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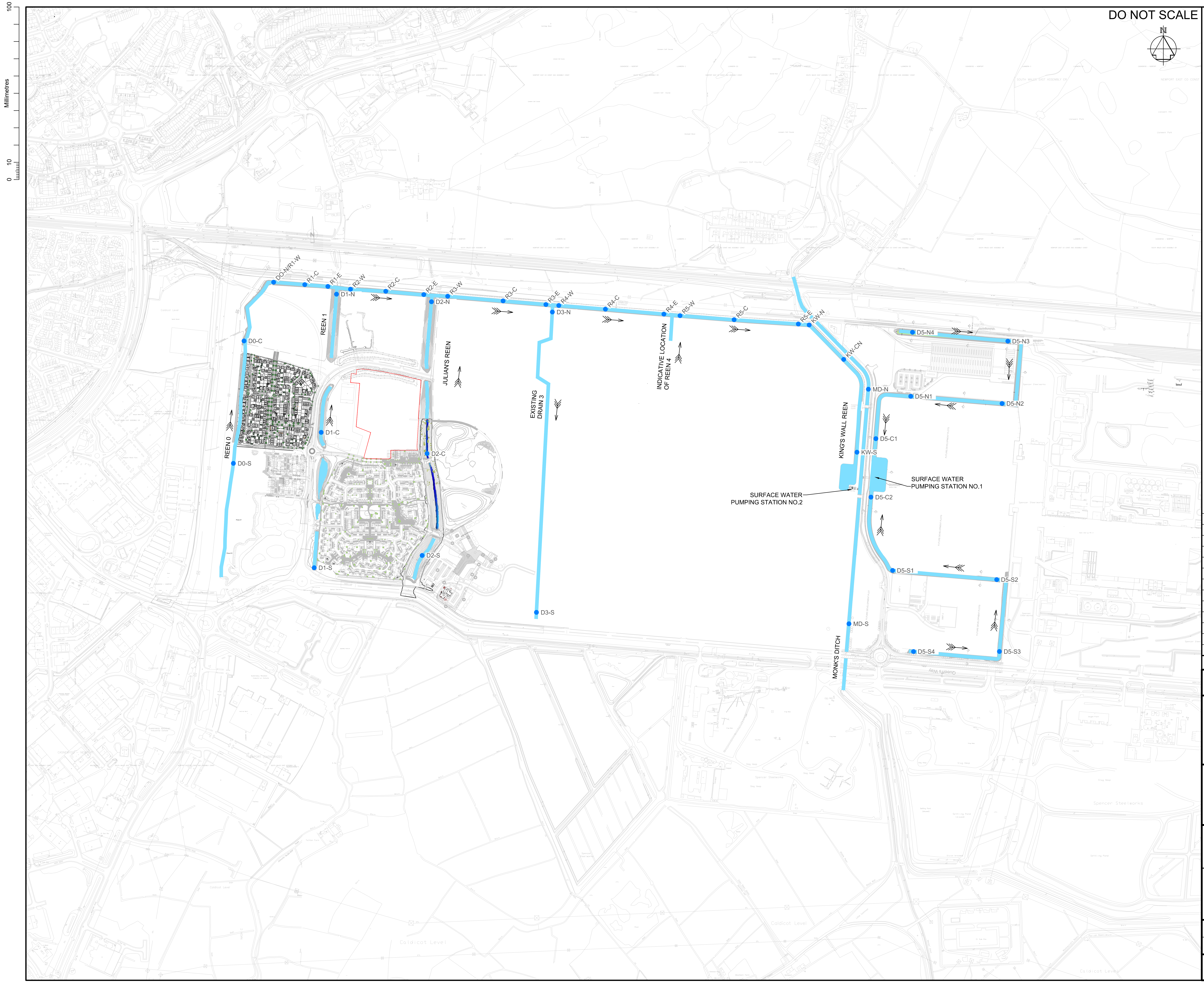
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N
DO-N/R1-W
R1-C
R1-E
R2-W
D1-N
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R2-E
R3-W
D2-N
R3-C
R3-E
R4-W
D3-N
R4-C
R4-E
R5-W
R5-C
R5-E
KW-N
KW-CN
D5-N4
D5-N3
MD-N
D5-N1
D5-N2
D5-C1
KW-S
D5-C2
D5-S1
D5-S2
MD-S
D5-S4
D5-S3
D0-C
D0-S
D1-C
D1-S
D2-C
D2-S
D3-S
REEN 0
REEN 1
JULIAN'S REEN
EXISTING DRAIN 3
INDICATIVE LOCATION OF REEN 4
KING'S WALL REEN
MONK'S DITCH
SURFACE WATER PUMPING STATION NO.1
SURFACE WATER PUMPING STATION NO.2

KEY:

●	SURFACE WATER MONITORING LOCATION
▬	SURFACE WATER
⟸	FLOW DIRECTION

Rev.	Date	Description	By	Chk'd	App'd

Drawing Status
FOR INFORMATION

Suitability
S2

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Client
ST.MODWEN

Project Title
LLANWERN

Drawing Title
NORTHERN EAST WEST
REEN MONITORING

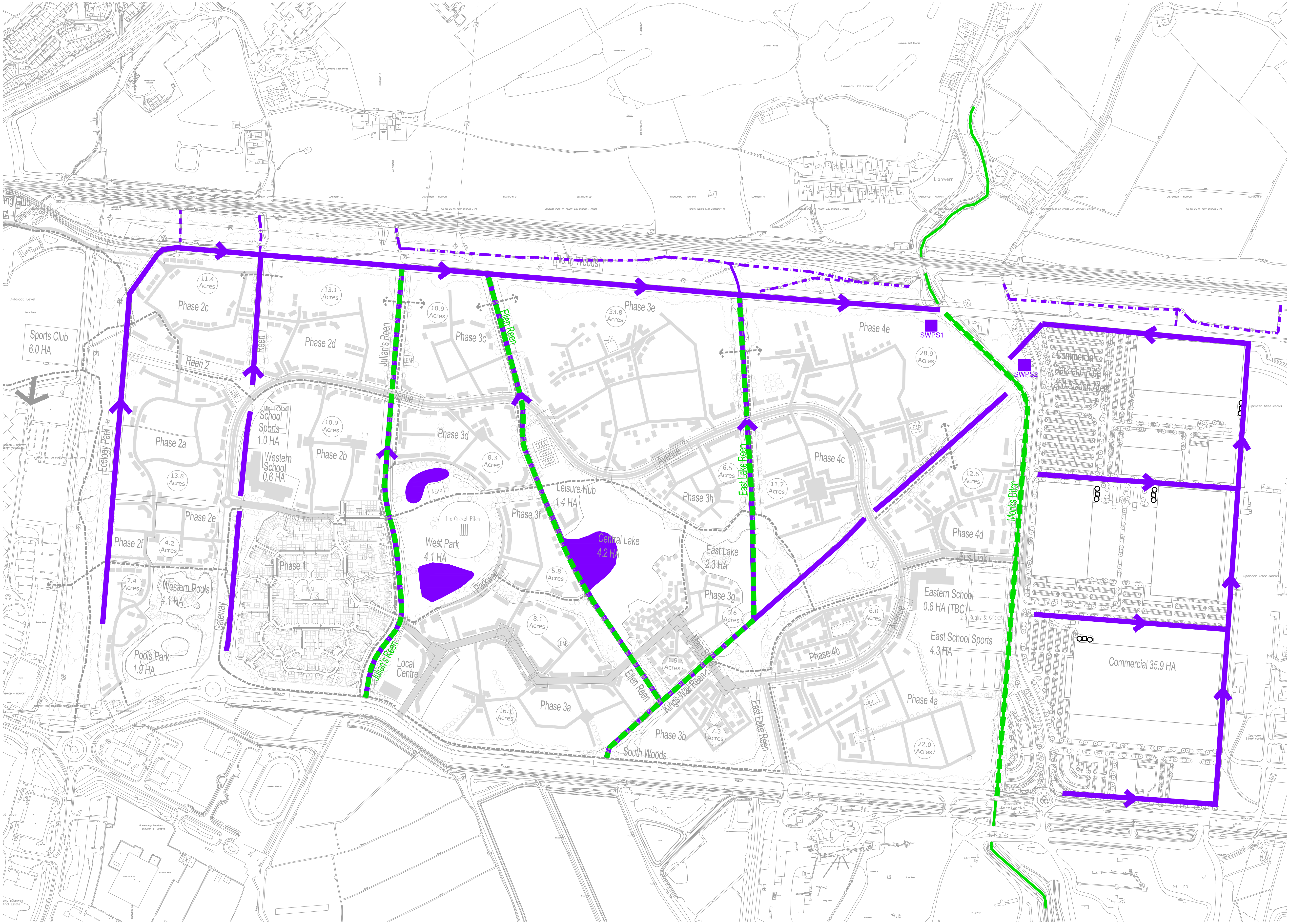
Scale	Designed	Drawn	Checked	Authorised
1:5000	JF	RJ	JF	DW
Original Size	Date	Date	Date	Date
A1	25/05/18	25/05/18	25/05/18	25/05/18

Drawing Number
5111373-LLA-DWG-EG-0408

Revision
P 1

USER: FOST7548 Date: 29/6/18 16:13:51 Filename: P:\GBBMA\DE2\Div80\5111\5111373 - Llanwern (MP)\6 Drawings\Working\0408 - Northern East West Reen Monitoring Plan.dwg

A3


North Woods
Sports Club
6.0 HA
Ecology Park
Phase 2c
11.4 Acres
13.1 Acres
Phase 2d
Reen 1
Reen 2
Julian's Reen
10.9 Acres
Phase 3c
Ellen Reen
33.8 Acres
Phase 3e
Phase 4e
SWPS1
28.9 Acres
SWPS2
Commercial Park and Ride and Station Area
Phase 2a
Min 1 form School Sports 1.0 HA
Western School 0.6 HA
10.9 Acres
Phase 2b
Avenue
Phase 3d
8.3 Acres
Leisure Hub 1.4 HA
6.5 Acres
Phase 3h
East Lake Reen
11.7 Acres
Phase 4c
12.6 Acres
Monks Ditch
Phase 4d
13.8 Acres
Phase 2e
Phase 2f
4.2 Acres
7.4 Acres
Western Pools 4.1 HA
Phase 1
West Park 4.1 HA
1 x Cricket Pitch
Phase 3f
Central Lake 4.2 HA
East Lake 2.3 HA
Phase 3g
6.6 Acres
5.8 Acres
Parkway
Gateway
Bus Link
Eastern School 0.6 HA (TBC)
2 x Rugby & Cricket
6.0 Acres
East School Sports 4.3 HA
Phase 4b
Pools Park 1.9 HA
8.1 Acres
Local Centre
Kings Wall Reen
Main St
6.9 Acres
Phase 3a
16.1 Acres
Phase 3b
7.3 Acres
South Woods
Phase 4a
22.0 Acres
Commercial 35.9 HA
Llanwern
Llanwern Golf Course

Notes:

- Monks Ditch
- Existing Reen/Ditch
- New/Upgrade on Site Reen
- Existing off site Reen

Rev.	Date	Amendments	By	Chk

RODGERS LEASK
Consulting Civil & Structural Engineers

Client
St Modwen

Project
Llanwern

Drawing Title
Overall Surface Water Drainage Strategy

Status
Information

Scale	Drawn	Checked	Date
A3@ 1:7500	CB	AC	11/03/15

Project No.	Drawing No.	Rev.
D12-084	512	

File Path:
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Appendices

Appendix A: RLEs Reclamation Performance Specification.

Technical Note

Project:	Glan Llyn
Subject:	Reclamation Performance Specification A Turnover - Final
Document Reference:	17480-RLE-18-XX-RP-O-1016
Date:	14/12/2018
Prepared by:	Howel Morris - *Associate* BSc (Hons), MSc, CGeol
Reviewed by:	Neil Fraser - Principal Geotechnical Engineer BSc (Hons) MSc FICE

1. Introduction

Rodgers Leask Environmental Ltd (RLE) has been asked by St. Modwen Developments Ltd to prepare a Reclamation Performance Specification for the turnover to reclaim the reens, 15 acres of the Business Park, the proposed Marshalls factory footprint and thirteen residential phases (3b, 3c, 3d, 4a, 4b, 4c, 4e, 4g, 5a, 5b, 5c, 5d, 5g) of the Glan Llyn development.

This specification is intended to develop reclaimed plots that maintain surface compliant water quality, can satisfy the requirements of the contaminated land planning conditions and provide a stable reengineered platform with an accurate record of retained features to support, as far as practical, a site suitable for the proposed development.

2. Reclamation Strategy

The key points of the strategy for reclaiming the site are listed as follows:

- Pre sample each phase of site,
- Review and update site specific Controlled Waters Risk Assessment criteria,
- Designate areas to receive unsuitable material (both chemically and geotechnically unsuitable) – estimated to be 10% of the volume (eg 200,000m^3 for 2 million m^3 turnover) comprising park & ride plots, business park, sport pitches and noise bunds,
- Designate phases where engineering (small 1m clay bunds to promote protection of primary water routes by increasing residency within plots and reducing contamination loading near to site discharge) is required to further protect surface water,
- Sequence turnover and placement to suit direct placement approach to support chemical and geotechnical compliance,
- Agree proposed placement with Monitoring Engineer
- Turnover of the ground to natural deposits and reengineer the site to a minimum of 5.7mAOD (600mm below the minimum flood level),
- Compact material in accordance with the backfill specification to reduce permeability to limit infiltration and air voids to reduce leachability and conditions for potential expansion of Made Ground containing slag,

- Prepare geotechnical and chemical validation report for each phase.

3. Pre Reclamation Sampling

Prior to the commencement of reclamation works each phase will be trial pitted on a 25m grid sampled in accordance with the following:

- One composite chemical sample every exploratory hole to represent how it will be excavated and placed, (current testing is 1 per metre depth for each trial pit location)
- One composite geotechnical sample every exploratory hole and,
- One composite BRE expansion test (at least one per 2000m3).

The sequencing of the reclamation will need to follow the sampling programme. Pre validated material within stockpiles may require some testing to improve frequency to the required ratio.

The Contractor needs to allow in the programme sufficient time for the receipt and assessment of the contamination results and the slag expansion tests which require a 28-day test but there may be limited capacity. Areas where the Made Ground contains high proportions of slag may be reused in the designated open space or commercial areas rather than reuse within the residential phases.

4. Material Suitability – Chemical

The risk driver for the remediation of site is the controlled waters (water quality within site reens prior to discharge into Monk’s Ditch). Therefore compliance with the Environmental Quality Standards (EQS) in the surface waters on site is the primary objective. The soil material placed within the plots will be assessed against the site specific criteria derived within the Controlled Waters Risk Assessment for the site and will use these criteria as guideline for compliance. Initial work will be undertaken to review the CWRA criteria to see if improvements are appropriate based on more recent site specific monitoring data and these will be submitted to the NRW for approval.

It is anticipated that the provision of clean cover will be sufficiently protective of human health providing the retained material complies with CWRA criteria.

In addition to chemical compliance reasonable engineering methods (creation of clay bunds below ground level) shall be employed to lengthen the contaminant travel time and direct the perched water discharge to a suitable point within the surface water system on site. This approach shall aim to use of cleaner material nearer the points of discharge.

Material with exceedances of the CWRA criteria may be retained within the plot if the overall profile of the placed material is assessed to be sufficiently protective of the water quality and human health (with the use of clean cover).

Material not suitable for reuse within the residential phases but suitable for public open space or commercial use shall be reused within commercial plots, park and ride areas, sports pitches and noise bunds.

Material assessed as requiring treatment will be investigated to delineate extent of contamination, excavated for treatment as required to permit reuse within one of the designated areas for lower threshold material. This is likely to apply to areas of gross contamination including but not limited to the coking works and the bitmac plant.

A programme of water quality monitoring shall be undertaken, either an existing agreed monitoring regime and/ or a dynamic monitoring programme to support the reclamation works, for the duration of the reclamation works to assess the developing water quality.

A mechanical method (scrubbing) and/ or natural method (reed beds) of water quality improvement may be deployed as mitigation prior to discharge into Monk’s Ditch in the event of non-compliance of the EQS. This action shall be supported by monitored natural improvement in water quality within the reens as the development progresses so that mechanical improvement is a short term measure to mitigate the interim state of a reclaimed site without the rainfall interception of the full redevelopment.

The Contractor’s method of working in close proximity of to the reen shall protect the watercourse. This shall also include potential run off from surface water or perched water levels. Chemical testing in accordance with EQS at a frequency approved by Natural Resources Wales. It is anticipated that an approach for monitoring the on site surface waters has been developed by Atkins and agreed with NRW.

The Contractor will manage the perched water as required and will provide compliant test results prior to discharge into the surface water course.

5. Material Suitability – Geotechnical

The following material types or physical properties shall be regarded as suitable for immediate placement with appropriate testing:

- Made Ground containing slag,
- Natural strata
- Crushed concrete
- The above materials, less than 300mm in size

The following material types or physical properties shall be regarded as unsuitable for immediate placement and should be deposited within the one the defined areas for unsuitable material:

- Colliery spoil and / or burnt shale
- Pure slag
- Material with obvious evidence visual & olfactory contamination
- Oversize material

- Scrap metals
- Organic material
- Plastics
- Voided areas
- Alluvium

The material visually regarded as not suitable for immediate reuse within the Site may either be retained until test results confirm the suitability for reuse or moved to one of the designated areas.

6. Formation Embankment Details

Where it is necessary to form an embankment an assessment will be undertaken to assess a minimum factor of stability for the slope. The assessment will take into account available land, characteristics of the material to be used and potential for post construction works to maintain stability. In the absence of detail reen volume/ layout/ profile requirements a minimum slope of 1:2 shall be assumed.

7. Levels

The phases within the site, following turn over to natural geology, will be backfilled with site won material to a minimum level of 5.7mAOD.

8. Turnover & Backfill

Within the boundaries of the site, the property will undergo reclamation to a depth where the natural underlying Tidal Flat Deposits can be confirmed. Known obstructions shall be removed, where they are unsuitable for retention within a normal piling layout, to a depth of 2m below minimum ground level in accordance with the flood mitigation requirements. Material within the site will undergo chemical and geotechnical testing.

Reclamation and subsequent backfill will be undertaken in accordance with the 600 Series (Earthworks) of the Specification for Highway Work (SHW) and each phase-specific Reclamation and Backfill Specification. The location and level of identified obstructions remaining in situ shall be accurately surveyed to the base of excavation and the positions recorded on a drawing.

In situ compaction testing of the placed layers shall be undertaken in compliance with the requirements of the 600 Series (Earthworks) of the Specification for Highway Work (SHW) and results provided to the developer. The backfilled material shall be reengineered to a target of 95% compaction. It will be at the discretion of the monitoring engineer to accept results below 95% to a minimum of 90%. The surface of each compacted layer shall be tested to ensure it meets the requirements of the SHW and a minimum CBR value of 2.5% at the surface.

9. Removal of Obstructions in Site Excavation Area

Shallow foundations and other man made obstructions encountered within the Made Ground and above the level of the underlying natural strata shall be entirely removed. Where isolated structures are encountered below 4.3mAOD that extend into the natural strata and measure less than 2.5m by 2.5m these may be retained on agreement with the engineer to reduce unnecessary excavation and support a nominal 3m grid for future piles. Where other obstructions are encountered which extend below the level of the underlying natural strata (e.g. slag in slag pits) these shall be removed unless otherwise agreed in writing by the Engineer.

Where redundant foundation piles or sheet piles are encountered these shall be cut down to the level of 4.3mAOD, and their location accurately surveyed for a future developer.

10. Grading

Fill material shall satisfy grading requirements for SHW Class 1 or Class 2 material except that a maximum particle size of 300mm shall apply and the maximum particle thickness shall not exceed two thirds of proposed compaction layer thickness.

Oversized material shall be removed, during the process of direct turnover, by visual assessment during excavation of existing ground and during the blade placement, by bulldozer, of the excavated ground prior to compaction. Removed oversize material not viable for crushing may be used in the sports pitches or park and ride areas, stored for an alternative suitable use or processed and tested to confirm material acceptability.

Incidental break up of material during the excavation and reengineering process is acceptable. Under no circumstances shall the crushing, as a specific operation, of slag bearing fill to achieve the required grading be permitted.

11. Reuse of Made Ground Containing Slag

Using the pre testing information the average risk of expansion will be managed as the layers of material are placed. Following the reclamation, surface monitoring points will be installed to monitor and validate stability of the reclaimed plot over a defined period to confirm the plot is within expansion tolerance prior to construction. BRE test results will be used to assess the suitability of material for reuse. A target expansion average for the accumulated material within the plot of 2.5% with a maximum of 5% being adopted. This may be amended based on practical mitigation measures and the proposed criteria will be subject to approval by the NHBC.

Where used as a reengineered material, Made Ground containing slag will be placed at a likely average thickness of 2m. A piled foundation solution with incorporated void (nominally 100mm, beam and block) would mitigate the risk of expansion to the building and the reengineered material is unlikely to cause unstable conditions for roads, services and gardens as the reclaimed plot will comprise weathered, well graded and well mixed layers.

Where there are areas of very slag rich made ground, with a potential for substantial expansion (as measured by the slag expansion results), the Contractor will have to regard this material as suitable for use in a public open space area.

12. Settlement & Stability Monitoring

Existing ground levels, on average, are within 300mm of the minimum ground level for flood requirements, therefore the increase in ground loading is not anticipated to be greater than 1m from the existing ground levels to incorporate an appropriate drainage system. Assuming a piled foundation solution, primary consolidation settlement from an increase in ground levels of 1m is likely to be acceptable for the stability of roads, services and gardens without surcharge given the time between reclamation and final development. An appropriate number of floor level monitoring points will be installed on pads of suitable material (5m x 5m) at the likely finished floor level, approximately 600mm above the reclaimed level, to reasonably replicate the final ground loading.

The floor level monitoring points will be monitored for a period to confirm stability of the site with regard to primary consolidation settlement but will also provide information relating heave stability prior to construction.

13. Land Quality Statement

A Land Quality Statement (LQS) will be prepared by St. Modwen Developments' Environmental Consultant which shall include a factual description of the site and its environs, the geo-environmental works carried out and describe the geo-environmental condition of the site following the completion of the agreed works. The LQS will provide a statement by the Environmental Consultant that planning conditions PC27 and PC28 of outline planning permission 06/0471 have been discharged by Newport City Council prior to final construction for the proposed residential end use. Amendments to existing CWRA criteria, which are relevant to the contaminated land planning conditions, will require approval by the NRW and local authority.

14. Notes for Intended Use

The developers and occupiers of the residential phases and reens, where this specification shall be applied, should consider the following:

- The site is underlain by soft organic rich Tidal Flat Deposits which according to historical information have been in part loaded by the former processes on the site. The site will continue to undergo unavoidable long-term creep settlement; this is normal for such sites.
- The buildings with piled foundations will not undergo creep settlement and therefore maintenance may be required where piled buildings meet ground bearing external areas due to the potential for differential settlement. Consideration should be given to boundary fences rather than brick walls. Extensions/ conservatories will require separate assessment to ensure settlement is considered prior to design of foundations.

- The storm water drainage of shall be constructed appropriately so that it does not leak into the underlying Made Ground. Poorly constructed drainage with headwalls into surface water features have the potential to generate leachate through infiltration into the Made Ground and then provide a pathway directly into the surface water.
- The external areas (roads, pavements, open space) have not been designed for the prolonged parking of HGVs, storage of materials, new buildings etc as these activities have the potential to cause settlement.
- The external areas may require maintenance due to creep settlement in the underlying Tidal Deposits.
- Flexible connections should be considered for services entering the piled buildings.
- Dewatering may result in localised reduction in groundwater level, which would induce localised consolidation settlement.

Appendix B: Atkins Permeability Technical Note

Technical Note

Subject:	Glan Llyn, Newport - Engineering Measures to Reduce Permeability & Infiltration		
Reference:	5111373-LLA-OUT-0256	**Revision:**	-
Author:	Howel Morris	**Checker:**	Chris Wilson
Issued to:	Craig Tidyman (Prosurv)	**Reviewer:**	Mark Williams
Date:	15th December 2016	**Authoriser:**	Howel Morris

Introduction

The Made Ground within the Glan Llyn site is generally compliant with residential, open space and commercial human health soil screening criteria. It is recognised that human health criteria is not intended to protect controlled waters but this note has been prepared to support the re-engineering of the onsite Made Ground material as a remediation measure in order to support parameters adopted within the Controlled Water Risk Assessment (Ref.1 5111373-OUT-RPT-0275). This is to be achieved by reducing the permeability of the shallow Made Ground soils by excavation and re-compaction, and providing a fall across its upper surface; as well as the placement of an overlying granular material to create a preferential pathway to minimise the potential for infiltration of precipitation into the underlying re-engineered Made Ground. The reduction in the permeability of the re-engineered Made Ground will attenuate the flow of precipitation through the Made Ground. This will have the intended benefit of increasing the volume intercepted rainwater against water infiltrating through the Made Ground within the surface water drainage system. Thus improving the surface water quality within the reens at the perimeters of the development plots.

It is worth noting that the re-use criteria developed within the CWRA report are protective of the surface water quality in the event that the full annual amount of water infiltrated and intercepted by the site be discharged to the reen system instantaneously. This technical note has been prepared to record the rationale of the chosen values for the permeability parameters used within the Controlled Waters Risk Assessment.

Site Permeability

The interception rates (where precipitation is intercepted by various development surfaces and flows into the surface water drainage system) and infiltration rates (where precipitation infiltrates through permeable gardens or landscaped areas into the underlying material) have been based on the figures provided in the drainage strategy prepared by Rodgers Leask (Rodgers Leask, 2016. Site Wide Surface Water Drainage Strategy Addendum for St Modwen Ltd. Rev 4 D12/084). The report provides figures for impermeable areas within the residential land and when this is compared with the total residential area a ratio of 60:40 is produced in favour of interception. The residential area includes all ancillary land including roads, landscaping features, drainage features, gardens and parks. The commercial area produces a ratio of 90:10 in favour of interception. The ratio provided within the drainage strategy does not account for the permeability of the percentage listed as permeable.

The respective adopted permeable values of 40% and 10% assume free draining material where the precipitation may freely percolate through the underlying materials. However, there are a number of factors resulting from the re-engineering of the development plots that significantly reduce the potential for infiltration of precipitation into the underlying Made Ground. The specification for the re-engineering of the Made Ground (Ref.2 5111373-LLA-OUT-225 Guidance for the Reuse of Made Ground Containing Slag, Dec 2016) requires compaction to a minimum 95% of maximum dry density and a minimum 5% CBR at finished levels to be achieved. The re-engineering of the plots into a stable platform with a fall from the centre to the periphery, and the materials used, will produce a preferential pathway. Based on soakaway tests carried out in the re-engineered Made Ground, and the results of Particle Size Distribution (PSD) laboratory tests carried out on the material, the site won re-engineered Made Ground within the plots is assessed as having a permeability of approximately 1 x 10^{-7} m/s (i.e. poor permeability). The properties of the re-engineered Made Ground are shown in Table 1 below.

Table 1: Properties of the Re-engineered Made Ground

Made Ground	PSD No./ Average	BRE Soakaway Test Result	Adopted Permeability(k)
Test 1	102 No./ 11% fines, 22% sand, 62% gravel, 5% cobbles	Fell 4mm in 3hrs	1 x 10^{-7} m/s
Test 2		Fell 20mm in 2hrs	1 x 10^{-7} m/s

* Unable to calculate an infiltration rate as the amount of infiltration was minimal during the test period indicating low permeability.

The PSD test samples were taken from existing stockpiles of site-won material. The soakaway tests were carried out on a re-engineered development plot within the site using typical stockpiled site-won Made Ground. The permeability of the re-engineered Made Ground was based on the values included within Soil Mechanics Principles & Practice, 3rd Edition, Table 3.3 (Ref.3) for a material with poor drainage characteristics.

The overlying gravel layer to be placed above the re-engineered Made Ground is expected to have a permeability of 1 x10^{-3} m/s (good) based on the values for a material on the boundary between a clean gravel and a clean sand provided in Soil Mechanics Principles & Practice, 3rd Edition, Table 3.3 (Ref.3).

The permeability will be validated on a plot by plot basis by undertaking soakaway tests. The designed fall at the top of the re-engineered Made Ground will promote flow within the more permeable granular layer and the infiltrated water will seek the course of least resistance, potentially flowing within the layer until it daylights at the reens at the periphery of the plot.

Landscaping/ Drainage & Public Open Space

The green areas of the site (including landscaped areas, parks & gardens) have been included within the permeable ratio for the residential areas. The green areas will have a minimum subsoil thickness of 450mm and in this region of south Wales red marl is a readily available subsoil which has already been used in some areas of the Glan Llyn development and which has a low permeability. The reduced permeability of areas assumed to allow free downward migration of rain water will further reduce the volume of rainwater able to infiltrate the re-engineered Made Ground. It is considered that a placed / un-compacted marl will have a permeability of 1 x 10^{-8} m/s, consistent with a stratified clay material (Ref.3). The reduced permeability of the green areas will also help improve the water quality within the drainage system.

Conclusion

The reduction in the permeability of the re-engineered Made Ground is intended to further improve surface water quality by attenuating the flow of infiltrated precipitation through the material. The reduced permeability of the Made Ground dramatically increases the transport time of the rainwater through the material, in contrast, a large volume of intercepted rainwater is able to reach the surface water reen system rapidly via the storm water drainage system. Therefore it is anticipated that the composition of surface waters will be dominated by intercepted clean rainwater. In reality, the large volume of intercepted precipitation and contrasting low volume of infiltrated seepage entering the reens annually will contribute to further improving water quality in a system already designed to maintain a compliant water quality within the surface water reens of the development.

References

1. 5111373-LLA-OUT- 0275, Glan Llyn, Site Wide Controlled Water Risk Assessment Atkins, December 2016.
2. 5111373-LLA-OUT-225 Guidance for the Reuse of Made Ground Containing Slag, Atkins, December 2016.
3. Soil Mechanics Principles & Practice, 3rd Edition, September 2010 (by G.E.Barnes).

Appendix C: Groundwater Levels Monitoring

Table A-1 Summary of 2016 Deep Monitored Groundwater Levels (mAOD)

Borehole	Easting	Northing	Ground Level (mAOD)	Count	Min (mAOD)	Max (mAOD)	Range (m)	Screened Unit*
2DBH-01	335405	187196	5.56	7	4.03	5.05	1.02	MMG
2DBH-02	335331	187310	5.94	7	4.58	5.20	0.62	MMG
2DCP-01	335475	187320	5.555	7	4.65	5.09	0.44	MMG
2DWS-05	335330	187336	5.957	7	3.76	5.60	1.84	TFD (BS)
CBP BH03	337064	186432	5.275	7	3.69	4.38	0.69	TFD (BS)
CBP BH04	337138	186342	4.833	7	4.15	4.63	0.48	TFD (BS)
CBP BH05	337014	186536	5.767	7	3.97	4.60	0.63	TFD (BS)
CBP BH06	336792	186392	5.081	7	4.18	4.70	0.52	TFD (BS)
CL2CB	335141	187332	6.008	5	4.32	4.81	0.49	Unknown
CWCP-01	335335	187278	5.65	7	4.20	4.89	0.69	MMG
CWCP-02	335279	187202	6.014	7	3.34	4.75	1.41	MMG
CWCP-03	334877	187364	6.159	6	4.87	5.49	0.62	MMG
CWCP-04	335186	187385	6.925	7	4.53	5.28	0.75	TFD (BS)
CWCP-05	335177	187153	5.877	7	4.16	5.20	1.04	TFD (BS)
CWCP-06	335381	187371	6.729	7	4.70	5.28	0.58	TFD (BS)
CWCP-07	335670	187347	6.759	7	4.52	6.16	1.64	TFD (BS)
CWCP-08	335941	187323	6.771	7	4.54	5.09	0.55	MMG
CWCP-09	336187	187302	5.699	7	3.65	4.86	1.21	TFD (BS)
CWCP-10	336505	187260	5.523	7	4.30	4.65	0.35	TFD(BS)/MMG
CWCP-11	336961	187241	6.26	7	4.37	4.64	0.27	TFD (BS)
CWCP-12	337225	187195	6.193	6	4.02	4.24	0.22	TFD (BS)
CWCP-13	336734	186782	7.15	7	4.22	4.60	0.38	TFD(BS)/MMG
CWCP-14	337203	186849	4.636	7	4.14	4.40	0.26	MMG
CWCP-15	337152	186553	4.014	7	3.68	4.01	0.33	TFD (BS)
CWCP-18	336343	186382	6.478	7	3.92	4.67	0.75	MMG
CWCP-19	336080	186401	6.5	7	4.59	4.90	0.31	TFD (BS)
CWCP-20	335760	186426	6.357	7	4.10	5.20	1.1	TFD(BS)/MMG
CWCP-21	334931	186510	5.945	6	4.12	5.26	1.14	TFD (BS)
CWCP-22	334919	186641	6.046	7	4.11	4.79	0.68	MMG
CWCP-23	334975	187134	6.335	7	4.72	5.21	0.49	TFD (BS)
CWCP-24	334857	187224	5.951	6	4.81	5.56	0.75	TFD (BS)
CWCP-25	335044	186908	7.288	7	4.35	5.03	0.68	TFD (BS)
CWCP-26-e	336825	187078	6.065	7	4.11	4.71	0.6	TFD(BS)/MMG
CWCP-26-w	335815	187129	6.084	7	4.22	4.96	0.74	TFD(BS)/MMG
CWCP-27	335732	186807	6.185	7	4.39	4.85	0.46	TFD (BS)
CWCP-28	335967	186642	6.452	7	4.68	4.99	0.31	TFD(BS)/MMG
CWCP-29	336132	186981	6.115	7	4.40	5.63	1.23	MMG
CWCP-30	336402	187007	6.068	7	4.42	4.77	0.35	MMG
CWCP-31	336299	186602	5.913	7	3.46	4.78	1.32	MMG
CWCP-32	336512	187099	5.583	7	4.29	4.68	0.39	MMG
CWCP-35	336969	186980	6.5	7	4.21	5.22	1.01	MMG
CWCP-36	337032	186762	5.321	7	4.06	4.34	0.28	TFD (BS)

LCBH2	335618	186555	5.729	7	4.63	4.79	0.16	TFD (BS)

*MMG – Mercia Mudstone Group, TFD (BS) – Tidal Flat Deposit Basal Sands

Table A-2 Summary of 2016 Shallow Monitored Groundwater Levels (mAOD)

Borehole	Easting	Northing	Ground Level (mAOD)	Count	Min (mAOD)	Max (mAOD)	Range (m)	Screened Unit
2DWS-01	335460	187331	5.471	7	3.44	5.37	1.93	TFD
2DWS-02	335453	187179	5.455	7	3.56	4.96	1.4	TFD
2DWS-03	335402	187253	5.619	6	5.12	5.47	0.35	TFD
2DWS-04	335288	187235	6.106	7	5.04	5.31	0.27	MG/TFD
CWWS-03	334876	187368	6.134	6	4.98	5.36	0.38	TFD
CWWS-04	335184	187384	6.969	6	5.13	5.54	0.41	Unknown
CWWS-05	335176	187152	5.936	6	4.98	5.49	0.51	MG
CWWS-06	335382	187372	6.665	2	5.23	5.95	0.72	MG
CWWS-07	335670	187348	6.791	0	Dry	Dry	n/a	MG
CWWS-08	335940	187325	6.784	0	Dry	Dry	n/a	MG
CWWS-09	336187	187301	5.601	6	4.08	5.60	1.52	MG
CWWS-10	336506	187260	5.522	5	4.69	4.86	0.17	MG/TFD
CWWS-11	336962	187240	6.262	7	3.66	4.62	0.96	MG
CWWS-13	336735	186782	7.194	7	5.09	5.46	0.37	MG
CWWS-14	337197	186847	4.708	7	4.14	4.42	0.28	MG
CWWS-15	337134	186552	4.976	7	3.35	4.05	0.7	MG/TFD
CWWS-16	337162	186301	5.021	4	4.24	4.80	0.56	Unknown
CWWS-17	336709	186340	6.982	4	5.35	5.51	0.16	MG
CWWS-19	336080	186398	6.672	7	4.77	4.98	0.21	MG
CWWS-20	335760	186423	6.247	0	Dry	Dry	n/a	MG
CWWS-21	334915	186527	5.805	7	4.92	5.39	0.47	TFD
CWWS-22	334927	186756	5.734	7	4.06	5.40	1.34	MG/TFD
CWWS-23	334957	187010	5.589	7	3.92	4.89	0.97	TFD
CWWS-24	334856	187228	5.904	6	4.78	5.06	0.28	TFD
CWWS-25	335049	186908	6.735	7	4.18	5.65	1.47	MG/TFD
CWWS-26-	336824	187074	6.151	7	4.31	5.90	1.59	MG
CWWS-26-	335817	187135	5.279	7	3.55	4.88	1.33	MG
CWWS-27	335731	186807	6.225	6	4.67	4.92	0.25	TFD
CWWS-28	335967	186643	6.473	7	4.67	4.86	0.19	MG
CWWS-29	336131	186980	6.128	7	4.88	5.14	0.26	MG/TFD
CWWS-30	336402	187010	6.068	7	4.29	5.44	1.15	MG
CWWS-31	336296	186605	6.031	6	4.55	5.08	0.53	MG
CWWS-32	336512	187099	5.585	7	4.94	5.25	0.31	MG
CWWS-33	336612	186991	6.48	7	4.99	5.34	0.35	TFD
CWWS-34	336656	186622	6.148	2	5.41	5.47	0.06	MG
CWWS-35	336968	186977	6.46	7	4.62	4.91	0.29	MG
CWWS-36	337027	186755	5.806	3	4.46	4.50	0.04	MG

*TFD – Tidal Flat Deposits (Clay), MG – Made Ground

Table A-3 Groundwater Level Data

Borehole	Deep/Shallow	Easting	Northing	Ground Level (mAOD)	Count	Min (mAOD)	Max (mAOD)	Range (m)	Depth of Base (mAOD)	10/05/2016	06/06/2016	07/07/2016	02/08/2016	01/09/2016	05/10/2016	03/11/2016
2DBH-01	Deep	335405	187196	5.56	7	4.03	5.05	1.02	-13.14	5.05	4.76	4.88	4.78	4.65	4.81	4.03
2DBH-02	Deep	335331	187310	5.94	7	4.58	5.20	0.62	-12.69	5.2	4.91	5.09	4.92	4.72	4.87	4.58
2DCP-01	Deep	335475	187320	5.555	7	4.65	5.09	0.44	-3.375	5.085	4.795	4.915	4.785	4.755	4.805	4.645
2DWS-05	Deep	335330	187336	5.957	7	3.76	5.60	1.84	2.997	4.017	3.757	4.767	4.727	5.387	5.597	5.557
CBP BH03	Deep	337064	186432	5.275	7	3.69	4.38	0.69	-5.495	4.375	4.295	4.195	4.155	4.115	4.145	3.685
CBP BH04	Deep	337138	186342	4.833	7	4.15	4.63	0.48	-2.057	4.633	4.153	4.413	4.193	4.303	4.493	4.513
CBP BH05	Deep	337014	186536	5.767	7	3.97	4.60	0.63	-4.323	4.357	4.237	4.257	4.597	3.967	4.177	4.057
CBP BH06	Deep	336792	186392	5.081	7	4.18	4.70	0.52	-4.159	4.701	4.601	4.621	4.181	4.201	4.701	4.531
CL2B	Deep	335141	187332	6.008	5	4.32	4.81	0.49	-4.892	-	4.678	4.808	4.668	4.508	-	4.318
CWCP-01	Deep	335335	187278	5.65	7	4.20	4.89	0.69	-3.25	4.89	4.41	4.81	4.71	4.48	4.63	4.2
CWCP-02	Deep	335279	187202	6.014	7	3.34	4.75	1.41	-3.136	4.714	4.134	4.754	3.684	3.564	3.634	3.344
CWCP-03	Deep	334877	187364	6.159	6	4.87	5.49	0.62	-2.951	5.489	5.159	5.219	5.049	4.959	-	4.869
CWCP-04	Deep	335186	187385	6.925	7	4.53	5.28	0.75	-2.485	5.275	4.685	4.815	4.545	4.725	4.785	4.525
CWCP-05	Deep	335177	187153	5.877	7	4.16	5.20	1.04	4.687	5.197	4.157	4.757	4.827	4.717	4.717	4.377
CWCP-06	Deep	335381	187371	6.729	7	4.70	5.28	0.58	-2.521	5.279	4.909	5.009	4.889	4.699	4.909	4.759

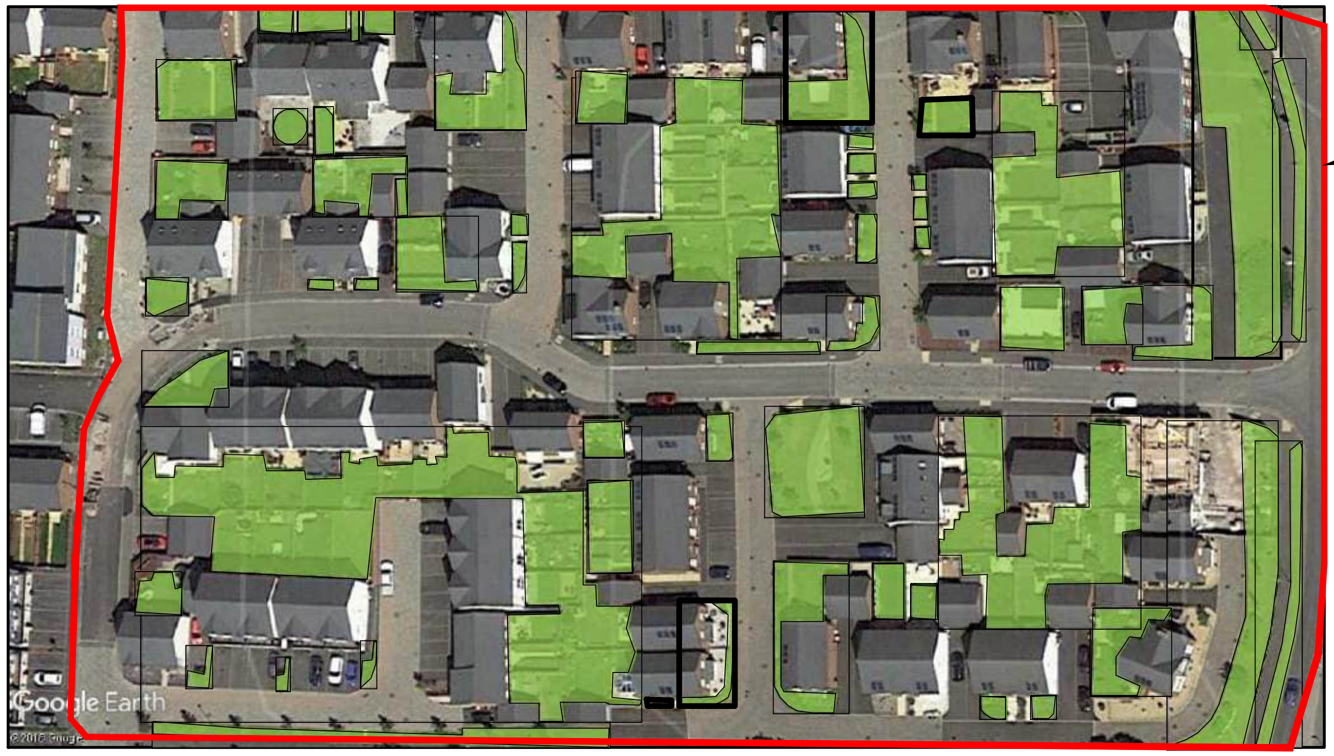
CWCP-07	Deep	335670	187347	6.759	7	4.52	6.16	1.64	-2.501	5.029	4.719	4.749	4.659	4.519	6.159	4.859
CWCP-08	Deep	335941	187323	6.771	7	4.54	5.09	0.55	-2.079	5.091	4.811	4.671	4.571	4.541	4.771	4.771
CWCP-09	Deep	336187	187302	5.699	7	3.65	4.86	1.21	-1.641	4.859	4.639	4.619	4.579	4.429	4.439	3.649
CWCP-10	Deep	336505	187260	5.523	7	4.30	4.65	0.35	-3.477	4.653	4.533	4.473	4.423	4.303	4.463	4.373
CWCP-11	Deep	336961	187241	6.26	7	4.37	4.64	0.27	0.33	4.57	4.64	4.59	4.37	4.48	4.63	4.45
CWCP-12	Deep	337225	187195	6.193	6	4.02	4.24	0.22	Unknown	-	4.143	4.243	4.083	4.023	4.133	4.093
CWCP-13	Deep	336734	186782	7.15	7	4.22	4.60	0.38	-4.76	4.56	4.6	4.41	4.31	4.22	4.33	4.23
CWCP-14	Deep	337203	186849	4.636	7	4.14	4.40	0.26	-4.904	4.396	4.366	4.306	4.186	4.136	4.206	4.136
CWCP-15	Deep	337152	186553	4.014	7	3.68	4.01	0.33	-5.116	4.014	4.014	4.014	4.014	4.014	3.684	4.014
CWCP-18	Deep	336343	186382	6.478	7	3.92	4.67	0.75	-5.442	4.668	4.518	4.408	4.578	4.188	3.918	4.168
CWCP-19	Deep	336080	186401	6.5	7	4.59	4.90	0.31	-2.51	4.82	4.9	4.75	4.75	4.59	4.69	4.7
CWCP-20	Deep	335760	186426	6.357	7	4.10	5.20	1.1	-5.513	4.707	4.777	4.247	5.197	4.097	4.177	5.067
CWCP-21	Deep	334931	186510	5.945	6	4.12	5.26	1.14	-4.635	4.455	4.425	4.295	5.255	4.115	4.125	-
CWCP-22	Deep	334919	186641	6.046	7	4.11	4.79	0.68	-5.554	4.586	4.526	4.356	4.786	4.296	4.246	4.106
CWCP-23	Deep	334975	187134	6.335	7	4.72	5.21	0.49	-3.895	5.205	4.865	4.775	4.715	4.785	4.925	4.715
CWCP-24	Deep	334857	187224	5.951	6	4.81	5.56	0.75	-3.509	5.561	5.061	5.131	5.011	4.911	-	4.811
CWCP-25	Deep	335044	186908	7.288	7	4.35	5.03	0.68	-4.532	5.028	4.738	4.778	4.688	4.638	4.728	4.348
CWCP-26-e	Deep	336825	187078	6.065	7	4.11	4.71	0.6	-4.345	4.475	4.525	4.395	4.325	4.155	4.705	4.105
CWCP-26-w	Deep	335815	187129	6.084	7	4.22	4.96	0.74	-4.276	4.964	4.784	4.794	4.744	4.604	4.224	4.574

CWCP-27	Deep	335732	186807	6.185	7	4.39	4.85	0.46	-5.325	4.845	4.665	4.665	4.555	4.515	4.605	4.385
CWCP-28	Deep	335967	186642	6.452	7	4.68	4.99	0.31	-5.308	4.992	4.892	4.862	4.682	4.902	4.932	4.892
CWCP-29	Deep	336132	186981	6.115	7	4.40	5.63	1.23	-4.585	4.945	4.725	4.725	4.615	4.525	5.625	4.395
CWCP-30	Deep	336402	187007	6.068	7	4.42	4.77	0.35	-5.372	4.768	4.638	4.528	4.528	4.438	4.518	4.418
CWCP-31	Deep	336299	186602	5.913	7	3.46	4.78	1.32	-4.247	4.783	4.663	4.623	4.603	3.463	4.563	4.313
CWCP-32	Deep	336512	187099	5.583	7	4.29	4.68	0.39	-4.637	4.683	4.593	4.503	4.373	4.293	4.483	4.383
CWCP-35	Deep	336969	186980	6.5	7	4.21	5.22	1.01	-5.54	4.52	4.44	4.39	4.32	5.22	4.33	4.21
CWCP-36	Deep	337032	186762	5.321	7	4.06	4.34	0.28	-3.889	4.341	4.331	4.191	4.141	4.071	4.151	4.061
LCBH2	Deep	335618	186555	5.729	7	4.63	4.79	0.16	-4.251	4.629	4.709	4.689	4.789	4.689	4.639	4.629
2DWS-01	Shallow	335460	187331	5.471	7	3.44	5.37	1.93	2.491	3.441	3.761	4.801	4.681	5.231	5.371	5.181
2DWS-02	Shallow	335453	187179	5.455	7	3.56	4.96	1.4	2.435	3.555	4.835	4.895	4.775	4.905	4.955	4.685
2DWS-03	Shallow	335402	187253	5.619	6	5.12	5.47	0.35	2.729	5.119	5.219	5.349	5.369	5.179	5.469	-
2DWS-04	Shallow	335288	187235	6.106	7	5.04	5.31	0.27	3.476	5.186	5.036	5.096	5.126	5.146	5.306	5.056
CWWS-03	Shallow	334876	187368	6.134	6	4.98	5.36	0.38	3.204	5.294	5.154	5.364	5.014	4.984	-	5.174
CWWS-04	Shallow	335184	187384	6.969	6	5.13	5.54	0.41	4.439	5.539	5.449	5.479	5.129	5.269	Dry	5.299
CWWS-05	Shallow	335176	187152	5.936	6	4.98	5.49	0.51	-3.244	5.016	4.976	Dry	5.256	5.376	5.486	5.446
CWWS-06	Shallow	335382	187372	6.665	2	5.23	5.95	0.72	Unknown	Dry	Dry	Dry	5.225	Dry	-	5.945
CWWS-07	Shallow	335670	187348	6.791	0	0.00	0.00	0	Unknown	Dry	Dry	Dry	Dry	Dry	Dry	Dry
CWWS-08	Shallow	335940	187325	6.784	0	0.00	0.00	0	Unknown	Dry	Dry	Dry	Dry	Dry	-	-

CWWS-09	Shallow	336187	187301	5.601	6	4.08	5.60	1.52	4.431	4.841	5.321	5.601	4.511	4.591	4.561	4.081
CWWS-10	Shallow	336506	187260	5.522	5	4.69	4.86	0.17	4.402	4.742	Dry	Dry	4.702	4.692	4.862	4.792
CWWS-11	Shallow	336962	187240	6.262	7	3.66	4.62	0.96	3.252	4.522	4.622	4.602	4.462	4.462	3.662	4.462
CWWS-13	Shallow	336735	186782	7.194	7	5.09	5.46	0.37	4.454	5.464	5.434	5.394	5.154	5.114	5.104	5.094
CWWS-14	Shallow	337197	186847	4.708	7	4.14	4.42	0.28	3.228	4.388	4.288	4.328	4.298	4.138	4.418	4.268
CWWS-15	Shallow	337134	186552	4.976	7	3.35	4.05	0.7	2.396	3.936	3.896	3.346	4.046	3.836	3.926	3.906
CWWS-16	Shallow	337162	186301	5.021	4	4.24	4.80	0.56	4.191	4.331	4.241	4.801	Dry	Dry	4.661	Dry
CWWS-17	Shallow	336709	186340	6.982	4	5.35	5.51	0.16	5.282	5.352	5.392	5.492	Dry	Dry	5.512	Dry
CWWS-19	Shallow	336080	186398	6.672	7	4.77	4.98	0.21	3.932	4.932	4.972	4.982	4.832	4.772	4.942	4.812
CWWS-20	Shallow	335760	186423	6.247	0	0.00	0.00	0	5.287	Dry	Dry	Dry	Dry	Dry	Dry	Dry
CWWS-21	Shallow	334915	186527	5.805	7	4.92	5.39	0.47	4.515	5.385	5.195	5.355	4.915	4.935	5.305	5.205
CWWS-22	Shallow	334927	186756	5.734	7	4.06	5.40	1.34	4.294	5.404	4.374	4.354	4.104	4.064	4.334	4.154
CWWS-23	Shallow	334957	187010	5.589	7	3.92	4.89	0.97	3.569	4.679	4.269	3.919	4.569	4.749	4.889	4.689
CWWS-24	Shallow	334856	187228	5.904	6	4.78	5.06	0.28	2.994	4.954	4.934	5.014	5.024	4.784	-	5.064
CWWS-25	Shallow	335049	186908	6.735	7	4.18	5.65	1.47	4.095	5.645	4.995	5.025	5.085	4.975	4.175	4.985
CWWS-26-e	Shallow	336824	187074	6.151	7	4.31	5.90	1.59	3.411	4.481	4.511	4.591	4.441	4.311	5.901	4.311
CWWS-26-w	Shallow	335817	187135	5.279	7	3.55	4.88	1.33	3.689	4.439	4.419	4.449	4.419	4.449	3.549	4.879
CWWS-27	Shallow	335731	186807	6.225	6	4.67	4.92	0.25	4.475	Dry	4.755	4.765	4.725	4.665	4.915	4.745
CWWS-28	Shallow	335967	186643	6.473	7	4.67	4.86	0.19	3.573	4.803	4.823	4.823	4.703	4.723	4.863	4.673

CWWS-29	Shallow	336131	186980	6.128	7	4.88	5.14	0.26	3.528	5.138	5.088	5.138	4.878	4.908	5.138	4.948
CWWS-30	Shallow	336402	187010	6.068	7	4.29	5.44	1.15	3.758	4.388	4.468	4.378	4.328	5.438	4.518	4.288
CWWS-31	Shallow	336296	186605	6.031	6	4.55	5.08	0.53	4.111	5.081	4.991	5.021	Dry	4.551	4.951	4.821
CWWS-32	Shallow	336512	187099	5.585	7	4.94	5.25	0.31	4.085	5.245	5.045	5.055	5.075	4.995	5.045	4.935
CWWS-33	Shallow	336612	186991	6.48	7	4.99	5.34	0.35	4.53	5.34	5.27	5.24	5.07	4.99	5.19	5.08
CWWS-34	Shallow	336656	186622	6.148	2	5.41	5.47	0.06		Dry	Dry	5.408	Dry	Dry	5.468	Dry
CWWS-35	Shallow	336968	186977	6.46	7	4.62	4.91	0.29	2.82	4.79	4.91	4.86	4.68	4.62	4.84	4.65
CWWS-36	Shallow	337027	186755	5.806	3	4.46	4.50	0.04	4.386	Dry	4.496	4.486	Dry	4.456	Dry	Dry

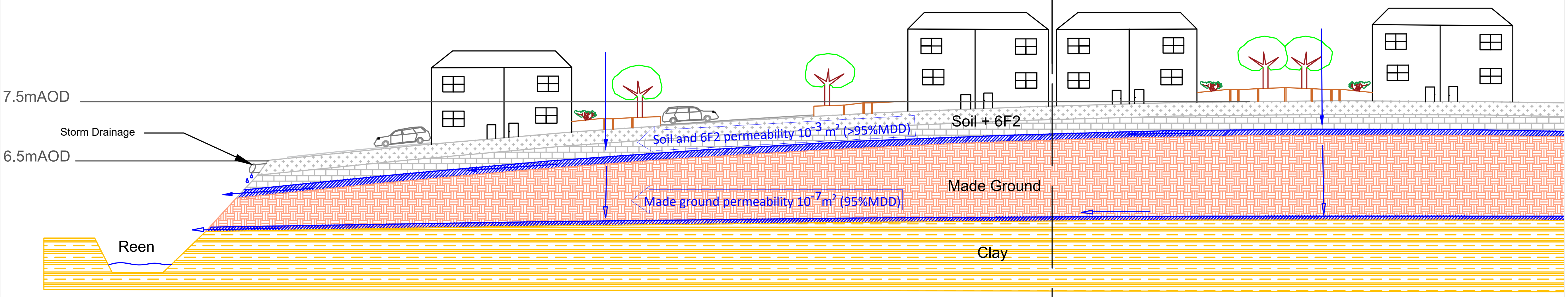
Appendix D: Glan Llyn Diagrammatic CSM


Google Earth
©2016 Google

Area covered by landscaping = 23.8%

40% Infiltration
into made ground

5% Infiltration
Increased distance from surface water


7.5mAOD
Storm Drainage
6.5mAOD
Soil and 6F2 permeability 10-3 m2 (>95%MDD)
Soil + 6F2
Made Ground
Made ground permeability 10-7m2 (95%MDD)
Reen
Clay

GENERAL NOTES

NO DIMENSIONS TO BE SCALED OFF THIS DRAWING.

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.

ANY DISCREPANCIES NOTED ON SITE ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

KEY

↙ Water movement within Soil and 6F2
⇙ Water movement within Made ground

Rev	Date	Amendments	By	Chk
-				

St Modwen

Project
Llanwern

Drawing Title
Glan Llyn Diagrammatic CSM

Status
Information

	Drawn	Checked	Date
NTS	ET	CW	05.07.19

Drawing Ref. Rev
18669-RLE-19-XX-DR-O-0005

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Appendix E: Soils Analysis

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

											Sample ID	TP3AD6V	TP3AD7V	TP3AE10	TP3AE10	TP3AE11	TP3AE11	TP3AE12	TP3AE13	TP3AE701	TP3AE9	TP3AE901	TP3AE902	TP3AE401	TP3AE402
											Depth	2.9	3.9	0.5	1.5	1	2	1	0.3	0.5	0.8	0.4	1	0.4	0.8
											Sampled Date	15/12/2017	15/12/2017	19/01/2018	19/01/2018	19/01/2018	19/01/2018	19/01/2018	19/01/2018	26/09/2017	19/01/2018	26/09/2017	26/09/2017	15/12/2017	15/12/2017
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**														
Carbon																									
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	2.4	3.69	1.27	2.52	0.612	1.79	2.22	3.14	2.95	1.47	1.03	0.35	16.2	6.43
Metals (Solids)																									
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	10.9	14.6	8.26	8.48	6	6	6.79	6	7.85	6.32	3.2	24.1	9.62	11.9
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	0.02	0.02	0.2	0.2	0.2	0.2	0.2	0.2	0.823	0.2	0.259	0.2	0.171	0.143
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	30.7	14.4	327	92	988	612	744	287	16.8	56.1	0.9	9	14.1	13.8
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	14.8	11.2	19.1	21	20.7	20.3	84.7	20.1	15.7	19.3	1.4	14	27.7	31.5
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	25.2	17.1	41.2	62.6	18.4	24	35.5	57.7	175	35.4	11.4	8.36	27.1	27.3
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	0.801	0.671	1.4	1.4	1.4	1.4	1.4	1.4	0.159	1.4	0.726	1.68	0.661	0.973
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	34.8	26.1	16.9	22	10.8	33.6	34.8	13.3	19.4	21.4	7.19	2	25.2	31.8
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	1.27	1.27	11.4	10	16	13.4	15.9	10.8	1.82	10	1	12.2	1	1
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	59.2	38.7	314	171	502	341	577	383	45.5	88.9	24.2	33.4	26.2	36.8
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	110	96.1	95.1	159	49.1	85.4	100	117	145	97.6	54.8	22.1	74.5	104
TPH Criteria Working Group (TPH CWG)																									
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.00222	0.008	0.008	0.008	0.008	0.008
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.003	0.012	0.012	0.012	0.012	0.012
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.138
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	0.101	3.27	2.19	1.95	1.46	1.79	4.55	0.785	0.833	1.62	0.736	0.1	12.4	85.1
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	0.527	7.07	10.7	8.6	8.07	10.5	28.5	3.46	6.93	4.88	3.47	0.399	84.2	213
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	5.2	17.8	69.5	49.3	61.1	73.8	199	26.3	24.9	27.7	43.4	7.85	50.1	80.7
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	0.1	3.77	33.9	25.4	18.1	17.5	116	7.75	5.42	13.4	24.8	1.28	1.22	0.1
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.0915
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	0.1	1.29	1.11	0.888	0.6	1.11	2.12	0.954	1.34	0.542	0.375	0.1	8.59	12.1
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	0.376	2.61	8.49	6.83	6.31	8.9	15.8	4.77	6.13	3.13	4.03	0.1	33	72.3
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	9.01	32.2	65.6	49.1	37.8	47	64.8	25.2	25.9	23.6	52.2	1.28	50.5	73.7
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	7.08	15.6	47	33.5	14.9	17.1	34.5	13.2	9.61	15.5	38.3	0.253	8.48	9.37
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	2.77	4.06	20.6	14.2	5.53	6.39	14.8	5.33	3.53	6.49	16.1	0.1	3.2	3.87
Polyaromatic Hydrocarbons (PAHs)																									
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	12	12	21.3	64.6	12	239	145	77.8	39.9	21.5	42	12	16.3	20.9
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	8	13.9	39.1	39.3	30.9	59.1	44.8	19	26.1	33.1	15.8	8	30.6	31
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	16	42.6	91.4	144	72.9	477	274	168	104	121	194	16	71.7	60.4
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	53.6	31.1	658	686	619	1510	1300	555	275	555	1300	14	187	176
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	50	54.2	697	753	647	1350	1280	492	232	582	1430	15	157	169
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	61.8	87.2	1110	1150	1130	2120	1930	764	455	839	1880	15	242	215
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	31.9	40.9	396	417	395	768	845	241	149	308	740	14	102	94.6
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	45.3	67.9	542	559	536	933	880	403	223	430	1040	24	116	110
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	55.8	61.4	788	691	725	1670	1340	540	275	618	1140	10	188	165
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	0.023	0.023	142	147	140	229	232	111	58.1	128	267	0.023	31	26.8
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	35.1	47.2	422	468	443	833	826	336	158	354	811	0.018	89.2	83.7
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	115	142	959	1140	1230	3190	2210	1310	495	926	1720	0.017	311	247
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	10	30.9	25.6	54	12.3	473	95.2	55.1	57	38.6	26.7	10	84.5	109
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	9	47.4	97.4	261	57.1	178	274	203	186	74.1	65.3	9	245	245
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	67.1	147	437	579	687	3020	959	541	471	396	683	15	481	399
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09														
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	0.591	0.912	7.28	8.1	7.73	19.3	14.3	6.82	3.56	6.18	12.8	0.118	2.62	2.42
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	109	126	93.2	101	95.5	93.4	92.4	98.9	95.9	95.9	96.9	94.6	96.5	96.3
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	106	123	88.3	96	90.9	87.7	87.1	98	91.7	89.8	92.1	91.3	93.1	94.4
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	103	121	86.9	94.7	91.4	87.8	87.6	94.2	89.6	87	90.8	89.7	93.2	92.3
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	93.7	114	90.6	94.1	92.5	92.6	92.8	96.7	91.7	87.5	95.3	86.3	95.8	97.2
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	91.2	119	95.8	103	100	95.9	97.7	93.5	91.6	93	96.7	90.8	97.7	102
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	5.83	31.9	116	85.3	88.7	104	349	38.3	38.1	47.6	72.4	9.53	148	379
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	16.5	51.7	122	90.4	59.6	74.1	117	44.1	43	42.8	94.9	1.53	101	167
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00														
Metals - (Solid)																									
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			33100	40700	156000	163000	162000	219000	213000	130000	50700	74900	37400	370000	24400	39600
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			260	1020	14900	5450	26900	22500	24900	14200	2990	3680	2860	12000	638	1310
Metals - (Liquid)																									
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			5570	50600	184000	95600	198000	217000	206000	171000	86100	91800	150000	4140	12400	17100
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			10400	9820	4510	14300	20500	19400	1870	17700	25400	14900	29500	520	3970	3720
Phenols																									
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01	0.01	0.01	0.01	0.01	0.01	0.0107	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01	0.0146	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																									
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	-	-	-	0.107	-	0.004	0.004	0.147	0.144	0.0679	0.409	0.177	0.487	0.367
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	8.14	7.93	11.3	10.8	12.7	12.6	12.5	11.5	10.3	10.5	10.7	9.89	8.33	8.08
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33	-	-	-	-	-	-	-	-	5490	-	22900	788	-	-
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	-	-	-	0.172	-	0.26	0.195	0.34	-	0.131	-	-	0.0923	0.0946
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	-	-	-	0.516	-	0.78	0.585	1.02	-	0.393	-	-	0.277	0.284
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	-	-	-	0.303	-	0.348	0.286	0.549	0.549	0.246	2.29	0.0788	0.195	0.176
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	52.3	12	12	12	12	12	12	12	12	12	12	12	12	12
Asbestos																									
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	TM048	No units		1371	0	0				0.00		-	-	-	23/01/2018	-	23/01/2018	-	23/01/2018	06/10/2017	23/01/2018	-	06/10/2017	04/01/2018	03/01/2018
Analysed By	TM048	No units		1371	0	0				0.00		-	-	-	Paul Poynton	-	Paul Poynton	-	Paul Poynton	Neville Mann	Christian Hallam	-	Neville Mann	Marcin Magdziarek	Renata Bozhkov
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	TM304	No units		1002	0	0				0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Comments	TM048	No units		1371	0	0			0	0.00		-	-	-	0	-	0	-	0	0	0	-	0	0	0
Volatile Organic Compounds (VOCs)																									
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		-	-	0.13	0.13	0.13	0.13	0.0199	0.13	-	0.13	-	-	0.13	0.13
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subcontracted: Inorganics																									
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

												Sample ID	40AF28	40AF28	40AF28	40AF28	40AF28V	40AG28	40AG28	40AH28	40AI28	40AI28	40AI28	40AI28	40AJ28	40AJ28	40AK28	40AK28	40ATP01	40ATP01	40ATP01	40ATP01
												Depth	0.500.50	1.001.00	1.501.50	2.002.00	2.602.60	0.500.50	0.900.90	0.500.50	0.500.50	1.001.00	1.501.50	2.202.20	0.700.70	1.201.20	0.700.70	1.101.10	0.500.50	1.001.00	1.501.50	3.003.00
												Sampled Date	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**																					
Carbon																																
Soil Organic Matter (SOM)	TM132	%	0.35	430	429	0	0.35	81	7		0.00	73.4	9.48	48.4	29	6.36	5.14	6.86	7.55	7.33	2.95	11.4	35.9	2.59	2.67	7.79	4.83	3.79	5.34	12	3.91	10.4
Metals (Solids)																																
Arsenic	TM181	mg/kg	<0.6	430	430	329	0.60	276	12	6.74	76.51	2.08	2.47	17.6	20	13.4	8.28	8.8	13	10.1	6	16.8	6.7	20.7	4.07	7.51	21.2	17.9	3.98	8.94	5.63	6.6
Cadmium	TM181	mg/kg	<0.02	430	430	341	0.02	9	1	0.19	79.30	0.112	0.401	1.89	1.62	0.499	0.768	2.08	3.87	1.2	1	0.966	0.374	0.689	0.326	0.811	0.849	0.961	0.21	0.243	0.23	0.978
Chromium	TM181	mg/kg	<0.9	430	430	293	0.90	876	73	25.08	68.14	5.44	62.5	9	9	26.1	35.3	10.8	24.5	15.8	454	76.9	166	109	50.3	74.5	46.5	121	5.66	11.2	6.66	160
Copper	TM181	mg/kg	<1.4	430	430	430	1.40	318	27	1.20	100.00	4.9	5.63	30.3	39.6	19.1	23.6	22.4	46.7	22.8	17.9	26.6	21.5	24.6	12.4	40.9	17.8	43.2	6.75	42.6	18	18.2
Lead	TM181	mg/kg	<0.7	430	430	186	0.70	787	61	41.85	43.26	13.4	23.8	125	144	38.7	70.8	153	363	202	51.4	62.5	30.1	73.8	23.2	144	130	24.2	21.9	31.3	21.8	104
Mercury	TM181	mg/kg	<0.14	430	430	84	0.14	14	0	0.35	19.53	0.14	0.14	1.4	1.4	0.14	0.14	0.14	0.396	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.02
Nickel	TM181	mg/kg	<0.2	430	430	112	0.76	169	23	30.61	26.05	4.25	9.87	25.1	37.6	29.7	17.4	14.4	28.4	15.6	9.9	24.7	12.2	19.7	9.35	33.9	26	28.7	4.23	26.8	19.4	9.78
Selenium	TM181	mg/kg	<1	430	430	257	1.00	40	4	1.87	59.77	2.13	4.07	10	10	1.26	3.53	2.35	1.1	2.41	13.3	10	5.7	5.71	4.46	2.73	5.26	3.93	1	1.88	1	3.86
Vanadium	TM181	mg/kg	<0.2	430	430	430	6.56	1790	121	4.27	100.00	20.8	92.7	60.5	86.5	45.7	140	58.3	72.6	40.4	1120	331	589	193	175	345	156	130	6.56	29.9	24.2	173
Zinc	TM181	mg/kg	<1.9	430	430	58	9.10	3690	248	365.79	13.49	49.8	113	239	250	130	432	1170	3260	888	141	162	146	1060	395	825	1240	129	65.7	71.5	74.3	436
TPH Criteria Working Group (TPH CWG)																																
Benzene	TM089	mg/kg	<0.01	15	15	15	0.04	0	0	0.01	100.00																					
Toluene	TM089	mg/kg	<0.002	15	15	0	0.01	0	0	0.32	0.00																					
Ethylbenzene	TM089	mg/kg	<0.003	15	15	0	0.01	0	0	0.21	0.00																					
sum of detected mpo xylene by GC	TM089	µg/kg	9	15	15	0	0.01	0	0	0.19	0.00																					
Aliphatics >C5-C6	TM089	mg/kg	<0.01	430	430	0	0.01	0	0	311.47	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C6-C8	TM089	mg/kg	<0.01	430	430	0	0.01	4	0	1134.98	0.00	0.04	0.0424	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0746	0.0938	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0516
Aliphatics >C8-C10	TM089	mg/kg	<0.01	430	430	0	0.01	26	0	7844.34	0.00	0.04	0.0532	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.105	0.04	0.04	0.04	0.04	0.04	0.04	0.0896	0.04	1
Aliphatics >C10-C12	TM089	mg/kg	<0.01	430	430	0	0.01	29	0	60406.47	0.00	0.0844	0.253	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0531	0.106	0.04	0.04	0.04	0.04	0.0672	0.04	0.244	0.04	29.2
Aliphatics >C12-C16	TM173	mg/kg	<0.1	430	430	0	0.10	1330	14	1198346.52	0.00	10.2	3.37	0.595	0.1	0.1	1.59	1.16	2.17	1.92	2.84	1.28	0.1	1.19	0.1	1.47	0.909	11.2	0.216	1.34	2.57	198
Aliphatics >C16-C21	TM173	mg/kg	<0.1	430	430	0	0.10	1100	24	150639254.34	0.00	41.8	15.3	8.52	4.97	0.1	8.82	7.37	24.1	21.3	21.5	5.91	2.94	9.22	5.5	15.2	8.83	33.1	1.88	3.64	9.28	64.3
Aliphatics >C21-C35	TM173	mg/kg	<0.1	430	430	0	0.10	3580	104	150639254.34	0.00	747	201	24.7	52.6	8.05	105	86.5	247	474	253	43.6	47.2	97.7	72.2	198	145	195	41.5	22.9	45.2	269
Aliphatics >C35-C44	TM173	mg/kg	<0.1	430	430	0	0.10	1380	36	150639254.34	0.00	836	224	6.09	30.7	0.1	46.1	33.5	82.5	244	109	18.8	20.6	25.4	17.4	69.1	31	227	37.3	18.4	26.4	65.9
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	430	430	0	0.01	1	0	19.81	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0417
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	430	430	0	0.01	0	0	451.11	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	430	430	0	0.01	17	0	380.12	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0554	0.085	0.04	0.04	0.04	0.04	0.04	0.04	0.0739	0.04	0.711
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	430	430	0	0.01	19	0	600.15	0.00	0.0563	0.168	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0713	0.04	0.04	0.04	0.04	0.0448	0.04	0.162	0.04	19.4
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	430	430	0	0.10	507	5	1196.62	0.00	5.5	2.54	0.2	0.626	3.83	0.709	0.1	2.59	1.8	1.03	1.75	0.1	0.841	0.1	1.66	0.1	4.96	0.616	4.48	2.6	131
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	430	430	0	0.10	1360	15	3783.48	0.00	29.6	11.4	2.45	2.56	7.62	3.5	2.77	15.2	15.7	6.75	2.9	2.1	5.67	3.3	26.6	2.83	15.3	2.19	13.4	7.7	39.5
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	430	430	0	0.10	4070	85	30052.88	0.00	1150	243	12.3	56.4	35.8	58.7	34.4	88.3	289	124	31.3	33.8	54.1	40.2	184	27.6	193	52.1	37.8	46.6	116
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	430	430	0	0.10	1250	38	30052.88	0.00	1120	342	6.48	63.6	4.94	47.8	25.3	46.3	292	121	23	26.5	21.5	16.4	59.8	11.9	265	50.3	27.2	33	61.4
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	430	430	0	0.10	532	16	30052.88	0.00	506	165	2.36	27.6	0.1	19.7	10.7	17.8	121	52.1	9.59	11.1	7.84	6.04	22.5	4.44	128	22.7	11.7	13.9	24.2
Polyaromatic Hydrocarbons (PAHs)																																
Acenaphthylene	TM218	µg/kg	<0.012	430	430	62	12.00	1620	30	44.45	14.42	120	60	12	60	12	15.8	12	80	120	12	120	12	12	12	56	12	60	68	12	60	165
Acenaphthene	TM218	µg/kg	<0.008	430	430	47	8.00	6190	79	79.05	10.93	629	299	8	40	8	48.8	32.1	889	80	10.6	80	8	45.9	10.1	60	20.8	66.5	60.2	119	71.2	92.6
Anthracene	TM218	µg/kg	<0.016	430	430	94	16.00	3990	103	90.76	21.86	160	80	16	80	16	50.2	39.4	187	160	23.1	160	16	46.4	28	156	40.8	80	92.7	43.5	80	139
Benz(a)anthracene	TM218	µg/kg	<0.014	430	430	11	0.03	15900	334	1613.93	2.56	224	122	30.2	70	33.7	472	174	839	644	320	233	88.2	443	373	1660	284	113	100	31.3	70	296
Benzo(a)pyrene	TM218	µg/kg	<0.015	430	430	197	15.00	10500	309	91.65	45.81	496	155	21.7	75	34	524	180	674	595	157	199	90.4	470	334	1690	269	120	91.5	15	75	337
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	430	430	429	3.00	27000	476	9.09	99.77	808	253	42.5	75	57.5	948	374	1320	1100	734	386	215	924	706	3190	585	217	129	36.7	107	548
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	430	430	429	0.03	8650	173	13.44	99.77	256	77.7	16	70	14	309	125	474	330	215	140	65.9	260	204	961	187	70	70	14	70	210
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	430	429	254	<0.024	9800	253	35.35	59.07	407	153	24	120	24	505	201	565	487	312	0.24	93.7	458	328	1320	276	120	120	24	120	382
Chrysene	TM218	µg/kg	<0.01	430	430	12	0.02	19400	380	1651.53	2.79	519	161	34.7	50	39.5	580	218	795	843	511	314	145	759	569	2760	417	146	93.8	60.1	67.2	396
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	430	430	1	0.02	3260	51	2227.85	0.23	0.23	0.115	0.023	0.115	0.023	122	44.9	135	0.23	70.6	0.23	0.023	113	62.5	326	61.5	0.115	0.115	0.023	0.115	0.115
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	430	430	208	0.02	10100	225	67.35	48.37	378	134	0.018	90	0.018	449	167	550	443	287	180	88.1	399	293	1130	257	90	90	0.018	90	323
Fluoranthene	TM218	µg/kg	<0.017	430	430	345	0.02	17900	545	17.67	80.23	522	300	60.6	0.085	84.3	463	294	1610	941	454	530	128	385	387	1400	374	264	301	96.1	131	738
Fluorene	TM218	µg/kg	<0.01	430	430	52	0.02	9160	89	72.09	12.09	180	93.8	10	50	10	18.1	14.7	127	0.1	10	0.1	20.8	34.1	10	72.7	17.8	50	84.7	102	65.8	162
Naphthalene	TM218	µg/kg	<0.009	430	430	114	0.02	38100	206	72.28	26.51	669	359	13.7	45	9	37.3	61.7	113	90	22.8	90	25.8	16.3	9	172	19.4	154	249	318	247	5540
Phenanthrene	TM218	µg/kg	<0.015	430	430	269	3.00	11600	385	72.09	62.56	473	287	70.5	75	27.1	218	163	818	326	132	215	106	201	99.2	613	232	238	412	484	263	535
Pyrene	TM218	µg/kg	15	347	347	0	0.02	18	1	203.18	0.00																					
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	430	430	0	0.12	169	4		0.00	6.4	2.77	0.347	0.59	0.352	5.33	2.41	10.8	6.67	3.85	2.38	1.21	5.12	3.9	17.7	3.42	1.53	1.94	1.37	1.15	10.6
Naphthalene-d8 % recovery**	TM218	%		430	430	0	32.20	120	92		0.00	78.6	88.4	87.2	88.4	88.5	91.1	93.4	92.6	75.1	92.2	77.9	78.4	80.1	80.4	82	79.9	94.2	104	79.3	88	97.4
Acenaphthene-d10 % recovery**	TM218	%		430	430	0	31.10	127	91		0.00	88.8	85.2	87.9	84.6	93.6	94.5	93.5	93.5	82.6	102	84.8	82.4	83.7	84.4	86.2	83.3	91.9	102	84.3	84.9	90.3
Phenanthrene-d10 % recovery**	TM218	%		430	430	0	29.50	121	94		0.00	82.1	98.9	77.8	77.4	97.1	101	94.3	96.6	81.7	112	74.9	82	83.3	88.2	87.4	85.2	92.6	98.9	90.4	84.5	93.3
Chrysene-d12 % recovery**	TM218	%		430	430	0	25.30	116	87		0.00	77	89.7	45.2	73.1	101	96.7	76.6	79	78.7	98.4	74.2	83.4	83.9	91.1	90.1	83.6	90.7	101	82.8	83.6	78.1
Perylene-d12 % recovery**	TM218	%		430	430	0	16.60	125	86		0.00	73.2	87.5	29.6	71.1	98.7	95	72.3	70	74.7	93	72.8	84.4	85.8	90.7	89.6	77.2	90.2	109	71.3	77.4	66
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	430	430	0	0.10	6880	178		0.00	1630	444	39.9	88.3	8.05	161	129	356	741	387	69.6	70.8	133	95.1	283	186	467	80.9	46.3	83.4	598
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	430	430	0	0.10	7180	143		0.00	2310	599	21.4	123	52.2	111	62.5	152	598	253	59	62.4	82.1	59.9	273	42.4	478	105	82.9	89.9	347
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	347	347	0	0.10	14100	309		0.00																					
Metals - (Solid)																																
Iron	TM224	mg/kg	<1000	430	415	0	<1000	443000	56863			13100	52100	312000	178000	33400	49900	67700	154000	83600	141000	128000	55000	97100	46500	93000	69600	208000	8480	16700	19700	121000
Manganese	TM224	mg/kg	<0.13	430	415	0	<0.13	140000	5731			1710	7220	4750	3410	729	4150	3610	4790	4180	24800	8150	10300	10800	6340	5630	7670	14800	793	326	496	9280
Metals - (Liquid)																																
Calcium	TM224	mg/kg	<21	429	176	0	<21	284000	136192			216000	-	29500	-	-	126000	-	125000	168000	-	124000	-	183000	-	135000	-	149000	212000	9810	-	161000
Magnesium	TM224	mg/kg	<8	429	176	0	<8	106000	19369			34300	-	5890	-	-	17300	-	14600	19200	-	8440	-	31700	-	14600	-	36900	106000	3070	-	15000
Phenols																																
Phenol	TM062 (S)	mg/kg	<0.01	430	430	430	0.01	1	0	0.00	100.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	TM062 (S)	mg/kg	<0.01	430	430	430	0.01	0	0	0.00	100.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	430	430	430	0.02	0	0	0.00	100.00	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	430	430	430	0.04	1	0	0.00	100.00	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																																
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	83	32	32	<0.004	2	0	0.00	38.55	1.91	-	0.14	-	-	0.878	-	0.283	0.27	-	0.216	-	1.13	-	0.618	-	0.296	0.0664	0.0578	-	0.115
pH	TM133	pH Units	<1	83	68	68	<1	12	10	0.00	81.93	9.45	10	9.21	9.33	7.39	10.3	11	11.1	11.2	11.8	11.6	11.3	10.9	11	10.3	10.9	11.7	9.79	8.49	8.26	9.24
Sulphate, Total	TM221	mg/kg	<48	83	0	0	<48	<48		0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphur, Total	TM132	%	<0.02	83	32	32	<0.02	1	0	0.00	38.55	1.26	-	0.191	-	-	0.381	-	0.199	0.419	-	0.38	-	0.465	-	0.36	-	0.258	0.164	0.16	-	0.279
Sulphate, Total potential	TM132	%	<0.06	83	32	32	<0.06	4	1	0.00	38.55	3.78	-	0.573	-	-	1.14	-	0.597	1.26	-	1.14	-	1.4	-	1.08	-	0.774	0.492	0.48	-	0.837
Sulphate, acid soluble (total)	TM221	%	<0.02	83	32	32	<0.02	2	0	0.00	38.55	2.16	-	0.0478	-	-	0.595	-	0.407	1.03	-	1.03	-	0.891	-	0.647	-	0.323	0.184	0.0935	-	0.235
Cyanide, Total	TM153	mg/kg	<1	83	83	83	1.00	197	5	0.00	100.00	1	1	1	1.47	1	1	23	2.98	2.74	4.62	1.51	2.01	1	1	1	1	1	1	2.26	1	26.5
Exchangeable Ammonia as N	TM024	mg/kg	<12	83	83	83	12.00	458	78	0.00	100.00	12	12	12	12	122	12	12	12	12	12	12	12	12	12	12	12	12	12	73.7	18.4	29
Asbestos																																
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	430	22	22	<0.001	0	0	0.00		-	-	-	-	-	-	-	0.001	0.001	-	-	-	-	-	0.001	-	-	-	-	-	0.001
Date of Analysis	TM048	No units		430	0	0				0.00		05/06/2018	-	05/06/2018	-	-	05/06/2018	-	05/06/2018	05/06/2018	-	05/06/2018	-	05/06/2018	-	05/06/2018	-	31/05/2018	31/05/2018	31/05/2018	-	31/05/2018
Analysed By	TM048	No units		430	0	0				0.00		Marcin Magdziarek	-	Marcin Magdziarek	-	-	Andrzej Ferfecki	-	Marcin Magdziarek	Lucy Caroe	-	Andrzej Ferfecki	-	Marcin Magdziarek	-	Lucy Caroe	-	Andrzej Ferfecki	Andrzej Ferfecki	James Richards	-	Andrzej Ferfecki
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	430	22	22	<0.001	0	0	0.00		-	-	-	-	-	-	-	0.001	0.001	-	-	-	-	-	0.001	-	-	-	-	-	0.001
Additional Asbestos Components (Using TM048)	TM304	No units		83	0	0				0.00		-	-	-	-	-	-	-	None	None	-	-	-	-	-	None	-	-	-	-	-	None
Analysts Comments	TM304	No units		83	0	0				0.00		-	-	-	-	-	-	-	N/C	N/C	-	-	-	-	-	N/C	-	-	-	-	-	N/C
Asbestos Quantification - Total - %	TM304	%	<0.001	430	22	22	<0.001	0	0	0.00		-	-	-	-	-	-	-	0.001	0.001	-	-	-	-	-	0.001	-	-	-	-	-	0.0013
Chrysotile (White) Asbestos	TM048	No units		430	0	0				0.00		Not Detected	-	Not Detected	-	-	Not Detected	-	Detected	Detected	-	Not Detected	-	Not Detected	-	Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected
Amosite (Brown) Asbestos	TM048	No units		430	0	0				0.00		Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Detected	-	Not Detected	Not Detected	Not Detected	-	Detected
Crocidolite (Blue) Asbestos	TM048	No units		430	0	0				0.00		Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected
Fibrous Anthophyllite	TM048	No units		430	0	0				0.00		Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected
Fibrous Tremolite	TM048	No units		430	0	0				0.00		Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected
Fibrous Actinolite	TM048	No units		430	0	0				0.00		Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected
Non-Asbestos Fibre	TM048	No units		430	0	0				0.00		Not Detected	-	Not Detected	-	-	Trace	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Detected	Trace	Not Detected	-	Detected
Comments	TM048	No units		430	0	0			0	0.00		0	-	0	-	-	0	-	Bundle of fibres in soil	Soil containing ACM debris	-	0	-	0	-	Fibre bundles in soil	-	0	0	0	-	loose fibres in soil
Volatile Organic Compounds (VOCs)																																
Dibromofluoromethane**	TM116	%		430	415	415		138	107	0.00		112	110	108	106	105	106	115	111	118	108	108	109	114	111	108	109	104	102	98.7	104	104
Toluene-d8**	TM116	%		430	415	415		106	97	0.00		91.8	95.8	99.9	98.5	99.1	98.8	98.2	97.6	95.9	96.7	97.2	98.3	98.8	99.8	97.3	98.1	97.7	101	100	101	99.9
4-Bromofluorobenzene**	TM116	%		430	415	415		114	92	0.00		86.8	93.5	95.7	96.8	94.1	98.5	98.1	91.9	96.9	99.3	92.3	96.2	97.7	101	93.1	98.9	95.1	96.9	87.9	96.6	92.9
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	430	415	415	<0.1	2	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	TM116	mg/kg	<0.09	430	415	415	<0.09	2	0	0.00		0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	TM116	mg/kg	<0.07	430	415	415	<0.07	1	0	0.00		0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	TM116	mg/kg	<0.04	430	415	415	<0.04	1	0	0.00		0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	TM116	mg/kg	<0.1	430	415	415	<0.1	2	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	TM116	mg/kg	<0.1	430	415	415	<0.1	2	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	TM116	mg/kg	<0.13	430	415	415	<0.13	37	0	0.00		0.615	0.539	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.144	0.13	0.149	0.13	0.15	0.13	0.912
Sum of BTEX	TM116	mg/kg	<0.4	430	415	415	<0.4	8	0	0.00		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics																																
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	430	40	40	<0.5	6	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	430	40	40	<0.5	3	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	430	40	40	<0.5	6	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	430	40	40	<0.5	1	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	SUB	%	<0.5	430	40	40	<0.5	3	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	SUB	%	<0.5	430	40	40	<0.5	58	17	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	SUB	%	<0.5	430	40	40	<0.5	60	18	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

40ATP02	40ATP02	40ATP02	40ATP02	40ATP03	40ATP03	40ATP03	40ATP04	40ATP04	40ATP04
0.500.50	1.001.00	2.002.00	3.003.00	0.500.50	1.001.00	2.202.20	0.500.50	1.001.00	1.501.50
23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018
6.53	2.17	4.19	1.69	1.41	13.4	12	14.5	1.56	6.72
8.78	5.28	10	4.98	9.06	4.13	26	26.3	5.49	6.11
0.348	0.158	0.298	0.442	0.508	0.306	1.92	9.23	2.08	0.319
8.93	10.1	9.33	104	43.8	14.9	103	876	96.7	7.64
23.2	52.6	30	13.7	20.6	12.4	133	131	25.3	27.3
30.8	17.3	21.6	14.7	22.4	19.2	96	351	90	30.8
0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.07
18.9	12.9	27.9	6.76	18.9	10.7	30.9	35.2	11.8	18.9
1.2	1	1.04	5.98	3.55	1.7	2.27	10.5	1.5	1
30.1	21.4	29.7	184	77.1	45.3	67.8	652	68.3	17
100	49	72.9	79.9	146	60.2	326	1950	563	66.8
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.078	0.0661	0.0677	0.04	0.04	0.04	0.0426	0.0644	0.04	0.0762
0.636	1.06	0.603	0.04	0.04	0.04	0.04	0.04	0.04	0.287
12.1	12.6	4.74	0.04	0.04	0.04	0.04	0.04	0.04	1.67
47	0.1	4.51	1.23	0.424	0.614	5.45	3.11	0.1	4.29
26.3	0.1	7.12	5.87	1.41	4.66	9.46	8.02	0.1	8.45
55.1	0.1	21.5	62.3	0.1	38.8	40.2	26.9	0.1	27.1
8.17	0.1	1.38	15	0.1	7.78	15.7	2.93	0.1	3.61
0.163	0.211	0.238	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.0644	0.047	0.0444	0.04	0.04	0.04	0.04	0.0441	0.04	0.04
0.485	0.803	0.496	0.04	0.04	0.04	0.04	0.0746	0.0414	0.196
8.1	8.41	3.16	0.04	0.04	0.04	0.04	0.04	0.04	1.11
35.4	2.24	14.3	0.1	0.77	1.21	9.39	7.49	0.1	2.5
18.1	0.1	5.38	3.11	2.12	4.3	16.6	22.3	1.34	5.85
39.7	0.1	17.3	20.2	6.94	21.3	60.4	68.8	9.86	18.3
15.8	0.1	3.36	8.37	1.46	7.17	31.6	18.9	2.39	7.66
6.09	0.1	0.831	2.8	0.449	2.19	13.3	6.49	0.1	3
71.2	18.6	32.8	12	12	12	15.6	77.1	21.4	12
98.9	15.5	30.4	9.02	8	8	37.3	95.8	16.2	8
47.4	16	16	21.5	16	19.9	112	326	42.1	16
81.6	14	44	150	14	66.1	381	744	127	18.6
89.4	15	39.6	146	15	49.8	314	555	112	15
148	15	58.8	296	31.6	111	483	861	149	37.5
49.7	14	21.2	83.2	14	39	162	349	66.9	14
92.1	24	29	159	24	54.1	250	359	89.2	24
122	16.4	58.6	166	19.4	86.8	322	842	126	21
0.023	0.023	0.023	27.1	0.023	0.023	80.8	118	0.023	0.023
86.7	0.018	27.5	99.5	0.018	46.1	206	385	85.2	0.018
208	33.8	92.1	280	28.3	159	708	1590	260	25.9
100	16.5	33.1	10	10	10	63.5	227	27.8	10
892	2270	1360	18.3	30.3	48.5	179	496	24.3	33.4
162	35.7	61.2	127	30.8	158	445	1350	135	39.9
2.42	2.43	1.97	1.85	0.167	0.986	4.29	9.44	1.5	0.199
87	88	88.5	103	94.9	81.9	101	96.3	106	95.3
89.1	87.4	92.2	97.4	90.3	86.8	97.9	95.3	101	93
95.3	93.8	99.2	95	89.5	92.1	96.7	99.9	102	88.7
79.4	78.2	88.1	89.6	83.6	72	95.9	92.5	96.1	86.8
62.3	53.2	74.1	83.8	73.8	58	86.9	83.8	89	88.9
137	0.1	34.5	84.4	1.84	51.9	70.8	40.9	0.1	43.4
109	2.24	40.4	31.7	11.3	34	118	118	13.6	34.3
30200	9900	24400	70300	25900	24100	25900	131000	21800	15300
1300	484	907	13200	4090	2160	2350	21700	3050	208
-	64500	-	259000	-	144000	165000	-	277000	17000
-	3910	-	54200	-	47700	18700	-	45200	1700
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
-	0.0534	-	0.116	-	0.15	0.135	-	0.0718	0.221
10.1	9.28	8.84	11.6	8.88	10.8	10	10.2	9.49	8.24
-	-	-	-	-	-	-	-	-	-
-	0.202	-	0.29	-	0.288	0.405	-	0.155	0.177
-	0.606	-	0.87	-	0.864	1.22	-	0.465	0.531
-	0.211	-	0.438	-	0.404	0.275	-	0.134	0.151
10.8	33.3	23.7	1	1	1	1.96	1.31	1.56	1
87.9	191	293	12	12	12	12	12	12	12
-	-	-	0.001	-	-	0.0011	-	-	-
-	31/05/2018	-	31/05/2018	-	31/05/2018	31/05/2018	-	31/05/2018	31/05/2018
-	James Richards	-	James Richards	-	James Richards	Barbara Urbanek-Walsh	-	Barbara Urbanek-Walsh	Renata Bozhkov
-	-	-	0.0014	-	-	0.001	-	-	-
-	-	-	PCOM showed signs of Amphibole fibres.	-	-	None	-	-	-
-	-	-	N/C	-	-	N/C	-	-	-
-	-	-	0.0016	-	-	0.0011	-	-	-
-	Not Detected	-	Detected	-	Not Detected	Detected	-	Not Detected	Not Detected
-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	0	-	Fibre bundles in soil	-	0	Loose fibres in soil.	-	0	0
101	102	105	103	103	99.1	99	79	99.9	108
98.6	99.5	99.4	99.2	100	98.5	98.9	96.7	101	100
90.2	95.7	92.1	94.9	97	85.9	88.9	80	97.5	95
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.166	0.265	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	2.5	2.49	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

40ATP05	40ATP06	40ATP06	40ATP07	40ATP07	40ATP07	40ATP08	40ATP08	40ATP08
0.500.50	0.500.50	0.900.90	1.001.00	1.501.50	2.002.00	0.500.50	1.001.00	1.701.70
23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018
5.55	7.26	4.41	51.4	8.69	22.1	10.4	4.71	3.57
11.4	12.3	5.53	6.59	10.6	11.5	6.96	6.14	8.11
0.377	0.02	0.221	0.225	0.269	1.57	1.03	0.615	0.711
14.1	19.8	142	24.1	18.2	14	340	87.1	33.1
23.1	28.3	15.9	59.3	13.7	26.3	22.1	17.2	26.2
19.6	19.6	27.1	26.2	20.3	285	110	70.6	111
0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
24.9	34.4	11.6	33.8	16.4	25.5	17.5	20.3	15.3
1	1.17	5.66	2.16	1.47	2.38	6.32	4.49	3.61
32.2	26.4	222	67.1	52	106	331	184	89.1
72.4	69.3	193	92.2	74.7	1260	468	268	488
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.0513	0.0921	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.122	1.21	0.04	0.04	0.04	0.0406	0.04	0.04	0.04
0.166	13.4	0.04	0.04	0.04	0.04	0.04	0.04	0.04
342	1330	2.14	1.53	0.868	3.54	3.76	1.58	1.59
313	940	17.2	14.9	4.68	40.9	15.7	14.5	14.6
282	1230	262	45.4	19.1	182	88	142	175
44.5	175	127	15.6	5.23	56.3	49.3	41	44.9
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.0923	0.809	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.111	8.91	0.04	0.04	0.04	0.04	0.04	0.04	0.04
62	239	0.719	0.1	0.415	2.62	0.979	0.768	1.46
78.3	276	6.66	3.69	2.36	19.2	6.63	6.66	12.1
98.6	315	219	57.9	16.6	125	67.8	89.7	119
28.2	72.1	226	61.3	8.73	95.1	68.2	54.2	44.2
8.14	15.8	99	27	3.53	42.4	32.7	23.3	16.9
12	146	60	60	12	60	208	60	73.8
8	294	40	40	8	40	5530	40	437
45.2	193	80	80	16	80	1700	80	2070
21.5	14	321	70	31.9	380	6080	389	15900
18.6	15	422	75	35.8	405	6210	387	10500
34.7	18.1	641	75	62.9	888	10600	660	27000
14	14	242	70	17.1	298	3670	237	8650
24	24	360	120	46.7	465	4610	439	9800
28.9	15.3	386	50	39.8	566	7430	427	19400
0.023	0.023	0.115	0.115	0.023	0.115	1500	0.115	3260
0.018	0.018	370	90	35.8	455	3890	341	10100
47.1	32	413	0.085	41.6	512	8220	390	17900
53.7	300	50	50	10	50	9160	50	323
39.3	186	45	45	26.2	112	180	47.2	99.9
126	171	152	75	58.8	280	9380	157	10200
0.46	1.4	3.69	0.59	0.429	4.89	85.2	3.87	169
91.1	78.4	93.6	69	94.7	79	94.2	98.4	92.4
94.2	127	96.6	76.7	94.8	81.8	95.4	93.7	72.8
92.8	90.3	92.9	62.5	95.4	74.8	97.7	92.3	92.8
82.6	78.1	91.5	54.9	92.9	61.7	103	114	96.3
72.5	70.7	92.3	43.5	92.2	62	104	88.9	103
981	3670	408	77.5	29.9	283	157	199	236
267	902	452	123	28.1	242	144	151	177
21700	21000	84200	24700	23000	125000	85200	53400	88800
598	475	12400	2310	2000	4860	14400	9650	4240
49000	-	191000	-	68700	-	186000	-	143000
2860	-	23700	-	11400	-	13200	-	26000
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
0.0951	-	0.135	-	0.0606	-	0.091	-	0.207
9.43	8.86	8.97	8.18	9.54	10.1	10.2	10.7	10
-	-	-	-	-	-	-	-	-
0.27	-	0.263	-	0.0945	-	0.217	-	0.247
0.81	-	0.789	-	0.284	-	0.651	-	0.741
0.349	-	0.24	-	0.0806	-	0.202	-	0.209
1	1	1	1	1	197	9.23	1	1.34
12	39.9	12	12	12	12	12	12	12
-	-	0.001	-	-	-	0.0045	-	0.0033
31/05/2018	-	04/06/2018	-	04/06/2018	-	04/06/2018	-	04/06/2018
Renata Bozhkov	-	Lucy Caroe	-	Lucy Caroe	-	Marcin Magdziarek	-	Marcin Magdziarek
-	-	0.001	-	-	-	0.001	-	0.001
-	-	None	-	-	-	None	-	None
-	-	N/A	-	-	-	N/A	-	N/C
-	-	0.001	-	-	-	0.0045	-	0.0033
Not Detected	-	Detected	-	Not Detected	-	Not Detected	-	Detected
Not Detected	-	Not Detected	-	Not Detected	-	Detected	-	Not Detected
Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
0	-	Fibre bundles in soil	-	0	-	Loose fibres in soil	-	Bundle of fibres in soil
102	104	105	116	104	106	104	106	106
98.6	94.8	95.7	97	97.4	94.5	96.9	97.4	97
90.4	84.2	90.3	81.3	93.3	82.7	92.1	90.1	90.7
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-

40ATP09	40ATP09	40ATP09	40ATP10	40ATP11	40ATP11	40ATP11	40ATP12	40ATP12	40ATP14
1.001.00	1.401.40	1.601.60	0.300.30	0.500.50	1.001.00	1.501.50	0.500.50	0.800.80	0.500.50
23/05/2018	23/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018
6.93	7.95	3.88	4.47	3.45	3.22	0.909	2.98	1.34	4.88
7.58	10.3	12.6	5.86	9.89	9.43	8.09	4.81	13.8	11.1
0.818	2.39	0.412	0.178	0.179	0.201	0.177	0.199	0.646	0.403
38.7	9	354	0.9	283	171	39.1	46.4	21.3	323
32.5	15.1	34.1	39.9	150	26.7	8.76	17.4	19	25.4
64.8	37	40.4	28.8	29	27.8	13	15.2	30.2	35
0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
19.2	38.2	24.1	20.5	16.8	15	10.5	12.7	15.3	23.6
3.01	10	5.06	2.87	4.59	5	2.45	4.53	1.09	4.91
113	67.8	266	73.2	453	345	59.4	84.1	30.9	445
763	270	358	109	120	144	43	84.4	114	108
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.0943	0.04	0.04	0.04	0.04
3.89	4.91	1.82	2.54	3.16	4.72	2.15	2.7	1.3	0.89
25.1	34.6	6.55	7.48	4.55	6.36	4.76	13.5	4.17	1.34
203	200	56.8	42	13.3	7.1	24.2	138	29.2	14.6
69.7	51.4	18.7	12.2	1.47	1.02	7.36	38.3	18.6	7.62
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.0633	0.04	0.04	0.04	0.04
5.83	3.7	0.601	0.683	1.14	1.82	0.1	0.824	1.1	0.1
34.4	20.5	3.2	3.84	3.28	4.18	0.1	5.53	2.75	2.44
216	108	42	31	14.7	12.1	3.64	75.4	26.7	20.3
85.2	34	22.6	17.7	4.13	4.15	0.1	44.6	23.5	12.2
37.1	12.4	8.96	7.18	1.32	1.52	0.1	18	10.1	5.16
14.7	12	12	12	12	12	12	86.8	12	12
70.3	57.7	8	32.3	15.4	13.1	8	14.1	20.2	8
119	67.3	21.5	49.4	18.8	16	16	548	16	19.1
1380	584	139	636	60.8	37	36.7	1150	35.2	125
1570	567	153	1020	48.6	27.6	42	735	26	98.8
2970	1130	222	1220	73.5	49	66.2	1170	45.9	181
818	333	77.9	457	25.8	14	21.1	343	14.8	47.9
1670	572	139	878	42.8	24	49.2	405	33.7	77.8
2030	821	152	662	78.7	44.3	46.9	1040	31.9	150
402	133	37.3	162	0.023	0.023	0.023	145	0.023	0.023
1460	519	144	887	38.2	21.8	44.1	425	27.2	71.7
1270	623	192	764	163	80.9	70.3	1910	85.5	131
46	34	12.7	19.6	28.8	14.8	10	91.8	13.4	10
73.9	42.2	63.1	36	42.3	24.8	16.4	29	13.6	24.5
722	360	100	290	143	76.2	41.5	851	66	113
16.4	6.65	1.62	7.89	0.901	0.454	0.497	10.3	0.486	1.16
108	98.9	99.6	99	95.4	93.2	95.1	96.1	95.4	93.4
106	94.8	96.2	95.2	91.2	96.3	92.3	97.1	92.4	98.3
108	97	95.7	95.8	91.3	99.6	93.2	96.9	93	97.2
108	97.7	94.3	94.7	86.3	99.6	90.6	100	90.7	94.5
112	98.2	95.3	96.8	84.1	99.9	92.3	100	91.2	93.2
301	291	83.9	64.3	22.5	19.2	38.5	192	53.2	24.4
341	167	68.4	53.3	23.3	22.3	3.64	126	54	35
80300	352000	53900	75800	42100	34100	21400	36400	20800	61400
4550	5430	8310	3180	8410	8070	2750	6930	994	9180
-	124000	121000	109000	-	110000	66800	-	213000	-
-	20200	28300	13800	-	18800	5130	-	12200	-
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
-	0.463	0.278	0.0929	-	0.15	0.0668	-	0.322	-
10.9	11.3	7.92	8.8	9.37	9.32	9.29	9.18	10	9.03
-	-	-	-	-	-	-	-	-	-
-	0.384	0.293	0.302	-	0.372	0.0965	-	0.134	-
-	1.15	0.879	0.906	-	1.12	0.29	-	0.402	-
-	0.579	0.241	0.299	-	0.396	0.138	-	0.315	-
3.72	1	1	1	1	1	1	1	1	1
12	12	12	12	12	12	12	12	12	12
-	-	-	0.001	-	-	-	-	-	-
-	04/06/2018	04/06/2018	04/06/2018	-	04/06/2018	04/06/2018	-	04/06/2018	-
-	Marcin Magdziarek	Andrzej Ferfecki	Marcin Magdziarek	-	Marcin Magdziarek	Renata Bozhkov	-	Andrzej Ferfecki	-
-	-	-	0.0011	-	-	-	-	-	-
-	-	-	None	-	-	-	-	-	-
-	-	-	N/C	-	-	-	-	-	-
-	-	-	0.0016	-	-	-	-	-	-
-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	Not Detected	Not Detected	Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	Not Detected	Trace	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	0	0	Loose fibres in soil	-	0	0	-	0	-
107	107	109	105	112	105	104	104	112	102
96	97.4	95.9	97.9	99.3	99.5	97.9	98.7	97.5	96.9
89.4	94.1	89.7	92	91.4	97.5	96.5	96.8	90	88.6
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

40ATP14	40ATP14	40ATP14	40ATP15	40ATP15	40ATP15	40ATP01V	40ATP02V	40ATP15	40ATP03V	40ATP04V	40ATP05V	40ATP06V	40ATP08V	40ATP10V	40ATP11V	40ATP12V	40ATP14V	40ATP15V	40AD11	40AD11	40AD12	40AD12	40AD15	40AD15	40AD15	40AD21	40AD21	40AD21	40AD21	40AD22	40AD22	40AD22	40AD22
1.001.00	1.701.70	2.502.50	0.500.50	0.700.70	1.001.00	3.603.60	4.004.00	1.201.20	2.602.60	2.102.10	0.800.80	1.201.20	3.003.00	0.500.50	2.002.00	1.101.10	3.003.00	1.301.30	0.500.50	2.602.60	0.500.50	1.001.00	0.800.80	1.301.30	2.002.00	0.500.50	1.001.00	2.002.00	3.003.00	0.400.40	0.900.90	2.002.00	2.502.50
24/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2018	24/05/2019	28/06/2018	28/06/2018	19/06/2018	19/06/2018	19/06/2018	19/06/2018	19/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018
18.4	27.1	1.43	2.57	2.93	3.52	29.3	2.34	1.76	3.36	61	11.3	1.54	4.5	2.24	6.83	1.11	2.12	8.98	2.48	1.55	1.47	1.47	2.12	5.1	7.62	8.46	1.54	3.74	1.78	4.71	7.46	1.84	4.09
20.2	25.8	8.01	9.84	10.4	9.37	11.1	5.56	10.5	9.33	5.02	20.7	12.1	10.2	12.7	14.4	6.34	7.57	13.6	8.79	17.3	7.04	7.35	276	182	6.87	2.68	11.8	8.58	36.2	24	18.2	22.6	9.27
0.586	0.543	1.77	1.32	0.456	0.381	0.0557	0.744	0.02	0.271	0.119	0.981	0.171	0.153	0.221	0.423	0.125	0.217	0.642	0.634	1.7	0.884	0.477	1.2	1.17	1.03	0.519	0.27	0.502	1.25	1.98	3.75	1.48	0.622
53.5	18.8	34.7	37.2	12.4	35.1	17.2	20.4	34.6	34.7	7.12	32.5	30	36.8	35.8	35.5	27.5	32.6	26.6	123	166	47.2	47.7	337	190	9	5.74	46.8	18.1	9	9.02	19.6	9	18.3
49.1	43.1	72.9	34	23.2	29.2	20.7	17.4	14	21.6	14.8	30.3	13.1	27.3	20.3	25.5	10.8	15.4	24	15.1	54.4	13.4	10.1	315	243	83.3	8.39	14	23.1	17.9	40.4	29	22.8	16.6
52.6	60.9	126	109	31.6	23.1	15.4	28.9	25.3	24.6	4.2	61.1	26.5	23.8	23.4	38.1	23.4	27.8	103	52.8	157	75.6	24.8	151	99.2	75.6	46.1	15.5	33.6	60.7	187	78.5	75.8	59
0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.148	0.147	1.4	0.14	1.4	0.14	1.4	1.4	2.57	1.4	1.4
24.4	33.4	12.6	17.3	16.2	33	28.8	11.9	36.1	34.7	13.7	28	37.2	37	36.8	28.2	32.7	37.3	15.3	12.9	17.6	10.2	5.86	12	13.1	18.5	6.2	12.5	15.9	43.3	48.2	34	27.9	13.6
2.6	3.19	2.55	1.99	1.14	1	1.97	3.34	1	1.02	2.27	1	1.06	1.14	1.11	1.28	1	1	1.83	3.28	3.88	1.72	5.89	3.54	2.73	10	2.71	10	3.58	10	10	10	10	10
74.9	35.6	57.4	44.7	22.9	51.9	32.9	46.6	54.4	56.6	13.9	51	59.8	59.9	61.1	55.1	51.8	55.4	60.5	307	111	44.5	81.5	110	81.3	43.6	32.8	132	63.3	189	145	56.5	116	63.9
212	213	622	425	96.1	143	81.6	89.5	101	108	44.9	192	120	113	115	148	110	121	277	121	291	141	1950	3690	1700	304	193	45.6	80.6	136	435	229	336	139
0.04	0.04	0.04	0.04	0.04	0.04	0.0442	0.04	0.04	0.01	0.04	0.0524	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.104	0.04	0.04	0.01	0.04	0.0823	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.121	0.04	0.04	0.04	0.0512	0.04
0.04	0.04	0.04	0.04	0.0631	0.04	0.122	0.04	0.04	0.01	0.04	0.146	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0559	0.04	0.04	0.04	0.403	0.04	0.04	0.04	0.139	0.04
0.04	0.04	0.04	0.04	0.337	0.04	0.0884	0.04	0.04	0.01	0.04	0.198	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0724	0.04	0.04	0.04	2.84	0.04	0.04	0.04	0.168	0.04
1.68	0.1	0.1	0.455	26.2	0.1	0.1	0.1	0.1	0.1	2.56	3.68	1.45	0.1	8.02	0.1	0.1	0.1	1.43	0.351	0.1	0.1	1.18	0.363	12.9	2.34	1.68	1.15	92.4	0.1	3.5	3.42	4.69	19.7
3.59	0.1	4.48	7.92	73.8	0.1	0.1	0.1	0.1	0.1	8.12	0.1	4.7	0.1	5.29	0.1	0.1	0.1	16.1	4.24	0.807	1.15	9.11	6.64	31	5.99	15.2	6.31	94.8	0.1	15	10.2	13.8	34.4
23	0.1	22.1	47.2	391	0.1	0.1	0.1	0.1	0.1	467	6.89	41.6	2.86	7.28	3.43	0.1	0.1	54.1	12.2	10.3	8.85	54.6	57.3	107	16.3	261	18.1	38.3	7.02	57.5	33.2	20.3	133
9.09	0.1	7.75	16.7	149	0.1	0.1	0.1	0.1	0.1	3.36	0.1	13.9	0.1	0.79	0.1	0.1	0.1	12.8	3.62	2	0.1	18.8	22.8	33.5	3.99	205	5.45	11	1	18.6	8.91	2.66	72.9
0.04	0.04	0.04	0.04	0.04	0.04	0.51	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0516	0.04	0.04	0.04	0.04	0.04	0.04	0.0542	0.04	0.129
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.0492	0.04	0.231	0.04	0.04	0.01	0.04	0.0972	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0516	0.04	0.04	0.04	0.269	0.04	0.04	0.04	0.0952	0.04
0.04	0.04	0.04	0.04	0.224	0.04	0.0598	0.04	0.04	0.01	0.04	0.133	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0483	0.04	0.04	0.04	1.89	0.04	0.04	0.04	0.112	0.04
1.53	1.9	1.17	0.937	5.61	0.1	0.1	1.59	0.1	0.1	2.37	1.97	1.3	0.1	0.1	0.1	0.1	0.1	5.06	0.712	0.1	0.552	0.908	0.812	4.34	0.1	1.86	0.256	11.2	0.1	0.1	1.25	0.1	4.21
4.37	5.06	2.26	4.81	42.3	0.531	3.34	7.59	0.1	0.1	12.9	4.5	3.67	0.1	0.1	1.02	0.1	0.771	44.1	5.3	2.48	3.03	3.91	4.73	15	4.11	6.56	3.3	21.3	0.362	3.86	4.51	4.14	22.7
36.6	19.3	14.9	37.8	312	13.7	146	6.57	0.1	3.89	2870	94.3	25.4	6.58	10.7	29	2.19	7.53	103	22.1	14	14.2	32	46.7	51.1	34.2	239	16.9	25.6	5.76	29.5	18.1	9.19	167
17.6	9.74	6.43	20.1	137	1.44	10.6	0.1	0.1	0.1	79.3	13.3	14.2	1.08	5.84	2.77	0.1	1.51	27.3	11.7	6.2	7.64	20.5	37.4	24.1	30.6	272	8.55	13.8	1.03	17	7.85	1.88	117
7.71	3.67	2.5	8.64	51.4	0.273	1.05	0.1	0.1	0.1	12.2	4.05	5.67	0.1	2.09	0.1	0.1	0.1	8.94	5.33	2.27	3.2	8.96	15.7	9.25	12.8	120	3.28	6.29	0.1	6.52	3.05	0.1	49.7
12	17.4	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	279	60	29.4	26.3	13.8	12	12	12	120	12	12	12	17.3	12	12	60
11.1	13.8	24.7	113	76.5	8	8	37.8	8	8	8	8	54.1	8	8	8	8	8	41.6	40	8	8.75	11.7	8	8	8	80	8	8	8	8	21.1	8	40
34	75.6	31.3	113	65	16	16	103	16	16	16	16	16	16	16	16	16	16	663	143	34.2	54.5	37.3	22.2	22.2	16	160	35.3	16	16	30	19.4	16	80
135	294	152	132	122	14	14	98.5	14	37.6	14	98.8	45.1	14	14	35.7	14	14	1560	320	198	166	197	66	90.5	37	140	131	45.6	14	106	38.9	14	70
111	189	122	101	99.6	15	15	73.7	15	36.1	15	96.8	50.4	15	15	32.9	15	15	1200	247	140	117	215	65.5	92.9	39.4	150	112	43.6	15	119	38.7	15	75
169	365	188	157	190	15	15	120	15	41.3	15	161	75.9	15	15	77.5	15	15	2050	421	275	223	381	124	114	54.2	169	156	67.9	22.7	141	60.8	24.2	75
57.2	114	66.7	57.1	56	14	14	40.5	14	19.8	14	55.8	24.7	14	14	14	14	14	774	221	89.7	78.1	125	45.1	46	22.6	140	66.8	24	14	69.9	17.7	14	70
79.8	113	99.9	96.1	90.3	24	24	61.1	24	24	24	72.7	41.8	24	24	24	24	24	884	189	98.7	105	198	62.9	84.9	50.2	0.24	87.1	32.2	24	162	43.1	24	120
165	292	163	152	117	10	10	105	10	29	10	122	50.9	10	10	40.2	10	10	1500	343	202	171	193	82.7	97.3	37.5	103	127	44.6	15.5	113	49.5	17.5	50
0.023	49.2	0.023	0.023	32.3	0.023	0.023	0.023	0.023	0.023	191	0.023	0.023	0.023	0.023	0.023	0.023	0.023	240	0.115	31.5	29.8	46	0.023	0.023	0.023	0.23	0.023	0.023	0.023	26.6	0.023	0.023	0.115
80.6	103	102	87.7	86.3	0.018	0.018	56.2	0.018	0.018	260	75.3	38.3	0.018	0.018	0.018	0.018	0.018	852	171	111	102	142	41	96.5	40.5	182	103	31.5	0.018	166	34.4	0.018	90
276	478	306	356	265	0.017	0.017	285	0.017	46.6	0.017	247	63.6	0.017	0.017	81.2	0.017	0.017	3030	677	374	425	363	131	172	66.8	181	252	67	23	175	89	33	0.085
43.7	67.2	25.4	60.8	92.2	10	10	36	10	10	10	10	21.4	10	10	10	10	10	190	50	13.9	23.1	10	10	12.1	10.5	0.1	14.7	10	10	10	22.6	10	50
52.2	103	50.9	52.2	60.6	9	41.4	39.9	9	9	9	9	42.9	9	9	9	9	9	467	103	26.7	78.4	55.4	62.3	113	16.2	90	39	21.1	32	55.9	95.5	94.2	163
178	328	218	974	290	15	15	345	15	15	15	106	60.1	15	15	41.6	15	15	1610	344	170	241	155	81.2	98.6	73.3	150	135	48	34.4	118	166	44.2	75
																		2.41	0.541	0.228	0.282	0.35	0.131	0.179	0.0713	0.179	0.19	0.0578	0.0236	0.166	0.0728	0.0324	0.075
1.64	3.03	1.82	2.74	1.87	0.118	0.118	1.62	0.118	0.254	0.45	1.23	0.632	0.118	0.118	0.372	0.118	0.118	17.8	3.72	2.02	2.13	2.48	0.915	1.22	0.52	1.18	1.45	0.483	0.151	1.46	0.77	0.245	0.59
86.5	89.7	96.6	98.8	98.5	90.7	104	99.5	103	98.9	98.4	95.6	90.7	91.9	86.4	92.9	91.9	83.3	106	104	91.9	92.8	103	99.9	93.5	88.4	82	85.5	98.5	91.4	87.2	83.6	85.9	98.5
81.3	90	94.7	94.6	96.2	88.4	102	94.5	98.1	98.6	95.1	97.4	89.6	92	86	93.1	94.8	85.2	111	106	89.7	86.2	111	96.3	98.7	92.4	83.5	88.5	94	90.6	92.8	83.8	89.9	95.5
84.1	91	96	96.2	98.9	89.5	103	94.3	96.6	102	94.5	101	98	90.6	84.9	94.9	97.6	86.5	113	114	88.4	90.8	121	99.7	97.1	98.4	86.5	91.5	91.6	91.3	95.2	83.5	90.6	88.4
77.9	91.1	98.5	98	98.1	88.4	95.2	92.5	88.5	96.9	99.5	99.1	102	90.5	82.6	96.2	97.7	86.9	87	87.3	84	80.1	101	81.7	78.6	79	71.8	76.5	94.4	78.1	71.8	62.8	71.7	99.4
78.2	84.8	99.4	102	98.7	82.7	87.5	94.4	86.4	91.7	94.5	94.2	102	91.2	88.3	96.2	104	88.1	84.4	85.4	82.3	79.6	102	78.8	76.7	78.3	70	75.3	97	74	70.4	54.4	70.6	99.9
37.4	0.1	34.3	72.3	640	0.1	0.1	0.1	0.1	0.1	481	10.6	61.7	2.86	21.4	3.43	0.1	0.1	84.5	20.4	13.1	10	83.7	87.1	184	28.7	483	31	237	8.03	94.5	55.7	41.5	260
60	36	24.8	63.7	497	15.6	160	15.8	0.1	3.89	2970	114	44.6	7.66	16.5	32.8	2.19	9.81	179	39.8	22.7	25.5	57.3	89.7	94.5	68.9	519	29	71.9	7.15	50.3	31.7	15.2	311
																		264	60.2	35.8	35.5	141	177	279	97.5	1000	60.1	314	15.2	145	87.4	57.3	571
18900	31400	28800	23300	19500	26700	29300	19300	24900	31300	12200	22200	41800	32000	31000	28400	21200	30400	55700	38800	32800	26500	32100	71300	45500	76300	30900	56200	20400	443000	340000	95100	385000	60600
1350	1480	3200	1960	1330	402	451	3600	381	772	274	270	862	215	503	262	670	513	3510	7490	5790	2800	7500	6130	4770	1940	3660	6170	3480	4530	9240	3180	10600	3310
45800	-	187000	-	162000	-	-	-	-	-	-	-	-	-	-	-	-	-	76000	-	65600	101000	-	27900	-	-	-	-	85900	-	113000	-	218000	-
8780	-	25500	-	59300	-	-	-	-	-	-	-	-	-	-	-	-	-	12300	-	8920	12000	-	7930	-	-	-	-	18500	-	13900	-	8150	-
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0113	0.01	0.0111	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0108
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.054	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0111	0.01	0.01	0.018	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
0.223	-	0.436	-	0.116	-	-	-	-	-	-	-	-	-	-	-	-	-																
8.37	9.01	11.3	11.3	9.09	6.76	8.23	10.5	7.73	7.37	7.94	7.66	9.8	7.02	7.19	7.09	9.18	7.78																
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																
0.385	-	0.204	-	0.166	-	-	-	-	-	-	-	-	-	-	-	-	-																
1.16	-	0.612	-	0.498	-	-	-	-	-	-	-	-	-	-	-	-	-																
0.24	-	0.563	-	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-																
1	6.12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																
12	12	12	12	25.7	398	424	12	197	405	145	293	256	272	261	218	33.2	151																
0.001	-	0.001	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/06/2018	-	04/06/2018	-	04/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	14/06/2018	-	14/06/2018	13/06/2018	-	13/06/2018	-	-	-	-	27/06/2018	-	27/06/2018	-	13/06/2018	-
Barbara Urbanek-Walsh	-	Andrzej Ferfecki	-	Barbara Urbanek-Walsh	-	-	-	-	-	-	-	-	-	-	-	-	-	Andrzej Ferfecki	-	Andrzej Ferfecki	James Richards	-	James Richards	-	-	-	-	James Richards	-	James Richards	-	Andrzej Ferfecki	-
0.001	-	0.001	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
None	-	None	-	None	-	-	-	-	-	-	-	-	-	-	-	-	-																
N/C	-	N/A	-	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-																
0.001	-	0.001	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Detected	-	Not Detected	-	Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-
Not Detected	-	Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-
Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-
Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-
Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-
Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-
Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Detected	-	Not Detected	-
Loose fibres in soil.	-	soil containing material typical of asbestos cement	-	Loose fibres in soil.	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	0	-	0	-	-	-	-	0	-	0	-	0	-
99.9	95.5	102	104	100	102	100	106	109	121	103	94.4	105	108	104	106	107	104	104	101	105	110	106	106	107	112	103	104	103	106	106	105	106	105
94.9	92.3	97.8	97.9	97.6	100	97.2	99.4	99.1	98.3	93.7	93.8	99.3	97.1	98.5	96.6	92.9	98.8	96.9	96.2	98.2	97.4	98.3	97.5	94.2	98.6	98	99	91.2	96	95.9	96.4	97.3	96.6
86.7	79	96.2	90.9	96.7	98.2	85.9	92.1	101	99.4	77.9	74.7	96.1	94.1	95.7	92.8	83.1	92.6	95.4	80	100	92.5	97.4	96	97.5	89.5	99.1	98.8	73.8	87.6	88.6	80.6	93.2	91.7
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.333	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.502	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.23	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.42	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.934	0.425	0.13	0.13	0.13	0.13	0.13	0.161	0.13	0.13	27.7	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.15	0.4	0.4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

40AD24	40AD24	40AD24	40AD11V	40AD12V	40AD22V	40AD24V	40AE16	40AE16	40AE16	40AE16	40AE25	40AE25	40AE25	40AE25	40AE26	40AE26	40AE27	40AE27	40AE27	40AE16V	40AE25V	40AE26V	40AE27V	40AF10	40AF10	40AF10	40AF10	40AF12	40AF12	40AF12	40AF13	40AF14	40AF14	40AF14	40AF16	40AF16	40AF16	40AF19
0.500.50	1.001.00	2.002.00	0.000.00	1.501.50	3.003.00	2.402.40	0.400.40	1.001.00	1.501.50	2.002.00	0.500.50	1.001.00	1.401.40	2.002.00	0.5	1.5	0.5	1	1.5	2.802.80	2.802.80	2.5	2.3	0.400.40	0.800.80	1.201.20	1.401.40	0.500.50	1.001.00	2.302.30	0.800.80	0.300.30	0.700.70	1.201.20	0.600.60	1.601.60	2.002.00	1.001.00
05/06/2018	05/06/2018	05/06/2018	28/06/2018	19/06/2018	05/06/2018	05/06/2018	20/06/2018	20/06/2018	20/06/2018	20/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	30/05/2018	30/05/2018	30/05/2018	30/05/2018	30/05/2018	20/06/2018	05/06/2018	30/05/2018	30/05/2018	19/06/2018	19/06/2018	19/06/2018	19/06/2018	28/06/2018	28/06/2018	28/06/2018	19/06/2018	19/06/2018	19/06/2018	19/06/2018	20/06/2018	20/06/2018	20/06/2018	03/07/2018
9.36	1.67	8.45	5.4	1.81	1.17	4.43	2.29	5.91	8.1	4.6	6.1	8.15	5.28	2.97	3.59	4.47	3.33	4.6	1.03	1.53	0.965	1.32	2.19	1.47	1.12	1.26	3.55	2.26	14.2	2.91	10.8	17.6	7.34	1.29	3.17	4.1	5.69	2.59
9.5	12.9	18.3	11.2	17.6	15.3	7.55	9.81	10.7	11.8	7.16	6.92	14.8	7.72	4.65	7.84	7.41	8.01	10.4	17.4	12.8	10.3	14.3	9.95	9.83	9.69	6.15	7.04	24.9	14.7	8.66	13.8	10.2	9.09	8.58	9.31	10.5	13	5.47
0.415	0.332	0.21	0.273	6.42	0.0366	1.49	0.376	0.723	0.263	2.53	1.04	1.68	0.404	1.09	2.26	1.49	1.02	0.988	0.323	0.0661	0.208	0.298	0.935	0.269	0.277	0.191	0.2	0.02	0.2	0.679	5.38	6.58	1.13	1.28	0.666	2.95	0.742	0.02
14.4	32.3	38.4	42	31.2	25.4	37.8	17.8	14.8	6.82	472	255	141	8.46	323	281	176	250	61.8	28	30.4	26.6	39.1	23.7	40.9	41.3	20.7	229	66.7	9	16.5	514	415	100	3.59	9.81	13.8	13.1	81.5
28.6	14	28.4	37.4	29.4	11.7	112	19.9	27.8	14.8	19.5	18.5	33	21.8	25.5	27.2	18.7	52	25.7	10.5	14.5	10.5	12.1	15	9.72	15.4	12.4	26.2	12.2	22.1	11.5	14.5	14	25.1	6.84	21.4	24.9	35	1.4
32.5	53.7	44.7	14.4	89.5	28.6	187	26.1	59.1	16.7	124	98.4	284	20.8	63.5	265	217	86.7	93.6	23.3	27.5	28.8	31.7	31.1	22.7	19.9	8	86.2	37	231	60.4	559	512	113	93.5	56.1	154	78.3	6.39
0.14	1.4	0.14	0.14	1.4	0.14	1.4	0.14	0.14	0.14	1.4	1.4	1.4	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.14	1.4	0.14	1.4	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14
41.8	33.6	26.9	43.5	45.2	37	105	13.9	24.1	16.4	14.5	9.53	17.6	24.8	9.42	19.6	11.1	14.4	16.6	38.5	38.2	27.3	35.3	21.1	12.5	18.4	13.9	17.4	12.4	20.5	13.3	18.6	21.5	20.6	8.85	18.1	29.3	28	32.9
1.94	10	1	2.05	10	1	10	3.95	3.3	1	11.1	10	10	1.13	7.33	10	5.77	6.77	4.28	1	1	1	1.15	10	4.91	4.1	5.11	10	3	10	1.09	10.1	10	2.7	1	1	1.32	1	1.34
40.2	59.7	54.2	62.9	57.4	51.8	92.8	53.9	39.2	15.8	381	233	185	20.8	318	303	279	333	133	53.6	55	52.2	72.9	67.4	112	253	39.5	140	143	84.9	26.6	392	345	101	13.2	24.4	28.7	50.4	184
91.5	129	148	107	403	105	616	103	209	58.9	252	296	681	53	256	640	784	201	313	109	104	105	132	87.9	110	64.5	43.7	207	121	449	229	1730	2130	418	90.9	341	201	416	65.5
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0978	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.049	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0409	0.04	0.04	0.04	0.04	0.04	0.04	0.429	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0663
0.0533	0.04	0.04	0.0887	0.04	0.04	0.04	0.0833	0.04	15.9	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	3.31	0.04	0.04	0.0585	0.04	0.04	0.04	0.158	0.04	0.04	0.04	0.04	0.04	0.062	0.04	0.04	0.0477	0.0413	0.04	0.716
0.287	0.078	0.04	0.0734	0.04	0.04	0.04	0.942	0.04	23	0.0842	0.0464	0.0912	0.04	0.04	0.228	0.04	0.04	0.04	3.58	0.04	0.04	0.14	0.04	0.04	0.0425	0.16	0.04	0.04	0.0441	0.04	0.04	0.122	0.04	0.0516	0.0758	0.0588	0.04	0.762
2.74	6.16	0.441	0.1	0.1	0.1	4.53	92.6	40.1	20.2	3.74	5.37	1.77	6.02	11	5.57	4.44	16.4	21.6	0.1	0.1	0.606	0.791	5.11	1.11	2.9	2.15	4.1	12.2	15.3	1.53	4.12	3.33	0.412	2.58	9.6	3.18	5.53	5.01
7.37	10.9	0.1	0.1	0.1	0.1	20.2	136	68.9	30.4	47.7	24.2	9.4	16.4	29.9	21.2	18	44	47.1	0.1	0.1	1.45	3.02	15.4	2.28	6.34	6.04	29.6	37.9	52.5	4.82	23.7	23.2	3.5	5.22	16.1	6.02	18.5	7.83
19.7	8.96	1.9	0.1	0.1	0.1	113	42.8	48.5	51.2	52.6	84.1	30.7	57	157	473	132	209	235	7.21	0.1	9.2	12.4	49	12	20.5	30	287	78.9	141	27.6	83.7	77.7	18.1	10.9	25.5	10.8	38	8.87
2.75	1.58	5.9	0.1	0.1	0.1	53.7	11.6	11	10.3	12.9	20.8	7.89	9.83	46.5	214	55.7	63	89.8	2.56	0.1	1.47	4.25	15.3	12.7	3.7	10.6	318	23	50.6	11.2	10	8.67	4.5	3.19	6.29	1.65	7.27	1.24
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.184	0.826	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.108	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.052	0.04	0.04	0.0597	0.04	0.04	0.04	0.0655	0.04	13.5	0.04	0.04	0.0424	0.0565	0.04	0.04	0.04	0.04	0.04	2.93	0.04	0.04	0.0505	0.04	0.04	0.04	0.328	0.04	0.04	0.04	0.04	0.04	0.0573	0.04	0.04	0.052	0.066	0.04	6.37
0.192	0.052	0.04	0.049	0.04	0.04	0.04	0.628	0.04	15.3	0.0557	0.04	0.0608	0.04	0.04	0.151	0.04	0.04	0.04	2.39	0.04	0.04	0.0931	0.04	0.04	0.04	0.107	0.04	0.04	0.04	0.04	0.04	0.0807	0.04	0.04	0.0509	0.04	0.04	0.508
2.71	1.24	0.637	0.1	0.1	0.1	1.95	9.17	6.39	6.85	1.8	2.7	1.95	1.42	0.1	3.64	1.65	0.1	1.86	0.1	0.1	0.1	0.1	1.87	1.21	3.01	0.1	3.99	2.87	5.2	1.67	4.78	4.38	1.12	0.752	2.72	1.5	2.05	4.25
3.98	3.49	3.67	0.1	1.13	0.1	10.3	49.8	25.9	33.8	21.4	14.8	7.63	6.04	5.94	15	10.3	5.01	14.9	0.1	0.1	0.1	1.34	6.27	2.72	3.75	0.1	22.1	12.7	19.7	5.19	21.9	20.9	3.31	1.98	5.57	3.87	9.5	6.03
24.4	8.48	68.7	7.17	3.23	0.1	112	35.8	37.4	71.5	138	93.5	24.8	21.4	40	135	80.1	38.1	208	0.884	1.73	3.92	8.67	22.7	13.6	9.37	5.72	598	36.7	57.5	28.1	43.6	37.2	14.2	5.83	12.8	11.8	30.8	4.86
7.14	5.55	9.39	5.01	6.87	0.1	113	18	17.2	32.4	39.8	48.8	7.4	2.84	7.11	77.5	43.4	8.85	94.8	0.1	0.675	1.17	6.1	18	24.2	0.1	0.848	754	21.1	57.8	16.1	8.85	5.53	7.37	1.41	2.81	1.44	17.3	1.28
2.23	2.21	1.32	2.35	3.75	0.1	46.9	7	6.41	7.52	13.8	20.3	2.6	0.283	1.27	30.1	17.6	2.33	38.6	0.1	0.1	0.1	2.76	8.33	12.2	0.1	0.1	324	8.6	28.4	6.78	3.2	2	2.69	0.1	0.1	0.1	7.13	0.1
45.2	18.3	12	12	12	12	60	12	33.1	12	22.5	52.7	41.9	12	45.1	22.2	60	28.7	28	12	12	12	12	12	12	12	12	60	12	12	12	23.1	14.3	12	12	12	12	24	12
16.6	8	31.6	8	8	8	40	18.9	28.1	15.3	96.9	49.8	23.1	8	129	178	40	107	25.9	8	8	8	19.9	8	8	8	8	96.8	36.7	796	8	37.5	32.9	8	8	8	8	20.7	49.9
16	16	16	16	16	16	186	16	96.6	16	178	139	89.6	71.7	461	127	80	457	55.6	16	16	16	38.1	16	16	16	19.3	80	28.9	218	25.2	194	161	23.1	16	18.1	16	95	36.5
14	19.9	30.7	14	14	14	271	49.8	226	27	1420	732	241	14	1520	284	405	933	445	14	14	18.5	105	63.9	35.3	38.6	86.7	288	39.5	65.8	36.1	171	173	30.6	14	42	19.7	266	14
15	15	32.4	15	15	15	243	45.5	203	17.9	1880	1100	1950	15	1270	306	439	757	490	15	15	15	101	71.4	28	35.5	79.2	298	30.2	41.7	31.2	79	58.9	15	15	38.7	23.9	208	15
15	24.2	51.9	15	15	15	406	78.8	317	15	2150	1350	2180	18.6	1930	433	499	1090	703	15	15	27.6	133	140	49.3	47.4	148	433	61.6	88.4	66.7	262	190	41.6	15	88.5	35	329	15
14	14	14	14	14	14	172	29.3	121	14	694	477	814	14	835	173	237	399	295	14	14	14	45.8	36.7	20.7	16	56.6	165	22.1	25.8	20.3	88	42.9	17.8	14	23.9	14	125	14
24	24	24	24	24	24	284	55.1	122	24	1480	1200	1490	24	1040	260	376	456	364	24	24	24	72.9	73.7	33.1	31.3	84.2	256	32	41.4	31.9	60.3	43.3	24	24	47.4	25.3	149	24
10	16.8	36.3	10	10	10	261	56	181	35.9	1380	793	488	21.2	1380	320	468	951	534	10	10	22.3	111	82.8	41.8	48.1	112	336	64.5	97.4	61.1	279	184	40.8	10	47	27.8	253	10
0.023	0.023	0.023	0.023	0.023	0.023	0.115	0.023	39.5	0.023	282	191	257	0.023	225	57.1	0.115	108	77.3	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.115	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.046	0.023
0.018	0.018	41.1	0.018	0.018	0.018	250	45.5	118	0.018	1660	1280	1630	0.018	952	275	326	465	362	0.018	0.018	0.018	64.8	89.2	26	28.9	64.4	214	27.8	28.9	0.018	34.7	0.018	0.018	0.018	51.1	0.018	124	0.018
30.1	46.4	62.2	0.017	0.017	0.017	678	122	390	99.3	2190	1110	376	30.6	3110	640	754	2110	673	0.017	0.017	36.1	219	153	78.5	74	182	473	114	430	99	994	959	105	0.017	86.5	41.6	781	49.3
38	41	10	10	10	10	50	10	50	28.7	48.3	51.9	43	10	87	144	50	131	30.9	10	10	10	21.1	10	10	10	21.1	53.9	33.5	527	10	104	95.1	12.7	10	17.4	10	0.02	59.5
1450	187	9	9	9	9	157	166	551	6970	215	239	958	182	226	203	213	123	87.6	414	9	9	32	34.5	89	53.1	72.9	124	75.1	250	58.6	300	253	40.8	9	105	32.9	72.5	169
55.9	129	37	15	15	15	368	31.7	282	123	768	540	177	75.3	2780	540	353	1330	294	15	15	27.1	139	112	86.6	66.2	159	307	144	1080	152	1200	995	131	27.3	147	101	324	105
0.0299	0.0597	0.0504	0.015	0.015	0.015	0.547	0.107	0.338	0.0677	2.3	1.12	0.608	0.0301	2.88	0.595	0.833	1.9	0.676	0.015	0.015	0.0339	0.206	0.14	0.063	0.0608	0.157	0.389	0.112	0.367	0.0844	0.805	0.81	0.0928	0.015	0.0695	0.0445	0.701	0.0365
1.67	0.542	0.374	0.118	0.118	0.118	3.82	0.806	3.1	7.39	16.8	10.4	11.4	0.43	18.9	4.56	4.91	11.3	5.14	0.414	0.118	0.166	1.31	0.998	0.551	0.5	1.24	3.43	0.822	4.05	0.666	4.64	4.01	0.536	0.118	0.782	0.352	3.45	0.506
91.6	83	100	88.6	89.9	85.2	93.7	94.9	92.4	91	87.8	87.5	32.2	95.1	90.9	88.8	104	89.5	89.1	87.9	78	79.4	81.7	89.8	95.7	89.1	99.6	110	102	98.3	103	98	105	90.2	93	92.7	87.1	90.8	89.3
93.7	87.3	93.3	85.7	90.6	87.9	93.8	89.6	88	95.9	91.7	96.3	31.1	92.8	98.1	92	93.1	84.5	92.6	79.8	78.4	74.5	85	91.2	86.9	87	95	106	100	100	108	102	109	78.1	97.9	100	92.3	86.2	91.1
96.2	93.2	95.9	91.2	95.1	93.3	99.4	86.6	89.3	84.4	98.3	103	29.5	86.9	108	93.6	99.9	95.3	99.1	82	82.9	76.2	87.5	91.1	90.1	85.4	102	100	105	94.9	114	97.2	103	88.9	102	98.3	92	97.6	97.1
77.5	76.3	96.2	79.4	88.5	77.9	87.4	71.8	70	43.6	85.8	83.2	25.3	46.1	108	77.5	95.3	106	109	75.8	72.6	79.5	77	81.5	77.9	78.9	91.8	93.4	87.3	69.8	102	49.1	58.4	70.1	95.2	86.2	76.2	90.1	89.8
73.2	76.2	101	84.2	91.5	76.4	89.4	72.3	68.9	25	85.1	81.8	23.6	26.8	102	74.4	86.9	96.5	102	78.3	70.5	71.7	77	85	77.3	75.2	90.7	91.2	78.3	58.6	92.4	27.8	30.6	57.7	99.6	75.7	74.2	86.6	87.7
32.6	27.6	8.23	0.1	0.1	0.1	191	283	169	112	117	135	49.7	89.3	245	714	210	332	393	9.77	0.1	12.7	20.4	84.9	28.1	33.4	48.9	638	152	259	45.1	122	113	26.5	21.9	57.4	21.7	69.4	22.9
38.2	18.8	82.4	12.2	11.2	0.1	237	113	86.9	145	201	160	41.7	31.7	53	231	135	52	320	0.884	2.41	5.09	16.1	48.9	41.7	16.1	6.57	1380	73.4	140	51.1	79.1	67.9	26	9.97	23.9	18.6	59.6	16.4
71.3	46.5	90.6	12.5	11.2	0.1	428	397	255	324	318	294	91.8	122	298	945	346	384	713	22.9	2.41	17.8	36.9	134	69.8	49.6	56.8	2020	226	399	96.2	201	181	52.6	31.9	81.5	40.4	129	47.8
19700	50300	22700	32600	49300	27900	47100	33700	23300	14500	166000	105000	211000	22100	106000	107000	111000	113000	75000	33600	27900	30300	44100	78800	24500	31800	22100	88100	38900	207000	20000	187000	204000	61600	23600	21700	23900	63300	44900
409	1300	182	547	390	291	3690	3010	3050	499	30900	13400	14500	375	21700	15300	15300	20000	9610	448	351	1660	1540	4250	5060	6500	3940	7300	6170	5310	1360	18100	16900	4490	1200	632	803	2130	3520
145000	-	-	159000	174000	-	118000	-	-	-	-	89100	-	111000	-	-	138000	100000	154000	171000	-	51500	153000	-	67300	77900	-	-	101000	8570	-	-	-	-	-	-	-	-	163000
9440	-	-	17900	29800	-	19300	-	-	-	-	11300	-	24400	-	-	16700	14000	10200	30500	-	8920	74400	-	6450	15100	-	-	9670	3700	-	-	-	-	-	-	-	-	23000
0.0109	0.0113	0.088	0.0113	0.0112	0.179	0.011	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0105	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.15
0.0109	0.158	0.01	0.01	0.01	0.0112	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.023	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0167	0.018	0.01	0.01	0.01	0.01	0.0107
0.015	0.113	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.283	0.088	0.035	0.035	0.19	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.16
-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-
14/06/2018	-	-	-	-	-	-	-	-	-	-	27/06/2018	-	28/06/2018	-	-	04/07/2018	03/07/2018	28/06/2018	27/06/2018	-	27/06/2018	28/06/2018	-	28/06/2018	10/07/2018	-	-	-	10/07/2018	-	-	-	-	-	-	-	-	04/07/2018
Andrzej Ferfecki	-	-	-	-	-	-	-	-	-	-	Andrzej Ferfecki	-	Andrzej Ferfecki	-	-	Lucy Caroe	James Richards	Andrzej Ferfecki	Andrzej Ferfecki	-	Lucy Caroe	Marcin Magdziarek	-	Lucy Caroe	Lucy Caroe	-	-	-	Lucy Caroe	-	-	-	-	-	-	-	-	Renata Bozhkov
-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-
-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-
Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	Not Detected	-	-	-	-	-	-	-	-	Not Detected
Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	Not Detected	-	-	-	-	-	-	-	-	Not Detected
Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	Not Detected	-	-	-	-	-	-	-	-	Not Detected
Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	Not Detected	-	-	-	-	-	-	-	-	Not Detected
Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	Not Detected	-	-	-	-	-	-	-	-	Not Detected
Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	Not Detected	-	-	-	-	-	-	-	-	Not Detected
Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Trace	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	Not Detected	-	-	-	-	-	-	-	-	Not Detected
0	-	-	-	-	-	-	-	-	-	-	0	-	0	-	-	0	0	0	0	-	0	0	-	0	0	-	-	-	0	-	-	-	-	-	-	-	-	0
105	105	109	105	105	108	110	106	103	108	108	109	109	110	105	103	113	112	109	106	106	109	106	101	110	104	104	108	104	113	110	98.3	105	106	112	110	106	106	117
99.3	98.1	98.4	98.2	99.4	100	96.3	98.9	97.7	98.5	98	98.4	97.5	100	98.6	94.1	98.5	98.3	96.3	95.2	90.2	98.5	99.4	95.7	96.3	92.9	95.1	97.7	99.2	94.8	99.8	94.9	101	96	98.3	101	98.4	88.2	97.1
97.2	89.4	97.5	90.8	93	102	92.9	90	96.8	100	97.4	91.6	87.2	92.3	89.6	93.7	87.6	83.7	88.6	85.3	74.7	90.6	94.4	85.5	82.4	102	108	91.1	91.4	110	92.3	110	80.4	102	94.9	83.6	98.1	90.7	84.7
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.572	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.126	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.175	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.212	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.509	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.181	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.23	0.16	0.13	0.928	0.13	0.13	0.13	1.25	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.572	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.865	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.28	1.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.12	1.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.18	1.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.74	1.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.23	1.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5	15.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.6	16.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

40AF19	40AF26	40AF26	40AFG18	40AFG18	40AFG18V	40AF10V	40AF12V	40AF13V	40AF14V	40AF16V	40AF19V	40AG12	40AG15	40AG15	40AG16	40AG16	40AG17	40AG17	40AG19	40AG19	40AG19	40AG22	40AG22	40AG22	40AG22	40AG25	40AG25	40AG25	40AG25	40AG26	40AG27	40AG27	40AG27	40AG15V
2.002.00	0.7	1.3	1.001.00	2.002.00	2.902.90	2.202.20	1.701.70	1.501.50	1.901.90	2.302.30	4.604.60	1.001.00	0.700.70	1.701.70	0.500.50	2.002.00	0.500.50	3.303.30	0.500.50	1.501.50	2.002.00	0.400.40	1.001.00	2.002.00	3.003.00	0.500.50	1.201.20	2.002.00	3.003.00	0.5	0.4	1	2.5	3.203.20
03/07/2018	30/05/2018	30/05/2018	03/07/2018	03/07/2018	03/07/2018	19/06/2018	28/06/2018	19/06/2018	19/06/2018	20/06/2018	03/07/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	03/07/2018	03/07/2018	03/07/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	05/06/2018	30/05/2018	30/05/2018	30/05/2018	30/05/2018	28/06/2018
2.69	19.1	2.64	9.02	3.72	8.19	12.7	1.42	2.31	1.76	51	3.62	3.03	2.71	7.46	3.65	2.22	1.79	3.34	5.05	1.38	6.05	22.2	4.17	4.05	4.86	48.6	8.33	8.33	1.67	4.67	0.821	11.7	11.2	7.91
1.79	11.5	17.5	14	12.5	14.2	20	15	11.5	12.8	9.93	15.3	7.27	5.48	13	9.92	5.96	6.16	11.5	14	7.79	14.2	15.6	17.5	12.4	4.48	5.59	1.85	6.65	4.15	6.61	0.6	7.45	17.6	18.1
0.199	1.22	0.0848	0.2	0.02	0.732	0.575	0.148	0.198	0.146	0.02	0.2	0.0465	0.0283	0.0736	0.0259	0.182	0.02	0.2	0.2	0.02	1.34	1.39	0.02	1.98	0.553	0.296	0.345	0.315	0.371	1.25	0.0516	3.09	0.415	0.0501
16.4	43	12	28.7	29.5	41.3	37.7	35.3	39.6	35.1	3.77	73.1	10.3	6.13	4.54	7.94	4.66	4.27	9	9	1.23	9	9	10.5	9	41.2	17.9	92	12.6	259	77.3	29.4	6.84	36.4	35.6
6.1	23.9	24.3	30.8	13.3	34.7	29.6	13.7	14.1	16	11.7	34.4	22.6	10.4	22.6	22.5	17	16.4	19.4	28.1	20.1	17.7	18.2	32.9	46	15.4	31.4	9.14	25.2	9.65	42.9	1.4	15.8	28.7	28.2
12.9	131	23	48.8	26.4	54.3	50.9	25.9	31.4	26.7	8.28	54.5	19.5	15.1	24	33.1	17.7	14.7	31.1	185	22.9	47.8	35.3	22.9	92.5	54.9	39.8	16.8	31.1	23.2	118	0.7	354	43	37.6
0.14	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	1.4	1.4	0.14	1.4	1.4	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
4.35	13.4	41.5	37.8	34.4	34.7	29.3	41.9	37.7	43	23	22.7	23.8	11.6	18.2	28.5	14.5	13.8	16.7	33.9	24.3	34	34.3	46.9	20.5	10.9	27.1	6.33	23.5	5.74	16.1	0.986	10.3	28	29.5
4.84	4.16	1	10	1	1.85	1	1	1.54	1	1.56	10	1	1	1	1	1	1	31.7	10	7.85	10	10	1.09	10	3.46	1.59	6.91	1.8	11.4	3.39	2.75	2.02	1	1
64.7	275	35.2	108	50.3	61.3	63.4	61.5	68.3	62.3	21.1	74.7	20.4	15.9	16.3	27.5	13.7	19	79.3	55.5	57.7	112	104	45	35.3	43	98.2	125	37.2	1560	106	29.6	39.7	57.9	55.1
84.8	285	101	176	90.9	188	166	118	105	122	35.7	208	73.7	59.4	77	93.9	49.4	39.9	71.4	399	66.7	171	114	62.9	355	163	66.4	74.7	100	71.4	499	38.9	1730	151	132
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.0504	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.0638	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.226	0.04	0.04	0.04	0.04	0.176	0.04	0.04	0.04	0.04	0.04
0.736	4.6	0.1	2.01	0.1	0.1	0.29	0.1	0.1	0.1	1.17	5.2	9.72	0.875	2.48	0.1	0.1	0.1	0.393	0.363	0.366	0.154	0.926	2.64	13.5	0.561	2.33	2.6	2.39	40.2	1.66	0.25	3	1.04	0.1
5.52	24.6	0.893	8.93	1.58	0.1	1.01	0.1	0.1	0.1	4.29	29.8	68.4	3.53	4.18	0.843	3.86	9.7	3.47	3.3	4.66	2.7	4.26	17.6	14.7	8.48	9.7	13.9	6.2	59.7	10.7	2.8	13.6	1.54	0.1
66.7	124	15.1	79.2	1.81	6.17	16.7	0.1	0.1	0.1	20	217	92.6	18.1	11.8	7.45	3.54	5.58	9.4	24.3	13.6	19.4	15.4	127	156	46.8	61.3	60.8	21.4	62.1	86.8	91.6	115	12.7	4.84
35.9	38.9	2.02	14	0.1	0.1	0.1	0.1	0.1	0.1	0.456	33.3	3.05	3.37	2.09	1.44	0.584	0.1	0.82	3.91	1.78	2.48	2.23	49	41.1	6.79	20.9	13.9	7.01	26.9	37.3	147	56.9	0.385	0.1
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.0467	0.04	0.04	0.04	0.057	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.15	0.04	0.04	0.04	0.04	0.118	0.04	0.04	0.04	0.04	0.04
0.1	1.57	0.713	2.23	0.1	0.16	0.1	0.1	0.1	0.211	1.72	3.79	0.717	0.561	1.87	0.1	0.487	0.645	0.124	0.588	0.1	0.507	1.42	0.1	3.86	1.61	0.875	1.09	0.1	7.57	0.63	0.1	0.1	3.78	0.175
3.82	11.3	1.8	7.62	0.1	1.2	1.22	0.652	0.1	0.469	6.55	17.5	6.88	4.72	5.29	0.1	1.74	2.12	0.988	4.02	0.915	3.32	11.8	3.49	6.46	9.06	3.87	4.77	0.1	26.4	4.05	1.77	3.73	2.74	0.724
64.2	87.1	7.6	44.4	7.87	47.4	117	2.14	1.45	3.89	162	81.4	19.2	15.4	10.1	0.1	4.86	6.09	4.43	24.5	5.37	14.1	23.3	17.2	41.4	38.4	26.7	26.7	0.978	55.5	46	84.9	66.6	84.9	40.5
65.1	42	1.72	18.3	1.26	6.57	12.5	0.534	0.1	5.09	14.6	27.8	0.777	0.867	1.13	0.1	5.99	5.47	0.754	10.4	0.698	4.99	7.21	14.7	16.5	20.3	13.9	10.9	0.1	35.8	49	232	81.9	8.52	5.36
28.4	16	0.1	6.84	0.1	1.68	3.58	0.1	0.1	2.89	3.69	11	0.1	0.1	0.1	0.1	3.23	2.91	0.1	4.06	0.1	1.85	2.9	6.61	4.27	8.11	5.29	3.9	0.1	15.1	23.3	120	39.6	2.48	1.34
32	13.9	12	12	12	12	12	12	12	12	12	16.8	12	12	12	12	12	12	12	15.1	12	12	12	12	12	31.3	12	12	12	12	60	12	60	12	12
39.8	32.7	8	8	8	8	8	8	8	8	8	21.1	8	25.7	8	8	8	8	8	8	8	18.2	9.15	8	8	30.8	8	30	12.4	21.4	40	8	40	596	8
73.9	56.4	16	38.5	16	16	16	16	16	16	16	82.8	16	16	30.8	16	16	16	16	32.5	16	16	60.1	16	16	68.6	16	32.7	16	32	80	16	80	31.5	16
682	474	18.8	90.4	14	14	45.5	14	14	14	14	134	18.6	17.4	41.6	14	14	14	18.5	124	26.1	37.7	64.2	14	24	225	27.2	137	34.3	198	294	42.2	70	28.2	14
976	551	15	94	15	15	48.1	15	15	15	15	97.2	15	15	15	15	15	15	15	107	25.5	26.4	35.7	15	17.3	252	22.4	151	30.3	250	291	34.4	75	29	15
1230	1260	26.5	142	15	36.8	105	15	15	15	15	229	36.8	21.4	53.2	22.2	17.1	15	38.1	255	39.6	44.6	63.6	15	38	310	48.5	234	57.9	343	462	50.8	155	43.8	34.5
427	414	14	58	14	14	28	14	14	14	14	79.9	14	14	18.2	14	14	14	14	73	18.7	19	16.8	14	14	135	14	83.5	20.3	135	164	19.9	70	14	14
759	685	24	84.2	24	24	51	24	24	24	24	98.1	24	24	24	24	24	24	24	117	26.9	28.3	28.4	24	24	205	24	122	27.5	207	284	31.9	120	24	24
754	675	23.2	114	10	26.9	75.7	10	10	10	10	192	46.6	34.3	88.7	24.2	19.8	15.4	29.8	161	37.9	41.1	73.8	10	31.2	256	56.4	188	56.9	241	355	39.1	104	44.3	21.9
131	87	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	25.1	0.023	0.023	0.023	0.023	0.023	0.023	0.023	29	0.023	0.023	0.023	0.023	0.023	45	0.023	0.023	0.023	36.2	0.115	0.023	0.115	0.023	0.023
732	602	0.018	61.5	0.018	0.018	64.5	0.018	0.018	0.018	0.018	73.3	0.018	0.018	0.018	0.018	0.018	0.018	21.9	131	0.018	24.9	22.3	0.018	0.018	179	0.018	139	26.2	171	279	23.7	90	0.018	0.018
1050	802	47.5	210	0.017	43.4	112	0.017	0.017	0.017	0.017	368	40.2	65	144	27.2	24.6	24.6	38.7	202	53.2	56.3	99.4	0.017	63.3	407	50.8	198	55.3	322	539	69.1	123	108	39.1
20.4	27.9	10	11.9	10	10	10	10	10	10	10	59.5	10	12.5	18.1	10	10	10	10	12	10	15.2	62.5	10	10	41.4	16.3	33.3	14.5	27.2	50	10	50	376	10
34.4	76.9	11.8	40.6	9	9	17	9	9	9	9	131	34.1	14.4	117	36.6	14.7	9	11.7	49.4	20.9	39.9	40.9	12.5	16.3	74.7	30.4	57.9	42.8	34.6	45	9	45	308	9
356	330	21.3	158	15	15	71.2	15	15	15	15	424	99.8	67.5	364	52.4	37.3	21.2	52.4	144	69.9	62.6	347	39.5	67.3	274	87.7	191	73.3	199	267	27.6	75	237	28.2
1.07	0.811	0.0455	0.197	0.015	0.0348	0.0862	0.015	0.015	0.015	0.015	0.307	0.0375	0.054	0.0945	0.0208	0.0197	0.0213	0.0332	0.182	0.0453	0.0626	0.105	0.015	0.051	0.375	0.0474	0.204	0.048	0.319	0.494	0.0622	0.112	0.0788	0.0305
8.37	6.9	0.195	1.3	0.118	0.142	0.704	0.118	0.118	0.118	0.118	2.34	0.314	0.312	0.97	0.183	0.133	0.118	0.244	1.63	0.364	0.477	1.03	0.118	0.308	2.91	0.387	1.8	0.5	2.54	3.43	0.401	0.59	1.88	0.154
89.9	85.5	88.7	94.1	86.4	94.8	102	96.9	81.6	82.7	96.5	103	87.3	96.9	101	103	105	103	98.9	99.3	105	98.9	89.8	88.1	82.7	91.6	68.3	94.9	72.4	90.2	104	90.7	88.9	102	95.7
93.1	88.3	86.4	92	84.1	97.7	95.2	100	89.2	87.2	94.5	106	84.3	82.3	104	96.1	89	97.7	95.6	94.7	104	92.8	89.3	89	83.4	94.4	72.5	95.1	77.7	89.2	91.6	92.8	85.6	97	89.8
98.6	94.6	95.3	101	97.7	100	99.3	103	96.9	92.4	107	102	83.7	93.7	106	98.2	101	93.9	94.9	94.3	109	90.1	84.3	87.9	84.8	94.9	60.9	96.6	74.1	92.8	99.4	96.7	85.8	93.8	91.9
113	84.8	92.7	90.3	93.4	94.4	102	104	95.7	90.9	103	78.1	74.8	83.6	78.6	88.5	83.8	83.9	84.9	82.3	102	88.6	50.6	71	77.4	80.1	45.1	95.9	70	93.7	97	101	61.4	92.8	90
107	75	93.2	81.9	94.1	100	106	99.3	93.8	94.3	102	73.1	66	86.5	73	81.4	87.7	88.5	82.1	74.2	95.2	81.3	38.4	65.9	72.4	75.1	32.2	91.4	66	87	83	97.6	57.2	92.6	93.3
109	192	18	104	3.39	6.17	18	0.1	0.1	0.1	25.9	286	174	25.9	20.5	9.74	7.99	15.3	14.1	31.9	20.5	24.7	22.8	196	225	62.6	94.2	91.3	37	189	136	242	188	15.7	4.84
133	142	11.8	72.5	9.14	55.3	131	3.32	1.45	9.66	185	131	27.5	21.5	18.4	0.1	13.1	14.3	6.29	39.4	6.98	22.9	43.7	35.4	68.2	69.3	45.3	43.5	0.978	125	99.7	318	152	100	46.7
242	334	29.9	177	12.5	61.5	149	3.32	1.45	9.66	211	416	201	47.4	38.9	9.74	21.1	29.6	20.4	71.3	27.4	47.7	66.5	232	294	132	140	135	38.1	314	236	560	340	116	51.6
28600	243000	30600	123000	29300	25900	23500	39100	26000	38900	23500	106000	22200	16500	19500	22100	23300	30500	78700	172000	53700	374000	298000	41500	43100	24400	22900	38000	22400	88100	53700	9440	52900	23300	25700
5250	14300	580	3810	305	498	313	492	225	637	336	6600	412	1120	771	994	500	667	6600	3680	1530	3750	2430	622	2490	4560	1220	11800	1680	32800	5360	3950	2530	239	161
-	178000	64000	-	-	31300	-	118000	-	-	18400	-	82400	163000	-	176000	-	257000	-	207000	-	-	-	-	-	-	-	-	136000	-	149000	136000	-	96400	115000
-	18200	12500	-	-	4230	-	14700	-	-	2380	-	15700	30200	-	27400	-	20100	-	27900	-	-	-	-	-	-	-	-	15900	-	10900	14800	-	7360	17100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0108	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0107	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0108	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0114	0.01
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	03/07/2018	04/07/2018	-	-	04/07/2018	-	10/07/2018	-	-	13/06/2018	-	13/06/2018	18/06/2018	-	18/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	02/07/2018	-	29/06/2018	04/07/2018	-	10/07/2018	10/07/2018
-	Renata Bozhkov	Barbara Urbanek-Walsh	-	-	Marcin Magdziarek	-	Andrzej Ferfecki	-	-	Andrzej Ferfecki	-	Andrzej Ferfecki	James Richards	-	James Richards	-	-	-	-	-	-	-	-	-	-	-	-	Lucy Caroe	-	Lucy Caroe	Renata Bozhkov	-	Andrzej Ferfecki	Andrzej Ferfecki
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected
-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Detected	Not Detected
-	0	0	-	-	0	-	0	-	-	0	-	0	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-	Soil containing material typical of AIB	-	0	0	-	0	0
101	115	105	112	106	118	105	105	108	105	104	108	105	110	108	108	110	109	106	109	115	118	116	116	112	102	104	109	111	111	110	114	115	107	104
96.7	98.6	97.8	100	99.2	98	94.4	94.9	94.3	98.7	97.2	98.2	97.8	96.1	92.7	95.5	92	99.7	97.8	99.6	98.5	96	96.3	98.7	92.9	97.9	96.8	98.6	98.7	97.9	98.2	97	98.5	94.2	94.2
92.2	82	93.4	100	99.2	84.6	110	106	108	96.9	90	93.7	95.3	90.4	74	89.9	75.2	95.5	93.1	94.1	92.3	83.7	94	87.3	104	96.4	96.7	102	90.6	92.3	86.1	82.5	90.2	103	104
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9	2.33	0.71	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.64	7.21	8.28	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.49	9.38	8.93	-	-	-	-

Glan Lyn Commercial Soils Data

40AG16V	40AG17V	40AG19V	40AG22V	40AG25V	40AG27V	40AH10	40AH10	40AH10	40AH14	40AH14	40AH16	40AH19	40AH19	40AH19	40AH21	40AH26	40AH26	40AH27	40AH27	40AH10V	40AH14V	40AH16V	40AH19V	40AH21V	40AI11	40AI11	40AI11	40AI13	40AI13	40AI13	40AI15	40AI15	40AI16	40AI17	40AI18
0.900.90	1.001.00	3.503.50	3.203.20	3.103.10	3.3	0.400.40	1.001.00	2.002.00	0.500.50	1.001.00	0.500.50	0.500.50	1.001.00	1.601.60	1.001.00	0.5	1.2	0.5	1	3.303.30	1.301.30	1.001.00	3.803.80	1.401.40	0.500.50	1.201.20	1.801.80	0.500.50	1.001.00	1.501.50	1.501.50	2.702.70	0.500.50	1.001.00	2.002.00
28/06/2018	28/06/2018	03/07/2018	05/06/2018	05/06/2018	30/05/2018	22/06/2018	22/06/2018	22/06/2018	28/06/2018	28/06/2018	03/07/2018	03/07/2018	03/07/2018	03/07/2018	07/06/2018	30/05/2018	30/05/2018	30/05/2018	30/05/2018	22/06/2018	28/06/2018	03/07/2018	03/07/2018	07/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018
4.03	7.31	4.22	3.52	2.98	2.55	0.683	4.69	7.34	0.679	9.81	4.59	1.22	0.931	9.36	1.76	49.7	3.59	4.64	23.4	5.09	1.29	6.05	3.41	3.45	0.379	1.13	2.05	0.35	0.945	5.41	4.12	2.93	1.74	2.88	0.607
11	16.2	10.6	11	12.8	6	7.58	8.16	17.6	13.1	23.5	15.8	5.39	5.44	10.2	4	6.32	6.56	4.87	14.8	12.7	10	12.4	7.96	7.3	2.4	4.39	7.36	6	4.7	10.8	9.79	9.16	7.24	9.79	7.17
0.02	0.31	0.259	0.382	0.399	5.74	0.802	0.218	1.24	0.101	1.61	0.2	0.02	0.02	0.547	1.2	0.441	0.869	0.706	0.255	0.02	0.02	0.22	0.254	0.12	0.02	0.02	0.2	0.2	0.02	0.146	0.164	0.282	0.0692	0.02	0.02
38.7	32.1	32.2	34.9	32	185	268	41.1	77	5.24	15.1	88.2	26.4	21.3	84.3	197	101	49.6	40.5	31.6	39.4	26.7	34.5	38.5	95.5	4.04	44.4	442	423	118	6.69	11	12.8	6.19	16	0.9
28.2	32.8	23.5	25	16.8	21.7	18.8	14.2	37	14.1	45	57.6	1.4	1.4	25.1	19.9	26.2	18	11.7	28.4	31.8	10.1	31.5	21.2	8.35	14	4.45	14	14	7.01	20.2	14.7	15.8	9	22.6	7.81
23	39	27	37	26.4	58.7	27.4	11.6	360	24.7	631	106	23.2	30.9	50.6	77.9	52.3	85.8	56.4	27.5	22.2	25.6	37.4	23.8	135	0.7	35.7	90.4	13.1	33.7	88.5	30.1	47	9.67	25.2	5.81
0.14	0.14	0.14	0.14	0.14	1.4	1.4	0.14	14	0.14	0.335	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14
40.9	28.2	36.5	31.6	31.7	16.8	9.45	15.3	29.9	21.7	22.9	42.1	4.34	4.65	24.8	11.3	16.1	13.8	8.93	30.4	42.7	34.3	30.2	41.4	11.2	0.777	3.62	9.12	3.88	3.43	17.1	17	15.1	9.88	19.8	6.83
1	1	1	1.22	1.15	10.5	13.8	4.01	10	1	1	10	5.96	5.71	3.5	6.65	5.26	3.65	2.85	1.71	1	1	1	1.29	2.76	9.41	4.83	10	10	2.42	1	1.3	1.01	1	1.38	4.73
58.1	49.4	50.8	54.5	51.1	283	430	83	90.4	19.4	27.9	95.5	32	23	203	207	157	96.2	57	48.1	57.2	50.4	52.3	57.7	86.1	14.5	49	297	261	81.3	25.9	31.2	54.1	15.2	34.2	21.3
112	136	109	129	132	126	55.5	64.7	2070	97.2	2450	434	282	368	190	209	84.9	343	310	91.6	102	108	137	91.4	989	23.4	214	424	196	332	337	177	267	46	76.1	104
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0416	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.325	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.66	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0723	0.04	0.04	0.04	0.04
0.1	1.14	0.1	0.1	0.19	0.364	0.307	0.102	5.3	0.1	1.71	3.34	0.1	0.297	0.1	2.09	0.1	3.49	2.28	1.99	0.228	0.1	0.1	0.1	1.69	1.7	2.56	15	8	8.45	3.5	9.75	0.67	0.851	2.94	0.633
0.1	1.45	0.1	0.1	0.1	6.04	1.75	0.894	23.3	0.1	10.8	8.8	2.2	0.921	1.06	13.6	5.28	18.8	12.4	4.54	0.131	0.1	0.1	0.1	18.1	7.34	8.19	49.4	30.3	34.9	11.7	30.8	4.02	2.16	8.51	0.951
0.902	9.11	0.1	1.25	2.28	49.4	16.4	9.39	81.3	1.96	75.6	39.5	15.3	9.26	28.6	158	44.2	186	118	58.7	0.915	0.369	7.97	0.1	181	18.8	24.4	247	154	170	46	40.8	24.9	11.5	28.1	5.02
0.1	0.1	0.1	0.1	3.32	24.2	6.86	5.91	21.7	0.1	16.2	4.31	1.47	0.782	3.38	80.2	12.1	81.7	42.9	1.18	0.1	0.1	0.1	0.1	123	6.83	6.6	34.8	17.2	26.1	12.2	7.98	4.97	2.46	6.28	0.1
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.217	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.44	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0482	0.04	0.04	0.04	0.04
0.295	0.1	0.1	0.1	0.1	0.1	0.1	0.208	1.17	0.1	3.19	2.63	0.244	0.174	2	1.53	0.939	1	0.719	1.97	0.1	0.1	0.1	0.1	0.225	0.1	0.1	4.1	1.48	1.92	0.791	1.15	1.13	0.1	0.841	9.51
0.1	1.21	1.26	0.1	0.1	3.67	2.9	1.87	11.1	1.67	9	6.34	1.25	0.652	6.84	7.62	3.67	8.41	4.85	7.84	0.1	0.1	1.75	0.1	7.23	1.26	1.64	13.8	8.15	8.05	6.83	11.9	6.34	1.02	6.16	44.3
9.09	46.3	9.09	0.112	2.58	89.3	31.7	16	40.1	0.1	62.6	36.1	9.62	7.02	63.4	119	24.1	105	46.1	225	1.91	1.51	26.2	3.71	158	9.65	9.57	59.7	43.9	40.1	44.8	32.8	40.1	7.6	46.2	101
3.58	4.73	9.74	0.549	5.57	31	13.1	12.8	14.2	0.1	32.3	10.8	2.96	1.29	17.7	139	11.1	77.6	35.1	33.8	0.1	0.1	9.83	1.01	167	12.4	6.72	19.5	9.85	14.1	18	8.21	18.3	0.737	31	35.7
1.67	0.1	4.87	0.1	2.83	10.1	4.79	5.77	4.78	0.1	12.7	4.03	0.994	0.1	6.81	60	4.27	32.3	15.3	9.55	0.1	0.1	2.89	0.1	73.8	5.96	2.58	7.36	3.56	5.52	6.35	2.56	8.11	0.1	13.5	15.1
12	12	12	12	12	12	12	12	14.7	12	12	12	12	12	67.4	60	12	16.6	12	12	12	12	12	12	12	12	12	12	12	12	16.3	12	12	12	12	12
8	8	8	8	8	47.2	9.44	12.1	8	8	13.5	8	8	8	18.8	122	16.1	14.7	9.02	8	8	8	8	8	8	8	8	8	8	8	39.9	13	8	8	14.6	8
16	16	16	16	16	166	32.6	45.2	57	16	47.2	16	16	16	119	88.7	28.8	41.1	25	16	16	16	16	16	35.4	16	16	16	16	16	84.8	28.9	26.8	16	19.7	16
14	14	14	14	14	1530	428	133	158	14	97.4	73.4	31	16.6	428	380	192	202	145	14	14	14	14	14	181	14	49.9	46.1	33	48.7	795	180	223	26.5	51.6	14
15	15	15	15	15	2090	551	159	135	15	107	78.4	49.3	19.8	367	375	243	266	138	15	15	15	15	15	194	15	41.9	40.8	27.3	39.3	1120	216	281	23.8	60.6	15
15	15	15	15	15	2670	747	262	262	15	249	92.8	53.2	30.3	663	534	305	373	216	39.1	15	15	15	15	335	15	83.3	110	60.9	85.9	1300	340	401	36.7	104	15
14	14	14	14	14	1060	302	80.1	78.5	14	82.1	40.4	27.5	14	206	185	125	139	68.6	14	14	14	14	14	120	14	28.1	33.2	17.8	30.8	517	117	152	14	34.4	14
24	24	24	24	24	1950	501	141	114	24	128	116	56.4	33	270	321	184	232	137	24	24	24	24	24	223	24	46.8	51.6	31.2	41.7	835	175	225	24	61	24
10	10	10	10	10	1460	475	163	218	10	165	90.9	36.5	25.2	442	387	209	253	169	26.7	10	10	10	10	176	10	52.7	79.9	58.1	77.3	741	220	233	27.3	65.7	10
0.023	0.023	0.023	0.023	0.023	357	86.5	0.023	29	0.023	30.9	0.023	0.023	0.023	67.4	0.115	39.4	57.5	31.4	0.023	0.023	0.023	0.023	0.023	59.4	0.023	0.023	0.023	0.023	0.023	193	45	55.8	0.023	0.023	0.023
0.018	0.018	0.018	0.018	0.018	1620	441	160	119	0.018	145	77.9	36.3	0.018	301	331	188	239	128	0.018	0.018	0.018	0.018	0.018	188	0.018	44.7	47	30.2	38.7	688	175	244	21.6	44	0.018
0.017	0.017	0.017	0.017	0.017	2080	575	324	441	0.017	186	107	45.1	32.6	757	677	267	354	236	0.017	0.017	0.017	0.017	0.017	289	0.017	132	113	71.6	115	1030	253	296	50.8	91.8	0.017
10	10	10	10	10	15.1	10	19.7	19.3	10	30.9	10	10	10	75	66.9	19.5	11.8	10	10	10	10	10	10	11.9	10	10	10	10	10	28.2	17.6	11.7	10	15.9	10
9	9	9	9	9	40.8	14.9	83.8	94.5	9	107	26.3	9	9	268	80.4	49.7	37.7	24.5	9	9	9	9	9	53.6	9	9	17.1	9	16.4	42.9	40.3	37.3	29.5	22.7	9
15	15	15	15	15	612	140	301	241	15	255	67.3	26.1	22.4	451	319	155	150	117	15	15	15	15	15	130	15	73.3	66.9	38.4	44.9	346	114	81.1	49.8	89.4	15
0.015	0.015	0.015	0.015	0.015	2.27	0.611	0.275	0.381	0.015	0.164	0.125	0.0525	0.0366	0.592	0.593	0.294	0.406	0.265	0.015	0.015	0.015	0.015	0.015	0.275	0.015	0.11	0.1	0.0658	0.114	1.07	0.257	0.284	0.0425	0.0775	0.015
0.118	0.118	0.118	0.118	0.118	18	4.92	2.16	2.36	0.118	1.81	0.895	0.414	0.216	5.09	4.46	2.31	2.79	1.71	0.118	0.118	0.118	0.118	0.118	2.27	0.118	0.663	0.706	0.434	0.652	8.86	2.19	2.55	0.309	0.753	0.118
91.3	85.1	90.3	91.1	92.3	85.9	93	90.6	88.3	94.8	88	89.6	93.3	89.6	103	90.9	78.8	93.1	99.8	94	91.8	90.3	89.2	92.5	91.2	98.1	98.4	93.6	89.6	96.5	98.6	90.7	90.6	95	98	90.1
93	82.8	86.5	87.9	85.5	86.7	84.8	97	83.5	92.1	87.4	83.1	87.7	86.4	93.2	83.6	75.3	93.1	98	94.2	90.7	87.8	88.3	91.2	96.6	93.6	92.2	81.2	80.2	90.4	94	85.6	76	96	101	85.9
92.8	94.2	85.6	91.7	88.3	96.6	96.1	97.6	84.5	92.8	86.3	81.8	99.4	93.9	96	93.1	58.3	89.1	101	96	90.8	95.1	99.5	88.1	96.1	89.9	85.6	96.4	90.4	92.9	90.5	90.5	87.7	99.8	106	96.1
88.4	88.2	81.6	98	94.8	82.5	90.4	80.9	68.6	89.3	75.3	80.3	94.2	90.5	98.6	89.5	38.7	75.7	91.1	85	86.3	92.9	97.9	79.8	84.7	84.3	82.3	83.3	87.7	79.3	84.5	77.6	85.4	89.9	83.6	92.1
89.6	89.5	91.5	107	89	86.2	89.9	78.4	62.5	94	70.3	79	94.5	91.1	97.8	84.3	30.6	77.8	90	88	89.1	93.5	101	81.8	74.8	91.7	83.3	81.4	89.2	79.7	80.5	75.5	80.1	90.5	81.2	92.2
0.902	11.7	0.1	1.25	5.8	80	25.3	16.3	132	1.96	104	56	18.9	11.3	33	253	61.5	290	176	66.4	1.27	0.369	7.97	0.1	323	34.6	41.7	347	210	240	73.4	89.3	34.6	17	45.9	6.61
13	52.2	20.1	0.661	8.15	124	47.7	30.9	66.6	1.67	107	55.8	14.1	9.14	90	268	39.8	192	86.8	268	1.91	1.51	37.7	4.72	333	23.3	17.9	97.2	63.4	64.2	70.3	54.1	65.9	9.36	84.2	190
13.9	63.9	20.1	1.91	13.9	204	74.6	47.2	198	3.63	211	112	33	20.4	123	521	101	482	262	335	3.18	1.87	45.7	4.72	656	57.9	59.6	444	273	304	144	144	100	26.3	130	197
24400	25600	31400	31100	35300	99800	139000	30900	145000	24400	50900	133000	20500	18400	61200	115000	72900	62300	48300	21600	21500	39900	30100	30100	59200	4700	30400	166000	139000	70000	35400	26500	18400	12000	29100	38500
280	210	580	506	1280	15900	24100	4500	4970	823	971	9040	7170	4310	7260	15800	13500	6790	4670	396	368	737	308	440	8080	5540	6200	21700	17400	8300	1100	2140	1950	414	1720	3790
-	224000	-	-	118000	152000	-	-	-	-	-	-	181000	-	216000	189000	-	184000	73600	58200	117000	216000	74800	-	147000	-	-	42800	-	73100	130000	-	-	-	-	-
-	31100	-	-	9720	23300	-	-	-	-	-	-	26300	-	31800	25200	-	30200	7090	7180	13100	11800	16100	-	25900	-	-	12500	-	8220	19200	-	-	-	-	-
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0163	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.375	0.01	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.01	0.0119	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.107
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.114	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.068	0.015	0.015	0.138
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.505	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.245
-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	-	-	-	-	-	-
-	10/07/2018	-	-	-	-	-	-	-	-	-	-	04/07/2018	-	04/07/2018	04/07/2018	-	04/07/2018	04/07/2018	04/07/2018	04/07/2018	04/07/2018	04/07/2018	-	10/07/2018	-	-	15/06/2018	-	-	-	-	-	-	-	-
-	Barbara Urbanek-Walsh	-	-	-	-	-	-	-	-	-	-	Barbara Urbanek-Walsh	-	Andrzej Ferfecki	Marcin Magdziarek	-	Marcin Magdziarek	Renata Bozhkov	Renata Bozhkov	Marcin Magdziarek	Marcin Magdziarek	Marcin Magdziarek	-	Lucy Caroe	-	-	James Richards	-	-	-	-	-	-	-	-
-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-
-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	-	-	-	-	-	-
-	Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	-	-	-	-
-	Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	-	-	-	-
-	Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	-	-	-	-
-	Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	-	-	-	-
-	Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	-	-	-	-
-	Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	-	-	-	-
-	Not Detected	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	-	-	-	-
-	0	-	-	-	-	-	-	-	-	-	-	0	-	0	0	-	0	0	0	Bundle of fibres in soil	0	0	-	0	-	-	0	-	-	-	-	-	-	-	-
104	108	105	107	111	109	109	111	119	98	110	105	111	110	109	116	110	110	116	117	110	118	116	104	105	105	105	106	115	106	112	114	110	114	107	99.3
94.9	94.8	90.9	98.2	98.3	97.3	97.8	96.1	95.7	94	93.2	96	95.6	99.8	97.4	98	98.7	106	96.9	97.6	99.7	96.9	92.7	95	94.8	95.5	95.5	96.5	94.2	99.8	99.1	94.4	89.5	99.7	96	93.1
110	109	78.4	89.5	86.8	94.8	99.8	90.1	85	109	114	98.7	80.4	91.8	92.9	87	94.4	84.1	79.1	83.3	82	84.1	79.1	109	110	109	91.5	88.1	94	86.1	91.3	89.8	70.9	88.1	98	109
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	2.06	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	6.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	2.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	5.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	0.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	3.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	58.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	59.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

40AI19	40AI19	40AI19	40AI25	40AI25	40AI26	40AI26	40AI27	40AI27	40AI11V	40AI15V	40AI16V	40AI19V	40AI25V	40AI26V	40AJ10	40AJ10	40AJ10	40AJ12	40AJ12	40AJ12	40AJ14	40AJ14	40AJ23	40AJ23	40AJ23	40AJ26	40AJ27	40AJ27	40AJK16	40AJK16V
0.500.50	1.301.30	2.002.00	0.500.50	0.900.90	0.5	1.2	0.7	1.5	4.954.95	0.400.40	1.001.00	4.304.30	1.001.00	2.6	0.500.50	1.001.00	1.501.50	0.500.50	1.001.00	2.002.00	0.500.50	1.001.00	0.700.70	1.601.60	2.002.00	1.5	0.7	1.5	0.500.50	1.501.50
03/07/2018	03/07/2018	03/07/2018	07/06/2018	07/06/2018	30/05/2018	30/05/2018	30/05/2018	30/05/2018	27/06/2018	28/06/2018	28/06/2018	03/07/2018	07/06/2018	30/05/2018	22/06/2018	22/06/2018	22/06/2018	27/06/2018	27/06/2018	27/06/2018	28/06/2018	28/06/2018	07/06/2018	07/06/2018	07/06/2018	30/05/2018	30/05/2018	30/05/2018	28/06/2018	28/06/2018
0.728	0.374	2.84	6.98	4.17	7.24	6.33	4.91	76.5	6.12	1.69	4.22	2.31	6.86	1.93	2.78	2.65	1.83	2.9	3.34	2.19	7.21	1.7	4.14	2.07	1.71	3.9	1.81	4.19	8.07	12.7
3.95	2.85	14.7	7.48	7.3	7.03	8.11	5.46	45.8	14.6	11.5	10.4	9.26	12.8	8.32	5.36	7.15	7.34	16.7	7.95	29.8	8.73	11.7	4.12	9.28	5.18	6.98	6.22	7.36	16.6	12.7
0.02	0.02	1.31	0.444	0.658	0.276	0.887	0.812	0.02	0.02	0.02	0.02	0.286	0.65	0.565	0.431	0.847	0.279	0.509	0.02	0.02	0.0817	0.28	0.205	0.418	0.187	0.805	1.74	0.228	0.362	0.174
2.13	1.52	26.8	11	85.1	119	68.2	79.4	7.25	39.2	35.2	34	34.6	42.5	65.4	51.3	33.8	30.4	100	64.6	24.3	14.2	10.8	6.02	22.7	12.9	138	144	15.3	34.6	38.7
1.4	1.4	38.4	21.2	22.8	24.1	23.7	16.5	13.4	29.9	16.5	16.3	23.7	28.8	20.6	7.74	16.1	33	64.9	26.5	37.4	29.3	33	6.8	24.3	19.5	53.6	16.6	16.3	25.9	26.2
12.2	7.44	378	33.5	59.7	21.2	121	66.6	3.55	26.6	25.9	27.6	25.6	41.6	32.6	23.4	57.6	38.1	74.2	40.9	40.1	21.4	37.3	8.03	25.8	25.3	56.2	115	31.6	35.8	39.1
0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.38	0.14	0.14	0.14
4.29	2	73.3	23.9	18	19.8	15.6	10.4	11.8	33.4	40.4	33.1	36.8	28.5	16.6	8.07	11.8	7.91	18.9	20.4	14.3	23.8	24.5	7.16	24.9	16.7	13.1	14	13.4	34.2	36
6.23	8.26	1.32	1.26	4.74	4.09	3.55	3.24	2.61	1	1	1	1.15	1.37	5.31	5.16	6.03	3.32	1.65	4.43	2.98	10	1.3	1	1.38	1.21	3.94	4.21	2.54	1	1
23.3	15.6	480	34.1	165	88.1	107	111	18.9	60.9	57.7	59.8	54.7	54.1	94.3	119	77.1	63.2	94	116	50.4	30.1	40.2	13.7	40.9	21.7	161	133	38.3	55.1	54.6
153	113	551	86	260	67.3	305	204	38.8	110	109	107	116	148	336	101	206	179	331	202	197	91.8	128	27.7	104	80.7	258	613	126	150	123
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.112	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.0982	0.04	0.04	0.04	0.04	0.248	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.364	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.0805	0.04	0.04	0.04	0.977	0.0836	0.04	0.04	0.04	3.9	0.04	0.0584
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0851	0.524	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.23	0.04	0.04	0.04	2.78	0.602	0.04	0.04	0.106	10.1	0.04	0.0917
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.571	0.139	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.57	0.04	0.0655	0.04	4.61	2.06	0.04	0.04	0.141	16.1	0.04	0.04
0.1	0.507	2.06	1.34	1.45	1.16	1.97	10.3	0.1	0.676	0.308	0.254	0.428	1.04	0.1	2.36	2.45	0.854	0.616	13.3	2.38	4.93	21.2	256	30	0.149	0.816	16	816	0.1	4.47
0.488	2.61	11.8	2.73	14.4	3.35	17.1	27.9	0.1	0.1	0.1	0.479	0.1	2.2	2.67	13	8.73	9.06	7.35	30.8	8.57	9.92	69.7	626	44.4	19.7	12.9	106	1100	0.1	4.91
3.33	9.33	123	12.5	94.7	15.4	160	345	136	2.28	1.18	3.83	0.218	13.6	19.5	35.3	44.1	46.3	65.1	137	89.7	222	253	1800	112	61.6	251	431	3580	7.38	20.9
0.1	0.1	40.3	1.82	64.1	5.84	41.5	237	0.1	0.1	0.1	0.1	0.21	1.33	4.46	6.2	15.6	13.8	24.9	57.1	16.4	20.1	107	830	53.2	8.15	85.3	128	1380	0.1	0.1
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0672	0.35	0.04	0.04	0.0428	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.158	0.04	0.04	0.04	1.85	0.415	0.04	0.04	0.148	6.7	0.04	0.0605
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.381	0.0918	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.381	0.04	0.0429	0.04	3.08	1.37	0.04	0.04	0.095	10.7	0.04	0.04
0.1	0.1	1.3	1.38	0.664	1.74	0.194	13.4	3.2	0.18	0.1	0.383	0.1	0.1	0.542	0.1	1.08	2.2	1.37	3.97	0.732	7.02	9.68	282	14.7	0.1	3.06	16.1	507	0.1	9.01
0.1	0.648	6.55	4.25	10.1	4.65	4.56	34.6	8.17	0.1	0.1	0.901	0.1	0.1	3.33	0.1	5.23	5.71	9.27	15.4	4.2	17.9	63.4	790	34.4	0.1	49.4	75.1	1360	0.1	13.4
1.49	4.25	70.7	13.9	104	12.3	51.8	561	944	10.3	2.98	12.4	4.6	37.3	30.8	3.73	42.5	17.9	103	99.1	31.9	74.4	335	2240	99	9.46	162	226	4070	35.3	74.4
0.1	1.07	44.7	4.48	92.1	5.42	34.6	453	24.4	0.1	0.1	1.14	0.711	10.9	16.5	0.1	24.9	9.66	22.2	72	16.9	17.1	157	880	46.7	8	59.6	79.5	1250	6	16.7
0.1	0.1	18.2	1.4	41.7	2.27	14.2	198	3.51	0.1	0.1	0.1	0.1	3.54	6.17	0.1	9.82	4.22	23.1	30.9	7.56	6.78	67.3	372	19.3	3.39	22.5	33	532	1.62	4.59
12	12	60	12	24	12	12	60	12	12	12	12	12	12	12	12	12	40.9	35.4	12	12	12	60	372	60	12	60	43.9	1040	12	12
8	8	40	8	16	8	12.8	2660	178	8	8	8	8	8	11.9	8.75	12.8	45.2	61.2	60.2	10.6	94.8	40	2420	128	8	124	263	6190	8	54.2
16	16	80	16	56.7	16	21	622	182	16	16	16	16	16	32.6	23.3	36.9	163	224	60.1	20.4	20.6	80	1670	115	16	607	506	3990	16	105
14	14	436	41.3	706	14	97.6	274	216	14	14	14	14	46	253	169	248	616	585	239	75.7	51.3	94.2	2050	161	16.7	2520	986	7500	14	77.9
15	15	480	33.9	904	15	90.1	187	158	15	15	15	15	43.7	285	252	327	593	590	295	85.6	50.1	117	1200	101	15	1650	624	5080	15	107
17.7	15	671	58.7	1120	15	134	406	273	15	15	15	15	96	494	393	498	851	989	491	127	81.5	102	937	103	26.9	2500	890	2800	25.8	226
14	14	255	24	379	14	63.7	126	126	14	14	14	14	28.9	154	134	160	303	300	159	43.3	26.3	70	195	70	14	806	322	862	14	68.5
24	24	458	27.5	754	24	102	158	145	24	24	24	24	24	315	286	313	453	503	303	73	48.4	229	688	120	24	1000	433	2340	24	129
10	14.6	572	53.9	771	10	106	276	256	10	10	10	10	72.7	233	187	253	631	634	292	91.8	83.6	146	4740	264	20	2390	1130	12600	10	163
0.023	0.023	0.115	0.023	125	0.023	0.023	0.115	0.023	0.023	0.023	0.023	0.023	0.023	58.6	49.1	64.2	129	126	59	0.023	0.023	0.115	267	0.115	0.023	256	142	1070	0.023	0.023
0.018	0.018	487	25.9	739	0.018	93.4	118	88	0.018	0.018	0.018	0.018	36.7	224	253	217	392	412	310	65.3	34.9	90	328	90	20.8	1060	387	1060	0.018	103
0.017	0.017	595	64.2	1130	19.8	168	1390	700	0.017	0.017	0.017	0.017	62.6	370	231	360	1200	1130	532	152	104	0.085	1470	184	30.5	5910	1860	6090	28.4	381
10	10	50	14.1	0.02	10	14.2	1700	242	10	10	10	10	10	10	10	10	45.2	73.7	42.2	10	17.6	50	2810	202	10	185	294	6540	10	95.3
9	9	45	12.1	0.018	27.3	24.5	3720	537	9	9	9	9	9	21.4	23	51	89.3	154	74.9	22.3	42.1	45	408	69.5	9	45	215	828	31.5	24.7
15	15	198	69.6	345	27.3	93.7	3760	1030	15	15	15	15	34.3	143	112	171	631	744	237	86	159	75	9540	446	24.7	2440	2400	5300	15	729
0.015	0.0175	0.495	0.0466	1.25	0.015	0.173	1.02	0.628	0.015	0.015	0.015	0.015	0.0484	0.36	0.245	0.371	0.981	0.898	0.496	0.152	0.108	0.184	4.65	0.358	0.0287	4.95	2.15	18.3	0.015	0.256
0.118	0.118	4.65	0.472	8.28	0.118	1.19	16.4	4.76	0.118	0.118	0.118	0.118	0.469	2.96	2.37	3.08	7.16	7.45	3.65	1.01	0.922	0.872	33.7	2.13	0.168	26.4	12.6	81.6	0.118	2.52
92.8	90.1	98.1	85.6	87.9	107	90.8	90.9	92.7	95.7	89.3	84.7	80.2	90.4	80.8	89.9	81.8	105	105	89.2	98.6	99.1	88.5	86.3	92.9	97.7	92.6	91.9	110	85.7	104
91.3	84.2	94	83	91.4	99.8	92	93.5	95.4	98.5	91.5	87	84.5	87.6	84.4	97.6	83.9	99.9	107	85.5	94.6	93.1	85.6	91.9	90.1	91.2	89.5	99.9	115	86.3	102
101	93.8	97.9	79.8	92.9	98.2	92.3	89.3	96	96.1	83.1	96.8	89.3	94.4	94.5	115	94.9	97.9	111	85.6	92.2	89.3	85.6	95.8	90.3	94.8	96.4	97.7	105	85.9	99.5
96	89.6	99.5	84.5	80.2	82.7	72.9	74.9	70.8	91.8	87.9	94.6	72.2	97.1	78.2	99	80.4	94.4	88	82.7	90.5	90.3	76.5	76.3	85.6	82.8	95.9	85.8	99.8	82.1	97
97.7	88.2	102	85.4	80	80.6	68.9	73.6	72.3	93.5	89.7	94.8	70.5	94.6	78.6	96.1	79.2	90.1	87.5	85.2	88.5	83.5	76.7	71.3	83.3	82.6	89.4	84.6	112	84	93.2
3.82	12.4	177	18.4	175	25.8	220	620	136	2.95	1.49	4.56	0.857	18.2	26.6	56.9	70.9	70	98	238	117	257	451	3510	240	89.6	350	681	6880	7.38	30.3
1.49	5.97	123	24	207	24.1	91.2	1060	980	10.5	2.98	14.8	5.31	48.2	51.2	3.73	73.7	35.4	136	190	53.7	116	565	4200	195	17.5	274	397	7180	41.3	113
5.31	18.4	300	42.3	381	49.9	312	1680	1120	13.4	4.47	19.4	6.17	66.4	77.8	60.6	145	105	234	430	171	373	1020	7720	439	107	624	1080	14100	48.7	144
36000	19200	33200	25900	58200	27900	83600	93000	17400	25500	32100	36300	25500	24100	37600	34300	35900	15400	56500	60800	45500	14300	23600	6300	29300	13700	59100	83500	19800	24900	20100
3950	6350	1580	1120	8750	6080	8240	8230	236	260	485	292	425	628	8310	7540	4540	6260	5380	8840	7200	530	1230	418	1460	1170	8110	9720	2870	207	291
-	-	-	157000	-	180000	-	130000	171000	-	63100	248000	-	48500	128000	-	112000	-	-	-	-	-	-	172000	-	141000	-	139000	-	73900	259000
-	-	-	22700	-	51700	-	23400	12000	-	5110	7370	-	8760	17500	-	31400	-	-	-	-	-	-	32600	-	17700	-	21000	-	15700	41500
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0826	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0165	0.01	0.01	0.01	0.0103	0.01	0.01	0.01	0.01	0.01
0.015	0.0486	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0465	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0207	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.114	0.035	0.035	0.035	0.035	0.035
-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	02/07/2018	-	04/07/2018	-	04/07/2018	04/07/2018	-	15/06/2018	18/06/2018	-	-	-	-	05/07/2018	-	-	-	-	-	-	-	-	02/07/2018	-	02/07/2018	-	02/07/2018	-
-	-	-	Marcin Magdziarek	-	Lucy Caroe	-	Lucy Caroe	Marcin Magdziarek	-	Renata Bozhkov	Christian Hallam	-	-	-	-	Barbara Urbanek-Walsh	-	-	-	-	-	-	Lucy Caroe	-	Marcin Magdziarek	-	James Richards	-	Lucy Caroe	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	Trace	-	Detected	-	Not Detected	Not Detected	-	Detected	Not Detected	-	-	-	-	Not Detected	-	-	-	-	-	-	Detected	-	Detected	-	Not Detected	-	Not Detected	-
-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-
-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-
-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-
-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-
-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-
-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-
-	-	-	Loose fibre in soil	-	Soil containing ACM debris	-	0	0	-	Loose fibres in soil	0	-	-	-	-	0	-	-	-	-	-	-	Soil containing material typical of asbestos rope	-	Soil containing material typical of asbestos cement	-	0	-	0	-
107	105	108	111	106	108	107	109	104	102	119	99.2	110	110	109	112	110	105	110	106	110	108	107	107	108	107	114	111	110	107	94
95	99	98.2	98.1	99.2	96.6	97.6	97.6	98.2	94.5	83.3	96.9	93.1	100	97.7	94.5	90.5	98.9	98.7	99.8	88.6	97.4	100	98.4	97	97.2	92	98.1	98.5	98.2	99.8
94.8	91.2	88.9	88.8	94	86.3	81.7	85.1	100	88	71.2	98.7	81	90.7	93.2	90.7	77.5	104	99.3	88.8	81.2	96	104	94.8	90.2	93.9	80	88.5	87.7	88.1	103
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1.8	0.09	0.09	0.09	0.09	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.4	0.07	0.07	0.07	0.07	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.8	0.04	0.04	0.04	0.04	0.185	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	2.6	0.13	0.13	0.13	0.13	1.1	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	8	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-
-	-	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-
-	-	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-
-	-	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-
-	-	0.78	0.96	0.76	-	-	-	-	-	-	-	-	-	-	-	-	-	2.69	-	-	-	-	1.39	1.31	1.21	1.71	1.1	1.31	0.5	-
-	-	9.41	8.79	11.7	-	-	-	-	-	-	-	-	-	-	-	-	-	51.7	-	-	-	-	9.11	10	8.96	6.14	9.67	12.8	8.44	-
-	-	10.1	9.67	12.3	-	-	-	-	-	-	-	-	-	-	-	-	-	53	-	-	-	-	10.4	11.2	10.1	7.74	10.7	13.9	8.44	-

Glan Lyn Commercial Soils Data

40AJ10V	40AJ12V	40AJ14V	40AJ23V	40AJ26V	40AK11	40AK11	40AK11	40AK13	40AK13	40AK13	40AK15	40AK27	40AK27	40AK27	40AK11V	40AK15V	40AL10	40AL10	40AL10	40AL10	40AL12	40AL12	40AL12	40AL15	40AL17	40AL17	40AL20	40AL20	40AL20	40AL28	40AL28	40AL28	40AL28	40AL10V	40AL12V
2.702.70	2.602.60	1.201.20	2.202.20	2.8	0.500.50	1.001.00	2.002.00	0.500.50	1.001.00	2.002.00	0.500.50	0.5	1	1.7	2.902.90	0.900.90	0.500.50	1.001.00	1.501.50	2.002.00	0.500.50	1.501.50	2.502.50	0.500.50	0.700.70	1.701.70	0.500.50	1.001.00	2.502.50	0.500.50	1	1.5	2.5	2.802.80	3.503.50
22/06/2018	27/06/2018	28/06/2018	07/06/2018	30/05/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	30/05/2018	30/05/2018	30/05/2018	22/06/2018	22/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	28/06/2018	22/06/2018	22/06/2018	05/06/2018	05/06/2018	05/06/2018	29/05/2018	29/05/2018	29/05/2018	29/05/2018	27/06/2018	27/06/2018
1.09	57.6	6.76	1.18	1.18	2.17	1.1	1.93	3	3.4	2.74	0.45	54	12.1	2.93	10.7	2.17	2.33	1.84	1.67	6.55	1.76	3.45	3.05	4.43	1.45	3.07	1.57	3.69	1.98	4.72	>100	21.7	7.19	31.7	2.16
10.1	11.2	15.6	10.4	7.04	7.67	8.03	6.89	9.02	8.06	11.4	1.35	7.81	6.75	16.6	21	30.2	25.7	10.3	7.37	7.42	6.84	5.12	13.2	12.7	13.3	2.45	16	11	4.82	3.88	4.22	5.98	16.8	9.15	10.2
0.02	0.02	0.638	0.187	0.575	0.704	1.7	2.02	0.985	0.821	0.515	0.542	3.37	0.7	0.02	0.579	0.315	0.722	0.2	0.02	0.02	0.128	0.02	0.0366	1.64	1.87	0.449	0.417	0.377	0.664	0.561	0.227	0.509	0.02	0.134	0.02
33	8.88	32.5	28.2	72.5	106	141	434	65.3	72	73.2	397	0.9	72.1	39.3	37	77.6	55.3	101	19.1	118	80.2	80.8	5.64	144	277	12.5	18.5	16.6	180	81.2	21.8	291	37.8	13.8	35.8
12.6	12.7	27.7	12	14.7	19.5	25.4	36.1	24.7	18.7	16.9	1.4	19.3	14.8	23.9	28.1	34.9	34	24.1	13.8	18.7	17.1	15.7	14.7	25.1	34.7	8.2	30.5	24.8	16.8	10.2	63	21.7	25.4	15.6	16.2
29.9	5.23	44.4	25	28.2	73.4	82.4	91.5	64.7	69.6	38.4	11.9	138	57.8	28.3	51.3	161	132	48.8	26.1	21.2	49.8	24.4	31.1	80.7	75.7	28.6	23.3	29.5	25	15.6	20.4	23.9	38.4	15.8	23.7
0.14	0.14	0.14	0.14	0.14	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	1.4	0.14	0.14	0.14	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14
39.4	21.5	28.2	37.6	9.07	12	16.7	14.1	22.3	12.9	19.4	1.04	43.4	15.9	39.1	26	13.3	12.8	22	19.4	3.19	11.8	8.74	17	19	20.5	6.74	41.4	34	8.62	7.24	8.01	15.2	31.2	23.7	38.5
1	2.34	1.29	1	5.11	6.94	10	18.1	7.98	4.36	1.95	7.99	1	2.49	1	1	6.21	3.92	10	1	9.2	2.56	3.89	1	10	10.5	2.79	1.36	2.06	5.08	3.59	1.5	7.48	1	1	1
60.2	20.7	51.2	50.1	132	127	193	702	109	125	70.9	274	16.8	59.6	69.6	60.5	128	111	164	37.8	397	108	127	21.7	216	632	38.3	44	35.4	301	172	38.1	714	62.8	27.9	57.5
114	20.6	154	105	106	249	283	120	325	362	129	34.9	727	207	70.3	170	2160	2080	330	140	94.6	266	90.2	55.6	341	318	114	104	106	80.1	73.6	35	76.7	130	69	105
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0598	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0432	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0469	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.048	0.04	0.04
0.04	0.04	0.0512	0.04	0.04	0.04	0.0857	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0511	0.0587	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.048	0.04	0.04
0.1	0.1	0.1	0.1	4.79	3.9	13.5	8.2	23.1	16.7	1.82	0.1	0.1	0.1	0.1	0.1	11.1	8.68	7.22	3.6	1.17	3.87	2.97	5.51	3.89	8.17	4.72	1.32	5.8	2.28	0.1	3.94	10.2	0.1	0.1	0.1
0.1	0.1	0.1	0.1	19.7	11.9	31.5	51.6	59.2	45	5.6	0.653	3.55	4.57	0.1	0.1	38.9	29.9	22.5	9.76	8.32	16.9	15.8	11.8	9.81	19.8	19.1	2.54	6.8	7.11	4.8	25.4	20.6	0.1	1.83	0.1
0.1	71.5	4.89	0.1	116	71.4	114	1000	239	218	22.8	11.6	84.2	56.4	2.55	8.39	221	189	126	57.7	64.8	78.2	126	27.3	34.5	62.1	143	8.97	6.89	48	42.4	363	93	8.22	41.6	2
0.1	0.835	0.1	0.1	39.2	21.4	40.5	948	94.5	108	5.58	0.78	5.13	19.4	0.1	0.1	62.7	56.6	59.6	21.7	27.9	24.6	24.1	6.48	12.1	18.3	41.5	1.87	1.7	21.1	15.8	111	37	0.1	0.1	0.1
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0512	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.0578	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	1.16	1.16	0.1	0.1	0.738	4.06	2.92	31.7	6.45	0.683	0.1	0.1	0.527	0.1	0.524	3.38	2.84	1.69	3.6	0.902	1.74	1.95	2.49	2.15	3.85	2.83	0.1	0.98	0.1	0.1	3.18	1.67	0.1	0.1	0.1
0.1	7.51	2.23	0.1	2.1	4.35	15.9	22.9	0.1	26.3	3.39	0.1	2.38	2.59	0.1	3.59	15.3	14.5	8.86	8.06	23.5	8.37	15.1	6.18	10	14.6	11.9	0.1	3.36	0.1	3.08	19	8.58	1	4.34	0.1
0.314	330	35.6	2.44	17.3	30.3	59.7	245	147	181	17.2	2.3	26	33.7	8.5	82.1	121	95.1	76.8	44.6	91.2	39.9	89.6	21.8	38.3	59.5	65.6	2.54	7.36	20.2	28.2	125	56.6	47.4	131	7.37
0.1	45	6.65	0.1	4.22	18.2	39.5	261	101	145	7.63	0.1	7.85	32.5	1.23	13	66.2	51.5	59.6	29.4	41.5	24.3	35.8	9.33	18.2	28.3	37.6	5.7	6.44	15.9	17.8	88.6	35.4	14	31.5	1.3
0.1	14.1	1.43	0.1	1.13	7.69	17.3	129	41.8	60.8	2.9	0.1	2.51	14.5	0.1	3.95	27.2	20.8	25.5	11.6	16.3	10.4	13.6	3.7	7.41	10.9	15.4	3.21	3.4	6.41	7.45	38.1	14.9	5.49	9.94	0.1
12	12	12	12	12	21.3	12	12	19.9	24	12	12	12	12	12	12	58.5	52.6	12	12	16.6	12	12	12	125	1620	18.8	12	12	12	12	17.2	12	12	12	12
8	8	8	8	8.94	9.2	46.8	71	55.3	189	27.6	8	8	8	8	8	28.9	34.3	17.9	30.1	123	25.3	34.2	8	42.3	192	12.1	8	8	17.9	11.1	22.9	16.8	8	8	8
16	16	16	16	76.4	131	166	653	155	183	51.6	16	16	28.7	16	16	140	171	51.2	39.7	1530	108	378	16	284	2970	129	16	16	39.9	55.1	99.4	52	16	16	16
14	14	14	14	301	379	396	1420	577	445	137	14	19.1	148	14	40.4	1190	626	182	107	6520	417	774	46.7	576	3390	648	26.8	38.4	292	243	288	554	23.7	14	14
15	15	15	15	207	259	323	1270	546	383	106	15	15	158	15	44.1	1160	593	151	87.5	4820	329	566	48.5	490	2600	559	23.2	35.9	371	266	224	587	24	15	15
15	15	15	15	341	416	467	1960	902	615	196	17	28.6	232	15	92.3	1660	826	239	171	7800	532	857	65.2	601	3800	574	33.2	61.6	399	338	403	841	52.9	77.3	15
14	14	14	14	135	135	157	803	343	229	59.3	14	14	84.9	14	38.4	706	318	92.4	55.9	2800	205	359	26.4	248	1210	292	14	18.6	156	123	172	286	14	14	14
24	24	24	24	189	193	239	1200	546	376	86.2	24	24	165	24	45.8	862	474	122	74.2	3070	277	421	49.8	402	1850	378	24	24	311	224	221	378	24	24	24
10	10	10	10	284	332	331	1450	557	445	124	13.7	30.7	188	10	66.2	1070	555	167	142	6410	480	807	51.5	499	2220	679	27.3	66.4	317	261	325	579	38.4	55.7	10
0.023	0.023	0.023	0.023	43.7	52.1	52.7	198	96.1	75	28.6	0.023	0.023	33.7	0.023	0.023	202	109	30.4	0.023	764	58.2	92.8	0.023	98	469	84	0.023	0.023	63.5	44.2	72.2	87.1	0.023	0.023	0.023
0.018	0.018	0.018	0.018	157	155	197	957	472	275	78.5	0.018	0.018	151	0.018	40	844	419	102	74.7	3070	274	429	38.7	339	1710	317	0.018	24	316	242	176	368	0.018	0.018	0.018
0.017	0.017	0.017	0.017	776	723	1090	1990	1210	1060	311	0.017	80.4	221	0.017	121	1760	962	381	234	10600	965	2270	84.5	1480	9940	1850	46.9	65.8	421	411	454	756	60.5	118	0.017
10	10	10	10	10	15.4	35.6	24.2	10	96.7	17.9	10	10	13.6	10	10	46.6	61.4	16.7	36.5	121	17	33.4	10	142	2670	19.7	10	10	10	10	48.6	10	10	10	10
9	9	9	9	41.6	25.1	41.4	22.6	71.1	134	28.6	9	31.9	29.2	9	9	65	79	37.9	94.7	60.2	33	35.7	17.2	827	38100	35.9	9	28.7	20.4	24.7	91	69.1	9	9	9
15	15	15	15	332	283	906	593	802	806	127	15	74.7	155	15	63.5	511	514	211	184	4150	468	1940	62.6	893	11600	607	28.6	121	161	178	385	239	34.2	15	15
0.015	0.015	0.015	0.015	0.752	0.626	0.914	5	1.2	1	0.293	0.015	0.0605	0.208	0.015	0.0944	1.53	0.945	0.322	0.178	13.3	1.2	1.9	0.0801	1.14	6.32	1.41	0.0411	0.0515	0.494	0.441	0.434	0.838	0.046	0.0812	0.015
0.118	0.118	0.118	0.118	3.64	3.76	5.36	17.6	7.55	6.31	1.67	0.118	0.326	1.82	0.118	0.646	11.8	6.74	2.12	1.51	65.1	5.39	10.9	0.571	8.19	90.7	7.61	0.227	0.512	3.38	2.86	3.43	5.65	0.28	0.332	0.118
105	99.2	83.1	85.4	83.3	93.4	86	88.1	91.7	87.2	88.9	91.2	91.9	90.5	95.2	101	94.6	96.6	90.8	87.5	98	96.6	88	97.7	78.5	73.3	91.6	91.9	92.3	91	91	83.4	87.4	89.9	102	82.1
98.9	99.7	83.8	86.1	85.7	101	92.5	96.2	93.5	93.1	96.6	90.7	85.2	94.9	91	105	97.6	101	96.4	74.5	87.4	92.2	89.5	90.7	75.6	85.9	94.5	93.3	84.7	93.7	95	88.7	91.6	87.9	107	80.5
106	102	90.4	89.8	99.5	115	104	103	103	102	107	91.4	69.6	95	89.5	108	95.5	99.5	95.9	87.3	98.1	88.1	91.7	90.3	91.7	95.3	95.3	93	81.4	94.9	98.3	89.2	92.7	91.7	112	80.1
93.4	92.3	89.1	79.8	82.1	97.5	87	71.8	88.7	91.7	81.1	88.2	31.6	72.4	85.5	87.4	77.1	86.2	82.7	76	107	92.5	87.7	88.1	76.1	76.9	85.1	79.9	73.7	80.9	83.6	70.7	93.2	89.4	88.8	79.8
96	92.4	96	79.1	85.4	100	92.1	73.3	89	86.9	81.2	83	16.6	71.3	85.2	88.9	72.2	83.1	80.1	75.5	112	96.2	90.3	86.9	77.3	79.3	83.2	74.1	73.3	79.2	81.2	63.3	79.5	86.5	89.5	82
0.1	72.3	4.89	0.1	180	109	199	2010	416	388	35.7	13.1	92.8	80.3	2.55	8.39	333	284	215	92.8	102	124	169	51	60.2	108	208	14.7	21.2	78.4	63	503	161	8.22	43.5	2
0.314	383	45.6	2.44	23.6	53.6	119	532	280	359	28.9	2.3	36.2	69.3	9.72	99.2	206	164	147	85.8	157	74.2	142	39.8	68.7	106	118	8.24	18.1	36.2	49.1	236	102	62.4	167	8.67
0.314	456	50.6	2.44	204	162	318	2540	696	746	64.7	15.4	129	150	12.3	108	539	448	362	179	259	198	312	90.9	129	215	326	22.9	39.3	115	112	739	263	70.7	211	10.7
44200	19100	22200	35700	63400	69200	78600	158000	83400	59000	39500	151000	239000	50700	32400	22400	63200	51600	133000	25800	78900	47900	37200	18500	91900	130000	35400	33300	31500	85800	48400	19000	116000	32500	22500	29700
492	411	367	379	12400	14200	11000	37600	17600	8990	2920	28300	3230	5520	249	230	18000	11200	8250	1820	29900	6890	10400	619	10700	21800	3310	940	1990	12500	6410	1190	21700	285	170	394
-	92500	-	-	164000	-	168000	-	208000	-	205000	40500	-	198000	243000	-	50500	205000	-	26600	-	-	-	-	-	-	-	69400	113000	-	125000	-	-	160000	-	3490
-	16800	-	-	23200	-	17100	-	26500	-	24100	2370	-	15700	19100	-	7960	16700	-	1760	-	-	-	-	-	-	-	10500	23800	-	15900	-	-	13700	-	1470
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.048	0.01	0.0116	0.0113	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0182	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0112	0.01
0.01	0.01	0.01	0.01	0.01	0.0109	0.01	0.01	0.01	0.0112	0.01	0.01	0.01	0.0113	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0182	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.048	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-
-	-	-	-	04/07/2018	-	04/07/2018	-	04/07/2018	-	04/07/2018	04/07/2018	-	02/07/2018	18/06/2018	-	18/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02/07/2018	-	21/06/2018
-	-	-	-	Barbara Urbanek-Walsh	-	Lucy Caroe	-	Lucy Caroe	-	Barbara Urbanek-Walsh	Renata Bozhkov	-	James Richards	Barbara Urbanek-Walsh	-	Marcin Magdziarek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	James Richards	-	Barbara Urbanek-Walsh
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-
-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected
-	-	-	-	Not Detected	-	Not Detected	-	Trace	-	Not Detected	Not Detected	-	Not Detected	Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected
-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected
-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected
-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected
-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected
-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected
-	-	-	-	0	-	0	-	Loose fibres in soil	-	0	Loose fibres in soil.	-	0	Loose fibres in soil.	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0
108	105	103	109	111	108	110	104	109	109	107	113	110	103	107	106	108	110	112	109	106	111	119	102	105	107	111	113	106	108	107	107	109	114	105	113
98.4	99	98.8	98.6	97.8	98.2	98.4	98.2	97.1	97.5	95.5	99.9	97.6	96.4	97.1	98.2	95.5	99.8	98.5	97.4	98	99.4	89.7	98.8	97.2	95.2	99	95.1	97	98.7	99.1	94.5	97.6	99	97.7	99.7
91.5	95.9	103	99.7	81.9	87.8	85	81.6	88.1	85.2	85.9	81.6	86.2	87.9	91.8	95.5	86	104	92.2	81.5	85.7	86.8	75.2	105	94.6	94	94.2	87.7	92	87.5	90.6	84.1	86.1	88	86.1	94.6
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.56	0.15	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	0.5	3.64	-	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	-	-	3.79	-	-	-	-	-	-	-	0.5	0.5	0.5	-
-	-	0.5	1.91	-	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	-	-	1.87	-	-	-	-	-	-	-	0.5	0.5	0.5	-
-	-	0.5	3.2	-	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	-	-	-	0.5	0.5	0.5	-
-	-	0.5	0.59	-	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	0.5	0.5	0.5	-
-	-	1.97	3.37	-	-	-	-	-	-	-	-	1.06	1.11	-	-	-	-	-	-	-	-	-	-	3.2	-	-	-	-	-	-	-	1.02	0.71	0.77	-
-	-	39.8	45.7	-	-	-	-	-	-	-	-	11.3	10.6	-	-	-	-	-	-	-	-	-	-	49.2	-	-	-	-	-	-	-	6.42	9.43	8.64	-
-	-	40.9	47.5	-	-	-	-	-	-	-	-	12.2	11.6	-	-	-	-	-	-	-	-	-	-	50.8	-	-	-	-	-	-	-	7.37	10.1	9.34	-

Glan Lyn Commercial Soils Data

40AL15V	40AL17V	40AL20V	40AL28V	40AM27	40AM28	40AM28	40AM28	40AM27V	40AN11	40AN11	40AN11	40AN13	40AN13	40AN24	40AN24	40AN24	40AN24	40AN26	40AN26	40AN26	40AN26	40AN28	40AN28	40AN11V	40AN13V	40AN20V	40AN26V	40AN28V	40AO14	40AO16	40AO16	40AO16
1.001.00	3.203.20	3.503.50	3	1.001.00	0.5	1	2	1.8	0.500.50	1.001.00	1.501.50	0.500.50	1.101.10	0.500.50	1.001.00	1.701.70	2.302.30	0.500.50	1.001.00	1.701.70	2.302.30	0.5	1	2.202.20	1.001.00	0.800.80	2.602.60	1.2	0.500.50	0.500.50	1.001.00	2.002.00
28/06/2018	22/06/2018	05/06/2018	29/05/2018	30/05/2018	29/05/2018	29/05/2018	29/05/2018	30/05/2018	22/06/2018	22/06/2018	22/06/2018	14/06/2018	14/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	29/05/2018	29/05/2018	22/06/2018	14/06/2018	14/06/2018	06/06/2018	29/05/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018
15.6	12.5	4.1	18.4	3.57	3.57	1.59	18.8	6.02	7.81	10.7	4.86	6.59	1.78	1.39	1.1	1.42	2.71	1.76	5	3.03	4.57	4.86	2.07	2.57	5.34	1.1	1.78	3.14	3.88	3.15	6.55	5.45
11.8	22.3	10.3	7.67	6.6	9.91	11	9.21	10.4	11.6	9.41	6.42	16.1	5.13	8.26	3.84	4.4	9.54	5.14	8.59	7.14	14.3	24.5	11.5	8.1	13	9.36	13.5	15.9	7.01	6.29	12.1	9.59
0.178	0.931	0.278	0.389	1.69	0.866	0.337	0.314	2.13	2.16	2.51	0.221	0.37	1.58	1.48	0.282	0.943	0.673	0.194	0.383	0.92	0.698	1.04	0.02	0.353	0.381	0.239	0.294	0.767	0.353	1.89	1.1	0.938
32.6	36.3	35.4	12.1	44.7	64.2	88.4	17.7	34.1	117	216	0.9	40.8	23.9	31.8	33.5	19.5	44.7	11.1	9.15	80	162	342	32.8	10.1	39.6	30.6	34.8	14.2	55.5	99.6	78.1	56.1
24.8	31	17	28	19.9	88.5	18.5	16.8	38.8	32.6	29.5	15.9	32.2	27.4	43.3	6.56	14.1	24.9	8.61	12	32.3	73	117	22.9	13	25.9	11.9	12.7	38.9	23.3	24.8	48.1	318
37.9	67	24.3	31.2	47.6	72.8	20.8	20.5	149	135	102	11.3	33.3	78.7	113	12.2	59.9	42.4	11.7	16.2	67.6	71.3	252	23.5	15.9	32.1	28	26.2	74.3	48.1	787	123	69.7
0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.2	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
31.5	27.8	29.6	18.3	14.2	18.2	10.9	21.3	26.3	25.1	30	19.3	36.4	12.6	20.3	4.99	11	25.7	17.6	33.4	17.9	24.8	26.6	36.1	35	37.5	38.7	34.8	25.1	17.4	10.9	19.3	41.8
1	1.42	1	1.76	2.56	3.13	3.6	1.74	10	10	10	1	1.73	1.94	1.43	4.02	3.31	2.52	1	1	3.29	3.56	2.32	1	1.24	1.32	1	1	2.59	2.2	5.95	3.21	2.59
49.9	56.9	55.5	75.6	118	138	85.3	38	58.6	359	160	16.3	64.5	53.2	56.9	84.9	46	80.6	17.4	20.9	168	104	83.2	52.7	25.6	59.5	51.8	58.2	50.7	99.7	185	242	116
134	176	103	140	204	219	105	105	614	468	409	40.7	122	268	298	50.1	86.5	131	48.2	103	202	270	491	90.7	74.2	115	111	116	145	187	165	336	251
0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0472	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0779	0.04	0.04	0.04	0.04	0.04	0.0415	0.04	0.061
0.04	0.0728	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.343	0.54	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1.43	0.04	0.04	0.04	0.04	0.04	0.0501	0.04	1.14
0.04	0.0455	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1.16	2.7	0.04	0.04	0.04	0.04	0.04	0.04	0.04	17.8	0.04	0.04	0.04	0.04	0.04	0.166	0.04	0.306
0.213	0.1	0.1	0.398	5.39	3.89	2.36	0.1	6.17	3.19	2.89	8.28	0.847	20	19	43.5	107	35	1.81	3.06	3.43	3.28	0.73	0.1	997	0.1	0.1	0.1	1.03	6.54	1.79	7.62	5.97
1.24	0.1	0.1	0.559	23.3	16	6.52	5.1	28.2	15	13.9	24	1.22	62.1	116	100	233	41.1	9.98	5.38	16.3	13.7	4.06	0.1	709	0.1	0.157	0.1	4.82	22.2	8.96	32.6	24.8
16.7	2.02	1.02	20.7	189	107	57.2	37.1	104	71.6	74.9	31.9	2.02	216	577	86.5	257	50.6	60.6	21.5	118	88.3	26.7	1.49	176	7.22	1.02	7.71	85.7	115	52.7	171	149
0.469	0.1	0.1	7.9	69.3	31.4	13.8	0.1	24.8	19.7	23.6	3.38	0.1	62.3	178	23	55.8	10	42.8	2.58	30.7	25.5	6.37	0.1	13.2	0.1	0.1	1.33	18.4	70.3	14.4	54.4	45.6
0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.0491	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.229	0.36	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.953	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.764
0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.776	1.8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	11.8	0.04	0.04	0.04	0.04	0.04	0.111	0.04	0.203
0.204	2.49	0.1	0.609	2.3	1.39	0.1	0.1	1.64	1.16	2.16	5.17	0.1	3.85	4.74	15.8	41.4	5.29	0.687	1.7	1.09	1.7	0.974	0.1	188	0.1	1.66	0.1	1.49	2.18	1.19	4	3.18
2.77	2.38	0.312	2.03	11.2	7.72	0.1	5.43	9.9	8.46	9.71	13.2	0.203	21.5	49.3	35.1	108	17.4	4.27	6.82	6.41	9.87	4.77	0.1	295	0.1	1.59	0.1	4.28	11.7	4.98	17.3	14.4
97	37.3	11.9	16.4	83.2	47.5	38.2	63.3	50	47.4	53.9	18.2	12.8	97.2	242	39.7	102	34.9	48	17.4	54.8	56.2	23.2	8.52	82	13	3.74	2.6	40.3	72.9	34.7	86.1	92.1
19.4	4.16	2	11	48.6	23	8.69	3.22	22.2	26.2	30	4.16	2.02	73.3	115	26.2	28.7	15.7	62.8	2.96	31	27.1	9.29	3.11	15.8	1.44	0.636	5.21	15.2	87.2	15.5	39	37.9
3.35	0.521	0.491	4.52	20.1	8.81	3.16	0.1	8.8	10.6	11.8	1.14	0.1	32.4	47.5	12.6	9.87	6.29	30.7	0.1	13.2	10.9	3.75	1.13	6.58	0.1	0.1	2.21	5.04	42.1	6.15	15.9	15.6
12	12	12	40.5	69.9	25.4	12	60	17.6	13.8	17.4	12	12	60	60	12	12	12	12	12	60	48	32.1	12	12	12	12	12	12	13.8	12	14.6	12
8	24	8	8	51.7	36.1	8	159	14.5	13	26.1	8	8	40	40	20.9	35.7	8	8	8	40	85.6	76.4	8	8	8	8	8	12.3	22	13.2	79.4	22.7
16	31.3	16	85.9	170	74.8	16	80	55.1	43.6	76.8	16	16	149	80	37.4	30	20.9	17.2	16	80	223	243	16	16	16	16	16	22.7	80.7	53.3	290	81.3
14	146	14	577	526	352	22.7	70	216	190	332	16.6	14	194	70	181	54.9	61.5	82.6	41.2	434	701	1040	14	28.3	14	14	14	86.5	251	165	386	293
15	150	15	803	606	351	15	75	255	202	365	15	15	188	99.6	105	46.3	63.4	95.9	34.2	446	708	932	15	15	15	15	15	74.6	223	170	273	212
61.4	215	15	861	862	572	29.5	75	358	347	576	23.9	15	305	109	135	86.8	105	173	79.3	828	860	1360	15	39.7	15	15	15	162	447	278	529	352
14	77.8	14	359	330	176	14	70	140	105	183	14	14	126	70	65.2	29.6	35.9	57.1	22.2	284	374	461	14	14	14	14	14	58.9	173	89.6	192	99.8
24	107	24	673	537	291	24	120	234	177	286	24	24	231	155	63.5	128	67.3	106	42.7	353	505	571	24	24	24	24	24	75	214	152	230	152
44	185	10	534	500	434	27.4	50	232	197	325	23.1	10	249	75.4	190	61.4	67.8	108	93	512	610	1070	10	36.2	10	10	10	111	281	196	448	301
0.023	0.023	0.023	125	120	56.7	0.023	0.115	51.2	0.023	59.5	0.023	0.023	0.115	0.115	0.023	0.023	0.023	0.023	0.023	0.115	116	132	0.023	0.023	0.023	0.023	0.023	0.023	44.6	33.5	44	40.7
34.5	96.2	0.018	638	521	280	0.018	90	207	194	304	0.018	0.018	169	98.7	49.5	50.8	49.8	110	28.3	386	532	610	0.018	0.018	0.018	0.018	0.018	53.7	161	120	259	144
69.9	402	25.6	1080	995	634	38.3	208	335	320	532	23.2	0.017	313	150	434	132	117	118	75.7	585	1330	1950	0.017	110	0.017	0.017	0.017	146	430	308	1280	498
10	63.4	10	19	85.9	42.6	10	115	17.9	11.1	30.4	17.5	10	50	50	102	153	10	10	10	50	109	101	10	10	10	10	10	19.5	17.9	12.9	50	21.7
9	9	9	30.3	211	89	16.3	45	65.3	78.1	129	32.7	9	45	45	20.8	22.5	17.9	26.2	31.1	45	266	163	9	9	9	9	9	30.2	77.7	48.1	77.4	54
30.7	197	15	287	618	338	39.2	496	196	196	302	67.5	15	184	87.9	236	296	84.1	105	168	258	848	884	15	15	15	15	15	104	238	215	1560	367
0.0524	0.335	0.015	1.07	0.898	0.604	0.0363	0.075	0.327	0.329	0.494	0.0225	0.015	0.308	0.195	0.434	0.166	0.107	0.115	0.0759	0.59	1.11	1.62	0.015	0.0951	0.015	0.015	0.015	0.132	0.392	0.292	1.07	0.437
0.293	2.03	0.118	7.18	7.1	4.36	0.21	0.978	2.72	2.42	4.04	0.227	0.118	2.42	0.97	2.07	1.29	0.797	1.11	0.692	4.68	8.42	11.2	0.118	0.309	0.118	0.118	0.118	1.09	3.07	2.15	6.78	3.08
88.5	92.6	90.1	85.4	93.7	88.3	87.9	91.7	95.2	99.4	95.8	86.7	85.9	88.4	91.2	90.5	95.7	85.1	94	92	85.9	89.6	84.8	91.1	101	101	92.8	76.7	102	104	102	89.1	93.6
89.1	94.7	89.2	85.2	94.1	88.8	86.4	93.9	94.3	100	97.9	86.4	90.4	94	95.3	92.3	104	88.4	91.5	92.6	86.3	89.8	84.9	89.4	104	87.6	88.8	77.6	93.9	94.6	91.5	92.3	95.7
89.5	95.9	85.5	83.1	93	99.2	89.1	93	101	95.8	96.4	83.5	94.5	91.3	97.1	93	102	92.3	91.8	94.4	84.1	96	81.6	90	95	76.2	89.5	84.4	85.8	94.4	84.1	94.8	99.5
88.6	90.4	77.3	68.7	79.4	96.6	84.2	76.5	87.2	84.9	85.3	84.1	78	81.2	80.4	82.2	109	82.5	96.2	77.1	86.1	96.4	82.2	86.6	90.6	98.2	91.4	85.4	97	100	86.9	79.8	107
88.4	86.3	81.3	63.6	86.1	88.3	78.4	75.8	82.2	80.4	84.2	84.2	80.2	80.9	81.1	79.3	113	82.8	96.4	71.6	82.9	92.2	75.3	88.1	97	99.7	94	81.3	98.9	103	87.7	74.2	93.3
18.6	2.02	1.02	29.6	287	159	79.9	42.1	163	109	115	67.6	4.08	360	890	253	652	137	115	32.6	168	131	37.8	1.49	1890	7.22	1.18	9.04	110	214	77.9	266	225
119	46.3	14.2	30	145	79.6	46.8	72	83.7	83.3	95.8	40.8	15	196	412	117	280	73.3	116	28.9	93.3	94.9	38.3	11.6	581	14.5	7.63	7.81	61.2	174	56.4	146	148
138	48.5	15.2	59.6	433	238	127	114	246	193	211	108	19.1	556	1300	372	938	210	231	61.4	261	226	76.1	13.1	2510	21.7	8.82	16.8	171	388	135	412	375
23300	20800	32700	50000	57100	47300	30300	29200	95800	104000	93600	19300	29600	41700	26200	14400	24300	46700	16300	20400	63100	65800	69300	37800	14700	26900	30300	34700	43300	53600	46200	59700	35100
185	272	374	2160	4790	4510	6890	1410	3840	11700	9050	426	243	3330	2980	4350	3350	4100	742	519	8260	8320	4990	465	406	243	414	594	2420	4150	9740	6780	4160
-	-	265000	-	165000	-	74400	-	138000	-	105000	-	-	-	-	-	115000	104000	-	-	94700	176000	-	140000	-	-	161000	-	198000	-	207000	-	100000
-	-	26700	-	35500	-	32600	-	31100	-	18500	-	-	-	-	-	12900	12800	-	-	12200	33200	-	13400	-	-	36300	-	36200	-	28600	-	16800
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.011	0.0658	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.16	0.147	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.0162	0.01	0.0105	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0114	0.0113	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0228	0.0226	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0658	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.194	0.181	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001
-	-	18/06/2018	-	18/06/2018	-	18/06/2018	-	18/06/2018	-	-	-	-	-	-	-	20/06/2018	21/06/2018	-	-	21/06/2018	21/06/2018	-	21/06/2018	-	-	18/06/2018	-	15/06/2018	-	15/06/2018	-	-
-	-	James Richards	-	Andrzej Ferfecki	-	Marcin Magdziarek	-	Andrzej Ferfecki	-	-	-	-	-	-	-	Lucy Caroe	Barbara Urbanek-Walsh	-	-	Andrzej Ferfecki	Lucy Caroe	-	Lucy Caroe	-	-	Renata Bozhkov	-	Renata Bozhkov	-	Renata Bozhkov	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001
-	-	Not Detected	-	Not Detected	-	Detected	-	Not Detected	-	-	-	-	-	-	-	Not Detected	Detected	-	-	Not Detected	Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-
-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-
-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-
-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-
-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-
-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-
-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-
-	-	0	-	0	-	Loose fibres in soil	-	0	-	-	-	-	-	-	-	0	Loose fibres in soil.	-	-	0	Soil containing material typical of asbestos cement	-	Soil containing material typical of AIB	-	-	0	-	0	-	0	-	-
121	107	114	114	107	121	105	110	109	106	104	108	112	109	112	109	111	101	105	105	107	105	104	106	106	104	104	111	109	108	103	107	106
99.7	95.3	96.2	97.2	95.4	97.6	98	95.7	96.4	98.3	99.2	97.9	95.9	98.8	97.9	98.6	96.9	97.4	94.7	98.6	93.6	99.9	96.2	95.5	95	97.2	98.2	96.8	95.7	93.2	95.5	97	98.3
95.6	92.6	91	94.1	87.1	96.3	83.9	84.8	89	92.5	96.5	91.4	81	99.7	95.3	94.3	87.5	97.2	93	97	97.7	96.2	95.3	92	93.2	95.1	93.6	94.1	91.4	92.2	94.4	93.4	94.7
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.147	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	1.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	30.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	31.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

40AO16	40AO17	40AO17	40AO17	40AO17	40AO23	40AO23	40AO23	40AO25	40AO25	40AO25	40AO25	40AO28	40AO14V	40AO16V	40AO17V	40AO25V	40AO28V	40AP10	40AP10	40AP10	40AP10	40AP11	40AP11	40AP11	40AP11	40AP13	40AP13	40AP13	40AP15	40AP15	40AP15
3.003.00	0.500.50	1.001.00	2.002.00	3.003.00	0.500.50	1.001.00	1.301.30	0.500.50	1.001.00	2.002.00	2.802.80	0.7	0.700.70	3.603.60	4.004.00	3.003.00	1	0.500.50	1.001.00	1.701.70	2.302.30	0.500.50	1.001.00	1.501.50	2.002.00	0.400.40	1.001.00	1.501.50	0.500.50	1.001.00	2.002.00
14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	30/05/2018	14/06/2018	14/06/2018	14/06/2018	06/06/2018	30/05/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	22/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018
1.97	3.78	2.22	2.64	2.26	4.45	2.17	1.48	0.952	1.09	0.705	3.19	7.29	4.38	64.1	10.8	6.4	5.86	3.43	3.29	2.12	3.72	3.78	1.79	1.17	1.18	1.07	3.83	2.57	12.3	3.83	4.38
10.1	40	7.66	4.39	4.75	7.04	5.34	6	6.22	6	3.35	10	15.5	12.9	5.55	20.9	13.5	9.9	14.8	10.1	11.9	9.67	9.21	8.34	9.62	14.1	8.3	11.2	8.85	10.4	7.48	8.11
0.859	0.875	1.46	0.435	1.62	1.5	1.33	0.796	0.88	0.743	0.447	0.85	0.52	0.466	0.236	0.74	0.451	0.841	1.83	1.02	0.726	2.53	2.03	0.23	0.51	1.15	0.24	0.342	1.09	0.647	0.465	0.528
128	76.5	173	40.4	29.4	31.8	82.5	292	273	155	49.2	52.8	39.9	30.4	15.6	33.8	32.5	48.1	137	66.5	56.1	115	71.5	96.7	127	16.5	3.83	8.37	77.4	54.9	33	24.8
63	37.8	35.9	13	20.1	50.9	19.7	14	40.2	21.5	37.5	40.8	33	17.8	30.9	25.8	17.7	22	28.5	34	29.1	36.4	24.5	17.7	23.3	23.7	8.5	24.9	27.9	31.3	18.2	24.7
112	91.2	76.2	33.9	93.2	120	66	42.7	55	59.7	39.2	94	38.8	29.6	7.14	50.3	38.1	98.1	208	97.8	90.3	110	150	38.5	49.4	95.5	14.4	16.6	67.8	57.2	30.6	45.5
0.171	0.14	1.4	0.14	0.14	0.14	0.14	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
12.7	33.7	13.9	9.4	10.7	15.1	14	7.67	11.4	18.7	8.43	16.4	33.2	38	20.4	27.6	25.4	16.2	19.5	16.7	16.5	26.2	18	11.9	17.4	19.2	7.48	19.1	14.8	17	14.3	16.8
3.58	16.1	10	2.17	3.16	3.24	2.74	10	10.4	10	4.13	2.67	1.48	1	2.58	1.29	1	3.28	10	3.15	2.65	10	10	4.03	6.25	2.38	1	1.41	3.4	2.83	1.59	2.57
156	117	305	56.5	77.1	55.6	108	486	537	297	141	105	63.5	51.4	32.1	53.6	51.6	80.9	162	88.4	94.7	163	127	129	102	37.8	8.59	16.9	139	71.2	58.7	48.6
238	225	262	126	253	320	179	149	113	134	100	260	128	117	62.4	154	135	281	296	297	251	467	512	191	265	252	22.3	58.2	470	233	83.4	140
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0459	0.04	0.01	0.04	0.0433	0.04	0.04	0.04	0.04	0.04	0.04	0.0479
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.0515	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0885	0.04	0.01	0.04	0.0682	0.04	0.0547	0.04	0.04	0.04	0.04	0.106
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.196	0.04	0.04	0.04	0.04	0.049	0.04	0.0613	0.04	0.04	0.327	0.04	0.01	0.0515	0.0573	0.0699	0.137	0.0757	0.04	0.0941	0.0888	0.384
4.1	5.36	5.04	4.02	4.14	4.7	2.4	87.9	1.19	7.85	5.17	3.1	0.718	0.1	0.1	0.854	0.1	12	11.5	10.2	21.7	4.96	4.44	4.91	4.81	5.19	1.08	1.41	6.03	6.68	8.37	10.8
19	19.7	23.8	16.7	16.7	17.9	8.71	279	20.8	32.5	6.64	15.9	0.712	0.1	0.1	0.1	0.1	23.5	32.5	31.1	50.1	18.7	17.4	18.8	17.5	14.2	2.52	2.73	35.3	28.9	66.8	107
126	93.4	238	93.5	62.8	79.5	34.7	859	166	199	10.3	82.8	5.04	0.1	78.1	6	9.07	105	134	139	131	91.1	102	93	82.1	66.6	12.7	8.91	106	86.1	1820	3220
45.5	26.7	207	31.8	22.3	47.9	9.45	145	42	58.1	1.4	21.3	0.1	0.1	0.1	0.1	0.1	41.1	32.2	39	28.7	25.1	29.7	23.9	23.9	22.1	3.5	1.19	20.1	12.7	632	841
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.065	0.04	0.01	0.04	0.0509	0.04	0.04	0.04	0.04	0.04	0.04	0.0718
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.13	0.04	0.04	0.04	0.04	0.04	0.04	0.0405	0.04	0.04	0.218	0.04	0.01	0.04	0.04	0.0466	0.0905	0.0509	0.04	0.0627	0.0599	0.256
1.71	0.1	2.3	1.31	1.31	0.1	1.81	8.1	1.41	1.22	1.25	1.24	0.267	0.1	0.1	0.277	0.1	4.1	3.47	0.298	30	1.46	1.95	2.49	1.6	1.02	1.8	2.54	1.15	2.96	6.42	9.3
11.7	0.1	14.5	7.14	5.19	0.1	5.32	48.8	10.3	10.2	3.94	8.34	0.663	0.1	4.12	0.996	1.5	13.8	15.1	8.93	0.1	9.34	11.1	10.4	7.6	4.24	2.69	3.11	9.27	14.1	22.2	32.1
66.8	18.7	162	48.7	31.6	3.69	26.3	192	82.3	103	5.48	48.6	19	11.6	344	30.2	38.4	78.6	65.5	74.4	86	49.4	58.4	43.3	33.5	21.6	10.3	5.05	39.6	54	412	732
39.2	10	156	25	17.4	7.58	13.6	115	42	76	1.87	23.4	3.47	0.1	28.2	3.24	5.86	52.5	35.6	31.9	31.4	23	29.5	22.8	22.7	14.4	4.28	1.21	13.7	19.4	383	239
16	2.72	67.3	9.93	6.93	3.38	5.43	47.9	16.1	29.3	0.1	9.51	0.1	0.1	9.41	0.1	2	21.6	15.1	11.9	13	9.28	11.9	9.58	10.2	6.2	1.5	0.17	4.91	7.29	173	65.8
31.3	60	60	24	12	12	19.7	60	12	60	12	22.1	12	12	12	12	12	17.9	24.7	37.9	18.1	183	26	12	12	12	12	12	13.5	18.8	12	12
28.7	40	47.7	53.8	11.3	8	23.2	40	19.3	55.5	19.8	41.6	8	8	8	8	30.1	60.7	57.1	43.8	51.2	50	26.6	80.4	54.3	8	24.1	8	27.6	20.4	21.7	89.2
104	80	141	87.8	34.9	28.2	110	80	50.8	112	28.8	140	16	16	16	16	16	188	130	158	111	205	93	654	89.7	16	130	16	57.7	50.2	19.5	137
473	111	290	280	163	116	726	230	466	662	101	571	14	14	14	44.4	23.4	650	492	867	378	1450	563	1160	206	23.2	1060	14	284	288	101	396
523	117	249	249	193	122	412	179	531	748	78.6	465	15	15	15	46	15	739	425	769	308	1750	435	736	165	21.2	839	15	295	284	117	330
875	161	459	449	310	237	908	408	894	1270	183	666	15	15	15	111	38.2	1080	738	1300	536	2410	706	939	228	39.3	890	15	484	423	137	407
286	70	153	142	95.3	102	442	137	312	369	50.4	253	14	14	14	29.2	14	335	235	411	165	766	266	395	100	14	455	14	160	134	66.7	180
431	120	226	248	202	142	369	228	487	711	61.1	303	24	24	24	24	24	630	342	676	262	1210	355	457	127	24	431	24	260	229	135	216
519	141	298	313	193	160	934	319	625	816	133	569	10	10	10	72.4	26.9	612	572	790	371	1410	580	1080	216	30.3	865	21.2	300	319	110	388
95	0.115	0.115	0.046	31.7	26.6	78.4	0.115	73.5	0.115	0.023	83.1	0.023	0.023	0.023	0.023	0.023	107	80.8	163	61	223	68.4	117	0.023	0.023	179	0.023	63.5	47	0.023	43.4
333	90	250	165	157	129	388	179	341	535	65.8	324	0.018	0.018	0.018	51	0.018	648	348	501	204	1320	416	570	150	24.1	428	0.018	268	194	104	195
781	228	677	522	302	183	1910	564	1000	1390	239	1020	0.017	0.017	0.017	108	51.7	1110	812	1120	658	1630	672	3030	549	33.5	1100	0.017	488	500	185	857
30.7	50	50	30.3	10	10	13.9	50	10	50	19.5	53	10	10	10	10	10	55.1	45	45.9	38.9	47.2	18.6	142	27	10	41	10	25.2	21.4	29.4	81.2
74.4	45	75.5	72.7	47.2	23.5	37.4	45	18.3	53.4	36.5	79.6	9	9	9	9	39.7	66.5	107	113	105	107	77.1	86.7	74	9	23.9	34.9	80.3	47.2	44.5	65.6
329	130	512	424	172	124	762	207	349	621	152	573	15	15	15	71.5	35.7	607	574	540	498	609	295	2310	470	29	498	93.1	314	266	182	868
0.802	0.246	0.621	0.5	0.299	0.17	1.44	0.516	0.921	1.46	0.21	0.961	0.015	0.015	0.015	0.0862	0.0415	1.16	1.06	1.69	0.997	2.17	1.32	2.37	0.503	0.0356	0.83	0.015	0.564	0.527	0.176	0.751
5.72	1.13	4	3.54	2.21	1.56	8.58	2.97	6.09	8.81	1.38	6.12	0.118	0.118	0.118	0.619	0.287	8.06	6.05	9.23	4.76	15.5	5.91	14.1	2.96	0.236	7.79	0.149	3.68	3.37	1.43	5.01
95.9	89.9	80.8	106	89.3	85.1	88.8	92.2	92.8	93.6	97.2	87.3	102	85.9	106	95.6	89.3	96.7	93.7	86.7	89.2	95.1	98.8	93.5	93.1	88.8	94.8	85.9	86.3	98	89.9	91.5
83.9	82.3	83.9	91.7	89.6	86.6	89.5	93.1	94.6	91.5	93	91.2	92.1	84.8	94.9	88.6	92.1	96.6	105	91.6	99.2	97.8	101	95.4	101	92.4	93.5	84.5	91.5	88.9	90.1	91
87.2	87.2	87.2	87.5	90.7	88.7	86.8	93.7	95.7	92.9	92.6	96.7	85.6	89.9	90.2	91.9	95.2	97	116	105	108	97.8	100	96.6	103	93.4	97.9	83.7	95.7	87.8	85.7	99.5
94.3	77.1	71.4	96.8	82.6	85.3	91.4	84.5	86.5	84.1	96.7	105	97.5	99.7	98.5	92.3	82.1	89.3	101	83.7	86.4	88.9	93.6	91.6	83.8	78	113	72.9	75.3	104	91	108
96.4	76.5	70.7	100	81.8	85	91.6	86	88	78.6	95.3	93.3	104	90.2	102	91.8	82.8	91.5	101	85.9	89.3	88.2	92.6	90.6	82.6	72.6	101	75.1	75	104	94	90.6
195	145	473	146	106	150	55.3	1370	230	297	23.5	123	6.47	0.1	78.1	6.85	9.07	181	210	219	232	140	154	141	128	108	19.8	14.2	167	134	2530	4180
119	28.7	335	82.2	55.5	11.3	47.1	365	136	190	12.5	81.6	23.3	11.6	376	34.7	45.8	149	120	116	147	83.2	101	79	65.5	41.2	19.1	11.9	63.6	90.5	823	1010
314	174	808	228	162	161	102	1740	366	488	36.4	205	29.8	11.6	454	41.6	54.9	330	330	335	380	223	255	220	194	149	39.2	26.3	231	225	3350	5190
55400	55100	70400	24300	36400	43700	22600	144000	148000	98900	37500	48300	26100	33500	9170	18600	28600	53300	88500	57500	89100	91100	108000	69000	67100	54500	6400	16100	48500	28600	24300	21600
8740	43500	12900	3390	4720	4710	6990	21900	28100	15900	6650	4780	351	340	388	356	297	6230	9120	6100	5070	11000	6690	9660	18100	3910	319	484	6810	3040	3810	1990
-	-	-	-	-	116000	-	163000	-	-	141000	-	169000	-	284000	49400	-	91300	145000	-	-	-	-	-	203000	86800	-	151000	161000	-	188000	-
-	-	-	-	-	16200	-	22000	-	-	20700	-	28600	-	5290	16300	-	12100	15600	-	-	-	-	-	12400	11500	-	20600	16800	-	21500	-
0.01	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.0112	0.01	0.01	0.0112	0.0433	0.01	0.01	0.01	0.01	0.01	0.0222	0.0109	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.522	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0116	0.01	0.0232	0.01	0.01	0.01	0.01
0.015	0.015	0.015	0.015	0.015	0.0219	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.186	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0433	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.731	0.035	0.035	0.035	0.035
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	02/07/2018	-	02/07/2018	-	-	29/06/2018	-	02/07/2018	-	21/06/2018	21/06/2018	-	20/06/2018	21/06/2018	-	-	-	-	-	21/06/2018	21/06/2018	-	15/06/2018	15/06/2018	-	15/06/2018	-
-	-	-	-	-	James Richards	-	James Richards	-	-	Lucy Caroe	-	Marcin Magdziarek	-	James Richards	Marcin Magdziarek	-	Barbara Urbanek-Walsh	Marcin Magdziarek	-	-	-	-	-	James Richards	Andrzej Ferfecki	-	Renata Bozhkov	Renata Bozhkov	-	Renata Bozhkov	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	Detected	-	Not Detected	-	-	Detected	-	Detected	-	Not Detected	Not Detected	-	Detected	Detected	-	-	-	-	-	Detected	Not Detected	-	Trace	Not Detected	-	Not Detected	-
-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-
-	-	-	-	-	Fibre bundles in soil	-	0	-	-	Loose fibres in soil	-	Loose fibre in soil	-	0	0	-	Loose fibres in soil.	Loose fibres in soil	-	-	-	-	-	Soil containing material typical of asbestos cement debris	0	-	Loose fibres in soil	0	-	0	-
112	103	108	110	112	109	106	107	111	109	101	104	108	116	117	111	106	118	111	114	108	112	110	115	112	124	108	105	105	105	109	109
98.6	96.1	88.1	94.7	97.2	96.7	97.2	98.3	95.6	98.4	88.2	99.4	100	99.8	99.8	99.1	98.6	97.7	95.3	88.9	96	98.7	88.7	94.3	96.8	96.3	99.5	97.8	96.9	98.2	97.7	97.2
92	96.6	80.5	90.6	99.8	88.1	89.7	90.4	85	95.5	70.1	98.2	95.7	93.7	96.3	92.9	93.9	94.8	88.2	74	87.3	105	75.7	83.8	92.9	93.5	92.9	96.4	94.6	98.8	95	95.9
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.56	1.08	1.22	1.14	1.13	1.09	1.12	1.08	-	-	-	-	-	-	-	1.98	1.52	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	9.24	8.91	8.99	8.46	9.77	9.61	9.79	9.31	-	-	-	-	-	-	-	33.9	33	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	9.75	9.9	10.1	9.5	10.8	10.6	10.8	10.3	-	-	-	-	-	-	-	35.2	34	-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

40AP15	40AP10V	40AP11V	40AP13V	40AP15V	40AQ18	40AQ20	40AQ20	40AQ21	40AQ24	40AQ24	40AQ24	40AQ27	40AQ27	40AQ27	40AQ27	40AQ18V	40AQ20V	40AQ21V	40AQ24V	40AQ27V	40AR11	40AR11	40AR11	40AR16	40AR16	40AR21	40AR25	40AR25	40AR11V	40AR13V	40AR16V	40AR21V	40AR25V
3.003.00	2.602.60	2.402.40	2.002.00	4.204.20	0.200.20	0.800.80	1.501.50	1.501.50	0.500.50	1.001.00	2.002.00	0.200.20	0.700.70	1.201.20	1.901.90	0.300.30	1.801.80	3.003.00	2.102.10	2.002.00	0.500.50	1.001.00	1.701.70	0.500.50	1.001.00	0.500.50	0.500.50	1.001.00	2.302.30	0.200.20	1.401.40	0.700.70	1.301.30
14/06/2018	22/06/2018	22/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	07/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	06/06/2018	14/06/2018	14/06/2018	07/06/2018	06/06/2018	06/06/2018	22/06/2018	22/06/2018	22/06/2018	14/06/2018	14/06/2018	07/06/2018	06/06/2018	06/06/2018	22/06/2018	14/06/2018	14/06/2018	07/06/2018	06/06/2018
5.03	5.26	46	58.6	0.469	3.19	2.83	2.74	2.43	1.47	6.36	1.6	0.35	0.35	0.35	3.53	26.4	81.2	1.68	1.41	2.33	1.5	0.379	2.1	2.53	0.893	1.57	0.872	7.48	1.7	50.2	1.11	1.17	4.69
11.5	12.6	31.2	11	6.84	10.6	6.77	10.7	5.97	5.37	8.15	9.48	6	6.7	6	8.79	14.9	3.64	9.48	12.8	7.81	5.9	9.65	6.68	11.3	7.37	8.82	6.74	17.5	8.9	14.2	12.6	9.82	10.2
0.02	0.02	0.58	0.266	0.485	0.384	0.229	0.326	0.448	0.573	0.547	0.732	0.657	0.401	0.443	0.424	0.378	0.0904	0.251	0.208	0.69	0.409	0.322	0.743	1.5	0.471	0.804	0.242	0.02	0.229	0.281	0.21	0.245	0.399
33.3	37.2	13.4	12.7	25.8	27.8	9.45	51	283	155	162	266	416	466	468	60.6	29.6	5.01	43.8	32.8	57	63.6	8.18	91.6	222	36.9	124	52.3	35.8	37.9	11	30.3	31.7	10.7
24.3	26.2	34.1	17.1	10.1	22.2	42	18	17.8	17.6	30.2	18.5	14.9	14	14	54.2	30.9	8.31	15.2	13.6	15.2	6.34	5.73	19.6	75.3	18	49.8	21.2	24.3	15.6	17.5	11.6	12.7	22.9
25.1	30.9	9.86	9.55	21.2	25.9	28.5	19.9	47	34.5	67.7	45.7	14.4	16.1	19.2	42.2	16.7	2.2	30.4	25.6	58.4	20.9	13.1	49.4	91.4	45.9	61.2	17.9	37.3	29.5	6.62	28.4	28.4	25.5
0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14
31	34.6	57.9	26.1	7.78	18.5	33.1	12.9	12.4	10.3	12.4	18.4	5.34	2.99	2	52.8	34.9	9.48	39.7	40.3	16.2	6.99	9.06	12	65.7	12.4	21.4	8.1	29	42	30.7	38.1	37.7	44.6
1	1	3.26	2.91	1	2.46	1.17	2.31	7.35	6.13	6.97	10	12.4	14.2	13.7	1.61	2.74	1.88	1.26	1	3.71	3.53	1.79	5.2	10	1.83	10	4.75	1	1	1.98	1	1.13	1.45
52	55.3	49.1	28.6	43.1	80.9	28	44.5	248	276	237	444	965	929	1020	59.8	49.1	10.4	72.2	57.8	106	137	40	157	329	42.3	183	137	57.6	60.6	28.4	53.2	56.5	35.9
113	115	75.8	27.6	79.7	53.8	102	46.6	238	171	416	131	36.2	24	33.9	1270	53.9	9.1	116	104	236	104	126	170	476	144	116	46.7	136	98.3	21.5	111	108	128
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.103	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0814	0.04	0.04	0.04	0.01	0.217	0.0749	0.04	0.04	0.04	0.0472	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0644	0.04	0.04	0.04	0.04	0.04	0.04	0.0902	0.04	0.04	0.04	0.01	1.19	0.339	0.04	0.04	0.04	0.189	0.04	0.04	0.04	0.04	0.04	0.04	0.0564
0.1	0.1	0.1	0.1	6.19	0.863	0.1	0.1	8.26	8.23	5.08	0.407	10.7	4.53	1.27	0.1	0.873	1.05	0.1	0.166	2.39	28.6	7.37	4.19	6	2.7	39.5	15.3	0.1	0.267	0.296	1.31	1.46	3.71
0.1	0.1	2.56	5.8	23.6	3.58	1.44	4.48	20.8	25.6	17.1	4.81	20.9	13.9	3.01	0.1	2.09	0.952	0.335	0.1	18.9	48.8	23.8	17.2	22.7	10.6	96.7	42.2	0.1	0.355	0.572	1.72	3.33	6.53
11	7.04	133	201	60.9	20.3	1.53	24.4	134	231	146	69	67.1	63.8	29.4	0.1	53	70.5	7.84	0.449	111	74.7	31.7	153	132	99.3	325	200	3.18	1.36	8.84	1.48	17.4	15.5
0.1	0.1	3.4	46.9	9.35	3.25	0.1	2.81	32.2	50.5	35.9	29.8	13.7	9.08	13.8	0.1	0.1	0.353	0.63	0.1	36	26.6	10.9	40.7	41.1	26.4	87.6	27.1	0.1	0.1	5.83	0.1	1.65	4.89
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.055	0.151	0.04	0.04	0.01	0.145	0.0491	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0433	0.04	0.04	0.04	0.04	0.04	0.04	0.0594	0.04	0.04	0.04	0.01	0.79	0.226	0.04	0.04	0.04	0.125	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	2.71	0.1	1.77	1.34	0.1	1.14	1.5	2.36	1.07	0.558	0.1	0.1	0.1	0.1	0.1	0.493	0.1	0.1	0.1	9.08	1.77	2.03	2.68	0.329	0.1	4.11	0.114	0.1	0.188	0.1	0.402	1.77
0.1	0.555	6.96	10.4	7.06	3.11	0.7	3.87	10.7	18	7.21	5.47	3.56	0.814	1.21	0.1	7.02	3.54	0.602	0.1	0.45	20.3	8.69	13.5	19.6	3.46	23.1	18.9	1.2	0.1	4.58	0.425	2.52	4.65
41.4	29.2	304	253	21.4	21.4	0.1	11.1	46.2	92.2	57.9	61.9	5.76	1.36	26.6	0.1	178	445	2.74	1.17	8.04	45.4	22.9	76.9	107	31.4	59.7	60.5	54.8	2.93	127	0.865	11.2	13.6
10.6	8.8	25.8	59.7	5.15	3.61	0.1	1.38	16.3	49.1	29.9	45.9	0.1	0.565	23.2	0.1	19.8	14.1	0.41	0.834	1.37	24.8	14.6	38.4	52.3	17.3	8.16	15.3	17.2	0.677	56.2	5.18	1.95	3.47
3.52	3.31	7.36	23	1.69	0.1	0.1	0.1	6.42	18.9	12.3	17.8	0.1	0.1	9.38	0.1	3.82	0.1	0.1	0.21	1.06	9.9	5.82	15.4	20.2	8.01	1.76	5.63	7.35	0.1	28.5	3.1	0.1	1.18
12	12	12	12	12	12	12	12	12	12	12	13.3	12	12	12	12	12	24	12	12	22.4	12	12	60	21.6	12	12	12	12	12	12	12	12	12
8	8	8	8	8	8	8	11.1	10.8	8	12.6	8	35.2	78.2	8	8	8	16	14.9	8	19.5	13.6	13	62.5	25.2	27.6	138	223	8	8	8	8	23.2	8
16	16	16	16	16	16	16	16	64.3	16	100	51.6	45.7	154	16	16	16	32	29	16	70.3	33.4	23.1	192	150	32.6	225	269	16	16	16	16	30.4	16
14	14	14	14	31.4	14	14	26.1	545	108	342	422	387	322	54.7	14	14	0.028	63.9	14	471	73.8	21.9	758	2110	113	913	1070	14	14	14	14	112	21.1
15	15	15	15	21.6	15	15	20	340	77.6	329	310	178	161	50.9	15	15	1210	55.7	15	421	63.1	15	506	1390	91.5	880	1200	15	15	15	15	106	15
15	15	15	15	35.7	32.7	15	27.6	377	133	453	628	416	267	86	15	15	3	86.5	15	614	120	27.8	878	2740	183	1240	970	31.1	15	15	15	155	31.8
14	14	14	14	14	14	14	14	202	57.1	246	294	178	111	27.7	14	14	0.028	28.9	14	222	36.2	14	342	1040	63.2	420	438	14	14	14	14	47.3	14
24	24	24	24	24	24	24	24	215	69.4	280	291	163	110	48.2	24	24	<0.048	50.2	24	360	61.8	24	419	988	84.1	619	719	24	24	24	24	73.6	24
10	10	10	10	38.1	25.2	20.3	29.6	477	130	360	482	441	283	62.8	10	10	0.02	70.4	10	458	87.4	24	788	2000	146	944	1000	22.7	10	10	10	124	35.2
0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	46.2	0.023	55.7	60.2	38	28.1	0.023	0.023	0.023	0.046	0.023	0.023	81.7	0.023	0.023	0.115	222	0.023	116	156	0.023	0.023	0.023	0.023	0.023	0.023
0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	188	62.3	237	302	187	117	42.6	0.018	0.018	0.036	38	0.018	326	53.5	0.018	450	794	74.1	566	611	0.018	0.018	0.018	0.018	65.7	0.018
0.017	0.017	0.017	0.017	75.6	30.9	29	70.2	1180	131	422	680	830	1070	180	0.017	0.017	0.034	174	0.017	616	141	58.5	2130	1200	264	1570	2160	33.2	0.017	0.017	0.017	201	36.6
10	10	10	10	10	10	14	11.6	11.5	10	15	10	10	13.8	10	10	10	0.02	10	10	22.5	14.8	16.3	50	13.4	12.9	79.8	126	10	10	10	10	14.5	10
9	9	9	9	15.1	13	36.4	15.5	24.9	32.6	44.4	16.5	14.2	49	9	9	24.1	0.018	17.4	19.7	63.6	33.4	10.7	87.7	66.6	22	97.4	143	9	9	9	9	23.2	13.6
15	15	15	15	90.6	53	117	62.7	122	65.9	217	282	525	471	229	15	15	3	143	15	238	89.4	57.5	858	394	217	832	1210	15	15	15	15	135	58.2
0.015	0.015	0.015	0.015	0.0557	0.0275	0.015	0.0639	1.42	0.282	0.6	0.618	0.742	0.883	0.144	0.015	0.015	0.03	0.179	0.015	0.874	0.152	0.0592	2.24	4.65	0.261	1.7	2.01	0.015	0.015	0.015	0.015	0.178	0.0283
0.118	0.118	0.118	0.118	0.364	0.182	0.216	0.338	5.22	1.15	3.71	4.45	4.18	4.12	0.926	0.118	0.118	1.21	0.951	0.118	4.88	0.973	0.312	9.71	17.8	1.59	10.3	12.3	0.118	0.118	0.118	0.118	1.29	0.225
93.7	92.4	92.1	99.7	94.1	83.8	92.9	92	88.3	92.4	91.4	88.2	87.1	90.3	89.8	80.6	97.1	96.8	90.4	87.5	93.1	89.7	98.7	92.2	102	99.1	88.2	89.7	84.2	91.2	99.6	83.8	87.7	89.3
91.1	87.2	95.4	97.3	92.4	88.4	87.3	91.7	86.3	90.8	89.3	89.3	88.1	94.8	93.5	83.2	95.6	97.1	86.6	57.4	102	101	100	77.2	93.4	95.5	95	92.2	81	91.2	91.9	80.5	90.4	91.4
91.4	88.1	100	98	97.3	95.1	89.1	93	92	93.1	91.5	92.2	84.5	99.2	98.2	90.1	94.7	99.5	89.4	94.3	121	111	101	97.1	99.2	97.8	98.2	97.2	84.4	99.2	92.2	86.9	94.6	95.1
91.6	86.4	82.8	97.9	107	78.3	84	89.5	91.5	88.4	86.7	95.3	89.3	94.7	90	89.4	87.8	109	89.3	93.1	99.7	101	97.1	77.4	95.3	101	90.2	86.8	84.9	105	96.3	88.7	92.4	80.4
90.8	85.9	74.6	99.1	94.6	77	82.3	93.7	92.5	93.9	91.1	97.2	93.1	90.5	84.7	92.9	88.1	107	95.4	88.6	95.7	103	100	79.6	94.7	96.5	85.1	89.8	83.6	91.8	100	89.2	87.6	76.3
11	7.04	139	254	100	28	2.96	31.7	196	315	204	104	112	91.3	47.4	0.1	55.9	72.9	8.81	0.615	168	179	73.7	215	202	139	549	284	3.18	1.99	15.5	4.52	23.8	30.6
52.1	38.5	339	323	35.3	29.5	0.7	17.5	74.7	162	96.2	114	9.32	2.74	51	0.1	205	463	3.75	2.01	9.87	99.6	48	131	182	52.5	91	98.8	73.2	3.6	188	6.47	16	23.4
63.1	45.6	478	577	135	57.5	3.66	49.2	270	477	300	218	122	94	98.4	0.1	261	536	12.6	2.62	178	281	122	346	384	191	641	383	76.4	5.59	203	11	39.9	54.1
30700	27600	27800	20300	55000	31000	24000	18100	53300	66100	91600	160000	177000	214000	226000	35900	17300	7950	32300	30600	66900	21500	19200	54600	103000	33500	91300	84900	27200	28700	16100	28100	34900	32100
280	261	390	428	2490	2300	535	4000	19300	15600	18200	25300	37600	39000	14.2	489	180	308	763	697	6750	4660	2000	14100	18200	3540	8530	11600	299	293	230	837	739	1560
252000	-	255000	-	-	-	-	-	155000	-	83400	255000	-	169000	-	161000	-	-	-	-	-	24700	-	144000	-	107000	-	170000	-	-	-	135000	-	114000
6760	-	7470	-	-	-	-	-	17500	-	7980	17700	-	41300	-	12900	-	-	-	-	-	6420	-	17200	-	29600	-	24700	-	-	-	40500	-	27600
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0318	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0264	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0174	0.01	0.01	0.0106	0.01	0.01
0.015	0.015	0.015	0.015	0.176	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.176	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0424	0.035	0.035
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18/06/2018	-	18/06/2018	-	-	-	-	-	29/06/2018	-	29/06/2018	20/06/2018	-	15/06/2018	-	18/06/2018	-	-	-	-	-	21/06/2018	-	21/06/2018	-	21/06/2018	-	18/06/2018	-	-	-	10/08/2018	-	10/08/2018
Barbara Urbanek-Walsh	-	Marcin Magdziarek	-	-	-	-	-	Lucy Caroe	-	Andrzej Ferfecki	Barbara Urbanek-Walsh	-	Renata Bozhkov	-	Barbara Urbanek-Walsh	-	-	-	-	-	Andrzej Ferfecki	-	Andrzej Ferfecki	-	James Richards	-	Marcin Magdziarek	-	-	-	Renata Bozhkov	-	Renata Bozhkov
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Detected	-	Not Detected	-	-	-	-	-	Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	Detected	-	Detected
Not Detected	-	Not Detected	-	-	-	-	-	Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Detected	-	Not Detected	-	Not Detected	-	-	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	Not Detected	-	Not Detected
Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	Not Detected	-	Not Detected
0	-	0	-	-	-	-	-	Fibre bundles in soil	-	0	0	-	0	-	0	-	-	-	-	-	0	-	loose fibres in soil	-	0	-	0	-	-	-	Loose fibres in soil.	-	Soil containing ACM debris.
98.9	99.6	8.9	118	107	105	103	108	109	112	107	116	113	113	123	106	110	108	103	110	110	123	109	115	104	114	109	138	110	111	104	99.5	97.3	98.6
97.9	97.8	94.9	100	95.4	92.5	97.2	97.7	98.1	99.2	99.6	98.9	97.4	95.9	97.6	97.1	99.1	99.6	89.9	97	96.8	96.9	99.8	96.3	94.4	100	97.6	98.7	92.1	98.7	97.3	98.7	99.3	97.8
97	97.5	98.7	97	81.7	81.9	98.9	97.2	93.9	93.5	99.7	95.1	92.5	95.5	95	96.2	102	98.7	70.1	96.8	96.5	90.5	94.5	91.5	77.9	95.2	96.2	103	93.8	95.7	95.4	86.1	90.7	88.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.266	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	1.05	0.6	0.5	-	-	-	-	-	1.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	6.72	12.6	15.2	-	-	-	-	-	37.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	7.7	13.2	15.2	-	-	-	-	-	38.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Lyn Commercial Soils Data

40AS12	40AS12	40AS18	40AS18	40AS18	40AS27	40AS27	40AS12V	40AS18V	40AS27V	RLS2TP1	RLS2TP10	RLS2TP10	RLS2TP10	RLS2TP11	RLS2TP12	RLS2TP13	RLS2TP13	RLS2TP14	RLS2TP14	RLS2TP14	RLS2TP15	RLS2TP15	RLS2TP15	RLS2TP2	RLS2TP2	RLS2TP3	RLS2TP4	RLS2TP5	RLS2TP5	RLS2TP6	RLS2TP6	RLS2TP6	RLS2TP7
0.500.50	1.001.00	0.500.50	1.001.00	2.002.00	0.200.20	0.700.70	1.801.80	2.302.30	0.800.80	0.200.20	1.001.00	2.002.00	3.003.00	0.500.50	0.500.50	0.200.20	0.500.50	0.800.80	1.501.50	2.002.00	0.500.50	1.001.00	1.501.50	0.300.30	0.700.70	0.500.50	0.200.20	0.300.30	0.800.80	1.001.00	2.002.00	3.003.00	0.800.80
14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	06/06/2018	06/06/2018	14/06/2018	14/06/2018	06/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018
2.21	2.1	3.91	1.18	1.81	1.95	11.2	8.93	3.65	16.8	2.5	3	3.15	5.72	2.59	1.18	17.4	4.22	24.8	2.07	3.1	5.79	2.83	1.17	4.14	1.62	2.34	3.65	2.22	3.72	5.26	1.95	1.37	5.86
6.82	7.27	45.1	15.5	2.74	3.67	18.3	21	12.3	18	6.02	6.65	5.64	24.2	8.16	12.4	16.4	7.12	8.03	4.84	6	8.47	7.29	6.16	11.2	11.2	12.6	8.97	11.6	9.25	8.81	10.3	5.53	9.87
0.336	0.221	1.84	0.998	0.253	0.263	0.757	0.735	0.509	0.641	0.688	1.18	0.579	0.783	0.356	0.76	0.271	0.513	0.553	0.676	0.998	0.867	0.611	0.18	0.246	1.47	0.283	0.493	0.515	1.02	1.45	1.05	0.753	1.16
0.989	35.9	24.2	9	105	50.1	40.9	35.7	26.3	6.89	77.1	116	64.4	206	36	4.03	4.89	326	47.1	31.9	249	89.1	52.6	29.5	12	203	14	0.9	96.7	73.9	148	121	134	318
9.21	23.8	18.5	14	8.66	12.9	29.6	27.7	21.3	49.3	22.1	25.5	16.5	128	15.2	9.35	20.6	36	39.2	14	22	25.9	18.3	14.3	16.7	25.4	19.5	14.7	20.3	29.1	21	24.7	19.8	33.1
13.1	24.9	34.8	40.6	11.7	14.8	49.8	51.5	36.3	57.4	68.3	89.6	51.1	110	24.2	20.2	20.6	47.3	48.8	49	67.9	104	49.1	12.8	19.5	52.4	15.9	16.6	24.9	65.9	49.6	61.6	69.2	118
0.14	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	1.11	0.14	0.14	0.14	2.69	0.14	0.14	1.4	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.14	1.4	1.4	1.4	0.14	0.14
10.2	13.9	18.3	18.8	7.21	10.9	30.9	30.4	29	53.1	12.2	13.7	10.1	19.1	15.8	14	20.4	11.6	20.4	10.9	13.9	16.2	13.5	17	21.6	25.8	24.4	17.7	17.8	24.9	22.2	18.3	14.2	30
1	5.3	2.53	10	5.06	4.38	1.5	1.4	1.02	1.23	3.65	10	2.19	2.57	1.81	2.22	1	6.33	2.07	4.1	10	3.44	2.01	1.19	1.83	13.8	1	1.19	4.76	10	10	10	4.58	4.14
14.2	108	49.2	16.5	199	171	70	58.3	45.3	37.5	108	123	51.5	98.4	67.6	26.6	17.9	248	82.5	54.8	256	152	71.4	121	35.1	532	24.1	13.1	175	111	157	136	144	128
31.7	49.9	447	75.4	41	54.9	146	159	154	83.7	187	344	207	388	84.4	67.5	42.7	146	109	109	145	353	267	40.2	54.7	156	53.2	58	72.7	290	164	134	206	332
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.223	0.04	0.04	0.04	0.04	0.04	0.04	0.0408	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.244	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0627	2.66	0.04	0.04	0.04	0.04	0.04	0.04	0.0864	0.04	0.04	0.04	0.04	0.0496	0.04	0.04	0.04	0.04	0.04	0.04	0.265	0.187	0.237
0.04	0.04	0.0622	0.04	0.04	0.04	0.04	0.04	0.04	0.0684	0.0414	0.0526	26	0.04	0.04	0.04	0.04	0.04	0.04	0.158	0.04	0.04	0.04	0.04	0.131	0.04	0.04	0.04	0.04	0.04	0.04	0.0414	1.52	1.83
0.04	0.0754	0.106	0.04	0.04	0.04	0.04	0.04	0.04	0.0616	0.132	0.0638	12.9	0.04	0.04	0.04	0.04	0.04	0.04	0.456	0.04	0.04	0.04	0.04	0.133	0.04	0.04	0.04	0.04	0.04	0.04	0.04	3.58	5.33
1.93	6.44	14.1	0.573	1.12	0.793	0.1	3.76	0.1	2.47	20.8	6.86	8.07	0.1	0.1	0.1	1.18	3.15	3.48	23.9	3.22	4.39	4.89	0.1	0.1	1.07	2.32	2.01	0.1	5.57	4.97	9.93	4.08	147
2.42	11.3	22.6	1.63	2.28	1.53	0.1	0.559	0.1	2.49	53.8	30.4	22.3	1.92	0.1	0.1	3.45	13.5	20	34.6	18.5	16.4	22.6	0.1	2.38	4.07	17.3	2.8	3.62	27	20.9	32.4	20.8	270
3.75	62.8	43.5	17.4	15.6	7.8	2.99	8.63	3.34	5.73	195	186	170	29.4	13.9	9.73	8.65	96.6	124	36.3	120	71.9	84.9	8.45	39.4	24.5	34.3	10.8	12.7	166	110	217	87.1	424
0.1	27.9	11.3	3.57	3.05	0.813	0.1	0.1	0.1	0.877	78.5	61.3	42.6	7.75	5.87	2.01	1.88	27.8	28.5	5.5	23.9	12.9	18.9	0.1	7.86	7.67	5.6	1.79	0.1	35.3	24	51	12.2	75.7
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.0531	0.04	0.04	0.04	0.04	0.04	0.04	0.0456	0.04	0.04	17.4	0.04	0.04	0.04	0.04	0.04	0.04	0.142	0.04	0.04	0.04	0.04	0.0897	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1.03	1.31
0.04	0.051	0.0712	0.04	0.04	0.04	0.04	0.04	0.04	0.041	0.0885	0.0426	8.57	0.04	0.04	0.04	0.04	0.04	0.04	0.304	0.04	0.04	0.04	0.04	0.0885	0.04	0.04	0.04	0.04	0.04	0.04	0.04	2.39	3.55
0.1	2.55	4.99	0.1	0.461	0.1	0.1	1.43	0.1	1.31	5.16	1.2	3.4	2.23	0.1	0.1	0.47	2.15	3.64	0.1	1.5	1.43	1.62	0.1	1.57	0.1	0.213	1.1	1.08	1.96	1.77	3.23	2.11	64.1
0.1	6.73	10.4	0.466	2.04	0.1	1.22	1.95	1.28	2.45	19.8	12.2	11.3	14.9	2.04	0.1	0.841	11.9	26.4	3.05	8.77	6.73	9.96	0.977	2.66	5.98	6.72	4.39	4.34	14.6	10	19.5	9.95	116
0.1	42.3	26.3	8.56	15.3	4.59	25.7	43	17.8	0.1	106	96.1	97.5	79	20.4	5.83	5.86	79.3	122	1.18	51.9	28.9	42.7	4.64	12.9	23.1	22.5	10.7	7.91	77.5	60	130	45.7	159
0.1	28.1	12.3	3.87	4.34	1.07	2.68	7.39	3.21	0.1	71.5	49.2	24.2	31.8	11.9	1.24	1.8	39.3	33.7	0.217	21.9	8.17	16.7	1.61	2.52	9.6	4.48	3.24	2.35	30.3	25.6	72.3	20.6	50.5
0.1	11.3	4.69	1.31	1.33	0.123	0.1	2.29	0.1	0.1	29.2	20.6	8.33	12.2	5.16	0.1	0.1	14.3	11.9	0.1	8.29	2.66	6.43	0.1	0.1	3.62	1.56	1.13	0.901	12.3	9.92	29.6	7.78	20
12	12	12	12	12	12	12	12	12	12	15.4	24	12	87.4	12	12	12	12	15.9	12	24	12	12	12	12	12	12	12	12	14.1	14	12	24	140
8	13.4	96.7	8	8	8	8	8	8	8	31.7	31.2	33.8	208	8	8	8	155	1170	15.3	40.4	33.2	57.8	8	8	8	8	8	9.11	36.6	25.6	38.5	31.9	220
16	20.2	79.7	16	16	16	16	16	16	16	57.5	78.7	55.9	734	23.7	16	16	220	1440	23.4	160	64.6	97.5	16	16	220	16	18.6	35.8	82.9	104	106	183	385
18.5	59.9	72.8	26.1	56.1	71.9	27.2	33.3	21.2	14	328	387	233	2030	88.5	14	20.7	1450	5960	68.4	812	222	528	14	51.1	1520	14	60.5	67.4	295	368	543	578	545
15	33.8	45.2	21.3	56.5	67.3	28.2	34	21.3	15	322	377	191	1800	87.9	15	15	2070	7860	77.1	630	211	617	15	18.6	743	15	64.1	19.4	279	396	433	475	437
22.7	95.7	101	37.7	101	111	51.9	80.6	45.6	15	626	629	336	3030	134	18.8	39	2030	7540	114	1050	370	876	15	60.8	1800	21.6	122	47.5	550	609	725	781	667
14	30.3	34.6	14	34.4	34.4	14	29.9	14	14	246	221	111	1230	46.1	14	14	866	3900	40.7	339	134	306	14	14	554	14	39.9	14	151	228	282	307	252
24	34	41.8	24	44.1	53.8	24	45.9	24	24	307	320	154	1310	69.5	24	24	1830	5720	64.8	481	193	508	24	24	611	24	53.6	24	245	322	382	385	319
27.9	85.6	97.7	28.1	56.2	75.4	36.3	51.7	28.5	10	420	485	258	2470	92.5	16.4	38.6	1500	5020	69.1	817	234	554	11.3	92.3	1590	16.5	84.2	143	360	442	590	563	626
0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	46.1	64	34.2	327	0.023	0.023	0.023	318	1120	0.023	99.7	46.4	98.3	0.023	0.023	148	0.023	0.023	0.023	41.9	61.6	82.7	92.3	78
0.018	39.4	44.3	0.018	51.7	55.4	0.018	0.018	0.018	0.018	335	277	163	1350	65.2	0.018	0.018	1500	5230	54.9	372	190	491	0.018	0.018	697	0.018	60.6	21	275	313	488	342	304
36.5	146	255	39.8	91.8	120	57.2	59.5	41.1	0.017	448	727	380	3770	145	23.7	51.4	2000	9370	155	1360	502	1030	0.017	38	3280	33.3	103	163	461	607	1030	1200	1300
10	10	96.3	10	10	10	10	10	10	10	31.5	30.8	38.6	255	10	10	21.6	74.9	555	10	0.02	16.9	17.1	10	19	10	10	19	13.5	25.1	19	20.1	58.7	601
32	39.7	119	15.5	9	11	9	9	9	13.5	59	60.1	61.8	181	41.5	13.4	124	170	474	98.3	72.3	68.3	34.8	14.7	29	49.4	20.9	43.4	39.1	107	57.6	34	48.2	234
67.7	128	423	45.8	58.1	64.8	35.3	26.6	23.3	39.9	232	402	265	2520	104	29.4	115	925	5100	119	749	299	398	36.8	72.9	1310	39.2	101	183	424	370	597	1090	1720
0.0278	0.131	0.18	0.0335	0.0797	0.0943	0.0445	0.0502	0.0329	0.015	0.576	0.766	0.356	2.92	0.112	0.0213	0.0393	2.13	9.79	0.148	1.24	0.469	1.07	0.015	0.035	3.38	0.0277	0.0948	0.168	0.47	0.584	0.905	1.16	1.03
0.233	0.858	1.69	0.248	0.63	0.759	0.281	0.412	0.214	0.118	4.08	4.86	2.67	24.2	1.01	0.123	0.45	17.2	70.3	1.05	8.22	3.05	6.68	0.118	0.417	15.9	0.159	0.864	0.909	3.82	4.52	6.26	7.29	8.86
99.7	86.2	84.1	100	92.1	92.2	87.6	105	100	86.8	93.4	97.7	100	87.8	97.3	95.5	99.6	97.9	98.2	87.1	102	86.3	86.2	91.8	98.4	91	91.7	91.4	96.4	89.4	91.5	90.1	93.5	88.2
84.3	88.6	88.1	89.3	89.8	42.4	86.7	90	88.5	88.8	95.5	100	90.3	84.5	90.2	92	85.5	90.1	90.2	85.8	84.7	78.1	74.5	88.1	85.4	94.3	90.5	90.5	94.8	92.3	91.9	86.8	90.3	99.2
80.4	94.3	91.8	87.4	91.3	97.7	86.1	83.6	92.8	83.2	96.3	99.3	92	90.8	91.3	93.2	74.6	91.1	94.4	98	84.7	94.9	93.6	90.9	88.7	98	94.3	89.1	91	93	88.5	92.5	95.2	98.1
92.5	78.3	73.4	103	96.9	93.6	79.1	101	94.8	71.1	102	106	102	88.3	85.4	87.3	78.7	107	108	81.3	99.4	75.5	81.6	91.9	88.5	96.9	90.9	87	83.8	102	92.7	90	104	98.7
92	79.3	71.1	104	95.1	88.3	81.9	104	93.7	65.8	102	101	102	93.4	86.5	87.2	84.4	112	113	84.5	102	73.6	82.9	86.1	86.4	91.6	92.1	90	80.3	102	97.7	93.7	99.8	93.9
8.1	108	91.5	23.2	22	10.9	2.99	12.9	3.34	11.6	348	284	243	39	19.7	11.7	15.2	141	176	100	166	106	131	8.45	49.6	37.4	59.4	17.4	16.3	234	160	311	124	917
0.1	79.7	53.9	12.9	22.1	5.66	29.6	53.8	22.3	3.77	202	159	136	128	34.4	7.07	8.97	133	186	4.45	84.1	45.2	71	7.23	19.7	38.7	33.9	19.4	15.7	124	97.4	225	78.3	390
8.1	188	146	36.1	44.2	16.6	32.6	66.7	25.6	15.5	551	443	448	167	54.1	18.8	24.1	274	362	106	250	151	202	15.7	69.8	76.1	93.4	36.8	32	358	258	536	211	1320
21000	53300	22400	78100	30100	28600	23100	24700	28000	39500	63000	53000	22600	45300	24500	55200	23800	77800	46700	22600	88600	44100	32300	20500	22700	133000	19800	38300	40600	66300	110000	73900	59900	74400
1260	7520	2750	773	7980	6120	228	262	735	685	5860	7310	3130	5600	2630	2690	625	28600	3910	3770	16100	4450	4180	1300	1180	29900	393	846	4370	5560	9910	7360	9430	8890
-	67000	-	117000	-	121000	-	141000	-	-	161000	-	54800	-	128000	-	139000	-	142000	-	163000	-	146000	-	152000	-	189000	-	-	-	-	-	-	-
-	22400	-	11200	-	18100	-	11500	-	-	15800	-	11200	-	4870	-	26100	-	22500	-	23000	-	27600	-	28400	-	19000	-	-	-	-	-	-	-
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.011	0.01	0.0118	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0109	0.0228	0.151	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.045	0.01	0.01	0.01	0.01	0.01
0.015	0.015	0.015	0.022	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0236	0.015	0.015	0.015	0.015	0.015	0.0565	0.015	0.015	0.015	0.0232	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0565	0.035	0.035	0.035	0.174	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	10/08/2018	-	10/08/2018	-	10/08/2018	-	09/08/2018	-	-	21/06/2018	-	18/06/2018	-	18/06/2018	-	19/06/2018	-	19/06/2018	-	18/06/2018	-	19/06/2018	-	19/06/2018	-	19/06/2018	-	-	-	-	-	-	-
-	Renata Bozhkov	-	Renata Bozhkov	-	Renata Bozhkov	-	Renata Bozhkov	-	-	Barbara Urbanek-Walsh	-	Paul Poynton	-	Christian Hallam	-	Christian Hallam	-	Christian Hallam	-	Paul Poynton	-	Christian Hallam	-	Christian Hallam	-	Christian Hallam	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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-	Not Detected	-	Trace	-	Not Detected	-	Trace	-	-	Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Detected	-	-	-	-	-	-	-
-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
-	0	-	Loose fibres in soil.	-	0	-	Loose fibres in soil.	-	-	Fibre bundles in soil.	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	Soil containing material typical of Asbestos Bitumen	-	-	-	-	-	-	-
99.7	99.2	102	94.4	92.7	96.4	107	99	96.3	103	104	109	111	107	105	99.2	103	106	106	111	101	108	102	103	99.2	105	100	105	107	107	104	103	104	104
102	93.7	102	95.9	94.2	97.1	97.1	98	97.6	95	99.9	96.9	94.9	97.2	97.8	96.7	97.5	95.9	97.3	95.9	95.6	94.3	95.3	93.4	91.1	95.6	92.4	97.6	89	99.5	93.2	95.8	92.1	95.6
91.1	77.2	110	83.2	81	88	89	87.9	91.1	92.4	95	93	92.7	98	97.9	92.2	97.2	92.8	95.8	88	85.6	93.4	93	75.7	70.2	94.1	88.7	98.1	72.5	98.4	87.4	95.9	88.8	97.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.01	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.009	0.09	0.09	0.009	0.009	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.007	0.07	0.07	0.007	0.007	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.004	0.04	0.04	0.004	0.004	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.01	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.01	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.13	0.13	0.13	0.362	0.53	0.302	0.247	0.211	0.245	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.013	0.13	0.13	0.013	0.013	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.04	0.4	0.4	0.04	0.04	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Glan Lyn Commercial Soils Data

RLS2TP7	RLS2TP7	RLS2TP8	RLS2TP8	RLS2TP8	RLS2TP9	RLS2TP9	RLS2TP10V	RLS2TP11V	RLS2TP12V	RLS2TP13V	RLS2TP14V	RLS2TP15V	RLS2TP1V	RLS2TP2V	RLS2TP3V	RLS2TP4V	RLS2TP5V	RLS2TP6V	RLS2TP7V	RLS2TP8V	RLS2TP9V	CAFTP10	CAFTP10	CAFTP15	CAFTP15	CAFTP16	CAFTP16	CAFTP16	CAFTP19	CAFTP19	CAFTP20	CAFTP20	CAFTP24	CAFTP24	CAFTP25		
2.002.00	3.103.10	1.001.00	2.202.20	2.802.80	0.500.50	1.001.00	4.004.00	0.800.80	0.700.70	0.650.65	2.252.25	2.302.30	0.400.40	1.201.20	1.101.10	0.450.45	1.301.30	5.305.30	3.803.80	3.203.20	1.601.60	0.000.50	0.002.40	0.000.50	0.002.40	0.000.60	0.001.20	0.002.00	0.000.60	0.002.90	0.000.70	0.002.90	0.001.00	0.002.50	0.000.70		
12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	12/06/2018	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017	16/05/2017		
3.74	5.03	2.83	5.38	1.32	1.83	55.5	6.72	15.9	7.14	26.5	5.86	1.54	5.83	4.26	4.38	3.97	6.12	1.61	30.7	8.29	1.31	5.97	1.19	8.31	9.57	0.778	5.97	5.64	4.86	8.43	0.915	2.14	1.31	2.09	2.97		
7.28	135	9.19	11.3	7.62	9.23	7.63	16.3	9.36	11.8	11.3	15.5	5.34	5.2	9.65	9.94	11.2	11.2	11.6	27.5	15.9	6	11.5	5.68	14.4	6.45	8.72	15.3	34.4	6.53	12.2	8.83	4.26	11.9	6	8.76		
0.798	0.884	1.26	0.41	1.14	0.492	0.236	0.379	0.269	0.415	0.607	0.438	0.104	0.177	0.289	0.186	0.304	0.346	0.161	0.439	0.567	0.2	0.22	0.02	0.412	0.151	0.02	0.327	0.41	0.127	2.61	0.128	0.616	0.0447	0.2	0.02		
25	98.1	81.7	18.1	200	19.1	16.3	40	32	33.6	30.7	39.2	24	31.2	30.1	22.5	38.9	25.9	33.2	28.5	37	33.1	38	7.78	11	12.8	0.9	45.4	35.9	31.7	61.3	28.1	420	58.4	114	39.5		
22.8	126	26.9	23.6	27.2	28.1	18	34.1	21.8	26.8	37	26.2	10.4	17.3	21.2	10.9	25.5	14.1	12.9	35.6	30.3	14	14.3	1.4	20.3	3.82	22.4	32.7	77.1	20.3	14	25	3.88	12.8	17.6	24.8		
71	81.2	145	131	64.7	17.8	7.5	134	19.3	33.4	21.9	35.3	19.5	20.5	21.7	24.7	26.8	20.1	33.9	19.2	43.5	7	27	0.7	23.6	16.6	3.2	28.8	116	25.9	93.7	18.4	16.6	32	13.1	22.6		
0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.401	0.14	0.52	0.14	1.87	0.748	0.14	0.14	0.14	0.14	1.4	0.712		
17.6	169	20.3	28.2	90.4	26.6	21.3	36.2	29	31.6	36.6	34.1	27.8	29.7	35.7	32.9	42.3	33.1	41.4	39.2	35	4.67	37.3	0.763	35.2	6.38	3.93	33.7	54.8	30.3	47	39.6	7.53	40.7	6.54	35.5		
2.11	40.2	3.82	1.68	4.98	10	3.22	1.66	1.66	1.41	2.86	1.29	1	1.1	1	1	1.68	1	1	3.19	1.37	10	1	8.31	1	6.43	1.65	1.54	1	1	10	1	12.3	1.12	10	1		
39.1	139	117	37.6	269	42.7	22.3	61.2	48.6	53	47.5	64.7	40.9	47.5	49.1	44.6	61.2	41.2	59.7	54.4	62.9	47.2	51.2	21.9	26.4	38.3	16.6	57.7	50.7	60.4	204	35.8	1790	93.9	501	61.7		
169	217	302	79.1	331	67.5	64.6	143	81.3	96.6	79.9	122	74.6	76.6	86.2	96.7	104	111	117	42.1	156	19	102	12.6	128	73.4	19.4	117	331	124	369	71	50.9	115	39.7	126		
																					0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04		
																					0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008		
																					0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012		
																					0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009		
0.04	0.04	0.0433	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0403	0.04		
0.107	0.0439	0.0888	0.0762	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0421	0.0442	0.04	0.0662	0.04	0.04	0.04	0.04	0.104	0.04		
1.44	0.04	0.135	0.291	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.251	0.0527	0.0758	0.04	0.211	0.263	0.04	0.04	0.04	0.084	0.04		
2.18	0.04	0.379	0.611	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.75	0.123	0.0901	0.04	0.488	0.787	0.04	0.04	0.04	0.0759	0.04		
35.8	4.42	12.7	9.17	6.54	0.1	1.62	0.1	0.1	0.1	3.46	0.102	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.13	0.1	3.08	0.228	0.1	0.1	3.49	4.76	0.1	0.1	1.65	1.97	0.109	0.1	0.1	3.76	0.1		
21.2	20.9	34	9.12	31.4	1.72	4.95	0.1	0.1	0.1	7.54	2.51	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.24	0.1	10.3	0.154	5.96	1.59	11.8	11.3	0.1	3.77	3.36	8.7	0.1	0.85	0.1	17.8	0.1		
59.5	136	146	37.5	207	20.1	231	1.98	15.5	3.88	37.9	5.23	0.1	1.23	0.865	6.64	1.15	2.58	0.1	74.1	0.1	15.7	0.1	77.8	14.9	208	42.9	5.59	33.6	8.12	38.9	0.1	6.96	2.67	90.6	3.7		
6.75	36.2	51.3	10.9	49.6	2.32	3.39	0.1	0.1	0.1	1.37	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.89	0.1	40.7	0.1	99	14.9	0.1	6.64	0.1	7.39	0.1	0.485	0.1	15.4	0.1		
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04		
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04		
1.01	0.045	0.105	0.213	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.173	0.0433	0.0569	0.04	0.14	0.181	0.04	0.04	0.04	0.0575	0.04		
1.45	0.04	0.252	0.406	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.5	0.0819	0.06	0.04	0.325	0.524	0.04	0.04	0.04	0.0506	0.04		
5.08	1.68	2.99	2.39	2.4	0.778	0.1	0.1	0.1	0.1	2.23	0.1	0.1	0.1	0.1	0.1	0.304	0.1	0.1	0.1	0.1	1.31	0.1	0.1	4.62	4.67	1.48	1.51	1.95	2.28	2.67	0.1	0.333	0.1	3.22	0.1		
14.8	7.38	12.9	7.05	18.2	3.51	4.52	0.1	2.17	0.1	5.97	0.589	0.1	3.05	0.182	0.1	0.115	0.1	0.1	4.31	2.01	4.33	0.1	0.777	5.17	27.9	4.2	0.803	5.74	2.38	6.91	0.1	6.95	3.33	24.6	0.1		
45.3	51	70.3	31.5	117	15.6	280	7.54	111	21.6	159	17.8	7.46	34.7	5.34	26.5	5.82	7.44	3.8	284	19.3	0.1	0.685	43.6	34.4	180	21.1	18.6	38.1	28.3	24.1	0.1	24.8	6.59	191	10.1		
9.22	29.5	50.6	15.2	53.8	8.42	24.8	0.891	6.33	2.31	27.1	1.88	0.1	4.44	0.139	2.12	1.59	3.41	0.1	25.2	2.37	0.1	0.1	56.1	15.2	153	12.3	2.89	19	2.42	11.5	0.1	6.34	0.84	59.1	1.98		
3.31	12.1	22.8	6.26	20.1	3.55	8.32	0.1	0.1	0.1	9.72	0.1	0.1	0.1	0.1	0.1	0.349	1.34	0.1	7.71	0.1	0.1	0.1	24.9	5.49	62.6	4.65	0.1	7.13	0.1	4.02	0.1	1.37	0.1	20.6	0.1		
12	12	12	12	15	12	60	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	24	12	12	78.5	12	12	12	16.7	12	12	12		
22.2	19.4	10.7	8	20.5	8	40	8	8	8	8	8	8	8	8	8	8	8	8	8	8	12.2	8	8	32.9	294	27.9	8	59.5	8	17.7	8	31.7	8	87	8		
28.6	44.9	25	16	69.9	16	80	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	45.6	129	16	16	185	16	84.1	16	86	16	143	16		
77.3	175	185	24.9	1150	155	70	14	14	14	14	14	14	14	14	14	14	14	14	14	32.4	25.2	32.9	59.3	129	371	48.1	14	653	28.4	186	14	595	14	1440	26.7		
57.2	162	191	21.5	1090	93.5	75	15	15	15	15	15	15	15	15	15	15	15	15	15	25.4	30.2	23	63.2	101	449	26.2	33.5	773	15	139	15	711	15	1740	25		
124	264	315	56.8	1810	182	75	15	15	15	15	35.1	15	15	15	15	15	15	15	15	44.2	50.3	27.6	115	173	778	78.4	48.5	1030	28	214	15	1080	15	2380	34.3		
36.2	101	113	18	711	73.8	70	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	39.2	73.3	242	25.4	22.7	340	14	79.5	14	338	14	822	14		
44	130	172	24	983	72.9	120	24	24	24	24	104	24	24	24	24	24	24	24	24	24	33.5	24	102	107	573	50.6	24	625	24	119	24	589	24	1220	24		
93.1	211	238	30.9	1250	172	50	10	10	20.7	10	20.3	10	10	10	10	10	10	10	10	38.3	15.6	23.9	49.2	148	304	48.9	39.5	595	24	178	10	667	10	1400	23.2		
0.023	30	34.6	0.023	177	0.023	0.115	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	123	0.023	0.023	155	0.023	26.4	0.023	118	0.023	219	0.023		
54.1	125	141	25.8	866	67.2	90	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	23.2	0.018	76.5	87.2	403	38.1	0.018	527	0.018	79.9	0.018	418	0.018	879	0.018		
148	330	275	64	854	136	0.085	0.017	0.017	30.4	0.017	32.4	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	68.3	41.3	35.5	82.2	294	611	84.2	70.8	1020	57.6	294	29.3	925	0.017	2250	32.4		
35.2	13.2	10	10	11.8	10	50	10	10	10	10	10	10	10	10	10	10	10	10	26.1	10	10	10	10	48	129	12.2	10	71.3	16.8	23.6	10	21.2	10	41.4	10		
44.2	28.2	27.2	22.8	60	28.2	45	9	9	9	9	9	9	9	9	9	9	9	9	9	67.4	15.8	43.6	27.9	64.5	253	41.9	18.8	237	9	58.9	9	26.7	9	32.4	9		
139	198	124	57.2	288	116	75	15	15	15	15	15	15	15	15	15	15	15	15	15	107	41.5	105	54.3	246	433	83.1	59.6	572	63.9	398	48.1	383	15	674	15		
0.128	0.342	0.329	0.0522	2.36	0.335	0.075	0.015	0.015	0.015	0.015	0.0275	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0556																	
1.03	2.17	2.18	0.374	11.7	1.43	0.59	0.118	0.118	0.118	0.118	0.219	0.118	0.118	0.118	0.118	0.118	0.118	0.118	0.118	0.439	0.33	0.321	0.741	1.75	5.61	0.634	0.347	7.7	0.262	2.18	0.118	6.84	0.118	15.5	0.168		
92.8	91.6	91.7	93.2	92	91	86.1	85.9	96.6	96.6	96.6	89.8	82.2	75.9	88	95.3	90.5	88.7	83	97.6	88.1	97.9	104	97.5	114	103	113	104	118	107	105	110	103	98.8	112	120		
95.3	88.4	95.4	96.2	90.3	91.4	81.3	90.5	93.2	91.9	89.6	89.3	81.3	76.5	93	94.7	87.3	86	79.5	97.7	87.4	98.2	100	96	111	99.8	110	102	114	103	101	106	98.7	95.7	109	114		
96.9	91.4	98.4	98.5	97.9	91.1	81.9	101	95	95	92.5	88.1	85.7	85.1	95.6	97.7	89.2	89.6	85	102	93	96.4	95.3	95.7	106	98	107	101	111	101	95.5	104	95.9	93.3	107	108		
94.7	95	103	97.1	106	95.8	86.7	97.9	89	89.7	103	79.8	85.2	83.3	99.9	95.1	90.1	88.7	92.4	90.4	95.6	91.2	96.2	86.4	95.1	101	90.8	94	116	88.7	95.7	104	101	86.5	96	108		
89.8	89.9	100	93.2	107	90.4	79.6	98.9	88.9	87.2	98.4	83.3	85.6	89.7	97.8	95.1	90.8	88.6	87.9	87.6	90.5	89.9	101	80.4	95.9	108	87.7	90.2	125	88.7	98.3	110	108	76.9	96.1	113		
123	197	244	66.7	295	24.2	241	1.98	15.5	3.88	50.2	7.85	0.1	1.23	0.865	6.64	1.15	2.58	0.1	76.5	0.1	33	0.381	124	16.5	323	73.8	5.59	44	13.1	57	0.109	8.29	2.67	128	3.7		
74.3	89.6	137	56.1	192	28.3	309	8.44	120	23.9	194	20.2	7.46	42.2	5.67	28.7	7.83	10.8	3.8	314	23.7	5.64	0.685	100	59.4	366	39.1	23.8	64.7	35.4	45.2	0.1	38.4	10.8	278	12.1		
204	287	382	124	487	52.4	550	10.4	135	27.8	244	28.1	7.46	43.4	6.53	35.3	8.98	13.4	3.8	390	23.7																	
19000	78400	56900	27900	86300	52200	14300	30300	21800	22500	20400	22300	23900	24200	31100	28700	28200	23900	30800	21300	27100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2180	140000	6350	1050	11200	2110	325	414	164	341	185	240	388	161	326	615	542	405	411	255	277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
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0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0155	0.01	0.01	0.0222	0.01	0.01	0.01	0.0115	0.0109	0.01	0.01	0.01	0.249	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0155	0.01	0.01	0.0555	0.01	0.01	0.0111	0.046	0.01	0.01	0.01	0.0108	0.01	0.01	0.0128	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0555	0.015	0.015	0.015	0.023	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015		
0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.133	0.035	0.035	0.035	0.0805	0.035	0.035	0.035	0.035	0.249	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035		
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108	106	109	108	104	110	107	114	104	102	103	102	96.3	93.5	95.3	100	98.8	97.7	99.1	96.4	98.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
97.2	95.1	97.9	98.1	96.5	96.6	96.7	97.9	96.9	96.3	97.4	96.6	98	95.1	93.5	97.3	97.2	96.9	99.5	93.6	95.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
96	89.2	97.8	97	98.2	89.2	97.8	88.7	96.3	91.8	89.8	99	97.8	93.8	88.3	101	102	89.7	107	84.6	90.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.2	2	0.1	0.01	0.1	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1.8	0.09	0.09	0.18	1.8	0.09	0.009	0.09	0.09	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.4	0.07	0.07	0.14	1.4	0.07	0.007	0.07	0.07	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.8	0.04	0.04	0.08	0.8	0.04	0.004	0.04	0.04	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.2	2	0.1	0.01	0.1	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.2	2	0.1	0.01	0.1	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	24.3	0.286	0.76	37.1	22.5	0.786	0.013	0.13	0.355	0.764	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	8	0.4	0.4	0.8	8	0.4	0.04	0.4	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
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Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Sample ID	TP3AF601	TP3AF602	TP3AF603	TP3AF701	TP3AF702	TP3AF703	TP3AF801	TP3AF802	TP3AF803	TP3AF10V	TP3AF11V	TP3AF12V	TP3AF14V	TP3AF1V	TP3AF9V	TP3AF5V	TP3AF6V	TP3AF7V	TP3AF8V
Depth	0.5	1	1.5	0.5	1	1.5	0.25	0.5	0.75	0	0	0	0	2.7	0	1.4	2.1	2.5	1
Sampled Date	15/12/2017	15/12/2017	15/12/2017	15/12/2017	15/12/2017	15/12/2017	15/12/2017	15/12/2017	15/12/2017	05/03/2018	05/03/2018	27/02/2018	26/02/2018	26/09/2017	09/03/2018	15/12/2017	15/12/2017	15/12/2017	15/12/2017
Carbon																			
Soil Organic Matter (SOM)	2.4	2.97	3.52	4.9	2.6	2.03	1.95	3.95	3.07	1.66	1.51	1.95	2	10.5	2.14	2.21	7.98	2.81	8.98
Metals (Solids)																			
Arsenic	9.47	7.53	7.39	10.5	6.98	14.5	19.1	11.6	9.73	11.9	12.2	14.5	10.8	7.57	13	9.97	32	11.9	33.8
Cadmium	0.995	0.185	0.0301	0.67	0.871	0.848	0.669	0.316	0.209	0.216	0.218	0.02	0.02	0.923	0.362	0.02	0.623	0.02	0.288
Chromium	0.9	44	28.5	7.44	25.7	41.1	18.7	9	9	33.5	34	27.7	25.7	21.1	36.3	23.6	23.2	21.5	24.4
Copper	16.8	15.4	16.5	20.5	17.3	14.3	64.9	26.3	23.9	11.8	15.8	11.6	9.85	18.6	12.1	14.4	21.1	12.7	21
Lead	44.2	51	66.2	80.9	77.2	85.1	34.8	62.9	68.6	29.6	29.7	30.2	27.2	53	30.8	24.7	44.5	25	32.8
Mercury	0.804	0.633	0.728	0.605	0.685	0.57	1.4	1.4	1.58	0.14	0.14	0.14	0.14	0.659	0.14	0.828	0.963	0.729	0.844
Nickel	20.6	16.3	16.6	20	19.1	18.5	24.9	26.4	24.5	38.4	36.8	33	26.5	20.2	39.4	33	30.4	30.8	29.7
Selenium	1.05	3.41	2.78	2.36	3.29	2.67	10	10	10	1	1.15	1	1	4.13	1	1.45	1	1.69	1.11
Vanadium	25.4	127	170	39.6	67.1	170	92.8	55.6	84.6	60.1	59.7	56.1	52.8	44.8	65.8	52.6	53.3	49	61.2
Zinc	131	170	144	148	187	155	112	155	173	131	134	111	101	156	134	126	183	112	138
TPH Criteria Working Group (TPH CWG)																			
Benzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.118
Toluene	0.008	0.008	0.008	0.008	0.0204	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.0648
Ethylbenzene	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
sum of detected mpo xylene by GC	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Aliphatics >C5-C6	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C6-C8	0.04	0.04	0.04	0.04	0.04	0.0533	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C8-C10	0.04	0.04	0.04	0.0403	0.04	0.0666	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0473	0.04	0.04	0.04	0.04	0.0418
Aliphatics >C10-C12	0.04	0.04	0.04	0.0456	0.04	0.0966	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0718	0.04	0.04	0.04	0.04	0.04
Aliphatics >C12-C16	0.765	0.624	1.92	1.61	0.83	1.15	2.1	1.01	1.98	0.1	0.1	2.63	0.1	0.1	0.1	0.1	0.1	3.55	0.1
Aliphatics >C16-C21	2.18	4.75	4.85	4.57	4.73	3.25	7.68	2.72	8.33	0.1	0.1	0.1	0.1	0.856	0.1	0.1	0.609	10	1.38
Aliphatics >C21-C35	9.69	38.4	31.5	23.6	25.6	19.6	31	13.2	29.1	0.1	2.59	2.91	1.63	12.7	0.487	0.171	10.7	7.42	11.5
Aliphatics >C35-C44	0.1	7.03	7.98	3.64	7.18	10.7	6.34	2.34	8.11	0.1	0.1	0.1	0.1	0.881	0.1	0.1	0.1	0.1	0.1
Aromatics >EC5-EC7	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.118
Aromatics >EC7-EC8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0648
Aromatics >EC8-EC10	0.04	0.04	0.04	0.04	0.0449	0.0555	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0403
Aromatics >EC10-EC12	0.04	0.04	0.04	0.04	0.04	0.0644	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0473	0.04	0.04	0.04	0.04	0.04
Aromatics >EC12-EC16	4.7	1.56	0.899	1.64	1.95	0.97	4.21	1.73	1.45	0.1	0.791	0.1	0.1	2.03	0.1	0.1	1.26	0.734	0.1
Aromatics >EC16-EC21	29.4	7.33	5.15	5.08	9.33	3.64	16.6	4	6.17	0.1	1.62	0.1	0.683	4.35	0.1	0.1	3.9	3.84	1.11
Aromatics >EC21-EC35	60.2	34.5	26.6	19.7	33.1	17.1	52.7	14.7	26.8	8.53	18.6	13.8	6.64	42.1	1.38	13.3	47.4	13.7	58.6
Aromatics >EC35-EC44	17.7	12.9	11	8.44	14.7	14.9	23.4	6.36	13.9	2.06	7.66	3.04	2.98	8.08	0.1	1.4	7.69	1.53	6.02
Aromatics >EC40-EC44	6.59	5.06	4.05	3.15	6.58	6.38	9.51	2.43	5.59	0.548	3.59	1.26	1.22	2.38	0.1	0.254	1.44	0.1	1.69
Polyaromatic Hydrocarbons (PAHs)																			
Acenaphthylene	78.1	92.8	59.9	45	56.8	34.1	38.9	22.3	60.4	12	12	12	12	12	12	12	12	12	12
Acenaphthene	144	38.2	17.1	30.7	30.7	30.9	16.5	8	11.6	8	8	8	8	161	8	8	8	8	8
Anthracene	259	167	127	112	117	90.1	60.9	63.2	91.3	16	16	16	16	53.4	16	16	16	16	16
Benz(a)anthracene	739	642	577	369	453	215	293	167	315	14	14	14	14	133	14	14	31.2	14	27.9
Benzo(a)pyrene	597	544	549	325	379	173	312	127	289	15	15	15	15	142	15	15	61	15	26.4
Benzo(b)fluoranthene	1080	1010	761	460	560	297	472	208	449	15	15	15	15	349	15	15	62.8	30.7	51.1
Benzo(k)fluoranthene	386	324	336	175	188	118	175	83.4	178	14	14	14	14	86.8	14	14	39.4	14	14
Benzo(g,h,i)perylene	383	401	356	212	223	141	212	129	266	24	24	24	24	183	24	24	77.5	24	24
Chrysene	680	591	520	262	281	221	200	217	353	10	10	10	10	202	10	10	68.8	10	23.7
Dibenzo(a,h)anthracene	121	103	87.9	66.9	74.2	35.4	64.8	0.023	78.5	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Indeno(1,2,3-cd)pyrene	349	361	304	198	230	114	204	95.3	202	0.018	0.018	0.018	0.018	130	0.018	0.018	54.7	0.018	0.018
Fluoranthene	1180	934	883	498	554	383	368	321	536	0.017	0.017	0.017	0.017	349	0.017	0.017	107	50	41
Fluorene	222	88.3	41.1	63.2	66.6	40.9	25.6	16.6	41.4	10	10	10	10	134	10	10	14.5	10	10
Naphthalene	172	414	165	164	202	122	92.6	76.9	148	9	9	9	9	845	9	9	19.8	20.3	17.1
Phenanthrene	973	742	545	435	481	353	235	218	345	15	15	15	15	660	15	15	81.1	59.4	37.5
Pyrene																			
PAH, Total Detected USEPA 16	8.19	7.18	6.07	3.77	4.3	2.67	3.06	1.99	3.77	0.118	0.118	0.118	0.118	3.65	0.118	0.118	0.7	0.201	0.257
Naphthalene-d8 % recovery**	101	111	96	93	93.9	97.2	92.7	105	104	102	89	96.8	91.7	109	103	125	96.1	104	104
Acenaphthene-d10 % recovery**	99.6	108	94.1	91.3	91.8	94.7	89.8	102	99.9	111	92.3	101	102	104	101	116	90.3	101	104
Phenanthrene-d10 % recovery**	96	105	90.9	85.5	86.6	92.8	84.9	99.7	99	103	87.1	93.6	91.5	100	96.7	112	88.9	96.7	94.6
Chrysene-d12 % recovery**	105	109	96.3	92.6	94.4	94.9	87.1	91.5	93.9	100	88.7	94.9	83.2	99.2	91.2	110	85.1	97.1	91.4
Perylene-d12 % recovery**	108	117	103	102	107	98.6	99.3	88.6	94.9	86	81.5	90.5	94.1	104	90.8	114	88.9	99.6	88.9
Total Aliphatics >C12-C44	12.6	50.8	46.2	33.4	38.4	34.7	47.1	19.3	47.5	0.1	2.59	5.55	1.63	14.4	0.487	0.171	11.3	21	12.9
Total Aromatics >EC12-EC44	112	56.2	43.7	34.8	59.1	36.6	96.9	26.8	48.3	10.6	28.7	16.8	10.3	56.5	1.38	14.7	60.2	19.8	65.7
Total Aliphatics & Aromatics >C5-C44																			
Metals - (Solid)																			
Iron	45800	62200	68800	44600	57500	56300	88000	79800	118000	35600	34500	41200	41600	26100	36600	41400	36900	42000	27800
Manganese	2300	7200	6020	1920	3710	4890	3330	2880	3430	740	915	468	347	740	513	693	350	1150	205
Metals - (Liquid)																			
Calcium	84100	124000	131000	48100	68400	76600	66400	55400	69900	-	-	-	-	-	-	4220	8320	17900	-
Magnesium	30100	14600	32900	9940	14500	13000	12400	10400	8670	-	-	-	-	-	-	8870	7640	9030	-
Phenols																			
Phenol	0.01	0.01	0.01	0.0106	0.0102	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0567	0.01	0.01	0.05	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0756	0.01	0.01	0.05	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.075	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.132	0.035	0.035	0.035	0.035	0.035
Inorganics																			
Soluble Sulphate 2:1 extract as SO4 BRE	0.268	-	0.114	0.299	-	0.125	0.0444	-	0.11	-	-	-	-	-	-	-	-	-	-
pH	8.84	9.51	9.1	9.94	10.5	9.83	9.81	9.13	9.62	7.65	7.33	7.27	7.2	10.6	7.07	7.32	7.44	7.77	6.88
Sulphate, Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphur, Total	0.125	-	0.058	0.155	-	0.131	0.118	-	0.284	-	-	-	-	-	-	-	-	-	-
Sulphate, Total potential	0.375	-	0.174	0.465	-	0.393	0.354	-	0.852	-	-	-	-	-	-	-	-	-	-
Sulphate, acid soluble (total)	0.242	-	0.238	0.406	-	0.115	0.0969	-	0.244	-	-	-	-	-	-	-	-	-	-
Cyanide, Total	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	12	12	12	12	12	12	12	212	238	206	173	24.7	270	183	150	223	60
Asbestos																			
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	04/01/2018	23/12/2017	04/01/2018	04/01/2018	04/01/2018	04/01/2018	03/01/2018	03/01/2018	04/01/2018	-	-	-	-	-	-	-	-	-	-
Analysed By	Barbara Urbanek-Walsh	Neville Mann	James Richards	Renata Bozhkov	Barbara Urbanek-Walsh	James Richards	James Richards	Renata Bozhkov	Barbara Urbanek-Walsh	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	None	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	N/C	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	-	-
Amosite (Brown) Asbestos	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	-	-
Crocidolite (Blue) Asbestos	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	-	-
Fibrous Anthophyllite	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	-	-
Fibrous Tremolite	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	-	-
Fibrous Actinolite	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	-	-
Non-Asbestos Fibre	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	-	-
Comments	0	0	0	0	0	0	Fibre bundles in soil	0	0	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)																			
Dibromofluoromethane**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene-d8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Bromofluorobenzene**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p/m-Xylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	-	-	-	-	-	-	-	-	-	0.13
Sum of BTEX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subcontracted: Inorganics																			
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	TP3AG10	TP3AG10	TP3AG11	TP3AG13	TP3AG13	TP3AG501	TP3AG9	TP3AG901	TP3AG902	TP3AG10V	TP3AG11V	TP3AG12V	TP3AG13V	TP3AG14V	TP3AG1V	TP3AG2V	TP3AG3V	TP3AG4V	TP3AG5V	TP3AG6V
Depth	1	1.5	0.8	0.8	1.2	0.5	1.5	0.3	0.9	0	0	0	0	0	0	0	0	0	2	0
Sampled Date	19/01/2018	19/01/2018	19/01/2018	19/01/2018	19/01/2018	26/09/2017	19/01/2018	26/09/2017	26/09/2017	05/03/2018	05/03/2018	27/02/2018	27/02/2018	26/02/2018	23/01/2018	23/01/2018	24/01/2018	29/01/2018	26/09/2017	30/01/2018
Carbon																				
Soil Organic Matter (SOM)	3.36	2.59	1.9	1.67	2.03	1.16	3.67	1.68	0.35	2.98	3.1	3.62	2.12	3.03	2.1	1.26	0.841	1.02	1.91	0.852
Metals (Solids)																				
Arsenic	8.08	6	13.4	6	6.31	6	7.36	6	27.6	13.4	12.3	13.4	15.7	12.8	14.8	13	14.4	15.9	10.6	11.4
Cadmium	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.313	0.193	0.02	0.02	0.02	0.146	0.2	0.274	0.122	0.18	0.02
Chromium	303	319	380	391	187	9	79.6	126	9	34.9	34	30.7	27.1	25.3	36.9	34	26.1	31.8	28.3	32.3
Copper	45.2	32.7	69.8	14.5	14.8	16.3	20.7	14	14	13.9	11.7	11.4	11.4	10.2	14.1	14	9.99	10.6	10.8	8.78
Lead	28	35.3	35.6	32.5	41.5	17.3	73.4	42.6	11.4	40.2	30.3	33.6	28.5	29.7	23.2	35.5	25.8	28.8	28.1	28
Mercury	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.694	0.14
Nickel	39.5	32.9	36.4	11.1	6.8	11.2	40.4	9.43	6.85	33.7	27.3	29.6	28.8	24.1	32.2	43.6	37.1	40.6	37.6	38
Selenium	10	10	12.5	10	10	10	10	10	22.2	1	1	1	1	1	1	10	1	1.11	1	1
Vanadium	310	370	512	344	223	105	197	173	23.5	62.9	55.5	57.1	55.5	52.3	53.7	57.8	49.8	59.8	65.5	58.5
Zinc	116	131	107	87.5	108	55.6	241	135	36.1	155	120	115	108	102	112	120	104	124	109	122
TPH Criteria Working Group (TPH CWG)																				
Benzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Toluene	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Ethylbenzene	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
sum of detected mpo xylene by GC	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Aliphatics >C5-C6	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C6-C8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C8-C10	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C10-C12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C12-C16	2.96	2.7	2.22	1.57	0.737	2.81	1.54	1.96	1.34	0.139	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.56	0.1
Aliphatics >C16-C21	23.4	19.5	17.8	11.9	3.52	9.69	11.4	10.8	1.96	0.363	0.1	0.349	0.1	0.1	0.1	0.1	0.1	0.1	2.74	0.1
Aliphatics >C21-C35	238	184	167	38	24.5	52.9	69.5	93.1	3	5.24	7.92	7.58	3.63	2.23	1.29	0.855	0.1	1.09	3.57	0.1
Aliphatics >C35-C44	81.2	62.1	54.9	7.65	6.41	26.6	33.4	89.6	0.698	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	12.9
Aromatics >EC5-EC7	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC7-EC8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC8-EC10	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC10-EC12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC12-EC16	1.13	1.15	1.1	0.463	0.1	0.321	1.05	1.02	0.1	0.767	0.591	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.37	1.24
Aromatics >EC16-EC21	5.97	5.47	5.3	6.92	1.71	0.75	6.12	4.57	0.1	2.17	1.58	1.03	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.63
Aromatics >EC21-EC35	53.1	45.6	42.8	28.7	11.2	33.2	58	82.4	0.1	33.4	44	32.6	15.1	6.09	2.99	1.48	2.43	1.36	0.1	0.1
Aromatics >EC35-EC44	28.2	24.9	22	7.42	3.36	25.7	49.7	115	0.1	9.04	10.2	10.6	7.63	1.19	3.25	0.341	0.726	1.33	0.481	17.9
Aromatics >EC40-EC44	11.7	10.3	8.92	2.61	1.21	10	21.6	55	0.1	3.24	3.16	4.1	2.15	0.1	1.99	0.1	0.1	0.627	0.1	11.6
Polyaromatic Hydrocarbons (PAHs)																				
Acenaphthylene	30.6	110	23.6	28.4	44	12	101	40.6	12	12	12	12	12	12	12	12	12	12	12	12
Acenaphthene	14.3	23	13.7	10.5	13.5	12	19.2	44.2	8	8	8	8	8	8	8	8	8	8	8	8
Anthracene	68.4	218	48.8	62.3	68.7	39.6	149	69.8	16	16	16	16	16	16	16	16	16	16	16	16
Benz(a)anthracene	262	913	241	271	366	359	560	316	40.6	14	14	14	14	14	14	14	14	14	24	14
Benzo(a)pyrene	268	920	266	268	382	359	705	208	34.9	15	15	15	15	15	15	15	15	15	26.4	15
Benzo(b)fluoranthene	495	1370	507	427	596	679	811	342	65.9	15	15	22.5	15	15	15	15	15	15	43.2	15
Benzo(k)fluoranthene	137	492	218	198	210	236	368	136	18.5	14	14	14	14	14	14	14	14	14	14	14
Benzo(g,h,i)perylene	253	658	298	231	295	330	619	171	36.7	24	24	24	24	24	24	24	24	24	24	24
Chrysene	319	860	327	301	358	366	587	310	22.1	10	10	10	10	10	10	10	10	10	16.6	10
Dibenzo(a,h)anthracene	59.4	162	67.8	57	81.3	80.4	143	41.8	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Indeno(1,2,3-cd)pyrene	193	572	230	197	256	260	499	127	25.3	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Fluoranthene	479	2000	536	415	609	492	920	352	68.2	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	37.8	0.017
Fluorene	20.7	54.7	15.8	21.3	21.7	10	46.6	27.6	10	10	10	10	10	10	10	10	10	10	10	10
Naphthalene	239	239	149	87.7	81.6	45.5	356	220	40.3	9	9	9	9	9	9	9	9	9	9	9
Phenanthrene	379	1010	381	239	260	182	478	220	61.4	15	15	24.6	15	15	15	15	15	15	23.1	15
Pyrene																				
PAH, Total Detected USEPA 16	3.6	11.1	3.71	3.14	4.13	4	7.22	3.52	0.466	0.118	0.118	0.118	0.118	0.118	0.118	0.118	0.118	0.118	0.22	0.118
Naphthalene-d8 % recovery**	85.1	96.6	103	91	93.3	101	95.8	102	94.4	130	95.7	105	101	95	103	107	103	97.9	106	106
Acenaphthene-d10 % recovery**	82.2	92.3	97.2	85.8	90.1	96.3	91.8	97.9	89.4	130	94	111	106	108	98.8	102	100	93.4	102	99.9
Phenanthrene-d10 % recovery**	81.8	90.5	96.8	85.6	88	95	91.1	96.2	87.1	120	89.5	102	97.9	94.6	96	99.3	95	90.9	99.8	95.3
Chrysene-d12 % recovery**	86.8	95.3	101	86.8	86.9	96.4	91.9	99.1	85.5	120	87.7	105	99.8	86.4	84.4	96.2	110	90.4	98.1	91.2
Perylene-d12 % recovery**	95.8	105	110	91	96.1	104	101	106	85.8	130	85.4	103	101	93.7	78.7	102	103	91.5	103	93.3
Total Aliphatics >C12-C44	345	269	241	59.2	35.2	92	116	195	7	5.74	7.92	7.93	3.63	2.23	1.29	0.855	0.1	1.09	7.87	12.9
Total Aromatics >EC12-EC44	88.4	77.2	71.3	43.5	16.2	59.9	115	203	0.1	45.4	56.4	44.2	22.7	7.28	6.24	1.82	3.15	2.69	0.851	19.8
Total Aliphatics & Aromatics >C5-C44																				
Metals - (Solid)																				
Iron	197000	234000	173000	229000	180000	186000	139000	111000	362000	30100	28100	34600	39300	38300	40500	40500	35000	34200	49800	32800
Manganese	11800	11200	20100	14700	8370	5170	5800	13500	32800	661	207	375	412	268	287	542	961	451	1310	439
Metals - (Liquid)																				
Calcium	123000	146000	146000	139000	75200	119000	178000	180000	1750	-	-	-	-	-	-	-	-	-	-	-
Magnesium	14100	13100	15100	4970	6880	18200	18600	17700	635	-	-	-	-	-	-	-	-	-	-	-
Phenols																				
Phenol	0.01	0.01	0.01	0.0111	0.011	0.01	0.01	0.01	0.01	0.01	0.0138	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																				
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.042	0.004	0.004	-	0.131	0.109	0.136	0.0676	-	-	-	-	-	-	-	-	-	-	-
pH	11.9	12.4	12.6	12.4	12.3	11.3	9.93	11.4	10.6	7.52	7.58	7.39	7.59	7.33	8.01	8.24	-	-	7.86	-
Sulphate, Total	-	-	-	-	-	11700	-	6490	518	-	-	-	-	-	-	-	-	-	-	-
Sulphur, Total	-	0.208	0.215	0.16	-	-	0.184	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphate, Total potential	-	0.624	0.645	0.48	-	-	0.552	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphate, acid soluble (total)	-	0.351	0.35	0.297	-	1.17	0.287	0.649	0.0518	-	-	-	-	-	-	-	-	-	-	-
Cyanide, Total	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	12	12	12	12	12	12	12	233	225	242	247	172	101	87.5	110	71.1	123	121
Asbestos																				
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	23/01/2018	-	-	24/01/2018	06/10/17	-	06/10/17	-	-	-	-	-	-	-	-	-	-	-	-
Analysed By	-	Eva Guerra	-	-	Christian Hallam	Christian Hallam	-	Christian Hallam	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-
Amosite (Brown) Asbestos	-	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-
Crocidolite (Blue) Asbestos	-	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-
Fibrous Anthophyllite	-	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-
Fibrous Tremolite	-	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-
Fibrous Actinolite	-	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-
Non-Asbestos Fibre	-	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	-	-	-	-	-	-	-	-
Comments	-	0	-	-	0	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)																				
Dibromofluoromethane**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene-d8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Bromofluorobenzene**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p/m-Xylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	0.13	0.13	0.13	0.13	0.013	-	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum of BTEX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subcontracted: Inorganics																				
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	TP3AG7V	TP3AG8V	TP3AG9V	TP3AH10	TP3AH101	TP3AH11	TP3AH9	TP3AH901	TP3AH902
Depth	0	0	0	0.8	0.2	1	1	0.5	1.5
Sampled Date	30/01/2018	30/01/2018	09/03/2018	19/01/2018	26/09/2017	19/01/2018	19/01/2018	07/12/2017	07/12/2017
Carbon									
Soil Organic Matter (SOM)	4.83	1.34	2.34	3.38	2.47	0.722	1.83	1.43	0.548
Metals (Solids)									
Arsenic	13.5	15	12.6	9.96	9.28	6	8.53	6	12.4
Cadmium	0.186	0.0415	0.021	0.2	0.2	0.2	0.2	2.43	4.21
Chromium	33.5	31	30.3	709	54.4	773	377	348	9
Copper	12.9	10	11	77.2	56.8	31.3	41.9	35	14
Lead	34.3	27.9	29.3	34.3	51.8	21.1	39.2	35.8	8.42
Mercury	0.14	0.14	0.14	1.4	1.4	1.4	1.4	1.4	1.88
Nickel	24.2	39	35.1	48.8	24.3	22.4	29.9	22.6	2
Selenium	1	1	1	12.5	10	17.4	10.6	10	10
Vanadium	53.3	57.3	60.1	587	230	616	309	279	46.9
Zinc	118	114	126	85.7	149	41.5	100	104	19
TPH Criteria Working Group (TPH CWG)									
Benzene	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Toluene	0.008	0.008	0.002	0.0113	0.008	0.008	0.008	0.008	0.008
Ethylbenzene	0.012	0.012	0.003	0.012	0.012	0.012	0.012	0.012	0.012
sum of detected mpo xylene by GC	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Aliphatics >C5-C6	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C6-C8	0.0584	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C8-C10	0.0949	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C10-C12	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Aliphatics >C12-C16	0.1	0.242	0.1	2.19	0.849	0.1	10.7	5.66	12.3
Aliphatics >C16-C21	1.24	0.1	0.1	12.1	6.25	3.07	23.8	17.5	19.3
Aliphatics >C21-C35	3.74	1.47	0.1	72.8	49.4	23.7	69.2	73.6	85.5
Aliphatics >C35-C44	0.1	0.1	0.1	18.3	24.6	5.25	42.5	40.7	8.95
Aromatics >EC5-EC7	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC7-EC8	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC8-EC10	0.0642	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC10-EC12	0.04	0.04	0.01	0.04	0.04	0.04	0.04	0.04	0.04
Aromatics >EC12-EC16	0.1	0.1	0.409	1	1.73	0.439	3.08	1.3	3.6
Aromatics >EC16-EC21	0.393	0.1	0.656	4.32	8.05	2.89	10.6	6.35	8.88
Aromatics >EC21-EC35	10.3	2.94	10.9	22.4	35.1	13.9	51.8	55	44.4
Aromatics >EC35-EC44	2.39	1.23	19.3	10	18	5.98	51.1	65.6	13.7
Aromatics >EC40-EC44	0.477	0.1	9.63	4.01	7.22	2.34	24.1	29.3	5.8
Polyaromatic Hydrocarbons (PAHs)									
Acenaphthylene	12	12	12	30.1	41.1	57.7	34.1	12	12
Acenaphthene	8	8	8	10.6	82.1	16.9	39.4	10.3	23.2
Anthracene	16	16	16	56.9	163	97.2	58.5	16	16
Benz(a)anthracene	32.6	14	14	165	604	333	287	119	67.6
Benzo(a)pyrene	15	15	15	151	650	286	321	104	49.1
Benzo(b)fluoranthene	15	15	15	266	1100	525	540	250	71.6
Benzo(k)fluoranthene	14	14	14	112	378	164	200	94	24.6
Benzo(g,h,i)perylene	24	24	24	147	581	218	294	145	44.6
Chrysene	10	10	10	216	590	378	352	164	45.2
Dibenzo(a,h)anthracene	0.023	0.023	0.023	36.4	131	60.6	72.7	38.5	0.023
Indeno(1,2,3-cd)pyrene	0.018	0.018	0.018	114	422	186	232	128	30.2
Fluoranthene	0.017	0.017	0.017	403	918	609	535	177	81.5
Fluorene	10	10	10	34.4	55.4	54.6	30.4	10	16.4
Naphthalene	9	9	9	210	441	667	126	30.5	35.8
Phenanthrene	15	15	15	357	685	361	242	86.8	80.5
Pyrene									
PAH, Total Detected USEPA 16	0.118	0.118	0.118	2.6	7.7	4.48	3.91	1.51	0.642
Naphthalene-d8 % recovery**	110	105	88	86.4	101	106	91.9	94.5	95.2
Acenaphthene-d10 % recovery**	97.7	98.9	94.5	81.7	96	100	88.9	91.2	92.5
Phenanthrene-d10 % recovery**	81.5	95	82.9	81.7	95.2	99.7	88.7	89.1	91
Chrysene-d12 % recovery**	72.8	90.5	80.7	84.6	99.3	98.3	93	98.3	92.8
Perylene-d12 % recovery**	73.9	92.7	80.2	89.1	106	102	102	106	94.7
Total Aliphatics >C12-C44	4.99	1.71	0.1	105	81	32	146	138	126
Total Aromatics >EC12-EC44	13	4.17	31.3	37.8	62.9	23.2	117	128	70.6
Total Aliphatics & Aromatics >C5-C44									
Metals - (Solid)									
Iron	30100	36900	41000	198000	135000	224000	213000	189000	315000
Manganese	220	395	500	17500	7030	22900	12600	17000	8630
Metals - (Liquid)									
Calcium	-	-	-	211000	82500	212000	130000	195000	40000
Magnesium	-	-	-	22200	11700	13500	12100	14500	3320
Phenols									
Phenol	0.01	0.01	0.01	0.01	0.0112	0.01	0.01	0.01	0.0222
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics									
Soluble Sulphate 2:1 extract as SO4 BRE	-	-	-	0.004	0.136	0.0352	0.164	-	-
pH	-	-	7.16	12.7	11	12.6	11.6	11.9	11.4
Sulphate, Total	-	-	-	-	2180	-	-	-	-
Sulphur, Total	-	-	-	0.213	-	0.242	0.257	-	-
Sulphate, Total potential	-	-	-	0.639	-	0.726	0.771	-	-
Sulphate, acid soluble (total)	-	-	-	0.302	0.218	0.393	0.478	-	-
Cyanide, Total	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	260	188	277	12	12	12	12	12	12
Asbestos									
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	0.0294	-	-
Date of Analysis	-	-	-	-	06/10/2017	23/01/2018	23/01/2018	19/12/2017	19/12/2017
Analysed By	-	-	-	-	Neville Mann	Paul Poynton	Christian Hallam	James Richards	Renata Bozhkov
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	0.001	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	None	-	-
Analysts Comments	-	-	-	-	-	-	N/A	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	0.0294	-	-
Chrysotile (White) Asbestos	-	-	-	-	Not Detected	Not Detected	Detected	Not Detected	Not Detected
Amosite (Brown) Asbestos	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Crocidolite (Blue) Asbestos	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Fibrous Anthophyllite	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Fibrous Tremolite	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Fibrous Actinolite	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Non-Asbestos Fibre	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Comments	-	-	-	-	0	0	Soil containing material typical of AC	0	0
Volatile Organic Compounds (VOCs)									
Dibromofluoromethane**	-	-	-	-	-	-	-	-	-
Toluene-d8**	-	-	-	-	-	-	-	-	-
4-Bromofluorobenzene**	-	-	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-
p/m-Xylene	-	-	-	-	-	-	-	-	-
o-Xylene	-	-	-	-	-	-	-	-	-
Naphthalene	-	-	-	0.13	-	0.335	0.13	0.13	0.13
Sum of BTEX	-	-	-	-	-	-	-	-	-
Subcontracted: Inorganics									
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Sample ID	TP3AH1001
											Depth	0.3
											Sampled Date	07/12/2017
											Percentage of exceedances	
Carbon												
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	1.09
Metals (Solids)												
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	6
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	2.49
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	600
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	20.6
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	46.1
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	1.4
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	12.1
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	13.5
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	567
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	94.2
TPH Criteria Working Group (TPH CWG)												
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00	0.04
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00	0.008
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00	0.012
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00	0.009
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.04
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.04
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.04
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.04
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	2.57
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	11.8
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	91.4
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	26
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.04
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.04
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.04
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.04
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	1.13
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	6.24
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	36.8
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	14.4
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	5.2
Polyaromatic Hydrocarbons (PAHs)												
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	12
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	37.5
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	59.9
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	590
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	665
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	1070
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	407
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	531
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	676
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	127
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	429
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	1010
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	18.1
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	49.9
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	551
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	7.08
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	100
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	95.9
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	94.8
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	99.7
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	102
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	132
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	58.6
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	
Metals - (Solid)												
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			199000
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			25800
Metals - (Liquid)												
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			247000
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			18200
Phenols												
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035
Inorganics												
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	-
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	12.6
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33	-
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	-
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	-
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	-
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	12
Asbestos												
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Date of Analysis	TM048	No units		1371	0	0				0.00		19/12/2017
Analysed By	TM048	No units		1371	0	0				0.00		Neville Mann
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-
Analysts Comments	TM304	No units		1002	0	0				0.00		-
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		Not Detected
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		Not Detected
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		Not Detected
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		Not Detected
Comments	TM048	No units		1371	0	0			0	0.00		0
Volatile Organic Compounds (VOCs)												
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		-
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		-
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		-
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		-
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		-
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		-
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		-
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		-
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		-
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		0.13
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		-
Subcontracted: Inorganics												
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Sample ID	TP3AK401	TP3AK402	TP3AK2V	TP3AK3V	TP3AK4V	3DV01	3DV02	3DV03	3DD2	3DD2	3DD3	3DD3	3DD2V	3DD3V
Depth	0.5	1	0	0	2	0	0	0	0.2	0.8	0.5	1	1.5	2
Sampled Date	26/09/2017	26/09/2017	24/01/2018	24/01/2018	26/09/2017	16/05/2017	16/05/2017	16/05/2017	26/03/2019	26/03/2019	26/03/2019	26/03/2019	26/03/2019	26/03/2019
Carbon														
Soil Organic Matter (SOM)	0.376	0.35	1.49	4.72	1.98	0.972	4.43	1.83	3.88	4.62	5.88	4.95	1.34	26.4
Metals (Solids)														
Arsenic	6	6	15.3	11.2	12	12	12.1	8.49	13.9	19.2	9.62	10	12.3	1.49
Cadmium	0.2	0.2	0.02	0.312	0.234	0.02	0.02	0.02	0.587	1.15	1.83	0.778	0.245	0.071
Chromium	73	9	36.6	46.4	27.8	22.1	24.5	34	24.2	82.8	222	47	30.8	3.62
Copper	14	14	15.8	16	12.5	10.1	14.7	16.6	20.3	34	18.8	20.2	15.9	2.57
Lead	66.5	7	25.6	34.3	31.1	17.4	28.3	27.1	75.8	89.2	152	87.4	24	2.85
Mercury	1.4	2.92	0.14	0.14	0.697	0.544	0.65	0.574	0.14	0.14	1.4	0.14	0.14	0.14
Nickel	3.96	2	33.7	30.3	42.5	28.3	31.2	33.6	20.5	28.9	16.8	16.3	37.9	4.54
Selenium	10.7	10	1	1	1	1	1	1	1	3.01	10	1.93	1	1
Vanadium	334	18.1	54.8	70	60.1	44.5	52.5	61.6	34.7	99.8	381	105	51.8	6.25
Zinc	19	19	129	133	117	96.3	119	129	127	394	317	320	118	7.15
TPH Criteria Working Group (TPH CWG)														
Benzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04						
Toluene	0.0134	0.008	0.008	0.0139	0.0109	0.008	0.008	0.008						
Ethylbenzene	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012						
sum of detected mpo xylene by GC	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009						
Aliphatics >C5-C6	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.0414	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.0482	0.02	0.0502	0.0258	0.0263
Aliphatics >C8-C10	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.0526	0.02	0.0524	0.0206	0.02
Aliphatics >C10-C12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0244	0.19	0.02	0.136	0.02	0.02
Aliphatics >C12-C16	0.141	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.03	1.96	2.75	0.1	0.1
Aliphatics >C16-C21	3.29	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.03	9.52	9.94	12.4	0.1	0.1
Aliphatics >C21-C35	11.6	2.96	0.1	4.26	0.1	2.19	4.39	2.96	73.8	57.3	41	55.2	0.1	3.02
Aliphatics >C35-C44	4.85	0.1	0.1	0.1	0.1	0.1	7.81	0.1	25.1	14.7	10.7	15	0.1	0.306
Aromatics >EC5-EC7	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0464	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.0347	0.02	0.0353	0.02	0.02
Aromatics >EC10-EC12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.127	0.02	0.0901	0.02	0.02
Aromatics >EC12-EC16	0.1	0.1	0.1	0.1	0.1	0.1	1.32	1.51	0.414	2.93	2.17	2.96	0.1	0.1
Aromatics >EC16-EC21	0.1	0.1	0.1	0.427	0.1	0.1	0.813	1.56	1.36	19.1	7.63	32	0.1	0.979
Aromatics >EC21-EC35	3.77	0.1	0.1	15.6	0.1	0.37	0.1	6.35	33.3	61.6	36.6	67.8	0.1	42.7
Aromatics >EC35-EC44	5.45	0.1	0.1	4.64	0.1	0.1	3.12	2.76	9.31	23.7	9.39	22.8	0.1	7.47
Aromatics >EC40-EC44	2.38	0.1	0.1	1.46	0.1	0.1	1.53	1.15	1.13	8.52	1.78	8.01	0.1	2.34
Polyaromatic Hydrocarbons (PAHs)														
Acenaphthylene	12	12	12	12	12	12	12	12	29.1	339	84	121	12	12
Acenaphthene	8	8	8	8	8	8	8	8	8	29.1	13.3	15.9	8	8
Anthracene	18.3	16	16	16	16	16	16	16	44.5	847	123	212	16	16
Benz(a)anthracene	63.9	14	14	14	14	14	14	90	191	1690	402	586	14	14
Benzo(a)pyrene	61.5	15	15	15	15	15	34	103	186	1540	369	506	15	15
Benzo(b)fluoranthene	130	15	15	15	15	15	74.1	136	287	2590	495	644	15	15
Benzo(k)fluoranthene	43.5	14	14	14	14	14	23.4	48.1	97.1	856	162	278	14	14
Benzo(g,h,i)perylene	71.3	24	24	24	24	24	24	83.8	142	1080	297	397	24	24
Chrysene	73.3	10	10	10	10	10	46.2	65.8	189	1630	397	622	10	10
Dibenzo(a,h)anthracene	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	35.3	211	68.3	88.5	0.023	0.023
Indeno(1,2,3-cd)pyrene	46.8	0.018	0.018	0.018	0.018	0.018	0.018	64.7	113	1260	236	318	0.018	0.018
Fluoranthene	133	0.017	0.017	0.017	0.017	0.017	96.8	94.7	357	4350	840	1490	0.017	0.017
Fluorene	10	10	10	10	10	10	10	10	15.4	296	43.6	82.3	10	10
Naphthalene	29	9	9	9	9	9	44.2	30.4	42.5	643	314	405	9	18.6
Phenanthrene	90.2	15	15	15	15	15	104	59.6	141	2060	483	876	15	15
Pyrene									0.282	3.19	0.651	1.13	0.015	0.015
PAH, Total Detected USEPA 16	0.862	0.118	0.118	0.118	0.118	0.118	0.493	0.862	2.15	22.6	4.98	7.77	0.118	0.118
Naphthalene-d8 % recovery**	101	101	86.1	112	99.5	103	109	107	93.3	87.1	93.6	93.6	94.7	90.6
Acenaphthene-d10 % recovery**	95.2	96.8	76.7	107	93.3	104	106	104	82	81.5	83.5	83.5	85.5	83.9
Phenanthrene-d10 % recovery**	94.1	94.6	71.3	102	88.5	100	105	102	85.4	86.8	85.1	84.7	85.6	90.8
Chrysene-d12 % recovery**	91.6	93.6	78.7	119	84.3	93.4	106	103	85.7	83.8	83.6	75.6	83.8	79.2
Perylene-d12 % recovery**	93	99.5	73.1	112	82.6	95.6	112	110	90.9	91.5	86	77.7	88.2	78.2
Total Aliphatics >C12-C44	19.8	2.96	0.1	4.26	0.1	2.19	12.2	2.96	102	84.5	63.6	85.4	0.1	3.33
Total Aromatics >EC12-EC44	9.21	0.1	0.1	20.7	0.1	0.37	5.25	12.2	44.3	107	55.8	126	0.1	51.1
Total Aliphatics & Aromatics >C5-C44									146	192	119	211	0.1	54.5
Metals - (Solid)														
Iron	130000	381000	28300	28700	43500	31500	37500	35500	23600	55400	101000	60200	37400	4300
Manganese	24400	1010	295	200	837	963	779	446	897	6380	12100	4180	804	122
Metals - (Liquid)														
Calcium	198000	2730	-	-	-	-	-	-	10900	-	-	115000	-	-
Magnesium	24400	4870	-	-	-	-	-	-	3860	-	-	21600	-	-
Phenols														
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0108	0.0114	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics														
Soluble Sulphate 2:1 extract as SO4 BRE	0.154	0.021	-	-	-	-	-	-	0.0489	-	-	0.158	-	-
pH	11.5	10.6	-	-	7.82	-	-	-	7.4	10.9	11	11.1	7.64	7.78
Sulphate, Total	9460	<48	-	-	-	-	-	-						
Sulphur, Total	-	-	-	-	-	-	-	-	0.0695	-	-	0.2	-	-
Sulphate, Total potential	-	-	-	-	-	-	-	-	0.209	-	-	0.6	-	-
Sulphate, acid soluble (total)	0.946	0.02	-	-	-	-	-	-	0.0521	-	-	0.342	-	-
Cyanide, Total	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	176	12	53.3	239	182	12	22.7	33.8	28.3	12	12	12	76.3	12
Asbestos														
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	0.001	-	-	0.001	-	-
Date of Analysis	-	06/10/2017	-	-	-	-	-	-	09/04/2019	-	-	08/04/2019	-	-
Analysed By	-	Neville Mann	-	-	-	-	-	-	Lucy Caroe	-	-	Renata Bozhkov	-	-
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	0.001	-	-	0.001	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	None	-	-	None	-	-
Analysts Comments	-	-	-	-	-	-	-	-	N/A	-	-	N/A	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	0.001	-	-	0.001	-	-
Chrysotile (White) Asbestos	-	Not Detected	-	-	-	-	-	-	Detected	-	-	Trace	-	-
Amosite (Brown) Asbestos	-	Not Detected	-	-	-	-	-	-	Not Detected	-	-	Not Detected	-	-
Crocidolite (Blue) Asbestos	-	Not Detected	-	-	-	-	-	-	Not Detected	-	-	Not Detected	-	-
Fibrous Anthophyllite	-	Not Detected	-	-	-	-	-	-	Not Detected	-	-	Not Detected	-	-
Fibrous Tremolite	-	Not Detected	-	-	-	-	-	-	Not Detected	-	-	Not Detected	-	-
Fibrous Actinolite	-	Not Detected	-	-	-	-	-	-	Not Detected	-	-	Not Detected	-	-
Non-Asbestos Fibre	-	Not Detected	-	-	-	-	-	-	Not Detected	-	-	Not Detected	-	-
Comments	-	0	-	-	-	-	-	-	Loose fibres in soil	-	-	Loose fibres in soil.	-	-
Volatile Organic Compounds (VOCs)														
Dibromofluoromethane**	-	-	-	-	-	-	-	-	107	107	95.2	101	104	113
Toluene-d8**	-	-	-	-	-	-	-	-	99.2	99.3	94.1	98.4	99.1	91.4
4-Bromofluorobenzene**	-	-	-	-	-	-	-	-	95.3	94.2	81.8	91.8	98.3	79.2
Methyl Tertiary Butyl Ether	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	-	-	-	-	-	-	-	-	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	-	-	-	-	-	-	-	-	0.121	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	-	-	-	-	-	-	-	-	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	-	-	-	-	-	-	-	-	0.13	1.35	0.13	0.13	0.13	0.13
Sum of BTEX	-	-	-	-	-	-	-	-	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics														
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	3DE2	3DE2	3DE3	3DE3	3DE5	3DE5	3DE2V	3DE3V	3DE5V	3DF1	3DF1	3DF2	3DF2	3DF3	3DF3
Depth	0.5	1	0.5	1	0.5	1	1.4	2.6	2	0.4	1	0.5	1	0.3	0.5
Sampled Date	26/03/2019	26/03/2019	26/03/2019	26/03/2019	25/03/2019	25/03/2019	26/03/2019	26/03/2019	25/03/2019	26/03/2019	26/03/2019	26/03/2019	26/03/2019	26/03/2019	26/03/2019
Carbon															
Soil Organic Matter (SOM)	2.98	3.12	5.24	7.69	1.21	4.47	3.07	40.7	12	1.52	3.29	5.33	3.33	3.6	3.02
Metals (Solids)															
Arsenic	8.01	8.11	16.7	14.6	7.44	15.6	12.3	2.9	15.1	9.42	8.2	10.3	8.45	14.3	8.73
Cadmium	0.633	0.514	0.466	2.33	0.518	1.79	0.274	0.108	1.18	0.677	0.452	2.64	2.83	0.516	0.266
Chromium	20.4	211	31.8	132	43.4	48.2	36.8	3.84	37.1	45.2	115	64.4	79.8	314	103
Copper	14.8	17.9	20.3	23.3	13.3	21.8	16.2	7.28	21.6	17.3	29.4	34	20.2	89.6	29.1
Lead	53.7	45.8	57	185	23.6	69.2	28.9	4.16	63.3	58.7	87.8	295	328	75.8	34.9
Mercury	0.14	0.14	0.14	1.4	0.14	1.4	0.14	0.14	0.14	0.14	0.14	1.4	1.4	1.4	0.14
Nickel	14.6	13.7	19.2	26.4	17.2	29.6	33	7.33	24.1	15.3	13.7	29.7	19.6	44.9	12.5
Selenium	1	3.48	2.28	10	2.43	10	1	1	1	1.94	5.95	10	10	13.2	7.17
Vanadium	41.3	125	112	214	73.2	190	58.2	10.3	69.1	69.6	157	127	333	219	110
Zinc	157	174	188	488	97.1	188	117	13.5	257	162	259	897	977	116	123
TPH Criteria Working Group (TPH CWG)															
Benzene															
Toluene															
Ethylbenzene															
sum of detected mpo xylene by GC															
Aliphatics >C5-C6	0.0253	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0719	0.02
Aliphatics >C6-C8	0.0759	0.02	0.02	0.02	0.0246	0.0559	0.0348	0.02	0.02	0.02	0.0344	0.0476	0.02	0.0947	0.0217
Aliphatics >C8-C10	0.0759	0.02	0.02	0.02	0.0225	0.0616	0.0268	0.02	0.02	0.02	0.0344	0.0429	0.02	0.126	0.02
Aliphatics >C10-C12	0.116	0.02	0.02	0.02	0.0385	0.158	0.0268	0.02	0.02	0.02	0.0611	0.0464	0.02	0.167	0.0228
Aliphatics >C12-C16	1.16	2.36	3	3.61	2.97	8.91	0.339	2.97	5.37	1.34	4.76	3.83	3.65	6.1	2.63
Aliphatics >C16-C21	8.33	10.1	10.7	15	14.1	24.5	0.804	0.583	17.3	10.7	20.6	33.8	29.8	26.5	10.6
Aliphatics >C21-C35	73	69.3	54.3	70	99.2	114	2.1	12.5	39	187	122	185	147	252	76.1
Aliphatics >C35-C44	33.4	33.1	20.9	24.1	29.1	31.4	0.1	0.1	15.2	104	46.8	48.9	33.6	157	38.3
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0359	0.02
Aromatics >EC8-EC10	0.0506	0.02	0.02	0.02	0.015	0.041	0.02	0.02	0.02	0.02	0.0233	0.029	0.02	0.0849	0.02
Aromatics >EC10-EC12	0.0782	0.02	0.02	0.02	0.0257	0.106	0.02	0.02	0.02	0.02	0.0411	0.0313	0.02	0.111	0.02
Aromatics >EC12-EC16	1.97	1.76	2.61	3.78	1.67	3.11	0.1	5.14	11.8	2.18	0.694	3.54	2.52	3.36	4.24
Aromatics >EC16-EC21	10.3	13.2	12.9	17.9	12.2	15	0.1	5.56	33.9	12.2	7.83	24.9	20.7	11.1	13
Aromatics >EC21-EC35	74.3	67.4	57.4	79.5	65.7	65	1.26	69.4	83.1	183	59.6	106	75.9	135	60.7
Aromatics >EC35-EC44	58.4	46.9	27.1	34.5	33.7	35.7	0.417	19.1	27.5	148	43.3	46.2	27.7	106	33.1
Aromatics >EC40-EC44	24.6	20.4	10.1	12.8	13.3	15	0.1	4.58	10.5	57.8	18.7	17.7	10.3	41.9	12.1
Polyaromatic Hydrocarbons (PAHs)															
Acenaphthylene	57.3	120	254	294	343	144	12	12	12	60	20.8	208	84.9	50.4	68.5
Acenaphthene	26.1	80	26.2	34.7	8	15.5	8	8	8	40	13.6	46.6	41.5	17.3	8
Anthracene	174	160	540	461	455	241	16	16	71.1	80	52.5	488	196	103	128
Benz(a)anthracene	405	140	1230	1390	1640	505	14	14	118	70	262	1490	669	321	381
Benzo(a)pyrene	335	150	1100	1230	1790	520	15	15	110	75	236	1310	610	281	310
Benzo(b)fluoranthene	494	150	1430	1930	2660	832	15	15	224	130	435	1950	995	420	410
Benzo(k)fluoranthene	183	140	533	662	1110	278	14	14	67.8	70	139	631	330	149	179
Benzo(g,h,i)perylene	245	0.24	805	885	1430	407	24	24	91.8	120	217	976	457	235	250
Chrysene	418	0.1	1120	1280	1580	461	10	10	139	79.4	298	1440	660	338	373
Dibenzo(a,h)anthracene	59	0.23	189	203	302	81.3	0.023	0.023	0.023	0.115	37.8	217	104	54.6	60.8
Indeno(1,2,3-cd)pyrene	190	180	701	696	1280	438	0.018	0.018	102	90	192	760	324	183	196
Fluoranthene	884	0.17	2790	3310	2610	1060	0.017	0.017	326	142	434	3960	1850	701	914
Fluorene	74.7	0.1	148	150	122	98.7	10	10	62.3	50	18.6	148	88	36.6	42.4
Naphthalene	120	90	406	588	354	293	9	32.5	123	45	51.1	295	237	195	256
Phenanthrene	575	150	1280	1350	967	482	15	15	280	75	201	1930	799	446	548
Pyrene	0.747	0.15	2.06	2.56	2.06	0.885	0.015	0.015	0.219	0.141	0.456	2.98	1.48	0.545	0.691
PAH, Total Detected USEPA 16	4.99	1.18	14.6	17	18.7	6.74	0.118	0.118	1.93	0.59	3.07	18.8	8.92	4.08	4.81
Naphthalene-d8 % recovery**	88	86.3	92.2	94.9	101	94.8	95	96.4	97.5	89.9	87.5	90.4	90	92.1	92.6
Acenaphthene-d10 % recovery**	85.4	70.5	85.1	86.2	93.3	87.6	82.2	83.9	87.9	75	80.8	85.6	84.7	84.1	83.2
Phenanthrene-d10 % recovery**	91.8	79.8	87	83.7	97.5	91	85.3	84.6	89.7	80.5	85.7	90	88.9	89.1	87.2
Chrysene-d12 % recovery**	84.9	70.9	86.9	74.9	98.8	83.8	83.7	82.3	84.1	72.4	84.3	81.7	79.5	85.4	85.3
Perylene-d12 % recovery**	89.1	75.3	86.2	75.7	105	85.4	87.2	83.1	86.2	77.8	93.2	82.2	75.6	90.3	89.4
Total Aliphatics >C12-C44	116	115	88.9	113	145	179	3.24	16	76.9	303	194	272	214	441	128
Total Aromatics >EC12-EC44	145	129	100	136	113	119	1.68	99.2	156	346	111	181	127	255	111
Total Aliphatics & Aromatics >C5-C44	261	244	189	249	259	298	5.01	115	233	648	306	453	341	698	239
Metals - (Solid)															
Iron	29600	64100	89900	99400	38600	144000	30800	7030	25400	52900	67500	100000	149000	127000	60500
Manganese	1770	9250	7490	9870	3440	7340	846	167	344	4670	11800	5000	8490	17000	10700
Metals - (Liquid)															
Calcium	-	136000	103000	-	103000	-	-	-	-	86600	-	-	114000	161000	-
Magnesium	-	32600	13600	-	16100	-	-	-	-	14900	-	-	14300	17200	-
Phenols															
Phenol	0.01	0.011	0.0115	0.0113	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0348	0.0228	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0116	0.01	0.0109	0.0114
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0464	0.035	0.035	0.035
Inorganics															
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.0578	0.238	-	0.134	-	-	-	-	0.152	-	-	0.16	0.133	-
pH	11.1	11	11.2	11.1	9.57	11.3	7.68	7.6	7.79	10.3	11.5	10.8	11.1	12.2	12
Sulphate, Total															
Sulphur, Total	-	0.122	0.289	-	0.235	-	-	-	-	0.219	-	-	0.206	0.678	-
Sulphate, Total potential	-	0.366	0.867	-	0.705	-	-	-	-	0.657	-	-	0.618	2.03	-
Sulphate, acid soluble (total)	-	0.18	0.405	-	1.42	-	-	-	-	0.425	-	-	0.311	1.25	-
Cyanide, Total	1	1	1	1	1	1	1	1	1	1	1	1.39	1	1	1
Exchangeable Ammonia as N	12	12	12	12	12	12	112	32.6	162	12	12	12	12	12	12
Asbestos															
Asbestos Quantification - Gravimetric - %	-	-	0.0838	-	-	-	-	-	-	-	-	-	0.001	0.001	-
Date of Analysis	-	09/04/19	09/04/19	-	08/04/2019	-	-	-	-	09/04/19	-	-	09/04/2019	08/04/2019	-
Analysed By	-	Andrzej Ferfecki	Andrzej Ferfecki	-	Renata Bozhkov	-	-	-	-	Andrzej Ferfecki	-	-	Lucy Caroe	Barbara Urbanek-Walsh	-
Asbestos Quantification - PCOM Evaluation - %	-	-	0.001	-	-	-	-	-	-	-	-	-	0.0012	0.001	-
Additional Asbestos Components (Using TM048)	-	-	None	-	-	-	-	-	-	-	-	-	None	None	-
Analysts Comments	-	-	N/C	-	-	-	-	-	-	-	-	-	N/C	N/C	-
Asbestos Quantification - Total - %	-	-	0.084	-	-	-	-	-	-	-	-	-	0.0019	0.001	-
Chrysotile (White) Asbestos	-	Not Detected	Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Detected	Detected	-
Amosite (Brown) Asbestos	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	Not Detected	-
Crocidolite (Blue) Asbestos	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	Not Detected	-
Fibrous Anthophyllite	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	Not Detected	-
Fibrous Tremolite	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	Not Detected	-
Fibrous Actinolite	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	Not Detected	-
Non-Asbestos Fibre	-	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	Not Detected	-
Comments	-	-	fibre bundles in soil	-	-	-	-	-	-	-	-	-	Fibre bundles in soil	Loose fibres in soil.	-
Volatile Organic Compounds (VOCs)															
Dibromofluoromethane**	105	105	92	95.7	102	101	105	114	109	106	107	99.5	105	103	104
Toluene-d8**	100	98.2	87.8	93.7	97.5	98.9	100	87.9	97	98.3	97.7	96.2	98.4	95.5	93.2
4-Bromofluorobenzene**	97.2	96	73.5	80.1	89.9	92	102	79.5	91.5	95.7	94.8	86.7	94.4	89.6	91.9
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.241	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics															
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	3DF4	3DF4	3DF5	3DF5	3DF1V	3DF2V	3DF3V	3DF4V	3DG1	3DG2	3DG2	3DG3	3DG4	3DG5	3DG5	3DG5	3DG6	3DG6	3DG1V	3DG2V
Depth	0.1	0.5	0.5	1.5	1.4	1.4	1.35	1.6	0.5	0.4	1	0.5	0.5	0.5	1.4	2	0.5	1	1	1.9
Sampled Date	26/03/2019	26/03/2019	25/03/2019	25/03/2019	26/03/2019	26/03/2019	26/03/2019	26/03/2019	18/03/2019	26/03/2019	26/03/2019	19/03/2019	19/03/2019	19/03/2019	19/03/2019	19/03/2019	26/03/2019	26/03/2019	18/03/2019	26/03/2019
Carbon																				
Soil Organic Matter (SOM)	11	13.5	1.28	26.5	9.65	0.931	1.88	3	10.5	3	19.7	1.68	3.88	6.45	42.2	26.9	4.81	4.48	3.81	0.746
Metals (Solids)																				
Arsenic	24	12.2	10.3	11.1	20.9	10.4	13.2	23.8	9.22	6.5	9.95	13	8.93	18.5	24.8	11.3	16.3	8.09	11.8	9.02
Cadmium	15.3	4.44	2.83	4.72	0.873	0.298	0.219	0.328	1.06	0.507	2.7	0.486	6.09	8.94	5.07	4.74	3.5	3.88	0.236	0.22
Chromium	9	159	216	9	31.8	31.6	36.4	32.2	87	66.8	85.4	38.3	361	9	9	9	413	274	43.2	24.6
Copper	68.9	34.3	23.5	16.2	20.7	11.7	15.2	15.7	21.6	12.8	21.9	12.3	26.7	31.1	27	23.1	52.1	17.9	14.9	8.71
Lead	3120	800	227	586	51.6	30.7	27.1	33.9	75.5	42.3	229	28.5	261	967	556	719	406	498	23.5	19.6
Mercury	1.4	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	1.4	1.4	1.4	1.4	1.4	1.4	0.14	0.14
Nickel	52.7	28.2	22.1	22.3	25.9	39.2	35.4	29.4	16.3	13.4	25.6	39.6	32	65.2	33.1	28.8	49.6	13.5	28.1	32.4
Selenium	10	10	10	10	1	1	1	1	2.95	1	10	1	10	10	10	10	19.2	12.8	1	1
Vanadium	154	194	243	83.8	59.2	86.7	57.5	53.2	117	207	125	60	152	311	122	171	441	1640	67.8	45.7
Zinc	7350	1960	528	1420	169	122	110	123	275	123	604	124	827	2100	1500	1560	991	1130	132	93.1
TPH Criteria Working Group (TPH CWG)																				
Benzene																				
Toluene																				
Ethylbenzene																				
sum of detected mpo xylene by GC																				
Aliphatics >C5-C6	0.02	0.02	0.01	0.328	0.02	0.02	0.02	0.02	0.0499	0.02	0.0302	0.02	0.02	0.02	0.02	0.2	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.0585	0.02	0.0363	0.663	0.0384	0.02	0.021	0.02	0.0557	0.0559	0.137	0.02	0.02	0.02	0.023	0.585	0.0319	0.02	0.02	0.02
Aliphatics >C8-C10	0.0449	0.02	0.0331	74.2	0.0256	0.02	0.02	0.02	0.0557	0.057	0.12	0.02	0.02	0.02	0.0387	60.4	0.0231	0.02	0.02	0.02
Aliphatics >C10-C12	0.0394	0.02	0.0843	987	0.0304	0.02	0.02	0.02	0.0557	0.0855	0.146	0.02	0.02	0.0269	0.092	767	0.022	0.02	0.02	0.02
Aliphatics >C12-C16	0.743	1.68	1.88	11.7	0.1	0.1	0.1	0.1	1.77	2.89	3.87	0.1	2.88	0.1	2.25	67.9	1.95	0.124	0.1	0.1
Aliphatics >C16-C21	10.8	9.33	9.13	121	0.1	0.115	0.1	0.1	9.84	18.4	25.8	0.1	29.6	0.1	10.5	668	13	8.59	0.1	0.1
Aliphatics >C21-C35	30.1	37.7	70.8	53.5	2.13	1.13	0.1	0.1	51.6	408	82.5	2.45	194	0.1	30.5	152	95.2	35.9	7.45	0.1
Aliphatics >C35-C44	2.88	6.55	34.1	2.81	0.1	0.1	0.1	0.1	17.2	276	30.9	0.1	53.7	0.1	1.7	5.27	34.1	5.32	0.1	0.1
Aromatics >EC5-EC7	0.02	0.02	0.01	2.8	0.02	0.02	0.02	0.02	0.02	0.02	0.0202	0.02	0.02	0.02	0.02	5.26	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.01	16.9	0.02	0.02	0.02	0.02	0.02	0.02	0.0224	0.02	0.02	0.02	0.02	20.3	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.0299	0.02	0.0213	49.5	0.02	0.02	0.02	0.02	0.0371	0.0376	0.0795	0.02	0.02	0.02	0.0254	40.3	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.0258	0.02	0.0566	658	0.0208	0.02	0.02	0.02	0.0371	0.057	0.0974	0.02	0.02	0.02	0.0617	512	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	0.1	1.95	7.68	1010	0.174	0.1	0.1	0.1	5.63	3.71	8.77	0.1	1.45	0.633	2.69	5280	1.4	1.75	1.08	0.1
Aromatics >EC16-EC21	7.2	8.57	44.7	2710	0.675	0.1	0.1	0.1	45.4	23.1	72.6	0.1	15.2	8.06	8.69	9800	12	43.9	4.58	0.1
Aromatics >EC21-EC35	13.3	31.8	132	2330	19.6	0.5	3.72	5.54	129	378	183	3.56	100	24.5	13	9010	49.6	112	25.4	0.1
Aromatics >EC35-EC44	0.709	9.96	55.3	419	2.02	2.41	0.855	0.733	50.5	414	61.6	0.1	59.8	6.56	0.442	1400	27.8	32.5	8.77	0.1
Aromatics >EC40-EC44	0.1	2.99	20.5	124	0.158	1.01	0.1	0.1	17.2	191	22.6	0.1	23.3	1.98	0.1	366	11.3	9.21	2.78	0.1
Polyaromatic Hydrocarbons (PAHs)																				
Acenaphthylene	17.5	136	57600	2100000	12	12	12	12	1950	59.7	827	12	197	407	28.3	355000	25.9	340	313	12
Acenaphthene	8	40	3450	115000	8	8	8	8	216	53.9	105	8	52	8	15.8	13300	27.9	21.3	19.9	8
Anthracene	43.5	317	43300	1860000	16	16	16	16	5970	232	2050	16	478	1040	33.4	268000	97.6	855	1000	16
Benz(a)anthracene	67.9	762	39200	1150000	68.4	14	14	14	11400	639	4410	14	1200	1580	39.2	185000	432	3320	1680	14
Benzo(a)pyrene	39.1	570	31900	714000	72	15	15	15	9500	450	3370	15	930	1280	22.2	125000	390	2810	1120	15
Benzo(b)fluoranthene	87.4	746	46200	1110000	124	15	15	15	15600	683	4790	15	1240	2270	26.5	140000	685	4300	1900	15
Benzo(k)fluoranthene	20.5	274	18500	373000	36.1	14	14	14	5590	205	1670	14	500	894	14	60700	248	1730	651	14
Benzo(g,h,i)perylene	24	442	19100	333000	66.4	24	24	24	5760	283	2160	24	700	790	24	65400	329	2170	647	24
Chrysene	71.1	713	37100	1090000	89	10	10	10	12500	618	3590	16.5	1210	1500	42.7	167000	487	3300	1560	10
Dibenzo(a,h)anthracene	0.023	0.115	5770	109000	0.023	0.023	0.023	0.023	1760	79.8	560	0.023	182	236	0.023	20600	52	573	190	0.023
Indeno(1,2,3-cd)pyrene	0.018	405	19300	374000	48.7	0.018	0.018	0.018	5450	219	1950	0.018	588	779	0.018	65000	311	1930	645	0.018
Fluoranthene	269	2030	83900	2940000	163	0.017	0.017	0.017	27200	1510	11500	38.6	2740	3090	112	580000	896	6220	4840	0.017
Fluorene	17.7	102	51900	1890000	10	10	10	10	1920	103	960	10	191	53.7	29.3	280000	25.5	113	471	10
Naphthalene	106	410	119000	4680000	9	9	9	9	2010	133	828	11.7	201	9	6770	1170000	81.3	224	89.9	9
Phenanthrene	200	836	104000	3810000	84.4	15	15	15	12900	892	6280	23.4	1410	1030	106	794000	479	2800	3880	15
Pyrene	0.256	1.6	17.9	1950	0.126	0.015	0.015	0.015	18.4	1.09	7.94	0.0303	1.98	2.17	0.0773	341	0.783	5	3.02	0.015
PAH, Total Detected USEPA 16	1.2	9.34	697	24600	0.878	0.118	0.118	0.118	138	7.25	53	0.12	13.8	17.1	7.3	4630	5.35	35.7	22	0.118
Naphthalene-d8 % recovery**	101	96.9	83.2	1100	93.5	93.5	94.7	95.3	96.3	92.5	87.9	101	111	96.5	86.1	99	88.7	92	95.4	92.8
Acenaphthene-d10 % recovery**	90.1	80	95.1	249	83.7	83.5	86	88.7	96.4	85.4	80.1	93.7	108	93.8	72.6	99.5	81.3	85.3	94.2	85.2
Phenanthrene-d10 % recovery**	93.6	72.4	93.3	97	88.5	85.1	84.2	87.2	96.3	84.9	87.9	94.6	110	101	55.9	93	81	85.6	98.4	90.4
Chrysene-d12 % recovery**	63.9	53.3	77.2	81.1	87.2	78.5	75.9	76.4	98.3	78.2	81.3	97.6	115	83.3	27.9	108	70.8	77.7	106	82.6
Perylene-d12 % recovery**	43.4	41.9	84.1	69.5	91.6	81.7	79.4	81.3	99.7	84.3	78.3	102	112	79	16.6	108	70.3	78.2	111	84.5
Total Aliphatics >C12-C44	44.6	55.3	116	189	2.13	1.25	0.1	0.1	80.4	705	143	2.45	281	0.1	44.9	894	144	50	7.45	0.1
Total Aromatics >EC12-EC44	21.2	52.3	240	6470	22.5	2.91	4.58	6.28	230	818	326	3.56	177	39.7	24.8	25500	90.7	190	39.8	0.1
Total Aliphatics & Aromatics >C5-C44	65.9	108	356	8450	24.7	4.16	4.58	6.28	311	1520	470	6.01	457	39.7	70	27800	235	240	47.3	0.1
Metals - (Solid)																				
Iron	426000	189000	168000	232000	28000	40600	33200	35600	76700	41100	73900	36500	117000	344000	261000	212000	205000	194000	39000	32300
Manganese	7700	11300	12700	3180	393	1360	304	318	6350	2210	5930	323	8640	5240	6040	4380	31000	24500	635	946
Metals - (Liquid)																				
Calcium	-	97400	106000	-	-	-	-	-	-	140000	-	4330	133000	38600	45500	-	147000	-	-	-
Magnesium	-	10600	10500	-	-	-	-	-	-	30600	-	10300	34900	5120	7130	-	11500	-	-	-
Phenols																				
Phenol	0.01	0.01	0.01	1.21	0.01	0.01	0.01	0.01	0.0232	0.01	0.0336	0.01	0.0113	0.01	0.01	0.1	0.01	0.0109	0.01	0.01
Cresols	0.01	0.01	0.01	4.77	0.01	0.01	0.01	0.01	-	0.01	0.01	0.01	0.01	0.01	0.01	1.22	0.01	0.01	-	0.01
Xylenols	0.015	0.015	0.015	4.41	0.015	0.015	0.015	0.015	-	0.015	0.015	0.015	0.015	0.015	0.015	0.434	0.015	0.015	-	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	10.4	0.035	0.035	0.035	0.035	-	0.035	0.035	0.035	0.035	0.035	0.035	1.65	0.035	0.035	-	0.035
Inorganics																				
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.159	0.0433	-	-	-	-	-	0.235	0.117	-	0.0325	0.2	0.025	0.147	-	0.105	-	-	-
pH	8.09	8.52	12.1	11	8.3	7.77	7.73	7.38	11.2	10.1	11.1	7.81	11.3	8.96	10.7	10.8	12.1	12.3	7.85	8.15
Sulphate, Total																				
Sulphur, Total	-	0.18	0.169	-	-	-	-	-	0.24	0.138	-	0.02	0.311	0.0819	0.217	-	0.219	-	-	-
Sulphate, Total potential	-	0.54	0.507	-	-	-	-	-	0.72	0.414	-	0.06	0.933	0.246	0.651	-	0.657	-	-	-
Sulphate, acid soluble (total)	-	0.248	0.31	-	-	-	-	-	0.417	0.199	-	0.02	0.429	0.0687	0.206	-	0.355	-	-	-
Cyanide, Total	14.2	4.69	1	4.16	1	1	1	1	1	1	1	1	3.51	1	9.28	1.25	2.52	1.83	1	1
Exchangeable Ammonia as N	12	12	12	12	179	70.4	71.2	12	-	12	12	164	12	12	12	12	12	12	-	17
Asbestos																				
Asbestos Quantification - Gravimetric - %	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	09/04/2019	08/04/2019	-	-	-	-	-	22/03/2019	09/04/19	-	02/04/2019	02/04/2019	02/04/2019	02/04/19	-	09/04/2019	-	22/03/2019	-
Analysed By	-	Lucy Caroe	Barbara Urbanek-Walsh	-	-	-	-	-	Marcin Magdziarek	Andrzej Ferfecki	-	Marcin Magdziarek	James Richards	Marcin Magdziarek	Andrzej Ferfecki	-	Lucy Caroe	-	Lucy Caroe	-
Asbestos Quantification - PCOM Evaluation - %	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	Not Detected	Trace	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-
Amosite (Brown) Asbestos	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-
Crocidolite (Blue) Asbestos	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-
Fibrous Anthophyllite	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-
Fibrous Tremolite	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-
Fibrous Actinolite	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-
Non-Asbestos Fibre	-	Not Detected	Not Detected	-	-	-	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Detected	-
Comments	-	-	Loose fibres in soil.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)																				
Dibromofluoromethane**	100	90.8	102	104	108	105	105	111	110	108	96.8	106	105	103	116	105	104	102	114	107
Toluene-d8**	99.7	88	98.6	99.7	96.3	100	100	96.8	101	94.9	94.8	99.1	98.1	99.4	95.7	97.9	96.9	97.3	102	100
4-Bromofluorobenzene**	94.4	69.8	94.1	98.4	90.6	98.5	101	97.4	82.2	90.1	84.6	98.7	94.5	94.6	87.8	89.6	93.3	91.7	85.7	102
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	1.8	0.09	0.09	0.09	0.09	0.18	0.09	0.09	0.09	0.09	0.09	0.09	7.03	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	3.55	0.07	0.07	0.07	0.07	0.14	0.07	0.07	0.07	0.07	0.07	0.07	28.3	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.8	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.04	0.04	0.04	0.04	1.15	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	9.31	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	61.5	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	2.8	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	17.5	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.907	2790	0.13	0.13	0.13	0.13	0.26	0.169	0.31	0.13	0.13	0.13	0.228	15500	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	15.7	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	116	0.4	0.4	0.4	0.4
Subcontracted: Inorganics																				
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

											Sample ID	3DG3V	3DG4V	3DH1	3DH2	3DH3	3DH3	3DH4	3DH5	3DH6	3DH1V	3DH2V	3DH3V	3DH4V	3DH5V	3DH6V	3DI1	3DI1	3DI2	3DI3	3DI4	3DI1V	3DI2V	3DI3V	3DI4V	3DJ1	3DJ1	3DJ1	3DJ2	3DJ2	3DJ3	3DJ4	3DJ4	3DJ1V	3DJ2V	3DJ3V	3DJ4V	3DK1	3DK1	3DK1
											Depth	0.9	1	0.5	0.5	0.5	1	0.5	0.5	0.5	1	1	1.5	1	1.1	1.6	0.5	1	0.5	0.5	0.5	1.5	1.2	1.8	1	0.5	1	1.6	0.5	2	0.5	0.5	1.1	2.4	3.3	2	2	0.5	1.2	2
											Sampled Date	19/03/2019	19/03/2019	18/03/2019	18/03/2019	19/03/2019	19/03/2019	19/03/2019	21/03/2019	21/03/2019	18/03/2019	18/03/2019	19/03/2019	19/03/2019	21/03/2019	21/03/2019	13/03/2019	13/03/2019	18/03/2019	19/03/2019	19/03/2019	13/03/2019	18/03/2019	19/03/2019	19/03/2019	18/03/2019	18/03/2019	18/03/2019	19/03/2019	19/03/2019	19/03/2019	19/03/2019	19/03/2019	18/03/2019	19/03/2019	19/03/2019	19/03/2019	13/03/2019	13/03/2019	13/03/2019
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**																																							
Carbon																																																		
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	3.07	0.964	14.6	6.38	18.3	7.26	0.717	4.81	2.24	2.26	1.57	7.71	2.16	2.19	6.48	10.6	33.4	4.07	9.93	4.91	1	3.76	8.98	2.53	20.3	62.8	2.62	27.4	12.3	11.8	6.79	4.33	3.33	3.1	4.14	7.41	21.6	>100	9.34
Metals (Solids)																																																		
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	8.72	12.9	10.7	9.81	22	10.8	7.06	10.3	9.5	13.4	13	13.5	9.27	9.79	11.2	7.74	13.1	11.4	20.7	10.9	18.3	11.7	15.8	14.5	7.9	8.97	10.9	3.64	9.05	6	21	35.8	10.1	12.4	11.1	12.7	6	6.89	8.4
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	2.88	0.254	1.32	1.19	0.2	0.332	0.666	1.11	1.8	0.392	0.364	0.229	0.02	0.02	0.37	1.41	2.99	1.21	1.92	1.4	0.28	0.489	0.808	0.02	1.27	0.189	0.143	0.613	0.381	0.2	5.52	14.9	0.489	0.02	0.02	0.02	1.11	0.31	0.256
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	133	35.7	30.2	36.8	83.9	111	86.7	106	61.2	37.6	35.6	42.2	33.9	34	39.7	441	131	37.9	204	58.8	33.8	39.4	46.8	36.6	238	157	16.6	230	33	533	9	9	32.1	34.1	37.1	38.9	487	53.6	28.6
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	25.9	12.1	29.5	20.7	47.6	27.9	11	20.7	25.6	16.6	14.6	20	12.4	13.8	17.7	18.8	38.9	22.9	20.6	24.9	13	17.4	19.7	15.3	12.8	15.7	24.7	9.61	23.2	14	39.5	98.6	23.2	21.1	17.3	17.2	14	18.7	8.69
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	240	27.9	127	84.5	60.2	125	27.9	281	155	23.9	25.1	40	26.6	25.2	26.7	67.7	185	106	350	295	28	28.7	46	24.6	99.1	11.9	14.7	27.6	19.9	32.5	1500	3300	28.2	25.9	27.6	35.9	30	17.9	10.7
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	1.4	0.14	0.14	0.14	1.4	1.4	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	1.4	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	1.4	1.4	0.14	0.14	0.14	0.14	1.4	0.14	0.14
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	18.9	39.3	24	57.9	47.7	31.1	12.6	28.6	23.6	38.1	36.6	27.6	32.7	31	39.7	18.7	44.7	29	21.7	31.3	39.2	29.5	25.7	31.5	11.7	9.03	40.1	6.94	24.2	14.5	54.8	80.2	34.2	31.9	26.4	24.9	8.96	8.75	11.2
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	10	1	1.71	1.77	10	10	3.56	10	4.55	1	1	1	1	1	1	10	10	2.88	10.5	10	1	1	1	1	3.87	2.71	1	5.53	1.14	17.7	10	10	1	1	1	1	12.3	3.75	1.01
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	210	56.3	63.1	84.5	232	314	288	254	194	58.7	54.1	70.8	53	54.2	59.3	509	218	186	229	206	55.5	63.4	79.5	59.9	169	164	26.1	189	47.2	378	209	217	52	54.2	55.4	65.1	497	203	75.6
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	718	121	413	270	183	373	98.9	750	600	108	107	143	111	124	99.1	179	818	237	999	794	112	135	149	124	408	103	63.7	87.1	64.4	82.4	3390	7120	129	130	125	125	86.9	21.2	24.9
TPH Criteria Working Group (TPH CWG)																																																		
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00																																							
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00																																							
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00																																							
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00																																							
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.02	0.02	0.02	0.01	0.0269	0.02	0.02	0.02	0.0592	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0821	0.0921	0.01	0.0207	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0109	0.0422	0.0119
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.02	0.02	0.02	0.01	0.115	0.02	0.02	0.02	0.0812	0.02	0.02	0.02	0.02	0.02	0.02	0.0296	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0744	0.17	0.01	0.0598	0.02	0.0362	0.02	0.02	0.02	0.02	0.02	0.02	0.0612	0.18	0.0474
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.02	0.02	0.02	0.01	0.131	0.02	0.02	0.0127	0.4	0.02	0.02	0.02	0.02	0.02	0.02	0.0205	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0488	0.0888	0.01	0.0311	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0557	0.0522	0.0291
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.02	0.02	0.02	0.01	0.868	0.02	0.02	0.02	0.129	0.02	0.02	0.02	0.02	0.02	0.02	0.0365	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0344	0.0677	0.01	0.0253	0.02	0.0224	0.02	0.02	0.02	0.02	0.02	0.02	0.047	0.0189	0.0183
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	2.85	0.1	3.47	3.58	1.47	1.2	7.94	2.32	3.4	0.1	0.1	0.1	0.1	0.1	0.1	5.22	1.76	3.45	1.91	3.98	0.1	0.1	0.1	0.1	5.73	9.12	0.1	13.3	4.36	1.42	0.1	0.1	0.1	0.1	0.1	0.1	4.06	6.43	3.07
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	19.6	0.1	16	12.7	6.34	6.49	23.7	14.4	24.2	0.1	0.1	0.1	0.1	0.1	0.1	21.8	9.35	14.2	22.9	23	0.339	0.1	0.1	0.1	36.7	42	0.1	18.3	4.46	6.46	7.61	0.1	0.1	0.1	0.1	0.1	15	11.1	19.7
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	105	0.1	85	67.2	17.9	17.7	184	67.1	149	2.14	0.1	6.57	8.36	0.871	0.1	59.8	59.5	73.1	103	123	0.1	5.2	13	0.1	403	220	0.1	47.5	7.17	75.4	23	0.1	5.9	0.1	6.53	3.6	28	23.5	27.5
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	33.6	0.1	23.6	19.9	5.69	0.618	49.5	16.6	45.4	0.1	0.1	0.1	0.1	0.1	0.1	23.3	15	18.1	31.2	30.6	0.1	0.1	0.1	0.1	96	53.3	0.1	5.82	0.1	4.3	1.19	0.1	0.1	0.1	0.1	0.1	6.31	4.97	6.93
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.11	0.014
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0444	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.0599	0.0151
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.02	0.02	0.02	0.01	0.0878	0.02	0.02	0.02	0.267	0.02	0.02	0.02	0.02	0.02	0.02	0.0137	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0322	0.0588	0.01	0.0207	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0372	0.0344	0.0194
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.02	0.02	0.02	0.01	0.579	0.02	0.02	0.02	0.0858	0.02	0.02	0.02	0.02	0.02	0.02	0.0239	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0222	0.0444	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0306	0.0122	0.0119
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	2	0.1	6.08	8.98	6.71	6.16	2.58	1.56	1.74	0.1	0.1	0.1	0.1	0.1	0.1	9.78	1.14	2.66	2.73	4.01	0.1	0.1	0.1	0.1	9.24	10.4	0.1	17.9	3.7	1.36	1.79	0.1	0.1	0.1	0.1	0.1	7.93	16.3	3.48
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	16.9	0.1	46	89	67.1	43.7	12.5	13.2	18.2	0.728	0.1	2.1	0.1	0.1	0.1	67.2	7.64	15.9	29.9	29.1	0.169	1.13	2.77	0.1	55.1	44.8	0.1	78.9	23.1	6.04	15	4.04	0.1	0.1	1.5	1.58	36.8	35.6	11.4
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	85.6	0.1	142	138	148	160	75.7	59.6	110	5.1	0.823	30.4	7.86	5.34	2.38	205	51.8	75.7	120	108	2.93	18.4	44.4	2.8	185	92.7	0.1	166	43.4	24	50.5	5.49	7.05	6.12	22.2	23	74.7	55.9	25.7
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	51.1	0.1	54.6	42	42.7	50.8	41.7	23.1	62	2.8	0.428	3.36	1.11	0.348	0.246	65	20.5	32.4	51.8	43.7	1.1	5.25	6.54	0.1	74.6	32.8	0.1	33.2	6.96	3.54	8.34	0.1	0.1	1.07	2.51	3.89	18.1	14.8	8.16
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	20.5	0.1	18.5	15.5	15.2	16.2	16.3	7.87	25.1	0.96	0.165	0.1	0.1	0.1	0.1	21.3	7.61	12	19.9	16.6	0.256	1.7	0.733	0.1	25.6	11.2	0.1	8.54	1.07	0.65	1.12	0.1	0.1	0.1	0.1	1.35	5.51	4.83	2.87
Polyaromatic Hydrocarbons (PAHs)																																																		
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	56	12	2460	265	621	287	27.5	286	281	12	12	12	12	12	12	956	154	217	255	296	12	12	27.6	12	719	12	12	1990	2070	84.7	133	12	12	12	40.1	12	2020	85.9	14.5
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	27.7	8	93.5	48.8	8	130	8	47.2	60.2	8	8	13.5	8	8	8	130	21.3	36	70.3	70.1	8	8	8	8	111	8	8	131	18900	8	8	8	8	8	8	8	2850	363	31.7
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	156	16	5900	547	2400	960	78.7	442	464	16	16	16	16	16	16	1510	239	700	577	593	16	16	32.9	16	1670	16	16	2900	46700	16	94.5	16	16	16	59.1	16	7410	272	42.8
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	393	14	19600	1880	4820	2730	341	1550	1190	14	14	52.7	14	14	14	6080	647	1570	2010	1630	14	29.5	143	14	3300	624	14	6500	152000	238	466	14	14	14	74.4	27	5870	516	140
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	335	15	14300	1710	3960	2220	369	1500	1010	15	15	45.4	15	15	15	5390	584	1290	1840	1540	15	25.6	143	15	2900	559	15	5020	105000	282	420	15	15	15	54.8	15	5140	323	135
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	643	15	23000	2620	6490	3510	589	2330	1500	15	15	99.5	15	15	15	7530	933	1840	3030	1790	15	40.6	152	15	4350	639	27.1	5650	137000	372	676	15	26.9	15	60.4	45.4	7330	455	207
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	238	14	8400	979	2330	1300	250	752	565	14	14	29.4	14	14	14	4310	309	691	989	758	14	14	75.3	14	1670	627	14	2420	60300	113	175	14	14	14	27.2	14	2310	149	73.2
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	265	24	7630	1110	2580	1490	288	1000	617	24	24	41	24	24	24	3750	498	805	1300	1160	24	24	123	24	1900	346	24	3050	57500	149	315	24	24	24	40.4	24	3800	206	111
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	428	10	18400	1890	4780	2350	327	1630	967	10	10	55.9	10	10	10	4790	693	1530	2080	1450	10	32.4	131	10	3030	651	22.5	5150	127000	275	394	24.5	10	10	53	31.1	6780	650	186
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	62.7	0.023	2530	297	715	371	59.1	222	145	0.023	0.023	0.023	0.023	0.023	0.023	806	99.9	209	325	273	0.023	0.023	0.023	0.023	508	96.4	0.023	749	19800	39.8	62.5	0.023	0.023	0.023	0.023	0.023	784	63.5	0.023
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	211	0.018	7790	1010	2430	1340	238	1200	772	0.018	0.018	32.2	0.018	0.018	0.018	2390	355	723	1140	938	0.018	0.018	136	0.018	2400	287	0.018	2750	54600	123	250	0.018	0.018	0.018	40	0.018	3050	128	69.9
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	929	0.017	52100	3950	9770	5390	667	3410	2950	32.2	0.017	163	0.017	0.017	0.017	11700	1430	3300	4020	3790	0.017	61.5	282	0.017	7800	2020	0.017	17500	275000	721	1210	108	37.7	0.017	260	74.1	17600	1450	284
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	61.8	10	2050	197	573	356	10	147	378	10	10	20.8	10	10	10	547	149	152	177	274	10	10	16.9	10	649	97.7	10	1270	24500	33.5	31.5	10	10	10	74.3	10	4060	725	50.1
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	202	12.2	428	278	942	576	9	457	284	9	9	505	9	9	27.9	2100	221	217	574	404	9	40.6	75.6	9	1740	9	17.1	4400	<0.45	522	173	57.7	9	14.9	173	43.1	5530	2350	245
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	491	15	11300	1600	4670	3040	306	1210	2190	15	15	101	15	15	15	4250	916	1090	1540	2040	15	44.8	127	15	4460	1640	37.3	8370	135000	688	431	150	15	15	328	67.2	20600	2410	271
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	0.793	0.015	32.8	2.8	7.42	4.02	0.549	2.89	2.23	0.0213	0.015	0.114	0.015	0.015	0.015	9.51	1.2	2.32	3.28	2.81	0.015	0.0449	0.217	0.015	5.76	1.45	0.015	12.5	184	0.473	0.915	0.158	0.0306	0.015	0.169	0.0536	12.7	1.09	0.23
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	5.29	0.118	209	21.2	54.5	30.1	4.09	19.1	15.6	0.118	0.118	1.27	0.118	0.118	0.118	65.8	8.44	16.7	23.2	19.8	0.118	0.32	1.68	0.118	43	9.04	0.118	80.4	1400	4.11	5.75	0.498	0.118	0.118	1.45	0.342	108	11.2	2.09
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	98.6	114	95.4	97.7	97.6	94.5	96.8	94.7	99.8	97.6	95.1	93.7	93.2	94	96.5	83.6	87.2	95.5	89.4	108	89.6	97.3	102	92	93.9	0	97.3	105	109	96.2	93.9	102	96.2	97.4	100	94.9	88.6	98.7	91.2
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	96.8	107	96	96.1	97.8	75.4	95.8	94.5	96.7	97.6	94.4	93.3	91.1	90	94.9	73	81.4	94.9	89.7	101	80.1	96.7	94.5	92.5	99.4	58.4	95.2	86.2	99	94.2	83.3	94.7	95.8	97.5	94.4	94.1	90	97	82.4
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	101	116	97.6	98.8	102	100	101	103	102	99	95.8	101	96.9	95.3	99.3	73.9	78.9	98.1	95.7	102	73.4	102	97.5	97.3	99.7	87.2	96.1	87.1	95.5	97.8	74.5	94.1	98	104	95.9	99.9	89.5	92.6	77.2
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	82.5	111	108	107	81.9	86	86.3	91.5	88.5	107	96.6	90.8	90.6	84.9	89	104	84.2	99.1	78.3	98.6	81	107	98.6	84.3	86.7	75.6	98.4	87.9	110	84.5	56.6	85.8	106	98.5	91.7	90.1	87.8	77	84.1
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	75.7	114	109	115	86.5	86.1	84.8	87.2	84.3	113	99	86.3	87.2	101	84.9	95.8	86.6	102	77.3	101	80.4	110	104	79.1	86.8	61.9	103	76.4	109	79.8	45.3	78.6	114	94.7	95.1	87.2	81	56.7	80.4
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	161	0.1	128	103	31.4	26	265	100	222	2.14	0.1	6.57	8.36	0.871	0.1	110	85.6	109	159	181	0.339	5.2	13	0.1	542	324	0.1	85	16	87.5	31.9	0.1	5.9	0.1	6.53	3.6	53.3	46	57.2
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	156	0.1	248	278	264	261	133	97.5	192	8.62	1.25	35.8	8.97	5.69	2.63	347	81.1	127	204	185	4.2	24.8	53.7	2.8	324	181	0.1	296	77.2	34.9	75.7	9.54	7.05	7.18	26.2	28.5	138	123	48.7
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	316	0.1	377	381	297	287	398	198	415	10.8	1.25	42.4	17.3	6.56	2.63	457	167	236	363	366	4.54	30	66.7	2.8	865	505	0.1	381	93.2	122	108	9.54	12.9	7.18	32.8	32	191	169	106
Metals - (Solid)																																																		
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			83100	38300	55700	58700	300000	109000	67700	119000	79800	33300	32800	18900	18600	23800	34700	91200	164000	117000	159000	118000	38300	23300	28400	23600	78000	80300	22600	66300	24000	133000	404000	669000	28700	21300	21700	19100	108000	37200	24900
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			13600	340	3340	3830	8540	7840	6650	8970	10800	327	294	348	438	464	467	17900	7770	7030	16000	6500	384	451	443	263	9800	9070	451	11900	1680	27300	5970	11500	400	452	256	315	23000	4820	2220
Metals - (Liquid)																																																		
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			-	-	-	-	94900	125000	139000	127000	167000	-	-	-	-	-	-	-	-	-	164000	126000	-	-	-	-	-	-	-	101000	40200	211000	53000	53700	-	-	-	-	-	-	-
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			-	-	-	-	9910	14900	15400	14600	25000	-	-	-	-	-	-	-	-	-	11600	16300	-	-	-	-	-	-	-	14800	6810	35500	5800	2300	-	-	-	-	-	-	-
Phenols																																																		
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01	0.01	0.01	0.0114	0.01	0.01	0.0114	0.069	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0114	0.0114	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0111	0.0234	0.069	0.0113	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0219	0.0222	0.0108
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.011	0.01	-	-	0.01	0.01	0.01	0.0115	0.01	-	-	0.01	0.01	0.01	0.01	-	-	-	0.01	0.01	-	-	0.01	0.01	-	-	-	0.0345	0.01	0.01	0.01	0.01	-	0.01	0.01	0.01	-	-	-
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015	0.015	-	-	0.015	0.015	0.015	0.015	0.015	-	-	0.015	0.015	0.015	0.015	-	-	-	0.015	0.015	-	-	0.015	0.015	-	-	-	0.015	0.015	0.015	0.015	0.015	-	0.015	0.015	0.015	-	-	-
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035	0.035	-	-	0.035	0.035	0.035	0.0575	0.035	-	-	0.035	0.035	0.035	0.035	-	-	-	0.035	0.035	-	-	0.035	0.035	-	-	-	0.104	0.035	0.035	0.035	0.035	-	0.035	0.035	0.035	-	-	-
Inorganics																																																		
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	-	-	0.189	0.138	0.173	0.235	0.241	0.2	0.233	-	-	-	-	-	-	0.125	-	0.239	0.129	0.256	-	-	-	-	0.089	-	0.0303	0.0464	0.031	0.0112	0.0405	0.597	-	-	-	-	0.043	-	0.0588
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	11.3	8.16	11.1	11.2	11.4	11.6	10.9	11.2	11.1	7.79	7.74	7.72	7.75	7.43	7.64	11	11.2	11.2	10.9	10.9	7.95	8.09	7.62	7.32	10.4	11.2	9.77	11.7	10.8	12.7	8.45	10.7	8.83	7.38	7.35	7.65	11.8	12.6	11.6
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33																																							
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	-	-	0.258	0.183	0.247	0.31	0.242	0.226	0.318	-	-	-	-	-	-	0.239	-	0.274	0.179	0.286	-	-	-	-	0.155	-	0.103	0.125	0.138	0.144	0.175	0.293	-	-	-	-	0.254	-	0.153
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	-	-	0.774	0.549	0.741	0.93	0.726	0.678	0.954	-	-	-	-	-	-	0.717	-	0.822	0.537	0.858	-	-	-	-	0.465	-	0.309	0.375	0.414	0.432	0.525	0.879	-	-	-	-	0.762	-	0.459
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	-	-	0.41	0.243	0.466	0.548	1.26	0.585	0.682	-	-	-	-	-	-	0.303	-	0.491	0.227	0.574	-	-	-	-	0.201	-	0.0907	0.0927	0.237	0.247	0.117	0.683	-	-	-	-	0.353	-	0.215
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6.41	1	1	1	1	1	1	1
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	12	101	-	-	12	12	12	12	12	-	-	187	12	266	119	-	-	-	12	12	-	-	217	12	-	-	-	12	12	12	12	12	-	212	235	171	-	-	-
Asbestos																																																		
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	0.0065	-	-	-	0.0165	0.0053	-	-	-	-	-	-	-	-	-	0.001	0.001	0.0033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001
Date of Analysis	TM048	No units		1371	0	0				0.00		-	-	22/03/2019	22/03/2019	02/04/2019	02/04/19	02/04/19	03/04/2019	05/04/19	22/03/2019	25/03/2019	-	-	-	-	21/03/2019	21/03/19	22/03/2019	02/04/2019	02/04/2019	-	22/03/2019	-	-	22/03/2019	22/03/2019	25/03/2019	02/04/2019	02/04/2019	02/04/2019	02/04/19	02/04/19	22/03/2019	-	-	-	21/03/2019	21/03/2019	21/03/2019
Analysed By	TM048	No units		1371	0	0				0.00		-	-	Lucy Caroe	Lucy Caroe	James Richards	Andrzej Ferfecki	Andrzej Ferfecki	Marcin Magdziarek	Christian Hallam	Marcin Magdziarek	James Richards	-	-	-	-	Renata Bozhkov	Andrzej Ferfecki	Renata Bozhkov	Marcin Magdziarek	Marcin Magdziarek	-	Barbara Urbanek-Walsh	-	-	James Richards	Renata Bozhkov	James Richards	Marcin Magdziarek	Marcin Magdziarek	Marcin Magdziarek	Andrzej Ferfecki	Andrzej Ferfecki	James Richards	-	-	-	Barbara Urbanek-Walsh	James Richards	Lucy Caroe
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	0.001	-	-	-	0.0133	0.001	-	-	-	-	-	-	-	-	-	0.001	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-	-	None	-	-	-	None	None	-	-	-	-	-	-	-	-	-	None	None	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	None
Analysts Comments	TM304	No units		1002	0	0				0.00		-	-	N/A	-	-	-	PCOM analysis shows fibres typical of Amphibole asbestos.	N/C	-	-	-	-	-	-	-	-	-	N/A	N/C	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/C
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	0.0065	-	-	-	0.0298	0.0058	-	-	-	-	-	-	-	-	-	0.001	0.001	0.0038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-	-	Detected	Not Detected	Not Detected	Not Detected	Detected	Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	Not Detected	Not Detected	Detected	Detected	Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	Trace
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	Not Detected
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	Not Detected
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	Not Detected
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	Not Detected
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	Not Detected
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	Not Detected
Comments	TM048	No units		1371	0	0			0	0.00		-	-	Soil containing ACM debris	-	-	-	loose fibres in soil	Loose fibres in soil	-	-	-	-	-	-	-	-	-	Loose fibres in soil.	Loose fibres in soil	Loose fibres in soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Loose fibres in soil
Volatile Organic Compounds (VOCs)																																																		
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		102	103	104	104	97.7	116	105	101	106	115	117	108	101	111	107	99.6	107	115	103	101	121	116	104	104	108	109	122	115	91.1	86.5	106	102	125	103	104	103	77.4	101	101
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		99.9	102	98.9	97.4	98.1	103	100	101	99.5	103	102	97.4	100	101	100	96.9	99.6	102	99.4	99.5	103	100	99	100	102	104	99.8	101	89.9	96.9	98	101	101	100	99.8	100	93.7	97.7	93.1
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		92.6	98.1	73.1	72.3	85.5	96.8	91.2	94.6	94.7	89.3	86.7	92	95.4	101	98.5	79.2	85.3	83.8	92.5	90.1	92.6	91.1	92.1	96.4	93.3	91.8	82.8	97.6	71	86.7	91.6	96.3	82.3	96.4	95.8	91.2	70.3	93.6	71.1
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	2	0.1
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		0.09	0.09	0.09	0.09	0.09	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1.8	1.8	0.09	1.8	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.18	1.8	0.13
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		0.07	0.07	0.07	0.07	0.07	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.4	1.4	0.07	1.4	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.14	1.4	0.128
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.8	0.8	0.04	0.8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.8	0.04
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	2	0.1
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	2	0.1
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		0.13	0.13	0.13	0.13	0.181	0.26	0.13	0.212	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.426	0.161	0.13	0.13	0.13	0.13	0.13	0.13	0.13	2.6	2.6	0.13	2.6	0.361	0.13	0.13	0.13	0.13	0.13	0.13	0.13	1.4	2.6	0.141
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	8	8	0.4	8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	8	0.4
Subcontracted: Inorganics																																																		
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
											Sample ID
											Depth
											Sampled Date
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

											Sample ID	TP3BF2
											Depth	0.5
											Sampled Date	15/05/2018
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**	
Carbon												
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	21.6
Metals (Solids)												
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	12.7
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	0.28
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	196
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	37.2
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	93.3
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	1.4
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	33.7
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	15.6
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	1100
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	183
TPH Criteria Working Group (TPH CWG)												
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00	
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00	
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00	
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00	
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.04
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.04
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.04
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.04
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	11.6
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	17.5
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	40.2
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	7.62
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.04
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.04
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.04
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.04
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	26
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	213
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	453
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	92.5
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	21.4
Polyaromatic Hydrocarbons (PAHs)												
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	2980
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	154
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	5060
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	11500
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	9890
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	16000
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	6200
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	6000
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	10200
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	1540
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	6610
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	32700
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	1940
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	4050
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	14400
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	154
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	90.6
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	98.7
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	104
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	84.2
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	78.5
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	76.9
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	785
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	
Metals - (Solid)												
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			134000
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			21700
Metals - (Liquid)												
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			-
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			6350
Phenols												
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.0112
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035
Inorganics												
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	-
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	10.9
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33	-
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	-
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	-
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	-
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	12
Asbestos												
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Date of Analysis	TM048	No units		1371	0	0				0.00		-
Analysed By	TM048	No units		1371	0	0				0.00		-
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-
Analysts Comments	TM304	No units		1002	0	0				0.00		-
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-
Comments	TM048	No units		1371	0	0			0	0.00		-
Volatile Organic Compounds (VOCs)												
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		103
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		98.6
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		94.4
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		2
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		1.8
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		1.4
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.8
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		2
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		2
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		3.26
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		8
Subcontracted: Inorganics												
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-

Glan Llyn Residential Soil Data

											Sample ID	TP3BB5	TP3BB8	TP3BB8	TP3BB8	TP3BB2V	TP3BB3V	TP3BB4V	TP3BB5V	TP3BB8V	TP3BC1	TP3BC1	TP3BC1	TP3BC1	TP3BC2	TP3BC2	TP3BC2	TP3BC2	TP3BC3	TP3BC3	TP3BC3	TP3BC3	TP3BC1V	TP3BC2V	TP3BC3V	TP3BD1	TP3BD1	TP3BD1	TP3BD2	TP3BD2	TP3BD2	TP3BD2	TP3BD3	TP3BD3	TP3BD3	TP3BD1V	TP3BD2V	TP3BD3V	TP3BE1	TP3BE1	TP3BE1	TP3BE2	TP3BE2	TP3BE2	TP3BE2	TP3BE3	TP3BE3	TP3BE3	TP3BE1V	TP3BE2V	TP3BE3V
											Depth	2	0.5	1	1.5	2.1	2.1	3	2.9	1.9	0.5	1	2	3	0.3	1	2	3.5	0.5	1	2	3	4.1	3.8	3.3	0.4	1	2	0.4	1	2	2.8	0.3	1	2	2.6	3	2.4	0.5	1	2	0.5	1	2	2.9	0.5	1	2	2.2	3	2.3
											Sampled Date	04/07/2018	04/07/2018	04/07/2018	04/07/2018	04/07/2018	04/07/2018	04/07/2018	04/07/2018	04/07/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018	01/06/2018
Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances																																																		
Carbon																																																													
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	11.3	4.67	2.1	2.19	0.795	3.64	4.1	2.55	3.41	2.69	3.31	1.57	5.02	5.36	9.09	3.05	3.84	5.91	1.34	4.81	5.53	5.14	5.19	6.48	1.33	13.4	12.6	11.5	7.15	2.83	6.69	20	29	17.9	3.43	9.02	3.91	1.28	5.6	2.6	26.7	29.7	58.1	47.8	52.2	17.4	10.5	4.79	2.47	2.71
Metals (Solids)																																																													
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	25.3	6	9.15	4.47	9.36	10.6	12.5	11.7	8.87	15.5	6	43.7	7.2	2.07	2.25	9.71	8.56	9.35	6	2.74	5.49	12.7	12.2	12.8	6	11.6	7.99	6	3.14	6	12.6	34.1	7.87	6.56	11.4	15.7	9.69	3.78	2.77	6	3.34	6	6	5.44	9.36	2.58	6	12.1	11.6	10.3
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	2.76	0.2	0.02	0.02	0.02	0.02	0.28	0.02	0.02	1.11	0.907	1.18	0.407	0.471	0.716	0.474	0.566	1.21	0.674	0.631	0.359	0.407	0.288	0.664	0.802	2.06	0.895	0.738	0.689	0.615	4.11	17.3	1.08	1.14	0.343	1.24	0.309	0.842	0.764	0.846	0.02	0.809	0.895	0.421	0.727	0.416	1.32	0.261	0.17	0.246
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	9	386	104	76.9	22	33.3	34.9	30.8	31.6	0.9	401	279	132	374	337	15.7	26.4	335	409	293	79.1	33	34.3	31.8	455	41.9	151	480	243	401	121	0.9	210	153	30.9	54.6	35.2	269	313	399	60.9	245	373	161	35.9	178	222	28.4	32.2	37.4
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	21.8	21.1	14.2	13	7.39	15	15.5	12.7	11.4	17.5	14	85.9	26.8	6.22	8.84	13.6	14.2	20	14	11.9	11	16.2	15.3	16.1	14	16.9	8.88	14	9.6	14	21.7	49.9	17.7	14	16.9	22.7	15	12.2	12.3	14.7	4.28	24.5	14	15.3	31.1	11.1	20.4	20.8	19.6	15.4
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	1050	34.8	20.9	47.1	19.3	28	34.2	27.6	23.1	36.4	29.3	58	20.2	17.7	6.8	21.4	22.2	42.9	14.7	9.53	14.2	35.6	29.5	46.3	12	23.5	11.9	20.5	38.4	13	736	4220	64.8	41.8	28.7	66.7	36.7	17	17.7	31.7	8.62	21.4	19.6	27.7	66	9.68	55.5	28.2	25.8	26.6
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	1.4	1.4	0.14	1.4	0.14	1.4	0.14	1.24	1.4	1.4	0.14	0.14	0.14	0.14	0.14	1.4	0.14	1.4	1.4	0.569	1.58	0.14	1.4	0.14	0.14	0.14
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	21.4	12.3	20	4.95	27.5	24.9	28.8	35	22	19.1	13.2	11.7	10.7	4.11	1.9	17.2	26.1	28.9	2.83	2.58	12.6	23.6	25.4	28.1	9.25	54.7	13	8.06	5.21	4.18	20.1	23.7	18.7	13.3	25.7	26.7	26.2	162	5.45	6.36	7.45	11.8	5.25	12.7	19	7.81	12.7	25.9	27.2	30.1
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	10	10	1	4.08	1	1	1	1	1	2.32	11.3	13	5.39	7.54	12	1.48	1.99	10	18.2	10.6	5.11	1	1	1	14.1	10	6.96	11.7	9.1	18.3	3.88	5.07	10.6	10	1	1.79	1	11.1	12	19.8	3.44	10	12.1	5.1	1.93	10.8	10	1	1	1
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	284	688	311	117	41.2	53.8	56.8	52.4	47	129	374	932	161	281	1940	97.8	124	647	2010	1580	341	54.5	57	65.4	432	688	885	499	339	2880	124	69.4	1600	1060	50.7	98.5	55.5	2180	1550	2410	254	779	449	311	86.8	1890	1400	49.2	52.7	60
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	2420	117	125	146	83.5	116	170	120	101	121	237	139	48.4	69.7	16.2	72.2	92.4	134	28	28.6	53.8	124	118	172	58.5	74.9	53	78.4	136	19	1530	11900	121	104	137	209	132	46.4	53.6	52.5	46.9	62.6	69.6	106	230	42.7	118	129	119	126
TPH Criteria Working Group (TPH CWG)																																																													
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00																																																		
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00																																																		
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00																																																		
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00																																																		
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.0145	0.01	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0808	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0526	0.04	0.04	0.04	0.04
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.01	0.01	0.01	0.01	0.01	0.0188	0.0348	0.0253	0.0221	0.04	0.04	0.04	0.108	0.04	0.0944	0.04	0.04	0.04	0.04	0.04	0.0445	0.04	0.04	0.04	0.04	0.274	0.118	0.04	0.04	0.04	0.0686	0.04	0.04	0.0452	0.04	0.04	0.0691	0.04	0.0727	0.04	0.0571	0.0403	0.04	0.0672	0.0784	0.193	0.0803	0.04	0.04	0.04
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.01	0.01	0.01	0.01	0.01	0.0161	0.0247	0.02	0.0179	0.04	0.04	0.101	0.123	0.04	0.124	0.04	0.07	0.04	0.04	0.04	0.184	0.04	0.04	0.04	0.04	0.258	0.113	0.04	0.0466	0.0949	0.147	0.04	0.04	0.0881	0.04	0.04	0.18	0.04	0.117	0.04	0.04	0.04	0.04	0.0516	0.0448	0.35	0.241	0.04	0.04	0.04
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.01	0.01	0.01	0.01	0.01	0.0121	0.0203	0.0106	0.011	0.04	0.089	0.193	0.311	0.04	1.19	0.04	0.0952	0.04	0.04	0.0828	1.12	0.04	0.04	0.04	0.0814	0.654	0.463	0.209	0.04	0.708	0.0635	0.04	0.089	0.588	0.04	0.0451	0.574	0.04	0.617	0.04	0.157	0.0874	0.04	0.0912	0.212	3.88	5.17	0.04	0.04	0.04
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	2.86	0.489	2.09	2.62	0.1	0.1	1.65	0.1	0.1	0.1	1.37	37.1	9.24	4.69	3.52	6.12	9.61	9.33	21	7.07	24.9	0.1	0.1	0.1	0.1	29	9.53	28.3	36.6	117	4.05	5.21	16.3	11.3	0.1	0.1	29.1	4.5	4.34	2.83	12.4	11.9	11.4	15.8	10.5	14.9	123	0.1	0.1	0.1
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	22.2	3.88	8.75	0.887	0.1	0.288	0.1	0.1	0.425	6.74	5.87	166	52.5	57.6	7.54	17.8	28.5	226	581	182	69.8	0.1	0.1	0.1	3.76	39.3	22.3	511	647	1600	85.3	90	91.9	98.2	0.133	3.56	264	18.2	18.3	11.2	75	138	64.7	167	71.6	57.6	2440	0.1	0.1	0.1
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	80	26.8	50.9	16	0.1	4.2	4.38	0.23	3.35	50.6	53.3	1610	263	111	25.2	156	213	128	212	74.7	180	4.02	3.33	6.74	24.1	151	89.6	135	158	294	59.3	224	94.9	64	2.39	6.04	56	99.8	64.5	63.4	266	92.2	65.3	113	106	114	856	8.89	0.37	0.1
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	3.82	6.31	9.38	2.4	0.1	0.1	0.1	0.1	0.1	20.4	6.68	482	73.1	16.1	3.06	64.3	29.9	23.7	14.7	5.41	55.7	0.1	0.1	0.1	3.37	85.5	55	7.08	10.7	11.6	6.96	45.4	21.5	8.59	0.1	0.1	0.121	27.7	16.7	19.3	61.2	22.4	10.8	12.7	13.1	14.8	44.9	0.345	0.1	0.1
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.116	0.0501	0.04	0.04	0.04	0.0838	0.0482	0.0477	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0571	0.04	0.04	0.04	0.0459	0.214	0.044	0.04	0.04	0.04
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.11	0.0685	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.108	0.0429	0.04	0.04	0.04
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.01	0.01	0.01	0.01	0.01	0.0107	0.016	0.0133	0.011	0.04	0.04	0.0746	0.0889	0.04	0.12	0.04	0.0462	0.04	0.04	0.04	0.144	0.04	0.04	0.04	0.04	0.28	0.139	0.04	0.053	0.0764	0.169	0.04	0.0521	0.0881	0.04	0.04	0.409	0.04	0.104	0.04	0.056	0.0459	0.04	0.0564	0.0594	0.472	0.296	0.04	0.04	0.04
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.0145	0.01	0.01	0.04	0.06	0.129	0.207	0.04	0.791	0.04	0.063	0.04	0.04	0.0555	0.749	0.04	0.04	0.04	0.0539	0.435	0.309	0.139	0.04	0.472	0.0419	0.04	0.0597	0.392	0.04	0.04	0.382	0.04	0.411	0.04	0.105	0.0582	0.04	0.06	0.141	2.59	3.45	0.04	0.04	0.04
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	4.14	1.38	2.69	1.36	0.1	0.422	1.41	0.1	0.1	0.1	11	9.83	3.91	17.4	12.7	1.13	4.88	5.24	8.04	7.74	9.3	0.905	0.1	0.1	3.59	27.8	34.1	35.1	13.8	47.5	1.76	4.25	68.8	233	0.346	0.1	16.1	1.2	10.5	3.41	34.5	23.7	33.1	63.1	38.7	489	160	0.58	0.332	0.477
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	22.4	4.01	10.6	1.57	0.1	1.1	0.436	0.1	0.582	6.45	51.3	59.5	29.2	80.4	61	5.53	24.7	69	162	89	57	2.74	0.1	0.1	17.6	115	129	245	211	447	28.7	59.7	354	671	1.69	2.53	111	14.8	49	21.6	205	155	163	446	203	1900	1050	0.771	0.805	1.7
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	51.1	18.6	54.5	5.71	1.04	22.6	4.15	8.48	14.3	38.8	106	400	114	234	93.1	39.3	103	97.5	133	90	125	58	29.9	17.8	36.9	289	239	228	160	219	41.2	147	779	1040	15.9	21.7	45.1	84.3	154	72.8	441	298	400	874	406	2530	881	60.5	10.7	23.7
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	9.02	8.6	30	0.444	0.453	2.95	0.1	1.49	2.31	20.5	28	180	38.6	59.9	26	23.2	25.2	24.3	24.6	21.4	55.2	10.4	3.41	3.47	8.4	141	90.9	47.8	32.6	35.1	6.61	33.8	191	248	7.09	4.01	6.04	31	53.6	23.9	111	85.7	93.4	185	100	504	175	11.5	4.17	6.74
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	2.49	3.08	12.3	0.1	0.1	0.326	0.1	0.1	0.1	7.63	10.4	57.8	12	17.6	8.33	8.43	7.53	8.18	7.84	8.08	22.2	3.5	0.1	0.1	2.45	57.4	35.1	14.1	9.58	9.9	1.25	14.2	57.4	68.9	3.19	0.1	2.06	10.4	19.6	7.94	32.8	29.2	27	47.5	30.5	158	58.4	3.77	1.73	2.82
Polyaromatic Hydrocarbons (PAHs)																																																													
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	93.9	32.6	113	12	12	12	12	12	12	181	5140	45.6	275	3180	2710	14.9	138	763	350	1010	62.3	12	12	12	1350	1040	4240	9770	1840	3530	128	79.5	17000	204000	12	20.7	342	16.8	9610	1360	4980	15600	10600	16000	17900	39300	8530	12	12	12
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	91.1	34.7	32.5	8	8	8	8	8	8	22.9	609	172	69.4	254	244	8	55.9	71.5	134	112	460	8	8	8	86.6	207	647	446	127	274	18	153	1950	13000	25.9	8	619	144	1670	130	340	1380	313	906	1870	3270	840	8	57.3	8
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	302	108	206	27.9	16	16	16	16	16	245	10900	745	506	3510	4160	24	1130	729	604	1460	1010	16	16	16	1870	1800	5060	11800	2160	2970	180	172	19900	167000	16	30.1	169	230	10300	2200	5130	25200	10900	15700	18200	27000	8100	16	41.7	16
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	479	385	654	71.5	14	14	21.3	14	14	992	18500	4790	1030	7670	5610	56.1	1650	2210	2220	3070	2440	21.5	14	23.8	3880	2900	5830	14100	4680	3960	259	187	31900	134000	44.5	80.9	27.1	1500	27200	5410	11500	48700	34100	43400	38400	40700	14500	39.4	91.5	14
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	295	417	611	59.7	15	15	15	15	15	890	13500	4090	1080	8740	4810	50.4	1200	2120	2000	2800	2300	22.8	15	15	3340	2310	4080	10600	4160	2980	193	115	31900	106000	28.5	72.8	15	1800	27100	4950	10100	42000	32000	40900	35700	32300	11600	35.4	72.8	15
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	548	602	1030	104	15	15	34.6	15	15	1340	19400	4020	1450	11000	6100	79.6	1740	3430	3040	4230	2700	36.6	15	37	4730	3450	2480	16300	6470	4350	306	258	47800	161000	45.8	135	32.2	2390	41100	7220	13400	52700	47600	61100	52500	46300	16700	57	108	15
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	191	259	310	35.9	14	14	14	14	14	446	7810	5280	534	4340	2540	25.3	673	1000	1080	1500	1300	14	14	14	1660	1200	2250	6250	1960	1680	107	83.8	15100	52800	14	40.9	14	960	13900	2510	5730	24200	15200	17300	17400	16400	6060	14	42.5	14
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	190	285	512	53.7	24	24	24	24	24	647	9450	4350	907	6940	3200	42	672	1690	1480	2070	1420	24	24	24	2330	1600	2740	7320	3280	2050	132	103	22300	69400	24	61.9	24	1330	18600	3380	6700	27100	24400	31300	26300	20600	7710	24	48.8	24
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	542	422	677	71.7	10	10	24.8	10	10	945	15200	6640	1080	6630	4520	59.5	1550	1960	1860	2810	2400	22.6	17.4	32.8	3310	2520	4570	11800	3720	3740	276	175	27900	112000	40.5	80.9	26.7	1670	27400	4640	9310	40100	29800	36300	28600	31400	12000	34.1	91.8	10
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	40.8	63.7	122	0.023	0.023	0.023	0.023	0.023	0.023	171	2290	929	235	1710	771	0.023	155	397	329	459	280	0.023	0.023	0.023	546	372	534	1860	795	479	35.3	0.023	5600	17800	0.023	0.023	0.023	227	4630	799	1660	7360	6270	7290	6230	4590	1700	0.023	0.023	0.023
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	180	215	407	40.9	0.018	0.018	0.018	0.018	0.018	677	10500	3980	1030	7180	3250	44.4	771	1960	1640	2260	1400	0.018	0.018	0.018	2680	1800	3000	8320	3730	2060	138	93.5	24600	78300	0.018	64.7	0.018	1440	21500	3860	7710	29900	27500	34600	29200	21400	7980	27.9	43.5	0.018
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	1530	732	1250	162	0.017	0.017	51.2	24.2	0.017	2130	56900	11300	2360	18200	16200	126	5420	5180	6360	8460	6520	49.4	39.4	53	10700	8000	17500	42600	12000	15400	905	556	78900	400000	112	233	204	2350	57600	14600	29800	129000	79400	103000	109000	135000	47700	90.5	192	0.017
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	266	36.8	63	10	10	10	14.6	10	10	68.3	3170	36.8	155	2940	1760	19.6	259	347	198	377	469	10	10	10	1110	878	3560	7720	838	2690	113	237	14600	166000	19	25.7	930	68.7	4320	703	2730	13500	3440	8640	22700	39200	9200	10	45.5	10
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	393	141	461	69.4	9	9	35.1	9	9	162	12700	1270	2810	7480	26000	119	1010	1690	1140	4130	1460	28.7	26.9	20.7	2140	2330	9270	11900	5740	3950	550	1630	29600	380000	29	50.9	5920	162	39900	929	22000	23300	17700	34100	40600	110000	26100	57.8	68.2	12.5
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	1580	419	704	97.8	15	15	46.6	15	15	580	37400	6530	1280	15800	15400	110	2440	2580	1750	5340	4760	36.7	28.8	37.4	6390	5730	15900	45200	8400	10800	823	567	51900	485000	87.1	164	1490	953	37600	6920	18600	79100	29100	56600	93100	142000	34800	51.1	204	15
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	1.35	0.699	1.08	0.137	0.015	0.015	0.0401	0.015	0.015	1.66	38.4	9.96	1.82	14.3	11.2	0.0958	4.06	4.2	5.05	6.09	5.21	0.039	0.0278	0.0423	7.45	6.16	13.1	30.7	9.1	11.1	0.682	0.717	53.7	269	0.0813	0.164	0.147	2.37	49.4	10.7	21.4	94.3	58.1	74.4	75.4	90.4	36.8	0.069	0.157	0.015
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	8.06	4.85	8.23	0.933	0.118	0.118	0.268	0.118	0.118	11.2	262	64.2	16.6	120	109	0.867	22.9	30.3	29.2	46.2	34.2	0.257	0.14	0.247	53.5	42.3	94.7	237	69	72.1	4.85	5.12	475	2820	0.514	1.23	9.9	17.6	392	70.3	171	654	426	582	614	800	250	0.462	1.26	0.118
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	85.2	87.7	95.8	79.2	83.6	108	85.6	75.3	85.3	89.1	84.7	93.4	93.1	91	88.4	93	90.2	87.2	85.7	87.8	91.5	90.6	86.5	87.2	84.2	85.5	90.9	86.2	89.3	85.9	86.6	91.4	88.9	85.7	86.2	90	90.3	90	89	85.2	90.1	87.1	90.1	86.9	90.5	76.3	98.7	80.7	82	90.6
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	84.3	88.5	94	81	82.4	93	88.8	70.4	88.2	89.2	90.6	93.3	86.2	91	91.1	90.6	95	88.9	87.3	81.2	90.7	88.2	83.6	82	85.2	85.8	85	89.6	92.2	97.1	89.7	90.6	88.8	99.3	83.3	83.9	91.2	83.9	86.6	84.6	89.5	87.8	89.4	89.5	90.7	87.8	106	83	84.5	87.3
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	78.8	93.9	107	82	83.2	93.9	92.9	83.7	96.2	88.8	86.4	91.5	84.8	89.5	88.9	87.3	98	88.7	89.4	89.2	87.3	85.4	91.4	87.6	86.3	85.1	88.4	91.5	89.6	87.8	88.5	93.4	85.4	85	90.5	87.8	91.3	87.9	93.5	86.7	85.6	80.1	82	85.9	84.2	86	96.4	85.6	86.9	84.7
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	48.1	94.1	99.1	79.1	91.2	84.6	86.4	89.5	99.5	85	84.7	89.7	89	91.8	86.3	84.8	102	85.1	85.2	87.6	82.4	81.1	82.4	80.1	83.9	78.5	87.5	87.1	85.4	79.6	78.8	81.6	91.6	79.2	83.1	81.2	80.2	85.7	85.1	87.6	81.3	77.9	82.7	86.4	82.3	82.2	87.9	83.9	81.8	81.4
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	34.8	83.5	95.4	74.4	84.2	84	88.5	82	92.5	82.1	83.4	100	101	99.7	81.9	92.9	89.5	90	90.2	92.1	77.7	95	79.7	75.7	86.1	78.5	79.6	84.4	92.9	76.7	72.9	66.8	99.1	87.1	84.7	79.4	80	84.7	86	92.3	76.1	100	92.4	85.9	89.9	70.6	86.4	89.2	80.3	89.7
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	109	37.5	71.1	21.9	0.1	4.49	6.03	0.23	3.78	77.7	67.2	2290	398	190	39.3	244	281	387	828	270	331	4.02	3.33	6.74	31.2	305	177	681	852	2020	156	365	225	182	2.53	9.6	350	150	104	96.7	414	264	152	308	201	201	3470	9.24	0.37	0.1
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	86.7	32.6	97.8	9.09	1.49	27.1	6	9.97	17.2	65.8	196	649	185	392	193	69.1	158	196	328	208	247	72.1	33.3	21.2	66.5	572	493	556	417	748	78.3	245	1390	2190	25	28.2	179	131	267	122	791	563	689	1570	748	5420	2260	73.3	16	32.6
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	196	70.1	169	31	1.49	31.6	12.2	10.3	21.1	144	264	2940	584	582	234	313	439	583	1160	478	580	76.1	36.6	28	97.8	880	671	1240	1270	2770	235	609	1620	2380	27.6	37.9	530	282	372	218	1210	827	842	1880	950	5630	5740	82.5	16.4	32.6
Metals - (Solid)																																																													
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			333000	116000	184000	139000	28100	21800	19200	22600	20700	233000	169000	134000	58000	139000	137000	83800	89500	211000	151000	130000	64000	20700	30600	32700	165000	292000	173000	131000	121000	123000	100000	243000	139000	133000	29600	25500	29600	160000	136000	149000	86300	105000	161000	80500	63400	69000	140000	31000	28200	29700
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			8320	10500	11500	7400	592	229	240	472	156	7950	24800	43800	11200	24600	33500	2970	3240	20000	40900	33300	9590	196	200	481	31500	12200	21400	23000	25400	42100	6120	7520	24400	17300	282	1220	239	36400	37600	44100	9240	18700	29000	12900	3660	25700	26900	461	448	280
Metals - (Liquid)																																																													
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			-	201000	-	53700	-	172000	-	217000	-	-	-	-	-	82600	-	183000	-	259000	-	-	150000	-	-	-	-	208000	-	233000	138000	-	196000	-	76600	-	186000	-	-	-												
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			-	35600	-	7050	-	19200	-	15800	-	-	-	-	-	5730	-	40600	-	10900	-	-	16600	-	-	-	-	14900	-	12100	26600	-	28500	-	8790	-	12900	-	-	-												
Phenols																																																													
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01	0.0107	0.0107	0.0119	0.476	0.05	0.0108	0.05	0.01	0.01	0.01	0.01	0.01	0.0646	0.0204	0.05	0.01	0.01	0.01	0.01	0.0217	0.17	0.01	0.01	0.01	0.01	0.01	0.05	0.0224	0.0112	0.339	0.024	0.0336	0.1	0.011	0.05	0.01	0.01												
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01	0.0107	0.0107	0.01	0.014	0.05	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.226	0.0511	0.05	0.01	0.01	0.01	0.01	0.0326	0.283	0.01	0.0167	0.01	0.01	0.01	0.05	0.0448	0.056	0.0113	0.204	0.0672	0.1	0.033	0.05	0.01	0.01												
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015	0.015	0.015	0.015	0.015	0.075	0.015	0.075	0.015	0.015	0.015	0.015	0.015	0.162	0.0307	0.075	0.015	0.015	0.015	0.015	0.0326	0.15	0.015	0.015	0.015	0.015	0.015	0.075	0.015	0.015	0.015	0.024	0.0784	0.15	0.033	0.075	0.015	0.015												
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035	0.035	0.035	0.035	0.49	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.452	0.102	0.035	0.035	0.035	0.035	0.035	0.0868	0.452	0.035	0.035	0.035	0.035	0.035	0.035	0.0672	0.0672	0.35	0.252	0.179	0.035	0.077	0.035	0.035	0.035												
Inorganics																																																													
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42																																																		
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01																																																		
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33																																																		
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32																																																		
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32																																																		
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42																																																		
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90																																																		
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61																																																		
Asbestos																																																													
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Date of Analysis	TM048	No units		1371	0	0				0.00		-	08/06/2018	-	08/06/2018	-	11/06/2018	-	11/06/2018	-	-	-	-	-	11/06/2018	-	11/06/2018	-	06/06/2018	-	-	11/06/2018	-	-	-	-	08/06/2018	-	11/06/2018	11/06/2018	-	11/06/2018	-	11/06/2018	-	11/06/2018	-	-	-												
Analysed By	TM048	No units		1371	0	0				0.00		-	James Richards	-	James Richards	-	Lucy Caroe	-	Barbara Urbanek-Walsh	-	-	-	-	-	Barbara Urbanek-Walsh	-	Lucy Caroe	-	Marcin Magdziarek	-	-	Barbara Urbanek-Walsh	-	-	-	-	James Richards	-	Andrzej Ferfecki	James Richards	-	Renata Bozhkov	-	Barbara Urbanek-Walsh	-	Renata Bozhkov	-	-	-												
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00																																																				
Analysts Comments	TM304	No units		1002	0	0				0.00																																																				
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Detected	-	-	-	-	Not Detected	-	Not Detected	Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-												
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-												
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-												
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-												
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-												
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-												
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	Trace	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-												
Comments	TM048	No units		1371	0	0			0	0.00		-	0	-	0	-	0	-	Loose fibres in soil.	-	-	-	-	-	0	-	0	-	0	-	-	Loose fibres in soil.	-	-	-	-	0	-	0	Fibre bundles in soil	-	0	-	0	-	0	-	-	-												
Volatile Organic Compounds (VOCs)																																																													
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		111	95.8	101	113	110	105	104	95.1	104	108	105	112	94.8	109	99.4	99.7	101	109	103	98	94.3	104	109	111	110	107	92.1	102	101	94.6	102	106	102	78.3	104	105	108	113												
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		98.6	95.7	98.9	98.9	98	95.1	97.4	95.9	97	97.6	97.9	97.9	96.9	98.8	90	95.9	96	96.6	97.6	97.5	95.3	98.8	96.8	98.6	98.2	96.4	90.9	95	98	94.4	98.1	98.9	96.6	90.7	94.1	96.9	100	98.3												
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		96.9	87.7	91	98.4	93.8	88.5	89.6	84.4	86.8	98.9	87.4	88.6	83.8	96.2	74.9	81	92.7	85.1	93.3	89.3	83.2	95.2	88.9	89.7	94.2	87.9	73.5	86.1	101	82.7	87.5	101	93.2	73.4	79.8	84.6	103	99												
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.2	2	2	2	0.1	0.1	0.1	2	0.1												
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1.8	0.09	0.09	0.18	0.09	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1.8	0.18	1.8	1.8	1.8	0.172	0.09	0.09	1.8	0.09												
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.4	0.07	0.07	0.14	0.07	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.4	0.14	1.4	1.4	1.4	0.116	0.07	0.07	1.4	0.07												
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.8	0.04	0.04	0.08	0.04	0.08	0.04	0.04	0.04	0.04	0.04	0.0592	0.04	0.04	0.04	0.8	0.08	0.8	0.8	0.8	0.04	0.04	0.04	0.8	0.04												
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.2	2	2	2	0.183	0.1	0.1	2	0.1												
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.2	2	2	2	0.1	0.1	0.1	2	0.1												
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		4.17	0.537	14.2	0.13	0.315	0.392	0.13	1.38	0.305	0.13	0.13	0.13	1.34	2.6	5.11	2.26	0.439	1.22	0.26	0.219	3.22	5.9	0.13	0.13	6.39	0.13	1.77	0.356	23.2	0.681	11.9	6.44	37.3	236	10.3	0.13	2.6	0.13												
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	8	0.4	0.4	0.8	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	8	0.8	8	8	8	0.47	0.4	0.4	8	0.4												
Subcontracted: Inorganics																																																													
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												

Glan Llyn Residential Soil Data

											Sample ID	TP3CB301	TP3CB302	TP3CB303	TP3CB501	TP3CB3V	TP3CB5V	TP3CD301	TP3CD302	TP3CD3V	TP3CM401	TP3CM402	TP3CM403	TP3CM4V	3CA1	3CA1	3CA1	3CA2	3CA2	3CA2	3CA3	3CA3	3CA3	3CA4	3CA4	3CA4	3CA5	3CA5	3CA5	3CA6	3CA6	3CA7	3CA7	3CA8	3CA8	3CA1V	3CA2V	3CA3V	3CA4V	3CA5V	3CA6V	3CA7V	3CA8V	3CB2	3CB2
											Depth	0.45	0.65	0.9	0.5	1.3	1.6	0.45	0.65	1.7	0.5	1.2	2	3.6	0.5	1	1.5	0.5	1.5	2.5	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5	0.5	1.5	0.5	1.5	0.5	1	2.3	2.9	2	2.2	1.8	2.2	2.2	1.8	1	2.2
											Sampled Date	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	28/09/2017	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	30/07/2018	30/07/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	07/08/2018	30/07/2018	13/08/2018	13/08/2018
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**																																												
Carbon																																																							
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	8.59	46.7	3.86	7.02	4.52	1.78	2.98	3.5	0.888	4.19	>100	6.59	5.55	6.15	17.4	16.7	5.65	55.3	6.19	14.4	10.8	5.72	6.83	22.8	8.28	9.38	16.7	8.24	3.79	4.67	6.24	5.72	1.46	4.83	5.24	5.9	1.36	1.43	6.62	1.72	1.57	1.91	5.59	74
Metals (Solids)																																																							
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	6	4.85	7.92	7.14	9.1	9.75	8.64	6	11.9	7.66	0.652	6	11.4	8.07	4.25	4.94	8.52	3.53	7.05	6.25	18.6	12.8	9.27	7.43	6	9.35	7.92	6	6.29	6.77	9.54	2.62	5.12	12.6	12.6	12.1	9.17	8.92	13.2	8.64	10.8	10.6	16.2	3.14
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	1.5	0.958	1.93	1.48	0.559	0.22	3.28	0.2	0.168	0.375	0.159	0.978	0.02	0.114	0.02	0.142	0.02	0.0729	0.2	0.02	0.02	0.2	0.2	1.2	0.211	0.455	1.67	0.2	0.02	0.02	0.381	0.02	0.02	0.2	0.0351	0.101	0.02	0.02	0.347	0.02	0.02	0.02	0.887	0.122
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	252	80.3	227	265	33.8	46.4	10.1	137	19.5	25.3	3.01	637	72.8	41.4	15.1	9.23	104	6.89	539	72	81.4	92.1	143	200	584	155	168	385	167	235	147	112	300	303	34.3	34	34.2	36.7	24.8	34.7	29.6	36.8	127	12.2
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	28.9	21.7	109	30.5	24.5	18	1790	22.5	9.51	15.2	8.91	14	22.9	15.3	13.5	13.2	17.7	10.2	15.2	18.1	26.2	42	20.1	47.3	19	22.8	28.3	16.2	13.4	19.3	18.6	7.11	14.4	45.1	34.7	24.2	20.1	21.2	27.5	20.1	13.6	16	18.6	16.5
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	103	39.3	68.7	93.5	44.4	25.2	312	29.5	20.2	32.3	6.34	29.9	30.5	44.5	21.1	17.9	58.2	10.6	10.5	24.6	55.8	88	59.5	91.7	55.9	88.7	99.8	23.3	29.7	48.3	63.9	10.4	11.9	17.9	37.3	40.1	22.9	20.9	45.3	21.1	21.3	25.9	84.4	30.1
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	1.4	0.14	1.4	1.4	0.663	0.645	1.4	1.4	0.526	0.69	0.14	1.4	0.856	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	1.4	1.4	0.14	1.4	1.4	1.4	1.4	0.14	0.14	1.4	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	17.7	18.4	65	22.6	27.2	37.3	22.8	19.1	32.9	29.2	1.43	2.7	29.4	12	8.52	11.8	16.4	6.33	14.7	17.3	32.5	39.9	16.7	14.6	12.7	22.6	17.3	2.07	9.68	12.8	17.6	5.46	5.29	35.3	27.1	28.7	36.6	37.4	29.3	33.4	29.9	28.5	19	7.25
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	10	9.64	14.4	12.6	1	1	10	10	1	1	1	13.1	1	1.2	1.44	1.5	2.99	1	13.3	1.89	4.2	10	10	12.6	15.5	10	12	10.6	3.84	4.84	10	3.92	9.33	10	1	1	1	1	1	1	1	1	10	1
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	756	91.8	454	333	66.9	66.4	59.1	223	46.6	48.6	8.94	528	100	67.4	20.2	20.9	149	17.1	454	261	165	613	210	223	415	304	302	291	230	369	213	167	244	338	49.8	52.1	51.2	52.6	41.7	50.7	48	53.5	469	15.7
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	379	324	178	446	150	116	4930	94.8	82.9	146	17.8	56.6	120	191	86.3	113	289	67.8	47.2	118	205	306	178	1050	227	308	635	175	122	296	218	51.3	56.6	108	136	149	109	125	145	123	90.2	104	292	105
TPH Criteria Working Group (TPH CWG)																																																							
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04																															
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00	0.0158	0.0109	0.008	0.0101	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008																															
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012																															
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009																															
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0286	0.0106	0.026	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0136	0.0154	0.01	0.01	0.01	0.01	0.0241	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.019
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0456	0.01	0.0195	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0124	0.0143	0.01	0.01	0.01	0.01	0.0197	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0123
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.04	0.04	0.537	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.134	0.01	0.0282	0.01	0.01	0.01	0.0132	0.01	0.01	0.0121	0.01	0.01	0.0249	0.0363	0.01	0.01	0.0134	0.0132	0.035	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0347
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	2.81	4.11	0.1	4.18	0.1	0.1	10.8	10.9	0.1	0.1	37.6	0.166	1.26	3.97	1.62	2.28	5.62	8.91	0.1	3.27	2.28	2.96	2.34	4.95	9.14	1.86	2.52	0.298	1.52	3.04	2.14	0.768	0.786	1.34	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.47	6.29
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	11	15.5	0.1	16.9	0.1	0.1	22.1	26	0.1	0.1	19.3	11.9	2.84	12.9	10.9	12.5	26	83.5	0.259	25.9	13.3	14.6	13.4	37.1	23.9	10.5	25	3	6.58	16.3	9.73	5.57	6.09	6.51	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	27.6	62.8
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	89.9	78.3	0.1	91.1	4.33	1.83	112	114	0.708	9.47	22.3	28.4	20.8	74.5	34.7	43.2	146	65.7	16.5	89	51.7	65.1	51.2	66.5	47.9	60.7	53.9	31.3	45	73.6	47.9	25.4	28.7	32.1	1.04	8.52	1.58	1.2	3.86	0.1	0.1	0.146	78.7	81.3
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	41.4	11.8	0.1	27.4	0.1	0.1	25.2	113	0.1	0.1	1.11	7.14	2.61	41.1	8.85	15.5	53.2	13.2	2.15	40.7	15.2	19.4	16.4	16.2	11.9	26.8	12.1	25.5	17.3	35	15.9	6.18	7.44	8.73	0.1	1.73	0.1	0.1	0.1	0.1	0.1	0.1	39.6	19.5
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0308	0.01	0.013	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0131	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.04	0.04	0.358	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0891	0.01	0.0184	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0158	0.0242	0.01	0.01	0.01	0.01	0.023	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0235
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	6.13	7.66	11.4	5.76	0.1	0.1	4.5	5.98	0.1	0.1	104	0.586	0.533	5.43	9.65	70.7	3.92	31.7	0.287	13	5.28	6.87	5.01	19.5	6.54	3.68	16.8	1.03	2.2	6.09	4.39	2.83	0.758	1.56	0.161	0.1	0.1	0.164	0.1	0.1	0.1	6.53	8.18	255
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	32.6	72	46.4	25.7	0.1	0.138	16	32.6	0.1	0.1	90.5	5.95	3.15	39.9	98.2	418	23.5	442	3.92	154	45.9	66.5	33.7	324	81.3	27.8	236	7.03	12.2	37.1	30.9	14.4	12.9	13.7	1.03	1.83	0.312	1.35	2.37	0.1	0.1	51.5	43.6	4330
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	130	206	59.4	143	13.4	6.42	73.4	144	2.21	18.2	116	27.4	42.4	146	432	755	118	1420	26.6	500	161	241	109	1030	370	104	701	54.3	54.4	151	85.3	45.9	71.6	72.1	15.9	20.4	4.22	8.13	21.9	3.99	3.02	160	152	5480
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	60.2	53.7	15.1	55.5	5.4	2.1	30.9	151	0.658	6.02	15.7	8.87	14.1	73.3	134	202	74	311	7.07	155	49.6	78.7	40.3	259	114	43.8	185	51.6	27	64.2	29.2	16.8	23.8	26.1	9.1	4.8	0.29	0.624	4.29	0.1	1.95	47.7	159	826
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	22.7	16.4	4.97	20.8	1.51	0.55	11.7	71.6	0.1	1.74	3.42	3.98	4.5	29.4	45.3	68.1	31.6	99.2	2.27	57.2	16.7	27.4	15.2	81.1	38.2	15.7	59.5	26.3	10.5	26.2	10.5	6.34	7.71	9.03	3.63	1.22	0.1	0.1	0.882	0.1	0.763	15.9	76.7	215
Polyaromatic Hydrocarbons (PAHs)																																																							
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	703	1170	622	291	26.2	12	157	38	12	12	127	12	12	890	1490	410	429	15600	382	3740	1480	1580	1060	9850	4600	962	5320	99.4	167	1120	533	801	12	249	12	12	12	28.9	22	12	12	12	855	61500
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	105	51.1	19.9	139	8	15.4	43.8	144	8	8	257	57.4	8	172	314	114	77	647	21.3	557	137	129	185	393	215	138	263	80	26.4	180	89.4	135	275	114	8	8	8	8	8	8	8	8	71.8	2720
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	1120	2490	415	523	24.4	20.9	293	256	16	16	529	81.8	16	1850	4560	1280	701	47500	529	6520	1940	2450	1450	14900	4310	1460	13900	224	186	1580	542	1030	472	550	16	16	16	22.3	27.4	16	16	16	1550	204000
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	4210	7240	1490	3480	63.7	369	1170	3790	14	22.8	1130	527	218	4290	18100	3790	1750	97300	1840	24000	5890	9560	4090	58600	22500	4080	29300	1630	596	4250	1720	2580	4180	2700	41.4	76.3	65	100	223	14	14	38	4110	358000
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	4270	6630	1350	4950	66.6	528	1260	3850	15	20.7	787	513	272	4010	13300	4770	1490	96900	2440	23300	6060	8290	4120	54200	28300	3740	26400	1950	584	3650	1660	2370	5300	2760	48.1	109	64	124	245	15	15	43.3	3670	303000
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	6850	10700	2620	5570	83.1	689	1750	5270	15	31.5	1490	679	364	6510	24800	6120	2030	139000	3600	37800	8590	12900	6250	72400	48800	6010	40900	2740	946	5580	2440	4010	8100	3690	82	148	98.5	190	356	15	15	63.7	4980	378000
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	2200	4080	830	2400	32.9	299	651	2460	14	14	482	275	145	2280	10200	2330	533	46100	1110	12900	3190	4160	2460	28200	11700	2220	16200	1140	324	2200	778	1500	2540	1300	14	52.1	44.6	63.1	118	14	14	19.7	2040	159000
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	3290	5400	1110	3400	60.1	400	1050	3170	24	24	562	411	226	2980	10100	3080	1040	76200	2010	18100	4270	6080	3190	37700	22800	2900	19900	1340	449	2630	1120	1790	3070	1840	41.3	80.8	47.9	103	146	24	24	24	2600	223000
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	3240	7060	1500	3450	34.6	431	1100	4040	10	23.4	1560	875	192	4260	17500	3640	1560	95400	2420	23400	5160	8900	3910	54500	22700	3750	27100	1810	582	3750	1500	2330	4190	2270	58.3	88.6	55.4	103	246	10	10	37.7	3450	308000
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	812	1410	304	815	0.023	98.5	233	839	0.023	0.023	209	102	0.023	736	3140	1030	231	18100	369	5320	1200	1700	896	11700	6230	839	5800	343	96.5	723	301	517	775	430	0.023	0.023	0.023	0.023	35	0.023	0.023	0.023	675	46100
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	2870	4780	964	2730	43	326	820	2600	0.018	0.018	377	291	170	2780	9880	3120	862	102000	2090	15900	5470	6980	2750	42800	19200	2530	25000	1270	580	2360	1590	1540	3780	1920	31.6	109	39.8	148	214	0.018	0.018	34.3	3210	194000
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	6750	14400	3570	4210	182	406	2280	8320	0.017	34.9	2210	798	268	9660	21700	5490	2730	241000	2410	48200	12200	18400	8170	110000	32700	8980	59300	2300	1240	8550	3500	6150	5200	4940	86.6	114	118	169	394	0.017	0.017	55.1	9730	1260000
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	437	696	259	325	41.6	10	93.1	66.7	10	10	686	30.4	10	735	1350	352	360	10600	21	1670	782	767	618	4330	910	584	4370	81.8	93.3	841	308	705	118	165	10	10	10	10	10	10	10	10	609	76800
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	1710	1230	1480	2050	34.9	46.9	302	419	39.5	9	4140	117	59.6	977	1260	262	415	4090	56.3	2120	1790	1630	2330	3290	1590	1520	2900	148	384	2340	1240	1780	66.2	451	9	9	9	9	13.2	9	9	9	719	13300
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	3390	6310	2790	2220	251	135	973	3790	15	31.5	6470	633	136	5670	14000	3300	2150	103000	141	13400	5630	5880	3860	38500	7470	4220	29900	895	617	4880	1850	3930	1990	2020	49.3	65.1	30.7	53.3	108	15	15	27.6	5290	831000
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09														7.1	15.4	3.83	1.73	193	2.74	35.7	9.52	14.9	6.53	89	33.6	6.6	41.5	2.19	0.906	6.54	2.65	4.46	4.97	4.13	0.0756	0.102	0.0953	0.166	0.325	0.015	0.015	0.0493	6.83	953
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	47	84.1	21.7	40.4	1.06	4.17	14.1	45.6	0.118	0.192	22.8	6.21	2.3	54.9	167	42.9	18.1	1290	22.2	273	73.3	104	51.9	630	268	50.5	348	18.2	7.77	51.2	21.8	35.6	45	29.5	0.514	0.945	0.659	1.27	2.47	0.118	0.118	0.369	50.4	5370
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	99.5	113	102	107	117	115	108	103	124	113	104	98.2	122	95.7	96.3	65.6	71	89.5	96.1	92.2	93.2	93	91.2	91.7	91.3	95.6	97.8	93	94.6	87.1	90	93.9	92.5	94	91.7	92.3	87.8	90	99.2	90.5	88	90.4	111	109
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	94	107	97.1	102	112	105	104	93.7	111	102	103	94	118	107	92	85	106	72.5	91.1	97.9	95	95	99.5	88.5	98	98.1	96.3	94.8	92.8	89.4	90.5	96.1	95.1	91	95	91.7	88	82.3	98.3	87.7	84.1	85.6	116	116
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	94.1	106	95.9	101	110	103	102	94.6	110	101	102	93.7	115	100	118	98.4	98.9	76.5	84.7	94.1	88.3	101	104	95.1	98.9	99.3	92.5	97.2	92.8	91.7	86.5	98.5	96	93.4	94.6	83.1	93.2	85.2	99.8	85.9	87.5	91.1	114	117
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	98.7	108	95.1	105	103	102	104	100	107	97.3	103	96	114	96.3	117	71.9	89.1	79.5	81.5	98.9	94.8	95.2	110	95.3	106	103	97.4	90.9	86	95.4	92.1	100	92.2	92.8	95.1	94.7	96.2	89.9	93.7	79.4	83.7	87	100	111
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	104	112	97.1	112	107	95.1	111	94.4	99.3	89.5	100	98.9	121	95.1	93.9	80.3	88.7	91	79.5	112	107	92.9	114	113	120	109	108	88.8	87.5	95.5	96.6	106	105	93.1	102	94.2	101	91	93.6	81	85.4	95.9	100	105
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	145	110	0.1	140	4.33	1.83	170	264	0.708	9.47	80.3	47.6	27.5	133	56.1	73.4	231	171	18.9	159	82.6	102	83.3	125	92.8	99.8	93.5	60.1	70.4	128	75.7	38	43	48.7	1.04	10.2	1.58	1.2	3.86	0.1	0.1	0.146	151	170
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	229	340	132	230	18.8	8.66	125	333	2.86	24.2	327	42.8	60.2	264	674	1450	219	2200	37.9	823	262	393	188	1630	572	180	1140	114	95.8	258	150	79.9	109	113	26.2	27	4.82	10.3	28.6	3.99	4.97	266	362	10900
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00														397	731	1520	449	2370	56.8	981	344	495	272	1760	665	280	1230	174	166	386	226	118	152	162	27.2	37.3	6.4	11.5	32.4	3.99	4.97	266	514	11100
Metals - (Solid)																																																							
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			128000	102000	276000	162000	34100	39700	169000	141000	36900	31800	1160	127000	39800	45000	24100	15600	54800	8780	118000	68000	72900	185000	85700	102000	109000	97500	113000	124000	80400	75900	72800	44100	132000	255000	20700	27500	24200	29500	28000	21700	29400	32600	94800	12100
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			19200	<0.13	26800	24000	807	1640	4020	15100	1590	750	133	28800	2460	3730	2790	1890	10200	523	26200	7800	12700	9430	9510	33100	27600	11500	20800	21400	12300	14300	9310	9660	33900	21400	287	417	383	472	776	487	941	332	12100	735
Metals - (Liquid)																																																							
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			199000	102000	160000	169000	-	-	118000	174000	-	37200	2090	265000	-	128000	-	211000	-	137000	-	194000	-	171000	85000	-	50200	57500	47900	-	-	-	-	-	-	-	-	175000	111000	164000	-	85500	-	74000	-	18000
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			14100	15000	5700	10200	-	-	18500	19000	-	11200	279	12700	-	21900	-	16000	-	14100	-	39500	-	9800	13900	-	4320	7310	8570	-	-	-	-	-	-	-	-	14400	24500	17700	-	9830	-	6590	-	2820
Phenols																																																							
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01	0.01	0.011	0.0112	0.01	0.01	0.01	0.0111	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0104	0.0107	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.114	0.236	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01	0.01	0.01	0.0224	0.01	0.01	0.01	0.01	0.01	0.0133	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0103	0.0411	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0226	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.124	0.277	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																																																							
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	0.0933	0.111	0.0661	0.16	-	-	0.357	0.17	-	0.0972	0.0621	0.0917	-																															
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	10.7	11.5	12.3	10.9	8.48	8.86	10.5	12.1	8.29	8.08	7.81	12.7	8.24																															
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33	-	-	-	-	-	-	-	-	-	-	-	-	-																															
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	0.319	0.272	0.265	0.256	-	-	0.176	9.28	-	0.052	0.398	0.31	-																															
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	0.957	0.816	0.795	0.768	-	-	0.528	27.8	-	0.156	1.19	0.93	-																															
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	0.326	0.199	0.466	0.557	-	-	0.39	0.846	-	0.0481	0.02	0.628	-																															
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1	4.21	13.9	1.13	1	1	1	1.64	1	1	1	1	1																															
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	12	18.3	12	12	342	141	14.8	12	170	12	12	12	246																															
Asbestos																																																							
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	0.001	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	TM048	No units		1371	0	0				0.00		06/10/2017	06/10/2017	06/10/2017	06/10/2017	-	-	06/10/2017	06/10/2017	-	06/10/2017	06/10/2017	06/10/2017	-	10/08/2018	-	09/08/2018	-	10/08/2018	-	10/08/2018	-	01/08/2018	10/10/2018	-	10/10/2018	10/10/2018	10/10/2018	-	-	-	-	-	-	-	-	01/08/2018	01/08/2018	03/08/2018	-	09/10/2018	-	10/10/2018	-	10/10/2018
Analysed By	TM048	No units		1371	0	0				0.00		Renata Hatos	Renata Hatos	Renata Hatos	Renata Hatos	-	-	Renata Hatos	Renata Hatos	-	Renata Hatos	Renata Hatos	Renata Hatos	-	Renata Bozhkov	-	Renata Bozhkov	-	Renata Bozhkov	-	Renata Bozhkov	-	James Richards	Andrzej Ferfecki	-	Andrzej Ferfecki	James Richards	Marcin Magdziarek	-	-	-	-	-	-	-	-	Lucy Caroe	James Richards	Andrzej Ferfecki	-	Marcin Magdziarek	-	Andrzej Ferfecki	-	James Richards
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	0.001	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-	-	None	-	-	-	None	-	-	-	-	-	-																															
Analysts Comments	TM304	No units		1002	0	0				0.00		-	-	N/C	-	-	-	N/C	-	-	-	-	-	-																															
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	0.001	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected	Not Detected	Detected	Not Detected	-	-	Trace	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Detected	-	Not Detected	-	Not Detected	-	Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	Not Detected	Not Detected	Not Detected	-	Detected	-	Not Detected	-	Not Detected
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		Not Detected	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		Not Detected	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		Not Detected	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		Not Detected	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-	-	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Comments	TM048	No units		1371	0	0			0	0.00		0	0	Fibre bundles in soil	0	-	-	Loose fibres in soil	0	-	0	0	0	-	0	-	Loose fibres in soil	-	0	-	0	-	Material typical of asbestos cement debris	0	-	0	0	0	-	-	-	-	-	-	-	-	Soil containing material typical of asbestos cement	0	0	-	Loose fibres in soil	-	0	-	0
Volatile Organic Compounds (VOCs)																																																						
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	95.7	93.8	105	101	99.3	109	108	102	97.7	110	103	111	105	109	108	112	103	105	101	105	113	104	104	105	102	103	105	103	104	107	105
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	95.1	91.5	94.4	102	94.6	96	97.9	98.7	93.6	95.9	98.8	99.2	94.9	98	99.3	97	100	99.1	109	99.9	100	98.9	97.7	95.9	98.7	95	98.5	97.4	96.9	96.6	99.3
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	87.6	86.3	98.1	95.1	89.9	87.4	85.8	95.8	81.2	93.6	94.2	96.3	85.8	95.9	89.9	96.6	98.9	96.9	99.8	102	99.7	90.3	88.5	87.6	96.8	87.6	92	95.4	86.7	86.5	96.5
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.18	0.09	0.09	0.09
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.14	0.07	0.07	0.07
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.04
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	0.303	0.758	0.13	0.13	0.825	0.28	0.318	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.221	0.13	0.13	0.13	0.13	0.26	0.173	0.368	0.13
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4
Subcontracted: Inorganics																																																							
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances	3CB2
											Sample ID	3CB2
											Depth	2.8
											Sampled Date	13/08/2018
Carbon												
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	30
Metals (Solids)												
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	3.16
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	0.154
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	15
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	10.5
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	23
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	0.14
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	8.2
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	1
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	28.8
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	92.5
TPH Criteria Working Group (TPH CWG)												
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00	
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00	
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00	
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00	
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.01
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.01
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.01
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.01
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	1.78
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	17
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	21.3
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	1.99
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.01
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.01
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.01
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.01
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	10.7
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	172
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	440
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	97.6
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	30.2
Polyaromatic Hydrocarbons (PAHs)												
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	1860
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	61.4
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	4860
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	14900
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	13500
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	21900
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	6810
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	9860
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	14500
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	2340
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	9140
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	33800
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	787
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	735
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	8420
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	25.1
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	169
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	92.1
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	96.4
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	98.3
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	102
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	94.4
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	42
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	720
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	762
Metals - (Solid)												
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			23000
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			1910
Metals - (Liquid)												
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			-
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			-
Phenols												
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035
Inorganics												
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33	
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	
Asbestos												
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Date of Analysis	TM048	No units		1371	0	0				0.00		-
Analysed By	TM048	No units		1371	0	0				0.00		-
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		
Analysts Comments	TM304	No units		1002	0	0				0.00		
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-
Comments	TM048	No units		1371	0	0			0	0.00		-
Volatile Organic Compounds (VOCs)												
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		111
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		98.9
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		99.5
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		0.1
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		0.09
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		0.07
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.04
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		0.1
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		0.1
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		0.13
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		0.4
Subcontracted: Inorganics												
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

											Sample ID
											Depth
											Sampled Date
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Sample ID	3CB1	3CB1	3CB3	3CB3	3CB3	3CB4	3CB4	3CB5	3CB5	3CB1V	3CB3V	3CB4V	3CB5V	3CC1	3CC1	3CC3	3CC3	3CC3	3CC4	3CC4	3CC5	3CC5	3CC1V	3CC3V	3CC4V
Depth	0.8	1.2	0.5	1	1.9	0.7	1.4	0.5	1	1.65	2.4	2.4	1.4	0.5	1	0.5	1	1.5	0.7	1.4	0.5	1	1.451.45	2.2	2.4
Sampled Date	23/10/2018	23/10/2018	19/10/2018	19/10/2018	19/10/2018	19/10/2018	19/10/2018	18/10/2018	18/10/2018	23/10/2018	19/10/2018	19/10/2018	18/10/2018	23/10/2018	23/10/2018	19/10/2018	19/10/2018	19/10/2018	19/10/2018	19/10/2018	18/10/2018	18/10/2018	23/10/2018	19/10/2018	19/10/2018
Carbon																									
Soil Organic Matter (SOM)	0.934	1.95	13	40.2	12.9	9.14	1.95	6.74	3.03	4.14	1.88	6.47	2.31	0.391	2.28	61.9	4.45	0.36	9.26	0.828	19.7	7.84	2.31	1.32	1.01
Metals (Solids)																									
Arsenic	8.04	9.6	41.1	23.9	17	5.97	6	9	12.2	9.16	12.1	14.2	12.6	6.61	8.01	12.4	20.7	7.04	14.7	6	19.3	9.45	9.11	10.6	9.1
Cadmium	0.404	0.398	0.02	0.2	0.2	0.766	0.2	0.02	0.2	0.02	0.02	0.16	0.02	0.893	0.02	1.59	0.919	0.2	1.16	1.25	10.1	1.9	0.02	0.02	0.02
Chromium	7.58	12.8	61.9	184	127	79.8	366	170	174	34.6	32	37.4	30.3	34.5	99.6	195	192	465	32	516	115	204	27.6	34.7	22.4
Copper	11.3	14.8	27.8	47.7	38.4	19.3	40.7	18.8	57	20.2	18.8	23.2	18.4	14.3	10.2	30.4	188	42.5	42.4	15.3	44.9	69	17.8	17.5	7.35
Lead	99.6	29.8	198	45.3	25.9	43	18.6	81.5	54.6	24.1	19.8	46.7	26.9	44.4	13.7	182	70	7	369	34.6	1320	190	18.8	21	23.5
Mercury	0.14	0.14	0.14	1.4	1.4	1.32	1.4	0.14	1.4	0.14	0.14	0.14	0.14	1.4	0.14	1.4	1.4	1.4	0.14	1.4	1.4	1.4	0.14	0.14	0.14
Nickel	28.2	26.8	18.9	35.6	25.7	14.7	29.2	13.9	38.4	25.3	37.4	25.4	31.9	29.3	16.3	36	137	32.5	27.5	10.7	40.2	59.9	31.8	36.8	25
Selenium	1	1	2.01	16.5	10	1.37	14.1	5.13	10	1	1	1	1	10	3.26	10	10	15.3	1.82	14.6	10	10	1	1	1
Vanadium	15	27.1	189	107	97.5	160	377	231	275	53.2	48.5	63.5	53	67.4	259	155	344	460	64.7	693	195	399	46.7	53.6	41.1
Zinc	117	91	745	240	83.1	446	70.5	492	302	106	107	164	127	153	82.5	812	190	29.2	2870	89.1	5610	749	101	104	114
TPH Criteria Working Group (TPH CWG)																									
Benzene																									
Toluene																									
Ethylbenzene																									
sum of detected mpo xylene by GC																									
Aliphatics >C5-C6	0.02	0.02	0.02	0.0341	0.0305	0.02	0.02	0.02	0.02	0.02	0.02	0.0231	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Aliphatics >C6-C8	0.02	0.02	0.02	0.0737	0.0502	0.02	0.02	0.02	0.02	0.02	0.02	0.0631	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Aliphatics >C8-C10	0.02	0.02	0.02	0.044	0.0295	0.02	0.02	0.02	0.02	0.02	0.02	0.0724	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Aliphatics >C10-C12	0.02	0.02	0.02	0.0539	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0816	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Aliphatics >C12-C16	0.1	0.1	2.97	7.12	1.7	2.29	0.1	1.75	1.66	0.1	0.1	0.1	0.1	5.68	2.96	3.7	0.305	0.1	0.1	3.96	2.83	2.82	0.1	0.1	0.1
Aliphatics >C16-C21	0.1	1.1	10.4	24.3	5.31	8.32	0.1	8.01	12.3	0.1	0.1	0.1	0.1	24.6	9.5	24.2	1.07	0.1	1.53	10.5	11.7	12.1	0.1	0.1	0.1
Aliphatics >C21-C35	0.1	7.85	58.9	128	28.1	37.7	2.4	44.1	82.4	3.73	1.8	4.63	0.1	93.4	35.4	88.6	6.77	59.6	23.3	52.9	53.1	87.3	0.1	0.1	0.1
Aliphatics >C35-C44	0.1	0.1	20.9	17.7	3.78	9.83	0.1	18.2	31.3	0.1	0.1	0.1	0.1	33.2	12.6	33.9	1.78	50.3	5.73	11.1	11.8	35.4	0.1	0.1	0.1
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Aromatics >EC8-EC10	0.02	0.02	0.02	0.0286	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0493	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Aromatics >EC10-EC12	0.02	0.02	0.02	0.0352	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0539	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Aromatics >EC12-EC16	0.1	0.1	5.23	5.47	1.31	3.3	0.1	13.2	2.54	0.1	0.1	0.1	0.1	3.23	3.1	29.5	1.5	0.1	0.15	1.14	3.92	1.73	0.1	0.1	0.1
Aromatics >EC16-EC21	0.1	2.01	31.4	30.4	7	18.5	2.07	307	22.7	0.1	0.1	2.17	0.1	15.4	14.4	371	14.8	0.637	2.33	13.8	37.4	14.2	0.1	0.1	0.1
Aromatics >EC21-EC35	0.1	11.8	116	101	21.9	98.6	8.39	634	133	14.6	1.54	20.7	6.66	59	37.2	1010	51.7	15.4	24.2	136	111	106	3.05	1.89	3.64
Aromatics >EC35-EC44	0.1	1.41	40.5	23.4	4.67	31.6	6.95	175	47.7	0.944	0.1	4.01	0.702	27.7	12.5	263	15.1	9.4	4.11	45.2	26.5	44.6	0.1	0.1	0.1
Aromatics >EC40-EC44	0.1	0.1	13.4	6.04	1.42	9.87	3.29	53	15.9	0.1	0.1	1.24	0.1	9.72	4.21	66.2	6.83	3.47	0.1	16.3	7.91	17.4	0.1	0.1	0.1
Polyaromatic Hydrocarbons (PAHs)																									
Acenaphthylene	12	17.2	678	1400	467	429	15.9	4040	131	12	12	12	12	226	208	10300	334	12	68.7	12	535	194	12	12	17.9
Acenaphthene	8	8	82.6	60.7	8	25.5	8	913	156	8	8	8	8	42.4	44.6	342	13.8	8	8	139	27.9	95.8	8	8	8
Anthracene	16	41.3	989	2700	900	474	34.8	17600	372	16	16	16	16	454	425	12700	330	16	42	152	531	375	16	16	16
Benz(a)anthracene	23	62.2	3090	6190	2080	1440	214	63600	2850	14	39	77.5	22.4	872	806	43600	1350	136	271	2740	2120	2680	14	27.8	111
Benzo(a)pyrene	16.3	54.4	2840	5110	1870	1900	105	58700	3760	15	15	44.4	24.4	727	649	36800	1430	76.3	237	4710	1790	3510	15	22	120
Benzo(b)fluoranthene	32.8	83.5	4520	8880	3210	2700	258	88100	5310	15	23.6	76	36	860	956	64100	2360	955	444	4710	2360	4650	15	33.4	167
Benzo(k)fluoranthene	14	25.6	1730	3290	1140	845	106	28900	2060	14	14	26.4	14	413	302	21800	797	333	115	2030	1010	1940	14	14	81.7
Benzo(g,h,i)perylene	24	47.4	2240	4190	1280	1770	102	42700	2590	24	24	24	24	612	554	29900	1110	560	239	3640	1300	2480	24	24	84
Chrysene	22.9	70.3	2640	5440	2240	1570	312	58900	3220	10	41.3	101	23.3	795	744	42300	1120	586	223	2900	1480	3010	10	22.9	123
Dibenzo(a,h)anthracene	0.023	0.023	609	1100	300	439	26.4	10200	648	0.023	0.023	0.023	0.023	137	124	6970	243	110	40.1	643	334	374	0.023	0.023	0.023
Indeno(1,2,3-cd)pyrene	19	45.3	2790	4760	1630	2140	81.9	50600	2910	0.018	0.018	33.4	0.018	645	531	33100	1600	250	232	3810	1180	2300	0.018	0.018	65.4
Fluoranthene	48.3	207	6830	14300	4620	2710	389	197000	3670	0.017	107	240	28.2	2140	2130	99000	3070	287	398	2700	4370	3650	0.017	35.7	186
Fluorene	10	19.5	358	850	10	103	10	7450	123	10	10	10	10	193	206	4060	106	10	10	52.9	238	101	10	10	10
Naphthalene	15.9	87.1	689	1110	537	252	39.7	11900	498	9	9	9	9	671	655	3050	206	24.9	77.7	48.3	387	162	9	9	9
Phenanthrene	45.9	186	2730	8150	1940	809	357	101000	1470	15	15	67.6	15	1690	1780	32900	982	81.1	164	732	1800	1170	15	15	33.3
Pyrene	0.0356	0.15	5.04	10.7	3.56	2.43	0.258	133	3.69	0.015	0.089	0.171	0.0262	1.52	1.5	72.8	2.35	0.21	0.297	2.97	3.23	3.34	0.015	0.0298	0.146
PAH, Total Detected USEPA 16	0.26	1.1	37.9	78.2	25.8	20	2.3	875	33.5	0.118	0.3	0.837	0.161	12	11.6	514	17.4	3.61	2.85	32	22.7	30	0.118	0.172	1.13
Naphthalene-d8 % recovery**	99.5	90.2	92.8	90.1	89.5	77.9	87.9	97.1	93.7	86.9	87.2	87.6	95.5	94.7	93.2	87.6	91	82.6	87.3	74.5	94.4	91.3	89.2	82.4	80.7
Acenaphthene-d10 % recovery**	98.3	88.5	91.8	90.9	87.3	90.4	92.2	91.8	90.5	88.4	90.7	92.9	96.1	94.5	93.2	98	89.9	83.4	93.3	82.4	93.6	92.2	89	93.6	82.2
Phenanthrene-d10 % recovery**	103	85.2	89.9	86.5	88.9	95.3	92.6	90.2	90.1	86.4	91	94.4	97	93.3	92.8	91.7	88.2	82.2	93.1	81.2	94.1	93.3	87.8	97.7	84.9
Chrysene-d12 % recovery**	81	80.2	87.3	74.6	85.5	76.8	86.3	85.6	87	84.4	84.8	90.8	93.1	91.9	91.9	78	85.1	83	91.5	70.5	87.2	87.6	85.9	80.3	84
Perylene-d12 % recovery**	75.9	78.4	84.1	73.7	75.6	71.5	76.7	96.4	90.9	83.1	76.6	83.1	91.5	87.5	88.2	81.1	89.2	78	81.6	77.8	75.6	89	76.6	74.8	80.6
Total Aliphatics >C12-C44	0.1	8.95	93.2	177	38.9	58.2	2.4	72.1	128	3.73	1.8	4.63	0.1	157	60.5	150	9.92	110	30.5	78.4	79.5	137	0.1	0.1	0.1
Total Aromatics >EC12-EC44	0.1	15.2	193	160	34.9	152	17.4	1130	206	15.5	1.54	26.9	7.37	105	67.2	1680	83.1	25.5	30.8	196	179	167	3.05	1.89	3.64
Total Aliphatics & Aromatics >C5-C44	0.1	24.2	286	337	73.9	210	19.8	1200	333	19.3	3.33	31.8	7.37	262	128	1830	93	135	61.3	275	259	305	3.05	1.89	3.64
Metals - (Solid)																									
Iron	17100	23800	61800	162000	209000	46100	214000	113000	245000	32400	34400	36600	45300	60400	54900	113000	424000	190000	87800	120000	175000	252000	27700	22600	31500
Manganese	541	1150	8440	25600	10100	8760	26300	10700	19800	195	501	792	1220	3460	6260	13200	19400	28700	3320	58200	10700	17900	710	405	1060
Metals - (Liquid)																									
Calcium	-	52000	78300	-	59600	148000	-	-	135000	-	-	-	-	89800	-	-	86600	-	-	245000	-	132000	-	-	-
Magnesium	-	13800	10400	-	7650	47900	-	-	10200	-	-	-	-	8920	-	-	4950	-	-	11400	-	8300	-	-	-
Phenols																									
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0116	0.01	0.01	0.01	0.01	0.01	0.01	0.0122	0.0327	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.194	0.01	0.0113	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0122	0.0436	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.0363	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.23	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0762	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																									
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.182	0.134	-	0.0526	0.144	-	-	0.239	-	-	-	-	0.149	-	-	0.0927	-	-	0.201	-	0.294	-	-	-
pH	8.25	8.38	7.97	10.8	9.93	7.87	12.5	8.79	11	7.62	8.25	7.87	7.96	8.87	9.42	8.06	11.8	8.03	7.84	11.7	8.4	11.3	7.38	7.82	8.6
Sulphate, Total																									
Sulphur, Total	-	0.0983	0.163	-	0.207	0.105	-	-	0.401	-	-	-	-	0.0703	-	-	0.161	-	-	0.24	-	0.298	-	-	-
Sulphate, Total potential	-	0.295	0.489	-	0.621	0.315	-	-	1.2	-	-	-	-	0.211	-	-	0.483	-	-	0.72	-	0.894	-	-	-
Sulphate, acid soluble (total)	-	0.104	0.155	-	0.152	0.163	-	-	0.759	-	-	-	-	0.265	-	-	0.263	-	-	0.662	-	0.932	-	-	-
Cyanide, Total	1	1	4.05	1	2	142	1	1.98	2.01	1	1	1.18	1	1	1	3.74	4.86	1	5.33	1	8.51	18.7	1	1	1
Exchangeable Ammonia as N	12	12	12	12	12	12	12	12	12	375	265	234	226	12	12	12	12	12	12	12	12	12	205	213	47.9
Asbestos																									
Asbestos Quantification - Gravimetric - %	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	06/11/2018	05/11/2018	-	05/11/2018	05/11/2018	-	-	05/11/2018	-	-	-	-	06/11/2018	-	-	05/11/2018	-	-	05/11/2018	-	05/11/2018	-	-	-
Analysed By	-	James Richards	Lucy Caroe	-	Andrzej Ferfecki	Christian Hallam	-	-	Lucy Caroe	-	-	-	-	Lucy Caroe	-	-	Barbara Urbanek-Walsh	-	-	James Richards	-	Lucy Caroe	-	-	-
Asbestos Quantification - PCOM Evaluation - %	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	N/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	Not Detected	Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	-
Amosite (Brown) Asbestos	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	-
Crocidolite (Blue) Asbestos	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	-
Fibrous Anthophyllite	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	-
Fibrous Tremolite	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	-
Fibrous Actinolite	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	-
Non-Asbestos Fibre	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	-
Comments	-	-	Fibre bundles in soil	-	0	0	-	-	0	-	-	-	-	-	-	-	0	-	-	0	-	0	-	-	-
Volatile Organic Compounds (VOCs)																									
Dibromofluoromethane**	108	116	97.9	101	108	102	80	103	106	112	107	108	107	113	111	95.4	103	109	115	112	93	109	120	102	107
Toluene-d8**	98	98.3	89.4	89.6	96.5	95.2	99.9	96.2	94.4	101	99.5	97.8	99.8	98.1	98.6	85.9	99	98.4	96.8	102	91.8	95.9	101	96.1	99.9
4-Bromofluorobenzene**	103	89.5	73.1	70.4	76.8	87.7	95	85.1	84.9	92.7	94.9	91.4	92.7	85.2	86.8	70.1	91.7	97.8	87.2	102	75.9	91.6	94.7	76.4	97.1
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.18	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.14	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.08	0.08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.13	0.469	0.309	0.13	0.13	0.214	0.151	0.13	0.13	0.13	0.13	0.13	0.13	0.446	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics																									
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	3CD1	3CD1	3CD1	3CD3	3CD3	3CD4	3CD4	3CD5	3CD5	3CD1V	3CD3V	3CD4V	3CD5V	3CE1	3CE1	3CE3	3CE3	3CE4	3CE4	3CE5	3CE5	3CE5	3CF1
Depth	0.3	0.7	1.2	0.8	1.5	0.5	1	0.8	1.6	1.65	1.9	2.5	2.6	0.4	1	0.5	1	0.5	1	0.5	1.5	2	0.3
Sampled Date	23/10/2018	23/10/2018	23/10/2018	19/10/2018	19/10/2018	19/10/2018	19/10/2018	18/10/2018	18/10/2018	23/10/2018	19/10/2018	19/10/2018	18/10/2018	23/10/2018	23/10/2018	19/10/2018	19/10/2018	19/10/2018	19/10/2018	18/10/2018	18/10/2018	18/10/2018	23/10/2018
Carbon																							
Soil Organic Matter (SOM)	2.72	3.91	0.35	0.35	5.57	4.9	3	12.6	2.88	1.52	1.57	6.6	2.05	3.15	4.52	9	0.688	2.91	3.05	3.57	0.984	0.35	0.35
Metals (Solids)																							
Arsenic	24.5	13.1	9.34	21.5	8.76	11.9	5.3	9.01	12.9	11.3	11.6	14.4	10.6	7.53	10.9	7.93	8.19	12	5.1	10.4	6	6	6
Cadmium	0.796	0.02	0.456	0.2	0.02	0.02	0.02	0.192	0.02	0.02	0.02	0.224	0.02	0.256	1.05	0.02	0.583	0.565	0.02	0.02	0.5	1.06	1.04
Chromium	12.9	0.9	20.6	91.7	145	31.9	352	45	318	31.3	32.8	31.4	38.8	27.9	35.4	265	531	35.4	381	58.1	636	623	86
Copper	13	23.4	11.4	35.6	8.58	20.7	6.4	23	8.21	20.4	12.7	20.9	17.6	14.4	18.8	15.1	36.3	22.7	14	17	14	26.9	19.2
Lead	53.5	21.3	15.5	13.2	8.27	35.6	13.9	84.5	21.5	21.8	20.8	43.7	30.6	33.3	65.3	22.6	13.9	47.3	31.2	27	17.8	16.3	37
Mercury	0.14	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	1.4	0.14	0.14	0.14	1.4	1.4	1.4
Nickel	14.1	36.9	28	14.1	7.17	32.3	3.97	19.7	5.25	36	33.1	28.8	30.2	20.7	34.1	15	25.4	30.5	8.93	20.7	11.3	27.2	33.9
Selenium	1	1	1	10	4.72	1	7.89	1.45	8.45	1	1	1	1	1.03	10	5.08	11.8	1	13.6	1.45	10.8	10	10
Vanadium	30.1	25.5	35	163	192	53.5	318	67.7	307	49	54.6	51	60.3	71.1	85	262	629	49.7	741	105	940	1180	82.5
Zinc	206	320	53.5	144	108	144	82.9	300	66	103	96.9	139	126	147	149	106	190	149	102	113	190	45.4	128
TPH Criteria Working Group (TPH CWG)																							
Benzene																							
Toluene																							
Ethylbenzene																							
sum of detected mpo xylene by GC																							
Aliphatics >C5-C6	0.02	0.02	0.02	0.0407	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0214	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.02	0.02	0.02	0.14	0.043	0.0219	0.0217	0.02	0.02	0.02	0.02	0.02	0.0224	0.02	0.02	0.0655	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C8-C10	0.02	0.02	0.02	0.162	0.0368	0.02	0.0206	0.02	0.02	0.02	0.02	0.02	0.0251	0.02	0.02	0.0567	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C10-C12	0.02	0.02	0.02	0.176	0.0808	0.02	0.0733	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0353	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C12-C16	1.49	0.1	0.1	5.24	22.2	0.1	5.18	1.07	16.7	0.1	0.1	0.167	0.1	3.36	1.94	1.89	0.1	0.1	2.63	0.1	0.1	0.1	1.22
Aliphatics >C16-C21	5.78	2.97	0.1	14.1	16.5	0.1	9.21	7	19.3	0.1	0.688	0.604	0.1	12	6.47	21.4	0.1	0.1	9.69	1.35	0.1	0.1	3.89
Aliphatics >C21-C35	33.7	8.1	0.1	98.4	77.2	4.95	142	24.7	86.5	0.1	0.901	3.77	0.1	70.9	36.3	39.1	0.1	3.53	76.3	16.5	0.1	2.42	17.7
Aliphatics >C35-C44	12.9	2.46	0.1	119	90.4	0.1	201	10.6	180	0.1	0.1	0.1	0.1	26.2	13.1	8.97	0.1	0.1	25.3	8.17	0.1	0.1	5.63
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.02	0.02	0.02	0.108	0.0246	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0378	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.02	0.02	0.02	0.117	0.0542	0.02	0.0485	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0239	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	2.45	0.1	0.1	2.6	6.73	0.1	2.48	2.64	5.31	0.1	0.1	0.1	0.1	4.89	2.57	4.17	0.1	0.1	2.03	0.1	0.1	0.1	1.27
Aromatics >EC16-EC21	9.67	1.33	0.1	17	16.7	0.1	18.7	30.9	21	0.1	0.1	0.1	0.1	23.6	10.8	24.1	0.1	1.63	21.9	1.33	1.75	0.1	5.76
Aromatics >EC21-EC35	33.5	5.53	0.1	120	102	8.55	173	122	131	0.1	1.7	12	3.72	74	37.4	81.4	0.1	14.8	127	29.3	12.5	1.44	17.8
Aromatics >EC35-EC44	13.2	1.39	0.1	110	91.3	1.38	172	43.8	219	0.1	0.1	1.63	4.04	28.1	15.2	27.4	0.1	5.06	51.8	19	6.23	0.1	4.69
Aromatics >EC40-EC44	4.75	0.1	0.1	47.1	38.3	0.1	77.1	14.8	109	0.1	0.1	0.1	1.92	9.88	5.39	9.53	0.1	1.88	19.5	7.78	2.67	0.1	1.32
Polyaromatic Hydrocarbons (PAHs)																							
Acenaphthylene	102	12	12	60	66	12	60	4020	60	12	12	12	12	301	175	184	12	12	12	14.4	12	16.2	86.9
Acenaphthene	21.9	8	8	89.9	131	8	80.9	101	40	8	8	8	8	59.6	28.4	77.6	8	8	82.1	24.6	8.74	8	16.4
Anthracene	213	23.4	16	181	288	16	265	2830	142	16	16	16	16	685	326	550	16	16	206	44.3	17.3	39	222
Benz(a)anthracene	429	48.7	14	2220	2620	21.2	2110	14800	2570	14	20.5	125	48.3	1610	586	949	55.6	53.9	1900	327	221	293	399
Benzo(a)pyrene	363	41.7	15	3090	2920	19.4	2050	14700	1810	15	20.1	61.7	36.6	1340	504	817	28.3	53	2100	493	245	235	317
Benzo(b)fluoranthene	453	77.9	15	3270	5000	27.9	3190	18900	3870	15	22.2	111	55.3	2070	602	1290	125	97.4	3880	572	490	347	306
Benzo(k)fluoranthene	182	24.4	14	1700	1870	14	1190	6950	1590	14	14	33.5	20.7	729	303	479	41.4	36.4	1520	208	171	107	171
Benzo(g,h,i)perylene	312	32.9	24	2700	2420	24	1380	10500	1690	24	24	49.8	24	910	424	572	94.9	47.2	1710	360	368	167	250
Chrysene	398	49.2	10	2500	3450	23	2190	12200	3080	10	24.1	175	51.2	1510	565	1100	143	64.6	2580	349	340	401	360
Dibenzo(a,h)anthracene	63.2	0.023	0.023	421	386	0.023	315	2690	293	0.023	0.023	0.023	0.023	246	87	119	0.023	0.023	342	85.9	75	27.5	62.3
Indeno(1,2,3-cd)pyrene	295	50.7	0.018	2570	2260	0.018	1090	9990	1270	0.018	0.018	42.9	0.018	1220	426	600	27.4	35	1360	402	206	159	258
Fluoranthene	1100	125	0.017	2990	3630	34.1	3240	27800	2680	0.017	53.7	266	102	3490	1570	1780	93.5	88.1	3990	450	375	653	1070
Fluorene	89.5	10	10	50	50	10	50	590	50	10	10	10	10	297	138	204	10	10	29	16	10	10	78
Naphthalene	354	37.6	9	192	625	9	201	1330	45	9	9	50.2	9	878	487	568	9	9	79.6	30	27.3	49.3	305
Phenanthrene	823	99	15	934	1620	15	1290	5310	914	15	21.1	94.5	42.2	2410	1110	1430	36.9	31.6	2020	184	241	194	770
Pyrene	0.79	0.0793	0.015	3.37	3.75	0.0289	3.73	21.7	3.87	0.015	0.0435	0.211	0.087	2.54	1.12	1.4	0.0762	0.0709	3.3	0.448	0.299	0.514	0.743
PAH, Total Detected USEPA 16	5.99	0.69	0.118	26.2	31	0.155	22.3	154	23.8	0.118	0.205	1.22	0.443	20.3	8.44	12.1	0.722	0.578	25.1	4.01	3.08	3.2	5.42
Naphthalene-d8 % recovery**	90.2	82.7	94.2	88.5	89.6	82.6	84.4	104	85.8	85.1	87.1	84.6	90.2	85.9	89.1	80.1	83	79.5	80.4	79.6	79.2	80.7	93.1
Acenaphthene-d10 % recovery**	88.8	81.4	92.6	88.7	95.1	83.5	83.6	103	89.7	89.6	88.6	91.7	93.4	92.6	90.9	88.9	86.7	80.3	80.7	91.7	84.9	88.2	91.5
Phenanthrene-d10 % recovery**	87.2	88.9	89.6	88	95.4	91.4	84.6	102	87.9	97.2	90.3	92.9	95.7	96.8	89.8	94.1	88.4	83	89.5	96.7	87.8	90.1	86.9
Chrysene-d12 % recovery**	84.1	72.1	86.5	83.7	103	94.7	87.9	92.4	91.9	105	85.9	87	86.3	104	85	88.7	82.3	78.5	92.3	78.5	78	81.2	81.2
Perylene-d12 % recovery**	79.4	71.7	85.4	79.9	90.6	85.1	78.3	92.9	87	101	90.9	77.7	79.1	91.4	79.2	76.4	84.4	76.1	85.4	71	77.9	70	76.6
Total Aliphatics >C12-C44	53.9	13.5	0.1	237	206	4.95	357	43.3	303	0.1	1.59	4.54	0.1	113	57.8	71.4	0.1	3.53	114	26	0.1	2.42	28.4
Total Aromatics >EC12-EC44	58.9	8.25	0.1	249	217	9.93	366	200	376	0.1	1.7	13.6	7.76	131	66	137	0.1	21.5	202	49.6	20.5	1.44	29.5
Total Aliphatics & Aromatics >C5-C44	113	21.8	0.1	487	423	14.9	723	243	679	0.1	3.29	18.1	7.76	243	124	209	0.1	25.1	316	75.6	20.5	3.86	58
Metals - (Solid)																							
Iron	30000	63700	20700	277000	118000	31300	126000	51100	106000	29500	32600	22700	38300	56900	74900	75100	177000	24700	126000	39100	136000	175000	108000
Manganese	2260	2340	1260	20500	20200	668	20500	3250	26000	376	1300	297	1200	3740	3920	24000	35700	1380	47200	3020	37700	37200	7190
Metals - (Liquid)																							
Calcium	118000	-	18700	91800	-	9350	-	83400	-	-	-	-	-	-	44600	-	225000	37000	-	-	247000	255000	42300
Magnesium	36500	-	11900	7500	-	9760	-	17900	-	-	-	-	-	-	7470	-	9530	14500	-	-	7750	800	8220
Phenols																							
Phenol	0.01	0.01	0.01	0.129	0.0102	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0252	0.01	0.01	0.044	0.01	0.0211	0.01	0.01
Cresols	0.01	0.01	0.01	0.107	0.0102	0.0129	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0504	0.01	0.01	0.01	0.0112	0.0211	0.01	0.01
Xylenols	0.015	0.015	0.015	0.075	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.311	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0756	0.035	0.035	0.044	0.035	0.0423	0.035	0.035
Inorganics																							
Soluble Sulphate 2:1 extract as SO4 BRE	0.106	-	0.0225	0.0968	-	0.0515	-	0.114	-	-	-	-	-	-	0.0879	-	0.151	0.0368	-	-	0.0438	0.289	0.0267
pH	9.07	7.89	8.33	7.98	12.4	8.38	11.5	8.41	12	7.17	8.44	7.96	8.32	10.9	9.64	8.37	12.1	8.63	12.8	8.12	12.2	10.9	9.06
Sulphate, Total																							
Sulphur, Total	0.261	-	0.02	0.0831	-	0.0403	-	0.219	-	-	-	-	-	-	0.101	-	0.462	0.0826	-	-	0.2	0.302	0.0707
Sulphate, Total potential	0.783	-	0.06	0.249	-	0.121	-	0.657	-	-	-	-	-	-	0.303	-	1.39	0.248	-	-	0.6	0.906	0.212
Sulphate, acid soluble (total)	0.417	-	0.02	0.445	-	0.0282	-	0.119	-	-	-	-	-	-	0.205	-	0.863	0.0677	-	-	0.314	0.495	0.108
Cyanide, Total	1	1	1	1.99	1.98	1	1	1	1	1	1	1	1	1	1	1	1	1	4.03	1	1	1	1
Exchangeable Ammonia as N	12	12	24.5	12	12	12	12	15.1	12	95.5	111	124	185	12	12	12	12	12	12	12	12	12	12
Asbestos																							
Asbestos Quantification - Gravimetric - %	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	0.001	-
Date of Analysis	06/11/2018	-	06/11/2018	05/11/2018	-	05/11/2018	-	05/11/2018	-	-	-	-	-	-	06/11/2018	-	05/11/2018	05/11/2018	-	-	05/11/2018	05/11/2018	06/11/2018
Analysed By	Barbara Urbanek-Walsh	-	James Richards	Marcin Magdziarek	-	Lucy Caroe	-	Christian Hallam	-	-	-	-	-	-	Andrzej Ferfecki	-	Barbara Urbanek-Walsh	Christian Hallam	-	-	Lucy Caroe	Marcin Magdziarek	Renata Bozhkov
Asbestos Quantification - PCOM Evaluation - %	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	0.001	-
Additional Asbestos Components (Using TM048)	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	None	-	-	-	-	None	-
Analysts Comments	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/C	-	-	-	-	N/C	-
Asbestos Quantification - Total - %	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	0.001	-
Chrysotile (White) Asbestos	Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Detected	Not Detected	-	-	Not Detected	Detected	Not Detected
Amosite (Brown) Asbestos	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Crocidolite (Blue) Asbestos	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Fibrous Anthophyllite	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Fibrous Tremolite	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Fibrous Actinolite	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Non-Asbestos Fibre	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Comments	Loose fibres in soil.	-	-	0	-	0	-	0	-	-	-	-	-	-	-	-	Loose fibres in soil.	0	-	-	0	Soil containing ACM debris	-
Volatile Organic Compounds (VOCs)																							
Dibromofluoromethane**	129	114	146	103	112	111	109	103	125	115	105	118	113	112	109	103	113	107	116	105	99.2	107	126
Toluene-d8**	98.8	99.9	100	94.2	95.7	100	93.5	96.2	93.8	99.6	99.3	99.6	99.8	97.9	96.6	96.9	99.9	95.6	101	99.1	97.2	99.6	98.3
4-Bromofluorobenzene**	89	90.7	97.8	81.9	83.4	95	86.8	82.6	79.6	92.9	96.9	102	99.8	82.5	82.5	79.9	98.8	80.5	98.8	90	92.9	94.3	84.7
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.009	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.147	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.007	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.004	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.013	0.13	0.13	0.13	0.13	0.224	0.16	0.173	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.04	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics																							
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Sample ID	3CF1	3CF3	3CF3	3CF3	3CF4	3CF4	3CF4	3CF5	3CF5	3CF5	3CF1V	3CF3V	3CF4V	3CF5V	3CG1	3CG1	3CG3
Depth	1	0.5	1	2	0.5	1.1	1.5	0.5	1	2	1.75	2.8	2.7	3.4	0.5	1	0.5
Sampled Date	23/10/2018	22/10/2018	22/10/2018	22/10/2018	22/10/2018	22/10/2018	22/10/2018	18/10/2018	18/10/2018	18/10/2018	23/10/2018	22/10/2018	22/10/2018	18/10/2018	22/10/2018	22/10/2018	22/10/2018
Carbon																	
Soil Organic Matter (SOM)	1.79	13.3	26.4	0.49	2.95	42.6	8.91	5.02	4.57	11.3	1.01	2.02	6.33	1.09	5.45	1.21	10.5
Metals (Solids)																	
Arsenic	24.1	15.8	13.6	9.29	15.4	8.21	11.1	7.96	7.96	6	9.06	13.2	13.6	13.5	9.3	10.6	11.1
Cadmium	0.02	6.44	4.95	0.2	0.02	0.02	0.2	0.902	0.89	0.2	0.02	0.02	0.096	0.02	1.22	0.0723	1.25
Chromium	4.81	217	110	619	29.1	110	459	39.3	592	430	21.6	59.8	44	34.6	83.2	24.4	122
Copper	17.5	44.5	83.7	29.7	11.2	13.4	36.3	24.2	28.8	28.3	8.96	21.4	23.8	9.84	23.8	19.9	24.6
Lead	63.7	737	518	46.2	19.1	22	16.8	50.3	36	39.8	14.2	27.5	36.8	21.3	74.9	47.9	162
Mercury	0.14	1.4	1.4	1.4	0.14	0.14	1.4	0.14	1.4	1.4	0.14	0.14	0.14	0.14	1.4	0.14	0.14
Nickel	44.3	35.5	31.8	20.6	31.7	22.9	27.7	18.4	26.5	31.8	26.6	35.1	26.5	33.7	25.9	33.5	18.4
Selenium	1	10	10	22	1	2.75	15.9	1.18	10	17.6	1	1	1	1	10	1.01	4.67
Vanadium	19.9	284	141	830	55.5	106	654	45.8	970	880	38.3	91.9	65.5	60.4	141	39.5	211
Zinc	195	3440	2600	395	107	78	65.8	181	190	118	81.6	132	124	86.3	236	131	689
TPH Criteria Working Group (TPH CWG)																	
Benzene																	
Toluene																	
Ethylbenzene																	
sum of detected mpo xylene by GC																	
Aliphatics >C5-C6	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.02	0.01	0.01	0.02	0.01	0.0454	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Aliphatics >C8-C10	0.02	0.01	0.01	0.02	0.01	0.0216	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Aliphatics >C10-C12	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Aliphatics >C12-C16	0.1	1.52	0.1	0.1	0.1	4.77	3.06	0.1	5.15	4.79	0.1	0.1	0.1	0.1	2.3	0.525	2.19
Aliphatics >C16-C21	2.82	8.74	6.85	0.1	0.563	16.7	15.1	0.1	10.1	13.2	0.1	0.1	0.1	0.1	7.65	1.18	11.4
Aliphatics >C21-C35	12.3	44.6	37	5.07	1.75	90.8	56.3	30.7	50.7	57.2	0.1	0.288	4.13	0.1	43.4	1.83	27.9
Aliphatics >C35-C44	5.46	7.66	3.24	0.1	0.1	13.1	8.84	17.9	11.7	14.2	0.1	0.1	0.1	0.1	14.3	0.1	5.8
Aromatics >EC5-EC7	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	0.1	4.09	4.2	0.1	0.1	2.26	2.5	0.1	2.84	5.53	0.1	0.1	0.1	0.1	4.03	0.1	3.54
Aromatics >EC16-EC21	0.9	36	34.9	0.426	0.1	12.2	16.5	2.78	33	74.4	0.1	0.1	1.29	0.1	18.2	0.1	18.8
Aromatics >EC21-EC35	5.41	124	123	9.2	12	46.5	53.3	47	148	167	0.1	2.29	24.1	3.28	59.3	0.121	63.7
Aromatics >EC35-EC44	2.02	32.6	33.4	3.06	0.982	4.48	17.5	47.9	53.6	56.2	0.1	0.248	1.98	0.1	26.4	0.1	14.3
Aromatics >EC40-EC44	0.1	11.1	11.8	3.52	0.1	0.1	6.32	21.1	20.1	20.7	0.1	0.1	0.1	0.1	10.9	0.1	3.71
Polyaromatic Hydrocarbons (PAHs)																	
Acenaphthylene	12	613	761	91.5	12	206	60	60	100	411	12	12	12	12	2600	81.8	148
Acenaphthene	8	37.4	31.8	10.4	8	28.2	44.4	40	107	163	8	8	8	8	392	8	38.4
Anthracene	16	754	1010	158	16	287	300	80	329	2410	16	16	16	16	5190	349	221
Benz(a)anthracene	21.3	2670	3690	336	14	955	2750	192	3560	8610	14	33.7	75.4	18.6	8370	325	858
Benzo(a)pyrene	15	2420	3380	306	15	841	3170	134	4420	6520	15	43.8	69.6	19.7	6180	248	669
Benzo(b)fluoranthene	24.6	3760	5560	669	15	1470	3410	208	6680	11100	15	99.6	111	26.4	9970	445	1190
Benzo(k)fluoranthene	14	1190	2090	223	14	551	1390	70	2870	5930	14	42.7	41	14	3660	146	416
Benzo(g,h,i)perylene	24	1810	2460	293	24	604	2690	120	3660	4760	24	50.3	55.5	24	3810	174	475
Chrysene	23	2820	4000	426	10	1100	3000	239	4050	8940	10	55.9	93.6	20.2	8490	393	885
Dibenzo(a,h)anthracene	0.023	374	550	70.4	0.023	161	526	0.115	872	1220	0.023	0.023	0.023	0.023	765	41.8	100
Indeno(1,2,3-cd)pyrene	0.018	2050	2650	234	0.018	490	2560	90	4420	5650	0.018	61.5	63.1	0.018	3400	277	502
Fluoranthene	46	5130	7470	807	22.4	1890	5760	334	6740	21600	0.017	44.2	159	30.8	21800	946	1660
Fluorene	10	172	274	81.4	10	83.8	50	50	61.1	107	10	10	10	10	3460	67.3	197
Naphthalene	22.8	432	608	91.8	9	517	219	45	231	301	9	15.5	18.8	9	4110	266	818
Phenanthrene	40.8	1790	2920	488	15	1060	4270	75	5580	18100	15	15	83.5	15	18700	840	1060
Pyrene	0.0349	3.95	5.67	0.542	0.0178	1.46	5.09	0.275	5.76	17.2	0.015	0.0428	0.132	0.0263	15.1	0.614	1.29
PAH, Total Detected USEPA 16	0.213	30	43.2	4.83	0.118	11.7	35.2	1.38	49.4	113	0.118	0.49	0.903	0.142	116	5.21	10.5
Naphthalene-d8 % recovery**	101	80	88.8	81.3	88.9	70.8	116	89.3	88.9	82.7	86.4	81.2	83.2	84.9	96	91.8	91.2
Acenaphthene-d10 % recovery**	84	88.2	92.8	79.6	91.4	77.2	109	93.8	90.5	87.4	91.7	84.2	86.5	86.1	101	89.7	95.5
Phenanthrene-d10 % recovery**	88.9	89.7	94.1	78.2	92.7	68.6	123	95.6	93.3	94.8	98.2	87.1	89.7	85.4	103	91.9	96.5
Chrysene-d12 % recovery**	83.1	78.5	86.2	75	99.3	58.3	126	100	87.6	98.3	109	92.2	84.6	83	112	85.9	95.7
Perylene-d12 % recovery**	81.5	70.2	76.7	73.6	94.4	53.1	122	83	99.1	92.8	100	91.4	82.3	80.3	90.1	84.9	84.1
Total Aliphatics >C12-C44	20.5	62.5	47.1	5.07	2.32	125	83.3	48.6	77.6	89.4	0.1	0.288	4.13	0.1	67.7	3.53	47.3
Total Aromatics >EC12-EC44	8.33	197	196	12.7	12.9	65.4	89.8	97.7	237	303	0.1	2.53	27.4	3.28	108	0.121	100
Total Aliphatics & Aromatics >C5-C44	28.9	259	243	17.8	15.3	191	173	146	315	393	0.1	2.82	31.5	3.28	176	3.66	148
Metals - (Solid)																	
Iron	41400	202000	223000	205000	29600	58400	187000	21400	163000	149000	26300	51900	31800	31200	84100	45900	62000
Manganese	947	17700	20000	48300	551	6120	35000	3170	31300	26300	1040	1810	1140	657	10600	1660	10300
Metals - (Liquid)																	
Calcium	-	101000	-	189000	22900	-	181000	114000	191000	-	-	-	-	-	128000	-	85100
Magnesium	-	12900	-	8530	10300	-	8320	23400	9860	-	-	-	-	-	20500	-	7810
Phenols																	
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0108	0.066	0.01	0.01	0.01	0.01	0.01	0.01	0.0351
Cresols	0.01	0.01	0.0115	0.0113	0.0111	0.0108	0.01	0.01	0.01	0.022	0.01	0.01	0.01	0.01	0.0109	0.01	0.117
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0351
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.088	0.035	0.035	0.035	0.035	0.035	0.035	0.187
Inorganics																	
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.117	-	0.0949	0.0789	-	0.0261	0.0351	0.0276	-	-	-	-	-	0.147	-	0.308
pH	8.51	7.86	8.36	12.1	8.53	9.99	12.8	8.14	12.8	13	8.42	9.07	8	8.42	10.6	8.61	8.03
Sulphate, Total																	
Sulphur, Total	-	0.184	-	0.212	0.0885	-	0.199	0.109	0.383	-	-	-	-	-	0.321	-	0.178
Sulphate, Total potential	-	0.552	-	0.636	0.266	-	0.597	0.327	1.15	-	-	-	-	-	0.963	-	0.534
Sulphate, acid soluble (total)	-	0.117	-	0.651	0.0361	-	0.488	0.0901	0.597	-	-	-	-	-	0.575	-	0.177
Cyanide, Total	1	10.5	9.68	1.72	1	1	1	1	1.21	2.96	1	1	1	1	1	1	2.46
Exchangeable Ammonia as N	12	12	12	12	12	12	12	12	12	12	23.8	195	234	154	12	12	12
Asbestos																	
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	05/11/2018	-	05/11/2018	05/11/2018	-	05/11/2018	05/11/2018	05/11/2018	-	-	-	-	-	05/11/2018	-	05/11/2018
Analysed By	-	Lucy Caroe	-	Barbara Urbanek-Walsh	Lucy Caroe	-	Christian Hallam	Christian Hallam	Lucy Caroe	-	-	-	-	-	James Richards	-	Barbara Urbanek-Walsh
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected
Amosite (Brown) Asbestos	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected
Crocidolite (Blue) Asbestos	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected
Fibrous Anthophyllite	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected
Fibrous Tremolite	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected
Fibrous Actinolite	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected
Non-Asbestos Fibre	-	Not Detected	-	Not Detected	Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected	-	Not Detected
Comments	-	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)																	
Dibromofluoromethane**	108	119	107	116	124	119	114	113	104	85.7	115	118	126	113	107	121	100
Toluene-d8**	99.5	101	95.8	102	104	91.4	103	96.5	98	95.1	99.5	103	104	99.2	96	101	95
4-Bromofluorobenzene**	90.6	87.5	74.4	101	91.5	74.9	85.7	91.7	96.2	87.4	94.2	91.3	88.6	98.7	83.8	95	98.3
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Benzene	0.09	0.09	0.09	0.09	0.09	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.18
Toluene	0.07	0.07	0.07	0.07	0.07	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.14
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Naphthalene	0.13	0.13	0.174	0.13	0.13	0.26	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.426	0.13	0.355
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
Subcontracted: Inorganics																	
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	3CG3	3CG3	3CG4	3CG4	3CG4	3CG5	3CG5	3CG5	3CG1V	3CG4V	3CG5V	3CH1	3CH1	3CH1	3CH2
Depth	1	1.5	0.5	1	2	0.5	1	1.5	1.7	3.1	3	0.25	0.5	1	0.5
Sampled Date	22/10/2018	22/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	22/10/2018	18/10/2018	18/10/2018	22/10/2018	22/10/2018	22/10/2018	19/10/2018
Carbon															
Soil Organic Matter (SOM)	19.5	24.8	2.69	50.3	11	2.93	20.2	7.05	0.912	1.09	4.21	3.22	1.65	3.36	8.45
Metals (Solids)															
Arsenic	6	8.52	12.7	6	6	6	6	6	9.98	12.6	12.5	11.1	20.4	14.1	10.4
Cadmium	0.2	0.2	0.201	0.67	0.2	0.2	0.2	0.808	0.02	0.204	0.363	0.02	0.252	1.01	0.0482
Chromium	444	300	28.7	166	680	537	743	760	24.3	44	41.6	49.7	11.7	10.1	26.3
Copper	14	16.6	15.4	14	17.9	14	16.5	14	12.3	11.3	20.4	17.7	15.6	17.8	31.7
Lead	20.1	59.5	49.4	23.1	7.14	11.8	25	13.3	21.5	34.5	34.1	20.8	38.4	31.7	30.9
Mercury	1.4	1.4	0.14	1.4	1.4	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Nickel	14.3	16.9	31.6	7.27	11.6	8.47	7.75	9.41	32.5	36.1	30.2	21.1	16.5	17.7	20.4
Selenium	11.7	10	1	10	18.1	11.9	22.6	13.3	1	1	1	2.25	3.21	2.45	1
Vanadium	305	248	50.8	194	578	364	635	865	43.3	64.5	61.8	187	53.3	30.4	52.7
Zinc	102	311	153	24.8	37.5	131	190	50	92.1	129	123	98.7	168	227	158
TPH Criteria Working Group (TPH CWG)															
Benzene															
Toluene															
Ethylbenzene															
sum of detected mpo xylene by GC															
Aliphatics >C5-C6	0.02	0.0684	0.02	0.0451	0.02	0.0203	0.01	0.0366	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.02	0.194	0.02	0.157	0.02	0.0857	0.0337	0.071	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C8-C10	0.02	0.147	0.02	0.0748	0.02	0.0568	0.021	0.0548	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C10-C12	0.02	0.174	0.02	0.0693	0.02	0.0482	0.0168	0.0688	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C12-C16	5.28	6.98	0.1	12.3	6.19	6.54	12.2	5.54	0.1	0.1	0.1	0.766	0.1	0.1	2.38
Aliphatics >C16-C21	19.6	29.4	0.1	23.4	13.7	10.4	53	22.6	0.1	0.767	0.254	2.79	0.1	0.1	10.5
Aliphatics >C21-C35	82.5	114	2.53	61	106	55.3	82.3	108	1.1	9.78	9.83	10.3	3.98	5.34	41.8
Aliphatics >C35-C44	11.3	16.8	0.646	11.2	56.6	4.12	16.8	46.1	0.529	4.57	10.1	3.32	0.31	0.1	13.2
Aromatics >EC5-EC7	0.02	0.0456	0.02	0.0209	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.0661	0.02	0.0418	0.02	0.0257	0.0126	0.0215	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.02	0.098	0.02	0.0506	0.02	0.0375	0.0147	0.0366	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.02	0.116	0.02	0.0462	0.02	0.0321	0.0116	0.0462	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	5.34	6.91	0.1	9.52	5.2	6.51	11.7	6.5	1.59	0.1	0.36	0.564	0.1	0.1	10.8
Aromatics >EC16-EC21	22.7	36.3	0.1	25.2	24.8	20.3	73.3	31.6	0.1	1.6	1.55	2.97	0.535	1.19	145
Aromatics >EC21-EC35	73.4	93.7	3.7	66.7	107	48.1	157	112	3.24	9.84	24.5	6.78	0.1	15	371
Aromatics >EC35-EC44	18.3	29.6	0.1	16.5	58.4	12.8	37.3	52.4	0.191	5.11	17.2	0.588	0.1	1.39	91.4
Aromatics >EC40-EC44	5.14	12.3	2.5	4.58	21.7	4.38	11.2	19.4	0.1	2.03	7.65	0.1	0.1	0.1	23.3
Polyaromatic Hydrocarbons (PAHs)															
Acenaphthylene	450	1400	12	289	56.6	307	1560	364	12	12	12	128	12	12	364
Acenaphthene	31.3	51	8	41.2	77.4	26.5	156	162	8	8	8	24.7	8	8	46.6
Anthracene	878	1890	16	665	179	1240	2510	414	16	16	16	235	16	16	1300
Benz(a)anthracene	3030	4510	25.2	1780	1480	1890	3800	1340	14	96.1	47.7	589	38	42.8	6340
Benzo(a)pyrene	2400	3510	22.6	1480	1100	1430	3650	1180	15	73.9	27.1	453	30	33.1	5150
Benzo(b)fluoranthene	4210	6060	29.6	2740	1940	2240	4290	1590	15	110	38.7	846	52	64.7	8700
Benzo(k)fluoranthene	1610	2090	14	991	726	919	1750	645	14	49.6	14	275	20.6	26.6	2870
Benzo(g,h,i)perylene	1770	2250	24	920	887	746	2590	828	24	56.2	24	326	33.3	35.9	3660
Chrysene	2680	4730	26.8	1720	1900	2070	3510	1220	10	106	49.4	606	39.2	46.5	6640
Dibenzo(a,h)anthracene	504	587	0.023	279	157	226	472	149	0.023	0.023	0.023	76.7	0.023	0.023	793
Indeno(1,2,3-cd)pyrene	2120	1970	0.018	1260	874	1000	2900	847	0.018	46.6	0.018	352	27.3	31.2	3920
Fluoranthene	6230	12900	179	3860	4960	5210	10100	3390	39.1	179	78.1	1420	87	72.5	14400
Fluorene	142	378	10	429	71.5	620	1950	320	10	10	10	134	10	10	298
Naphthalene	814	2460	9	782	292	727	1620	512	9	9	9	443	26.1	16.3	561
Phenanthrene	2420	6920	63.2	1980	7440	3510	8020	3010	15	136	67	1080	74.8	66.2	6640
Pyrene	4.66	9.2	0.129	2.95	3.4	3.51	7.19	2.52	0.0326	0.142	0.0656	0.981	0.0644	0.0692	10.6
PAH, Total Detected USEPA 16	33.9	60.9	0.475	22.2	25.5	25.7	56	18.5	0.118	0.997	0.374	7.97	0.493	0.505	72.2
Naphthalene-d8 % recovery**	92.1	77.4	86.5	93.1	83.5	80.4	77.8	80	75.6	91.5	90.7	82.7	85	80.6	90.1
Acenaphthene-d10 % recovery**	90.1	79.7	84.5	96.4	92.1	84.8	85.1	84.5	83.4	90.7	89.8	89.3	86.1	85.4	95.3
Phenanthrene-d10 % recovery**	88.7	84.8	86.9	94.4	91.3	86.2	87.6	87.1	79.5	88.4	89.2	87	87.5	88.1	96.4
Chrysene-d12 % recovery**	78.6	82.6	80	76.2	85.5	88.8	72.8	76	71.2	85.1	87.1	80.3	80.1	95.5	96.8
Perylene-d12 % recovery**	74.2	73.2	81.3	66.7	73.8	80.2	73.4	77.5	70.9	78.9	82.7	76.6	78.6	88.4	91.7
Total Aliphatics >C12-C44	119	167	3.17	108	182	76.3	164	182	1.63	15.1	20.2	17.2	4.29	5.34	67.9
Total Aromatics >EC12-EC44	120	167	3.7	118	195	87.8	279	202	5.02	16.6	43.6	10.9	0.535	17.6	619
Total Aliphatics & Aromatics >C5-C44	238	334	6.87	226	377	164	444	385	6.65	31.7	63.8	28.1	4.82	23	686
Metals - (Solid)															
Iron	145000	144000	23800	57200	144000	152000	165000	142000	37300	25900	25200	51200	22600	27800	29600
Manganese	19700	29900	784	15600	35900	31000	40700	47200	621	791	590	4470	3790	2500	1320
Metals - (Liquid)															
Calcium	-	139000	-	111000	237000	192000	-	238000	-	-	-	-	107000	-	100000
Magnesium	-	24900	-	15600	9810	38100	-	22000	-	-	-	-	18800	-	7920
Phenols															
Phenol	0.01	0.01	0.01	0.01	0.0107	0.0214	0.021	0.0215	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.0113	0.01	0.01	0.01	0.01	0.0107	0.0105	0.0108	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics															
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.115	-	0.0868	0.0236	0.052	-	0.0222	-	-	-	-	0.101	-	0.146
pH	10.2	12.1	8.42	11.7	12.9	12.3	12.9	12.6	8.08	8.93	8.46	8.9	8.38	7.53	8.7
Sulphate, Total															
Sulphur, Total	-	0.154	-	0.397	0.398	0.214	-	0.191	-	-	-	-	0.365	-	0.199
Sulphate, Total potential	-	0.462	-	1.19	1.19	0.642	-	0.573	-	-	-	-	1.1	-	0.597
Sulphate, acid soluble (total)	-	0.291	-	0.334	0.456	0.305	-	0.445	-	-	-	-	0.33	-	0.112
Cyanide, Total	1	1.34	1	1.13	1	1	1.17	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	12	12	12	12	12	12	79.3	164	12	12	12	12	12
Asbestos															
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	05/11/2018	-	05/11/2018	05/11/2018	05/11/2018	-	05/11/2018	-	-	-	-	05/11/2018	-	05/11/2018
Analysed By	-	Barbara Urbanek-Walsh	-	Marcin Magdziarek	Barbara Urbanek-Walsh	Lucy Caroe	-	Barbara Urbanek-Walsh	-	-	-	-	Marcin Magdziarek	-	James Richards
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected
Amosite (Brown) Asbestos	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected
Crocidolite (Blue) Asbestos	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected
Fibrous Anthophyllite	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected
Fibrous Tremolite	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected
Fibrous Actinolite	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected
Non-Asbestos Fibre	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	Not Detected
Comments	-	-	-	0	0	0	-	0	-	-	-	-	-	-	0
Volatile Organic Compounds (VOCs)															
Dibromofluoromethane**	108	100	112	107	95.8	99.8	99.6	99.4	112	112	110	109	113	112	108
Toluene-d8**	89.8	93.9	100	101	97.2	95.6	96.5	95.7	101	99.1	99.5	99.4	101	99.6	96.8
4-Bromofluorobenzene**	73.8	82.2	99.3	101	93.8	109	69.5	79.6	101	94.1	95.7	87.4	98.2	94	81.9
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	2	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	1.8	0.09	1.8	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	1.4	0.07	1.4	0.11	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.8	0.04	0.8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	2	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	2	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.586	0.13	2.6	0.13	2.6	0.279	0.288	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	8	0.4	8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics															
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	3CH2	3CH2	3CH3	3CH1V	3CH2V	3CI1	3CI1	3CI1	3CI2	3CI2	3CI2	3CI3	3CI3
Depth	1	2	0.5	1.251.25	2.3	0.5	1	1.5	0.5	1	2	0.5	1.5
Sampled Date	19/10/2018	19/10/2018	22/10/2018	22/10/2018	19/10/2018	22/10/2018	22/10/2018	22/10/2018	19/10/2018	19/10/2018	19/10/2018	18/10/2018	18/10/2018
Carbon													
Soil Organic Matter (SOM)	90.2	5.86	3.81	3.24	2.16	1.05	2	6	6.79	9.76	31.5	19	0.35
Metals (Solids)													
Arsenic	9.64	12.9	6	13.4	10.8	6.3	10.7	9	9.71	12.6	10.1	2.93	6
Cadmium	0.02	0.053	0.2	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.2
Chromium	14.9	28.6	678	35.1	40	64.5	12.7	11.7	24.7	25.8	5.1	192	554
Copper	37.4	41.9	14	21.5	26.4	13.2	15.3	17.6	16.3	18	35.2	3.28	14
Lead	69	34.1	7	21.9	21.3	19.2	37.2	26.7	34.8	27.2	28.1	5.52	7
Mercury	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4
Nickel	19.2	26.7	6.26	26.3	39	10.4	33.9	19.1	22.5	23.6	22.7	4.3	10.4
Selenium	1.1	2.04	14.6	1	1	1.4	1	1	1	1	1	5.24	13.1
Vanadium	45	55.7	512	58.7	58.3	93.3	31.2	46.4	45.4	44.8	63	198	394
Zinc	335	105	46.2	90.6	114	87.9	118	95.9	179	144	127	55.2	67.4
TPH Criteria Working Group (TPH CWG)													
Benzene													
Toluene													
Ethylbenzene													
sum of detected mpo xylene by GC													
Aliphatics >C5-C6	0.0232	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.126	0.0223	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.0219	0.02	0.0662	0.02
Aliphatics >C8-C10	0.288	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.403	0.02
Aliphatics >C10-C12	4.68	0.0211	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	1.33	0.02
Aliphatics >C12-C16	31.1	2.51	0.1	0.1	0.1	2.26	1.27	1.69	0.1	1.05	1.06	58.4	0.999
Aliphatics >C16-C21	123	48.6	1.98	0.1	0.1	5.78	2.28	5.14	3.09	5.11	3.52	23	7.6
Aliphatics >C21-C35	194	36.2	19	1.05	0.1	33	6.31	33.9	26	35.1	16.7	297	54.7
Aliphatics >C35-C44	53.3	6.75	0.654	0.1	0.1	11.7	1.04	10.5	7.67	8.58	2.23	261	13.7
Aromatics >EC5-EC7	0.0255	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.0499	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.191	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.268	0.02
Aromatics >EC10-EC12	3.12	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.888	0.02
Aromatics >EC12-EC16	356	32.2	0.1	0.1	0.1	2.64	0.581	2.3	0.1	0.1	2.92	21.2	0.765
Aromatics >EC16-EC21	3100	343	0.1	0.1	0.1	14.1	1.97	10.8	2.81	5.95	32.5	41.3	4.78
Aromatics >EC21-EC35	3690	570	4.35	9.76	1.97	48.4	5.09	38.6	34.2	50.2	116	737	30
Aromatics >EC35-EC44	688	126	2.03	0.511	0.128	14.9	0.4	12.3	8.71	4.9	30.9	559	18.1
Aromatics >EC40-EC44	159	31.1	3.06	0.1	0.1	4.75	0.1	4.15	3.04	0.1	7.04	250	7.92
Polyaromatic Hydrocarbons (PAHs)													
Acenaphthylene	1950	7410	43.6	12	12	202	13.7	85	51.6	37.9	83.5	0.24	44.9
Acenaphthene	227	431	8	8	8	39.9	8	21	8	8	8	3600	8
Anthracene	4350	12600	64.5	16	16	537	37.4	209	87.7	76.3	373	927	74.9
Benz(a)anthracene	8840	31300	137	14	14	1310	117	642	272	295	2640	360	204
Benzo(a)pyrene	8040	28000	119	15	15	988	82.2	459	259	208	2360	300	168
Benzo(b)fluoranthene	10900	38000	209	15	15	1620	143	649	445	411	5750	391	266
Benzo(k)fluoranthene	4240	12500	84.2	14	14	700	71.4	279	159	132	2000	280	94.6
Benzo(g,h,i)perylene	5640	19000	106	24	24	743	57.4	321	195	163	2180	0.48	115
Chrysene	7730	27500	149	10	10	1270	118	541	273	320	2830	390	260
Dibenzo(a,h)anthracene	993	4300	0.023	0.023	0.023	201	0.023	58.3	50.5	36.7	729	0.46	29
Indeno(1,2,3-cd)pyrene	7060	22500	69.3	0.018	0.018	865	71	317	242	160	2850	0.36	129
Fluoranthene	30900	93100	353	0.017	24.4	2790	226	1400	513	555	7450	2410	494
Fluorene	2970	6430	10.7	10	10	191	13.7	91.1	34.1	33.7	10	1650	13.7
Naphthalene	1320	5100	167	9	9	494	43.1	275	105	66.9	1090	10000	205
Phenanthrene	22100	50800	239	15	15	1500	163	855	279	316	4960	6370	377
Pyrene	22.2	66.7	0.254	0.015	0.015	2.06	0.177	1.02	0.414	0.423	4.48	1.55	0.393
PAH, Total Detected USEPA 16	139	426	2.01	0.118	0.118	15.5	1.33	7.22	3.38	3.23	39.8	27.7	2.87
Naphthalene-d8 % recovery**	92.4	89.4	81.1	92.1	94.9	89.2	84.3	82.2	91.9	87	90.7	97.9	79.8
Acenaphthene-d10 % recovery**	100	91.8	82.3	92.1	98.4	89.7	76.3	84.9	95.1	92	93.3	92	83.2
Phenanthrene-d10 % recovery**	96.6	94.5	83.7	88.3	0	88.1	87.8	84.9	99.2	93.5	97.2	85	86.5
Chrysene-d12 % recovery**	89.8	98.3	83.1	84.1	107	83.2	91.1	78.4	105	96.2	101	80.1	83.1
Perylene-d12 % recovery**	89.4	91.1	74.2	84.5	102	82.8	85.5	72.2	101	84.7	95.2	82.9	73.4
Total Aliphatics >C12-C44	401	94.1	21.7	1.05	0.1	52.8	10.9	51.2	36.7	49.9	23.5	639	77
Total Aromatics >EC12-EC44	7830	1070	6.38	10.3	2.09	80.1	8.04	64.1	45.7	61.1	183	1360	53.6
Total Aliphatics & Aromatics >C5-C44	8240	1160	28	11.3	2.09	133	18.9	115	82.4	111	206	2000	131
Metals - (Solid)													
Iron	68300	22100	165000	39800	36600	61100	40000	50100	24200	25100	73700	98400	176000
Manganese	1780	1210	29900	286	416	4990	1210	1720	1260	952	1870	20000	36900
Metals - (Liquid)													
Calcium	-	18300	201000	-	-	195000	-	121000	64900	-	39600	182000	205000
Magnesium	-	3880	33800	-	-	55700	-	48300	12700	-	6030	34200	41100
Phenols													
Phenol	0.0116	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.0348	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0109	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.0464	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics													
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.349	0.0353	-	-	0.108	-	0.117	0.481	-	0.291	0.0697	0.0099
pH	8.24	7.61	12.6	7.48	7.72	9.9	8.64	9.02	8.38	8.11	7.97	12.7	12.4
Sulphate, Total													
Sulphur, Total	-	0.127	0.126	-	-	0.0927	-	0.134	0.179	-	0.324	0.461	0.0738
Sulphate, Total potential	-	0.381	0.378	-	-	0.278	-	0.402	0.537	-	0.972	1.38	0.221
Sulphate, acid soluble (total)	-	0.17	0.292	-	-	0.194	-	0.154	0.191	-	0.107	0.491	0.19
Cyanide, Total	8.59	2.85	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	12	116	104	12	12	12	12	12	12	12	12
Asbestos													
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	0.001	-	0.001	-	-
Date of Analysis	-	05/11/2018	05/11/2018	-	-	05/11/2018	-	05/11/2018	05/11/2018	-	05/11/2018	05/11/2018	05/11/2018
Analysed By	-	Lucy Caroe	Marcin Magdziarek	-	-	Marcin Magdziarek	-	James Richards	Lucy Caroe	-	James Richards	Marcin Magdziarek	Christian Hallam
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	0.001	-	0.001	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	None	-	None	-	-
Analysts Comments	-	-	-	-	-	-	-	-	N/C	-	N/A	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	0.001	-	0.001	-	-
Chrysotile (White) Asbestos	-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	Detected	-	Detected	Not Detected	Not Detected
Amosite (Brown) Asbestos	-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Crocidolite (Blue) Asbestos	-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Fibrous Anthophyllite	-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Fibrous Tremolite	-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Fibrous Actinolite	-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected
Non-Asbestos Fibre	-	Not Detected	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Detected	Not Detected	Not Detected
Comments	-	0	-	-	-	-	-	-	Loose fibres in soil	-	Fibre bundles in soil	0	0
Volatile Organic Compounds (VOCs)													
Dibromofluoromethane**	116	122	112	112	110	107	117	108	109	110	111	107	101
Toluene-d8**	92.8	96.1	96.3	99.9	98.8	96.9	96.7	99.6	98.1	92.2	93.9	98.2	96.1
4-Bromofluorobenzene**	82.2	74.6	93.1	96.2	96.1	87.7	86.2	90.5	83.5	79.8	72.2	84	91.6
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.136	0.2	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	32.2	0.793	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.152	2.25	0.13
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics													
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

											Sample ID	3CI1V
											Depth	1.7
											Sampled Date	22/10/2018
Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances	
Carbon												
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	0.609
Metals (Solids)												
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	7.45
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	0.02
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	21.4
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	8.03
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	13
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	0.14
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	25.3
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	1
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	35.8
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	71.1
TPH Criteria Working Group (TPH CWG)												
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00	
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00	
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00	
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00	
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.02
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.02
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.02
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.02
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	0.1
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	0.1
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	0.1
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	0.1
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.02
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.02
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.02
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.02
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	0.1
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	0.1
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	0.1
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	0.1
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	0.1
Polyaromatic Hydrocarbons (PAHs)												
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	12
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	8
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	16
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	14
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	15
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	15
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	14
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	24
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	10
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	0.023
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	0.018
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	0.017
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	10
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	9
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	15
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	0.015
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	0.118
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	80.9
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	84.4
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	87.6
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	96.7
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	97.1
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	0.1
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	0.1
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	0.1
Metals - (Solid)												
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			22100
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			586
Metals - (Liquid)												
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			-
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			-
Phenols												
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035
Inorganics												
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	-
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	8.27
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33	
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	-
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	-
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	-
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	12
Asbestos												
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Date of Analysis	TM048	No units		1371	0	0				0.00		-
Analysed By	TM048	No units		1371	0	0				0.00		-
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-
Analysts Comments	TM304	No units		1002	0	0				0.00		-
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-
Comments	TM048	No units		1371	0	0			0	0.00		-
Volatile Organic Compounds (VOCs)												
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		111
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		102
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		102
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		0.1
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		0.09
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		0.07
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.04
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		0.1
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		0.1
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		0.13
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		0.4
Subcontracted: Inorganics												
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances	3CL6V
											Depth	3
											Sampled Date	23/10/2018
Carbon												
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	3.26
Metals (Solids)												
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	13.8
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	0.02
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	34.2
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	20.2
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	22.4
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	0.14
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	30
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	1
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	61.4
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	112
TPH Criteria Working Group (TPH CWG)												
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00	
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00	
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00	
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00	
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.02
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.02
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.02
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.02
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	0.1
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	0.1
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	0.1
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	0.1
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.02
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.02
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.02
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.02
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	0.1
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	0.1
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	5.28
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	0.1
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	0.1
Polyaromatic Hydrocarbons (PAHs)												
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	12
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	8
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	16
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	14
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	15
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	15
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	14
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	24
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	10
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	0.023
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	0.018
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	27.7
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	10
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	9
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	15
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	0.015
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	0.118
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	83.4
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	82.1
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	82.9
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	82.4
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	75.5
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	0.1
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	5.28
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	5.28
Metals - (Solid)												
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			42300
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			577
Metals - (Liquid)												
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			-
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			-
Phenols												
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035
Inorganics												
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	-
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	7.59
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33	
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	-
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	-
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	-
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	172
Asbestos												
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Date of Analysis	TM048	No units		1371	0	0				0.00		-
Analysed By	TM048	No units		1371	0	0				0.00		-
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-
Analysts Comments	TM304	No units		1002	0	0				0.00		-
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-
Comments	TM048	No units		1371	0	0			0	0.00		-
Volatile Organic Compounds (VOCs)												
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		113
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		101
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		94.4
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		0.1
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		0.09
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		0.07
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.04
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		0.1
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		0.1
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		0.13
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		0.4
Subcontracted: Inorganics												
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Sample ID	W13104	W13301	W13302	W13303	W13304	SPJC01	SPJC02	4AB1	4AB1	4AB2	4AB4	4AB4	4AB4
Depth	0	0	0	0	0	0	0	0.5	1.3	0.5	0.5	1	2
Sampled Date	23/01/2018	23/01/2018	23/01/2018	23/01/2018	23/01/2018	01/08/2018	01/08/2018	02/04/2019	02/04/2019	03/04/2019	11/03/2019	11/03/2019	11/03/2019
Carbon													
Soil Organic Matter (SOM)	11.9	11	10.8	15.3	10.2	2.19	2.47	16.7	93.8	25.2	8.79	13.6	6.93
Metals (Solids)													
Arsenic	11.1	6.54	11.4	8.85	7.8	4.71	7.31	8.63	3.16	7.15	40.8	37.1	16.5
Cadmium	1.12	1.6	2.38	1.97	1.04	0.02	0.02	1	0.154	0.186	9.32	11.6	5.25
Chromium	81.2	80.9	204	222	155	174	113	19.4	8.05	8.93	230	77.1	52.5
Copper	24	20.7	21.8	22.7	103	9.18	11.5	34.5	15.1	16	105	87.3	42.6
Lead	87.6	264	199	293	201	21.1	36.1	48	16.3	13.1	1340	1940	703
Mercury	1.4	1.4	1.4	1.4	1.4	0.14	0.14	1.4	0.14	0.14	1.4	1.4	1.4
Nickel	27.7	21.1	22	22.7	28.6	8.02	11.8	20.4	8.05	8.61	161	74.1	56.4
Selenium	10	10	12	10	10	4.03	2.29	10	1.51	2.47	10.4	10	10
Vanadium	140	148	425	200	181	273	159	53.3	16.7	20	115	120	105
Zinc	284	865	683	1070	555	93.5	152	147	63.1	62.7	5560	7140	2470
TPH Criteria Working Group (TPH CWG)													
Benzene	0.04	0.04	0.04	0.04	0.04								
Toluene	0.008	0.0216	0.0118	0.0218	0.0189								
Ethylbenzene	0.012	0.012	0.012	0.012	0.012								
sum of detected mpo xylene by GC	0.009	0.009	0.009	0.009	0.009								
Aliphatics >C5-C6	0.04	0.04	0.04	0.04	0.04	0.01	0.01	0.02	0.0945	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.04	0.04	0.04	0.0557	0.059	0.01	0.01	0.02	0.345	0.02	0.02	0.02	0.02
Aliphatics >C8-C10	0.04	0.04	0.04	0.0424	0.0566	0.01	0.01	0.02	0.155	0.02	0.02	0.02	0.02
Aliphatics >C10-C12	0.04	0.0864	0.04	0.0932	0.114	0.01	0.01	0.02	0.173	0.02	0.02	0.02	0.02
Aliphatics >C12-C16	0.503	1.56	1.65	1.63	2.92	0.804	1.48	14.1	120	13.5	0.884	1.33	0.1
Aliphatics >C16-C21	3.4	11.9	27.4	16.2	20.7	6.68	13.8	25.8	182	68.8	28.1	15.8	3.95
Aliphatics >C21-C35	19.8	23.4	39.6	40.7	47.1	34.2	57.3	110	441	141	96.8	77.9	60.1
Aliphatics >C35-C44	6.07	5.54	9.47	15.3	12.9	12.8	29.4	22.7	50	18.6	15.3	10.7	18.8
Aromatics >EC5-EC7	0.04	0.04	0.04	0.04	0.04	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.04	0.04	0.04	0.04	0.04	0.01	0.01	0.02	0.0409	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.04	0.0576	0.04	0.0641	0.072	0.01	0.01	0.02	0.103	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.04	0.0576	0.04	0.0629	0.0755	0.01	0.01	0.02	0.116	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	7.4	4.91	4.74	3.72	6.49	1.07	1.05	23.1	126	35.4	1.35	2.14	0.339
Aromatics >EC16-EC21	81.7	25.4	38.1	29.7	9.82	6.39	7.61	66.7	290	161	10.1	10.1	5.69
Aromatics >EC21-EC35	160	56.8	93	90.6	36	38	41.6	161	521	402	49.1	43.3	50.2
Aromatics >EC35-EC44	46.7	17.2	30.6	35.9	16.7	22.8	35	53.8	136	106	16	12.4	23
Aromatics >EC40-EC44	16.2	5.87	11.4	13.6	6.2	9.65	16.2	19.2	46.8	30.2	5.5	4.31	8.16
Polyaromatic Hydrocarbons (PAHs)													
Acenaphthylene	1790	900	1050	1280	1610	89.3	110	1180	3460	2140	157	189	122
Acenaphthene	193	154	217	241	280	27.7	24.6	121	416	457	13.6	8	36.2
Anthracene	3480	2020	2160	3460	4070	171	214	1920	4610	4950	157	131	88.9
Benz(a)anthracene	6120	4740	5200	7510	8260	684	649	2710	6060	8590	474	287	600
Benzo(a)pyrene	4250	4220	4760	6720	7190	700	691	1900	4530	8140	539	337	661
Benzo(b)fluoranthene	6160	6180	6340	9610	9830	1080	788	3320	7550	12700	1080	557	1180
Benzo(k)fluoranthene	2380	2160	2720	3390	3880	392	345	1160	2800	5260	269	251	384
Benzo(g,h,i)perylene	2190	2680	3180	3930	4490	576	545	1290	2570	5560	581	406	520
Chrysene	5440	4430	5270	6370	7010	716	645	2640	5550	8220	536	379	680
Dibenzo(a,h)anthracene	787	793	925	1280	1260	140	121	273	741	1340	120	70.4	119
Indeno(1,2,3-cd)pyrene	2260	2350	2850	3700	4030	629	545	1400	2530	4970	421	294	462
Fluoranthene	15700	9730	11700	14900	16500	1110	1300	7720	17000	17900	748	496	1020
Fluorene	4000	1150	1190	1570	2110	45.7	71.4	1010	2880	1420	38.1	30.7	31.5
Naphthalene	6450	6950	7980	11900	11200	204	326	6660	21200	4790	192	220	50.8
Phenanthrene	15900	6220	7070	9370	11400	477	641	6850	19300	11400	419	319	315
Pyrene						0.957	1.03	5.23	12.1	13.7	0.52	0.371	0.813
PAH, Total Detected USEPA 16	86.4	61.3	70.9	95.7	105	8	8.05	45.4	113	112	6.26	4.34	7.09
Naphthalene-d8 % recovery**	91.4	93.1	103	122	104	97.6	90.7	93.4	97.4	101	83.5	90.8	93.3
Acenaphthene-d10 % recovery**	84.3	87.2	101	109	99.2	106	87.4	93	98.7	97.9	86.6	89.3	90.2
Phenanthrene-d10 % recovery**	82.9	86.8	103	104	99.1	111	86.5	98	103	103	87.4	92.2	92.8
Chrysene-d12 % recovery**	90.6	94.8	105	109	102	105	81	80.7	84.8	84.6	75.6	69.8	92.4
Perylene-d12 % recovery**	93.7	98.5	99.2	110	107	94.6	81	75	79.6	77.9	70.3	54.7	87.2
Total Aliphatics >C12-C44	29.8	42.4	78.2	74	83.7	54.4	102	173	794	242	141	106	82.8
Total Aromatics >EC12-EC44	295	104	166	160	69	68.2	85.3	305	1070	705	76.6	67.9	79.2
Total Aliphatics & Aromatics >C5-C44						123	187	478	1870	946	218	174	162
Metals - (Solid)													
Iron	58900	85100	108000	95400	93400	70700	75200	67100	4360	23100	214000	305000	149000
Manganese	5510	8440	14900	13600	11100	10700	7870	3110	462	2090	11400	7670	4770
Metals - (Liquid)													
Calcium	-	105000	-	108000	-	-	156000	133000	49600	163000	-	-	-
Magnesium	-	16400	-	12700	-	-	25900	19300	2290	25100	-	-	-
Phenols													
Phenol	0.01	0.01	0.01	0.0121	0.0118	0.0348	0.01	0.01	0.0141	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.0116	0.0106	0.01	0.01	0.01	-	-	-
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	-	-	-
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.0464	0.035	0.035	0.035	0.035	-	-	-
Inorganics													
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.182	-	0.148	-			0.102	0.109	0.0526	0.0277	-	0.045
pH	8.78	10.6	9.34	10	9.33			8.77	8.47	8.48	8.19	8.28	8.08
Sulphate, Total	-	-	-	-	-								
Sulphur, Total	-	0.255	-	0.212	-			0.307	0.272	0.262	0.0861	-	0.0867
Sulphate, Total potential	-	0.765	-	0.636	-			0.921	0.816	0.786	0.258	-	0.26
Sulphate, acid soluble (total)	-	0.483	-	0.207	-			0.413	0.0643	0.526	0.0876	-	0.0687
Cyanide, Total	1	1.04	1.51	1	1.2			1	1	1	20.9	27.6	4.98
Exchangeable Ammonia as N	12	12	31.8	12	12			12	12	12	-	-	-
Asbestos													
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	03/02/2018	-	01/02/2018	-	-	18/07/2018	16/04/19	16/04/19	16/04/19	18/03/19	-	18/03/2019
Analysed By	-	James Richards	-	Eva Guerra	-	-	James Richards	Christian Hallam	Christian Hallam	Christian Hallam	Andrzej Ferfecki	-	Barbara Urbanek-Walsh
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-			-	-	-	-	-	-
Analysts Comments	-	-	-	-	-			-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected
Amosite (Brown) Asbestos	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected
Crocidolite (Blue) Asbestos	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected
Fibrous Anthophyllite	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected
Fibrous Tremolite	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected
Fibrous Actinolite	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected
Non-Asbestos Fibre	-	Not Detected	-	Not Detected	-	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected
Comments	-	0	-	0	-	-	0	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)													
Dibromofluoromethane**	-	-	-	-	-	95.5	88.8	99.1	102	89.1	103	103	102
Toluene-d8**	-	-	-	-	-	91.8	94.8	96.3	96.7	91.5	101	102	101
4-Bromofluorobenzene**	-	-	-	-	-	82.8	87.3	85.1	96.4	72.4	93	92.5	95
Methyl Tertiary Butyl Ether	-	-	-	-	-	0.1	0.1	0.1	2	0.2	0.1	0.1	0.1
Benzene	-	-	-	-	-	0.09	0.09	0.09	1.8	0.18	0.09	0.09	0.09
Toluene	-	-	-	-	-	0.07	0.07	0.07	1.4	0.14	0.07	0.07	0.07
Ethylbenzene	-	-	-	-	-	0.04	0.04	0.04	0.8	0.08	0.04	0.04	0.04
p/m-Xylene	-	-	-	-	-	0.1	0.1	0.1	2	0.2	0.1	0.1	0.1
o-Xylene	-	-	-	-	-	0.1	0.1	0.1	2	0.2	0.1	0.1	0.1
Naphthalene	-	-	-	-	-	0.475	0.753	0.13	2.6	0.664	0.13	0.13	0.13
Sum of BTEX	-	-	-	-	-	0.4	0.4	0.4	8	0.8	0.4	0.4	0.4
Subcontracted: Inorganics													
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	2.57	3.15	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	2.16	2.7	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	2.42	2.93	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	1.66	2.19	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	0.95	1.17	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	15.3	13.1	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	16.1	14.1	-	-	-	-	-	-	-	-	-	-

Sample ID	4AB5	4AB5	4AB5	4AB6	4AB6	4AB1V	4AB2V	4AC1	4AC1	4AC2
Depth	0.5	1.4	2.5	0.5	1	1.7	1	0.5	1	0.5
Sampled Date	11/03/2019	11/03/2019	11/03/2019	13/03/2019	13/03/2019	02/04/2019	03/04/2019	02/04/2019	02/04/2019	03/04/2019
Carbon										
Soil Organic Matter (SOM)	6.14	97.2	10.6	8.91	18.8	7.26	2.93	7.72	6.95	21.6
Metals (Solids)										
Arsenic	10.7	6.24	7.98	6	8.33	13.6	13.2	6.66	8	1.92
Cadmium	1.79	0.168	2.22	1.11	1.32	0.79	0.184	0.231	0.22	0.02
Chromium	192	20.9	599	539	387	30.9	28.8	7.93	10.6	8.42
Copper	29.3	30.6	25.6	18.3	17.3	22.4	12.8	11.7	23.7	3.32
Lead	252	54.4	232	22.3	62.9	41.4	20.2	26.3	25.3	1
Mercury	0.14	0.14	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14
Nickel	23.9	10.7	19.8	8.71	20.9	31.4	33.8	11.7	21.3	2.67
Selenium	6.7	2.7	16.9	16.4	10	2.28	1.25	3.19	1.34	3.78
Vanadium	438	25.5	452	401	297	52.1	51.4	32.2	24.8	10.6
Zinc	1240	52.3	865	63.4	201	163	101	95.5	52.9	24.5
TPH Criteria Working Group (TPH CWG)										
Benzene										
Toluene										
Ethylbenzene										
sum of detected mpo xylene by GC										
Aliphatics >C5-C6	0.01	0.02	0.0469	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.01	0.02	0.15	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C8-C10	0.01	0.02	0.0917	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C10-C12	0.01	0.02	0.097	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C12-C16	1.68	32.3	4.48	7.93	1.34	0.1	0.343	2.02	0.662	5.45
Aliphatics >C16-C21	6.92	81.8	62	146	11.4	2.23	20	5.62	1.71	13.6
Aliphatics >C21-C35	75.9	103	108	37.4	21.4	14.2	15.6	37.3	5.21	35.4
Aliphatics >C35-C44	21.3	21.1	24.8	3.87	5.47	5.29	0.442	8.45	0.851	3.98
Aromatics >EC5-EC7	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.01	0.02	0.0608	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.01	0.02	0.065	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	2.08	34.7	3.92	1.33	9.66	0.1	1.92	2.5	0.351	10.5
Aromatics >EC16-EC21	10.4	91.8	39.8	36.6	97.1	1.66	5.61	7.81	1.82	29.1
Aromatics >EC21-EC35	77.1	161	157	19.9	191	21.5	25.2	31.4	5.54	66.4
Aromatics >EC35-EC44	40.7	36.7	38.6	3.2	49.1	6.01	0.119	11.2	0.772	17.9
Aromatics >EC40-EC44	15.3	12.3	13.3	1.05	15.9	1.98	1.54	4.13	0.165	5.56
Polyaromatic Hydrocarbons (PAHs)										
Acenaphthylene	55.6	72.5	62.4	34	1210	12	44.4	72.8	48.8	12
Acenaphthene	68.6	112	145	9.46	164	8	8	11.5	10.2	8
Anthracene	165	333	239	21.6	2260	16	24.3	99.7	68.9	771
Benz(a)anthracene	633	230	1480	78.4	8890	14	19.9	309	201	1490
Benzo(a)pyrene	607	109	1280	96.3	7760	15	15	255	232	1250
Benzo(b)fluoranthene	1200	261	1220	112	7240	28.3	30.3	501	366	2340
Benzo(k)fluoranthene	536	70.5	572	48.5	3990	14	14	173	120	841
Benzo(g,h,i)perylene	501	73.3	996	108	5580	24	24	248	185	929
Chrysene	824	498	1670	88.9	7120	29.6	35.3	390	195	1550
Dibenzo(a,h)anthracene	99	32.2	233	0.023	1070	0.023	0.023	46.6	43	252
Indeno(1,2,3-cd)pyrene	399	42.7	728	63.7	3980	0.018	0.018	238	170	925
Fluoranthene	1540	799	2150	117	20900	53.4	47.4	657	429	3920
Fluorene	71.1	360	99.6	23.2	739	10	32.6	52.4	32.2	284
Naphthalene	72.3	1310	233	172	2240	9	173	253	139	2850
Phenanthrene	730	1920	1280	135	7010	30.6	140	465	274	3860
Pyrene	1.13	0.587	2.13	0.114	15.5	0.0395	0.0339	0.461	0.31	2.65
PAH, Total Detected USEPA 16	8.63	6.81	14.5	1.22	95.7	0.181	0.581	4.23	2.82	23.9
Naphthalene-d8 % recovery**	97.8	93.6	106	92.9	79.3	91	93.4	91	100	102
Acenaphthene-d10 % recovery**	96.8	95.4	105	92.5	74.1	88.8	87.1	88	94.9	95.8
Phenanthrene-d10 % recovery**	107	98.3	105	91.9	71.5	92.3	91.7	92.5	102	103
Chrysene-d12 % recovery**	93.1	75.4	109	97.8	96	76.8	78	81.5	91.5	91
Perylene-d12 % recovery**	82.8	53.8	106	94.1	77.3	81.2	79	77.3	87.9	82.1
Total Aliphatics >C12-C44	106	238	199	196	39.7	21.7	36.4	53.4	8.43	58.4
Total Aromatics >EC12-EC44	130	324	240	61.1	347	29.2	32.8	52.8	8.48	124
Total Aliphatics & Aromatics >C5-C44	236	563	439	257	387	50.9	69.2	106	16.9	182
Metals - (Solid)										
Iron	99800	6800	158000	131000	94800	22300	34600	31600	22900	5310
Manganese	10600	676	25200	31900	16100	253	787	2310	748	2860
Metals - (Liquid)										
Calcium	-	-	-	-	-	-	-	133000	27700	179000
Magnesium	-	-	-	-	-	-	-	22200	6550	31300
Phenols										
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	-	-	-	-	-	0.01	0.01	0.01	0.01	0.01
Xylenols	-	-	-	-	-	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	-	-	-	-	-	0.035	0.035	0.035	0.035	0.035
Inorganics										
Soluble Sulphate 2:1 extract as SO4 BRE	0.051	-	0.159	0.116	0.11	-	-	0.0525	0.0422	0.0411
pH	8.57	8.03	11.5	11.2	10.7	6.55	8.44	8.86	8.43	8.96
Sulphate, Total										
Sulphur, Total	0.107	-	0.181	0.512	0.196	-	-	0.238	0.0885	0.412
Sulphate, Total potential	0.321	-	0.543	1.54	0.588	-	-	0.714	0.266	1.24
Sulphate, acid soluble (total)	0.0816	-	0.328	0.716	0.279	-	-	0.515	0.113	0.574
Cyanide, Total	5.29	1	2.22	1	1.28	1	1	1	1	1
Exchangeable Ammonia as N	-	-	-	-	-	99	17.5	12	12	12
Asbestos										
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-
Date of Analysis	18/03/2019	-	18/03/2019	20/03/2019	20/03/19	-	-	17/04/2019	17/04/19	16/04/19
Analysed By	Barbara Urbanek-Walsh	-	Barbara Urbanek-Walsh	Barbara Urbanek-Walsh	Lucy Caroe	-	-	Paul Poynton	Christian Hallam	Christian Hallam
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Amosite (Brown) Asbestos	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Crocidolite (Blue) Asbestos	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Fibrous Anthophyllite	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Fibrous Tremolite	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Fibrous Actinolite	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	Not Detected	Not Detected	Not Detected
Non-Asbestos Fibre	Not Detected	-	Not Detected	Not Detected	Detected	-	-	Not Detected	Not Detected	Not Detected
Comments	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)										
Dibromofluoromethane**	97.7	99.8	101	102	98.8	110	103	100	102	83.6
Toluene-d8**	97.9	95.9	96.8	98.8	96.8	98.9	98.6	93.5	98.4	85.7
4-Bromofluorobenzene**	85	83.9	91.4	86.2	71.2	90	97.4	84.5	88.6	70.1
Methyl Tertiary Butyl Ether	0.1	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Benzene	0.09	0.09	1.8	0.09	0.09	0.09	0.09	0.09	0.09	0.18
Toluene	0.07	0.07	1.4	0.07	0.07	0.07	0.07	0.07	0.07	0.14
Ethylbenzene	0.04	0.04	0.8	0.04	0.04	0.04	0.04	0.04	0.04	0.08
p/m-Xylene	0.1	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
o-Xylene	0.1	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Naphthalene	0.13	0.13	2.6	0.13	0.521	0.13	0.13	0.13	0.13	0.26
Sum of BTEX	0.4	0.4	8	0.4	0.4	0.4	0.4	0.4	0.4	0.8
Subcontracted: Inorganics										
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-

Sample ID	4AC2	4AC4	4AC4	4AC4	4AC5	4AC5	4AC5	4AC6	4AC6	4AC1V	4AC2V	4AC6V	4AD1
Depth	1	0.5	1	3	0.5	1.5	3	0.5	1	1.7	1.3	2.6	0.5
Sampled Date	03/04/2019	11/03/2019	11/03/2019	11/03/2019	11/03/2019	11/03/2019	11/03/2019	11/03/2019	11/03/2019	02/04/2019	03/04/2019	11/03/2019	02/04/2019
Carbon													
Soil Organic Matter (SOM)	82.1	21.2	14.3	13.3	11.9	8.24	2.64	19.7	32.1	5.47	0.726	3.72	2.91
Metals (Solids)													
Arsenic	4.81	38.5	25.7	45.4	14.3	10.4	6	8.04	9.9	14.2	7.45	10	5.32
Cadmium	0.155	31.3	17.3	20.9	1	0.509	0.432	0.219	1.47	0.384	0.159	0.193	0.338
Chromium	10.3	10.6	54.5	332	27.4	242	962	159	95.2	37.2	24.9	41.9	6.21
Copper	13.9	83.4	62	58.5	111	59.3	24.7	24.7	25.1	19.1	8.24	24.1	14.4
Lead	13.2	4140	2480	2360	193	115	38.6	63.6	115	31.5	19.1	23	12.7
Mercury	0.14	1.4	1.4	1.4	0.14	0.14	1.4	0.14	1.4	0.14	0.14	0.14	0.14
Nickel	8.08	64.3	47.4	56.8	27.7	21.2	6.48	20.3	27.4	33	31.2	39.9	13.9
Selenium	1.54	11.3	10.1	19.4	2.04	5.33	21.5	7.52	10	1.32	1	2.05	1.81
Vanadium	18.9	147	214	395	40.5	166	673	236	126	58.2	44	62.2	34.8
Zinc	44.1	13300	8110	7800	551	531	108	221	425	124	85.9	110	61.5
TPH Criteria Working Group (TPH CWG)													
Benzene													
Toluene													
Ethylbenzene													
sum of detected mpo xylene by GC													
Aliphatics >C5-C6	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0357	0.0285	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.182	0.112	0.02	0.02	0.02	0.02
Aliphatics >C8-C10	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.299	0.107	0.02	0.02	0.02	0.02
Aliphatics >C10-C12	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.235	0.196	0.02	0.02	0.02	0.02
Aliphatics >C12-C16	17.4	1.02	0.53	2.47	0.771	0.709	1.15	11.6	3.6	0.1	0.115	0.1	1.64
Aliphatics >C16-C21	39.3	16.6	9	20.2	2.3	2.63	6.07	54	18	0.1	0.1	0.1	3.9
Aliphatics >C21-C35	82.3	83.9	35.1	73.3	23.5	22.2	21.8	74.5	37.3	4.18	0.221	0.1	19.8
Aliphatics >C35-C44	11.5	11.6	3.81	13.5	13.1	9.6	5.67	31.7	9.56	0.1	0.1	0.1	5.37
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0288	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.038	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.199	0.0718	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.156	0.131	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	25.4	1.85	1.27	1.69	1.39	1.38	0.804	9.78	9.26	0.1	0.1	0.1	2.21
Aromatics >EC16-EC21	66.5	10.4	6.38	10.2	8.98	9.5	7.3	36	100	0.1	0.1	0.1	6.04
Aromatics >EC21-EC35	172	47.3	22.7	42.2	60.6	63.1	37.2	76.7	265	9.16	1.2	4.29	21
Aromatics >EC35-EC44	44.4	13	3.77	11.6	37.9	31.4	9.83	43.6	78.1	2.06	0.173	0.1	8.05
Aromatics >EC40-EC44	14.3	4.39	1.3	4.36	16.5	12.7	3.57	20.2	26.8	0.1	0.156	0.1	3.12
Polyaromatic Hydrocarbons (PAHs)													
Acenaphthylene	840	42.1	41	23.6	60	120	24	1070	1670	12	12	79.8	75.6
Acenaphthene	8	8	11.4	30.5	198	192	126	143	118	8	8	8	8
Anthracene	4420	95.8	72.7	109	162	190	201	1050	2630	16	16	88.6	146
Benz(a)anthracene	2650	205	171	241	1020	1350	862	1650	7490	31.3	14	253	379
Benzo(a)pyrene	2280	205	164	198	1090	1250	685	1320	6940	33.1	15	200	344
Benzo(b)fluoranthene	4340	470	334	439	1830	1920	789	2300	10400	61.5	15	316	604
Benzo(k)fluoranthene	1470	162	115	176	728	635	287	963	4430	21.7	14	111	198
Benzo(g,h,i)perylene	1620	202	140	187	736	987	457	765	4510	33.2	24	127	240
Chrysene	2620	289	217	366	1320	1380	891	1730	7590	32.9	10	206	441
Dibenzo(a,h)anthracene	460	42.7	31	43.2	228	0.23	116	199	1250	0.023	0.023	0.023	60.4
Indeno(1,2,3-cd)pyrene	1550	145	113	138	637	673	329	743	4220	23.5	0.018	117	225
Fluoranthene	5770	411	288	493	1910	2240	1320	4390	18600	74.7	0.017	534	821
Fluorene	339	29.3	20	31.9	133	147	93.3	899	750	10	10	25.2	10
Naphthalene	3160	82.4	94.2	74.8	80	90	173	4510	1690	9	9	106	243
Phenanthrene	4580	272	196	399	869	1090	965	3470	5540	46.1	15	194	545
Pyrene	4.14	0.322	0.22	0.412	1.41	1.68	1.21	3.48	13.7	0.0591	0.015	0.372	0.596
PAH, Total Detected USEPA 16	40.2	2.98	2.23	3.36	12.4	13.7	8.51	28.7	91.6	0.417	0.118	2.73	4.92
Naphthalene-d8 % recovery**	101	91	90.1	92.9	93	91	104	85	90.3	104	102	93.5	102
Acenaphthene-d10 % recovery**	94.6	88.3	87.5	92	89.8	86	104	88.9	88.4	98.7	95.3	89.9	96.8
Phenanthrene-d10 % recovery**	91.9	83.8	85.8	92.4	87.5	93.1	108	98.5	91.7	104	106	90.4	101
Chrysene-d12 % recovery**	85.5	70.5	73.2	79.2	84.5	101	119	89.9	96.7	94.5	100	83.8	98.4
Perylene-d12 % recovery**	79.2	50.8	56.6	61.4	77.1	93.4	112	81.8	91.6	100	101	81.9	93.7
Total Aliphatics >C12-C44	151	113	48.4	110	39.6	35.1	34.7	172	68.5	4.18	0.335	0.1	30.7
Total Aromatics >EC12-EC44	308	72.5	34.1	65.7	109	105	55.1	166	453	11.2	1.37	4.29	37.3
Total Aliphatics & Aromatics >C5-C44	458	186	82.5	175	148	140	89.8	339	522	15.4	1.7	4.29	68.1
Metals - (Solid)													
Iron	8250	335000	275000	277000	38800	85800	136000	70300	116000	30300	27100	30200	39500
Manganese	1180	10700	9730	29200	1430	8000	37200	10200	5640	357	846	409	2370
Metals - (Liquid)													
Calcium	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols													
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.023	0.01	0.01	0.01	0.01	0.01
Cresols	0.01	-	-	-	-	-	-	-	-	0.01	0.01	-	0.01
Xylenols	0.015	-	-	-	-	-	-	-	-	0.015	0.015	-	0.015
Phenols, Total Detected monohydric	0.035	-	-	-	-	-	-	-	-	0.035	0.035	-	0.035
Inorganics													
Soluble Sulphate 2:1 extract as SO4 BRE	-	-	0.108	-	-	0.08	-	-	0.0769	-	-	-	-
pH	8.18	8.2	8.49	12.2	8.22	8.51	12.7	10.9	9.92	6.71	8.1	7.43	9.35
Sulphate, Total													
Sulphur, Total	-	-	0.0954	-	-	0.0927	-	-	0.103	-	-	-	-
Sulphate, Total potential	-	-	0.286	-	-	0.278	-	-	0.309	-	-	-	-
Sulphate, acid soluble (total)	-	-	0.115	-	-	0.117	-	-	0.131	-	-	-	-
Cyanide, Total	1	34.3	29.4	19.2	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	-	-	-	-	-	-	-	-	75.7	20.1	-	12
Asbestos													
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	-	18/03/19	-	-	18/03/2019	-	-	18/03/19	-	-	-	-
Analysed By	-	-	Christian Hallam	-	-	Barbara Urbanek-Walsh	-	-	Christian Hallam	-	-	-	-
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	-	-	-
Amosite (Brown) Asbestos	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	-	-	-
Crocidolite (Blue) Asbestos	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	-	-	-
Fibrous Anthophyllite	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	-	-	-
Fibrous Tremolite	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	-	-	-
Fibrous Actinolite	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	-	-	-
Non-Asbestos Fibre	-	-	Not Detected	-	-	Not Detected	-	-	Not Detected	-	-	-	-
Comments	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)													
Dibromofluoromethane**	109	98.1	103	99.3	89	95.4	102	77	102	115	105	104	104
Toluene-d8**	99.4	99.2	99.8	100	90.9	95.2	100	91.6	96.9	97.4	96.8	101	97.8
4-Bromofluorobenzene**	99.1	84.3	90.2	89.4	72.1	78	94.8	70.6	81.2	94.7	103	95.3	91.7
Methyl Tertiary Butyl Ether	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	1.8	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	1.4	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	2.6	0.13	0.13	0.13	0.13	0.13	0.13	1.14	0.462	0.13	0.13	-	0.13
Sum of BTEX	8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics													
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	4AD1	4AD2	4AD5	4AD5	4AD5	4AD1V	4AD2V	4AE1	4AE1	4AE2
Depth	1	0.5	0.5	1.2	2	2	0.8	0.5	1	0.5
Sampled Date	02/04/2019	03/04/2019	11/03/2019	11/03/2019	11/03/2019	02/04/2019	03/04/2019	02/04/2019	02/04/2019	03/04/2019
Carbon										
Soil Organic Matter (SOM)	5.5	38.1	16.8	46.2	9.55	0.522	0.865	5.45	26.5	18.1
Metals (Solids)										
Arsenic	11.1	6.8	10.4	8.8	6	13.2	10.7	6.6	18.7	11.4
Cadmium	0.18	0.281	1.29	0.773	0.375	0.21	0.119	0.859	0.623	0.304
Chromium	9.8	29.8	69.2	136	1140	39.3	40.6	57.9	5.57	22.2
Copper	29.7	16.1	39.4	34.9	14	18.1	18.3	14	31.6	17.7
Lead	25.5	26.3	177	83.6	31.2	20.4	18.7	42.8	61.5	29.3
Mercury	0.14	0.14	0.14	0.14	1.4	0.14	0.14	1.4	0.14	0.14
Nickel	27.8	11.8	25.4	16.3	6.78	35.6	40.4	11.6	36.8	24.9
Selenium	2.21	3.4	3.53	4.42	21.9	1.2	1.33	10	1.68	2.15
Vanadium	29.3	36.6	83.5	116	748	61.3	62.5	54.1	51.2	43.4
Zinc	68.5	247	695	326	45.7	111	118	144	71.5	103
TPH Criteria Working Group (TPH CWG)										
Benzene										
Toluene										
Ethylbenzene										
sum of detected mpo xylene by GC										
Aliphatics >C5-C6	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.02	0.02	0.0342	0.0309	0.025	0.02	0.02	0.0286	0.02	0.02
Aliphatics >C8-C10	0.02	0.02	0.0403	0.025	0.022	0.02	0.02	0.0201	0.02	0.02
Aliphatics >C10-C12	0.02	0.02	0.0403	0.02	0.022	0.02	0.02	0.02	0.02	0.02
Aliphatics >C12-C16	0.1	17.2	5.37	1.64	0.512	0.1	0.1	1.91	1.11	3.28
Aliphatics >C16-C21	0.1	33.7	12.1	29.3	7.63	0.1	0.1	8.6	2.16	40.7
Aliphatics >C21-C35	0.1	91.3	38.1	32.2	11.7	2.51	0.1	67.5	8.77	40.8
Aliphatics >C35-C44	0.1	16.2	12.8	9.56	3.41	0.209	0.1	15.4	1.42	1.42
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.02	0.02	0.0268	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.02	0.02	0.0268	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	0.1	14.8	4.87	2.93	0.852	1.47	0.1	2.97	0.881	6.13
Aromatics >EC16-EC21	0.1	63.6	16.2	19.1	11.1	3.02	0.1	17	3.79	24.5
Aromatics >EC21-EC35	5.57	165	74.2	64.8	54.1	18.1	0.1	71	12.1	49.3
Aromatics >EC35-EC44	0.1	42.6	34.5	26.8	17.8	5	0.1	26.9	2.84	10.7
Aromatics >EC40-EC44	0.1	12.6	13.6	10.9	5.88	1.41	0.1	9.12	0.801	3.49
Polyaromatic Hydrocarbons (PAHs)										
Acenaphthylene	12	1270	218	42.1	43.7	12	12	179	16.3	246
Acenaphthene	8	57.7	233	26.3	54.5	8	8	35.5	8	32.3
Anthracene	16	1130	438	154	206	16	16	319	16	336
Benz(a)anthracene	14	3070	1960	442	802	45	14	1000	77.9	426
Benzo(a)pyrene	24.5	2580	2080	433	839	47.6	15	877	65.4	377
Benzo(b)fluoranthene	35.6	4940	3280	722	1360	85.5	15	1440	127	624
Benzo(k)fluoranthene	14	1620	1460	275	491	31.5	14	585	41.6	242
Benzo(g,h,i)perylene	24	2260	1380	309	661	70.2	24	618	49	286
Chrysene	32.4	3070	2220	513	837	52.8	10	982	87.1	477
Dibenzo(a,h)anthracene	0.023	488	297	89	154	0.023	0.023	124	0.023	67.2
Indeno(1,2,3-cd)pyrene	0.018	2440	1190	250	529	29.4	0.018	559	42.9	256
Fluoranthene	31.9	7490	3510	677	1150	109	0.017	2150	160	1290
Fluorene	10	353	233	45.5	72.8	10	10	156	10	212
Naphthalene	22.4	4790	359	245	62.5	16.1	9	28.9	27.3	974
Phenanthrene	63.3	5680	1640	519	598	61.3	15	1180	141	1270
Pyrene	0.0246	5.12	2.76	0.523	0.877	0.0822	0.015	1.63	0.112	0.946
PAH, Total Detected USEPA 16	0.235	46.3	23.2	5.27	8.73	0.631	0.118	11.9	0.947	8.06
Naphthalene-d8 % recovery**	103	85.4	94.8	86.9	89.7	105	89.8	103	99.5	100
Acenaphthene-d10 % recovery**	96.4	87.1	92.8	87.7	87.7	99	87	96.4	93.5	94
Phenanthrene-d10 % recovery**	103	93	89.3	89.5	90.9	109	85.6	97.6	97.6	103
Chrysene-d12 % recovery**	90.3	89.5	89.9	80.7	91.1	108	70.5	93.4	86.5	96.2
Perylene-d12 % recovery**	87.9	75.8	83.9	78.5	85.9	104	73.8	94.5	73.8	93.4
Total Aliphatics >C12-C44	0.1	158	68.5	72.8	23.2	2.72	0.1	93.4	13.5	86.2
Total Aromatics >EC12-EC44	5.57	286	130	114	83.8	27.6	0.1	118	19.6	90.7
Total Aliphatics & Aromatics >C5-C44	5.57	444	198	186	107	30.3	0.1	211	33.1	177
Metals - (Solid)										
Iron	22700	24800	66600	49600	173000	32200	35100	71500	41700	15800
Manganese	1230	2720	4670	5580	36200	375	524	2470	1670	482
Metals - (Liquid)										
Calcium	37600	140000	-	-	-	-	-	180000	-	77700
Magnesium	11300	18300	-	-	-	-	-	44900	-	7260
Phenols										
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0106	0.01	0.01
Cresols	0.01	0.01	-	-	-	0.01	0.01	0.0212	0.01	0.01
Xylenols	0.015	0.015	-	-	-	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	-	-	-	0.035	0.035	0.035	0.035	0.035
Inorganics										
Soluble Sulphate 2:1 extract as SO4 BRE	0.0968	0.157	0.048	-	0.0172	-	-	0.0549	-	0.0523
pH	8.61	8.84	8.98	11.8	12.8	6.8	7.61	10	8.48	8.13
Sulphate, Total										
Sulphur, Total	0.105	0.34	0.0947	-	0.218	-	-	0.129	-	0.118
Sulphate, Total potential	0.315	1.02	0.284	-	0.654	-	-	0.387	-	0.354
Sulphate, acid soluble (total)	0.198	0.283	0.0869	-	0.259	-	-	0.197	-	0.0969
Cyanide, Total	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	-	-	-	78.8	12	12	12	12
Asbestos										
Asbestos Quantification - Gravimetric - %	-	-	0.001	-	-	-	-	-	-	-
Date of Analysis	16/04/2019	16/04/2019	18/03/2019	-	18/03/19	-	-	17/04/19	-	16/04/2019
Analysed By	Paul Poynton	Paul Poynton	Barbara Urbanek-Walsh	-	Christian Hallam	-	-	Christian Hallam	-	Paul Poynton
Asbestos Quantification - PCOM Evaluation - %	-	-	0.001	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	None	-	-	-	-	-	-	-
Analysts Comments	-	-	N/C	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	0.001	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected
Amosite (Brown) Asbestos	Not Detected	Not Detected	Trace	-	Not Detected	-	-	Not Detected	-	Not Detected
Crocidolite (Blue) Asbestos	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected
Fibrous Anthophyllite	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected
Fibrous Tremolite	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected
Fibrous Actinolite	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected
Non-Asbestos Fibre	Not Detected	Not Detected	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected
Comments	-	-	Loose fibres in soil.	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)										
Dibromofluoromethane**	107	81.7	94.6	106	97.2	110	105	101	109	100
Toluene-d8**	99	90.3	94.1	99.7	97.8	97.7	102	94.8	94.2	94.7
4-Bromofluorobenzene**	95.3	76.4	75.7	90.4	85.8	97.5	101	86	84.5	75.4
Methyl Tertiary Butyl Ether	0.1	0.2	0.1	0.1	-	0.1	0.1	0.1	0.1	0.2
Benzene	0.09	0.18	0.09	0.09	-	0.09	0.09	0.09	0.09	0.18
Toluene	0.07	0.14	0.07	0.07	-	0.07	0.07	0.07	0.07	0.14
Ethylbenzene	0.04	0.08	0.04	0.04	-	0.04	0.04	0.04	0.04	0.08
p/m-Xylene	0.1	0.2	0.1	0.1	-	0.1	0.1	0.1	0.1	0.2
o-Xylene	0.1	0.2	0.1	0.1	-	0.1	0.1	0.1	0.1	0.2
Naphthalene	0.13	2.56	0.13	0.13	-	0.13	0.13	0.13	0.13	0.26
Sum of BTEX	0.4	0.8	0.4	0.4	-	0.4	0.4	0.4	0.4	0.8
Subcontracted: Inorganics										
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Sample ID	4AE1V	4AE2V	4AF1	4AF1	4AF1	4AF2	4AF2	4AF1V	4AF2V	4AG1	4AG1	4AG1	4AG2	4AG2	4AG1V
Depth	1.7	0.8	0.4	1	1.5	0.5	1.2	2.1	1.6	0.5	1.1	1.4	0.5	1	1.5
Sampled Date	02/04/2019	03/04/2019	02/04/2019	02/04/2019	02/04/2019	03/04/2019	03/04/2019	02/04/2019	03/04/2019	02/04/2019	02/04/2019	02/04/2019	02/04/2019	02/04/2019	02/04/2019
Carbon															
Soil Organic Matter (SOM)	7.1	0.717	4.83	34.1	3.17	14.7	6.79	0.957	0.991	3.14	5.28	4.4	8.45	8.91	8.41
Metals (Solids)															
Arsenic	16.2	10.6	11.8	7.68	7.03	2.72	8.54	12.8	12.1	11.3	8.18	8.25	6.04	11	19.1
Cadmium	0.55	0.171	1.99	0.911	0.342	0.0919	0.285	0.122	0.155	1.87	0.676	1.03	0.824	0.415	0.598
Chromium	41.2	30.9	69.4	94	84.8	60.6	11.8	36.7	41.5	94.2	17.2	15.4	465	66.4	43.7
Copper	24.4	12.7	18.6	14	10.9	5.83	11.5	17.5	15.4	14	13.7	14.4	14	19.1	22
Lead	37.6	26.9	98.2	53.4	19	4.9	21.4	19.2	22	33.9	43.5	46.4	15.7	78.9	37.3
Mercury	0.14	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	1.4	0.14	0.14
Nickel	28.5	38.8	32.2	12.1	14.8	6.16	11.8	36.3	39.8	25.5	15.9	14.8	15.6	20.2	28.3
Selenium	1.65	1	10	10	2.97	4.02	1.53	1.09	1	10	2.23	2.52	10	3.87	1.56
Vanadium	75.2	54.3	122	103	105	77.8	25.9	53.7	67.2	149	42.3	41.6	281	141	82
Zinc	120	110	334	115	82	50.7	66.5	106	124	111	70.3	65	137	328	137
TPH Criteria Working Group (TPH CWG)															
Benzene															
Toluene															
Ethylbenzene															
sum of detected mpo xylene by GC															
Aliphatics >C5-C6	0.02	0.02	0.02	0.0319	0.0291	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.02	0.02	0.02	0.191	0.0614	0.02	0.02	0.02	0.02	0.02	0.02	0.0459	0.02	0.02	0.02
Aliphatics >C8-C10	0.02	0.02	0.02	0.177	0.0701	0.02	0.02	0.0203	0.02	0.02	0.02	0.109	0.02	0.02	0.02
Aliphatics >C10-C12	0.02	0.02	0.02	0.253	0.1	0.02	0.02	0.02	0.02	0.02	0.02	0.188	0.02	0.02	0.02
Aliphatics >C12-C16	0.1	0.1	1.07	35.4	3.85	12.6	4.3	0.321	0.1	2.2	2.66	1.79	2.46	1.47	0.1
Aliphatics >C16-C21	0.1	0.1	6.56	253	33.4	29	15.4	0.163	0.1	12.3	9.3	4.34	9.22	6.21	0.1
Aliphatics >C21-C35	3.83	0.1	62.2	482	62	66	39.8	1.04	0.446	78.4	37.6	16.2	31.5	38.9	6.48
Aliphatics >C35-C44	0.1	0.1	21.2	52.1	8.53	8.9	9.33	0.156	0.172	21.7	6.4	3.09	6.47	20.4	0.1
Aromatics >EC5-EC7	0.02	0.02	0.02	0.072	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.046	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.02	0.02	0.02	0.118	0.0464	0.02	0.02	0.02	0.02	0.02	0.02	0.0717	0.02	0.02	0.02
Aromatics >EC10-EC12	0.02	0.02	0.02	0.169	0.0668	0.02	0.02	0.02	0.02	0.02	0.02	0.125	0.02	0.02	0.02
Aromatics >EC12-EC16	0.1	0.1	2.37	70	7.5	14.7	6.44	0.1	0.929	4.15	3.12	0.976	4.25	2.19	0.1
Aromatics >EC16-EC21	0.1	0.1	7.8	253	34.6	45.2	17.7	0.151	1.65	15.9	11.5	3.26	18.1	9.91	1.29
Aromatics >EC21-EC35	21.2	0.1	47.7	506	79.7	120	43.5	3.84	4.54	62.7	38.1	10.4	58	53	22.3
Aromatics >EC35-EC44	3.72	0.1	31.2	119	24.8	37.1	14.7	0.577	0.954	33.3	14.4	2.37	17.9	39.7	4.02
Aromatics >EC40-EC44	0.545	0.1	12.9	38.4	7.99	11.9	4.98	0.1	0.199	13.5	5.3	0.696	5.43	16.6	1.17
Polyaromatic Hydrocarbons (PAHs)															
Acenaphthylene	12	12	153	4700	545	455	99.8	12	12	324	410	42.5	304	113	12
Acenaphthene	8	8	44.5	682	8	39.1	85	8	8	34.2	48.8	11.5	82.6	11.3	8
Anthracene	16	16	268	5760	653	448	143	16	16	426	884	59.8	537	109	16
Benz(a)anthracene	37.4	14	759	7250	1040	1310	180	14	14	1370	1550	182	1280	432	28.5
Benzo(a)pyrene	39.7	15	725	6780	1080	1120	162	15	15	1290	1440	170	1210	414	25.9
Benzo(b)fluoranthene	70.8	15	1280	12000	1750	2280	314	15	15	2210	2300	297	2070	675	58.5
Benzo(k)fluoranthene	14	14	505	3550	771	695	95.1	14	14	778	780	117	737	212	21
Benzo(g,h,i)perylene	42	24	578	5220	871	1010	137	24	24	1110	1100	122	905	321	32.4
Chrysene	38.5	10	722	7430	848	1490	254	10	10	1390	1360	183	1310	456	34.7
Dibenzo(a,h)anthracene	0.023	0.023	117	1020	177	224	0.023	0.023	0.023	207	225	32.5	230	59.2	0.023
Indeno(1,2,3-cd)pyrene	34.2	0.018	536	5810	761	1160	155	0.018	0.018	964	1230	115	876	340	0.018
Fluoranthene	96.2	0.017	1460	23700	2720	3270	441	0.017	0.017	2710	3920	362	2760	892	67.9
Fluorene	10	10	126	3650	433	178	135	10	10	186	271	36.2	176	44.2	10
Naphthalene	9	9	550	24400	3000	1100	610	9	9	681	1200	182	1180	174	9
Phenanthrene	49.5	15	920	21700	2400	2300	718	15	15	1500	2190	278	2000	410	39.6
Pyrene	0.0735	0.015	1.18	15.9	1.89	2.2	0.29	0.015	0.015	1.95	2.76	0.261	2.04	0.65	0.053
PAH, Total Detected USEPA 16	0.482	0.118	9.93	150	19	19.3	3.82	0.118	0.118	17.1	21.7	2.45	17.7	5.31	0.362
Naphthalene-d8 % recovery**	93	93.7	100	100	103	93.5	96	98.8	91	90.3	90	73.6	97.1	91.5	87.8
Acenaphthene-d10 % recovery**	91.9	87.7	95.8	96.9	97.6	89.7	89.3	92.7	85.6	91.9	87.5	68.9	92.4	85.7	0
Phenanthrene-d10 % recovery**	97.8	91.1	105	101	94.4	98.3	92.1	103	86.8	110	97.2	70.4	97.9	90	95.8
Chrysene-d12 % recovery**	87.3	78.3	93.3	84.1	90.3	94.6	70.6	104	71.5	104	95.1	73	86.1	79.2	91.3
Perylene-d12 % recovery**	100	82.7	89.3	70.9	91.5	91.3	70.1	99.8	72.5	109	93.7	70.3	86.3	80.6	86.9
Total Aliphatics >C12-C44	3.83	0.1	91	823	108	116	68.9	1.68	0.618	115	56	25.4	49.7	66.9	6.48
Total Aromatics >EC12-EC44	25	0.1	89	947	147	216	82.3	4.57	8.07	116	67.1	17.1	98.3	105	27.6
Total Aliphatics & Aromatics >C5-C44	28.8	0.1	180	1770	255	333	151	6.26	8.69	231	123	43	148	172	34.1
Metals - (Solid)															
Iron	22400	33000	157000	84300	54600	23600	17400	28000	40200	212000	22500	21600	93000	48400	29400
Manganese	400	635	6120	9550	5650	4470	1310	316	620	8850	1900	1920	15200	4420	376
Metals - (Liquid)															
Calcium	-	-	79200	187000	129000	191000	-	-	-	67700	83400	-	-	96100	-
Magnesium	-	-	11800	13300	14300	27400	-	-	-	6560	10100	-	-	16000	-
Phenols															
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.0826	0.0108	0.025	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.0354	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.118	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics															
Soluble Sulphate 2:1 extract as SO4 BRE	-	-	0.0838	0.149	0.0757	0.0721	-	-	-	0.0302	0.122	-	-	0.189	-
pH	6.17	8.11	9.38	9.15	9.7	8.51	8.63	7.72	8.1	10.4	9.41	9.5	8.99	8.31	7.32
Sulphate, Total															
Sulphur, Total	-	-	0.135	0.277	0.141	0.226	-	-	-	0.0889	0.235	-	-	0.174	-
Sulphate, Total potential	-	-	0.405	0.831	0.423	0.678	-	-	-	0.267	0.705	-	-	0.522	-
Sulphate, acid soluble (total)	-	-	0.131	0.295	0.232	0.197	-	-	-	0.0992	0.657	-	-	0.175	-
Cyanide, Total	1	1	1	4.2	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	98.1	12	12	12	12	12	12	110	12	12	12	12	12	12	238
Asbestos															
Asbestos Quantification - Gravimetric - %	-	-	0.0382	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	-	17/04/19	16/04/19	16/04/19	16/04/19	-	-	-	17/04/19	17/04/19	-	-	17/04/19	-
Analysed By	-	-	Christian Hallam	Christian Hallam	Christian Hallam	Christian Hallam	-	-	-	Christian Hallam	Christian Hallam	-	-	Christian Hallam	-
Asbestos Quantification - PCOM Evaluation - %	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	None	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	N/C	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	0.0384	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	-	Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	-	-	Not Detected	-
Amosite (Brown) Asbestos	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	-	-	Not Detected	-
Crocidolite (Blue) Asbestos	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	-	-	Not Detected	-
Fibrous Anthophyllite	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	-	-	Not Detected	-
Fibrous Tremolite	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	-	-	Not Detected	-
Fibrous Actinolite	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	-	-	Not Detected	-
Non-Asbestos Fibre	-	-	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected	-	-	Not Detected	-
Comments	-	-	Soil containing material typical of asbestos gasket.	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)															
Dibromofluoromethane**	105	103	101	83.8	86.1	98.9	97.4	104	103	100	94.6	105	89.1	101	107
Toluene-d8**	98.2	100	94.8	87.2	92.5	87.5	97.2	99	98.8	93.2	95.1	97.9	86.7	96.2	97.5
4-Bromofluorobenzene**	95.8	98.7	88.2	70.6	77.2	71.8	80.7	96.9	104	84.1	81.5	91.3	71.6	89.6	94
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.18	0.09	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.14	0.07	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.08	0.04	0.08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.13	0.26	0.532	0.26	0.13	0.13	0.13	0.13	0.198	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	0.8	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics															
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	4AG2V	4AH1	4AH1	4AH1	4AH10	4AH10	4AH2	4AH2	4AH3	4AH3	4AH3	4AH3	4AH4	4AH4	4AH4
Depth	1.6	0.5	0.8	1.1	0.5	1	0.5	1	0.4	0.9	1.5	2.5	0.4	1	1.7
Sampled Date	02/04/2019	02/04/2019	02/04/2019	02/04/2019	10/04/2019	10/04/2019	02/04/2019	02/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019
Carbon															
Soil Organic Matter (SOM)	1.15	9.72	49.5	1.62	9.67	0.557	19	9.17	14.2	32.9	20	12.9	16.9	22.6	6.52
Metals (Solids)															
Arsenic	13.6	4.11	5.92	7.01	6	11.2	7.85	9.55	14.1	6	6	6	6	6	6
Cadmium	0.116	0.242	0.0625	0.153	0.205	0.02	0.608	0.229	1.88	0.2	0.619	0.2	0.665	0.2	0.532
Chromium	40.8	25.2	130	10.8	311	1050	31.2	111	474	379	276	478	358	3090	849
Copper	15.8	6.5	11	9.01	22.5	13.7	16.4	17	41.6	32.2	14	16.6	14	15.3	14
Lead	23.2	20.5	16	16	34.6	11	57.6	19.8	31.8	33.6	25.2	17.1	13.4	7	25.4
Mercury	0.14	0.14	0.14	0.14	1.4	0.14	0.14	0.14	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Nickel	39.1	5.22	6.59	18.9	8.72	6.97	14.9	22.1	42.7	16.7	8.84	12.3	4.01	2	2
Selenium	1.26	3.47	4.08	2.26	10	17.7	4.96	2.35	11	10	10	10	10	10	16.9
Vanadium	66.6	30.6	217	31.6	268	617	36.7	81.4	598	467	272	313	344	549	773
Zinc	119	95.3	78.8	67	190	36.9	289	96.6	98.9	129	101	76.7	51.2	19	35.7
TPH Criteria Working Group (TPH CWG)															
Benzene															
Toluene															
Ethylbenzene															
sum of detected mpo xylene by GC															
Aliphatics >C5-C6	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0216	0.0297	0.0233	0.0332	0.0146	0.0354	0.0439
Aliphatics >C6-C8	0.02	0.02	0.0289	0.02	0.02	0.02	0.02	0.02	0.0625	0.0912	0.0741	0.154	0.0502	0.139	0.0541
Aliphatics >C8-C10	0.02	0.02	0.0233	0.02	0.02	0.02	0.02	0.02	0.0388	0.0692	0.0476	1.63	0.0377	0.0612	0.0316
Aliphatics >C10-C12	0.02	0.02	0.0377	0.02	0.02	0.02	0.02	0.02	0.0377	0.0802	0.0434	19.3	0.045	0.0569	0.0214
Aliphatics >C12-C16	0.1	5.38	24.2	0.432	5.36	1.88	6.38	0.1	5.43	11.4	5.32	43.2	10.1	13.9	4.04
Aliphatics >C16-C21	0.1	24.6	90.1	1.2	18.2	6.06	28.9	3.43	38.9	113	36.9	236	41.7	29.9	10.6
Aliphatics >C21-C35	0.1	59.6	203	7.36	82.1	26.7	53.7	16.3	127	122	59.4	33.6	95.6	167	38.3
Aliphatics >C35-C44	0.1	8.79	25.7	1.4	25.9	9.16	5.05	2.25	106	24.8	11.3	7.28	10.9	25.4	4.52
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.119	0.01	0.01	0.01
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0119	0.0231	0.018	0.0271	0.01	0.0225	0.0245
Aromatics >EC8-EC10	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0259	0.0462	0.0317	1.09	0.0251	0.0408	0.0214
Aromatics >EC10-EC12	0.02	0.02	0.0255	0.02	0.02	0.02	0.02	0.02	0.0248	0.0539	0.0296	12.9	0.0303	0.0376	0.0143
Aromatics >EC12-EC16	0.1	12.1	58	2.18	9.71	0.386	16.2	1.8	13.3	33.7	12.3	280	13.4	14.9	7.07
Aromatics >EC16-EC21	0.1	53.3	291	5.72	58.2	6.47	52.2	7.8	88.3	391	74.1	773	61.4	38	20.9
Aromatics >EC21-EC35	0.1	136	679	14.7	202	56.5	225	41.1	267	994	200	773	119	95.8	48.4
Aromatics >EC35-EC44	0.1	40.1	178	4.51	65.3	25	64.4	12.4	161	250	58.3	219	32	29.6	13.8
Aromatics >EC40-EC44	0.1	12.1	50	1.36	22.1	9.66	19.4	3.69	68	81.7	19.5	77.5	11	10.7	4.66
Polyaromatic Hydrocarbons (PAHs)															
Acenaphthylene	12	1050	8580	35.9	1250	60	1830	104	1050	8090	2420	5240	1700	426	85.4
Acenaphthene	8	137	1840	8	227	40	702	21.9	90.3	757	194	40600	89.9	41	52.4
Anthracene	16	1900	22600	84.4	2470	80	1540	115	1710	19100	4250	28300	4960	799	373
Benz(a)anthracene	14	3230	42600	169	6590	857	6640	584	5650	23600	9450	56000	7990	1470	754
Benzo(a)pyrene	15	3130	41800	154	7480	1230	17100	637	4990	13600	8200	42600	5590	1010	610
Benzo(b)fluoranthene	15	5610	63100	264	11000	1680	22600	1030	8200	24800	13500	65000	10000	2040	1030
Benzo(k)fluoranthene	14	1890	23100	84.3	3910	698	7760	312	3080	9580	5420	19600	3130	608	354
Benzo(g,h,i)perylene	24	2400	28800	125	5400	978	12700	586	3410	8560	5920	26300	3630	634	460
Chrysene	10	2610	37300	156	6510	1110	18900	658	5750	21700	9300	42400	7380	1590	718
Dibenzo(a,h)anthracene	0.023	563	6680	28.3	267	183	3520	125	826	2540	1540	7370	793	185	132
Indeno(1,2,3-cd)pyrene	0.018	2130	25600	107	4540	738	14800	556	3600	10500	5090	24600	3760	570	480
Fluoranthene	0.017	7360	104000	361	12400	953	7560	903	10500	74400	21200	97300	23600	4640	1520
Fluorene	10	563	5120	27.7	927	50	731	45.2	471	7220	1210	35200	1260	252	145
Naphthalene	9	2990	10900	120	3370	45	7160	284	1560	2750	4570	98800	3370	1730	517
Phenanthrene	15	5340	39900	268	7820	240	4780	460	4740	72000	10900	84500	18500	4330	1440
Pyrene	0.015	5.28	73.8	0.276	10.2	1.06	9.95	0.655	8.53	48.8	15.9	69.3	16.1	3.22	1.06
PAH, Total Detected USEPA 16	0.118	46.2	536	2.26	84.4	9.73	138	7.08	64.1	348	119	743	112	23.5	9.73
Naphthalene-d8 % recovery**	101	100	91.5	102	101	84.2	96.9	90.9	95.9	9.95	104	97.8	102	94.2	87.7
Acenaphthene-d10 % recovery**	95	96.3	79.7	95.8	86.1	72.6	89.9	90.2	94.8	9.98	96.5	106	100	90.3	91.2
Phenanthrene-d10 % recovery**	105	102	85.8	104	105	79.7	96.3	105	96.7	11.1	100	107	99.6	94.3	106
Chrysene-d12 % recovery**	95.7	91.6	90.3	91.7	85.2	82.3	90.4	104	91.6	9.12	84.7	85.2	87.7	89.8	105
Perylene-d12 % recovery**	97.1	87.4	83.9	90.2	82.9	79	83.1	107	94.8	6.13	82.4	89.2	85.9	80.4	95.7
Total Aliphatics >C12-C44	0.1	98.4	343	10.4	132	43.8	94	22	278	272	113	320	158	237	57.4
Total Aromatics >EC12-EC44	0.1	242	1210	27.1	335	88.4	358	63.1	530	1670	345	2040	225	178	90.2
Total Aliphatics & Aromatics >C5-C44	0.1	340	1550	37.5	467	132	452	85.1	807	1940	458	2400	384	415	148
Metals - (Solid)															
Iron	35000	33800	51600	34500	67500	159000	29500	29200	245000	138000	75400	95800	137000	205000	158000
Manganese	504	3800	6930	1670	20000	35300	6970	2860	24200	23800	13100	26700	19000	38800	35100
Metals - (Liquid)															
Calcium	-	190000	-	49800	-	205000	102000	-	142000	-	171000	-	192000	-	244000
Magnesium	-	33500	-	6780	-	8000	10800	-	10700	-	24700	-	34000	-	14900
Phenols															
Phenol	0.01	0.01	0.01	0.01	0.0435	0.01	0.01	0.01	0.01	0.011	0.0212	0.01	0.0314	0.0322	0.0102
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.0137	0.01	0.01	0.011	0.01	0.01	0.0105	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.0369	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.0435	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0418	0.035	0.035
Inorganics															
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.179	-	0.0711	-	0.0845	0.0426	-	0.0928	-	0.0227	-	0.006	-	0.015
pH	8.06	9.78	6.68	9.02	12.1	12.2	8.13	7.75	11.5	11.7	11.5	10.8	12.5	12.5	12.7
Sulphate, Total															
Sulphur, Total	-	0.368	-	0.141	-	0.266	0.333	-	0.247	-	0.273	-	0.148	-	0.234
Sulphate, Total potential	-	1.1	-	0.423	-	0.798	0.999	-	0.741	-	0.819	-	0.444	-	0.702
Sulphate, acid soluble (total)	-	0.78	-	0.77	-	0.384	0.125	-	0.225	-	0.327	-	0.163	-	0.226
Cyanide, Total	1	1	1.55	1	1	1	1	1	1.05	11.3	1	1	1	1	1
Exchangeable Ammonia as N	21.4	12	12	12	12	12	12	15.7	12	12	12	12	12	12	12
Asbestos															
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-
Date of Analysis	-	17/04/19	-	16/04/2019	-	25/04/19	16/04/19	-	24/04/2019	-	24/04/2019	-	24/04/2019	-	24/04/2019
Analysed By	-	Christian Hallam	-	Paul Poynton	-	Christian Hallam	Christian Hallam	-	James Richards	-	Marcin Magdziarek	-	Barbara Urbanek-Walsh	-	Lucy Caroe
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	-	None	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	-	N/A	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-
Chrysotile (White) Asbestos	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Amosite (Brown) Asbestos	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Trace	-	Not Detected
Crocidolite (Blue) Asbestos	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Anthophyllite	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Tremolite	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Actinolite	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected
Non-Asbestos Fibre	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Detected
Comments	-	-	-	-	-	-	-	-	-	-	-	-	Loose fibres in soil.	-	-
Volatile Organic Compounds (VOCs)															
Dibromofluoromethane**	105	75.4	86	105	90.9	106	95.7	101	87.3	91.6	94.5	103	88.7	106	87
Toluene-d8**	98.5	89.8	88.3	98.7	88.9	98.5	93.4	95.4	82.2	87.6	90.9	95.8	82.2	96.7	84.7
4-Bromofluorobenzene**	98.3	70.5	73.2	96.2	77.9	101	81.9	86.6	71.2	74.6	79.5	89.7	71.6	97.6	71.6
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.172	0.09	1.8	0.116
Toluene	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.4	0.158
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.259	0.04	0.8	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.629	0.1	2	0.187
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.232	0.1	2	0.1
Naphthalene	0.13	0.23	0.666	0.13	0.449	0.13	0.13	0.13	0.305	0.527	0.283	167	0.13	2.6	0.235
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.29	0.4	8	0.461
Subcontracted: Inorganics															
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	4AH5	4AH5	4AH5	4AH6	4AH6	4AH7	4AH7	4AH7	4AH8	4AH8	4AH8	4AH9	4AH9
Depth	0.4	1	1.4	0.3	0.8	0.5	1	1.5	0.5	0.8	1.4	0.5	1
Sampled Date	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019
Carbon													
Soil Organic Matter (SOM)	47.6	30.9	29.5	33.6	9.17	25.7	3.02	13.1	6.5	8.03	14.9	0.379	0.593
Metals (Solids)													
Arsenic	6	2.93	6	6	6	6	6	6	3.41	1.43	6	7.74	6.95
Cadmium	0.757	0.26	0.257	0.624	0.2	0.47	0.2	0.626	0.245	0.02	0.2	0.2	1.13
Chromium	698	250	291	570	691	342	816	829	146	13.3	217	820	915
Copper	14	6.87	14	79	21.4	14	24.3	15.3	10.5	1.4	14.8	43.1	24.8
Lead	21.6	7.91	21.2	17.5	7	12	7	14.5	23	0.7	22.3	21.1	22.4
Mercury	1.4	0.14	1.4	1.4	1.4	1.4	1.4	1.4	0.14	0.14	1.4	1.4	1.4
Nickel	5.19	3.8	2.73	7.18	6.46	8.83	2.49	5.9	8.38	1.65	5.53	12.3	15.1
Selenium	10	6.89	10	12.2	10.7	10	10	16.4	5.19	4.21	10	19	28.8
Vanadium	319	211	205	338	627	249	827	1250	144	39.1	196	730	694
Zinc	86.9	29.9	28.7	44.7	50.5	62.4	26.7	44.1	86.7	11	109	88.4	53.3
TPH Criteria Working Group (TPH CWG)													
Benzene													
Toluene													
Ethylbenzene													
sum of detected mpo xylene by GC													
Aliphatics >C5-C6	0.02	0.02	0.058	0.0322	0.02	0.01	0.0132	0.0256	0.111	0.132	0.04	0.02	0.02
Aliphatics >C6-C8	0.02	0.0913	0.241	0.0986	0.02	0.0217	0.0265	0.0738	0.551	0.449	0.0703	0.02	0.02
Aliphatics >C8-C10	0.02	0.108	0.469	0.0716	0.02	0.0134	0.0265	0.0472	1.66	0.208	0.0995	0.02	0.02
Aliphatics >C10-C12	0.02	1.56	1.36	0.0519	0.02	0.0124	0.0652	0.0451	4.93	0.199	0.293	0.02	0.02
Aliphatics >C12-C16	10.3	32.1	22.2	9.96	9.82	12.1	20.1	7.28	33.3	12	15.3	0.1	0.469
Aliphatics >C16-C21	28.8	575	508	19.6	81.8	18.9	1160	30.5	61.6	42.6	41.3	3.37	2.88
Aliphatics >C21-C35	79.3	169	131	107	221	61.5	216	138	261	176	254	21.8	22.6
Aliphatics >C35-C44	12.1	16.3	8.42	12.1	56.5	4.41	16	37.9	409	106	296	5.85	9.02
Aromatics >EC5-EC7	0.02	0.02	0.0736	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.0963	0.0228	0.02	0.01	0.01	0.0246	0.146	0.168	0.0324	0.02	0.02
Aromatics >EC8-EC10	0.02	0.072	0.313	0.0477	0.02	0.01	0.0173	0.0308	1.11	0.139	0.0659	0.02	0.02
Aromatics >EC10-EC12	0.02	1.04	0.907	0.0353	0.02	0.01	0.0438	0.0308	3.29	0.132	0.196	0.02	0.02
Aromatics >EC12-EC16	39.7	585	200	9.55	8.64	18.9	15.2	8.25	177	12.4	45.8	0.342	0.462
Aromatics >EC16-EC21	221	2590	1130	21.2	63	67.4	407	34.7	272	56	95	6	5.66
Aromatics >EC21-EC35	356	2530	1310	67.1	194	104	624	104	469	219	330	53.6	51
Aromatics >EC35-EC44	72.9	513	280	18.6	60.9	23.2	163	34.7	612	132	410	20.3	34.1
Aromatics >EC40-EC44	23	153	88.5	6.41	22.5	7.5	55.1	12.4	273	51.8	186	6.95	15.8
Polyaromatic Hydrocarbons (PAHs)													
Acenaphthylene	1840	60200	199000	48.2	12	2250	206	186	1330	60	335	60	60
Acenaphthene	509	5090	193000	10.4	141	243	414	188	6660	275	437	40	40
Anthracene	5590	87200	192000	80.7	307	3480	1020	482	4190	686	1050	80	103
Benz(a)anthracene	8850	124000	190000	328	2120	5040	4420	1450	2330	765	1720	1840	923
Benzo(a)pyrene	6110	65100	186000	221	1710	3430	5340	1440	1540	424	1490	2800	1310
Benzo(b)fluoranthene	11400	127000	189000	413	4370	5270	6780	1980	2580	808	2540	3860	1830
Benzo(k)fluoranthene	3580	51400	196000	129	1500	2210	2760	779	657	212	970	1040	754
Benzo(g,h,i)perylene	3690	43900	177000	184	1840	1860	2970	860	861	300	1070	2080	897
Chrysene	8670	114000	190000	370	3550	4750	4160	1490	2090	747	1850	1940	1190
Dibenzo(a,h)anthracene	914	10400	177000	46.7	455	516	673	183	0.23	0.115	0.23	343	125
Indeno(1,2,3-cd)pyrene	4010	58500	219000	142	1340	2310	2620	875	766	223	854	1680	960
Fluoranthene	24300	425000	202000	609	4320	14500	6910	2810	8380	3760	4700	0.085	1560
Fluorene	2330	43000	202000	44	72.1	1930	258	191	3810	104	364	50	50
Naphthalene	2950	13200	208000	259	194	3250	555	847	36300	668	8140	84	45
Phenanthrene	18200	566000	203000	577	3310	13300	5410	2370	17600	4990	5640	639	1540
Pyrene	17	252	208	0.495	3.28	9.54	6.2	2.45	7.1	2.5	3.45	2.35	1.42
PAH, Total Detected USEPA 16	120	2050	3130	3.95	28.5	73.9	50.7	18.6	96.3	16.5	34.6	18.7	12.6
Naphthalene-d8 % recovery**	96.9	98	9940	87.4	94.7	91.7	96	98.9	94.8	98.8	91.5	93.2	81.2
Acenaphthene-d10 % recovery**	97.3	100	9830	92.8	91.6	91	93	95.4	103	93.1	86.5	89.6	83
Phenanthrene-d10 % recovery**	95.4	99	9920	109	95.6	92.7	97.3	103	101	100	96.8	97.9	85.7
Chrysene-d12 % recovery**	89.2	90	9460	107	93.5	88.9	98	82.5	75.9	87.9	79.3	81.3	74.3
Perylene-d12 % recovery**	82.7	79	8930	95.9	94.3	81.3	97.2	74.7	65.7	84	74.4	83.7	77.5
Total Aliphatics >C12-C44	131	793	669	148	369	96.9	1410	213	765	337	606	31	35
Total Aromatics >EC12-EC44	690	6220	2910	116	326	214	1210	181	1530	419	881	80.2	91.2
Total Aliphatics & Aromatics >C5-C44	820	7010	3590	265	695	311	2620	395	2310	757	1490	111	126
Metals - (Solid)													
Iron	137000	59500	61800	115000	135000	83300	163000	165000	56900	7680	62800	163000	152000
Manganese	18900	26100	16400	24800	34300	15200	34900	32800	10400	6750	14700	51300	58400
Metals - (Liquid)													
Calcium	155000	-	162000	145000	-	98900	-	235000	118000	-	188000	381000	-
Magnesium	25200	-	18000	26200	-	15700	-	10900	15500	-	22100	6820	-
Phenols													
Phenol	0.01	0.107	0.05	0.0311	0.032	0.01	0.0102	0.0103	0.27	0.0113	0.0108	0.0417	0.0212
Cresols	0.01	0.322	0.124	0.01	0.0107	0.01	0.01	0.01	0.659	0.01	0.0108	0.01	0.01
Xylenols	0.015	0.075	0.075	0.015	0.015	0.015	0.015	0.015	0.713	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.43	0.124	0.035	0.0427	0.035	0.035	0.035	1.64	0.035	0.035	0.0417	0.035
Inorganics													
Soluble Sulphate 2:1 extract as SO4 BRE	0.0286	-	0.0212	0.0079	-	0.0066	-	0.0051	0.151	-	0.142	0.0074	-
pH	9.21	12.4	12.1	12.4	12.7	12.2	12.6	12.6	11.7	11.4	11.8	12.6	12.7
Sulphate, Total													
Sulphur, Total	0.13	-	0.524	0.232	-	0.178	-	0.222	0.367	-	0.613	0.0913	-
Sulphate, Total potential	0.39	-	1.57	0.696	-	0.534	-	0.666	1.1	-	1.84	0.274	-
Sulphate, acid soluble (total)	0.0866	-	0.918	0.346	-	0.222	-	0.218	0.688	-	1.19	0.244	-
Cyanide, Total	1	1	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	12	12	12	12	12	12	12	12	12	12	12
Asbestos													
Asbestos Quantification - Gravimetric - %	0.001	-	-	-	-	-	-	-	-	-	-	0.001	-
Date of Analysis	24/04/19	-	24/04/2019	24/04/19	-	24/04/2019	-	24/04/2019	25/04/19	-	26/04/19	25/04/19	-
Analysed By	Christian Hallam	-	James Richards	Andrzej Ferfecki	-	Lucy Caroe	-	Marcin Magdziarek	Christian Hallam	-	Christian Hallam	Christian Hallam	-
Asbestos Quantification - PCOM Evaluation - %	0.001	-	-	-	-	-	-	-	-	-	-	0.001	-
Additional Asbestos Components (Using TM048)	None	-	-	-	-	-	-	-	-	-	-	None	-
Analysts Comments	N/A	-	-	-	-	-	-	-	-	-	-	N/C	-
Asbestos Quantification - Total - %	0.001	-	-	-	-	-	-	-	-	-	-	0.001	-
Chrysotile (White) Asbestos	Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Detected	-
Amosite (Brown) Asbestos	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Crocidolite (Blue) Asbestos	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Fibrous Anthophyllite	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Fibrous Tremolite	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Fibrous Actinolite	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Non-Asbestos Fibre	Not Detected	-	Not Detected	Not Detected	-	Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Comments	Soil containing asbestos bitumen debris.	-	-	-	-	-	-	-	-	-	-	Fibre bundles in soil.	-
Volatile Organic Compounds (VOCs)													
Dibromofluoromethane**	83.7	115	103	92.3	102	109	103	96.9	101	94.8	91.6	99.2	94.2
Toluene-d8**	85.2	87.9	92.9	90.9	94.1	98.4	92.9	91.1	97.2	91.6	88.1	99.5	99.6
4-Bromofluorobenzene**	78.2	79.3	88.3	77	90.6	101	91.1	79.6	99	78.8	72.6	102	97.8
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	2	0.2	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	1.8	0.09	0.09	1.8	0.18	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	1.4	0.07	0.07	1.4	0.262	0.0869	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.8	0.04	0.04	0.8	0.08	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	2	0.26	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	2	0.2	0.1	0.1	0.1
Naphthalene	0.194	20.5	9.5	0.13	0.13	2.6	0.13	0.13	81.2	0.377	5.98	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	8	0.4	0.4	8	0.8	0.4	0.4	0.4
Subcontracted: Inorganics													
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Sample ID	4AH1V	4AH2V	4AH4V	4AH5V	4AH6V	4AH7V	4AH8V	4AH9V	4AH10V	4AI1	4AI1	4AI1	4AI1V	4AJ1	4AJ1	4AJ1V	4AL1	4AL1	4AL2
Depth	2	2.8	3.8	3.8	3.8	4	3.4	3.4	3.4	0.4	1	1.5	2.5	0.5	1.2	2.2	0.25	0.8	0.4
Sampled Date	02/04/2019	02/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019	10/04/2019	11/04/2019	11/04/2019	11/04/2019
Carbon																			
Soil Organic Matter (SOM)	2.57	1.23	1.27	1.34	0.941	2.57	1.66	3.26	2.12	2.26	95.2	12.8	1.05	74.6	17.1	2.95	4.95	>100	4.71
Metals (Solids)																			
Arsenic	13	13.5	13.6	15.2	17.1	9.73	16.4	12.4	15.2	1.66	6	3.46	14.7	7	7.52	12.6	6.15	6	8.77
Cadmium	0.194	0.147	0.298	0.346	0.361	0.3	0.0712	0.265	0.125	0.0403	0.703	0.12	0.126	0.371	0.392	0.168	0.329	1.17	0.2
Chromium	38	35.1	39.2	37.6	37.1	44.4	31.5	41.3	35	64.6	157	20.2	34.8	44.5	94.1	33.9	108	96.6	128
Copper	20.2	12.8	14.5	15.6	10.4	17.8	12.5	22.4	18.2	1.4	17.6	5.02	16.3	30.6	18	22.6	21.5	22.4	16.3
Lead	19.5	27.8	25.2	27.8	26.7	22.9	28	23.4	25.4	4.66	32.9	9.43	24.8	33.6	70.2	20.4	63.1	36.4	91.2
Mercury	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	1.08	1.4	0.14	1.4	1.4	1.4
Nickel	35	38	38.9	38.8	42.8	32.3	38.5	36	33.3	2.52	9.01	5.57	43	12.9	14	28.5	10.2	13.6	17.6
Selenium	1.61	1.02	1	1	1	1	1	1	1	4.68	10	2.97	1	1.93	10	1	10	10	10
Vanadium	60.2	57.2	58.1	60	65.4	64.3	57	62.8	59.5	58.6	130	31.2	56.4	46	137	56.9	132	88.2	305
Zinc	96.6	117	113	118	129	96.5	111	113	115	44.1	129	44.1	122	131	272	120	799	205	282
TPH Criteria Working Group (TPH CWG)																			
Benzene																			
Toluene																			
Ethylbenzene																			
sum of detected mpo xylene by GC																			
Aliphatics >C5-C6	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0244	0.02	0.02	0.02	0.0702	0.02
Aliphatics >C6-C8	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0545	0.02	0.02	0.02	0.173	0.02
Aliphatics >C8-C10	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0534	0.02	0.02	0.02	0.185	0.02
Aliphatics >C10-C12	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0824	0.02	0.02	0.02	0.292	0.02
Aliphatics >C12-C16	0.1	0.6	0.1	0.1	0.195	0.596	0.269	0.168	1.32	0.622	16.1	2.35	1.84	12	6.46	1.8	2.07	4.13	2.08
Aliphatics >C16-C21	0.1	0.813	0.1	0.68	0.246	2.68	0.1	0.1	0.66	1.24	43.1	4.52	0.797	40.3	33	1.03	9.34	27.3	8.15
Aliphatics >C21-C35	0.229	1.67	0.1	0.1	0.1	2.17	0.1	0.635	1.21	12.9	172	17.9	1.67	70	63	3.43	61.6	95.6	79.9
Aliphatics >C35-C44	0.1	0.281	0.1	0.1	0.1	0.1	0.644	0.198	0.1	2.07	24.9	4.85	0.437	11.5	11.3	0.712	19.6	11.4	28.9
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0357	0.02
Aromatics >EC8-EC10	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.036	0.02	0.02	0.02	0.123	0.02
Aromatics >EC10-EC12	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0545	0.02	0.02	0.02	0.194	0.02
Aromatics >EC12-EC16	1.03	0.1	0.339	0.174	0.166	0.532	0.1	0.257	0.171	0.795	22.3	3.45	0.155	49.8	40.4	0.1	5.74	17.1	3.69
Aromatics >EC16-EC21	1.04	0.1	0.276	0.635	0.347	1.91	0.185	0.203	0.1	8.18	196	14.1	0.268	619	345	0.388	23.9	124	20.6
Aromatics >EC21-EC35	9.63	2.37	1.57	1.61	2.11	3.58	3.12	5.3	3.03	23.1	626	38.8	1.59	1460	609	12.8	79.5	427	72.6
Aromatics >EC35-EC44	3.26	0.661	0.1	0.1	0.1	0.295	3.5	0.332	0.1	7.73	146	23.4	0.1	382	158	3.63	31.4	127	29.7
Aromatics >EC40-EC44	0.974	0.132	0.1	0.1	0.1	0.1	1.82	0.1	0.1	2.6	44	10.4	0.1	130	50.6	1.59	10.2	39.6	9.64
Polyaromatic Hydrocarbons (PAHs)																			
Acenaphthylene	12	12	12	12	12	12	12	12	12	68.2	1970	224	12	19700	1340	12	1530	3120	676
Acenaphthene	8	8	8	8	8	8	8	8	8	17.1	355	16	8	17100	40	8	560	395	57.9
Anthracene	16	16	16	16	16	16	16	16	16	123	2870	400	16	107000	3050	16	3650	4620	1000
Benz(a)anthracene	18.1	14	39.3	50.5	14	20.1	14	14	14	353	9110	719	14	202000	8220	14	10900	18100	3050
Benzo(a)pyrene	15	15	25.7	28.7	15	15	15	15	15	323	9390	631	15	142000	7800	15	9240	16400	2870
Benzo(b)fluoranthene	27	15	39.4	54	15	15	15	15	22.5	555	15900	1110	15	207000	13200	28	15700	18600	3370
Benzo(k)fluoranthene	14	14	14	19.4	14	14	14	14	14	198	5630	397	14	98800	4230	14	5480	8050	1220
Benzo(g,h,i)perylene	24	24	24	24	24	24	24	24	24	250	7100	554	24	78500	5600	24	6940	11700	2000
Chrysene	17.7	10	41.7	42.8	10	14.3	10	10	10	353	8610	684	10	172000	8340	17.5	11500	13300	2380
Dibenzo(a,h)anthracene	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	54.2	2190	115	0.023	25900	1550	0.023	1560	3280	494
Indeno(1,2,3-cd)pyrene	0.018	0.018	0.018	26.5	0.018	0.018	0.018	0.018	0.018	293	6390	471	0.018	73700	4670	0.018	5830	9810	1760
Fluoranthene	0.017	0.017	51	101	0.017	31.6	0.017	0.017	0.017	693	16500	1990	0.017	289000	17700	53.2	20000	37000	6580
Fluorene	10	10	10	10	10	10	10	10	10	43.4	770	183	10	34900	608	10	1190	1690	516
Naphthalene	13.1	9	33.1	9	9	9	9	9	9	172	2800	347	9	11400	1080	105	2640	3470	717
Phenanthrene	15	15	37.6	83.5	15	30.2	15	15	15	415	8550	1510	15	219000	4950	41.5	9410	15200	4110
Pyrene	0.0324	0.015	0.0379	0.0669	0.015	0.022	0.015	0.015	0.015	0.504	12.2	1.39	0.015	258	12.9	0.0391	15	27	4.67
PAH, Total Detected USEPA 16	0.118	0.118	0.306	0.473	0.118	0.118	0.118	0.118	0.118	4.41	110	10.7	0.118	1950	95.2	0.284	121	192	35.5
Naphthalene-d8 % recovery**	101	89	102	90.9	91.2	89.9	98.2	97.5	96.1	86.5	87	101	86.4	95.8	86.1	97.9	108	86.5	87.9
Acenaphthene-d10 % recovery**	96.6	86.9	96.8	93.1	93.2	94.4	92.1	94.7	91.8	83.4	86	91.8	83.7	97.2	78.4	90.4	100	77.2	77.3
Phenanthrene-d10 % recovery**	108	90.6	104	108	106	110	100	104	100	87.5	86.7	101	86.9	102	86.5	98	104	84.9	89.9
Chrysene-d12 % recovery**	103	79	95.1	114	110	115	89.2	92	84.2	80.6	83	87	77.2	64.3	81.8	87.7	109	85.2	89.8
Perylene-d12 % recovery**	96.6	82.7	94.6	110	108	112	86.9	91.5	83.7	84.8	77.2	82.5	82.4	88.2	84.3	86.8	102	82.8	95.7
Total Aliphatics >C12-C44	0.229	3.36	0.1	0.68	0.441	5.45	0.913	1	3.2	16.8	256	29.6	4.75	134	114	6.97	92.6	138	119
Total Aromatics >EC12-EC44	14.9	3.03	2.19	2.42	2.62	6.32	6.81	6.09	3.2	39.8	990	79.8	2.01	2510	1150	16.8	140	695	127
Total Aliphatics & Aromatics >C5-C44	15.2	6.39	2.19	3.1	3.07	11.8	7.72	7.09	6.4	56.7	1250	109	6.76	2650	1270	23.8	233	835	246
Metals - (Solid)																			
Iron	32000	33800	28200	37900	30800	27000	27400	27400	28500	29200	63400	13100	33400	25500	60200	42500	62500	60400	165000
Manganese	433	597	399	489	583	331	409	549	791	10500	8520	3390	738	2610	9620	859	6880	4430	20100
Metals - (Liquid)																			
Calcium	-	-	-	-	-	-	-	-	-	352000	-	152000	-	-	111000	-	129000	-	152000
Magnesium	-	-	-	-	-	-	-	-	-	30200	-	48700	-	-	19000	-	24700	-	15600
Phenols																			
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0113	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0113	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																			
Soluble Sulphate 2:1 extract as SO4 BRE	-	-	-	-	-	-	-	-	-	0.1	-	0.0525	-	-	0.0849	-	0.126	-	0.0694
pH	7.89	8.53	7.68	7.79	7.77	7.64	7.37	6.88	7.37	10	8.95	9.33	7.21	8.08	10.3	7.03	9.61	10.2	9.62
Sulphate, Total																			
Sulphur, Total	-	-	-	-	-	-	-	-	-	0.427	-	0.209	-	-	0.221	-	0.246	-	0.396
Sulphate, Total potential	-	-	-	-	-	-	-	-	-	1.28	-	0.627	-	-	0.663	-	0.738	-	1.19
Sulphate, acid soluble (total)	-	-	-	-	-	-	-	-	-	1.46	-	0.647	-	-	0.311	-	0.327	-	0.709
Cyanide, Total	1	1	1	1	1	1	1	1	1	1	1	1	1	127	7.88	1	1	2.41	1
Exchangeable Ammonia as N	25.4	12	91.5	118	90.3	210	192	333	201	12	12	12	203	12	12	219	12	12	12
Asbestos																			
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	-	-	-	-	-	-	-	-	25/04/19	-	25/04/19	-	-	26/04/19	-	26/04/19	-	26/04/19
Analysed By	-	-	-	-	-	-	-	-	-	Christian Hallam	-	Christian Hallam	-	-	Christian Hallam	-	Christian Hallam	-	Christian Hallam
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected
Amosite (Brown) Asbestos	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected
Crocidolite (Blue) Asbestos	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Anthophyllite	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Tremolite	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected
Fibrous Actinolite	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected
Non-Asbestos Fibre	-	-	-	-	-	-	-	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-	Not Detected	-	Not Detected
Comments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)																			
Dibromofluoromethane**	107	104	109	105	105	106	105	108	107	103	85.1	96	107	96	98.7	108	84.1	92.9	98.8
Toluene-d8**	96.9	99.2	96.8	97.5	95.6	97.2	98.8	97	97.9	97.1	91	87.6	98.8	92.9	95.3	99.3	92.9	90.3	93.6
4-Bromofluorobenzene**	96.9	99.7	99.1	95.9	98.2	99.7	99.3	102	98.7	95.1	74.1	72.1	99.5	81.5	86.3	99.8	77	75	80.9
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.01	0.1	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.18	0.09	0.09	0.18	0.09	0.09	0.009	0.11	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.14	0.07	0.07	0.14	0.07	0.07	0.007	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.08	0.04	0.04	0.004	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.01	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.01	0.1	0.1
Naphthalene	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.26	0.13	0.13	1.21	0.169	0.13	0.157	0.959	0.13
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.8	0.4	0.4	0.04	0.4	0.4
Subcontracted: Inorganics																			
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	4AL2	4AL2	4AL2	4AL1V	4AL2V	4AM1	4AM1	4AM1V	4EA7	4EA7	4EA8	4EA8	4EA7V	4EA8V	4EB4	4EB4
Depth	0.8	1.2	1.6	2.4	3.4	0.3	0.9	2.2	0.4	0.9	0.5	1	2.1	1.7	0.5	1
Sampled Date	11/04/2019	11/04/2019	11/04/2019	11/04/2019	11/04/2019	11/04/2019	11/04/2019	11/04/2019	01/11/2018	01/11/2018	31/10/2018	31/10/2018	01/11/2018	31/10/2018	29/10/2018	29/10/2018
Carbon																
Soil Organic Matter (SOM)	3.81	11.1	1.97	0.972	2.59	52.2	23.8	0.869	6.81	8.45	51.4	4.91	3.22	0.905	7.59	3.28
Metals (Solids)																
Arsenic	2.76	7.95	6	12.7	16.5	8.26	6.33	7.87	13.6	6	6	5.52	12.9	18.9	11.5	9.31
Cadmium	0.265	0.0402	0.612	0.119	0.221	0.159	0.279	0.133	0.2	0.2	0.2	0.02	0.37	0.3	0.2	0.2
Chromium	51.2	84.4	347	40.8	70.9	58.5	25	22.6	188	359	9	115	38.2	27	75.9	9
Copper	7.16	19.7	14	18.2	21.4	15.4	14.8	8.1	25.1	20	14	11.1	14.6	12.1	26.1	14
Lead	8.42	22.4	18.8	23.1	22.6	23.7	32.2	15.5	86.7	36	41.9	48.9	33.3	28.8	144	55.6
Mercury	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	1.4	1.4	1.4	0.14	0.14	0.14	1.4	1.4
Nickel	5.6	12.7	8.17	41	38.5	9.73	12.6	29.2	21.6	14.6	37.5	7.78	34.2	42.1	34.1	20.3
Selenium	1.59	4.5	17	1	1	2.15	3.49	1	10	10.9	10	6.07	1	1	10	10
Vanadium	53.8	86.7	548	60.1	61.4	73.4	56.6	40.8	276	419	163	117	64	54.2	168	98
Zinc	87.2	87.8	81.9	116	284	105	164	83.3	346	85.9	145	201	115	116	467	236
TPH Criteria Working Group (TPH CWG)																
Benzene																
Toluene																
Ethylbenzene																
sum of detected mpo xylene by GC																
Aliphatics >C5-C6	0.02	0.02	0.02	0.02	0.02	0.0294	0.02	0.02	0.01	0.2	0.02	0.0336	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.0355	0.02	0.02	0.02	0.02	0.0746	0.0403	0.02	0.172	3.32	0.02	0.137	0.0945	0.02	0.02	0.0361
Aliphatics >C8-C10	0.0323	0.02	0.02	0.02	0.02	0.102	0.0348	0.02	2.5	46.7	0.02	0.444	0.62	0.02	0.02	0.035
Aliphatics >C10-C12	0.025	0.02	0.02	0.02	0.02	0.0859	0.0392	0.02	10.8	168	0.02	2.04	2.55	0.02	0.02	0.0552
Aliphatics >C12-C16	3.68	0.435	0.1	1.74	0.1	3.48	3.17	0.1	260	471	5.47	34.2	2.24	0.1	0.132	2.13
Aliphatics >C16-C21	6.1	5.75	0.1	1.72	0.1	19.8	10.7	0.1	351	579	23.9	79.4	4.26	0.1	4.21	9.81
Aliphatics >C21-C35	30.7	5.82	1.43	2.03	0.927	77.4	52.6	0.271	2980	2980	131	404	20.3	0.1	49.6	82.2
Aliphatics >C35-C44	4.56	0.944	0.1	0.312	0.1	8.98	8.43	0.1	513	381	27.3	91.4	5.07	0.1	17.7	35.8
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.2	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.2	0.02	0.0314	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.0209	0.02	0.02	0.02	0.02	0.0678	0.0228	0.02	1.67	31.1	0.02	0.296	0.413	0.02	0.02	0.0233
Aromatics >EC10-EC12	0.02	0.02	0.02	0.02	0.02	0.0576	0.0261	0.02	7.19	112	0.02	1.36	1.7	0.02	0.02	0.0371
Aromatics >EC12-EC16	3.44	0.913	0.1	0.1	0.1	17.7	19.1	0.1	77.4	177	3.33	22.4	0.1	0.1	2.49	2.8
Aromatics >EC16-EC21	15.7	7.91	0.1	0.451	0.1	145	168	1.12	108	170	15.9	213	1.97	0.1	10.7	11.3
Aromatics >EC21-EC35	47.4	18.7	0.1	2.62	3.32	430	509	3.74	425	561	65.3	449	24.3	2.3	52.3	61.1
Aromatics >EC35-EC44	12.1	5.05	0.1	0.411	0.557	110	133	0.513	86.1	178	28.9	123	13.3	3.01	28.4	44.9
Aromatics >EC40-EC44	3.06	1.77	0.1	0.1	0.1	31.9	35.5	0.1	29.5	67	12.2	40.7	5.5	1.66	11.4	19.7
Polyaromatic Hydrocarbons (PAHs)																
Acenaphthylene	334	29.8	12	12	12	3550	8280	12	92.7	12	206	184	12	12	174	142
Acenaphthene	24.7	8	8	8	8	224	40	8	9.18	244	24.5	40	8	8	29.6	22.5
Anthracene	473	86.2	16	16	16	4020	14900	16	144	60.2	478	590	16	16	394	226
Benz(a)anthracene	2590	307	14	19.6	14	13700	24800	14	315	116	987	1210	14	25.5	897	837
Benzo(a)pyrene	2120	254	15	15	15	12200	20600	15	291	131	817	1040	15	19.8	804	771
Benzo(b)fluoranthene	4100	395	15	25.8	15	21900	33400	22.1	352	389	1360	1230	15	28.2	1290	1250
Benzo(k)fluoranthene	1400	151	14	14	14	6040	12200	14	157	140	509	491	14	14	521	436
Benzo(g,h,i)perylene	1760	182	24	24	24	8150	14300	24	265	208	515	783	24	24	584	549
Chrysene	2750	283	10	17.6	10	12500	22200	10	307	311	929	1050	10	22.2	946	792
Dibenzo(a,h)anthracene	433	50.5	0.023	0.023	0.023	1920	3480	0.023	56.6	38.2	124	187	0.023	0.023	161	130
Indeno(1,2,3-cd)pyrene	1510	157	0.018	0.018	0.018	10700	12400	0.018	217	174	567	815	0.018	0.018	736	726
Fluoranthene	4030	634	0.017	56.1	0.017	33400	75300	0.017	781	330	2160	3380	0.017	68.6	1840	1620
Fluorene	87.3	10	10	10	10	1660	7630	10	78.4	95.7	193	252	10	10	182	78
Naphthalene	654	63.1	9	9	9	2190	2270	9	181	31.2	556	290	9	25.9	299	228
Phenanthrene	1650	380	15	15	15	13400	45600	15	511	583	1330	2830	15	33.3	1290	848
Pyrene	3.05	0.437	0.015	0.0416	0.015	24	52.2	0.015	0.798	0.564	1.68	2.27	0.015	0.0474	1.38	1.3
PAH, Total Detected USEPA 16	27	3.41	0.118	0.161	0.118	170	350	0.118	4.56	3.42	12.4	16.6	0.118	0.271	11.5	9.95
Naphthalene-d8 % recovery**	93.3	90	92.5	83.2	92.8	79.7	88.9	93.4	93.2	89.5	92.5	83.8	88.4	94.1	86.1	87
Acenaphthene-d10 % recovery**	85.8	87.3	83.3	80.9	87.2	76.5	86.9	88.8	82.2	98.9	95	81.5	88.7	87.6	90.3	89.1
Phenanthrene-d10 % recovery**	89.3	84	90.2	84.2	90.8	80.6	90	94.4	103	104	92.6	89.8	90.8	90.2	98.3	95.6
Chrysene-d12 % recovery**	96.4	71.4	83.9	78.7	86.9	74.6	73.7	87.5	98.9	102	77.7	92.5	92.7	87.7	95.1	108
Perylene-d12 % recovery**	89.9	66.8	87	83.7	88.8	78.6	74.1	88.3	87.1	95.3	70.4	83.3	91	86.1	89.4	99.5
Total Aliphatics >C12-C44	45	12.9	1.43	5.8	0.927	110	74.9	0.271	4100	4410	188	609	31.8	0.1	71.7	130
Total Aromatics >EC12-EC44	78.6	32.6	0.1	3.48	3.88	703	829	5.37	696	1090	113	808	39.5	5.32	94	120
Total Aliphatics & Aromatics >C5-C44	124	45.6	1.43	9.28	4.8	813	904	5.64	4820	5850	301	1420	76.8	5.32	166	250
Metals - (Solid)																
Iron	29500	31700	96000	37600	39100	32300	38500	31800	183000	134000	133000	66500	37600	38900	210000	216000
Manganese	4340	8950	29200	315	419	4390	3660	1070	11500	26600	2070	13100	854	1750	9030	3260
Metals - (Liquid)																
Calcium	-	186000	-	-	-	-	106000	-	-	160000	-	191000	-	-	82200	-
Magnesium	-	38700	-	-	-	-	15000	-	-	4470	-	16600	-	-	6840	-
Phenols																
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.0325	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0217	0.0139	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.0326	0.015	0.055	0.015	0.015	0.0217	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.066	0.035	0.035	0.0759	0.035	0.035	0.035	0.035
Inorganics																
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.395	-	-	-	-	0.109	-	-	0.133	-	0.178	-	-	0.0679	-
pH	11.3	11.5	11.8	7.28	8.35	9.8	9.8	8.08	10.3	11.6	10.8	12.5	8.09	8.14	9.45	9.15
Sulphate, Total																
Sulphur, Total	-	0.274	-	-	-	-	0.223	-	-	0.189	-	0.559	-	-	0.192	-
Sulphate, Total potential	-	0.822	-	-	-	-	0.669	-	-	0.567	-	1.68	-	-	0.576	-
Sulphate, acid soluble (total)	-	0.814	-	-	-	-	0.473	-	-	0.549	-	0.533	-	-	0.184	-
Cyanide, Total	4.79	1	7.86	1	1	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	12	134	202	12	12	32.7	12	12	12	12	218	76.4	12	12
Asbestos																
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	0.001	-
Date of Analysis	-	26/04/2019	-	-	-	-	26/04/2019	-	-	08/11/2018	-	09/11/2018	-	-	08/11/2018	-
Analysed By	-	Paul Poynton	-	-	-	-	Paul Poynton	-	-	Christian Hallam	-	Marcin Magdziarek	-	-	Lucy Caroe	-
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	0.001	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	None	-	-	None	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	N/A	-	-	N/A	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	0.001	-
Chrysotile (White) Asbestos	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Detected	-	-	Detected	-
Amosite (Brown) Asbestos	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-
Crocidolite (Blue) Asbestos	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-
Fibrous Anthophyllite	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-
Fibrous Tremolite	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-
Fibrous Actinolite	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-
Non-Asbestos Fibre	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	-	-	Not Detected	-
Comments	-	-	-	-	-	-	-	-	-	0	-	Fibre bundles in soil	-	-	Soil containing ACM debris	-
Volatile Organic Compounds (VOCs)																
Dibromofluoromethane**	94.7	106	104	103	105	96.8	101	113	107	105	109	105	105	106	105	104
Toluene-d8**	91.9	98.7	99.8	98.8	99.8	88.2	95.3	97.3	95.8	91.8	92.8	97.8	99.9	101	99.5	97.5
4-Bromofluorobenzene**	79.4	96.7	100	100	96.4	73.2	86.4	102	89.5	86.2	75.8	93.1	98.8	100	88.2	86.4
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.135	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.102	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.211	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.232	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.13	0.13	0.13	0.3	0.257	0.13	0.13	0.13	0.13	0.691	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.68	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics																
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	4EB7	4EB8	4EB8	4EB9	4EB9	4EB9	4EB7V	4EB8V	4EB9V	4EC1	4EC1	4EC10	4EC10	4EC10	4EC2
Depth	0.5	0.5	1	0.5	1	1.5	1.6	2.6	2.2	0.2	0.4	0.5	1	2	0.5
Sampled Date	01/11/2018	31/10/2018	31/10/2018	31/10/2018	31/10/2018	31/10/2018	01/11/2018	31/10/2018	31/10/2018	29/10/2018	29/10/2018	26/11/2018	26/11/2018	26/11/2018	29/10/2018
Carbon															
Soil Organic Matter (SOM)	1.56	1.68	1.7	8.29	5.28	17.6	1.61	1.3	1.91	36.9	37.1	9.79	3.9	2.67	37.2
Metals (Solids)															
Arsenic	10.5	6	8.97	7.07	7.42	8.69	19.1	24	17.1	6.16	6.22	9.99	4.72	10	10
Cadmium	0.2	0.2	0.2	0.2	0.2	0.2	0.316	0.238	0.02	0.388	0.02	0.2	0.02	0.2	0.893
Chromium	775	987	825	220	255	150	40.8	30.1	36.6	114	30.8	267	3.69	10.3	20.5
Copper	34.4	16.2	33.4	19.4	23.5	37	11.4	11.1	12.9	13.2	17.4	54.5	1.4	56.5	31.8
Lead	31.2	16.5	11.1	48.8	48.7	75.1	29.4	30.8	29.8	63.4	36.7	67.5	1.18	54.4	97.6
Mercury	1.4	1.4	1.4	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14	1.4	0.14	1.4	1.4
Nickel	26.4	8.78	21.7	21.9	25.6	26.5	39.3	39.1	39.9	15.7	13.6	34.9	1.66	32.6	30.2
Selenium	22	21.1	17.1	12.3	10	10	1	1	1	3.2	1.85	10	6.08	10	10
Vanadium	591	499	456	269	258	200	66.9	64.2	60.6	132	65	224	23.2	71	45.7
Zinc	97.6	55.3	75.5	113	169	188	108	137	123	542	260	277	11.3	188	332
TPH Criteria Working Group (TPH CWG)															
Benzene															
Toluene															
Ethylbenzene															
sum of detected mpo xylene by GC															
Aliphatics >C5-C6	0.02	0.02	0.02	0.02	0.02	0.0495	0.02	0.0219	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.0377	0.02	0.02	0.0627	0.0616	0.198	0.02	0.0876	0.02	0.02	0.02	0.0463	0.02	0.02	0.02
Aliphatics >C8-C10	0.0237	0.02	0.02	0.495	1.14	3	0.02	0.299	0.02	0.02	0.02	0.0516	0.02	0.02	0.02
Aliphatics >C10-C12	0.163	0.02	0.02	2.52	7.01	11.6	0.02	0.945	0.02	0.02	0.02	0.0613	0.02	0.02	0.02
Aliphatics >C12-C16	5.04	0.617	0.1	110	177	292	0.1	0.1	0.1	1.86	3.69	5.69	15	59.4	3.11
Aliphatics >C16-C21	21.3	0.203	0.1	255	210	469	0.1	2.5	0.1	11.9	22.2	31.7	24.5	175	13.6
Aliphatics >C21-C35	136	17.4	37.1	1140	1100	2220	0.1	21.3	0.1	52.3	66.6	200	355	582	52.5
Aliphatics >C35-C44	39.3	3.88	6.78	225	237	472	0.1	0.638	0.1	25.2	19.9	56.7	212	138	24.2
Aromatics >EC5-EC7	0.02	0.02	0.02	0.065	0.0358	1.73	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.02	0.02	0.398	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.02	0.02	0.02	0.33	0.758	2	0.02	0.2	0.02	0.02	0.02	0.0344	0.02	0.02	0.02
Aromatics >EC10-EC12	0.109	0.02	0.02	1.68	4.67	7.75	0.02	0.629	0.02	0.02	0.02	0.0409	0.02	0.02	0.02
Aromatics >EC12-EC16	1.71	1.04	1.65	23.5	41.6	72.4	0.174	1.08	0.1	7.28	8.07	3.37	3.57	24.9	5.84
Aromatics >EC16-EC21	10.9	7.05	9.49	75.1	71.3	152	0.1	2.64	0.428	28.1	46.6	13.8	31	95.8	26.1
Aromatics >EC21-EC35	90.5	46	66.9	313	295	561	0.286	10.7	2.07	108	122	76.3	451	302	96
Aromatics >EC35-EC44	38.7	15.8	26.4	90.5	110	149	0.525	3.55	3.3	61	39.1	39.4	481	134	49.8
Aromatics >EC40-EC44	13.9	5.9	9.22	30.9	43.3	50.7	0.379	1.53	1.96	27.1	14.8	15.6	230	56.2	21.1
Polyaromatic Hydrocarbons (PAHs)															
Acenaphthylene	15.4	12	12	17.6	12	112	12	12	34.2	220	157	66.3	120	50.3	97.6
Acenaphthene	44.4	21.3	25.4	49.1	164	766	8	8	65.7	43	49.1	14.9	80	49.7	27
Anthracene	66.2	53.7	68.6	120	278	504	16	16	58.9	475	365	99.5	160	110	177
Benz(a)anthracene	923	495	629	628	1490	1300	14	23.5	113	1590	1290	262	198	236	736
Benzo(a)pyrene	1160	593	740	651	1760	1180	15	15	105	1440	1130	223	272	214	623
Benzo(b)fluoranthene	1090	464	1400	832	2370	1160	15	30.8	179	2370	1910	288	299	253	1120
Benzo(k)fluoranthene	624	297	524	353	723	519	14	14	57.5	860	675	114	140	105	338
Benzo(g,h,i)perylene	895	544	627	679	1250	944	24	24	80	1080	742	187	386	200	465
Chrysene	1020	605	815	611	1590	1330	10	27.7	128	1510	1480	228	153	246	705
Dibenzo(a,h)anthracene	178	119	135	144	252	206	0.023	0.023	0.023	288	232	39.8	0.23	39.3	124
Indeno(1,2,3-cd)pyrene	743	513	593	634	1130	1040	0.018	0.018	64	1310	890	195	315	185	452
Fluoranthene	1240	752	1110	1330	2780	3720	0.017	70.8	297	3030	2460	531	393	605	1230
Fluorene	21.1	13	11.7	32.7	10	236	10	10	53.8	114	101	44.8	0.1	54.1	52.8
Naphthalene	62.1	32.6	51.3	193	470	1760	9	55.3	118	279	378	229	90	205	219
Phenanthrene	427	291	431	955	1870	4050	15	44.6	193	1470	1510	425	213	429	685
Pyrene	1.39	0.689	0.946	1.15	2.29	2.9	0.015	0.0519	0.253	2.25	1.95	0.444	0.31	0.564	0.932
PAH, Total Detected USEPA 16	9.91	5.48	8.1	8.38	18.4	21.7	0.118	0.304	1.8	18.3	15.3	3.39	2.54	3.55	7.98
Naphthalene-d8 % recovery**	94.5	82	96.6	84.4	94	84.1	86.9	92.7	90.7	90.3	88.6	91	89.4	93.2	91.1
Acenaphthene-d10 % recovery**	95.4	87	82.8	88.7	95.1	97.1	88.7	86.3	86.3	92.6	94.1	86.4	80.5	94.8	88.9
Phenanthrene-d10 % recovery**	101	91.4	85.9	92.3	91	92.8	90.7	88.1	89.1	96	95.2	89.7	77.5	90.7	87.3
Chrysene-d12 % recovery**	100	97.1	86.3	96.9	76.6	78.2	90.7	83.5	85	103	94.7	80.4	72.2	80.8	72.5
Perylene-d12 % recovery**	92.8	89.3	82.1	88.6	86.1	71.5	89.1	81.2	85.1	91.9	79.8	75.8	72.4	78.3	70.1
Total Aliphatics >C12-C44	202	22.1	43.9	1730	1720	3450	0.1	24.5	0.1	91.3	112	294	606	954	93.5
Total Aromatics >EC12-EC44	142	69.9	104	502	518	935	0.986	18	5.8	204	216	133	967	557	178
Total Aliphatics & Aromatics >C5-C44	344	92.1	148	2240	2250	4410	0.986	44.6	5.8	295	328	427	1570	1510	271
Metals - (Solid)															
Iron	220000	172000	194000	123000	118000	135000	38200	42000	35000	47600	57700	179000	4940	170000	80100
Manganese	33000	31900	33200	19000	21800	15900	523	397	367	6110	3690	10600	3730	3660	2780
Metals - (Liquid)															
Calcium	233000	271000	-	223000	196000	-	-	-	-	151000	-	153000	-	75800	97700
Magnesium	12100	7450	-	9730	16400	-	-	-	-	27100	-	26200	-	9830	14300
Phenols															
Phenol	0.0108	0.0104	0.0107	0.0336	0.0112	0.0115	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.0115	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics															
Soluble Sulphate 2:1 extract as SO4 BRE	0.104	0.004	-	0.442	0.604	-	-	-	-	0.0845	-	0.0853	-	0.475	0.0521
pH	12.7	12.8	12.8	12.8	12.6	12.8	7.89	8.12	8.02	9.04	9.51	10.5	8.39	10.1	8.98
Sulphate, Total															
Sulphur, Total	0.506	0.186	-	0.409	0.834	-	-	-	-	0.284	-	0.0983	-	0.524	0.282
Sulphate, Total potential	1.52	0.558	-	1.23	2.5	-	-	-	-	0.852	-	0.295	-	1.57	0.846
Sulphate, acid soluble (total)	0.671	0.315	-	1.01	1.27	-	-	-	-	0.21	-	0.185	-	0.382	0.13
Cyanide, Total	1	1	1	1	15.1	1	1	1	1.58	1	1	1	1	2.28	1
Exchangeable Ammonia as N	21	117	12	12	12	12	130	65.2	193	12	12	12	12	12	12
Asbestos															
Asbestos Quantification - Gravimetric - %	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-
Date of Analysis	14/11/2018	09/11/2018	-	06/11/2018	09/11/2018	-	-	-	-	09/11/2018	-	11/12/2018	-	11/12/2018	09/11/2018
Analysed By	Andrzej Ferfecki	Lucy Caroe	-	Andrzej Ferfecki	Renata Bozhkov	-	-	-	-	Andrzej Ferfecki	-	Marcin Magdziarek	-	Paul Poynton	Andrzej Ferfecki
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	None	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	Not Detected	Not Detected	-	Not Detected	Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected
Amosite (Brown) Asbestos	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected
Crocidolite (Blue) Asbestos	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected
Fibrous Anthophyllite	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected
Fibrous Tremolite	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected
Fibrous Actinolite	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected
Non-Asbestos Fibre	Not Detected	Not Detected	-	Not Detected	Not Detected	-	-	-	-	Not Detected	-	Not Detected	-	Not Detected	Not Detected
Comments	0	0	-	0	Loose fibres in soil.	-	-	-	-	0	-	0	-	0	0
Volatile Organic Compounds (VOCs)															
Dibromofluoromethane**	106	104	80	104	107	104	104	108	109	98.7	107	108	116	114	104
Toluene-d8**	99.4	101	95.9	94.8	97.3	91.3	99.7	101	97.2	95	90.2	95.6	90.7	92.4	95.8
4-Bromofluorobenzene**	97.5	94	95	92.7	93.5	86.4	97.9	100	95.7	80.3	74	85	82.1	88.5	75
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	0.869	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	0.193	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.16	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.119	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.13	0.13	0.229	0.835	0.13	0.13	0.13	0.13	0.13	0.275	0.13	0.13	0.167
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	1.34	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics															
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

											Sample ID	4EC2	4EC4	4EC4	4EC7	4EC7	4EC8	4EC8	4EC9	4EC10V	4EC2V	4EC4V	4EC7V	4ED1	4ED1	4ED10	4ED10	4ED2	4ED2	4ED4	4ED4	4ED7	4ED8	4ED8	4ED9	4ED9	4ED10V	4ED1V	4ED4V	4ED7V	4ED8V	4ED9V	4EE1	4EE1	4EE1	4EE10	4EE10	4EE2	4EE2	4EE2	4EE4	4EE4	4EE4	4EE5	4EE5
											Depth	1	0.5	1	0.5	1	0.5	1	0.5	2.5	1.65	2.25	1.8	0.5	1	0.5	1	0.25	1	0.5	1.2	0.5	0.5	0.9	0.5	1	2.8	1.8	2.1	1.9	1.7	2	0.5	1	2	0.4	1.5	0.2	0.5	1.3	0.5	1	1.5	0.2	0.8
											Sampled Date	29/10/2018	30/10/2018	30/10/2018	01/11/2018	01/11/2018	01/11/2018	01/11/2018	31/10/2018	26/11/2018	29/10/2018	30/10/2018	01/11/2018	29/10/2018	29/10/2018	26/11/2018	26/11/2018	29/10/2018	29/10/2018	30/10/2018	30/10/2018	01/11/2018	01/11/2018	01/11/2018	31/10/2018	31/10/2018	26/11/2018	29/10/2018	30/10/2018	01/11/2018	01/11/2018	31/10/2018	01/11/2018	01/11/2018	01/11/2018	26/11/2018	26/11/2018	29/10/2018	29/10/2018	29/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**																																												
Carbon																																																						
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	10.7	7.28	2.64	6.84	27.1	84.8	9.86	4.84	4.91	0.852	1.48	9.19	11.8	48.8	2.47	3.45	44	4.19	29	8.4	2.78	21.6	12.3	4.05	1.23	5.28	1	1.15	5.07	1.55	3.29	10.7	19.3	6.6	6.74	3.21	6.72	59.8	43.4	32.2	45.2	31.7	7.36	27.8
Metals (Solids)																																																						
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	12.3	9.76	12.8	15.3	9.98	4.99	8.49	10.5	17.2	11.1	16.1	15.5	5.35	6.63	11	4.97	8.33	7.33	10.4	8.56	12.2	8.99	8.83	3.68	6	17.7	13.7	15.2	15	20.7	13.3	7.22	8.25	6.69	10.9	6.05	14.8	4.96	7.34	10.5	12.1	11.2	6	6
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	2.07	0.2	0.2	0.2	0.2	0.02	1.14	0.2	0.269	0.02	0.02	0.02	0.02	0.02	0.562	0.281	0.02	0.342	0.02	0.02	0.2	1.11	0.2	0.02	0.2	0.271	0.02	0.02	0.2	0.394	0.02	0.02	0.877	0.02	0.2	0.2	0.02	0.02	0.462	0.02	0.02	0.02	0.2	0.2
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	36.8	150	388	63.2	168	3.33	161	76.4	33.9	25.6	46.6	115	16.5	32	137	24.5	126	732	16.2	480	9	190	732	53.4	567	34.4	28.1	36.4	39.8	55.9	35.7	37	115	143	129	525	48	95.8	187	34	37.7	69.8	454	369
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	67.5	14	286	25.3	24.9	13.7	22.1	34.6	15.9	9.52	14.2	23.3	7.2	20	19.8	6.71	19.5	30	14.7	23.9	14	22.3	36.5	2.48	15.4	18.5	10.5	10.6	14	12.7	13.7	14.6	29.2	15.4	19.7	18.3	36.2	12.8	15.9	17.9	26.2	21.1	19	14
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	113	38.2	31.2	116	91.6	29.2	46	77.3	41.1	22.5	29.3	45.3	15.7	30.5	52.8	105	28.8	24.1	23.5	19.6	94.4	43.7	11.4	11.5	21	41.4	24.5	27.8	39.8	27.7	30.5	29.2	35.4	26.2	29.9	9.99	79.8	23.7	30.2	33	24.7	58.6	16.6	21.8
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	0.14	1.4	1.4	1.4	1.4	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	0.14	1.4	0.14	1.4	0.14	1.4	0.14	0.14	0.14	1.4	0.14	0.14	0.14	0.14	0.14	1.4	1.4	0.14	0.14	1.4	1.61	2.17	0.757	1.4	1.4
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	35	17.1	36.3	31.6	24.2	12	15.4	39.8	33.4	32	43.7	22.1	7.56	14.7	22	6.8	13.5	22.2	18.4	14.4	14.3	14.9	26.3	4.31	9.49	34.4	36.9	43	29.4	38.1	36.4	17.1	16	10.1	56.6	13.4	17.6	9.88	14.7	13.3	15.5	18	13.5	6.83
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	1.47	10	16.4	10	10	2.17	5.34	10	1.7	1	1	2.88	1.13	2.57	7.47	3.59	3.53	17.9	1.72	13.1	10	2.91	18	5.93	22	1.88	1	1	10	1	1	1.44	4.09	5.45	10	21	1.86	4.92	10	2.36	2.91	3.3	19.3	12
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	37.6	179	405	226	140	17.7	177	113	57.5	45.3	71.4	108	33.7	45.6	163	77.5	96.4	397	52.3	443	43.7	138	507	115	397	54.5	50.4	61.6	63.9	81	58.1	47	155	247	123	416	86.8	116	190	59.2	92.1	84.3	508	335
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	395	164	122	422	323	112	183	238	136	96.5	129	149	47.6	293	234	572	329	69.1	109	92.3	270	165	45.5	58.8	60.3	156	104	117	106	103	128	128	130	83.5	236	38.6	454	77	107	97.9	103	156	43.3	45.1
TPH Criteria Working Group (TPH CWG)																																																						
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00																																											
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00																																											
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00																																											
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00																																											
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.0697	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.0532	0.0187	0.01	0.02	0.02	0.02	0.923	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.02	0.01	0.01	0.0314	0.02	0.01	0.02	0.07	0.02	0.02	0.01	0.219	0.02	0.02	0.051	0.0582	0.02	0.02	0.02	0.01	0.02	0.0606	0.0435	0.02	0.0246	0.0581	0.02	0.01	0.0526	0.161	0.0518	0.01	0.0549	0.0418	0.0294	0.363	0.02	0.02	0.02	0.02	0.02	0.02	0.0463	0.0155
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.02	0.01	0.01	0.0238	0.02	0.01	0.02	0.373	0.02	0.02	0.01	0.481	0.02	0.02	0.0632	0.0538	0.02	0.02	0.02	0.01	0.02	0.0412	0.0498	0.02	0.02	0.0969	0.02	0.01	0.092	0.557	0.753	0.01	0.0373	0.0237	0.0272	2.59	0.02	0.02	0.02	0.02	0.02	0.02	0.0328	0.0155
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.02	0.01	0.01	0.02	0.02	0.01	0.02	2.05	0.02	0.02	0.01	1.32	0.02	0.02	0.142	0.483	0.02	0.02	0.02	0.01	0.02	0.231	1.52	0.154	0.108	0.128	0.02	0.01	0.209	1.19	0.657	0.01	0.0461	0.0203	0.0958	651	0.02	0.02	0.02	0.02	0.02	0.02	0.276	0.164
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	2.48	3.7	4.04	2.48	2.39	7.26	0.1	120	0.1	0.1	0.1	1.15	6.9	5.84	13.9	13.7	3.5	7.19	1.61	8.13	0.1	2.36	2.84	7.49	6.17	1.24	0.1	0.1	1.31	0.1	0.107	5.78	2.61	2.01	0.1	2.85	2.26	5.52	7.21	5.28	3.06	4.72	5.34	1.38
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	10.8	35.9	21.7	17	21.9	42.4	0.808	290	0.947	0.1	1.14	3.98	26.7	22.1	36.9	52.2	20.8	59.4	19	29.4	9.87	10.5	15.8	20.1	20.5	1.53	0.1	0.1	2.88	0.1	11.1	23.7	39.4	12.1	1.5	7.05	22.7	28.9	26.2	20.9	21.4	21.6	28.6	11.1
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	40.6	64.9	83.4	143	80.3	241	109	2010	13.8	0.1	1.79	17.1	70.4	64.3	74.8	151	65.3	118	80.5	65.9	158	81.7	79.5	275	133	6.38	0.1	0.1	14.7	2.43	4.58	94.5	77.6	45.5	30.6	36.9	123	77.6	111	51.3	33.7	43	61.1	35.4
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	20.1	16.2	27.7	92.4	15.3	71.6	32.6	590	1.03	0.1	0.1	14.9	25.9	18.1	25.8	96.7	20.5	43.3	14.8	7.3	37.1	28.1	27.5	150	61.7	0.1	0.1	0.1	1.14	0.1	0.1	43.7	16.7	14.2	6.9	9.07	36.3	12	38.1	7.89	4.55	8.94	18.7	8.93
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.0956	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.0213	0.0504	0.01	0.02	0.02	0.02	0.427	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.0308	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.0259	0.01	0.02	0.02	0.02	0.2	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.249	0.02	0.02	0.01	0.321	0.02	0.02	0.0418	0.0358	0.02	0.02	0.02	0.01	0.02	0.0271	0.0329	0.02	0.02	0.0641	0.02	0.01	0.0613	0.371	0.503	0.01	0.0253	0.02	0.02	1.73	0.02	0.02	0.02	0.02	0.02	0.02	0.0215	0.01
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.02	0.01	0.01	0.02	0.02	0.01	0.02	1.36	0.02	0.02	0.01	0.881	0.02	0.02	0.0949	0.323	0.02	0.02	0.02	0.01	0.02	0.154	1.02	0.102	0.0717	0.0849	0.02	0.01	0.139	0.793	0.438	0.01	0.0307	0.02	0.0643	434	0.02	0.02	0.02	0.02	0.02	0.02	0.184	0.11
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	2.72	2.98	0.856	4.01	2.92	7.02	2.65	43	0.1	0.1	0.23	1.63	7.07	15.2	5.27	3.22	9.33	4.25	5.57	2.76	0.1	2.16	1.92	2.4	3	0.1	0.1	0.1	0.53	0.1	0.472	6.88	10.1	4.05	0.461	17.3	4.35	6.9	6.88	10.4	6.3	7.22	2.3	2.16
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	12.7	29.3	13.3	14.2	9.06	25.1	12.2	95.3	1.9	0.1	1.42	5.65	20.1	89	17.9	21.2	66	38.2	22.6	18.4	1.25	7.2	9.26	15.5	29.9	1.37	1.38	0.1	1.63	0.1	8.99	28.9	114	29.6	3.93	20.5	18	29.6	34.2	86.9	39.7	55	16.2	17.1
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	69.3	91.2	79.2	97.9	42	144	153	377	26.9	3.49	6.09	55.3	82.9	292	59.2	148	161	150	107	96.4	17.7	51.7	71.8	294	165	28.4	6.82	0.1	16.1	4.96	5.72	133	292	93.2	21.7	91.3	78.7	118	155	358	149	189	80.3	73.3
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	42.9	33.6	33.6	116	17.3	82.1	94.9	160	6.41	0.173	3.1	10.8	44.9	78.3	43.3	185	54.2	60.6	31.6	35.7	1.63	36.9	43	294	115	3.73	1.06	0.1	3.55	5.54	0.1	79.5	84.9	29.2	13.1	32.3	36.5	34.2	62.5	84.7	36.3	53.5	30.4	25.3
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	17.3	13	12.6	55	7.23	36.3	38.8	58.7	1.86	0.1	1.28	2.82	19.1	21.2	20.2	89.1	20.7	18.6	11.1	12.9	0.1	16.8	18	135	51.1	0.644	0.1	0.1	1.16	2.43	0.1	33.5	28.5	10.2	6.01	12.9	14.1	11.8	24.1	24.8	12.5	18.2	12.1	9.41
Polyaromatic Hydrocarbons (PAHs)																																																						
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	37.9	234	112	43.1	12	60	43.9	41.2	12	12	12	12	132	192	61.2	120	180	80.8	51.6	77.8	35.9	31.2	12	60	12	12	12	12	12	12	68.9	133	616	231	28.6	16.7	198	56.5	44.4	800	1390	571	12	12
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	12	40	60.9	17.3	8	40	17.4	97.8	8	8	8	21.6	25.8	111	31.1	80	43.4	63.1	28.5	73.9	8	8	8	40	10.2	13.9	8	8	50.5	113	38.4	40	57.2	31.2	8	43.1	63.8	35.9	28.3	221	396	192	47	58.3
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	102	404	503	74.7	93.8	144	69	82.3	16	16	16	16	223	735	114	160	773	212	158	232	41.1	47.3	27.7	80	75.3	16	16	16	16	28.9	53.5	362	1590	434	295	70.4	668	187	201	1450	2830	1360	112	145
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	673	1620	3050	247	192	381	700	113	29.4	14	33.6	142	648	3130	488	622	2320	1630	456	1650	98.3	289	583	114	219	14	14	14	103	160	168	1150	4960	1780	129	1170	1840	942	632	6210	8900	4250	787	853
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	645	1620	3060	238	209	288	898	100	28.8	15	38.7	154	614	2930	510	565	1950	1880	397	2150	81.7	303	760	130	235	15	15	15	103	39.2	161	1000	4090	1160	129	1630	1400	908	591	6780	8460	4060	918	887
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	976	2620	4820	267	376	545	932	158	35.6	15	62.3	155	1040	4410	708	806	3280	2980	658	3170	160	640	1330	138	269	28.2	15	15	107	78.7	227	1200	5490	1910	151	1750	2350	1490	952	9900	12900	6610	1290	1060
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	338	808	1690	106	14	174	372	60.9	14	14	30	74.6	293	1380	235	177	1150	940	181	1150	49.1	226	451	70	137	14	14	14	54.8	35.7	95.3	553	1960	685	51.7	637	843	594	297	3520	3690	2160	458	462
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	415	1190	2040	206	167	256	664	109	24	24	35.5	106	458	1980	416	476	1300	1530	315	1690	68.8	320	661	155	209	24	24	24	86.1	24	107	718	2820	792	136	1440	879	603	458	4930	5810	3450	635	608
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	638	1550	3270	256	574	398	699	150	25.3	10	41.6	153	679	3000	481	560	2250	1910	463	1950	110	340	727	112	259	22.6	10	10	115	185	173	1080	4270	1680	140	1210	1720	1020	698	6200	7020	4120	799	828
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	132	311	598	46.7	33.6	0.115	153	0.023	0.023	0.023	0.023	0.023	119	574	86.8	0.23	370	288	95.8	401	0.023	77.8	142	0.115	35.8	0.023	0.023	0.023	0.023	0.023	0.023	177	686	216	28	288	275	175	98.3	1340	1490	1020	172	146
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	554	1010	1880	157	190	203	528	93.1	0.018	0.018	32.3	106	388	2540	460	462	1740	1340	242	1750	63	269	566	123	150	0.018	0.018	0.018	77.4	0.018	100	665	3360	679	133	1420	1230	741	408	4160	4800	3580	504	546
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	1090	3080	6330	492	576	894	815	332	55	0.017	69.4	175	1180	4710	822	804	5470	3100	738	2530	195	368	642	262	740	42.9	0.017	0.017	216	766	387	2550	10400	4250	215	1530	4040	1340	1140	10700	16600	7720	1210	1350
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	18.2	94.5	88.1	29	10	77.9	19.2	260	10	10	10	10	78	256	29.5	0.1	285	50	75	66.5	15.5	14.7	10	50	10	10	10	10	17.8	47.6	19.9	121	607	284	39.2	31.6	209	56.9	46.9	488	1110	464	26.6	26.5
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	77.2	922	471	95.6	9	123	79.2	146	13.6	9	15.6	213	229	465	353	90	360	186	136	102	116	66.6	43.9	45	11.4	458	9	9	1330	545	325	325	715	176	89	411	301	143	105	2460	2240	1550	59.6	102
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	361	1740	2340	291	376	790	277	769	27.9	15	45.2	87.1	605	2740	393	223	4080	968	549	904	150	180	183	132	347	33.5	15	15	141	513	168	1370	6700	2350	180	696	2310	814	596	5810	10300	5030	513	803
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	0.806	2.43	4.32	0.388	0.43	0.703	0.806	0.419	0.0439	0.015	0.0569	0.224	0.918	3.93	0.732	1.95	3.79	2.88	0.594	2.36	0.171	0.372	0.689	0.218	0.589	0.0326	0.015	0.015	0.192	0.664	0.331	1.96	8.01	2.67	0.17	1.49	2.91	1.3	0.93	8.71	13.1	6.06	1.1	1.23
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	6.87	19.6	34.6	2.95	3.22	4.98	7.07	2.93	0.259	0.118	0.461	1.61	7.64	33.1	5.92	6.64	29.4	20	5.14	20.3	1.35	3.54	6.8	1.38	3.29	0.632	0.118	0.118	2.6	3.17	2.42	13.4	56.3	19.3	1.92	13.8	21.2	10.4	7.22	73.6	101	52.2	8.63	9.11
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	86.2	87.7	85.3	86	0	91.4	88.1	85.8	92	87.1	93.1	86.9	86.4	87.6	91.7	89.3	86.7	88.1	86.3	94.2	93.6	90.5	86.8	85.4	85	91.2	88.6	92.1	96.2	91.2	93.9	91.9	88.7	89	92.9	90.6	87.6	85.6	91.4	86.3	85	93.6	86.6	94.9
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	89.8	81.4	77.6	90.1	0	92	89.7	92.6	89.3	89.7	98.5	88.9	85.6	90.2	92.8	83.9	91.1	87.2	86.7	99.8	87.4	89.7	92.5	91.6	88.9	90.3	90.2	94.7	96.1	92.9	86.4	95.3	89.8	91.4	88.6	90.5	91.5	89.6	89.3	82.8	81.7	99.3	80.9	94.4
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	93.7	78	81.9	98.8	88.4	93.9	99.2	97.9	84.8	97.3	97	89.6	86.8	97.2	88.9	82.8	92.6	84.8	85.8	97.6	86.8	89.4	100	93.5	92.3	87.1	94	92.7	101	94.1	93.4	97.2	94.9	98.5	83.4	86.8	101	93.2	87.1	78.1	77.5	95.4	82	98.8
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	93	75.7	76.5	103	77.2	91.7	104	96.1	77.3	110	84	92.7	82.8	93.5	81.7	79	86.6	76.8	74.7	83.6	81.2	90.6	104	97.8	77.9	79.7	109	80.8	98.7	97.7	91.2	88.7	92	104	72.3	77.7	105	86.8	72.7	72.8	73.1	77.6	78	91.4
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	88.1	77	79.6	97.4	69.5	82.2	98.8	83.1	84.8	105	81	90.3	78.8	81.3	82.4	82.2	76.7	78.8	70.2	79.3	80.4	84.5	99.4	85.1	72.8	86.9	106	76.8	91.8	97	87.7	73	89.4	99.2	72.4	83.6	98.5	72.1	71.8	71.3	70.7	75.6	80.5	77.9
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	74	121	137	255	120	362	142	3010	15.7	0.1	2.93	37.2	130	110	151	314	110	228	116	111	205	123	126	453	222	9.15	0.1	0.1	20.1	2.43	15.8	168	136	73.7	39	55.8	184	124	182	85.5	62.7	78.3	114	56.9
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	128	157	127	232	71.3	258	263	675	35.2	3.66	10.8	73.4	155	474	126	357	290	253	166	153	20.6	98	126	606	313	33.5	9.25	0.1	21.8	10.5	15.2	249	501	156	39.3	161	138	189	258	540	232	305	129	118
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	202	278	264	488	191	620	405	3690	51	3.66	13.8	114	285	585	277	672	400	481	282	264	226	221	254	1060	535	43.1	9.25	0.1	42.4	16.1	33.5	417	637	230	78.5	1310	322	313	440	626	294	383	244	175
Metals - (Solid)																																																						
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			63800	160000	223000	174000	152000	48100	88300	198000	33200	33400	49700	68100	32900	33300	144000	44100	57900	201000	51700	151000	77100	110000	228000	36000	106000	36400	34200	41500	42200	46000	27400	41600	64500	84900	189000	147000	53900	57600	67400	43800	41500	43600	130000	92900
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			3570	11200	28300	11400	7850	3070	12700	11200	563	1260	1260	6170	2290	3490	11100	5400	7680	45700	3220	35900	1940	11500	42500	12000	37700	477	1640	866	1300	1500	721	3000	10400	17100	7510	32800	4340	9350	15600	3750	4240	5570	28800	22300
Metals - (Liquid)																																																						
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			-	138000	-	143000	-	104000	-	133000	-	-	-	-	171000	-	-	194000	-	219000	98100	-	196000	-	232000	203000	-	-	-	-	-	-	-	123000	-	171000	101000	226000	122000	-	166000	74600	-	133000	224000	-
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			-	9150	-	12000	-	14000	-	24000	-	-	-	-	12800	-	-	31100	-	7260	6120	-	16800	-	13700	33500	-	-	-	-	-	-	-	17000	-	2470	17400	7200	14600	-	12400	7220	-	13500	12600	-
Phenols																																																						
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01	0.01	0.0107	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0112	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0107	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0108	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																																																						
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	-	0.0774	-	0.196	-	0.0695	-	0.0794	-	-	-	-	0.121	-	-	0.102	-	0.108	0.336	-	0.15	-	0.0476	0.79	-	-	-	-	-	-	-	0.137	-	0.168	0.063	1.46	0.4	-	0.173	0.111	-	0.187	0.244	-
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	11.6	11.2	12.6	10.4	11.4	8.9	10.8	11.2	7.84	8.46	6.54	8.25	9.62	9.85	11.4	10.7	11	11.7	8.35	11.8	10.3	11.2	12.4	9.94	12.7	7.73	8.35	8.06	7.87	7.99	8.04	9.42	11.2	11.5	9.69	11.6	10.8	11.4	11.3	8.94	8.86	10.9	12.1	12.2
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33																																											
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	-	0.196	-	0.311	-	0.673	-	0.289	-	-	-	-	0.273	-	-	0.22	-	0.276	0.225	-	0.131	-	0.233	0.852	-	-	-	-	-	-	-	0.383	-	0.3	0.142	1.31	0.338	-	0.663	0.285	-	0.29	0.304	-
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	-	0.588	-	0.933	-	2.02	-	0.867	-	-	-	-	0.819	-	-	0.66	-	0.828	0.675	-	0.393	-	0.699	2.56	-	-	-	-	-	-	-	1.15	-	0.9	0.426	3.93	1.01	-	1.99	0.855	-	0.87	0.912	-
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	-	0.28	-	0.381	-	0.396	-	0.325	-	-	-	-	0.393	-	-	1.05	-	0.507	0.202	-	0.296	-	0.32	0.868	-	-	-	-	-	-	-	0.548	-	0.42	0.102	3.43	0.494	-	0.53	0.21	-	0.261	0.729	-
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7.46	15.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.17	1	1	20.9	18.5	12.7	1	1
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	12	12	12	13.6	12	12	12	12	223	341	194	269	15.4	19.2	19.4	12	12	12	12	12	28.2	12	19.1	12	12	227	137	164	262	92.4	171	12	12	12	12	12	12	12	12	12	12	12	12	12
Asbestos																																																						
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-
Date of Analysis	TM048	No units		1371	0	0				0.00		-	09/11/2018	-	13/11/2018	-	14/11/2018	-	13/11/2018	-	-	-	-	08/11/2018	-	-	11/12/2018	-	08/11/2018	09/11/2018	-	09/11/2018	-	13/11/2018	09/11/2018	-	-	-	-	-	-	-	14/11/2018	-	09/11/2018	11/12/2018	11/12/2018	08/11/2018	-	08/11/2018	09/11/2018	-	09/11/2018	09/11/2018	-
Analysed By	TM048	No units		1371	0	0				0.00		-	Barbara Urbanek-Walsh	-	Lucy Caroe	-	Andrzej Ferfecki	-	Barbara Urbanek-Walsh	-	-	-	-	James Richards	-	-	Paul Poynton	-	Lucy Caroe	Barbara Urbanek-Walsh	-	Lucy Caroe	-	Lucy Caroe	Barbara Urbanek-Walsh	-	-	-	-	-	-	-	Andrzej Ferfecki	-	Renata Bozhkov	Paul Poynton	Paul Poynton	Lucy Caroe	-	James Richards	Lucy Caroe	-	Barbara Urbanek-Walsh	Barbara Urbanek-Walsh	-
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	None	-	-	-	-	None	None	-	-	-	-	-	-	-	-	-	-	-	-	None	-	-	-	-	-	-	-
Analysts Comments	TM304	No units		1002	0	0				0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A	-	-	-	-	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Detected	Not Detected	-	Not Detected	-	Not Detected	Detected	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Detected	Not Detected	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	-	Not Detected	Not Detected	-	Not Detected	Not Detected	-
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-	Not Detected	-	Detected	-	Not Detected	-	Not Detected	-	-	-	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	-	Detected	-	Not Detected	Not Detected	-	-	-	-	-	-	-	Not Detected	-	Not Detected	Detected	Not Detected	Not Detected	-	Not Detected	Detected	-	Not Detected	Not Detected	-
Comments	TM048	No units		1371	0	0			0	0.00		-	0	-	0	-	0	-	0	-	-	-	-	0	-	-	0	-	Soil containing Fibre bundles	0	-	0	-	Loose fibres in soil	Fibre bundles in soil.	-	-	-	-	-	-	-	0	-	0	0	0	Fibre bundles in soil	-	0	0	-	0	0	-
Volatile Organic Compounds (VOCs)																																																						
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		106	120	118	101	102	95.6	104	110	108	105	117	103	103	95.6	111	113	106	114	103	117	111	101	109	117	91.3	107	107	122	112	110	105	97.8	107	99.7	107	111	107	109	111	85.9	103	95.8	104	118
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		100	96.4	97.1	99	98.9	95.5	98.1	94.5	98.8	98.4	99.9	98.8	94.8	91.7	95.2	92.5	98.3	100	97.1	98.1	98.6	98.6	95.6	90.1	93.1	98.8	98.6	99.1	99.3	99.9	96.6	97	96	97.9	95.7	96.2	99.7	95.5	99.9	89.7	90.8	95.3	99.8	98.1
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		92.7	97.7	98	91.5	92.2	79	94.1	86.6	95.3	96	104	95	82.1	73.5	90.8	87.2	83.1	95.2	83.9	94.6	91.9	90	92.6	82.6	96	95.4	95.9	106	97.5	97.9	94.7	81.6	90	87.3	87.8	94.9	90.9	72.7	95.8	69.3	66.6	78.2	95.5	94.3
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		0.09	0.09	0.09	0.09	0.09	0.09	0.009	0.09	0.09	0.09	0.09	0.09	0.09	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.171	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		0.07	0.07	0.07	0.07	0.07	0.07	0.007	0.07	0.07	0.07	0.07	0.07	0.07	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.04	0.04	0.04	0.04	0.04	0.04	0.004	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.189	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.26	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.308	0.13	0.13	0.13	1.15	1.25	0.13	0.258	0.13	0.13	0.389	0.13	0.13	0.13	0.159	0.367	0.183	0.13	0.13
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		0.4	0.4	0.4	0.4	0.4	0.4	0.04	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics																																																						
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.3	-	-	11.2	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.4	-	-	9.84	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.2	-	-	11	-	-	-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	9.34	-	-	-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.08	-	-	0.95	-	-	-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.6	-	-	11.6	-	-	-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.6	-	-	12.5	-	-	-

Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Sample ID	4EE6	4EE6	4EE7	4EE7	4EE8	4EE8	4EE9	4EE9	4EE9	4EE10V	4EE1V	4EE2V	4EE4V	4EE5V	4EE6V	4EE7V
Depth	0.25	0.8	0.3	0.8	0.5	1	0.5	1	1.5	2.5	2.5	2.6	2.1	1.95	1.8	1.75
Sampled Date	30/10/2018	30/10/2018	30/10/2018	30/10/2018	31/10/2018	31/10/2018	31/10/2018	31/10/2018	31/10/2018	26/11/2018	01/11/2018	29/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018
Carbon																
Soil Organic Matter (SOM)	1.52	1.14	2.1	1.19	3.93	1.49	4.88	0.803	1.14	2.97	1.81	5.03	1.05	5.78	1.23	5.65
Metals (Solids)																
Arsenic	10.3	8.95	13.4	5.77	7.54	16.3	4.66	6	6	13.6	14	13.3	12.4	13.1	13.6	14
Cadmium	0.2	0.02	0.2	0.02	0.2	0.2	0.02	0.2	0.2	0.0786	0.428	0.02	0.02	0.02	0.02	0.02
Chromium	220	297	60.5	466	46.1	864	62.5	677	361	37	34.4	35	31.7	37.7	33.7	35.9
Copper	26.7	24.8	17.1	12.5	16.5	59.4	8.23	14.3	17.2	12.9	12.1	15.3	10.3	16.3	11.8	22.5
Lead	20	2.92	74.8	0.7	69.2	17.1	22.6	7	14.3	31.5	28.7	31.6	22.7	45.1	24.5	39.1
Mercury	1.4	0.14	1.4	0.14	1.4	1.4	0.14	1.4	1.4	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Nickel	22.5	14.2	21.1	5.87	21.5	49.2	6.74	7.52	49.6	35.2	35.7	25.1	34	27.7	38.8	30.4
Selenium	13.3	10.2	10	13.9	10	35.7	5.56	25.3	17.9	1.52	1	1	1	1	1	1
Vanadium	249	360	95	439	104	614	70.3	486	348	58.8	59.9	50.9	53.6	57.8	56.5	58
Zinc	56.1	53.8	239	14.6	249	86.6	115	29.2	54.9	105	113	112	103	129	107	165
TPH Criteria Working Group (TPH CWG)																
Benzene																
Toluene																
Ethylbenzene																
sum of detected mpo xylene by GC																
Aliphatics >C5-C6	0.02	0.01	0.02	0.02	0.02	0.01	0.02	0.023	0.0283	0.74	0.02	0.02	0.02	0.01	0.02	0.0311
Aliphatics >C6-C8	0.0391	0.0111	0.02	0.0561	0.045	0.0281	0.0367	0.0513	0.0523	0.66	0.02	0.02	0.0715	0.01	0.02	0.124
Aliphatics >C8-C10	0.0467	0.01	0.02	0.619	0.0364	0.0562	0.04	0.627	0.384	1.77	0.02	0.02	0.195	0.01	0.02	0.891
Aliphatics >C10-C12	0.981	0.0477	0.02	0.74	0.16	1.45	0.638	2.31	3.28	17.4	0.02	0.02	0.542	0.01	0.02	1.53
Aliphatics >C12-C16	23.5	1.25	0.683	8.03	2.54	13.8	0.1	1.66	12.9	0.1	0.59	0.1	70.9	0.1	0.1	0.1
Aliphatics >C16-C21	109	7.31	3.8	13	11.3	31.8	25.9	3.03	36.3	0.1	0.1	0.1	67.6	0.1	0.1	0.1
Aliphatics >C21-C35	119	28.8	41.6	73.8	82.3	254	118	44.4	173	0.1	2.43	4.89	14.1	5.27	0.1	5.15
Aliphatics >C35-C44	52.1	16	16.3	20.4	26.3	124	51.3	29.9	92.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Aromatics >EC5-EC7	0.02	0.01	0.02	0.156	0.02	0.01	0.02	0.196	0.0871	1.09	0.02	0.02	0.02	0.01	0.02	0.02
Aromatics >EC7-EC8	0.02	0.01	0.02	0.373	0.02	0.013	0.02	0.349	0.142	0.2	0.02	0.02	0.02	0.01	0.02	0.02
Aromatics >EC8-EC10	0.0315	0.01	0.02	0.412	0.0246	0.0378	0.0259	0.418	0.256	1.18	0.02	0.02	0.13	0.01	0.02	0.593
Aromatics >EC10-EC12	0.654	0.0311	0.02	0.494	0.107	0.964	0.426	1.54	2.18	11.6	0.02	0.02	0.361	0.01	0.02	1.02
Aromatics >EC12-EC16	5.66	1.7	1.97	3.21	3.68	4.93	3.43	0.565	3.23	0.1	0.1	0.1	21.8	0.1	0.1	0.1
Aromatics >EC16-EC21	45.8	8.59	8.5	34.8	11.6	30.2	25.6	12.9	24.4	0.1	0.299	1.3	26.2	0.268	0.1	0.1
Aromatics >EC21-EC35	136	68.6	45.3	216	52.9	208	111	99.3	145	2.19	5.4	39.8	9.14	25.1	0.1	50.5
Aromatics >EC35-EC44	86.9	50.5	28.7	76.5	26.8	139	74.7	60.9	103	0.1	1.76	8.98	1.62	3.81	0.1	7.63
Aromatics >EC40-EC44	39.9	22.9	12.3	27.6	11	55.6	32	25.3	44.1	0.1	0.1	2.98	1.2	0.831	0.1	1.88
Polyaromatic Hydrocarbons (PAHs)																
Acenaphthylene	155	12	116	60	145	32.9	60	60	13.2	12	12	12	12	12	12	12
Acenaphthene	40	29.2	18.6	255	62.3	79.2	61.9	40	38.5	8	8	8	8	8	8	28.2
Anthracene	80	30.2	188	484	289	156	179	113	105	16	16	16	25.8	16	16	16
Benz(a)anthracene	1250	712	551	5400	829	1460	1200	1870	1330	14	42.1	14	14	14	14	14
Benzo(a)pyrene	1960	1020	464	6200	664	1540	1020	2230	1440	15	31.9	15	15	15	15	15
Benzo(b)fluoranthene	2730	1460	511	8320	1150	2440	1230	3360	1650	15	39.8	15	15	15	15	15
Benzo(k)fluoranthene	1090	496	234	3300	355	762	479	1340	790	14	14	14	14	14	14	14
Benzo(g,h,i)perylene	1480	710	365	4050	518	1150	669	1610	1300	24	24	24	24	24	24	24
Chrysene	1560	831	512	6030	681	1700	1170	1920	1500	10	39.7	10	10	10	10	16.2
Dibenzo(a,h)anthracene	376	181	82.8	822	134	254	143	397	212	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Indeno(1,2,3-cd)pyrene	1200	554	333	5770	479	1100	756	1350	1130	0.018	23.1	0.018	0.018	0.018	0.018	0.018
Fluoranthene	1220	745	1020	7160	1730	2150	1860	2430	2710	0.017	107	0.017	24	0.017	0.017	33.5
Fluorene	50	10	59.7	107	207	50.7	50	50	18.9	23	10	10	34.4	10	10	10
Naphthalene	45	45.4	293	2000	415	152	83	240	709	2450	17.4	9	27.2	9	9	545
Phenanthrene	361	185	659	2930	1420	873	545	943	1280	15	66.7	15	71.8	15	15	24
Pyrene	1.35	0.777	0.727	6.84	1.24	2.68	2.47	2.55	2.72	0.015	0.0834	0.015	0.0201	0.015	0.015	0.0253
PAH, Total Detected USEPA 16	14.7	7.77	6.13	59.7	10.3	16.6	11.9	20.4	16.9	2.47	0.451	0.118	0.203	0.118	0.118	0.672
Naphthalene-d8 % recovery**	89.1	87.8	82.4	76.6	96.3	93.1	86.4	106	90.4	92.8	96.8	83.6	94	79.7	81.4	78.5
Acenaphthene-d10 % recovery**	81.1	84.6	84.6	81.4	90.8	91.7	89.4	85.2	93.8	90.2	96.2	87.8	98.3	82.8	84.3	83.2
Phenanthrene-d10 % recovery**	82.2	87.1	87.1	81.7	90.4	91.5	93.9	92.8	98	87.5	101	93.9	97.4	85.8	86.1	85.6
Chrysene-d12 % recovery**	76	84.6	76.8	81.2	81.4	81.5	96.2	96.9	85.8	91.6	97.9	96.6	82.3	79.5	84.9	77.4
Perylene-d12 % recovery**	79.3	80.3	70.7	77.1	83.1	88.8	86.8	95.2	78.9	86.1	84.3	95.8	77.7	76.4	82.6	74.3
Total Aliphatics >C12-C44	304	53.4	62.4	115	122	424	196	79	314	0.1	3.02	4.89	153	5.27	0.1	5.15
Total Aromatics >EC12-EC44	275	129	84.5	330	95	382	215	174	275	2.19	7.46	50.1	58.8	29.2	0.1	58.2
Total Aliphatics & Aromatics >C5-C44	580	183	147	448	218	809	412	258	596	36.6	10.5	55	213	34.4	0.1	67.5
Metals - (Solid)																
Iron	125000	185000	114000	188000	144000	2390000	64800	181000	114000	34100	37200	24600	40000	34400	41300	39900
Manganese	18000	32400	4850	49400	6740	408000	13500	43600	35500	414	1600	188	1390	267	736	349
Metals - (Liquid)																
Calcium	193000	-	153000	-	173000	-	193000	-	242000	-	-	-	-	-	-	-
Magnesium	14000	-	9950	-	12900	-	26100	-	21600	-	-	-	-	-	-	-
Phenols																
Phenol	0.01	0.0444	0.01	0.0104	0.01	0.01	0.01	0.01	0.0109	0.013	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.01	0.0111	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.0555	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																
Soluble Sulphate 2:1 extract as SO4 BRE	0.174	-	0.0991	-	0.0641	-	0.11	-	0.0942	-	-	-	-	-	-	-
pH	11.8	12.2	9.95	12.6	10.6	11.1	11	12.6	12.3	7.9	8.36	7.2	8.12	6.64	7.63	7.18
Sulphate, Total																
Sulphur, Total	0.631	-	0.153	-	0.115	-	0.671	-	0.739	-	-	-	-	-	-	-
Sulphate, Total potential	1.89	-	0.459	-	0.345	-	2.01	-	2.22	-	-	-	-	-	-	-
Sulphate, acid soluble (total)	0.796	-	0.303	-	0.255	-	0.589	-	0.923	-	-	-	-	-	-	-
Cyanide, Total	1	3.56	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	12	12	12	12	12	12	12	126	227	353	205	190	102	378
Asbestos																
Asbestos Quantification - Gravimetric - %	0.0174	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	09/11/2018	-	09/11/2018	-	09/11/2018	-	09/11/2018	-	09/11/2018	-	-	-	-	-	-	-
Analysed By	Lucy Caroe	-	Lucy Caroe	-	Barbara Urbanek-Walsh	-	Marcin Magdziarek	-	Marcin Magdziarek	-	-	-	-	-	-	-
Asbestos Quantification - PCOM Evaluation - %	0.0017	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	None	-	None	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	N/A	-	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	0.0191	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	Detected	-	Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
Amosite (Brown) Asbestos	Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
Crocidolite (Blue) Asbestos	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
Fibrous Anthophyllite	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
Fibrous Tremolite	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
Fibrous Actinolite	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
Non-Asbestos Fibre	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	Not Detected	-	-	-	-	-	-	-
Comments	Soil containing debris typical of AIB	-	Fibre bundles in soil	-	0	-	0	-	0	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)																
Dibromofluoromethane**	122	118	100	123	102	116	105	99.1	109	110	103	110	126	119	128	107
Toluene-d8**	95.7	99	97.4	106	96.7	84.3	99	95.8	98.9	98.4	101	95.1	108	100	107	97.5
4-Bromofluorobenzene**	100	107	85.2	106	82.4	71.6	93.7	94.9	95.9	95.8	98.7	92.1	108	104	106	94.6
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.0991	0.09	1.76	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.102	0.07	0.07	0.07	0.101	0.077	0.153	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.582	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.928	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.297	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	10.6	0.13	0.13	0.13	0.13	0.13	0.436
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	3.72	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics																
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	4EE8V	4EE9V	4EF10	4EF10	4EF4	4EF4	4EF6	4EF6	4EF8	4EF8	4EF9A	4EF9A	4EF9AV	4EF10V	4EF4V	4EF6V	4EF8V
Depth	2	2.1	0.4	1	0.5	1	0.3	0.8	0.5	0.9	0.5	1	2	2.5	2.1	1.55	1.5
Sampled Date	31/10/2018	31/10/2018	26/11/2018	26/11/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	01/11/2018	01/11/2018	31/10/2018	31/10/2018	31/10/2018	26/11/2018	30/10/2018	30/10/2018	01/11/2018
Carbon																	
Soil Organic Matter (SOM)	6	1.13	2.43	2.57	28.1	30.5	1.25	0.972	0.722	0.76	7.78	0.35	2.78	1.27	1.33	3.78	1.23
Metals (Solids)																	
Arsenic	14.9	17.3	81.7	4.05	11.7	9.29	4.75	6	6	6	6	6	13	21.8	12.3	11.9	13.2
Cadmium	0.02	0.02	0.2	0.02	0.02	0.02	0.02	0.2	0.2	0.2	0.2	0.2	0.02	0.0827	0.02	0.02	0.02
Chromium	51	25.6	86.7	52.4	108	59	352	439	528	824	106	734	37.2	34.9	29.8	41.4	34
Copper	16.8	16.6	41.1	25.8	18.5	18.7	12.4	14	18	14.8	18.2	19.3	12.8	11.5	11.1	13.7	11.3
Lead	41.7	22.3	46.2	13.6	45.6	33.2	0.992	10.5	19.7	7	17.3	7	27.6	33.4	24.5	32	28.6
Mercury	0.14	0.14	1.4	0.14	0.14	0.14	0.14	1.4	1.4	1.4	1.4	1.4	0.14	0.14	0.14	0.14	0.14
Nickel	25.8	30.3	88.3	8.26	12.9	11.6	6.38	8.31	12.8	4.68	16	9.16	34.9	41	32.6	30.3	43.7
Selenium	1	1	24.8	4.12	3.27	3.11	10.8	21.1	20.7	25.1	10	26.8	1	1	1	1	1
Vanadium	66.9	44.2	183	149	112	128	283	379	380	542	99.4	540	62.6	58.2	52.7	65.9	59.5
Zinc	128	83.9	188	94.2	116	96.3	30.9	30.2	89.1	25.6	64.3	19	107	113	102	114	115
TPH Criteria Working Group (TPH CWG)																	
Benzene																	
Toluene																	
Ethylbenzene																	
sum of detected mpo xylene by GC																	
Aliphatics >C5-C6	0.0143	0.0494	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.02	0.0201	0.02	0.02	0.01	0.0354
Aliphatics >C6-C8	0.0445	0.0806	0.0601	0.0396	0.01	0.01	0.02	0.02	0.0645	0.0596	0.01	0.0304	0.0884	0.0683	0.02	0.01	0.128
Aliphatics >C8-C10	0.159	0.209	0.0848	0.0451	0.01	0.01	0.02	0.02	0.123	0.565	0.01	0.0933	0.423	0.0898	0.02	0.01	0.365
Aliphatics >C10-C12	0.984	1.28	0.392	0.235	0.01	0.01	0.02	0.02	0.421	0.965	0.01	0.405	0.945	0.225	0.02	0.01	0.199
Aliphatics >C12-C16	23.6	0.1	0.1	1.47	1.15	1.09	0.718	14.5	0.1	2.78	0.1	1.14	0.1	0.1	0.1	0.1	0.1
Aliphatics >C16-C21	27.9	0.1	5.01	10.2	12.2	12.2	5.58	75.1	5.14	9.32	1.06	0.612	0.1	0.1	0.1	0.1	0.1
Aliphatics >C21-C35	5.03	0.1	32.8	140	27.1	31.4	18.2	63.1	68.4	64.4	46	13.9	0.1	0.1	0.1	1.71	0.225
Aliphatics >C35-C44	0.1	0.1	10.8	31.2	5.28	3.78	8.55	36.3	14.2	14	7.73	4.65	0.1	0.1	0.1	0.1	0.1
Aromatics >EC5-EC7	0.01	0.0702	0.02	0.02	0.01	0.01	0.02	0.02	0.0333	0.218	0.01	0.0252	0.02	0.02	0.02	0.01	0.02
Aromatics >EC7-EC8	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.0688	0.561	0.01	0.0566	0.02	0.02	0.02	0.01	0.02
Aromatics >EC8-EC10	0.105	0.14	0.0558	0.0297	0.01	0.01	0.02	0.02	0.0817	0.377	0.01	0.0618	0.283	0.059	0.02	0.01	0.244
Aromatics >EC10-EC12	0.657	0.853	0.261	0.157	0.01	0.01	0.02	0.02	0.282	0.644	0.01	0.269	0.63	0.15	0.02	0.01	0.132
Aromatics >EC12-EC16	9.37	0.1	1.54	1.05	1.69	3.5	0.197	3.18	2.3	6.74	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Aromatics >EC16-EC21	17.5	0.1	17.7	16.8	12	29.6	4.06	25.8	28.9	30.6	6.22	3.41	0.1	0.1	0.1	0.1	0.5
Aromatics >EC21-EC35	8.02	0.1	101	67.3	48.4	118	24.4	85.4	153	135	29.3	22.5	1.47	0.1	0.282	11.3	4.84
Aromatics >EC35-EC44	0.1	0.1	46.1	27.8	15.9	32.8	14.5	51.3	56.1	55.2	14	13.7	0.1	0.1	0.1	1.67	3.24
Aromatics >EC40-EC44	0.197	0.1	19	9.49	5.74	10.6	5.98	22.6	19.2	18.8	5.25	6.11	0.1	0.1	0.1	0.523	1.07
Polyaromatic Hydrocarbons (PAHs)																	
Acenaphthylene	12	12	364	448	148	124	12	60	30.4	18.5	12	12	12	12	12	12	12
Acenaphthene	29	19.8	63.8	32.8	28	132	8	40	175	104	21.1	13.7	8	8	8	8	8
Anthracene	16	16	230	399	177	461	20.6	80	468	246	22.2	29.1	16	16	16	16	16
Benz(a)anthracene	111	14	2020	3480	737	1940	249	519	4530	2150	195	756	14	42	14	14	14
Benzo(a)pyrene	98.6	15	2000	3190	788	2210	255	745	5180	2240	214	921	15	52.3	15	15	15
Benzo(b)fluoranthene	161	15	3460	3920	1310	2960	340	1170	5950	3390	220	944	15	51.6	15	15	15
Benzo(k)fluoranthene	66	14	1190	1470	457	1030	150	394	2490	1400	96.5	458	14	25	14	14	14
Benzo(g,h,i)perylene	74.8	24	1470	1720	679	1630	206	604	3640	1570	180	681	24	48	24	24	24
Chrysene	128	17	1930	2560	716	1880	287	565	4670	2310	215	818	10	45.7	10	10	10
Dibenzo(a,h)anthracene	0.023	0.023	291	441	189	427	45.1	148	774	366	35.8	137	0.023	0.023	0.023	0.023	0.023
Indeno(1,2,3-cd)pyrene	66.1	0.018	1590	1400	531	1480	183	497	3520	1380	200	748	0.018	46.2	0.018	0.018	0.018
Fluoranthene	293	49.7	2880	5580	1270	3120	624	648	7660	3690	239	987	0.017	56.9	0.017	0.017	0.017
Fluorene	27.7	10	55.4	62.7	68.8	122	10	50	75.6	27.3	10	10	10	10	10	10	10
Naphthalene	983	524	227	121	382	429	50.3	45	143	222	117	229	639	24.4	9	97.8	9
Phenanthrene	279	37.9	762	1170	698	1550	220	176	4450	2490	111	259	15	20.9	15	15	15
Pyrene	0.24	0.0442	2.43	4.98	0.999	2.6	0.546	0.711	7.01	3.28	0.253	0.987	0.015	0.0602	0.015	0.015	0.015
PAH, Total Detected USEPA 16	2.56	0.693	21	31	9.17	22.1	3.18	6.17	50.8	24.9	2.12	7.97	0.639	0.473	0.118	0.118	0.118
Naphthalene-d8 % recovery**	103	91.8	93.3	87.9	87.7	91	82.2	90.4	92.4	88.6	84.5	84.9	97.1	93.2	84.9	83.1	92.9
Acenaphthene-d10 % recovery**	97.1	97.4	92.7	88.6	89.5	86.3	85.1	81.3	92.8	91.2	91.1	91.3	94.8	90.3	81.4	80.1	93.2
Phenanthrene-d10 % recovery**	99.8	101	89.7	91.3	85.9	81	86	81.4	99.7	99.4	96.1	96.5	97.7	83.8	75.8	73.7	98.6
Chrysene-d12 % recovery**	93.1	90.4	96.8	103	74.5	72.3	77.2	70.8	97.2	105	94.4	93.4	86.2	75	71.6	70.2	94.5
Perylene-d12 % recovery**	92.6	82.2	96.6	109	72.8	72.4	73.5	72.3	90.3	96.5	88.6	90.6	91.9	79	70.7	72.8	84.5
Total Aliphatics >C12-C44	56.5	0.1	48.6	182	45.7	48.4	33	189	87.8	90.5	54.8	20.3	0.1	0.1	0.1	1.71	0.225
Total Aromatics >EC12-EC44	34.9	0.1	167	113	77.9	184	43.1	166	240	228	49.6	39.7	1.47	0.1	0.282	13	8.58
Total Aliphatics & Aromatics >C5-C44	93.3	2.68	216	296	124	232	76.1	355	329	322	104	60.9	3.86	0.592	0.282	14.7	9.91
Metals - (Solid)																	
Iron	33500	27400	61700	45900	36200	37500	129000	112000	150000	184000	91900	186000	38500	42900	37400	39800	36000
Manganese	1390	432	34700	6820	5510	5380	29500	32200	26700	44000	10100	134000	825	311	1220	639	803
Metals - (Liquid)																	
Calcium	-	-	203000	192000	-	192000	-	253000	235000	-	-	288000	-	-	-	-	-
Magnesium	-	-	23800	21200	-	35200	-	8910	9850	-	-	9480	-	-	-	-	-
Phenols																	
Phenol	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0215	0.0106	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics																	
Soluble Sulphate 2:1 extract as SO4 BRE	-	-	0.0706	0.213	-	0.0796	-	0.127	0.0212	-	-	0.0639	-	-	-	-	-
pH	8.06	8.14	9.92	11.3	10.1	9.64	12.7	12.1	12.7	12.4	10.7	12.3	7.79	7.76	7.97	6.87	8
Sulphate, Total																	
Sulphur, Total	-	-	0.302	0.466	-	0.221	-	0.505	0.141	-	-	0.395	-	-	-	-	-
Sulphate, Total potential	-	-	0.906	1.4	-	0.663	-	1.52	0.423	-	-	1.19	-	-	-	-	-
Sulphate, acid soluble (total)	-	-	0.309	0.507	-	0.133	-	0.539	0.37	-	-	0.574	-	-	-	-	-
Cyanide, Total	1	1	1.25	1.67	1.06	1.84	1	1.02	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	322	152	12	12	12	12	12	12	12	12	12	12	177	169	89.8	216	321
Asbestos																	
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	-	11/12/2018	11/12/2018	-	09/11/2018	-	09/11/2018	09/11/2018	-	-	09/11/2018	-	-	-	-	-
Analysed By	-	-	Paul Poynton	Paul Poynton	-	Barbara Urbanek-Walsh	-	Barbara Urbanek-Walsh	Lucy Caroe	-	-	Renata Bozhkov	-	-	-	-	-
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	-
Amosite (Brown) Asbestos	-	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	-
Crocidolite (Blue) Asbestos	-	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	-
Fibrous Anthophyllite	-	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	-
Fibrous Tremolite	-	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	-
Fibrous Actinolite	-	-	Not Detected	Not Detected	-	Not Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	-
Non-Asbestos Fibre	-	-	Detected	Detected	-	Detected	-	Not Detected	Not Detected	-	-	Not Detected	-	-	-	-	-
Comments	-	-	0	0	-	0	-	0	0	-	-	0	-	-	-	-	-
Volatile Organic Compounds (VOCs)																	
Dibromofluoromethane**	111	107	110	110	115	114	106	105	101	103	106	107	107	109	122	121	103
Toluene-d8**	95.2	97.2	97.2	97.3	95.7	95.9	101	99.2	99.3	99.4	97.3	101	97	98	99.3	97.2	100
4-Bromofluorobenzene**	94.1	94.9	95.2	94.3	87.2	84.9	97.3	96	96.9	99.3	98.2	99.2	95.7	96.5	103	99.8	99.1
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.171	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.121	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.706	0.402	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	1.64	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics																	
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample ID	4EG4	4EG4	4EG4V	4GA4	4GA4	4GA6	4GA6	4GA7	4GA8	4GA8	4GA4V	4GA6V	4GA7V	4GA8V	4GB1
Depth	0.5	1	1.9	0.2	1	0.5	0.7	0.5	0.4	0.7	1.8	2.8	1.8	2.1	0.2
Sampled Date	30/10/2018	30/10/2018	30/10/2018	06/11/2018	06/11/2018	05/11/2018	05/11/2018	20/11/2018	20/11/2018	20/11/2018	06/11/2018	05/11/2018	20/11/2018	20/11/2018	02/11/2018
Carbon															
Soil Organic Matter (SOM)	22.8	28.3	0.953	8.84	11.8	5.69	3.22	24.8	6.1	10.8	9.74	59.8	1.56	4.14	4.43
Metals (Solids)															
Arsenic	10.8	10.9	14.2	9.63	6.72	13.8	6	6.83	7.85	2.33	10.7	10.2	12.4	11	8.77
Cadmium	0.129	0.02	0.02	0.0973	0.02	1.19	0.2	0.02	0.686	0.604	0.02	0.222	0.267	0.264	0.372
Chromium	38.9	36.2	30.3	33.3	43.3	240	533	33	245	49.4	38.6	3.2	74.3	33.1	81.3
Copper	31.2	107	12.2	18.9	13.4	32.3	15.9	10.7	19.2	4.82	15.7	15.6	12	14.7	25.9
Lead	72.6	112	23.8	72.2	21.6	30.1	14.3	32.4	37.2	28.5	32.4	4.61	24.8	29.7	106
Mercury	0.14	0.14	0.14	0.14	0.14	0.14	1.4	0.14	1.4	0.14	0.14	0.14	0.14	0.14	1.4
Nickel	28.1	33	35.1	13	14.5	22.3	12.7	13.1	18.9	2.88	28.9	9.29	36	30.9	24.4
Selenium	2.25	1.6	1	6.06	1.73	6.38	15.5	1.3	10	1	1	1.55	1.04	1	10
Vanadium	87.9	64.4	52.9	44.3	59.5	430	985	58.8	225	38.8	57.3	10.5	89.4	54.1	89.2
Zinc	151	864	104	279	102	99.3	50.6	114	112	109	114	47.1	97.8	108	435
TPH Criteria Working Group (TPH CWG)															
Benzene															
Toluene															
Ethylbenzene															
sum of detected mpo xylene by GC															
Aliphatics >C5-C6	0.02	0.02	0.02	0.0242	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C6-C8	0.02	0.02	0.02	0.119	0.0598	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C8-C10	0.02	0.02	0.02	0.366	0.0736	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C10-C12	0.02	0.02	0.02	0.265	0.153	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aliphatics >C12-C16	0.233	1.25	0.1	7.62	25.8	2.03	1.5	0.793	2.71	0.593	0.1	0.546	0.1	0.156	1.78
Aliphatics >C16-C21	9.83	10.3	0.1	25	51.8	8.87	3.86	4.98	26.9	5.21	0.1	0.1	0.1	0.1	9.08
Aliphatics >C21-C35	46.5	64.8	0.1	112	148	53.5	21.9	60.5	167	24.7	3.1	42.8	0.1	0.692	90.1
Aliphatics >C35-C44	17.4	29.7	0.1	41.4	37.8	25.2	15.1	17.2	45.8	4.74	0.1	0.1	0.1	0.235	34.4
Aromatics >EC5-EC7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC7-EC8	0.02	0.02	0.02	0.0264	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC8-EC10	0.02	0.02	0.02	0.244	0.0495	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC10-EC12	0.02	0.02	0.02	0.177	0.102	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aromatics >EC12-EC16	3.58	1.6	0.1	6.44	0.135	1.41	0.1	1.82	2.11	0.867	0.1	2.52	0.1	0.122	3.14
Aromatics >EC16-EC21	56.6	16.3	0.1	36.8	9.6	12.4	5.95	7.24	11.8	6.21	0.1	8	0.1	0.1	11.5
Aromatics >EC21-EC35	174	93.1	1.53	134	41.2	98	57	50.3	109	16.8	21.7	159	4.61	3.67	73.7
Aromatics >EC35-EC44	64.5	43.7	2.26	63.5	4.58	41	20	22.5	60.2	4.96	5	32.5	0.547	0.395	45.3
Aromatics >EC40-EC44	23.8	17.3	2.05	26.1	0.354	15	6.7	10.5	27.9	1.75	1.55	11.9	0.1	0.1	18.8
Polyaromatic Hydrocarbons (PAHs)															
Acenaphthylene	236	446	12	60	60	27.2	12	40.2	120	12	12	120	12	12	816
Acenaphthene	49.4	88	8	40	40	51.1	30.3	15.9	80	11.3	8	80	8	8	70.7
Anthracene	475	779	16	195	80	111	46.3	89.7	254	35.7	16	160	16	16	1560
Benz(a)anthracene	2170	2960	14	651	70	1460	1040	333	486	178	14	140	38.3	14	2340
Benzo(a)pyrene	2290	3480	15	498	75	1960	1390	371	580	214	15	150	66.9	15	1860
Benzo(b)fluoranthene	3580	5190	15	412	75	1620	1070	582	950	355	15	150	65.8	15	2390
Benzo(k)fluoranthene	1590	1670	14	255	70	914	695	219	318	97.1	14	140	19.8	14	817
Benzo(g,h,i)perylene	2000	3610	24	384	120	1320	946	250	435	158	24	0.24	50.2	24	1280
Chrysene	2020	2960	10	537	50	1470	1140	375	608	189	10	0.1	44.1	10	1810
Dibenzo(a,h)anthracene	488	824	0.023	0.115	0.115	283	207	59.9	0.23	39.1	0.023	0.23	0.023	0.023	301
Indeno(1,2,3-cd)pyrene	1550	2790	0.018	319	90	1340	875	190	328	149	0.018	180	37.8	0.018	1380
Fluoranthene	3330	5180	0.017	1680	0.085	1790	1200	497	1060	221	0.017	0.17	38.7	0.017	6240
Fluorene	123	365	10	50	50	33	13.9	22.3	0.1	17.8	10	0.1	10	10	1040
Naphthalene	561	621	9	117	45	83.5	33.2	105	167	26.8	9	90	9	9	361
Phenanthrene	1540	2810	15	596	75	464	276	239	432	186	15	150	15	15	6030
Pyrene	2.64	3.98	0.015	1.26	0.075	1.84	1.26	0.408	0.903	0.216	0.015	0.15	0.0401	0.015	4.16
PAH, Total Detected USEPA 16	24.6	37.8	0.118	6.91	0.59	14.8	10.2	3.8	6.52	2.09	0.118	1.18	0.402	0.118	32.4
Naphthalene-d8 % recovery**	87.2	86.9	81.9	84.2	91	97.9	98.5	73.8	71	86.8	94.6	90.7	88.1	68.9	91.2
Acenaphthene-d10 % recovery**	77.2	88.3	79.9	82.9	83.3	98.1	97.5	73.6	68.2	87.4	91.2	87.2	83	71.2	92.7
Phenanthrene-d10 % recovery**	83.3	78.7	76	82.2	90.4	99.8	100	74.5	72.8	89.6	93.3	92.7	81.4	69.7	99.7
Chrysene-d12 % recovery**	74	74.4	73.3	80.9	78.6	101	102	71	72.7	85.4	82.4	87	86.3	72.8	99.1
Perylene-d12 % recovery**	71.8	72.9	72.6	76.5	76.3	96.4	95.7	72.2	75.1	84.1	82.2	85.2	94.8	74.4	91.5
Total Aliphatics >C12-C44	73.9	106	0.1	186	263	89.6	42.3	83.5	242	35.2	3.1	43.3	0.1	1.08	135
Total Aromatics >EC12-EC44	299	155	3.78	241	55.6	153	82.9	81.8	183	28.9	26.7	202	5.16	4.18	134
Total Aliphatics & Aromatics >C5-C44	373	261	3.78	428	319	242	125	165	425	64.1	29.8	245	5.16	5.27	269
Metals - (Solid)															
Iron	38700	52300	38300	51400	50900	165000	159000	43400	91800	26700	29000	13200	38300	22300	59600
Manganese	3590	2860	1710	12600	3880	23700	30100	4350	15700	2950	370	292	2710	328	4370
Metals - (Liquid)															
Calcium	-	114000	-	-	145000	-	157000	136000	175000	-	-	-	-	-	147000
Magnesium	-	9950	-	-	11800	-	8180	14000	19900	-	-	-	-	-	27500
Phenols															
Phenol	0.01	0.01	0.01	0.01	0.0345	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cresols	0.01	0.01	0.01	0.01	0.0115	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenols	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Phenols, Total Detected monohydric	0.035	0.035	0.035	0.035	0.046	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Inorganics															
Soluble Sulphate 2:1 extract as SO4 BRE	-	0.141	-	-	0.105	-	0.0858	0.125	0.0917	-	-	-	-	-	0.112
pH	10.1	9.46	8.63	10.9	11.2	11.9	11.6	10.7	10.1	11.4	7.47	6.85	8.76	7.48	9.52
Sulphate, Total															
Sulphur, Total	-	0.247	-	-	0.263	-	0.208	0.159	0.389	-	-	-	-	-	0.2
Sulphate, Total potential	-	0.741	-	-	0.789	-	0.624	0.477	1.17	-	-	-	-	-	0.6
Sulphate, acid soluble (total)	-	0.231	-	-	0.54	-	0.316	0.02	0.731	-	-	-	-	-	0.26
Cyanide, Total	1	1.98	1	1.29	1	1	1	1	1	1	1	1	1	1	1
Exchangeable Ammonia as N	12	12	68	12	12	22.7	12	12	12	12	302	97.3	59.7	202	12
Asbestos															
Asbestos Quantification - Gravimetric - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of Analysis	-	09/11/2018	-	-	15/11/2018	-	09/11/2018	03/12/2018	03/12/2018	-	-	-	-	-	14/11/2018
Analysed By	-	Marcin Magdziarek	-	-	Andrzej Ferfecki	-	Andrzej Ferfecki	Christian Hallam	Christian Hallam	-	-	-	-	-	Andrzej Ferfecki
Asbestos Quantification - PCOM Evaluation - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Additional Asbestos Components (Using TM048)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysts Comments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysotile (White) Asbestos	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected
Amosite (Brown) Asbestos	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected
Crocidolite (Blue) Asbestos	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected
Fibrous Anthophyllite	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected
Fibrous Tremolite	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected
Fibrous Actinolite	-	Not Detected	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected
Non-Asbestos Fibre	-	Detected	-	-	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	Not Detected
Comments	-	0	-	-	0	-	0	0	0	-	-	-	-	-	0
Volatile Organic Compounds (VOCs)															
Dibromofluoromethane**	102	101	120	103	107	112	108	107	109	109	114	112	108	108	106
Toluene-d8**	98.2	96.9	105	90.9	94.4	98.7	99.8	101	98.2	102	96.7	93.6	97.5	101	96.4
4-Bromofluorobenzene**	88.9	83.8	107	70.2	74.5	91.2	108	81.1	76.5	85.6	83.5	74.4	100	85.2	96.1
Methyl Tertiary Butyl Ether	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzene	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Toluene	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ethylbenzene	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
p/m-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
o-Xylene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Naphthalene	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Sum of BTEX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subcontracted: Inorganics															
Gross Calorific Value in Dry Matter Q(V/gr/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Calorific Value Original Q(V/gr/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Dry Matter Q(V/net/d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Calorific Value in Original Q(V/net/ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Analytical M (ad)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Gross M(ex)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Total M(ar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Glan Llyn Residential Soil Data

											Sample ID	4GB1	4GB2
											Depth	0.7	0.7
											Sampled Date	02/11/2018	02/11/2018
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**		
Carbon													
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	19.8	14.3
Metals (Solids)													
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	8.72	21.6
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	0.2	0.2
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	112	9
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	18.9	15.7
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	134	9.11
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	1.4	1.4
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	44.9	31.1
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	10	10
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	137	128
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	221	68.5
TPH Criteria Working Group (TPH CWG)													
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00		
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00		
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00		
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00		
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.02	0.02
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.0652	0.02
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.0576	0.02
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.0489	0.02
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	0.281	0.1
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	26	4.52
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	46.8	42.6
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	3.82	3.13
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.02	0.02
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.02	0.02
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.038	0.02
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.0326	0.02
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	12.1	0.928
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	93.2	10.9
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	245	26.6
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	67.6	1.5
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	22	0.1
Polyaromatic Hydrocarbons (PAHs)													
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	589	51.1
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	105	10.8
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	1290	113
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	3660	287
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	3790	216
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	5110	328
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	2000	104
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	3080	194
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	3450	278
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	700	48.4
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	2950	175
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	7210	668
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	381	50.7
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	1220	171
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	3910	557
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	5.65	0.511
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	45.1	3.76
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	94.5	94.3
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	95.6	93.2
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	100	95.8
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	95.9	86.4
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	82.3	70.1
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	76.9	50.2
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	418	40
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	495	90.2
Metals - (Solid)													
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			221000	339000
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			9310	10200
Metals - (Liquid)													
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			-	-
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			-	-
Phenols													
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01	0.01
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01	0.01
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015	0.015
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035	0.035
Inorganics													
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	-	-
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	10.6	9.72
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33		
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	-	-
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	-	-
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	-	-
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1.95	1
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	19.9	12
Asbestos													
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-
Date of Analysis	TM048	No units		1371	0	0				0.00		-	-
Analysed By	TM048	No units		1371	0	0				0.00		-	-
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-	-
Analysts Comments	TM304	No units		1002	0	0				0.00		-	-
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		-	-
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		-	-
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		-	-
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		-	-
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		-	-
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		-	-
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		-	-
Comments	TM048	No units		1371	0	0			0	0.00		-	-
Volatile Organic Compounds (VOCs)													
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		90.9	106
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		89.9	96.2
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		70.2	85.1
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		0.2	0.1
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		0.18	0.09
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		0.14	0.07
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.08	0.04
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		0.2	0.1
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		0.2	0.1
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		0.26	0.13
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		0.8	0.4
Subcontracted: Inorganics													
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-	-
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-	-
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-	-
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-	-
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-	-

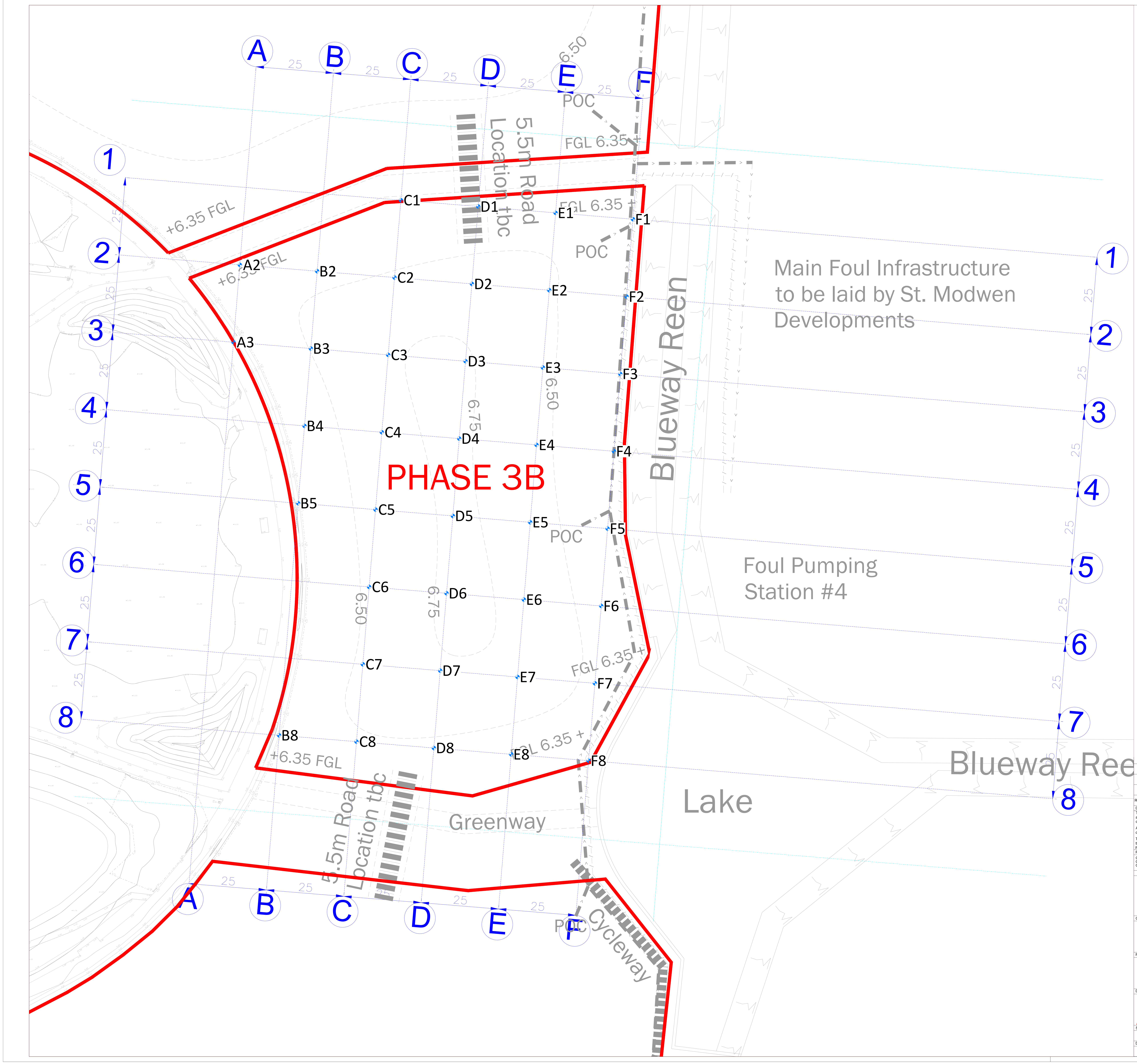
Glan Llyn Residential Soil Data

Determinand	Method	Units	LOD	No. of Samples	No. of Samples >LOD	No. of Samples > WQS	Min	Max	Average	WQS	Percentage of exceedances
Carbon											
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00
Metals (Solids)											
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57
TPH Criteria Working Group (TPH CWG)											
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00
Polyaromatic Hydrocarbons (PAHs)											
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00
Metals - (Solid)											
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039		
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574		
Metals - (Liquid)											
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387		
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371		
Phenols											
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06
Inorganics											
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61
Asbestos											
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Date of Analysis	TM048	No units		1371	0	0				0.00	
Analysed By	TM048	No units		1371	0	0				0.00	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00	
Analysts Comments	TM304	No units		1002	0	0				0.00	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00	
Comments	TM048	No units		1371	0	0			0	0.00	
Volatile Organic Compounds (VOCs)											
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00	
Subcontracted: Inorganics											
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00	

Glan Llyn Residential Soil Data

											Sample ID	4GG5	4GG5	4GG6	4GG6	4GG7	4GG7	4GG5V	
											Depth	0.4	0.7	0.3	0.5	0.5	1	3.2	
											Sampled Date	19/11/2018	19/11/2018	13/11/2018	13/11/2018	19/11/2018	19/11/2018	19/11/2018	
Determinand	**Method**	**Units**	**LOD**	**No. of Samples**	**No. of Samples >LOD**	**No. of Samples > WQS**	**Min**	**Max**	**Average**	**WQS**	**Percentage of exceedances**								
Carbon																			
Soil Organic Matter (SOM)	TM132	%	0.35	1382	1370	0	0.35	99	9		0.00	7.1	7.03	0.712	1.72	45.3	10.5	0.91	
Metals (Solids)																			
Arsenic	TM181	mg/kg	<0.6	1383	1383	1064	0.65	397	12	6.74	76.93	11.4	5.48	2.38	14.2	11.9	8.44	11.6	
Cadmium	TM181	mg/kg	<0.02	1383	1383	864	0.02	31	1	0.19	62.47	1.6	0.524	0.02	0.2	0.2	0.2	0.326	
Chromium	TM181	mg/kg	<0.9	1383	1383	1080	0.90	3090	139	25.08	78.09	9	5.37	17.8	9	9	9	27.1	
Copper	TM181	mg/kg	<1.4	1383	1383	1383	1.40	1790	25	1.20	100.00	14	6.68	1.4	14	22.1	16	11	
Lead	TM181	mg/kg	<0.7	1383	1383	507	0.70	4220	92	41.85	36.66	27.6	17.7	3.57	25.1	33.4	47	25.5	
Mercury	TM181	mg/kg	<0.14	1383	1383	606	0.14	6	1	0.35	43.82	1.4	0.14	0.14	1.4	1.4	1.4	0.14	
Nickel	TM181	mg/kg	<0.2	1383	1383	427	1.34	313	26	30.61	30.87	15.8	6.93	1.36	23.7	40.4	30.6	35.2	
Selenium	TM181	mg/kg	<1	1383	1383	815	1.00	52	6	1.87	58.93	10	1	3.57	10	10	10	1	
Vanadium	TM181	mg/kg	<0.2	1383	1378	1377	<0.2	2880	207	4.27	99.57	38.3	36.7	40	76.2	155	87.3	49.4	
Zinc	TM181	mg/kg	<1.9	1383	1383	160	7.15	13300	291	365.79	11.57	72.8	57.3	11.8	134	170	129	105	
TPH Criteria Working Group (TPH CWG)																			
Benzene	TM089	mg/kg	<0.01	271	271	271	0.01	0	0	0.01	100.00								
Toluene	TM089	mg/kg	<0.002	271	271	0	0.00	0	0	0.32	0.00								
Ethylbenzene	TM089	mg/kg	<0.003	271	271	0	0.00	0	0	0.21	0.00								
sum of detected mpo xylene by GC	TM089	µg/kg	9	271	271	0	0.01	0	0	0.19	0.00								
Aliphatics >C5-C6	TM089	mg/kg	<0.01	1383	1383	0	0.01	1	0	311.47	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Aliphatics >C6-C8	TM089	mg/kg	<0.01	1383	1382	0	<0.01	3	0	1134.98	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Aliphatics >C8-C10	TM089	mg/kg	<0.01	1383	1383	0	0.01	74	0	7844.34	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Aliphatics >C10-C12	TM089	mg/kg	<0.01	1383	1383	0	0.01	987	3	60406.47	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Aliphatics >C12-C16	TM173	mg/kg	<0.1	1383	1383	0	0.10	514	5	1198346.52	0.00	0.1	3.09	0.1	6.29	2.35	1.33	0.1	
Aliphatics >C16-C21	TM173	mg/kg	<0.1	1383	1383	0	0.10	3530	27	###########	0.00	3.35	7.46	3.03	23.4	12.3	4.58	0.1	
Aliphatics >C21-C35	TM173	mg/kg	<0.1	1383	1383	0	0.10	2980	65	###########	0.00	34.2	53.2	15.8	125	50.8	24.5	2.25	
Aliphatics >C35-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	913	20	###########	0.00	6.07	41	12.1	77.8	17.9	10.6	0.1	
Aromatics >EC5-EC7	TM089	mg/kg	<0.01	1383	1383	0	0.01	5	0	19.81	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Aromatics >EC7-EC8	TM089	mg/kg	<0.01	1383	1383	0	0.01	20	0	451.11	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Aromatics >EC8-EC10	TM089	mg/kg	<0.01	1383	1383	0	0.01	50	0	380.12	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Aromatics >EC10-EC12	TM089	mg/kg	<0.01	1383	1383	1	0.01	658	2	600.15	0.07	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Aromatics >EC12-EC16	TM173	mg/kg	<0.1	1383	1383	1	0.10	5280	14	1196.62	0.07	0.719	1.23	1.13	2.66	1	0.1	0.1	
Aromatics >EC16-EC21	TM173	mg/kg	<0.1	1383	1383	2	0.10	9800	57	3783.48	0.14	3.83	5.31	1.41	11	6.01	2.15	0.1	
Aromatics >EC21-EC35	TM173	mg/kg	<0.1	1383	1383	0	0.10	9010	123	30052.88	0.00	23.6	49.2	10.4	133	26.1	14.8	0.1	
Aromatics >EC35-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	1580	41	30052.88	0.00	13.3	73.4	19.5	156	16.1	14.1	0.1	
Aromatics >EC40-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	724	15	30052.88	0.00	5.81	34.8	9.65	71.8	6.65	6.05	0.1	
Polyaromatic Hydrocarbons (PAHs)																			
Acenaphthylene	TM218	µg/kg	<0.012	1383	1383	664	0.24	2100000	3076	44.45	48.01	12	12	12	60	17	120	12	
Acenaphthene	TM218	µg/kg	<0.008	1383	1383	296	8.00	193000	466	79.05	21.40	12.6	64.3	8	47.4	8	80	8	
Anthracene	TM218	µg/kg	<0.016	1383	1382	696	<0.016	1860000	3608	90.76	50.33	19.5	16	16	80	16	160	16	
Benz(a)anthracene	TM218	µg/kg	<0.014	1383	1383	308	14.00	1150000	4645	1613.93	22.27	49.3	130	28.2	95.4	56.7	453	14	
Benzo(a)pyrene	TM218	µg/kg	<0.015	1383	1383	898	15.00	714000	3728	91.65	64.93	40.7	121	23.2	81.9	36.3	250	15	
Benzo(b)fluoranthene	TM218	µg/kg	<0.015	1383	1383	1383	15.00	1110000	5283	9.09	100.00	79.8	175	39	141	79.7	439	15	
Benzo(k)fluoranthene	TM218	µg/kg	<0.014	1383	1383	1383	14.00	373000	2081	13.44	100.00	25.5	64	14	70	19.3	177	14	
Benzo(g,h,i)perylene	TM218	µg/kg	<0.024	1383	1383	989	0.24	333000	2514	35.35	71.51	40.6	108	24	120	39.2	0.24	24	
Chrysene	TM218	µg/kg	<0.01	1383	1383	294	0.10	1090000	4217	1651.53	21.26	69.7	158	29.3	139	66.3	372	10	
Dibenzo(a,h)anthracene	TM218	µg/kg	<0.023	1383	1383	64	0.02	177000	740	2227.85	4.63	0.023	0.023	0.023	0.115	0.023	0.23	0.023	
Indeno(1,2,3-cd)pyrene	TM218	µg/kg	<0.018	1383	1383	898	0.02	374000	2607	67.35	64.93	34.8	99.4	19.5	90	36.9	180	0.018	
Fluoranthene	TM218	µg/kg	<0.017	1383	1383	1132	0.02	2940000	11586	17.67	81.85	94.2	269	50.1	240	90.6	649	0.017	
Fluorene	TM218	µg/kg	<0.01	1383	1383	509	0.10	1890000	2814	72.09	36.80	10.9	34.8	10	50	11.6	0.1	10	
Naphthalene	TM218	µg/kg	<0.009	1383	1381	814	<0.009	4680000	10974	72.28	58.86	26.5	40.3	16.4	63.3	45.5	90	9	
Phenanthrene	TM218	µg/kg	<0.015	1383	1383	977	15.00	3810000	9794	72.09	70.64	118	209	41.6	207	181	150	15	
Pyrene	TM218	µg/kg	15	1008	1008	11	0.02	1950	10	203.18	1.09	0.0905	0.228	0.0374	0.22	0.0824	0.492	0.015	
PAH, Total Detected USEPA 16	TM218	mg/kg	<0.118	1383	1380	0	<0.118	24600	76		0.00	0.713	1.7	0.285	1.23	0.763	2.83	0.118	
Naphthalene-d8 % recovery**	TM218	%		1383	1378	0		9940	100		0.00	87.6	84.2	84	81.1	85.3	77.2	84.7	
Acenaphthene-d10 % recovery**	TM218	%		1383	1377	0		9830	98		0.00	89.9	89	88.5	80.6	69.9	0	87.3	
Phenanthrene-d10 % recovery**	TM218	%		1383	1379	0		9920	99		0.00	92.8	84.9	93.6	93.3	82.7	83.4	88.7	
Chrysene-d12 % recovery**	TM218	%		1383	1380	0		9460	96		0.00	83.3	79	93.2	98.1	71.2	93.8	83.7	
Perylene-d12 % recovery**	TM218	%		1383	1380	0		8930	94		0.00	75	74.2	79.9	83.2	59.4	74.7	82.3	
Total Aliphatics >C12-C44	TM173	mg/kg	<0.1	1383	1383	0	0.10	4740	117		0.00	43.6	105	30.9	233	83.3	40.9	2.25	
Total Aromatics >EC12-EC44	TM173	mg/kg	<0.1	1383	1383	0	0.10	25500	234		0.00	41.4	129	32.4	303	49.3	31	0.1	
Total Aliphatics & Aromatics >C5-C44	TM173	µg/kg	100	1008	1008	0	0.10	27800	416		0.00	85.1	234	63.3	536	133	72	2.25	
Metals - (Solid)																			
Iron	TM224	mg/kg	<1000	1383	1381	0	<1000	2390000	103039			164000	51600	13200	231000	243000	216000	28800	
Manganese	TM224	mg/kg	<0.13	1383	1380	0	<0.13	408000	9574			3660	2780	4010	7140	3430	4820	985	
Metals - (Liquid)																			
Calcium	TM224	mg/kg	<21	1371	622	0	<21	398000	131387			133000	-	263000	-	63300	-	-	
Magnesium	TM224	mg/kg	<8	1371	623	0	<8	55700	15371			27200	-	41800	-	7020	-	-	
Phenols																			
Phenol	TM062 (S)	mg/kg	<0.01	1371	1371	1371	0.01	1	0	0.00	100.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Cresols	TM062 (S)	mg/kg	<0.01	1371	1317	1317	<0.01	5	0	0.00	96.06	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Xylenols	TM062 (S)	mg/kg	<0.015	1371	1317	1317	<0.015	4	0	0.00	96.06	0.015	0.015	0.015	0.015	0.015	0.015	0.015	
Phenols, Total Detected monohydric	TM062 (S)	mg/kg	<0.035	1371	1317	1317	<0.035	10	0	0.00	96.06	0.035	0.035	0.035	0.035	0.035	0.035	0.035	
Inorganics																			
Soluble Sulphate 2:1 extract as SO4 BRE	TM243	g/l	<0.004	1002	425	425	<0.004	2	0	0.00	42.42	0.254	-	1.51	-	0.14	-	-	
pH	TM133	pH Units	<1	1002	972	972	<1	13	10	0.00	97.01	9.82	9.91	10.4	9.82	9.4	9.3	8.59	
Sulphate, Total	TM221	mg/kg	<48	375	20	20	<48	22900	6520	0.00	5.33								
Sulphur, Total	TM132	%	<0.02	1002	404	404	<0.02	9	0	0.00	40.32	0.26	-	0.916	-	0.236	-	-	
Sulphate, Total potential	TM132	%	<0.06	1002	404	404	<0.06	28	1	0.00	40.32	0.78	-	2.75	-	0.708	-	-	
Sulphate, acid soluble (total)	TM221	%	<0.02	1002	425	425	<0.02	3	0	0.00	42.42	0.683	-	0.736	-	0.228	-	-	
Cyanide, Total	TM153	mg/kg	<1	1002	1001	1001	<1	272	2	0.00	99.90	1	1	1	1	1	1	1	
Exchangeable Ammonia as N	TM024	mg/kg	<12	1002	948	948	<12	1590	61	0.00	94.61	12	12	12	12	14.3	12	89	
Asbestos																			
Asbestos Quantification - Gravimetric - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	
Date of Analysis	TM048	No units		1371	0	0				0.00		30/11/2018	-	19/11/2018	-	30/11/2018	-	-	
Analysed By	TM048	No units		1371	0	0				0.00		Paul Poynton	-	Andrzej Ferfecki	-	Paul Poynton	-	-	
Asbestos Quantification - PCOM Evaluation - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	
Additional Asbestos Components (Using TM048)	TM304	No units		1002	0	0				0.00		-	-	-	-	-	-	-	
Analysts Comments	TM304	No units		1002	0	0				0.00		-	-	-	-	-	-	-	
Asbestos Quantification - Total - %	TM304	%	<0.001	1371	65	65	<0.001	0	0	0.00		-	-	-	-	-	-	-	
Chrysotile (White) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected	-	Not Detected	-	Not Detected	-	-	
Amosite (Brown) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected	-	Not Detected	-	Not Detected	-	-	
Crocidolite (Blue) Asbestos	TM048	No units		1371	0	0				0.00		Not Detected	-	Not Detected	-	Not Detected	-	-	
Fibrous Anthophyllite	TM048	No units		1371	0	0				0.00		Not Detected	-	Not Detected	-	Not Detected	-	-	
Fibrous Tremolite	TM048	No units		1371	0	0				0.00		Not Detected	-	Not Detected	-	Not Detected	-	-	
Fibrous Actinolite	TM048	No units		1371	0	0				0.00		Not Detected	-	Not Detected	-	Not Detected	-	-	
Non-Asbestos Fibre	TM048	No units		1371	0	0				0.00		Not Detected	-	Not Detected	-	Not Detected	-	-	
Comments	TM048	No units		1371	0	0			0	0.00		0	-	0	-	0	-	-	
Volatile Organic Compounds (VOCs)																			
Dibromofluoromethane**	TM116	%		1371	1100	1100		175	105	0.00		108	113	114	106	112	105	114	
Toluene-d8**	TM116	%		1371	1100	1100		115	97	0.00		99.1	102	99.4	96.4	101	97.4	102	
4-Bromofluorobenzene**	TM116	%		1371	1100	1100		111	90	0.00		95.8	85.3	108	97	80.2	94.1	88.2	
Methyl Tertiary Butyl Ether	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	2	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Benzene	TM116	mg/kg	<0.09	1371	1099	1099	<0.09	7	0	0.00		0.09	0.09	0.09	0.09	0.09	0.09	0.09	
Toluene	TM116	mg/kg	<0.07	1371	1099	1099	<0.07	28	0	0.00		0.07	0.07	0.07	0.07	0.07	0.07	0.07	
Ethylbenzene	TM116	mg/kg	<0.04	1371	1099	1099	<0.04	1	0	0.00		0.04	0.04	0.04	0.04	0.04	0.04	0.04	
p/m-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	62	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	
o-Xylene	TM116	mg/kg	<0.1	1371	1099	1099	<0.1	18	0	0.00		0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Naphthalene	TM116	mg/kg	<0.13	1371	1211	1211	<0.13	15500	17	0.00		0.13	0.13	0.13	0.13	0.13	0.13	0.13	
Sum of BTEX	TM116	mg/kg	<0.4	1371	1095	1095	<0.4	116	1	0.00		0.4	0.4	0.4	0.4	0.4	0.4	0.4	
Subcontracted: Inorganics																			
Gross Calorific Value in Dry Matter Q(V/gr/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	
Gross Calorific Value Original Q(V/gr/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	21	12	0.00		-	-	-	-	-	-	-	
Net Calorific Value in Dry Matter Q(V/net/d)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	28	14	0.00		-	-	-	-	-	-	-	
Net Calorific Value in Original Q(V/net/ar)	SUB	MJ/kg	<0.5	1371	16	16	<0.5	20	12	0.00		-	-	-	-	-	-	-	
Water Analytical M (ad)	SUB	%	<0.5	1371	16	16	<0.5	1	1	0.00		-	-	-	-	-	-	-	
Water Gross M(ex)	SUB	%	<0.5	1371	16	16	<0.5	25	14	0.00		-	-	-	-	-	-	-	
Water Total M(ar)	SUB	%	<0.5	1371	16	16	<0.5	25	15	0.00		-	-	-	-	-	-	-	

Appendix F: Sampling Location Plans


A
B
C
D
E
F
1
2
3
4
5
6
7
8
25
6.50
POC
FGL 6.35
5.5m Road Location tbc
+6.35 FGL
C1
D1
E1
F1
A2
B2
C2
D2
E2
F2
A3
B3
C3
D3
E3
F3
B4
C4
D4
E4
F4
B5
C5
D5
E5
F5
C6
D6
E6
F6
C7
D7
E7
F7
B8
C8
D8
E8
F8
6.75
PHASE 3B
Blueway Reen
Main Foul Infrastructure to be laid by St. Modwen Developments
Foul Pumping Station #4
Blueway Reen
Lake
Greenway
Cycleway

N'	M	P
C1	335762.257	186956.550
D1	335787.174	186954.507
E1	335812.090	186952.464
F1	335837.006	186950.422
A2	335710.382	186935.719
B2	335735.298	186933.676
C2	335760.214	186931.633
D2	335785.131	186929.591
E2	335810.047	186927.548
F2	335834.964	186925.505
A3	335708.339	186910.802
B3	335733.255	186908.760
C3	335758.172	186906.717
D3	335783.088	186904.674
E3	335808.005	186902.632
F3	335832.921	186900.589
B4	335731.213	186883.843
C4	335756.129	186881.801
D4	335781.045	186879.758
E4	335805.962	186877.715
F4	335830.878	186875.672
B5	335729.170	186858.927
C5	335754.086	186856.884
D5	335779.003	186854.841
E5	335803.919	186852.799
F5	335828.836	186850.756
C6	335752.044	186831.968
D6	335776.960	186829.925
E6	335801.876	186827.882
F6	335826.793	186825.840
C7	335750.001	186807.051
D7	335774.917	186805.009
E7	335799.834	186802.966
F7	335824.750	186800.923
B8	335723.042	186784.178
C8	335747.958	186782.135
D8	335772.875	186780.092
E8	335797.791	186778.050
F8	335822.707	186776.007

Revision	Details	Date

Disclaimer:

This plan should only be used for its original purpose. Hawk accepts no responsibility for this plan if supplied to any party other than the original client.

All dimensions and or level information shown should be checked on site prior to design and construction.

This drawing is not to be used in whole or part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

Reference Grid:	Reference Datum:
Ordnance Survey National Grid (OSGB36) via the Active GNSS Network	Ordnance Survey National Datum (OSGB36) via the Active GNSS Network

All dimensions in metres

Client:

St Modwen

Project Title:

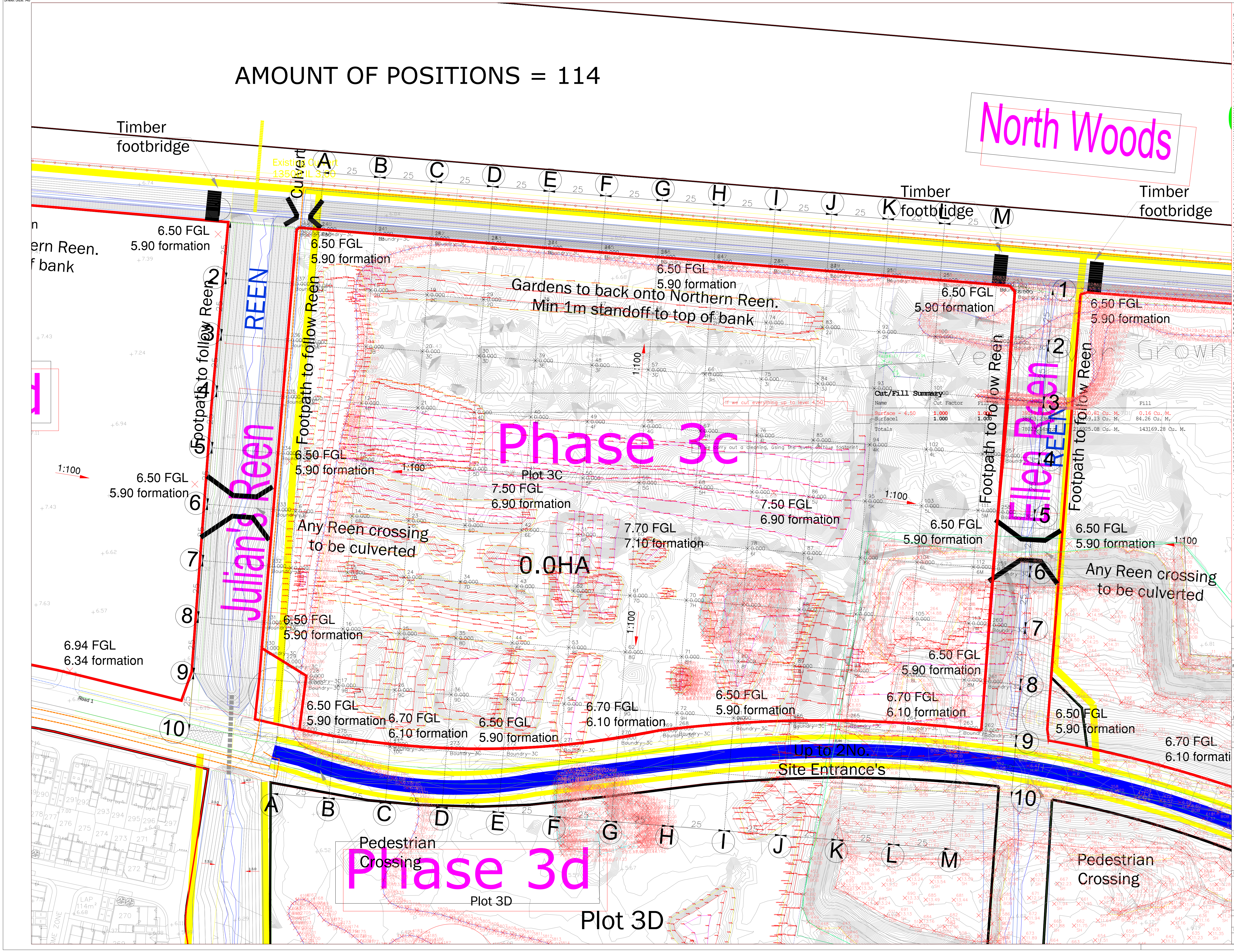
Drawing Title:

Scale:	Sheet Size:	Drawn:	Date:
			13.03.2018

Drawing Number:	Revision:
XXXX	*R1

For Information Only

Sheet Size: A0


AMOUNT OF POSITIONS = 114
North Woods
Timber footbridge
Timber footbridge
Timber footbridge
Existing Culvert 1350 RL 3.50
Culvert
A B C D E F G H I J K L M
1 2 3 4 5 6 7 8 9 10
25
6.50 FGL 5.90 formation
6.94 FGL 6.34 formation
7.50 FGL 6.90 formation
7.70 FGL 7.10 formation
6.70 FGL 6.10 formation
REEN
Julian's Reen
Ellen Reen
Footpath to follow Reen
Gardens to back onto Northern Reen. Min 1m standoff to top of bank
Phase 3c
Plot 3C
0.0HA
Any Reen crossing to be culverted
1:100
Cut/Fill Summary
Very Grown
Up to 2No Site Entrance's
Pedestrian Crossing
Phase 3d
Plot 3D
Road 1
ern Reen. f bank
For Information Only

N'	M	P	Z	GRID
1	335550.1411	187340.3071	0.0000	1A
2	335548.0984	187315.3907	0.0000	2A
3	335546.0557	187290.4743	0.0000	3A
4	335544.0130	187265.5579	0.0000	4A
5	335541.9703	187240.6415	0.0000	5A
6	335539.9276	187215.7250	0.0000	6A
7	335537.8849	187190.8086	0.0000	7A
8	335535.8422	187165.8922	0.0000	8A
9	335575.0575	187338.2644	0.0000	1B
10	335573.0148	187313.3480	0.0000	2B
11	335570.9721	187288.4316	0.0000	3B
12	335568.9294	187263.5152	0.0000	4B
13	335566.8867	187238.5988	0.0000	5B
14	335564.8440	187213.6823	0.0000	6B
15	335562.8013	187188.7659	0.0000	7B
16	335560.7586	187163.8495	0.0000	8B
17	335558.7159	187138.9331	0.0000	9B
18	335599.9739	187336.2217	0.0000	1C
19	335597.9312	187311.3053	0.0000	2C
20	335595.8885	187286.3889	0.0000	3C
21	335593.8458	187261.4725	0.0000	4C
22	335591.8031	187236.5561	0.0000	5C
23	335589.7604	187211.6396	0.0000	6C
24	335587.7177	187186.7232	0.0000	7C
25	335585.6750	187161.8068	0.0000	8C
26	335583.6323	187136.8904	0.0000	9C
27	335581.5896	187111.9740	0.0000	10C
28	335624.8903	187334.1790	0.0000	1D
29	335622.8476	187309.2626	0.0000	2D
30	335620.8049	187284.3462	0.0000	3D
31	335618.7622	187259.4298	0.0000	4D
32	335616.7195	187234.5134	0.0000	5D
33	335614.6768	187209.5970	0.0000	6D
34	335612.6341	187184.6805	0.0000	7D
35	335610.5914	187159.7641	0.0000	8D
36	335608.5487	187134.8477	0.0000	9D
37	335649.8067	187332.1363	0.0000	1E
38	335647.7640	187307.2199	0.0000	2E
39	335645.7213	187282.3035	0.0000	3E
40	335643.6786	187257.3871	0.0000	4E
41	335641.6359	187232.4707	0.0000	5E
42	335639.5932	187207.5543	0.0000	6E
43	335637.5505	187182.6378	0.0000	7E
44	335635.5078	187157.7214	0.0000	6E
45	335633.4651	187132.8050	0.0000	7E
46	335674.7231	187330.0936	0.0000	1F
47	335672.6804	187305.1772	0.0000	2F
48	335670.6377	187280.2608	0.0000	3F
49	335668.5950	187255.3444	0.0000	4F
50	335666.5523	187230.4280	0.0000	5F
51	335664.5096	187205.5116	0.0000	6F
52	335662.4669	187180.5952	0.0000	7F
53	335660.4242	187155.6787	0.0000	8F
54	335658.3815	187130.7623	0.0000	9F
55	335699.6395	187328.0509	0.0000	1G
56	335697.5968	187303.1345	0.0000	2G
57	335695.5541	187278.2181	0.0000	3G
58	335693.5114	187253.3017	0.0000	4G
59	335691.4687	187228.3853	0.0000	5G
60	335689.4260	187203.4689	0.0000	6G
61	335687.3833	187178.5525	0.0000	7G
62	335685.3406	187153.6360	0.0000	8G
63	335683.2979	187128.7196	0.0000	9G
64	335724.5559	187326.0082	0.0000	1H
65	335722.5132	187301.0918	0.0000	2H
66	335720.4705	187276.1754	0.0000	3H
67	335718.4278	187251.2590	0.0000	4H
68	335716.3851	187226.3426	0.0000	5H
69	335714.3424	187201.4262	0.0000	6H
70	335712.2997	187176.5098	0.0000	7H
71	335710.2570	187151.5933	0.0000	8H
72	335708.2143	187126.6769	0.0000	9H
73	335749.4723	187323.9655	0.0000	1I
74	335747.4296	187299.0491	0.0000	2I
75	335745.3869	187274.1327	0.0000	3I
76	335743.3442	187249.2163	0.0000	4I
77	335741.3015	187224.2999	0.0000	5I
78	335739.2588	187199.3835	0.0000	6I
79	335737.2161	187174.4671	0.0000	7I
80	335735.1734	187149.5507	0.0000	8I
81	335733.1308	187124.6342	0.0000	8I
82	335774.3887	187321.9228	0.0000	1J
83	335772.3460	187297.0064	0.0000	2J
84	335770.3033	187272.0900	0.0000	3J
85	335768.2606	187247.1736	0.0000	4J
86	335766.2179	187222.2572	0.0000	5J
87	335764.1753	187197.3408	0.0000	6J
88	335762.1326	187172.4244	0.0000	7J
89	335760.0899	187147.5080	0.0000	8J
90	335758.0472	187122.5915	0.0000	9J
91	335799.3051	187319.8801	0.0000	1K
92	335797.2624	187294.9637	0.0000	2K
93	335795.2197	187270.0473	0.0000	3K
94	335793.1771	187245.1309	0.0000	4K
95	335791.1344	187220.2145	0.0000	5K
96	335789.0917	187195.2981	0.0000	6K
97	335787.0490	187170.3817	0.0000	7K
98	335785.0063	187145.4653	0.0000	8K
99	335824.2216	187317.8374	0.0000	1L
100	335822.1789	187292.9211	0.0000	2L
101	335820.1362	187268.0047	0.0000	3L
102	335818.0935	187243.0882	0.0000	4L
103	335816.0508	187218.1718	0.0000	5L
104	335814.0081	187193.2554	0.0000	6L
105	335811.9654	187168.3390	0.0000	7L
106	335809.9227	187143.4226	0.0000	8L
107	335849.1380	187315.7947	0.0000	1M
108	335847.0953	187290.8784	0.0000	2M
109	335845.0526	187265.9619	0.0000	3M
110	335843.0099	187241.0455	0.0000	4M
111	335840.9672	187216.1291	0.0000	5M
112	335838.9245	187191.2127	0.0000	6M
113	335836.8818	187166.2963	0.0000	7M
114	335834.8391	187141.3799	0.0000	8M

Revision	Details	Date

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Reference Grid:	Reference Datum:
Ordnance Survey National Grid (OSGB36) via the Active GNSS Network	Ordnance Survey National Datum (OSGB36) via the Active GNSS Network

All dimensions in metres

Client:
St Modwen

Project Title:

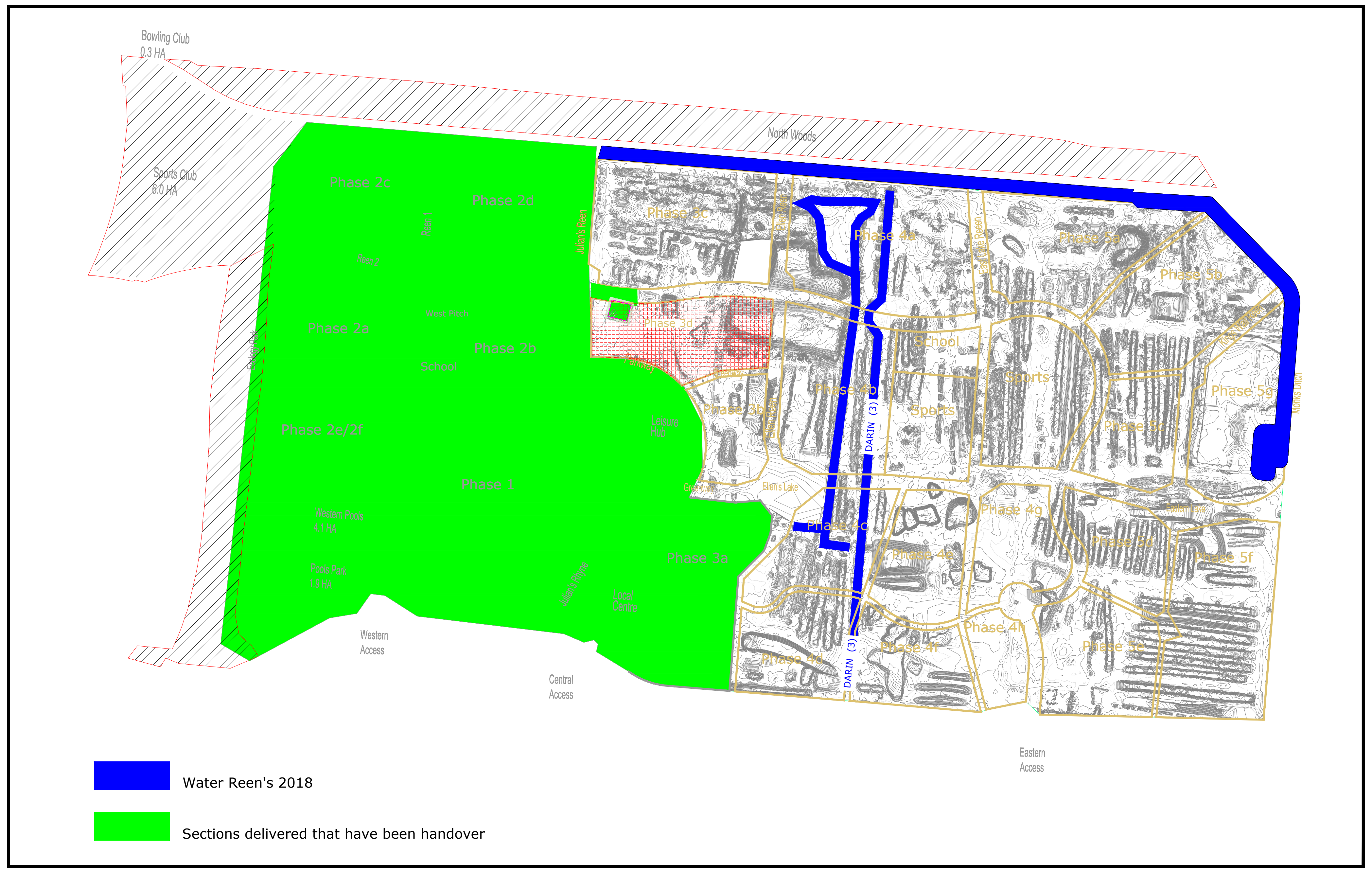
Drawing Title:

Scale:	Sheet Size:	Drawn:	Date:
			_/__/_

Drawing Number:	Revision:
XXXX	*RXX*

For Information Only

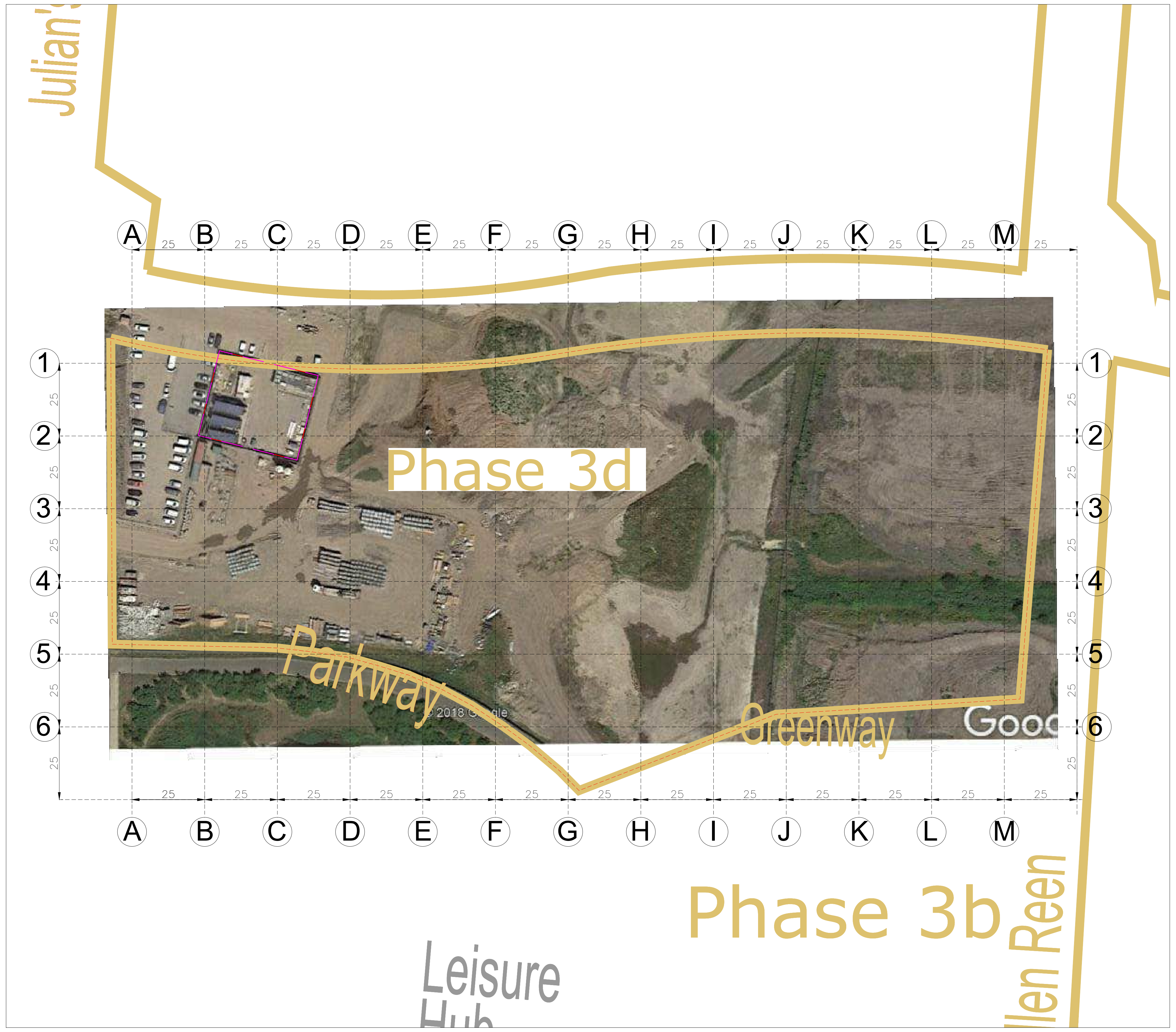
Millimetres
100
10
0



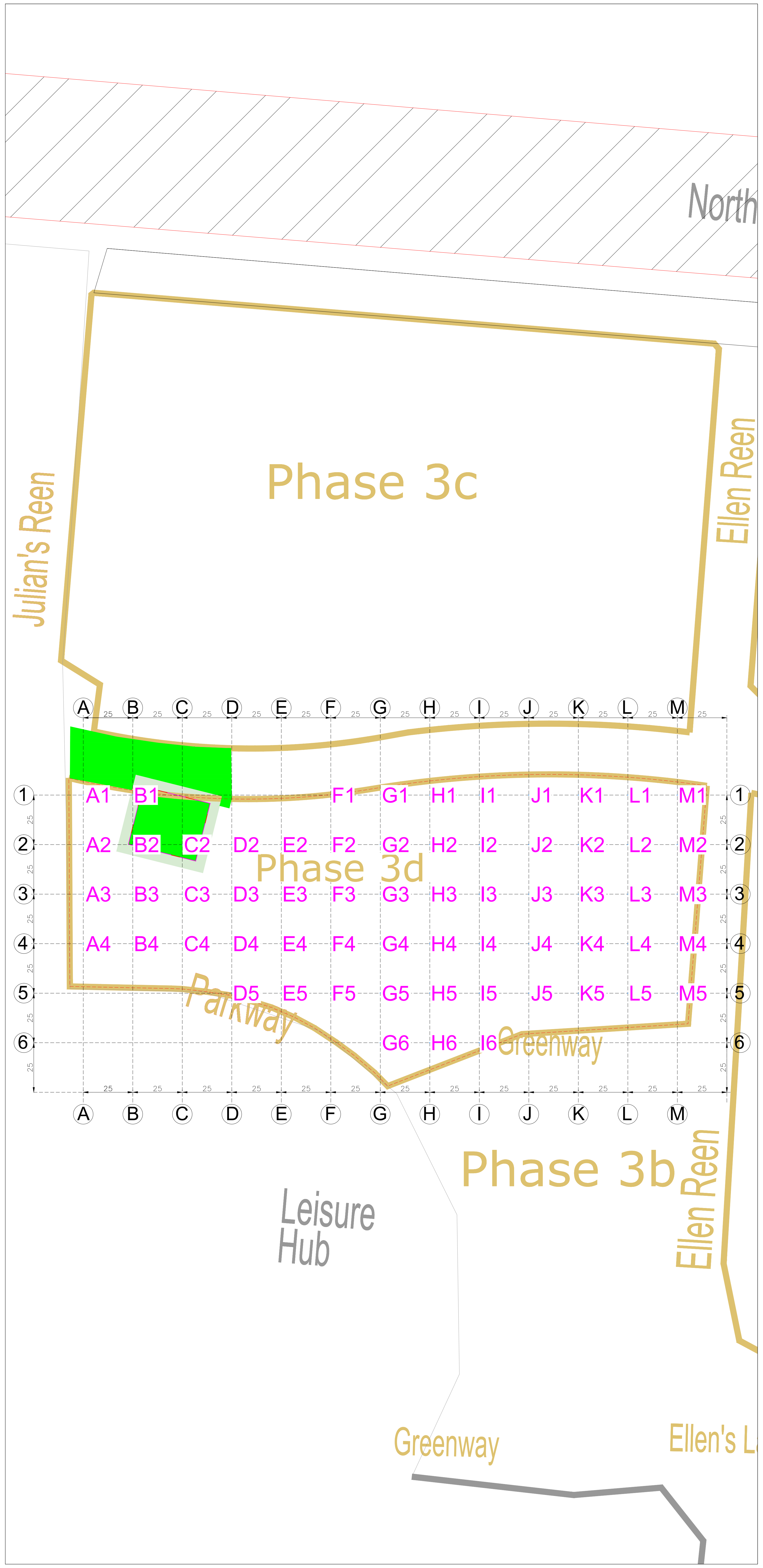
Bowling Club 0.3 HA
North Woods
Sports Club 9.0 HA
Western Access
Central Access
Eastern Access

🟦 Water Reen's 2018

🟩 Sections delivered that have been handover



Julian's
A B C D E F G H I J K L M
1 2 3 4 5 6
25
Phase 3d
Parkway
Greenway
2018 Google
Phase 3b
Leisure Hub
Ellen Reen



North
Phase 3c
Julian's Reen
Ellen Reen
A B C D E F G H I J K L M
1 2 3 4 5 6
25
A1 B1 F1 G1 H1 I1 J1 K1 L1 M1
A2 B2 C2 D2 E2 F2 G2 H2 I2 J2 K2 L2 M2
A3 B3 C3 D3 E3 F3 G3 H3 I3 J3 K3 L3 M3
A4 B4 C4 D4 E4 F4 G4 H4 I4 J4 K4 L4 M4
D5 E5 F5 G5 H5 I5 J5 K5 L5 M5
G6 H6 I6
Phase 3d
Parkway
Greenway
Phase 3b
Leisure Hub
Ellen Reen
Greenway
Ellen's L

62 POSITIONS

Log	X	y	N'
A1	335536.245	187087.4374	1
A2	335536.245	187062.4374	2
A3	335536.245	187037.4374	3
A4	335536.245	187012.4374	4
B1	335561.245	187087.4374	5
B2	335561.245	187062.4374	6
B3	335561.245	187037.4374	7
B4	335561.245	187012.4374	8
C2	335586.245	187062.4374	9
C3	335586.245	187037.4374	10
C4	335586.245	187012.4374	11
D2	335611.245	187062.4374	12
D3	335611.245	187037.4374	13
D4	335611.245	187012.4374	14
D5	335611.245	186987.4374	15
E2	335636.245	187062.4374	16
E3	335636.245	187037.4374	17
E4	335636.245	187012.4374	18
E5	335636.245	186987.4374	19
F1	335661.245	187087.4374	20
F2	335661.245	187062.4374	21
F3	335661.245	187037.4374	22
F4	335661.245	187012.4374	23
F5	335661.245	186987.4374	24
G1	335686.245	187087.4374	25
G2	335686.245	187062.4374	26
G3	335686.245	187037.4374	27
G4	335686.245	187012.4374	28
G5	335686.245	186987.4374	29
G6	335686.245	186962.4374	30
H1	335711.245	187087.4374	31
H2	335711.245	187062.4374	32
H3	335711.245	187037.4374	33
H4	335711.245	187012.4374	34
H5	335711.245	186987.4374	35
H6	335711.245	186962.4374	36
I1	335736.245	187087.4374	37
I2	335736.245	187062.4374	38
I3	335736.245	187037.4374	39
I4	335736.245	187012.4374	40
I5	335736.245	186987.4374	41
I6	335736.245	186962.4374	42
J1	335761.245	187087.4374	43
J2	335761.245	187062.4374	44
J3	335761.245	187037.4374	45
J4	335761.245	187012.4374	46
J5	335761.245	186987.4374	47
K1	335786.245	187087.4374	48
K2	335786.245	187062.4374	49
K3	335786.245	187037.4374	50
K4	335786.245	187012.4374	51
K5	335786.245	186987.4374	52
L1	335811.245	187087.4374	53
L2	335811.245	187062.4374	54
L3	335811.245	187037.4374	55
L4	335811.245	187012.4374	56
L5	335811.245	186987.4374	57
M1	335836.245	187087.4374	58
M2	335836.245	187062.4374	59
M3	335836.245	187037.4374	60
M4	335836.245	187012.4374	61
M5	335836.245	186987.4374	62

N

REV.	DATE	NOTES	Ds.	Rev.	Ap.
3D.1	27/11/18	Phase 3D -Geotechnical Engineer Grid 25x25	GF	JF	CR

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Reference Grid:	Reference Datum:
Ordnance Survey National Grid (OSGB36) via the Active GNSS Network	Ordnance Survey National Datum (OSGB36) via the Active GNSS Network

All dimensions in metres

Client:

St Modwen

Project Title:

LLANWERN-Glan Llyn Primary
Phase 3D

Drawing Title:

Phase 4G -Geotechnical Engineer
Testing Grid
Grid 25x25

Scale:	Sheet Size:	Drawn:	Date:
DO NOT SCALE			27/11/2018

Drawing Number:	Revision:
Geotechnical Grid 25x25	3D.1

For information only

USER: gua Date: 27/11/18 18:28:02 Filename: E:\LLanwern - 2014 GF\HAWK\Job Number-PW0260\Llanwern\dwg\Phase 3D - St Modwen\Trial Pits 3D\Phase 3D -Geotechnical Engineer Grid 25x25_R.3D.1.dwg

Millimetres
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10
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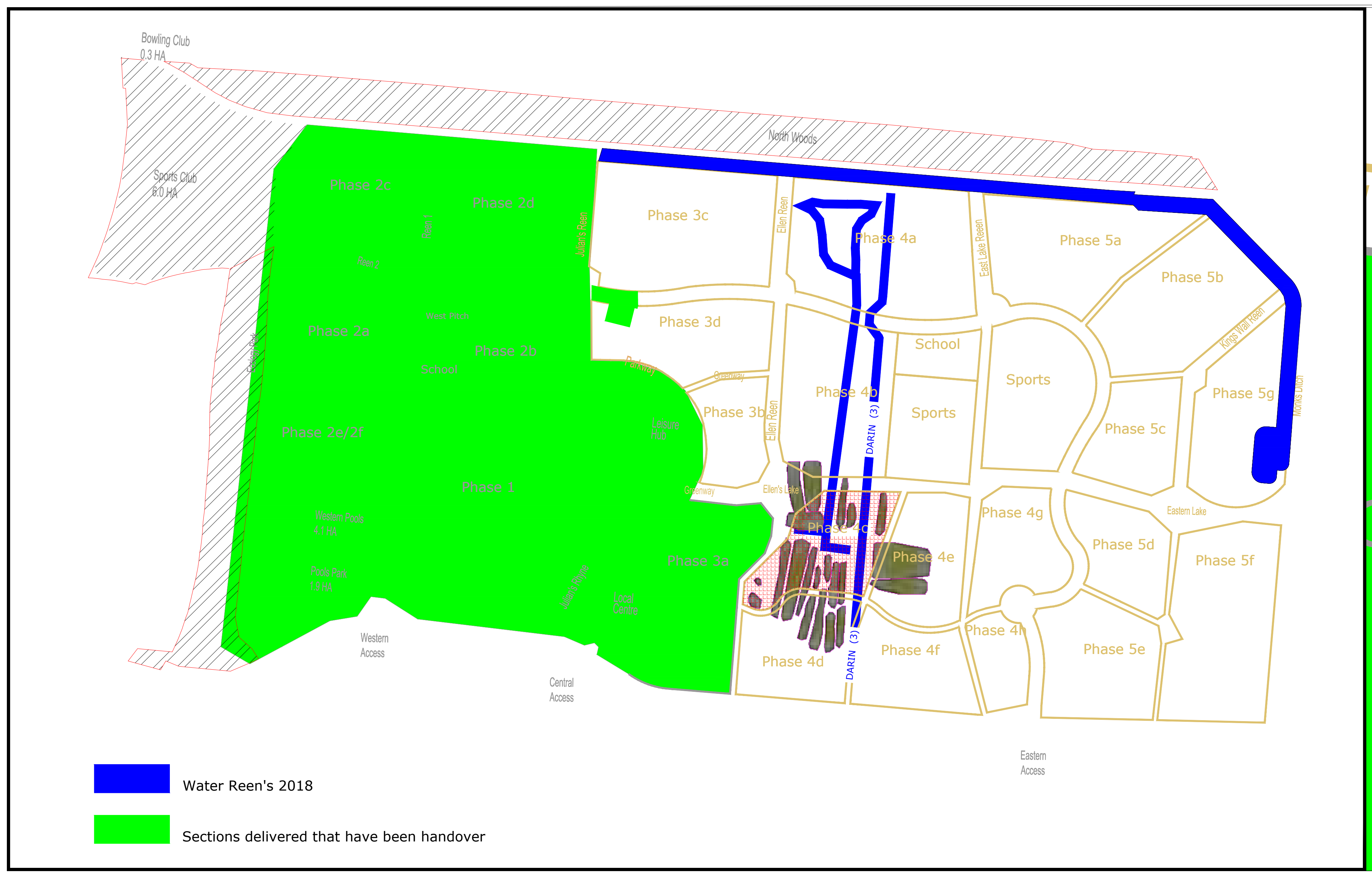
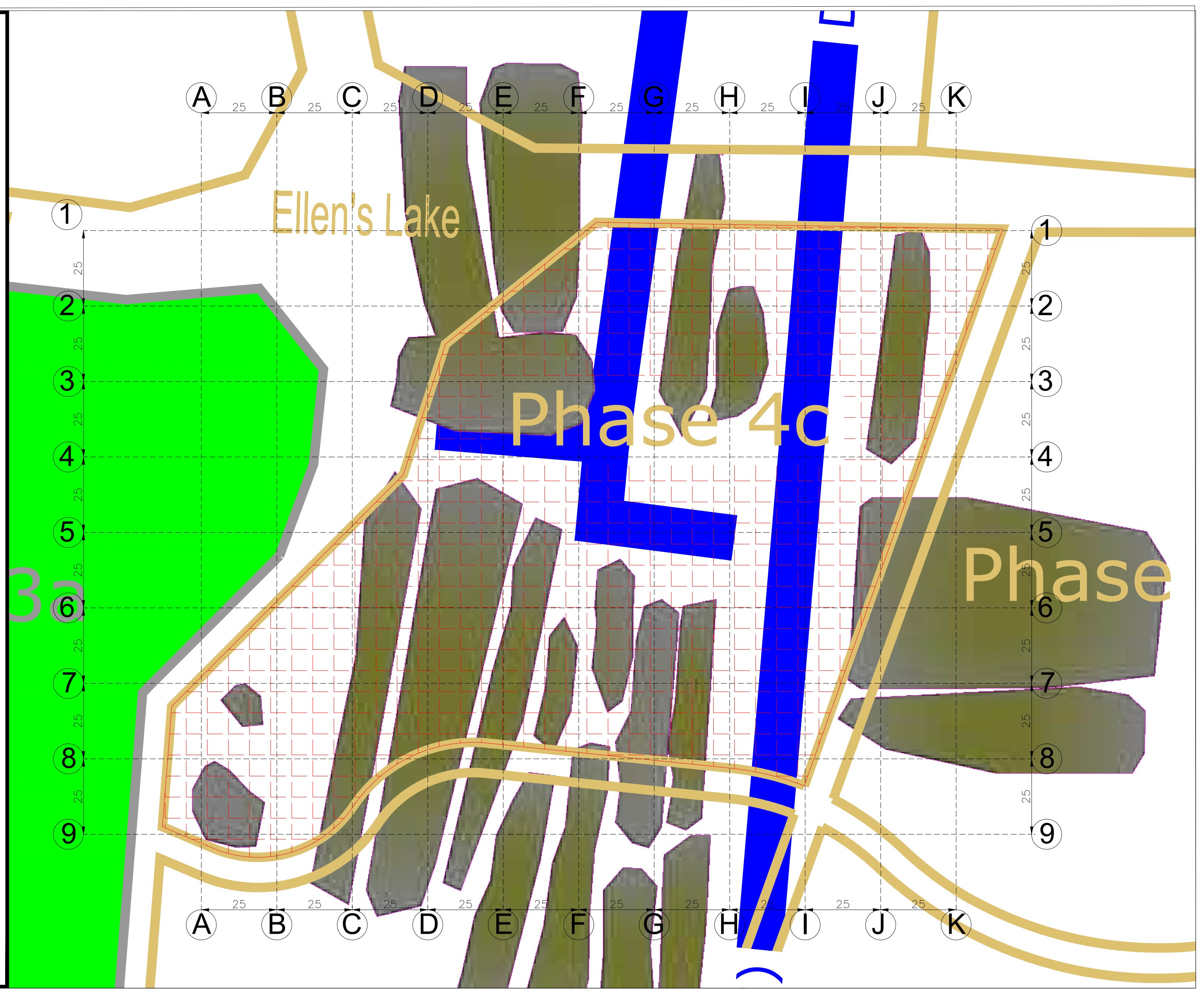
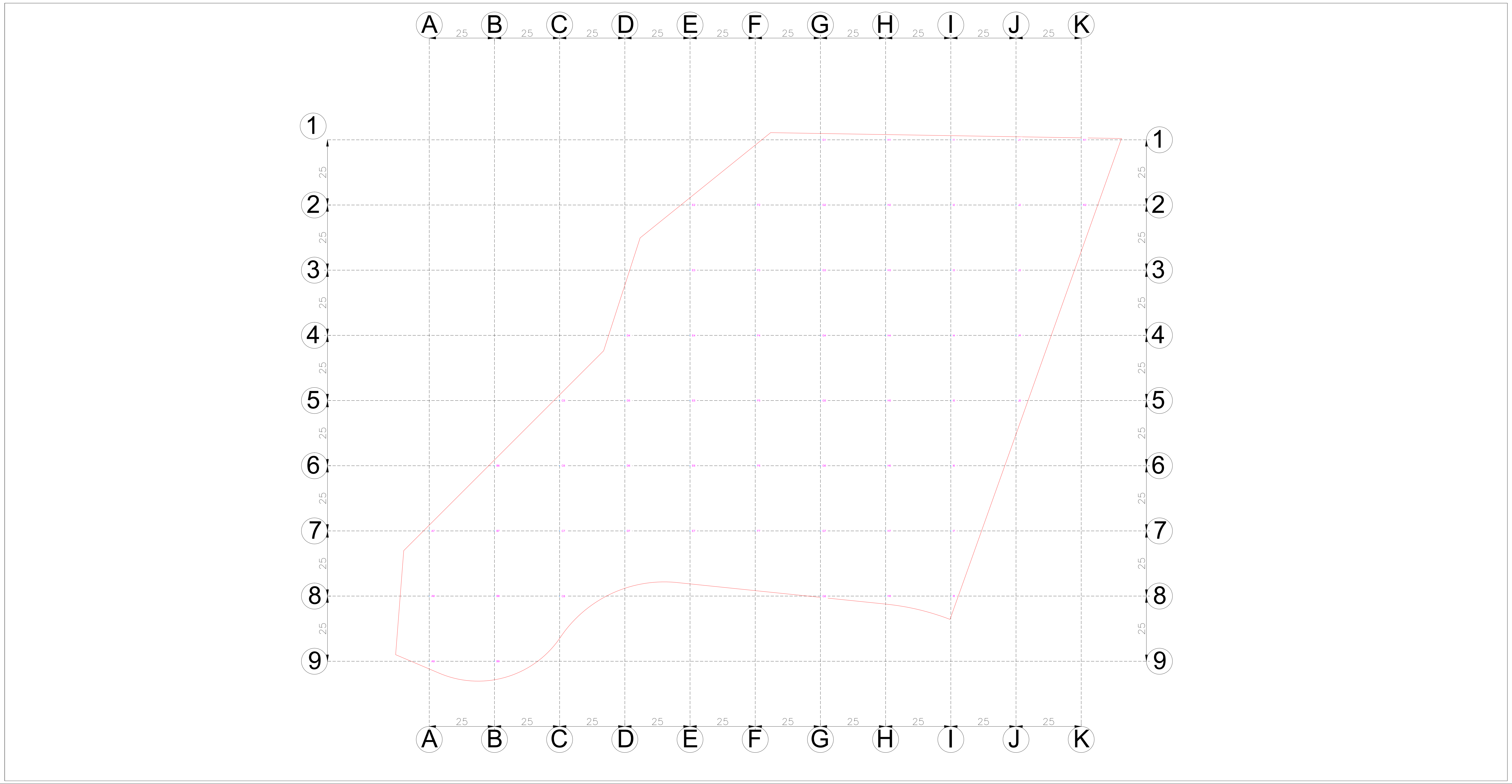

Bowling Club
0.3 HA
Sports Club
8.0 HA
Phase 3c
Phase 4a
Phase 5a
Phase 5b
Phase 3d
School
Sports
Sports
Phase 4b
Phase 3b
Phase 5g
Phase 5c
Phase 4g
Phase 5d
Phase 5f
Phase 4e
Phase 4c
Phase 4d
Phase 4f
Phase 4h
Phase 5e
DARIN (3)
Western Access
Central Access
Eastern Access
🟦 Water Reen's 2018
🟩 Sections delivered that have been handover


A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
9
25
Ellen's Lake
Phase 4c
Phase
3a

58 POSITIONS

Log	X	y
A7	335808.8769	186607.028
A8	335808.8769	186582.028
A9	335808.8769	186557.028
B6	335833.8769	186632.028
B7	335833.8769	186607.028
B8	335833.8769	186582.028
B9	335833.8769	186557.028
C5	335858.8769	186657.028
C6	335858.8769	186632.028
C7	335858.8769	186607.028
C8	335858.8769	186582.028
D4	335883.8769	186682.028
D5	335883.8769	186657.028
D6	335883.8769	186632.028
D7	335883.8769	186607.028
E2	335908.8769	186732.028
E3	335908.8769	186707.028
E4	335908.8769	186682.028
E5	335908.8769	186657.028
E6	335908.8769	186632.028
E7	335908.8769	186607.028
F2	335933.8769	186732.028
F3	335933.8769	186707.028
F4	335933.8769	186682.028
F5	335933.8769	186657.028
F6	335933.8769	186632.028
F7	335933.8769	186607.028
G1	335958.8769	186757.028
G2	335958.8769	186732.028
G3	335958.8769	186707.028
G4	335958.8769	186682.028
G5	335958.8769	186657.028
G6	335958.8769	186632.028
G7	335958.8769	186607.028
G8	335958.8769	186582.028
H1	335983.8769	186757.028
H2	335983.8769	186732.028
H3	335983.8769	186707.028
H4	335983.8769	186682.028
H5	335983.8769	186657.028
H6	335983.8769	186632.028
H7	335983.8769	186607.028
H8	335983.8769	186582.028
I1	336008.8769	186757.028
I2	336008.8769	186732.028
I3	336008.8769	186707.028
I4	336008.8769	186682.028
I5	336008.8769	186657.028
I6	336008.8769	186632.028
I7	336008.8769	186607.028
I8	336008.8769	186582.028
J1	336033.8769	186757.028
J2	336033.8769	186732.028
J3	336033.8769	186707.028
J4	336033.8769	186682.028
J5	336033.8769	186657.028
K1	336058.8769	186757.028
K2	336058.8769	186732.028


A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
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9
25

REV.	DATE	NOTES	Ds.	Rev.	Ap.
4C.1	26/09/18	Phase 4C -Geotechnical Engineer Grid 25x25	GF	JF	CR

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Reference Grid:	Reference Datum:
Ordnance Survey National Grid (OSGB36) via the Active GNSS Network	Ordnance Survey National Datum (OSGB36) via the Active GNSS Network

All dimensions in metres

Client:

St Modwen

Project Title:

LLANWERN-Glan Llyn Primary
Phase 4C

Drawing Title:

Phase 4C -Geotechnical Engineer
Testing Grid
Grid 25x25

Scale:	Sheet Size:	Drawn:	Date:
DO NOT SCALE			26/09/2018

Drawing Number:	Revision:
Geotechnical Grid 25x25	4C.1

USER: gua
Date: 26/9/18 16:50:43
Filename: E:\LLanwern - 2014 GF\HAWK\Job Number-PW0260\Llanwern\dwg\Phase 4C\Phase 4C -Geotechnical Engineer Grid 25x25_R.4C.1_.dwg

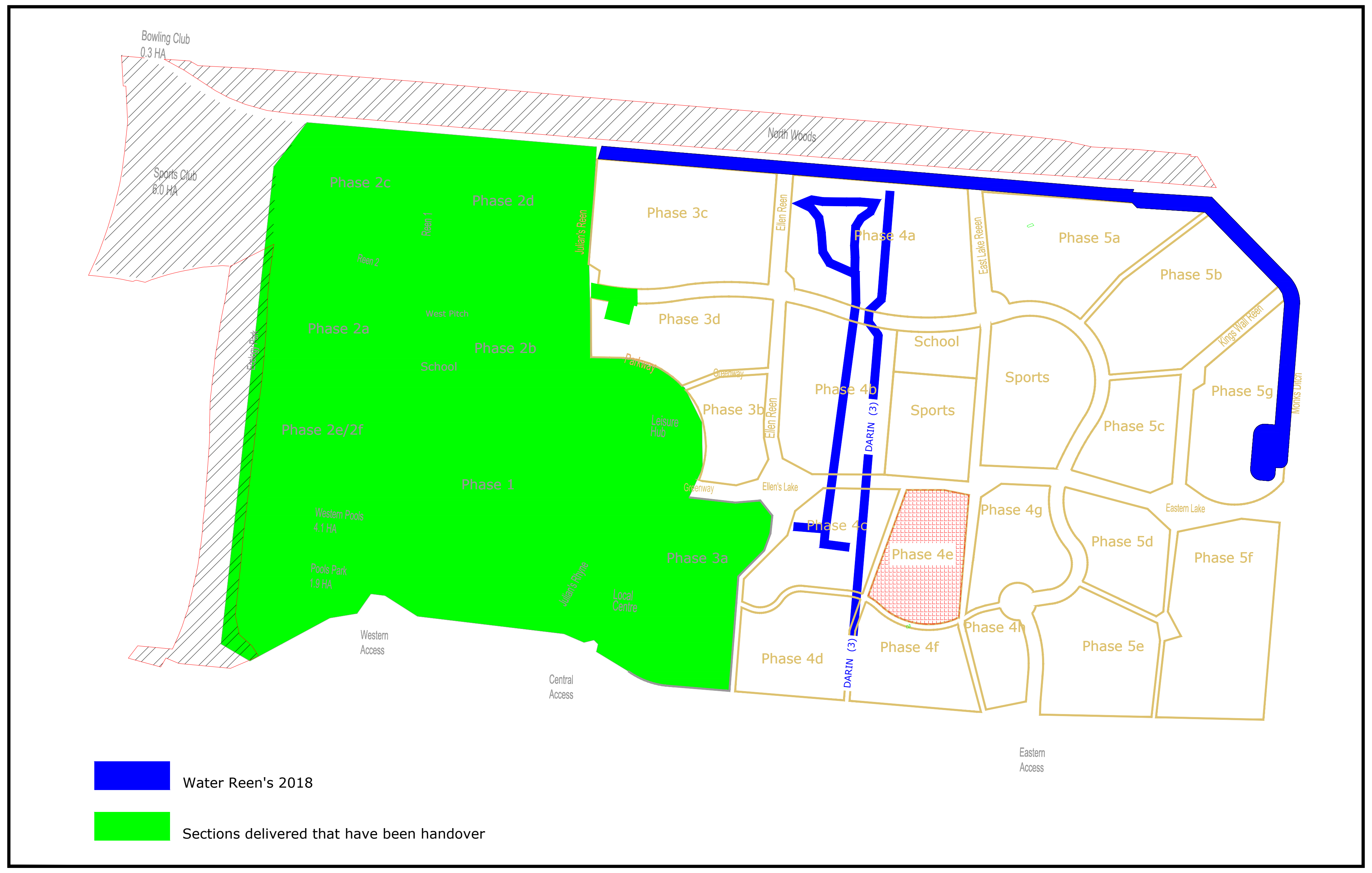
For information only

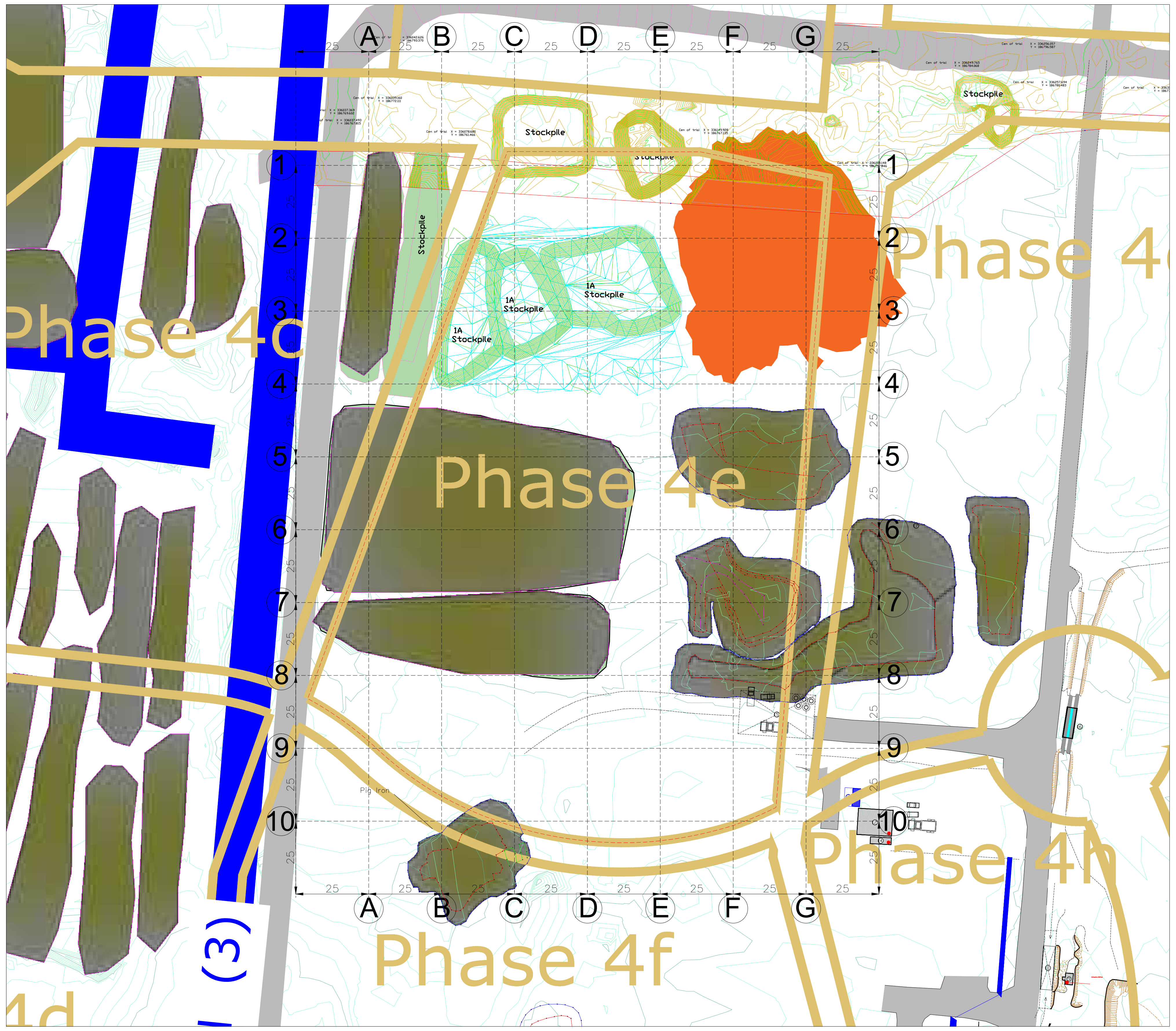
100

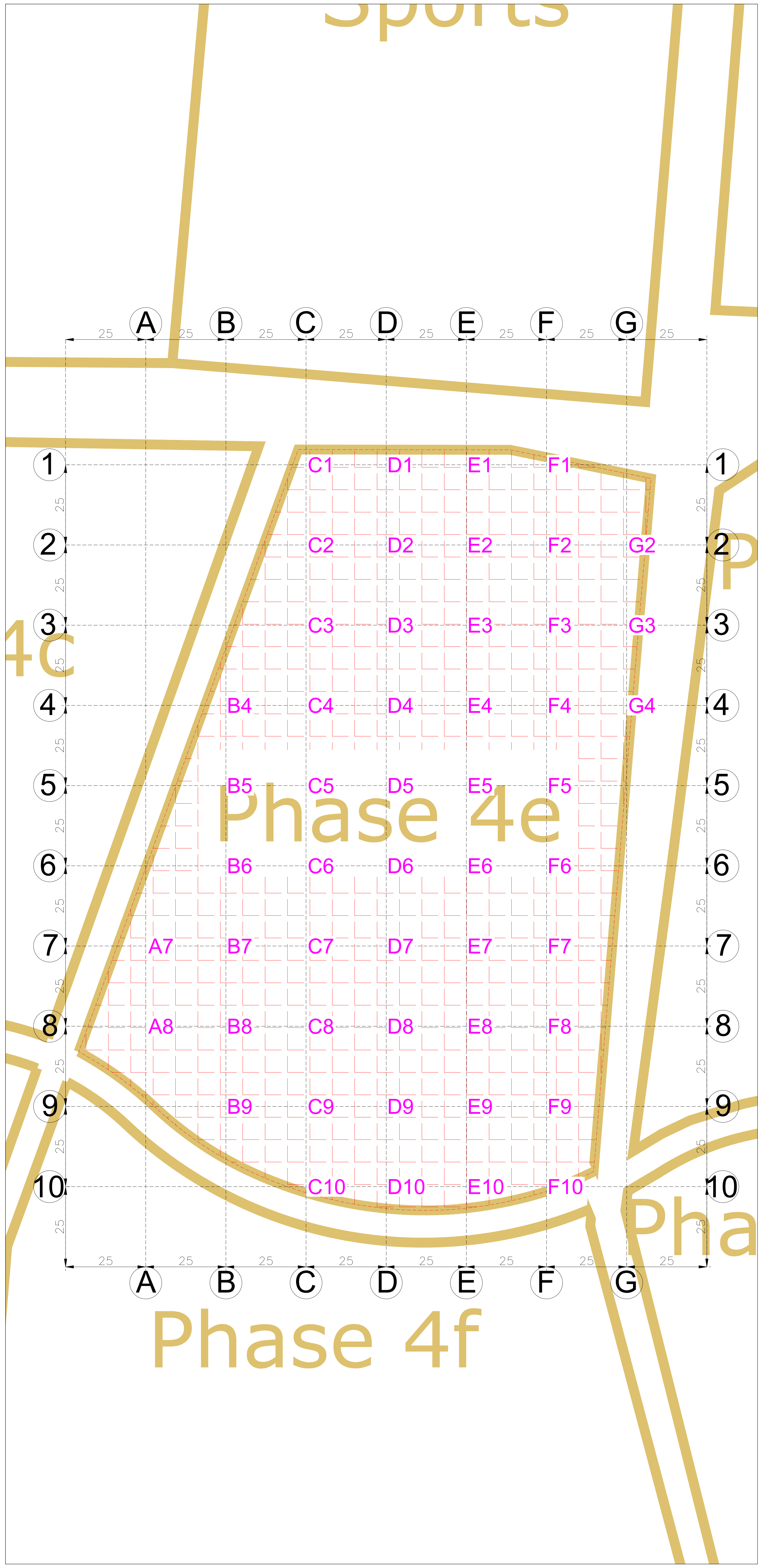
Millimetres

10

0


Bowling Club 0.3 HA
Sports Club 8.0 HA
North Woods
Phase 3c
Phase 4a
Phase 5a
Phase 5b
Phase 3d
School
Sports
Phase 3b
Phase 4b
Sports
Phase 5c
Phase 5g
Phase 4g
Phase 4e
Phase 5d
Phase 5f
Phase 4d
Phase 4f
Phase 4h
Phase 5e
DA&IN (3)
Western Access
Central Access
Eastern Access
Water Reen's 2018
Sections delivered that have been handover


A B C D E F G
1 2 3 4 5 6 7 8 9 10
25
Stockpile
1A Stockpile
Phase 4c
Phase 4e
Phase 4
Phase 4h
Phase 4f
(3)
4d


Sports
A B C D E F G
1 2 3 4 5 6 7 8 9 10
25
C1 D1 E1 F1
C2 D2 E2 F2 G2
C3 D3 E3 F3 G3
B4 C4 D4 E4 F4 G4
B5 C5 D5 E5 F5
B6 C6 D6 E6 F6
A7 B7 C7 D7 E7 F7
A8 B8 C8 D8 E8 F8
B9 C9 D9 E9 F9
C10 D10 E10 F10
Phase 4e
4c
P
Pha
Phase 4f

51 POSITIONS

Log	X	y
A7	336039.0603	186601.7624
A8	336039.0603	186576.7624
B4	336064.0603	186676.7624
B5	336064.0603	186651.7624
B6	336064.0603	186626.7624
B7	336064.0603	186601.7624
B8	336064.0603	186576.7624
B9	336064.0603	186551.7624
C1	336089.0603	186751.7624
C2	336089.0603	186726.7624
C3	336089.0603	186701.7624
C4	336089.0603	186676.7624
C5	336089.0603	186651.7624
C6	336089.0603	186626.7624
C7	336089.0603	186601.7624
C8	336089.0603	186576.7624
C9	336089.0603	186551.7624
C10	336089.0603	186526.7624
D1	336114.0603	186751.7624
D2	336114.0603	186726.7624
D3	336114.0603	186701.7624
D4	336114.0603	186676.7624
D5	336114.0603	186651.7624
D6	336114.0603	186626.7624
D7	336114.0603	186601.7624
D8	336114.0603	186576.7624
D9	336114.0603	186551.7624
D10	336114.0603	186526.7624
E1	336139.0603	186751.7624
E2	336139.0603	186726.7624
E3	336139.0603	186701.7624
E4	336139.0603	186676.7624
E5	336139.0603	186651.7624
E6	336139.0603	186626.7624
E7	336139.0603	186601.7624
E8	336139.0603	186576.7624
E9	336139.0603	186551.7624
E10	336139.0603	186526.7624
F1	336164.0603	186751.7624
F2	336164.0603	186726.7624
F3	336164.0603	186701.7624
F4	336164.0603	186676.7624
F5	336164.0603	186651.7624
F6	336164.0603	186626.7624
F7	336164.0603	186601.7624
F8	336164.0603	186576.7624
F9	336164.0603	186551.7624
F10	336164.0603	186526.7624
G2	336189.0603	186726.7624
G3	336189.0603	186701.7624
G4	336189.0603	186676.7624

N

REV.	DATE	NOTES	Ds.	Rev.	Ap.
4E.1	29/10/18	Phase 4E -Geotechnical Engineer Grid 25x25	GF	JF	CR
4E.2	30/10/18	Phase 4E - Key number of logs (51)	GF	JF	CR

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Reference Grid:	Reference Datum:
Ordnance Survey National Grid (OSGB36) via the Active GNSS Network	Ordnance Survey National Datum (OSGB36) via the Active GNSS Network

All dimensions in metres

Client:

St Modwen

Project Title:

LLANWERN-Glan Llyn Primary
Phase 4C

Drawing Title:

Phase 4E -Geotechnical Engineer
Testing Grid
Grid 25x25

Scale:	Sheet Size:	Drawn:	Date:
DO NOT SCALE			30/10/2018

Drawing Number:	Revision:
Geotechnical Grid 25x25	4E.2

For Information Only

USER: gua Date: 30/10/18 08:50:37 Filename: E:\LLanwern - 2014 GF\HAWK\Job Number-PW0260\Llanwern\dwg\Phase 4E\Phase 4E -Geotechnical Engineer Grid 25x25_R.4E.2.dwg

Millimetres
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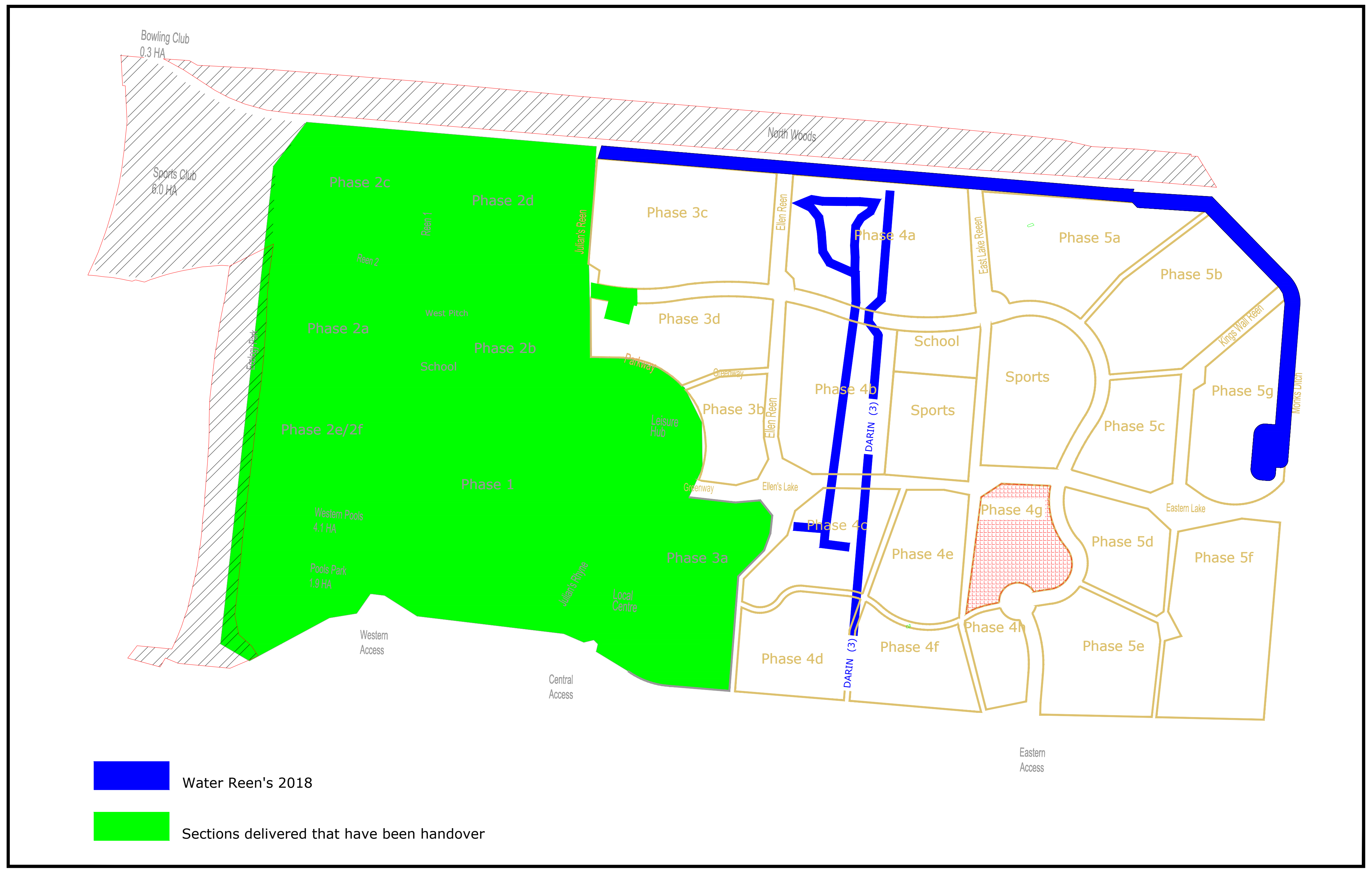
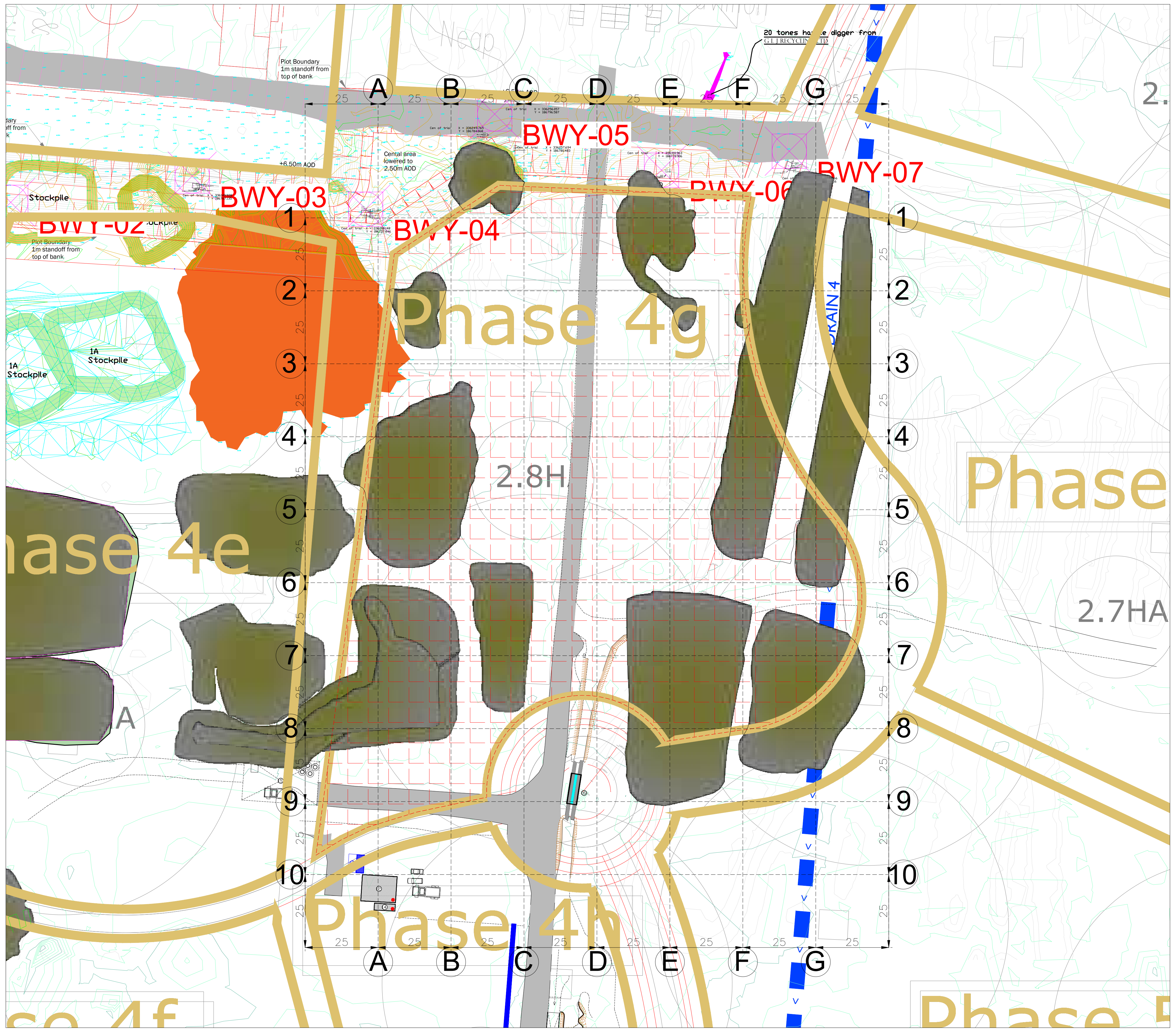
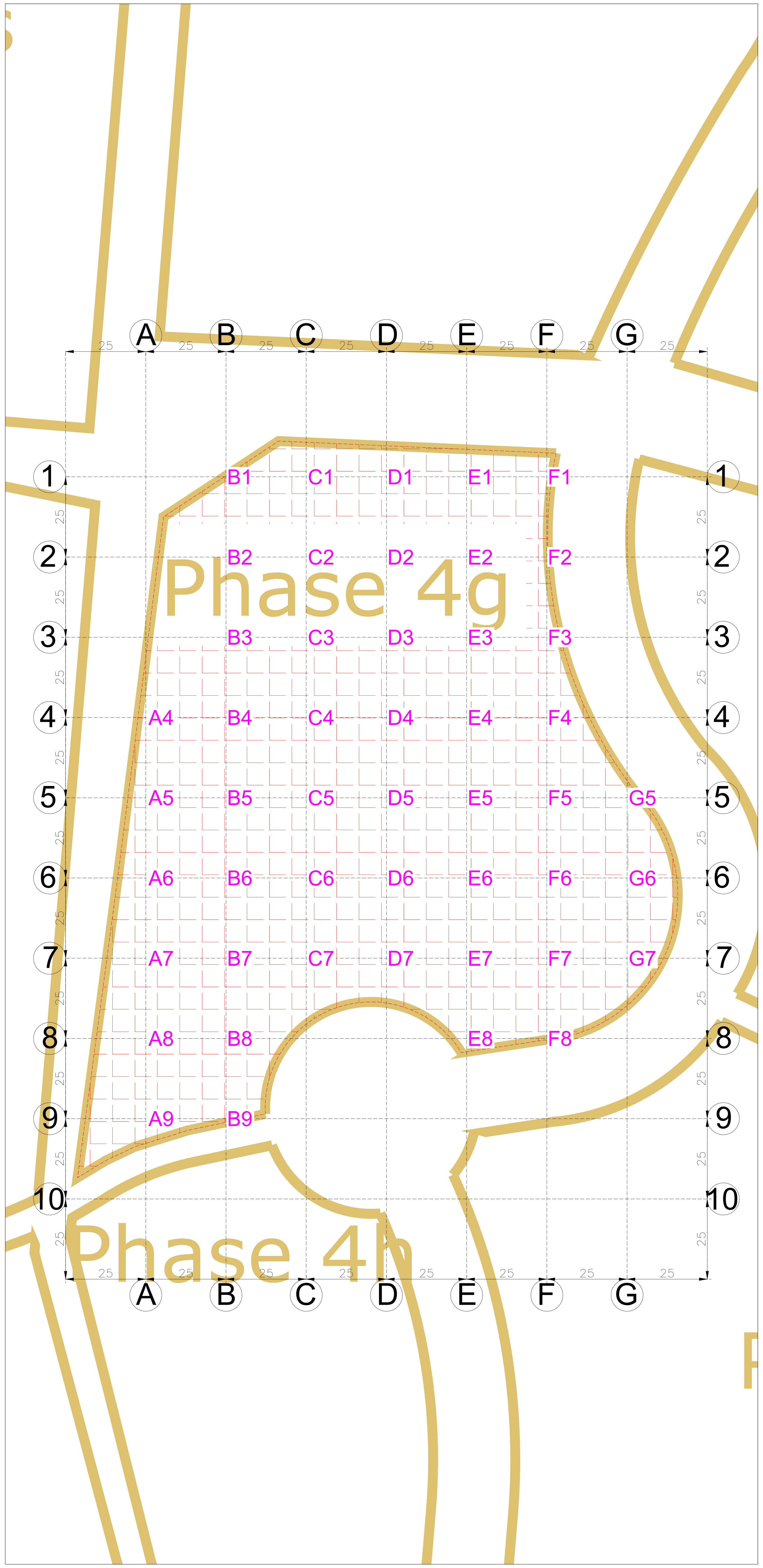

Bowling Club
0.3 HA
Sports Club
8.0 HA
North Woods
Phase 3c
Phase 3d
Phase 3b
Phase 4a
Phase 4b
Phase 4c
Phase 4d
Phase 4e
Phase 4f
Phase 4g
Phase 4h
Phase 5a
Phase 5b
Phase 5c
Phase 5d
Phase 5e
Phase 5f
Phase 5g
School
Sports
Sports
Western Access
Central Access
Eastern Access
DARIN (3)

🟦 Water Reen's 2018

🟩 Sections delivered that have been handover


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
25
BWY-02
BWY-03
BWY-04
BWY-05
BWY-06
BWY-07
Phase 4g
Phase 4e
Phase 4h
Phase
2.8H
2.7HA
Stockpile
1A Stockpile
1A Stockpile
DRAIN 4
20 tones ... digger ...
Plot Boundary 1m standoff from top of bank
Central area lowered to 2.50m AOD


A
B
C
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D1
E1
F1
B2
C2
D2
E2
F2
B3
C3
D3
E3
F3
A4
B4
C4
D4
E4
F4
A5
B5
C5
D5
E5
F5
G5
A6
B6
C6
D6
E6
F6
G6
A7
B7
C7
D7
E7
F7
G7
A8
B8
E8
F8
A9
B9
Phase 4g
Phase 4h

48 POSITIONS

Log	X	y	N'
A4	336212.3946	186681.2165	1
A5	336212.3946	186656.2165	2
A6	336212.3946	186631.2165	3
A7	336212.3946	186606.2165	4
A8	336212.3946	186581.2165	5
A9	336212.3946	186556.2165	6
B1	336237.3946	186756.2165	7
B2	336237.3946	186731.2165	8
B3	336237.3946	186706.2165	9
B4	336237.3946	186681.2165	10
B5	336237.3946	186656.2165	11
B6	336237.3946	186631.2165	12
B7	336237.3946	186606.2165	13
B8	336237.3946	186581.2165	14
B9	336237.3946	186556.2165	15
C1	336262.3946	186756.2165	16
C2	336262.3946	186731.2165	17
C3	336262.3946	186706.2165	18
C4	336262.3946	186681.2165	19
C5	336262.3946	186656.2165	20
C6	336262.3946	186631.2165	21
C7	336262.3946	186606.2165	22
D1	336287.3946	186756.2165	23
D2	336287.3946	186731.2165	24
D3	336287.3946	186706.2165	25
D4	336287.3946	186681.2165	26
D5	336287.3946	186656.2165	27
D6	336287.3946	186631.2165	28
D7	336287.3946	186606.2165	29
E1	336312.3946	186756.2165	30
E2	336312.3946	186731.2165	31
E3	336312.3946	186706.2165	32
E4	336312.3946	186681.2165	33
E5	336312.3946	186656.2165	34
E6	336312.3946	186631.2165	35
E7	336312.3946	186606.2165	36
E8	336312.3946	186581.2165	37
F1	336337.3946	186756.2165	38
F2	336337.3946	186731.2165	39
F3	336337.3946	186706.2165	40
F4	336337.3946	186681.2165	41
F5	336337.3946	186656.2165	42
F6	336337.3946	186631.2165	43
F7	336337.3946	186606.2165	44
F8	336337.3946	186581.2165	45
G5	336362.3946	186656.2165	46
G6	336362.3946	186631.2165	47
G7	336362.3946	186606.2165	48

N

REV.	DATE	NOTES	Ds.	Rev.	Ap.
4G.1	01/11/18	Phase 4G -Geotechnical Engineer Grid 25x25	GF	JF	CR

Disclaimer:

This plan should only be used for its original purpose. Hawk accepts no responsibility for this plan if supplied to any party other than the original client.

All dimensions and or level information shown should be checked on site prior to design and construction.

This drawing is not to be used in whole or part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

Reference Grid:	Reference Datum:
Ordnance Survey National Grid (OSGB36) via the Active GNSS Network	Ordnance Survey National Datum (OSGB36) via the Active GNSS Network

All dimensions in metres

Client:

St Modwen

Project Title:

LLANWERN-Glan Llyn Primary
Phase 4C

Drawing Title:

Phase 4G -Geotechnical Engineer
Testing Grid
Grid 25x25

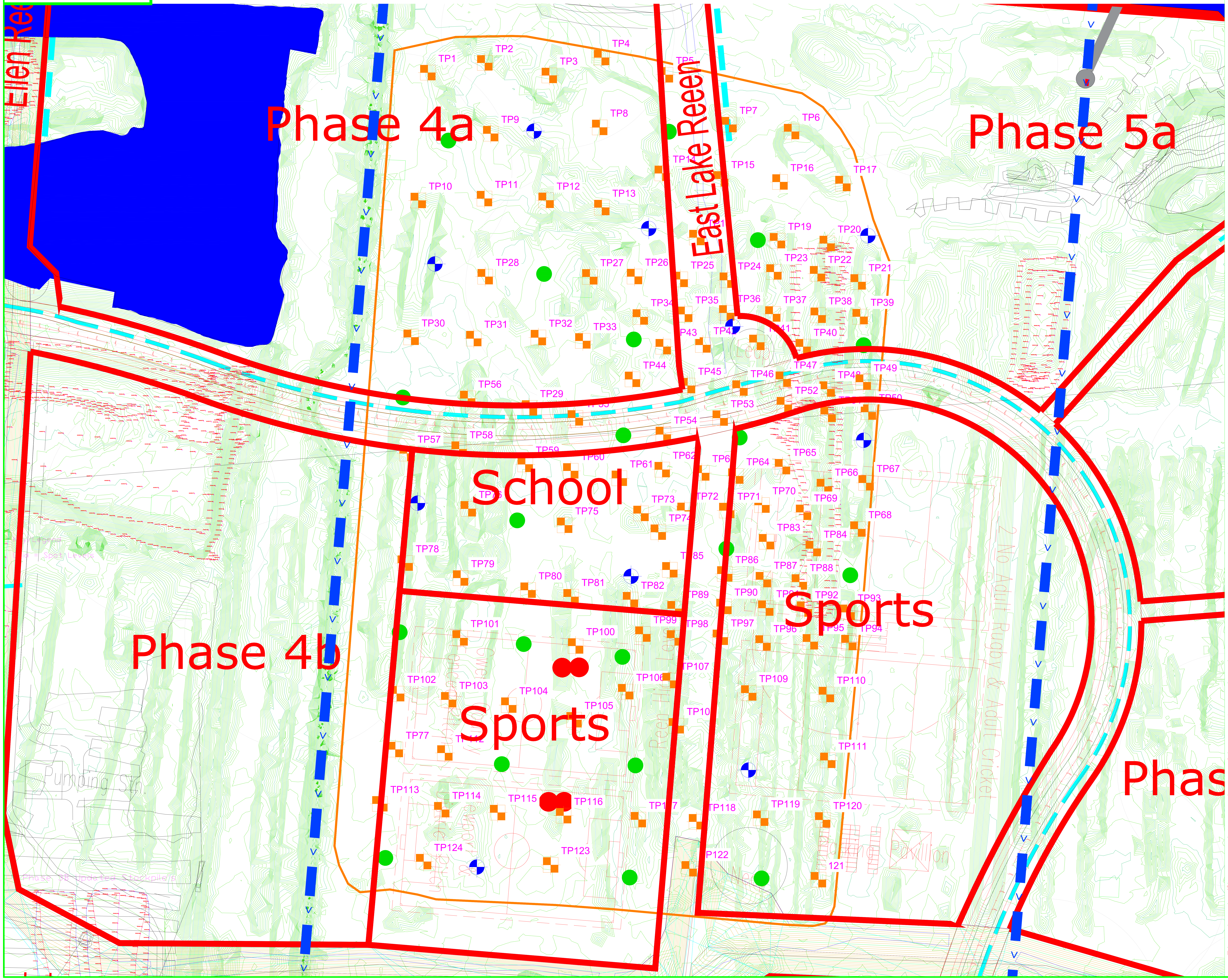
Scale: DO NOT SCALE
Sheet Size:
Drawn:
Date: 01/11/2018

Drawing Number: Geotechnical Grid 25x25
Revision: 4G.1

For Information Only

ATKINS

5111373-LLA-DWG-EG-0422


Ellen Ree
Phase 4a
Phase 5a
East Lake Reen
School
Sports
Sports
Phase 4b
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2 No Adult Rugby & Adult Cricket

KEY

▬	COKING WORKS BOUNDRY
▚	125No. TRIAL PIT - 3m
●	20No. CABLE PERCUSSIVE BOREHOLE - 10m
◐	10No. DYNAMIC SAMPLING WITH ROTARY FOLLOW-ON BOREHOLE - 20m
◆	WINDOW SAMPLING - 5m (LOCATIONS TO BE DECIDED FOLLOWING TRIAL PITTING)

N

REVISIONS	Drawn By	Checked By	Date

PURPOSE OF ISSUE	Rev.	Authorised for issue	Date

Atkins Ltd

Consulting Engineers

The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF
Tel 0121 483 5000
Fax 0121 483 5252

©

THIS DRAWING IS NOT TO BE SCALED

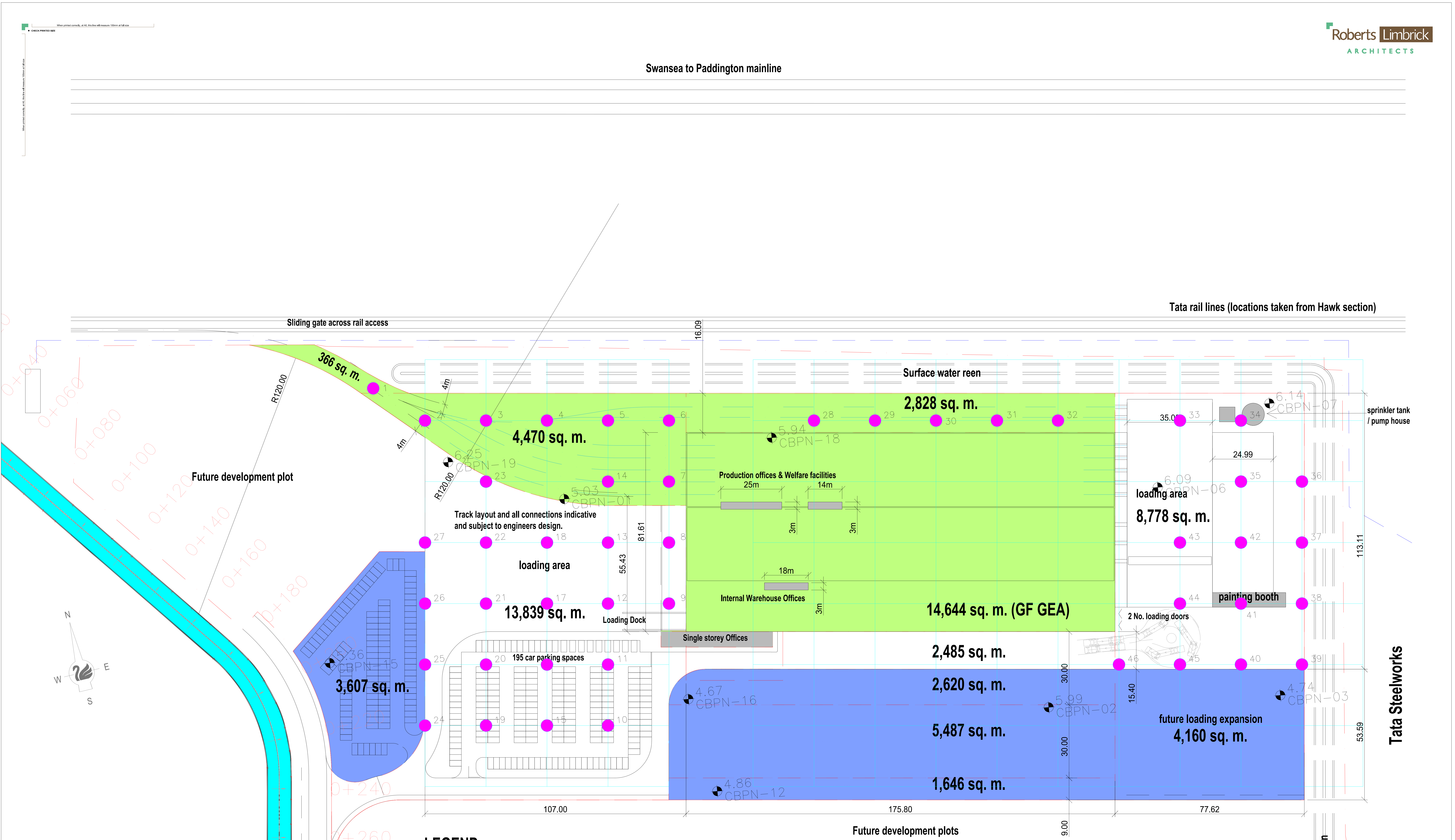
CLIENT

P:\GBBMA\DE2\Div80\511\5111373 - Llanwern (MP)\6 Drawings\Working\IMAGE\St Mod Logo.jpg

PROJECT
LLANWERN

DRAWING TITLE
COKING WORKS
EXPLORATORY HOLE LOCATION PLAN

SCALES	DRAWN	CHECKED	CO-ORD CHECK
1:1250	RJ	SD	
	DATE 05/09/18	DATE 05/09/18	DATE
0		SHEET A3	PLOT DATE
DRAWING NO			REV


Roberts Limbrick
ARCHITECTS
Swansea to Paddington mainline
Tata rail lines (locations taken from Hawk section)
Sliding gate across rail access
16.09
366 sq. m.
R120.00
4m
4m
Surface water reen
2,828 sq. m.
4,470 sq. m.
6.14 CBPN−07
sprinkler tank / pump house
35.00
24.99
5.94 CBPN−18
6.25 CBPN−19
5.03 CBPN−01
R120.00
Future development plot
Production offices & Welfare facilities
25m
14m
3m
3m
6.09 CBPN−06
loading area
8,778 sq. m.
Track layout and all connections indicative and subject to engineers design.
81.61
55.43
loading area
18m
Internal Warehouse Offices
3m
13,839 sq. m.
Loading Dock
14,644 sq. m. (GF GEA)
painting booth
2 No. loading doors
113.11
Single storey Offices
195 car parking spaces
5.36 CBPN−15
3,607 sq. m.
2,485 sq. m.
2,620 sq. m.
5,487 sq. m.
1,646 sq. m.
4.67 CBPN−16
5.99 CBPN−02
4.74 CBPN−03
4.86 CBPN−12
30.00
30.00
15.40
future loading expansion
4,160 sq. m.
53.59
Tata Steelworks
N
E
S
W
107.00
175.80
77.62
9.00
Future development plots
Surface water reen
New Estate Road
Bridge crossing Monks Ditch
0+040
0+060
0+080
0+100
0+120
0+140
0+160
0+180
0+240
0+260
0+280
0+300
0+320
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LEGEND:

🟩	Phase One development	47,410 sq. m.	11.71 acres
🟦	Future development	17,520 sq. m.	4.33 acres
	Total	64,930 sq. m.	16.04 acres

— — Indicates approximate line of existing 628mm Gas Main (locations taken from Hawk section)

— Rail track recessed within concrete yard (INDICATIVE LAYOUT)

● Requiring pits on a 25m x 25m grid (INDICATIVE LAYOUT)

◐ CAF Trial pits 01.02.2017 (INDICATIVE LAYOUT)

POSITIONS OF THE PITS

NAME −N.:	M	P
CAFTP− 1	336841.7298	187239.1315
CAFTP− 2	336861.8005	187224.2262
CAFTP− 3	336886.7157	187222.1686
CAFTP− 4	336911.6309	187220.1110
CAFTP− 5	336936.5461	187218.0534
CAFTP− 6	336961.4612	187215.9958
CAFTP− 7	336959.4036	187191.0806
CAFTP− 8	336957.3460	187166.1654
CAFTP− 9	336955.2884	187141.2502
CAFTP−10	336926.2580	187093.4775
CAFTP−11	336928.3156	187118.3927
CAFTP−12	336930.3732	187143.3078
CAFTP−13	336932.4308	187168.2230
CAFTP−14	336934.4884	187193.1382
CAFTP−15	336901.3428	187095.5351
CAFTP−16	336903.4004	187120.4503
CAFTP−17	336905.4580	187145.3655
CAFTP−18	336907.5156	187170.2806
CAFTP−19	336876.4276	187097.5927
CAFTP−20	336878.4852	187122.5079
CAFTP−21	336880.5428	187147.4231
CAFTP−22	336882.6005	187172.3383
CAFTP−23	336884.6581	187197.2534
CAFTP−24	336851.5124	187099.6503
CAFTP−25	336853.5700	187124.5655
CAFTP−26	336855.6277	187149.4807
CAFTP−27	336857.6853	187174.3959
CAFTP−28	337020.7036	187211.1032
CAFTP−29	337045.6188	187209.0456
CAFTP−30	337070.5340	187206.9880
CAFTP−31	337095.4491	187204.9304
CAFTP−32	337120.3643	187202.8727
CAFTP−33	337170.1947	187198.7575
CAFTP−34	337195.1099	187196.6999
CAFTP−35	337193.0522	187171.7847
CAFTP−36	337217.9674	187169.7271
CAFTP−37	337215.9098	187144.8119
CAFTP−38	337213.8522	187119.8967
CAFTP−39	337211.7945	187094.9815
CAFTP−40	337186.8794	187097.0392
CAFTP−41	337188.9370	187121.9543
CAFTP−42	337190.9946	187146.8695
CAFTP−43	337166.0794	187148.9271
CAFTP−44	337164.0218	187124.0120
CAFTP−45	337161.9642	187099.0968
CAFTP−46	337137.0490	187101.1544
CBPN−01	336916.049	187187.471
CBPN−02	337106.901	187086.047
CBPN−03	337201.924	187083.142
CBPN−06	337158.875	187172.229
CBPN−07	337207.296	187202.742
CBPN−12	336968.688	187062.952
CBPN−15	336814.747	187128.39
CBPN−16	336960.014	187101.55
CBPN−18	337002.866	187205.527
CBPN−19	336869.829	187206.442

The Carriage Building Bruton Way Gloucester GL1 1DG
The Estates Office, 25 - 26 Gold Tops, Newport, NP20 4PG
T: 03333 405 500
E: mail@robertslimbrick.com

SKETCH SITE LAYOUT (SINGLE RAIL CONNECTION)

Date: SEPTEMBER 2016

Scale: 1/500 @ A0

Subject to correct printing. See top left.

Drawing No: 5900 / SK55g

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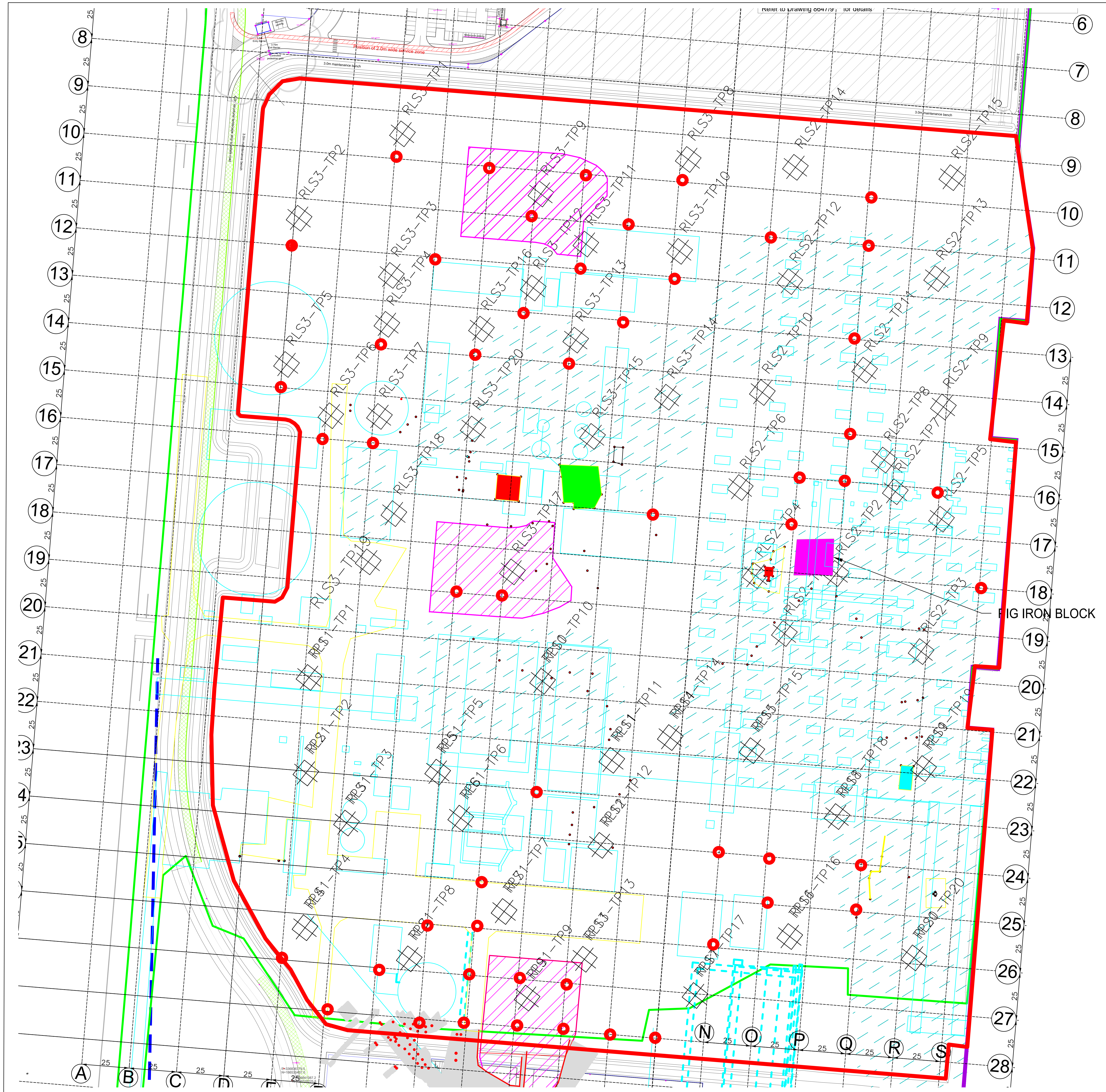
ST. MODWEN
THE UK'S LEADING REGENERATION SPECIALIST


PIG IRON BLOCK
RLS3-TP1
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GENERAL NOTES

NO DIMENSIONS TO BE SCALED OFF THIS DRAWING.

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.

ANY DISCREPANCIES NOTED ON SITE ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

Key

/ Boundary

○ Atkins Trial pit location

Rev	Date	Amendments	By	Chk
B	16/08/18	All trial pits added	ET	
A	22/05/18	First draft	ET	

Client

St Modwen Developments

Project

Llanwern
40 Acre Plot
Trial Pit Location Map

Drawing Title

Trial Pit location

Status

For infomation

Scale	Drawn	Checked	Date
A1@NTS	ET	CW	16/08/18

Drawing No. 17480-RLE-18-DR-O-1002

Rev. B

Seven House ● 18 High Street ● Longbridge ● B31 2UQ ● Tel: 0121 475 8462 ● Fax: 01332 291728 ● www.rodgersleask.co.uk

Appendix G: Soil Leachate Analysis

Glan Llyn Leachate Data

Determinand	Method	Units	LOD	No. of samples	No. of Samples >LOD	No. of Samples > EQS	Min	Max	EQS
Waste Acceptance Criteria (WAC)									
CEN 10:1 - Temperature	PM115	°C		1121	1119	0		25.70000	n/a
CEN 10:1 - pH	PM115	pH Units		1121	1119	0		12.75000	n/a
CEN 10:1 - Conductivity @ 20 deg.C	PM115	µS/cm		1121	1119	0		#########	n/a
Filtered (Dissolved) Metals									
CEN 10:1 - Arsenic (diss.filt)	TM152	mg/l	<0.0005	1121	931	1	<0.0005	0.07700	0.05
CEN 10:1 - Cadmium (diss.filt)	TM152	mg/l	<0.00008	1121	16	1	<0.00008	0.00028	0.00025
CEN 10:1 - Chromium (diss.filt)	TM152	mg/l	<0.001	1121	601	601	<0.001	0.07960	0.00047
CEN 10:1 - Copper (diss.filt)	TM152	mg/l	<0.0003	1121	960	843	<0.0003	0.14300	0.001
CEN 10:1 - Lead (diss.filt)	TM152	mg/l	<0.0002	1121	474	164	<0.0002	0.49000	0.0012
CEN 10:1 - Mercury (diss.filt)	TM183	mg/l	<0.00001	1121	230	0	<0.00001	0.00047	0.07
CEN 10:1 - Nickel (diss.filt)	TM152	mg/l	<0.0004	1121	744	26	<0.0004	0.00777	0.004
CEN 10:1 - Selenium (diss.filt)	TM152	mg/l	<0.0005	1121	857	41	<0.0005	0.06640	0.01
CEN 10:1 - Vanadium (diss.filt)	TM152	mg/l	<0.001	1121	1034	711	<0.001	1.01000	0.02
CEN 10:1 - Zinc (diss.filt)	TM152	mg/l	<0.001	1121	742	98	<0.001	2.09000	0.0109
CEN 10:1 - Mercury (diss.filt)	TM183	mg/kg	<0.0001	1121	230	0	<0.0001	0.00471	n/a
CEN 10:1 - Arsenic (diss.filt)	TM152	mg/kg	<0.005	1121	931	0	<0.005	0.77000	n/a
CEN 10:1 - Cadmium (diss.filt)	TM152	mg/kg	<0.0008	1121	16	0	<0.0008	0.00276	n/a
CEN 10:1 - Chromium (diss.filt)	TM152	mg/kg	<0.01	1121	601	0	<0.01	0.79600	n/a
CEN 10:1 - Copper (diss.filt)	TM152	mg/kg	<0.003	1121	960	0	<0.003	1.43000	n/a
CEN 10:1 - Lead (diss.filt)	TM152	mg/kg	<0.002	1121	474	0	<0.002	4.90000	n/a
CEN 10:1 - Nickel (diss.filt)	TM152	mg/kg	<0.004	1121	744	0	<0.004	0.07770	n/a
CEN 10:1 - Selenium (diss.filt)	TM152	mg/kg	<0.005	1121	857	0	<0.005	0.66400	n/a
CEN 10:1 - Vanadium (diss.filt)	TM152	mg/kg	<0.01	1121	1034	0	<0.01	10.10000	n/a
CEN 10:1 - Zinc (diss.filt)	TM152	mg/kg	<0.01	1121	742	0	<0.01	20.90000	n/a
TPH Criteria Working Group (TPH CWG)									
CEN 10:1 - GRO Surrogate % recovery**	TM245	%		1121	1118	0		129.00000	n/a
CEN 10:1 - GRO >C5-C12	TM245	mg/l	<0.05	1121	57	0	<0.05	312.00000	n/a
CEN 10:1 - GRO >C5-C12	TM245	mg/kg	<0.5	1121	57	0	<0.5	96.20000	n/a
CEN 10:1 - Methyl tertiary butyl ether (MTBE)	TM245	mg/l	<0.03	1121	17	0	<0.03	0.12000	n/a
CEN 10:1 - Methyl tertiary butyl ether (MTBE)	TM245	mg/kg	<0.003	1121	17	0	<0.003	0.01200	n/a
CEN 10:1 - Benzene	TM245	mg/l	<0.07	1121	15	15	<0.07	5.21000	0.01
CEN 10:1 - Benzene	TM245	mg/kg	<0.007	1121	15	0	<0.007	0.52100	n/a
CEN 10:1 - Toluene	TM245	mg/l	<0.04	1121	22	7	<0.04	4.90000	0.074
CEN 10:1 - Toluene	TM245	mg/kg	<0.004	1121	22	0	<0.004	0.49000	n/a
CEN 10:1 - Ethylbenzene	TM245	mg/l	<0.05	1121	4	4	<0.05	0.39000	0.02
CEN 10:1 - Ethylbenzene	TM245	mg/kg	<0.005	1121	4	0	<0.005	0.03900	n/a
CEN 10:1 - m,p-Xylene	TM245	mg/l	<0.08	1121	11	0	<0.08	3.15000	n/a
CEN 10:1 - m,p-Xylene	TM245	mg/kg	<0.008	1121	11	0	<0.008	0.31500	n/a
CEN 10:1 - o-Xylene	TM245	mg/l	<0.03	1121	13	0	<0.03	1.02000	n/a
CEN 10:1 - o-Xylene	TM245	mg/kg	<0.003	1121	13	0	<0.003	0.10200	n/a
CEN 10:1 - Sum of detected Xylenes	TM245	mg/kg	<0.011	1121	12	7	<0.011	4.08000	0.03
CEN 10:1 - Sum of detected Xylenes	TM245	mg/l	<0.11	1121	12	0	<0.11	1.31000	n/a
CEN 10:1 - Sum of detected BTEX	TM245	mg/l	<0.28	1121	11	0	<0.28	14.30000	n/a
CEN 10:1 - Sum of detected BTEX	TM245	mg/kg	<0.028	1121	11	0	<0.028	1.43000	n/a
CEN 10:1 - Aliphatics >C12-C16 (diss.filt)	TM174	mg/l	<0.01	590	0	0	<0.01	<0.01	n/a
CEN 10:1 - Aliphatics >C12-C16 (diss.filt)	TM174	mg/kg	<0.1	590	0	0	<0.1	<0.1	n/a
CEN 10:1 - Aliphatics >C5-C6	TM245	mg/l	<0.01	1121	2	0	<0.01	0.33000	n/a
CEN 10:1 - Aliphatics >C5-C6	TM245	mg/kg	<0.1	1121	2	0	<0.1	0.03300	n/a
CEN 10:1 - Aliphatics >C16-C21 (diss.filt)	TM174	mg/l	<0.1	590	2	0	<0.1	0.20000	n/a
CEN 10:1 - Aliphatics >C16-C21 (diss.filt)	TM174	mg/kg	<0.01	590	2	0	<0.01	0.02000	n/a
CEN 10:1 - Aliphatics >C6-C8	TM245	mg/l	<0.1	1121	22	0	<0.1	1.37000	n/a
CEN 10:1 - Aliphatics >C6-C8	TM245	mg/kg	<0.01	1121	22	0	<0.01	0.13700	n/a
CEN 10:1 - Aliphatics >C21-C35 (diss.filt)	TM174	mg/l	<0.1	590	0	0	<0.1	<0.1	n/a
CEN 10:1 - Aliphatics >C21-C35 (diss.filt)	TM174	mg/kg	<0.01	590	0	0	<0.01	<0.01	n/a
CEN 10:1 - Aliphatics >C8-C10	TM245	mg/l	<0.1	1121	36	0	<0.1	8.63000	n/a
CEN 10:1 - Aliphatics >C8-C10	TM245	mg/kg	<0.01	1121	36	0	<0.01	0.86300	n/a
CEN 10:1 - Total Aliphatics >C12-C35 (diss.filt)	TM174	mg/l	<0.1	590	2	0	<0.1	0.27000	n/a
CEN 10:1 - Total Aliphatics >C12-C35 (diss.filt)	TM174	mg/kg	<0.01	590	2	0	<0.01	0.02700	n/a
CEN 10:1 - Aliphatics >C10-C12	TM245	mg/l	<0.1	1121	68	0	<0.1	182.00000	n/a
CEN 10:1 - Aliphatics >C10-C12	TM245	mg/kg	<0.01	1121	68	0	<0.01	18.20000	n/a
CEN 10:1 - Aromatics >EC5-EC7	TM245	mg/l	<0.01	1121	10	0	<0.01	5.21000	n/a
CEN 10:1 - Aromatics >EC5-EC7	TM245	mg/kg	<0.1	1121	10	0	<0.1	0.52100	n/a
CEN 10:1 - Aromatics >EC7-EC8	TM245	mg/l	<0.1	1121	5	0	<0.1	4.90000	n/a
CEN 10:1 - Aromatics >EC7-EC8	TM245	mg/kg	<0.01	1121	5	0	<0.01	0.49000	n/a
CEN 10:1 - Aromatics >EC8-EC10	TM245	mg/l	<0.1	1121	31	0	<0.1	7.00000	n/a
CEN 10:1 - Aromatics >EC8-EC10	TM245	mg/kg	<0.01	1121	31	0	<0.01	0.70000	n/a
CEN 10:1 - Aromatics >EC10-EC12	TM245	mg/l	<0.1	1121	60	0	<0.1	121.00000	n/a
CEN 10:1 - Aromatics >EC10-EC12	TM245	mg/kg	<0.01	1121	60	0	<0.01	12.10000	n/a
CEN 10:1 - Aromatics >EC12-EC16 (diss.filt)	TM174	mg/l	<0.1	590	4	0	<0.1	8.68000	n/a
CEN 10:1 - Aromatics >EC12-EC16 (diss.filt)	TM174	mg/kg	<0.01	590	4	0	<0.01	0.86800	n/a
CEN 10:1 - Aromatics >EC16-EC21 (diss.filt)	TM174	mg/l	<0.01	590	5	0	<0.01	78.80000	n/a
CEN 10:1 - Aromatics >EC16-EC21 (diss.filt)	TM174	mg/kg	<0.1	590	5	0	<0.1	7.88000	n/a
CEN 10:1 - Aromatics >EC21-EC35 (diss.filt)	TM174	mg/l	<0.1	590	1	0	<0.1	5.61000	n/a
CEN 10:1 - Aromatics >EC21-EC35 (diss.filt)	TM174	mg/kg	<0.01	590	1	0	<0.01	0.56100	n/a
CEN 10:1 - Total Aromatics >EC12-EC35 (diss.filt)	TM174	mg/l	<0.01	590	6	0	<0.01	93.10000	n/a
CEN 10:1 - Total Aromatics >EC12-EC35 (diss.filt)	TM174	mg/kg	<0.1	590	6	0	<0.1	9.31000	n/a
CEN 10:1 - Total Aliphatics & Aromatics >C5-35 (diss.filt)	TM174	mg/l	<0.01	590	12	0	<0.01	93.10000	n/a
CEN 10:1 - Total Aliphatics & Aromatics >C5-35 (diss.filt)	TM174	mg/kg	<0.1	590	12	0	<0.1	98.60000	n/a
Polyaromatic Hydrocarbons (PAHs)									
CEN 10:1 - Naphthalene (diss.filt)	TM178	mg/l	<0.0001	590	99	0	<0.0001	#########	n/a
CEN 10:1 - Naphthalene (diss.filt)	TM178	mg/kg	<0.00001	590	99	0	<0.00001	194.00000	n/a
CEN 10:1 - Acenaphthene (diss.filt)	TM178	mg/l	<0.00000	590	77	0	<0.000005	0.79100	n/a
CEN 10:1 - Acenaphthene (diss.filt)	TM178	mg/kg	<0.00005	590	77	0	<0.00005	2.21000	n/a
CEN 10:1 - Acenaphthylene (diss.filt)	TM178	mg/l	<0.00000	590	59	0	<0.000005	0.90100	n/a
CEN 10:1 - Acenaphthylene (diss.filt)	TM178	mg/kg	<0.00005	590	59	0	<0.00005	9.01000	n/a
CEN 10:1 - Fluoranthene (diss.filt)	TM178	mg/l	<0.00005	590	114	0	<0.00005	8.70000	n/a
CEN 10:1 - Fluoranthene (diss.filt)	TM178	mg/kg	<0.00000	590	114	0	<0.000005	0.87000	n/a
CEN 10:1 - Anthracene (diss.filt)	TM178	mg/l	<0.00005	590	88	0	<0.00005	111.00000	n/a
CEN 10:1 - Anthracene (diss.filt)	TM178	mg/kg	<0.00000	590	88	0	<0.000005	11.10000	n/a
CEN 10:1 - Phenanthrene (diss.filt)	TM178	mg/l	<0.00005	590	115	0	<0.00005	7.58000	n/a
CEN 10:1 - Phenanthrene (diss.filt)	TM178	mg/kg	<0.00000	590	115	0	<0.000005	0.75800	n/a
CEN 10:1 - Fluorene (diss.filt)	TM178	mg/l	<0.00005	590	81	0	<0.00005	3.56000	n/a
CEN 10:1 - Fluorene (diss.filt)	TM178	mg/kg	<0.00000	590	81	0	<0.000005	0.35600	n/a
CEN 10:1 - Chrysene (diss.filt)	TM178	mg/l	<0.00005	590	56	0	<0.00005	28.30000	n/a
CEN 10:1 - Chrysene (diss.filt)	TM178	mg/kg	<0.00000	590	56	0	<0.000005	2.83000	n/a
CEN 10:1 - Pyrene (diss.filt)	TM178	mg/l	<0.00005	590	112	0	<0.00005	9.23000	n/a
CEN 10:1 - Pyrene (diss.filt)	TM178	mg/kg	<0.00000	590	112	0	<0.000005	0.92300	n/a
CEN 10:1 - Benzo(a)anthracene (diss.filt)	TM178	mg/l	<0.00005	590	55	0	<0.00005	21.20000	n/a
CEN 10:1 - Benzo(a)anthracene (diss.filt)	TM178	mg/kg	<0.00000	590	55	0	<0.000005	2.12000	n/a
CEN 10:1 - Benzo(b)fluoranthene (diss.filt)	TM178	mg/l	<0.00000	590	54	0	<0.000005	2.11000	n/a
CEN 10:1 - Benzo(b)fluoranthene (diss.filt)	TM178	mg/kg	<0.00005	590	54	0	<0.00005	21.10000	n/a
CEN 10:1 - Benzo(k)fluoranthene (diss.filt)	TM178	mg/l	<0.00005	590	42	0	<0.00005	30.30000	n/a
CEN 10:1 - Benzo(k)fluoranthene (diss.filt)	TM178	mg/kg	<0.00000	590	42	0	<0.000005	3.03000	n/a
CEN 10:1 - Benzo(a)pyrene (diss.filt)	TM178	mg/l	<0.00002	590	56	0	<0.00002	21.10000	n/a
CEN 10:1 - Benzo(a)pyrene (diss.filt)	TM178	mg/kg	<0.00000	590	56	0	<0.000002	2.11000	n/a
CEN 10:1 - Dibenzo(a,h)anthracene (diss.filt)	TM178	mg/l	<0.00005	590	23	0	<0.00005	22.20000	n/a
CEN 10:1 - Dibenzo(a,h)anthracene (diss.filt)	TM178	mg/kg	<0.00000	590	23	0	<0.000005	2.22000	n/a
CEN 10:1 - Benzo(g,h,i)perylene (diss.filt)	TM178	mg/l	<0.00005	590	32	0	<0.00005	32.80000	n/a
CEN 10:1 - Benzo(g,h,i)perylene (diss.filt)	TM178	mg/kg	<0.00000	590	32	0	<0.000005	3.28000	n/a
CEN 10:1 - Indeno(1,2,3-cd)pyrene (diss.filt)	TM178	mg/l	<0.00000	590	35	0	<0.000005	2.49000	n/a
CEN 10:1 - Indeno(1,2,3-cd)pyrene (diss.filt)	TM178	mg/kg	<0.00005	590	35	0	<0.00005	24.90000	n/a
CEN 10:1 - PAH Sum of EPA 16 detected (Diss filt)	TM178	mg/l	<0.00082	590	99	0	<0.00082	#########	n/a
CEN 10:1 - PAH Sum of EPA 16 detected (Diss filt)	TM178	mg/kg	<0.00008	590	99	0	<0.000082	219.00000	n/a
Volatile Organic Compounds (VOCs)									
CEN 10:1 - Aromatics >EC16-EC35 (diss.filt)	TM174	mg/l	<0.01	590	5	0	<0.01	84.40000	n/a
CEN 10:1 - Aromatics >EC16-EC35 (diss.filt)	TM174	mg/kg	<0.1	590	5	0	<0.1	8.44000	n/a
Inorganics									
CEN 10:1 - Ammoniacal Nitrogen as N			<2	145	0	0	<2	<2	
CEN 10:1 - Ammoniacal Nitrogen as N			<0.2	1121	328	0	<0.2	76.90000	
CEN 10:1 - Ammoniacal Nitrogen as N			<2	1121	328	0	<2	590.00000	
CEN 10:1 - pH			<1	1121	1016	0	<1	12.83000	
CEN 10:1 - pH (diss.filt)			<1	1121	103	0	<1	12.75000	
CEN 10:1 - Cyanide, Total			<0.5	1121	78	0	<0.5	70.00000	
CEN 10:1 - Cyanide, Total			<0.05	1121	78	0	<0.05	7.00000	
Filtered (Total) Metals									
CEN 10:1 - Manganese (diss.filt)			<0.01	1121	321	0	<0.01	21.60000	
CEN 10:1 - Manganese (diss.filt)			<0.001	936	249	0	<0.001	2.16000	
CEN 10:1 - Iron (Dis.Filt)			<0.019	936	337	0	<0.019	681.00000	
CEN 10:1 - Iron (Dis.Filt)			<0.19	936	337	0	<0.19	68.10000	
TPH Criteria Working Group (TPH CWG) (aq)									
CEN 10:1 - Aliphatics >C12-C16 (aq)			<0.1	1121	5	0	<0.1	0.30000	
CEN 10:1 - Aliphatics >C12-C16 (aq)			<0.01	1121	6	0	<0.01	0.81000	
CEN 10:1 - Aliphatics >C16-C21 (aq)			<0.01	1121	12	0	<0.01	1.01000	
CEN 10:1 - Aliphatics >C16-C21 (aq)			<0.1	1121	12	0	<0.1	0.81000	
CEN 10:1 - Aliphatics >C21-C35 (aq)			<0.1	1121	11	0	<0.1	0.88000	
CEN 10:1 - Aliphatics >C21-C35 (aq)			<0.01	1121	22	0	<0.01	2.48000	
CEN 10:1 - Total Aliphatics >C12-C35 (aq)			<0.1	1121	26	0	<0.1	1.97000	
CEN 10:1 - Total Aliphatics >C12-C35 (aq)			<0.01	1121	27	0	<0.01	2.00000	
CEN 10:1 - Aromatics >EC12-EC16 (aq)			<0.1	1121	64	0	<0.1	28.10000	
CEN 10:1 - Aromatics >EC12-EC16 (aq)			<0.01	1121	58	0	<0.01	2.81000	
CEN 10:1 - Aromatics >EC16-EC21 (aq)			<0.01	1121	66	0	<0.01	15.20000	
CEN 10:1 - Aromatics >EC16-EC21 (aq)			<0.1	1121	72	0	<0.1	4.14000	
CEN 10:1 - Aromatics >EC21-EC35 (aq)			<0.1	1121	40	0	<0.1	1.33000	
CEN 10:1 - Aromatics >EC21-EC35 (aq)			<0.01	1121	47	0	<0.01	11.50000	
CEN 10:1 - Total Aromatics >EC12-EC35 (aq)			<0.01	1121	94	0	<0.01	42.30000	
CEN 10:1 - Total Aromatics >EC12-EC35 (aq)			<0.1	1070	74	0	<0.1	4.23000	
CEN 10:1 - Total Aliphatics & Aromatics >C5-35 (aq)			<0.01	1070	167	0	<0.01	354.00000	
CEN 10:1 - Total Aliphatics & Aromatics >C5-35 (aq)			<0.1	1070	167	0	<0.1	40.70000	
TPH Criteria Working Group (TPH CWG) (aq)				269	0	0			
CEN 10:1 - Total EPH (C6-C40) (aq)			<1	145	0	0	<1	<1	
CEN 10:1 - Total EPH (C6-C40) (aq)			<0.1	145	0	0	<0.1	<0.1	
CEN 10:1 - Naphthalene (aq)			<0.0001	1121	792	0	<0.0001	119.00000	
CEN 10:1 - Naphthalene (aq)			<0.00001	1121	792	0	<0.00001	11.90000	
CEN 10:1 - Acenaphthene (aq)			<0.00005	1121	583	0	<0.00005	0.81500	
CEN 10:1 - Acenaphthene (aq)			<0.00000	1121	583	0	<0.000005	0.08150	
CEN 10:1 - Acenaphthylene (aq)			<0.00005	1121	450	0	<0.00005	9.37000	
CEN 10:1 - Acenaphthylene (aq)			<0.00000	1121	450	0	<0.000005	0.93700	
CEN 10:1 - Fluoranthene (aq)			<0.00005	1121	898	0	<0.00005	0.37300	
CEN 10:1 - Fluoranthene (aq)			<0.00000	1121	898	0	<0.000005	0.03730	
CEN 10:1 - Anthracene (aq)			<0.00005	1121	664	0	<0.00005	0.23600	
CEN 10:1 - Anthracene (aq)			<0.00000	1121	664	0	<0.000005	0.02360	
CEN 10:1 - Phenanthrene (aq)			<0.00005	1121	882	0	<0.00005	2.35000	
CEN 10:1 - Phenanthrene (aq)			<0.00000	1121	882	0	<0.000005	0.23500	
CEN 10:1 - Fluorene (aq)			<0.00005	1121	592	0	<0.00005	1.99000	
CEN 10:1 - Fluorene (aq)			<0.00000	1121	592	0	<0.000005	0.19900	
CEN 10:1 - Chrysene (aq)			<0.00005	1121	493	0	<0.00005	0.10500	
CEN 10:1 - Chrysene (aq)			<0.00000	1121	493	0	<0.000005	0.01050	
CEN 10:1 - Pyrene (aq)			<0.00005	1121	887	0	<0.00005	0.20600	
CEN 10:1 - Pyrene (aq)			<0.00000	1121	887	0	<0.000005	0.02060	
CEN 10:1 - Benzo(a)anthracene (aq)			<0.00005	1121	483	0	<0.00005	0.09460	
CEN 10:1 - Benzo(a)anthracene (aq)			<0.00000	1121	483	0	<0.000005	0.00946	
CEN 10:1 - Benzo(b)fluoranthene (aq)			<0.00005	1121	485	0	<0.00005	0.15100	
CEN 10:1 - Benzo(b)fluoranthene (aq)			<0.00000	1121	485	0	<0.000005	0.01510	
CEN 10:1 - Benzo(k)fluoranthene (aq)			<0.00005	1121	392	0	<0.00005	0.11800	
CEN 10:1 - Benzo(k)fluoranthene (aq)			<0.00000	1121	392	0	<0.000005	0.01180	
CEN 10:1 - Benzo(a)pyrene (aq)			<0.00002	1121	471	0	<0.00002	0.10400	
CEN 10:1 - Benzo(a)pyrene (aq)			<0.00000	1121	471	0	<0.000002	0.01040	
CEN 10:1 - Dibenzo(a,h)anthracene (aq)			<0.00005	1121	186	0	<0.00005	0.09230	
CEN 10:1 - Dibenzo(a,h)anthracene (aq)			<0.00000	1121	186	0	<0.000005	0.00923	
CEN 10:1 - Benzo(g,h,i)perylene (aq)			<0.00005	1121	284	0	<0.00005	0.09280	
CEN 10:1 - Benzo(g,h,i)perylene (aq)			<0.00000	1121	284	0	<0.000005	0.03000	
CEN 10:1 - Indeno(1,2,3-cd)pyrene (aq)			<0.00005	1121	306	0	<0.00005	0.11100	
CEN 10:1 - Indeno(1,2,3-cd)pyrene (aq)			<0.00000	1121	306	0	<0.000005	0.01110	
CEN 10:1 - PAH, Total Detected USEPA 16 (aq)			<0.00082	1121	760	0	<0.00082	133.00000	
CEN 10:1 - PAH, Total Detected USEPA 16 (aq)			<0.00008	1121	760	0	<0.000082	13.30000	
EPH CWG (Speciated)				1121	0	0			
CEN 10:1 - Aliphatics >C16-C35 Aqueous			<0.1	1121	15	0	<0.1	1.84000	
CEN 10:1 - Aliphatics >C16-C35 Aqueous			<0.01	1121	15	0	<0.01	0.18400	
Volatile Organic Compounds (VOCs)				145	0	0			
CEN 10:1 - Benzene			<0.01	145	23	0	<0.01	0.21100	
CEN 10:1 - Benzene			<0.001	145	23	0	<0.001	0.02110	
CEN 10:1 - Toluene			<0.001	145	14	0	<0.001	0.00983	
CEN 10:1 - Toluene			<0.01	145	14	0	<0.01	0.09830	
CEN 10:1 - Ethylbenzene			<0.01	145	0	0	<0.01	<0.01	
CEN 10:1 - Ethylbenzene			<0.001	145	0	0	<0.001	<0.001	
CEN 10:1 - m,p-Xylene			<0.01	145	6	0	<0.01	0.10300	
CEN 10:1 - m,p-Xylene			<0.001	145	6	0	<0.001	0.01030	
CEN 10:1 - o-Xylene			<0.01	145	2	0	<0.01	0.03470	
CEN 10:1 - o-Xylene			<0.001	145	2	0	<0.001	0.00347	
CEN 10:1 - Sum of detected Xylenes			<0.02	145	3	0	<0.02	0.13800	
CEN 10:1 - Sum of detected Xylenes			<0.002	145	3	0	<0.002	0.01380	
Addition Inorganic									
CEN 10:1 - Ammoniacal Nitrogen as N (low level)	TM099	mg/kg	<0.1	531	20	0	<0.1	78.70000	
CEN 10:1 - Ammoniacal Nitrogen as N (low level)	TM099	mg/l	<0.01	531	20	0	<0.01	7.87000	
CEN 10:1 - Cyanide, Free	TM227	mg/kg	<0.5	976	0	0	<0.5	<0.5	
CEN 10:1 - Cyanide, Free	TM227	mg/l	<0.05	976	0	0	<0.05	<0.05	
Phenols				445	0	0			
CEN 10:1 - Phenol	TM259	mg/kg	<0.02	445	0	0	<0.02	<0.02	
CEN 10:1 - Phenol	TM259	mg/l	<0.002	445	0	0	<0.002	<0.002	

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40A-TP-03	40A-TP-03	40A-TP-04	40A-TP-04	40A-TP-04	40A-TP-05	40A-TP-06	40A-TP-06	40A-TP-07	40A-TP-07	40A-TP-07	40A-TP-08	40A-TP-08
1.00-1.00	2.20-2.20	0.50-0.50	1.00-1.00	1.50-1.50	0.50-0.50	0.50-0.50	0.90-0.90	1.00-1.00	1.50-1.50	2.00-2.00	0.50-0.50	1.00-1.00
23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018	23/05/2018
8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	4.8	4.8	4.8	4.8	4.8
21.4	21.3	21.2	21.3	21	21.2	21.3	21.3	20.4	20.8	20.5	21	21.3
9.41	10.98	10.03	10.22	8.54	8.73	8.4	7.69	9.12	8.48	9.82	11.08	9.8
150	307	225	148	206	143	77.9	118	133	138	104	489	181
0.0042	0.0012	0.0105	0.0133	0.00294	0.0033	0.00754	0.00646	0.00484	0.00407	0.00581	0.00111	0.00205
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
<0.001	<0.001	<0.001	0.00124	<0.001	<0.001	<0.001	<0.001	0.00113	0.00138	<0.001	0.00246	0.00138
<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00142	0.00116	<0.0003	0.0014	0.000475
<0.0002	<0.0002	0.000231	<0.0002	<0.0002	0.00036	<0.0002	<0.0002	0.000623	<0.0002	0.000214	<0.0002	<0.0002
<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
0.000648	<0.0004	0.000664	0.000678	0.00145	0.000796	<0.0004	0.0012	<0.0004	0.000423	<0.0004	<0.0004	<0.0004
0.00165	0.00245	0.0054	0.00187	0.00444	0.00195	0.00123	<0.001	0.00213	0.0018	0.0026	0.00175	0.00324
0.0287	0.045	0.115	0.174	0.00604	0.00755	0.015	0.0189	0.0622	0.0291	0.0622	0.105	0.15
<0.001	<0.001	0.00844	<0.001	<0.001	<0.001	<0.001	<0.001	0.00724	0.00265	0.00568	<0.001	<0.001
<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
0.042	0.012	0.105	0.133	0.0294	0.033	0.0754	0.0646	0.0484	0.0407	0.0581	0.0111	0.0205
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
<0.01	<0.01	<0.01	0.0124	<0.01	<0.01	<0.01	<0.01	0.0113	0.0138	<0.01	0.0246	0.0138
<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0142	0.0116	<0.003	0.014	0.00475
<0.002	<0.002	0.00231	<0.002	<0.002	0.0036	<0.002	<0.002	0.00623	<0.002	0.00214	<0.002	<0.002
0.00648	<0.004	0.00664	0.00678	0.0145	0.00796	<0.004	0.012	<0.004	0.00423	<0.004	<0.004	<0.004
0.0165	0.0245	0.054	0.0187	0.0444	0.0195	0.0123	<0.01	0.0213	0.018	0.026	0.0175	0.0324
0.287	0.45	1.15	1.74	0.0604	0.0755	0.15	0.189	0.622	0.291	0.622	1.05	1.5
<0.01	<0.01	0.0844	<0.01	<0.01	<0.01	<0.01	<0.01	0.0724	0.0265	0.0568	<0.01	<0.01

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40A-H26	40A-H26	40A-H27	40A-H27	40A-I11	40A-I11	40A-I11	40A-I13	40A-I13	40A-I13	40A-I15	40A-I15	40A-I16	40A-I17	40A-I18	40A-I19	40A-I19	40A-I19	40A-I25	40A-I25
0.50-	1.20-	0.50-	1.00-	0.50-0.50	1.20-1.20	1.80-1.80	0.50-0.50	1.00-1.00	1.50-1.50	1.50-1.50	2.70-2.70	0.50-0.50	1.00-1.00	2.00-2.00	0.50-0.50	1.30-1.30	2.00-2.00	0.50-0.50	0.90-0.90
30/05/2018	30/05/2018	30/05/2018	30/05/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	03/07/2018	03/07/2018	03/07/2018	07/06/2018	07/06/2018
16.4	16.4	16.4	16.4	5	5	5	5	5	5	15.4	15.4	15.4	15.4	15.4	13.4	13.4	13.4	13.4	13.4
20.6	20.4	20.5	20.7	23.1	21.1	23.5	23.8	23	24.3	24.7	25	24.3	24.5	24	21.6	21.8	21.5	20.3	20.2
10.62	10.42	10.95	11.57	10.44	10.92	10.51	11.19	11.36	11.36	10.95	10.7	8.93	9.98	8.86	7.96	8.27	8.56	9.64	8.15
223	166	396	990	610	509	544	634	814	871	375	283	135	474	170	2030	2050	1980	200	165
0.00104	0.00335	0.00112	<0.0005	0.000998	<0.0005	<0.0005	0.00074	<0.0005	<0.0005	0.006	0.0073	0.00822	0.00541	0.00226	0.000541	0.000521	<0.0005	0.0044	0.000736
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
0.00113	<0.001	0.00715	0.00282	0.00385	<0.001	<0.001	0.00375	0.00615	0.00408	0.00199	<0.001	<0.001	0.00372	<0.001	<0.001	<0.001	<0.001	0.0127	<0.001
0.00291	0.00169	0.0022	0.000529	0.000781	<0.0003	0.00115	0.00454	0.000565	0.00461	0.00667	0.00702	0.00214	0.0138	0.0026	<0.0003	<0.0003	<0.0003	0.00677	0.0014
<0.0002	0.00127	0.00117	0.000549	0.000323	<0.0002	<0.0002	<0.0002	0.000674	<0.0002	<0.0002	<0.0002	0.000654	<0.0002	<0.0002	<0.0002	0.000292	<0.0002	0.00535	<0.0002
0.0000147	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	1.25E-05	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
0.00148	0.000821	<0.0004	<0.0004	<0.0004	<0.0004	0.000433	0.000414	<0.0004	<0.0004	0.00138	0.00158	0.000744	0.00189	0.000746	0.000808	0.000686	0.000611	0.00213	0.000829
0.00168	0.00911	0.0019	<0.001	0.00512	0.0664	0.0294	0.00127	<0.001	<0.001	0.00238	0.00802	0.00531	0.00273	0.014	0.00768	0.00941	0.0237	0.0032	0.00153
0.106	0.189	0.0715	0.0118	0.0573	0.00635	0.011	0.036	0.0168	0.0169	0.0429	0.103	0.0336	0.047	0.0107	0.00111	0.00178	0.00414	1.01	0.00262
<0.001	0.00733	0.00659	0.00137	0.00417	0.0034	0.00211	0.00396	0.00632	0.00323	0.00168	0.00151	0.00151	<0.001	<0.001	0.00239	0.00262	0.00129	0.00526	0.00169
0.000147	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.000125	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
0.0104	0.0335	0.0112	<0.005	0.00998	<0.005	<0.005	0.0074	<0.005	<0.005	0.06	0.073	0.0822	0.0541	0.0226	0.00541	0.00521	<0.005	0.044	0.00736
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
0.0113	<0.01	0.0715	0.0282	0.0385	<0.01	<0.01	0.0375	0.0615	0.0408	0.0199	<0.01	<0.01	0.0372	<0.01	<0.01	<0.01	<0.01	0.127	<0.01

Glan Llyn Leachate Data

40A-Q24	40A-Q24	40A-Q24	40A-Q27	40A-Q27	40A-Q27	40A-Q27	40A-R11	40A-R11	40A-R11	40A-R16	40A-R16	40A-R21	40A-R25
0.50-0.50	1.00-1.00	2.00-2.00	0.20-0.20	0.70-0.70	1.20-1.20	1.90-1.90	0.50-0.50	1.00-1.00	1.70-1.70	0.50-0.50	1.00-1.00	0.50-0.50	0.50-0.50
6/06/2018	06/06/2018	06/06/2018	6/06/2018	6/06/2018	6/06/2018	06/06/2018	22/06/2018	22/06/2018	22/06/2018	14/06/2018	14/06/2018	17/06/2018	06/06/2018
13.4	13.4	13.4	13.4	13.4	13.4	13.4	17	17	17	14.8	14.8	13.4	13.4
20.1	20.1	19.9	20.5	20.8	20.3	20.4	22.9	22	21.9	19.6	19.4	20.3	21.1
10.76	10.58	10.48	11.81	12.23	12.23	12.37	10.76	10.63	10.44	11.4	11.16	11.53	11.06
295	274	232	1420	5590	5720	7020	342	262	159	704	424	718	508
0.0027	0.00588	0.000941	0.000965	0.00277	0.000567	0.000653	0.00189	0.0038	0.00621	0.000752	0.00111	0.000608	0.00126
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
<0.001	<0.001	0.00101	0.00587	0.00108	0.00137	0.0104	0.00211	0.00123	<0.001	0.0015	0.00107	0.0165	0.00111
0.00346	0.00336	0.00211	0.00526	0.00535	0.00276	0.00309	0.000667	0.00215	<0.0003	0.00434	0.0023	0.0249	0.0084
<0.0002	<0.0002	<0.0002	0.00028	0.00166	0.002	0.00444	<0.0002	<0.0002	0.000267	0.000504	<0.0002	<0.0002	0.000521
<0.00001	<0.00001	<0.00001	1.29E-05	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0000115	<0.00001	<0.00001	<0.00001
0.000684	0.000745	0.000586	0.0005	0.00163	0.000846	<0.0004	0.000813	0.00195	0.00111	0.00088	0.000421	0.00128	0.00134
0.0014	0.00175	0.00139	<0.001	<0.001	<0.001	<0.001	0.00217	0.00377	0.00353	0.00253	0.00209	0.00176	0.00377
0.0731	0.0808	0.065	0.0242	0.00227	0.00144	0.00227	0.0605	0.17	0.1	0.0359	0.0373	0.0188	0.0832
<0.001	<0.001	<0.001	0.00773	0.00333	0.00246	0.00616	0.00469	0.00336	<0.001	0.00723	0.00633	0.00529	0.00273
<0.0001	<0.0001	<0.0001	0.000129	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.000115	<0.0001	<0.0001	<0.0001
0.027	0.0588	0.00941	0.00965	0.0277	0.00567	0.00653	0.0189	0.038	0.0621	0.00752	0.0111	0.00608	0.0126
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
<0.01	<0.01	0.0101	0.0587	0.0108	0.0137	0.104	0.0211	0.0123	<0.01	0.015	0.0107	0.165	0.0111
0.0346	0.0336	0.0211	0.0526	0.0535	0.0276	0.0309	0.00667	0.0215	<0.003	0.0434	0.023	0.249	0.084
<0.002	<0.002	<0.002	0.0028	0.0166	0.02	0.0444	<0.002	<0.002	0.00267	0.00504	<0.002	<0.002	0.00521
0.00684	0.00745	0.00586	0.005	0.0163	0.00846	<0.004	0.00813	0.0195	0.0111	0.0088	0.00421	0.0128	0.0134
0.014	0.0175	0.0139	<0.01	<0.01	<0.01	<0.01	0.0217	0.0377	0.0353	0.0253	0.0209	0.0176	0.0377
0.731	0.808	0.65	0.242	0.0227	0.0144	0.0227	0.605	1.7	1	0.359	0.373	0.188	0.832
<0.01	<0.01	<0.01	0.0773	0.0333	0.0246	0.0616	0.0469	0.0336	<0.01	0.0723	0.0633	0.0529	0.0273
83	89	79	90	93	79	96	89	100	92	89	85	98	98

Glan Llyn Leachate Data

TP3BF4	TP3BF4	TP3BF4	TP3BF4	TP3BF5	TP3BF5	TP3BF5	TP3BF5	TP3BF6	TP3BF6	TP3BF6	TP3BF6	TP3BF7	TP3BF7	TP3BF7	TP3BF7	TP3BF8	TP3BF8	TP3BF8
0.50-0.50	1.00-1.00	2.00-2.00	2.50-2.50	0.50-0.50	1.00-1.00	1.50-1.50	2.00-2.00	0.30-0.30	0.70-0.70	1.00-1.00	1.50-1.50	0.50-0.50	1.20-1.20	1.70-1.70	2.30-2.30	0.50-0.50	1.00-1.00	1.50-1.50
15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018	15/05/2018
16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
19.3	21.2	19.4	20.2	21.2	21.2	21.2	21.3	20.7	21.3	20.7	20.9	21.2	21.2	20.3	21.1	19.6	19.5	19.7
10.97	7.44	10.99	10.55	10.68	11.52	10.97	10.82	11.6	11.7	9.56	9.06	12.2	11.96	11.19	9.72	11.27	11.01	8.7
350	98.7	460	353	232	810	446	348	1040	1230	160	198	4.9	2.32	480	179	508	372	199
0.00492	0.00373	0.00285	0.0027	0.00151	<0.0005	0.00163	0.00369	<0.0005	0.000926	0.00196	0.00141	<0.0005	<0.0005	0.00145	0.0411	0.00101	0.00144	0.00362
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0077	0.00589	<0.001	<0.001	0.00646	0.00755	0.00324	0.00333	0.00435	0.00177	<0.001
0.0016	0.000434	0.00211	<0.0003	0.000334	0.0005	0.000717	0.00093	0.00228	0.00385	<0.0003	<0.0003	0.00169	0.00216	0.0024	0.0155	0.00132	0.00169	0.00118
0.00129	0.000335	0.00853	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00178	<0.0002	<0.0002	0.000368	<0.0002	<0.0002	0.00028
<0.00001	<0.00001	0.0000238	<0.00001	<0.00001	1.23E-05	<0.00001	<0.00001	0.000024	1.94E-05	<0.00001	<0.00001	<0.00001	0.0000198	0.0000146	0.0000189	0.0000759	0.0000111	<0.00001
0.000445	<0.0004	0.00136	0.00125	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.000541	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.00313	<0.0004	<0.0004	0.00321
0.00586	0.0037	0.0357	0.0271	0.0017	0.00223	0.00539	0.00703	<0.001	0.0011	0.00163	0.00171	<0.001	<0.001	0.00213	0.00244	0.00301	0.0048	<0.001
0.0626	0.0178	0.0346	0.0241	0.0989	0.0245	0.0603	0.0491	0.0249	0.0162	0.0138	0.00939	<0.001	0.0032	0.0247	0.0823	0.053	0.0777	0.0025
0.11	<0.001	0.00933	<0.001	<0.001	0.0041	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00101	0.00211	0.00885	<0.001	<0.001	0.00868	<0.001
<0.0001	<0.0001	0.000238	<0.0001	<0.0001	0.000123	<0.0001	<0.0001	0.00024	0.000194	<0.0001	<0.0001	<0.0001	0.000198	0.000146	0.000189	0.000759	0.000111	<0.0001
0.0492	0.0373	0.0285	0.027	0.0151	<0.005	0.0163	0.0369	<0.005	0.00926	0.0196	0.0141	<0.005	<0.005	0.0145	0.411	0.0101	0.0144	0.0362
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.077	0.0589	<0.01	<0.01	0.0646	0.0755	0.0324	0.0333	0.0435	0.0177	<0.01

Glan Llyn Leachate Data

3CE6	3CE6	3CE7	3CE7	3CE8	3CE8	3CE9	3CE9	3CF2	3CF2	3CF6	3CF6	3CF7	3CF7	3CF8	3CF8	3CF9	3CF9	3CF9
0.50-0.50	1.00-1.00	0.50-0.50	0.90-0.90	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50	0.80-0.80	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	1.60-1.60
01/08/2018	01/08/2018	30/07/2018	30/07/2018	30/07/2018	30/07/2018	01/08/2018	01/08/2018	13/08/2018	13/08/2018	01/08/2018	01/08/2018	30/07/2018	30/07/2018	30/07/2018	30/07/2018	30/07/2018	30/07/2018	30/07/2018
12.6	12.6	9.2	9.2	9.2	9.2	12.6	12.6	18.6	18.6	12.6	12.6	13.8	13.8	13.8	13.8	9.2	9.2	9.2
23.3	23.2	23.6	23.2	23.6	23.3	23	21.8	22.7	22.8	22.4	22.6	22.6	22.1	22.9	19.5	23.3	23.3	23.4
10.1	10.67	10.85	10.95	10.78	10.29	10.42	10.61	9.27	7.82	10.4	10.5	10.77	10.74	11.18	11.1	10.34	9.91	8.84
279	346	380	461	397	265	310	311	87.5	71.2	276	308	363	336	567	445	209	162	108
0.00693	0.0093	0.00423	0.00335	0.00586	0.00805	0.00777	0.00586	0.00145	0.00335	0.00765	0.01	0.00331	0.00622	0.00345	0.0044	0.0127	0.0163	0.00191
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
<0.001	<0.001	0.00193	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
0.00647	0.0167	0.018	0.0215	0.0118	0.00974	0.0124	0.00795	0.00312	0.00146	0.0106	0.0112	0.0117	0.00791	0.0166	0.0164	0.0214	0.017	0.00271
<0.0002	0.000344	<0.0002	<0.0002	0.00038	<0.0002	<0.0002	<0.0002	0.00189	0.000256	0.000297	0.000214	<0.0002	<0.0002	0.000455	<0.0002	0.000223	0.000448	<0.0002
<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0000332	0.0000137	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
0.00174	0.00413	0.00164	0.00291	0.00219	0.00239	0.00188	0.00171	0.000995	<0.0004	0.00231	0.00309	0.00227	0.00181	0.00413	0.00336	0.00253	0.00276	0.00121
0.00271	0.00702	0.00315	0.0041	0.00445	0.00536	0.00358	0.00327	0.00158	0.00124	0.00525	0.00664	0.0043	0.00627	0.00501	0.00464	0.00457	0.00475	<0.001
0.126	0.358	0.101	0.108	0.177	0.22	0.137	0.152	0.00403	0.0108	0.187	0.296	0.104	0.148	0.293	0.291	0.117	0.112	0.00226
0.00267	0.00545	0.0382	0.0039	0.00103	0.00281	<0.001	0.00103	0.00843	0.0018	<0.001	0.00119	0.00188	0.00227	0.0152	0.00383	0.00135	0.00138	0.00164
<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.000332	0.000137	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
0.0693	0.093	0.0423	0.0335	0.0586	0.0805	0.0777	0.0586	0.0145	0.0335	0.0765	0.1	0.0331	0.0622	0.0345	0.044	0.127	0.163	0.0191
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
<0.01	<0.01	0.0193	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
0.0647	0.167	0.18	0.215	0.118	0.0974	0.124	0.0795	0.0312	0.0146	0.106	0.112	0.117	0.0791	0.166	0.164	0.214	0.17	0.0271
<0.002	0.00344	<0.002	<0.002	0.0038	<0.002	<0.002	<0.002	0.0189	0.00256	0.00297	0.00214	<0.002	<0.002	0.00455	<0.002	0.00223	0.00448	<0.002
0.0174	0.0413	0.0164	0.0291	0.0219	0.0239	0.0188	0.0171	0.00995	<0.004	0.0231	0.0309	0.0227	0.0181	0.0413	0.0336	0.0253	0.0276	0.0121
0.0271	0.0702	0.0315	0.041	0.0445	0.0536	0.0358	0.0327	0.0158	0.0124	0.0525	0.0664	0.043	0.0627	0.0501	0.0464	0.0457	0.0475	<0.01
1.26	3.58	1.01	1.08	1.77	2.2	1.37	1.52	0.0403	0.108	1.87	2.96	1.04	1.48	2.93	2.91	1.17	1.12	0.0226
0.0267	0.0545	0.382	0.039	0.0103	0.0281	<0.01	0.0103	0.0843	0.018	<0.01	0.0119	0.0188	0.0227	0.152	0.0383	0.0135	0.0138	0.0164

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3C-G3	3C-G4	3C-G4	3C-G4	3C-G5	3C-G5	3C-G5	3C-H1	3C-H1	3C-H1	3C-H2	3C-H2
1.50-1.50	0.50-0.50	1.00-1.00	2.00-2.00	0.50-0.50	1.00-1.00	1.50-1.50	0.25-0.25	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00
22/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	22/10/2018	22/10/2018	22/10/2018	19/10/2018	19/10/2018
7.4	10.8	10.8	10.8	10.8	10.8	10.8	7.4	7.4	7.4	7.4	7.4
18.4	19.3	18.4	18.3	18.3	18.5	18.6	18.1	18.3	18.2	18.2	18.8
11.88	8.49	10.88	12.36	11.76	12.48	11.23	9.89	9.69	8.18	8.28	8.14
1100	131	281	7.16	1890	4.86	621	141	110	456	137	153
<0.0005	0.000722	0.00228	<0.0005	<0.0005	<0.0005	0.00166	0.013	0.0107	0.00241	0.00508	0.00201
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
0.0125	<0.001	<0.001	0.00159	0.0046	0.00101	0.00213	<0.001	<0.001	<0.001	<0.001	<0.001
0.00971	0.00581	0.00725	0.00978	0.0212	0.00438	0.0248	0.00194	0.00173	0.00289	0.00517	0.00466
0.000228	<0.0002	<0.0002	0.00269	0.00199	0.0101	<0.0002	<0.0002	<0.0002	<0.0002	0.000352	<0.0002
<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
0.000751	0.000893	0.000698	0.000882	0.00277	<0.0004	0.00559	<0.0004	0.000468	0.00135	0.00142	0.000605
0.00105	<0.001	0.00346	<0.001	<0.001	<0.001	0.00123	0.0016	0.00198	0.00186	0.00138	<0.001
0.00713	<0.001	0.0561	<0.001	0.00384	<0.001	0.0285	0.0704	0.0422	0.00114	0.0109	0.00341
0.00573	<0.001	<0.001	0.0114	0.00503	0.0174	<0.001	<0.001	<0.001	0.00968	0.00154	0.00129
<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
<0.005	0.00722	0.0228	<0.005	<0.005	<0.005	0.0166	0.13	0.107	0.0241	0.0508	0.0201
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
0.125	<0.01	<0.01	0.0159	0.046	0.0101	0.0213	<0.01	<0.01	<0.01	<0.01	<0.01
0.0971	0.0581	0.0725	0.0978	0.212	0.0438	0.248	0.0194	0.0173	0.0289	0.0517	0.0466
0.00228	<0.002	<0.002	0.0269	0.0199	0.101	<0.002	<0.002	<0.002	<0.002	0.00352	<0.002
0.00751	0.00893	0.00698	0.00882	0.0277	<0.004	0.0559	<0.004	0.00468	0.0135	0.0142	0.00605
0.0105	<0.01	0.0346	<0.01	<0.01	<0.01	0.0123	0.016	0.0198	0.0186	0.0138	<0.01
0.0713	<0.01	0.561	<0.01	0.0384	<0.01	0.285	0.704	0.422	0.0114	0.109	0.0341
0.0573	<0.01	<0.01	0.114	0.0503	0.174	<0.01	<0.01	<0.01	0.0968	0.0154	0.0129

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4C-G5	4C-G5	4C-G5	4C-G6	4C-G6	4C-G6	4C-H1	4C-H1	4C-H2	4C-H2	4C-H4	4C-H4	4C-H4	4C-H5	4C-H5	4C-H5	4C-H6	4C-H6	4C-H6
0.50-0.50	1.00-1.00	1.50-1.50	0.30-0.30	1.00-1.00	1.50-1.50	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	1.60-1.60	0.50-0.50	1.00-1.00	1.80-1.80	0.50-0.50	1.00-1.00	1.50-1.50
02/10/2018	02/10/2018	02/10/2018	02/10/2018	02/10/2018	02/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	02/10/2018	02/10/2018	02/10/2018
12.4	12.4	12.4	12.4	12.4	12.4	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.4	12.4	12.4
19.4	18.7	18.3	17.4	19.2	19.3	18.5	18.8	18.8	18.8	18.8	18.7	18.8	19.8	18.5	18.5	17.4	18.1	16.9
11.12	11.47	11.41	10.25	11.18	11.11	9.46	10.5	9.16	8.7	10.36	10.07	9.73	9.98	9.59	9.59	10.49	9.92	10.22
718	603	843	184	558	544	92.9	216	83.4	6.96	169	152	125	140	140	126	159	165	120
0.000867	0.000617	<0.0005	0.00192	0.00144	0.000685	0.00393	0.00596	0.00385	0.0131	0.00233	0.00327	0.00593	0.00387	0.00536	0.00496	0.00271	0.00245	0.00347
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
0.0123	0.00419	0.00828	0.00154	0.00337	<0.001	0.00154	<0.001	0.00103	<0.001	<0.001	0.0041	0.00141	<0.001	0.00102	0.00117	0.00164	0.0018	0.00137
0.00236	0.00129	0.00476	0.00204	0.00273	0.000754	0.000924	0.00257	0.000721	0.00129	0.000397	0.00105	0.000775	0.00183	0.000589	0.000801	0.0018	0.0015	0.00168
<0.0002	0.000286	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000352	0.000208	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
0.0000102	0.0000315	0.0000194	<0.00001	0.0000535	0.000049	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
0.000554	<0.0004	0.00069	0.00044	<0.0004	<0.0004	<0.0004	0.000645	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.000419	<0.0004
0.00145	0.00125	0.00146	0.00305	0.00185	0.00169	<0.001	<0.001	<0.001	<0.001	0.00301	0.00321	0.00427	0.00235	0.00248	0.0023	0.00188	0.00209	0.00192
0.0679	0.183	0.0596	0.059	0.041	0.0516	0.0473	0.095	0.0214	0.0151	0.0842	0.0965	0.064	0.104	0.0923	0.111	0.0928	0.0951	0.0912
0.00114	<0.001	0.00394	0.00218	0.00192	0.00139	0.00301	<0.001	0.00296	0.00295	<0.001	<0.001	<0.001	<0.001	<0.001	0.00119	<0.001	0.00143	<0.001
0.000102	0.000315	0.000194	<0.0001	0.000535	0.00049	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
0.00867	0.00617	<0.005	0.0192	0.0144	0.00685	0.0393	0.0596	0.0385	0.131	0.0233	0.0327	0.0593	0.0387	0.0536	0.0496	0.0271	0.0245	0.0347
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
0.123	0.0419	0.0828	0.0154	0.0337	<0.01	0.0154	<0.01	0.0103	<0.01	<0.01	0.041	0.0141	<0.01	0.0102	0.0117	0.0164	0.018	0.0137
0.0236	0.0129	0.0476	0.0204	0.0273	0.00754	0.00924	0.0257	0.00721	0.0129	0.00397	0.0105	0.00775	0.0183	0.00589	0.00801	0.018	0.015	0.0168
<0.002	0.00286	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00352	0.00208	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
0.00554	<0.004	0.0069	0.0044	<0.004	<0.004	<0.004	0.00645	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.00419	<0.004
0.0145	0.0125	0.0146	0.0305	0.0185	0.0169	<0.01	<0.01	<0.01	<0.01	0.0301	0.0321	0.0427	0.0235	0.0248	0.023	0.0188	0.0209	0.0192
0.679	1.83	0.596	0.59	0.41	0.516	0.473	0.95	0.214	0.151	0.842	0.965	0.64	1.04	0.923	1.11	0.928	0.951	0.912
0.0114	<0.01	0.0394	0.0218	0.0192	0.0139	0.0301	<0.01	0.0296	0.0295	<0.01	<0.01	<0.01	<0.01	<0.01	0.0119	<0.01	0.0143	<0.01
73	100	99	103	85	79	52	88	76	89	111	93	89	75	80	83	102	98	79

4C-J3	4C-J3	4C-J3	4C-J4	4C-J4	4C-J4	4C-J5	4C-J5	4C-E2	4C-E2	4C-E5	4C-E5	4C-E6	4C-E6	4C-E7	4C-E7	4C-E7	4C-G8	4C-G8	4C-K1	4C-K1	4C-K2
0.50-0.50	1.00-1.00	1.50-1.50	0.50-0.50	1.00-1.00	1.40-1.40	0.50-0.50	1.00-1.00	0.50-0.50	0.70-0.70	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	1.40-1.40	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50
17/10/2018	17/10/2018	17/10/2018	17/10/2018	17/10/2018	17/10/2018	17/10/2018	17/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	18/10/2018	24/10/2018	24/10/2018	18/10/2018
12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	9.0	9.0	10.8
18.4	18.1	18.1	18.5	19.6	19.5	18.1	18.1	18.5	18.2	18.3	18.1	18.4	19.2	19	19.2	18.4	18.8	18.6	17.6	18.2	18.1
9.97	9.69	9.74	10.95	11.74	11.93	10.86	11.21	11.17	11.77	8.99	10.28	9.76	10.31	10.7	10.86	10.79	11.44	11.27	10.58	11.79	11.07
105	80.1	84.2	689	1740	1730	316	534	320	1780	161	304	187	158	275	285	369	932	427	281	976	296
0.00368	0.00456	0.00454	0.000552	<0.0005	<0.0005	0.00107	0.000628	0.00217	<0.0005	0.00391	0.00211	0.00452	0.00157	0.00756	0.00495	0.00369	<0.0005	0.00124	0.00293	<0.0005	0.00101
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
0.00135	0.00179	0.00127	0.00149	0.00295	0.00452	0.00392	0.00235	0.00203	0.00128	0.00105	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0117	0.00289	<0.001	0.00157	0.00379
0.00117	0.00085	0.000651	0.00164	0.00155	0.000963	0.00289	0.00401	0.0029	0.00125	0.00152	0.00533	0.00719	0.00162	0.0083	0.00565	0.0102	0.0041	0.00154	0.00748	0.00252	0.00404
<0.0002	<0.0002	<0.0002	<0.0002	0.000736	<0.0002	0.000214	0.000241	<0.0002	0.000227	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000206	<0.0002	<0.0002

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4AH2	4AH2	4AH3	4AH3	4AH3	4AH3	4AH4	4AH4	4AH4	4AH5	4AH5	4AH5	4AH6	4AH6
0.50-0.50	1.00-1.00	0.40-0.40	0.90-0.90	1.50-1.50	2.50-2.50	0.40-0.40	1.00-1.00	1.70-1.70	0.40-0.40	1.00-1.00	1.40-1.40	0.30-0.30	0.80-0.80
02/04/2019	02/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019	08/04/2019
5.6	5.6	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
17.6	16.2	18.7	18.9	18.8	18.9	19	19.1	19	19.2	19.2	19	19.2	18.7
8.48	7.96	11.2	11.33	11.43	9.37	12.2	12.42	12.08	10.44	12.3	11.85	12.31	12.03
293	234	533	603	779	147	1890	3050	6380	160	2820	2520	2620	5100
0.00136	0.00217	0.000514	<0.0005	0.000522	0.00577	<0.0005	<0.0005	<0.0005	0.000965	<0.0005	<0.0005	<0.0005	<0.0005
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
0.00102	<0.001	0.00785	0.00925	0.00962	<0.001	0.00362	0.00603	0.015	0.00234	0.0121	0.0117	0.0123	0.0146
0.0115	0.0038	0.00659	0.00505	0.00813	0.00422	0.00218	0.00146	0.00206	0.00459	0.00325	0.00531	0.00129	0.000829
0.000848	<0.0002	0.000371	<0.0002	0.00029	<0.0002	0.000475	0.00639	0.011	<0.0002	0.00149	0.0018	0.000681	0.0018
<0.00001	<0.00001	0.0000204	0.0000238	0.0000197	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
0.00314	0.00176	0.00125	0.00103	0.00144	0.00152	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.000538	<0.0004	<0.0004
<0.001	0.00134	<0.001	0.00126	<0.001	<0.001	<0.001	<0.001	<0.001	0.00101	0.00107	<0.001	<0.001	<0.001
0.00308	0.00608	0.0358	0.0192	0.0262	0.0184	0.0026	<0.001	<0.001	0.137	<0.001	<0.001	<0.001	<0.001
0.00634	0.00661	0.00351	0.00212	0.00329	0.0291	0.00513	0.00683	0.0109	0.00478	0.00786	0.00413	0.00472	0.0122
<0.0001	<0.0001	0.000204	0.000238	0.000197	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
0.0136	0.0217	0.00514	<0.005	0.00522	0.0577	<0.005	<0.005	<0.005	0.00965	<0.005	<0.005	<0.005	<0.005
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
0.0102	<0.01	0.0785	0.0925	0.0962	<0.01	0.0362	0.0603	0.15	0.0234	0.121	0.117	0.123	0.146
0.115	0.038	0.0659	0.0505	0.0813	0.0422	0.0218	0.0146	0.0206	0.0459	0.0325	0.0531	0.0129	0.00829
0.00848	<0.002	0.00371	<0.002	0.0029	<0.002	0.00475	0.0639	0.11	<0.002	0.0149	0.018	0.00681	0.018
0.0314	0.0176	0.0125	0.0103	0.0144	0.0152	<0.004	<0.004	<0.004	<0.004	<0.004	0.00538	<0.004	<0.004
<0.01	0.0134	<0.01	0.0126	<0.01	<0.01	<0.01	<0.01	<0.01	0.0101	0.0107	<0.01	<0.01	<0.01
0.0308	0.0608	0.358	0.192	0.262	0.184	0.026	<0.01	<0.01	1.37	<0.01	<0.01	<0.01	<0.01
0.0634	0.0661	0.0351	0.0212	0.0329	0.291	0.0513	0.0683	0.109	0.0478	0.0786	0.0413	0.0472	0.122
100	107	105	101	112	104	106	102	102	95	98	92	87	105

Glan Llyn Leachate Data

4E-C2	4E-C2	4E-C4	4E-C4	4E-C7	4E-C7	4E-C8	4E-C8	4E-C9	4E-D1	4E-D1	4E-D10	4E-D10	4E-D2
0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.50-0.50	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	0.25-0.25
29/10/2018	29/10/2018	30/10/2018	30/10/2018	01/11/2018	01/11/2018	01/11/2018	01/11/2018	31/10/2018	29/10/2018	29/10/2018	26/11/2018	26/11/2018	29/10/2018
8.2	8.2	6.8	6.8	8.4	8.4	8.4	8.4	9.9	8.2	8.2	7.8	7.8	8.2
18.3	18.3	18.3	19	18.9	19	18.5	19	18.5	18.3	18.3	18.4	18.6	18.4
9.16	11.29	11.01	12.34	10.79	11.37	9.03	11.1	10.56	10.11	10.19	11.05	10.64	10.81
99.2	631	411	3760	325	489	128	372	254	166	133	472	251	276
0.00306	0.000603	0.000878	<0.0005	0.00132	0.0016	0.00128	0.000607	0.00252	0.00551	0.00557	0.000534	0.000731	0.0035
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.0000885	<0.00008	<0.00008
0.0025	0.0137	0.00381	0.0267	<0.001	0.00225	<0.001	<0.001	<0.001	<0.001	<0.001	0.00248	<0.001	0.00323
0.0026	0.00461	0.00459	0.00438	0.00103	0.0038	0.000637	0.000595	0.00507	0.00428	0.00227	0.00184	0.000437	0.0057
0.000733	<0.0002	<0.0002	0.00206	<0.0002	<0.0002	0.000216	<0.0002	<0.0002	0.000459	<0.0002	<0.0002	0.00119	<0.0002
<0.00001	<0.00001	1.85E-05	<0.00001	4.16E-05	<0.00001	<0.00001	<0.00001	<0.00001	1.12E-05	<0.00001	0.0000201	<0.00001	<0.00001
<0.0004	0.000487	0.00102	0.000599	<0.0004	0.000623	0.000721	<0.0004	0.000479	0.000883	0.000659	<0.0004	<0.0004	0.00096
0.00238	<0.001	0.00182	0.00173	0.00354	0.00127	0.00139	0.00305	0.00554	0.00416	0.00316	0.00138	0.00481	0.00144
0.0166	0.0215	0.0634	<0.001	0.231	0.0247	0.00756	0.104	0.103	0.152	0.0497	0.0723	0.0434	0.0737
0.00134	0.00314	0.00147	0.00419	<0.001	0.00188	0.0192	<0.001	0.00105	<0.001	<0.001	0.038	0.00138	0.00619
<0.0001	<0.0001	0.000185	<0.0001	0.000416	<0.0001	<0.0001	<0.0001	<0.0001	0.000112	<0.0001	0.000201	<0.0001	<0.0001
0.0306	0.00603	0.00878	<0.005	0.0132	0.016	0.0128	0.00607	0.0252	0.0551	0.0557	0.00534	0.00731	0.035
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.000885	<0.0008	<0.0008
0.025	0.137	0.0381	0.267	<0.01	0.0225	<0.01	<0.01	<0.01	<0.01	<0.01	0.0248	<0.01	0.0323
0.026	0.0461	0.0459	0.0438	0.0103	0.038	0.00637	0.00595	0.0507	0.0428	0.0227	0.0184	0.00437	0.057
0.00733	<0.002	<0.002	0.0206	<0.002	<0.002	0.00216	<0.002	<0.002	0.00459	<0.002	<0.002	0.0119	<0.002

4E-D2	4E-D4	4E-D4	4E-D7	4E-D8	4E-D8	4E-D9	4E-D9	4E-E1	4E-E1	4E-E1	4E-E10	4E-E10	4E-E2
1.00-1.00	0.50-0.50	1.20-1.20	0.50-0.50	0.50-0.50	0.90-0.90	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00	2.00-2.00	0.40-0.40	1.50-1.50	0.20-0.20
29/10/2018	30/10/2018	30/10/2018	01/11/2018	01/11/2018	01/11/2018	31/10/2018	31/10/2018	01/11/2018	01/11/2018	01/11/2018	26/11/2018	26/11/2018	29/10/2018
8.2	6.8	6.8	8.4	8.4	8.4	9.9	9.9	8.4	8.4	8.4	7.8	7.8	8.2
18.4	18.8	18.4	18.7	18.5	18.8	18.7	18.7	18.9	18.6	18.6	18.3	18.3	18
11.46	7.09	11.46	10.51	10.66	11.74	11.82	9.92	8.54	11.01	11.15	10.16	11.86	11.04
982	216	993	232	238	1740	273	449	194	439	542	122	2.72	494
0.000771	0.00652	<0.0005	0.00234	0.00131	<0.0005	<0.0005	<0.0005	0.00608	0.00146	0.00112	0.00222	0.00351	0.00316
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
0.0171	0.00103	0.00844	<0.001	0.00418	0.0225	0.0116	<0.001	<0.001	0.00224	<0.001	0.00115	0.00121	0.00329
0.000647	0.00366	0.0154	0.00181	0.000417	0.00277	0.00365	<0.0003	0.00371	0.00547	0.00472	0.00104	0.00445	0.00945
<0.0002	0.000226	<0.0002	0.000259	<0.0002	0.00191	0.000615	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
<0.00001	1.06E-05	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	1.32E-05	<0.00001	0.0000114	<0.00001	<0.00001	2.11E-05	<0.00001
<0.0004	0.00111	0.0027	0.000476	<0.0004	<0.0004	0.000565	<0.0004	0.000426	0.001	0.00116	0.000482	0.00235	0.00102
0.00108	0.00184	<0.001	0.00326	0.00162	<0.001	0.00177	0.00567	0.00227	0.00215	0.00151	<0.001	<0.001	0.00169
0.0171	0.0655	0.00859	0.0631	0.0547	0.00191	<0.001	0.082	0.0478	0.0604	0.0572	0.0578	0.0125	0.0543
<0.001	<0.001	0.00726	0.00166	<0.001	0.00256	0.00496	0.00186	0.00292	0.00205	0.00365	0.00613	0.00222	0.0016
<0.0001	0.000106	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.000132	<0.0001	0.000114	<0.0001	<0.0001	0.000211	<0.0001
0.00771	0.0652	<0.005	0.0234	0.0131	<0.005	<0.005	<0.005	0.0608	0.0146	0.0112	0.0222	0.0351	0.0316
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
0.171	0.0103	0.0844	<0.01	0.0418	0.225	0.116	<0.01	<0.01	0.0224	<0.01	0.0115	0.0121	0.0329
0.00647	0.0366	0.154	0.0181	0.00417	0.0277	0.0365	<0.003	0.0371	0.0547	0.0472	0.0104	0.0445	0.0945
<0.002	0.00226	<0.002	0.00259	<0.002	0.0191	0.00615	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

4E-E2	4E-E2	4E-E4	4E-E4	4E-E4	4E-E5	4E-E5	4E-E6	4E-E6	4E-E7	4E-E7	4E-E8	4E-E8	4E-E9
0.50-0.50	1.30-1.30	0.50-0.50	1.00-1.00	1.50-1.50	0.20-0.20	0.80-0.80	0.25-0.25	0.80-0.80	0.30-0.30	0.80-0.80	0.50-0.50	1.00-1.00	0.50-0.50
29/10/2018	29/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	31/10/2018	31/10/2018	31/10/2018
8.2	8.2	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	9.9	9.9	9.9
18.3	18.3	18.3	18.7	18.7	19.1	19.1	18.8	18.5	18.4	19	18.4	18.6	18.5
11.01	11.15	9.11	9.03	11.03	11.71	11.88	11.42	11.71	10.21	12.32	10.79	11.62	10.72
406	504	103	112	440	962	1650	942	1990	142	4140	235	1360	314
0.00196	0.00134	0.00334	0.00247	0.00303	0.000722	<0.0005	0.000645	0.0012	0.00375	0.00207	0.00199	<0.0005	<0.0005
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
0.00271	0.00203	0.00393	0.00319	0.00244	0.00342	0.00739	0.0114	0.0059	0.00156	0.00953	<0.001	0.00751	<0.001
0.000932	0.00194	0.00173	0.00166	0.0111	0.00354	0.00303	0.00332	0.000404	0.00166	<0.0003	0.00185	0.00209	0.000344
<0.0002	<0.0002	0.00067	0.000386	<0.0002	<0.0002	0.000444	<0.0002	0.000307	<0.0002	0.00206	<0.0002	0.000575	<0.0002
<0.00001	<0.00001	2.34E-05	3.51E-05	2.31E-05	0.000013	<0.00001	5.65E-05	1.01E-05	<0.00001	<0.00001	<0.00001	1.11E-05	1.15E-05
0.000439	0.000539	0.000599	<0.0004	0.00397	0.000936	0.000862	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
0.00229	0.00173	0.00156	0.00143	0.0023	<0.001	<0.001	0.00139	<0.001	0.00113	<0.001	0.00147	<0.001	0.00639
0.0656	0.0343	0.0168	0.0128	0.0413	0.0169	0.00278	0.0138	0.00175	0.0779	<0.001	0.0968	0.00527	0.013
<0.001	0.00185	0.00184	0.00102	0.00136	0.00125	0.00348	0.00207	0.00388	0.00131	0.00545	<0.001	0.00183	<0.001
<0.0001	<0.0001	0.000234	0.000351	0.000231	0.00013	<0.0001	0.000565	0.000101	<0.0001	<0.0001	<0.0001	0.000111	0.000115
0.0196	0.0134	0.0334	0.0247	0.0303	0.00722	<0.005	0.00645	0.012	0.0375	0.0207	0.0199	<0.005	<0.005
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
0.0271	0.0203	0.0393	0.0319	0.0244	0.0342	0.0739	0.114	0.059	0.0156	0.0953	<0.01	0.0751	<0.01
0.00932	0.0194	0.0173	0.0166	0.111	0.0354	0.0303	0.0332	0.00404	0.0166	<0.003	0.0185	0.0209	0.00344
<0.002	<0.002	0.0067	0.00386	<0.002	<0.002	0.00444	<0.002	0.00307	<0.002	0.0206	<0.002	0.00575	<0.002

4E-E9	4E-E9	4E-F10	4E-F10	4E-F4	4E-F4	4E-F6	4E-F6	4E-F8	4E-F8	4E-F9A	4E-F9A	4E-G4	4E-G4
1.00-1.00	1.50-1.50	0.40-0.40	1.00-1.00	0.50-0.50	1.00-1.00	0.30-0.30	0.80-0.80	0.50-0.50	0.90-0.90	0.50-0.50	1.00-1.00	0.50-0.50	1.00-1.00
31/10/2018	31/10/2018	26/11/2018	26/11/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	01/11/2018	01/11/2018	31/10/2018	31/10/2018	30/10/2018	30/10/2018
9.9	9.9	7.8	7.8	6.8	6.8	6.8	6.8	8.4	8.4	9.9	9.9	6.8	6.8
18.6	18.8	18	18.1	19.1	18.4	18.8	18.5	18.7	19.3	18.4	18.6	18.8	19.1
11.93	11.86	9.27	11	9.91	10.62	12.11	11.97	12.27	11.91	10.79	11.87	10.6	10.93
376	307	87.1	500	103	222	5520	5160	418	283	342	341	299	293
<0.0005	<0.0005	0.0017	0.00102	0.00942	0.00351	0.00258	0.00235	0.00149	0.00105	<0.0005	<0.0005	0.00429	0.00356
<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
0.00439	0.00397	0.00157	0.00218	0.00295	0.00459	0.00653	0.00376	0.00337	0.00485	<0.001	0.00513	0.00634	0.0076
0.00192	0.00168	0.00247	0.00629	0.000876	0.00258	<0.0003	0.000997	0.00598	0.00417	<0.0003	0.00229	0.00363	0.00974
0.000737	0.000576	<0.0002	<0.0002	0.00098	<0.0002	0.000634	0.002	0.00132	0.000815	<0.0002	0.00104	<0.0002	<0.0002
<0.00001	<0.00001	1.05E-05	0.000121	1.07E-05	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	1.15E-05
<0.0004	<0.0004	<0.0004	0.000713	0.000444	<0.0004	<0.0004	<0.0004	0.00105	<0.0004	<0.0004	<0.0004	<0.0004	0.000888
0.00124	0.00116	0.00222	0.00228	0.00249	0.00338	0.00132	<0.001	<0.001	<0.001	0.00666	<0.001	0.0027	0.00246
<0.001	<0.001	0.0461	0.0832	0.0435	0.0542	<0.001	<0.001	0.00104	<0.001	0.0176	<0.001	0.0424	0.0475
0.00832	0.00418	<0.001	<0.001	0.00117	<0.001	0.0012	0.00605	0.00364	0.00682	0.00225	0.00781	0.00247	<0.001
<0.0001	<0.0001	0.000105	0.00121	0.000107	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.000115
<0.005	<0.005	0.017	0.0102	0.0942	0.0351	0.0258	0.0235	0.0149	0.0105	<0.005	<0.005	0.0429	0.0356
<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
0.0439	0.0397	0.0157	0.0218	0.0295	0.0459	0.0653	0.0376	0.0337	0.0485	<0.01	0.0513	0.0634	0.076
0.0192	0.0168	0.0247	0.0629	0.00876	0.0258	<0.003	0.00997	0.0598	0.0417	<0.003	0.0229	0.0363	0.0974
0.00737	0.00576	<0.002	<0.002	0.0098	<0.002	0.00634	0.02	0.0132	0.00815	<0.002	0.0104	<0.002	<0.002

Appendix H: Surface Waters Analysis