

Ipsen, Ash Road North, Wrexham
East Site Development
Geo-environmental Report
Ipsen Biopharm Group



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Consulting Geotechnical, Engineering Geology and Environmental Engineers

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1.0 INTRODUCTION

Ipsen Biopharm Group (IBG) propose to construct a new facility on an existing industrial site on Ash Road North, Wrexham Industrial Estate. A large industrial unit is currently located on the site, with areas of hard landscaping comprising car parking, access roads and loading areas surrounding the building. The site is owned by IBG and is currently occupied by Proserve.

Lovelock Mitchell Ltd (LML) are the architects for the scheme and they have appointed GroundSolve Ltd (GSL) on behalf of IBG to undertake a combined Phase 1 desk study and Phase II site investigation at the site in order to assist with the planning application and to inform the design team.

A geo-environmental report for the main Ipsen site on the opposite side of Ash Road North was undertaken by GSL in June 2017, Reference 1. The desk study information collected for Reference 1 has been used for this report.

This report presents the findings of the desk study and site investigations, and gives firm geotechnical recommendations for the development. In addition, conceptual ground models are presented, along with environmental risk assessments.

2.0 THE SITE

2.1 Site Location and Description

The site is located off Ash Road North on Wrexham Industrial Estate, at National Grid Reference SJ 375 501, see Figure 1.

It is bounded by Ash Road North to the west, with Ash Road South defining the northern site boundary. Erlas Black Wood is located to the east of the site, with industrial units, also occupied by Proserve to the south, see Figure 2.

The existing building on site is a large steel portal framed structure, with a smaller prefabricated concrete office building near the entrance to the site off Ash Road North. The northern section of the site comprises tarmacked hardstanding currently in use as car parking. The western and southern sections of the site are grassed areas, with some trees, at present a substantial quantity of crushed concrete is stockpiled on a section of the grass, see Figure 2.

The site is generally level, at an approximate elevation of 36.5mAOD, with the surrounding land also at a similar elevation, although it does fall by approximately 2m along the eastern boundary towards the woodland. An aerial photograph of the site is presented below showing the relationship between this site and the existing Ipsen site.



Photographs showing the site are presented in Appendix A.

2.2 Geology and Hydrogeology

The geology of the site has been studied on the 1:50,000 scale geology plan, Sheet 121, and the geological memoirs, Reference 2. In addition, the Wrexham Applied mapping project at a scale of 1: 25,000 has been researched, Reference 3.

The geology plans show the site to be underlain by “Landscaped Ground – Artificially Modified Ground” extensively remodelled by earth moving and tipping, with the superficial deposits being glacial till (Clay). Experience in this area shows the glacial till to have a thin weathered surface, typically described as firm, yellow brown clay, quickly becoming a stiff, red brown clay, with a little gravel. Occasional thin sand horizons are common in this stratum. Reference 3 records the superficial deposits in this area to be in excess of 50m thick.

The underlying bedrock is the Erbistock Formation, of Carboniferous age, mainly comprising mudstone and siltstone, which in turn are underlain by the Coal Measures at significant depth. A fault trending in a northwest-southeast orientation passes through the northern corner of the site, with the bedrock on the north eastern side shown to be the Kinnerton Sandstone of Triassic age, which comprises red brown and yellow brown sandstones.

The superficial deposits beneath the site are classified as an unproductive aquifer, whilst the Erbistock Formation is classified as a Secondary A Aquifer. The Kinnerton Formation to the north west of the fault is classified as a Principal Aquifer.

Groundwater is unlikely to be encountered at shallow depth beneath the site, with any groundwater flow to the north towards the nearest watercourse.

2.3 Abandoned Mining

A Coal Authority mining report was obtained for the adjacent Ipsen site, the main points are summarised below, with the full report presented in Appendix B.

- The site is not within a surface area that could be affected by past underground mining;
- The site is not within a surface area that could be affected by present underground mining;
- There are no known coal mine entries within, or within 20m of, the site boundary;
- The site lies within an area where a notice to withdraw support was given in 1972;
- The property lies outside the Cheshire Brine Compensation District.

Based on the Coal Authority report and the underlying geology of the area, the site is not considered at risk from coal mining related hazards.

2.4 History

The history of the site has been studied using old Ordnance Survey (OS) plans, generally at a scale of 1: 2,500, dating from 1879, and historic aerial photography from the Welsh Government's Aerial Photography Unit online viewer, and Google Earth.

An OS plan dated 1879 at a scale of 1:10,560 shows the site to be within open fields, with Erlas Wood to the south east of the site. Several small ponds were visible to the south of the site.

The 1899 OS plan confirms the site to be within open fields. A footpath crosses the site from the centre of the northern boundary towards Erlas Wood to the east. A benchmark on a building some 170m to the north west of the site records an elevation of 128.4 ft. (39.14 m), see Figure 3a. The ponds to the south of the site are clearly visible, with further ponds to the west and east of the site. A stream course is present to the north of the site trending in an east to west direction.

No significant changes are evident on the 1912 OS plan, see Figure 3b.

An OS plan dated 1938 at a scale of 1:10,560, failed to show any changes.

The area was used for Cordite production during WWII, which was the propellant for shells. Production ceased in 1945, and the Welsh Development Agency started construction of Wrexham Industrial estate in the 1960's.

The 1954 OS plan at a scale of 1:10,560 scale shows buildings had been constructed in the southern and south western sections of the site, a building is also shown immediately north of the site. A road has also been constructed, looping around the buildings in the south and along the western boundary of the site, see Figure 3c. Numerous buildings and access roads are evident across the land to the south of the site. These are the remains of buildings from the area's use during WWII as an Ordnance Factory. Development from the Ordnance Factory extended up to the southern section of the site.

The 1961 OS plan shows a mineral railway had been constructed to the west of the site, trending north-northeast to south-southwest, see Figure 3d. a spur from this line entered the south western corner of the site. Several large industrial buildings had been constructed immediately to the north of the site, and Ash Road had been partly constructed along a similar alignment to the existing road. The buildings on the southern section of the site had been demolished, however the access road remains. A small building and a hydrant is shown within the site boundary.

The 1982 OS Plan shows the Mineral Railway had been removed and the site had been developed with a large industrial unit and areas of hardstanding, which have the same layout as the current buildings, see Figure 3e. Further industrial units and factories/warehouses had been constructed to the west and south of the site. The alignment of Ash Road had been

moved, now running along the outside of the western boundary and linking to Abenbury Way to the south west of the site.

The 1988 OS plan shows no changes to the layout on site, see Figure 3f. Some of the buildings to the north of the site had been demolished, and Ash Road South had been constructed along the northern boundary, with Ash Road renamed Ash Road North.

The 1990 OS plan shows minor changes within the site with small building constructed in the south eastern corner. A new industrial building had been constructed to the north of the site, see Figure 3g.

No significant changes are visible on the 1995 OS plan, see Figure 3h.

A 2003 aerial photograph shows the site in a similar layout to the 1995 OS plan, see Figure 3i.

3.0 ENVIRONMENTAL SEARCHES

An Envirocheck report has been obtained for the main Ipsen site and has been used for the assessment of this site. The main points are summarised below and the report presented in full in Appendix C.

Agency and Hydrological

- There're no active discharge consent within 250m of the site,
- An Integrated Pollution Prevention and Control is recorded for the main IBL site, for the production of plant health products/biocides,
- The nearest surface water feature is recorded on the site boundary,
- The nearest pollution incident to controlled waters is to the north west of the site, recorded in 1998, where light oil caused a Category 3 – Minor incident,
- The nearest water abstraction is over 250m to the north east of the site, where water is abstracted for non-evaporative cooling,
- There is a registered radioactive substances at Specwood Ltd, on the other side of Ash Road North,
- The site is located within a Zone 3 Source Protection Zone, related to Meadow Foods
- The site is not at risk of flooding from rivers or seas,
- According to the BGS the site lies in an area with the potential for groundwater flooding to property situated below ground level.

Waste

- There is an historical landfill site greater than 500m to the north west of the site, operational between 1953 and 1983, where deposited waste included industrial waste and liquid sludge,
- The nearest licensed waste management facility is greater than 500m to the north of the site, at Clays Farm Golf Centre.

Geological

The BGS have provided a summary of the estimated soil chemistry at the site, which is summarised below:

- Arsenic <15 mg/kg,
- Cadmium < 1.8 mg/kg,
- Chromium 60 – 90 mg/kg,
- Lead < 100 mg/kg,
- Nickel 15-30 mg/kg.

In addition, the following issues were raised:

- The site is in an area, which may be affected by coal mining,
- The site is within a lower probability radon area since 1 to 3% of homes are estimated to be at or above the Action Level,
- Consequently, no radon protective measures are necessary.

Industrial Land Uses

- The nearest industrial land use is recorded for the main Ipsen facility,
- Numerous other industrial land uses surrounding the site on Wrexham Industrial Estate.

Sensitive Land Use

- Ancient woodland is recorded to the southeast of the site.

4.0 PROPOSED DEVELOPMENT

IBG are proposing to demolish the existing industrial unit, and to replace it with a new facility comprising a central octagonal building, with eight rectangular outer buildings each linked to the central section with connecting walkways. An artist's impression of the proposed layout is presented in Figure 4. The development will also include associated car parking and a water feature surrounding the development and minor landscaping.

The proposed foundation loads for the new buildings are unknown, however the buildings are anticipated to be three storey individual steel framed structures, with a combination of conventional and glass cladding. Column loads are not known at this stage, but are anticipated to be between 250 and 500kN.

While no floor slab loads have been provided, they are considered unlikely to exceed 30kN/m². Finished floor levels have not been provided for the proposed development, however, they are anticipated to be similar to existing ground levels.

The recommendations given in this report are based on these assumptions and will need to be reviewed, and if necessary revised, if any significant changes are made to the proposed development.

5.0 THE INVESTIGATIONS

5.1 Previous Investigation

The investigation for the recent works on the main Ipsen Facility, Reference 1, was undertaken on the 3rd May 2017, and comprised:

- Three window sample boreholes, with SPT's carried out at 1m intervals to a maximum depth of 5.0m;
- Two dynamic probes to 10m at the base of WS01 and WS03;
- A hand-dug trial pit and hand auger to 2.5m depth,
- Chemical Testing,
- Physical Testing.

The window sample and hand auger logs are presented in Appendix D, along with the dynamic probes and physical test results.

The investigation encountered a thin veneer of made ground, generally comprising hardcore overlying glacial till, which was generally described as soft, quickly becoming very stiff, brown, locally mottled grey clay, with frequent silt laminations.

SPT "N" values were generally between 5 and 26, with the lower values encountered near surface. The clay typically became stiff at depths of around 2.0m.

Atterberg limit testing recorded Liquid limits between 44 and 48%, Plastic limits between 19 and 23%, with plasticity indices of 21 to 29%, indicating clay of intermediate plasticity. Natural moisture contents were between 26.7 and 29.9%.

pH values between 7.28 and 7.78 were recorded, with water soluble sulphate values, when measured as 2:1 water extract, between 0.04 and 0.08g/l.

Groundwater was encountered in borehole WS01, standing at a depth of 2.85m below ground level upon completion of the borehole. Groundwater inflows were not recorded in any of the remaining boreholes, although the glacial till was noted to be damp or wet below 1.3m depth in borehole WS03.

5.2 This Investigation

The investigation was undertaken on the 7th and 8th of February 2018 and comprised:

- Six window sample boreholes, with SPT's carried out at 1m intervals to a maximum depth of 5.0m;
- Two dynamic probes to 10m at the base of WS01 and WS03.

The window sample boreholes were undertaken by Earth Engineering, and were supervised and logged by an engineer from GSL, in general accordance with BS5930, Reference 4.

The window sample logs are presented in Appendix E, and the locations of the exploratory positions are presented on Figure 2. The locations of the boreholes were limited by the site being in use at the time.

5.3 Laboratory Work

Samples of made ground were taken from the window sample boreholes, placed in the appropriate containers, and taken immediately to the laboratories of ALS in Chester for the following chemical testing:

Metals & Non-metals - Arsenic (As), Boron (B), Cadmium (Cd), Copper (Cu), Lead (Pb), Mercury (Hg), Nickel (Ni), Phenol, Selenium (Se), and Zinc (Zn).

Petroleum Hydrocarbons - Benzene, Toluene, Ethylbenzene, o-xylene, m-xylene, p-xylene, Aliphatics >C5 – C44, Aromatics >EC5 – EC44.

Polyaromatic Hydrocarbons (PAH) – Acenaphthene, Acenaphthylene, Anthracene, Benz (a) anthracene, Benzo (b) fluoranthene, Benzo (g, h, i) perylene, Benzo (k) fluoranthene, Benzo (a) pyrene, Chrysene, Dibenzo (a, h) anthracene, Fluorene, Indeno (1,2,3-cd) pyrene, Naphthalene, Phenanthrene, Pyrene.

Other Contaminants – Sulphide (easily liberated), Water soluble Sulphate (2:1 extract), Cyanide, pH, Soil Organic Matter (SOM), Sulphur, Phenol, Cresol, Chromium (Hexa), Chromium (Triv).

In addition, asbestos screening was carried out on all samples.

The results are summarised in Section 7.0, and the results presented in full in Appendix F.

Physical Testing – Geotechnics

The following physical tests were undertaken by Geotechnics Ltd on two samples of the glacial till:

- Atterberg limit tests,
- Natural moisture content,
- pH,
- water soluble sulphate (2:1 water extract).

The testing was carried out in accordance with BS1377; Reference 5. The results are discussed in Section 6.0 and presented in full in Appendix G.

6.0 GROUND CONDITIONS

6.1 General Stratigraphy

The ground conditions encountered across the site were fairly uniform, with the general stratigraphy summarised in the table below:

BH No.	Made Ground (m)	Alluvium (m)	Glacial Till (m)	Sand Horizon (m)	Groundwater (m)
BH1	0.00 – 0.40		0.40 – 5.00	2.30 – 2.45	2.30
BH2	0.00 – 0.40		0.40 – 5.00	1.30 – 1.50	1.30
BH3	0.00 – 1.10		1.10 – 5.00	3.20 – 3.30	3.20
BH4	0.00 – 1.60	1.60 – 2.30	2.30 – 5.00	3.60 – 3.70	3.60
BH5	0.00 – 1.90	1.90 – 2.30	2.30 – 5.00	4.50 – 4.60	4.50
BH6	0.00 – 0.60		0.60 – 5.00	3.40 – 3.50	3.40

6.2 Topsoil/Made Ground

The made ground encountered varied in thickness and description across the site. In the northern section of the site BH1, BH2 encountered 0.2m of topsoil, described as soft to firm, brown, clayey, silt, overlying 0.2m of firm, red brown, gravelly clay, with the gravel being medium to coarse and angular. BH6 located to the front of the existing office building encountered 0.35m of topsoil, underlain by 0.25m of medium dense, grey, fine to coarse, angular, gravel.

The thickness of made ground increased in the southern and eastern sections of the site. Topsoil similar to the material described above was encountered to a depth of 0.20m in BH3 and BH4. The surface material in BH5 was 0.40m deep and described as loose, black, silt, with much roots, gravel and fragments of brick and concrete. The underlying made ground encountered in BH3 was described as medium dense, brown, clayey, sandy, fine to coarse, angular to sub-angular, gravel of brick and concrete. In BH4 and BH5 the made ground comprised firm, red brown, clay, with much sand and gravel of concrete, tarmac, brick and sandstone.

SPT “N” values between 10 and 15 were recorded, confirming a firm consistency, see Figure 5.

pH values between 8.17 and 8.55 were recorded, with sulphate values, when measured as 2:1 water extract between <0.004 and 0.101g/l.

6.3 Alluvium

Two of the boreholes, BH4 and BH5 encountered what was considered to be alluvium to depths up to 2.30m in the south eastern corner of the site. It was described as firm, grey, clayey, silt, with BH4 also containing roots and organic matter.

SPT “N” values of 10 and 15 were recorded in this material, see Figure 5.

6.4 Glacial Till

A thin layer of weathered glacial till was encountered in BH6 to a depth of 0.90m, which was described as firm, light red brown, mottled dark orange, slightly silty, slightly sandy, clay.

Glacial till was encountered in all of the boreholes, and was described as firm to stiff, red brown mottled grey clay, with frequent silt laminations.

SPT “N” values were generally between 14 and 32, with the lower values encountered near sand horizons. No trend with depth was observed, see Figure 5.

Atterberg limit testing recorded Liquid limits between 48 and 52%, a Plastic limit of 24%, with plasticity indices between 24 to 28%, indicating clay of intermediate to high plasticity. Natural moisture contents were between 22.1 and 25.9%.

Thin sand horizons were encountered the boreholes at depths varying from 1.30m to 4.50m. They were typically described as medium dense, red brown, clayey, fine sand, and were all wet.

Tests on three samples of the glacial till recorded pH values between 7.88 and 8.06, with water soluble sulphate values, when measured as 2:1 water extract, between 0.04 and 0.08g/l.

6.5 Groundwater

Groundwater was encountered in the sand horizons within the glacial till.

7.0 RESULTS OF CHEMICAL TESTING

Six soil samples were taken from the made ground encountered in the window sample boreholes, at the depths presented in the table below.

BH No.	Depth (m)
BH1	0.20 - 0.40
BH2	0.15 – 0.20
BH3	0.30 – 0.40
BH4	0.80 – 0.85
BH5	1.00 – 1.20
BH6	0.15 – 0.25

The results of the soil analyses are presented below, where they have been compared to suitable generic assessment criteria (GACs) for a commercial end-use, based on an SOM content of 2.5%.

The Category 4 Screening Levels (C4SLs) published by DEFRA (2014) have been adopted in the first instance, which have been published for six substances to date. Where a C4SL is unavailable, the “Suitable 4 Use Levels” (S4ULs) published by LQM/CIEH (2015) have been adopted.

These criteria have been derived using the CLEA model for a range of standard end-use scenarios and a range of soil organic matter (SOM) contents. It should be noted that the C4SL values are derived on the basis of a “low level of toxicological concern”, while the S4UL values are based on a “tolerable” or “minimal” level of risk. As such, the S4ULs describe a lower level of risk than the C4SLs, and are equivalent to the former Soil Guideline Values (SGVs, published by the Environment Agency) and the previous editions of the LQM/CIEH GAC values.

Note: the S4UL values presented below are Copyright Land Quality Management Limited, reproduced with permission; Publication Number S4UL3668. All rights reserved.

Metals & Non-Metals	Min (mg/kg)	Max (mg/kg)	Average (mg/kg)	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Arsenic	8.82	14.8	11.23	6	640	C4SL	0
Boron	4.04	15	9.2	6	240000	S4UL	0
Cadmium	0.32	1.16	0.53	6	190	C4SL	0
Chromium, Trivalent	10.6	22.5	16.17	6	8600	S4UL	0
Chromium, Hexavalent	<0.6	<0.6	0.6	6	33	C4SL	0
Copper	17.7	44.4	27.58	6	68000	S4UL	0
Lead	25.7	94.2	50.72	6	2300	C4SL	0
Mercury	<0.14	0.205	0.16	6	58	S4UL	0
Nickel	13.9	37.1	25.52	6	980	S4UL	0
Phenol	<0.01	0.0118	0.01	6	690	S4UL	0
Selenium	<1	1	1	6	12000	S4UL	0
Zinc	87.1	271	152.48	6	730000	S4UL	0

Petroleum Hydrocarbons	Min (mg/kg)	Max (mg/kg)	Average (mg/kg)	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Benzene	<0.01	<0.01	0.01	6	47	C4SL	0
Toluene	<0.002	<0.002	0.002	6	110000	S4UL	0
Ethylbenzene	<0.003	<0.003	0.003	6	13000	S4UL	0
o-xylene	<0.003	<0.003	0.003	6	15000	S4UL	0
Aliphatics >C5-C6	<0.01	<0.01	0.01	6	5900	S4UL	0
Aliphatics >C6-C8	<0.01	<0.01	0.01	6	17000	S4UL	0
Aliphatics >C8-C10	<0.01	<0.01	0.01	6	4800	S4UL	0
Aliphatics >C10-C12	<0.01	<0.01	0.01	6	23000	S4UL	0
Aliphatics >C12-C16	0.568	2.58	1.18	6	8200	S4UL	0
Aliphatics >C35-C44	0.848	6.05	2.26	6	1700000	S4UL	0
Aromatics >EC5-EC7	<0.01	<0.01	0.01	6	46000	S4UL	0
Aromatics >EC7-EC8	<0.01	<0.01	0.01	6	110000	S4UL	0
Aromatics >EC8-EC10	<0.01	<0.01	0.01	6	8100	S4UL	0
Aromatics >EC10-EC12	<0.01	<0.01	0.01	6	28000	S4UL	0
Aromatics >EC12-EC16	<0.1	2.64	0.87	6	37000	S4UL	0
Aromatics >EC16-EC21	<0.1	10.8	4.79	6	28000	S4UL	0
Aromatics >EC21-EC35	6.33	60.1	27.84	6	28000	S4UL	0
Aromatics >EC35-EC44	3.37	20.4	10.92	6	28000	S4UL	0

Polyaromatic Hydrocarbons (PAH)	Min (mg/kg)	Max (mg/kg)	Average (mg/kg)	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Acenaphthene	<0.008	0.032	0.02	6	97000	S4UL	0
Acenaphthylene	<0.012	0.0275	0.02	6	97000	S4UL	0
Anthracene	<0.016	0.121	0.06	6	540000	S4UL	0
Benz(a)anthracene	<0.014	0.659	0.3	6	170	S4UL	0
Benzo(a)pyrene	<0.015	0.801	0.34	6	35	C4SL	0
Benzo(b)fluoranthene	<0.015	0.885	0.43	6	44	S4UL	0
Benzo(g,h,i)perylene	<0.024	0.586	0.26	6	4000	S4UL	0
Benzo(k)fluoranthene	<0.014	0.366	0.17	6	1200	S4UL	0
Chrysene	<0.01	0.561	0.27	6	350	S4UL	0
Dibenzo(a,h)anthracene	<0.023	0.119	0.06	6	3.6	S4UL	0
Fluoranthene	<0.017	0.736	0.38	6	23000	S4UL	0
Fluorene	<0.01	<0.01	0.01	6	68000	S4UL	0
Indeno(1,2,3-cd)pyrene	<0.018	0.407	0.18	6	510	S4UL	0
Naphthalene	<0.009	0.603	0.12	6	460	S4UL	0
Phenanthrene	<0.015	0.407	0.19	6	22000	S4UL	0
Pyrene	<0.015	0.662	0.35	6	54000	S4UL	0

No exceedances of any contaminant guidelines for commercial land use have been recorded. It is also noted that none of the results exceeded the far stricter guideline values for residential use.

Asbestos screening was carried out on all of the soil samples tested. Loose fibres of chrysolite (white) asbestos were identified in a sample from BH4 at a depth of 0.80 – 0.85. Consequently, a quantification test was scheduled on this sample to allow further risk assessment to be carried out. This recorded a total asbestos content of 0.0252%

No asbestos fibres or asbestos-containing materials (ACMs) were identified in any of the remaining samples.

8.0 CONCEPTUAL GROUND MODEL AND RISK ASSESSMENT

8.1 General

According to the Contaminated Land Regulations, to determine whether there is a significant possibility of significant harm, the following should be taken into account:

“The nature and degree of harm, the susceptibility of the receptors and the timescale within which the harm might occur”.

Current good practice therefore requires that the findings from the desk study or site investigation be evaluated for contamination on a site-specific basis using a risk-based approach. Risk assessment involves identification of the hazards and evaluation of the risks associated with these hazards. Risk assessment requires an evaluation of a conceptual “source – pathway – receptor” linkage model and can be qualitative or quantitative.

The basis of an environmental risk assessment involves identifying a ‘source’ of contamination, a ‘pathway’ along which the contamination may migrate and a ‘receptor’ at risk from the contamination.

Current legislation defines the various elements of the pollution linkage as:

- A contaminant ‘source’ is a substance, which is in or under the ground and which has the potential to cause harm or to cause pollution of controlled waters.
- A ‘pathway’ is one or more routes through which a receptor is being exposed to, or affected by, a contaminant, or could be so affected.
- A ‘receptor’ is either a living organism, an ecological system, a piece of land or property, or controlled water.

A pollutant linkage indicates that all three elements have been identified. The site can only be defined as ‘Contaminated Land’ if a pollutant linkage exists and the contamination meets the criteria above.

8.2 Hazard Identification

On Site

The desk study has revealed that the site has historically been agricultural land, before entering industrial use and forming part of a large industrial estate following WWII. However, the site was on the perimeter of a wartime ordnance factory, although the historical plans indicate that the site was only just impinged by the munitions manufacture close to the southern boundary.

This is the area that has been raised by filling when the site was developed, therefore, contamination resulting from ordnance manufacture is not considered a significant risk at the site.

The site is currently being used as a distribution warehouse with large lorries, consequently, localised hydrocarbon spills is a possibility that needs consideration.

In addition, during the sites development, which comprised buildings and hardstanding construction, any made ground and soft materials will have been removed and taken off site, with the exempt areas being the landscaped areas to the south and east of the building.

Therefore, any potential contamination would have been removed as part of the site works. This has largely been proved by the site investigation, whereby no visual or olfactory evidence of contamination was observed and no exceedances of any contaminants were recorded during the testing.

Off Site

The site is located on a large industrial estate, with numerous industrial processes carried out in the vicinity of the site. Historically, an ordnance factory was located immediately to the south and west of the site area.

However, no significantly contaminative industrial processes have been identified as occurring near to the site. In addition, the underlying glacial till will be highly impermeable, and this will act to prevent migration of off-site contaminants into the site area.

8.3 Pathways

In relation to any on site contamination reaching potential site users, the following pathways are generally considered:

- Ingestion and skin contact with soils on site,
- Inhalation from wind-blown dust,
- Leaching of contaminated materials that may affect controlled waters,
- Direct contact with contaminated material during construction.

8.4 Receptors

The potential impact of a hazard must be assessed with regard to the following target groups:

- Future site users,
- Construction workers,
- Surface and groundwater, both on and off the site,
- Nearby vegetation,
- Building materials and buried services.

8.5 Summary of Conceptual Ground Model

Potential Contamination Sources	Potential Contaminants of Concern	Potential Pathways	Receptor Group
Made ground Hydrocarbon spills – industrial land use	Heavy metals & non-metals PAH Petroleum Hydrocarbons	Dermal contact Ingestion of soil Inhalation of contaminated dust	Construction Workers End Users
Ordnance Factory	Asbestos Explosives	Lateral Migration and Infiltration	End Users Groundwater

No exceedances of any contaminants were recorded in any of the samples tested for the proposed/current commercial site land use. In addition, no values exceeding the more stringent residential land use were recorded.

8.6 Future Site Users Risk Assessment

The site is to be re-developed by demolishing the existing building and constructing a new unit occupying a slightly larger footprint. The site is currently in industrial use, with a change of use from a distribution depot to pharmaceutical end-use.

No exceedances of any contaminants have been recorded in six samples of made ground tested, based on a commercial land end-use. In addition, the values did not exceed the residential land use values. The site area was not developed as part of the ordnance factory, and therefore the pathways associated with this contamination source are not considered active.

Therefore, the risk to future site users from the proposed development is considered to be negligible.

However, in accordance with current good practice, a watching brief should be undertaken on all excavations, any contamination encountered should be excavated, stored safely on site, tested, and then disposed of at a suitably licensed landfill facility.

8.7 Controlled Waters Risk Assessment

When considering the risk to controlled water both surface waters and ground water needs to be considered.

The only nearby surface water is related to surface drainage channels for the industrial estate, where existing storm water from buildings is discharged along with road drainage.

No exceedances of any contaminants have been recorded in the six samples of made ground tested, based on a commercial land end-use. The fact that the surface water will also be continually diluted, means that the risk to surface waters is considered to be very low, especially as the made ground thickness is small and is underlain by very low permeability glacial till.

In addition, the proposed development involves the replacement of an existing structure using modern building materials. Therefore, the underlying made ground will either remain covered by building floor slabs or tarmac/concrete hardstanding, reducing the potential for rainfall infiltrations. The underlying glacial till is considered to be impermeable, and will prevent the downward migration of any contaminants to the underlying aquifer.

Therefore, the risk to controlled waters is considered to be negligible.

8.8 Construction Workers Risk Assessment

The risks to construction workers is considered to be very low and can be catered for by appropriate PPE and washing facilities in accordance with current good practice.

8.9 Ground Gases Risk Assessment

No significant sources of ground gas have been identified during the site investigation.

In addition, the site lies in a lower-probability radon area, and therefore no radon-protective measures are required for the new development.

8.10 Building Materials Risk Assessment

The investigation has not revealed any contamination that could adversely affect building materials or services. However, the chemical test results should be supplied to the statutory suppliers for confirmation.

8.11 Vegetation Risk Assessment

No suitable topsoil was encountered on site for landscaping purposes. However, there will possibly be abundant topsoil on the western side of the site, which may be possible for use in landscaping, although it will require testing first.

If found to be unsuitable, any landscaped areas will need to be constructed using clean imported materials. Therefore, the site will pose no risks to vegetation.

It can therefore be concluded that the site is uncontaminated and fit for its intended end use.

9.0 GEOTECHNICAL RECOMMENDATIONS

9.1 Excavations and Site Preparation

It will be necessary to strip the existing tarmac hardstandings, which should be taken off site to a suitably licensed landfill facility.

There are also several mature trees on site that may require removal, with the roots grubbed out. Any resulting excavations will require backfilling with suitable site won, or imported material, compacted in accordance with an approved earthworks specification, Reference 6.

The existing industrial unit will need to be demolished and the concrete floor slab and existing foundations broken out using pneumatic/hydraulic breakers. The concrete could then be crushed on site to form a structural fill material, which should be suitable for capping for roads or beneath floor slabs, etc.

Subsequent excavations will be in made ground and glacial till and will be possible using conventional earth moving equipment. Excavation sides are likely to be stable in the short-term, although collapses of any excavations left open should be anticipated. Any excavations deeper than 1.2m that are to be entered will need to be shored or battered back for safety reasons.

It is anticipated that several service runs will require diversion and depending on their location will either need to be filled with grout/foam concrete or excavated and backfilled with suitable granular material compacted in accordance with an approved earthworks specification.

Depending on the depth of excavations for foundations and services, groundwater seepages are generally not anticipated, if encountered seepages should be slight and easily catered for by pumping from sumps cut within the excavation.

9.2 Foundations and Floor Slabs

The design of the proposed facility is at an early stage, with no details of anticipated loads or development layouts. It is assumed the facility will be made up of individual portal framed buildings linked by ground level corridors.

Conventional spread foundations are considered appropriate, with pad foundations considered the most suitable solution. A minimum foundation depth of 0.90m should be assumed to protect foundations from frost heave, however the pads would be required to be deeper in the southern and eastern sections of the site where the made ground and alluvium was encountered to depths up to 2.30m. Consequently, the pads should be founded in the firm to stiff, red brown, clay, designed assuming an allowable bearing pressure of 125kN/m².

However, the current proposals include large areas of glass cladding, which may be sensitive to settlement. Therefore, it may be necessary to lower the bearing pressures further to limit settlement of the structures to acceptable levels.

The underlying ground conditions for each of the buildings will need to be reviewed in relation to the floor slabs. The majority of the building footprints will be within the footprint of the existing building, which is likely to have been prepared previously for the existing structure, with the clay prepared and covered with compacted hardcore. Outside of this area the ground should be lowered to the top of the glacial till. The formation should then be proof rolled, any soft spots excavated typically an additional 300mm and backfilled with suitable well compacted granular material to the underside of the slab.

A Modulus of sub grade reaction of 0.027N/mm^3 can be assumed on the clay sub grade, Reference 7.

9.3 Hardstanding

The proposed design is at an early stage, and the hardstanding layout is not known, therefore no CBR tests were undertaken during the site investigation. Once the final layout has been finalised and the alignment of roads and parking areas is known, CBR test can be carried out to allow carriageway construction design.

However, CBR values of between 3 and 6% should be feasible in the underlying glacial till.

9.4 Protection of Buried Concrete

Chemical testing recorded concentrations of sulphate, when measured as 2:1 water extract in the range of 0.04g/l to 0.08g/l in the superficial deposits; with pH values ranging from 7.88 to 8.06. Whilst in the made ground pH values between 8.17 and 8.55 were recorded, with sulphate values, when measured as 2:1 water extract between <0.004 and 0.101g/l.

Therefore, in accordance with Reference 8, and assuming mobile groundwater, the concrete can be classified as:

- DS-1,
- AC-1.

9.5 Drainage

The site is underlain by a considerable thickness of very low permeability glacial till. Consequently, soakaway drainage will not be suitable at the site.

9.6 Reuse of Materials

It is envisaged that any concrete broken out from the existing floor slab and foundations could be crushed on site to form a structural fill material. This material will be suitable for access road capping, and also for replacing the existing made ground beneath floor slabs on the southern and eastern sections of the site.

There is also likely to be significant quantities of hardcore beneath the existing tarmac and access roads, and it may be possible to salvage this material for re use.

The excavated made ground will need to be taken off site to a suitably licensed landfill facility. The chemical testing has indicated it to be inert, although further Waste Acceptance Criteria testing (WAC) may be required by the receiving landfill.

9.7 Landfill Gas and Radon

The site lies within a lower probability radon area, and therefore the new structures will not require radon protection measures. In addition, no nearby landfills have been identified that could be a source of landfill gas.

REFERENCES

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6. Specification for Highway Work, Series 600 Earthworks, Dtp, 2017,
7. Single Pour Industrial Floor Slab, Specification, design, construction and behaviour, Knapton J, Thomas Telford, 1999,
8. BRE Special Digest 1, 2005, Concrete in Aggressive Ground.

FIGURES



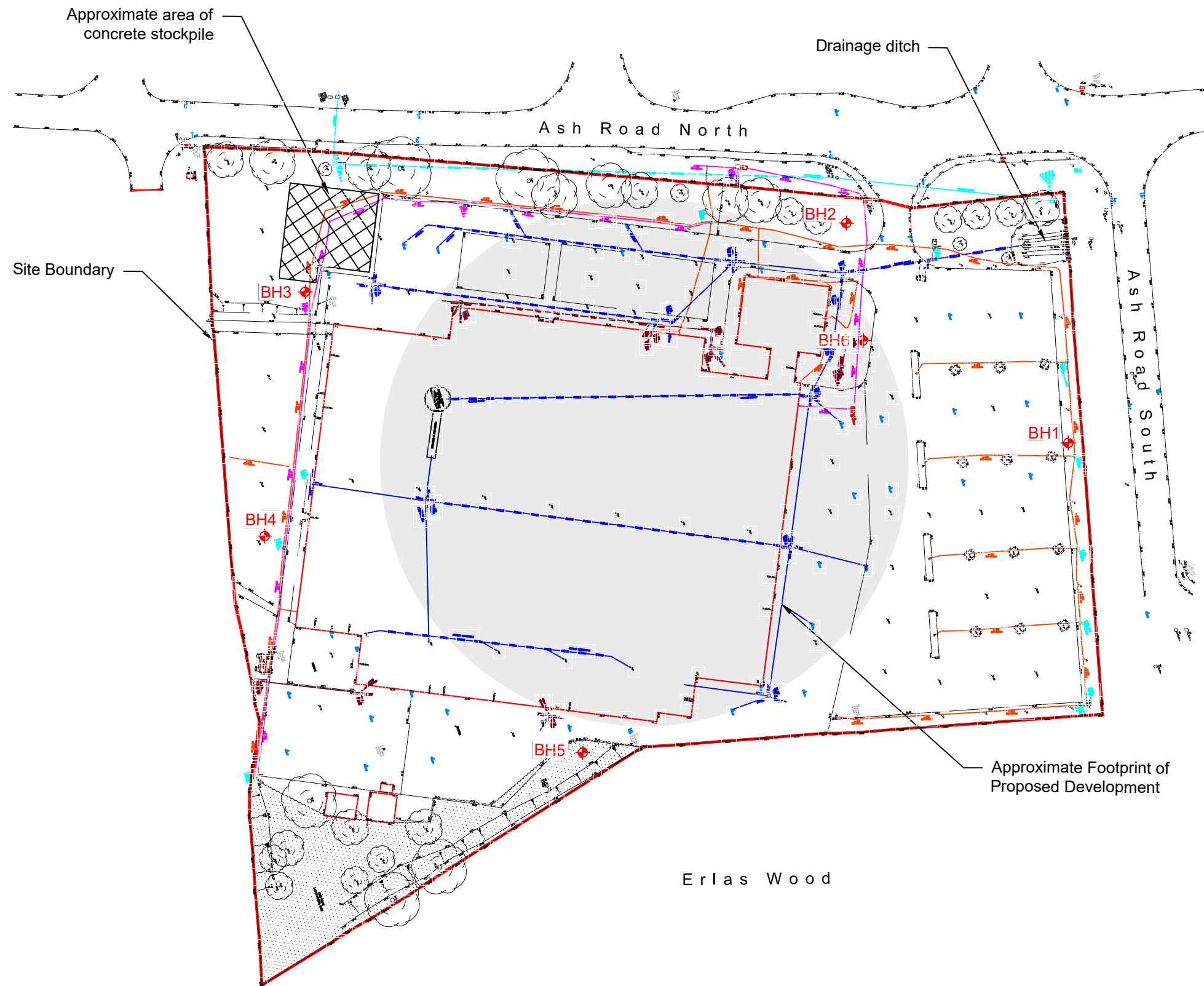
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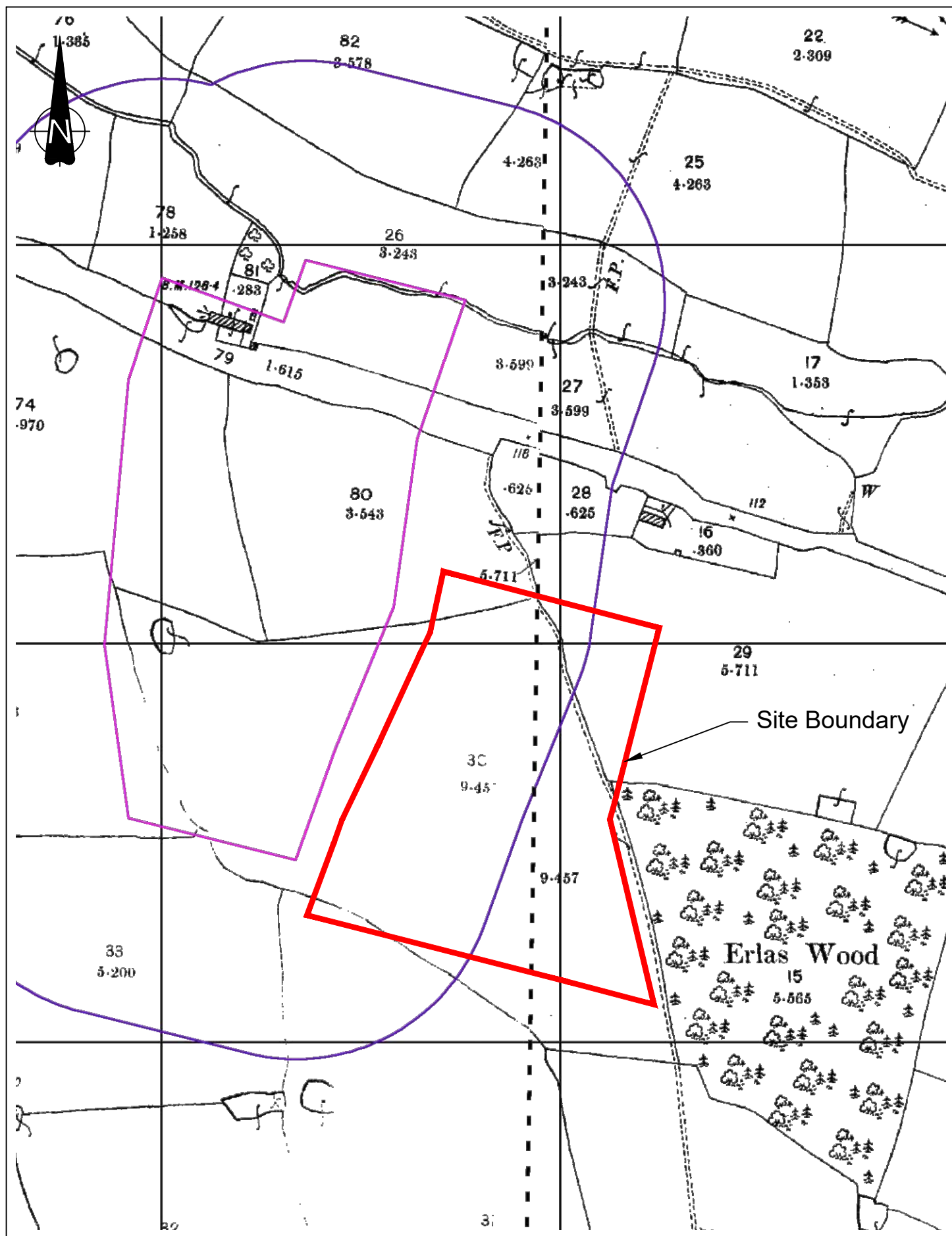
SITE LOCATION

FIGURE 1



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Figure Title
SITE LAYOUT & WS
BOREHOLE LOCATIONS

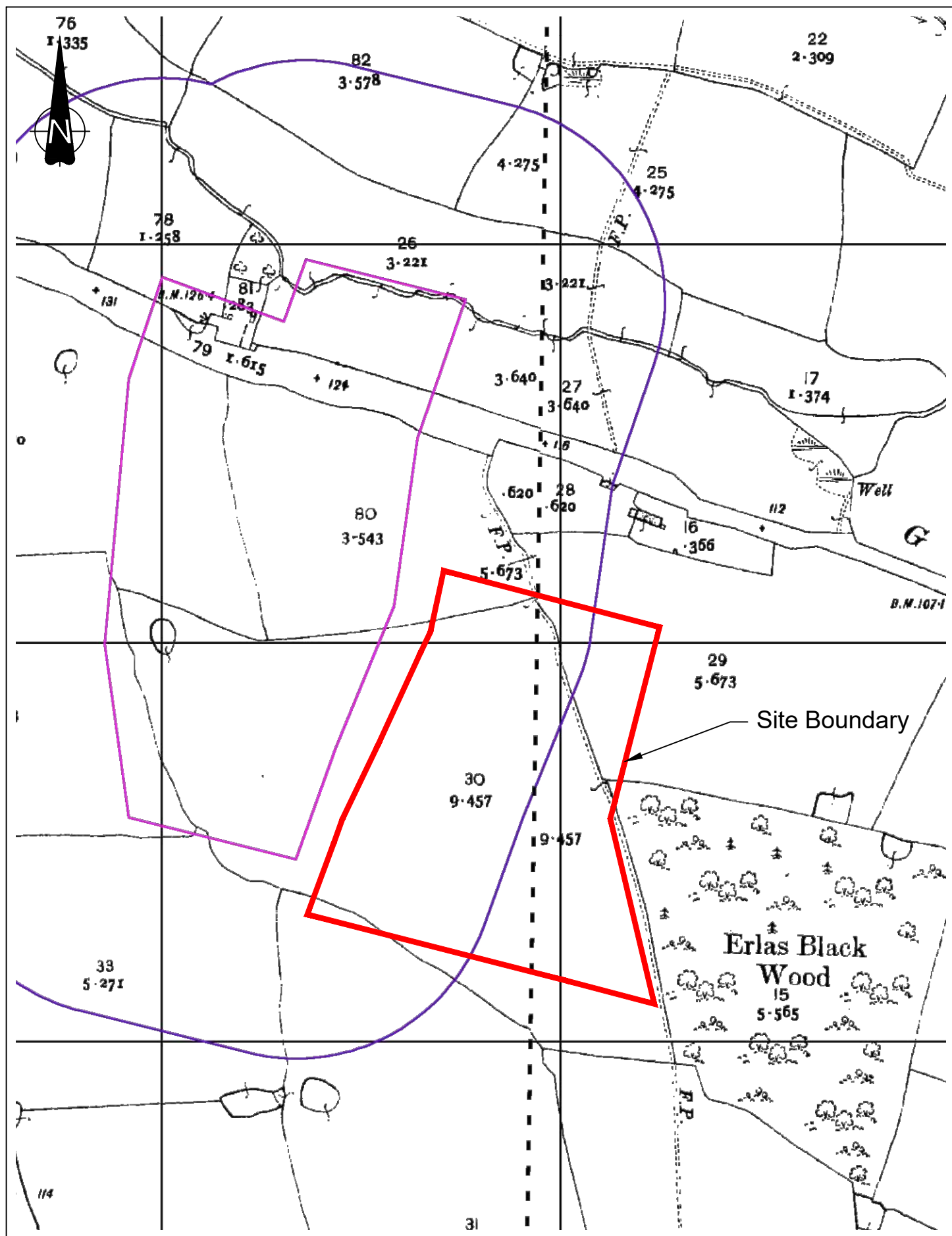


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Figure Title

SITE HISTORY
1899 OS PLAN

FIGURE 3a

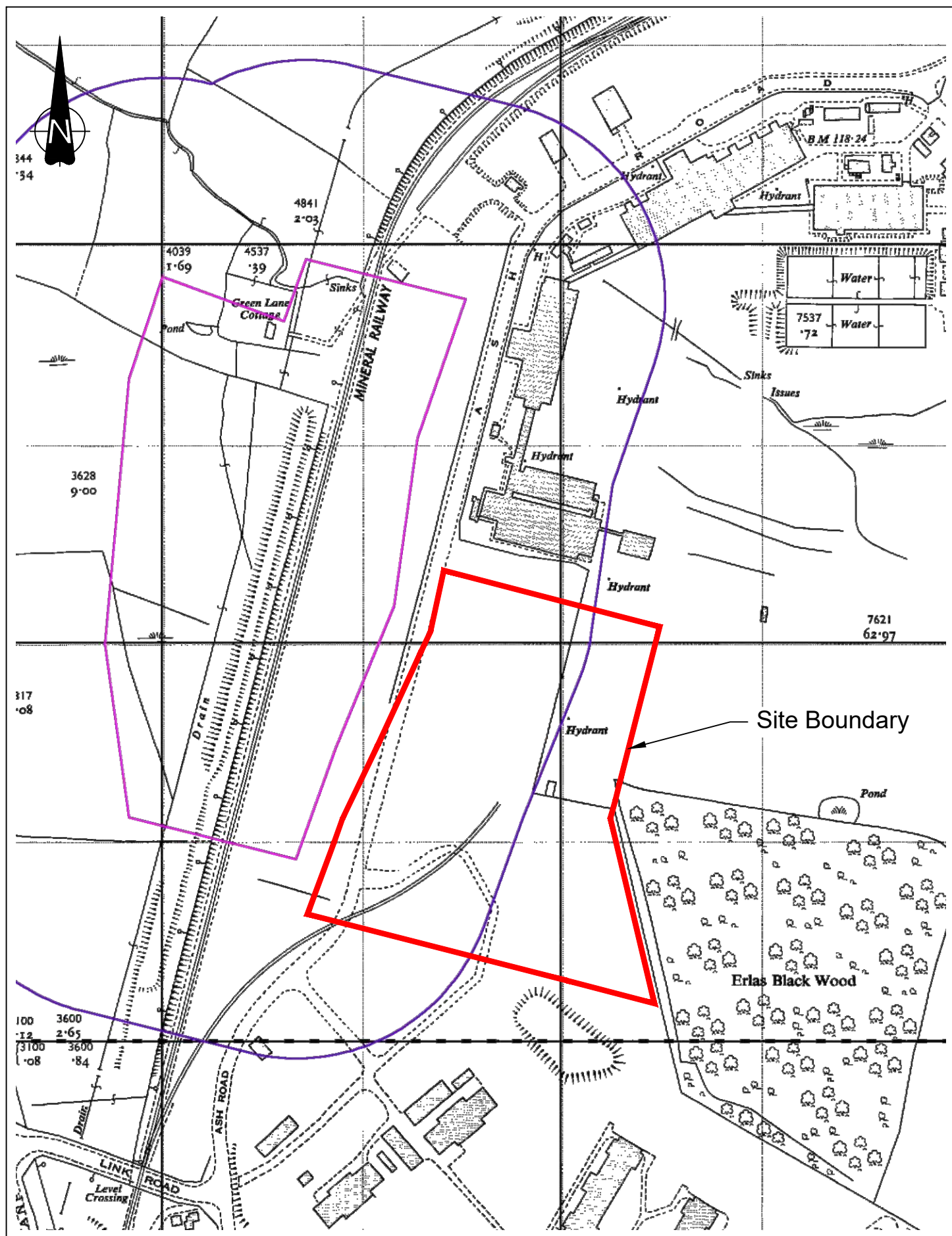


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Figure Title

SITE HISTORY
1912 OS PLAN

FIGURE 3b

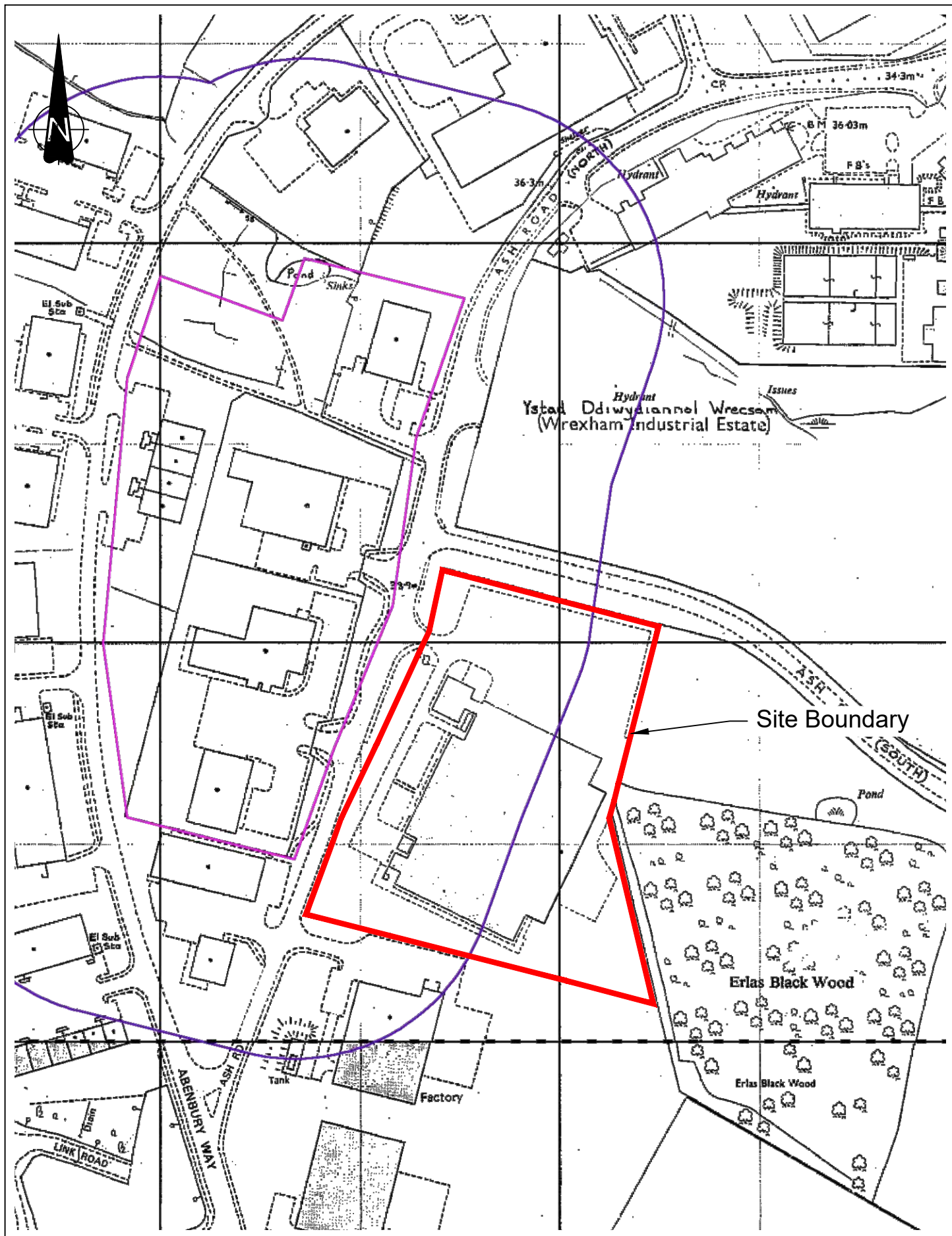


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Figure Title

SITE HISTORY
1961 OS PLAN

FIGURE 3d

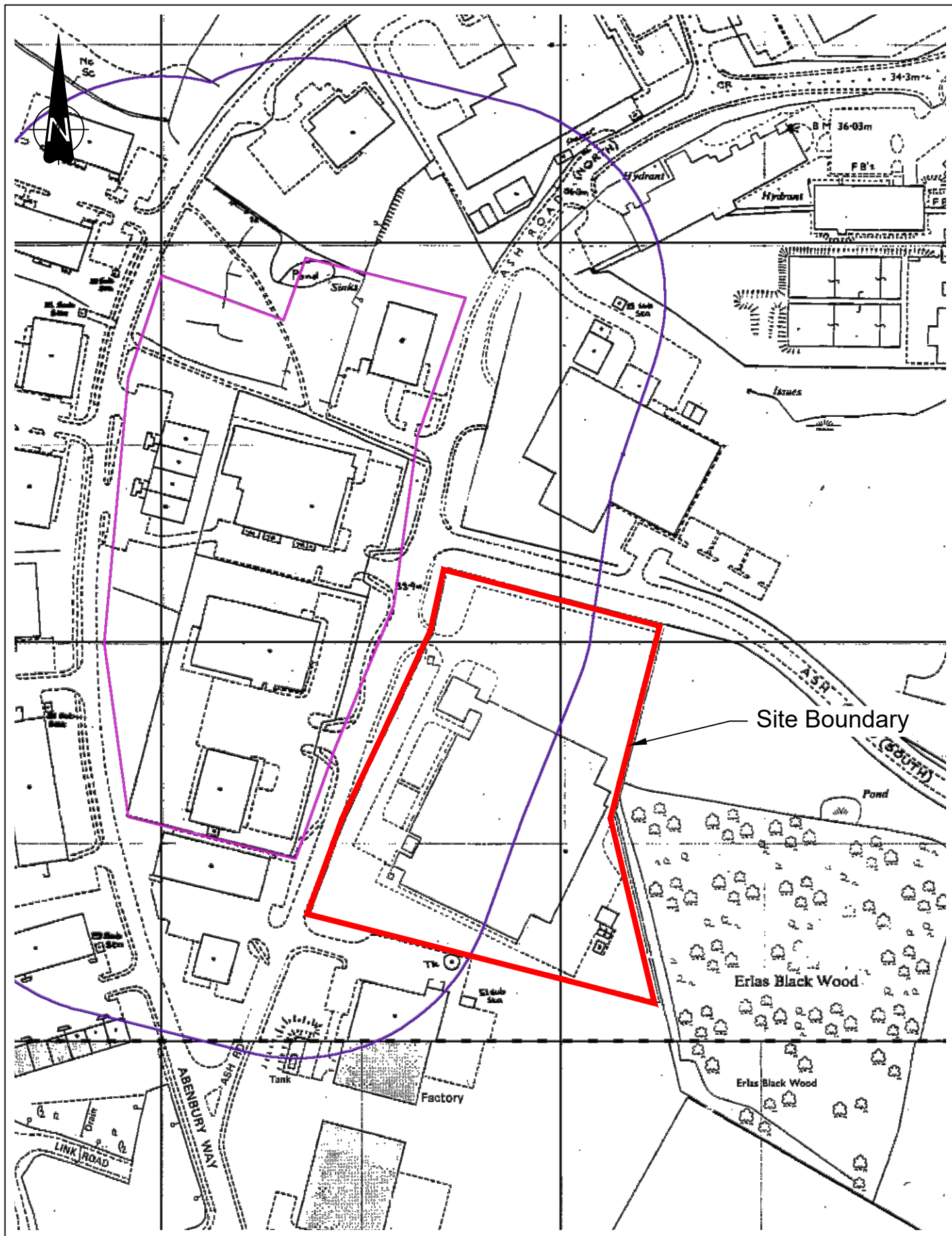


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Figure Title

SITE HISTORY
1988 OS PLAN

FIGURE 3f

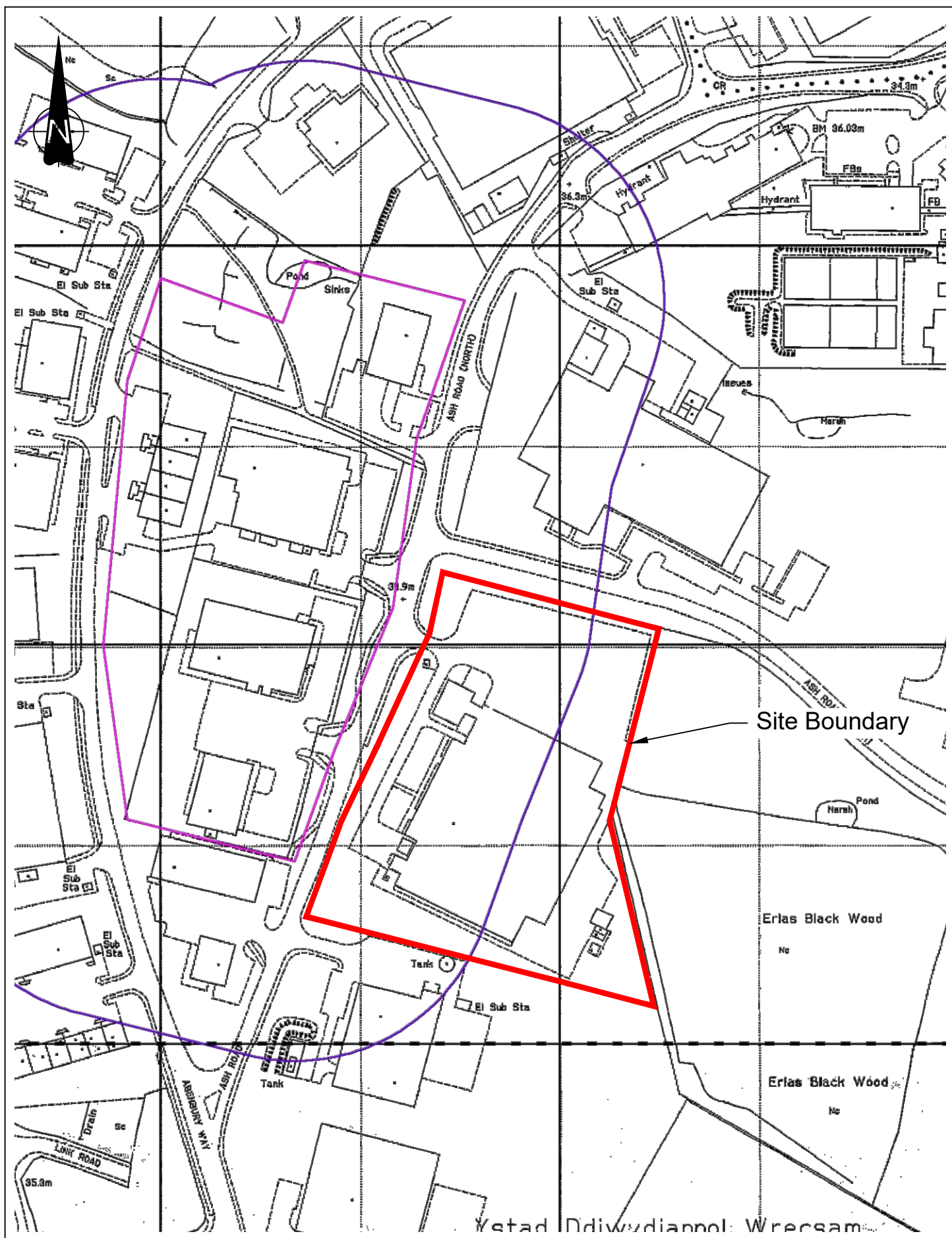


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Figure Title

SITE HISTORY
1990 OS PLAN

FIGURE 3g

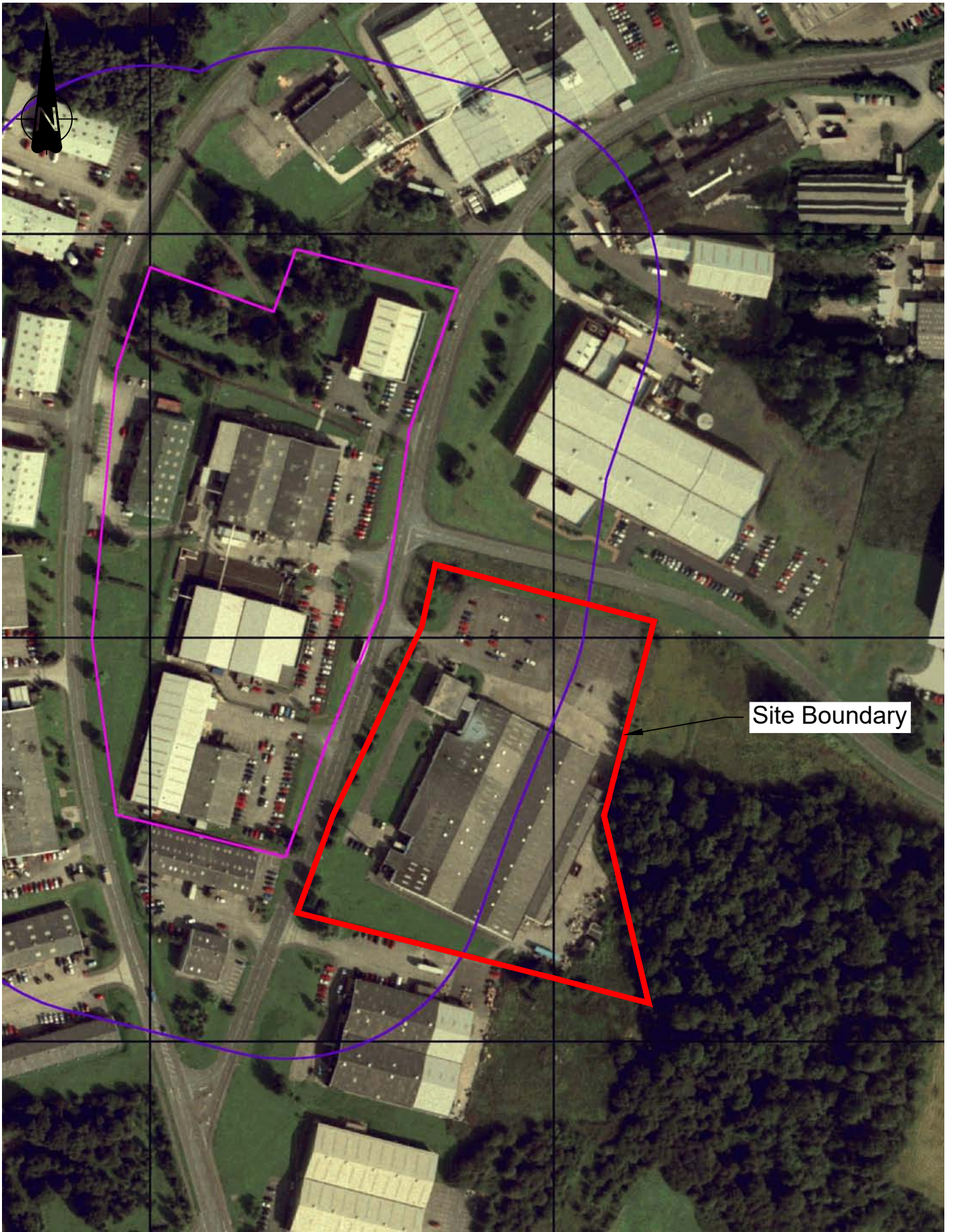


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Figure Title

SITE HISTORY
1995 OS PLAN

FIGURE 3h



SCALE 1:2500 @ A4

Figure Title

SITE HISTORY
2003 OS PLAN

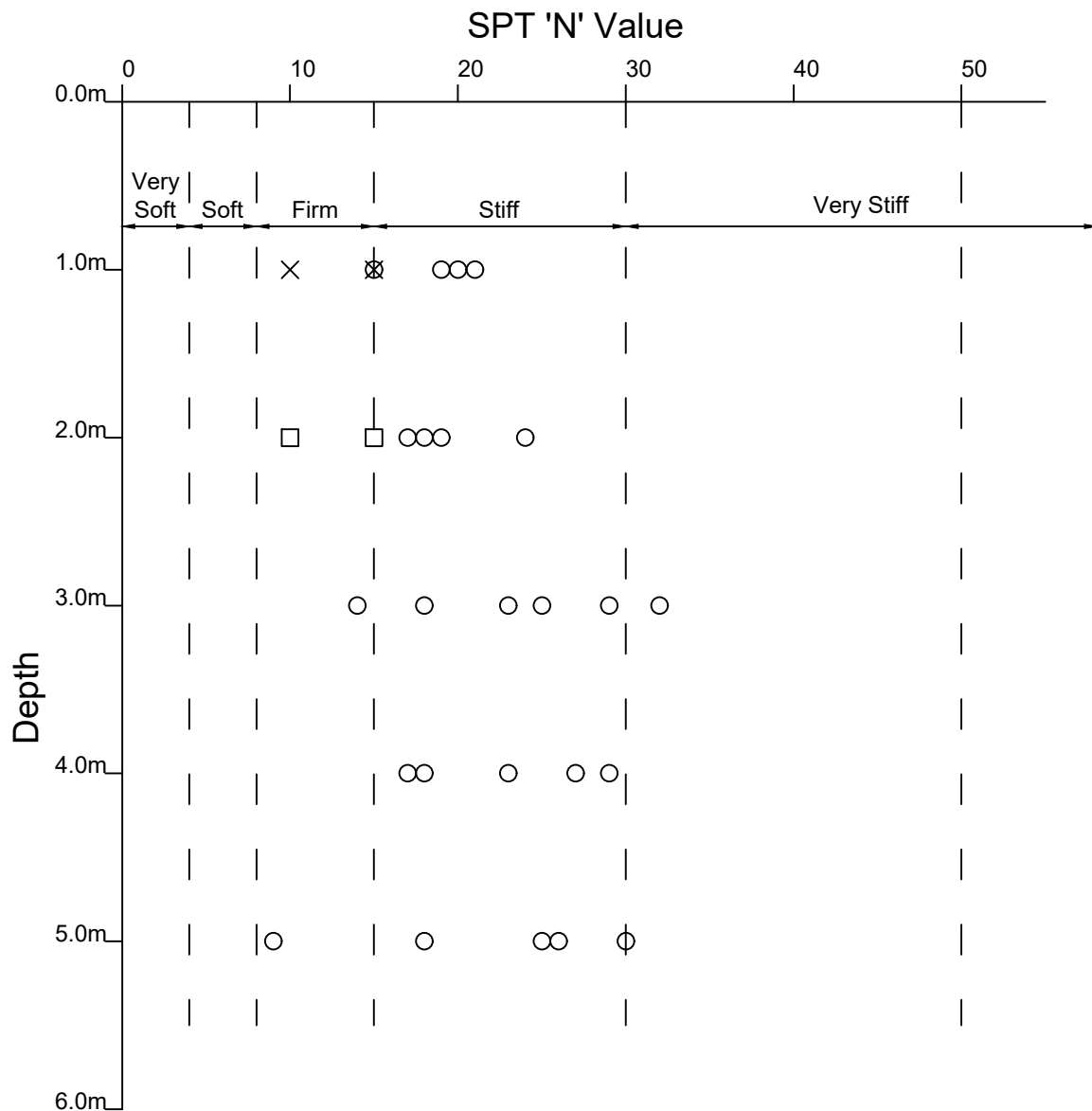
FIGURE 3i



SCALE NTS

Figure Title
PROPOSED DEVELOPMENT

FIGURE 4



SCALE NTS

Figure Title

**SPT 'N' VALUE Vs
DEPTH PLOT**

FIGURE 5

APPENDIX A
Site Photographs



Photograph 1 – From site entrance looking towards the existing buildings



Photograph 2 – From the northern boundary looking west



Photograph 3 – Adjacent to the office building looking south



Photograph 4 – South of the industrial unit looking west (stockpile of concrete)



Photograph 5 – South of the industrial unit looking east



Photograph 6 – Centre of east boundary looking south



Photograph 7 – Centre of east boundary looking north



Photograph 8 – Drainage discharge in north west corner of the site

APPENDIX B

Coal Authority Mining Report



The Coal
Authority

Resolving the **impacts** of mining

CON29M Non-Residential Mining Report

IPSEN BIOPHARM LTD, UNIT 10
WREXHAM INDUSTRIAL ESTATE
ASH ROAD NORTH WREXHAM

Date of enquiry: 02 May 2017
Date enquiry received: 02 May 2017
Issue date: 02 May 2017

Our reference: 51001463112001
Your reference: 123167900_2 |



CON29M Non-Residential Mining Report

This report is based on, and limited to, the records held by the Coal Authority and the Cheshire Brine Subsidence Compensation Board's records, at the time we answer the search.

Client name

LANDMARK INFORMATION GROUP LIMITED

Enquiry address

IPSEN BIOPHARM LTD, UNIT 10, WREXHAM
INDUSTRIAL ESTATE, ASH ROAD NORTH,
WREXHAM

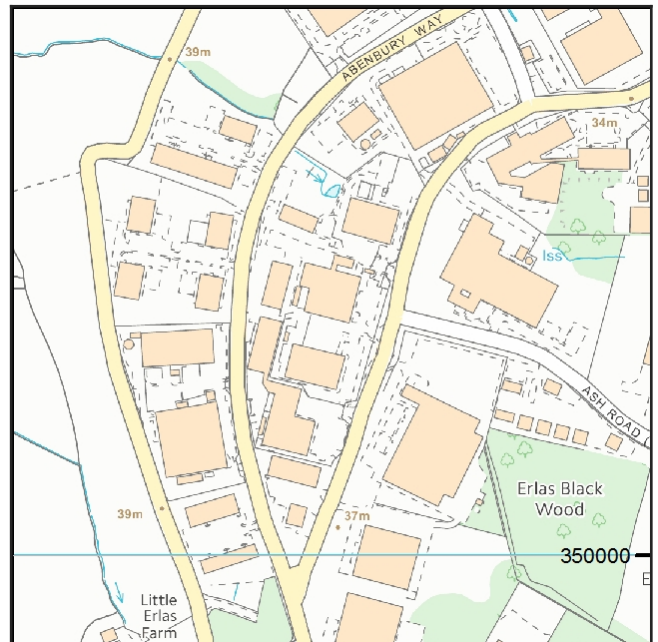
How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

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Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

 /company/the-coal-authority
 /thecoalauthority
 /coalauthority



Approximate position of property



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Summary

Has the search report highlighted evidence or potential of		
1	Past underground coal mining	No
2	Present underground coal mining	No
3	Future underground coal mining	Yes
4	Mine entries	No
5	Coal mining geology	No
6	Past opencast coal mining	No
7	Present opencast coal mining	No
8	Future opencast coal mining	No
9	Coal mining subsidence	No
10	Mine gas	No
11	Hazards related to coal mining	No
12	Withdrawal of support	Yes
13	Working facilities order	No
14	Payments to owners of former copyhold land	No
15	Information from the Cheshire Brine Subsidence Compensation Board	No

For detailed findings, please go to page 4.

Detailed findings

1. Past underground coal mining

The property is not within a surface area that could be affected by past underground mining.

2. Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3. Future underground coal mining

The property is not in an area where the Coal Authority has plans to grant a licence to remove coal using underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

4. Mine entries

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

5. Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6. Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7. Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8. Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9. Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

10. Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11. Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

12. Withdrawal of support

The property is in an area where a notice to withdraw support was given in 1972.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

13. Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14. Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

15. Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

Additional remarks

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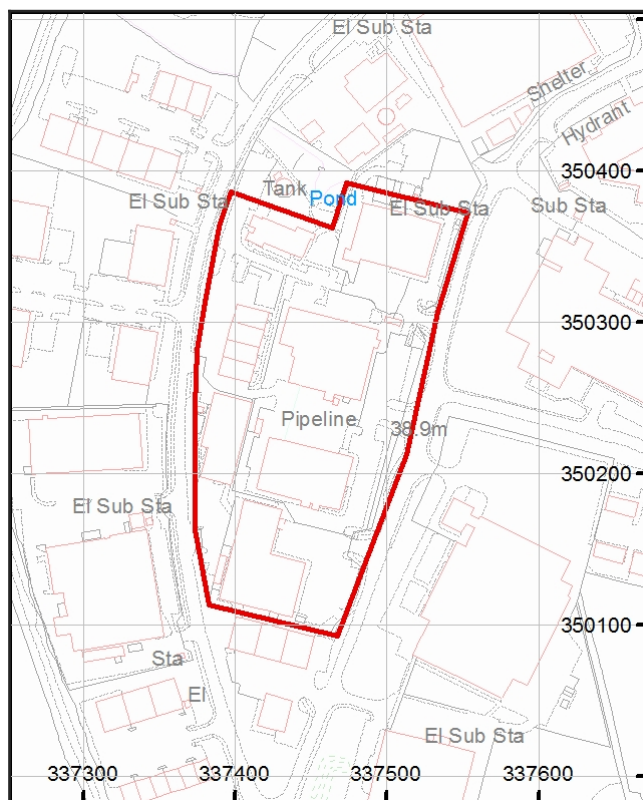
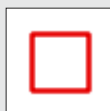
Alternative formats

If you would like this report in an alternative format, please contact our communications team.

Enquiry boundary

Key

Approximate position of enquiry boundary shown



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APPENDIX C

Envirocheck Report

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

123167900_1_1

Customer Reference:

1971/sdi

National Grid Reference:

337450, 350250

Slice:

A

Site Area (Ha):

3.74

Search Buffer (m):

1000

Site Details:

Ipsen Biopharm Ltd, Unit 10
Ash Road North
Wrexham Industrial Estate
WREXHAM
LL13 9JT

Client Details:

Mr M Scott
GroundSolve Ltd
Unit 1
Well House Barns
Chester Road
Bretton
Flintshire
CH4 0DH

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	35
Hazardous Substances	-
Geological	40
Industrial Land Use	42
Sensitive Land Use	63
Data Currency	64
Data Suppliers	70
Useful Contacts	71

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v50.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2		5	6	18
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls	pg 9		1		4
Integrated Pollution Prevention And Control	pg 10	2	5	5	4
Local Authority Integrated Pollution Prevention And Control	pg 14		2		3
Local Authority Pollution Prevention and Controls	pg 15		3	3	15
Local Authority Pollution Prevention and Control Enforcements	pg 18				2
Nearest Surface Water Feature	pg 18	Yes			
Pollution Incidents to Controlled Waters	pg 18		7	14	38
Prosecutions Relating to Authorised Processes	pg 28				1
Registered Radioactive Substances	pg 28	3			
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 29			2	3
Water Abstractions	pg 29			1	1 (*14)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 33	Yes	n/a	n/a	n/a
Drift Deposits	pg 34	1	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 34	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 34	Yes	n/a	n/a	n/a
Source Protection Zones	pg 34	2			
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 35				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 35				2
Local Authority Landfill Coverage	pg 35	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 35				1
Potentially Infilled Land (Water)	pg 35	5	7	15	37
Registered Landfill Sites	pg 39				1
Registered Waste Transfer Sites	pg 39				1
Registered Waste Treatment or Disposal Sites	pg 39				1
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 40	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 40	Yes			Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 40	Yes	n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 40	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 41		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 41	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 41		Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 41	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 41	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 42	2	34	33	127
Fuel Station Entries					
Points of Interest - Commercial Services	pg 60		4	4	13
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 62		1	4	4
Points of Interest - Public Infrastructure					
Points of Interest - Recreational and Environmental					
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 63		1	2	
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (W)	0	1	337450 350250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	0	1	337550 350350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	0	1	337500 350251
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	0	1	337455 350251
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (SE)	0	1	337500 350200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (S)	9	1	337400 350100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	28	1	337550 350200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (E)	29	1	337550 350250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	71	1	337350 350050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	85	1	337300 350100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (S)	92	1	337455 350000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	124	1	337550 350000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (SW)	140	1	337300 350000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	217	1	337400 350600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	321	1	337350 350700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	359	1	337450 350750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (N)	365	1	337400 350750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	408	1	337455 350800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (N)	420	1	337350 350800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A17SE (NW)	437	1	337100 350700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A7NE (SW)	457	1	337050 349800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A17SE (NW)	474	1	337100 350750

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	Discharge Consents Operator: Royalite Plastics Ltd Property Type: Processing Of Plastics Location: Royalite Plastics Ltd. Authority: Natural Resources Wales Catchment Area: Not Given Reference: Cm0134701 Permit Version: 2 Effective Date: 3rd October 1991 Issued Date: 3rd October 1991 Revocation Date: 28th May 1996 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Unknown Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	103	2	337305 350422
2	Discharge Consents Operator: Caparo Steel Products Ltd Property Type: Insulated Wires & Cables Location: Caparo Steel Products Ltd Ash Road, Ash Road North, Wrexham Ind Estate Wrexham, LI13 9jt Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0207601 Permit Version: 1 Effective Date: 6th February 1990 Issued Date: 6th February 1990 Revocation Date: 6th November 1995 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Clvrtd Sctn Of Trib Of Redwith Status: Authorisation revokedRevoked Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	167	2	337700 350450
3	Discharge Consents Operator: Caparo Steel Products Ltd Property Type: Insulated Wires & Cables Location: Caparo Steel Products Ltd Ash Road, Wrexham Ind Estate, Wrexham, LI13 9jt Authority: Natural Resources Wales Catchment Area: River Dee Reference: CM0069301 Permit Version: 2 Effective Date: 7th November 1995 Issued Date: 6th November 1995 Revocation Date: 24th April 2003 Discharge Type: Trade Effluent Discharge: Not Supplied Environment: Receiving Water: Un-Named Trib. Of Redwither Br Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	224	2	337700 350540
4	Discharge Consents Operator: Caparo Steel Products Ltd Property Type: Insulated Wires & Cables Location: Caparo Steel Products Ltd Ash Road, Wrexham Ind Estate, Wrexham, LI13 9jt Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0069301 Permit Version: 1 Effective Date: 17th February 1972 Issued Date: 17th February 1972 Revocation Date: 6th November 1995 Discharge Type: Trade Effluent Discharge: Not Supplied Environment: Receiving Water: Un-Named Trib. Of Redwither Br Status: Authorisation revokedRevoked Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	231	2	337720 350530

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Discharge Consents Operator: Caparo Steel Products Ltd Property Type: Insulated Wires & Cables Location: Caparo Steel Products Ltd Ash Road, Ash Road North, Wrexham Ind Estate Wrexham, L113 9jt Authority: Natural Resources Wales Catchment Area: River Dee Reference: CM0207601 Permit Version: 2 Effective Date: 7th November 1995 Issued Date: 6th November 1995 Revocation Date: Not Supplied Discharge Type: Miscellaneous Discharges - Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: Clvrtd Sctn Of Trib Of Redwith Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	236	2	337750 350500
5	Discharge Consents Operator: Mrs G A Allman Property Type: Domestic Property (Single) Location: Unit 2, Little Erlas, Erlas Lane, Abenbury, Wrexham, L113 0pe Authority: Natural Resources Wales Catchment Area: River Dee Reference: CG0337203 Permit Version: 1 Effective Date: 22nd April 1993 Issued Date: 22nd April 1993 Revocation Date: Not Supplied Discharge Type: Unspecified Discharge: Freshwater Stream/River Environment: Receiving Water: Redwith Brook Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	255	2	337260 349890
5	Discharge Consents Operator: Mrs G A Allman Property Type: Domestic Property (Single) Location: Unit 2, Little Erlas, Erlas Lane, Abenbury, Wrexham, L113 0pe Authority: Natural Resources Wales Catchment Area: River Dee Reference: CG0337201 Permit Version: 1 Effective Date: 22nd April 1993 Issued Date: 22nd April 1993 Revocation Date: Not Supplied Discharge Type: Unspecified Discharge: Freshwater Stream/River Environment: Receiving Water: Redwith Brook Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	264	2	337280 349870
5	Discharge Consents Operator: Mr Richard John Hewitt Property Type: Domestic Property (Single) Location: Unit 2, Little Erlas, Erlas Lane, Abenbury, Wrexham, L113 0pe Authority: Natural Resources Wales Catchment Area: River Dee Reference: CG0337202 Permit Version: 1 Effective Date: 22nd April 1993 Issued Date: 22nd April 1993 Revocation Date: Not Supplied Discharge Type: Unspecified Discharge: Freshwater Stream/River Environment: Receiving Water: Redwith Brook Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	264	2	337260 349880

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	Discharge Consents Operator: Royalite Plastics Ltd Property Type: Undefined Or Other Location: Wrexham Ind.Est. British Celanese S, British Celanese Site Superseded, Superseded By Cm01347.01 Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0052201 Permit Version: 1 Effective Date: 17th October 1968 Issued Date: 17th October 1968 Revocation Date: 26th February 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Un-Named Trib Of Redwither Bro Status: Consent expired Positional Accuracy: Located by supplier to within 100m	A14NW (E)	259	2	337800 350300
7	Discharge Consents Operator: J C B Transmissions Ltd Property Type: Mechanical Power Transmission Location: Jcb Transmissions Ltd Wrexham Ind E, Wrexham Ind Estate Wrexham Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0097601 Permit Version: 1 Effective Date: 25th July 1984 Issued Date: 25th July 1984 Revocation Date: 9th March 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Un-Named Trib. Of Dee Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	486	2	337910 350700
7	Discharge Consents Operator: J C B Transmissions Ltd Property Type: Mechanical Power Transmission Location: Jcb Transmissions Ltd Wrexham Ind E, Wrexham Ind Estate Wrexham Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0097602 Permit Version: 1 Effective Date: 25th July 1984 Issued Date: 25th July 1984 Revocation Date: 14th July 1994 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Un-Named Trib. Of Dee Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	492	2	337910 350710
8	Discharge Consents Operator: Pochins (Design And Build) Ltd Property Type: Undefined Or Other Location: Plot 6 Wrexham Ind Est, Clywedog Road Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0207401 Permit Version: 2 Effective Date: 29th January 1990 Issued Date: 29th January 1990 Revocation Date: 6th May 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Stream Nr Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A8SE (S)	574	2	337520 349520

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Discharge Consents Operator: Pochins (Design And Build) Ltd Property Type: Undefined Or Other Location: Plot 6 Wrexham Ind Est, Clywedog Road Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0207401 Permit Version: 1 Effective Date: 1st January 1901 Issued Date: 1st January 1901 Revocation Date: 28th January 1990 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Stream Nr Redwither Brook Status: Authorisation revokedRevoked Positional Accuracy: Located by supplier to within 10m	A8SE (S)	574	2	337520 349520
9	Discharge Consents Operator: Welsh Development Agency Property Type: Undefined Or Other Location: Wrexham Ind.Est.Dis.2 Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0093602 Permit Version: 1 Effective Date: 25th August 1982 Issued Date: 25th August 1982 Revocation Date: 28th April 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	679	2	338080 349800
9	Discharge Consents Operator: Welsh Development Agency Property Type: Undefined Or Other Location: Wrexham Ind. Estate - Discharg Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0093601 Permit Version: 1 Effective Date: 25th August 1982 Issued Date: 25th August 1982 Revocation Date: 28th April 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	697	2	338090 349780
10	Discharge Consents Operator: Welsh Development Agency Property Type: Undefined Or Other Location: Wrexham Ind. Estate - Discharg Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0093603 Permit Version: 1 Effective Date: 25th August 1982 Issued Date: 25th August 1982 Revocation Date: 28th April 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	694	2	338110 349830

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	Discharge Consents Operator: Welsh Development Agency Property Type: Undefined Or Other Location: Wrexham Ind Estate Factory/Coedaben, Factory/Coedaben Road Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0064501 Permit Version: 1 Effective Date: 27th April 1971 Issued Date: 27th April 1971 Revocation Date: 28th April 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	705	2	337850 349500
12	Discharge Consents Operator: Welsh Development Agency Property Type: Undefined Or Other Location: Wrexham Ind. Estate - Discharg Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0093604 Permit Version: 1 Effective Date: 25th August 1982 Issued Date: 25th August 1982 Revocation Date: 28th April 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	718	2	338150 349870
12	Discharge Consents Operator: Welsh Development Agency Property Type: Undefined Or Other Location: Wrexham Ind.Est.Dis.6 Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0093605 Permit Version: 1 Effective Date: 25th August 1982 Issued Date: 25th August 1982 Revocation Date: 28th April 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	724	2	338160 349880
13	Discharge Consents Operator: Ball Packaging Europe Uk Ltd Property Type: Undefined Or Other Location: Continental Can Co Ltd Authority: Natural Resources Wales Catchment Area: River Dee Reference: CM0085401 Permit Version: 2 Effective Date: 9th March 1994 Issued Date: 9th March 1994 Revocation Date: 21st January 2004 Discharge Type: Trade Effluent Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A9SW (SE)	741	2	337950 349530

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	Discharge Consents Operator: Continental Can Company Ltd Property Type: Undefined Or Other Location: Continental Can Co Ltd Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0085401 Permit Version: 1 Effective Date: 30th April 1979 Issued Date: 30th April 1979 Revocation Date: 8th March 1994 Discharge Type: Trade Effluent Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Authorisation revokedRevoked Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	741	2	337950 349530
14	Discharge Consents Operator: Welsh Development Agency Property Type: Undefined Or Other Location: Wrexham Ind. Estate - Discharg Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0093606 Permit Version: 1 Effective Date: 25th August 1982 Issued Date: 25th August 1982 Revocation Date: 28th April 1993 Discharge Type: Miscellaneous Discharges - Surface Water Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A14SE (SE)	741	2	338190 349910
14	Discharge Consents Operator: Welsh Development Agency Property Type: Undefined Or Other Location: Wrexham Ind.Est.Dis.8. Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0093607 Permit Version: 1 Effective Date: 25th August 1982 Issued Date: 25th August 1982 Revocation Date: 28th April 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A14SE (E)	748	2	338210 349940
15	Discharge Consents Operator: Welsh Development Agency Property Type: Other Electronic Equipment Location: Pcb Containment Cell Marlborough Ro, Marlborough Road, Wrexham Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0149901 Permit Version: 1 Effective Date: 13th January 1987 Issued Date: 13th January 1987 Revocation Date: 27th March 1995 Discharge Type: Trade Effluent Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: Authorisation revokedRevoked Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	744	2	338100 349700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	Discharge Consents Operator: Welsh Assembly Government Property Type: Other Electronic Equipment Location: Pcb Containment Cell Marlborough Ro, Marlborough Road, Wrexham Industrial Estate, Wrexham Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0149901 Permit Version: 3 Effective Date: 24th August 2005 Issued Date: 23rd August 2005 Revocation Date: Not Supplied Discharge Type: Trade Effluent Discharge: Freshwater Stream/River Environment: Receiving Water: Redwither Brook Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	751	2	338150 349780
16	Discharge Consents Operator: Welsh Development Agency Property Type: Other Electronic Equipment Location: Pcb Containment Cell Marlborough Ro, Marlborough Road, Wrexham Industrial Estate, Wrexham Authority: Natural Resources Wales Catchment Area: River Dee Reference: CM0149901 Permit Version: 2 Effective Date: 28th March 1995 Issued Date: 28th March 1995 Revocation Date: 23rd August 2005 Discharge Type: Trade Effluent Discharge: Not Supplied Environment: Receiving Water: Redwither Brook Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	751	2	338150 349780
17	Discharge Consents Operator: Royalite Plastics Ltd Property Type: Undefined Or Other Location: Wrexham Ind Estate British Celanese, British Celanese Site Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0001801 Permit Version: 1 Effective Date: 31st January 1966 Issued Date: 31st January 1966 Revocation Date: 26th February 1993 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Trib.Of Redwither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	838	2	338130 349580
18	Discharge Consents Operator: Norwest Holst Group Property Type: Civil Engineering Location: Wrexham Ind Estate Conren Ltd Authority: Natural Resources Wales Catchment Area: River Dee Reference: Cm0086201 Permit Version: 1 Effective Date: 4th October 1979 Issued Date: 4th October 1979 Revocation Date: 26th April 1995 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Trib. Of Rewither Brook Status: Consent expired Positional Accuracy: Located by supplier to within 100m	A9SW (SE)	867	2	338100 349500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	Discharge Consents Operator: Mrs Sarah Jones Property Type: Domestic Property (Single) Location: Bryn Villa, Hugmore Lane, Llanypwll, Wrexham, Wales, LL13 9ye Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Cg0447601 Permit Version: 1 Effective Date: 1st December 2006 Issued Date: 1st September 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Unnamed Watercourse Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A23SE (N)	899	2	337705 351260
20	Prosecutions Relating to Controlled Waters Location: Unit 1, Unit 1, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UZ Prosecution Text: Ea Welsh Data 02/09/1999 (Legal Ref: R809), Polluting A Tributary Of Red Wither Brook. Offence Committed 05/08/1997. Given A Caution. Prosecution Act: Wra91 S85 Hearing Date: Not Supplied Verdict: Guilty Fine: Not Supplied Cost: Not Supplied Positional Accuracy: Manually positioned to the road within the address or location	A13NE (N)	150	3	337517 350535
21	Prosecutions Relating to Controlled Waters Location: Coed Aben Road, Coed Aben Road, WREXHAM, Clwyd, LL13 9UH Prosecution Text: Ea Welsh Data 02/09/1999, Polluting Red Wither Brook With Trade Effluent Pollutants. Offence Committed 06/11/1991. Given A Caution. Prosecution Act: Wra91 S85 Hearing Date: Not Supplied Verdict: Guilty Fine: Not Supplied Cost: Not Supplied Positional Accuracy: Manually positioned to the road within the address or location	A8NE (S)	489	3	337665 349645
22	Prosecutions Relating to Controlled Waters Location: Red Wither Brook, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9 Prosecution Text: Liquid Waste Collected And Flushed Into A Septic Tank Designed For Domestic Waste Prosecution Act: Wra91 S85(1) & S85(6) Hearing Date: 14th February 2003 Verdict: Guilty Fine: 100000 Cost: 114818 Positional Accuracy: Manually positioned within the geographical locality	A9SE (SE)	941	3	338172 349469
23	Integrated Pollution Controls Name: Activair Europe Location: 11 Ash Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UF Authority: Environment Agency, Welsh Region Permit Reference: AR3402 Dated: 28th April 1995 Process Type: IPC new application Description: 4.5 A (H) Inorganic Chemical processes within the Chemical Industry Status: Application received by HMIP but is not yet authorisedNot Yet Authorised Positional Accuracy: Manually positioned to the road within the address or location	A13SE (S)	17	3	337497 350127
24	Integrated Pollution Controls Name: Stadex Industries Ltd Location: Coed Aben Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UH Authority: Environment Agency, Welsh Region Permit Reference: BF1220 Dated: 8th June 1999 Process Type: IPC new application Description: 6.2 A (D) Di-isocyanate processes within Miscellaneous Industries Status: Authorisation revokedRevoked Positional Accuracy: Manually positioned to the road within the address or location	A8SE (S)	602	3	337720 349546

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	Integrated Pollution Controls Name: Hydro Aluminium Deeside Ltd Location: Bridge Road South, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9SQ Authority: Environment Agency, Welsh Region Permit Reference: AS4117 Dated: 4th December 1995 Process Type: IPC application for process that was regulated by HMIP for air releases under previous legislation Description: 2.2 A (A) Non-ferrous Metal processes within the Metal Industry Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A8SE (S)	838	3	337619 349268
25	Integrated Pollution Controls Name: Hydro Aluminium Deeside Ltd Location: Bridge Road South, Wrexham Industrial Estate, WREXHAM, LL13 9PS Authority: Environment Agency, Welsh Region Permit Reference: AX6443 Dated: 1st May 1997 Process Type: IPC major (substantial) variation Description: 2.2 A (A) Non-ferrous Metal processes within the Metal Industry Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A8SE (S)	843	3	337619 349263
25	Integrated Pollution Controls Name: Hydro Aluminium Deeside Ltd Location: Bridge Road, Wrexham Industrial Estate, WREXHAM, Wrexham, LL13 9PS Authority: Environment Agency, Welsh Region Permit Reference: BD8312 Dated: 24th November 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 2.2 A (A) Non-ferrous Metal processes within the Metal Industry Status: Revoked - Now IPPC Positional Accuracy: Automatically positioned to the address	A8SE (S)	844	3	337624 349263
26	Integrated Pollution Prevention And Control Name: Ipsen Biopharm Ltd Location: Wrexham Pharmaceutical Works, Unit 9, Ash Road North, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UF Authority: Natural Resources Wales Permit Reference: JP3038HV Original Permit Ref: Sp3030Lz Effective Date: 19th December 2012 Status: Effective Application Type: Variation App. Sub Type: Simple Standard Variation Positional Accuracy: Automatically positioned to the address Activity Code: 4.4 A(1) (A) Activity Description: Plant Health & Biocides; Producing Plant Health Products/Biocides Primary Activity: Y	A13NW (N)	0	2	337447 350289
26	Integrated Pollution Prevention And Control Name: Ipsen Biopharm Ltd Location: Unit 9, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Authority: Natural Resources Wales Permit Reference: SP3030LZ Original Permit Ref: Sp3030Lz Effective Date: 4th December 2006 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 4.4 A(1) (A) Activity Description: Plant Health & Biocides; Producing Plant Health Products/Biocides Primary Activity: Y	A13NW (N)	0	2	337447 350289

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	Integrated Pollution Prevention And Control Name: Almetron Ltd Location: Unit 24, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Authority: Natural Resources Wales Permit Reference: YP3736UX Original Permit Ref: Yp3736ux Effective Date: 28th November 2007 Status: Effective Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 4.2 A(1) (A) (IV) Activity Description: Inorganic Chemicals; Salts Eg Ammonium Chloride Primary Activity: Y Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N Activity Code: 4.1 A(1) (A) (IV) Activity Description: Organic Chemicals; Nitrogen Containing Compounds Eg Amines Primary Activity: N	A13NW (NW)	117	2	337269 350354
28	Integrated Pollution Prevention And Control Name: Gillette Uk Ltd Location: Wrexham Zinc Air Cell, Duracell Global Business Manag, 11 Ash Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Authority: Natural Resources Wales Permit Reference: UP3431UH Original Permit Ref: Bk3824ix Effective Date: 6th November 2007 Status: Surrender Effective Application Type: Surrender App. Sub Type: Whole Positional Accuracy: Manually positioned to the address or location Activity Code: 4.2 A(1) (F) Activity Description: Inorganic Chemicals; Using Mercury/Cadmium And Compounds If Release Into Air Primary Activity: Y Activity Code: 4.2 A(1) (A) (V) Activity Description: Inorganic Chemicals; Non Metals Etc Eg Calcium Carbide Primary Activity: N	A13NE (NE)	151	2	337700 350399
28	Integrated Pollution Prevention And Control Name: Gillette Uk Ltd Location: Wrexham Zinc Air Cell, Duracell Global Business Manag, Wrexham, Clwyd, LL13 9UF Authority: Natural Resources Wales Permit Reference: AP3933LR Original Permit Ref: Bk3824ix Effective Date: 3rd March 2006 Status: Superseded By Variation Application Type: Variation App. Sub Type: Standard Positional Accuracy: Located by supplier to within 100m Activity Code: 4.2 A(1) (A) (V) Activity Description: Inorganic Chemicals; Non Metals Etc Eg Calcium Carbide Primary Activity: N Activity Code: 4.2 A(1) (F) Activity Description: Inorganic Chemicals; Using Mercury/Cadmium And Compounds If Release Into Air Primary Activity: Y	A13NE (NE)	151	2	337700 350400
28	Integrated Pollution Prevention And Control Name: Gillette Uk Ltd Location: Wrexham Zinc Air Cell, Duracell Global Business Manag, 11 Ash Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Authority: Natural Resources Wales Permit Reference: Bk3824ix Original Permit Ref: Bk3824ix Effective Date: 9th October 2003 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Located by supplier to within 100m Activity Code: 4.2 A(1) (F) Activity Description: Inorganic Chemicals; Using Mercury/Cadmium And Compounds If Release Into Air Primary Activity: Y Activity Code: 4.2 A(1) (A) (V) Activity Description: Inorganic Chemicals; Non Metals Etc Eg Calcium Carbide Primary Activity: N	A13NE (NE)	151	2	337700 350400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	Integrated Pollution Prevention And Control Name: Caparo Steel Products Limited Location: Wrexham Wire, Po Box 87, Ash Road North,,Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9JT Authority: Natural Resources Wales Permit Reference: KP3231ZB Original Permit Ref: Bx6774in Effective Date: 28th March 2013 Status: Effective Application Type: Variation App. Sub Type: Minor Positional Accuracy: Located by supplier to within 100m Activity Code: 5.4 A(1) a) (ii) Activity Description: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Primary Activity: N Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N Activity Code: 2.3 A(1) (A) Activity Description: Surface Treating Metals And Plastics; Electrolytic/Chemical Greater Than 30 Cubic Metres Primary Activity: Y	A13NE (NE)	231	2	337700 350550
30	Integrated Pollution Prevention And Control Name: Caparo Wire Ltd Location: Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Authority: Natural Resources Wales Permit Reference: ZP3336LN Original Permit Ref: Bx6774in Effective Date: 26th June 2006 Status: Superseded By Variation Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 5.3 A(1) (C) (II) Activity Description: Other Waste Disposal; Non-Hazardous Waste >50T/D By Physico-Chemical Treatment Primary Activity: N Activity Code: 2.3 A(1) (A) Activity Description: Surface Treating Metals And Plastics; Electrolytic/Chemical Greater Than 30 Cubic Metres Primary Activity: Y	A18SE (NE)	291	2	337733 350600
30	Integrated Pollution Prevention And Control Name: Caparo Wire Limited Location: Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Authority: Natural Resources Wales Permit Reference: Bx6774in Original Permit Ref: Bx6774in Effective Date: 26th November 2004 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 2.3 A(1) (A) Activity Description: Surface Treating Metals And Plastics; Electrolytic/Chemical Greater Than 30 Cubic Metres Primary Activity: Y Activity Code: 5.3 A(1) (C) (II) Activity Description: Other Waste Disposal; Non-Hazardous Waste >50T/D By Physico-Chemical Treatment Primary Activity: N	A18SE (NE)	291	2	337733 350600
31	Integrated Pollution Prevention And Control Name: Oscar Mayer Limited Location: Rowan Foods, Rowan Foods Limited, Ash Road South,,Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UG Authority: Natural Resources Wales Permit Reference: PP3538VJ Original Permit Ref: Wp3534gx Effective Date: 25th June 2014 Status: Effective Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (D) (I) Activity Description: Animal Vegetable & Food; Treating Etc Animal Raw Materials (Not Milk) For Food >75T/D Primary Activity: Y Activity Code: 5.4 A(1) a) (ii) Activity Description: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Primary Activity: N	A14NW (E)	307	2	337838 350260

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
31	Integrated Pollution Prevention And Control Name: Oscar Mayer Limited Location: Rowan Foods, Rowan Foods Limited, Ash Road South,,Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UG Authority: Natural Resources Wales Permit Reference: WP3131ZF Original Permit Ref: Wp3534gx Effective Date: 26th March 2013 Status: Superseded By Variation Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 5.4 A(1) a) (ii) Activity Description: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Primary Activity: N Activity Code: 6.8 A(1) (D) (I) Activity Description: Animal Vegetable & Food; Treating Etc Animal Raw Materials (Not Milk) For Food >75T/D Primary Activity: Y	A14NW (E)	307	2	337838 350260
31	Integrated Pollution Prevention And Control Name: Oscar Mayer Limited Location: Rowan Foods Ea/Epr/Wp3534gx/A001, Rowan Foods Limited, Ash Road South,,Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UG Authority: Natural Resources Wales Permit Reference: WP3534GX Original Permit Ref: Wp3534gx Effective Date: 10th September 2009 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (D) (I) Activity Description: Animal Vegetable & Food; Treating Etc Animal Raw Materials (Not Milk) For Food >75T/D Primary Activity: Y Activity Code: 5.3 A(1) (C) (II) Activity Description: Other Waste Disposal; Non-Hazardous Waste >50T/D By Physico-Chemical Treatment Primary Activity: N	A14NW (E)	307	2	337838 350260
32	Integrated Pollution Prevention And Control Name: Hydro Aluminium Deeside Ltd Location: Wrexham Aluminium Processing Ea/Epr/Bk3638if/V002, Bridge Road, Wrexham Industrial Estate,,, WREXHAM, LL13 9SQ Authority: Natural Resources Wales Permit Reference: HP3338VH Original Permit Ref: Bk3638if Effective Date: 20th June 2014 Status: Effective Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 2.2 A(1) (B) (I) Activity Description: Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others Primary Activity: N Activity Code: 2.2 A(1) (B) (II) Activity Description: Non-Ferrous Metals; Melting With Capacity Greater Or Equal To 5T Primary Activity: Y	A8SE (S)	838	2	337619 349268
32	Integrated Pollution Prevention And Control Name: Hydro Aluminium Deeside Ltd Location: Wrexham Aluminium Processing Ea/Epr/Bk3638if/V002, Bridge Road, Wrexham Industrial Estate,,, WREXHAM, LL13 9SQ Authority: Natural Resources Wales Permit Reference: BP3934LJ Original Permit Ref: Bk3638if Effective Date: 14th July 2009 Status: Superseded By Variation Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 2.2 A(1) (B) (I) Activity Description: Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others Primary Activity: N Activity Code: 2.2 A(1) (B) (II) Activity Description: Non-Ferrous Metals; Melting With Capacity Greater Or Equal To 5T Primary Activity: Y	A8SE (S)	838	2	337619 349268

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	Integrated Pollution Prevention And Control Name: Hydro Aluminium Deeside Ltd Location: Wrexham Aluminium Processing Ea/Epr/Bk3638if/V002, Bridge Road, Wrexham Industrial Estate,,, WREXHAM, LL13 9SQ Authority: Natural Resources Wales Permit Reference: Bk3638if Original Permit Ref: Bk3638if Effective Date: 15th March 2002 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 2.2 A(1) (B) (II) Activity Description: Non-Ferrous Metals; Melting With Capacity Greater Or Equal To 5T Primary Activity: Y Activity Code: 2.2 A(1) (B) (I) Activity Description: Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others Primary Activity: N	A8SE (S)	838	2	337619 349268
32	Integrated Pollution Prevention And Control Name: Hydro Aluminium Deeside Ltd Location: Wrexham Aluminium Processing Ea/Epr/Bk3638if/V002, Bridge Road, Wrexham Industrial Estate,,, WREXHAM, LL13 9SQ Authority: Natural Resources Wales Permit Reference: FP3836WE Original Permit Ref: Bk3638if Effective Date: Not Supplied Status: Valid Application Type: Variation App. Sub Type: Standard Positional Accuracy: Automatically positioned to the address Activity Code: 2.2 A(1) (B) (I) Activity Description: Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others Primary Activity: N Activity Code: 2.2 A(1) (B) (II) Activity Description: Non-Ferrous Metals; Melting With Capacity Greater Or Equal To 5T Primary Activity: Y	A8SE (S)	838	2	337619 349268
33	Local Authority Integrated Pollution Prevention And Control Name: Cytec Engineered Materials Ltd Location: Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9uz Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/02/CEM Dated: 6th April 2004 Process Type: Other Activities Description: SG6 Status: Permit Issued Positional Accuracy: Manually positioned to the address or location	A13NE (N)	124	4	337550 350500
33	Local Authority Integrated Pollution Prevention And Control Name: Cytec Engineered Materials Ltd Location: Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/02/CEM Dated: Not Supplied Process Type: Other Activities Description: Coating manufacturing process Status: Permit Issued Positional Accuracy: Manually positioned to the address or location	A13NE (N)	124	4	337550 350500
34	Local Authority Integrated Pollution Prevention And Control Name: Exopack Advanced Coatings Location: Wrexham Industrial Estate, Wrexham, LL13 9uf Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/04/IT(V1) Dated: 30th May 2002 Process Type: Other Activities Description: Coating Process Status: Permit Issued Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	545	4	338023 350647
34	Local Authority Integrated Pollution Prevention And Control Name: Intelicoat Technologies Location: Wrexham Industrial Estate, Wrexham, LL13 9UF Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/04/14 Dated: Not Supplied Process Type: Other Activities Description: Coating manufacturing process Status: Permit Issued Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	548	4	338032 350637

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
35	Local Authority Integrated Pollution Prevention And Control Name: Ball Packaging Europe Ltd Location: Bridge Road, Wrexham Industrial Estate, Wrexham Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/01/BP Dated: 6th January 2004 Process Type: Other Activities Description: Coating of Metal Packaging Status: Permit Issued Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	594	4	337901 349687
36	Local Authority Pollution Prevention and Controls Name: Westminster Pine Location: Unit 22, Site 5 Abenbury Way, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: NOT GIVEN Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/33 Wood coating Status: Not Supplied Positional Accuracy: Manually positioned within the geographical locality	A13SW (S)	49	4	337383 350063
37	Local Authority Pollution Prevention and Controls Name: Cytec Engineered Materials Ltd Location: Abenbury Way, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UZ Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/02/CEM Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating Status: Transferred to LAIPPC Positional Accuracy: Manually positioned to the address or location	A13NE (N)	124	4	337550 350500
37	Local Authority Pollution Prevention and Controls Name: Cytec Engineered Materials Ltd Location: Abenbury Way, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UZ Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/02/CEM Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/10 Coating manufacturing Status: Transferred to LAIPPC Positional Accuracy: Manually positioned to the address or location	A13NE (N)	124	4	337550 350500
38	Local Authority Pollution Prevention and Controls Name: Westminster Bedsteads Location: Unit 3 Abenbury Way, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UZ Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: Wcbc/Njm/03/026 Dated: 7th April 1992 Process Type: Local Authority Air Pollution Control Description: PG6/33 Wood coating Status: Authorised Positional Accuracy: Manually positioned to the road within the address or location	A18SE (NE)	308	4	337644 350666
38	Local Authority Pollution Prevention and Controls Name: Westminster Bedsteads Location: Unit 3 Abenbury Way, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UZ Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: Wmbc/Hjb/01/003 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/2 Manufacture of timber and wood-based products Status: Not Supplied Positional Accuracy: Manually positioned to the road within the address or location	A18SE (NE)	308	4	337644 350666
39	Local Authority Pollution Prevention and Controls Name: Jcb Transmissions Location: Unit 4 Abenbury Way, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UF Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/PG6/23/JCB/V1 Dated: 6th August 1999 Process Type: Local Authority Air Pollution Control Description: PG6/23 Coating of metal and plastic Status: Authorised Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	423	4	337844 350678

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	Local Authority Pollution Prevention and Controls Name: Exopack Advanced Coatings Location: Ash Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UF Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/04/IT(V1) Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/14 Film coating processes Status: Transferred to LAIPPC Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	547	4	338031 350637
40	Local Authority Pollution Prevention and Controls Name: Exopack Advanced Coatings Location: Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9uf Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/04/IT(V1) Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/10 Coating manufacturing Status: Transferred to LAIPPC Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	547	4	338031 350637
41	Local Authority Pollution Prevention and Controls Name: Trittech Precision Products Limited Location: Bridge Road North, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9PS Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC-PG2-4-TP(V2) Dated: 10th November 1993 Process Type: Local Authority Air Pollution Control Description: PG2/3 Electrical and rotary furnaces Status: Authorised Positional Accuracy: Automatically positioned to the address	A9NW (SE)	593	4	337901 349688
41	Local Authority Pollution Prevention and Controls Name: Lloyds Animal Feeds (Western) Ltd Location: Bridge Road North, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9PS Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/PG6/26(1)V2 Dated: 21st October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/26 Animal feed compounding Status: Transferred to LAIPPC Positional Accuracy: Automatically positioned to the address	A9NW (SE)	593	4	337901 349688
41	Local Authority Pollution Prevention and Controls Name: Ball Packaging Europe Ltd Location: Bridge Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9PS Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/IPPC/01/BP(v2) Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/7 Printing and coating of metal packaging Status: Transferred to LAIPPC Positional Accuracy: Automatically positioned to the address	A9NW (SE)	593	4	337901 349688
42	Local Authority Pollution Prevention and Controls Name: Rexham UK Ltd Location: Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WMBC/HJB/03/041 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating Status: Authorisation revokedRevoked Positional Accuracy: Manually positioned within the geographical locality	A19SW (NE)	609	4	338105 350626
43	Local Authority Pollution Prevention and Controls Name: Applied Component Technology Ltd Location: 54 Clywedog Road South, Wrexham Industrial Estate, Wrexham, LL13 9XS Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/PG6/29/CO v2 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/29 Di-isocyanate processes Status: Permitted Positional Accuracy: Manually positioned to the address or location	A7SE (SW)	610	4	337124 349561

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
44	Local Authority Pollution Prevention and Controls Name: Rexham Uk Ltd Location: Ash Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UF Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: Wmbc/Hjb/03/027 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/14 Film coating processes Status: Authorised Positional Accuracy: Manually positioned to the road within the address or location	A19SW (NE)	625	4	338050 350750
45	Local Authority Pollution Prevention and Controls Name: Hoya Lens Uk Ltd Location: Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UA Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: Not Given Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/29 Di-isocyanate processes Status: Authorised Positional Accuracy: Manually positioned to the address or location	A14NE (E)	638	4	338170 350530
45	Local Authority Pollution Prevention and Controls Name: Hoya Lens Uk Ltd Location: Fourth Road, Wrexham Industrial Estate, Wrexham, LL13 9ua Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/PG6/45/HL1 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/45 Surface cleaning Status: Permitted Positional Accuracy: Manually positioned to the address or location	A14NE (E)	638	4	338170 350530
46	Local Authority Pollution Prevention and Controls Name: Williams Service & Steve Williams Transport Location: Unit 11 Bridge Way Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/PG1/1/WST Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input Status: Permitted Positional Accuracy: Manually positioned to the address or location	A8SE (S)	738	4	337701 349392
47	Local Authority Pollution Prevention and Controls Name: Deeside Aluminium Ltd Location: Bridge Road South, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9SQ Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: AE8267 Dated: 23rd March 1992 Process Type: Application under SI 318, 1989 The Control of Industrial Air Pollution (Registration of Works) Regulations 1989 Description: Processes registered under S. 9 of the Alkali Act 1906 and S. 5 of the Health & Safety at Work Act 1974 Status: Authorised Positional Accuracy: Automatically positioned to the address	A8SE (S)	838	4	337619 349268
48	Local Authority Pollution Prevention and Controls Name: Orchid Dry Cleaners Ltd Location: Unit A4 Abbey Close, Redwither Business Park, Wrexham, LL19 9XG Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/PG6/46/ODC Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Manually positioned to the address or location	A14NE (E)	877	4	338407 350567
49	Local Authority Pollution Prevention and Controls Name: K D Products Ltd Location: Redwither Tower, Redwither Industrial Complex, WREXHAM, Clwyd, LL13 9UE Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/PG6/2(1) Dated: 14th April 2000 Process Type: Local Authority Air Pollution Control Description: PG6/2 Manufacture of timber and wood-based products Status: Authorised Positional Accuracy: Manually positioned to the address or location	A14SE (E)	925	4	338448 350144

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	Local Authority Pollution Prevention and Controls Name: Lloyds Animal Feeds (Western) Ltd Location: Bridge Road North, Wrexham Industrial Estate, Wrexham, LI13 9ps Authority: Wrexham County Borough Council, Environmental Health Department Permit Reference: WCBC/PG6/26(1)V2 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/28 Rubber processes Status: Permitted Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	961	4	338320 349650
51	Local Authority Pollution Prevention and Control Enforcements Location: Bridge North Road, Wrexham Industrial Estate, Wrexham Type: Air Pollution Control Enforcement Notice Reference: WCBC-PG2-4-TP Date Issued: 1st March 2007 Enforcement Date: Not Supplied Details: Not Supplied Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	594	4	337901 349687
52	Local Authority Pollution Prevention and Control Enforcements Location: Redwither Tower, Redwither Industrial Estate, Wrexham Type: Air Pollution Control Enforcement Notice Reference: WCBC/PG6/2(1) Date Issued: Not Supplied Enforcement Date: 18th June 2007 Details: Not Supplied Positional Accuracy: Manually positioned to the address or location	A14SE (E)	925	4	338448 350144
	Nearest Surface Water Feature	A13NE (N)	0	-	337466 350379
53	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Grounds Of Speywood, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Light Oil Note: Deliberate; Afon Clywedog Incident Date: 30th June 1998 Incident Reference: 36161 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13NW (N)	117	3	337400 350500
54	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Factory Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Not Supplied Incident Date: 16th December 1991 Incident Reference: 3381 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A13NE (N)	124	3	337550 350500
54	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Foam/Soap Suds Note: Not Supplied Incident Date: 10th October 1995 Incident Reference: 26344 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	137	3	337600 350500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
55	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Units 412 And 414, Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Blockage Incident Date: 9th June 1997 Incident Reference: 32646 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13NE (E)	164	3	337700 350300
55	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Units 412 & 414, Wrexham Industrial Estate Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Redwither Brook; Overflow Incident Date: 9th June 1997 Incident Reference: 32646 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13NE (E)	165	3	337700 350295
56	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Small Spillage, Of Acetone And, Chlorinated Authority: Environment Agency, Welsh Region Pollutant: Heavy Fuel Oil Note: Not Supplied Incident Date: 23rd September 1994 Incident Reference: 21091 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	203	3	337650 350550
57	Pollution Incidents to Controlled Waters Property Type: Warehouses Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Accidental Spillage/Leakage Incident Date: 21st August 1991 Incident Reference: 3160 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leakage Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	236	3	337750 350500
58	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Surface Water Outfall Location: Deepak, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Accidental Spillage/Leakage Incident Date: 25th September 1994 Incident Reference: 21118 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	349	3	337400 349750
59	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Grounds Of, Westfield Pill Authority: Environment Agency, Welsh Region Pollutant: Farm Effluent/Slurry Note: Poor Management Control Incident Date: 12th March 1996 Incident Reference: 27779 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	355	3	337700 350695

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Surface Water Outfall Location: Grounds Of, Westminster, Pine Authority: Environment Agency, Welsh Region Pollutant: Farm Effluent/Slurry Note: Poor Operational Practise Incident Date: 12th March 1996 Incident Reference: 27779 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	360	3	337700 350700
60	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Stadex, Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Poor Management Incident Date: 23rd April 1997 Incident Reference: 31952 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NE (SE)	407	3	337750 349800
61	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Opposite Cafe, On Industrial Est Authority: Environment Agency, Welsh Region Pollutant: Oils - Petrol Note: Not Supplied Incident Date: 3rd December 1995 Incident Reference: 26923 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	414	3	337600 349700
61	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Natural Foam Note: Not Supplied Incident Date: 30th July 1995 Incident Reference: 25248 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	419	3	337600 349695
62	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Milk/Creamery Wastes Note: Redwither Brook; Spillage Incident Date: 11th August 1997 Incident Reference: 33200 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Poor Management Control Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	421	3	337300 349700
63	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Adjacent To Coachman Foods Authority: Environment Agency, Welsh Region Pollutant: Oils - Fats And Grease Note: Not Supplied Incident Date: 10th April 1997 Incident Reference: 31820 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	452	3	337800 350750

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
64	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Surface Water Outfall Location: Gkk Plastics, Clywed Authority: Environment Agency, Welsh Region Pollutant: Agricultural: Carcasses Note: Vandalism Incident Date: 24th October 1994 Incident Reference: 21477 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (SE)	456	3	337700 349700
64	Pollution Incidents to Controlled Waters Property Type: Warehouses Location: Stadex Authority: Environment Agency, Welsh Region Pollutant: Sewage - Septic Tank Effluent Note: Poor Operational Practise Incident Date: 5th October 1994 Incident Reference: 21316 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NE (SE)	460	3	337700 349695
64	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Stadex Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Poor Operational Practise Incident Date: 26th November 1991 Incident Reference: 1142 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (SE)	463	3	337705 349695
65	Pollution Incidents to Controlled Waters Property Type: Waste Handling Facilities Location: Wjc Construction Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Poor Operational Practise Incident Date: 16th April 1991 Incident Reference: 2612 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	493	3	337500 349600
65	Pollution Incidents to Controlled Waters Property Type: Waste Handling Facilities Location: Wjc Construction Authority: Environment Agency, Welsh Region Pollutant: Oils - Petrol Note: Poor Operational Practise Incident Date: 16th April 1991 Incident Reference: 2612 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	498	3	337500 349595
66	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Sewage Treatment Works Location: Ash Road Authority: Environment Agency, Welsh Region Pollutant: Sewage - Septic Tank Effluent Note: Weather Incident Date: 20th May 1996 Incident Reference: 28406 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leachate Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	500	3	338000 350595

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
66	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Sewage Treatment Works Location: Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Sewage - Treated Effluent Note: Weather Incident Date: 20th May 1996 Incident Reference: 28406 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leachate Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	503	3	338000 350600
66	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Ash Road Behind, Nanttyffyllon Right Hand Bank Authority: Environment Agency, Welsh Region Pollutant: Sewage - Septic Tank Effluent Note: Weather Incident Date: 20th May 1996 Incident Reference: 28406 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leachate Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	505	3	338005 350595
66	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Wrexham Industrial Estate Authority: Environment Agency, Welsh Region Pollutant: Sewage - Treated Effluent Note: Weather Incident Date: 20th May 1996 Incident Reference: 28406 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leachate Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	507	3	338005 350600
67	Pollution Incidents to Controlled Waters Property Type: Council Premises Location: Blocked Manhole, At Con Can On, Wrexham Estate Authority: Environment Agency, Welsh Region Pollutant: Farm Effluent/Slurry Note: Blocked Sewer Incident Date: 7th December 1994 Incident Reference: 21916 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	514	3	337800 349700
67	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Continental Can, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Sewage - Septic Tank Effluent Note: Not Supplied Incident Date: 28th November 1995 Incident Reference: 26963 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	518	3	337800 349695
67	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Continental Can, Wrexham Industrial Estate, MARCHWIEL Authority: Environment Agency, Welsh Region Pollutant: Miscellaneous - Fire water / Foam Note: Afon Clywedog; Run-Off Incident Date: 6th December 1997 Incident Reference: 34279 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	548	3	337850 349700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
67	Pollution Incidents to Controlled Waters Property Type: Waste Handling Facilities Location: Down Stream Of Stadex, Industries Authority: Environment Agency, Welsh Region Pollutant: Farm Land Run-Off Note: Inadequate Design/Capacity Incident Date: 6th November 1991 Incident Reference: 3274 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	553	3	337800 349650
68	Pollution Incidents to Controlled Waters Property Type: Not Given Location: At Jcb, Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Redwither Brook; Run-Off Incident Date: 22nd September 1997 Incident Reference: 33758 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Poor Management Control Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	521	3	337850 350800
69	Pollution Incidents to Controlled Waters Property Type: Process Location: Continental Can, Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Accidental Spillage/Leakage Incident Date: 2nd March 1992 Incident Reference: 3052 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	544	3	337700 349600
69	Pollution Incidents to Controlled Waters Property Type: Waste Handling Facilities Location: Stadex Authority: Environment Agency, Welsh Region Pollutant: Farm Effluent/Slurry Note: Poor Operational Practise Incident Date: 10th June 1991 Incident Reference: 2808 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	546	3	337705 349600
69	Pollution Incidents to Controlled Waters Property Type: Waste Handling Facilities Location: Stadex Authority: Environment Agency, Welsh Region Pollutant: Chemicals - Acid Note: Poor Operational Practise Incident Date: 3rd December 1991 Incident Reference: 1791 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	549	3	337700 349595
69	Pollution Incidents to Controlled Waters Property Type: Waste Handling Facilities Location: Stadex Authority: Environment Agency, Welsh Region Pollutant: Chemicals - Other Organic Note: Poor Operational Practise Incident Date: 3rd December 1991 Incident Reference: 1791 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	551	3	337705 349595

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Continental Can, Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Chemicals - Acid Note: Afon Clywedog; Spillage Incident Date: 14th July 1997 Incident Reference: 33038 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	552	3	337850 349695
71	Pollution Incidents to Controlled Waters Property Type: Process Location: Down Stream Of Richardsons, Fine Food Authority: Environment Agency, Welsh Region Pollutant: Oils - Diesel (Including Agricultural) Note: Deliberate Act Incident Date: 3rd December 1991 Incident Reference: 3294 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	586	3	337540 349510
71	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Surface Water Outfall Location: Tributary Of Red, Wither Brook, Deepack Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Weather Incident Date: 30th September 1994 Incident Reference: 21645 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	593	3	337500 349500
72	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Surface Water Outfall Location: Down Stream Of Stadex Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Poor Operational Practise Incident Date: 15th March 1995 Incident Reference: 23047 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	594	3	337800 349600
72	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Surface Water Outfall Location: Engineering Authority: Environment Agency, Welsh Region Pollutant: Farm Effluent/Slurry Note: Poor Operational Practise Incident Date: 22nd February 1995 Incident Reference: 22665 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	598	3	337800 349595
73	Pollution Incidents to Controlled Waters Property Type: Warehouses Location: Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Heavy Fuel Oil Note: Poor Operational Practise Incident Date: 10th September 1991 Incident Reference: 3221 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leakage Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	607	3	337600 349500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
73	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Clywedog Road North, Wrexham Road Authority: Environment Agency, Welsh Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 22nd August 1996 Incident Reference: 29674 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	612	3	337600 349495
74	Pollution Incidents to Controlled Waters Property Type: Other Transport Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Accidental Spillage/Leakage Incident Date: 28th May 1991 Incident Reference: 2805 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Burst Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SW (S)	640	3	337200 349500
75	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Oils - Other Oil Note: Redwither Brook; Direct Introduction Incident Date: 9th February 1998 Incident Reference: 35173 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Deliberate Act Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	661	3	338100 349900
76	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Not Supplied Incident Date: 16th September 1994 Incident Reference: 21092 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	667	3	337650 349450
77	Pollution Incidents to Controlled Waters Property Type: Warehouses Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Poor Operational Practise Incident Date: 29th August 1991 Incident Reference: 3198 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leakage Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A9SW (SE)	679	3	337800 349500
78	Pollution Incidents to Controlled Waters Property Type: Warehouses Location: Continental Can, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Accidental Spillage/Leakage Incident Date: 6th December 1991 Incident Reference: 1790 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	725	3	338000 349600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
79	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 14th January 1997 Incident Reference: 31050 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	764	3	338150 349750
80	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Oils - Petrol Note: Not Supplied Incident Date: 14th January 1997 Incident Reference: 31050 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	766	3	338150 349745
80	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Light Oil Note: Redwither Brook Incident Date: 17th September 1997 Incident Reference: 33591 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	769	3	338140 349720
80	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Wrexham Industrial Estate, Dolphin Cottage Authority: Environment Agency, Welsh Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 24th January 1996 Incident Reference: 27506 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	790	3	338150 349695
81	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Wxm Industrial Estate Authority: Environment Agency, Welsh Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 24th January 1996 Incident Reference: 27506 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	787	3	338150 349700
81	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Surface Water Outfall Location: Redwither Brook Authority: Environment Agency, Welsh Region Pollutant: Sewage - Treated Effluent Note: Not Supplied Incident Date: 15th December 1995 Incident Reference: 26909 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	831	3	338200 349700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	Pollution Incidents to Controlled Waters Property Type: Not Given Location: By Redwither Inn, Wrexham Industrial Estate Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Redwither Brook Incident Date: 11th September 1997 Incident Reference: 33595 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9SW (SE)	831	3	338050 349500
83	Pollution Incidents to Controlled Waters Property Type: Process Location: Drain From, Redwither Industrial Estate Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Blocked Sewer Incident Date: 10th October 1995 Incident Reference: 26343 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SE (E)	866	3	338400 350200
84	Pollution Incidents to Controlled Waters Property Type: Miscellaneous Premises: Surface Runoff Location: Trib From N E Authority: Environment Agency, Welsh Region Pollutant: Chlorinated Water Note: Not Supplied Incident Date: 15th December 1995 Incident Reference: 26908 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	921	3	338300 349700
84	Pollution Incidents to Controlled Waters Property Type: Warehouses Location: Oldacres Wrexham, Industrial Estate, Marchwile Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Accidental Spillage/Leakage Incident Date: 28th July 1995 Incident Reference: 25692 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	966	3	338350 349700
85	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Sewage Treatment Works Location: Trout Pond Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Poor Operational Practise Incident Date: 14th January 1992 Incident Reference: 2591 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A23SW (N)	923	3	337300 351300
86	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Treated Water Distribution System Location: 50 Metres Down Stream Of, Redwither Pub Bridge Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Accidental Spillage/Leakage Incident Date: 13th December 1995 Incident Reference: 26907 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9SE (SE)	942	3	338200 349500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
86	Pollution Incidents to Controlled Waters Property Type: Process Location: Bestoy Unit, Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Not Supplied Incident Date: 15th March 1995 Incident Reference: 22827 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9SE (SE)	974	3	338200 349450
87	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Rear Railway Crossing, Wrexham Industrial Estate, WREXHAM Authority: Environment Agency, Welsh Region Pollutant: Oils - Petrol Note: Neglect Incident Date: 12th January 1996 Incident Reference: 27252 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A15SW (E)	964	3	338500 350200
88	Prosecutions Relating to Authorised Processes Location: Bridge Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9PS Prosecution Text: Press Release HM389, Failure to comply with an improvement notice to prevent emissions of smoke from the factory vents. Prosecution Act: HSWA74 Hearing Date: 15th March 1996 Verdict: Guilty Fine: 10000 Costs: 9882 Positional Accuracy: Manually positioned to the road within the address or location	A3NE (S)	915	3	337692 349205
89	Registered Radioactive Substances Name: Specwood Ltd Location: Unit 9, Ash Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UF Authority: Natural Resources Wales Permit Reference: AQ7135 Dated: 4th April 1995 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation either revoked or cancelledCancelled Positional Accuracy: Manually positioned to the address or location	A13SW (S)	0	2	337417 350138
89	Registered Radioactive Substances Name: Specwood Ltd Location: Duracell Global Business Management Group, 11 Ash Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UF Authority: Natural Resources Wales Permit Reference: AK1576 Dated: 22nd October 1993 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Manually positioned to the address or location	A13SW (S)	0	2	337418 350134
89	Registered Radioactive Substances Name: Specwood Ltd Location: Unit 11, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Authority: Natural Resources Wales Permit Reference: AG0500 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A13SW (S)	0	2	337425 350118

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
90	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 13th July 2004 Incident Reference: 250782 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: General Biodegradable Materials And Wastes: Food And Drink	A8NE (S)	485	2	337678 349655
91	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 19th January 2006 Incident Reference: 371865 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Organic Chemicals/Products: Other Organic Chemical Or Product Pollutant: Organic Chemicals/Products: Pesticides And Biocides	A8NE (SE)	499	2	337752 349682
92	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 8th August 2002 Incident Reference: 98530 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Crude Sewage	A8SE (S)	594	2	337715 349552
93	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 15th July 2001 Incident Reference: 16543 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Inorganic Chemicals : Acids	A9NW (SE)	594	2	337901 349687
94	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 26th June 2009 Incident Reference: 691429 Water Impact: Category 2 - Significant Incident Air Impact: Category 3 - Minor Incident Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Contaminated Water: Vegetable Washings	A9SE (SE)	899	2	338152 349510
95	Water Abstractions Operator: Caparo Wire Ltd Licence Number: 24/67/7/0178 Permit Version: 100 Location: Tributary Of Redwither Brook Authority: Natural Resources Wales Abstraction: Metal: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Tributary Of Redwither Brook Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	288	2	337810 350500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	Water Abstractions Operator: Mr G Taylor Licence Number: 24/67/9/0130 Permit Version: 100 Location: Well Authority: Environment Agency, Welsh Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th June 1968 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	959	3	337980 351230
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: Wa/067/0007/006 Permit Version: 1 Location: 144m Deep, 150mm Dia., Ob1 Authority: Natural Resources Wales Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Spectrum Business Park, Wrexham Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1265	2	338240 349090
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: 24/67/7/0222 Permit Version: 1 Location: 144m Deep, 150mm Dia., Ob1 Authority: Environment Agency, Welsh Region Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Spectrum Business Park Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th September 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1265	3	338240 349090
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: 24/67/7/0213 Permit Version: 100 Location: 144m Deep, 150mm Dia., Ob1 Authority: Environment Agency, Welsh Region Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: 144M Deep 150mm Diameter Ob1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th September 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4NE (SE)	1265	3	338240 349090

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: Wa/067/0007/006 Permit Version: 1 Location: Spectrum Business Park Borehole Aw2 Authority: Natural Resources Wales Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Spectrum Business Park, Wrexham Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1269	2	338350 349180
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: 24/67/7/0222 Permit Version: 1 Location: 144 M Deep, 200mm Dia Bh Aw2 Authority: Environment Agency, Welsh Region Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Spectrum Business Park Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th September 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1269	3	338360 349190
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: 24/67/7/0213 Permit Version: 100 Location: 144 M Deep, 200mm Dia Bh Aw2 Authority: Environment Agency, Welsh Region Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: 144M Deep 200mm Diameter Borehole Aw2 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th September 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4NE (SE)	1269	3	338360 349190
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: Wa/067/0007/006 Permit Version: 1 Location: 144m Deep, 150mm Dia. Borehole Aw1 Authority: Natural Resources Wales Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Spectrum Business Park, Wrexham Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1360	2	338190 348940

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: 24/67/7/0222 Permit Version: 1 Location: 144m Deep, 150mm Dia. Borehole Aw1 Authority: Environment Agency, Welsh Region Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Spectrum Business Park Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th September 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1360	3	338190 348940
	Water Abstractions Operator: Calypso Soft Drinks Ltd Licence Number: 24/67/7/0213 Permit Version: 100 Location: 144m Deep, 150mm Dia. Borehole Aw1 Authority: Environment Agency, Welsh Region Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: 144M Deep 150mm Diameter Borehole Aw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th September 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4NE (SE)	1360	3	338190 348940
	Water Abstractions Operator: Cott Beverages Limited Licence Number: Wa/067/0007/006 Permit Version: Not Supplied Location: Not Supplied Authority: Natural Resources Wales Abstraction: Food And Drink: Process Water Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1360	2	338190 348940
	Water Abstractions Operator: Lafarge Tarmac Trading Limited Licence Number: 24/67/7/0197 Permit Version: 103 Location: Borehole Authority: Natural Resources Wales Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th March 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1768	2	336870 352070

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Tarmac Limited Licence Number: 24/67/7/0197 Permit Version: 102 Location: Borehole Authority: Environment Agency, Welsh Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 15th February 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1768	3	336870 352070
	Water Abstractions Operator: Tarmac Central Ltd Licence Number: 24/67/7/0197 Permit Version: 101 Location: Borehole Authority: Environment Agency, Welsh Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th March 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1768	3	336870 352070
	Water Abstractions Operator: Tarmac Quarry Products (North West) Ltd Licence Number: 24/67/7/0197 Permit Version: 100 Location: Borehole Authority: Environment Agency, Welsh Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1768	3	336870 352070
	Groundwater Vulnerability Soil Classification: Soils of Low Leaching Potential - Soils in which pollutants are unlikely to penetrate the soil layer because water movement is largely horizontal or they have large ability to attenuate diffuse pollutants. Lateral flow from these soils contribute to groundwater recharge elsewhere in the catchment Map Sheet: Sheet 16 West Cheshire Scale: 1:100,000	A13NW (NW)	0	3	337455 350251
	Groundwater Vulnerability Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise Map Sheet: Sheet 16 West Cheshire Scale: 1:100,000	A13SE (SE)	0	3	337518 350169
	Groundwater Vulnerability Soil Classification: Soils of Low Leaching Potential - Soils in which pollutants are unlikely to penetrate the soil layer because water movement is largely horizontal or they have large ability to attenuate diffuse pollutants. Lateral flow from these soils contribute to groundwater recharge elsewhere in the catchment Map Sheet: Sheet 16 West Cheshire Scale: 1:100,000	A13SE (S)	0	3	337472 350134
	Groundwater Vulnerability Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise Map Sheet: Sheet 16 West Cheshire Scale: 1:100,000	A13NE (E)	0	3	337478 350250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Drift Deposits Drift Deposit: Low permeability drift deposits occurring at the surface and overlying Major and Minor Aquifers are head, clay-with-flints, brickearth, peat, river terrace deposits and marine and estuarine alluvium Map Sheet: Sheet 16 West Cheshire Scale: 1:100,000	A13NW (NW)	0	3	337455 350251
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	A13NW (NW)	0	1	337455 350251
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SE (SE)	0	1	337515 350183
	Superficial Aquifer Designations Aquifer Designation: Unproductive Strata	A13NW (NW)	0	1	337455 350251
97	Source Protection Zones Name: Bretton - Meadow Foods Source: Natural Resources Wales Reference: We079 Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A13NW (NW)	0	2	337455 350251
98	Source Protection Zones Name: Various Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A13NW (NW)	0	3	337455 350251
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
99	Historical Landfill Sites Licence Holder: British Celanese Limited Location: Wrexham Name: British Celanese Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD14271 First Input Date: 31st December 1953 Last Input Date: 31st December 1983 Specified Waste: Deposited Waste included Industrial Waste and Liquid Sludge Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6955/0010 BGS Ref: Not Supplied Other Ref: LB/2.3	A9NW (SE)	595	2	337978 349786
100	Licensed Waste Management Facilities (Locations) Licence Number: 102738 Location: Clays Site, Bryn Estyn Road, Llan -y- Pwll, Wrexham, LL13 9UB Operator Name: Clays Farm Golf Centre Limited Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Use of waste in construction <100,000 tps Licence Status: Issued Issued: 5th October 2011 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18NE (N)	806	2	337642 351180
101	Licensed Waste Management Facilities (Locations) Licence Number: 37221 Location: Unit 1, Redwither Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Operator Name: North Western Insulation Ltd Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Special Waste Transfer Stations Licence Status: Expired Issued: 19th February 2001 Last Modified: 17th March 2006 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A9SE (SE)	948	2	338150 349434
	Local Authority Landfill Coverage Name: Wrexham County Borough Council - Has supplied landfill data		0	5	337455 350251
102	Potentially Infilled Land (Non-Water) Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A23SW (N)	932	-	337296 351309
103	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SW (SW)	0	-	337403 350203
104	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A13NE (N)	0	-	337477 350379
105	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13NE (N)	0	-	337488 350380
106	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A13NE (N)	0	-	337465 350355
107	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A13NW (W)	0	-	337436 350252
108	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13NW (NW)	30	-	337355 350341

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
109	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13NE (NE)	36	-	337584 350355
110	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SW (W)	91	-	337282 350183
111	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SE (S)	122	-	337482 349971
112	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SW (S)	127	-	337448 349967
113	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A13NE (N)	170	-	337532 350552
114	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13NE (NE)	225	-	337680 350557
115	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SE (SE)	283	-	337773 350099
116	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1881	A18SE (NE)	317	-	337785 350587
117	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NE (SE)	326	-	337709 349874
118	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SE (SE)	340	-	337757 349914
119	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A18SE (NE)	358	-	337686 350704
120	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NW (S)	378	-	337401 349720
121	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A18SE (NE)	378	-	337667 350732
122	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NW (S)	383	-	337423 349712
123	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NE (S)	410	-	337482 349682
124	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NE (S)	416	-	337468 349676
125	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NW (S)	418	-	337285 349707
126	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NW (S)	427	-	337353 349681
127	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NW (SW)	438	-	337205 349713
128	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A19SW (NE)	445	-	337940 350591
129	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SW (SE)	489	-	337944 349975

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
130	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1881	A9NW (SE)	525	-	337847 349729
131	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1881	A9NW (SE)	529	-	337926 349829
132	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SW (S)	559	-	337293 349559
133	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14NW (E)	567	-	338110 350470
134	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NE (SE)	587	-	337749 349577
135	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SW (E)	590	-	338123 350225
136	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1881	A9NW (SE)	601	-	337954 349741
137	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14NE (E)	609	-	338153 350468
138	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SE (S)	622	-	337702 349516
139	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14NE (E)	645	-	338189 350272
140	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SW (S)	651	-	337357 349450
141	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SE (S)	676	-	337477 349417
142	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14NE (E)	679	-	338223 350271
143	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7SE (SW)	711	-	337104 349459
144	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SE (SE)	724	-	337797 349448
145	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SE (SE)	741	-	338198 349929
146	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14NE (E)	750	-	338302 350365
147	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SW (S)	764	-	337128 349393
148	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A19NW (NE)	805	-	338099 350962
149	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SE (E)	810	-	338326 350134
150	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SW (S)	813	-	337264 349305

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
151	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SE (S)	841	-	337536 349253
152	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A9NE (SE)	869	-	338253 349720
153	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A19SE (NE)	870	-	338265 350871
154	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A3NE (S)	872	-	337482 349220
155	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A3NE (S)	873	-	337528 349221
156	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7SE (S)	884	-	337106 349274
157	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A23SW (N)	920	-	337243 351289
158	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7SE (SW)	921	-	336956 349297
159	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A23SW (N)	923	-	337208 351285
160	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A19SE (NE)	925	-	338356 350830
161	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A9SW (SE)	930	-	337988 349321
162	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SE (E)	943	-	338410 349919
163	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7NW (SW)	947	-	336508 349753
164	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SE (E)	953	-	338455 350059
165	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SE (E)	968	-	338434 349911
166	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A3NW (S)	985	-	337398 349109

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
167	Registered Landfill Sites Licence Holder: British Celanese Licence Reference: L10 Site Location: British Celanese, Industrial Estate, Wrexham, Clwyd Licence Easting: 338000 Licence Northing: 349770 Operator Location: As Site Address Authority: Environment Agency Wales, North Area Site Category: Landfill Max Input Rate: Undefined Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st June 1977 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Asbestos Cellulose Waste Contaminated Waste Delagged Pipes Oil/Water Mixtures	A9NW (SE)	623	3	338000 349770
168	Registered Waste Transfer Sites Licence Holder: Reynolds Services - North Western Insul' Licence Reference: EAWML37221 Site Location: Redwither Road Transfer Station, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RD Operator Location: Redwither Road Transfer Station, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RD Authority: Environment Agency Wales, North Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Site not yet started Dated: 19th February 2001 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Supplied Authorised Waste: Asbestos Maximum Waste Permitted By Licence Prohibited Waste: Liquid Wastes Other Waste / Waste Not Otherwise Specified Sludge Wastes Special Waste (As In Epa 1990:S62 Of 1996 Regs) Not Otherwise Specified	A9SE (SE)	958	3	338160 349430
169	Registered Waste Treatment or Disposal Sites Licence Holder: Alpha Environmental Management Ltd Licence Reference: EAWML37211 Site Location: Site 1 Redwither Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RD Operator Location: Singret Cottage, Singret Hill, Llay, WREXHAM, Clwyd, LL12 0NS Authority: Environment Agency Wales, North Area Site Category: Transfer Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 9th March 2000 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Maximum Waste Permitted By Licence Solid, Dry Non-Haz. Degradable Commercial Waste Solid, Dry Non-Haz. Degradable Household Waste Solid, Dry Non-Haz. Degradable Industrialwaste Solid, Dry Non-Haz. Inert Waste Solid, Dry Non-Haz. Metal Waste With Annual Maximum Prohibited Waste: Liquid Wastes Other Waste/Waste Not Otherwise Specified Sludge Wastes Special Waste (As In Epa 1990:S62 Of 1996 Regs)	A9SE (SE)	990	3	338180 349405

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Permian Rocks (Undifferentiated)	A13NW (NW)	0	1	337455 350251
	BGS 1:625,000 Solid Geology Description: Warwickshire Group	A13SE (SE)	0	1	337499 350200
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (SE)	0	1	337515 350183
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NW (NW)	0	1	337455 350251
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A17NE (NW)	736	1	337000 351000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12SW (W)	759	1	336634 350000
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13NW (NW)	0	6	337455 350251
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	337455 350251
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	92	1	337455 350000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	337455 350251
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	92	1	337455 350000
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	110	1	337634 350266
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	337455 350251
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	92	1	337455 350000
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	337455 350251
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	92	1	337455 350000
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	337455 350251
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	92	1	337455 350000
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	102	1	337252 350172
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	110	1	337634 350266
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	130	1	337319 350000
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	211	1	337657 350000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	337455 350251
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	92	1	337455 350000
	Radon Potential - Radon Affected Areas Affected Area: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	337475 350251
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	337455 350251
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	337475 350251
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	337455 350251

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
170	Contemporary Trade Directory Entries Name: Duracell Location: Unit 11, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Classification: Battery Manufacturers & Supplies Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (S)	0	-	337425 350118
171	Contemporary Trade Directory Entries Name: Ipsen Biopharm Location: 55 Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Classification: Pharmaceutical Manufacturers & Distributors Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (NE)	0	-	337517 350351
172	Contemporary Trade Directory Entries Name: Quadraco Contracts Ltd Location: Unit 25, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Joinery Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A13NW (NW)	44	-	337340 350342
173	Contemporary Trade Directory Entries Name: Owen Tatton Location: Unit 22, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Building Block Manufacturers & Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (W)	53	-	337327 350291
174	Contemporary Trade Directory Entries Name: P J Garage Ltd Location: Unit 8, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9JT Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A13SW (S)	58	-	337427 350042
174	Contemporary Trade Directory Entries Name: Cuski International Location: Unit 8, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Classification: Toys, Games & Sporting Goods - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (S)	60	-	337429 350040
175	Contemporary Trade Directory Entries Name: Pann Krisp Ltd Location: Unit 37, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	60	-	337322 350122
176	Contemporary Trade Directory Entries Name: J C B Transmissions Location: Unit 4, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Power Transmission Equipment Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (N)	62	-	337488 350452
177	Contemporary Trade Directory Entries Name: A & B Air Systems Ltd Location: Unit 21, Abenbury Way, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UZ Classification: Air Compressors Status: Active Positional Accuracy: Automatically positioned to the address	A13SW (SW)	74	-	337349 350048
177	Contemporary Trade Directory Entries Name: N & S Car Sales Location: Unit 20, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	80	-	337337 350049

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177	Contemporary Trade Directory Entries Name: Ash Tyres Location: Unit 19, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Tyre Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	95	-	337320 350043
178	Contemporary Trade Directory Entries Name: Oakhouse Foods Location: Unit 32, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Frozen Food Processors & Distributors Status: Active Positional Accuracy: Manually positioned to the address or location	A13NW (NW)	80	-	337365 350454
178	Contemporary Trade Directory Entries Name: Cymru Lifting Gear Location: Unit 31, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Lifting Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (NW)	87	-	337356 350458
178	Contemporary Trade Directory Entries Name: Total Engineering Solutions (Uk) Ltd Location: Unit 31, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Distribution Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (NW)	87	-	337356 350458
179	Contemporary Trade Directory Entries Name: Tenax Uk Ltd Location: Unit 12, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Classification: Plastics - Injection Moulding Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (S)	89	-	337510 350014
179	Contemporary Trade Directory Entries Name: Milner Engineering Services Ltd Location: Unit 12, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9JT Classification: Precision Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (S)	89	-	337510 350014
180	Contemporary Trade Directory Entries Name: Almetron Ltd Location: Unit 24, Abenbury Way, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UZ Classification: Chemicals - Distributors & Wholesalers Status: Active Positional Accuracy: Automatically positioned to the address	A13NW (NW)	117	-	337269 350354
181	Contemporary Trade Directory Entries Name: Advanced Surface Polymers Location: Unit 30, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (NW)	123	-	337286 350428
182	Contemporary Trade Directory Entries Name: Up Design & Print Location: Unit 18, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Printers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SW (S)	124	-	337348 349994
183	Contemporary Trade Directory Entries Name: Metal Finishings (North Wales) Ltd Location: Unit 23, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Powder Coatings Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (W)	125	-	337255 350295

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
183	Contemporary Trade Directory Entries Name: Metal Finishing Of Wrexham Ltd Location: Unit 23, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Powder Coatings Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (W)	125	-	337255 350295
183	Contemporary Trade Directory Entries Name: Wrexham Powder Coating Location: Unit 23, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Powder Coatings Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (W)	125	-	337255 350295
184	Contemporary Trade Directory Entries Name: Cema Location: Blackwood House, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Automation Systems & Equipment Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SE (E)	144	-	337655 350179
185	Contemporary Trade Directory Entries Name: Cytec Location: Unit 2-4, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Gum & Resin Manufacturers & Distributors Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (NE)	149	-	337569 350521
186	Contemporary Trade Directory Entries Name: Forster International Ltd Location: Unit 13, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (S)	173	-	337496 349922
186	Contemporary Trade Directory Entries Name: Vannplastic Location: Unit 13, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Plastics - Extrusion Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (S)	173	-	337496 349922
186	Contemporary Trade Directory Entries Name: Ecodek Location: Unit 13, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (S)	173	-	337496 349922
187	Contemporary Trade Directory Entries Name: Cheap Tyres Location: Unit 424b, Ash Rd North, Wrexham Ind Est, Wrexham, Clwyd, LL13 9JT Classification: Tyre Dealers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A13NE (NE)	174	-	337708 350449
187	Contemporary Trade Directory Entries Name: Playford Packaging Location: Ash Road North, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9JT Classification: Boxes & Cartons Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (NE)	174	-	337708 350449
187	Contemporary Trade Directory Entries Name: Ash Road Tyres Location: Unit 424b, Ash Rd North, Wrexham Ind Est, Wrexham, Clwyd, LL13 9JT Classification: Tyre Dealers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A13NE (NE)	174	-	337708 350449
187	Contemporary Trade Directory Entries Name: Koala Nationwide Ltd Location: Ash Rd North, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UF Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13NE (NE)	218	-	337740 350482

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188	Contemporary Trade Directory Entries Name: Delta Dailyfood (UK) Ltd Location: Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (N)	211	-	337480 350603
188	Contemporary Trade Directory Entries Name: Westminster Bedsteads Location: Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Bed & Mattress Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (N)	211	-	337480 350603
189	Contemporary Trade Directory Entries Name: Sandstone Brewery Location: Unit 5a, Wrexham Enterprise Park, Ash Road North, Wrexham, LL13 9JT Classification: Brewers Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (NE)	243	-	337794 350396
189	Contemporary Trade Directory Entries Name: C & J Partnership Location: Unit 4b, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Classification: Road Haulage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (E)	243	-	337795 350385
189	Contemporary Trade Directory Entries Name: W T T C Ltd Location: Unit 4b, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Classification: Trailers & Towing Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (E)	243	-	337795 350385
189	Contemporary Trade Directory Entries Name: I P S Location: Unit 3, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9JT Classification: Packaging Materials Manufacturers & Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A14NW (NE)	264	-	337813 350413
189	Contemporary Trade Directory Entries Name: Royalite Industrial Sheet A Division Of Vita Thermoplastic Sheet Ltd Location: Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Classification: Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	264	-	337813 350413
190	Contemporary Trade Directory Entries Name: H E Hydraulics Location: Ash Rd North, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UF Classification: Engineering Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13NE (NE)	252	-	337778 350484
191	Contemporary Trade Directory Entries Name: Andrews Logistics Location: Ash Rd South, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UG Classification: Road Haulage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13SE (E)	261	-	337766 350144
191	Contemporary Trade Directory Entries Name: Clwyd Transport Services Ltd Location: Clwyd House, Ash Road South, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UG Classification: Road Haulage Services Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	271	-	337767 350117
191	Contemporary Trade Directory Entries Name: Norwood Williams & Sons Location: Ash Rd South, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UG Classification: Wrought Ironwork Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13SE (E)	280	-	337782 350133

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192	Contemporary Trade Directory Entries Name: J & B Sewing Machine Co Ltd Location: Unit 14, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Sewing Machines - Industrial Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	264	-	337533 349836
193	Contemporary Trade Directory Entries Name: Wrexham Wire Location: Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Classification: Wire Products - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A18SE (NE)	291	-	337733 350600
194	Contemporary Trade Directory Entries Name: Rowan Foods Location: Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Frozen Food Processors & Distributors Status: Active Positional Accuracy: Automatically positioned to the address	A14NW (E)	307	-	337838 350260
194	Contemporary Trade Directory Entries Name: Rowan Foods Location: Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Frozen Food Processors & Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (E)	307	-	337838 350260
194	Contemporary Trade Directory Entries Name: Hazlewood Ready Meals Location: Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (E)	307	-	337838 350260
195	Contemporary Trade Directory Entries Name: Tower Engineering Ltd Location: Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	308	-	337602 349815
196	Contemporary Trade Directory Entries Name: C L Products Ltd Location: Unit 424a, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Classification: Precision Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A14NW (NE)	316	-	337860 350444
197	Contemporary Trade Directory Entries Name: Graphtec Location: Coed Aben Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9UH Classification: Industrial Instrument & Apparatus Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	333	-	337477 349759
198	Contemporary Trade Directory Entries Name: Ash Tyres Wrexham Location: Ash Rd North, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UF Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14NW (NE)	371	-	337896 350511
198	Contemporary Trade Directory Entries Name: Wockhardt Uk Location: Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Classification: Pharmaceutical Manufacturers & Distributors Status: Active Positional Accuracy: Manually positioned within the geographical locality	A14NW (NE)	371	-	337896 350511
198	Contemporary Trade Directory Entries Name: Wockhardt (Uk) Ltd Location: Ash Rd North, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UF Classification: Pharmaceutical Manufacturers & Distributors Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14NW (NE)	371	-	337896 350511

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198	Contemporary Trade Directory Entries Name: Clarke'S Equine Coachworks Location: Unit 416, Ash Road North, Wrexham, LL13 9UF Classification: Horse Boxes & Transporting Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	396	-	337929 350492
198	Contemporary Trade Directory Entries Name: Loweroak Location: Unit 411, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9UF Classification: Sand, Gravel & Other Aggregates Status: Active Positional Accuracy: Automatically positioned to the address	A14NW (NE)	409	-	337926 350537
199	Contemporary Trade Directory Entries Name: Stadex Industries Ltd Location: Dutton Rd, Redwither Business Pk, Wrexham, Clwyd, LL13 9UL Classification: Gum & Resin Manufacturers & Distributors Status: Inactive Positional Accuracy: Manually positioned to the address or location	A8NE (SE)	381	-	337686 349780
200	Contemporary Trade Directory Entries Name: Broadway Leisure Location: Coed Aben Road, Wrexham Industrial Estate, Wrexham, LL13 9UH Classification: Caravans - Servicing & Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	384	-	337535 349713
200	Contemporary Trade Directory Entries Name: Business Print & Design Location: Millwood House, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	428	-	337563 349675
201	Contemporary Trade Directory Entries Name: Riello Galatrek Ltd Location: Unit 50, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN Classification: Windmills & Wind Power Equipment Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	400	-	337367 349704
201	Contemporary Trade Directory Entries Name: Riello U P S Ltd Location: Unit 50, Clywedog Road North, Wrexham Industrial Estate, Wrexham, LL13 9XN Classification: Windmills & Wind Power Equipment Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	401	-	337367 349704
202	Contemporary Trade Directory Entries Name: D J L Haulage Location: Unit 411, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Classification: Road Haulage Services Status: Active Positional Accuracy: Automatically positioned to the address	A14NW (NE)	420	-	337937 350540
202	Contemporary Trade Directory Entries Name: Loweroak Ltd Location: Unit 411, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Classification: Sand, Gravel & Other Aggregates Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	420	-	337937 350540
203	Contemporary Trade Directory Entries Name: J C B Transmission Location: Unit 1, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Gearboxes Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	425	-	337845 350680
203	Contemporary Trade Directory Entries Name: Jcb Transmissions Location: Unit 1, Abenbury Way, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UZ Classification: Gearboxes Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	425	-	337845 350680

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
204	Contemporary Trade Directory Entries Name: Dragon Packaging Ltd Location: Unit 47-48, Clywedog Road North, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9XN Classification: Packaging Materials Manufacturers & Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	451	-	337226 349690
205	Contemporary Trade Directory Entries Name: Zaviz International Ltd Location: Coed Aben Road, Wrexham Industrial Estate, Wrexham, LL13 9UH Classification: Car Engine Tuning & Diagnostic Services Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	463	-	337570 349641
205	Contemporary Trade Directory Entries Name: Roil Foods Ltd Location: Unit 52, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	488	-	337544 349611
206	Contemporary Trade Directory Entries Name: Lifteknit Ltd Location: Unit 68, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN Classification: Lift Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	491	-	337341 349617
206	Contemporary Trade Directory Entries Name: Maelor Advanced Engineering Ltd Location: Unit 68 Wrexham Indust Est, Wrexham, Clwyd, LL13 9XE Classification: Sheet Metal Work Status: Inactive Positional Accuracy: Manually positioned to the address or location	A8NW (S)	493	-	337340 349616
207	Contemporary Trade Directory Entries Name: Silvergate Location: Unit 53, Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS Classification: Plastics - Raw Materials Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	516	-	337204 349629
208	Contemporary Trade Directory Entries Name: George L Williams Location: Ash Rd South, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UG Classification: Road Haulage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	518	-	338026 350128
209	Contemporary Trade Directory Entries Name: Central Machining Services Location: Unit 404, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Classification: Precision Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	534	-	338048 350571
209	Contemporary Trade Directory Entries Name: C M S Wrexham Ltd Location: Unit 404, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Classification: Engineers - General Status: Active Positional Accuracy: Automatically positioned to the address	A14NW (NE)	534	-	338048 350571
209	Contemporary Trade Directory Entries Name: C N S Contract Cleaning Location: Unit 401, Abbey Road, Wrexham, LL13 9UF Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	569	-	338085 350571
210	Contemporary Trade Directory Entries Name: Nijmidon Location: Coed Aben Rd, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UH Classification: Wallpapers & Wall Coverings Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A8NE (SE)	538	-	337724 349619

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
211	Contemporary Trade Directory Entries Name: Betts Uk Ltd Location: Ash Road South, Wrexham Indust Est, Wrexham, Clwyd, LL13 9UG Classification: Plastics - Injection Moulding Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	546	-	338057 350148
211	Contemporary Trade Directory Entries Name: Conren Ltd Location: Unit 1, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	551	-	338073 350194
211	Contemporary Trade Directory Entries Name: Nightingale Care Beds Location: Unit 1, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Medical Equipment Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	551	-	338073 350194
212	Contemporary Trade Directory Entries Name: Exopack Advanced Coatings Ltd Location: Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF Classification: Coating Specialists Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	548	-	338032 350637
213	Contemporary Trade Directory Entries Name: J C B Drivetrain Systems Location: Unit 1, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT Classification: Engine Manufacturers & Distributors Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	555	-	337967 350741
214	Contemporary Trade Directory Entries Name: Commercial & Industrial Handling Ltd Location: Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH Classification: Conveyors & Conveyor Belts Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	569	-	337683 349566
215	Contemporary Trade Directory Entries Name: Maelor Display Systems Ltd Location: Unit 9, Ash Road South, Wrexham Industrial Estate, Wrexham, LL13 9UG Classification: Electronic Equipment - Manufacturers & Assemblers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	582	-	338093 350139
215	Contemporary Trade Directory Entries Name: Ledtech Location: Ash Road South, Wrexham Industrial Estate, Wrexham, LL13 9UG Classification: Lighting Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	582	-	338093 350139
216	Contemporary Trade Directory Entries Name: Erddig Brewery Location: Unit 56, Clywedog Road North, Wrexham Industrial Estate, Wrexham, LL13 9XN Classification: Brewers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	584	-	337551 349514
217	Contemporary Trade Directory Entries Name: Ball Packaging Location: Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9PS Classification: Can Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A9NW (SE)	593	-	337901 349688
218	Contemporary Trade Directory Entries Name: Sonira Foods Location: Unit 66, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	597	-	337654 349525

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
218	Contemporary Trade Directory Entries Name: Barlow World Handling Ltd Location: Unit 103-104, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH Classification: Materials Handling Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	615	-	337704 349525
218	Contemporary Trade Directory Entries Name: A P T Coatings Ltd Location: Unit 106, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH Classification: Paint Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	618	-	337690 349515
219	Contemporary Trade Directory Entries Name: S G Logistics Location: Ash Rd South, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UG Classification: Distribution Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	598	-	338090 350052
219	Contemporary Trade Directory Entries Name: A A D Wholesale Foods Location: Ash Rd South, Wrexham Ind Est, Wrexham, Clwyd, LL13 9UG Classification: Meat - Wholesale Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	615	-	338096 350015
220	Contemporary Trade Directory Entries Name: Autothane Ltd Location: Unit 6, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN Classification: Foam Products - Rubber & Plastics Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	603	-	337438 349489
220	Contemporary Trade Directory Entries Name: Inblow Form Ltd Location: Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN Classification: Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	603	-	337438 349489
221	Contemporary Trade Directory Entries Name: B O S Automotive Products Uk Location: Unit 54, Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS Classification: Automation Systems & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (SW)	610	-	337124 349561
222	Contemporary Trade Directory Entries Name: Eriks Location: Unit 60, Clywedog Road North, Wrexham Industrial Estate, Wrexham, LL13 9XN Classification: Mechanical Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A8SE (S)	627	-	337576 349474
222	Contemporary Trade Directory Entries Name: Hydrosand Location: Unit 61, Clywedog Road North, Wrexham Industrial Estate, Wrexham, LL13 9XN Classification: Hydraulic Equipment & Accessories - Sales & Service Status: Active Positional Accuracy: Automatically positioned to the address	A8SE (S)	637	-	337583 349466
222	Contemporary Trade Directory Entries Name: Pirtek (Wrexham) Location: Unit 61, Clywedog Rd North, Wrexham Ind Est, Wrexham, Clwyd, LL13 9XN Classification: Hydraulic Engineers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A8SE (S)	637	-	337584 349466
223	Contemporary Trade Directory Entries Name: I M C Location: Abbey Road, Wrexham Industrial Estate, Wrexham, LL13 9RF Classification: Catering Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	637	-	338177 350492

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
223	Contemporary Trade Directory Entries Name: H O Y A Location: Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UA Classification: Optical Goods - Manufacturers Status: Active Positional Accuracy: Manually positioned within the geographical locality	A14NE (E)	638	-	338170 350530
223	Contemporary Trade Directory Entries Name: Hoya Lens Uk Ltd Location: Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UA Classification: Optical Goods - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A14NE (E)	638	-	338170 350530
224	Contemporary Trade Directory Entries Name: B D Performance Location: Unit 102, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	657	-	337761 349504
225	Contemporary Trade Directory Entries Name: B D Automotive Location: Unit 101, Coed Aben Road, Wrexham Industrial Estate, Wrexham, LL13 9UH Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	659	-	337813 349531
226	Contemporary Trade Directory Entries Name: D H D Location: Unit 107, Coed Aben Road, Wrexham Industrial Estate, Wrexham, LL13 9UH Classification: Metal Products - Fabricated Status: Active Positional Accuracy: Automatically positioned to the address	A8SE (S)	677	-	337679 349449
226	Contemporary Trade Directory Entries Name: G Evans Holding Co Ltd Location: Unit 107, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	677	-	337680 349449
226	Contemporary Trade Directory Entries Name: Dhd Part Of G Evans Holding Co Ltd Location: Unit 107, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH Classification: Engineering Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	677	-	337680 349449
227	Contemporary Trade Directory Entries Name: Nypro (Uk) Ltd Location: Unit 70, Clywedog Road East, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XE Classification: Plastics - Injection Moulding Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	681	-	337306 349430
228	Contemporary Trade Directory Entries Name: Demon Tweeks Location: Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Cycle Accessories, Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	682	-	338179 350057
228	Contemporary Trade Directory Entries Name: Demon Tweeks Fitting Centre Location: Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	682	-	338179 350057
228	Contemporary Trade Directory Entries Name: Demon Tweeks Performance Location: Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG Classification: Car Customisation & Conversion Specialists Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	682	-	338179 350057

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
229	Contemporary Trade Directory Entries Name: Industrial Encoders Direct Ltd Location: Unit D1, Dutton Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UL Classification: Industrial Instrument & Apparatus Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	715	-	338248 350210
230	Contemporary Trade Directory Entries Name: Rascals Petfood Centre Location: Unit 24, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Pet Foods & Animal Feeds Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	716	-	337867 349498
230	Contemporary Trade Directory Entries Name: Help Save Our Planet Recycled Goods Location: Unit 25, The Bridgeway Centre, Coed Aben Rd, Wrexham Ind Est, Wrexham, Clwyd, LL13 9QS Classification: Recycling Centres Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A9SW (SE)	722	-	337860 349486
230	Contemporary Trade Directory Entries Name: Transform Window Films Location: Unit 25, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Classification: Window Film Manufacturers and Dealers Status: Active Positional Accuracy: Automatically positioned to the address	A9SW (SE)	726	-	337875 349491
230	Contemporary Trade Directory Entries Name: Intawood Location: Unit 21, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	739	-	337856 349463
230	Contemporary Trade Directory Entries Name: Try Thai Shop Location: Unit 27-28, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	745	-	337889 349478
230	Contemporary Trade Directory Entries Name: Gallion Ltd Location: Unit 30, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	748	-	337864 349458
231	Contemporary Trade Directory Entries Name: Auto Rallye Prep Location: Unit 20, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Car Engine Tuning & Diagnostic Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	716	-	337812 349465
232	Contemporary Trade Directory Entries Name: Silver Lining Workshops Location: Unit 12, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Cabinet Makers Status: Active Positional Accuracy: Automatically positioned to the address	A8SE (S)	720	-	337731 349423
232	Contemporary Trade Directory Entries Name: Riva Location: Unit 11, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Bags, Belts & Accessories - Manufacturers & Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A8SE (S)	745	-	337700 349384

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
233	Contemporary Trade Directory Entries Name: Decor-Lam Ltd Location: Unit 71, Clywedog Road East, Wrexham Industrial Estate, Wrexham, LL13 9XE Classification: Lamination & Encapsulation Services Status: Active Positional Accuracy: Automatically positioned to the address	A8SW (S)	724	-	337363 349375
234	Contemporary Trade Directory Entries Name: Maelor Trafflex Ltd Location: Abbey Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RX Classification: Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (NE)	742	-	338235 350662
234	Contemporary Trade Directory Entries Name: Dragon Engineering Location: Unit 3, Abbey Road, Wrexham, LL13 9RX Classification: Hydraulic Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A19SE (NE)	744	-	338237 350664
234	Contemporary Trade Directory Entries Name: Dragon Hydraulics Location: Unit 3, Abbey Road, Wrexham, LL13 9RX Classification: Hydraulic Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A19SE (NE)	744	-	338237 350664
235	Contemporary Trade Directory Entries Name: Porvair Sciences Ltd Location: Unit 73, Clywedog Road South, Wrexham Industrial Estate, Wrexham, LL13 9XS Classification: Filter Manufacturers & Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A8SW (S)	768	-	337186 349371
236	Contemporary Trade Directory Entries Name: Diamond Domestics Location: Unit 17a The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Cleaning Services - Domestic Status: Active Positional Accuracy: Manually positioned within the geographical locality	A8SE (S)	770	-	337766 349382
236	Contemporary Trade Directory Entries Name: Associated Toolmakers Ltd Location: Unit 16, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Plastics - Injection Moulding Status: Active Positional Accuracy: Automatically positioned to the address	A8SE (S)	770	-	337766 349382
236	Contemporary Trade Directory Entries Name: Technical Engineering Polymers Ltd Location: Unit 15, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Rubber & Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	777	-	337761 349372
237	Contemporary Trade Directory Entries Name: R J Scott & Son Ltd Location: Unit 13, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	776	-	337724 349360
237	Contemporary Trade Directory Entries Name: Colour Definitions Location: Unit 13, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Powder Coatings Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	777	-	337728 349360

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
237	Contemporary Trade Directory Entries Name: Hannah Services Location: Unit 1, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	813	-	337777 349340
237	Contemporary Trade Directory Entries Name: Maly Ltd Location: The Bridgeway Centre, Bridge Rd, Wrexham Ind Est, Wrexham, Clwyd, LL13 9QS Classification: Glass Fibre Moulding, Materials & Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	815	-	337773 349336
237	Contemporary Trade Directory Entries Name: M G Engineering Ltd Location: Unit 3, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	818	-	337734 349319
237	Contemporary Trade Directory Entries Name: Williams Services Location: Unit 3, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	818	-	337734 349319
238	Contemporary Trade Directory Entries Name: Bryn Roberts Workshops Ltd Location: Abbey Road North, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RX Classification: Joinery Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A19SE (E)	786	-	338306 350594
239	Contemporary Trade Directory Entries Name: Nutrafeed Location: Bridge Rd, Wrexham Ind Est, Wrexham, Clwyd, LL13 9PS Classification: Pet Foods & Animal Feeds Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A9SW (SE)	786	-	337935 349460
240	Contemporary Trade Directory Entries Name: Omega Technical Supplies Ltd Location: Unit D5, Dutton Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UL Classification: Machinery - Industrial & Commercial Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	790	-	338296 350093
240	Contemporary Trade Directory Entries Name: Pure Transfer Location: Unit 2, Dutton Rd, Redwither Business Pk, Wrexham, Clwyd, LL13 9UL Classification: Pharmaceutical Manufacturers & Distributors Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14SE (E)	790	-	338296 350093
240	Contemporary Trade Directory Entries Name: Paul Bristow Associates Ltd Location: Unit D6, Dutton Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UL Classification: T-Shirts Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	798	-	338302 350078
240	Contemporary Trade Directory Entries Name: C M W Controls Ltd Location: 7 Dutton Rd, Redwither Business Pk, Wrexham, Clwyd, LL13 9UL Classification: Electrical Engineers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14SE (E)	815	-	338314 350052
240	Contemporary Trade Directory Entries Name: I F A Ltd Location: Unit D7, Dutton Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UL Classification: Flow Measurement Systems - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	816	-	338315 350053

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
241	Contemporary Trade Directory Entries Name: B J M Euromac Location: Unit 9, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Asphalt & Coated Macadam Laying Contractors Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	798	-	337676 349322
241	Contemporary Trade Directory Entries Name: Motofix Location: Unit 7, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Motor Cycle Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	806	-	337682 349315
241	Contemporary Trade Directory Entries Name: Dragon Pallets Ltd Location: Unit 6, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS Classification: Pallets, Crates & Packing Cases Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	811	-	337684 349311
241	Contemporary Trade Directory Entries Name: Bridgeway Garage Location: Unit 5, The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A8SE (S)	817	-	337698 349308
242	Contemporary Trade Directory Entries Name: Jami Q'S Location: Abbey Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RF Classification: T-Shirts Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (NE)	808	-	338307 350660
242	Contemporary Trade Directory Entries Name: A & S Jones Location: Abbey Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RX Classification: Kitchen Furniture Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (NE)	831	-	338334 350654
243	Contemporary Trade Directory Entries Name: Hydro Location: Bridge Road, Wrexham, LL13 9PS Classification: Recycling Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A8SE (S)	838	-	337619 349268
244	Contemporary Trade Directory Entries Name: Discount Central Heating Supplies Location: Unit A2, Abbey Close, Redwither Business Park, Wrexham, Clwyd, LL13 9XG Classification: Central Heating Supplies & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	855	-	338393 350526
245	Contemporary Trade Directory Entries Name: Duct Hygiene Location: Unit 4 Office 3, Bridge Business Centre, Ash Road South, Wrexham, LL13 9UG Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	855	-	338234 349713
246	Contemporary Trade Directory Entries Name: Ningbo Furniture Location: Unit 2 Redwither Business Park, First Avenue, Redwither Business Park, Wrexham, Clwyd, LL13 9XP Classification: Distribution Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14SE (E)	866	-	338404 350221
246	Contemporary Trade Directory Entries Name: Mccarthy Haulage Location: Building 4, First Avenue, Redwither Business Park, Wrexham, Clwyd, LL13 9XP Classification: Road Haulage Services Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	866	-	338404 350221

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
246	Contemporary Trade Directory Entries Name: Ningbo Distributors Location: Unit 4 Wrexham Industrial Estate, First Avenue, Redwither Business Park, Wrexham, Clwyd, LL13 9XP Classification: Distribution Services Status: Active Positional Accuracy: Manually positioned within the geographical locality	A14SE (E)	866	-	338404 350221
247	Contemporary Trade Directory Entries Name: Toyoseal Industries (Uk) Ltd Location: Unit 72, Clywedog Road East, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XE Classification: Seal & Joint Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	868	-	337272 349247
248	Contemporary Trade Directory Entries Name: Evans Environmental Location: Redwither Business Centre, Redwither Business Pk, Wrexham, Clwyd, LL13 9XR Classification: Waste Disposal Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14NE (E)	874	-	338426 350382
248	Contemporary Trade Directory Entries Name: Gesnl Location: Office 10, Redwither Business Centre, Redwither Business Park, Wrexham, Clwyd, LL13 9XR Classification: Engineering Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	888	-	338440 350339
248	Contemporary Trade Directory Entries Name: P H Jones Location: Office F5, Redwither Business Centre, Redwither Business Park, Wrexham, Clwyd, LL13 9XR Classification: Boilers - Servicing, Replacements & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	888	-	338440 350339
248	Contemporary Trade Directory Entries Name: Arrow Environmental Services Ltd Location: Unit 10, First Floor, Redwither Business Centre, Redwither Business Park, Wrexham, Clwyd, LL13 9XR Classification: Waste Disposal Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	888	-	338440 350339
248	Contemporary Trade Directory Entries Name: Home Style Roof Line Products Ltd Location: Redwither Business Centre, Redwither Business Park, Wrexham, Clwyd, LL13 9XR Classification: Cladding Suppliers & Installers Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A14NE (E)	888	-	338440 350339
248	Contemporary Trade Directory Entries Name: Applied Products Location: Unit P, Ground Floor, Redwither Business Centre, Redwither Business Park, Wrexham, Clwyd, LL13 9XR Classification: Window Tinting Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	888	-	338440 350339
248	Contemporary Trade Directory Entries Name: Engtechniques Ltd Location: 15 Redwither Business Centre, Redwither Business Pk, Wrexham, Clwyd, LL13 9XR Classification: Materials Handling Equipment Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14NE (E)	888	-	338439 350338
248	Contemporary Trade Directory Entries Name: Electricity Solutions Location: Redwither Business Centre, Redwither Business Pk, Wrexham, Clwyd, LL13 9XR Classification: Electrical Engineers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14NE (E)	888	-	338439 350338

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
249	Contemporary Trade Directory Entries Name: Hi-Mark Automotive Ltd Location: Unit A, Spectrum Business Park, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QA Classification: Plastics - Injection Moulding Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	877	-	337979 349380
249	Contemporary Trade Directory Entries Name: Genice Foods Ltd Location: Unit B, Spectrum Business Park, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QA Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	916	-	338014 349357
249	Contemporary Trade Directory Entries Name: Kannon 2000 Location: Spectrum Business Pk, Wrexham Ind Est, Wrexham, Clwyd, LL13 9QA Classification: Distribution Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A9SW (SE)	943	-	338026 349332
250	Contemporary Trade Directory Entries Name: Cortecs Healthcare Ltd Location: Wrexham Indust Est, Abbey Rd, Wrexham, Clwyd, LL13 9PW Classification: Medical Instruments - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14NE (E)	893	-	338443 350432
251	Contemporary Trade Directory Entries Name: Cool Point Location: Bridge Rd, Wrexham Ind Est, Wrexham, Clwyd, LL13 9PS Classification: Refrigeration Equipment - Commercial Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A8SE (S)	894	-	337756 349246
251	Contemporary Trade Directory Entries Name: Ocs Support Services Ltd Location: Bridge Rd, Wrexham Indust Est, Wrexham, Clwyd, LL13 9PS Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A8SE (S)	898	-	337750 349240
252	Contemporary Trade Directory Entries Name: Biltong Basket Ltd Location: Unit A6, Abbey Close, Redwither Business Park, Wrexham, Clwyd, LL13 9XG Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (E)	894	-	338421 350582
252	Contemporary Trade Directory Entries Name: A W R Engineering Services Location: Unit A11, Abbey Close, Redwither Business Park, Wrexham, Clwyd, LL13 9XG Classification: Precision Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A14NE (E)	906	-	338442 350542
252	Contemporary Trade Directory Entries Name: Wrexham Autogas Ltd Location: Unit 7, Abbey Cl, Redwither Business Pk, Wrexham, Clwyd, LL13 9XG Classification: Autogas Suppliers & Installers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A19SE (E)	913	-	338440 350584
252	Contemporary Trade Directory Entries Name: Discount Central Heating Supplies Location: Unit A7, Abbey Close, Redwither Business Park, Wrexham, Clwyd, LL13 9XG Classification: Central Heating Supplies & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (E)	914	-	338441 350585
252	Contemporary Trade Directory Entries Name: N S Eastern Cuisine Location: Unit A8, Abbey Close, Redwither Business Park, Wrexham, Clwyd, LL13 9XG Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	920	-	338449 350579

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
253	Contemporary Trade Directory Entries Name: Disc-Lock Europe Location: Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS Classification: Nuts, Bolts & Fixings Status: Active Positional Accuracy: Manually positioned within the geographical locality	A7SE (S)	896	-	337097 349264
253	Contemporary Trade Directory Entries Name: N U Instruments Location: Unit 74, Clywedog Road South, Wrexham Industrial Estate, Wrexham, LL13 9XS Classification: Scientific Apparatus & Instruments - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A7SE (S)	896	-	337097 349264
253	Contemporary Trade Directory Entries Name: Maelor Contract Systems Ltd Location: Unit 74, Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS Classification: Electronic Equipment - Manufacturers & Assemblers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (S)	898	-	337098 349262
254	Contemporary Trade Directory Entries Name: Malpas Tractors Location: Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS Classification: Agricultural Vehicles Status: Active Positional Accuracy: Automatically positioned to the address	A7SE (SW)	899	-	337022 349290
254	Contemporary Trade Directory Entries Name: Malpas Tractors Ltd Location: Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS Classification: Agricultural Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (SW)	899	-	337022 349290
255	Contemporary Trade Directory Entries Name: Isringhausen Gb Ltd Location: Second Avenue, Redwither Business Park, Wrexham, Clwyd, LL13 9XQ Classification: Seating Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	902	-	338394 350014
256	Contemporary Trade Directory Entries Name: Nutrafeed Ltd Location: Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9PS Classification: Reclaiming - Waste Products Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SE (SE)	906	-	338185 349539
257	Contemporary Trade Directory Entries Name: K D Products Ltd Location: Ground Floor, Redwither Tower, Redwither Business Park, Wrexham, Clwyd, LL13 9XT Classification: Furniture Manufacturers - Home & Office Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	921	-	338442 350138
257	Contemporary Trade Directory Entries Name: Refractory International Ltd Location: Redwither Tower, Redwither Business Pk, Wrexham, Clwyd, LL13 9XT Classification: Refractory Materials & Supplies Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14SE (E)	921	-	338442 350138
257	Contemporary Trade Directory Entries Name: Remagen Location: Second Floor, Redwither Tower, Redwither Business Park, Wrexham, Clwyd, LL13 9XT Classification: Seating Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	921	-	338442 350138
257	Contemporary Trade Directory Entries Name: Tisane Location: 2f, Redwither Tower, Redwither Business Pk, Wrexham, Clwyd, LL13 9XT Classification: Seating Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14SE (E)	921	-	338442 350138

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
257	Contemporary Trade Directory Entries Name: Dee Pharmaceuticals Ltd Location: Redwither Tower, Redwither Business Pk, Wrexham, Clwyd, LL13 9XT Classification: Pharmaceutical Manufacturers & Distributors Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14SE (E)	921	-	338442 350138
258	Contemporary Trade Directory Entries Name: Cns Cleaning Ltd Location: 401 Abbey Road North, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RF Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14NE (E)	922	-	338474 350394
258	Contemporary Trade Directory Entries Name: Space Age Manufacturing Location: Units 231 Abbey Rd, Redwither Industrial Complex, Wrexham, Clwyd, LL13 9UE Classification: Precision Engineers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A15NW (E)	923	-	338475 350388
259	Contemporary Trade Directory Entries Name: H T C Management Services Ltd Location: Redwither Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Classification: Engineering Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	923	-	338110 349430
260	Contemporary Trade Directory Entries Name: Tritech Group Ltd Location: Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9PS Classification: Precision Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	925	-	338242 349587
261	Contemporary Trade Directory Entries Name: App-Chem Location: App-Chem House, Hugmore Lane, Llan-y-Pwll, Wrexham, Clwyd, LL13 9YE Classification: Chemicals - Distributors & Wholesalers Status: Active Positional Accuracy: Automatically positioned to the address	A19NW (NE)	943	-	337979 351213
262	Contemporary Trade Directory Entries Name: Scrap Yard In Wrexham Htt Location: Unit 75, Wrexham, Clwyd, LL13 9xs Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7SE (SW)	949	-	337005 349243
262	Contemporary Trade Directory Entries Name: Scrap My Car Now For Money Wrexham Kws Location: Clywedog Road South, Wrexham, Clwyd, LL13 9XS Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7SE (SW)	949	-	337005 349243
262	Contemporary Trade Directory Entries Name: R F Bellis Haulage Ltd Location: Russell Bellis Transport, Unit 4, Clywedog Road South, Wrexham, LL13 9XS Classification: Road Haulage Services Status: Active Positional Accuracy: Automatically positioned to the address	A2NE (SW)	989	-	336989 349206
263	Contemporary Trade Directory Entries Name: Lyan Packaging Supplies Ltd Location: Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS Classification: Packaging Materials Manufacturers & Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A7SE (SW)	963	-	336954 349251
264	Contemporary Trade Directory Entries Name: Wrexham General Engineering Ltd Location: Unit 226e, Elm Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UE Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A15NW (E)	981	-	338527 350484

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
264	Contemporary Trade Directory Entries Name: Wrexham Rubber Fabricators Ltd Location: Unit 226B, Elm Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UE Classification: Rubber & Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A15NW (E)	981	-	338527 350484
264	Contemporary Trade Directory Entries Name: Lm Engineering Services Ltd Location: 226a-D, Unit, Abbey Road, Redwither Business Park, Wrexham, Clwyd, LL13 9XU Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A15NW (E)	981	-	338527 350484
265	Contemporary Trade Directory Entries Name: Envirochem Technologists Ltd Location: Hugmore Lane, Llan-y-Pwll, Wrexham, Clwyd, LL13 9YE Classification: Scientific Apparatus & Instruments - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A24SW (NE)	988	-	337961 351271
266	Points of Interest - Commercial Services Name: Transport & Storage Services Location: Unit 22, Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13NW (W)	53	7	337327 350291
267	Points of Interest - Commercial Services Name: P J Garage Ltd Location: Unit 8, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9JT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (S)	60	7	337428 350040
268	Points of Interest - Commercial Services Name: B D Performance Location: Unit 19, Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (SW)	95	7	337320 350043
269	Points of Interest - Commercial Services Name: George L Williams Location: B K House, Ash Road South, Wrexham Industrial Estate, Wrexham, LL13 9UG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SE (E)	144	7	337655 350179
270	Points of Interest - Commercial Services Name: Clwyd Transport Services Ltd Location: Clwyd House, Ash Road South, Wrexham Industrial Estate, Wrexham, LL13 9UG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SE (SE)	270	7	337766 350116
271	Points of Interest - Commercial Services Name: Steve Vernon Transport Location: Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9JT Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (NE)	372	7	337916 350447
272	Points of Interest - Commercial Services Name: D J L Haulage Location: Unit 411, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9UF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (NE)	420	7	337937 350540
273	Points of Interest - Commercial Services Name: Zaviz International Ltd Location: Coed Aben Road, Wrexham Industrial Estate, Wrexham, LL13 9UH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	463	7	337570 349640

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
274	Points of Interest - Commercial Services Name: Proserve Industrial Ltd Location: Unit 2, Ash Road South, Wrexham Industrial Estate, Wrexham, LL13 9UG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (E)	573	7	338101 350209
275	Points of Interest - Commercial Services Name: B D Automotive Location: Unit 101, Coed Aben Road, Wrexham Industrial Estate, Wrexham, LL13 9UH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	656	7	337815 349536
276	Points of Interest - Commercial Services Name: Demon Tweeks Modifying Location: Ash Road South, Wrexham Industrial Estate, Wrexham, LL13 9UG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (E)	682	7	338179 350057
277	Points of Interest - Commercial Services Name: Stephen Williams Transport Ltd Location: Unit 11 The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8SE (S)	745	7	337700 349384
277	Points of Interest - Commercial Services Name: Williams Services Location: Unit 11 The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	746	7	337700 349383
277	Points of Interest - Commercial Services Name: R J Scott & Son Ltd Location: Unit 13 The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	775	7	337723 349360
277	Points of Interest - Commercial Services Name: Motofix Motorcycle Services Location: Unit 7 The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	806	7	337682 349315
277	Points of Interest - Commercial Services Name: Bridgeway Garage Location: Unit 5 The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	818	7	337697 349307
277	Points of Interest - Commercial Services Name: Hydro Location: Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9PS Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A8SE (S)	839	7	337619 349267
278	Points of Interest - Commercial Services Name: McCarthy Haulage Ltd Location: Building 4, First Avenue, Redwither Business Park, Wrexham, LL13 9XP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SE (E)	866	7	338404 350221
279	Points of Interest - Commercial Services Name: Nutrafeed Location: Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9PS Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A9SE (SE)	906	7	338185 349539

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
280	Points of Interest - Commercial Services Name: North Western Insulations Ltd Location: Unit 1, Redwither Road, Wrexham Industrial Estate, Wrexham, LL13 9RD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A9SE (SE)	973	7	338155 349404
281	Points of Interest - Commercial Services Name: R F Bellis Haulage Ltd Location: Russell Bellis Transport Unit 4, Clywedog Road South, Wrexham, LL13 9XS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A2NE (SW)	990	7	336989 349205
282	Points of Interest - Manufacturing and Production Name: Tank Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13SW (S)	111	7	337455 349982
283	Points of Interest - Manufacturing and Production Name: Ystad Ddiwydiannol Wrecsam (Wrexham Industrial Estate) Location: LL13 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A8NE (SE)	270	7	337657 349900
284	Points of Interest - Manufacturing and Production Name: Tanks Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	358	7	337907 350421
285	Points of Interest - Manufacturing and Production Name: Tank Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	401	7	337672 350755
286	Points of Interest - Manufacturing and Production Name: Tank Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8NE (SE)	443	7	337781 349780
287	Points of Interest - Manufacturing and Production Name: Tank Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	603	7	338070 350681
288	Points of Interest - Manufacturing and Production Name: Tank Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	701	7	337992 349627
289	Points of Interest - Manufacturing and Production Name: Redwither Business Centre Location: Redwither, Business Park, Wrexham, LL13 9XR Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A14NE (E)	890	7	338441 350342
290	Points of Interest - Manufacturing and Production Name: Redwither Tower Location: Redwither Business Park, Wrexham, LL13 9XT Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A14SE (E)	921	7	338442 350138

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
291	Ancient Woodland Name: Not Supplied Reference: 1440 Area(m²): 23843.23 Type: Ancient and Semi-Natural Woodland	A13SE (SE)	147	2	337637 350125
292	Ancient Woodland Name: Not Supplied Reference: 1438 Area(m²): 60377.5 Type: Ancient and Semi-Natural Woodland	A12SE (W)	398	2	336988 350073
293	Ancient Woodland Name: Not Supplied Reference: 1445 Area(m²): 26375.3 Type: Plantation on Ancient Woodland	A12SE (SW)	443	2	336980 349931

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Wrexham County Borough Council - Public Protection Department Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department Cheshire West and Chester Council - Environmental Health Department	April 2016 August 2008 November 2013	Annually Not Applicable Annually
Discharge Consents Environment Agency - Welsh Region Natural Resources Wales	August 2014 January 2017	Quarterly Quarterly
Enforcement and Prohibition Notices Environment Agency - North West Region Environment Agency - Welsh Region	March 2013 March 2013	As notified As notified
Integrated Pollution Controls Environment Agency - North West Region Environment Agency - Welsh Region	October 2008 October 2008	Not Applicable Not Applicable
Integrated Pollution Prevention And Control Environment Agency - North West Region Environment Agency - Welsh Region Natural Resources Wales	January 2017 January 2017 November 2016	Quarterly Quarterly Quarterly
Local Authority Integrated Pollution Prevention And Control Wrexham County Borough Council - Environmental Health Department Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department Cheshire West and Chester Council - Environmental Health Department	April 2014 December 2008 July 2015	Annual Rolling Update Not Applicable Annually
Local Authority Pollution Prevention and Controls Wrexham County Borough Council - Environmental Health Department Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department Cheshire West and Chester Council - Environmental Health Department	April 2014 December 2008 July 2015	Annual Rolling Update Not Applicable Annually
Local Authority Pollution Prevention and Control Enforcements Wrexham County Borough Council - Environmental Health Department Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department Cheshire West and Chester Council - Environmental Health Department	April 2014 December 2008 July 2015	Annual Rolling Update Not Applicable Annually
Pollution Incidents to Controlled Waters Environment Agency - Welsh Region	December 1998	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - North West Region Environment Agency - Welsh Region Natural Resources Wales	March 2013 March 2013 March 2013	As notified As notified As notified
Prosecutions Relating to Controlled Waters Environment Agency - North West Region Environment Agency - Welsh Region Natural Resources Wales	March 2013 March 2013 March 2013	As notified As notified As notified
Registered Radioactive Substances Natural Resources Wales	January 2015	As notified
Substantiated Pollution Incident Register Environment Agency - North West Region - South Area Environment Agency Wales - North Area Natural Resources Wales	January 2017 January 2017 January 2017	Quarterly Quarterly Quarterly
Water Abstractions Natural Resources Wales Environment Agency - Welsh Region	November 2016 October 2016	Quarterly Quarterly

Agency & Hydrological	Version	Update Cycle
Water Industry Act Referrals Environment Agency - North West Region Environment Agency - Welsh Region Natural Resources Wales	January 2017 January 2017 October 2015	Quarterly Quarterly Quarterly
Groundwater Vulnerability Environment Agency - Head Office	April 2015	Not Applicable
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations British Geological Survey - National Geoscience Information Service	August 2015	As notified
Superficial Aquifer Designations British Geological Survey - National Geoscience Information Service	August 2015	As notified
Source Protection Zones Environment Agency - Head Office Natural Resources Wales	February 2017 November 2016	Quarterly Quarterly
Extreme Flooding from Rivers or Sea without Defences Natural Resources Wales	February 2017	Quarterly
Flooding from Rivers or Sea without Defences Natural Resources Wales	February 2017	Quarterly
Areas Benefiting from Flood Defences Natural Resources Wales	February 2017	Quarterly
Flood Water Storage Areas Natural Resources Wales	February 2017	Quarterly
Flood Defences Natural Resources Wales	February 2017	Quarterly
Surface Water 1 in 30 year Flood Extent Natural Resources Wales	October 2013	As notified
Surface Water 1 in 100 year Flood Extent Natural Resources Wales	October 2013	As notified
Surface Water 1 in 1000 year Flood Extent Natural Resources Wales	October 2013	As notified
Surface Water Suitability Natural Resources Wales	October 2013	As notified
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Natural Resources Wales	January 2017	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - North West Region Environment Agency - Welsh Region	October 2008 October 2008	Not Applicable Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - North West Region - South Area Environment Agency Wales - North Area Natural Resources Wales	August 2016 August 2016 August 2016	Quarterly Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Natural Resources Wales Environment Agency - North West Region - South Area Environment Agency Wales - North Area	January 2017 October 2016 October 2016	Quarterly Quarterly Quarterly
Local Authority Landfill Coverage Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department Wrexham County Borough Council	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department Wrexham County Borough Council Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department	February 2005 June 2003 May 2000	Not Applicable Not Applicable Not Applicable
Potentially Infilled Land (Non-Water) Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water) Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites Environment Agency - North West Region - South Area Environment Agency Wales - North Area	March 2003 March 2003	Not Applicable Not Applicable
Registered Waste Transfer Sites Environment Agency - North West Region - South Area Environment Agency Wales - North Area	March 2003 March 2003	Not Applicable Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - North West Region - South Area Environment Agency Wales - North Area	March 2003 March 2003	Not Applicable Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	March 2017	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements Cheshire West and Chester Council - Planning Department Wrexham County Borough Council - Planning Department Cheshire County Council (now part of Cheshire East Council) - Planning Department Chester City Council (now part of Cheshire West and Chester Council)	April 2016 February 2016 July 2008 October 2008	Annually Annual Rolling Update Annual Rolling Update Not Applicable
Planning Hazardous Substance Consents Cheshire West and Chester Council - Planning Department Wrexham County Borough Council - Planning Department Cheshire County Council (now part of Cheshire East Council) - Planning Department Chester City Council (now part of Cheshire West and Chester Council)	April 2016 February 2016 July 2008 October 2008	Annually Annual Rolling Update Annual Rolling Update Not Applicable
Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	April 2017	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	As notified
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	As notified

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	January 2017	Quarterly
Fuel Station Entries Catalist Ltd - Experian	February 2017	Quarterly
Gas Pipelines National Grid	July 2014	Quarterly
Points of Interest - Commercial Services PointX	December 2016	Quarterly
Points of Interest - Education and Health PointX	December 2016	Quarterly
Points of Interest - Manufacturing and Production PointX	December 2016	Quarterly
Points of Interest - Public Infrastructure PointX	December 2016	Quarterly
Points of Interest - Recreational and Environmental PointX	December 2016	Quarterly
Underground Electrical Cables National Grid	December 2015	Bi-Annually

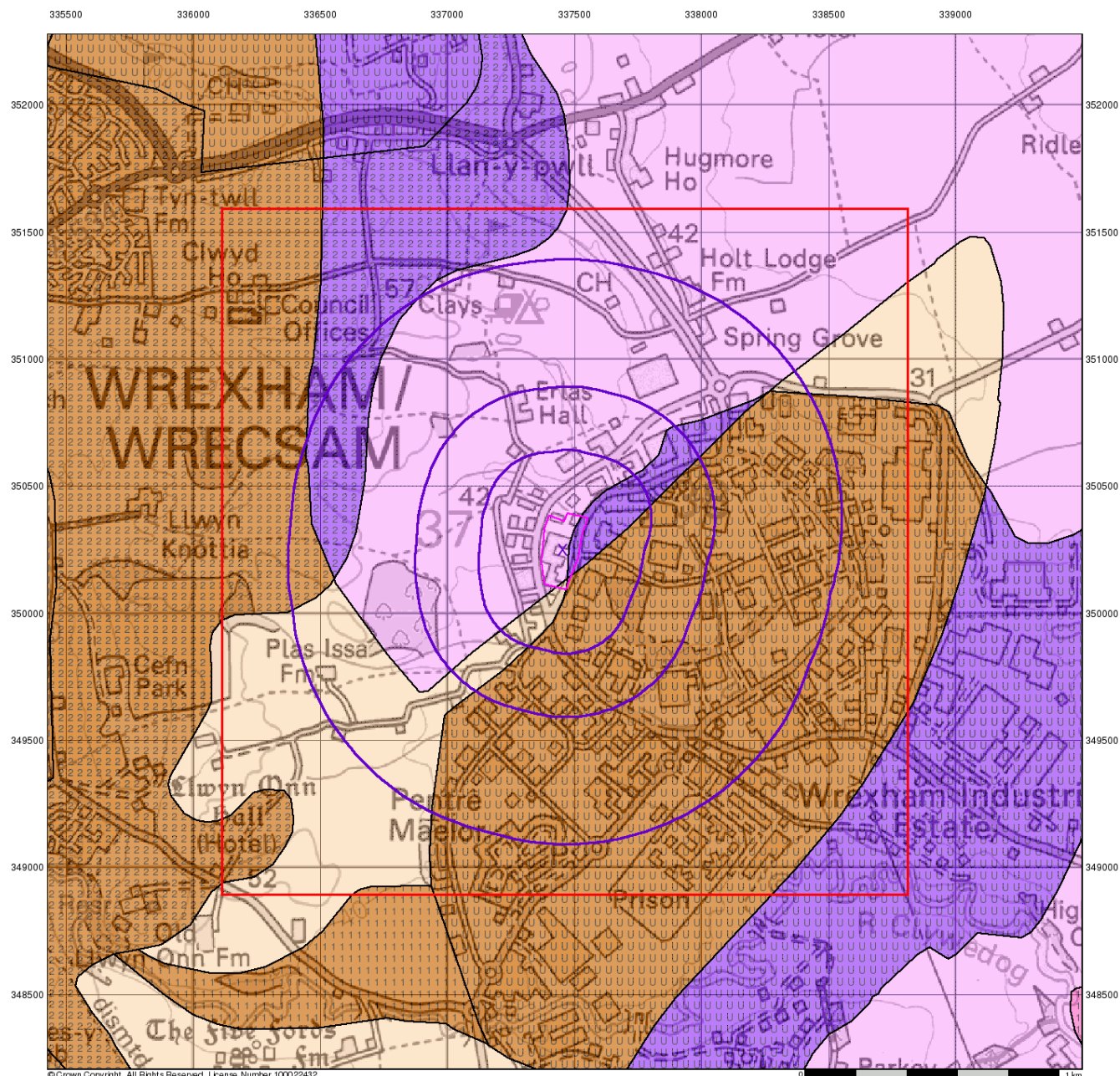
Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural Resources Wales	January 2014	Bi-Annually
Areas of Adopted Green Belt Chester City Council (now part of Cheshire West and Chester Council)	February 2017	As notified
Areas of Unadopted Green Belt Chester City Council (now part of Cheshire West and Chester Council)	February 2017	As notified
Areas of Outstanding Natural Beauty Natural England Natural Resources Wales	January 2017 January 2017	Bi-Annually Bi-Annually
Environmentally Sensitive Areas Natural England The National Assembly for Wales - GI Services (Department of Planning & Countryside)	January 2017 January 2017	Annually Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England Wrexham County Borough Council	January 2017 January 2017	Bi-Annually Bi-Annually
Marine Nature Reserves Natural Resources Wales	January 2017	Bi-Annually
National Nature Reserves Natural Resources Wales	January 2017	Bi-Annually
National Parks Natural Resources Wales Natural England	February 2017 February 2017	Annually Bi-Annually
Nitrate Vulnerable Zones The National Assembly for Wales - GI Services (Department of Planning & Countryside)	October 2005	Annually
Ramsar Sites Natural Resources Wales	January 2017	Bi-Annually
Sites of Special Scientific Interest Natural Resources Wales	January 2017	Bi-Annually
Special Areas of Conservation Natural Resources Wales	January 2017	Bi-Annually
Special Protection Areas Natural Resources Wales	January 2017	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Peter Brett Associates	

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Natural Resources Wales Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP	Telephone: 0300 065 3000 Email: enquiries@naturalresourceswales.gov.uk
3	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
4	Wrexham County Borough Council - Environmental Health Department Crown Buildings, P O Box 1297, Wrexham, Clwyd, LL13 8ZE	Telephone: 01978 297038 Fax: 01978 292502 Website: www.wrexham.gov.uk
5	Wrexham County Borough Council Lampet Street, Guildhall, Wrexham, Clwyd, LL11 1WL	Telephone: 01978 292000 Fax: 01978 292502 Website: www.wrexham.gov.uk
6	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk
7	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



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Groundwater Vulnerability

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

Major Aquifer
(Highly Permeable)

Minor Aquifer
(Variably Permeable)

Non Aquifer
(Negligibly Permeable)

Water or Sea

Drift Deposit

Soil Classes

High (H) 1, 2, 3, U

Intermediate (I) 1, 2

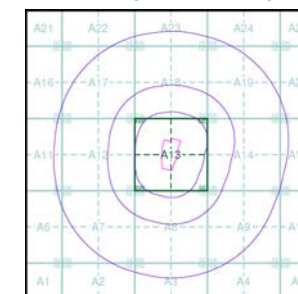
Low

High (H) 1, 2, 3, U

Intermediate (I) 1, 2

Low

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

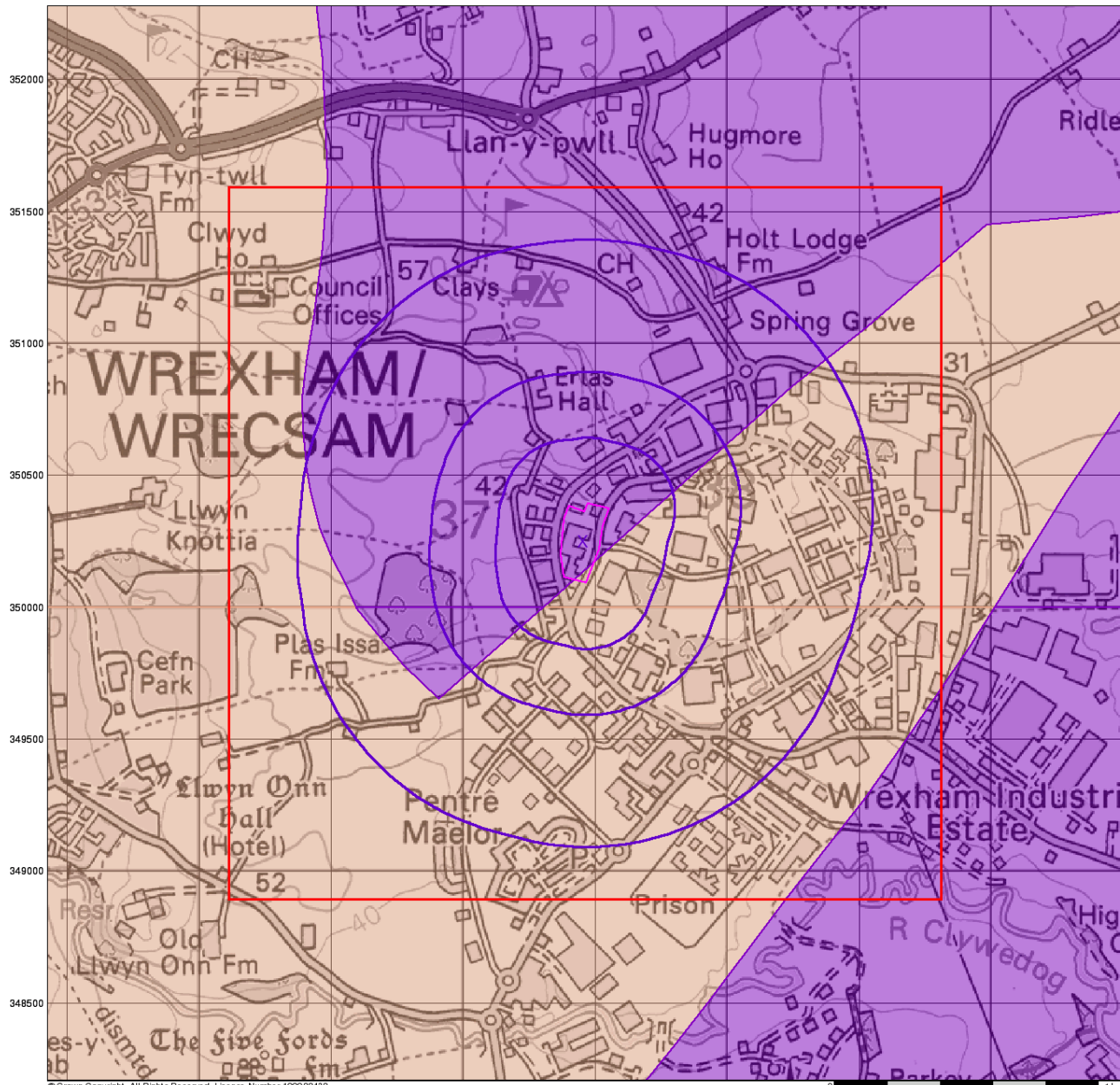
Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham
Industrial Estate, WREXHAM, LL13 9JT

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335500 336000 336500 337000 337500 338000 338500 339000



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0 1 km

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Bedrock Aquifer Designation

General

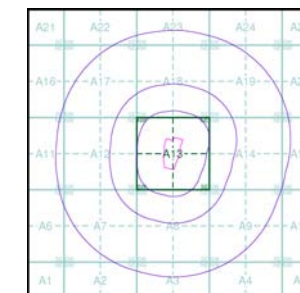
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

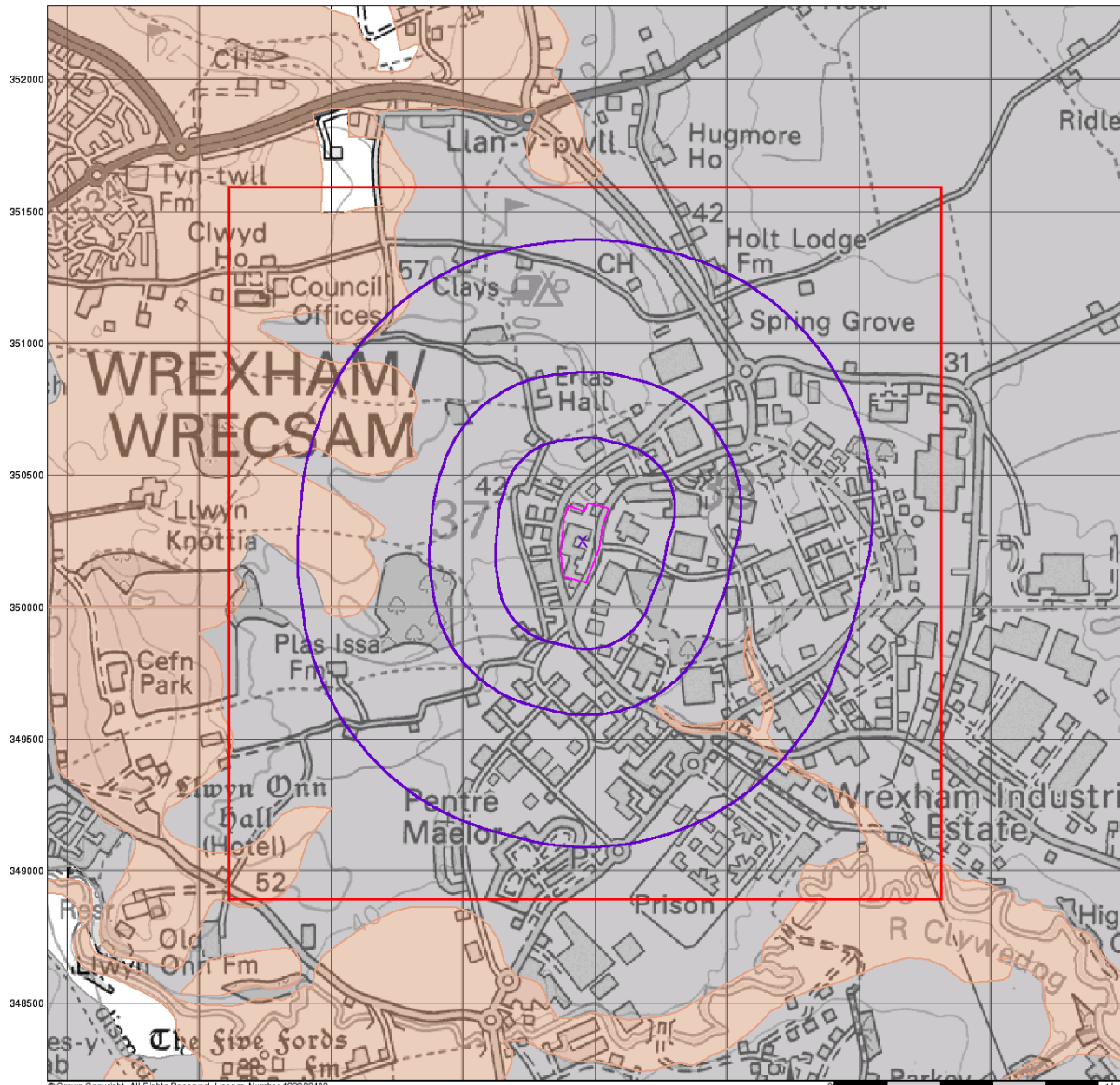
Site Details

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Superficial Aquifer Designation

General

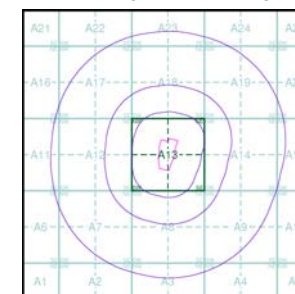
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 123167900_1_1
 Customer Ref: 1971/sdi
 National Grid Reference: 337450, 350250
 Slice: A
 Site Area (Ha): 3.74
 Search Buffer (m): 1000

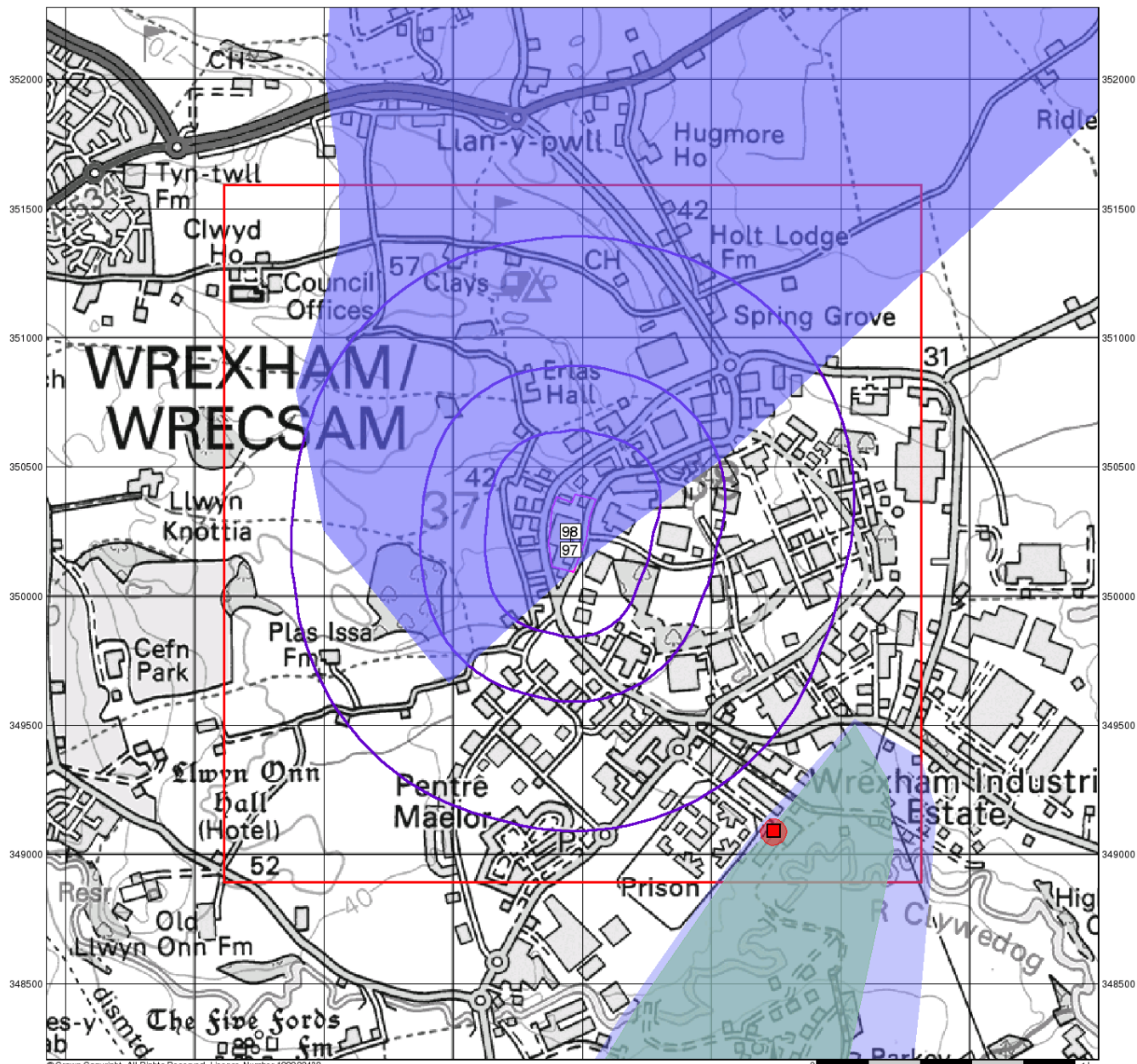
Site Details

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Source Protection Zones

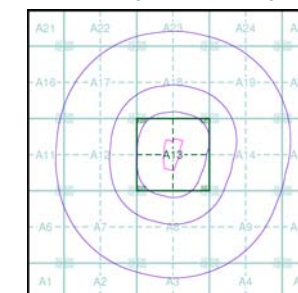
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)
- Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 123167900_1_1
 Customer Ref: 1971/sdi
 National Grid Reference: 337450, 350250
 Slice: A
 Site Area (Ha): 3.74
 Search Buffer (m): 1000

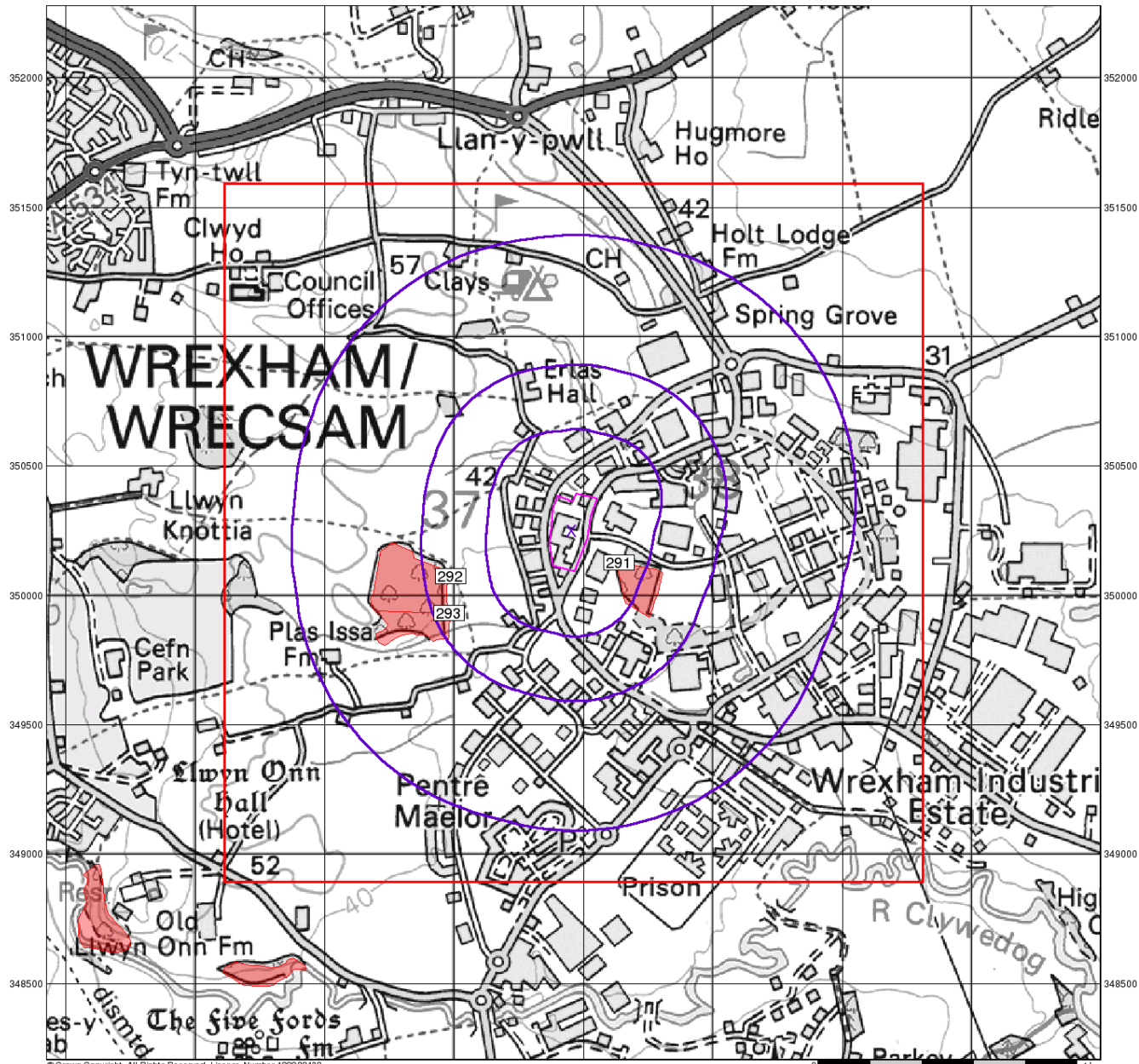
Site Details

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Sensitive Land Uses

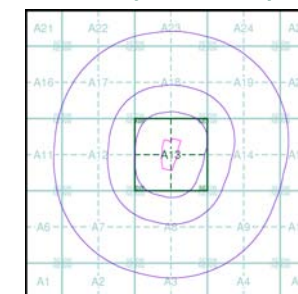
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 123167900_1_1
 Customer Ref: 1971/sdi
 National Grid Reference: 337450, 350250
 Slice: A
 Site Area (Ha): 3.74
 Search Buffer (m): 1000

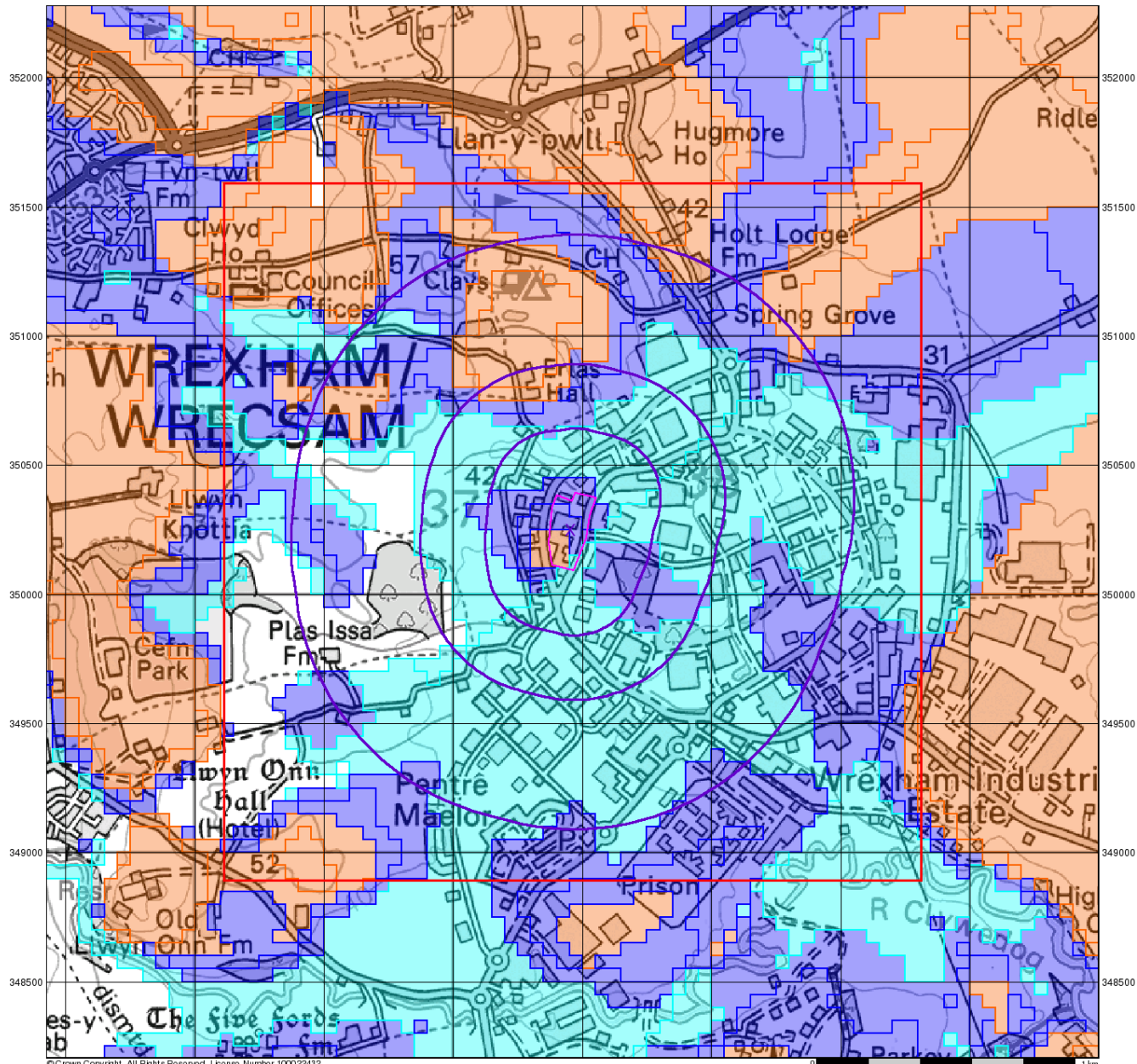
Site Details

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BGS Flood GFS Data

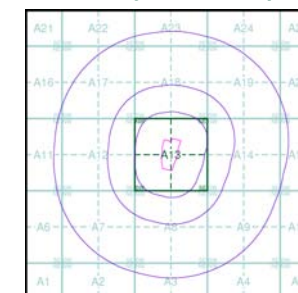
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

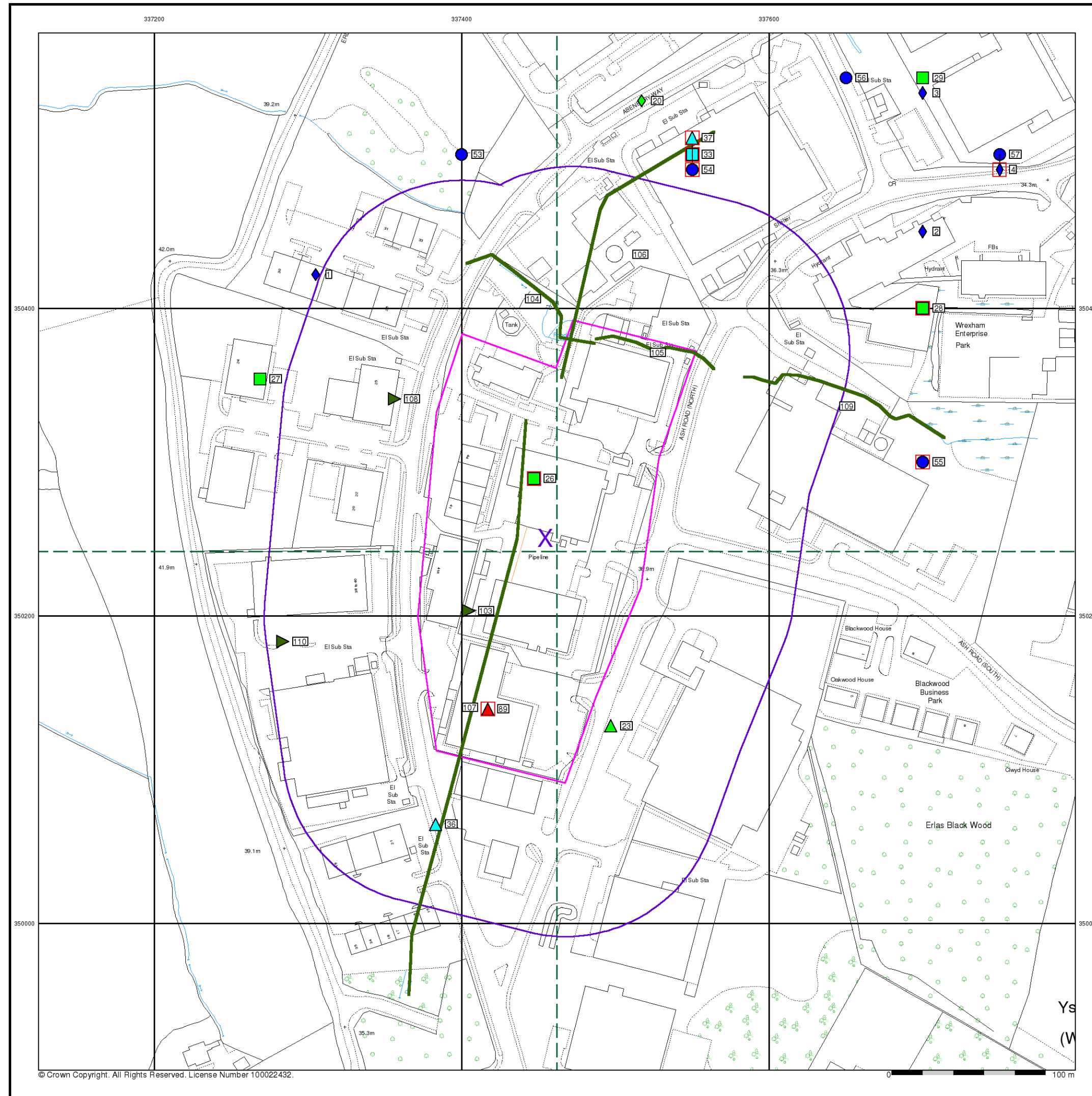
Order Number: 123167900_1_1
 Customer Ref: 1971/sdi
 National Grid Reference: 337450, 350250
 Slice: A
 Site Area (Ha): 3.74
 Search Buffer (m): 1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham
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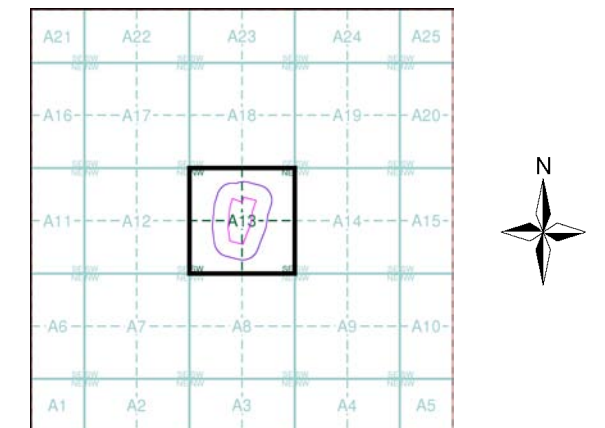
Tel: 0844 844 9952
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- ### General
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Map ID
 - Several of Type at Location
 - Pylon
 - Overhead Transmission Line
- ### Agency and Hydrological
- Contaminated Land Register Entry or Notice (Location)
 - Contaminated Land Register Entry or Notice
 - Discharge Consent
 - Enforcement or Prohibition Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Prosecution Relating to Authorised Processes
 - Prosecution Relating to Controlled Waters
 - Registered Radioactive Substance
 - River Network or Water Feature
 - River Quality Sampling Point
 - Substantiated Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Referral
- ### Hazardous Substances
- COMAH Site
 - Explosive Site
 - NIHHS Site
 - Planning Hazardous Substance Consent
 - Planning Hazardous Substance Enforcement
 - BGS Recorded Mineral Site
- ### Waste
- BGS Recorded Landfill Site (Location)
 - BGS Recorded Landfill Site
 - EA Historic Landfill (Buffered Point)
 - EA Historic Landfill (Polygon)
 - Integrated Pollution Control Registered Waste Site
 - Licensed Waste Management Facility (Landfill Boundary)
 - Licensed Waste Management Facility (Location)
 - Local Authority Recorded Landfill Site (Location)
 - Local Authority Recorded Landfill Site
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Registered Landfill Site
 - Registered Landfill Site (Location)
 - Registered Landfill Site (Point Buffered to 100m)
 - Registered Landfill Site (Point Buffered to 250m)
 - Registered Waste Transfer Site (Location)
 - Registered Waste Transfer Site
 - Registered Waste Treatment or Disposal Site (Location)
 - Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A13

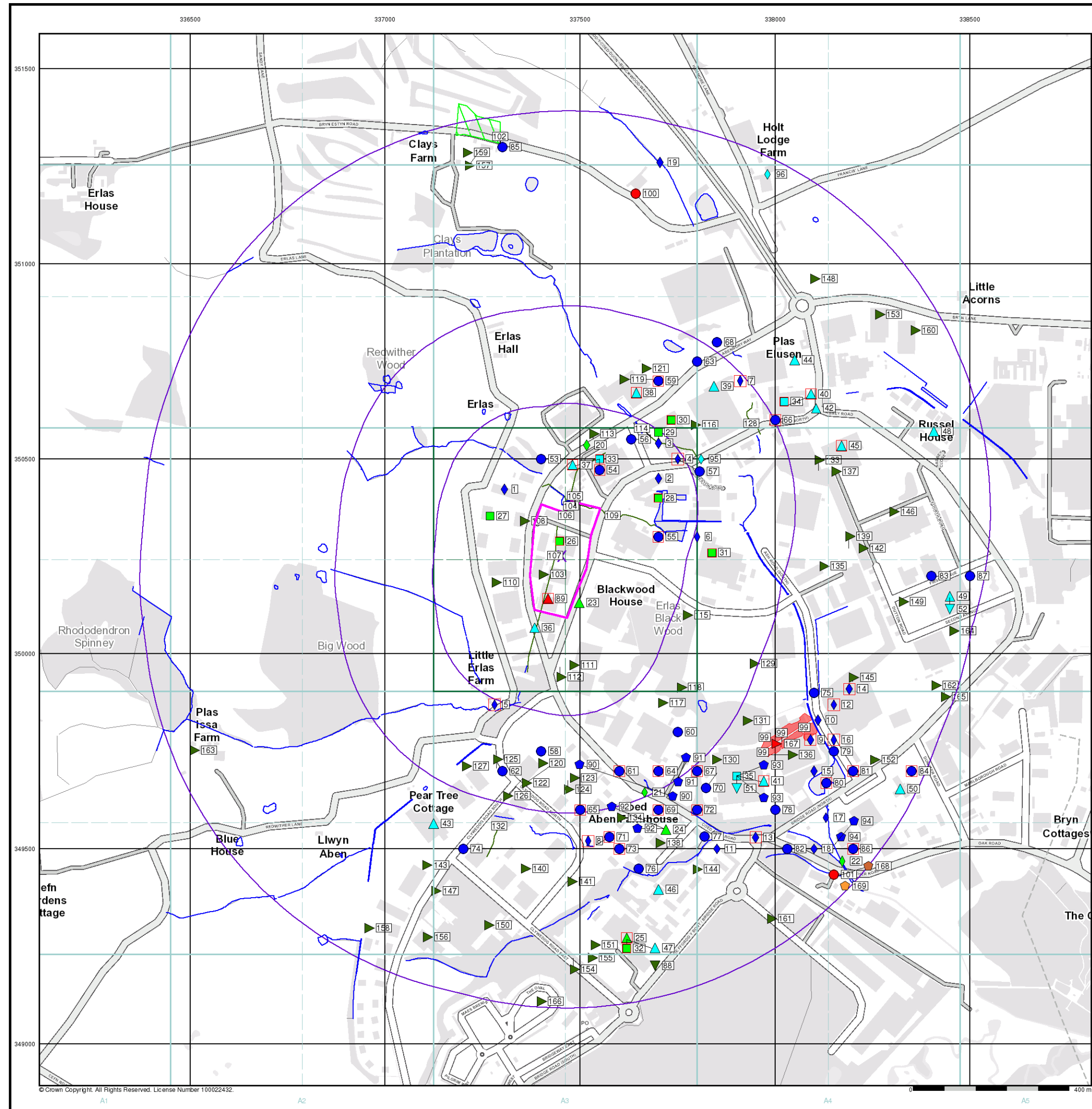


Order Details

Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Plot Buffer (m): 100

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT



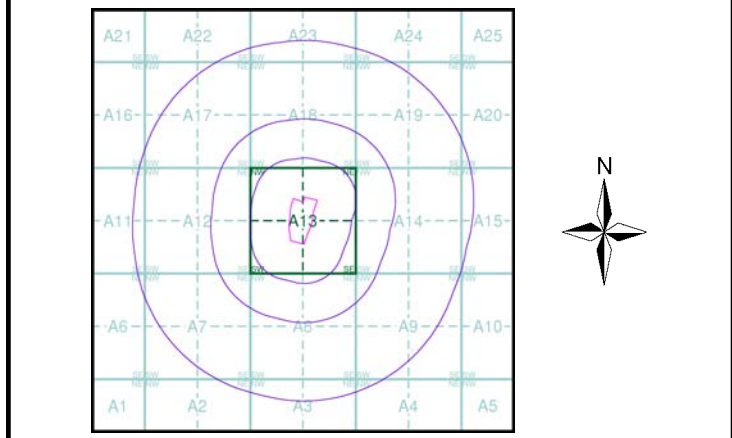
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- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Map ID
 - Several of Type at Location
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
 - Contaminated Land Register Entry or Notice
 - Discharge Consent
 - Enforcement or Prohibition Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Prosecution Relating to Authorised Processes
 - Prosecution Relating to Controlled Waters
 - Registered Radioactive Substance
 - River Network or Water Feature
 - River Quality Sampling Point
 - Substantiated Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Referral
- Hazardous Substances**
- COMAH Site
 - Explosive Site
 - NIHHS Site
 - Planning Hazardous Substance Consent
 - Planning Hazardous Substance Enforcement
 - BGS Recorded Mineral Site
- Waste**
- BGS Recorded Landfill Site (Location)
 - BGS Recorded Landfill Site
 - EA Historic Landfill (Buffered Point)
 - EA Historic Landfill (Polygon)
 - Integrated Pollution Control Registered Waste Site
 - Licensed Waste Management Facility (Landfill Boundary)
 - Licensed Waste Management Facility (Location)
 - Local Authority Recorded Landfill Site (Location)
 - Local Authority Recorded Landfill Site
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Registered Landfill Site (Location)
 - Registered Landfill Site (Point Buffered to 100m)
 - Registered Landfill Site (Point Buffered to 250m)
 - Registered Waste Transfer Site (Location)
 - Registered Waste Transfer Site
 - Registered Waste Treatment or Disposal Site (Location)
 - Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



Order Details

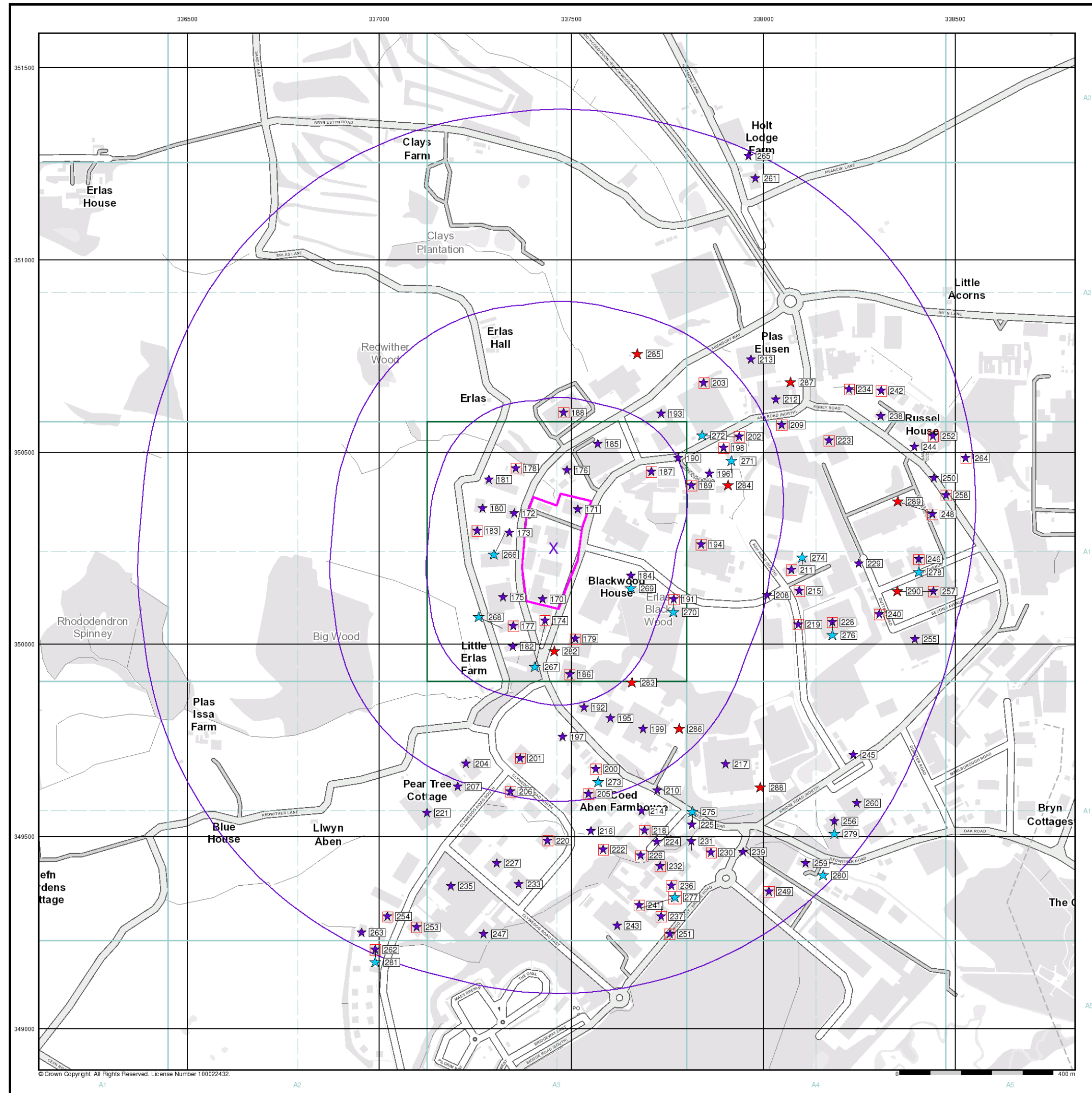
Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT

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Industrial Land Use Map

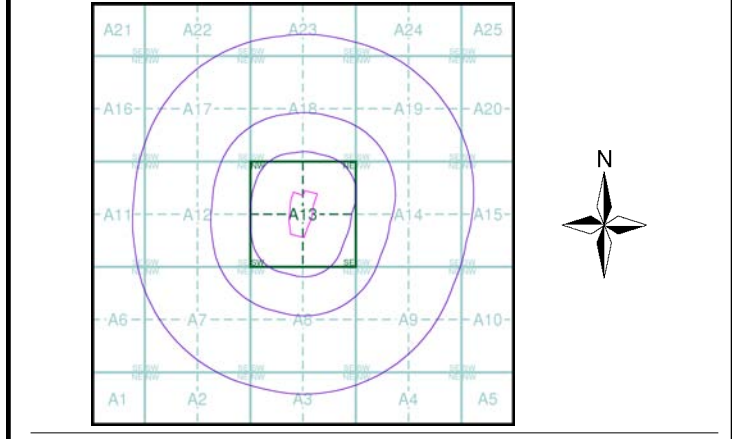
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A

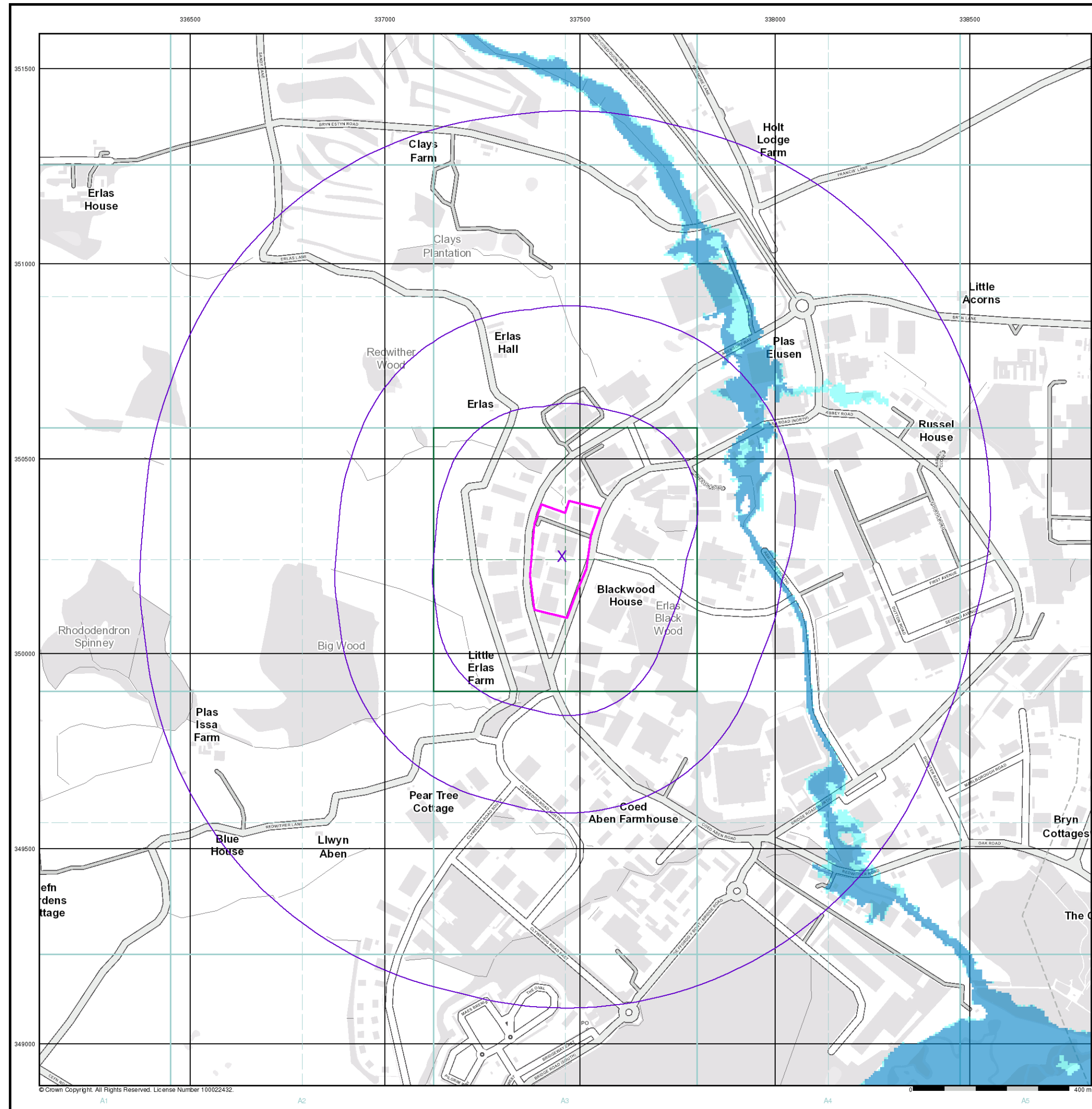


Order Details

Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

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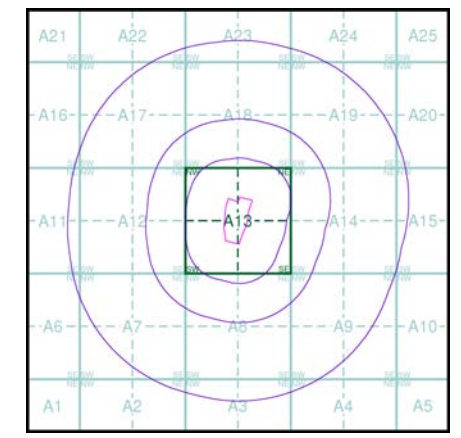
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A

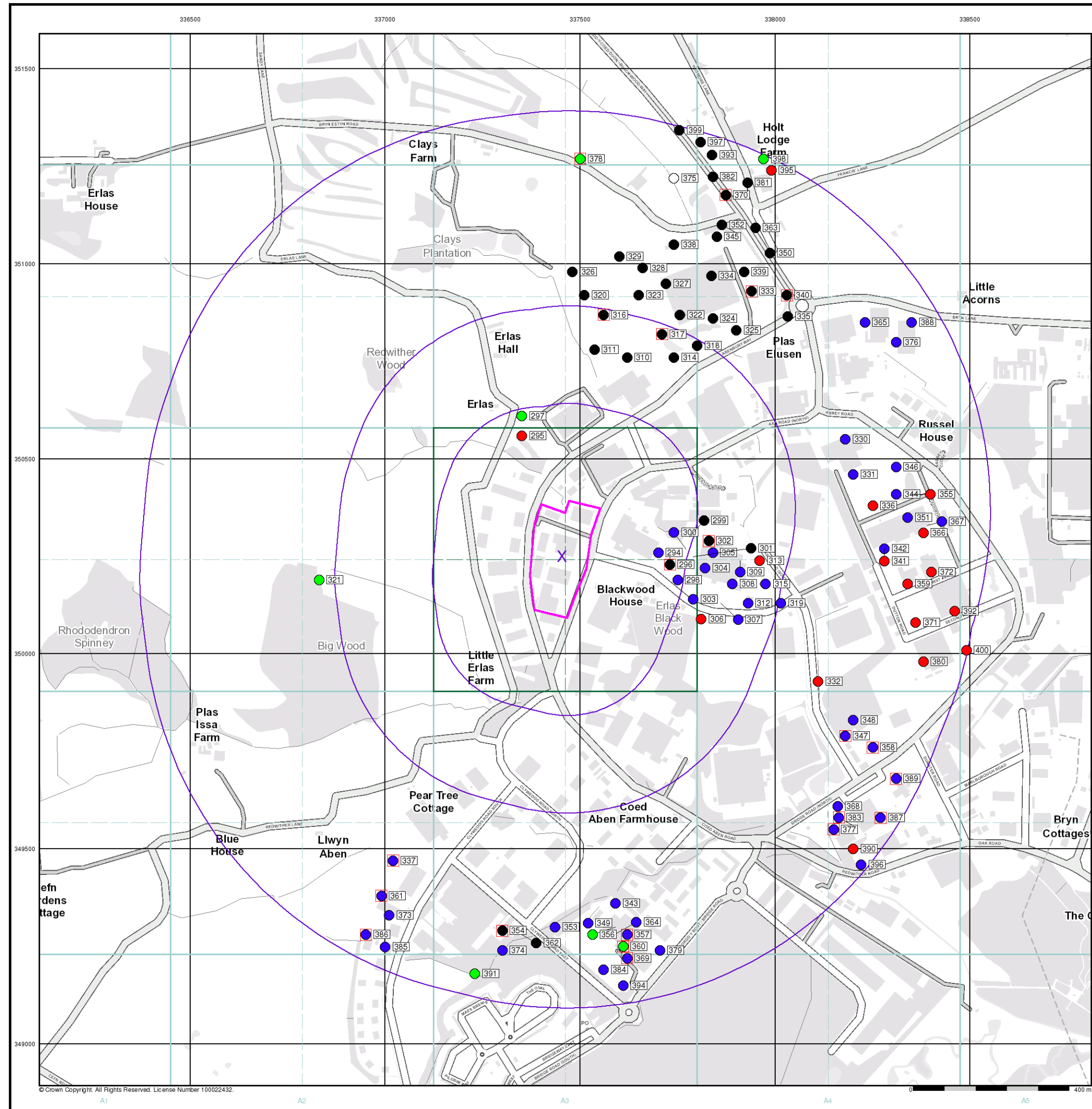


Order Details

Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

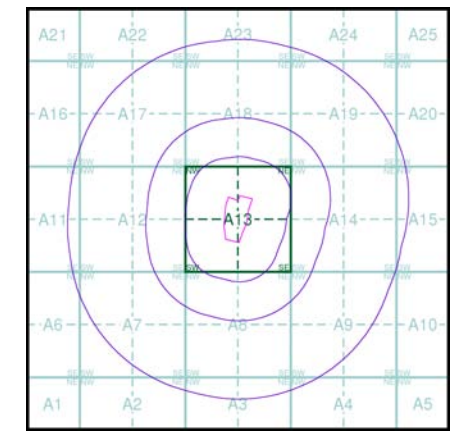
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A

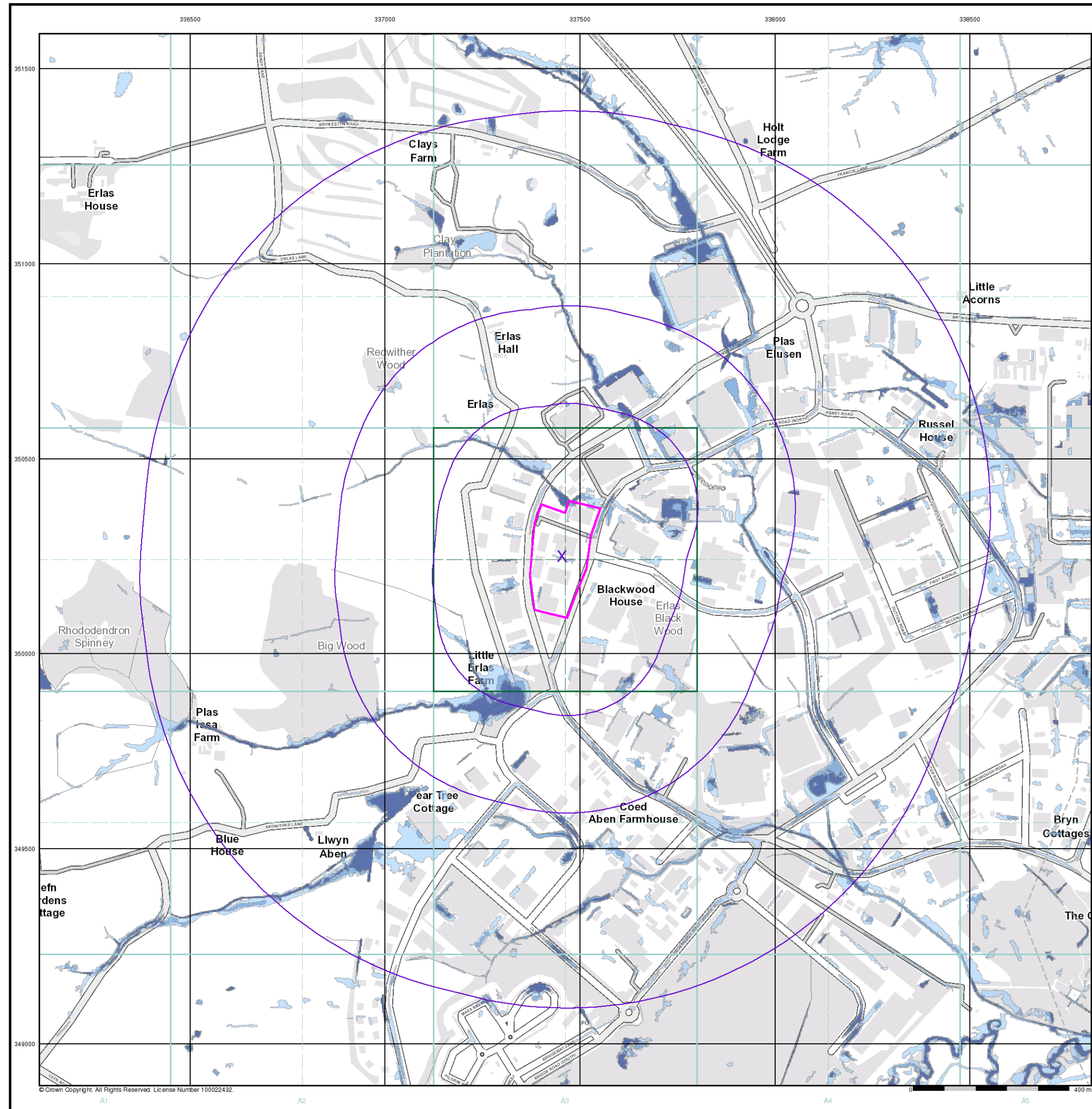


Order Details

Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT



General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

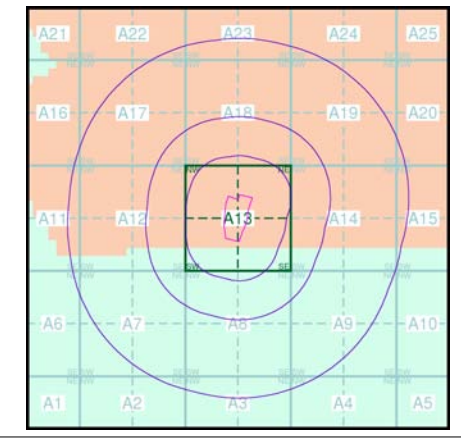
Risk of Flooding from Surface Water

- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

- See the suitability map below
- National to county
 - County to town
 - Town to street
 - Street to parcels of land
 - Property

EA/NRW Suitability Map - Slice A



Order Details

Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

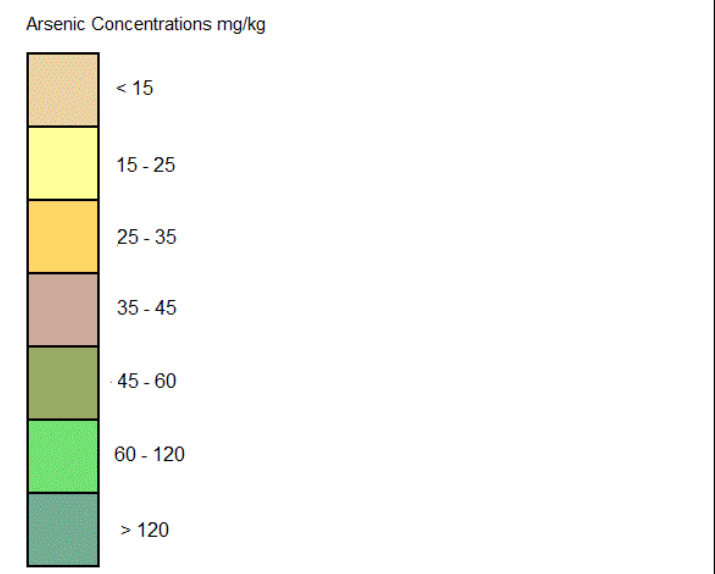
Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT



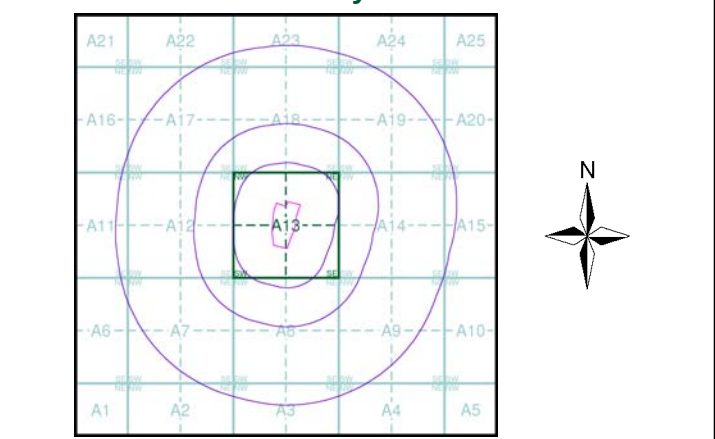
General

Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Arsenic



Estimated Soil Chemistry Arsenic - Slice A



Order Details

Order Details: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT



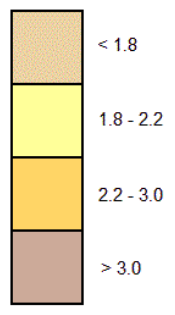
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General

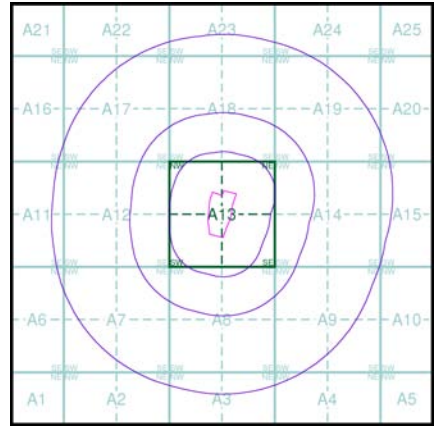
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg



Estimated Soil Chemistry Cadmium - Slice A

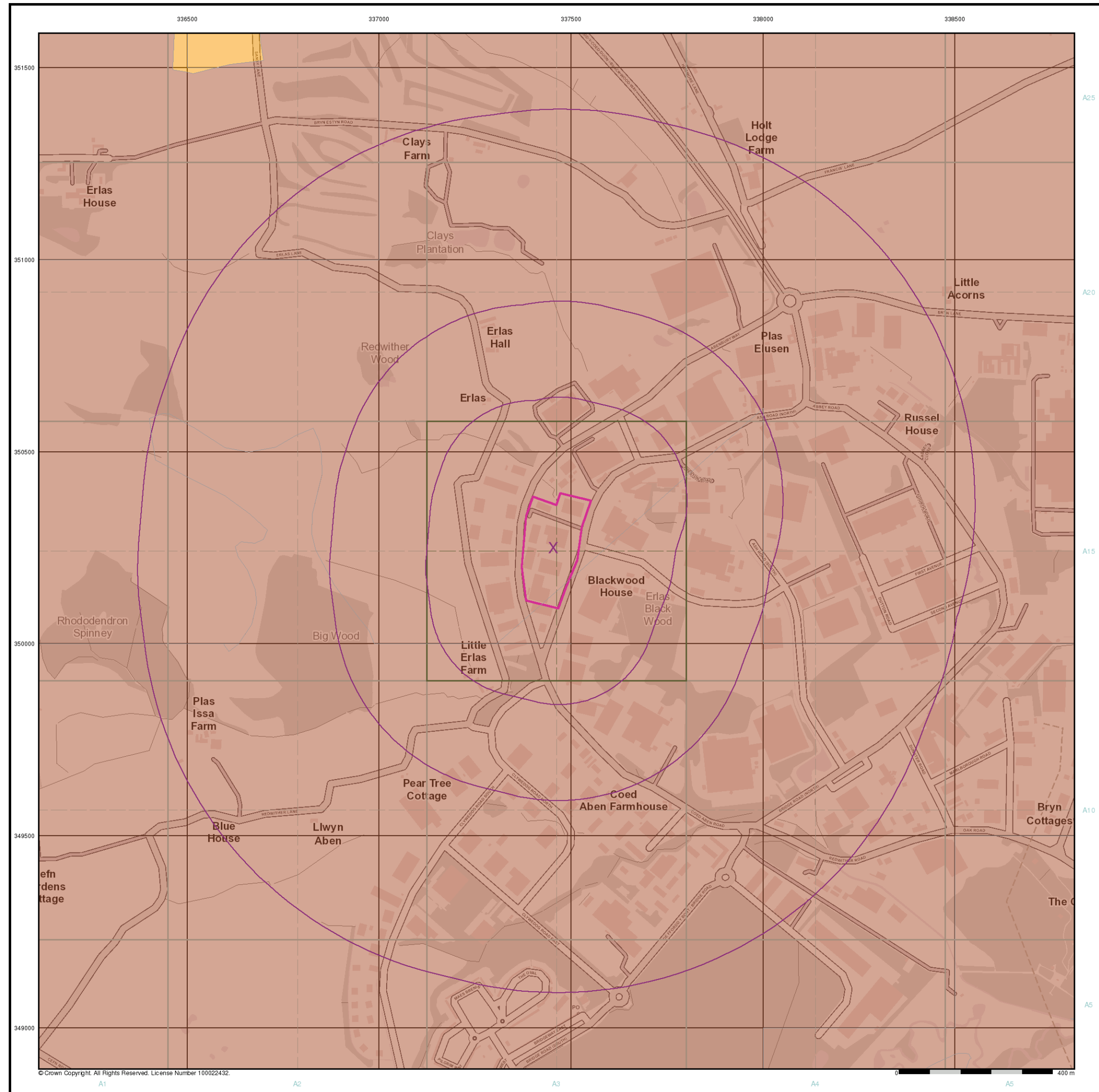


Order Details

Order Details: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT



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General

Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

< 20
20 - 40
40 - 60
60 - 90
90 - 120
120 - 180
> 180

Estimated Soil Chemistry Chromium - Slice A

Order Details

Order Details:	123167900_1_1
Customer Ref:	1971/sdi
National Grid Reference:	337450, 350250
Slice:	A
Site Area (Ha):	3.74
Search Buffer (m):	1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT

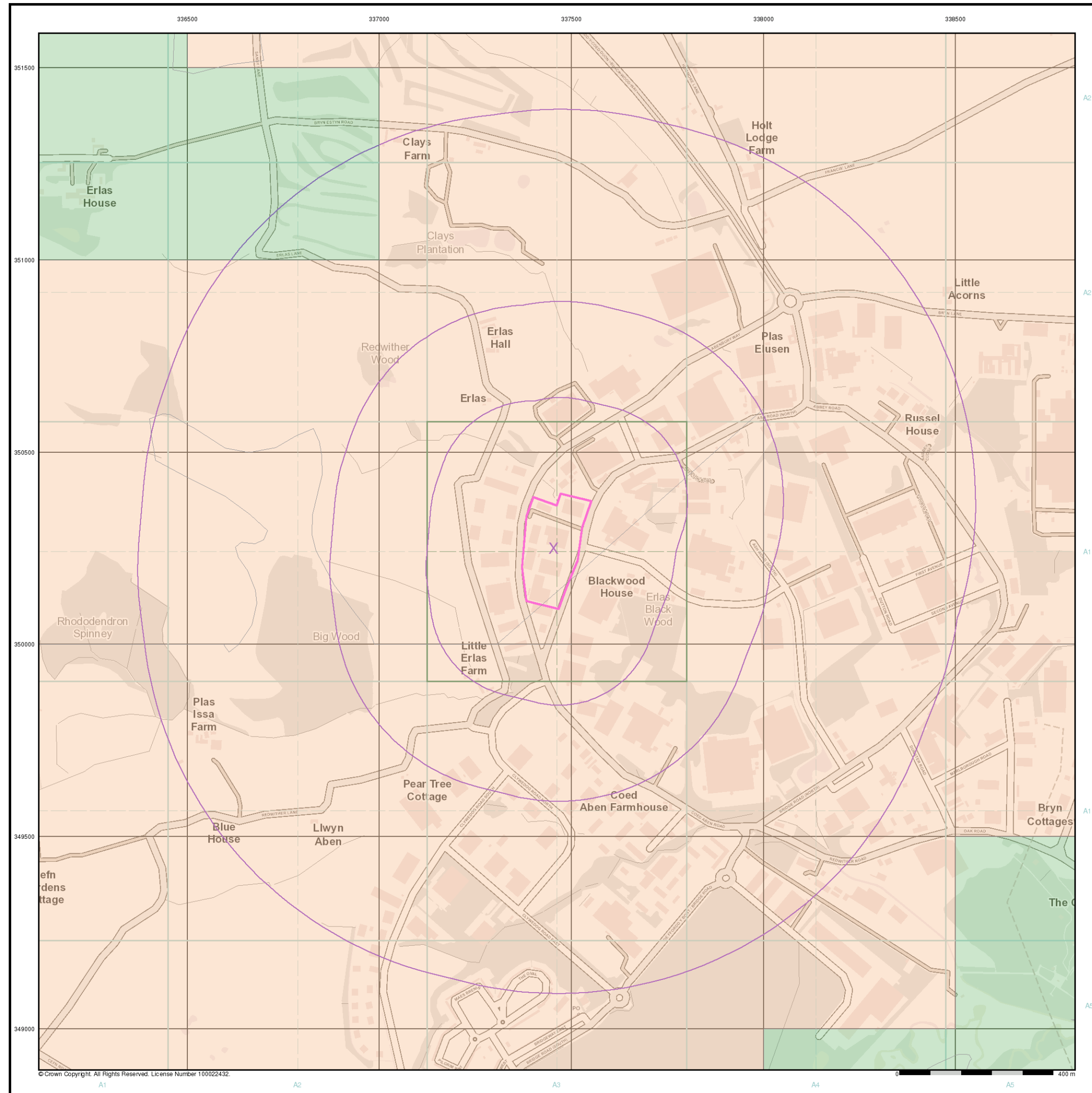
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General

Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

	<100 mg/kg
	100 - 200
	200 - 300
	300 - 600
	600 - 1200
	>1200

Estimated Soil Chemistry Lead - Slice A

Order Details

Order Details:	123167900_1_1
Customer Ref:	1971/sdi
National Grid Reference:	337450, 350250
Slice:	A
Site Area (Ha):	3.74
Search Buffer (m):	1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT

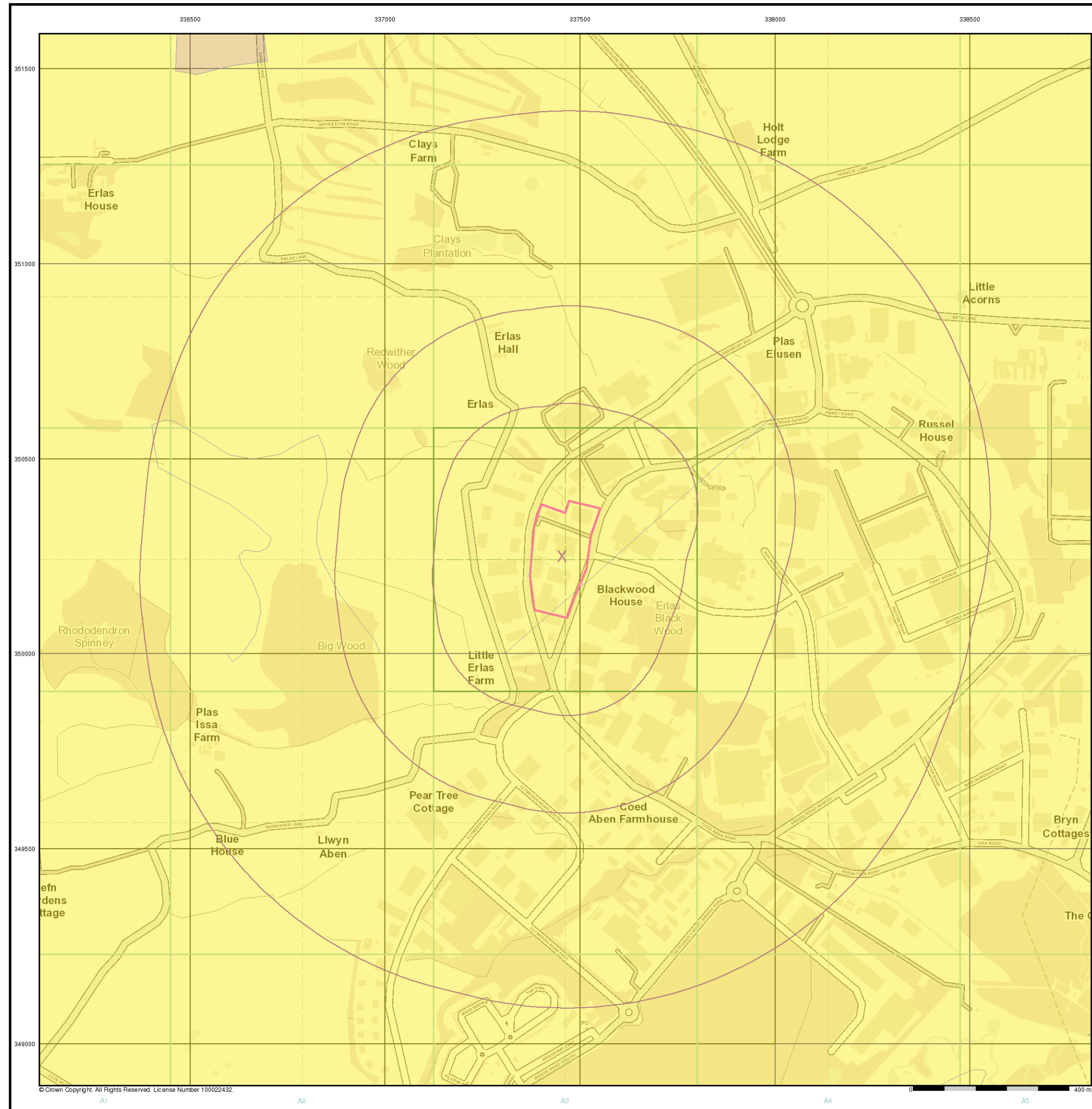
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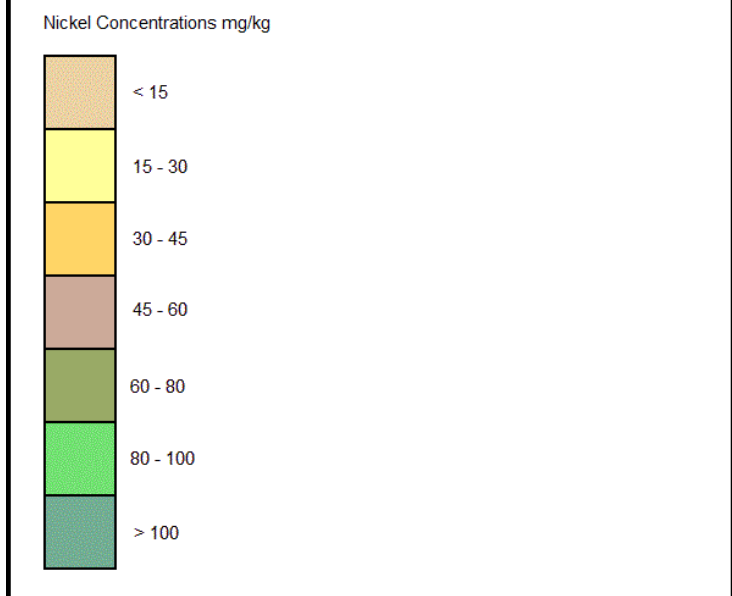


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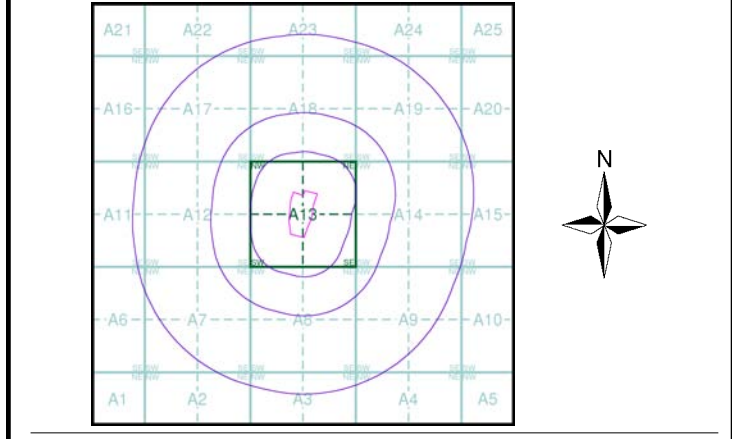
General

Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Nickel



Estimated Soil Chemistry Nickel - Slice A

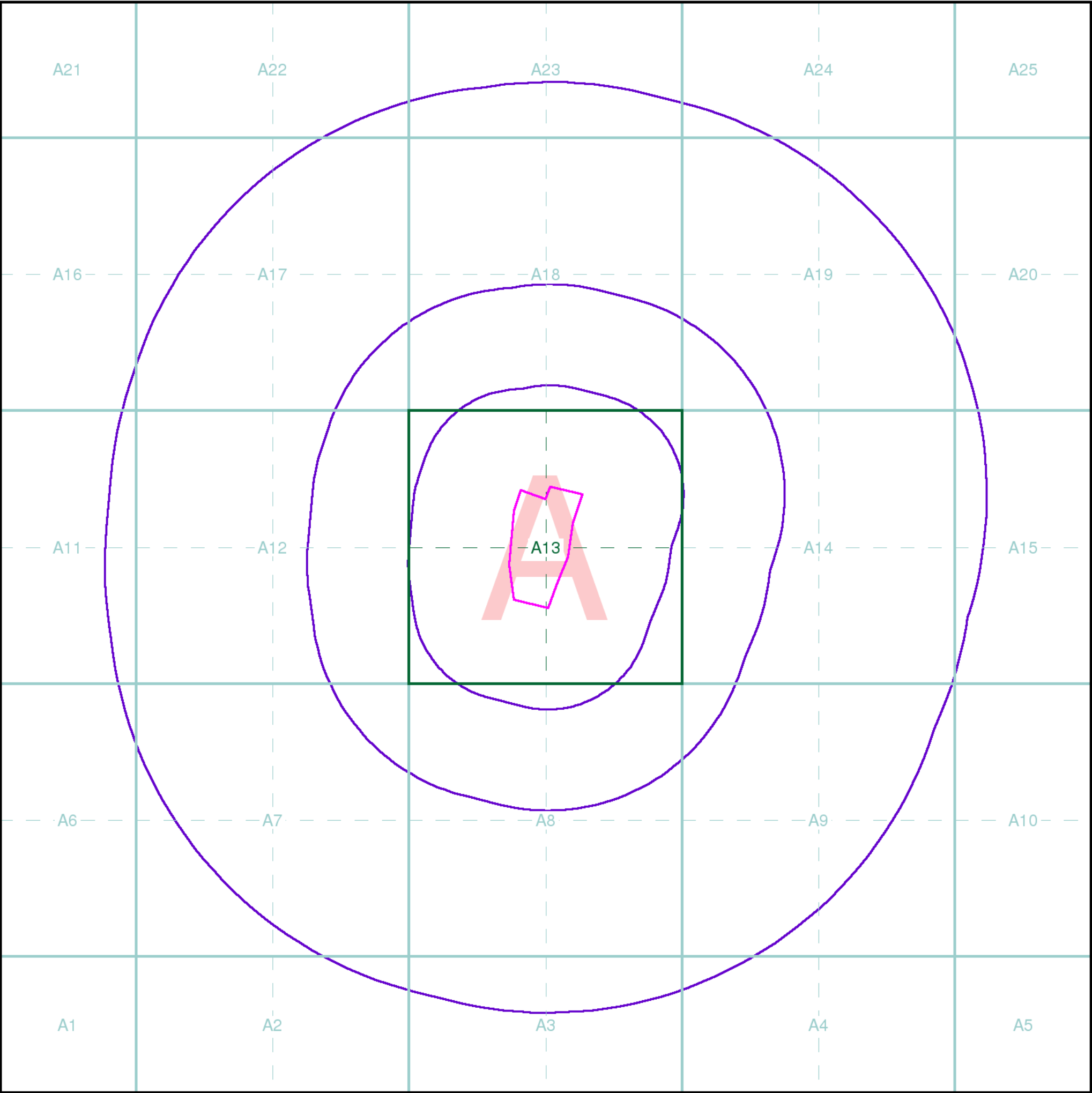


Order Details

Order Details: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT



Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Client Details

Mr M Scott, GroundSolve Ltd, Unit 1, Well House Barns,
Chester Road, Bretton, Flintshire, CH4 0DH

Order Details

Order Number: 123167900_1_1
Customer Ref: 1971/sdi
National Grid Reference: 337450, 350250
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham
Industrial Estate, WREXHAM, LL13 9JT

Full Terms and Conditions can be found on the following link:
<http://www.landmarkinfo.co.uk/Terms/Show/515>

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LSGR	Landscaped Ground (Undivided)	Artificially Modified Ground	Holocene - Holocene
	MGR	Made Ground (Undivided)	Artificial Deposit	Holocene - Holocene
	WGR	Worked Ground (Undivided)	Void	Holocene - Holocene

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Flandrian - Flandrian
	TILLD	Till, Devensian	Diamicton	Devensian - Devensian
	GLLDD	Glaciolacustrine Deposits, Devensian	Clay and Silt	Devensian - Devensian
	GFSDD	Glaciofluvial Sheet Deposits, Devensian	Sand and Gravel	Devensian - Devensian
	RTDU	River Terrace Deposits (Undifferentiated)	Sand and Gravel	Quaternary - Quaternary
	RTD1	River Terrace Deposits, 1	Sand and Gravel	Quaternary - Quaternary
	RTD2	River Terrace Deposits, 2	Sand and Gravel	Quaternary - Quaternary
	RTD3	River Terrace Deposits, 3	Sand and Gravel	Quaternary - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	KNSF	Kinnerton Sandstone Formation	Sandstone	Early Triassic - Early Triassic
	SAL	Salop Formation	Mudstone, Sandstone and Conglomerate	Cisuralian - Westphalian D
		Faults		

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Geology 1:50,000 Maps

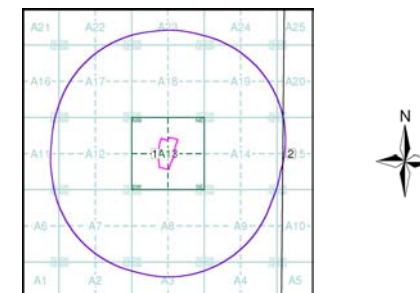
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	1	Map ID:	2
Map Sheet No:	121	Map Sheet No:	122
Map Name:	Wrexham	Map Name:	Nantwich
Map Date:	1993	Map Date:	1967
Bedrock Geology:	Available	Bedrock Geology:	Available
Superficial Geology:	Available	Superficial Geology:	Available
Artificial Geology:	Available	Artificial Geology:	Not Available
Faults:	Not Supplied	Faults:	Not Supplied
Landslip:	Available	Landslip:	Available
Rock Segments:	Not Supplied	Rock Segments:	Not Supplied

Geology 1:50,000 Maps - Slice A



Order Details:

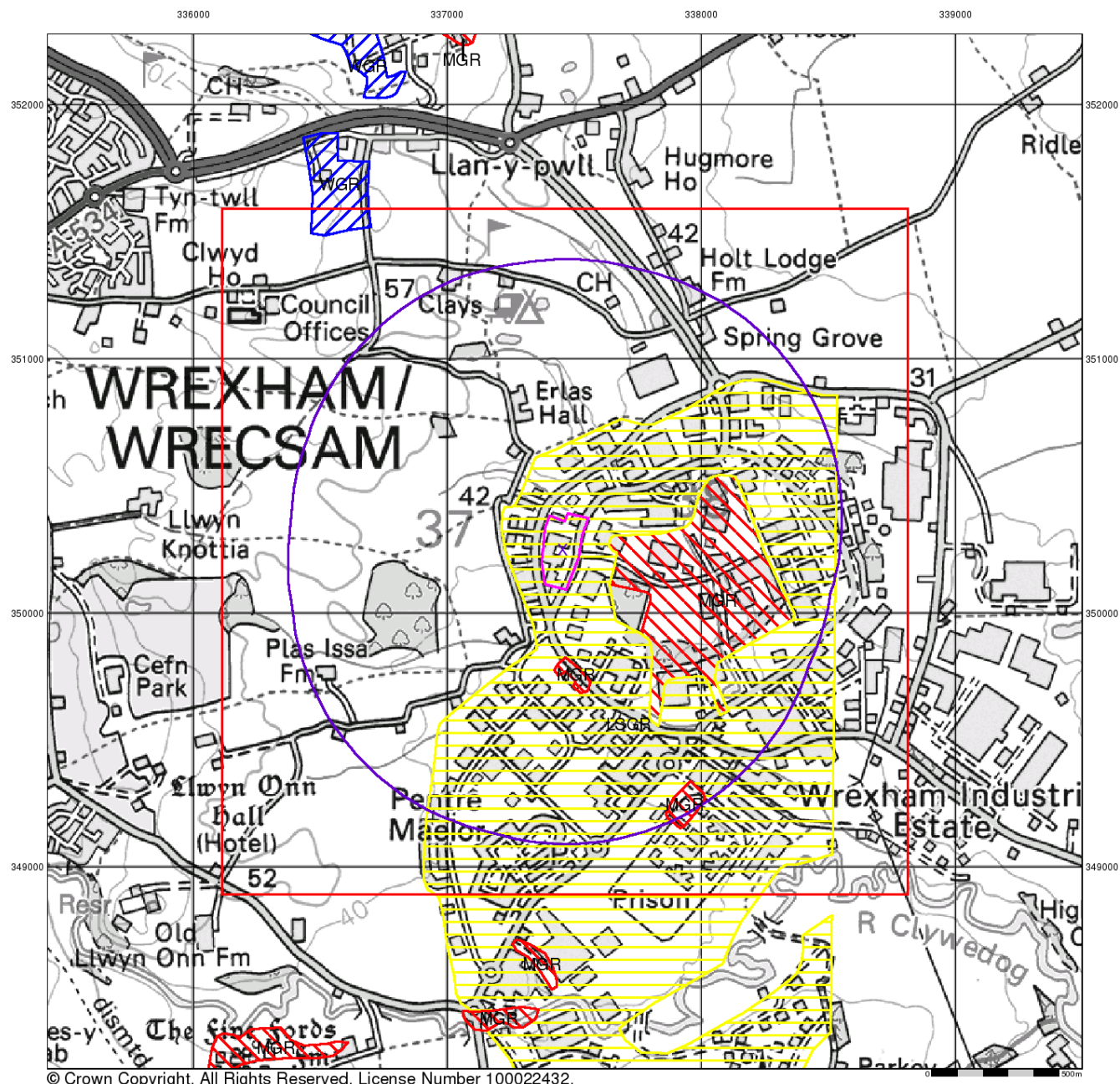
Order Number: 123167900_1_1
 Customer Reference: 1971/sdi
 National Grid Reference: 337450, 350250
 Slice: A
 Site Area (Ha): 3.74
 Search Buffer (m): 1000

Site Details:

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT

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Artificial Ground and Landslip

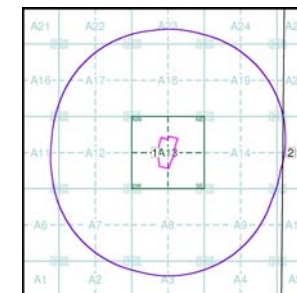
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



Order Details:

Order Number: 123167900_1_1
Customer Reference: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details:

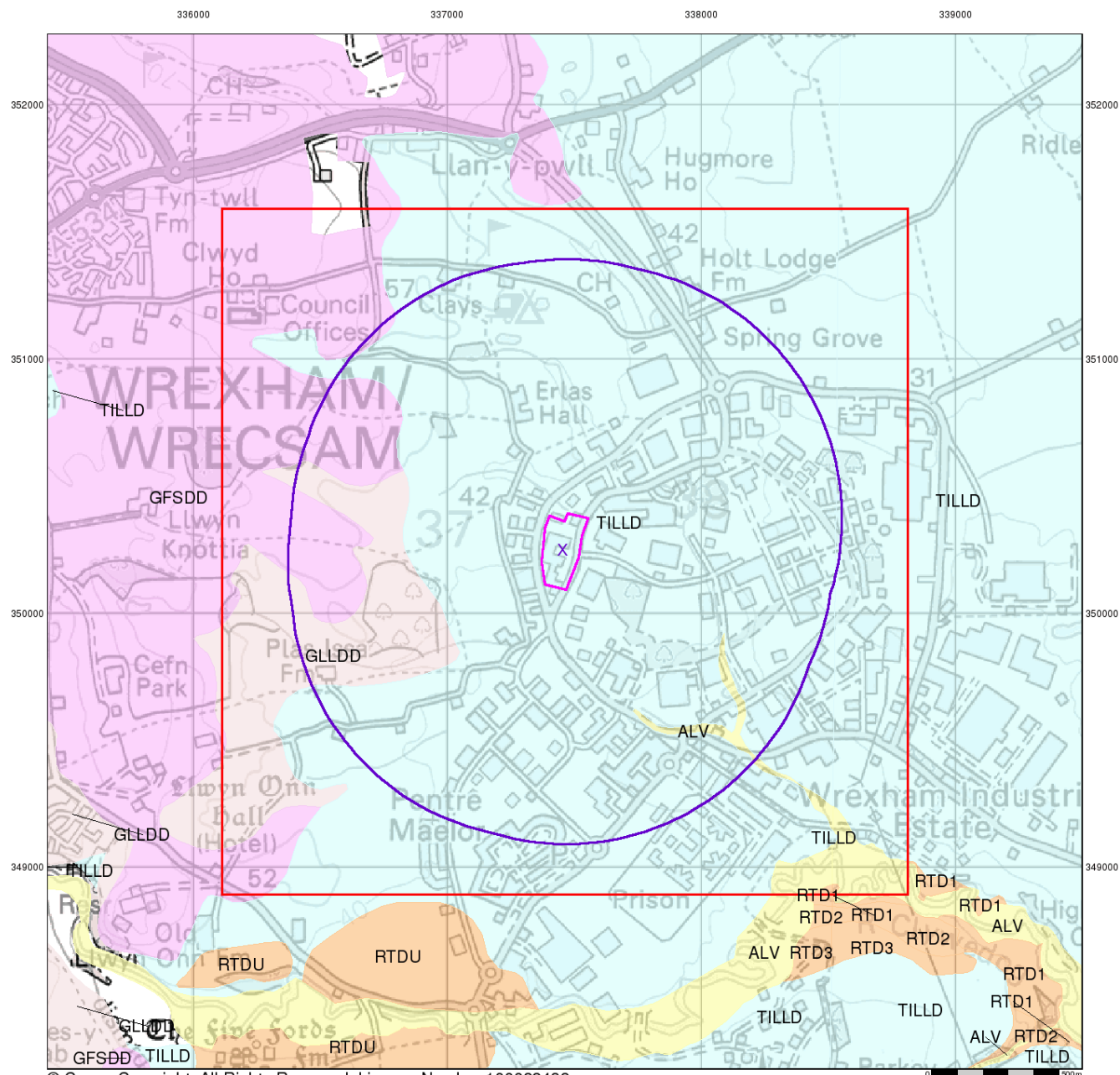
Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT

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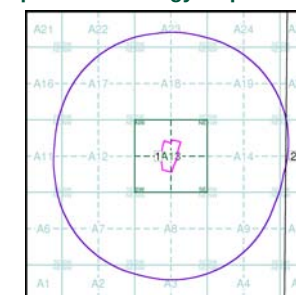
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order Details:

Order Number: 123167900_1_1
Customer Reference: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details:

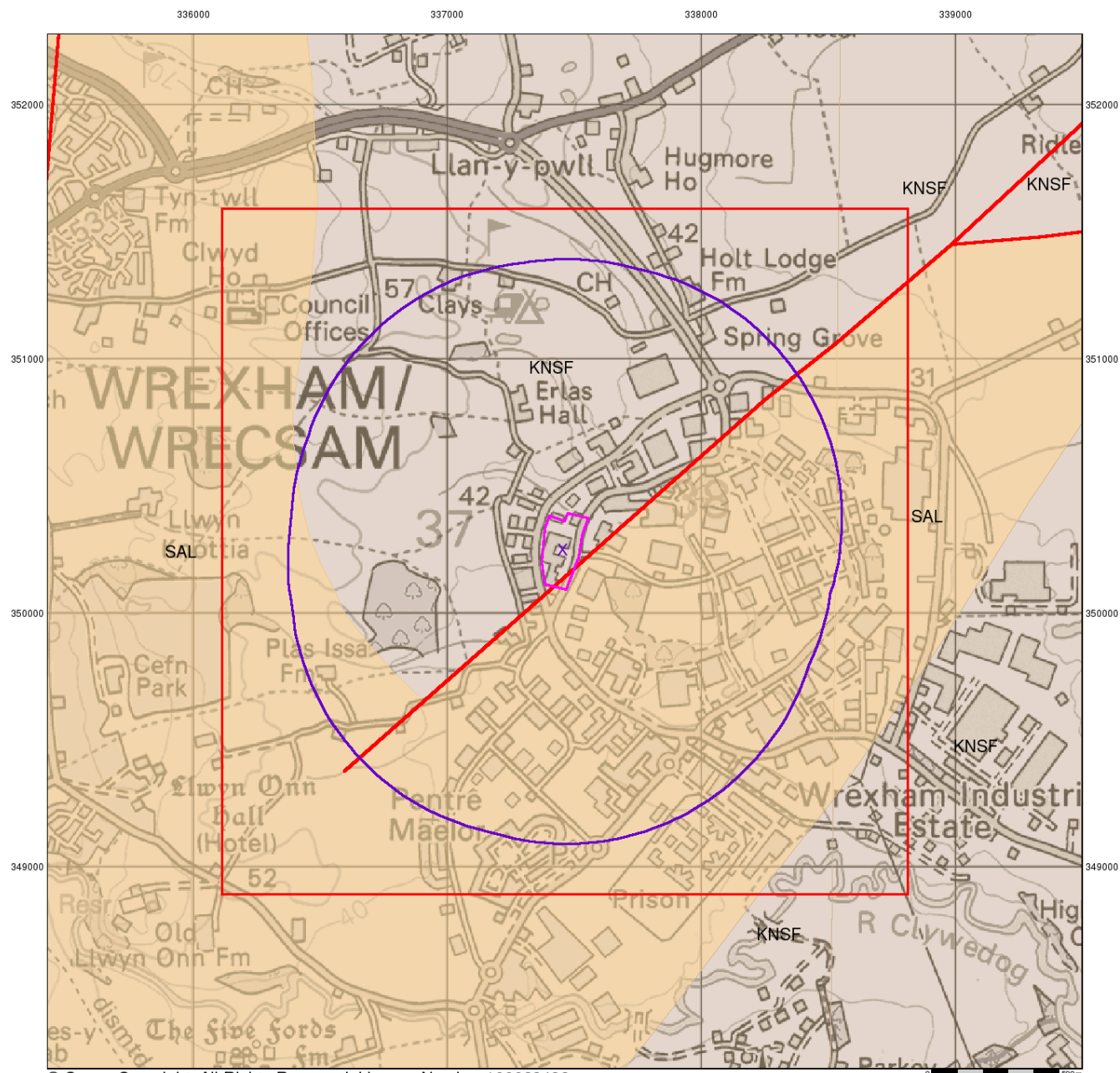
Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT

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Bedrock and Faults

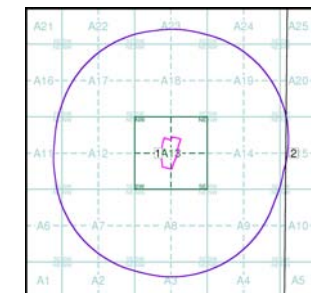
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

Order Number: 123167900_1_1
 Customer Reference: 1971/sdi
 National Grid Reference: 337450, 350250
 Slice: A
 Site Area (Ha): 3.74
 Search Buffer (m): 1000

Site Details:

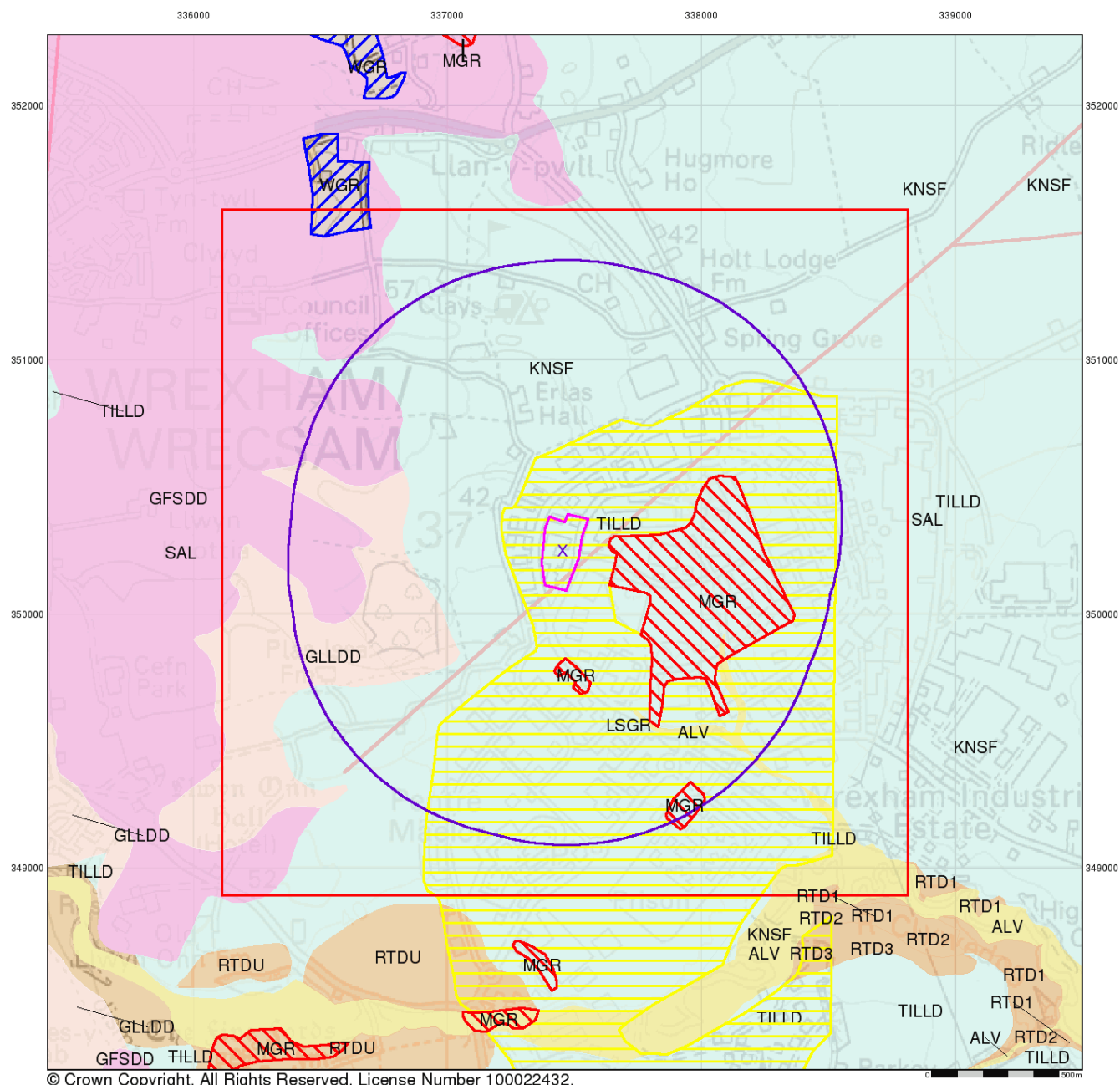
Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT

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Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

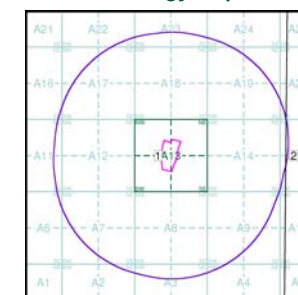
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number: 123167900_1_1
Customer Reference: 1971/sdi
National Grid Reference: 337450, 350250
Slice: A
Site Area (Ha): 3.74
Search Buffer (m): 1000

Site Details:

Ipsen Biopharm Ltd, Unit 10, Ash Road North, Wrexham Industrial Estate, WREXHAM, LL13 9JT

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Web: www.envirocheck.co.uk

APPENDIX D

Window Sample logs and Physical testing
(Previous Investigation)

BOREHOLE LOG

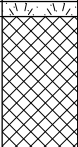
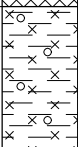
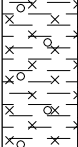
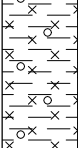
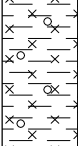
Project Ipsen Biopharm				BOREHOLE No WS01	
Job No 1971	Date 03-05-17 03-05-17	Ground Level (m)	Co-Ordinates ()		
Contractor Earth Engineering				Sheet 1 of 1	

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
0.50	ES					0.10	Loose grey medium to coarse GRAVEL of limestone. (MADE GROUND)		
						(0.70)	Medium dense grey and brown slightly clayey SAND AND GRAVEL. Gravel is fine to coarse, angular to subangular of limestone. (MADE GROUND)		
						0.80			
1.20	D	N6				0.90	Stiff grey and brown silty CLAY with occasional roots and rootlets. (OLD TOPSOIL)		
1.30						(1.30)	Soft grey brown becoming reddish brown silty CLAY. (GLACIAL TILL)		
2.00		N7				2.20			
						2.40	Medium dense reddish brown fine clayey SAND. (GLACIAL TILL)		
3.00		N21				(2.60)	Stiff reddish brown mottled grey silty CLAY with occasional randomly orientated laminations of grey silt. (GLACIAL TILL)		
							- Damp between 3.4-3.6m		
4.00		N26							
5.00		N12				5.00			

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											1. Hand dug to 1.2m depth 2. Water standing at 2.85m
All dimensions in metres Scale 1:50			Client Ipsen Biopharm			Method/ Plant Used			Logged By SDI		

BOREHOLE LOG

Project Ipsen Biopharm				BOREHOLE No WS02	
Job No 1971	Date 03-05-17 03-05-17	Ground Level (m)	Co-Ordinates ()		
Contractor Earth Engineering				Sheet 1 of 1	

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION		
						0.10	Grass over loose grey brown slightly gravelly SILT. Gravel is fine to medium subrounded to subangular limestone. (TOPSOIL)		
						(0.90)	Medium dense to dense grey slightly silty SAND AND GRAVEL with low cobble content of subangular limestone. Gravel is fine to coarse subangular limestone. (MADE GROUND)		
						1.00			
1.20		N7					Soft becoming stiff reddish brown locally mottled grey slightly silty very slightly gravelly CLAY. Gravel is fine to medium subangular sandstone. (GLACIAL TILL)		
2.00		N14					- Grey with localised organic (black) inclusions between 1.4-1.6m depth (possible old topsoil layer)		
3.00		N17				(4.00)			
4.00		N21							
5.00		N18				5.00			

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											1. Hand dug to 1.2m depth
All dimensions in metres Scale 1:50			Client Ipsen Biopharm			Method/ Plant Used			Logged By SDI		

BOREHOLE LOG

Project Ipsen Biopharm				BOREHOLE No WS03	
Job No 1971	Date 03-05-17 03-05-17	Ground Level (m)	Co-Ordinates ()		
Contractor Earth Engineering				Sheet 1 of 1	

SAMPLES & TESTS			STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
0.30	ES					(1.40)	Grass over stiff reddish brown slightly gravelly CLAY. Gravel is fine to medium subangular limestone with very rare brick fragments. (MADE GROUND)	
1.20		N5				1.40		
1.50	D					1.50	Soft grey brown silty CLAY. (OLD TOPSOIL)	
2.00		N15					Soft becoming stiff reddish brown silty locally very slightly sandy CLAY. (GLACIAL TILL)	
3.00		N20				(3.50)		
4.00		N21						
5.00		N19				5.00		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											1. Hand dug to 1.2m depth 2. Soils damp or wet below 1.3m depth
All dimensions in metres Scale 1:50			Client Ipsen Biopharm			Method/ Plant Used			Logged By SDI		

[illegible]

[illegible]

Depth(m)	BLOWS (100mm)	DIAGRAM DPSH N100 VALUES
1.00		
2.00		
3.00		
4.00		
5.00		
6.00	2	
	1	
	2	
	2	
	1	
	2	
	2	
	2	
	3	
	2	
7.00	3	
	3	
	3	
	4	
	3	
	4	
	5	
	4	
	5	
	5	
8.00	5	
	5	
	5	
	5	
	5	
	6	
	5	
	6	
	6	
	6	
9.00	6	
	5	
	6	
	6	
	6	
	6	
	7	
	7	
	7	
	7	
10.00	8	
	8	
	8	
	8	
	8	
	8	
	9	
	9	
	9	
	9	

REMARKS: Probing started at 5.5m depth	PROBE NUMBER: WS1
CONTRACT: Ipsen Biopharm, Wrexham	DATE: 03/05/2017
	PAGE 1 of 1

Depth(m)	BLOWS (100mm)	DIAGRAM DPSH N100 VALUES
1.00		
2.00		
3.00		
4.00		
5.00		
6.00	0	
	1	
	2	
	2	
	2	
	2	
	2	
	3	
	3	
	2	
7.00	3	
	3	
	2	
	3	
	2	
	1	
	2	
	2	
	2	
	2	
8.00	2	
	2	
	3	
	3	
	2	
	3	
	3	
	4	
	3	
	4	
9.00	4	
	6	
	5	
	5	
	6	
	5	
	6	
	6	
	7	
	7	
10.00	7	
	8	
	8	
	8	
	9	
	9	
	9	
	9	
	10	

</

LABORATORY RESULTS - Classification and Strength

Project IPSEN BIOPHARM, WREXHAM

Project No: PC176723

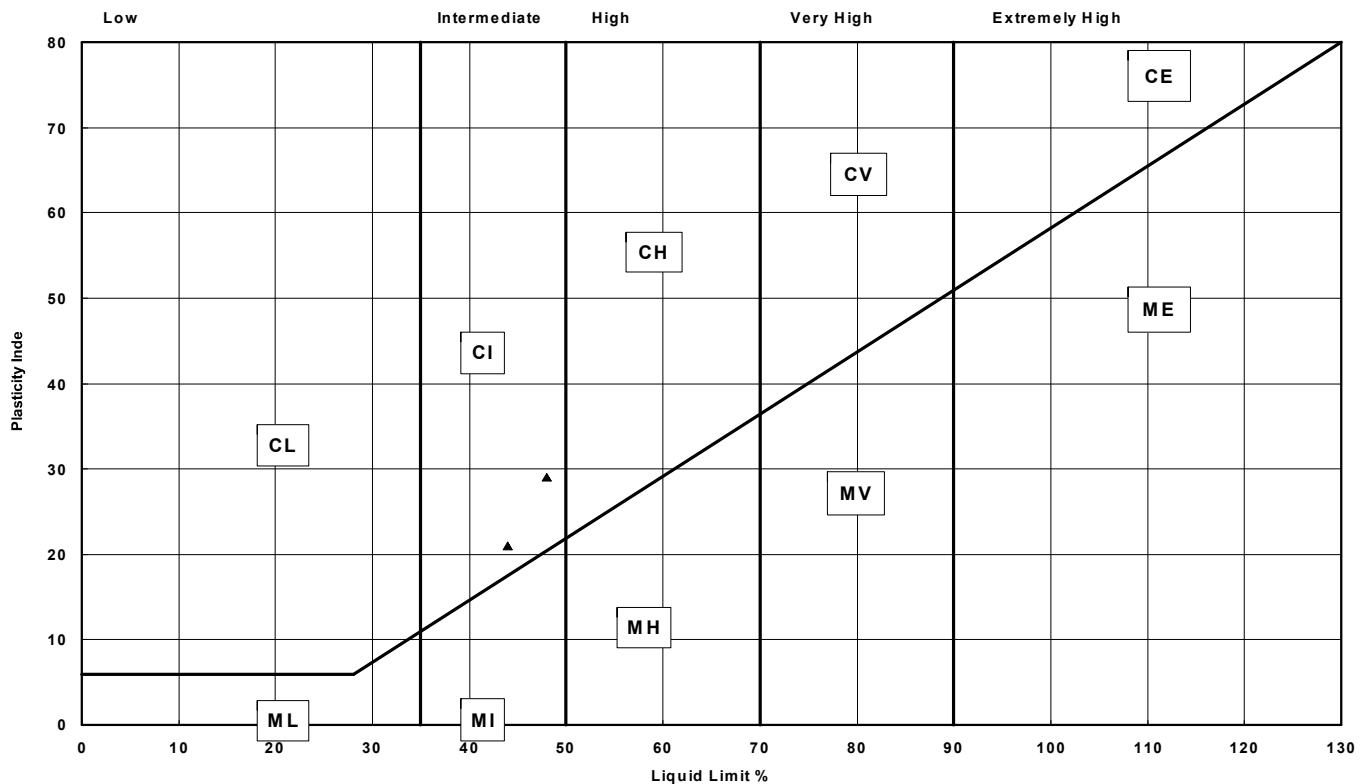
[illegible]

LABORATORY RESULTS - Classification Chart

Project: IPSEN BIOPHARM, WREXHAM

Project No: PC176723

PLOT OF PLASTICITY INDEX AGAINST LIQUID LIMIT for all items tested



Soil Type	Plasticity Characteristics
C Clay	L Low
	I Intermediate
M Silt	H High
	V Very High
	E Extremely High

Table of Soil Types and Plasticity Characteristics from BS 5930 : 1999

Remarks

18/05/2017

LABORATORY RESULTS - Chemical Analysis

Project IPSEN BIOPHARM, WREXHAM

Project No: PC176723

[illegible]

Remarks  Tests performed in accordance with BS 1377: Part 3: 1990
Sulphate reported as SO₃, results in brackets reported as SO₄

GEOTECHNICS
geotechnical and geoenvironmental specialists

APPENDIX E

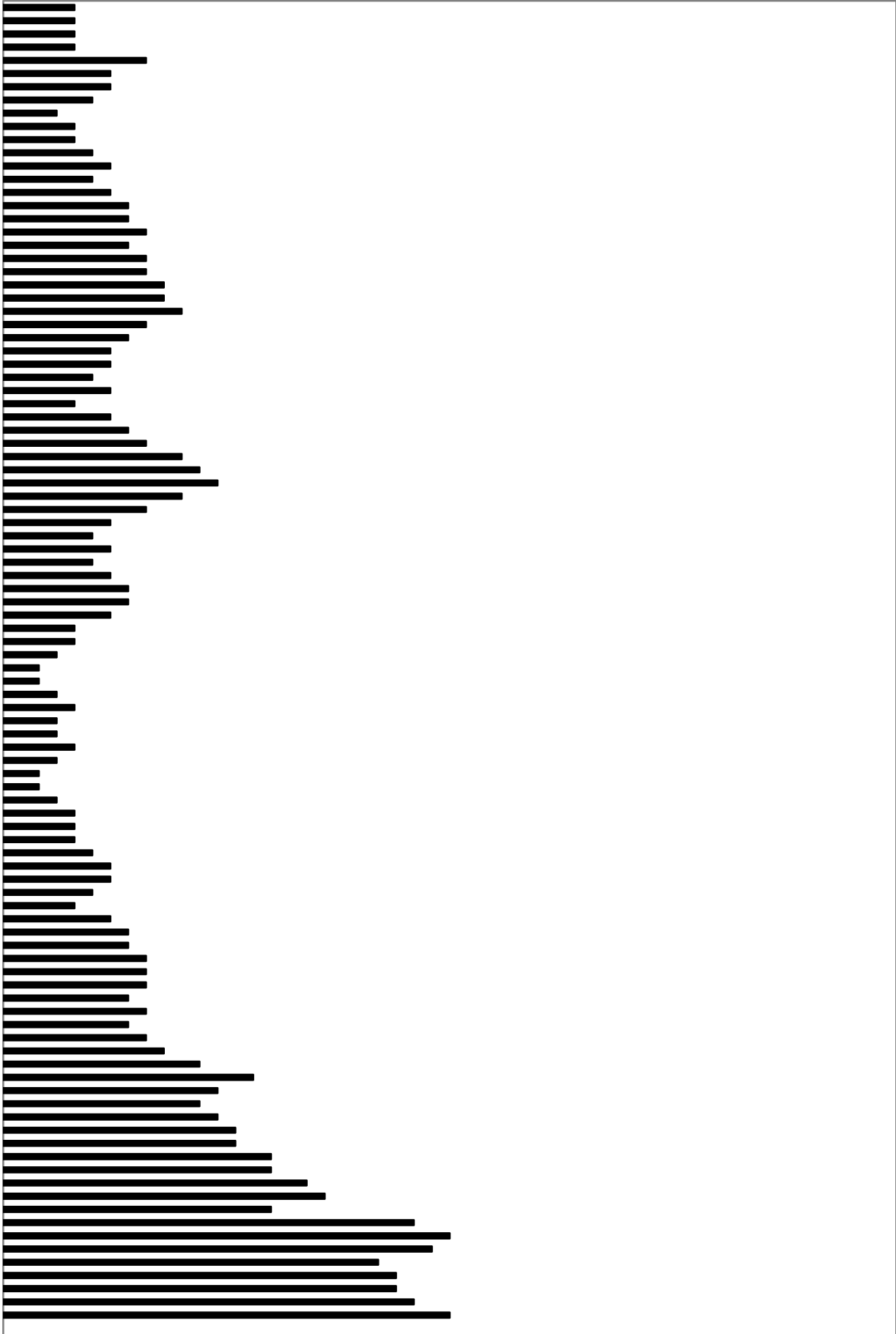
Window Sample and Borehole Logs

BOREHOLE LOG

Project Ipsen East Site Development				BOREHOLE No BH1
Job No 2053	Date 07-02-18 07-02-18	Ground Level (m)	Co-Ordinates () E 337,590.0 N 350,226.0	
Contractor Earth Engineering				
Sheet 1 of 1				

SAMPLES & TESTS			STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
1.00	N19					0.20	Grass over soft to firm brown clayey SILT (TOPSOIL)	
						0.40	Firm red brown gravelly CLAY, gravel is angular medium to coarse (MADE GROUND)	
						(1.90)	Firm to stiff red brown slightly sandy CLAY with occasional grey fissures (GLACIAL TILL)	
2.00	N19					2.30		
						2.45	Soft red brown very sandy CLAY. Material was wet (GLACIAL TILL)	
							Firm to stiff red brown slightly sandy CLAY with grey sandy fissures (GLACIAL TILL)	
3.00	N23					(2.55)		
								
								
4.00	N29							
								
								
5.00	N18					5.00		
								
								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Starter pit to 1.0m Recovery 1.0 - 2.0m = 100% 2.0 - 3.0m = 100% 3.0 - 4.0m = 100% 4.0 - 5.0m = 80% Perched GW in sandy layer at 2.30m
All dimensions in metres Scale 1:34.0625			Client Ipsen			Method/ Plant Used			Logged By ERW		

Depth(m)	BLOWS (100mm)	DIAGRAM DPSH N100 VALUES
1.00	4	
	4	
	4	
	4	
	8	
	6	
	6	
	5	
	3	
	4	
2.00	4	
	5	
	6	
	5	
	6	
	7	
	7	
	8	
	7	
	8	
3.00	8	
	9	
	9	
	10	
	8	
	7	
	6	
	6	
	5	
	6	
4.00	4	
	6	
	7	
	8	
	10	
	11	
	12	
	10	
	8	
	6	
5.00	5	
	6	
	5	
	6	
	7	
	7	
	6	
	4	
	4	
	3	
6.00	2	
	2	
	3	
	4	
	3	
	3	
	4	
	3	
	2	
	2	
7.00	3	
	4	
	4	
	4	
	5	
	6	
	6	
	5	
	4	
	6	
8.00	7	
	7	
	8	
	8	
	8	
	7	
	8	
	7	
	8	
	9	
9.00	11	
	14	
	12	
	11	
	12	
	13	
	13	
	15	
	15	
	17	
10.00	18	
	15	
	23	
	25	
	24	
	21	
	22	
	22	
	23	
	25	

BOREHOLE LOG

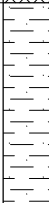
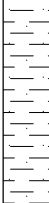
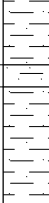
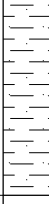
Project Ipsen East Site Development				BOREHOLE No BH2
Job No 2053	Date 07-02-18 07-02-18	Ground Level (m)	Co-Ordinates () E 337,534.0 N 350,192.0	
Contractor Earth Engineering				
Sheet 1 of 1				

SAMPLES & TESTS			STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
1.00	N21					0.20	Grass over soft to firm very clayey SILT (TOPSOIL)	
						0.40	Firm red brown slightly sandy gravelly sandy CLAY. Gravel is coarse angular (MADE GROUND DERIVED FROM GLACIAL TILL)	
						(0.90)	Stiff red brown slightly sandy CLAY with occasional grey sandy fissures (GLACIAL TILL)	
						1.30		
2.00	N17					1.50	Medium dense red brown clayey fine SAND with thin bands of grey fine sand. Material was wet (GLACIAL DEPOSIT)	
							Firm to stiff red brown sandy CLAY with grey sandy fissures (GLACIAL TILL)	
3.00	N18					(3.50)		
								
4.00	N27							
								
5.00	N9					5.00		
								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Starter pit 1.0m Recovery 1.0 - 2.0m = 100% 2.0 - 3.0m = 100% 3.0 - 4.0m = 80% 4.0 - 5.0m = 45% Perched GW in sandy layer at 1.30m
All dimensions in metres Scale 1:34.0625			Client Ipsen			Method/ Plant Used			Logged By ERW		

BOREHOLE LOG

Project Ipsen East Site Development				BOREHOLE No BH3	
Job No 2053	Date 08-02-18 08-02-18	Ground Level (m)	Co-Ordinates () E 337,509.0 N 350,076.0		
Contractor Earth Engineering				Sheet 1 of 1	

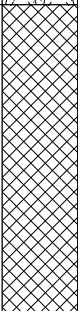
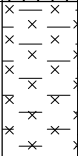
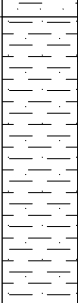
SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
1.00		N15			0.20	Grass over soft dark brown very clayey SILT (TOPSOIL)			
					(0.90)	Medium dense brown clayey sandy fine to coarse angular to sub-angular GRAVEL of brick and concrete (MADE GROUND)			
					1.10	Firm to stiff red brown slightly sandy CLAY with occasional grey fissures (GLACIAL TILL)			
2.00		N24			(2.10)				
3.00		N32			3.20				
					3.30	Medium dense red brown clayey fine SAND. Material was wet (GLACIAL DEPOSIT)			
4.00		N18			(1.70)	Firm to stiff red brown slightly sandy CLAY with grey sandy fissures (GLACIAL TILL)			
5.00		N26			5.00				

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Starter pit to 1.0m Recovery 1.0 - 2.0m = 100% 2.0 - 3.0m = 100% 3.0 - 4.0m = 0% (cobble in shoe) 4.0 - 5.0m = 80% Perched GW in sandy layer at 3.20m (SPT spoon)
All dimensions in metres Scale 1:34.0625			Client Ipsen			Method/ Plant Used			Logged By ERW		

Depth(m)	BLOWS (100mm)	DIAGRAM DPSH N100 VALUES
1.00	3	
	5	
	4	
	5	
	6	
	5	
	6	
	6	
	5	
	4	
2.00	4	
	6	
	7	
	8	
	8	
	9	
	6	
	7	
	7	
	6	
3.00	6	
	8	
	9	
	10	
	8	
	11	
	12	
	9	
	8	
	8	
4.00	6	
	6	
	5	
	6	
	7	
	5	
	7	
	8	
	8	
	9	
5.00	10	
	7	
	8	
	8	
	9	
	9	
	10	
	9	
	7	
	6	
6.00	7	
	6	
	6	
	5	
	6	
	5	
	6	
	7	
	5	
	6	
7.00	5	
	6	
	6	
	6	
	4	
	6	
	7	
	8	
	6	
	6	
8.00	8	
	8	
	9	
	11	
	9	
	8	
	9	
	10	
	11	
	9	
9.00	10	
	12	
	10	
	13	
	13	
	15	
	15	
	17	
	17	
	19	
10.00	16	
	20	
	23	
	22	
	20	
	23	
	21	
	20	
	24	
	27	

BOREHOLE LOG

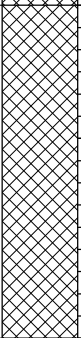
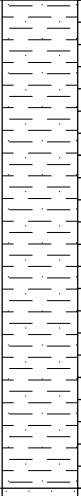
Project Ipsen East Site Development				BOREHOLE No BH4
Job No 2053	Date 08-02-18 08-02-18	Ground Level (m)	Co-Ordinates () E 337,556.0 N 350,051.0	
Contractor Earth Engineering				
Sheet 1 of 1				

SAMPLES & TESTS			Water	STRATA			Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)		
1.00		N15				0.20	Grass over brown clayey sandy SILT (REWORKED TOPSOIL)	
					(1.40)	Firm red brown CLAY with much sand and gravel of concrete, tarmac, brick and sandstone (MADE GROUND)		
					1.60			
2.00		N15			(0.70)	Firm grey clayey SILT with some organic content (roots) (ALLUVIUM)		
						2.30		
3.00		N25			(1.30)	Stiff red brown slightly sandy CLAY with some grey sandy fissures (GLACIAL TILL)		
					3.60			
						3.70	Medium dense red brown very clayey SAND. Material was wet (GLACIAL DEPOSIT)	
4.00		N27			(1.30)	Stiff red brown slightly sandy CLAY with some grey sandy fissures (GLACIAL TILL)		
5.00		N30				5.00		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Starter pit to 1.0m Recovery 1.0 - 2.0m = 100% 2.0 - 3.0m = 100% 3.0 - 4.0m = 95% 4.0 - 5.0m = 70% Perched GW in sandy layer at 3.6m
All dimensions in metres Scale 1:34.0625			Client Ipsen			Method/ Plant Used			Logged By ERW		

BOREHOLE LOG

Project Ipsen East Site Development				BOREHOLE No BH5	
Job No 2053	Date 08-02-18 08-02-18	Ground Level (m)	Co-Ordinates () E 337,622.0 N 350,104.0		
Contractor Earth Engineering				Sheet 1 of 1	

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
1.00		N10				(0.40) 0.40	Loose black SILT with much roots with gravel and fragments of concrete and brick (MADE GROUND)		
						(1.50) 1.90	Firm red brown CLAY with much gravel of concrete, brick and tarmac (MADE GROUND)		
2.00		N10			(0.40) 2.30	Firm grey clayey SILT (ALLUVIUM)			
3.00		N29			(2.20) 4.50	Stiff red brown slightly sandy CLAY with grey sandy fissure (GLACIAL TILL)			
4.00		N17			4.50 4.60	Medium dense red brown clayey fine SAND. Material was wet (GLACIAL TILL)			
5.00		N25			(0.40) 5.00	Stiff red brown slightly sandy CLAY with grey sandy fissure (GLACIAL TILL)			

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Starter pit to 1.0m Recovery 1.0 - 2.0m = 95% 2.0 - 3.0m = 100% 3.0 - 4.0m = 100% 4.0 - 5.0m = 80% Perched GW in sandy layer at 4.5m
All dimensions in metres Scale 1:34.0625			Client Ipsen			Method/ Plant Used			Logged By ERW		

BOREHOLE LOG

Project Ipsen East Site Development				BOREHOLE No BH6
Job No 2053	Date 08-02-18 08-02-18	Ground Level (m)	Co-Ordinates () E 337,557.0 N 350,186.0	
Contractor Earth Engineering				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA			Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)		
1.00	N20					(0.35) 0.35	Grass over dark brown sandy SILT (TOPSOIL)	
						0.60	Medium dense grey angular fine to coarse GRAVEL in clayey matrix (MADE GROUND)	
						(0.30) 0.90	Firm light red brown mottled dark orange slightly silty slightly sandy CLAY (WEATHERED GLACIAL TILL)	
							Firm to stiff red brown slightly sandy CLAY with grey sandy fissures (GLACIAL TILL)	
								
2.00	N18					(2.50)		
3.00	N14							
						3.40		
						3.50	Medium dense red brown clayey fine SAND. Matrial was wet. (GLACIAL TILL)	
4.00	N23					(1.50)	Stiff red brown slightly sandy CLAY with grey sandy fissures (GLACIAL TILL)	
5.00	N26					5.00		
								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Starter pit to 1.0m Recovery 1.0 - 2.0m = 100% 2.0 - 3.0m = 85% 3.0 - 4.0m = 100% 4.0 - 5.0m = 65% Perched GW in sandy layer at 3.40m
All dimensions in metres Scale 1:34.0625			Client Ipsen			Method/ Plant Used			Logged By ERW		

APPENDIX F

Chemical Test Results



Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US

Tel: (01244) 528700

Fax: (01244) 528701

email: hawardencustomerservices@alsglobal.com

Website: www.alsenvironmental.co.uk

Ground Solve
Unit 1
Well House Barns
Chester Road
Bretton
Cheshire
CH4 0DH

Attention: Elgan Williams

CERTIFICATE OF ANALYSIS

Date: 28 February 2018
Customer: H_GRSOLVE_BRE
Sample Delivery Group (SDG): 180211-4
Your Reference: 2053/I2W/ERW
Location: IPSEN 2
Report No: 446346

This report has been revised and directly supersedes 445164 in its entirety.

We received 6 samples on Friday February 09, 2018 and 6 of these samples were scheduled for analysis which was completed on Wednesday February 28, 2018. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

Approved By:

Sonia McWhan

Operations Manager





CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4
Location: IPSEN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
17030599	BH1		0.20 - 0.40	07/02/2018
17030600	BH2		0.15 - 0.20	07/02/2018
17030601	BH3		0.30 - 0.40	08/02/2018
17030602	BH4		0.85 - 0.85	08/02/2018
17030604	BH5		1.00 - 1.20	08/02/2018
17030605	BH6		0.15 - 0.25	08/02/2018

Maximum Sample/Coolbox Temperature (°C) :

ISO5667-3 Water quality - Sampling - Part3 -

During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

8.2

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.



CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4
Location: IPSSEN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

Results Legend

X Test
N No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Results Legend	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container		Sample Type	
	17030605	BH6					0.15 - 0.25		60g VOC (ALE215)	S		
	17030604	BH5					1.00 - 1.20		250g Amber Jar (ALE210)	S		
	17030602	BH4					0.85 - 0.85		60g VOC (ALE215)	S		
	17030601	BH3					0.30 - 0.40		250g Amber Jar (ALE210)	S		
	17030600	BH2					0.15 - 0.20		60g VOC (ALE215)	S		
	17030609	BH1					0.20 - 0.40		250g Amber Jar (ALE210)	S		
									60g VOC (ALE215)	S		
									250g Amber Jar (ALE210)	S		
									60g VOC (ALE215)	S		
									250g Amber Jar (ALE210)	S		
									60g VOC (ALE215)	S		
Anions by Kone (soil)	All		NDPs: 0 Tests: 6									
Asbestos ID in Solid Samples	All		NDPs: 0 Tests: 6									
Asbestos Quantification - Full	All		NDPs: 0 Tests: 1									
Chromium III	All		NDPs: 0 Tests: 6									
Cyanide Comp/Free/Total/Thiocyanate	All		NDPs: 0 Tests: 6									
Easily Liberated Sulphide	All		NDPs: 0 Tests: 6									
Elemental Sulphur	All		NDPs: 0 Tests: 6									
EPH CWG (Aliphatic) GC (S)	All		NDPs: 0 Tests: 6									
EPH CWG (Aromatic) GC (S)	All		NDPs: 0 Tests: 6									
GRO by GC-FID (S)	All		NDPs: 0 Tests: 6									
Hexavalent Chromium (s)	All		NDPs: 0 Tests: 6									
Metals in solid samples by OES	All		NDPs: 0 Tests: 6									
PAH by GCMS	All		NDPs: 0 Tests: 6									
pH	All		NDPs: 0 Tests: 6									
Phenols by HPLC (S)	All		NDPs: 0 Tests: 6									



CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4
Location: IPSN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

Results Legend



Test


No Determination
Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Results Legend	Lab Sample No(s)		17030605	17030604	17030602	17030601	17030600	17030599
	Customer Sample Reference		BH6	BH5	BH4	BH3	BH2	BH1
	AGS Reference							
	Depth (m)		0.15 - 0.25	1.00 - 1.20	0.85 - 0.85	0.30 - 0.40	0.15 - 0.20	0.20 - 0.40
	Container		60g VOC (ALE215)	250g Amber Jar (ALE210)	60g VOC (ALE215)	250g Amber Jar (ALE210)	60g VOC (ALE215)	250g Amber Jar (ALE210)
	Sample Type		S	S	S	S	S	S
Sample description	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
Total Organic Carbon	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 6	X	X	X	X	X	X



CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4
Location: IPSEN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
17030599	BH1	0.20 - 0.40	Dark Brown	Sandy Clay Loam	Stones	Vegetation
17030600	BH2	0.15 - 0.20	Dark Brown	Silty Clay Loam	Stones	Vegetation
17030601	BH3	0.30 - 0.40	Dark Brown	Loamy Sand	Stones	Vegetation
17030602	BH4	0.85 - 0.85	Dark Brown	Sandy Clay Loam	Stones	Vegetation
17030604	BH5	1.00 - 1.20	Dark Brown	Sandy Clay Loam	Stones	Vegetation
17030605	BH6	0.15 - 0.25	Dark Brown	Sandy Loam	Stones	Vegetation

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4 Client Reference: 2053/I2W/ERW Report Number: 446346
Location: IPSEN 2 Order Number: 2053/I2W/ERW Superseded Report: 445164

Results Legend		Customer Sample Ref.	BH1	BH2	BH3	BH4	BH5	BH6
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference						
M	mCERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
**	Subcontracted test.							
% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery								
(F)	Trigger breach confirmed							
1-5&+5@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	15	15	18	12	16	18
Phenol	<0.01 mg/kg	TM062 (S)	<0.01 M	0.0118 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M
Cresols	<0.01 mg/kg	TM062 (S)	0.0118 M	0.0118 M	0.0121 M	<0.01 M	<0.01 M	0.0492 M
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.015 M	0.148 M
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	<0.035 M	<0.035 M	<0.035 M	<0.035 M	0.197 M
Soil Organic Matter (SOM)	<0.35 %	TM132	1.33 #	1.95 #	3.05 #	2.07 #	0.602 #	4.93 #
pH	1 pH Units	TM133	8.32 M	8.4 M	8.25 M	8.38 M	8.55 M	8.17 M
Sulphur, Elemental	<10 mg/kg	TM136	<10 M	<10 M	<10 M	50.2 M	10.4 M	<10 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #
Cyanide, Total	<1 mg/kg	TM153	<1 M	<1 M	<1 M	<1 M	<1 M	<1 M
Sulphide, Easily liberated	<15 mg/kg	TM180	36.4 ♦ M	<15 ♦ M	<15 ♦ M	<15 M	<15 ♦ M	<15 ♦ M
Chromium, Trivalent	<0.9 mg/kg	TM181	19	18.3	15.1	11.5	22.5	10.6
Arsenic	<0.6 mg/kg	TM181	10.3 M	9.94 M	12.2 M	8.82 M	11.3 M	14.8 M
Boron	<0.7 mg/kg	TM181	12 #	9.34 #	9.27 #	5.55 #	15 #	4.04 #
Cadmium	<0.02 mg/kg	TM181	0.399 M	0.527 M	1.16 M	0.32 M	0.359 M	0.395 M
Chromium	<0.9 mg/kg	TM181	19 M	18.3 M	15.1 M	11.5 M	22.5 M	10.6 M
Copper	<1.4 mg/kg	TM181	21 M	22 M	21.6 M	17.7 M	44.4 M	38.8 M
Lead	<0.7 mg/kg	TM181	28.5 M	42.3 M	94.2 M	46.6 M	25.7 M	67 M
Mercury	<0.14 mg/kg	TM181	<0.14 M	<0.14 M	0.205 M	0.188 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181	30.7 M	31.6 M	22.1 M	17.7 M	37.1 M	13.9 M
Selenium	<1 mg/kg	TM181	<1 #	<1 #	<1 #	<1 #	<1 #	1 #
Zinc	<1.9 mg/kg	TM181	89.8 M	138 M	271 M	87.1 M	102 M	227 M
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243	0.0191 M	0.101 M	0.0476 M	0.0178 M	0.0333 M	<0.004 M
Asbestos Quantification - Gravimetric - %	<0.001 %	TM304				0.0213 #		
Asbestos Quantification - PCOM Evaluation - %	<0.001 %	TM304				0.0039 #		
Additional Asbestos Components (Using TM048)		TM304				None #		
Analysts Comments		TM304				N/A		
Asbestos Quantification - Total - %	<0.001 %	TM304				0.0252 #		



CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4
Location: IPSEN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

TPH CWG (S)

Results Legend		Customer Sample Ref.	BH1	BH2	BH3	BH4	BH5	BH6
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference						
M	mCERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&+5@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	89	87	112	90	97	74
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<44	<44	<44	<44	<44	<44
			M	M	M	M	M	M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5	<5	<5	<5	<5	<5
			#	#	#	#	#	#
Benzene	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
			M	M	M	M	M	M
Toluene	<2 µg/kg	TM089	<2	<2	<2	<2	<2	<2
			M	M	M	M	M	M
Ethylbenzene	<3 µg/kg	TM089	<3	<3	<3	<3	<3	<3
			M	M	M	M	M	M
m,p-Xylene	<6 µg/kg	TM089	<6	<6	<6	<6	<6	<6
			M	M	M	M	M	M
o-Xylene	<3 µg/kg	TM089	<3	<3	<3	<3	<3	<3
			M	M	M	M	M	M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aliphatics >C6-C8	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aliphatics >C8-C10	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aliphatics >C10-C12	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aliphatics >C12-C16	<100 µg/kg	TM173	568	608	1130	1330	868	2580
Aliphatics >C16-C21	<100 µg/kg	TM173	<100	<100	1950	4180	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173	9140	18100	9190	41000	8670	8570
Aliphatics >C35-C44	<100 µg/kg	TM173	1120	3450	848	6050	975	1090
Total Aliphatics >C12-C44	<100 µg/kg	TM173	10800	22200	13100	52600	10500	12200
Aromatics >EC5-EC7	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aromatics >EC10-EC12	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100	<100	1110	1190	<100	2640
Aromatics >EC16-EC21	<100 µg/kg	TM173	1580	3080	6960	10800	<100	6240
Aromatics >EC21-EC35	<100 µg/kg	TM173	11500	37000	28200	60100	6330	23900
Aromatics >EC35-EC44	<100 µg/kg	TM173	6020	19400	7830	20400	3370	8510
Aromatics >EC40-EC44	<100 µg/kg	TM173	2670	7770	2560	7220	1570	3100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	19100	59400	44100	92500	9710	41200
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	30000	81600	57200	145000	20200	53500



CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4
Location: IPSEN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

Asbestos Identification - Solid Samples

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	BH1 0.20 - 0.40 SOLID 07/02/2018 00:00:00 14/02/2018 15:15:02 180211-4 17030599 TM048	17/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	BH2 0.15 - 0.20 SOLID 07/02/2018 00:00:00 14/02/2018 16:05:26 180211-4 17030600 TM048	19/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	BH3 0.30 - 0.40 SOLID 08/02/2018 00:00:00 14/02/2018 15:36:03 180211-4 17030601 TM048	19/02/2018	Neville Mann	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	BH4 0.85 - 0.85 SOLID 08/02/2018 00:00:00 14/02/2018 15:25:46 180211-4 17030602 TM048	19/02/2018	Neville Mann	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	BH5 1.00 - 1.20 SOLID 08/02/2018 00:00:00 14/02/2018 15:45:09 180211-4 17030604 TM048	19/02/2018	Neville Mann	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	BH6 0.15 - 0.25 SOLID 08/02/2018 00:00:00 14/02/2018 15:53:07 180211-4 17030605 TM048	19/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

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SDG: 180211-4
Location: IPSEN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

Asbestos Quantification - Full

Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
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Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	BH4 0.85 - 0.85 SOLID 08/02/2018 00:00:00 24/02/2018 09:48:46 180211-4 17030602 TM304	None (#)	N/A	0.0213 (#)	0.0039 (#)	0.0252 (#)
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CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4
Location: IPSEN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

Table of Results - Appendix

Method No	Reference	Description
ASB_PREP		
PM001		Preparation of Samples for Metals Analysis
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM062 (S)	National Grid Property Holdings Methods for the Collection & Analysis of Samples from National Grid Sites version 1 Sec 3.9	Determination of Phenols in Soils by HPLC
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)
TM132	In - house Method	ELTRA CS800 Operators Guide
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM136	Method 17.10, Second Site property, March 2003	Determination of Sulphur by HPLC
TM151	Method 3500D, AWWA/APHA, 20th Ed., 1999	Determination of Hexavalent Chromium using Kone analyser
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID
TM180	Sulphide in waters and waste waters 1991 ISBN 01 175 7186 SCA rec. 2007 (unpublished)	The Determination Of Easily Liberated Sulphide In Soil Samples by Ion Selective Electrode Technique
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM218	Determination of PAH by GCMS Microwave extraction	The determination of PAH in soil samples by microwave extraction and GC-MS
TM243		Mixed Anions In Soils By Kone
TM304	HSE Contract research Report no 83/1996	Asbestos Quantification in Soil: Fibres identified by morphology only

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).



CERTIFICATE OF ANALYSIS

Validated

SDG: 180211-4
Location: IPSEN 2

Client Reference: 2053/I2W/ERW
Order Number: 2053/I2W/ERW

Report Number: 446346
Superseded Report: 445164

Test Completion Dates

Lab Sample No(s)
Customer Sample Ref.

AGS Ref.
Depth
Type

	17030599	17030600	17030601	17030602	17030604	17030605
	BH1	BH2	BH3	BH4	BH5	BH6
	0.20 - 0.40	0.15 - 0.20	0.30 - 0.40	0.85 - 0.85	1.00 - 1.20	0.15 - 0.25
	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Anions by Kone (soil)	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Asbestos ID in Solid Samples	17-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Asbestos Quantification - Full				28-Feb-2018		
Chromium III	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Cyanide Comp/Free/Total/Thiocyanate	16-Feb-2018	19-Feb-2018	16-Feb-2018	19-Feb-2018	16-Feb-2018	16-Feb-2018
Easily Liberated Sulphide	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Elemental Sulphur	19-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018
EPH CWG (Aliphatic) GC (S)	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
EPH CWG (Aromatic) GC (S)	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
GRO by GC-FID (S)	17-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018
Hexavalent Chromium (s)	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Metals in solid samples by OES	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
PAH by GCMS	19-Feb-2018	19-Feb-2018	15-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
pH	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018
Phenols by HPLC (S)	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018
Sample description	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018
Total Organic Carbon	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
TPH CWG GC (S)	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018



CERTIFICATE OF ANALYSIS

SDG:	180211-4	Client Reference:	2053/I2W/ERW	Report Number:	446346
Location:	IPSEN 2	Order Number:	2053/I2W/ERW	Superseded Report:	445164

Appendix

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH₄ by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%, they are generally wider for volatiles analysis, 50-150%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

General

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as "mixed hydrocarbons". Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Holding time exceeded before sample received
5	Samples exceeded holding time before preservation was performed
§	Sampled on date not provided
◆	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to sampled on date
&	Sample Holding Time exceeded - Late arrival of instructions.

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asteststos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

APPENDIX G

Physical Test Results

Laboratory Test Certificate

Form REP008 Rev 1

Issued To Elgan Williams Groundsolve Ltd Unit 1 Charter Court Well House Barns Chester road Bretton Flintshire CH4 0DH	Date of issue	28/02/2018
	Client Ref. No.	2053/I2W/ERW
	Samples / Material Source	
	Date Samples Received 13 February 2018	
Project No		PC187046
Project Name		2053 - IPSEN 2, WREXHAM

Summary of Tests

Standard	Test Description	Test Quantity	UKAS
BS EN ISO 17892-1:2014	Water Content	4	Yes
BS 1377-2:1990:Cl. 4.3 & 5.3	Liquid Limit and Plastic Limit	4	Yes
BS 1377-3:1990:Cl. 5.4 & 5.5	Sulphate Analysis - Water	3	Yes
BS 1377-3:1990:Cl. 9.5	pH	3	Yes



Test Results checked and approved for issue
Signed for and on behalf of Geotechnics Limited

Schiano

Stephane Schiano (Laboratory Supervisor)

#REF!

LABORATORY RESULTS - Classification and Strength

Project 2053 - IPSEN2, WREXHAM

Project No: PC187046

Sample					Classification					Strength					
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description	Symbol	I_p (>425) %	w_L %	w_p %	w (p_d) %	Test	γ_b (γ_d) Mg/m ³	σ_3 kN/m ²	$\sigma_1 - \sigma_3$ kN/m ²	c_u kN/m ²	c_{Avg} kN/m ²
BH1	0.90- 1.20 (0.90)	D	C77375	Brown CLAY.	CI	26 (0%)	50	24	23.1						
BH2	0.70- 0.90 (0.70)	D	C77379	Brown mottled grey CLAY.	CH	28 (1%)	52	24	25.9						
BH3	1.10- 1.20 (1.10)	D	C77378	Brown slightly gravelly CLAY with blades of grass.	CH	28 (4%)	52	24	23.4						
BH6	0.90- 1.20 (0.90)	D	C77376	Brown CLAY.	CI	24 (1%)	48	24	22.1						
Remarks  NST - Not suitable for Test Water Content Test/Bulk Density Test/Particle Density Test performed in accordance with BS EN ISO 17892-1:2014/BS EN ISO 17892-2:2014/BS EN ISO 17892-3:2015 All other Tests performed in accordance with BS1377: 1990															

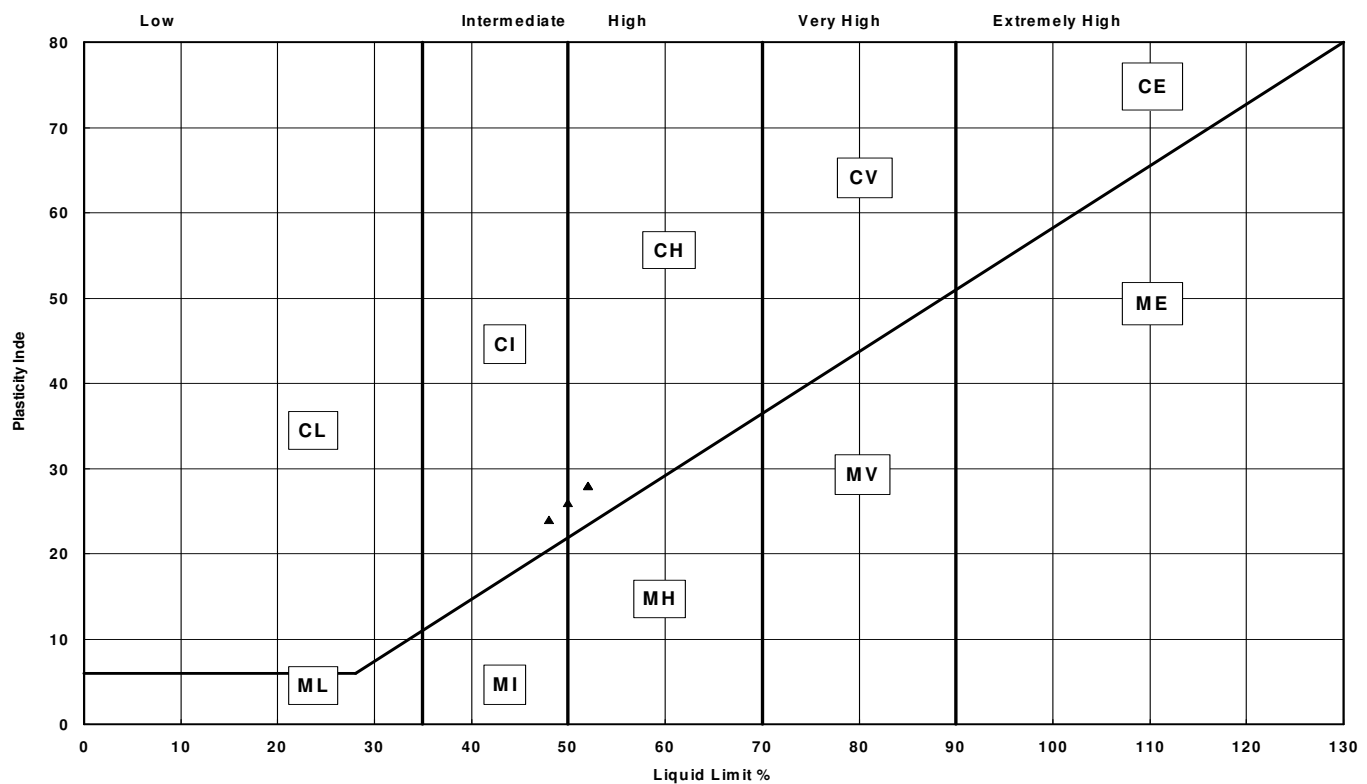
GEOTECHNICS
geotechnical and geoenvironmental specialists

LABORATORY RESULTS - Classification Chart

Project: 2053 - IPSEN2, WREXHAM

Project No: PC187046

PLOT OF PLASTICITY INDEX AGAINST LIQUID LIMIT for all items tested



Soil Type	Plasticity Characteristics
C Clay	L Low
	I Intermediate
M Silt	H High
	V Very High
	E Extremely High

Table of Soil Types and Plasticity Characteristics from BS 5930 : 1999

Remarks

27/02/2018

LABORATORY RESULTS - Chemical Analysis

Project 2053 - IPSEN2, WREXHAM

Project No: PC187046

[illegible]

Remarks Tests performed in accordance with BS 1377: Part 3: 1990
Sulphate reported as SO₃, results in brackets reported as SO₄

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United Kingdom Accreditation Service

ACCREDITATION CERTIFICATE



TESTING LABORATORY
No. 1365

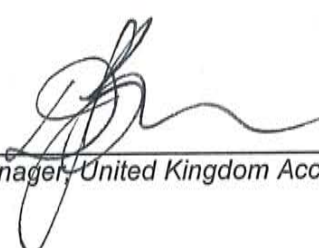
Geotechnics Limited

is accredited in accordance with the recognised International Standard ISO/IEC 17025:2005
General Requirements for the competence of testing and calibration laboratories.

This accreditation demonstrates technical competence for a defined scope as detailed in and at the locations specified in the schedule to this certificate, and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009).

The schedule to this certificate is an essential accreditation document and from time to time may be revised and reissued by the United Kingdom Accreditation Service. The most recent issue of the schedule of accreditation, which bears the same accreditation number as this certificate, is available from the UKAS website www.ukas.com.

This accreditation is subject to continuing conformity with United Kingdom Accreditation Service requirements. The absence of a schedule on the UKAS website indicates that the accreditation is no longer in force.



Accreditation Manager, United Kingdom Accreditation Service

Initial Accreditation date
1 September 1993

This certificate issued on
13 February 2013

UKAS is appointed as the sole national accreditation body for the UK by The Accreditation Regulations 2009 (SI No 3155/2009) and operates under a Memorandum of Understanding (MoU) with the Department for Business, Innovation and Skills (BIS).

Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-Upon-Thames, Middlesex TW18 3HR

 Accredited to ISO/IEC 17025:2005	Geotechnics Limited Issue No: 017 Issue date: 12 February 2018	
	The Geotechnical Centre 203 Torrington Avenue Tile Hill Coventry CV4 9AP	Contact: Mr Stephane Schiano Tel: +44 (0)24 7662 9024 E-Mail: sschiano@geotechnics.co.uk Website: www.geotechnics.co.uk
Testing performed at the above address only		

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
AGGREGATES	Particle size distribution - sieving method	BS EN 933-1:2012
	Water content	BS EN 1097-5:2008
ROCK	Point load strength and anisotropy indices	ISRM Commission on Testing Methods. Suggested Method for Determining Point Load Strength 1985
	Water content – method 1	International Society for Rock Mechanics – suggested methods, Part 1 Test 1: 1981
GEOTECHNICAL INVESTIGATION and TESTING - Laboratory testing of soil	Water content	BS EN ISO 17892-1:2014
	Bulk density - linear measurement method	BS EN ISO 17892-2:2014
	Determination of particle density – fluid pycnometer method,	BS EN ISO 17892-3:2015
	Determination of particle size distribution - Sieving method	BS EN ISO 17892-4:2016
	Determination of particle size distribution - Pipette method	BS EN ISO 17892-4:2016
	Incremental loading odometer test	BS EN ISO 17892-5:2017



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Geotechnics Limited

Issue No: 017 Issue date: 12 February 2018

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SOILS for civil engineering purposes	Organic matter content	BS 1377-3:1990
	Mass loss on ignition	BS 1377-3:1990
	Sulphate content of soil and ground water gravimetric method	BS 1377-3:1990
	Water-soluble chloride content	BS 1377-3:1990
	pH value	BS 1377-3:1990
	California Bearing Ratio (CBR)	BS 1377-4:1990
	Unconfined compressive strength - load frame method	BS 1377-7:1990
	Undrained shear strength - triaxial compression without measurement of pore pressure	BS 1377-7:1990
	Undrained shear strength - triaxial compression with multistage loading and without measurement of pore pressure	BS 1377-7:1990
	Moisture content - oven drying method	BS 1377-2:1990
	Saturation moisture content of chalk	BS 1377-2:1990
	Liquid limit - cone penetrometer	BS 1377-2:1990
	Liquid limit - cone penetrometer - one point	BS 1377-2:1990
	Plastic limit	BS 1377-2:1990
	Plasticity index	BS 1377-2:1990
	Linear shrinkage	BS 1377-2:1990
	Density - linear measurement	BS 1377-2:1990



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Issue No: 017 Issue date: 12 February 2018

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SOILS for civil engineering purposes (cont'd)	Particle density - gas jar	BS 1377-2:1990
	Particle density - small pyknometer	BS 1377-2:1990
	Particle density - large pyknometer	BS 1377-2:1990
	Particle size distribution - wet sieving	BS 1377-2:1990
	Particle size distribution - dry sieving	BS 1377-2:1990
	Particle size distribution - sedimentation - pipette method	BS 1377-2:1990
	Dry density/moisture content relationship (2.5 kg rammer)	BS 1377-4:1990
	Dry density/moisture content relationship (4.5 kg rammer)	BS 1377-4:1990
	Dry density/moisture content relationship (vibrating hammer)	BS 1377-4:1990
	Maximum and minimum dry densities for granular soils	BS 1377-4:1990
	Moisture condition value (MCV)	BS 1377-4:1990
	MCV/moisture content relation	BS 1377-4:1990
	Chalk crushing value	BS 1377-4:1990
	One-dimensional consolidation properties	BS 1377-5:1990
	Shear strength - small shear box	BS1377: Part 7:1990
	Residual strength - small ring shear apparatus	BS1377: Part 7:1990



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Issue No: 017 Issue date: 12 February 2018

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
STABILIZED MATERIALS for civil engineering purposes - cement-stabilized and lime-stabilized materials	Initial consumption of lime	BS 1924-2:1990
	California Bearing Ratio (CBR)	BS 1924-2:1990
	Moisture content - oven drying method (definitive)	BS 1924-2:1990
	Plastic limit	BS 1924-2:1990
	Liquid limit	BS 1924-2:1990
	Plasticity index	BS 1924-2:1990
	Dry density/moisture content relationship (2.5 kg rammer)	BS 1924-2:1990
	Dry density/moisture content relationship (4.5 kg rammer)	BS 1924-2:1990
	Dry density/moisture content relationship (vibrating hammer - subsidiary method)	BS 1924-2:1990
	Moisture condition value (MCV)	BS 1924-2:1990
END		

Classification and Strength

Symbol	C - Clay (0 - containing organic matter) Plasticity	M - Silt L - Low I - Intermediate H - High V - Very High E - Extremely High
I _p	Plasticity Index	
%	% Retained on 425 µm sieve, shown under I _p value	
w _L	Liquid Limit	
w _p	Plastic Limit	
NP	Non-Plastic	
NAT	Sample tested in natural state	
w	Water Content	
p _d	Particle Density	
Test	Quick undrained triaxial tests	
SS	Single stage - 102mm diameter.	
S3	Single stage - set of 3 38mm diameter.	
MS	Multistage - 102mm diameter.	
D	Drained Test	
HV	Hand Vane	
PP	Pocket Penetrometer (kg/cm ²)	
NST	Not suitable for test	
γ _b	Bulk Density	
σ ₃	Triaxial Cell Pressure	
σ ₁ - σ ₃	Deviator Stress	
##	Excessive Strain	
c _u	Undrained Cohesion	
c	Cohesion Intercept	
φ	Angle of Shearing Resistance	
Linear Shrink	Linear Shrinkage	

Consolidation

m _v	Coefficient of Volume Compressibility
c _{v50}	Coefficient of Consolidation - Log t
c _{v90}	Coefficient of Consolidation - √t

Rock

UF	Unacceptable Failure
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Chemical Analysis

Acid Soluble	Total sulphate in specimen, expressed as SO ₃ %, value in brackets expressed as SO ₄ %
Water Soluble	Soluble sulphate in 2:1 water : soil extract, expressed as SO ₃ g/l, value in brackets expressed as SO ₄ g/l
In Water	Sulphate content of groundwater, expressed as SO ₃ g/l, value in brackets expressed as SO ₄ g/l
pH	pH value
Organic content	Organic content expressed as a percentage of dry weight
Chloride	Chloride Ion content expressed as a percentage of dry weight

MCV, Compaction, CBR

MCV	Moisture Condition Value at natural water content
MCC	Moisture Condition Calibration
CCV	Chalk Crushing Value

Compaction

Type	2.5 = BS 2.5 kg Rammer
	4.5 = BS 4.5 kg Rammer
	V = BS Vibrating Hammer

γ_b Bulk Density

γ_d Dry Density

CBR California Bearing Ratio

Type	2.5 = Test on Specimen Recompacted using BS 2.5 kg Rammer
	4.5 = As above but using BS 4.5 kg Rammer
	V = As above but using BS Vibrating Hammer
	M = Test on open drive mould specimen cut in field
	S = Soaked Specimen

Top CBR at top of mould

Bottom CBR at bottom of mould

ND None Detected

* In the Sample Description denotes a laboratory only description

Tests performed in accordance with
BS 1377: Parts 1-9:1990 incorporating amendments where appropriate and BS EN ISO 17892: Parts 1-2:2014; Part 3:2015; Part 4:2016; Part 5:2017