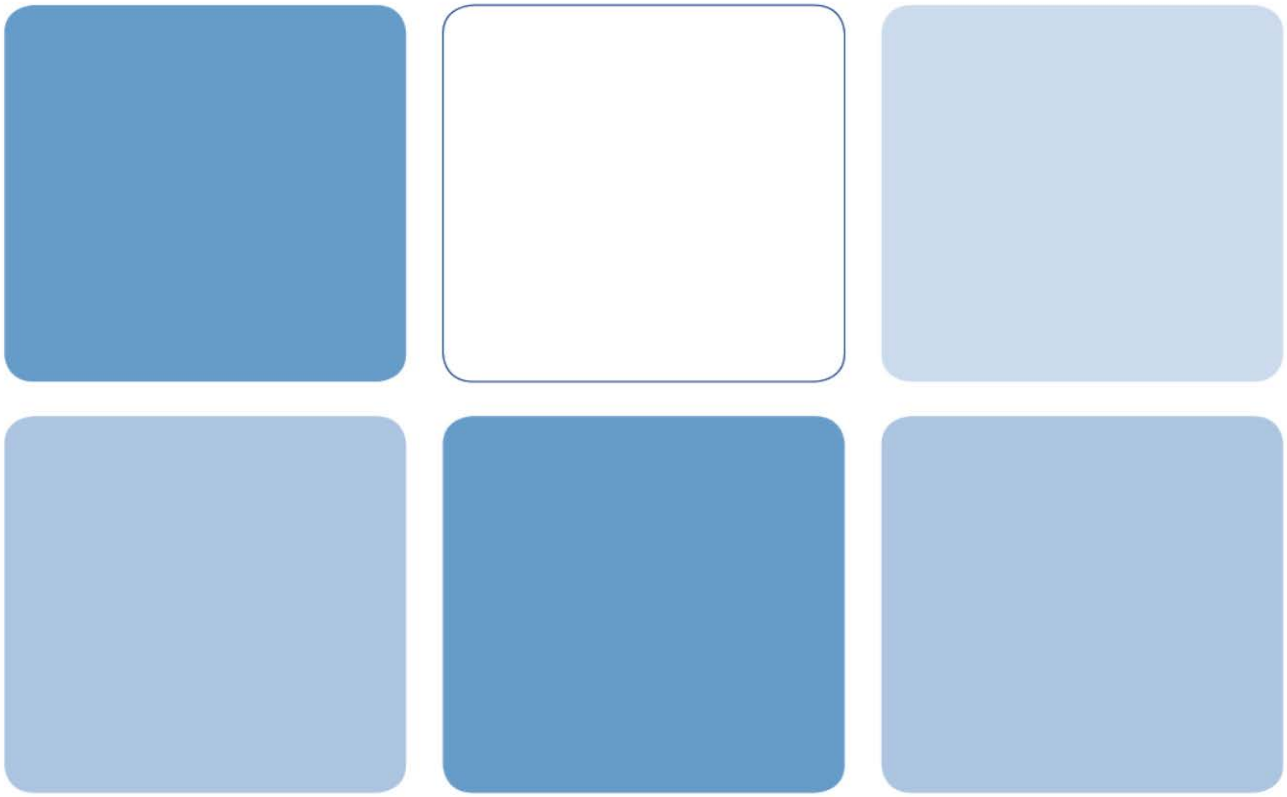
Site Condition Report

Unit 1C, Tremorfa Industrial Estate, Cardiff

On Behalf of

Bayliss Metals



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1 Introduction

1.1 Background

1.1.1 RPS Planning and Development (RPS) was commissioned by Bayliss Metals (herein referred to as the client) to undertake a Site Condition Report of a site located on the Tremorfa Industrial Estate, Cardiff at National Grid Reference (NGR) 321404 175730. The site comprises a roughly square parcel of land with a hardstanding cover and two single story workshop / storage buildings. The proposed site covers an area of approximately 0.5 ha. The plan within *Appendix 1* details the site boundary hereinafter referred to as the Assessment Site.

1.1.2 The purpose of undertaking this assessment is to support a permit application for a new metal recycling facility and associated infrastructure.

1.2 Objectives

1.2.1 The objectives of this assessment are to:

- Assess likely existing ground conditions, including geological, hydrogeological and hydrological conditions to establish baseline conditions and allow an assessment of environmental sensitivity;
- Identify the potential contamination sources, both from historical and current activities, that may have lead to contamination of the Assessment Site; ; and
- To develop and undertake an investigation to assess benchmark the current contamination status of the Assessment Site.

1.2.2 Details of the methodology followed in relation to the desk based elements of the assessment are provided in *Appendix 1*.

1.3 Limitations

1.3.1 This assessment is limited to the information available at the time of production including a Landmark Envirocheck Report (*Appendix 2*), published environmental / geological data and observations made during a site walkover visit undertaken by a consultant from RPS on the 2nd February 2015.

2 Land Use

2.1.1 This section sets out details of the current and historical land use of the Assessment Site and the surrounding area. The data presented does not represent full details of all land uses, but those that are considered to have the potential to have led to contamination of the Assessment Site. For full details of the land use, the information presented within *Appendix 2* should be consulted.

Table 2.1 Land Use

Section	Description/Information	Comments / Potential Contamination Sources
Site Size	Approximately 0.5 hectares	N/A
Current Site Description / Layout**	The Assessment Site is broadly square in shape and comprises a former vehicle hire and MOT centre. At the time of the site walkover some works to install new services and soakaway testing had been undertaken with a limited number of trenches and test pits still open. Several mounds of excavation arisings were also present within the south and western area of the Assessment Site. Onsite were two warehouse buildings, one large two story and one small single story. The two buildings are positioned within the north eastern area of the Assessment Site with a small concrete pad situated directly to the south of the larger building and tarmac hardstanding covering the remainder of the Assessment Site. An area formally used as a car wash down area with a static storage container was also identified within the north western area of the Assessment Site. Protruding into the south eastern corner of the Assessment Site was a sub-station, although this actually lies outside of the Assessment Sites boundary.	The two warehouse buildings and surrounding areas have formally been used to store, service, and repair vehicles, therefore there is potential for contamination associated with these processes to be present within the buildings footprint and surrounding areas. The substation, although not formally within the Assessment Sites boundary is considered a potential source of contamination, with any leaks or spills of transformer oil (including the potential for PCBs) having the potential to impact the Assessment Site. Lastly the area formally used as a car wash down area is considered as a potential contamination source. Any oils and or chemical contamination from vehicles being washed down is likely to have made its way into the ground within this area via cracks within the hardstanding present.

<table>
<tr><th>Section</th><th colspan="3">Description/Information</th><th>Comments / Potential Contamination Sources</th></tr>
<tr><td>Neighbouring Land Uses**</td><td colspan="3">The Assessment Site is bound on all sides by light industrial uses associated with Tremorfa Industrial Estate. These include several vehicle dismantling companies, heavy and light storage facilities and an aggregate distributer. In the wider vicinity there also lies Celsa Manufacturing steel works and also a sewage treatment facility.

In addition, to the east of the Assessment Site there currently sits a large area of land used for the storage of unwanted vehicle parts. It was unclear during the site walkover if this area was indeed part of a business, or weather this in fact was a misused piece of scrap land.</td><td>The industrial nature of the surrounding businesses is considered to represent a potential source of contamination, with hydrocarbons associated with the many of the uses, the vehicle storage and dismantling facilities being the most prominent. Other potential contaminants of concern would include asbestos and heavy metal contamination.</td></tr>
<tr><td colspan="5"></td></tr>
<tr><td rowspan="4">Site History**</td><td colspan="2">Date</td><td rowspan="2">On-site Land Uses</td><td rowspan="4">The sites former use as part of the large Slag Reclamation Works, including the presence of several buildings, infrastructure and tanks should be considered as potential contamination sources. The material used in the land reclamation to raise ground levels has the potential to be contaminated.</td></tr>
<tr><td>From</td><td>To</td></tr>
<tr><td>1880</td><td>1954</td><td>Assessment Site indicated as part of the Cardiff Mud Flats. No development is shown.</td></tr>
<tr><td>1954</td><td>1993</td><td>The Assessment Site is shown to be developed as part of the slag reclamation works for the large steel works located to the north west. It is assumed that substantial land reclamation would have had to have occurred prior to this time to allow the Assessment Sites development. During this time the Assessment Site is shown to have had several small buildings conveyors, hoppers, crushers, railway tracks and unknown tanks positions in numerous orientations upon it.</td></tr>
<tr><td>1993</td><td>2014</td><td>From 1993 until 2014 (most recent map available) the site appears in its current form, with the two warehouse buildings present within the northern area.</td></tr>
</table>

Section	Description/Information			Comments / Potential Contamination Sources
	Date		*Surrounding Land Uses (250m radius unless otherwise stated)*	
	From	To		
	1884	1886	Assessment Site and surrounding area is indicated as part of the Cardiff Mud Flats. To the south west a target marker, associated with a historical riffle range can be seen.	The current industrial nature of the surrounding area is considered to represent a potential source of contamination, with hydrocarbons associated with the many vehicle storage and dismantling facilities being the most prominent. Furthermore the historical Slag works is expected to have impacted significantly on the contaminant status of the area, with the presence of significant slag deposits being likely. Contamination associated with former slag works is likely to include, high alkaline deposits, heavy metal contamination, ammonia deposits and the potential for hydrocarbon contamination. Furthermore due to the age of the slag works it is likely that asbestos was used within its buildings, and hence asbestos contamination associated with historic demolition rubble may also be considered likely to be present.
	1901	1941	The aforementioned riffle range and associated target are no longer present; instead the Cardiff Main Sewer Outfall can be seen approx. 250 m south of the Assessment Site beyond which a series of rail tracks associated with Roath Docks can be seen heading in a north western direction adjacent to site.	
	1942	1953	To the west of site Tremorfa Works (Rolling Works) can be seen with extensive rail links approximately 100 m from the Assessment Site.	
	1954	1993	The area surrounding the Assessment Site can be seen developed as part of the Slag Reclamation Works. Several buildings associated with the works can be seen present in numerous orientations connected at different times with conveyors and temporary rail links.	

Section	Description/Information			Comments / Potential Contamination Sources
	1993	**2014**	From 1993 until 2014 (most recent map available) the areas surrounding site appear in their current form, with several small industrial units and the sewage treatment plan present all associated with Tremorfa Industrial Estate. The large steel works is also still present, approximately 100 m to the west of the Assessment Site.	
	Distance & Direction		***Details***	
Landfills / Waste (500 m)*	East (0-250m)		Marlee Metals & Skip Hire Ltd, Unit 17 Tremorfa Industrial Estate, Registered waste transfer station.	The adjacent landfills and registered waste transfer stations have the potential to have lead to contamination of the Assessment Site through the migration of gas and groundwater onto the Assessment Site. Whilst a number of landfills are in relatively close proximity to the Assessment Site they are off an age (based on available landfill records and historical maps) where you would expect gas and leachate generation to be declining. In addition a number of these landfills have also been redeveloped and therefore may have already been remediated to some extent.
	West (0-250m)		Personnel Hygiene Services Ltd, Unit 49 Portmanmoor Road Ind. Estate, Registered waste transfer station.	
	South west (0-250m)		H J Lane t/a Tremorfa Autosalvage, Unit 5 Martin Road, Tremorfa Industrial Estate, Registered Waste treatment or Disposal Site.	
	East (0-250m)		M Harrison T/A 1st Choice Vehicle Dismant, 1st Choice Vehicle Dismantlers, Units 12/13 Martins Road, Rover Way, Registered Waste treatment or Disposal Site.	
	North East (0-250m)		N Young t/a City Salvage Ltd, 11 Martin Road, Tremorfa Industrial Estate, Registered waste transfer station.	
	East (0-250m)		City Special Waste Ltd, 11 Martin Road, Tremorfa Industrial Estate, Registered waste transfer station.	

Section	Description/Information		Comments / Potential Contamination Sources
	North East (0-250m)	Bill Way % Co Ltd, Unit 16 Tremorfa Industrial Estate, Registered Waste treatment or Disposal Site.	
	West (250-500m)	Unit 49, Portmanmoor Road, Portmanmoor Road Ind Est, Cardiff, Clinical Waste Transfer Station.	
	South East (0-250m)	B.S.C. Welsh Div., Cardiff Foreshore At. Rover Way, Cardiff, Registered Landfill. (Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled)	
	South East (0-250m)	Allied Steel And Wire, Cardiff Foreshore, Rover Way, Cardiff, Registered Landfill. (Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled)	
	South (0-250m)	W T Davies (Transport) Ltd, Rover Way, (Adj. Tarmac Topmix), Tremorfa, Cardiff, Registered Landfill. (Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled)	
	North East (0-250m)	Allied Steel & Wire Ltd, Behind Slag Reduction, Rover Way, Cardiff, Registered Landfill. (Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled)	
	North East (0-250m)	Slag Reduction Company (Cardiff) Ltd, Cardiff Foreshore, Rover Way, Registered Landfill. (Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled)	
	On Site	British Steel Corp, Rover Way, Cardiff East Moors, CARDIFF, BGS Recorded Landfill.	

Section	Description/Information		Comments / Potential Contamination Sources
	On Site	R Bailey Plant (Bedwas) Ltd, Rear Of Tarmac Topmix Site, Rover Way, Cardiff, Registered Landfill.(Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled)	
Contemporary Trade Directory Entries* (250 m)	On Site	Commercial Motors, Stratus: Inactive	As previously discussed, the identified contemporary trade directory entries are considered as potential contamination sources as they have the potential lead to contamination of the Assessment Site
	South East (0-250m)	Diggers, Martin Rd, Stratus: Inactive	
	East (0-250m)	Bill Way & Co Ltd, Car Breakers & Dismantlers, Status: Active	
	East (0-250m)	Cardiff Reclamation , Salvage Dealers, Status: Inactive	
	East (0-250m)	C & B Car Repairs, Scrap Metal Merchants, Status: Inactive	
	East (0-250m)	A A 1, Breakers & Dismantlers, Status: Active	
	West (0-250m)	Mot'S 4 U, Mot Testing Centres, Status: Inactive	
	North West (0-250m)	Body & Soul Auto Works, Classic Car Specialists, Status: Active	
	North West (0-250m)	Hayward James Motor Co Ltd, Car Dealers, Status: Inactive	
	West (0-250m)	Presco (Uk) Ltd, Catering Equipment, Status: Inactive	
	North West (0-250m)	Action Recycling Ltd, Reclaiming - Waste Products, Status: Inactive	
	South East (0-250m)	The Panel Shop, Car Breakers & Dismantlers, Status: Inactive	
	West (0-250m)	Window Tinting, Window Tinting, Status: Active	

Section	Description/Information		Comments / Potential Contamination Sources
	West (0-250m)	Celtic Chem-Dry, Carpet, Curtain & Upholstery Cleaners, Status: Inactive	
	West (0-250m)	Cars Cardiff, Car Dealers - Used, Status: Inactive	
	West (0-250m)	Cardiff Van Centre, Commercial Vehicle Dealers, Status: Inactive	
	North East (0-250m)	It Works, Recycling & Disposal, Status: Inactive	
	East (0-250m)	Ace Tyre Services, Tyre Dealers, Status: Inactive	
	North East (0-250m)	1st Choice Vehicle Dismantlers, Car Breakers & Dismantlers, Status: Active	
	North East (0-250m)	D M D Mechanical Engineering Ltd, Mechanical Engineers, Status: Inactive	
	North East (0-250m)	The Engine Shop, Engine Rebuilding & Reconditioning, Status: Inactive	
	North East (0-250m)	National Engine Centre Review, Engine Rebuilding & Reconditioning, Status: Active	
	North East (0-250m)	Parts (Uk), Scrap Yards, Status: Inactive	
	East (0-250m)	South Western Print Finishers, Print Finishers, Status: Inactive	
Recorded Pollution Incidents (250m)*	On Site	None recorded.	None recorded
	Off Site	(July 2001) Air Impact: Category 2 - Significant Incident	Atmospheric Pollutants And Effects

Section	Description/Information		Comments / Potential Contamination Sources
	Off Site	(September 2005) Land Impact: Category 2 - Significant Incident	Pollutant: Asbestos Waste
Pollution Prevention and Controls* (250 m)	On Site	There are no recorded Integrated Pollution Controls (IPCs), Integrated Pollution & Prevention Controls (IPPCs), Local Authority Pollution Controls or Local Authority Pollution and Prevention Controls on the Assessment Site.	None recorded
	West (0-250m)	Action Environmental, Part B - Mineral Industry Sector. Status: Permitted	Whilst the materials recycling facility may represent a potential contamination source, it is considered that it is unlikely to have lead to contamination of the Assessment Site, due to the nature of materials (recycled aggregates) and its distance from the Assessment Site (approx. 150m).
	North (0-250m)	Tarmac Concrete, Part B – Mineral Industry Sector. Status: Permitted	Whilst the ready mixed concrete facility may represent a potential contamination source, it is considered that it is unlikely to have lead to contamination of the Assessment Site, given its distance from the Assessment Site (approx. 125m).

Section	Description/Information		Comments / Potential Contamination Sources
	North (0-250m)	Tilcon Ltd, Part B - Mineral Industry Sector. Status: Permitted	Whilst the concrete business may represent a potential contamination source, it is considered unlikely to have lead to contamination of the Assessment Site, given that the site appears to consist solely of an outside storage facility and is currently underlain by competent hardstanding.
	North East (0-250m)	Diggers Vehicle Dismantlers. Part B - Fuel and Power Industry Sector Status: Authorised	The car breaking activity does represent a potential contamination source, and it is considered possible that the process could have led to contamination of the Assessment Site.
Discharge Consents (250 m)*	On site	None recorded	None recorded
	North (0-250m)	John Laing Construction Ltd, Unknown Discharge, Status: Revoked	The identified discharge consents are considered unlikely to have lead to contamination of the Assessment Site.
	South West (0-250m)	Dwr Cymru Cyfyngedig, Sewage Discharge, Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)	

*** based on review of Landmark report.**

**** based on site reconnaissance and review of Landmark report.**

3 Environmental Setting

3.1.1 This section sets out details of the environmental setting of the Assessment Site and the surrounding areas.

Table 3.1 Environmental Sensitivity

Section	Description / Information				Issues / Comments
Geology & Hydrogeology**	***Strata***	***Description***	***Aquifer Status***	***Anticipated Approx. thickness (m)***	
	Made Ground	Unknown	Non-productive.	Unknown	-
	Superficial deposits.	Tidal Flat Deposits with possible peat - Clay and Sand & gravel.	Secondary (undifferentiated).	10-20 m	-
	Bedrock	Mercia Mudstone - Sedimentary Mudstone.	Secondary B.	Unknown	Mercia Mudstone bedrock anticipated to be at 16-20 m below ground level.
Groundwater Vulnerability		Minor Aquifer Low.	Negligibly permeable.		The designation of Minor Aquifer relates to the whole of the Assessment Site. The Minor Aquifer is considered a low sensitivity receptor.

	Distance & Direction	***Details***	
SPZs* (500m)	On site	None identified	None recorded
	Off site	None identified within 500 m of the Assessment Site.	None recorded
Surface Water (1km)*	On site	None Identified	None recorded
	Off site: 200 m south	Seven Estuary located to the south of the Assessment Site.	-
Licensed Water Abstractions (1km)*	On site	None identified.	None recorded
	North (0-250m)	Celsa Manufacturing (UK) Ltd, underground Strata, Marine Alluvium And E A F Slag, Abstractions Industrial. Status: Unknown (presumed active)	Whilst the abstraction is a potentially sensitive receptor, due to their industrial nature and distance from the Assessment Site they are considered unlikely to be impacted by contamination that may arise at the Assessment Site.

Section	Description / Information		Issues / Comments
Conservation Areas & Sensitive Land Use (500m)*	Off Site	The Seven Estuary, 200m to the south of the Assessment Site is: o RAMSAR site; o Special Area of Conservation; o Special Protection Area; and o Site of Special Scientific Interest.	The Assessment Site is located in a very sensitive environmental setting.

	Is the site potentially affected?	***Details***	
Radon*	No	The Assessment Site is in a lower probability radon area (<1% homes are above the action level).	No radon protective measures are necessary.
Coal Mining*	No	The Assessment Site is not in an area that is recorded as impacted by coal mining.	
Potential for collapsible Ground	On site	Hazard Potential: No Hazard	Although the Site Check report suggests there is no hazard with regards to collapsible ground, the presence of the former slag reclamation works on site, and the identification of made ground by the BGS would suggest that some hazard may exist at the Assessment Site.
Foundered Strata / Landslide*	Possibly	The Site Check report suggests that there is: o No hazard potential for ground dissolution stability hazards; o A moderate hazard potential of compressible ground; o A moderate hazard potential for running sand ground stability hazards; o A moderate potential for compressible ground stability hazards; and o A moderate hazard potential of landslide ground stability hazards.	These risks should be taken into consideration during the design stage of development. It should be noted that the where slag deposits ae present beneath the Assessment Site that these may be expansive.

Section	Description / Information		Issues / Comments
Ground gas**	Yes	The area underlying the Assessment Site was reclaimed around 1920 using fill materials. Additionally there is the possibility of ground gas being produced by estuarine deposits beneath the Assessment Site.	From a review of BGS borehole records within the surrounding area, there is evidence of gas producing materials within the underlying geology, including slag, peat and ash materials.

*** based on review of Landmark report.**

**** based on review of geological and hydrogeological maps and the Landmark report.**

4 Contamination Sources

4.1.1 The DTS has identified a number of potential onsite and offsite contamination sources that have the potential to have impacted the baseline contaminated land conditions at the Assessment Site.

4.1.2 These contamination sources are both onsite and offsite as outlined within *Table 4.1*

Table 4.1 Potential Contamination Sources

Onsite Contamination Sources	Offsite Contamination Sources
• Vehicles historically processed and stored on site; • Historical tank (usage not confirmed); • Electric substation; • Historical site use as slag reclamation works, including, railway siding, and associated infrastructure; • Potential for asbestos containing materials buried beneath site due to historic buildings; • Unknown thickness of Made Ground used to reclaim land from original salting's and marshes.	• Industrial use of adjacent land.

4.1.3 These contamination sources have been targeted by the intrusive investigation works outlined within the remainder of this report.

5 Site Investigation Methodology

5.1.1 The intrusive site investigation was undertaken on the 2nd of February 2015. The works comprised the advancement of a total of 9 No. trial pits. All pitting works were undertaken under the supervision of an RPS Geo-Environmental Consultant.

5.1.2 All investigation works were designed and undertaken in general accordance with current guidance advocated by regulatory authorities, including *BS10175:2011 Code of Practice for Investigation of Potentially Contaminated Sites (British Standards Institute, March 2011) and BS5930-1999 Code of Practice for Site Investigations (British Standards Institute, March 2011).*

5.2 Design of Investigation

5.2.1 The ground investigation was primarily designed to target areas of potential contamination as identified by the desk study and to target the key process areas for the proposed new facility. Additionally locations were investigated across the Assessment Site to establish the presence or absence of contamination within these areas.

5.3 Intrusive Exploratory Holes

Preparation

5.3.1 Prior to commencing intrusive works, all exploratory locations were initially cleared for buried services using Cable Avoidance Tools (CAT), and where concrete / tarmac was present these were broken out prior to excavation using a hydraulic breaker.

Trial Pitting

5.3.2 A total of 9 No. trial pits (TP01 to TP09) were excavated across the Assessment Site. In addition one sample was also recovered from a former soakaway pit which was open during the time of investigation. Following service clearance, trial pits were progressed using a mechanical excavator (JCB 360X), reaching a maximum depth of 3.0 mbGL (depth of refusal). Each trial pit on completion was backfilled and compacted in layers with arisings in the sequence in which they were excavated, as far as practicable. Trial pit logs are provided in *Appendix 3*.

5.3.3 Arisings from the trial were logged and sampled directly from the excavator bucket immediately after excavation.

5.4 Soil Sampling and Field Testing

5.4.1 A Photo-ionisation Detector (PID) (MiniRae 2000) was used during the trial pitting works to determine the concentration of Volatile Organic Compound (VOCs) vapours arising from the excavated ground materials. To ensure that even low concentrations of VOCs were detected a headspace methodology was used for VOC screening. In all exploratory locations, PID

monitoring was undertaken at one meter intervals, with further monitoring where visual and or olfactory evidence of contamination was identified.

5.4.2 As each exploratory location was advanced, representative soil samples were collected for chemical testing.

5.4.3 Each soil sample was labelled with a unique reference number together with project details.

5.4.4 Environmental samples were placed into laboratory supplied containers which were then placed into cool boxes and kept at a nominal temperature of +4°C ± 2°C by the use of ice packs. The samples were then dispatched for analysis to a UKAS accredited laboratory, Environmental Scientifics laboratories in Burton-Upon-Trent together with appropriate chain of custody documentation.

5.5 Laboratory Analysis

Chemical Analysis for Soils

5.5.1 Laboratory analysis of soil samples was undertaken at a United Kingdom Accreditation Service (UKAS) accredited laboratory (ESG), in accordance with MCERTS validation methodologies (in soils). The soil samples were analysed for a wide range of soil contaminants, the suite of contaminants scheduled was derived based on the potential contamination sources identified within the PSCM and a range of common contaminants. The analysis consisted of the following:

- Speciated Total Petroleum Hydrocarbons (TPH);
- Speciated Polycyclic Aromatic Hydrocarbons (PAH);
- Poly Chlorinated Byphenols (PCBs);
- Phenol;
- Metals suite including arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc;
- Sulphate;
- Glycols suite;
- pH; And
- An asbestos screen and ID of selected samples.

5.5.2 The analytical soil results are provided in *Appendix 4.*

6 Site Investigation Findings

6.1 Introduction

This section sets out the ground conditions identified through the investigation works.

6.2 Ground Conditions

6.2.1 The ground conditions identified during the intrusive site investigation are summarised in the following sections. For a detailed account of the ground conditions at each location reference should also be made to the individual trial pit records presented in *Appendix 3* of this report.

Hardstanding

6.2.2 Hardstanding consisting of tarmacadam, underlain in several locations with coarse orange grey gravels (engineered sub-base), was identified at all exploratory locations. Tarmacadam was identified to a maximum thickness of 0.1 m across the Assessment Site, and in general was identified as being in a reasonable condition with only minor cracking and occasional weathering identified.

Made Ground

6.2.3 Materials considered to be Made Ground were encountered in all exploratory locations to a maximum recorded depth of between 3.0 mbgl within TP04. Across the Assessment Site, these materials comprised variable deposits of slag with variable gravels of brick, concrete, wood, metal, plastic and glass.

6.2.4 With the exception of TP04, impenetrable slag, or large boulders of concrete surrounded by impenetrable slag were identified, and consequently TP01, TP02, TP03, TP05, TP06, TP07, TP08 and TP09 failed to reach their proposed maximum depth.

6.3 Visual and Olfactory Evidence of Contamination

6.3.1 No visual or olfactory evidence of gross contamination (i.e. hydrocarbon sheens or odours) was noted during the intrusive investigation. Field monitoring with a PID did not detect elevated levels of VOCs above the PID Limit of Detection (LOD) of 0.1 Parts per Million (ppm). As previously stated slag deposits were identified at all locations.

7 Summary of Chemical Analytical Results and Screening Assessment

7.1 Introduction

7.1.1 This section summarises the laboratory analytical results for soil samples collected during the intrusive investigation and compares those identified with their respective commercial screening criteria. The complete laboratory chemical analytical certificates are presented within *Appendix 4*.

7.2 Soil Analytical Results

The soil analytical results are summarised within this section. The analytical data relates to the Made Ground slag materials.

Metals and Inorganic Parameters

7.2.1 A total of 7 No. samples were analysed for metals and selected inorganic determinants. *Table 8.1* provides a summary of the chemical results. The results have been screened against human health screening criteria to establish if the concentrations are substantially elevated. For the purposed of this Site Condition report an exceedence does not warrant further assessment or mitigation, merely suggesting elevated concentrations.

Table 8.1 Summary of Inorganic Soil Analytical Results

Determinant	Unit	No. of Samples Analysed	No. Analyses above LOD	Concentration Range	Location of Maximum	Commercial GAC/SGV[1]	Exceedance of GAC/SGV?
Arsenic	mg/kg	7	7	5.0 – 26.5	TP01 (0.5-1.0m)	640[1]	No
Boron	mg/kg	7	7	4.0 – 8.6	TP05 (0.5-1.0m)	192,000[2]	No
Cadmium	mg/kg	7	7	0.51 – 2.54	TP01 (0.5-1.0m)	230[1]	No
Chromium	mg/kg	7	7	124.5 - 1852	TP01 (0.5-1.0m)	8,840[2]	No
Copper	mg/kg	7	7	41.9 – 271.8	TP01 (0.5-1.0m)	71,700[2]	No
Lead	mg/kg	7	7	66.0 – 520.7	TP01 (0.5-1.0m)	750[3]	No
Mercury	mg/kg	7	7	0.18 – 1.58	TP01 (0.5-1.0m)	3,600[1]	No
Nickel	mg/kg	7	7	20.1 – 207.2	TP01 (0.5-1.0m)	1,800[1]	No
Selenium	mg/kg	7	7	0.8 – 5.0	TP05 (0.5-1.0m)	13,000[1]	No

Determinant	Unit	No. of Samples Analysed	No. Analyses above LOD	Concentration Range	Location of Maximum	Commercial GAC/SGV[1]	Exceedance of GAC/SGV?
Zinc	mg/kg	7	7	133.7 – 654.8	TP01 (0.5-1.0m)	166,000[2]	No

Notes:

1. EA Soil Guideline Value (SGV)
2. LQM/CIEH Generic Assessment Criteria (GAC)
3. In the absence of a current SGV or GAC, the withdrawn SGV for lead has been used as a screening tool only.

7.2.2 Table 8.1 identifies that low to moderate concentrations of metals are presented throughout the site. Concentrations do not exceed the arbitrary screening criteria suggesting they are not substantially elevated.

Polycyclic Aromatic Hydrocarbons (PAH)

7.2.3 A total of 7 No. samples were analysed for speciated PAH's. Concentrations of all contaminants encountered above Laboratory Limit of Detection (LOD) are summarised in Table 8.2.

Table 8.2 Summary of PAH Soil Analytical Results

Determinant	Units	Number of Samples Analysed	No. Analyses above LOD	Concentration Range	Location of Maximum	Commercial GAC	Exceedance of GAC/SGV?
Naphthalene	mg/kg	7	1	0.14	TP06 (0.5-1.0m)	200	No
Acenaphthylene	mg/kg	7	1	0.2	TP06 (0.5-1.0m)	84,000	No
Acenaphthene	mg/kg	7	1	0.69	TP06 (0.5-1.0m)	85,000	No
Anthracene	mg/kg	7	1	3.67	TP06 (0.5-1.0m)	530,000	No
Fluorene	mg/kg	7	1	0.44	TP06 (0.5-1.0m)	64,000	No
Phenanthrene	mg/kg	7	6	0.11 – 9.28	TP06 (0.5-1.0m)	22,000	No
Fluoranthene	mg/kg	7	7	0.13 – 25.5	TP06 (0.5-1.0m)	23,000	No
Pyrene	mg/kg	7	7	0.11 – 22.5	TP06 (0.5-1.0m)	54,000	No

Determinant	Units	Number of Samples Analysed	No. Analyses above LOD	Concentration Range	Location of Maximum	Commercial GAC	Exceedance of GAC/SGV?
Benzo[a]anthracene	mg/kg	7	7	0.1 – 11.6	TP06 (0.5-1.0m)	90	No
Chrysene	mg/kg	7	7	0.08 – 9.69	TP06 (0.5-1.0m)	140	No
Benzo(b)fluoranthene	mg/kg	7	7	0.13 – 13.8	TP06 (0.5-1.0m)	100	No
Benzo(k)fluoranthene	mg/kg	7	4	0.16 – 4.91	TP06 (0.5-1.0m)	140	No
Benzo(a)pyrene	mg/kg	7	6	0.13 – 12.2	TP06 (0.5-1.0m)	14	No
Dibenzo(a,h)anthracene	mg/kg	7	3	0.11 – 1.85	TP06 (0.5-1.0m)	13	No
Indeno(123-cd)pyrene	mg/kg	7	6	0.08 – 8.98	TP06 (0.5-1.0m)	60	No
Benzo(g,h,i)perylene	mg/kg	7	5	0.14 – 7.95	TP06 (0.5-1.0m)	650	No

Notes:

Bold indicates outlier that exceeds its SGV/GAC.

7.2.4 Table 8.2 identifies that low to moderate concentrations of PAHs are presented throughout the site. Concentrations do not exceed the arbitrary screening criteria suggesting they are not substantially elevated.

Total Petroleum Hydrocarbons (TPH)

7.2.5 In total 7 No. samples have been tested for TPH CWG + BETX analysis. A summary of the identified contaminant concentrations identified above LOD are presented in Table 8.3.

Table 8.3 Summary of TPH Soil Analytical Results

Determinant	Unit	Number of Samples. Analysed	No. Analyses above LOD	Concentration Range	Location of Maximum	Commercial GAC / SGV	Exceedance of GAC/SGV?
Aromatics >C12-C16	Mg/kg	7	4	4.0 – 9.0	TP06 (0.5-1.0m)	36,000	No
Aliphatics >C16-C21	Mg/kg	7	6	4.49 – 20.1	TP06 (0.5-1.0m)	1,600,000	No
Aromatics >16-C21	Mg/kg	7	6	4.01 - 115	TP06 (0.5-1.0m)	28,000	No
Aliphatics >C21-C35	Mg/kg	7	7	14.5 - 149	SA01 (2.5m)	1,600,000	No
Aromatics >C21-C35	Mg/kg	7	7	10.4 - 391	TP06 (0.5-1.0m)	28,000	No

1. Assumes LQM/CIEH Generic Assessment Criteria (GAC) for aliphatic fraction to provide a conservative approach, 1% Soil Organic Matter (SOM).

2. Assumes LQM/CIEH Generic Assessment Criteria (GAC) for aromatic fraction to provide a conservative approach, 1% Soil Organic Matter (SOM).

3. LQM/CIEH GAC. Assumes 1% SOM

7.2.6 Table 8.3 identifies that low to moderate concentrations of TPH are presented throughout the site. Concentrations do not exceed the arbitrary screening criteria suggesting they are not substantially elevated.

PCBs

7.2.7 1 No. soil sample from within the Made Ground located close to the electrical substation was tested for the presence of PCBs. All results were below the LOD of 5 µg/kg.

Phenols

7.2.8 Analysis for phenols was undertaken on 2 No. samples from the Made Ground across the Assessment Site. All results were below the respective LOD.

Glycols

7.2.9 Analysis for glycols was undertaken on 1 No. samples from the Made Ground across the Assessment Site. All results were below the LOD of 10 mg/kg.

Asbestos

7.2.10 A total of 7 No. soil samples were screened for the presence of asbestos fibres within the Made Ground. Six of these samples were identified as containing asbestos at a range of depths between 0.5 and 2.5 mbGL. The location and type of asbestos identified within each sample is detailed within Table 8.4.

Table 8.4 Summary of Asbestos Identified in Soil Samples

Location and Depth (mbGL)	Type and Composition	Strata
TP01 (0.5-1.0m)	Amosite(Free Fibres)	Made Ground
TP04 (0.5-1.0m)	Amosite(Free Fibres)	Made Ground
TP05 (0.5-1.0m)	Amosite(Free Fibres)	Made Ground
TP06 (0.5-1.0m)	Amosite(Free Fibres)	Made Ground
TP07 (0.5-1.0m)	Amosite(Free Fibres)	Made Ground
SA01 (2.5m)	Chrysotile(Cement)	Made Ground

8 Conclusions and Recommendations

8.1.1 RPS Planning and Development was commissioned by Bayliss Metals to undertake a Site Condition Report on a site located on the Tremorfa Industrial Estate, Cardiff. The works were undertaken in order to support a permit application for a new metal recycling facility and associated infrastructure. Works have been completed to help establish the baseline ground conditions with regard to soils at the Assessment Site.

8.1.2 The assessment comprised a site reconnaissance visit and review of available records, which was used to confirm the site sensitivity and potential for contamination. The desk based assessment identified a range of potential historic and current contamination sources including a former Slag Reclamation Works, MOT and Servicing Centre, an Electricity Substation and multiple adjacent industrial land uses.

8.1.3 A ground investigation was designed to characterise the contamination from the identified potential contamination sources and those that may be introduced to the Assessment Site based on its proposed use.

8.1.4 The site investigation comprised the advancement of 9 No. trial pits using a mechanical excavator. The trial pits were excavated to maximum depth of 3.0 mbGL and all refused within the Made Ground, found to comprise of slag from the former slag reclamation works.

8.1.5 Soil samples collected at each location were analysed for a suite of chemical contaminants based on the historic, current and future uses of the Assessment Site.

8.1.6 Analysis identified low to moderate concentrations of metals, PAHs and TPH across the site together with asbestos. PCBs, Phenols and glycols.

References

British Standards Institute, March 2011. BS10175 - Investigation of Potentially Contaminated Land.

British Standards Institute, March 2011 (Amended 2010) – BS5930 – Code of Practice for Site Investigations

Drawings

Notes
1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

Legend

Site Boundary

RPS Investigation Locations (February 2015)

Trial Pit

Rev	Description	Date	Initial	Checked

RPS
2420 The Quadrant
Aztec West
Almondsbury
Bristol
BS32 4AQ
T: +44(0)1454 853 000 E: rpssw@rpsgroup.com F: +44(0)1454 205 820

Client BAYLISS METALS

Project TREMORFA INDUSTRIAL ESTATE

Title INVESTIGATION LOCATIONS

Status	Drawn By	PM/Checked By
PRELIMINARY	RJ	JG
Job Ref	**Scale @ A3**	**Date Created**
JER	1:500	MAR 15

Drawing Number **JER6480-SI-001** Rev **-**

rpsgroup.com

Appendices

Appendix 1

Desk Study Methodology

Introduction

This report provides available factual data for the site obtained only from the sources described below and related to the site on the basis of the location provided by the client. The desk study information is not necessarily exhaustive and further information relevant to the site may be available from other sources. No responsibility can be accepted by RPS for inaccuracies in the data supplied by any other party.

This report is written in the context of an agreed scope of work and should not be used in a different context. Furthermore, new information and changes in legislation may necessitate a re-interpretation of the report in whole or in part after its original submission. The report is provided for sole use by the client and is confidential to them and their professional advisors. No reliance whatsoever is provided to any party other than the client unless otherwise agreed.

Information Sources

Land Use

This establishes the former and current uses of the site, which could have caused contamination. Details of the site location, the current and proposed site uses have been provided by the client.

Where specified, a site inspection has been carried out by RPS to identify any significant issues associated with current and past activities, neighbouring land uses and other key environmental issues.

Information about the history of the site has been obtained through an inspection of historical maps at 1:10,000, 1:2,500 and 1:1,250 scales (where available). The accuracy of maps cannot be guaranteed and it should be recognised that different conditions on site may have existed between and subsequent to the map survey dates.

Regulatory records including landfills, pollution incidents (‘major’ and ‘significant’ only), industry authorisations and licensed water abstractions are derived from information purchased from the Landmark Information Group (unless otherwise specified).

Environmental Setting

It is important to establish the environmental setting because, irrespective of the level of contamination at a site, if its location is not ‘sensitive’ to this contamination, there is a reduced risk of an environmental liability.

The geological sequence underlying the site and the approximate depths of strata are provided by maps published by the British Geological Survey (BGS) 1:50,000 scale. The hydrogeological classification is obtained from Groundwater Vulnerability mapping on the Environment Agency (EA) website. The vulnerability of groundwater is determined from this mapping and geological information.

The location of surface watercourses is obtained from an inspection of current OS maps. Surface water quality information is taken from the most up-to-date Chemical River Quality General Quality Assessment (GQA) details published by the EA. Flood risk details and information on groundwater Source Protection Zones are obtained from readily available EA information published on-line.

Details of sensitive ecosystems/habitats and coal mining areas are supplied by English Nature and the Coal Authority respectively via the Landmark Information Group.

Radon is a radioactive gas produced naturally by certain types of geology. This report uses the Indicative Atlas of Radon in England and Wales (2007) produced by the Health Protection Agency (HPA) and the British Geological Survey (BGS) to determine whether the site is located in an area at risk from radon gas. Where potential issues are identified, a site-specific radon report is obtained from the HPA and BGS to provide a more accurate estimate of the probability of the site being affected by radon gas ingress.

Risk Assessment

The Risk Assessment consists of an appraisal of the source-pathway-receptor 'pollutant linkages' which is central to the approach used to determine the existence of 'contaminated land' according to the definition set out under Part 2A of the Environmental Protection Act 1990. For a risk to exist (under Part 2A), all three of the following components must be present to facilitate a potential 'pollutant linkage'.

- Source of contamination (Hazard);
- Pathway for the contaminant to move from the source(s) to receptor(s); and
- Receptor (Target) that could be affected by the contaminant(s).

Receptors include human beings, other living organisms, crops, controlled waters and buildings / structures. The mere presence of a contaminant source / hazard at a site does not mean that there will necessarily be attendant risks or that the site will be designated as 'contaminated land'.

The Risk Assessment sections comprise a summary of the land use and environmental sensitivity information demonstrated as the contaminant Source, Pathway and Receptor components. It also incorporates its likelihood of occurrence and commercial impact. It has been classified under three broad categories:

- Low risk - it is considered unlikely that issues assigned this designation will give rise to significant harm;
- Moderate risk - it is possible, but not certain that issues assigned this designation may give rise to significant harm or a liability/cost for the owner of the site; and
- High risk - there is a high potential that issues assigned this designation may give rise to significant harm or a liability/cost for the owner of the site.

In addition the assessment includes consideration of redevelopment constraints i.e. potential for extra-ordinary environment-related development costs, the site's 'suitability for use' and the perception by any future purchasers regarding the potential impact on investment value/saleability. The assessment of redevelopment constraints should be considered preliminary and does not represent an exhaustive assessment of potential constraints.

Appendix 2

Envirocheck Report

Plot 1C, Martin Road Tremorfa Industrial Estate, Tremorfa, CARDIFF, CF24 5SD

Prepared for:
Searchflow
Searchflow
42 Kings Hill Avenue
Kings Hill
West Malling
Kent
ME19 4AJ

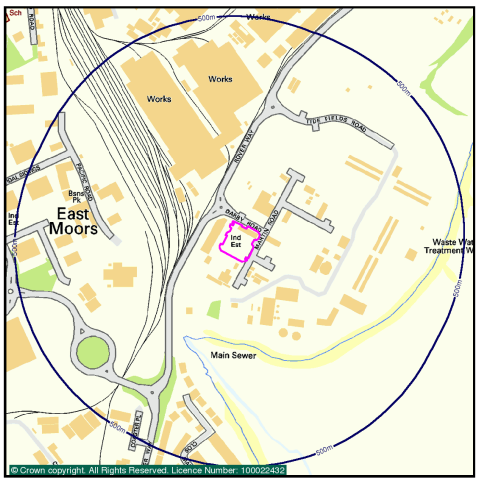
Report Reference: SAS_56725124_1_1

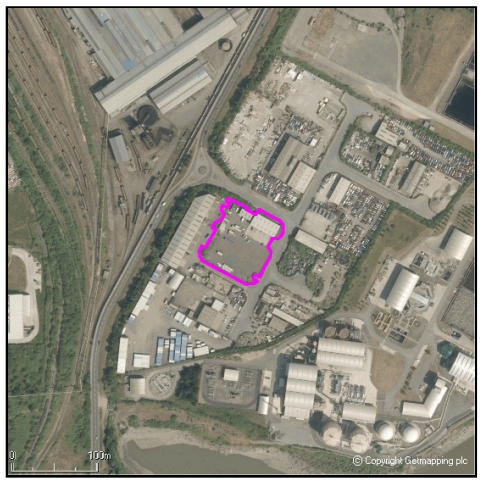
Report Date: 29-MAY-2014

Customer Reference: SF20855676000

National Grid Reference: 321040 175730

Site Area: 5612 m²





If you have any questions on the contents of this Report please contact Landmark Customer Helpdesk which is open from 9:00am - 5:30pm, Monday - Friday, via one of the following channels:

Telephone: 0844 844 9966
Fax: 0844 844 9980
Email: info@landmarkinfo.co.uk
Website: www.sitecheck.co.uk

Sitecheck® Assess

argyll environmental™

Professional Opinion
on environmental risk

FURTHER ACTION

The Sitecheck report dated 29-MAY-2014 and reference SAS_56725124_1_1 for Plot 1C, Martin Road Tremorfa Industrial Estate, Tremorfa, CARDIFF, CF24 5SD has examined the sources of potential contamination in terms of historical land use, environmental data and current land uses where known.

The report has highlighted the presence of BGS Recorded Landfill Sites, Car Breakers & Dismantlers, Heap, unknown constituents, Historical Tanks And Energy Facilities, Local Authority Pollution Prevention and Controls, Military Land, Reclaiming - Waste Products, Registered Landfill Sites, Salvage Dealers, Scrap Metal Merchants and Unknown Filled Ground (Pond, marsh, river, stream, dock etc) on or within 25m of the site boundary.

INTRODUCTION

This professional opinion determines the level of environmental risk, as to whether a pollutant linkage exists which is created when there is a source of contamination, a pathway for it to travel along and receptors, which may be harmed. This risk-based approach underpins the government approach to contaminated land. If a pollutant linkage exists the property may be regarded by the local authority as being "Contaminated Land" for the purposes of Part 2A of the Environmental Protection Act 1990.

In completing this report, Argyll Environmental has undertaken a review of data made available to it. No site inspection, further enquiries or investigation of surface or ground conditions has been carried out by Argyll Environmental. No information as to the age, value and type of property has been made available. It is important to note that it is not known by Argyll Environmental for what purpose the report has been commissioned.

FACTORS AFFECTING THIS PROPERTY

Potential Sources:

A detailed examination of the historical Ordnance Survey maps from 1880 to 2014 has revealed that the site remained undeveloped, existing as agricultural land, up until 1969 the site was developed as part of a wider slag reduction works. This use remained until some time between 1999 and 2006 when the site was redeveloped as part of the Tremorfa Industrial Estate.

From a review of historical map data the Sitecheck Assess Report has identified that the site is located on or within 25 metres of Military Land, a heap (unknown constituents) and unknown filled ground.

A review of selected 1:2,500 and 1:1,250 scale Ordnance Survey mapping covering a period from 1943 to 1996 has identified that the site is on or within 25 metres of tanks.

The British Geological Survey have revealed, from reference to their database of landfill sites for England and Wales, records of landfilling on or within 25 metres of the site. The sites are located at Rover Way, Cardiff East Moors, Cardiff, South Glamorgan.

The site is on or within 25 metres of registered landfill sites and potential landfill buffers which represent a former registered landfill site. In determining the likelihood of risk in association with this site the probable location of the site boundary has been assessed using the historical Ordnance Survey maps made available. The landfill located at Rear Of Tarmac Topmix Site, Rover Way, Cardiff, South Glamorgan was operated by R Bailey Plant (Bedwas) Ltd under licence no. 89/01. This facility is indicated to have accepted Concrete/Bricks/Hardcore/Rubble and natural occurring Soils/Clays/Gravels/Rocks.

From contemporary trade directory entries it would appear that companies associated with high risk contaminative uses are located on or within 25 metres of the site. Although this may identify current occupiers no details are available

to confirm whether or not potentially contaminative operations are taking place.

Local Authority data has identified Local Authority Pollution Prevention and Control authorisations on or within 25 metres of the site. Held by Action Environmental at Unit 5 Martin Road, Tremorfa Industrial Estate, Cardiff, CF24 5SD for Mobile screening and crushing processes.

Potential Pathways:

- Direct human contact with soil (and water).
- Contamination transport to shallow groundwater.
- Contamination transport to deep groundwater.
- Gas migration through soils, service media and building foundations.

Potential Receptors:

The property itself, surrounding properties and their respective occupants may be considered as receptors. Buildings and people can suffer harm by definition of Part 2A of the Environmental Protection Act 1990.

The groundwater vulnerability map, Sheet 36 Mid Glamorgan, has revealed that the site is located above a Non Aquifer (Negligibly permeable).

CONCLUSIONS:

The data examined in this risk assessment indicates that there may be a potential source of contamination arising from the potentially contaminative past land uses which may have significant implications. It would appear from this preliminary appraisal that there may be a potential pollutant linkage.

In our opinion, from the information we have examined, there is a risk that the value of the property could be impaired.

In our opinion the property may also constitute "contaminated land" as defined by Part 2A of the Environmental Protection Act 1990.

NEXT STEPS:

In order to revise the risk assessment provided, additional information will need to be reviewed. This could include:

1. Confirmation or commentary from the Local Authority Environmental Health Department that they are not considering taking any action against the Site under Part 2A of the Environmental Protection Act 1990.

2. Confirmation or commentary from the Local Authority Planning Department that any recent redevelopment of the site included ground investigations and/or remediation works undertaken to their satisfaction resulting in discharge of any associated conditions.

3. Ground Investigation reports (Phase II intrusive investigations, geo-technical reports)completed at the Site providing information on soil and/or groundwater quality and any ground gas issues, as relevent.

4. Confirmation from the developer or Local Authority Building Control Department that any risks from ground gases, associated emissions or ground instabilities were considered and mitigated during the recent development to the satisfaction of the Local Authority.

5. A warrenty or similar guarantee, environmental indemnity or Contaminated Land insurance Policy would transfer any risk identified in the context of the report, subject to its validity, wording and terms.

6. Information from the appointed Chartered Building Surveyor confirming thay ground stability and/or ground gas issues were addressed during the recent redevelopment.

If any of the information above is available, please consider taking advantage of our free re-review service. The

purpose of this is to quickly appraise additional information to determine whether a passed certificate can be issued. If you have any information you would like us to review, please forward this to our customer services team using the following email address; helpdesk@landmarkinfo.co.uk

If no information is available or the information you send us is insufficient, we can collect and review additional information for you for £450 plus VAT. We may also be able to offer insurance terms. Please call 08448449966 to discuss these options in more detail.

OTHER ENVIRONMENTAL FACTORS:
NONE

Approved by

Christopher S. Taylor BSc (Hons), MSc, AIEMA
Chartered Water and Environmental Manager
Technical Director, Argyll Environmental Limited

Professional Opinion

on environmental risk

SOURCES OF ADDITIONAL PROFESSIONAL GUIDANCE:

If the report is for valuation, or investment, or other forms of lending decision making there may be issues arising from the current occupation, which need to be examined. The Royal Institution of Chartered Surveyors has provided guidance with respect to such matters and specific reference should be made to the guidance note 'Contamination, the environment and sustainability - Implications for chartered surveyors and their clients' published April 2010. This guidance note is referred to in UKGN1.1 paragraph 2.2 of the RICS Valuation Standards (6th Edition) (The "Red Book").

It is recommended that the client reviews the outputs of any valuation report, which should include a Property Observation Checklist, contained at Appendix A for commercial property or Appendix B for rural property in the Royal Institution of Chartered Surveyors guidance note 'Contamination, the environment and sustainability - Implications for chartered surveyors and their clients'. Completion of these checklists does not constitute an environmental assessment for the purposes of Professional Indemnity Insurance where many surveyors are unlikely to have appropriate indemnity cover. Any contamination, which is observed on the site by the surveyor during the normal course of their inspection, can also be recorded.

If the property is let, the landlord or the tenant (as appropriate) should take legal advice as to whether the covenants in the lease constitute legal or financial burdens. The Law Society's "Environmental Law Handbook-6th Edition" provides valuable assistance.

In leases with no express covenants dealing with environmental matters, lawyers and surveyors need to be aware of the extent to which the repairing of covenants can be applied and, when advising tenant clients in particular, will need to draw attention to the client's obligations to comply with enacted legislation.

Should contamination have been observed on site a suitably qualified, insured and experienced professional, preferably with the Specialist in Land Condition (SiLC) accreditation, should quantify whether this could give rise to an action by a regulator or any other party. A suitable management plan for action incorporated in a Land Quality Statement in accordance with RICS guidance should be put in place and appropriate matters taken up with the tenant / occupier.

In terms of development this report should be seen as a precursor to a thorough investigation of the property for planning control purposes. The DTI funded guidance published by the Construction Industry Research and Information Association (CIRIA) Brownfields-managing the development of previously developed land-a clients guide may be a useful starting point.

Sitecheck® Assess

Contents

Current Land Use Waste / Landfill Sites	Page No.	Reference Number (Map ID)
Registered Landfill Sites		
R Bailey Plant (Bedwas) Ltd, Rear Of Tarmac Topmix Site, Rover Way, Cardiff, South Glamorgan, Reference: 89/01, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled, Positional Accuracy: Manually positioned to the road within the address or location, Boundary Quality: Not Applicable, Contact Ref: 1	9	1
BGS Recorded Landfill Sites		
British Steel Corp, Rover Way, Cardiff East Moors, CARDIFF, South Glamorgan, BGS Landfill Survey Site, Positional Accuracy: Positioned by the supplier, Boundary Accuracy: Moderate	8	2

Current Land Use Potentially Contaminative Uses	Page No.	Reference Number (Map ID)
Contemporary Trade Directory Entries		
Commercial Motors, Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Commercial Vehicle Dealers, Status: Inactive, Positional Accuracy: Manually positioned within the geographical locality	13	12

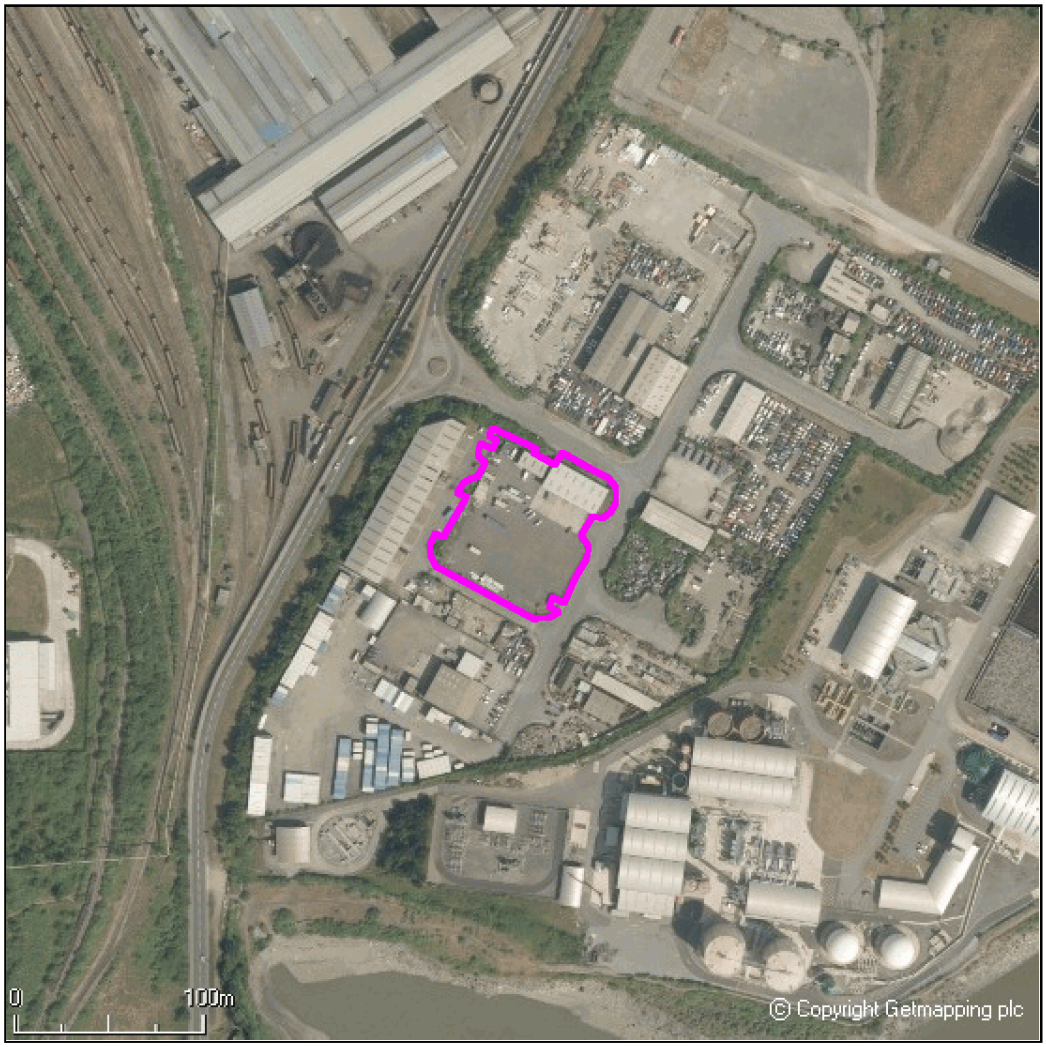
Historical Land Use Potentially Contaminative Uses	Page No.	Reference Number (Map ID)
Potentially Contaminative Industrial Uses (Past Land Use)		
Heap, unknown constituents, Date of Mapping: 1965 - 1989	19	7
Railways, Date of Mapping: 1901 - 1989	19	17
Factory or works - use not specified, Date of Mapping: 1951 - 1989	19	18
Historical Tanks And Energy Facilities		
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1969	18	9

If you would like any further assistance regarding this report then please contact
Landmark on (Tel) 0844 844 9966, (Fax) 0844 844 9980, Email: helpdesk@landmark.co.uk

Historical Land Use Potentially Infilled Land	Page No.	Reference Number (Map ID)
Potentially Infilled Land (Water)		
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1922	20	10

Sensitivity Pathways	Page No.	Reference Number (Map ID)
Groundwater Vulnerability		
Geological Classification: Non Aquifer (Negligibly permeable) - Formations which are generally regarded as containing insignificant quantities of groundwater. However, groundwater flow through such rocks, although imperceptible, does take place and needs to be considered in assessing the risk associated with persistent pollutants, Soil Classification: Not classified, Map Scale: 1:100,000, Map Name: Sheet 36 Mid Glamorgan, Contact Ref: 1	24	-

Other Factors Geological	Page No.	Reference Number (Map ID)
Radon Potential - Radon Affected Areas		
Affected Areas: The property is in a lower probability radon area, as less than 1% of homes are above the action level, Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 4	26	-
Radon Potential - Radon Protection Measures		
Radon Protection Measures: None, Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 4	26	-
Potential for Compressible Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 4	26	-
Potential for Landslide Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 4	26	-
Potential for Running Sand Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 4	26	-
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 4	26	-



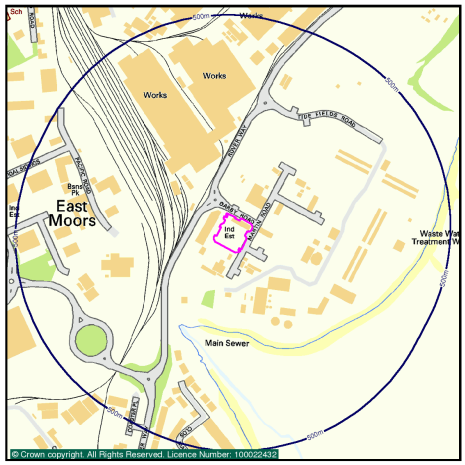
Site
Plot 1C,Martin Road Tremorfa Industrial Estate,Tremorfa,CARDIFF,CF24 5SD

Grid Reference
321040, 175730

Report Reference
SAS_56725124_1_1

Customer Reference
SF20855676000

Size of Site
5612 m²



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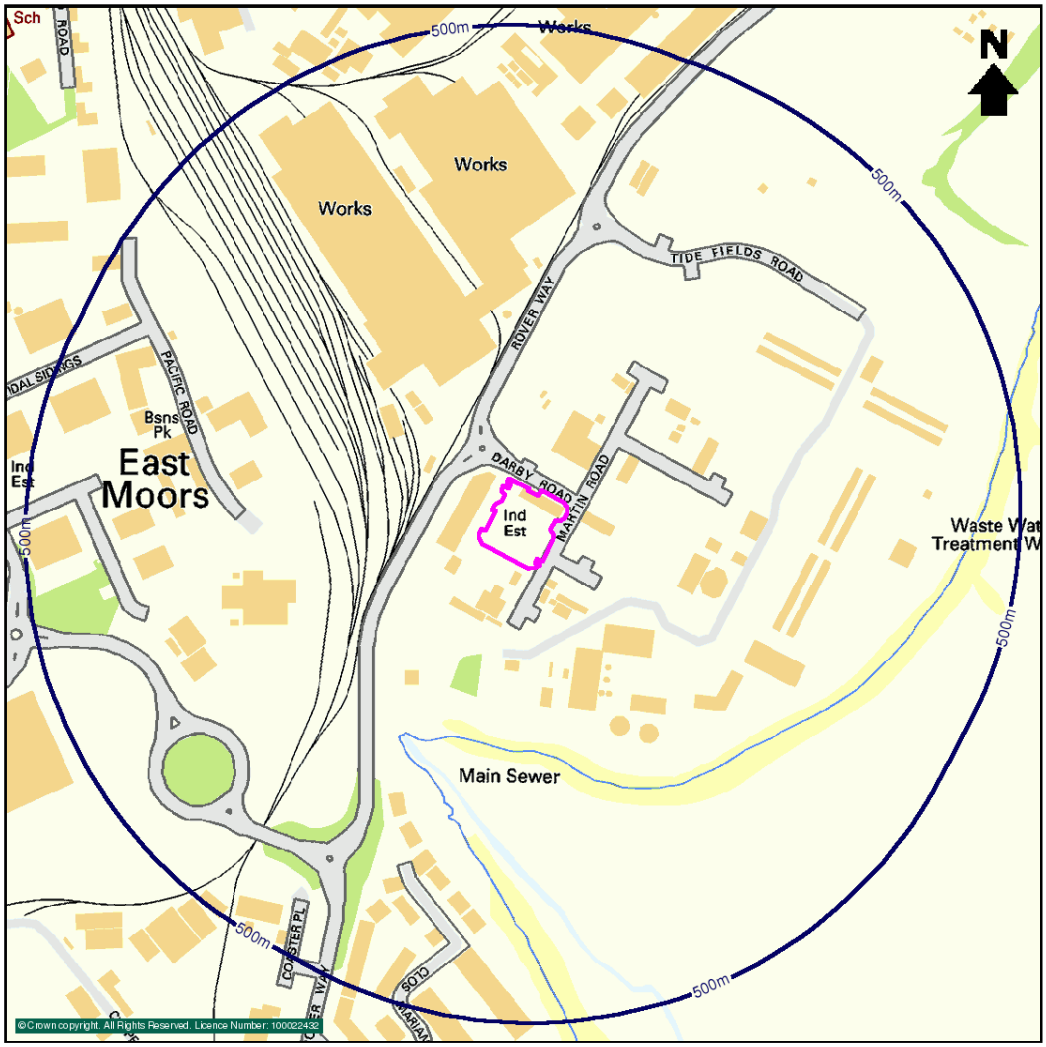

Site
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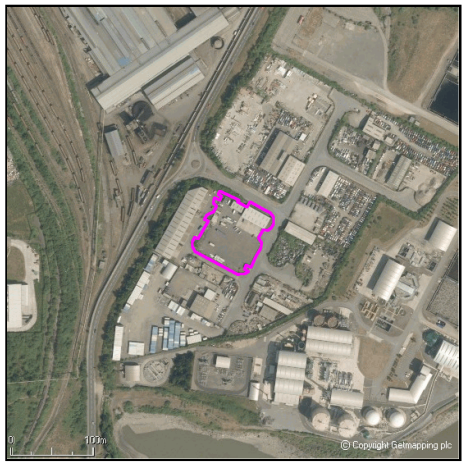
Grid Reference
321040, 175730

Report Reference
SAS_56725124_1_1

Customer Reference
SF20855676000

Size of Site
5612 m²



If you would like any further assistance regarding this report then please contact
Landmark on (Tel) 0844 844 9966, (Fax) 0844 844 9980, Email: helpdesk@landmark.co.uk

Current Land Use	On Site	0-250m	250-500m
Contaminants	**3**	**59**	**27**
Waste / Landfill Sites			
BGS Recorded Landfill Sites	1	0	0
Licensed Waste Management Facilities (Landfill Boundaries)	0	0	0
Licensed Waste Management Facilities (Locations)	0	8	2
Local Authority Recorded Landfill Sites	0	0	0
Registered Landfill Sites	1	3	2
Registered Waste Transfer Sites	0	4	2
Registered Waste Treatment or Disposal Sites	0	3	0
Statutory Authorisations			
Local Authority Pollution Prevention and Controls	0	5	3
Contaminated Land Register Entries and Notices	0	0	0
Registered Radioactive Substances	0	0	0
Discharge Consents			
Discharge Consents	0	3	1
Water Industry Act Referrals	0	0	0
Industrial Processes			
Integrated Pollution Controls	0	0	0
Integrated Pollution Control Registered Waste Sites	0	0	0
Environmental Permitting Regulations - Industry	0	3	2
Local Authority Integrated Pollution Prevention And Control	0	0	0
Storage of Hazardous Substances			
Control of Major Accident Hazards Sites (COMAH)	0	0	0
Explosive Sites	0	0	0
Notification of Installations Handling Hazardous Substances (NIHHS)	0	0	0
Planning Hazardous Substance Consents	0	1	0
Contraventions			
Local Authority Pollution Prevention and Control Enforcements	0	0	0
Enforcement and Prohibition Notices	0	0	0
Planning Hazardous Substance Enforcements	0	0	0
Prosecutions Relating to Authorised Processes	0	0	0
Prosecutions Relating to Controlled Waters	0	0	0
Substantiated Pollution Incident Register	0	2	0

If you would like any further assistance regarding this report then please contact
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Current Land Use	On Site	0-250m	250-500m
Contaminants	**3**	**59**	**27**
Potentially Contaminative Uses			
Contemporary Trade Directory Entries	1	26	15
Fuel Station Entries	0	0	0
Miscellaneous			
BGS Recorded Mineral Sites	0	1	0

Historical Land Use	On Site	0-250m	250-500m
Contaminants	**5**	**14**	**42**
Potentially Contaminative Uses			
Historical Tanks And Energy Facilities	1	7	23
Potentially Contaminative Industrial Uses (Past Land Use)	3	5	12
Potentially Infilled Land			
Former Marshes	0	0	0
Potentially Infilled Land (Non-Water)	0	1	0
Potentially Infilled Land (Water)	1	1	7

Sensitivity	On Site	0-250m	250-500m
Pathways and Receptors	**1**	**10**	**1**
Pathways			
Groundwater Vulnerability	1	n/a	n/a
Drift Deposits	0	n/a	n/a
Historical Flood Liabilities	0	1	1
Extreme Flooding from Rivers or Sea without Defences	0	1	n/a
Flooding from Rivers or Sea without Defences	0	1	n/a
Areas Benefiting from Flood Defences	0	0	n/a
Flood Water Storage Areas	0	0	n/a
Flood Defences	0	0	n/a

Sensitivity Pathways and Receptors	On Site 1	0-250m 10	250-500m 1
Environmentally Sensitive Receptors			
Areas of Outstanding Natural Beauty	0	0	0
Environmentally Sensitive Areas	0	0	0
Local Nature Reserves	0	0	0
Marine Nature Reserves	0	0	0
National Nature Reserves	0	0	0
Nearest Surface Water Feature	0	1	0
Ramsar Sites	0	1	0
Sites of Special Scientific Interest	0	1	0
Source Protection Zones	0	0	0
Special Areas of Conservation	0	1	0
Special Protection Areas	0	1	0
Water Abstractions	0	2	0
Protected Countryside Areas			
Forest Parks	0	0	0
National Parks	0	0	0
National Scenic Areas	0	0	0

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Other Factors Geological	On Site 7	0-250m 3	250-500m 0
Brine Compensation Area	0	n/a	n/a
Coal Mining Affected Areas	0	n/a	n/a
Mining Instability	0	0	n/a
Man-Made Mining Cavities	0	0	0
Natural Cavities	0	0	0
Non Coal Mining Areas of Great Britain	0	0	n/a
Radon Potential - Radon Affected Areas	1	n/a	n/a
Radon Potential - Radon Protection Measures	1	n/a	n/a
Potential for Collapsible Ground Stability Hazards	1	0	n/a
Potential for Compressible Ground Stability Hazards	1	1	n/a
Potential for Ground Dissolution Stability Hazards	0	0	n/a
Potential for Landslide Ground Stability Hazards	1	1	n/a
Potential for Running Sand Ground Stability Hazards	1	1	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	1	0	n/a

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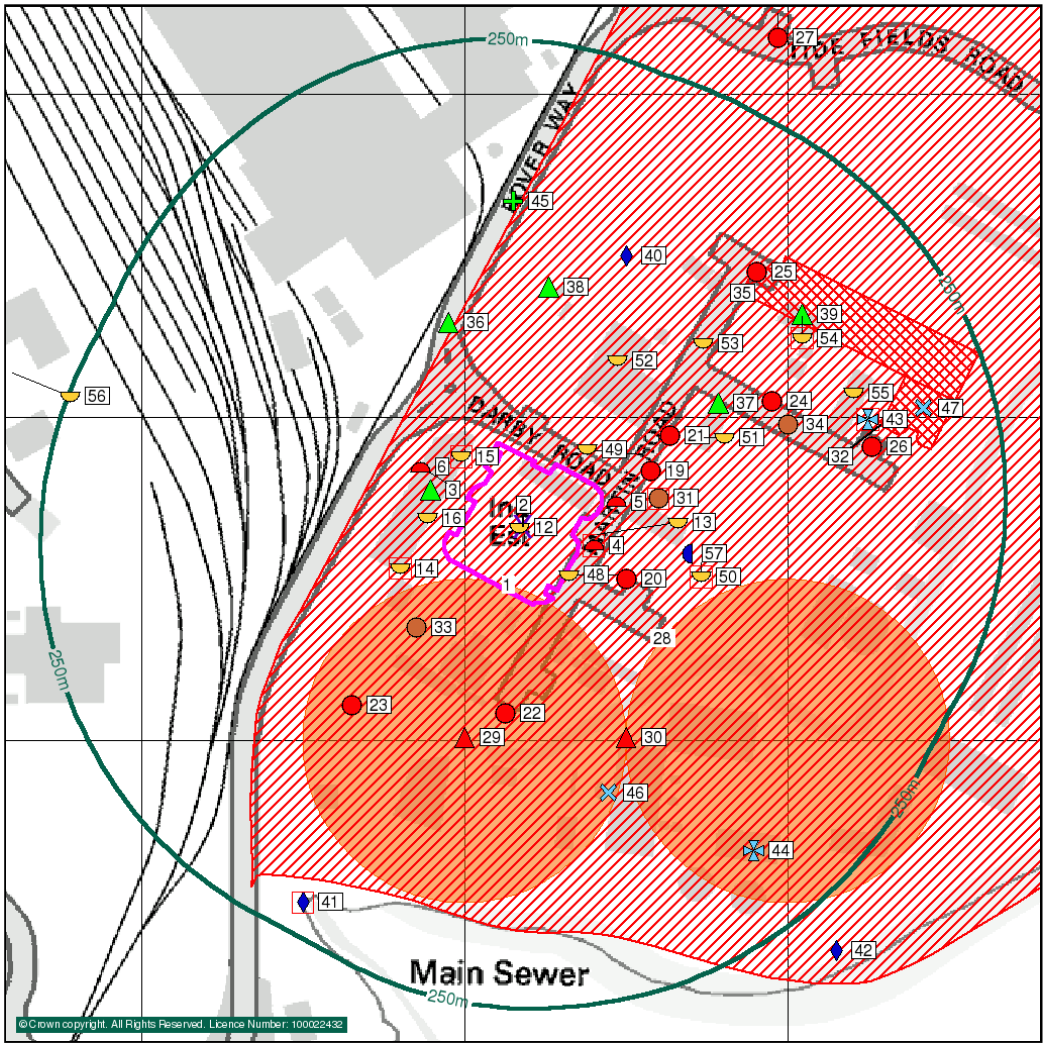

General

- Site Boundary
- Search Buffer
- Bearing Reference Point
- Reference Number

Miscellaneous

- BGS Recorded Mineral Site

Potentially Contaminative Use

- Potentially Contaminative Use
- Potentially Contaminative Use (High Risk)

Waste/Landfill Sites

- BGS Recorded Landfill Site
- Licensed Waste Management Facilities (Landfill)
- Local Authority Recorded Landfill Site
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site
- Registered Landfill Site
- Point Location of Registered Landfill Site
- BGS Recorded Landfill Site (Point)
- Licensed Waste Management Facilities (Location)
- Local Authority Recorded Landfill Site (Point)
- Registered Waste Transfer Site (Point)
- Registered Waste Treatment or Disposal Site (Point)
- Registered Landfill Site Potential Landfill Buffer

Contraventions

- Local Authority Pollution Prevention and Control Enforcement
- Planning Hazardous Substance Enforcement
- Prosecution Relating to Authorised Processes
- Enforcement and Prohibition Notice
- Substantiated Pollution Incident Register
- Prosecution Relating to Controlled Waters

Storage Of Hazardous Substances

- COMAH
- Planning Hazardous Substance Consent
- Explosive Site
- NHHS

Industrial Processes

- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Integrated Pollution Control Registered Waste Site
- Local Authority Integrated Pollution Prevention and Control

Statutory Authorisations

- Local Authority Pollution Prevention and Control
- Contaminated Land Register Entry or Notice (Point)
- Contaminated Land Register Entry or Notice
- Registered Radioactive Substance

Discharge Consents

- Discharge Consent
- Water Industry Act Referral

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Contaminants Waste / Landfill Sites	Ref No.	Search Buffer	Direction
Local Authority Landfill Coverage			
Name: Cardiff Council, - Has no landfill data to supply, Contact Ref: 6	-	On Site	NE
BGS Recorded Landfill Sites			
British Steel Corp, Rover Way, Cardiff East Moors, CARDIFF, South Glamorgan, BGS Landfill Survey Site, Positional Accuracy: Positioned by the supplier, Boundary Accuracy: Moderate	2	On Site	NE
Licensed Waste Management Facilities (Locations)			
Location: 11 Martin Road, Tremorfa Ind Est, Cardiff, Glamorgan, CF24 5SD, Licence Number: 30127, Site Category: Special Waste Transfer Stations, Licence Status: IPPC, IPPC Reference: PP3739BK, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	19	0-250m	NE
Location: Unit 6, Martin Road, Tremorfa, Cardiff, Licence Number: 30303, Site Category: Household, Commercial And Industrial Transfer Stations, Licence Status: Issued,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m, Contact Ref: 1	20	0-250m	SE
Location: Units 12/13, Martin Road, Tremorfa Ind Estate, Cardiff, Glamorgan, CF24 5SD, Licence Number: 30244, Site Category: Metal Recycling Sites (Vehicle Dismantlers), Licence Status: Modified,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	21	0-250m	NE
Location: Unit 6, Martin Road, Tremorfa, Cardiff, Glamorgan, CF24 5SD, Licence Number: 30303, Site Category: Household, Commercial And Industrial Transfer Stations, Licence Status: Expired,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	22	0-250m	S
Location: Unit 5, Rover Way, Tremorfa Ind Est, Cardiff, Glamorgan, CF2 2RX, Licence Number: 30115, Site Category: Metal Recycling Sites (Mixed), Licence Status: Surrendered,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	23	0-250m	SW
Location: 15 Martin Road, Tremorfa Ind Estate, Cardiff, Glamorgan, CF24 5SD, Licence Number: 30319, Site Category: End of Life Vehicles, Licence Status: Issued,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	24	0-250m	NE
Location: Unit 16, Tremorfa Industrial Estate, Rover Way, Cardiff, Glamorgan, CF24 5SD, Licence Number: 30238, Site Category: Metal Recycling Sites (Vehicle Dismantlers), Licence Status: Modified,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	25	0-250m	NE
Location: Unit 17, Tremorfa Industrial Estate, Tremorfa, Cardiff, Glamorgan, CF24 5SD, Licence Number: 30224, Site Category: Household, Commercial And Industrial Transfer Stations, Licence Status: Modified,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	26	0-250m	E
Location: Tremorfa Melt Shop, Seawall Road, Cardiff, Glamorgan, CF24 2TH, Licence Number: 30093, Site Category: Physical Treatment Facilities, Licence Status: Modified,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	27	250-500m	NE

Contaminants Waste / Landfill Sites	Ref No.	Search Buffer	Direction
Licensed Waste Management Facilities (Locations)			
Location: Unit 49, Portmanmoor Road, Portmanmoor Road Ind Est, Cardiff, Glamorgan, CF24 5HB, Licence Number: 30052, Site Category: Clinical Waste Transfer Stations, Licence Status: Modified,IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	-	250-500m	W
Registered Landfill Sites			
R Bailey Plant (Bedwas) Ltd, Rear Of Tarmac Topmix Site, Rover Way, Cardiff, South Glamorgan, Reference: 89/01, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled, Positional Accuracy: Manually positioned to the road within the address or location, Boundary Quality: Not Applicable, Contact Ref: 1	1	On Site	S
B.S.C. Welsh Div., Cardiff Foreshore At.Rover Way, Cardiff, South Glamorgan, Reference: 2/77, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled, Positional Accuracy: Manually positioned to the road within the address or location, Boundary Quality: Not Applicable, Contact Ref: 1	28	0-250m	SE
W T Davies (Transport) Ltd, Rover Way, (Adj. Tarmac Topmix), Tremorfa, Cardiff, South Glamorgan, Reference: 1/84, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled, Positional Accuracy: Manually positioned to the address or location, Boundary Quality: Not Applicable, Contact Ref: 1	29	0-250m	S
Allied Steel And Wire, Cardiff Foreshore, Rover Way, Cardiff, South Glamorgan, Reference: 3/81, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled, Positional Accuracy: Manually positioned to the address or location, Boundary Quality: Not Applicable, Contact Ref: 1	30	0-250m	SE
Slag Reduction Company (Cardiff) Ltd, Cardiff Foreshore., Rover Way, Cardiff, South Glamorgan, Reference: 4/77, Status: Record superseded, Superseded, Positional Accuracy: Manually positioned to the address or location, Boundary Quality: Not Applicable, Contact Ref: 1	-	250-500m	NE
Allied Steel & Wire Ltd, Behind Slag Reduction, Rover Way, Cardiff, South Glamorgan, Reference: 88/09, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Cancelled, Positional Accuracy: Manually positioned to the address or location, Boundary Quality: Not Applicable, Contact Ref: 1	-	250-500m	NE
Registered Waste Transfer Sites			
N Young t/a City Salvage Ltd, 11 Martin Road, Tremorfa Industrial Estate, Rover Way, CARDIFF, South Glamorgan, CF2, Reference: 94/06, Status: Record superseded, Superseded, Positional Accuracy: Manually positioned to the address or location,Boundary Quality: Not Supplied Contact Ref: 1	31	0-250m	E
City Special Waste Ltd, 11 Martin Road, Tremorfa Industrial Estate, Rover Way, CARDIFF, South Glamorgan, CF2, Reference: 94/07, Status: Operational as far as is known, Operational, Positional Accuracy: Manually positioned to the address or location,Boundary Quality: Not Supplied Contact Ref: 1	31	0-250m	E
N Young t/a City Special Waste, 11 Martin Road, Tremorfa Industrial Estate, Tremofa, CARDIFF, South Glamorgan, CF2 2SD, Reference: T18 (94/07), Status: Record superseded, Superseded, Positional Accuracy: Manually positioned to the address or location,Boundary Quality: Not Supplied Contact Ref: 1	31	0-250m	E

Contaminants Waste / Landfill Sites	Ref No.	Search Buffer	Direction
Registered Waste Transfer Sites			
Marlee Metals & Skip Hire Ltd, Unit 17 Tremorfa Industrial Estate, off Martin Road, CARDIFF, South Glamorgan, CF2 2SD, Reference: EAWML30224, Status: Operational as far as is known, Operational, Positional Accuracy: Positioned by the supplier, Boundary Quality: Good, Contact Ref: 1	32	0-250m	E
Personnel Hygiene Services Ltd, Unit 49 Portmanmoor Road Ind. Estate, CARDIFF, South Glamorgan, CF2 2FX, Reference: T13 (91/08), Status: Operational as far as is known, Operational, Positional Accuracy: Manually positioned to the address or location,Boundary Quality: Not Supplied Contact Ref: 1	-	250-500m	W
Personnel Hygiene Services Ltd, Unit 49 Portmanmoor Road Ind. Estate, CARDIFF, South Glamorgan, CF2 2FX, Reference: 91/08, Status: Record superseded, Superseded, Positional Accuracy: Manually positioned to the address or location,Boundary Quality: Not Supplied Contact Ref: 1	-	250-500m	W
Registered Waste Treatment or Disposal Sites			
H J Lane t/a Tremorfa Autosalvage, Unit 5 Martin Road, Tremorfa Industrial Estate, CARDIFF, South Glamorgan, CF2 2RX, Reference: S12 (94/02), Status: Operational as far as is known, Operational, Positional Accuracy: Manually positioned to the address or location,Boundary Quality: Not Supplied Contact Ref: 1	33	0-250m	SW
M Harrison T/A 1st Choice Vehicle Dismant, 1st Choice Vehicle Dismantlers, Units 12/13 Martins Road, Rover Way, Cardiff, South Glamorgan, Cf2 2sd, Reference: Eawml30244, Status: Operational as far as is known, Operational, Positional Accuracy: Approximate location provided by supplier,Boundary Quality: Not Supplied Contact Ref: 1	34	0-250m	E
Bill Way % Co Ltd, Unit 16 Tremorfa Industrial Estate, Rover Way, CARDIFF, South Glamorgan, CF2 2SD, Reference: EAWML30238, Status: Operational as far as is known, Operational, Positional Accuracy: Positioned by the supplier, Boundary Quality: Good, Contact Ref: 1	35	0-250m	NE

Statutory Authorisations	Ref No.	Search Buffer	Direction
Local Authority Pollution Prevention and Controls			
Action Environmental, Unit 5 Martin Road, Tremorfa Industrial Estate, Cardiff, Cf24 5sd, Part B - Mineral Industry Sector, Reference: PPC/121/3.5, Status: Permitted, Positional Accuracy: Manually positioned to the address or location, Contact Ref: 2	3	0-250m	W
Tilcon Ltd, Rover Way, The Docks, CARDIFF, South Glamorgan, CF24 2RX, Part B - Mineral Industry Sector, Reference: epa90/12/3.1, Status: Authorisation has varied, Positional Accuracy: Manually positioned to the road within the address or location, Contact Ref: 2	36	0-250m	N
Diggers Vehicle Dismantlers, Unit 15 Tremorfa Industrial Estate, Tremorfa, CARDIFF, Mid Glamorgan, CF2 2SD, Part B - Fuel and Power Industry Sector, Reference: Epa90/116/2.2, Status: Authorised, Positional Accuracy: Manually positioned to the address or location, Contact Ref: 2	37	0-250m	NE
Tarmac Concrete, Cardiff Wharf, Roath Dock Road, Cardiff, CF10 4ED, Part B - Mineral Industry Sector, Reference: Ppc/15/3.1, Status: Permitted, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 2	38	0-250m	N

Contaminants Statutory Authorisations	Ref No.	Search Buffer	Direction
Local Authority Pollution Prevention and Controls			
National Engine Centre, Unit 16c Martin Road, Tremorfa Industrial Estate, Cardiff, CF24 5SD, Part B - Fuel and Power Industry Sector, Reference: EPR 152/1.1, Status: Permitted, Positional Accuracy: Manually positioned to the address or location, Contact Ref: 2	39	0-250m	NE
Castle Wire, PO Box 48, Castle Works, CARDIFF, South Glamorgan, CF10 1XQ, Part B - Metal Industry Sector, Reference: Epa90/19/2.2, Status: Authorisation revoked, Revoked, Positional Accuracy: Manually positioned to the address or location, Contact Ref: 2	-	250-500m	N
Castle Nails, PO Box 4, Tremorfa Nail Works, CARDIFF, South Glamorgan, CF24 5YS, Part B - Metal Industry Sector, Reference: Epa90/20/2.2, Status: Authorisation revoked, Revoked, Positional Accuracy: Manually positioned to the address or location, Contact Ref: 2	-	250-500m	N
Celsa Manufacturing (Uk) Ltd, Cardiff Mill Services, Rover Way, CARDIFF, South Glamorgan, CF24 5UX, Part B - Mineral Industry Sector, Reference: Ppc/27/3.5, Status: Permitted, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 2	-	250-500m	N

Discharge Consents	Ref No.	Search Buffer	Direction
Discharge Consents			
John Laing Construction Ltd, Project Offices Construction Site O, Construction Site Of Cardiff Wwt, Wwtw Cardiff, Unknown Discharge, Reference: AN027740101, Version: 1, Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995), Positional Accuracy: Located by supplier to within 100m, Contact Ref: 1	40	0-250m	N
Dwr Cymru Cyfyngedig, Cardiff Central Sps Tremorfa, Cardiff, Cardiff Cbc, Sewage Discharge, Reference: An0306101, Version: 1, Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995), Positional Accuracy: Located by supplier to within 100m, Contact Ref: 1	41	0-250m	SW
Dwr Cymru Cyfyngedig, Cardiff Central Sps Tremorfa, Cardiff, Cardiff Cbc, Sewage Discharge, Reference: An0306101, Version: 1, Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995), Positional Accuracy: Located by supplier to within 100m, Contact Ref: 1	41	0-250m	SW
Hyder Consulting Ltd, Cardiff Wastewater Trtmnt Plnt Tide, Tide Fields Road Cardiff, Unknown Discharge, Reference: AN027770101, Version: 1, Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995), Positional Accuracy: Located by supplier to within 100m, Contact Ref: 1	42	250-500m	SE

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Contaminants Industrial Processes	Ref No.	Search Buffer	Direction
Environmental Permitting Regulations - Industry			
Silverdell (Uk) Ltd, Martin Road Hazardous Waste Transfer Station, Martin Road,Unit 11, Tremorfa Industrial Estate,Tremorfa,, Cardiff, South Wales, CF24 5SD, Integrated Pollution And Prevention Control Processes, Reference: EP3831ZG, Status: Effective, Positional Accuracy: Automatically positioned to the address, Contact Ref: 1	43	0-250m	E
Silverdell (Uk) Ltd, Unit 11, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD, Integrated Pollution And Prevention Control Processes, Reference: Pp3739bk, Status: Superseded By Variation, Positional Accuracy: Automatically positioned to the address, Contact Ref: 1	43	0-250m	E
Dwr Cymru Cyfyngedig (Welsh Water), Cardiff East Wastewater Treatment Works, Cardiff East Ww T W, Martin Road,Tremorfa Industrial Estate,Tremorfa, CARDIFF, South Glamorgan, CF24 5SD, Integrated Pollution And Prevention Control Processes, Reference: FP3232KG, Status: Superseded By Variation, Positional Accuracy: Manually positioned to the address or location, Contact Ref: 1	44	0-250m	SE
Dwr Cymru Cyfyngedig (Welsh Water), Cardiff Chp Facility Epr/Fp3232kg/V002, Dwr Cymru Cyfyngedig,Cardiff East Wastewater Treatment Works, Tide Fields Road,Rover Way,Tremorfa, CARDIFF, South Glamorgan, CF24 2RX, Integrated Pollution And Prevention Control Processes, Reference: DP3330ZA, Status: Valid, Positional Accuracy: Automatically positioned to the address, Contact Ref: 1	-	250-500m	NE
Celsa Manufacturing Uk Ltd, Cardiff Section Mill, Section Mill, Tremorfa Works, Seawall Road, Cardiff, CF24 5TH, Integrated Pollution And Prevention Control Processes, Reference: Bv0767it, Status: Effective, Positional Accuracy: Manually positioned to the address or location, Contact Ref: 1	-	250-500m	N

Storage of Hazardous Substances	Ref No.	Search Buffer	Direction
Planning Hazardous Substance Consents			
Allied Steel & Wire Ltd, Tremorfa Steelworks, Rover Way, Cardiff, South Glamorgan, Cf1 5ux, Planning (Hazardous Substance) Regulations 1992 as amended by the Planning (COMAH) Regulations 1999, Reference: H/92/00001/R, Status: Deemed Consent Granted, Granted, Positional Accuracy: Manually positioned to the road within the address or location, Contact Ref: 3	45	0-250m	N

Contraventions	Ref No.	Search Buffer	Direction
Substantiated Pollution Incident Register			
Authority: Environment Agency Wales, South East Area, Incident Date: 18th July 2001, Incident Reference: 17309, Water Impact: Category 3 - Minor Incident, Air Impact: Category 2 - Significant Incident, Land Impact: Category 4 - No Impact, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1 Pollutant: Atmospheric Pollutants And Effects: Other Atmospheric Pollutant Or Effect,	46	0-250m	S

Contaminants Contraventions	Ref No.	Search Buffer	Direction
Substantiated Pollution Incident Register			
Authority: Environment Agency Wales, South East Area, Incident Date: 29th September 2005, Incident Reference: 349879, Water Impact: Category 4 - No Impact, Air Impact: Category 4 - No Impact, Land Impact: Category 2 - Significant Incident, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1 Pollutant: Asbestos Waste,	47	0-250m	E

Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Contemporary Trade Directory Entries			
Commercial Motors, Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Commercial Vehicle Dealers, Status: Inactive, Positional Accuracy: Manually positioned within the geographical locality	12	On Site	W
Diggers, Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, S Glam, CF24 5SD, Car Breakers & Dismantlers, Status: Inactive, Positional Accuracy: Manually positioned to the road within the address or location	4	0-250m	SE
Bill Way & Co Ltd, 16 Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Car Breakers & Dismantlers, Status: Active, Positional Accuracy: Manually positioned to the road within the address or location	4	0-250m	E
Cardiff Reclamation, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD, Salvage Dealers, Status: Inactive, Positional Accuracy: Manually positioned to the road within the address or location	5	0-250m	E
C & B Car Repairs, Unit 1d,Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Garage Services, Status: Inactive, Positional Accuracy: Manually positioned to the road within the address or location	13	0-250m	E
Marlee Metals & Skip Hire Ltd, Unit 17,Off Martin Road, Cardiff, South Glamorgan, CF24 2SD, Scrap Metal Merchants, Status: Inactive, Positional Accuracy: Manually positioned to the road within the address or location	4	0-250m	E
A A 1, Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Car Breakers & Dismantlers, Status: Active, Positional Accuracy: Manually positioned to the road within the address or location	4	0-250m	E
Mot'S 4 U, Unit 1c,Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Mot Testing Centres, Status: Inactive, Positional Accuracy: Manually positioned within the geographical locality	14	0-250m	W
Body & Soul Auto Works, Unit 3,Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Classic Car Specialists, Status: Active, Positional Accuracy: Manually positioned within the geographical locality	15	0-250m	NW
Hayward James Motor Co Ltd, Unit 1c,Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Car Dealers, Status: Inactive, Positional Accuracy: Manually positioned within the geographical locality	15	0-250m	NW

Contaminants Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Contemporary Trade Directory Entries			
Presco (Uk) Ltd, Unit 4, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Catering Equipment, Status: Inactive, Positional Accuracy: Automatically positioned to the address	16	0-250m	W
Action Recycling Ltd, Unit 6, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Reclaiming - Waste Products, Status: Inactive, Positional Accuracy: Automatically positioned to the address	6	0-250m	NW
The Panel Shop, Martin Road, Tremorfa Industrial Estate, Tremorfa, CARDIFF, CF24 5SD, Car Breakers & Dismantlers, Status: Inactive, Positional Accuracy: Automatically positioned to the address	48	0-250m	SE
Window Tinting, Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD, Window Tinting, Status: Active, Positional Accuracy: Automatically positioned to the address	14	0-250m	W
Celtic Chem-Dry, Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Carpet, Curtain & Upholstery Cleaners, Status: Inactive, Positional Accuracy: Automatically positioned to the address	14	0-250m	W
Cars Cardiff, Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Car Dealers - Used, Status: Inactive, Positional Accuracy: Automatically positioned to the address	14	0-250m	W
Celtic Chem-Dry, Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD, Carpet, Curtain & Upholstery Cleaners, Status: Inactive, Positional Accuracy: Automatically positioned to the address	14	0-250m	W
Cardiff Van Centre, Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Commercial Vehicle Dealers, Status: Inactive, Positional Accuracy: Manually positioned to the address or location	14	0-250m	W
It Works, Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Computer Recycling & Disposal, Status: Inactive, Positional Accuracy: Manually positioned to the road within the address or location	49	0-250m	NE
Ace Tyre Services, Martin Road, Tremorfa Industrial Estate, Tremorfa, CARDIFF, CF24 5SD, Tyre Dealers, Status: Inactive, Positional Accuracy: Automatically positioned to the address	50	0-250m	E
Ace Tyre Services, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Tyre Dealers, Status: Inactive, Positional Accuracy: Automatically positioned to the address	50	0-250m	E
1st Choice Vehicle Dismantlers, Unit 12-13, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD, Car Breakers & Dismantlers, Status: Active, Positional Accuracy: Automatically positioned to the address	51	0-250m	NE
D M D Mechanical Engineering Ltd, Darby Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SB, Mechanical Engineers, Status: Inactive, Positional Accuracy: Automatically positioned to the address	52	0-250m	NE
The Engine Shop, 16 Martin Rd,Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD, Engine Rebuilding & Reconditioning, Status: Inactive, Positional Accuracy: Manually positioned to the road within the address or location	53	0-250m	NE

Contaminants Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Contemporary Trade Directory Entries			
National Engine Centre Review, Unit 16, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD, Engine Rebuilding & Reconditioning, Status: Active, Positional Accuracy: Automatically positioned to the address	54	0-250m	NE
Parts (Uk), Unit 16, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD, Scrap Yards, Status: Inactive, Positional Accuracy: Automatically positioned to the address	54	0-250m	NE
South Western Print Finishers, 16a, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD, Print Finishers, Status: Inactive, Positional Accuracy: Automatically positioned to the address	55	0-250m	E
D4 Print, Pacific Business Pk,Pacific Rd, Cardiff, South Glamorgan, CF24 5HJ, Printers, Status: Inactive, Positional Accuracy: Manually positioned within the geographical locality	56	250-500m	W
Cardiff Bay Office Furniture, Charnwood Park, Foreshore Road, Cardiff, CF10 4LZ, Office Furniture & Equipment, Status: Active, Positional Accuracy: Automatically positioned to the address	-	250-500m	S
Vanda Coatings Ltd, Unit 5a, Charnwood Park, Clos Marion, Cardiff, South Glamorgan, CF10 4LJ, Spraying - Paint & Coatings, Status: Inactive, Positional Accuracy: Automatically positioned to the address	-	250-500m	S
J & J Commercials Ltd, Unit N/2, South Point, Clos Marion, Cardiff, CF10 4LQ, Commercial Vehicle Servicing, Repairs, Parts & Accessories, Status: Active, Positional Accuracy: Automatically positioned to the address	-	250-500m	S
Adseal, Charnwood Park, Foreshore Road, Cardiff, South Glamorgan, CF10 4LZ, Adhesives, Glues & Sealants, Status: Inactive, Positional Accuracy: Automatically positioned to the address	-	250-500m	S
Print Partnership, Unit 11, Pacific Business Park, Pacific Road, Cardiff, South Glamorgan, CF24 5HJ, Printers, Status: Active, Positional Accuracy: Automatically positioned to the address	-	250-500m	W
Fig Fixings, Unit H/1, South Point, Foreshore Road, Cardiff, CF10 4SP, Nuts, Bolts & Fixings, Status: Active, Positional Accuracy: Automatically positioned to the address	-	250-500m	S
Sheffield Insulations, South Point, Foreshore Road, Cardiff, CF10 4SP, Insulation Materials, Status: Active, Positional Accuracy: Automatically positioned to the address	-	250-500m	S
Premier Fixings, Unit 6, Charnwood Park, Clos Marion, Cardiff, CF10 4LJ, Nuts, Bolts & Fixings, Status: Inactive, Positional Accuracy: Automatically positioned to the address	-	250-500m	S
Globe Dynamics Ltd, Unit P/6, South Point, Clos Marion, Cardiff, CF10 4LQ, Commercial Vehicle Servicing, Repairs, Parts & Accessories, Status: Inactive, Positional Accuracy: Automatically positioned to the address	-	250-500m	S
Brt International Ltd, Coaster Pl, Cardiff, South Glamorgan, CF10 4XZ, Road Haulage Services, Status: Active, Positional Accuracy: Manually positioned within the geographical locality	-	250-500m	SW
Tyres Cardiff Ltd, Coaster Pl, Cardiff, South Glamorgan, CF10 4XZ, Tyre Dealers, Status: Active, Positional Accuracy: Manually positioned within the geographical locality	-	250-500m	SW
Brt Workshops, Coaster Pl, Cardiff, South Glamorgan, CF10 4XZ, Garage Services, Status: Active, Positional Accuracy: Manually positioned within the geographical locality	-	250-500m	SW

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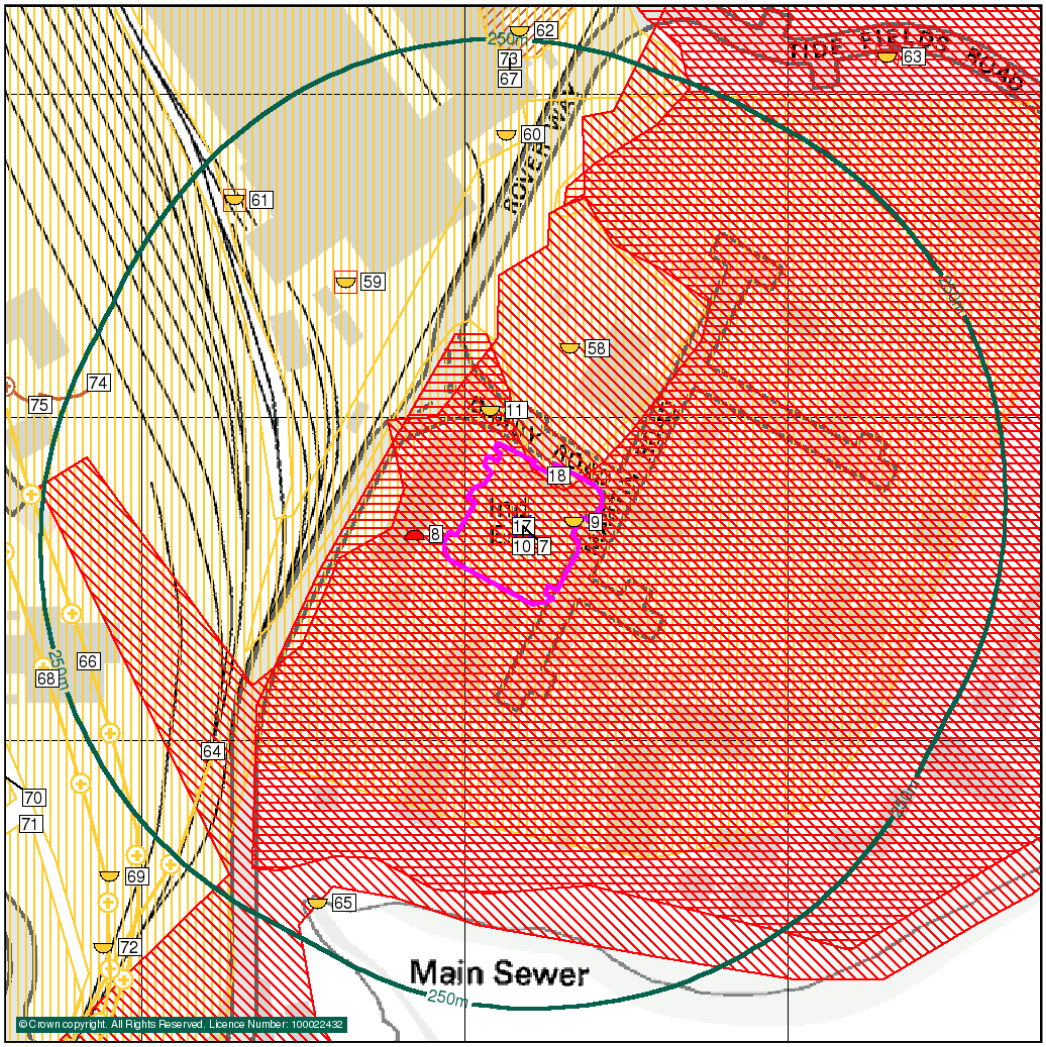
Landmark on (Tel) 0844 844 9966, (Fax) 0844 844 9980, Email: helpdesk@landmark.co.uk

Contaminants Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Contemporary Trade Directory Entries			
Cardiff Rescue, Coaster Pl, Cardiff, South Glamorgan, CF10 4XZ, Breakdown and Recovery, Status: Active, Positional Accuracy: Manually positioned within the geographical locality	-	250-500m	SW
C V S Service Centre, Unit P/2, South Point, Clos Marion, Cardiff, CF10 4LQ, Garage Services, Status: Active, Positional Accuracy: Automatically positioned to the address	-	250-500m	S

Miscellaneous	Ref No.	Search Buffer	Direction
BGS Recorded Mineral Sites			
Rover Way, Rover Way, Cardiff, Status: Ceased, Reference: 505, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 4	57	0-250m	E



General

- Site Boundary
- Search Buffer
- Bearing Reference Point
- Reference Number

Potentially Contaminative Use

- Point Feature
- Point Feature (High Risk)
- Area Feature
- Area Feature (High Risk)
- Line Feature
- Line Feature (High Risk)

Potentially Infilled Land

- Point Feature
- Point Feature (High Risk)
- Area Feature
- Area Feature (High Risk)
- Line Feature
- Line Feature (High Risk)

Contaminants Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Historical Tanks And Energy Facilities			
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1969	9	On Site	E
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1969	11	0-250m	N
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1969	58	0-250m	N
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1954 - 1968	59	0-250m	NW
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1954 - 1969	59	0-250m	NW
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1969	60	0-250m	N
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1969	61	0-250m	NW
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968	61	0-250m	NW
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	62	250-500m	N
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	-	250-500m	N
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1970	-	250-500m	N
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	63	250-500m	NE
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1970	63	250-500m	NE
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	-	250-500m	NE
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1970	-	250-500m	NE
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	-	250-500m	NW
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1970	-	250-500m	NW
Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1989	-	250-500m	SW
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	-	250-500m	N
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1970	-	250-500m	N
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	-	250-500m	N
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1970	-	250-500m	N
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	-	250-500m	N
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1970	-	250-500m	N
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1970	-	250-500m	N
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	-	250-500m	N
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1954 - 1966	-	250-500m	NW

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Contaminants Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Historical Tanks And Energy Facilities			
Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1955 - 1970	-	250-500m	NW
Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1966	-	250-500m	NW
Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1954 - 1969	-	250-500m	W
Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1954 - 1968	-	250-500m	W
Potentially Contaminative Industrial Uses (Past Land Use)			
Heap, unknown constituents, Date of Mapping: 1965 - 1989	7	On Site	NE
Railways, Date of Mapping: 1901 - 1989	17	On Site	NE
Factory or works - use not specified, Date of Mapping: 1951 - 1989	18	On Site	NE
Military Land, Date of Mapping: 1886	8	0-250m	W
Railways, Date of Mapping: 1989	64	0-250m	SW
Outfalls, Date of Mapping: 1901 - 1922	65	0-250m	SW
Railways, Date of Mapping: 1901 - 1951	66	0-250m	W
Quarrying of sand & clay, operation of sand & gravel pits, Date of Mapping: 1951	67	0-250m	N
Railways, Date of Mapping: 1922	68	250-500m	W
Military Land, Date of Mapping: 1886	69	250-500m	SW
Factory or works - use not specified, Date of Mapping: 1965 - 1989	70	250-500m	SW
Transport support & cargo handling, Date of Mapping: 1922 - 1951	71	250-500m	SW
Military Land, Date of Mapping: 1886	72	250-500m	SW
Transport: air and space, cargo and handling and transport support, Date of Mapping: 1989	-	250-500m	S
Railways, Date of Mapping: 1901 - 1951	-	250-500m	NW

Contaminants Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Potentially Contaminative Industrial Uses (Past Land Use)			
Railways, Date of Mapping: 1989	-	250-500m	SW
Pipelines [transport via], Date of Mapping: 1989	-	250-500m	SW
Transport support & cargo handling, Date of Mapping: 1901	-	250-500m	SW
Heap, unknown constituents, Date of Mapping: 1965	-	250-500m	N
Sawmilling, planing & impregnation [i.e. treatment of timber], Date of Mapping: 1989	-	250-500m	SW

Potentially Infilled Land	Ref No.	Search Buffer	Direction
Potentially Infilled Land (Non-Water)			
Unknown Filled Ground (Pit, quarry etc), Date of Mapping: 1989	73	0-250m	N
Potentially Infilled Land (Water)			
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1922	10	On Site	NE
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1922	74	0-250m	W
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1886	75	250-500m	W
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1886	-	250-500m	W
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1886	-	250-500m	SW
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1922	-	250-500m	N
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1922	-	250-500m	NW
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1886	-	250-500m	NW
Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1886	-	250-500m	NW

Map Details

The following maps have been analysed for Historical Tanks and Energy Facilities		
1:1,250	**Mapsheet**	**Published**
Ordnance Survey Plan	ST2075NE	1954
Ordnance Survey Plan	ST2075NE	1968
1:2,500	**Mapsheet**	**Published**
Ordnance Survey Plan	ST2075	1954
Ordnance Survey Plan	ST2075	1969
Ordnance Survey Plan	ST2175	1969
The following maps have been analysed for Potentially Contaminative Uses and Potentially Infilled Land information		
1:10,000	**Mapsheet**	**Published**
Ordnance Survey Plan	ST27NW	1989
1:10,560	**Mapsheet**	**Published**
Monmouthshire	037_00	1886
Glamorganshire	043_00	1886
Monmouthshire	037_SE	1901
Glamorganshire	043_SE	1901
Glamorganshire	043_SE	1922
Monmouthshire	037_SE	1951
Glamorganshire	043_SE	1951
Ordnance Survey Plan	ST27NW	1965

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Flood Map

General

- Site Boundary
- Search Buffer
- Bearing Reference Point
- Reference Number

Area of Floodplain

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

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Sensitivity Map

General

- Site Boundary
- Search Buffer
- Bearing Reference Point
- Reference Number

Environmentally Sensitive Land Use

- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- Nearest Surface Water Feature
- Water Abstractions

Protected Coutryside Areas

- Forest Park
- National Park
- National Scenic Area

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Pathways and Receptors Pathways	Ref No.	Search Buffer	Direction
Groundwater Vulnerability			
Geological Classification: Non Aquifer (Negligibly permeable) - Formations which are generally regarded as containing insignificant quantities of groundwater. However, groundwater flow through such rocks, although imperceptible, does take place and needs to be considered in assessing the risk associated with persistent pollutants, Soil Classification: Not classified, Map Scale: 1:100,000, Map Name: Sheet 36 Mid Glamorgan, Contact Ref: 1	-	On Site	NE
Drift Deposits			
None	-		-
Historical Flood Liabilities			
Area liable to flood, Date of Mapping: 1901,	-	0-250m	W
Area liable to flood, Date of Mapping: 1901,	-	250-500m	N
Extreme Flooding from Rivers or Sea without Defences			
Type: Extent of Extreme Flooding from Rivers or Sea without Defences, Flood Plain Type: Tidal Models, Contact Ref: 1	-	0-250m	S
Flooding from Rivers or Sea without Defences			
Type: Extent of Flooding from Rivers or Sea without Defences, Flood Plain Type: Tidal Models, Contact Ref: 1	-	0-250m	S
Areas Benefiting from Flood Defences			
None	-		-
Flood Water Storage Areas			
None	-		-
Flood Defences			
None	-		-

Environmentally Sensitive Receptors	Ref No.	Search Buffer	Direction
Nearest Surface Water Feature			
Distance: 200m	76	0-250m	S

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Pathways and Receptors Environmentally Sensitive Receptors	Ref No.	Search Buffer	Direction
Ramsar Sites			
Severn Estuary (Wales), Designation Date: 13th July 1995, Total Area: 68891898.01(m2), Contact Ref: 5	77	0-250m	S
Sites of Special Scientific Interest			
Severn Estuary, Total Area: 68537733.72(m2), Reference: 461, 33wgx, Contact Ref: 5	78	0-250m	S
Special Areas of Conservation			
Severn Estuary (Wales), Designation Date: 10th December 2009, Total Area: 267698780.64(m2), Status: Designated, Contact Ref: 5	79	0-250m	S
Special Protection Areas			
Severn Estuary (Wales), Designation Date: 13th July 1995, Total Area: 68891897.65(m2), Contact Ref: 5	80	0-250m	S
Water Abstractions			
Celsa Manufacturing (Uk) Ltd, Underground Strata, Marine Alluvium And E A F Slag, Abstractions Industrial, Reference: 21/57/25/0078, Permit Version: 1, Authorised Start: 01 January, Authorised End: 31 December, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	81	0-250m	N
Celsa Manufacturing (Uk) Ltd, Underground Strata, Marine Alluvium And E A F Slag, Abstractions Industrial, Reference: 21/57/25/0078, Permit Version: 1, Authorised Start: 01 January, Authorised End: 31 December, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	81	0-250m	N

Other Factors Geological	Search Buffer	Direction
Brine Compensation Area		
No		-
Coal Mining Affected Areas		
In an area which may not be affected by Coal Mining		-
Non Coal Mining Areas of Great Britain		
No Hazard		-
Radon Potential - Radon Affected Areas		
Affected Areas: The property is in a lower probability radon area, as less than 1% of homes are above the action level, Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 4	On Site	NE
Radon Potential - Radon Protection Measures		
Radon Protection Measures: None, Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 4	On Site	NE
Potential for Collapsible Ground Stability Hazards		
Hazard Potential: No Hazard, Contact Ref: 4	On Site	NE
Potential for Compressible Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 4	On Site	NE
Hazard Potential: Moderate, Contact Ref: 4	0-250m	S
Potential for Ground Dissolution Stability Hazards		
No Hazard		-
Potential for Landslide Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 4	On Site	NE
Hazard Potential: Moderate, Contact Ref: 4	0-250m	S
Potential for Running Sand Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 4	On Site	NE
Hazard Potential: Moderate, Contact Ref: 4	0-250m	S
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 4	On Site	NE

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Registered Landfill Sites

At present no complete national data set exists for landfill site boundaries, therefore a point grid reference, provided by the data supplier, is used for some landfill sites. In certain cases the point grid references supplied provide only an approximate position and can vary from the site entrance to the centre of the site. Where the exact position of the site is unclear, Landmark construct either a 100 metre or 250 metre "buffer" around the point to warn of the possible presence of landfill. The size of this "buffer" relates to the positional accuracy that can be attributed to the site. The "buffer" is shown on the map as an orange cross-hatched circle and is referred to in the map legend as Potential Landfill Buffer. Where actual boundaries are available, the landfill site area is shown on the map as a red diagonal hatched polygon and referred to in the map legend as Registered Landfill Site.

Local Authority Recorded Landfill Sites

Local Authority landfill data are sourced from individual local authorities that were able to provide information on sites operating prior to the introduction of the Control of Pollution Act (COPA) in 1974. Appropriate authorities are listed under Local Authority Landfill Coverage with an indication of whether or not they were able to make landfill data available. Details of any records identified are disclosed. You should be aware that if the local authority 'Had landfill data but passed it to the relevant environment agency' it does not necessarily mean that local authority landfill data is included in our other Landfill datasets. In addition if no data has been made available, for all or part of the search area, you should be aware that a negative response under 'Local Authority Recorded Landfill Sites' does not necessarily confirm that no local authority landfills exist.

Flooding

The Sitecheck report flood map plots all flood related features revealed within the search area as supplied by the relevant agency. However, to avoid confusion, the text entry in the body of the report only reveals the detail of the nearest feature in each flood data set. This is also reflected in the summary table where only a single entry is included to indicate the search buffer of the nearest occurrence.

Mining Instability Data

The Mining Instability data was obtained on Licence from Ove Arup + Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such data is to be made without the prior written consent of Ove Arup + Partners Limited. The information and data supplied in the Product are derived from publicly available records and other third party sources and neither Ove Arup + Partners nor Landmark warrant the accuracy or completeness of such information or data.

If you would like any further assistance regarding this report then please contact
Landmark on (Tel) 0844 844 9966, (Fax) 0844 844 9980, Email: helpdesk@landmark.co.uk

Contact Names and Addresses

1 Environment Agency National Customer Contact Centre (NCCC)

PO Box 544
Templeborough
Rotherham
S60 1BY

Telephone 08708 506 506

enquiries@environment-agency.gov.uk

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

2 Cardiff Council Pollution Control Division

Regulatory Services
City Hall
Cardiff
Mid Glamorgan
CF10 3ND

Telephone 029 20872000
Fax 01222 873212

www.cardiff.gov.uk

3 Cardiff Council Regulatory Services

Room 158
City Hall
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Mid Glamorgan
CF10 3ND

Telephone 029 20872429
Fax 029 2087 2597

www.cardiff.gov.uk

4 British Geological Survey Enquiry Service

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
Nottinghamshire
NG12 5GG

Telephone 0115 936 3143
Fax 0115 936 3276

enquiries@bgs.ac.uk
www.bgs.ac.uk

5 Natural Resources Wales (NRW) - formerly CCW

Plas Penrhose
Fford Penrhos
Bangor
Gwynedd
LL57 2LQ

Telephone 01248 385500
Fax 01248 355782

6 Cardiff Council

County Hall
Atlantic Wharf
Cardiff
Mid Glamorgan
CF1 5UW

Telephone 029 2087 2000
Fax 029 2087 3212

www.cardiff.gov.uk

Other Contacts

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Cheshire
WA14 1PF

Telephone 0161 928 8074

www.ices.org.uk/ices.asp

The Association of Geotechnical and Geoenvironmental Specialists

Foreham Street
83 Copers
Cope Road
Beckenham
Kent
BR3 1NR

Telephone 020 86588212

www.ags.org.uk/

The Environmental Auditors Registration Association

Welton House
Limekiln Way
Lincoln
LN2 4US

Telephone 01522 540069

www.greenchannel.com/iea/earahome.htm

The Environmental Industries Commission

45 Weymouth Street
London
W1N 3LD

Telephone 020 79351675

www.eic-uk.co.uk/

The Institution of Civil Engineers

One Great George Street
Westminster
LONDON
SW1P 3AA

Telephone 0207 222 7722
Fax 0207 222 7500

www.ice.org.uk

The Royal Institution of Chartered Surveyors

12 Great George Street
Parliament Square
London
SW1P 3AD

Telephone 020 7222 7000

www.rics.org.uk/

Argyll Environmental Ltd

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21-33 Dyke Road
Brighton
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info@argyllenviro.com
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Search Code

IMPORTANT CONSUMER PROTECTION INFORMATION

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The Search Code:

- Provides protection for homebuyers, sellers, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom.
- Sets out minimum standards which firms compiling and selling search reports have to meet.
- Promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals.
- Enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Code will:

- Display the Code logo prominently on their search reports.
- Act with integrity and carry out work with due skill, care and diligence.
- At all times maintain adequate and appropriate insurance to protect consumers.
- Conduct business in an honest, fair and professional manner.
- Handle complaints speedily and fairly.
- Ensure that all search services comply with the law, registration rules and standards.
- Monitor their compliance with the Code.

COMPLAINTS

If you have a query or complaint about your search, you should raise it directly with the firm, and if appropriate ask for your complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if it finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs Contact Details:
The Property Ombudsman Scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk.

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE

Search Code

COMPLAINTS PROCEDURE

If you want to make a complaint, we will:

- Acknowledge it within 5 working days of its receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

Complaints should be sent to:

Head of Customer Relations
Landmark Information Group Ltd
Landmark UK Property
Imperium
Imperial Way
Reading
RG2 0TD

Telephone: 0844 844 9966

E-mail: helpdesk@landmark.co.uk

Fax: 0844 844 9980

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman Scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk.

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision.

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http://www.landmarkinfo.co.uk/Terms/Show/515

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit
Sand Pit
Other Pits
Quarry
Shingle
Orchard
Osiers
Reeds
Marsh
Mixed Wood
Deciduous
Brushwood
Fir
Furze
Rough Pasture
Arrow denotes flow of water
Trigonometrical Station
Site of Antiquities
Bench Mark
Pump, Guide Post, Signal Post
Well, Spring, Boundary Post
·285 Surface Level
Sketched Contour
Instrumental Contour
Main Roads
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
Sunken Road
Raised Road
Road over Railway
Railway over River
Railway over Road
Level Crossing
Road over River or Canal
Road over Stream
Road over Stream
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)
R.D. Bdy. Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

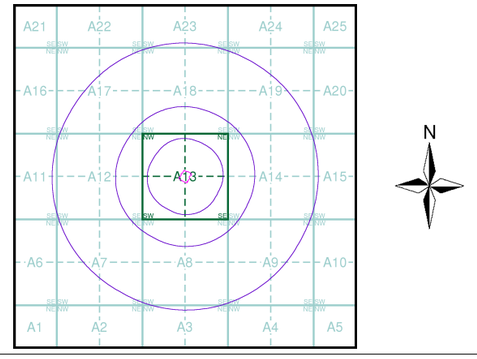
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Mud
Sand
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

RPS

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1885 - 1886	3
Monmouthshire	1:10,560	1886 - 1887	4
Monmouthshire	1:10,560	1887	5
Glamorganshire	1:10,560	1901	6
Glamorganshire	1:10,560	1922	7
Glamorganshire	1:10,560	1938 - 1947	8
Glamorganshire	1:10,560	1947 - 1954	9
Historical Aerial Photography	1:10,560	1947	10
Historical Aerial Photography	1:10,560	1947	11
Ordnance Survey Plan	1:10,000	1964 - 1965	12
Ordnance Survey Plan	1:10,000	1970 - 1975	13
Cardiff	1:10,000	1982	14
Ordnance Survey Plan	1:10,000	1984 - 1989	15
Ordnance Survey Plan	1:10,000	1991 - 1996	16
Ordnance Survey Plan	1:10,000	1995	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2014	19

Historical Map - Slice A



Order Details

Order Number: 63625239_1_1
Customer Ref: JER6480
National Grid Reference: 321040, 175730
Slice: A
Site Area (Ha): 0.57
Search Buffer (m): 1000

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

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Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Fireproof Building
- Prominent Fireproof Building
- Non-fireproof Building
- Non-fireproof Building (non-dwelling)
- Factory, mill, and flour mill, with chimneys
- Factory, mill, and flour mill, without chimneys
- Power Station, drawn to scale
- Hydroelectric Power Station
- Radio Station, drawn to scale
- Telephone Station, drawn to scale
- Abandoned Open-pit Mine or Quarry
- Open-pit Salt Mine
- Pit
- Oil Deposit or Well
- Oil Seepage
- Tailings Pile
- Fuel Storage Tanks
- Natural Gas Tank
- Bench Mark
- Drill Hole
- Burial Mound
- Triangulation Point on Burial Mound
- Single-track Railroad
- Double-track Railroad and Station Building
- Coniferous Forest
- Deciduous Forest
- Mixed Forest
- Lawns
- Citrus Orchard
- Wet Ground
- Scattered Vegetation

243,8 — Values for prominent elevations

186.0 — Numbers for spot elevations, depth soundings, contour lines, etc.

0,2 — Velocity of the current, width of river bed, depth of river

Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	ъ (–)
Д д (D)	Л л (L)	У у (U)	ы (Y)
Е е (E)	М м (M)	Ф ф (F)	ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Partly Demolished Buildings
- Demolished Buildings
- Built-Up Area with Fireproof Buildings Predominant
- Built-Up Area with Non-Fireproof Buildings Predominant
- Individual Fireproof Building
- Prominent Industrial Building
- Individual Dwelling, Fireproof
- Ruins of an Individual Dwelling
- Factory or Mill Chimney
- Factory or Mill with Chimney
- Factory or Mill without Chimney
- Mine or Open Pit Mine
- Operating Shaft or Mine
- Non-Operating Shaft or Mine
- Salt Mine
- Tailings Pile
- Pit
- Stone Quarry
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station
- Cemetery
- Burial Mound (height in metres)
- Triangulation Point on Burial Mound
- Triangulation Point
- Bench Mark
- Bench Mark (monumented)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Main Highway
- Highway under Construction
- Improved Dirt Road (former truck road)
- Double-track Railroad with First Class Station
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment
- Direction and velocity of current
- Well
- Water Reservoir or Rain Water Pit
- Spring
- Isobath with value
- Heavy (Index) Contour Line
- Contour Line and Value
- Half Contour Line
- Spot Elevation Value
- Coniferous
- Deciduous
- Mixed
- Scrub

Key to Numbers on Mapping

ST27NW_Cardiff

No.	Description
18	Factory (Gas)
24	Factory (Machinery)
45	Factories (Metal Works)
48	Mill (Flour) And Storage (Grain)
56	Factory (Non-Ferrous Metals)
57	Factory (Boats)
103	Depot (Railway)

RPS

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1885 - 1886	3
Monmouthshire	1:10,560	1886 - 1887	4
Monmouthshire	1:10,560	1887	5
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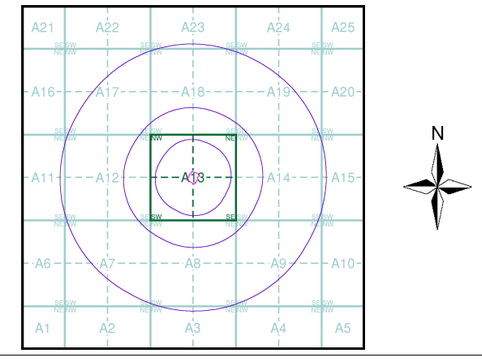
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2014	19

Russian Map - Slice A



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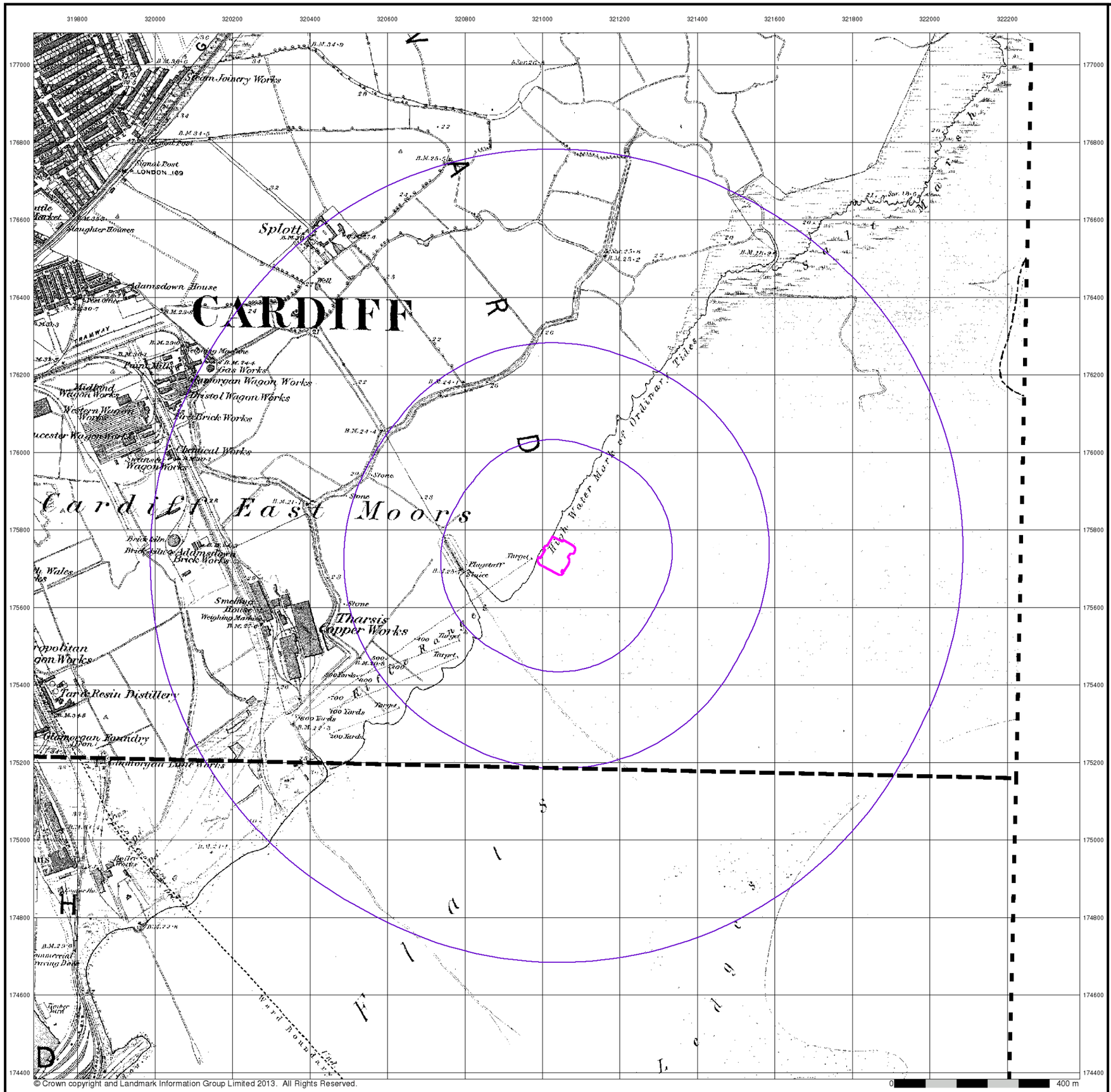

RPS

Glamorganshire

Published 1885 - 1886

Source map scale - 1:10,560

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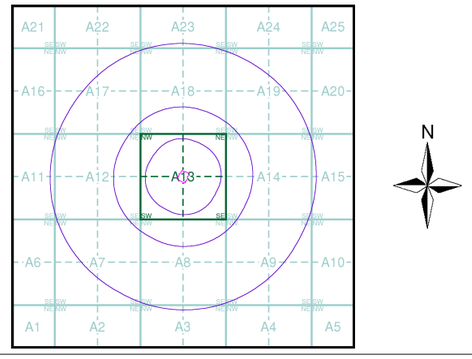
Map Name(s) and Date(s)

04300
1886
1:10,560

04700
1885
1:10,560

Historical Map - Slice A



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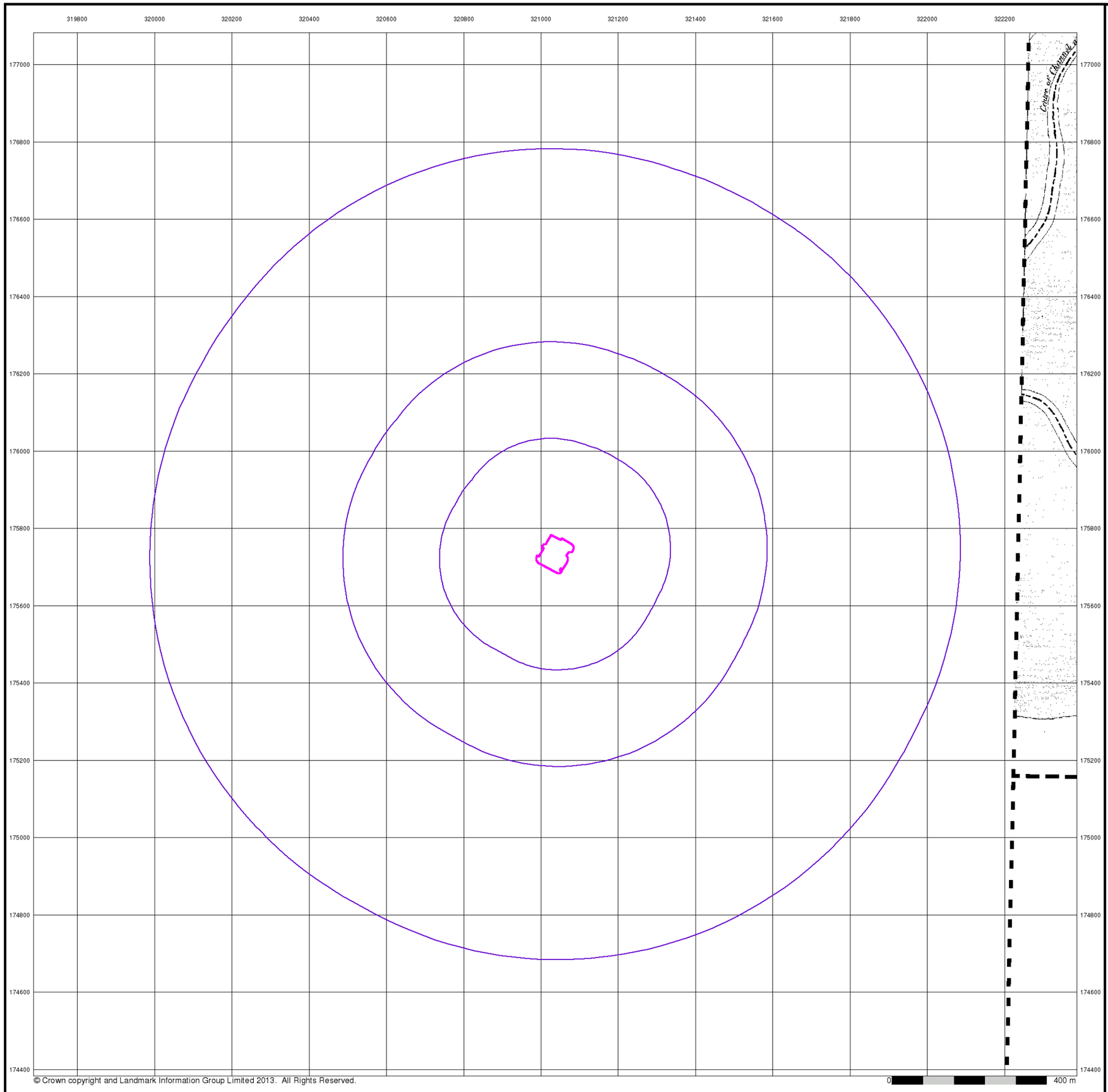

RPS

Monmouthshire

Published 1886 - 1887

Source map scale - 1:10,560

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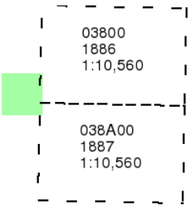
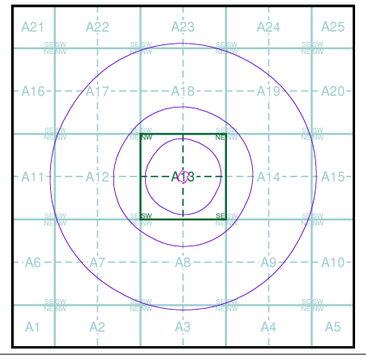
Map Name(s) and Date(s)



Historical Map - Slice A



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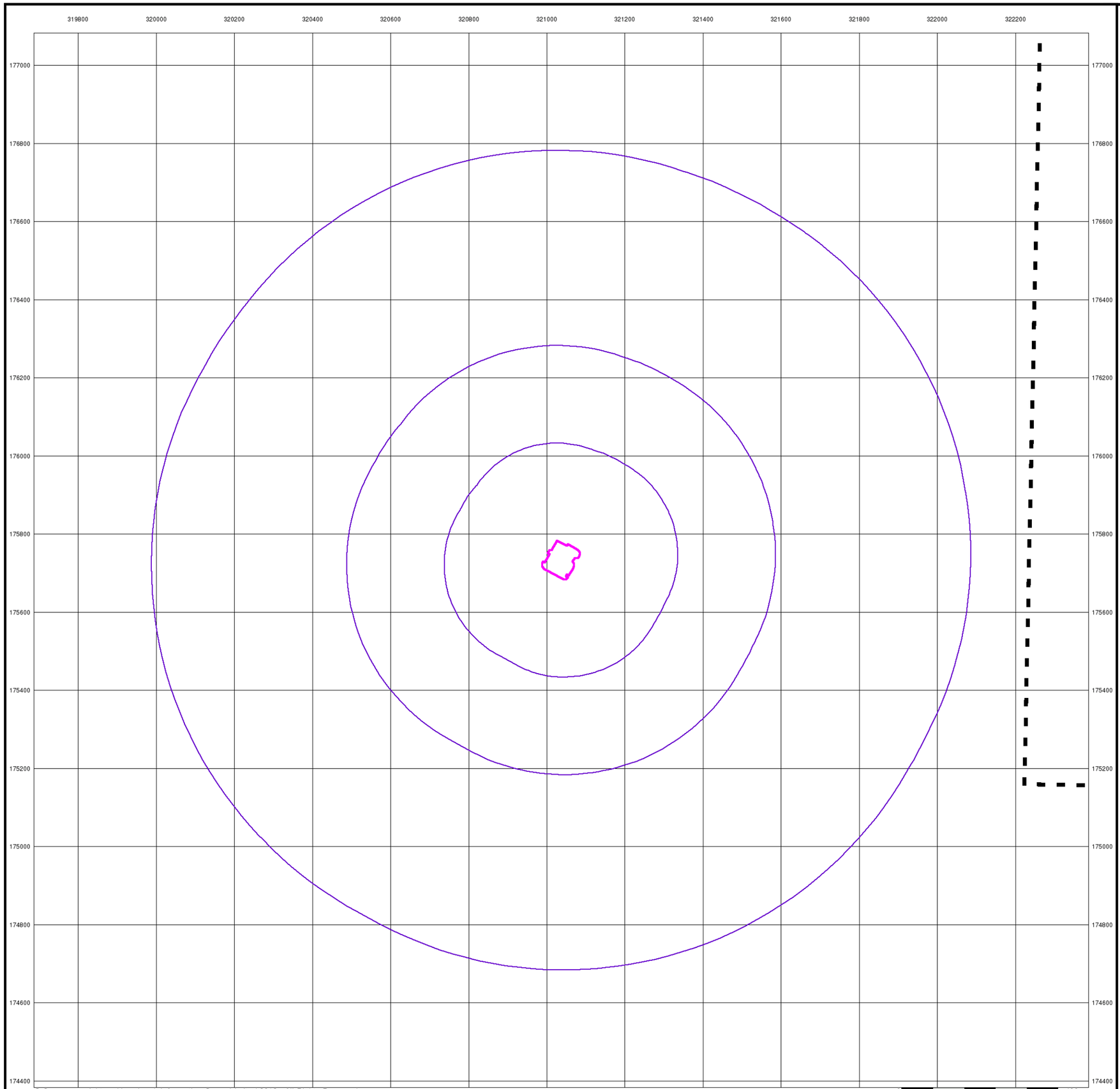

RPS

Monmouthshire

Published 1887

Source map scale - 1:10,560

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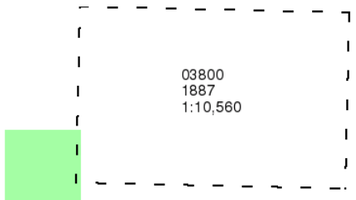
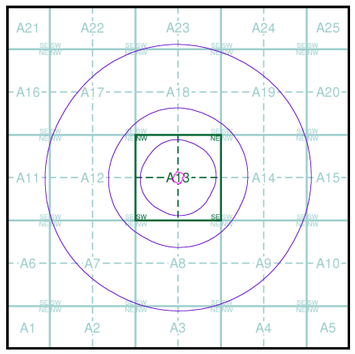


Historical Map - Slice A



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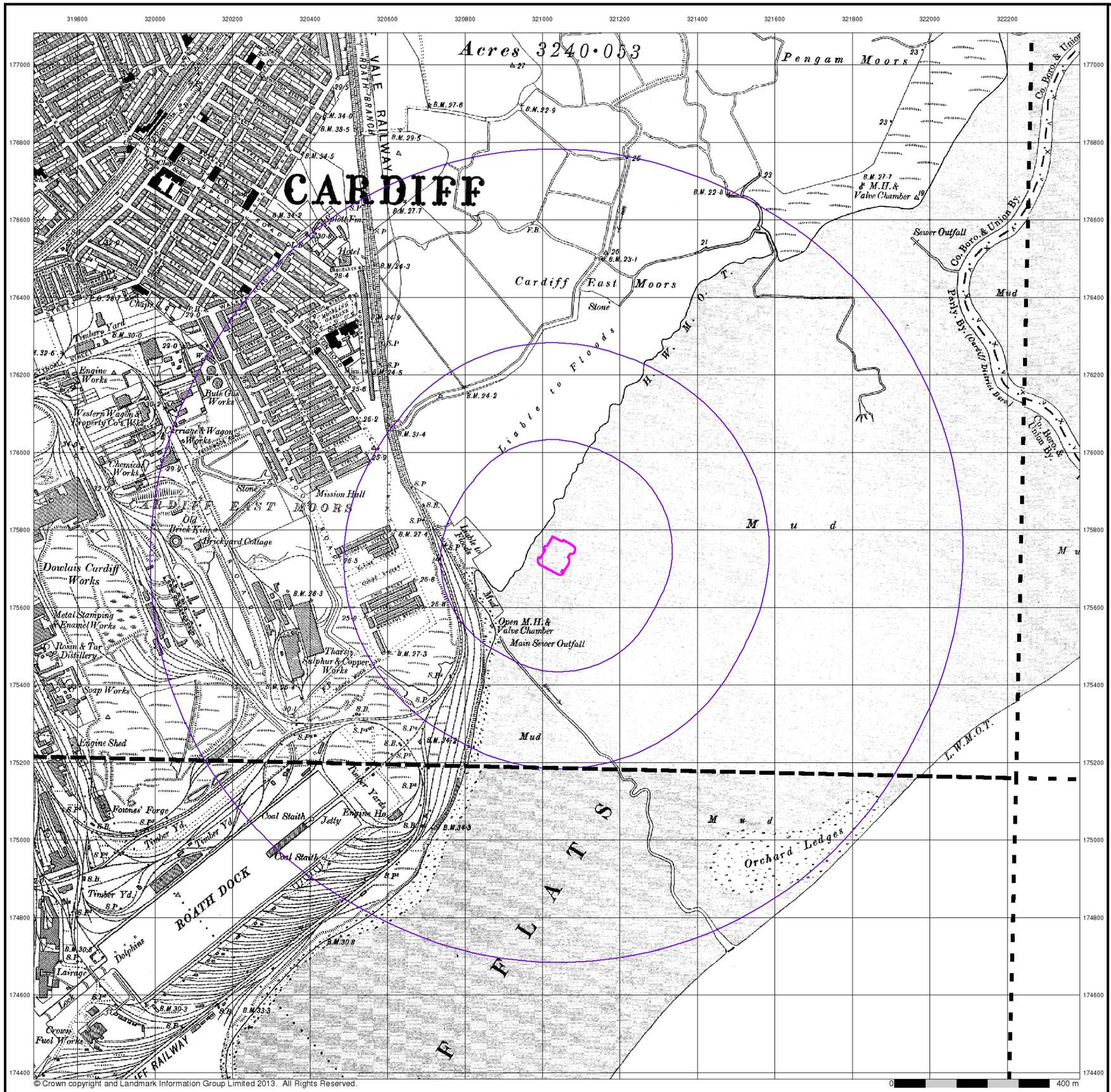

RPS

Glamorganshire

Published 1901

Source map scale - 1:10,560

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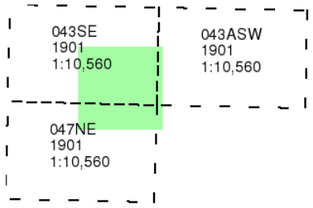
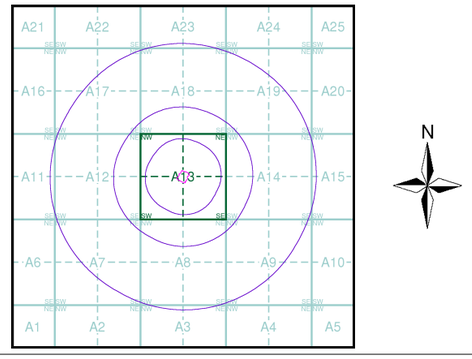
Map Name(s) and Date(s)



Historical Map - Slice A



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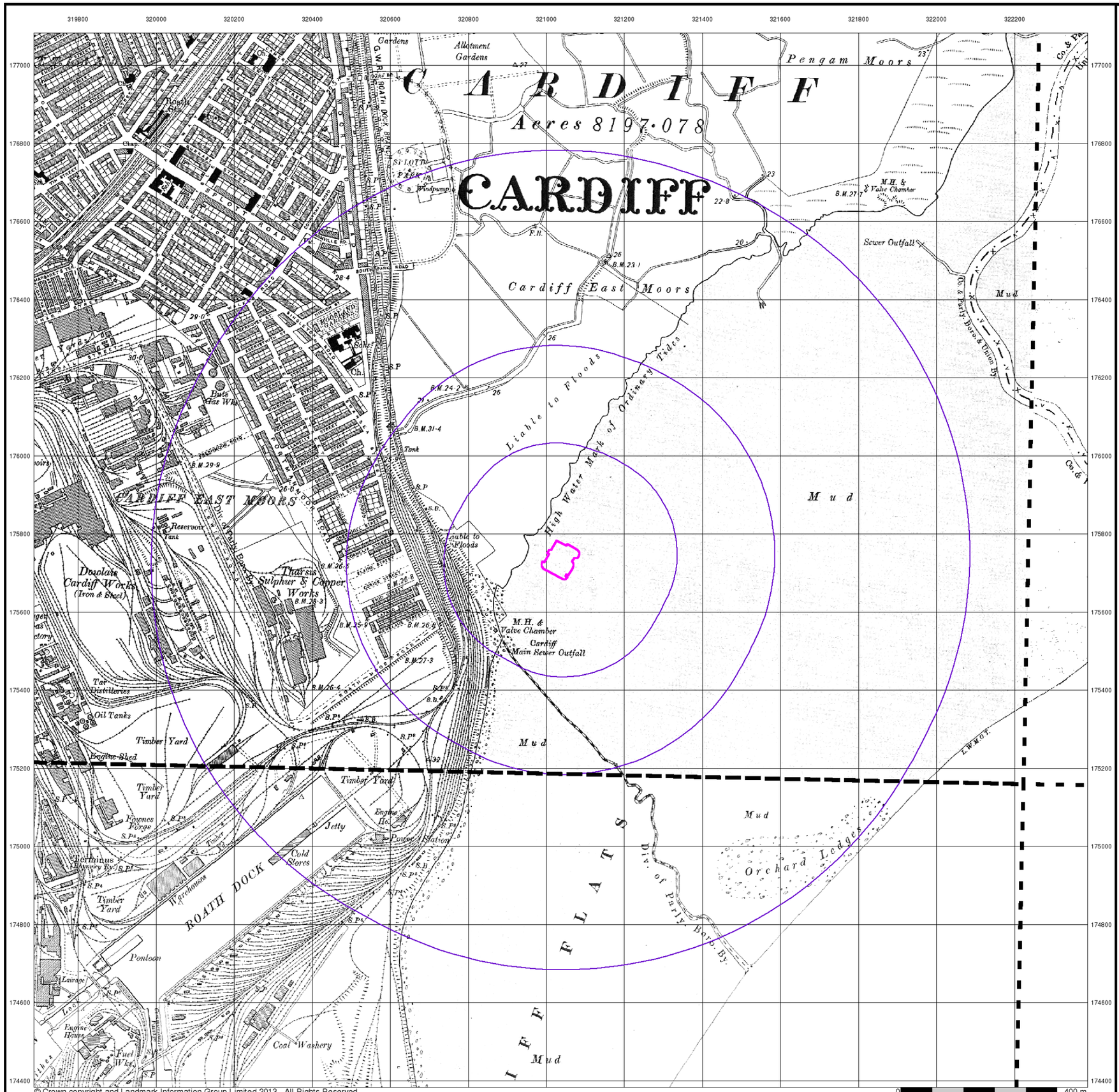

RPS

Glamorganshire

Published 1922

Source map scale - 1:10,560

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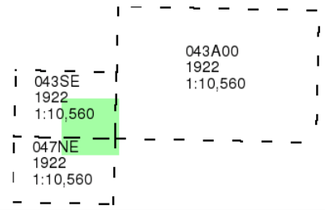
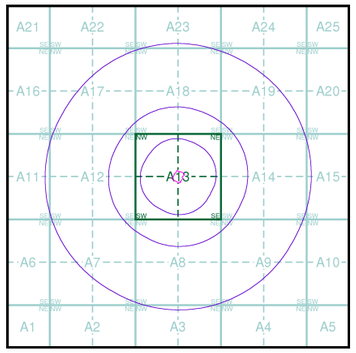
Map Name(s) and Date(s)



Historical Map - Slice A



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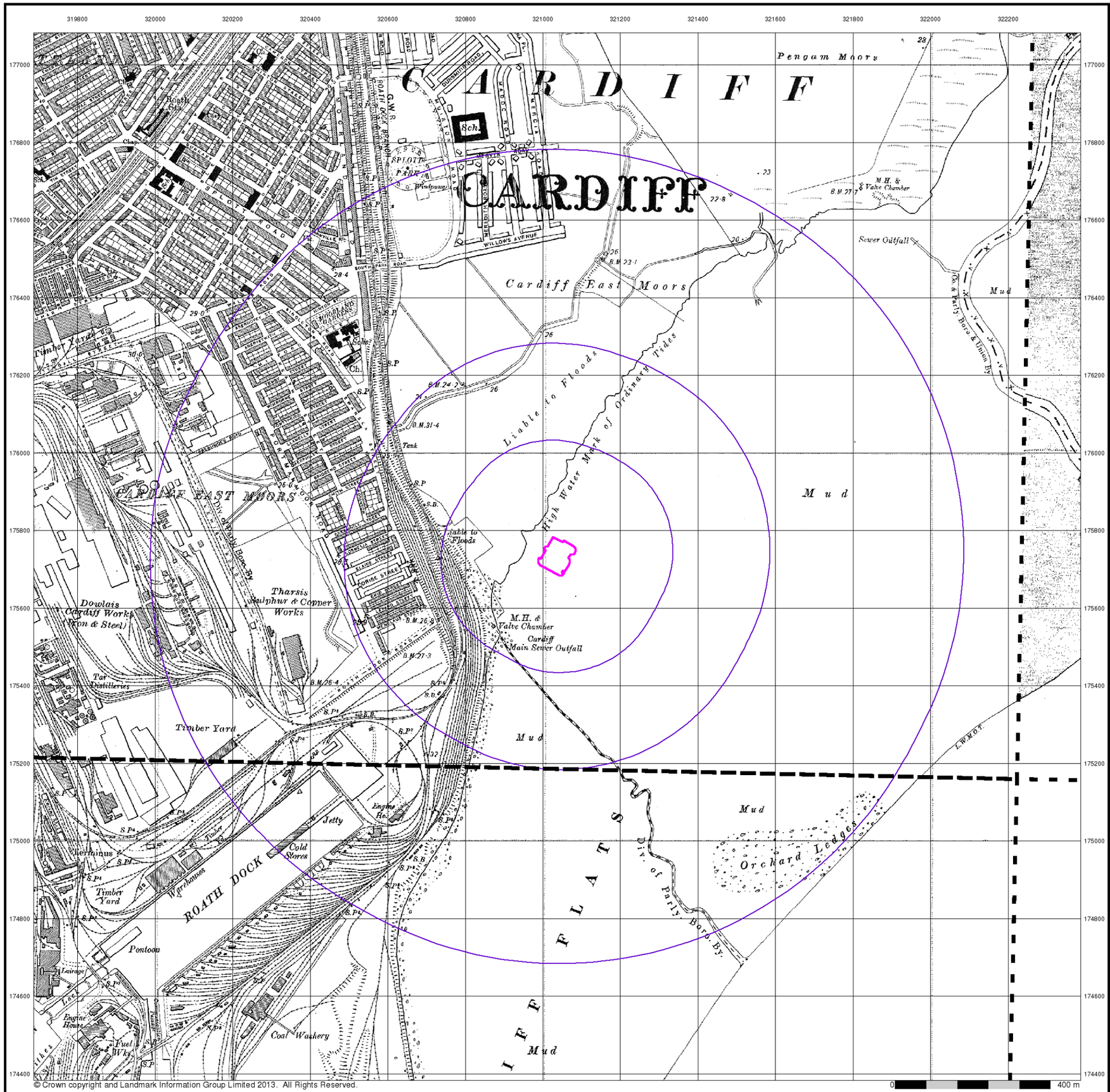

RPS

Glamorganshire

Published 1938 - 1947

Source map scale - 1:10,560

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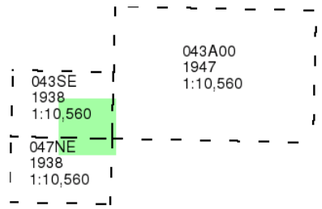
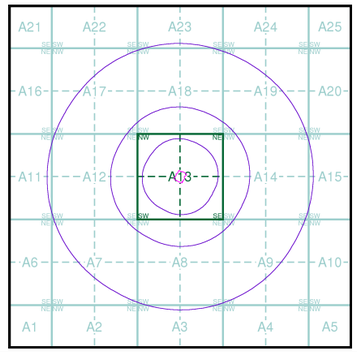
Map Name(s) and Date(s)



Historical Map - Slice A



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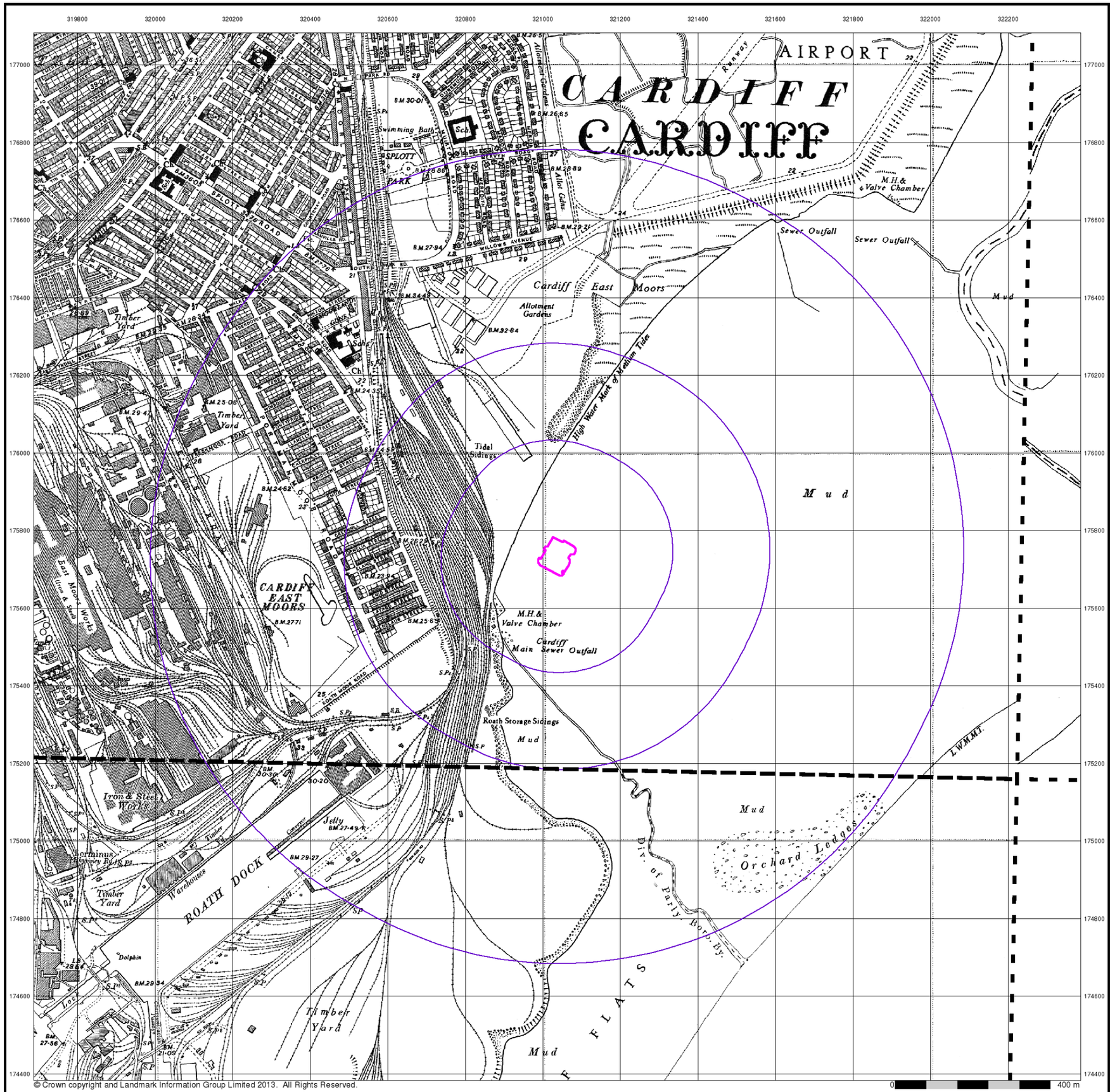


RPS

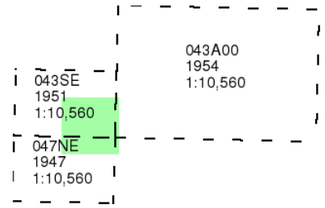
Glamorganshire

Published 1947 - 1954

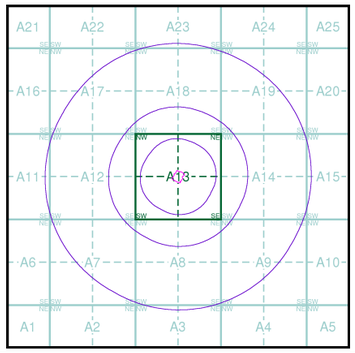
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



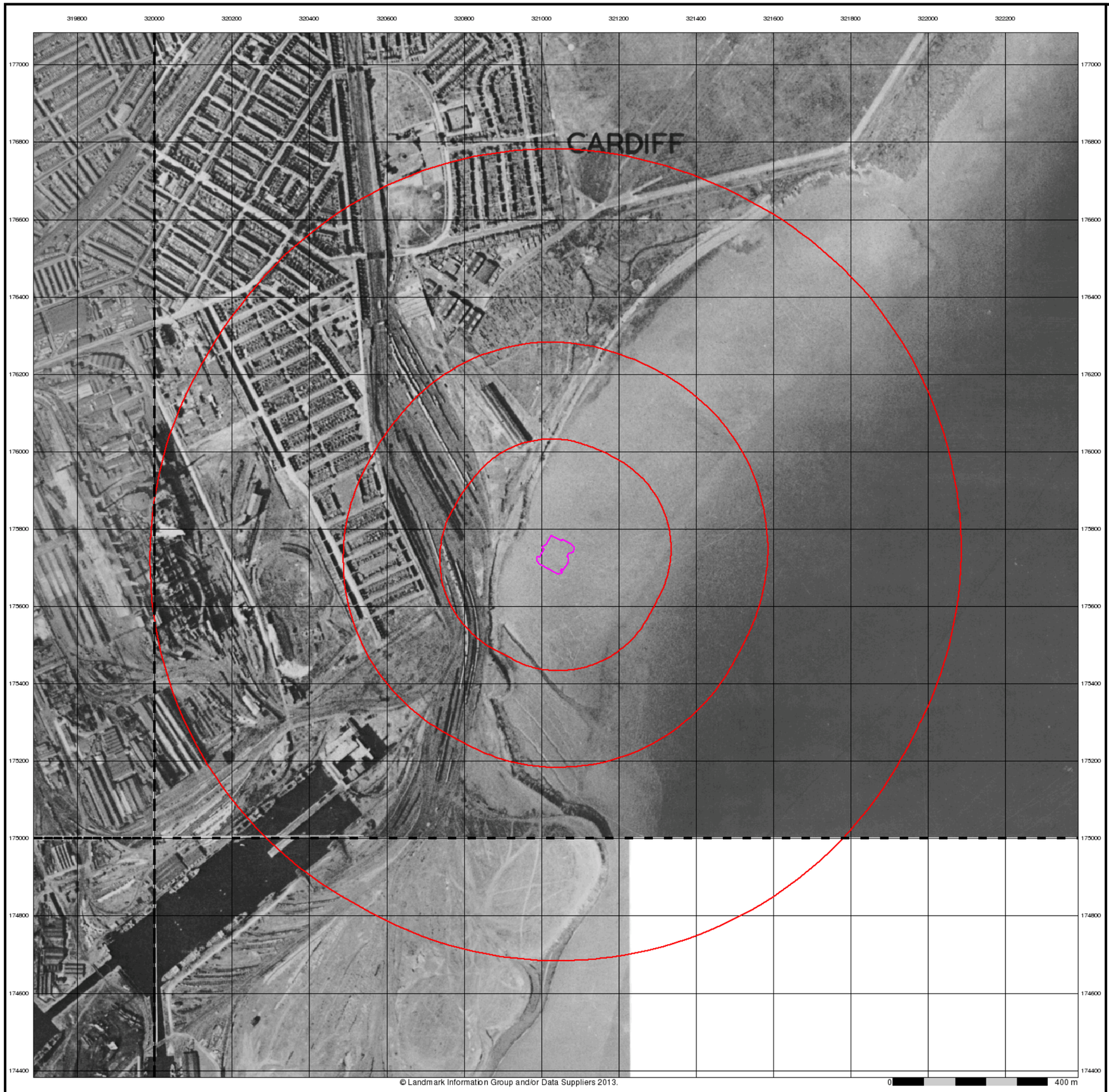
Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	1000

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



RPS

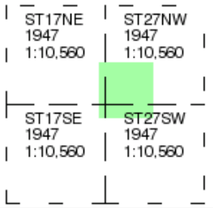
Historical Aerial Photography

Published 1947

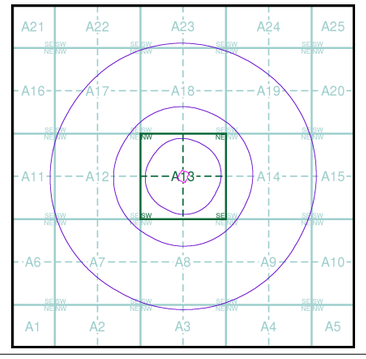
Source map scale - 1:10,560

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



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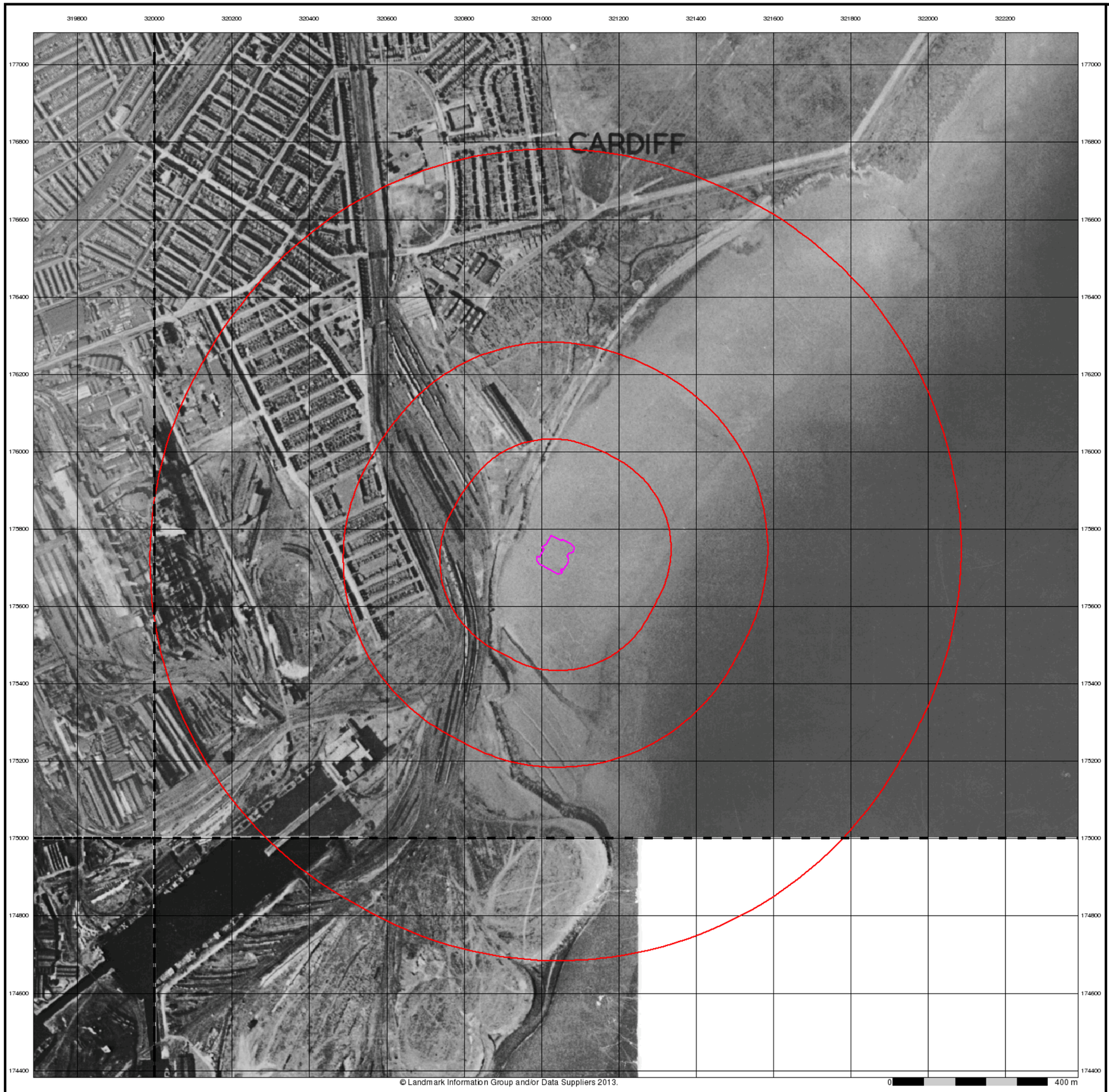

RPS

Historical Aerial Photography

Published 1947

Source map scale - 1:10,560

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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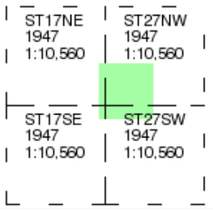
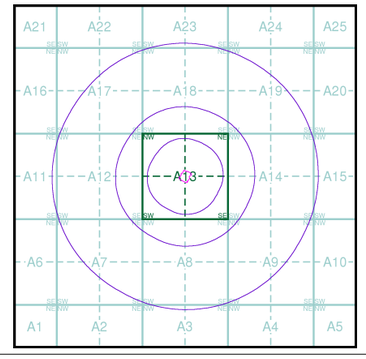


Historical Aerial Photography - Slice A



Order Details

Order Number:	63625239_1_1
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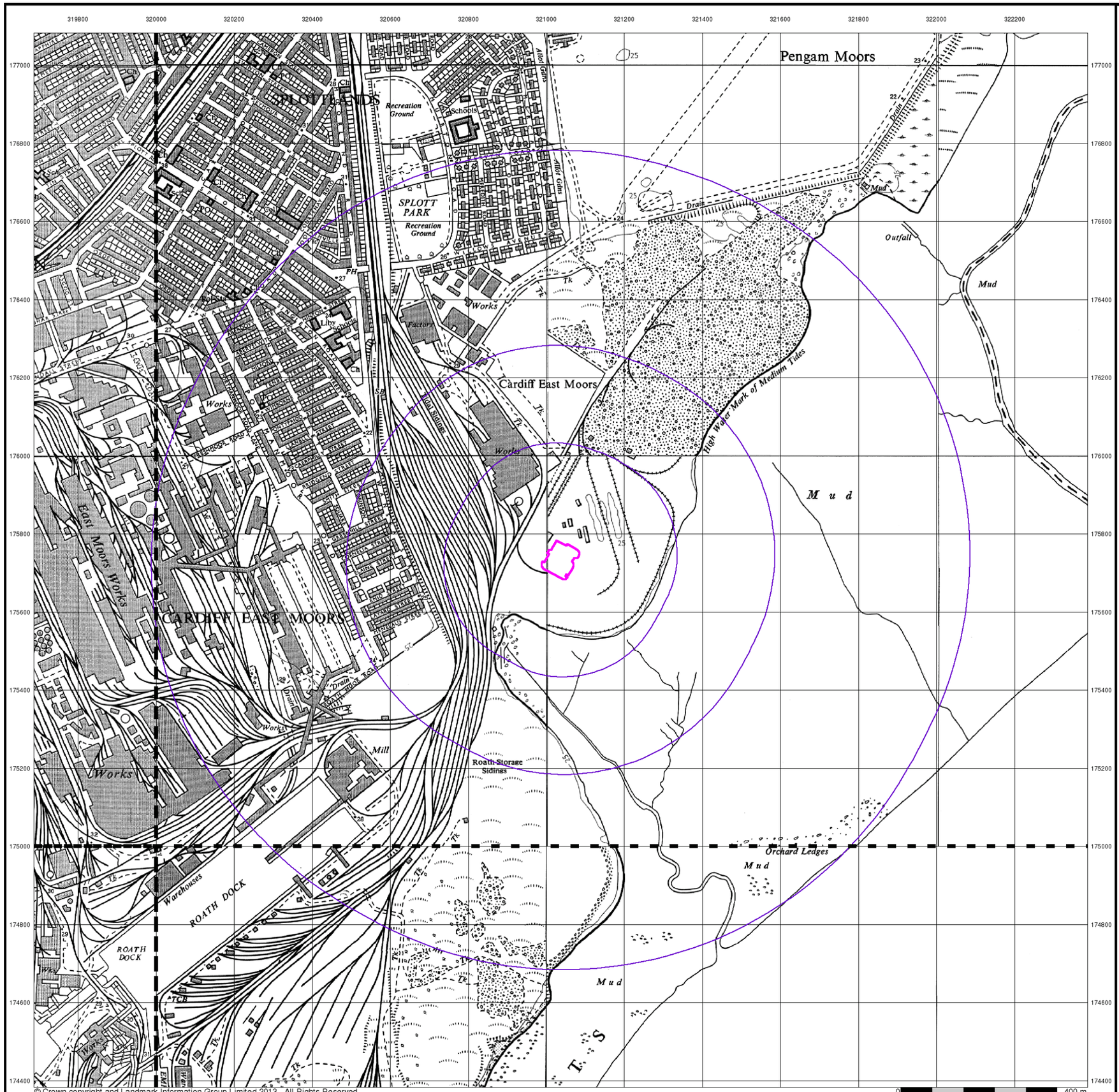


RPS

Ordnance Survey Plan

Published 1964 - 1965

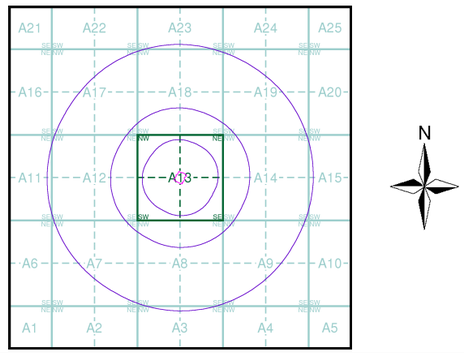
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

ST17NE 1965 1:10,560	ST27NW 1965 1:10,560
ST17SE 1965 1:10,560	ST27SW 1964 1:10,560

Historical Map - Slice A



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	1000

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group

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Web: www.envirocheck.co.uk

RPS

Ordnance Survey Plan

Published 1970 - 1975

Source map scale - 1:10,000

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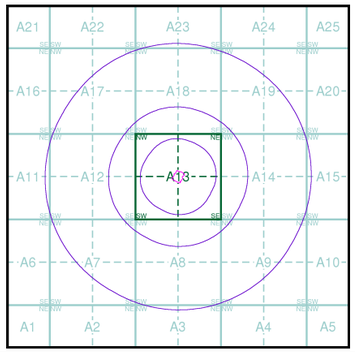
Map Name(s) and Date(s)

ST17NE 1975 1:10,000	ST27NW 1975 1:10,000
ST17SE 1974 1:10,000	ST27SW 1970 1:10,000

Historical Map - Slice A



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
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RPS

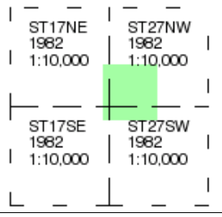
Cardiff

Published 1982

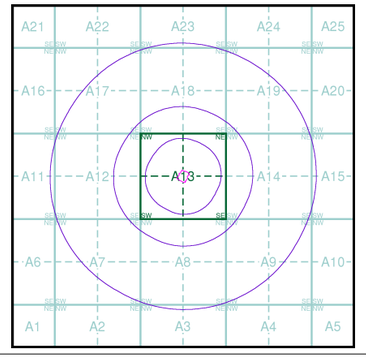
Source map scale - 1:10,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.
They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)



Russian Map - Slice A



Order Details

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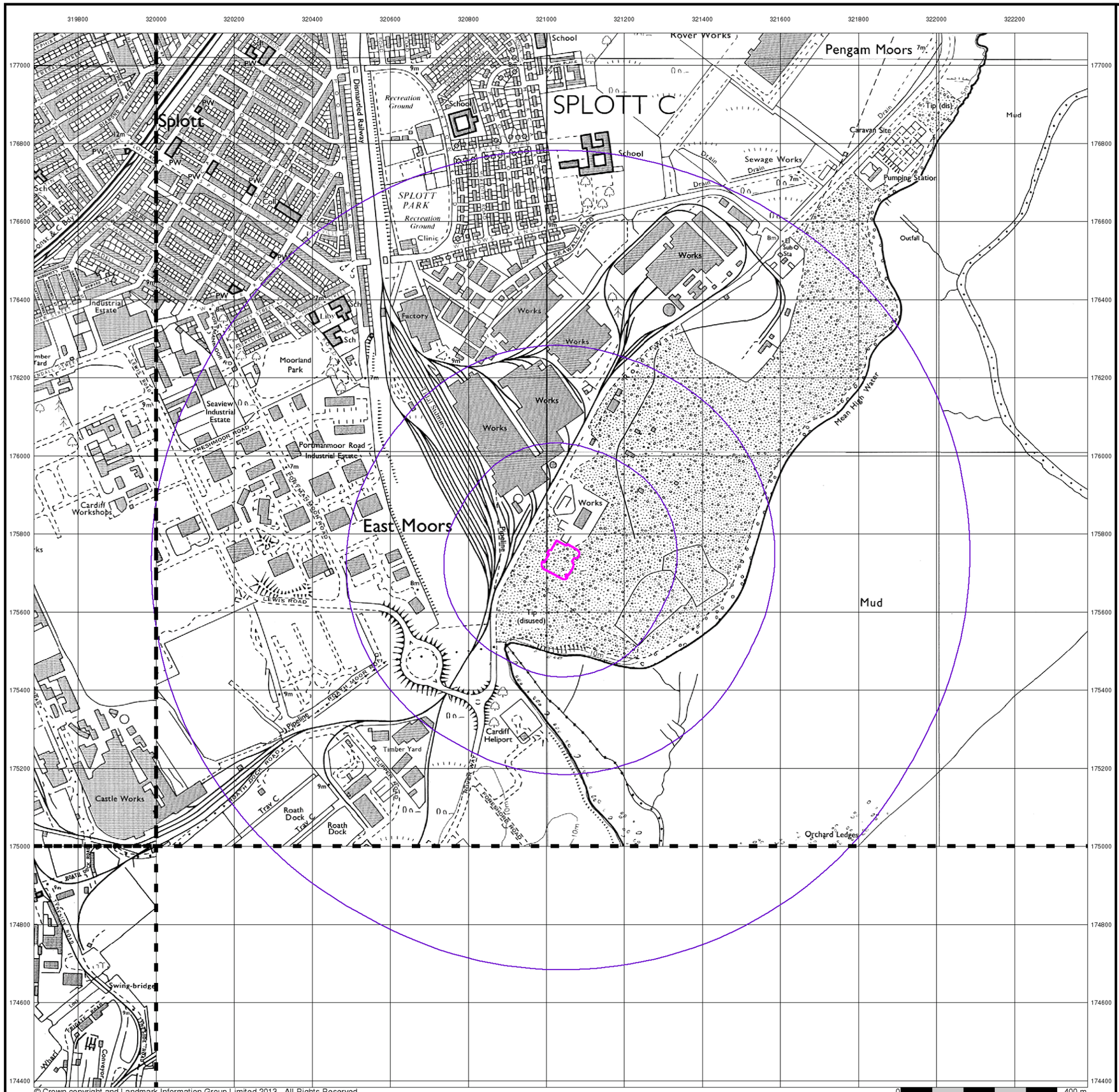


0 400 m

RPS

Ordnance Survey Plan

Published 1984 - 1989

Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

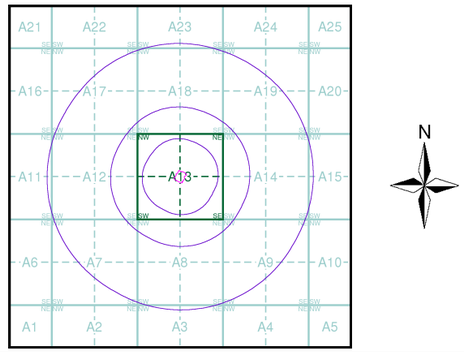
Map Name(s) and Date(s)

ST17NE 1986 1:10,000

ST27NW 1989 1:10,000

ST17SE 1984 1:10,000

Historical Map - Slice A



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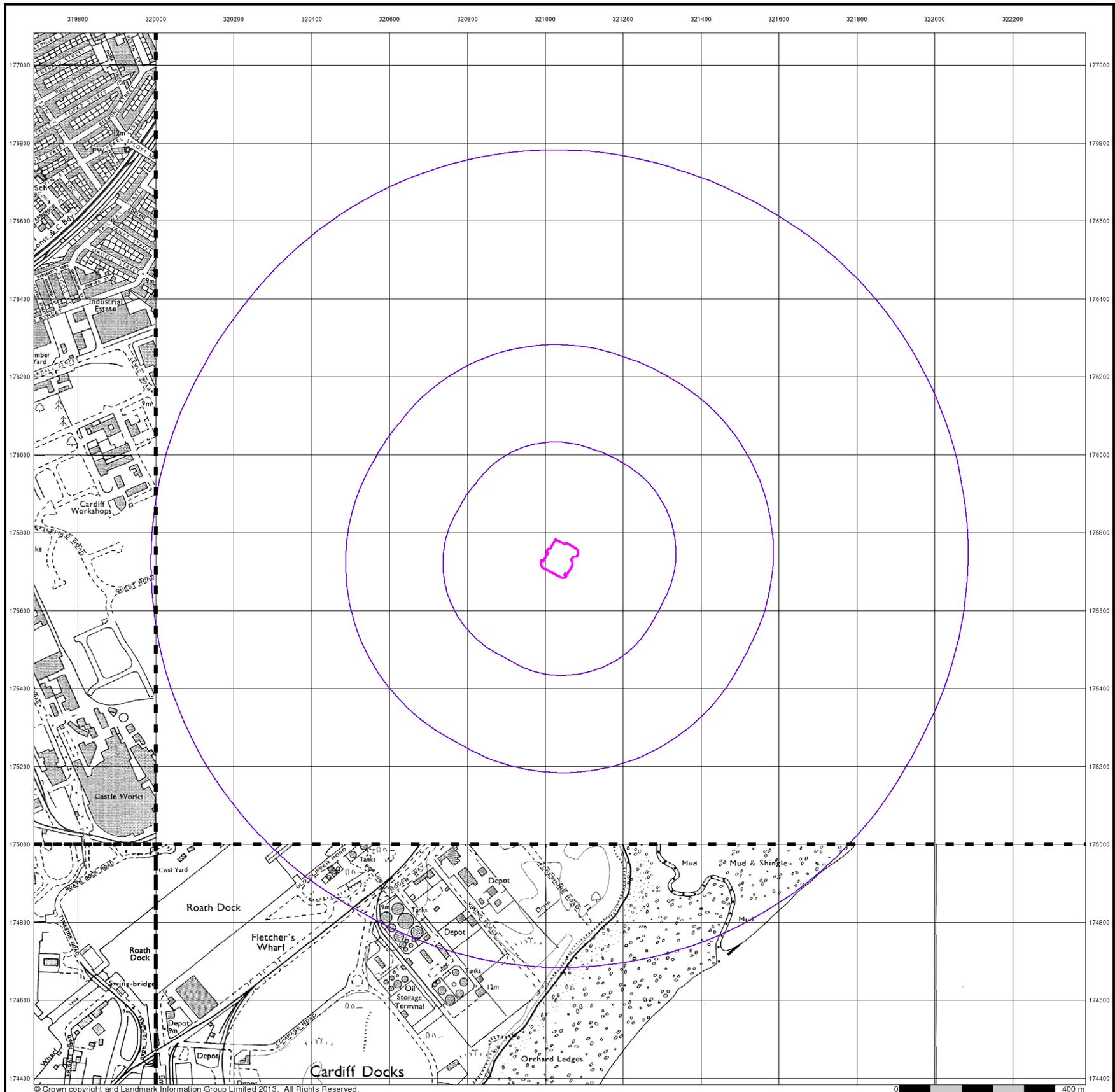


RPS

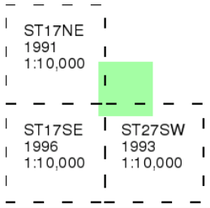
Ordnance Survey Plan

Published 1991 - 1996

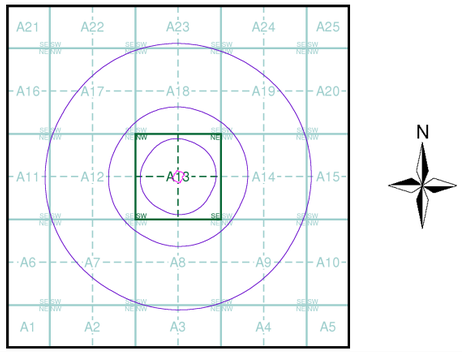
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

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Slice:	A
Site Area (Ha):	0.57
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Site Details

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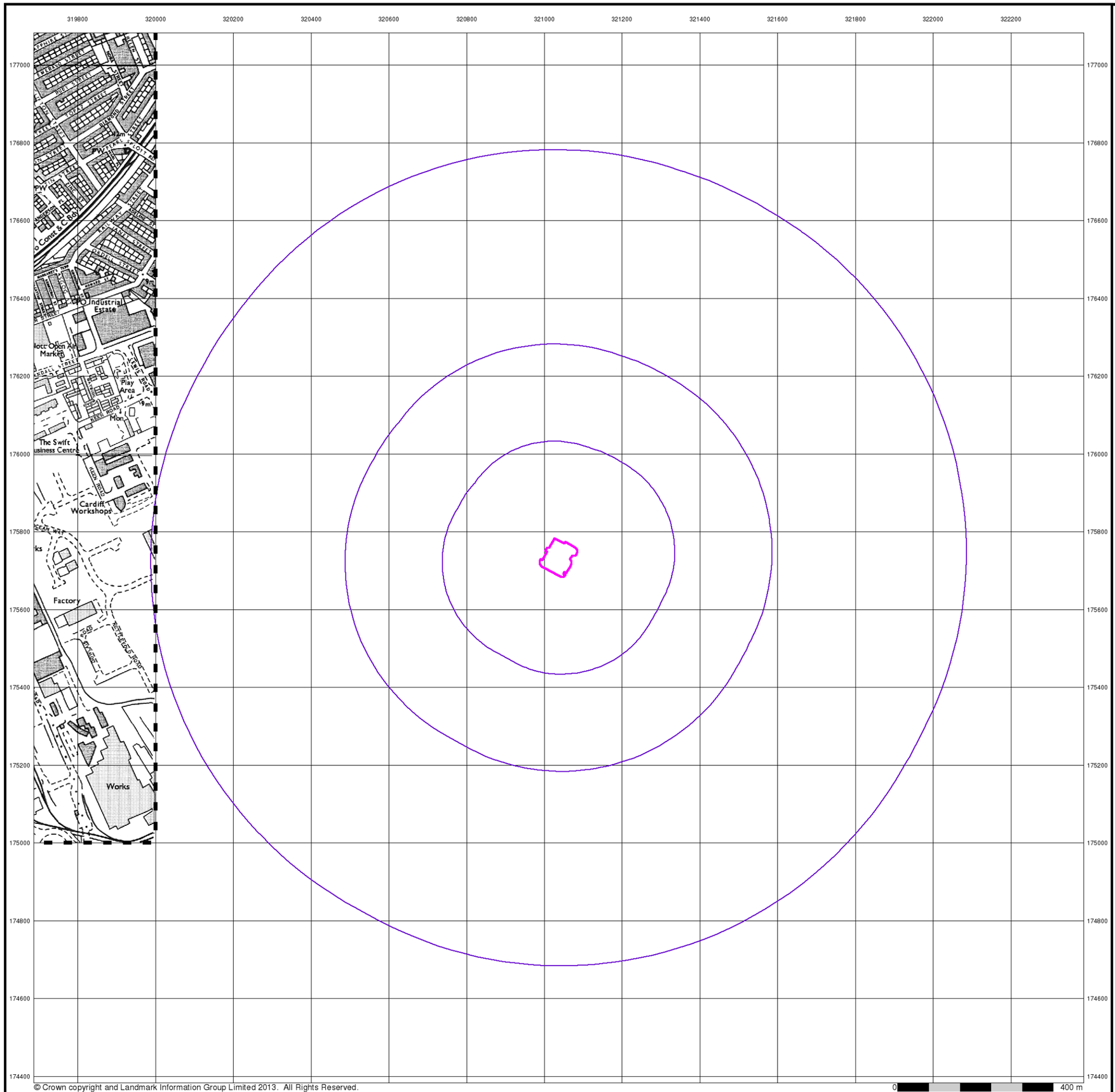

RPS

Ordnance Survey Plan

Published 1995

Source map scale - 1:10,000

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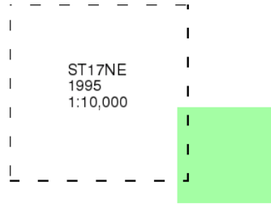
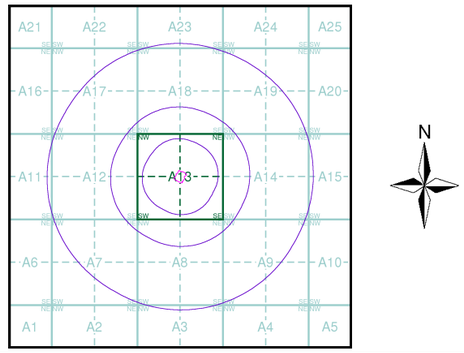
Map Name(s) and Date(s)



Historical Map - Slice A



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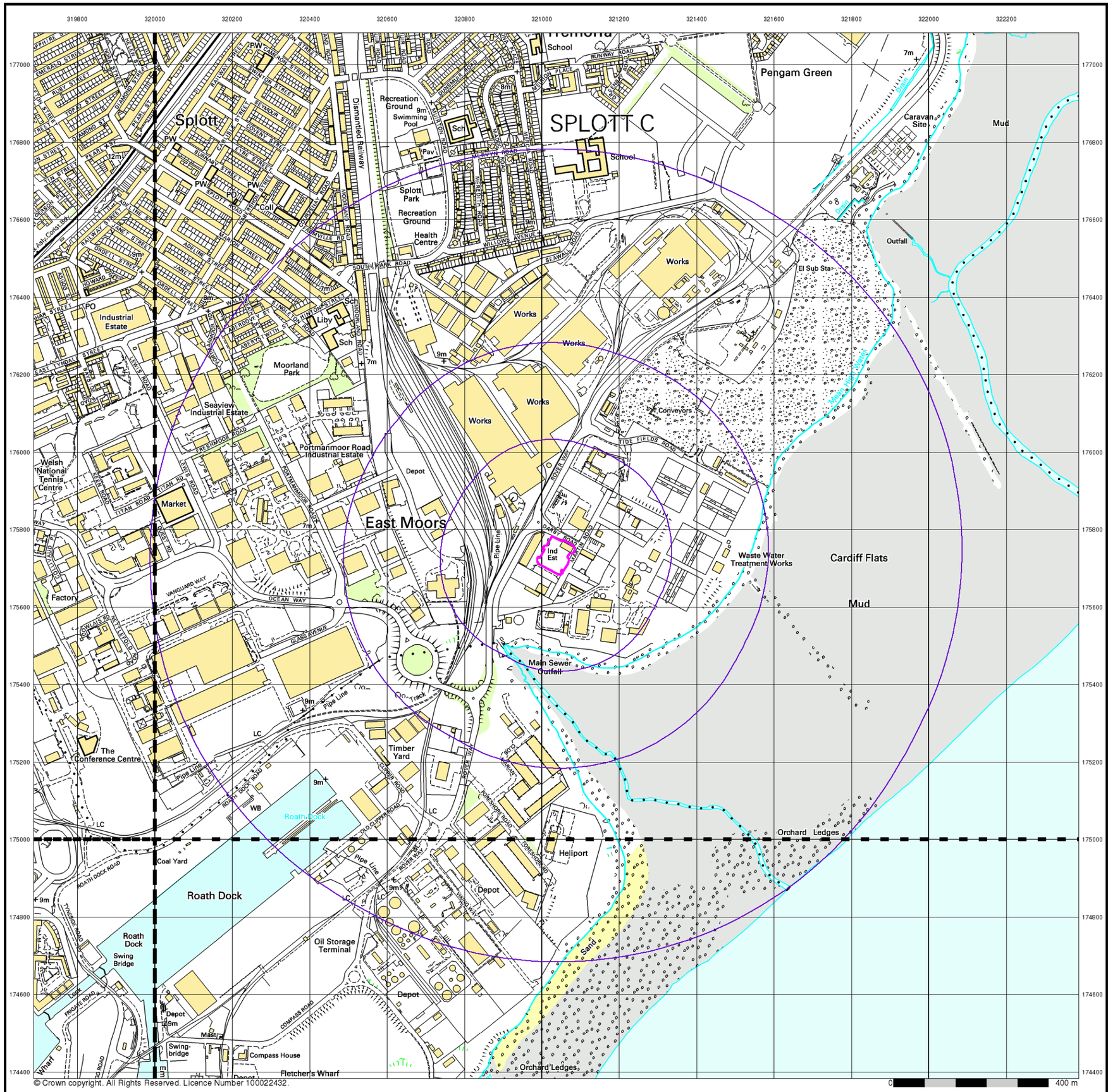

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RPS

10k Raster Mapping

Published 2006

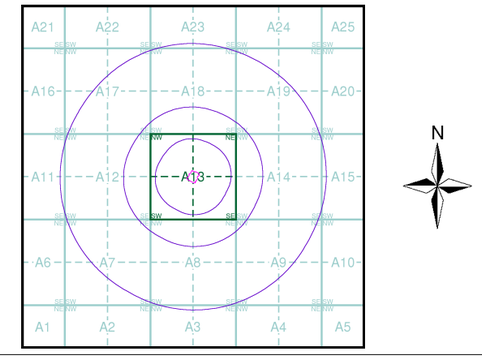
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

ST17NE 2006 1:10,000	ST27NW 2006 1:10,000
ST17SE 2006 1:10,000	ST27SW 2006 1:10,000

Historical Map - Slice A



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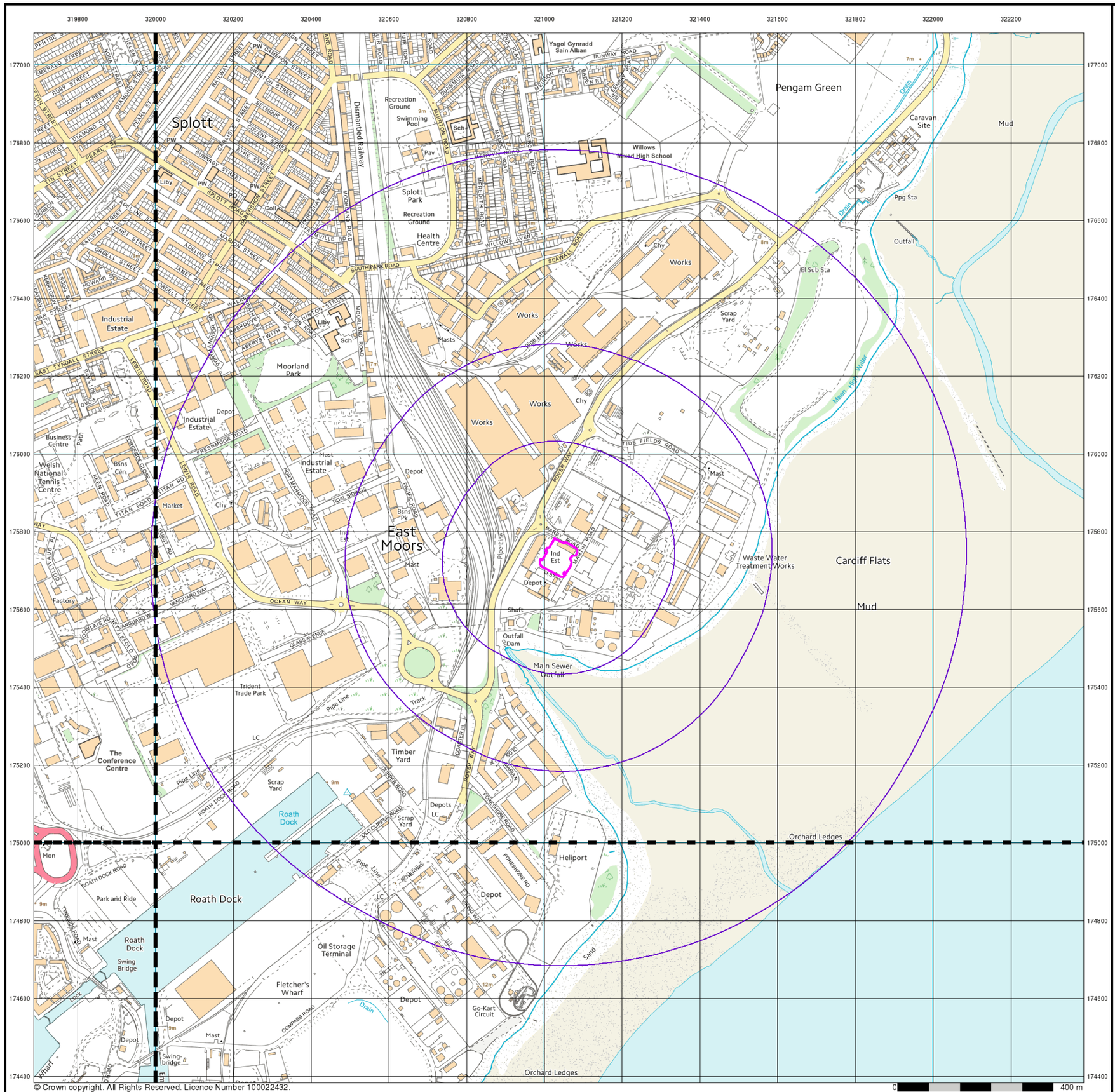


RPS

VectorMap Local

Published 2014

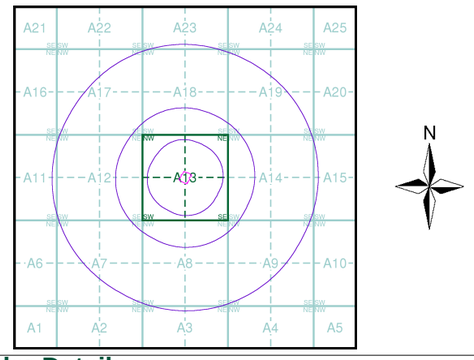
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

ST17NE 2014 Variable	ST27NW 2014 Variable
ST17SE 2014 Variable	ST27SW 2014 Variable

Historical Map - Slice A



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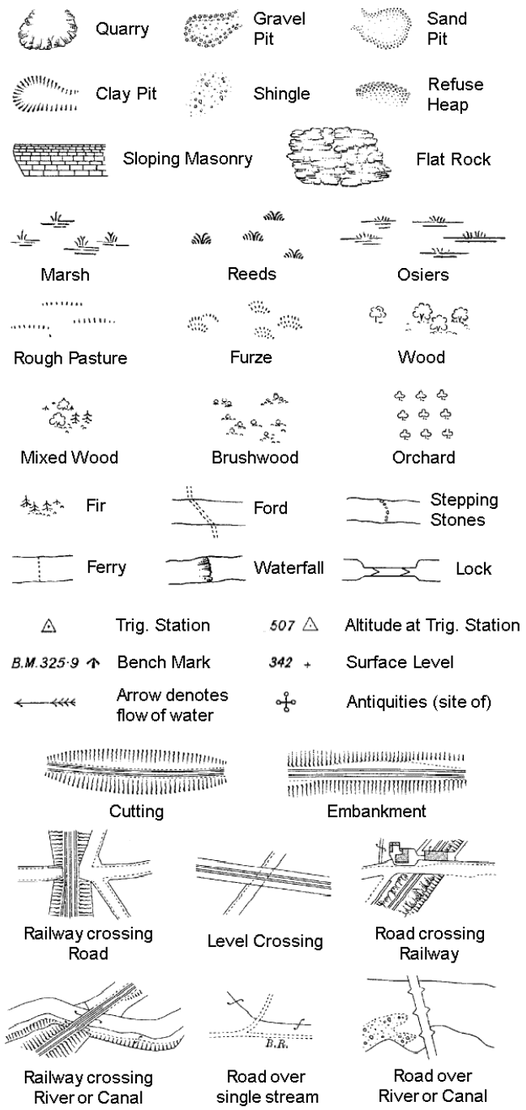
Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)

County & Civil Parish Boundary

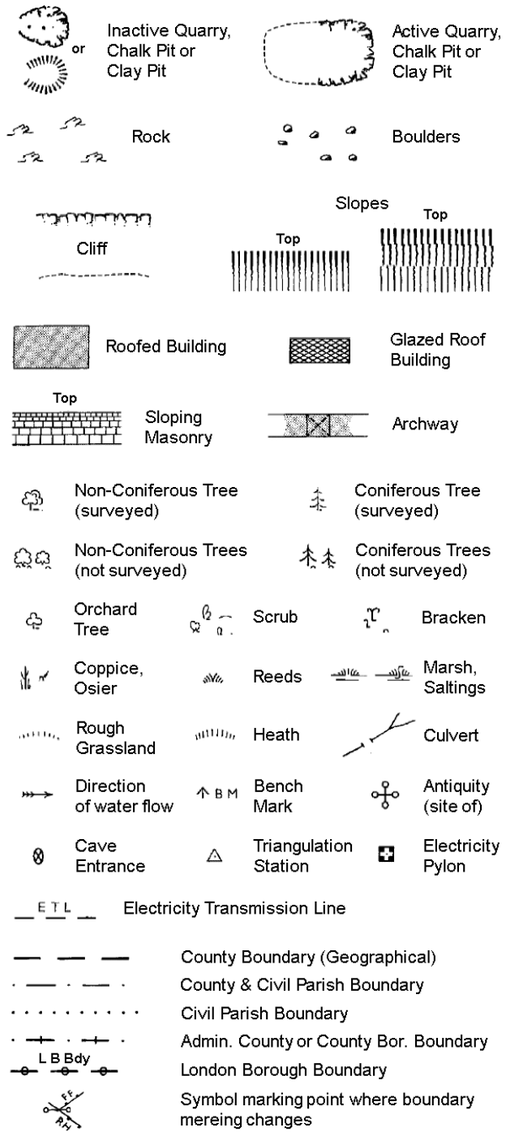
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

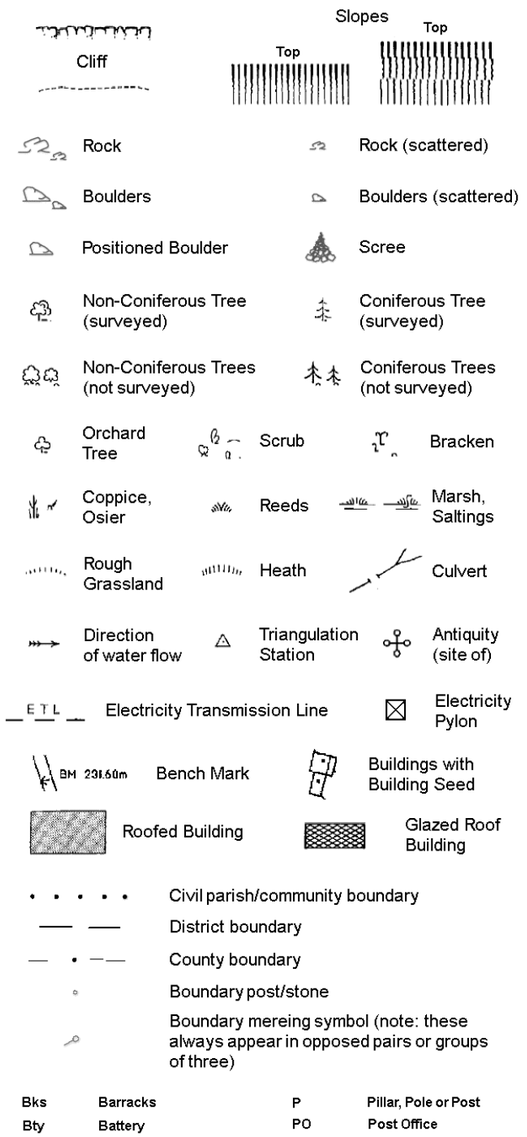
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

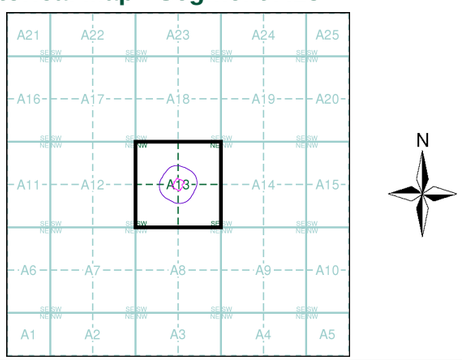
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

RPS

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:2,500	1880	2
Glamorganshire	1:2,500	1901	3
Glamorganshire	1:2,500	1919	4
Glamorganshire	1:2,500	1942	5
Ordnance Survey Plan	1:1,250	1954 - 1957	6
Ordnance Survey Plan	1:2,500	1954 - 1969	7
Ordnance Survey Plan	1:1,250	1966 - 1968	8
Additional SIMs	1:1,250	1966 - 1985	9
Ordnance Survey Plan	1:2,500	1969 - 1970	10
Additional SIMs	1:2,500	1987	11
Additional SIMs	1:1,250	1988	12
Ordnance Survey Plan	1:1,250	1989	13
Large-Scale National Grid Data	1:1,250	1992	14
Large-Scale National Grid Data	1:2,500	1992	15
Large-Scale National Grid Data	1:1,250	1993 - 1995	16
Large-Scale National Grid Data	1:2,500	1993	17
Large-Scale National Grid Data	1:1,250	1994 - 1995	18

Historical Map - Segment A13



Order Details

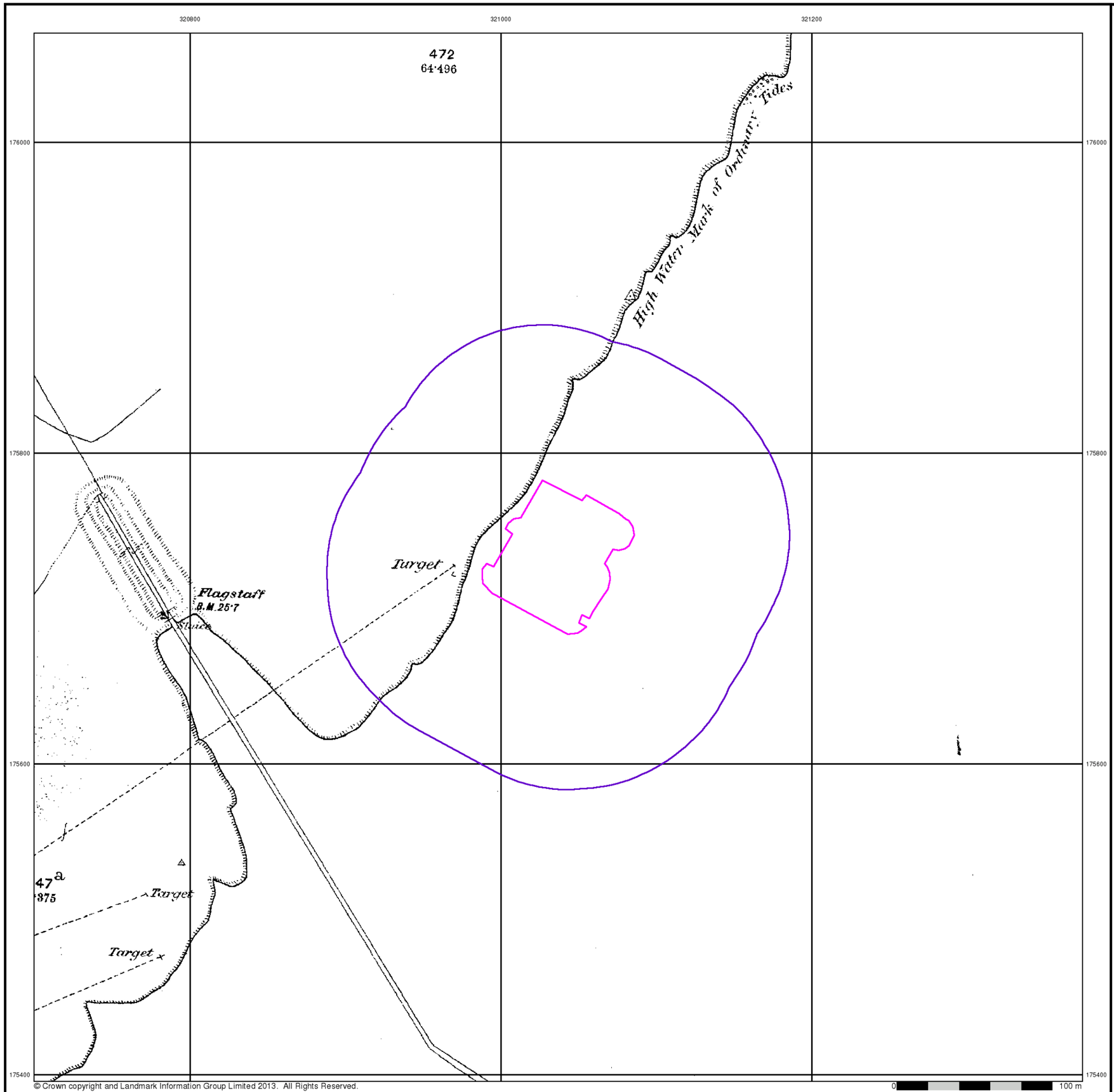
Order Number: 63625239_1_1
Customer Ref: JER6480
National Grid Reference: 321040, 175730
Slice: A
Site Area (Ha): 0.57
Search Buffer (m): 100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark® Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



RPS

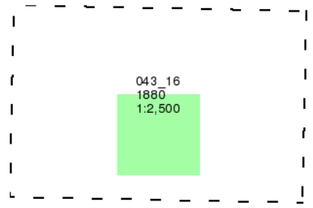
Glamorganshire

Published 1880

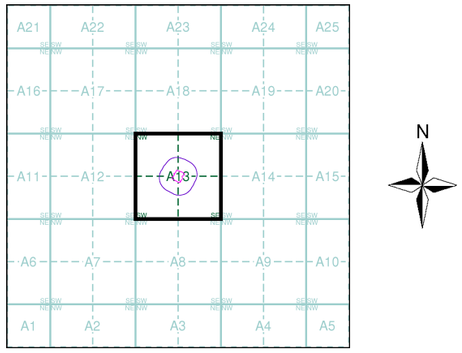
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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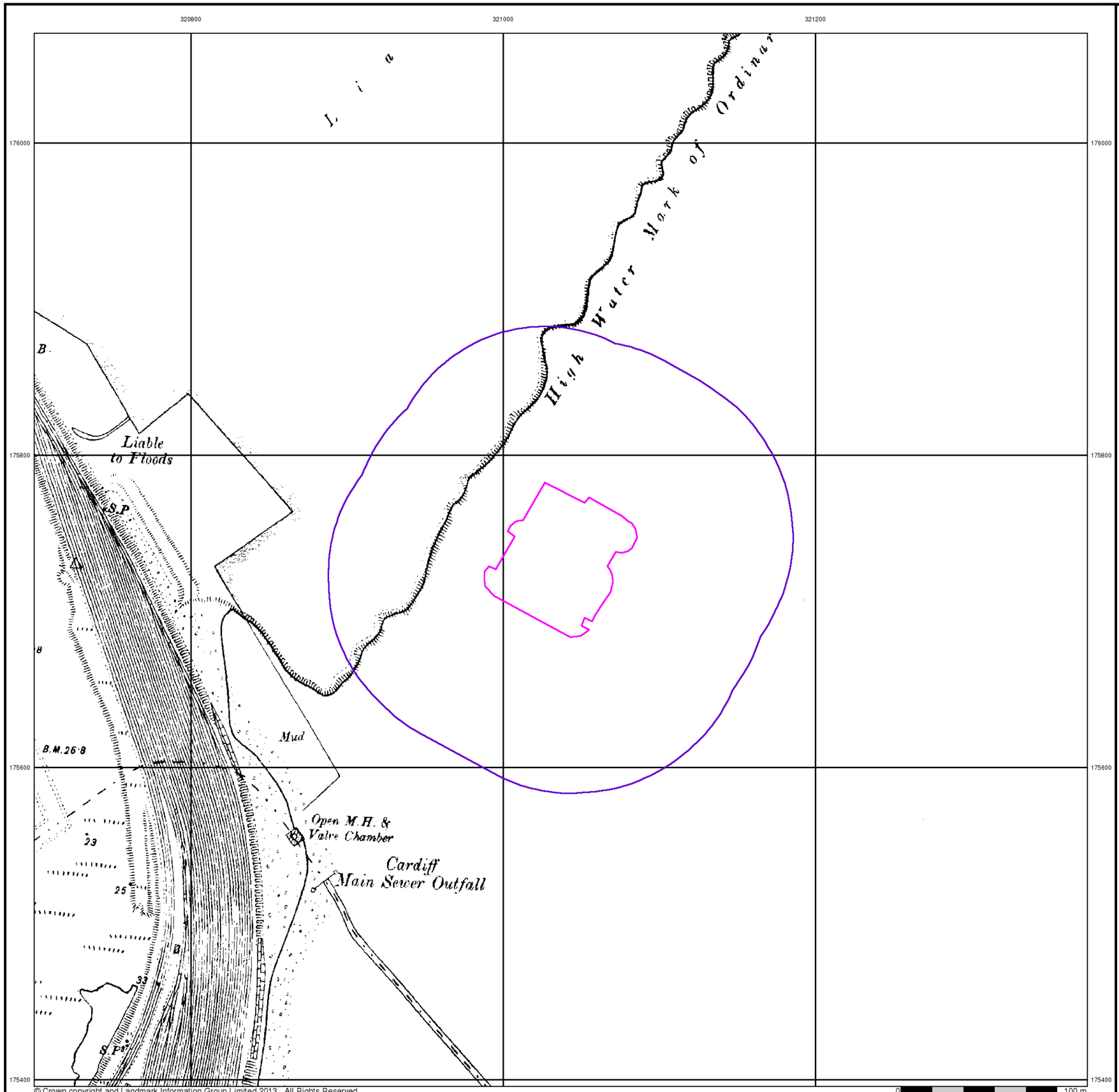


RPS

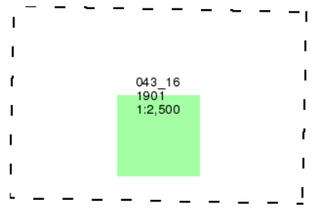
Glamorganshire

Published 1901

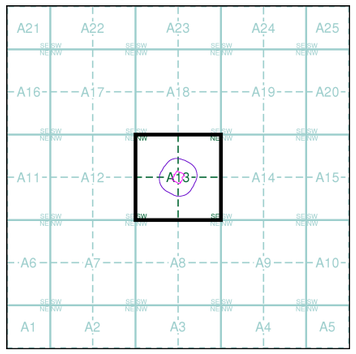
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

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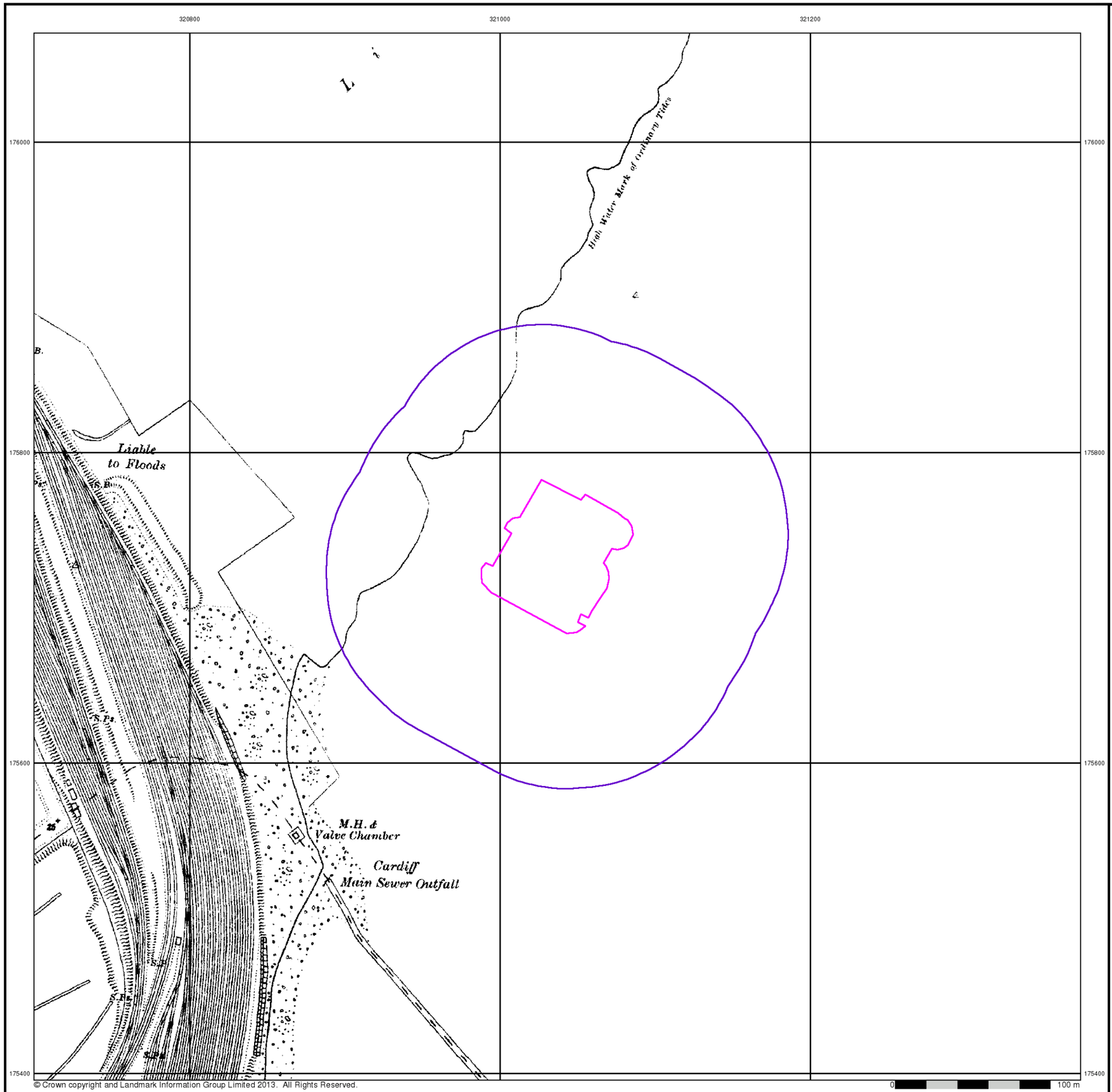


RPS

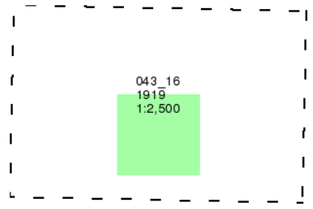
Glamorganshire

Published 1919

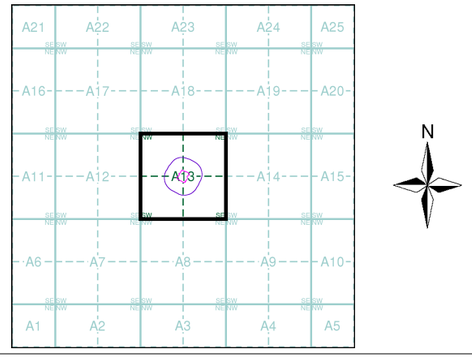
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

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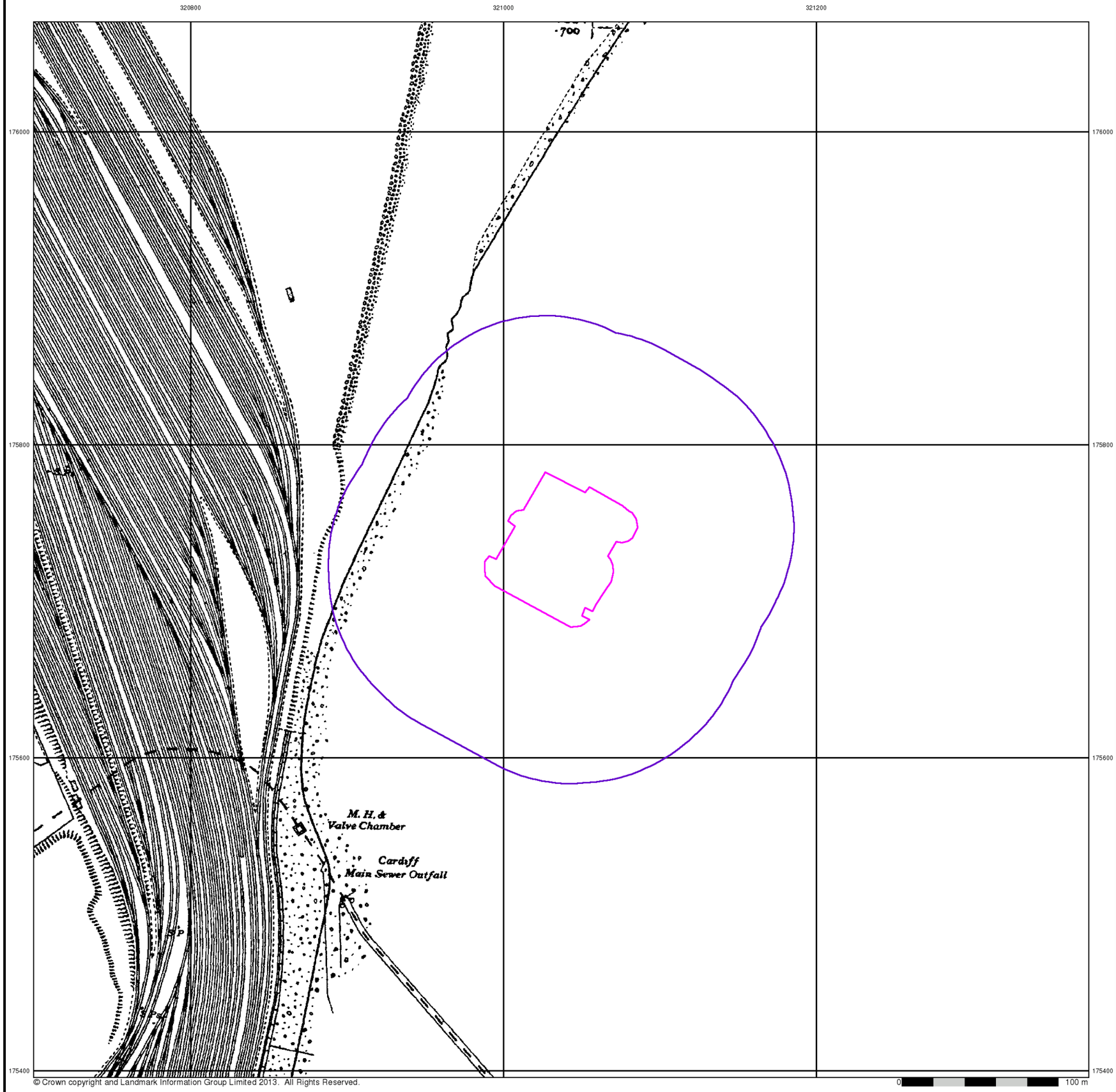


0 100 m

RPS

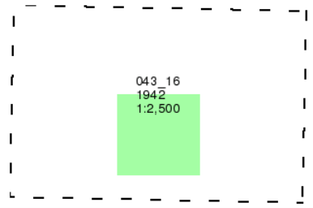
Glamorganshire

Published 1942

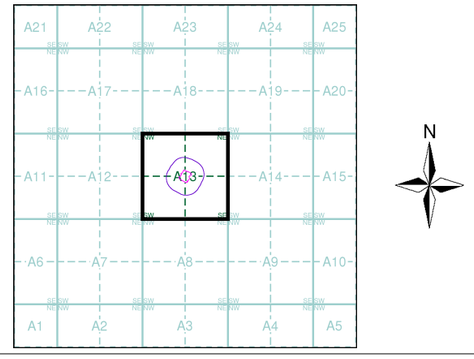
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

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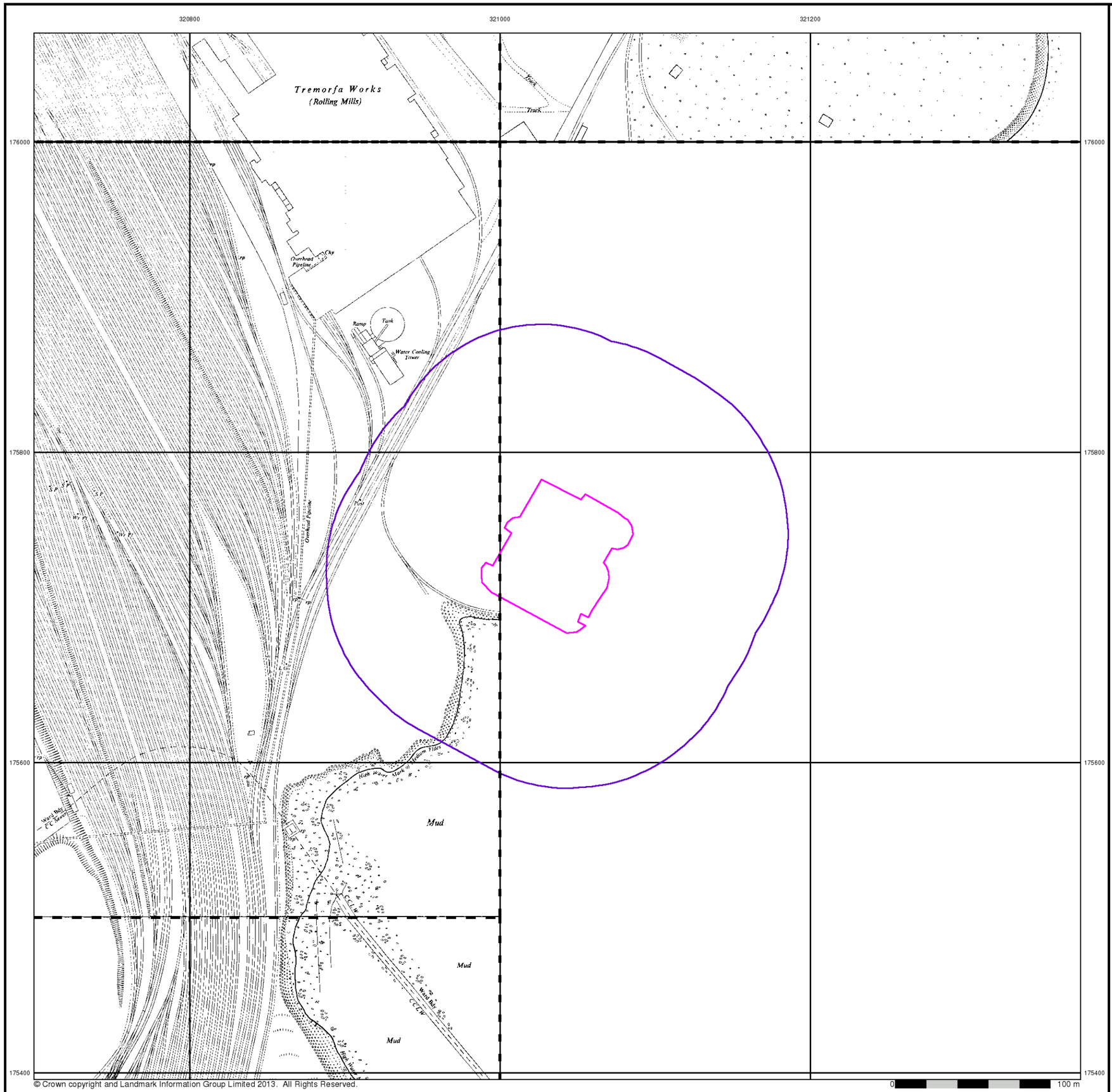


RPS

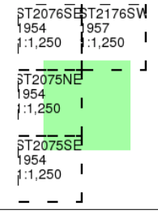
Ordnance Survey Plan

Published 1954 - 1957

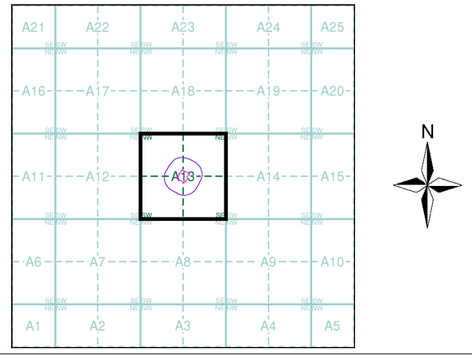
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

RPS

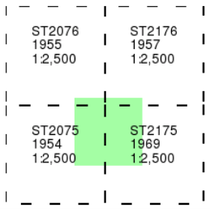
Ordnance Survey Plan

Published 1954 - 1969

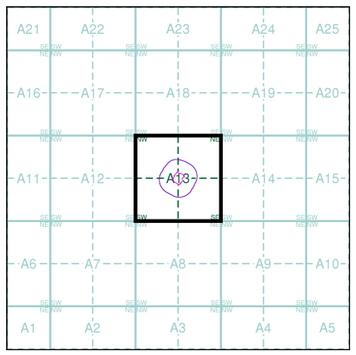
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group

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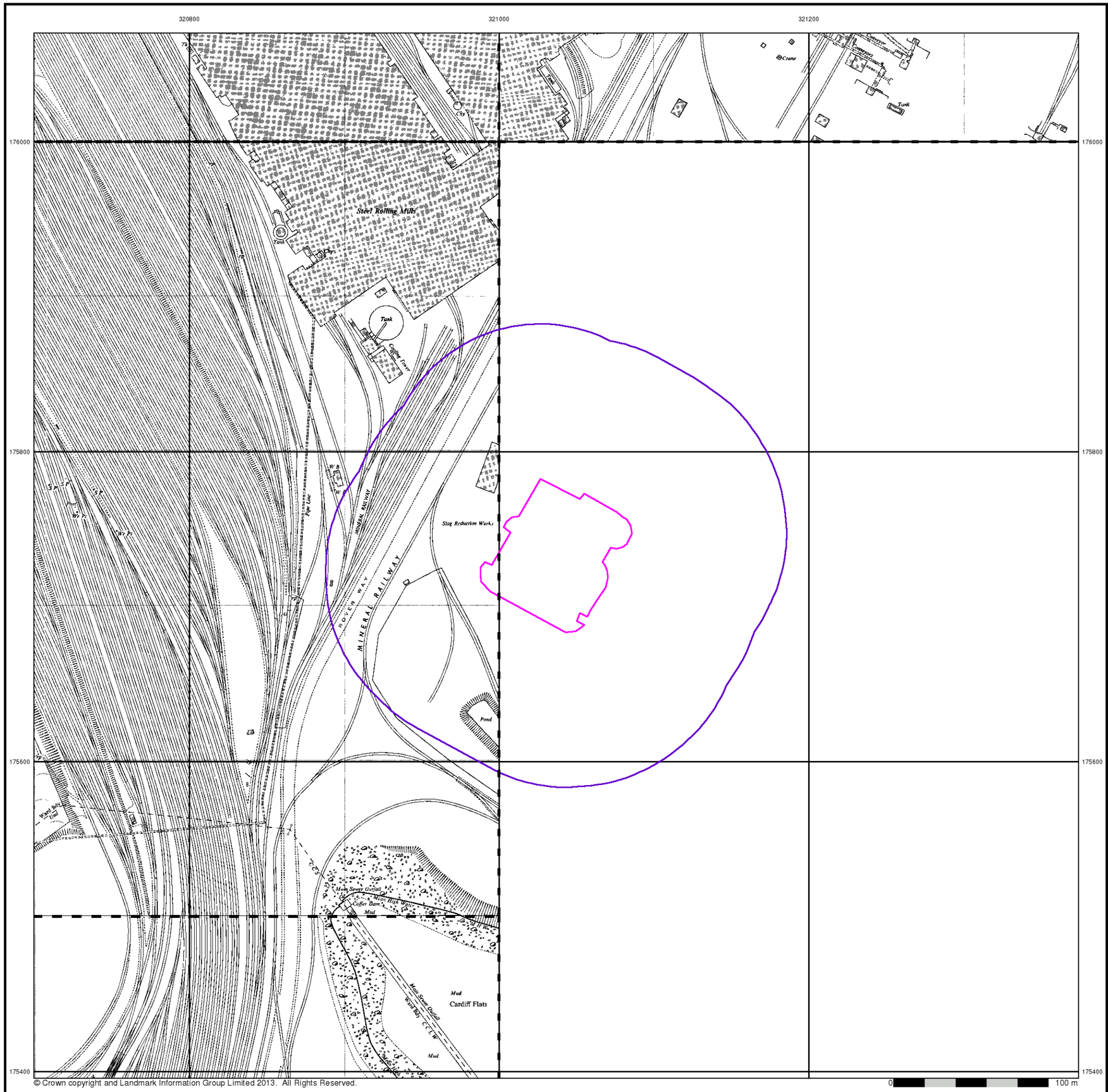


RPS

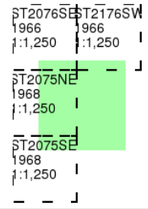
Ordnance Survey Plan

Published 1966 - 1968

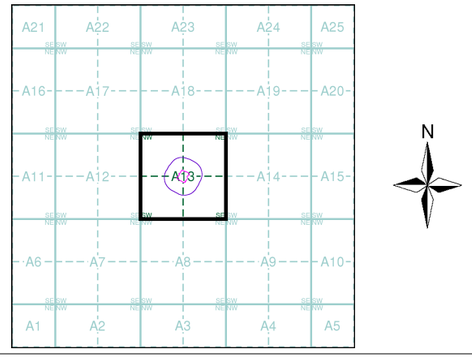
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group
Tel: 0844 844 9952
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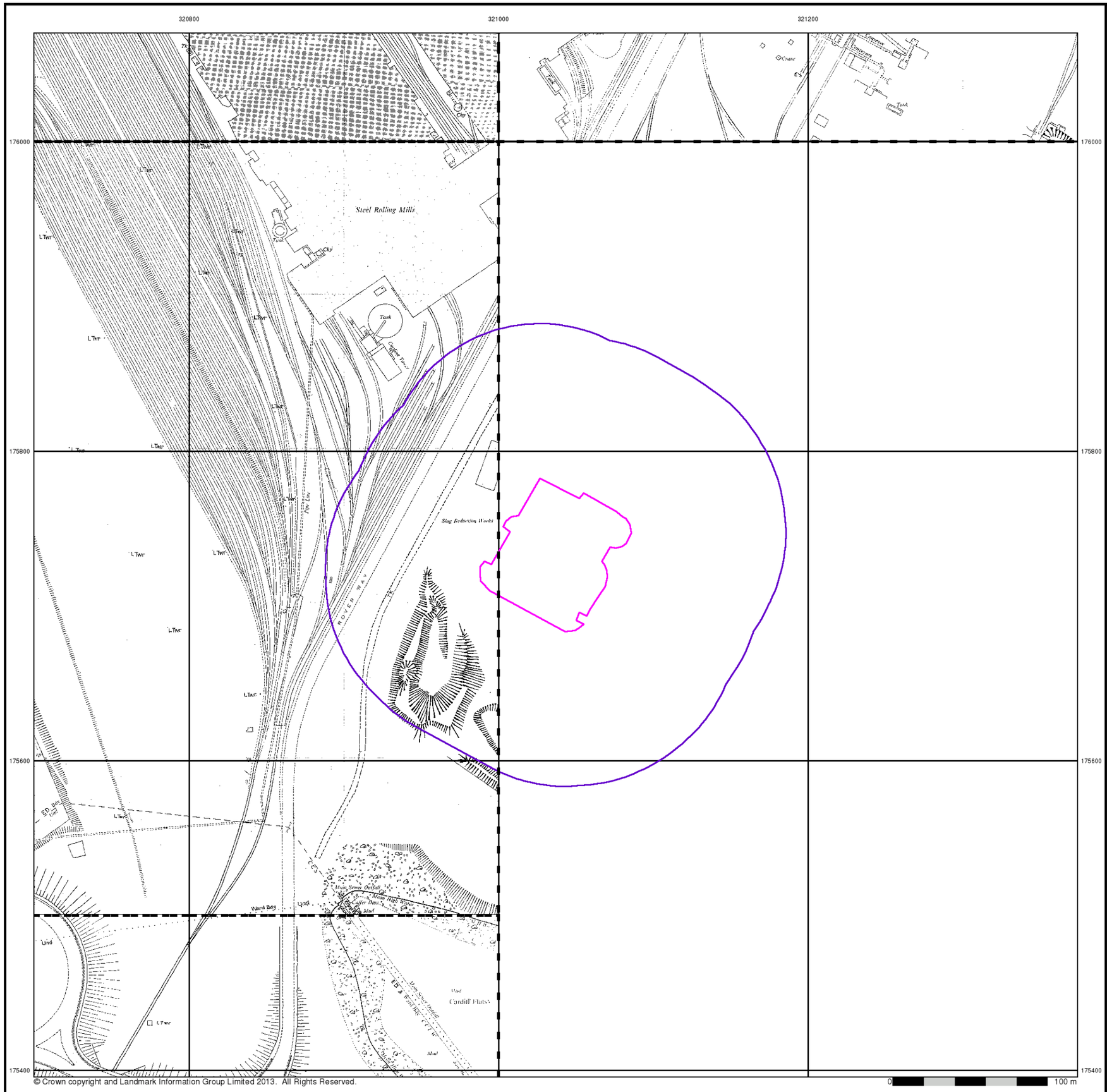


RPS

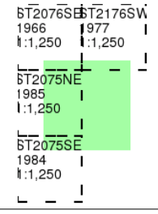
Additional SIMs

Published 1966 - 1985

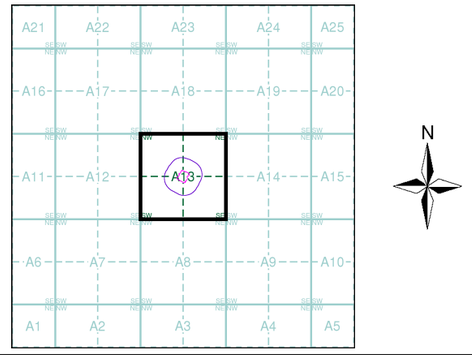
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group
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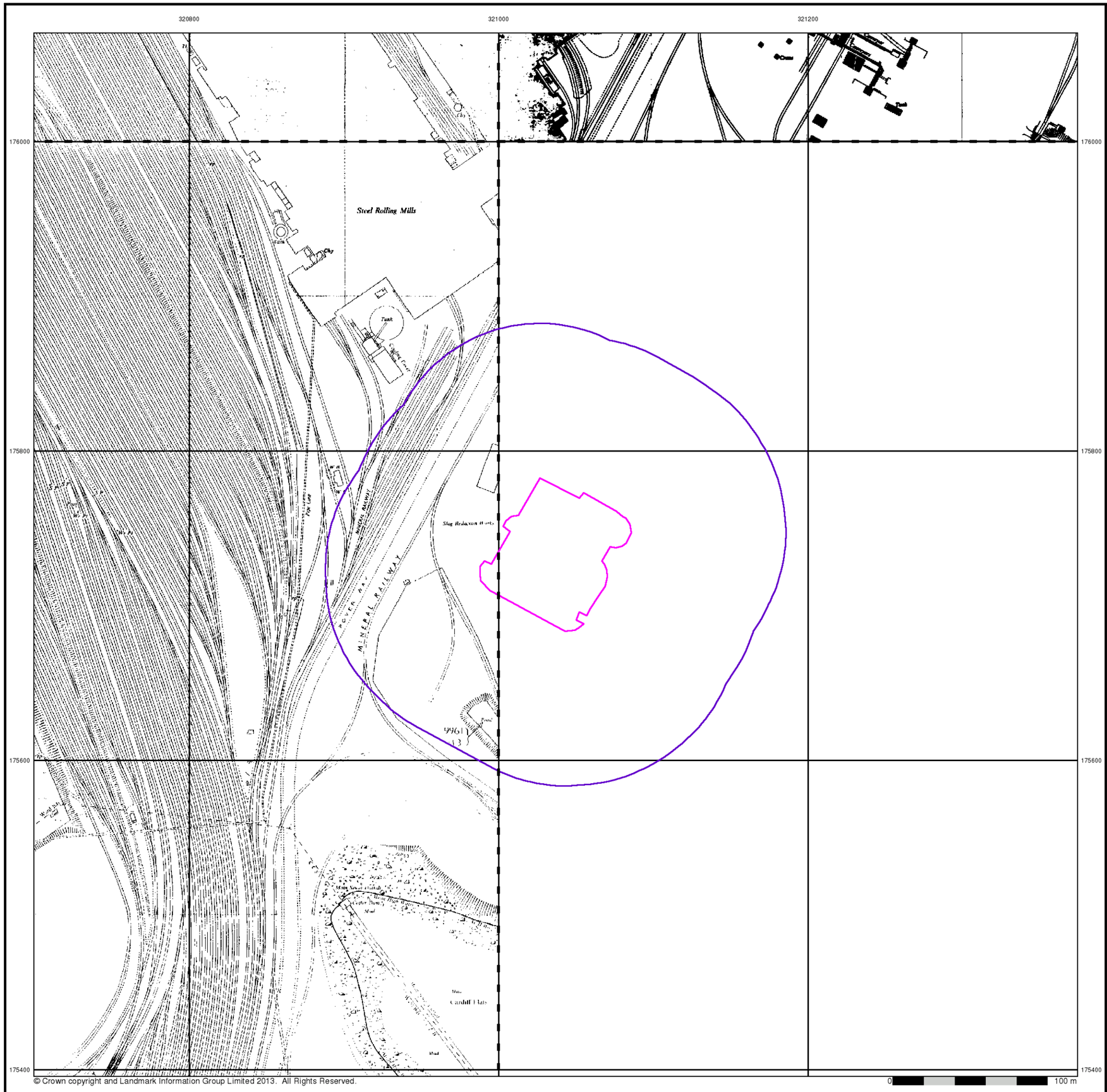

RPS

Ordnance Survey Plan

Published 1969 - 1970

Source map scale - 1:2,500

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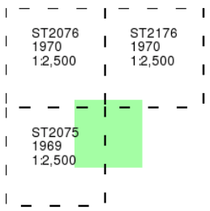
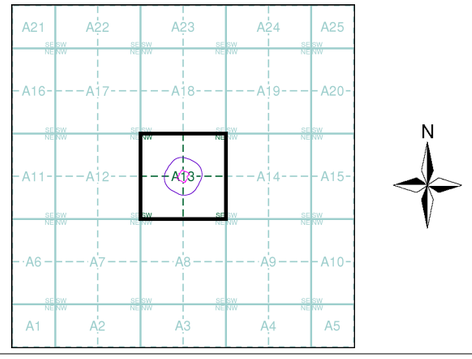
Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

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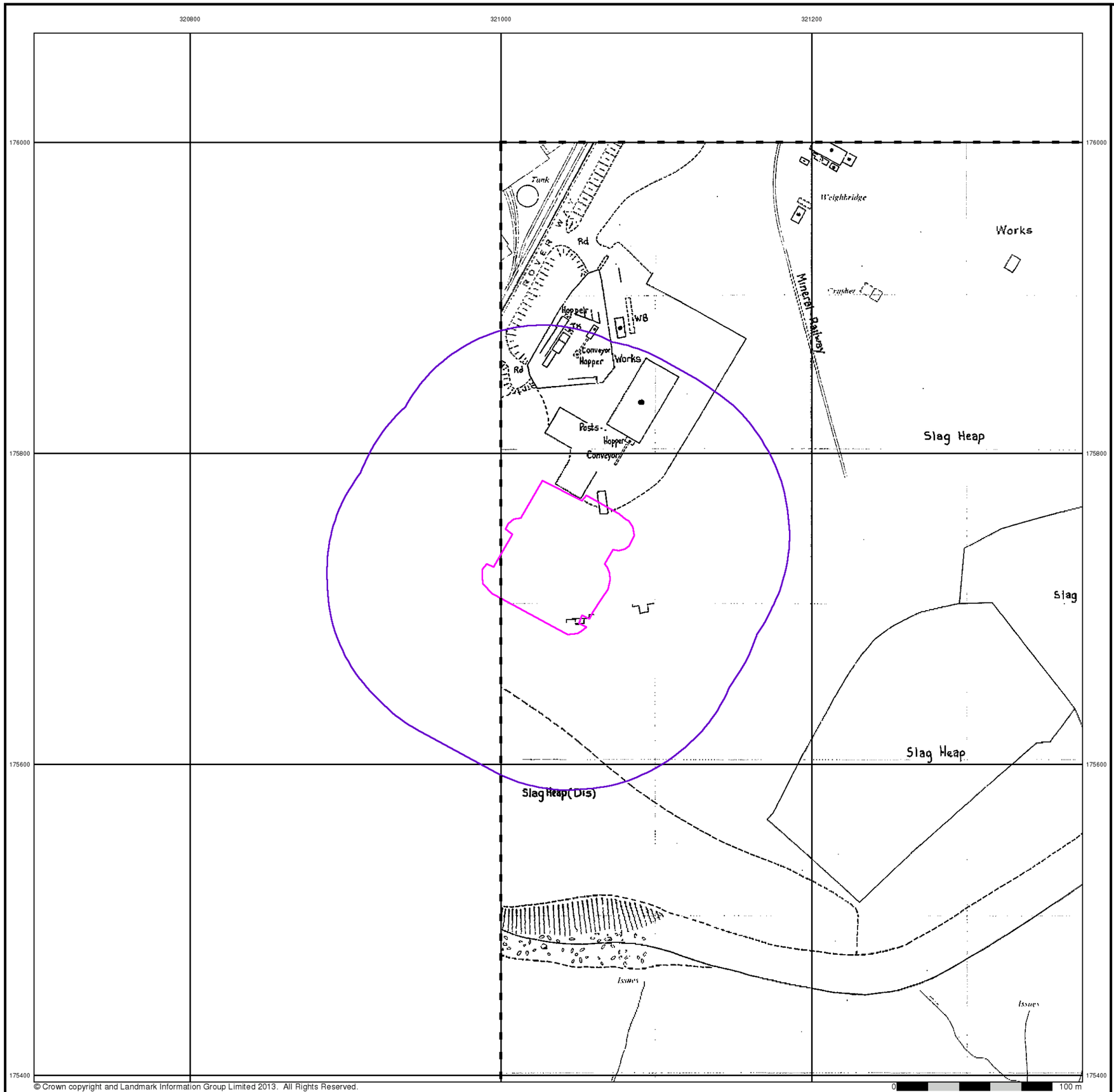


RPS

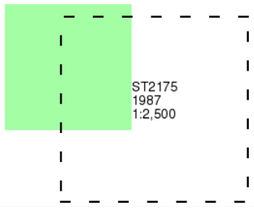
Additional SIMs

Published 1987

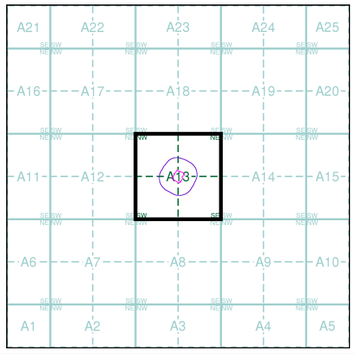
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
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Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

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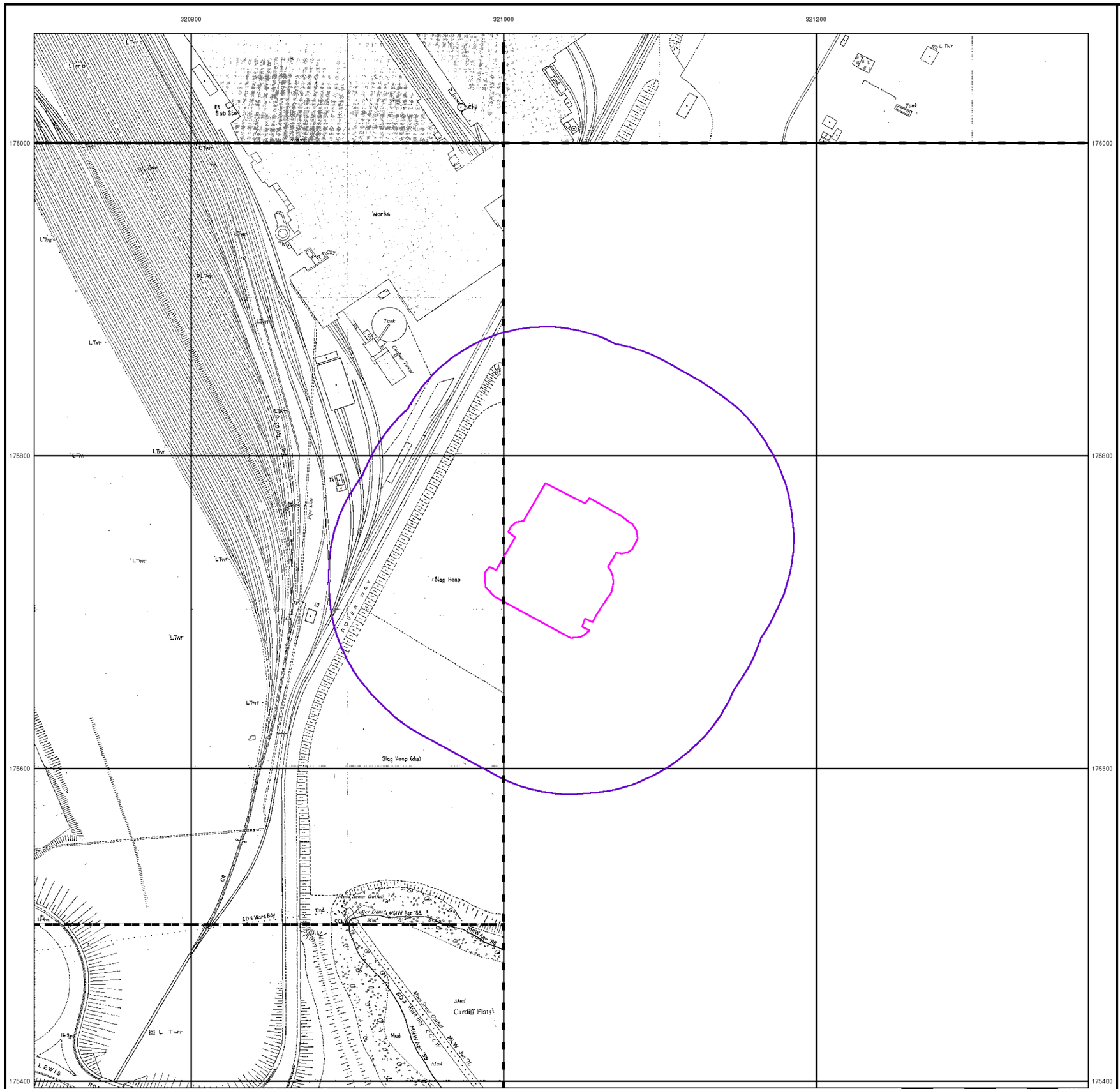


RPS

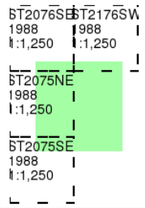
Additional SIMs

Published 1988

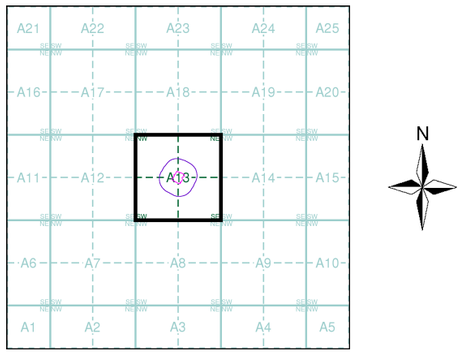
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



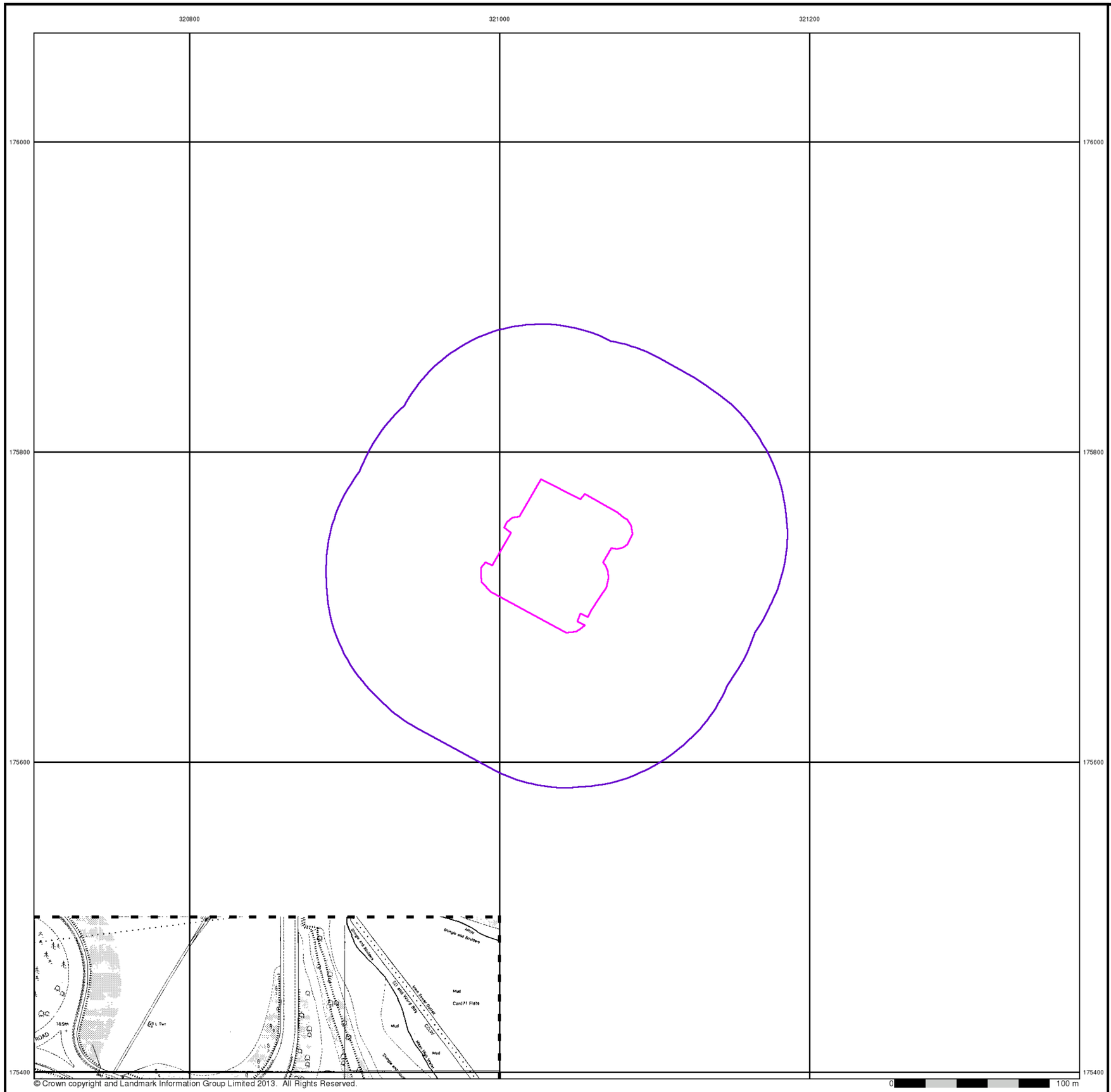
Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



RPS

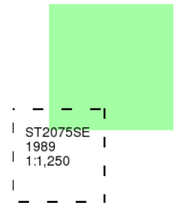
Ordnance Survey Plan

Published 1989

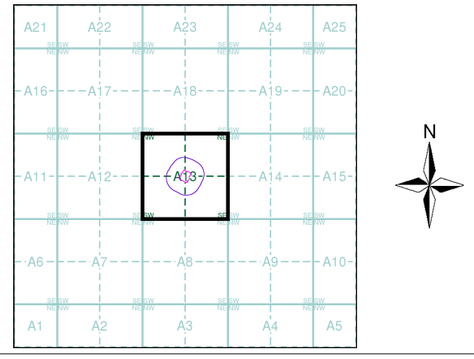
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

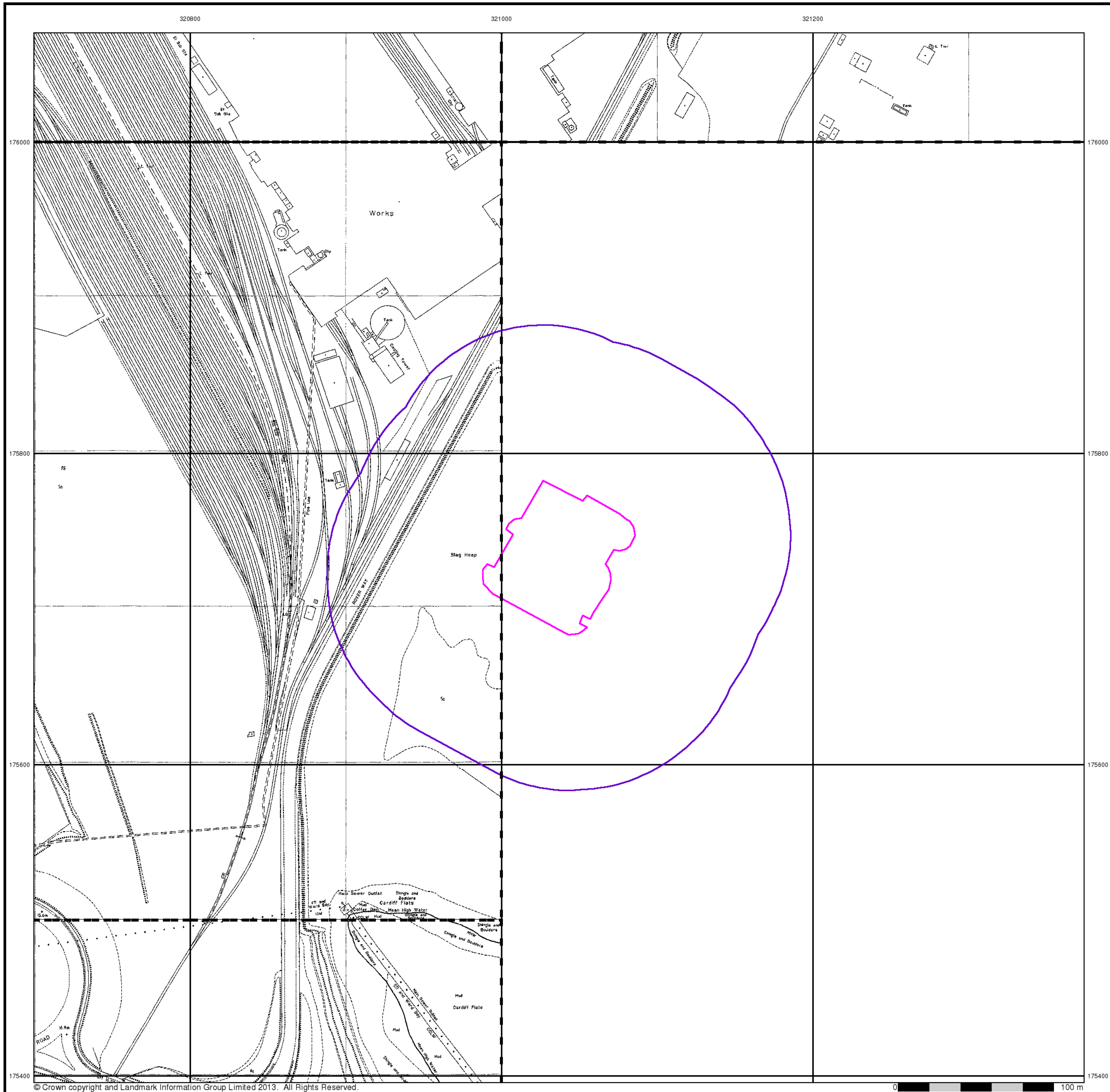
Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



RPS

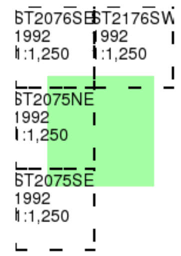
Large-Scale National Grid Data

Published 1992

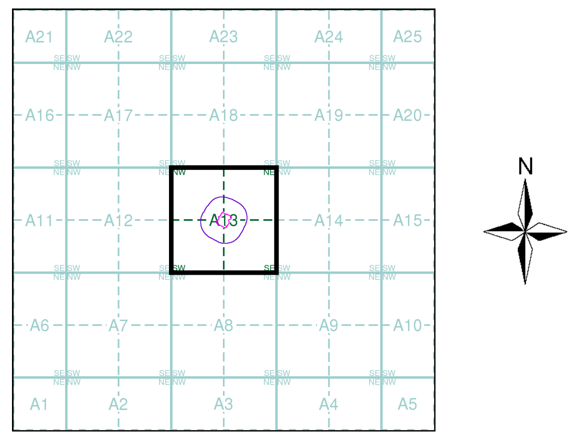
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 63625239_1_1
Customer Ref: JER6480
National Grid Reference: 321040, 175730
Slice: A
Site Area (Ha): 0.57
Search Buffer (m): 100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group

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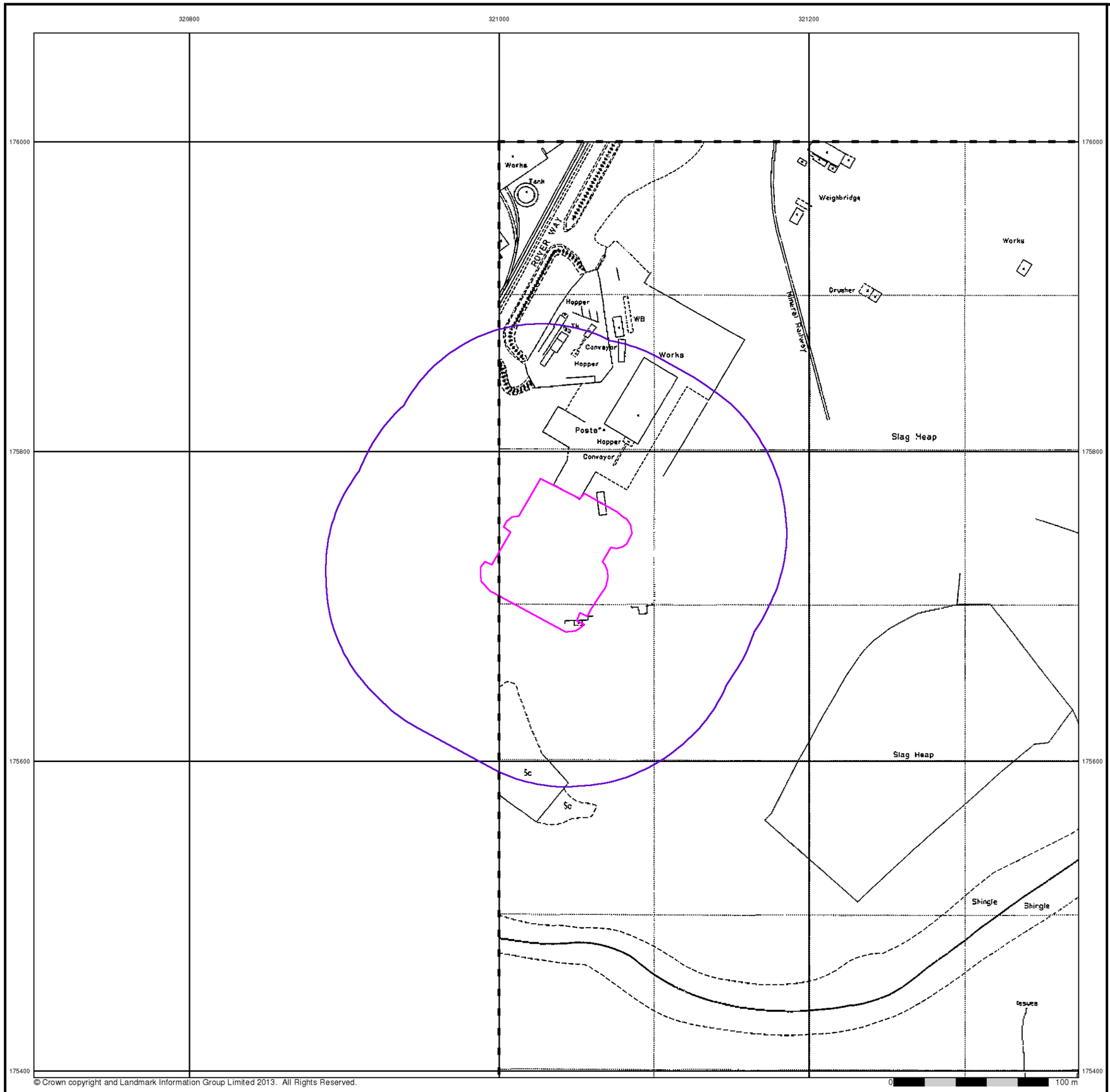
Web: www.envirocheck.co.uk



RPS

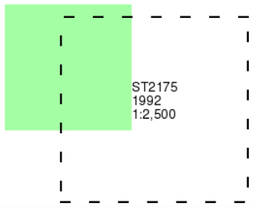
Large-Scale National Grid Data

Published 1992

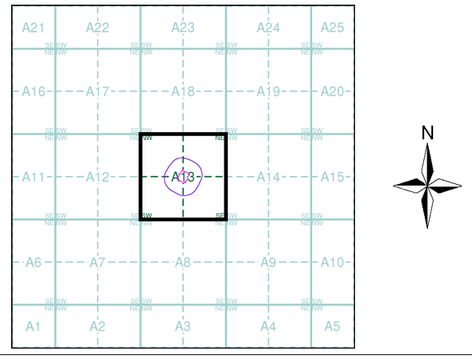
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group

Tel: 0844 844 9952
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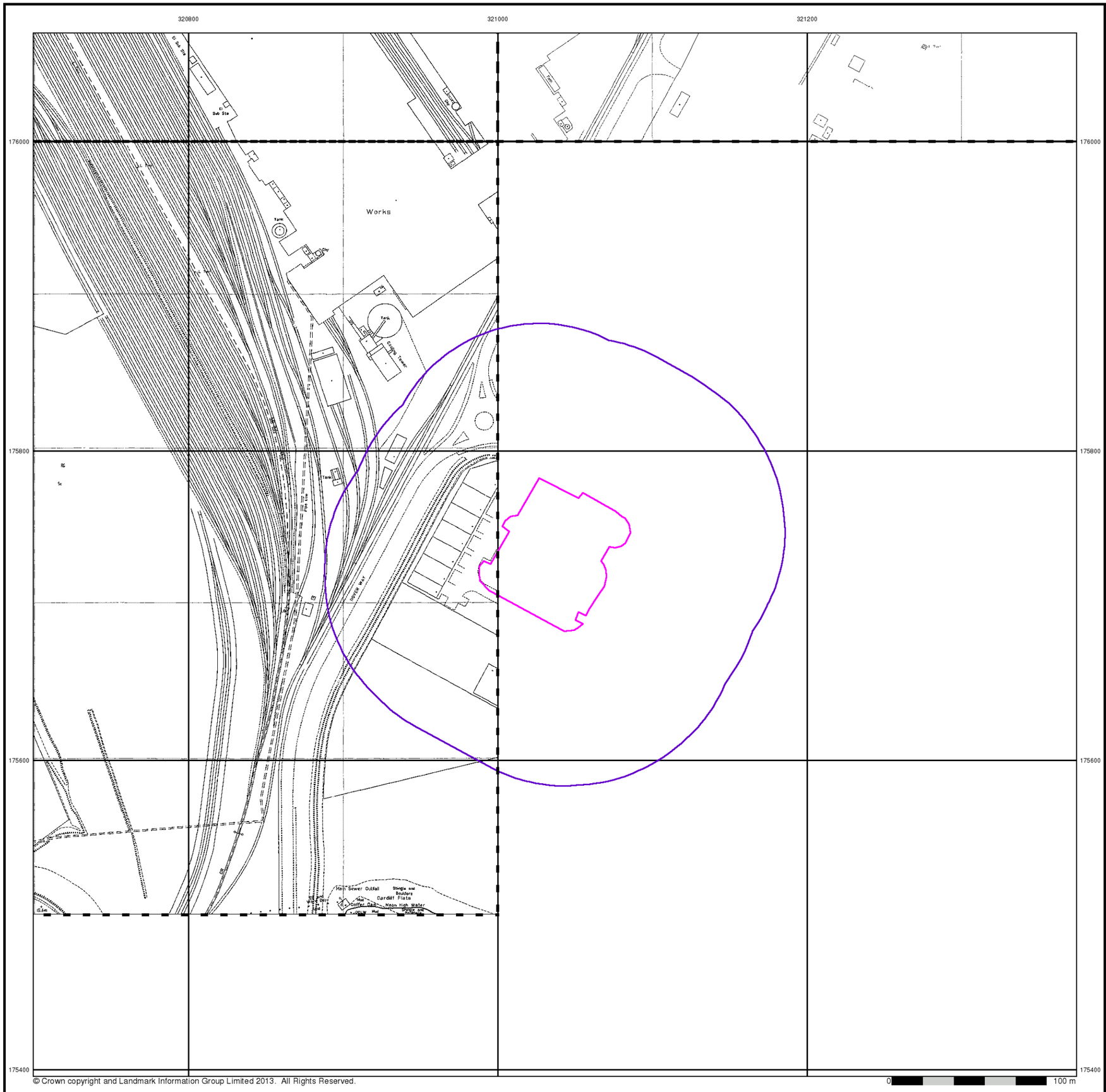
Web: www.envirocheck.co.uk



RPS

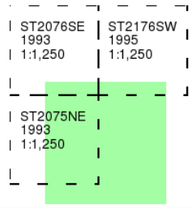
Large-Scale National Grid Data

Published 1993 - 1995

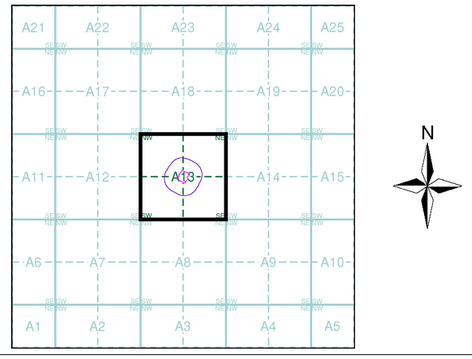
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

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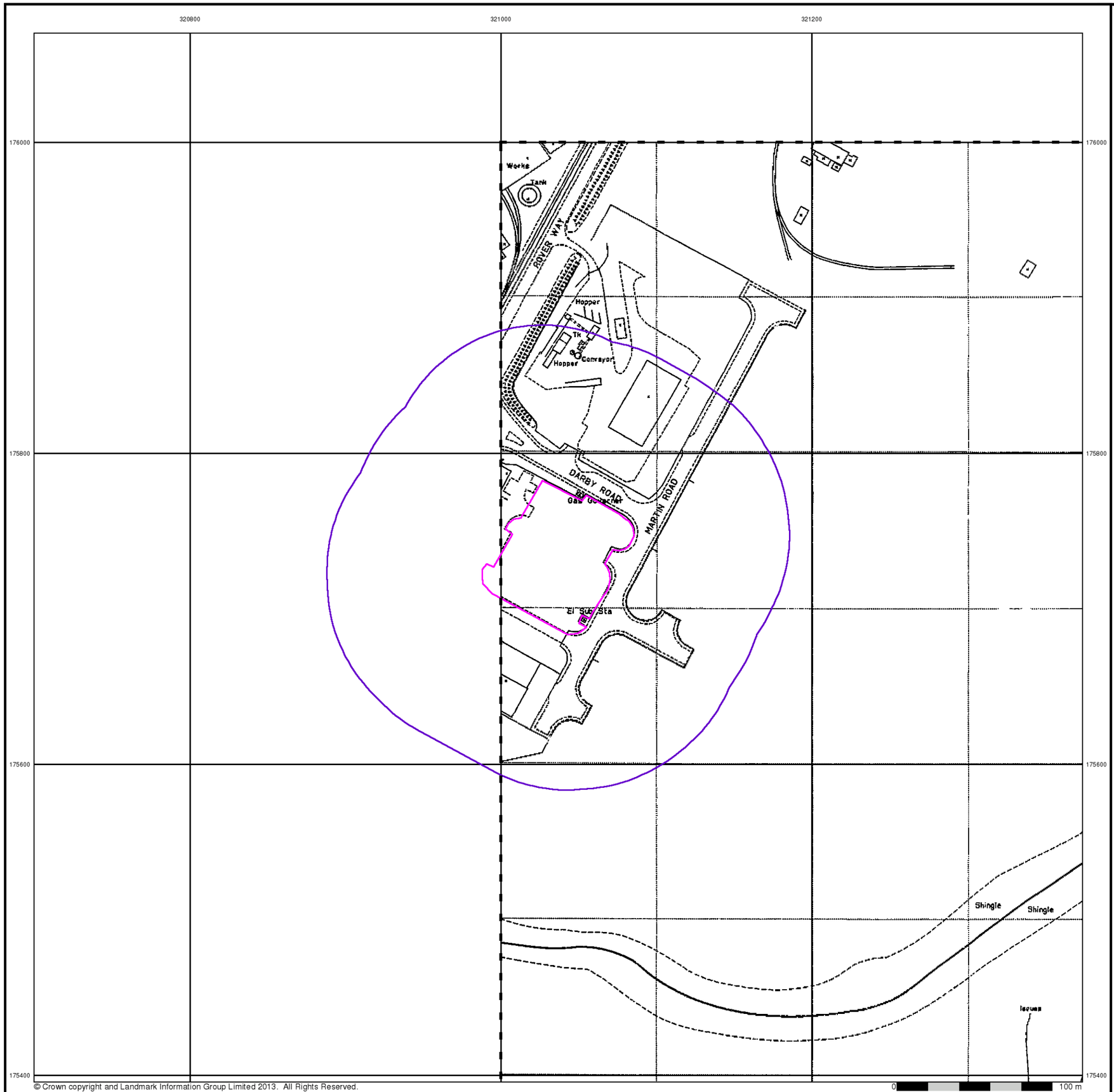


RPS

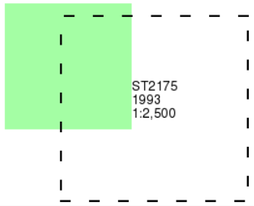
Large-Scale National Grid Data

Published 1993

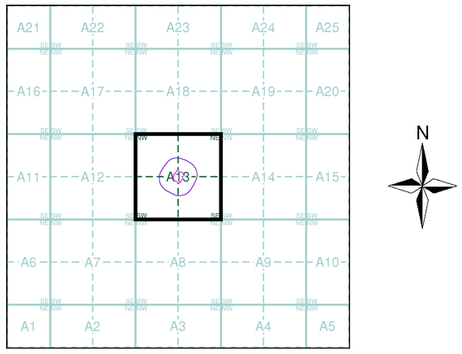
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

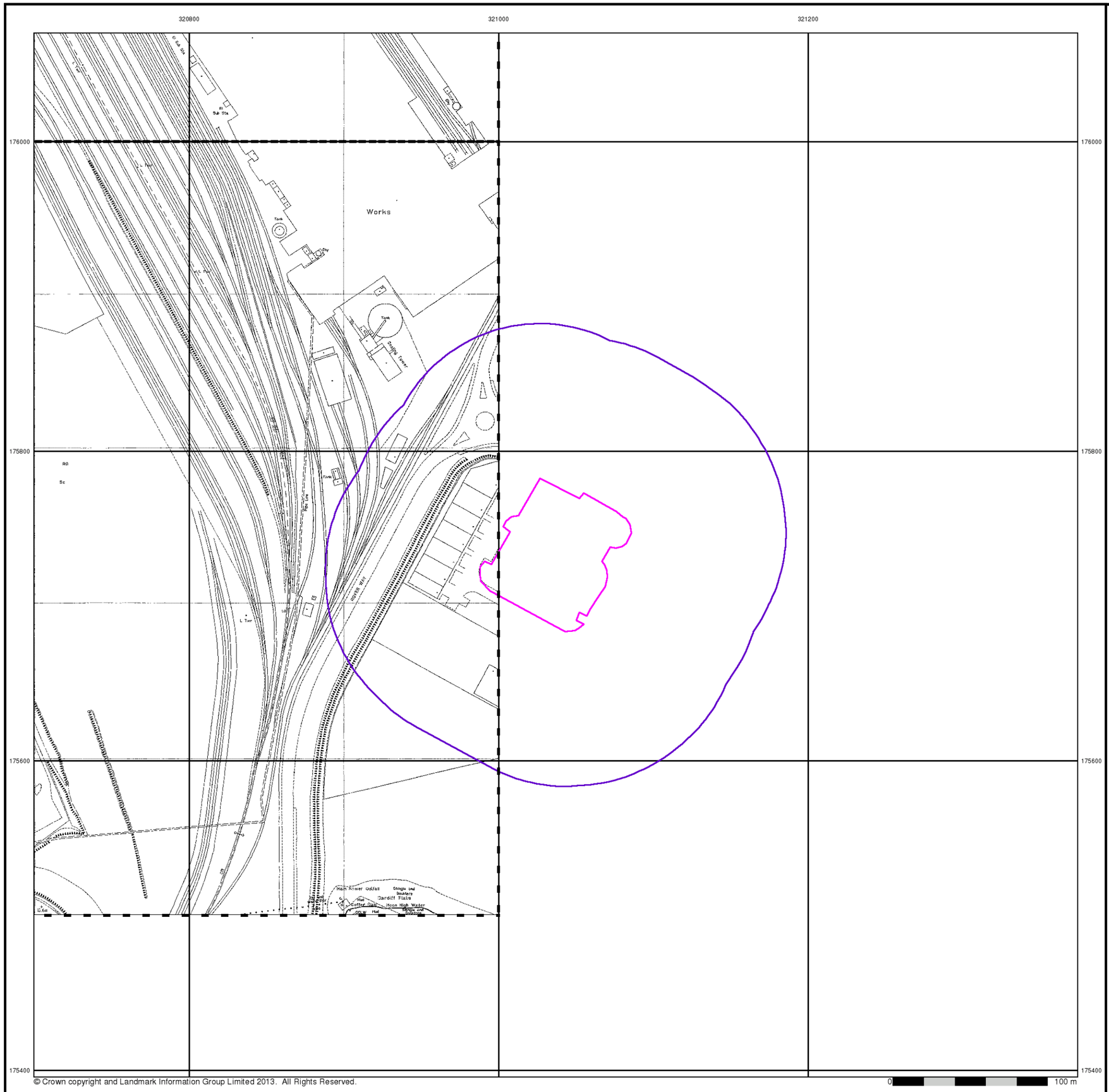
Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



RPS

Large-Scale National Grid Data

Published 1994 - 1995

Source map scale - 1:1,250

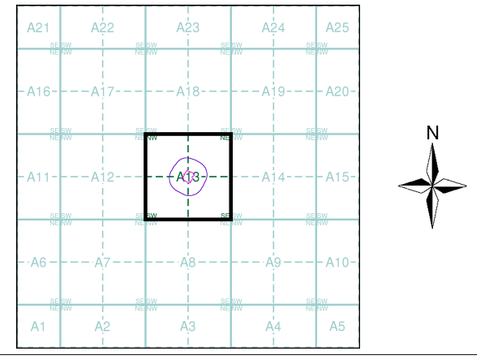
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

ST2076SE
1994
1:1,250

ST2075NE
1995
1:1,250

Historical Map - Segment A13



Order Details

Order Number:	63625239_1_1
Customer Ref:	JER6480
National Grid Reference:	321040, 175730
Slice:	A
Site Area (Ha):	0.57
Search Buffer (m):	100

Site Details

Plot 1C, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD

Landmark® Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Appendix 3

Trial Pit Logs

TRIAL PIT LOG

Pit No. **SA01**

Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321016	Equipment:	TP
Location:	Cardiff	Northing:	175751	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing			Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
		Depth (m)	Type	Results						
					0.00	(0.05)			Tarmac	
					0.05				(MADE GROUND)	
									Grey black sandy clayey gravels of SLAG, with frequent coarse gravels of brick, metal, wood, plastic and concrete. (MADE GROUND)	
						(2.45)				
		2.50	ES						End of Pit at 2.50m	

Remarks: Pit not excavated during RPS investigation. Sample collection and visual inspection only.

Groundwater: None identified.

Stability: Stable

TRIAL PIT LOG

Pit No. **TP01** Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321060	Equipment:	TP
Location:	Cardiff	Northing:	175715	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing: Depth (m)	Type	Results	Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
					0.00	(0.10)			TARMAC (TARMACADAM)	
					0.10				Grey black sandy clayey gravels of SLAG, with frequent coarse gravels of brick, metal, wood, plastic and concrete. (MADE GROUND)	
		0.50	ES			(1.10)				
		1.20	ES						*Impenetrable slag. Terminated.* End of Pit at 1.20m	

Remarks: Terminated due to impenetrable slag.

Groundwater: None identified.

Stability: Stable

TRIAL PIT LOG

Pit No. **TP02** Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321025	Equipment:	TP
Location:	Cardiff	Northing:	175767	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing			Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
		Depth (m)	Type	Results						
					0.00	(0.05)			TARMAC	
					0.05	(0.05)			(TARMACADAM)	
					0.10				Orange brown coarse sandy GRAVEL (Type 1 Fill) (MADE GROUND)	
		0.50	ES						Grey brown sandy clayey gravels of slag, brick and concrete. (Some cobbles of slag). (MADE GROUND)	
						(2.40)				
		2.50	ES						*Impenetrable slag. terminated.* End of Pit at 2.50m	

Remarks: Terminated due to impenetrable slag.

Groundwater: None identified.

Stability: Stable

TRIAL PIT LOG

Pit No. **TP03** Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321002	Equipment:	TP
Location:	Cardiff	Northing:	175720	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing: Depth (m)	Type	Results	Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
					0.00	(0.05)			Tarmac (MADE GROUND)	
					0.05	(0.35)			Grey black sandy clayey gravels of SLAG, with frequent coarse gravels of brick, metal, wood, plastic and concrete. (MADE GROUND)	
									End of Pit at 0.40m	

Remarks: Terminated due to impenetrable slag.

Groundwater: None identified.

Stability: Stable

TRIAL PIT LOG

Pit No. **TP04** Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321030	Equipment:	TP
Location:	Cardiff	Northing:	175726	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing			Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
		Depth (m)	Type	Results						
					0.00	(0.05)			TARMAC	
					0.05				(TARMACADAM)	
									Grey black sandy clayey gravels of SLAG, with frequent coarse gravels of brick, metal, wood, plastic and concrete. (MADE GROUND)	
		0.50	ES							1
						(2.95)				2
		3.00	ES						*Impenetrable slag. Terminated.*	3
									End of Pit at 3.00m	4
										5

Remarks: Terminated due to collapse at depth.

Groundwater: None identified.

Stability: Unstable after 2.8m.

AGS

TRIAL PIT LOG

Pit No. **TP05**

Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321044	Equipment:	TP
Location:	Cardiff	Northing:	175690	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing			Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
		Depth (m)	Type	Results						
					0.00	(0.05)			TARMAC	
					0.05				(TARMACADAM)	
									Grey brown sandy clayey gravels of SLAG, metal, wood and brick.	
						(0.55)			(MADE GROUND)	
		0.50	ES							
									Impenetrable slag. Terminated.	
									End of Pit at 0.60m	

Remarks: Terminated due to impenetrable slag.

Groundwater: None identified.

Stability: Stable

TRIAL PIT LOG

Pit No. **TP06** Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321038	Equipment:	TP
Location:	Cardiff	Northing:	175759	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing			Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
		Depth (m)	Type	Results						
					0.00				TARMAC (TARMACADAM)	
					0.01				Orange brown sandy GRAVEL. (MADE GROUND)	
					0.02				Grey black sandy clayey gravels of SLAG, with frequent coarse gravels of brick, metal, wood, plastic and concrete. (MADE GROUND)	
		0.50	ES			(2.48)				1
									Obstruction at north end, extended to west and obstructed at 2.5m.	2
		2.50	ES						*Terminated.* End of Pit at 2.50m	3
										4
										5

Remarks: Terminated due to impenetrable slag.

Groundwater: None identified.

Stability: Stable

TRIAL PIT LOG

Pit No. **TP07**

Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321016	Equipment:	TP
Location:	Cardiff	Northing:	175725	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing			Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
		Depth (m)	Type	Results						
					0.00	(0.05)			Tarmac	
					0.05	(0.05)			(TARMACADAM)	
					0.10				Orange brown sandy GRAVEL. (MADE GROUND)	
		0.50	ES			(1.40)			Grey black sandy clayey gravels of SLAG, with frequent coarse gravels of brick, metal, wood, plastic and concrete. (MADE GROUND)	1
					1.50	(0.20)			Impenetrable slag. (MADE GROUND)	
		1.70	ES						*Impenetrable slag. Terminated.* End of Pit at 1.70m	2
										3
										4
										5

Remarks: Terminated due to impenetrable slag.

Groundwater: None identified.

Stability: Stable

TRIAL PIT LOG

Pit No. **TP08** Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321021	Equipment:	TP
Location:	Cardiff	Northing:	175702	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing: Depth (m)	Type	Results	Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
					0.00	(0.05)			Tarmac (MADE GROUND)	
					0.05	(0.35)			Grey black sandy clayey gravels of SLAG, with frequent coarse gravels of brick, metal, wood, plastic and concrete. (MADE GROUND)	
									End of Pit at 0.40m	

Remarks: Terminated due to impenetrable slag.

Groundwater: None identified.

Stability: Stable

TRIAL PIT LOG

Pit No. **TP09** Sheet 1 of 1

Project Name:	Bayliss Metals	Co-ordinates:		Date(s): 02/02/2015	Hole Type:
Project No:	JER6480	Easting:	321040	Equipment:	TP
Location:	Cardiff	Northing:	175700	JCB	Scale:
Client:	Bayliss Metal	Ground Level (mAOD):		Logged By: JG	1:25

Backfill	Water Strike(s)	Samples & In Situ Testing			Depth (mbGL)	Thickness (m)	Level (mAOD)	Legend	Stratum Description	Scale
		Depth (m)	Type	Results						
					0.00	(0.05)			Tarmac (MADE GROUND)	
					0.05	(0.40)			Grey black sandy clayey gravels of SLAG, with frequent coarse gravels of brick, metal, wood, plastic and concrete. (MADE GROUND)	
									End of Pit at 0.45m	

Remarks: Terminated due to impenetrable slag.

Groundwater: None identified.

Stability: Stable

Appendix 4

Analytical Soil Results

Our Ref: EFS/151118 (Ver. 2)
Your Ref: JER6480

February 16, 2015

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Mr J Grace
RPS
2420 The Quadrant
Aztec West
Almondsbury
Bristol
BS32 4AQ

For the attention of Mr J Grace

Dear Mr Grace

Sample Analysis - Bayliss Metals

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 19/03/15 when they will be discarded. Please call 01283 554547 for an extension of this date.
Please be aware that our policy for the retention of paper based laboratory records and analysis reports is 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Multi-Sector Services) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for ESG

JMColbourne

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT

1252

Report No. EFS/151118 (Ver. 2)

RPS
RPS
2420 The Quadrant
Aztec West
Almondsbury
Bristol
BS32 4AQ

Site: Bayliss Metals

The 7 samples described in this report were registered for analysis by ESG on 05-Feb-2015. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 16-Feb-2015

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited.
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:

On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 16-Feb-2015

Tests marked '^' have been subcontracted to another laboratory.

Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected. ESG accepts no responsibility for any sampling not carried out by our personnel.

Units :			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	pH Units		mg/kg
Method Codes :			GROHSA	ICPACIDS	ICPBOR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPWSS	PHSOIL	Sub002a	TPHUSSI
Method Reporting Limits :			0.2	20	0.5	0.3	0.1	0.5	0.5	0.5	0.1	0.5	0.5	3	10			20
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**GRO (AA) by HSA GC-FID**	**SO4-- (acid sol)**	**Boron (H20 Soluble)**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Selenium (MS)**	**Zinc (MS)**	**SO4-- (H2O sol) mg/l**	**pH units (AR)**	**^Asbestos Screen**	**TPH by GCFID (AR/Si)**
1538962	TP01 0.5-1m	02-Feb-15	Req	3510	8	26.5	2.54	1852	271.8	520.7	1.58	207.2	0.8	654.8	269	11.1	AM	Req
1538963	TP02 0.5-1m	02-Feb-15	Req	10400	6	6	0.59	181.6	53.5	111.3	0.25	20.2	3.8	370.5	1740	8.9	NAIIS	Req
1538964	TP04 0.5-1m	02-Feb-15	Req	7450	6.8	7.5	0.91	684	62.7	148.2	0.26	35.9	3.5	258.6	1440	10.1	AM	Req
1538965	TP05 0.5-1m	02-Feb-15	Req	6940	8.6	8.2	0.82	509.9	51.6	138.1	0.22	22.2	5	240.2	616	10.8	AM	Req
1538966	TP06 0.5-1m	02-Feb-15	Req	3750	4	12.1	0.95	124.5	118.5	146.3	0.28	53.5	1.9	261.5	1020	9.5	AM	Req
1538967	TP07 0.5-1m	02-Feb-15	Req	10400	6.4	6.2	0.51	188.2	51.7	67.2	0.18	20.1	4.1	165.6	1670	8.8	AM	Req
1538968	SA01 2.5m	02-Feb-15	Req	5680	5	5	0.57	437	41.9	66	0.19	21.4	2.9	133.7	717	9.5	CH	Req

ESG

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Client Name RPS

Contact Mr J Grace

Bayliss Metals

Sample Analysis

Date Printed	**16-Feb-2015**
Report Number	**EFS/151118**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg									
Method Codes :			PCBUSECDAR	Sub005	PAHMSUS	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC									
Method Reporting Limits :						0.3	0.3	0.3	0.3										
UKAS Accredited :			No	No	Yes	Yes	Yes	Yes	Yes	Yes									
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**PCB-12 Congeners Analysis**	**^Glycol**	**PAH (16) by GCMS**	**Phenol**	**Cresols**	**Xylenols**	**Trimethylphenols**	**Total Phenols**									
1538962	TP01 0.5-1m	02-Feb-15			Req														
1538963	TP02 0.5-1m	02-Feb-15		Req	Req	<0.3	<0.3	<0.3	<0.3	<1.2									
1538964	TP04 0.5-1m	02-Feb-15			Req														
1538965	TP05 0.5-1m	02-Feb-15	Req		Req														
1538966	TP06 0.5-1m	02-Feb-15			Req	<0.3	<0.3	<0.3	<0.3	<1.2									
1538967	TP07 0.5-1m	02-Feb-15			Req														
1538968	SA01 2.5m	02-Feb-15			Req														

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Sample Analysis

Date Printed	**16-Feb-2015**
Report Number	**EFS/151118**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	RPS: Bayliss Metals		
Sample Details:	TP01 0.5-1m	**Job Number:**	S15_1118
LIMS ID Number:	CL1538962	**Date Booked in:**	05-Feb-15
QC Batch Number:	150121	**Date Extracted:**	09-Feb-15
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Feb-15
Directory:	0915PAHMS20\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	5.46	0.13	98
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	6.76	0.17	88
Pyrene	129-00-0	7.04	0.19	99
Benzo[a]anthracene	56-55-3	8.70	0.12	97
Chrysene	218-01-9	8.75	0.13	90
Benzo[b]fluoranthene	205-99-2	10.21	0.17	97
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-
Benzo[a]pyrene	50-32-8	10.56	0.13	96
Indeno[1,2,3-cd]pyrene	193-39-5	12.00	0.08	83
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-
Total (USEPA16) PAHs	-	-	< 1.76	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	103
Acenaphthene-d10	100
Phenanthrene-d10	105
Chrysene-d12	118
Perylene-d12	132

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	103

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	RPS: Bayliss Metals		
Sample Details:	TP02 0.5-1m	**Job Number:**	S15_1118
LIMS ID Number:	CL1538963	**Date Booked in:**	05-Feb-15
QC Batch Number:	150121	**Date Extracted:**	09-Feb-15
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Feb-15
Directory:	0915PAHMS20\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	-	< 0.08	-
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	6.76	0.13	88
Pyrene	129-00-0	7.04	0.11	97
Benzo[a]anthracene	56-55-3	8.70	0.10	95
Chrysene	218-01-9	8.75	0.08	98
Benzo[b]fluoranthene	205-99-2	10.21	0.13	78
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-
Benzo[a]pyrene	50-32-8	-	< 0.08	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-
Total (USEPA16) PAHs	-	-	< 1.43	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	102
Phenanthrene-d10	104
Chrysene-d12	109
Perylene-d12	117

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	73
Terphenyl-d14	81

Concentrations are reported on a wet weight basis.

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	RPS: Bayliss Metals		
Sample Details:	TP04 0.5-1m	**Job Number:**	S15_1118
LIMS ID Number:	CL1538964	**Date Booked in:**	05-Feb-15
QC Batch Number:	150121	**Date Extracted:**	09-Feb-15
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Feb-15
Directory:	0915PAHMS20\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	5.45	0.11	96
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	6.76	0.24	100
Pyrene	129-00-0	7.04	0.22	98
Benzo[a]anthracene	56-55-3	8.70	0.17	94
Chrysene	218-01-9	8.74	0.16	97
Benzo[b]fluoranthene	205-99-2	10.21	0.23	96
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-
Benzo[a]pyrene	50-32-8	10.56	0.18	97
Indeno[1,2,3-cd]pyrene	193-39-5	12.00	0.17	78
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-
Benzo[g,h,i]perylene	191-24-2	12.29	0.14	74
Total (USEPA16) PAHs	-	-	< 2.18	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	105
Acenaphthene-d10	102
Phenanthrene-d10	109
Chrysene-d12	124
Perylene-d12	153

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	86

Concentrations are reported on a wet weight basis.

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	RPS: Bayliss Metals		
Sample Details:	TP05 0.5-1m	**Job Number:**	S15_1118
LIMS ID Number:	CL1538965	**Date Booked in:**	05-Feb-15
QC Batch Number:	150121	**Date Extracted:**	09-Feb-15
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Feb-15
Directory:	0915PAHMS20\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	5.46	0.23	98
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	6.76	0.46	87
Pyrene	129-00-0	7.04	0.40	97
Benzo[a]anthracene	56-55-3	8.69	0.31	94
Chrysene	218-01-9	8.74	0.32	97
Benzo[b]fluoranthene	205-99-2	10.21	0.47	96
Benzo[k]fluoranthene	207-08-9	10.25	0.16	97
Benzo[a]pyrene	50-32-8	10.63	0.29	98
Indeno[1,2,3-cd]pyrene	193-39-5	12.00	0.29	92
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-
Benzo[g,h,i]perylene	191-24-2	12.28	0.27	98
Total (USEPA16) PAHs	-	-	< 3.68	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	104
Phenanthrene-d10	110
Chrysene-d12	121
Perylene-d12	143

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	96
Terphenyl-d14	104

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	RPS: Bayliss Metals		
Sample Details:	TP06 0.5-1m	**Job Number:**	S15_1118
LIMS ID Number:	CL1538966	**Date Booked in:**	05-Feb-15
QC Batch Number:	150121	**Date Extracted:**	09-Feb-15
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Feb-15
Directory:	0915PAHMS20\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	3.12	0.14	96
Acenaphthylene	208-96-8	4.16	0.20	98
Acenaphthene	83-32-9	4.28	0.69	96
Fluorene	86-73-7	4.64	0.44	97
Phenanthrene	85-01-8	5.45	9.28	99
Anthracene	120-12-7	5.50	3.67	99
Fluoranthene	206-44-0	6.76	25.50	99
Pyrene	129-00-0	7.04	22.50	97
Benzo[a]anthracene	56-55-3	8.69	11.60	94
Chrysene	218-01-9	8.74	9.69	90
Benzo[b]fluoranthene	205-99-2	10.21	13.80	98
Benzo[k]fluoranthene	207-08-9	10.24	4.91	96
Benzo[a]pyrene	50-32-8	10.63	12.20	98
Indeno[1,2,3-cd]pyrene	193-39-5	12.00	8.98	95
Dibenzo[a,h]anthracene	53-70-3	12.03	1.85	92
Benzo[g,h,i]perylene	191-24-2	12.28	7.95	97
Total (USEPA16) PAHs	-	-	133.40	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	104
Phenanthrene-d10	113
Chrysene-d12	140
Perylene-d12	172

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	76
Terphenyl-d14	85

Concentrations are reported on a wet weight basis.

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	RPS: Bayliss Metals		
Sample Details:	TP07 0.5-1m	**Job Number:**	S15_1118
LIMS ID Number:	CL1538967	**Date Booked in:**	05-Feb-15
QC Batch Number:	150121	**Date Extracted:**	09-Feb-15
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Feb-15
Directory:	0915PAHMS20\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	5.45	0.31	97
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	6.76	0.63	99
Pyrene	129-00-0	7.04	0.54	98
Benzo[a]anthracene	56-55-3	8.69	0.39	92
Chrysene	218-01-9	8.74	0.33	95
Benzo[b]fluoranthene	205-99-2	10.21	0.61	99
Benzo[k]fluoranthene	207-08-9	10.24	0.22	97
Benzo[a]pyrene	50-32-8	10.63	0.40	99
Indeno[1,2,3-cd]pyrene	193-39-5	12.00	0.35	98
Dibenzo[a,h]anthracene	53-70-3	12.03	0.11	88
Benzo[g,h,i]perylene	191-24-2	12.29	0.38	99
Total (USEPA16) PAHs	-	-	< 4.67	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	108
Acenaphthene-d10	105
Phenanthrene-d10	111
Chrysene-d12	128
Perylene-d12	159

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	85
Terphenyl-d14	95

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	RPS: Bayliss Metals		
Sample Details:	SA01 2.5m	**Job Number:**	S15_1118
LIMS ID Number:	CL1538968	**Date Booked in:**	05-Feb-15
QC Batch Number:	150121	**Date Extracted:**	09-Feb-15
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Feb-15
Directory:	0915PAHMS20\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit
Naphthalene	91-20-3	-	< 0.08	-
Acenaphthylene	208-96-8	-	< 0.08	-
Acenaphthene	83-32-9	-	< 0.08	-
Fluorene	86-73-7	-	< 0.08	-
Phenanthrene	85-01-8	5.46	0.25	97
Anthracene	120-12-7	-	< 0.08	-
Fluoranthene	206-44-0	6.76	0.62	100
Pyrene	129-00-0	7.04	0.50	96
Benzo[a]anthracene	56-55-3	8.70	0.38	90
Chrysene	218-01-9	8.74	0.34	94
Benzo[b]fluoranthene	205-99-2	10.21	0.64	99
Benzo[k]fluoranthene	207-08-9	10.24	0.23	97
Benzo[a]pyrene	50-32-8	10.63	0.39	94
Indeno[1,2,3-cd]pyrene	193-39-5	12.00	0.38	92
Dibenzo[a,h]anthracene	53-70-3	12.03	0.11	93
Benzo[g,h,i]perylene	191-24-2	12.28	0.33	98
Total (USEPA16) PAHs	-	-	< 4.57	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	98
Phenanthrene-d10	100
Chrysene-d12	113
Perylene-d12	131

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	90
Terphenyl-d14	98

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polychlorinated Biphenyls (congeners)

Customer and Site Details: RPS: Bayliss Metals
Job Number: S15_1118
QC Batch Number: 150121
Directory: 0209PCB.GC8
Method: Ultrasonic

Matrix: Soil Soil
Date Booked in: 05-Feb-15
Date Extracted: 09-Feb-15
Date Analysed: 14-Jan-15

*** This sample data is not UKAS accredited.**

		Concentration, (µg/kg)											
Sample ID	**Customer ID**	**PCB 81**	**PCB 77**	**PCB 123**	**PCB 118**	**PCB 114**	**PCB 105**	**PCB 126**	**PCB 167**	**PCB 156**	**PCB 157**	**PCB 169**	**PCB 189**
* CL1538965	TP05 0.5-1m	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25	<5.25

Where individual results are flagged see report notes for status.

Gasoline Range Organics
(BTEX and Aliphatic Carbon Ranges)

Customer and Site Details: RPS : Bayliss Metals
Job Number: S15_1118
Directory: D:\TES\DATA\Y2015\0209HSA_GC12\150209 2015-02-09 13-40-28\025F1901.D
Method: Headspace GCFID

Matrix: Soil
Date Booked in: 05-Feb-15
Date extracted: 09-Feb-15
Date Analysed: 09-Feb-15, 19:3

*** Sample data with an asterisk are not UKAS accredited.**

		Concentration, (mg/kg) - as wet weight					Aliphatics				
Sample ID	**Client ID**	**Benzene**	**Toluene**	**Ethyl benzene**	**m/p-Xylene**	**o-Xylene**	**C5 - C6**	**>C6 - C7**	**>C7 - C8**	**>C8 - C10**	**Total GRO**
CL1538962	TP01 0.5-1m	<0.010	<0.010	<0.010	<0.010	<0.010	<0.2	<0.2	<0.2	<0.2	<0.2
CL1538963	TP02 0.5-1m	<0.010	<0.010	<0.010	<0.010	<0.010	<0.2	<0.2	<0.2	<0.2	<0.2
CL1538964	TP04 0.5-1m	<0.010	<0.010	<0.010	<0.010	<0.010	<0.2	<0.2	<0.2	<0.2	<0.2
CL1538965	TP05 0.5-1m	<0.010	<0.010	<0.010	<0.010	<0.010	<0.2	<0.2	<0.2	<0.2	<0.2
CL1538966	TP06 0.5-1m	<0.010	<0.010	<0.010	<0.010	<0.010	<0.2	<0.2	<0.2	<0.2	<0.2
CL1538967	TP07 0.5-1m	<0.010	<0.010	<0.010	<0.010	<0.010	<0.2	<0.2	<0.2	<0.2	<0.2
CL1538968	SA01 2.5m	<0.010	<0.010	<0.010	<0.010	<0.010	<0.2	<0.2	<0.2	<0.2	<0.2

Where individual results are flagged see report notes for status.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: RPS : Bayliss Metals
Job Number: S15_1118
QC Batch Number: 150121
Directory: D:\TES\DATA\Y2013\02\021015TPH_GC3\064B1901.D
Method: Ultra Sonic

Separation: Silica gel
Eluents: Hexane, DCM

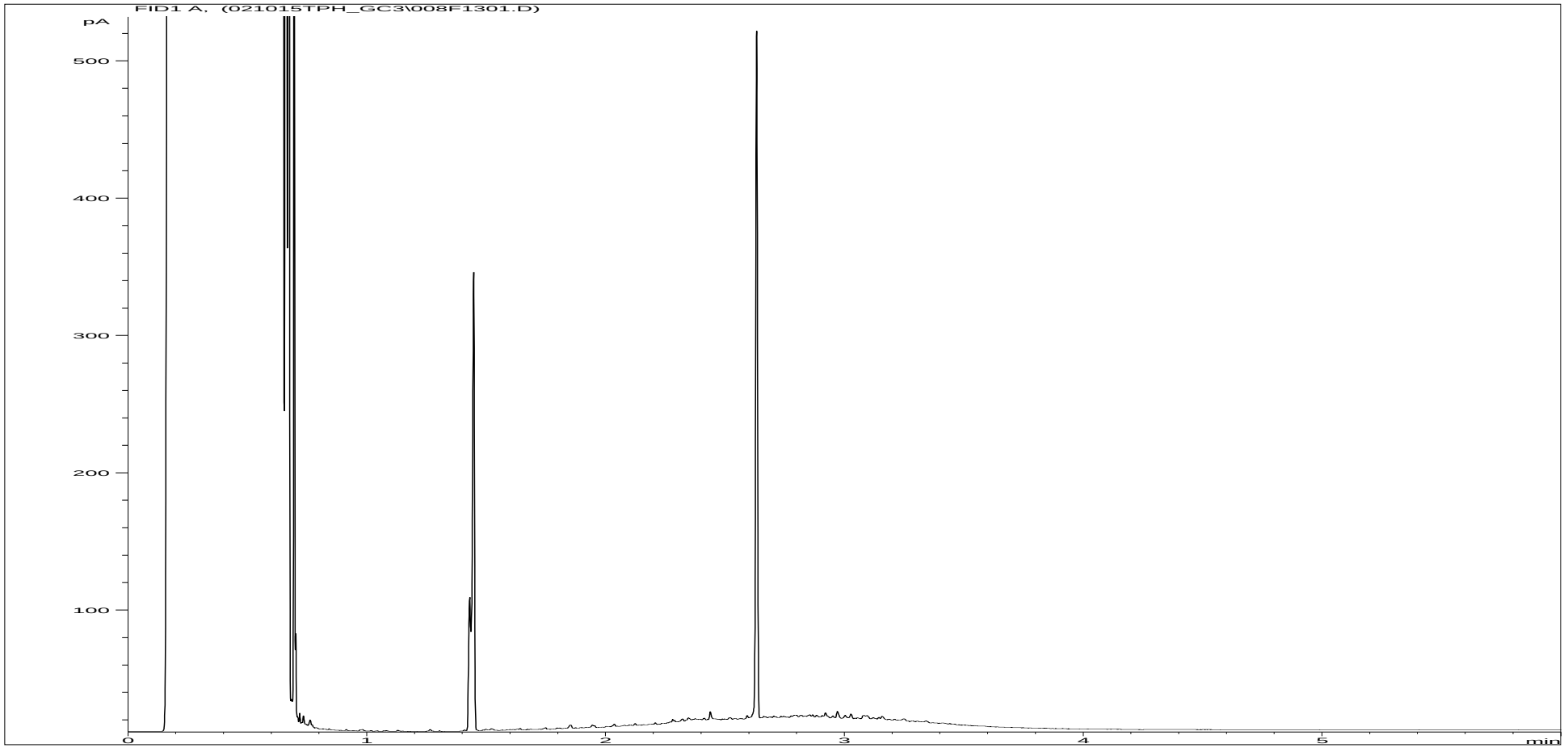
Matrix: Soil
Date Booked in 05-Feb-15
Date Extracted 09-Feb-15
Date Analysed 10-Feb-15

*** This sample data is not UKAS accredited.**

		Concentration, (mg/kg) - as wet weight											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
CL1538962	TP01 0.5-1m	<4	<4	<4	<4	<4	<4	13.1	5.36	75.5	28.2	106	44.2
CL1538963	TP02 0.5-1m	<4	<4	<4	<4	<4	4.99	<4	<4	14.5	10.4	<20	<20
CL1538964	TP04 0.5-1m	<4	<4	<4	<4	<4	4	4.49	4.11	37.7	31.7	56.7	56.9
CL1538965	TP05 0.5-1m	<4	<4	<4	<4	<4	<4	5.99	4.01	38.5	24.1	51.5	36.3
CL1538966	TP06 0.5-1m	<4	<4	<4	<4	<4	9	20.1	115	86.1	391	118	548
CL1538967	TP07 0.5-1m	<4	<4	<4	<4	<4	<4	6.21	5.84	41.5	31.2	55.7	47
CL1538968	SA01 2.5m	<4	<4	<4	<4	<4	4.43	14	7.94	149	69.8	179	94.7

Where individual results are flagged see report notes for status.

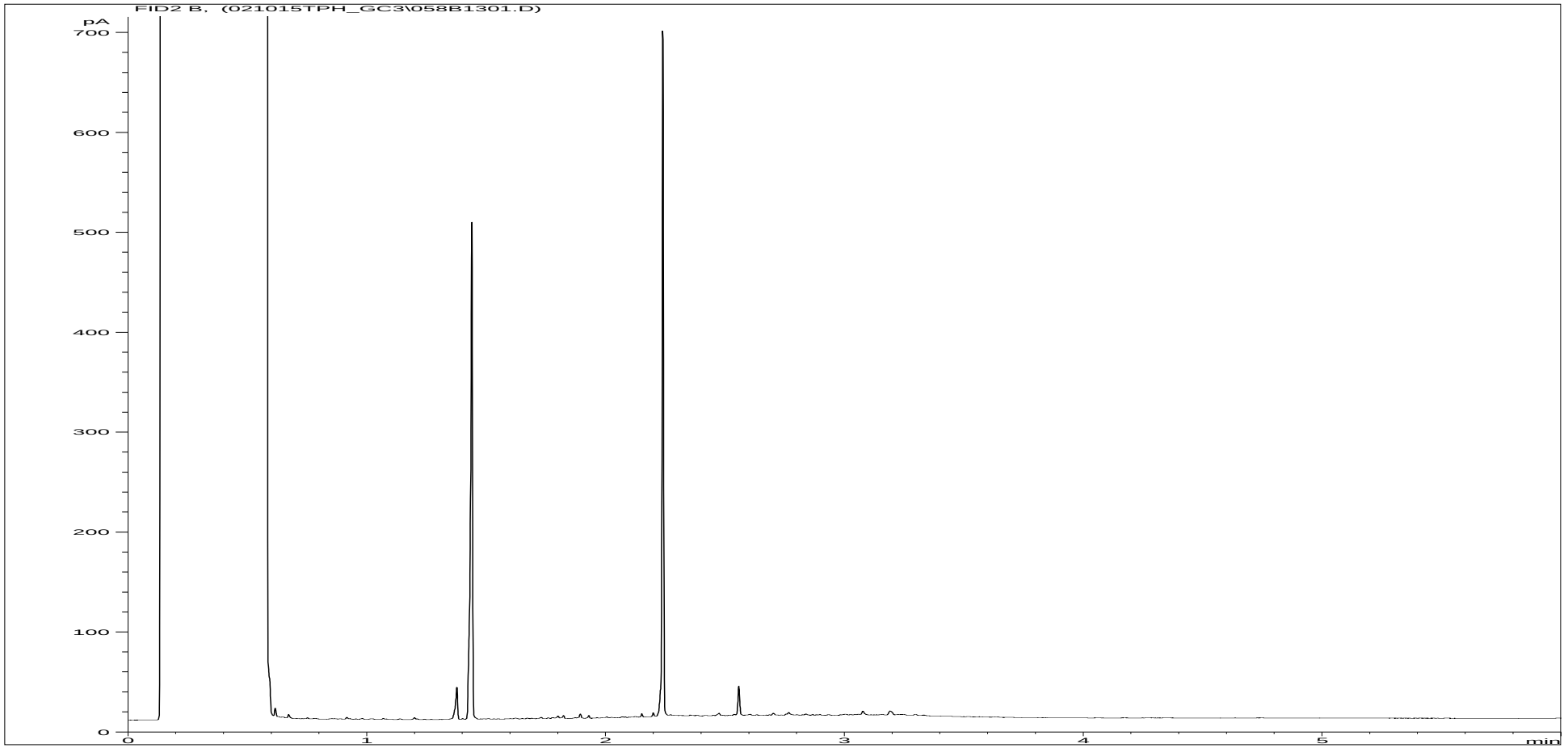
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1538962ALI	**Job Number:**	S15_1118
Multiplier:	15.2	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP01 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\008F1301.D		

Where individual results are flagged see report notes for status.

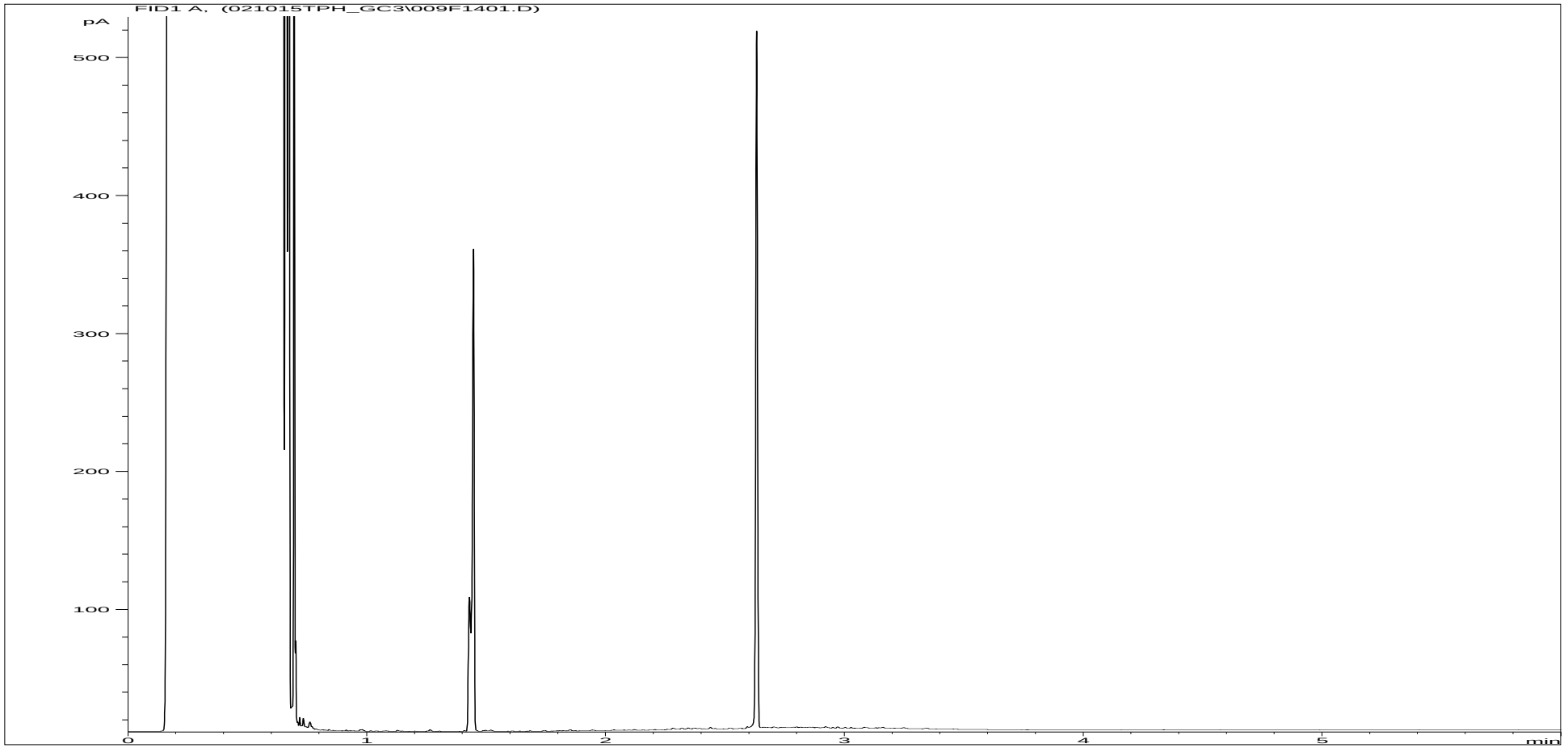
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1538962ARO	**Job Number:**	S15_1118
Multiplier:	11.36	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP01 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\058B1301.D		

Where individual results are flagged see report notes for status.

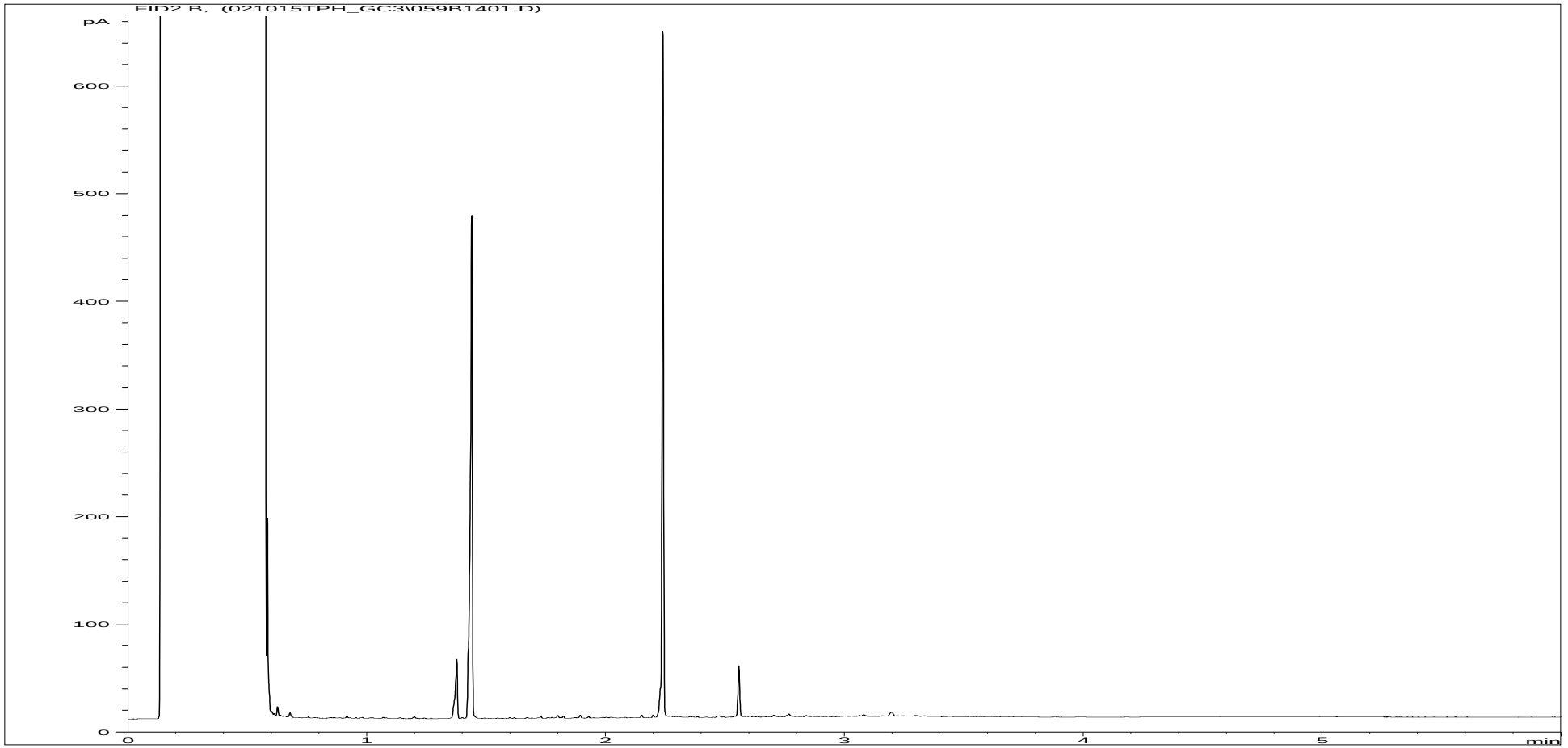
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1538963ALI	**Job Number:**	S15_1118
Multiplier:	15.36	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP02 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\009F1401.D		

Where individual results are flagged see report notes for status.

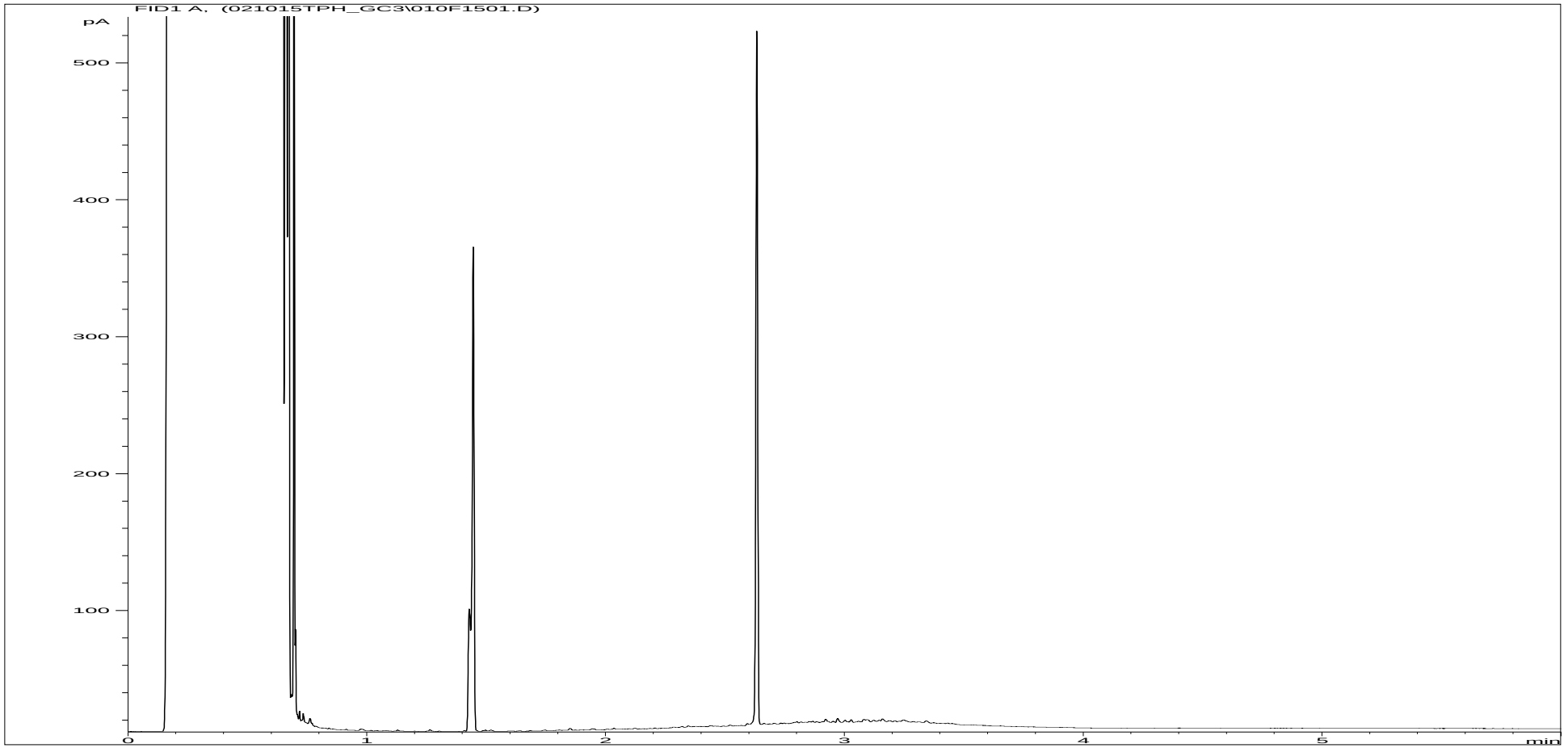
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1538963ARO	**Job Number:**	S15_1118
Multiplier:	11.36	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP02 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\059B1401.D		

Where individual results are flagged see report notes for status.

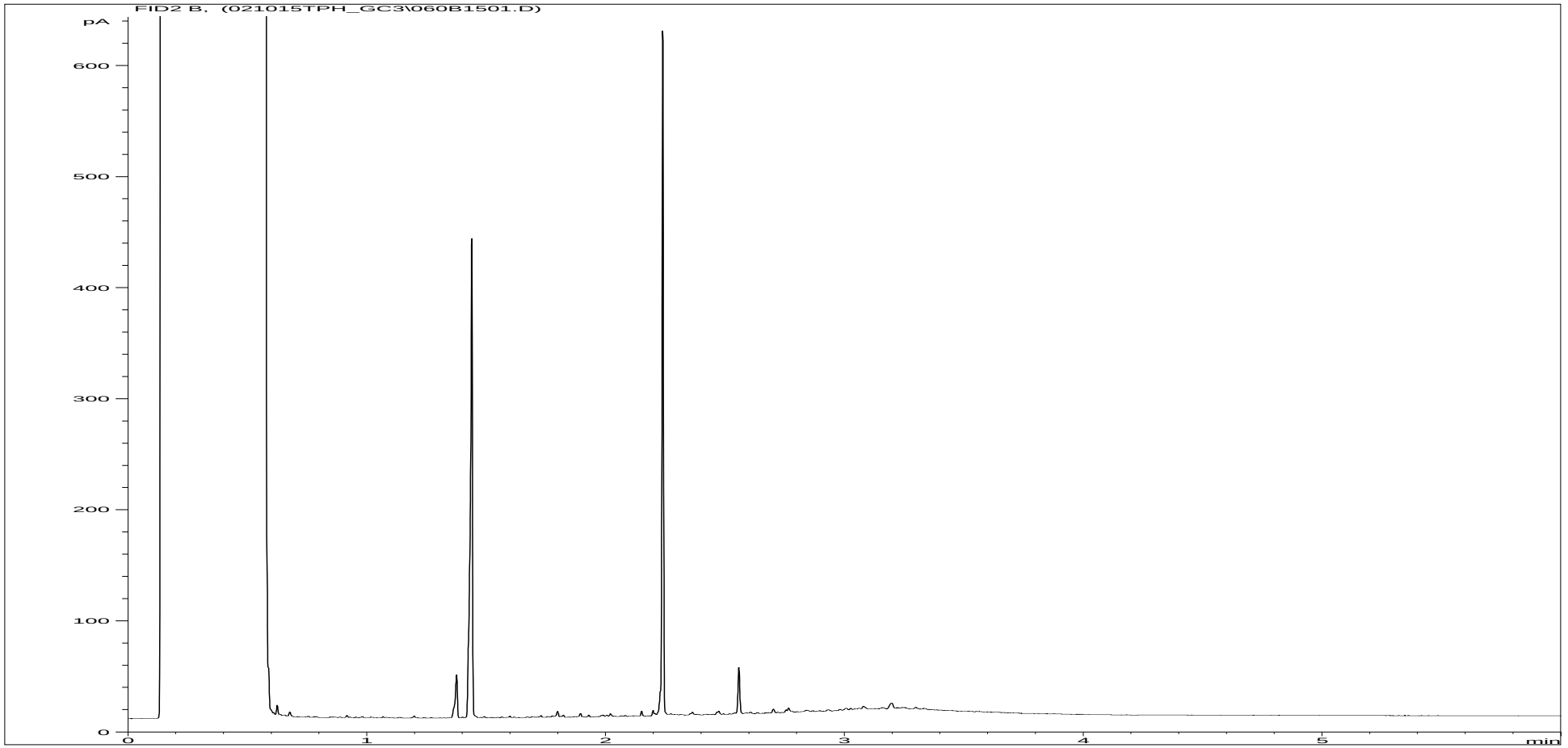
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1538964ALI	**Job Number:**	S15_1118
Multiplier:	14.88	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP04 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\010F1501.D		

Where individual results are flagged see report notes for status.

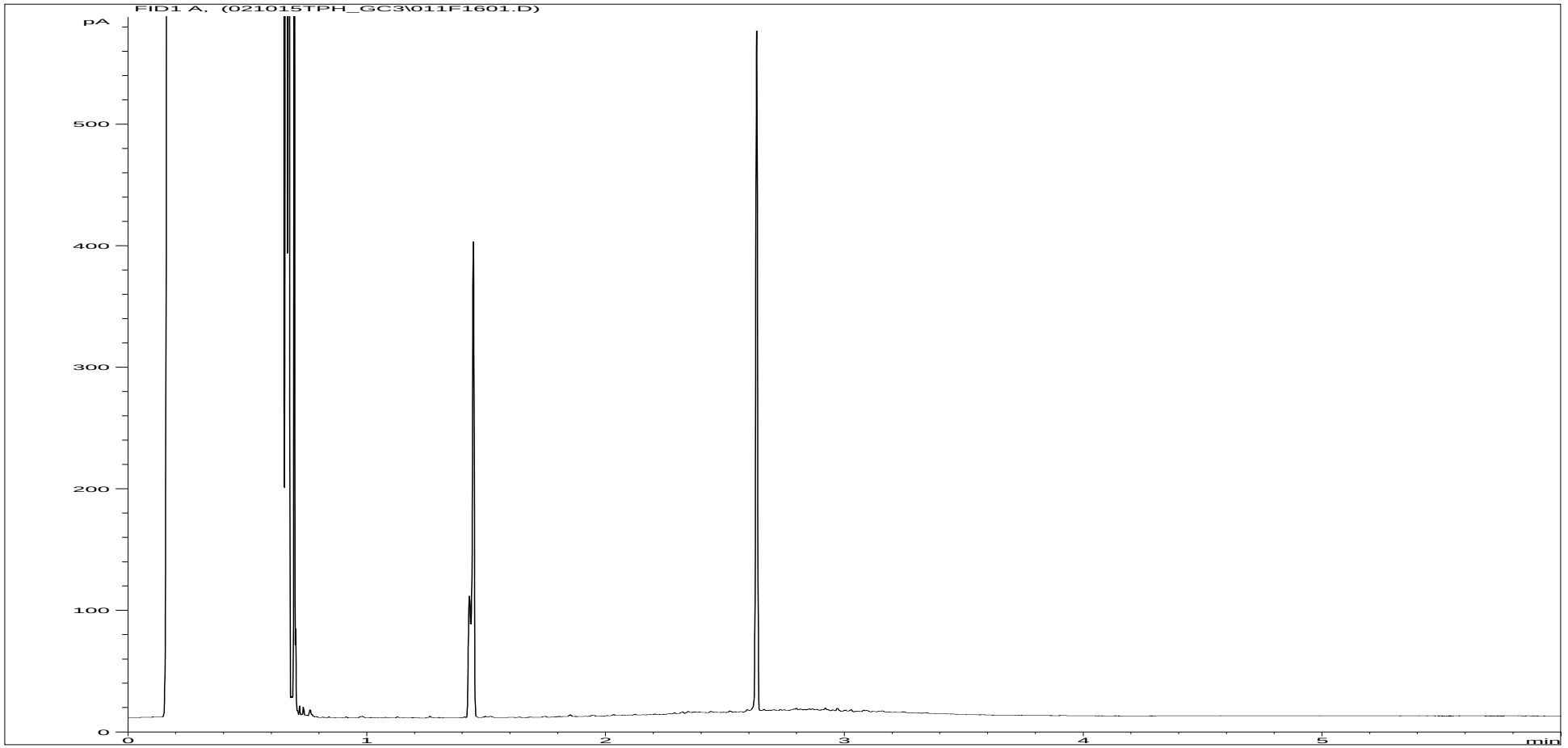
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1538964ARO	**Job Number:**	S15_1118
Multiplier:	11.2	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP04 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\060B1501.D		

Where individual results are flagged see report notes for status.

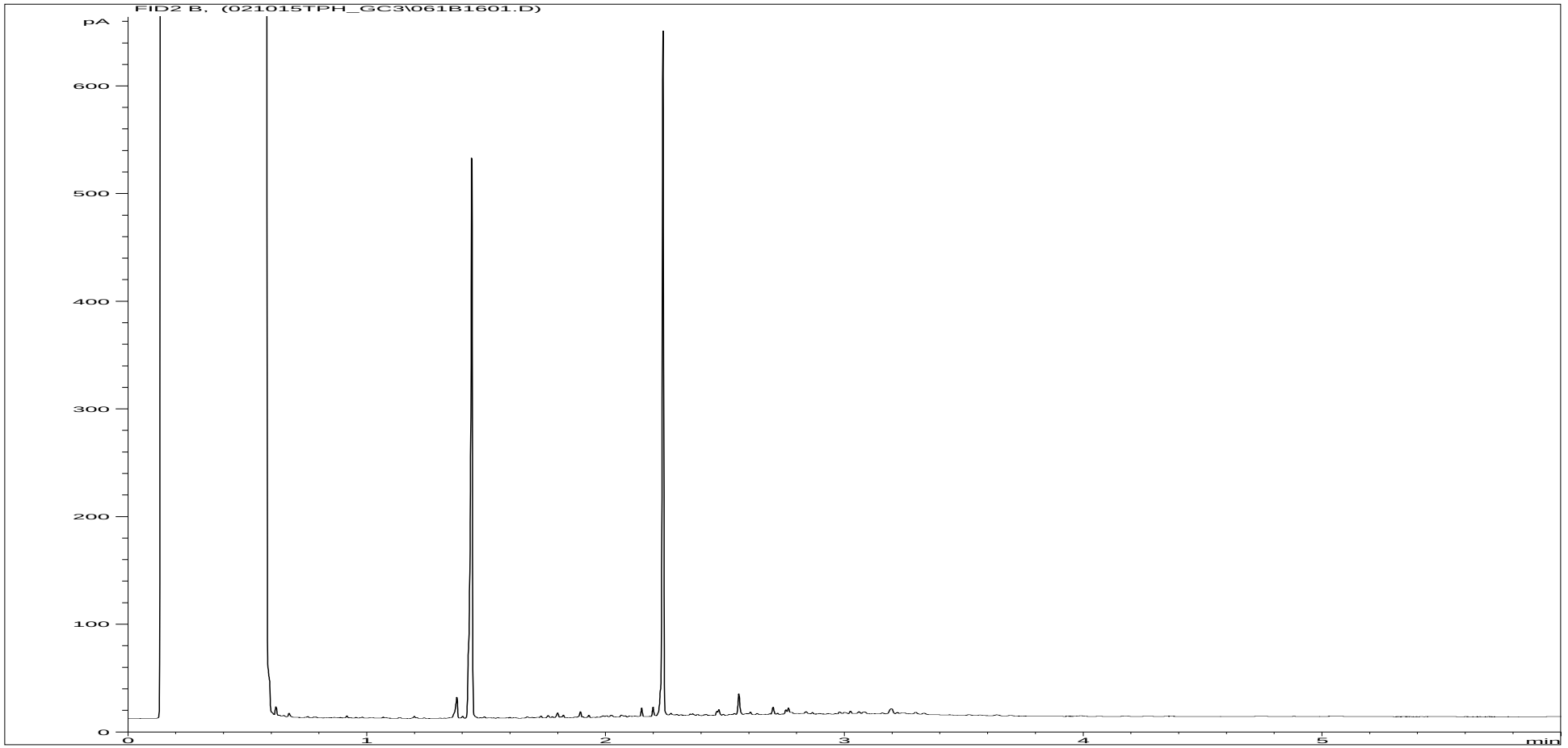
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1538965ALI	**Job Number:**	S15_1118
Multiplier:	15.2	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP05 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\011F1601.D		

Where individual results are flagged see report notes for status.

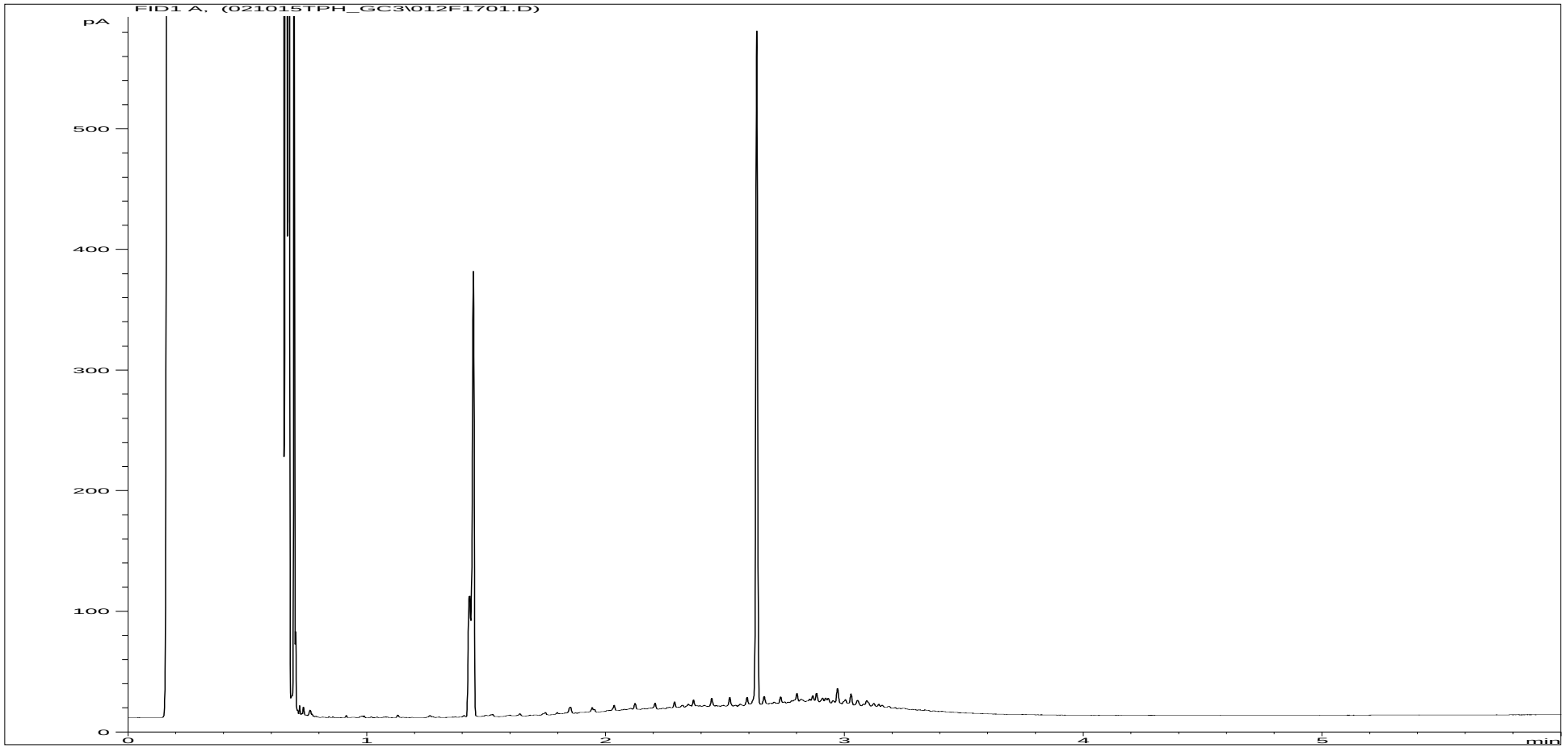
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1538965ARO	**Job Number:**	S15_1118
Multiplier:	11.36	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP05 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\061B1601.D		

Where individual results are flagged see report notes for status.

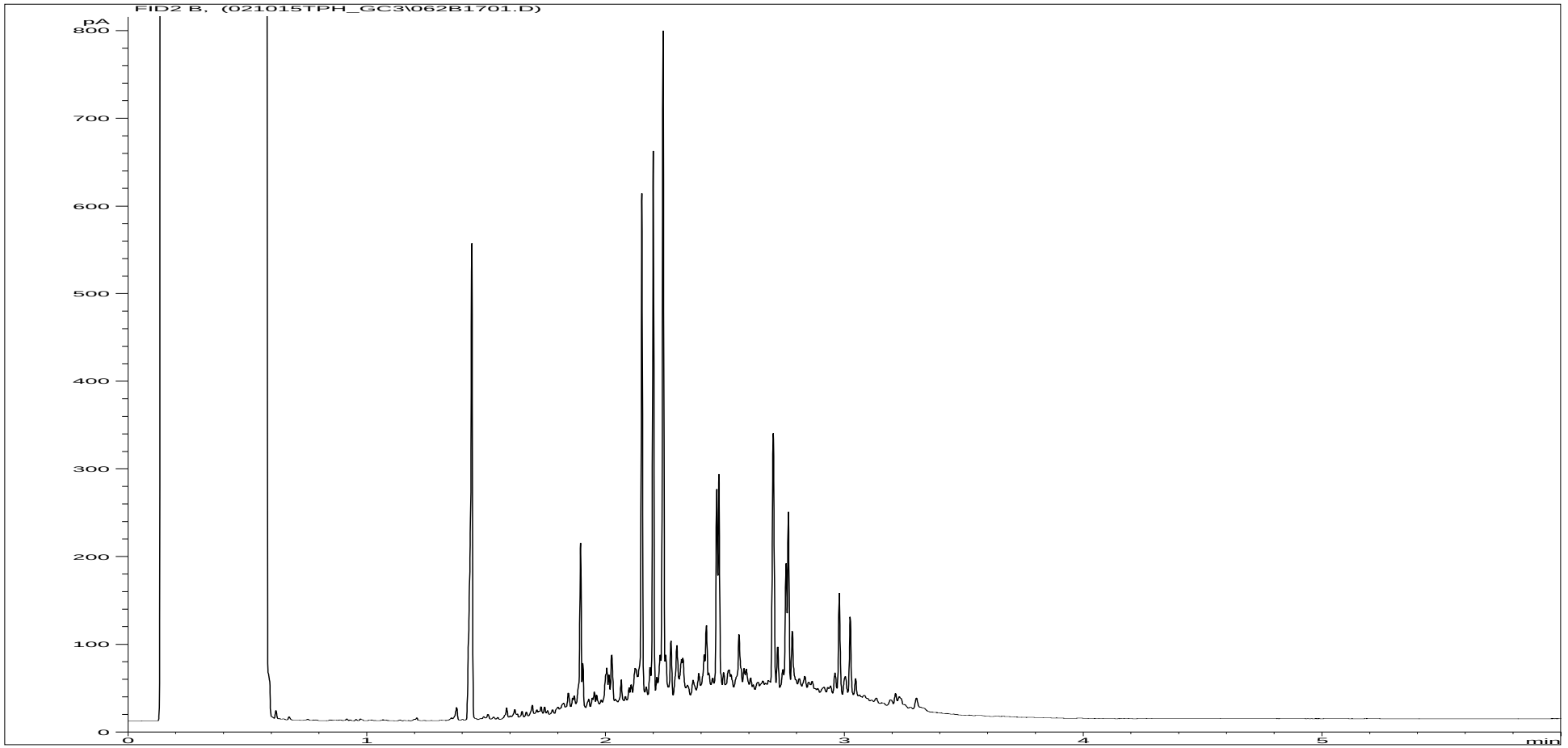
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1538966ALI	**Job Number:**	S15_1118
Multiplier:	14.88	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP06 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\012F1701.D		

Where individual results are flagged see report notes for status.

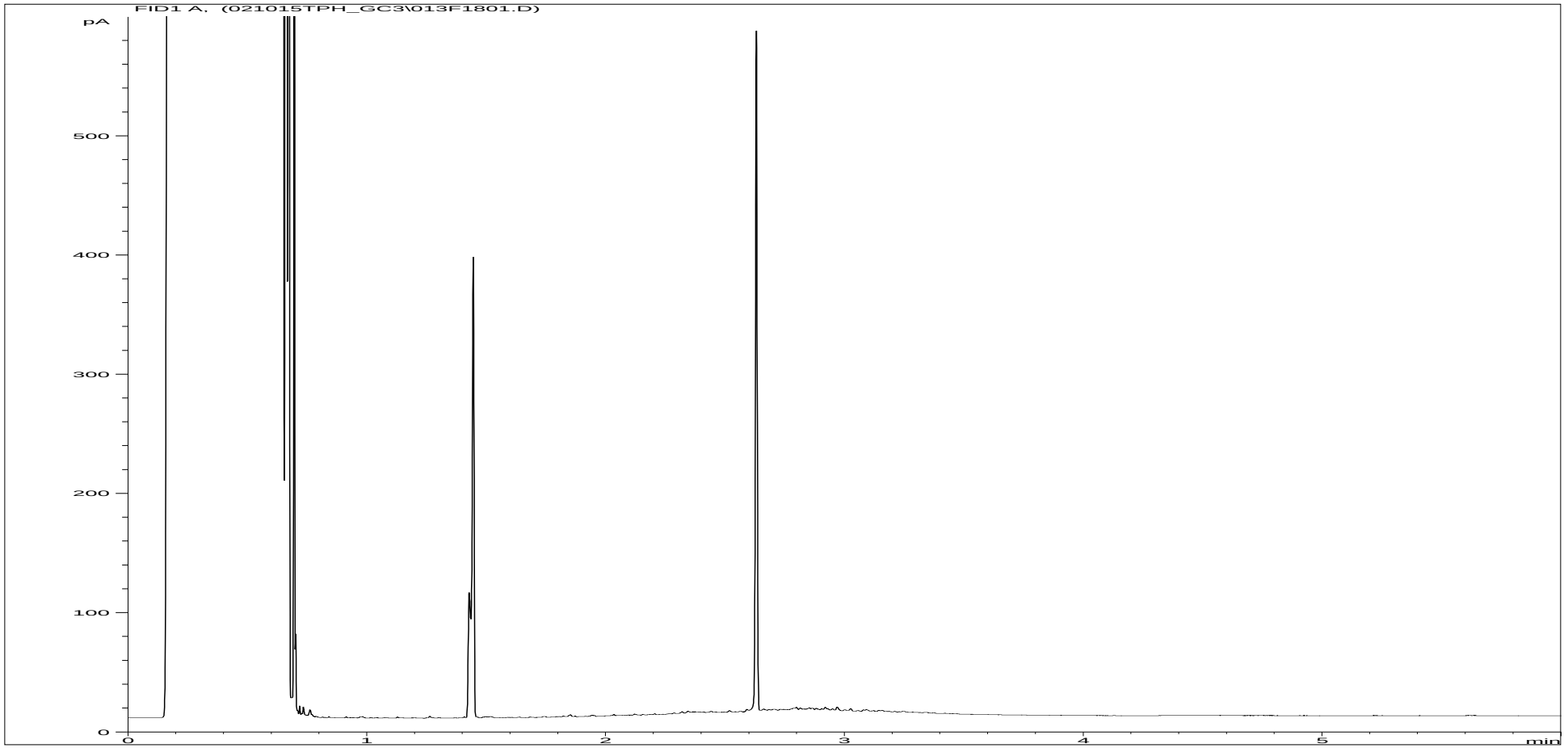
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1538966ARO	**Job Number:**	S15_1118
Multiplier:	11.2	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP06 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\062B1701.D		

Where individual results are flagged see report notes for status.

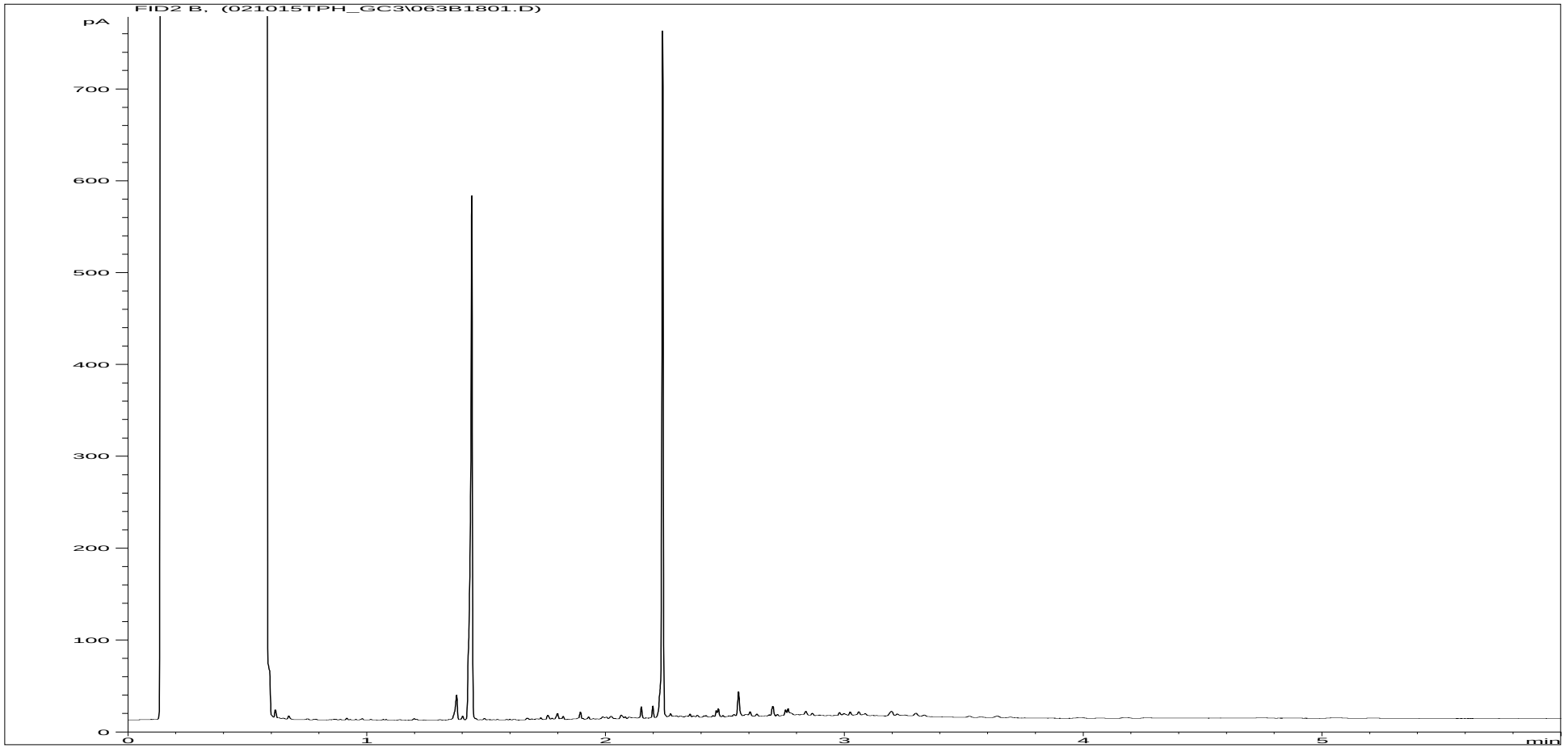
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1538967ALI	**Job Number:**	S15_1118
Multiplier:	14.88	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP07 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\013F1801.D		

Where individual results are flagged see report notes for status.

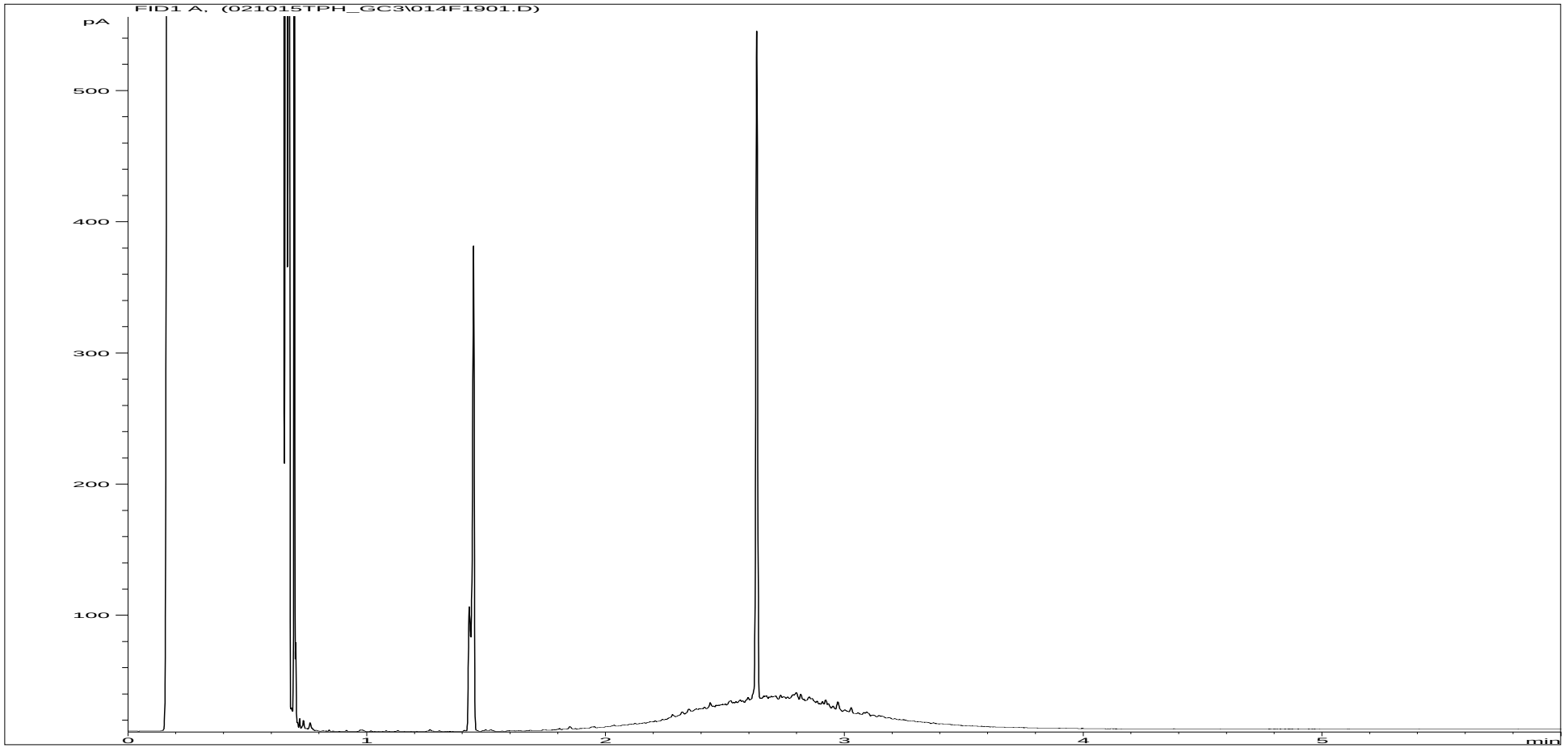
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1538967ARO	**Job Number:**	S15_1118
Multiplier:	11.2	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	TP07 0.5-1m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\063B1801.D		

Where individual results are flagged see report notes for status.

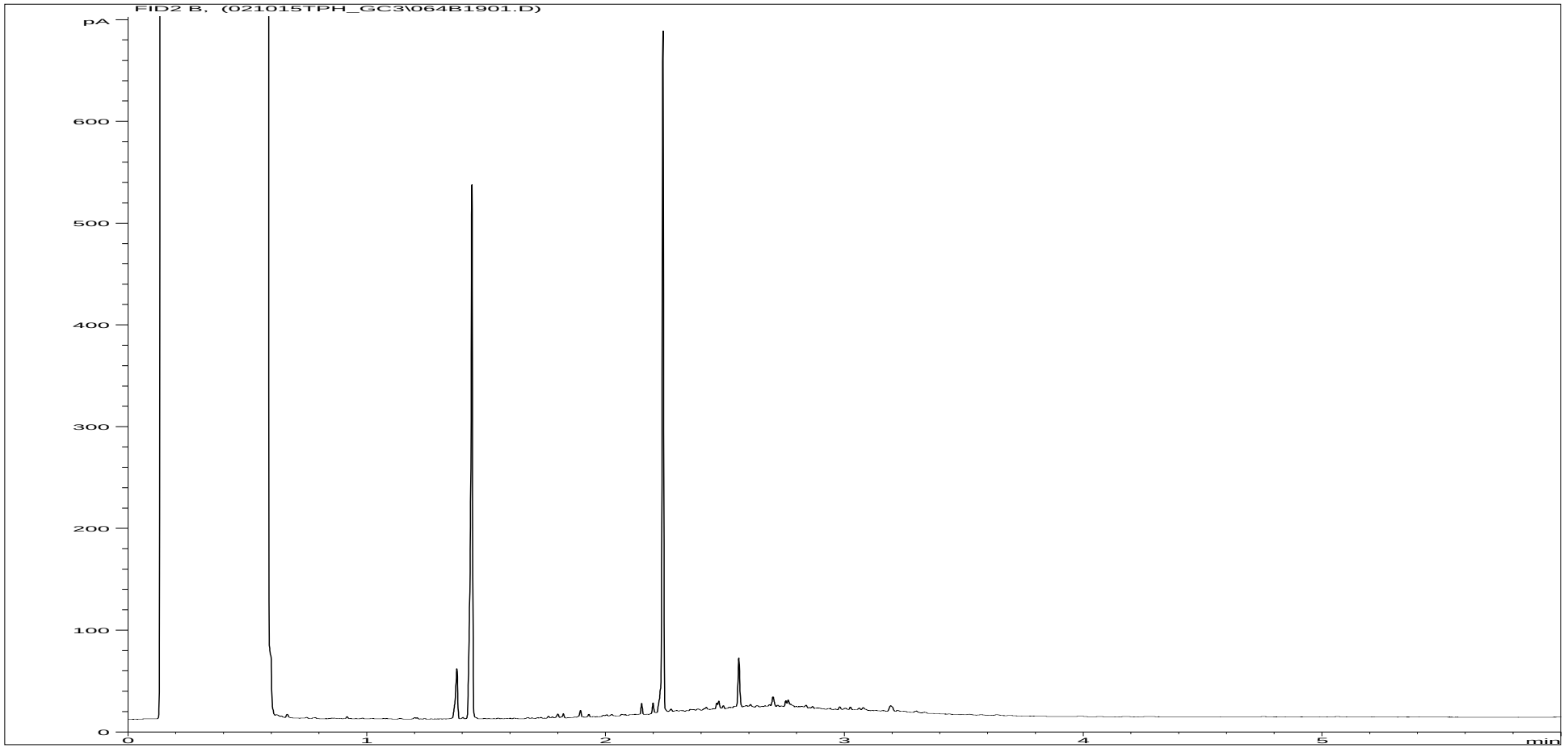
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1538968ALI	**Job Number:**	S15_1118
Multiplier:	14.88	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	SA01 2.5m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\014F1901.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1538968ARO	**Job Number:**	S15_1118
Multiplier:	11.2	**Client:**	RPS
Dilution:	1	**Site:**	Bayliss Metals
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	SA01 2.5m
Acquisition Date/Time:	10-Feb-15		
Datafile:	D:\TES\DATA\Y2013\02\021015TPH_GC3\064B1901.D		

Where individual results are flagged see report notes for status.

Glycols

Customer and Site Details : RPS - Bayliss Metals
Report Number : s151118
Report Date : 16/02/2015

Matrix (level) : Soil
Units : mg/kg

ESG ID Number	Client Reference	Date Sampled	1,2-butanediol	1,2-propylene glycol	1,3-butanediol	1,3-propylene glycol	1,4-butanediol	1,5-pentanediol	diethylene glycol	ethylene glycol	triethylene glycol				
CL/1538963	TP02 0.5-1m	02/02/15	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0				
				Where individual results are flagged see report notes for status.											

ASBESTOS ANALYSIS RESULTS - SOIL ANALYSIS

ESG Asbestos Limited Certificate of Analysis for Asbestos in Soils

1089

Detection limit of Method SCI-ASB-020 is 0.001%

Sampling has been carried out by a third party

Client:	ESG Environmental Chemistry	**Page 1 of 1**	
Address:	Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent	**Report No:**	**ANO-0488-09628**
For the attention of:	RPS	**Report Date:**	**11/02/2015**
Site Address:	Bayliss Metals	**Project Number:**	**S151118**

Sample Number	Sample Date	Sample Location	Test Date	Total Sample Dry Weight (g)	Weight of <2mm Fraction (g)	Asbestos(g) in >8mm+>2mm	Asbestos(g) in <2mm	% Asbestos by weight of Total Dried Sample	Asbestos Fibre Types Identified
CL/1538962	02/02/15	TP01 0.5-1m	11/02/2015					Screen & ID	Amosite(Free Fibres)
CL/1538963	02/02/15	TP02 0.5-1m	11/02/2015					Screen Only	NAIIS
CL/1538964	02/02/15	TP04 0.5-1m	11/02/2015					Screen & ID	Amosite(Free Fibres)
CL/1538965	02/02/15	TP05 0.5-1m	11/02/2015					Screen & ID	Amosite(Free Fibres)
CL/1538966	02/02/15	TP06 0.5-1m	11/02/2015					Screen & ID	Amosite(Free Fibres)
CL/1538967	02/02/15	TP07 0.5-1m	11/02/2015					Screen & ID	Amosite(Free Fibres)
CL/1538968	02/02/15	SA01 2.5m	11/02/2015					Screen & ID	Chrysotile(Cement)

Keys

NAACR = Not Analysed at Clients Request

NAIIS = No Asbestos Identified in Sample (Screens Only)

NADIS = No Asbestos Detected in Sample (ID & Quant Only)

Name:	Stacey Innes	Authorised Signatory:
Position:	Lab Analyst	

The sample analysis for the above results was carried out using the procedures detailed in ESG Asbestos Limited in house method (SCI-ASB-020) based on HSE document MDHS 90 - Asbestos Contaminated Land - Draft 5 - November 1997 (withdrawn). Fibre identification was carried out using ESG Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), based on HSE's HSG 248. The analysis of fine fraction for asbestos content only includes fibres and does not discriminate non-asbestos fibres. All fibres are assumed, unless specified, to be amphiboles. All tests were carried out at ESG Asbestos Laboratory, Ashbourne House, Bretby Business Park, Ashby Road, Burton-upon-Trent, Staffordshire. DE15 0XD, UKAS Laboratory Number 1089.

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

Customer RPS
Site Bayliss Metals
Report No S151118

Consignment No S46305
Date Logged 05-Feb-2015

Report Due 11-Feb-2015

ID Number	Description	MethodID	CustServ	GROHSA	ICPACIDS	ICPBOR	ICPMSS									ICPWSS	PAHMSUS	PCBUSECDAR	PHEHPLC	PHSOIL	Sub002a	Sub005	TPHUSSI
		Sampled	REPORT A	GRO (AA) by HSA GC-FID	SO4-- (acid sol)	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	SO4-- (H2O sol) mg/l	PAH (16) by GCMS	PCB-12 Congeners Analysis	Phenol - HPLC	pH units (AR)	^Asbestos Screen	^Glycol	TPH by GCFID (AR/Si)
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓
CL/1538962	TP01 0.5-1m	02/02/15																					
CL/1538963	TP02 0.5-1m	02/02/15																					
CL/1538964	TP04 0.5-1m	02/02/15																					
CL/1538965	TP05 0.5-1m	02/02/15																					
CL/1538966	TP06 0.5-1m	02/02/15																					
CL/1538967	TP07 0.5-1m	02/02/15																					
CL/1538968	SA01 2.5m	02/02/15																					

Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.

In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID
Soil	ICPACIDS	Oven Dried @ < 35℃	Determination of Total Sulphate in soil samples by Hydrochloric Acid extraction followed by ICPOES detection
Soil	ICPBOR	Oven Dried @ < 35℃	Determination of Boron in soil samples by hot water extraction followed by ICPOES detection
Soil	ICPMSS	Oven Dried @ < 35℃	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	ICPWSS	Oven Dried @ < 35℃	Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PCBUSECDAR	As Received	Determination of Polychlorinated Biphenyl (PCB) congeners/aroclors by hexane/acetone extraction followed by GCECD detection
Soil	PHEHPLC	As Received	Determination of Phenols by methanol extraction followed by HPLC detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TPHUSSI	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection including quantitation of Aromatic and Aliphatic fractions.

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile **TR** Denotes Tremolite
CR Denotes Crocidolite **AC** Denotes Actinolite
AM Denotes Amosite **AN** Denotes Anthophylite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined **N.Det** Not detected
N.F No Flow
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : RPS

Site : Bayliss Metals

Report Number : S15_1118

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1538962	TP01 0.5-1m	MADE GROUND
CL/1538963	TP02 0.5-1m	MADE GROUND
CL/1538964	TP04 0.5-1m	MADE GROUND
CL/1538965	TP05 0.5-1m	MADE GROUND
CL/1538966	TP06 0.5-1m	MADE GROUND
CL/1538967	TP07 0.5-1m	SILT
CL/1538968	SA01 2.5m	SILT