

SITE CONDITION REPORT

SOUTH SIDE, SOUTH DOCK, NEWPORT

ExCAL



Prepared for: **Associated British Ports,
Newport**

By: **Anita Davis**

Date: **March 2023**



DOCUMENT CONTROL SHEET

PROJECT:	Associated British Ports, Newport – South Side, South Dock
TITLE:	Site Condition Report

PROJECT REF:	238-03-05-23
REPORT No.:	238-03-05.R2

PREPARED BY:

A Davis:



APPROVED BY:

S Owen:



Version	Date	Amendments
Original	March 2023	

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**ASSOCIATED BRITISH PORTS, NEWPORT – SOUTH SIDE, SOUTH DOCK
SITE CONDITION REPORT**

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PART A - COMPLETED SECTIONS 1-3

These Sections have been completed and submitted as part of the Permit Application

1.0 SITE DETAILS	
Name of the applicant	Associated British Ports
Activity address	South Side, South Dock, East Way Road, Newport, NP20 2WF
National grid reference	ST 31687 84287

Document reference and dates for Site Condition Report at permit application and surrender	238-03-05.R2 – Site Condition Report - South Side, South Dock
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Document references for site plans (including location and boundaries)	See Appendix A - Drawings 238-03-05.D01 – Site Location Plan 238-03-05.D03 – Borehole Locations
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Note:

In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing: -

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site;
- Locations of receptors, sources of emissions/releases, and monitoring points;
- Site drainage;
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

2.0 CONDITION OF THE LAND AT PERMIT ISSUE	
<p>Environmental setting including: -</p> <ul style="list-style-type: none"> • Geology • Hydrogeology • Surface Waters 	<p>A full Groundsure Enviro & Geo Insight report for the site is contained in Appendix B.</p> <p>Superficial Aquifer – The superficial aquifer present directly beneath the site is classified as Unproductive. These rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.</p> <p>Bedrock Aquifer – The bedrock aquifer identified beneath the site consists of a Secondary B aquifer. Secondary B aquifers consist of predominantly lower permeability layers which may store/yield limited amounts of groundwater due to the localised features such as fissures, thin permeable horizons and weathering. These are generally water-bearing parts of the former non-aquifers.</p>

Groundwater Vulnerability – Groundwater vulnerability consists of an assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties present within a one kilometre square grid of the site. Groundwater vulnerability is described as High, Medium or Low as follows:-

- **High** - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits;
- **Medium** - Intermediate between high and low vulnerability;
- **Low** - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

A summary of the groundwater vulnerability of the site is provided below: -

Summary Classification: Secondary superficial aquifer - **Low Vulnerability**

Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer

Soil/Surface: -

Leaching class: High
Infiltration value: >70%
Dilution value: >550mm/year

Superficial Geology: -

Vulnerability: Unproductive
Aquifer type: Unproductive
Thickness: >10m
Patchiness value: >90%
Recharge potential: Low

Bedrock Geology: -

Vulnerability: Low
Aquifer type: Secondary
Flow mechanism: Well-connected fractures

Artificial and Made Ground – The site consists entirely of made ground. Historical mapping indicates that the site remained completely undeveloped until approximately 1920, at which time Alexandra Dock was observed to have been constructed.

Bedrock – The bedrock geology beneath the site comprises Mercia Mudstone group, with the rock being of the Triassic Period. The permeability of this bedrock is thought to be low and consists of fracture flow type.

Ground dissolution of soluble rocks – Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

	<p>Surface Water – The nearest surface water feature to the site consists of Alexandra’s Dock which is a transitional and coastal water body, located immediately adjacent to the northern boundary of the search area.</p> <p>The risk of river and coastal flooding on site is assessed as high.</p> <p>The risk of groundwater flooding on site is assessed as low.</p> <p>The risk of surface water flooding on site is assessed as negligible.</p> <p>In February 2023, three Boreholes were drilled at the site for both geotechnical design and in order to gain chemical analysis data to determine the condition of the soil and water at the site.</p> <p>Groundwater was encountered in each borehole at varying depths during this investigation. The entire dock consists of made ground and ground conditions encountered comprised primarily of a mixture of cobbles and gravels, with sandy clay also being recorded.</p> <p>Borehole Logs are available for review in Appendix C.</p>
<p>Pollution history including: -</p> <ul style="list-style-type: none"> • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual / olfactory evidence of existing contamination • evidence of damage to pollution prevention measures 	<p>The review of historical mapping indicates that the site was undeveloped until 1920, with the site being located near Alexandra Dock.</p> <p>The first evidence of development at the site is visible on historical mapping from 1920, by which time the dock and wharf infrastructure with its associated railway lines and a Central Store Depot located to the east had been constructed.</p> <p>Approximately 100m south of the site, an Electric Power Station was also constructed.</p> <p>Limited changes have been recorded on site between the 1920’s and 1960’s, with no significant infrastructure being recorded to have been constructed on the site in this time.</p> <p>By 2001, all railway lines were demolished and an Electricity Generating Station was constructed approximately 750m south-east of the site. Additionally, a Timber Storage Shed and Terminal were constructed 500m north-west of the application site.</p> <p>One record for a Historical Licensed Waste Site has been identified 382m west of the site.</p> <p>The closest record for sites with Waste Exemptions is 153m south of the application site. This waste exemption allows for the ‘Storing agricultural and non-agricultural waste’ (Reference: NRW-WME042270).</p> <p>One pollution incident has been recorded 333m east of the site. The incident occurred in January 2018 (Reference: 1800060) with the pollutant being identified as ‘Gas and Fuel Oils’. The incident had a Category 2 (Significant) on water. No information is available regarding the impact of this pollution event on land and air.</p> <p>The site is covered with an impermeable concrete slab, and no visual or olfactory evidence of contamination was recorded during the site walkover, with no evidence at the ground surface of any contamination.</p>

<p>Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)</p>	<p>In anticipation of potential future construction at the site, three boreholes were drilled in February 2023 in order to gain both geotechnical and chemical analysis data of the existing ground conditions present on site.</p> <p>All three were fitted with permanent standpipes to allow for future groundwater monitoring to provide regular assessment of groundwater quality both during the lifetime of permitted activities and upon permit surrender.</p> <p>The location of these boreholes is shown on Drawing 238-02-07.D03 in Appendix A.</p> <p>Soil and water samples were submitted to a UKAS accredited laboratory for analysis.</p>
<p>Baseline soil and groundwater reference data</p>	<p>Analysis results have been compared with Land Quality Management (LQM) / Chartered Institute of Environmental Health (CIEH) Suitable 4 Use Levels (S4UL), which provide generic assessment criteria (GAC's) based on minimal or tolerable risk that are intended to be protective of human health for individual/mixtures of substances.</p> <p>Where the site concentration of a contaminant exceeds the relevant S4UL, this does not necessarily mean the risk is unacceptable under Part 2A/IIA or unsuitable for use under planning, and indeed, many conservative assumptions are included in the derivation of the S4UL's, as they are for all GAC's. To reduce the conservatism, Detailed Quantitative Risk Assessments (DQRA) can be undertaken to derive Site Specific Assessment Criteria (SSAC) where appropriate, which better reflect the conditions at the site.</p> <p>The results of the chemical analysis indicate some elevated concentrations of PAH's and SVOC's at surface level in the vicinity of BH01.</p> <p>These comparisons are available for review in S4UL Guideline Values vs ABP Newport Soil Results, located within Appendix D.</p> <p>On the whole, concentrations below the S4UL recommended thresholds for commercial development were returned for the majority of analysed determinands.</p> <p>Some elevated concentrations of polycyclic aromatic hydrocarbons and semi-volatile organic compounds were recorded, namely at 1m in BH01, whereby figures were found to exceed recommended commercial development S4ULs for dibenzo(a,h)anthracene (3.79 mg/kg recorded, S4UL Commercial Limit = 3.6 mg/kg) and pyrene (38.8 mg/kg recorded, S4UL Commercial Limit = 36 mg/kg).</p> <p>Of the 12 soil samples analysed, no samples returned evidence of the presence of asbestos or asbestos containing materials.</p>

	Full chemical analysis results are available for review in Appendix D.
Supporting information	<ul style="list-style-type: none"> • Source information identifying environmental setting and pollution incidents; • Historical Ordnance Survey plans; • Site reconnaissance; • Historical investigation / assessment / remediation / verification reports; • Baseline soil and groundwater reference data.

3.0 PERMITTED ACTIVITIES	
Permitted Activities	
Waste Codes	

Non-permitted activities undertaken	
Document references for: <ul style="list-style-type: none"> • Plan showing activity layout; and • Environmental risk assessment 	

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on the guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

PART B - SECTIONS 4-7 – DURING THE LIFE OF THE PERMIT

These sections are to be completed and maintained by the Site Operator for the life of the Permit

4.0 CHANGES TO THE ACTIVITY	
Have there been any changes to the activity boundary?	
Have there been any changes to the permitted activities?	
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	
Checklist of supporting information	<ul style="list-style-type: none"> • Plan showing any changes to the boundary (where relevant); • Description of the changes to the permitted activities (where relevant); • List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant).

5.0 MEASURES TAKEN TO PROTECT LAND	
<p>Boreholes have been installed with the provision of permanent ground water monitoring wells for sampling and analysis to be undertaken during the lifetime of the environmental permit.</p>	
Checklist of supporting information	<ul style="list-style-type: none"> • Inspection records and summary of findings of inspections for all pollution prevention measures; • Records of maintenance, repair and replacement of pollution prevention measures.

6.0 POLLUTION INCIDENTS THAT MAY HAVE HAD AN IMPACT ON LAND, AND THEIR REMEDIATION	
Checklist of supporting information	<ul style="list-style-type: none"> • Records of pollution incidents that may have impacted on land; • Records of their investigation and remediation.

7.0 SOIL GAS AND WATER QUALITY MONITORING (WHERE UNDERTAKEN)	
<p>Soil and water analysis was undertaken in February 2023 prior to the commencement of site activities. The results of this analysis are available for review in Appendix D.</p>	
Checklist of supporting information	<ul style="list-style-type: none"> • Description of soil gas and/or water monitoring undertaken; • Monitoring results (including graphs).

PART C – SECTIONS 8 – 10 – PERMIT SURRENDER

Upon surrender of the permit, sections 8 through 10 must be completed, along with the document reference in Section 1, and submitted with your Surrender Application

8.0 DECOMMISSIONING AND REMOVAL OF POLLUTION RISK	
<p>During the lifetime of the operation the groundwater will be consistently monitored and documented. Upon surrender of the permit, the site investigation procedure and analysis will be repeated, documented and compared with the analysis undertaken prior to the commencement of site activities. At the end of the proposed operations, all remaining materials are to be processed and all analysis of soil and water will be undertaken in an UKAS accredited laboratory.</p>	
Checklist of supporting information	<ul style="list-style-type: none"> • Site closure plan; • List of potential sources of pollution risk; • Investigation and remediation reports (where relevant).

9.0 REFERENCE DATA AND REMEDIATION (WHERE RELEVANT)	
<p>Soil and water analysis was undertaken in February 2023 prior to the commencement of site activities. The results of this analysis are available for review in Appendix D.</p>	
Checklist of supporting information	<ul style="list-style-type: none"> • Land and/or groundwater data collected at application (if collected); • Land and/or groundwater data collected at surrender (where needed); • Assessment of satisfactory state; • Remediation and verification reports (where undertaken).

10.0 STATEMENT OF SITE CONDITION	
<p>Chemical analysis undertaken prior to the issue of an environmental permit and prior to the commencement of site activities indicate that a small amount of PAH and SVOC contamination is present at surface level in the vicinity of BH01.</p> <p>Full soil and groundwater analysis data is contained in Appendix D.</p>	

For full details, see H5 SCR guide for applicants v2.0 4 August 2008

APPENDIX A

Drawings

— Site Boundary

Job:
Associated British Ports,
Newport

Title:
Site Location Plan

Date: January 2023

Scale: NTS

Drawn by: AJD

Checked by: SO



ExCAL House,
Capel Hendre Ind. Est.,
Ammanford,
Carmarthenshire,
SA18 3SJ
Tel: 01269 831606
Fax: 01269 841867
Website: www.excaluk.com
E-mail: info@excaluk.com

Drawing No: 238-03-05.D01

Revision No: **Date** 19.01.2023



-  Boundary
-  Borehole
-  Terminated Borehole

Note: Boreholes 01, 02 & 05 are monitoring wells

BH Co-ordinates

- BH01 - X 331638.147, Y 184179.926
- BH02 - X 331657.404, Y 184245.479
- BH03 - X 331712.143, Y 184270.482
- BH04 - X 331641.781, Y 184305.731
- BH05 - X 331718.274, Y 184353.103

Job:
ABP Newport,
Land at South Side Coal Terminal

Title:
Borehole Locations

Date: February 2023

Scale: NTS

Drawn by: AJD

Checked by: SO



ExCAL House,
Capel Hendre Ind. Est.,
Ammanford,
Carmarthenshire,
SA18 3SJ
Tel: 01269 831606
Fax: 01269 841867
Website: www.excaluk.com
E-mail: info@excaluk.com

Drawing No: 238-03-05.D03

Revision No: **Date:** 17.02.2023



APPENDIX B
Groundsure Reports

ASSOCIATED BRITISH PORTS, , EAST WAY ROAD, ALEXANDRA DOCKS, NEWPORT, NP20 2UW

Order Details

Date: 13/01/2023
Your ref: ABP_Newport
Our Ref: HMD-142-9296478

Site Details

Location: 331693 184281
Area: 2.42 ha
Authority: [Casnewydd - Newport City Council](#)



Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

p.13

groundsure.com/insightuserguide

Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	<u>Historical industrial land uses</u>	9	6	14	48	-
17	1.2	<u>Historical tanks</u>	0	0	2	5	-
18	1.3	<u>Historical energy features</u>	1	0	3	4	-
19	1.4	Historical petrol stations	0	0	0	0	-
19	1.5	Historical garages	0	0	0	0	-
19	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
20	2.1	<u>Historical industrial land uses</u>	11	7	17	54	-
24	2.2	<u>Historical tanks</u>	0	0	6	8	-
25	2.3	<u>Historical energy features</u>	1	0	11	8	-
26	2.4	Historical petrol stations	0	0	0	0	-
26	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
27	3.1	Active or recent landfill	0	0	0	0	-
27	3.2	Historical landfill (BGS records)	0	0	0	0	-
28	3.3	<u>Historical landfill (LA/mapping records)</u>	0	0	0	2	-
28	3.4	<u>Historical landfill (EA/NRW records)</u>	0	0	0	3	-
29	3.5	<u>Historical waste sites</u>	0	0	0	1	-
29	3.6	<u>Licensed waste sites</u>	1	0	0	24	-
36	3.7	<u>Waste exemptions</u>	0	0	7	3	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
38	4.1	<u>Recent industrial land uses</u>	0	3	5	-	-
39	4.2	Current or recent petrol stations	0	0	0	0	-
39	4.3	Electricity cables	0	0	0	0	-
39	4.4	Gas pipelines	0	0	0	0	-
40	4.5	Sites determined as Contaminated Land	0	0	0	0	-



40	4.6	<u>Control of Major Accident Hazards (COMAH)</u>	0	0	0	2	-
40	4.7	Regulated explosive sites	0	0	0	0	-
40	4.8	Hazardous substance storage/usage	0	0	0	0	-
41	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
41	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
41	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	2	0	-
41	4.12	Radioactive Substance Authorisations	0	0	0	0	-
42	4.13	<u>Licensed Discharges to controlled waters</u>	1	0	11	12	-
45	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
45	4.15	Pollutant release to public sewer	0	0	0	0	-
45	4.16	List 1 Dangerous Substances	0	0	0	0	-
45	4.17	List 2 Dangerous Substances	0	0	0	0	-
45	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	0	1	-
46	4.19	Pollution inventory substances	0	0	0	0	-
46	4.20	Pollution inventory waste transfers	0	0	0	0	-
46	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
47	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
48	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
50	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
51	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
51	5.5	Groundwater vulnerability- local information	None (within 0m)				
52	5.6	Groundwater abstractions	0	0	0	0	0
53	5.7	<u>Surface water abstractions</u>	0	0	0	0	2
53	5.8	Potable abstractions	0	0	0	0	0
54	5.9	Source Protection Zones	0	0	0	0	-
54	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
55	6.1	<u>Water Network (OS MasterMap)</u>	0	1	10	-	-



56	6.2	<u>Surface water features</u>	0	2	5	-	-
57	6.3	<u>WFD Surface water body catchments</u>	2	-	-	-	-
57	6.4	<u>WFD Surface water bodies</u>	0	0	1	-	-
58	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
59	7.1	<u>Risk of flooding from rivers and the sea</u>	High (within 50m)				
60	7.2	Historical Flood Events	0	0	0	-	-
60	7.3	Flood Defences	0	0	0	-	-
60	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
60	7.5	Flood Storage Areas	0	0	0	-	-
61	7.6	<u>Flood Zone 2</u>	Identified (within 50m)				
62	7.7	<u>Flood Zone 3</u>	Identified (within 50m)				
Page	Section	Surface water flooding					
63	8.1	<u>Surface water flooding</u>	1 in 100 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
65	9.1	<u>Groundwater flooding</u>	Negligible (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
66	10.1	<u>Sites of Special Scientific Interest (SSSI)</u>	0	0	2	0	4
67	10.2	<u>Conserved wetland sites (Ramsar sites)</u>	0	0	0	1	0
69	10.3	<u>Special Areas of Conservation (SAC)</u>	0	0	1	1	0
69	10.4	<u>Special Protection Areas (SPA)</u>	0	0	0	1	0
70	10.5	<u>National Nature Reserves (NNR)</u>	0	0	0	1	0
70	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
70	10.7	<u>Designated Ancient Woodland</u>	0	0	0	0	3
71	10.8	Biosphere Reserves	0	0	0	0	0
71	10.9	Forest Parks	0	0	0	0	0
71	10.10	Marine Conservation Zones	0	0	0	0	0
71	10.11	Green Belt	0	0	0	0	0
72	10.12	Proposed Ramsar sites	0	0	0	0	0

72	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
72	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
72	10.15	Nitrate Sensitive Areas	0	0	0	0	0
73	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
74	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
75	10.18	SSSI Units	0	0	0	0	0

Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
76	11.1	World Heritage Sites	0	0	0	-	-
76	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
76	11.3	National Parks	0	0	0	-	-
76	11.4	Listed Buildings	0	0	0	-	-
77	11.5	Conservation Areas	0	0	0	-	-
77	11.6	Scheduled Ancient Monuments	0	0	0	-	-
77	11.7	Registered Parks and Gardens	0	0	0	-	-

Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
78	12.1	<u>Agricultural Land Classification</u>	Grade 5 (within 250m)				
79	12.2	<u>Open Access Land</u>	0	0	2	-	-
79	12.3	Tree Felling Licences	0	0	0	-	-
80	12.4	Environmental Stewardship Schemes	0	0	0	-	-
80	12.5	Countryside Stewardship Schemes	0	0	0	-	-

Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
81	13.1	Priority Habitat Inventory	0	0	0	-	-
81	13.2	Habitat Networks	0	0	0	-	-
81	13.3	Open Mosaic Habitat	0	0	0	-	-
81	13.4	Limestone Pavement Orders	0	0	0	-	-

Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
82	14.1	<u>10k Availability</u>	Identified (within 500m)				
83	14.2	Artificial and made ground (10k)	0	0	0	0	-
84	14.3	Superficial geology (10k)	0	0	0	0	-



84	14.4	Landslip (10k)	0	0	0	0	-
85	14.5	Bedrock geology (10k)	0	0	0	0	-
85	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
86	15.1	<u>50k Availability</u>	Identified (within 500m)				
87	15.2	Artificial and made ground (50k)	0	0	0	0	-
87	15.3	Artificial ground permeability (50k)	0	0	-	-	-
88	15.4	<u>Superficial geology (50k)</u>	1	0	2	0	-
89	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
89	15.6	Landslip (50k)	0	0	0	0	-
89	15.7	Landslip permeability (50k)	None (within 50m)				
90	15.8	<u>Bedrock geology (50k)</u>	1	0	0	0	-
91	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
91	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
92	16.1	<u>BGS Boreholes</u>	0	0	1	-	-
Page	Section	Natural ground subsidence					
93	17.1	<u>Shrink swell clays</u>	Low (within 50m)				
94	17.2	<u>Running sands</u>	Moderate (within 50m)				
95	17.3	<u>Compressible deposits</u>	Moderate (within 50m)				
96	17.4	<u>Collapsible deposits</u>	Negligible (within 50m)				
97	17.5	<u>Landslides</u>	Low (within 50m)				
99	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
100	18.1	Natural cavities	0	0	0	0	-
101	18.2	<u>BritPits</u>	0	0	1	0	-
101	18.3	<u>Surface ground workings</u>	3	1	4	-	-
102	18.4	Underground workings	0	0	0	0	0
102	18.5	Historical Mineral Planning Areas	0	0	0	0	-



102	18.6	Non-coal mining	0	0	0	0	0
102	18.7	Mining cavities	0	0	0	0	0
102	18.8	JPB mining areas	None (within 0m)				
103	18.9	Coal mining	None (within 0m)				
103	18.10	Brine areas	None (within 0m)				
103	18.11	Gypsum areas	None (within 0m)				
103	18.12	Tin mining	None (within 0m)				
103	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
104	19.1	Radon	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
106	20.1	BGS Estimated Background Soil Chemistry	1	0	-	-	-
106	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
106	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
107	21.1	Underground railways (London)	0	0	0	-	-
107	21.2	Underground railways (Non-London)	0	0	0	-	-
108	21.3	Railway tunnels	0	0	0	-	-
108	21.4	Historical railway and tunnel features	9	0	36	-	-
110	21.5	Royal Mail tunnels	0	0	0	-	-
110	21.6	Historical railways	0	0	1	-	-
110	21.7	Railways	1	0	0	-	-
110	21.8	Crossrail 1	0	0	0	0	-
111	21.9	Crossrail 2	0	0	0	0	-
111	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 14/04/2020

Site Area: 2.42ha



Recent site history - 2017 aerial photograph



Capture Date: 25/05/2017

Site Area: 2.42ha



Recent site history - 2014 aerial photograph



Capture Date: 23/07/2014

Site Area: 2.42ha



Recent site history - 2009 aerial photograph

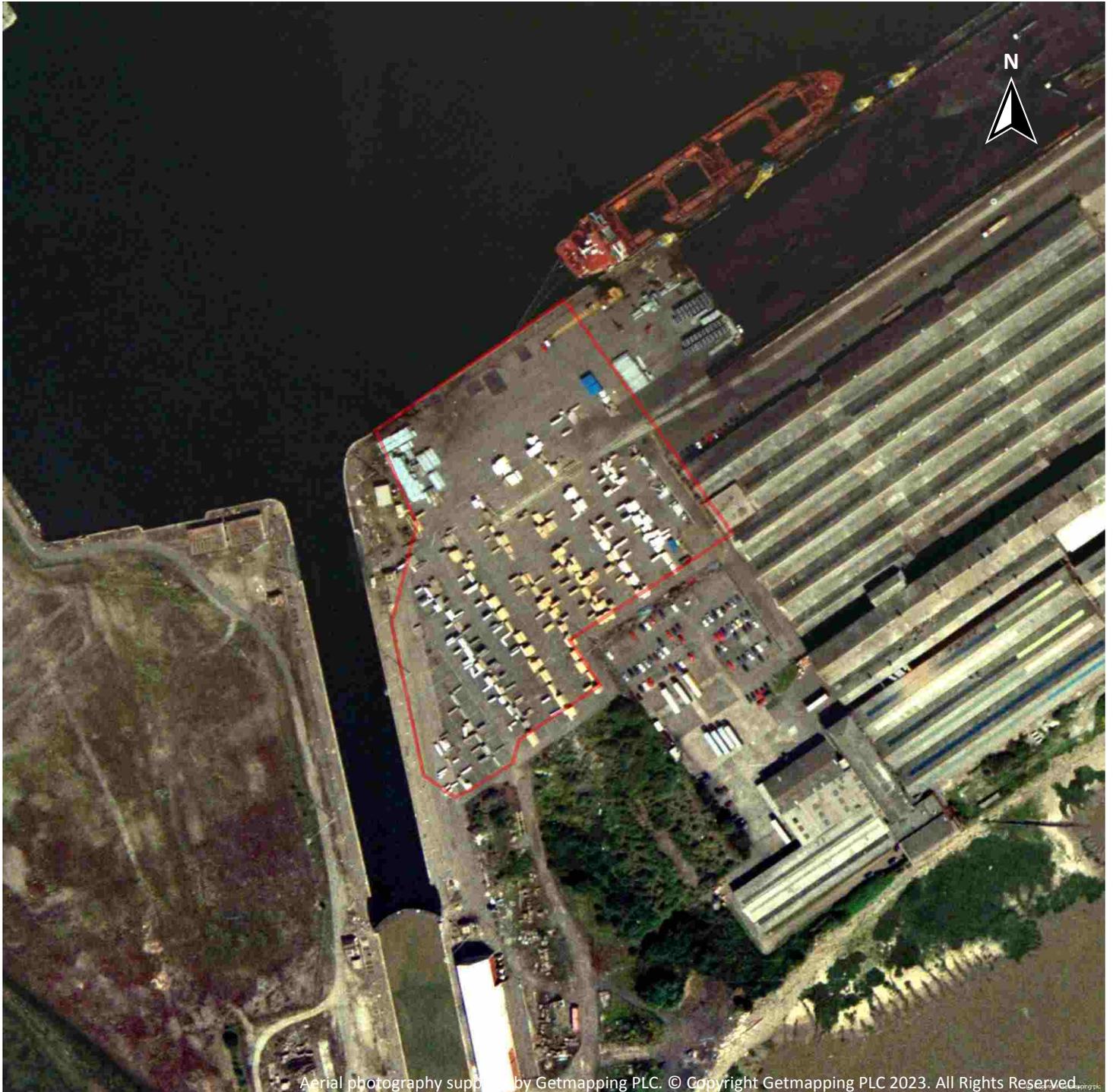


Capture Date: 12/10/2009

Site Area: 2.42ha



Recent site history - 2000 aerial photograph



Capture Date: 17/06/2000

Site Area: 2.42ha



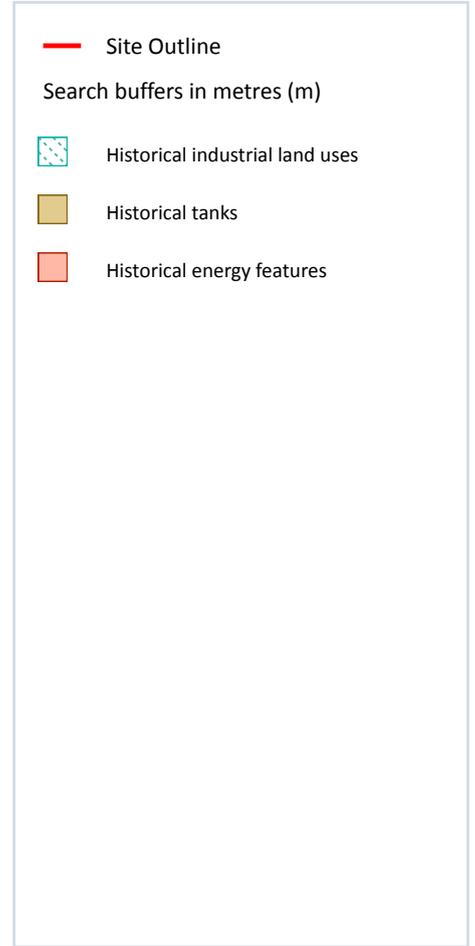
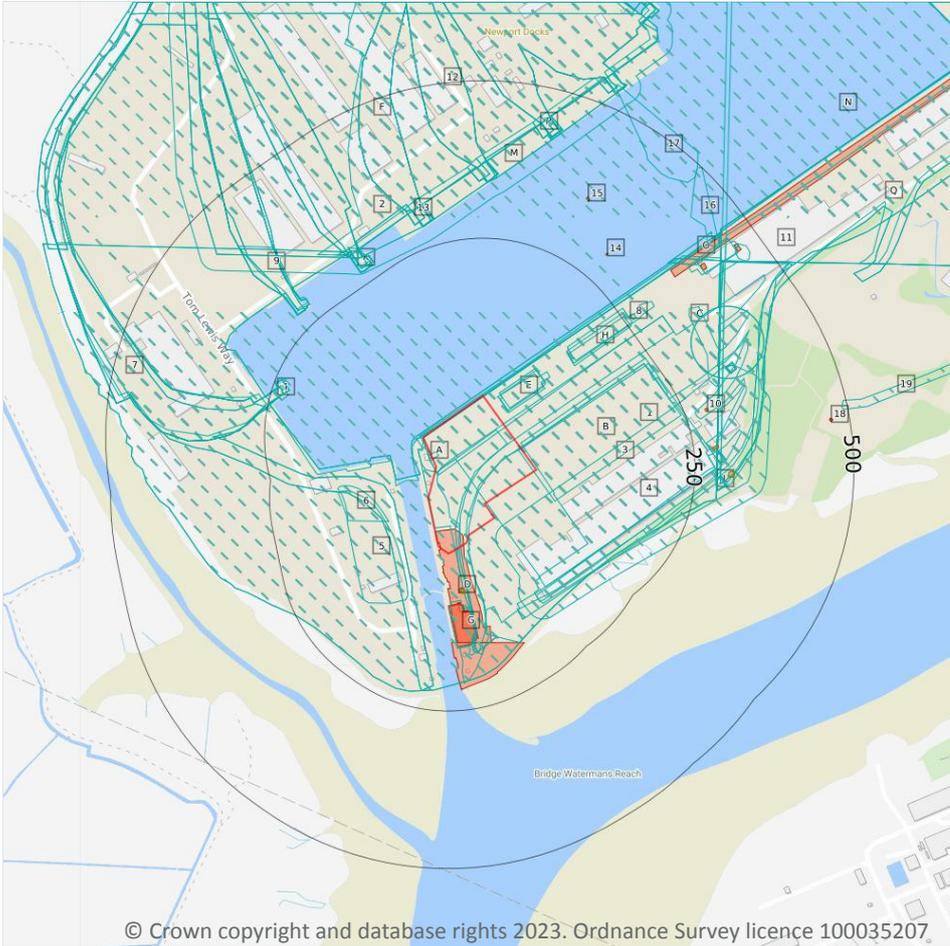
OS MasterMap site plan



Site Area: 2.42ha



1 Past land use



1.1 Historical industrial land uses

Records within 500m

77

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
1	On site	Quay	1956	1164889

ID	Location	Land use	Dates present	Group ID
A	On site	Railway Building	1956	1172480
A	On site	Docks	1922	1157146
A	On site	Docks	1922	1157151
B	On site	Unspecified Works	1956	1178970
B	On site	Railway Sidings	1950	1190082
B	On site	Store Depot	1922	1200332
C	On site	Railway Sidings	1956	1190125
C	On site	Railway Sidings	1920 - 1949	1203016
2	0m N	Docks	1922	1258080
3	3m E	Store Depot	1950	1256036
4	17m SE	Unspecified Mills	1956	1164943
E	17m N	Railway Buildings	1956	1181817
E	18m NE	Transit Shed	1922 - 1950	1208217
E	23m N	Transit Shed	1922	1190325
F	53m SW	Railway Sidings	1956	1195033
F	53m SW	Dock	1956	1260805
5	62m SW	Unspecified Pit	1922	1260461
6	68m SW	Unspecified Pit	1922	1268170
G	77m S	Electric Power Station	1922	1198445
H	145m NE	Transit Shed	1922	1207429
H	147m NE	Railway Buildings	1956	1181818
H	150m NE	Transit Shed	1922 - 1950	1269010
I	222m NW	Coal Hoists	1922	1183863
I	223m NW	Coal Hoist	1922 - 1950	1196003
F	231m NW	Railway Sidings	1922	1190018
F	231m NW	Railway Sidings	1922	1190019
F	231m NW	Railway Sidings	1922	1190020
F	231m NW	Railway Sidings	1922	1190021



ID	Location	Land use	Dates present	Group ID
7	252m W	Railway Sidings	1950	1189962
J	257m N	Docks	1920	1197679
8	262m NE	Railway Building	1922	1172479
K	269m NW	Coal Hoists	1922	1197986
K	273m NW	Coal Hoist	1922	1184700
K	277m NW	Railway Sidings	1950	1189964
9	281m NW	Railway Sidings	1950	1189963
M	282m N	Coal Hoists	1949	1191845
M	282m N	Coal Hoists	1920	1251177
C	283m E	Railway Sidings	1916	1265591
L	284m E	Railway Building	1916	1255371
C	284m E	Railway Sidings	1885	1269301
L	284m E	Railway Building	1885	1243513
C	284m E	Railway Sidings	1949	1191872
L	284m E	Railway Building	1949	1199268
L	284m E	Railway Building	1922	1267834
J	285m N	Railway Sidings	1949	1233464
J	285m N	Railway Sidings	1920	1256077
L	285m E	Railway Building	1916	1236057
L	285m E	Railway Building	1922	1214682
L	285m E	Railway Building	1949	1218121
L	286m E	Railway Building	1885	1242659
11	290m E	Railway Sidings	1922	1271261
N	290m E	Dock	1922	1198907
12	291m N	Dock	1949	1190066
13	291m N	Coal Hoists	1949	1268571
C	305m NE	Unspecified Level	1949	1213343
C	305m NE	Unspecified Level	1885 - 1900	1215289



ID	Location	Land use	Dates present	Group ID
C	307m E	Unspecified Heap	1900	1163118
M	339m N	Coal Hoists	1922	1219565
C	340m E	Railway Building	1916	1258556
C	340m E	Railway Building	1922 - 1949	1208339
M	340m N	Coal Hoists	1949	1263001
C	341m E	Railway Building	1885	1203471
O	360m NE	Railway Sidings	1949	1195459
O	360m NE	Railway Sidings	1920	1210842
O	381m NE	Railway Building	1956	1230175
O	397m NE	Railway Building	1922	1255398
P	419m N	Coal Hoists	1949	1196663
P	423m N	Coal Hoist	1922	1184699
O	428m NE	Transit Shed	1920 - 1922	1250095
16	428m NE	Unspecified Ground Workings	1900	1160913
Q	429m NE	Dock	1920	1190067
Q	429m NE	Dock	1949	1190068
Q	429m NE	Dock	1949	1190069
17	451m NE	Unspecified Heap	1900	1163113
O	454m NE	Unspecified Heap	1900	1163117
19	491m E	Unspecified Ground Workings	1956	1160912

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

7

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**



ID	Location	Land use	Dates present	Group ID
D	58m S	Unspecified Tank	1920	185566
D	59m S	Unspecified Tank	1955 - 1989	185475
L	280m E	Unspecified Tank	1956	181432
10	282m E	Unspecified Tank	1956	179499
14	295m NE	Unspecified Tank	1921	173568
L	302m E	Unspecified Tank	1956	184357
15	350m NE	Unspecified Tank	1921	173567

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

8

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
D	On site	Power Station	1968	113484
G	80m S	Power Station	1955 - 1989	105879
G	81m S	Electric Power Station	1920	99470
G	82m S	Power Station	1989	100292
N	356m NE	Electricity Substation	1994	97666
O	398m NE	Electricity Substation	1971 - 1994	110724
O	460m NE	Electricity Substation	1956	107622
18	468m E	Electricity Substation	1956	113397

This data is sourced from Ordnance Survey / Groundsure.



1.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

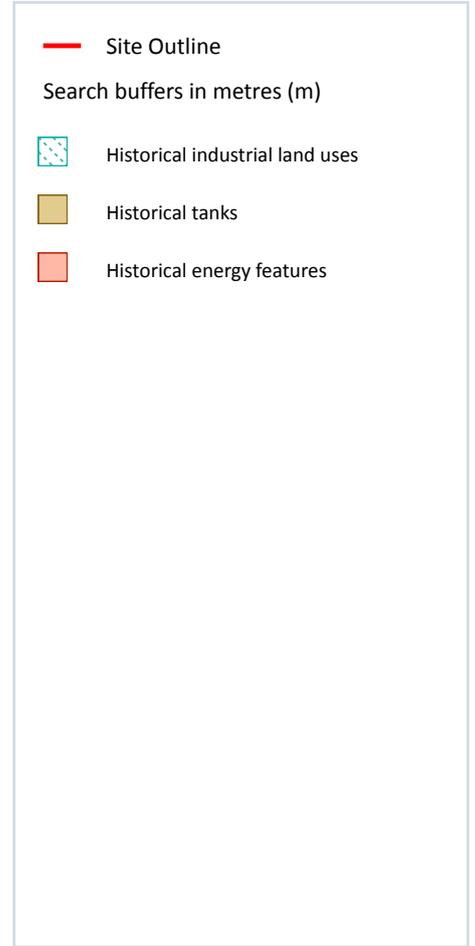
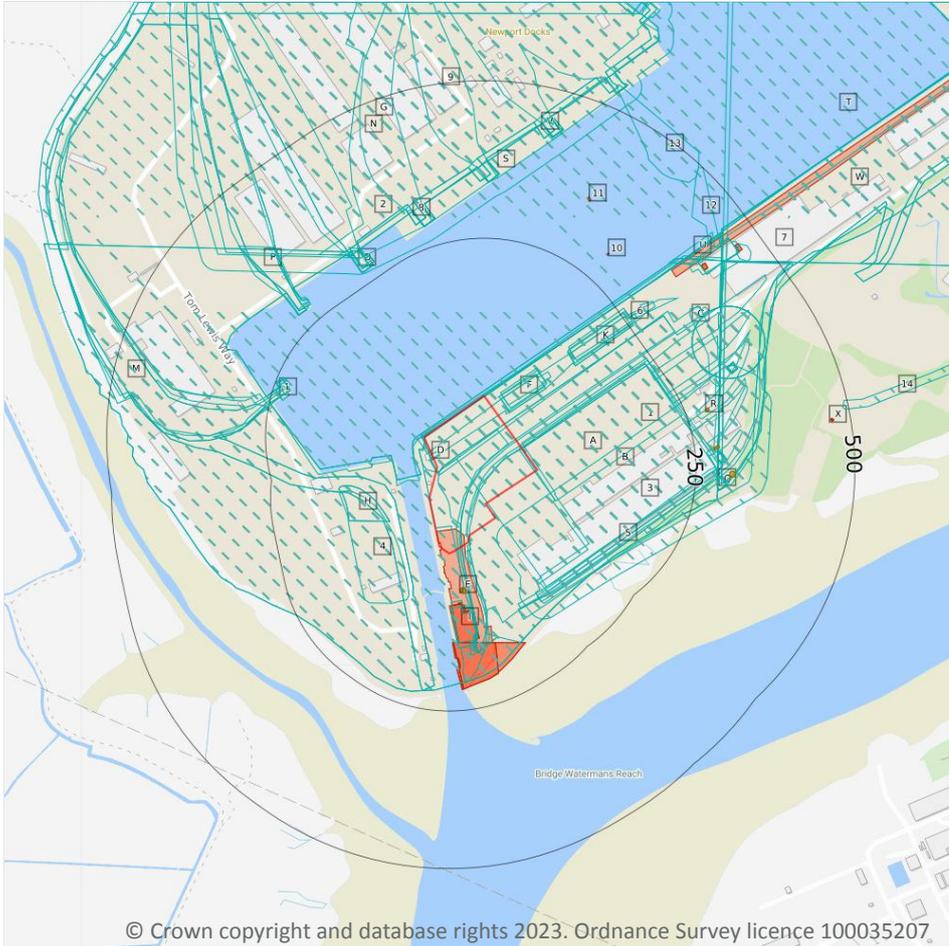
0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m

89

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 20**

ID	Location	Land Use	Date	Group ID
1	On site	Quay	1956	1164889
A	On site	Railway Sidings	1950	1190082
A	On site	Railway Sidings	1922	1203016

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Works	1956	1178970
A	On site	Railway Sidings	1922	1203016
A	On site	Store Depot	1922	1200332
B	On site	Store Depot	1922	1200332
C	On site	Railway Sidings	1956	1190125
D	On site	Railway Building	1956	1172480
D	On site	Docks	1922	1157146
D	On site	Docks	1922	1157151
2	0m N	Docks	1922	1258080
B	3m E	Store Depot	1950	1256036
3	17m SE	Unspecified Mills	1956	1164943
F	17m N	Railway Buildings	1956	1181817
F	18m NE	Transit Shed	1922	1208217
F	23m NE	Transit Shed	1950	1208217
F	23m N	Transit Shed	1922	1190325
G	53m SW	Dock	1956	1260805
G	53m SW	Railway Sidings	1956	1195033
4	62m SW	Unspecified Pit	1922	1260461
H	68m SW	Unspecified Pit	1922	1268170
H	68m SW	Unspecified Pit	1922	1268170
I	77m S	Electric Power Station	1922	1198445
I	86m S	Electric Power Station	1922	1198445
5	126m S	Railway Sidings	1922	1203016
K	145m NE	Transit Shed	1922	1207429
K	147m NE	Railway Buildings	1956	1181818
K	150m NE	Transit Shed	1950	1269010
K	151m NE	Transit Shed	1922	1269010
L	222m NW	Coal Hoists	1922	1183863



ID	Location	Land Use	Date	Group ID
L	223m NW	Coal Hoist	1922	1196003
G	231m NW	Railway Sidings	1922	1190018
M	234m NW	Railway Sidings	1922	1190021
L	234m NW	Coal Hoist	1950	1196003
M	252m W	Railway Sidings	1950	1189962
N	257m N	Docks	1920	1197679
6	262m NE	Railway Building	1922	1172479
O	269m NW	Coal Hoists	1922	1197986
O	273m NW	Coal Hoist	1922	1184700
O	274m NW	Railway Sidings	1922	1190020
P	277m NW	Railway Sidings	1922	1190019
O	277m NW	Railway Sidings	1950	1189964
P	281m NW	Railway Sidings	1950	1189963
S	282m N	Coal Hoists	1920	1251177
C	283m E	Railway Sidings	1916	1265591
Q	284m E	Railway Building	1916	1255371
C	284m E	Railway Sidings	1885	1269301
Q	284m E	Railway Building	1885	1243513
C	284m E	Railway Sidings	1949	1191872
Q	284m E	Railway Building	1949	1199268
Q	284m E	Railway Building	1922	1267834
N	285m N	Railway Sidings	1920	1256077
Q	285m E	Railway Building	1916	1236057
Q	285m E	Railway Building	1949	1218121
Q	285m E	Railway Building	1922	1214682
Q	286m E	Railway Building	1885	1242659
7	290m E	Railway Sidings	1922	1271261
T	290m E	Dock	1922	1198907



ID	Location	Land Use	Date	Group ID
8	291m N	Coal Hoists	1949	1268571
9	291m N	Dock	1949	1190066
N	291m N	Railway Sidings	1949	1233464
O	300m NW	Coal Hoists	1949	1191845
C	305m NE	Unspecified Level	1949	1213343
C	305m NE	Unspecified Level	1885	1215289
C	305m NE	Unspecified Level	1900	1215289
C	307m E	Unspecified Heap	1900	1163118
S	339m N	Coal Hoists	1922	1219565
C	340m E	Railway Building	1916	1258556
C	340m E	Railway Building	1949	1208339
C	340m E	Railway Building	1922	1208339
S	340m N	Coal Hoists	1949	1263001
C	341m E	Railway Building	1885	1203471
U	360m NE	Railway Sidings	1949	1195459
U	371m NE	Railway Sidings	1920	1210842
U	381m NE	Railway Building	1956	1230175
U	397m NE	Railway Building	1922	1255398
V	419m N	Coal Hoists	1949	1196663
V	423m N	Coal Hoist	1922	1184699
U	428m NE	Transit Shed	1922	1250095
12	428m NE	Unspecified Ground Workings	1900	1160913
U	429m NE	Transit Shed	1920	1250095
W	429m NE	Railway Sidings	1920	1203016
W	429m NE	Dock	1920	1190067
W	429m NE	Railway Sidings	1949	1203016
W	429m NE	Dock	1949	1190068
13	451m NE	Unspecified Heap	1900	1163113



ID	Location	Land Use	Date	Group ID
U	454m NE	Unspecified Heap	1900	1163117
14	491m E	Unspecified Ground Workings	1956	1160912

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

14

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 20**

ID	Location	Land Use	Date	Group ID
E	58m S	Unspecified Tank	1920	185566
E	59m S	Unspecified Tank	1989	185475
E	59m S	Unspecified Tank	1955	185475
E	59m S	Unspecified Tank	1968	185475
E	60m S	Unspecified Tank	1968	185475
E	60m S	Unspecified Tank	1955	185475
Q	280m E	Unspecified Tank	1956	181432
Q	281m E	Unspecified Tank	1956	181432
R	282m E	Unspecified Tank	1956	179499
R	282m E	Unspecified Tank	1956	179499
10	295m NE	Unspecified Tank	1921	173568
Q	302m E	Unspecified Tank	1956	184357
Q	303m E	Unspecified Tank	1956	184357
11	350m NE	Unspecified Tank	1921	173567

This data is sourced from Ordnance Survey / Groundsure.



2.3 Historical energy features

Records within 500m

20

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 20**

ID	Location	Land Use	Date	Group ID
E	On site	Power Station	1968	113484
I	80m S	Power Station	1955	105879
I	80m S	Power Station	1955	105879
I	81m S	Electric Power Station	1920	99470
I	82m S	Power Station	1989	100292
I	83m S	Power Station	1968	105879
J	141m S	Power Station	1989	105879
J	141m S	Power Station	1989	105879
J	142m S	Power Station	1956	105879
J	142m S	Power Station	1965	105879
J	142m S	Power Station	1956	105879
J	142m S	Power Station	1966	105879
T	356m NE	Electricity Substation	1994	97666
U	398m NE	Electricity Substation	1971	110724
U	398m NE	Electricity Substation	1994	110724
U	398m NE	Electricity Substation	1992	110724
U	460m NE	Electricity Substation	1956	107622
U	460m NE	Electricity Substation	1956	107622
X	468m E	Electricity Substation	1956	113397
X	469m E	Electricity Substation	1956	113397

This data is sourced from Ordnance Survey / Groundsure.



2.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

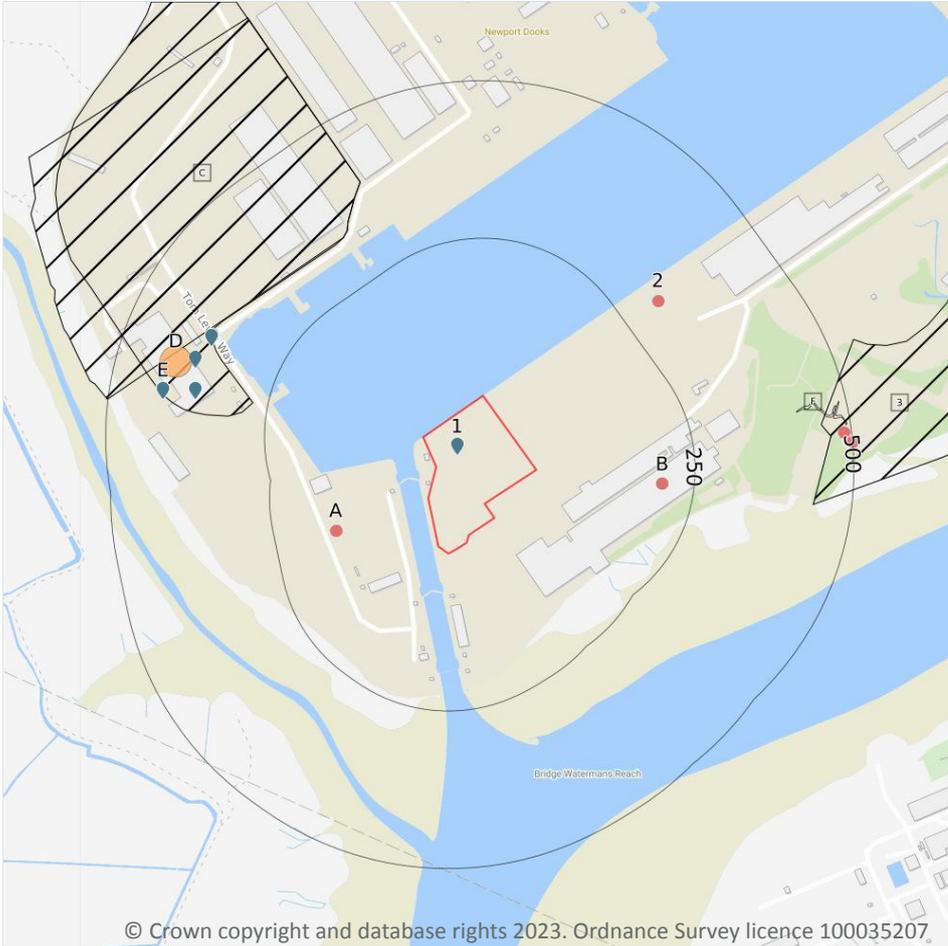
0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m

2

Landfill sites identified from Local Authority records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 27**

ID	Location	Site address	Source	Data type
F	420m E	Refuse Tip	1956 mapping	Polygon
F	476m E	Refuse Tip	1956 mapping	Polygon

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m

3

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on **page 27**

ID	Location	Details		
C	273m W	Site Address: South Dock Licence Holder Address: -	Waste Licence: Yes Site Reference: 004/77 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 21/01/1977 Licence Surrender: 31/12/1990	Operator: - Licence Holder: Gwent Haulage Company Limited First Recorded 31/01/1976 Last Recorded: 31/12/1990
C	331m NW	Site Address: Old Coal Sidings Licence Holder Address: -	Waste Licence: Yes Site Reference: 015/77 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 22/04/1977 Licence Surrender: -	Operator: - Licence Holder: H Wessen First Recorded 31/12/1970 Last Recorded: 31/12/1983
3	439m E	Site Address: South Dock Phase 1 Licence Holder Address: -	Waste Licence: Yes Site Reference: 039/86 Waste Type: Industrial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 14/04/1986 Licence Surrender: -	Operator: - Licence Holder: Coslett Contractors Limited First Recorded 30/04/1986 Last Recorded: 30/04/1990

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m

1

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 27**

ID	Location	Address	Further Details	Date
D	382m W	Site Address: North Dock,Alexandra Dock, Newport Docks, NEWPORT, Gwent, NP20 2NP	Type of Site: Waste Transfer Station (Conversion) Planning application reference: 05/1155/F Description: Scheme comprises change of use to a waste transfer station with associated wood chipping plant. An application (ref: 05/1155/F) for Detailed Planning permission was submitted to Newport B.C. on 22nd August 2005. Data source: Historic Planning Application Data Type: Point	-

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m

25

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 27**

ID	Location	Details		
1	On site	Site Name: - Site Address: Coal Terminal, South Dock, East Way Road, Newport Docks, Newport, NP20 2WE Correspondence Address: -	Type of Site: Physical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: CB3295FG EPR reference: - Operator: South West Wood Products Limited Waste Management licence No: 0 Annual Tonnage: 250000	Issue Date: 29/09/2021 Effective Date: 29/09/2021 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
D	366m W	Site Name: Sims Group Uk Ltd Site Address: Sims Group Uk Ltd, North Side, South Dock, Alexandra Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM011 EPR reference: CP3595FW/S002 Operator: Sims Group U K Ltd Waste Management licence No: 30305 Annual Tonnage: 1355	Issue Date: 30/01/2004 Effective Date: - Modified: - Surrendered Date: 2.00502e+016 Expiry Date: 0 Cancelled Date: 0 Status: Surrendered
D	367m W	Site Name: Sims Group U K Ltd Site Address: North Quay, South Dock, Westway Road, Newport Docks, Newport, NP9 2WE Correspondence Address: Sims Group U K Ltd, Long Marston, Stratford Upon Avon, Warwickshire, CU37 8AG	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM009 EPR reference: - Operator: Sims Group U K Ltd (Newport) Waste Management licence No: 30273 Annual Tonnage: 24999.9	Issue Date: 28/02/2003 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
D	369m NW	Site Name: Sims Newport Site Address: South Dock, Westway Road, Newport Docks, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: SIM009 EPR reference: TP3495FK/S005 Operator: Sims Group U K Ltd Waste Management licence No: 30273 Annual Tonnage: 0	Issue Date: 28/02/2003 Effective Date: - Modified: 27/10/2010 Surrendered Date: 2.01507e+016 Expiry Date: 0 Cancelled Date: 0 Status: Surrendered
D	369m NW	Site Name: Sims Group U K Ltd (fridge Storage) Site Address: Land/ Premises At, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM009 EPR reference: TP3495FK/V002 Operator: Sims Group U K Ltd (fridge Storage) Waste Management licence No: 30273 Annual Tonnage: 25000	Issue Date: 28/02/2003 Effective Date: - Modified: 14/06/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified



ID	Location	Details		
D	369m NW	Site Name: Sims Newport Site Address: South Dock, Westway Road, Newport Docks, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM009 EPR reference: TP3495FK/V004 Operator: Sims Group U K Ltd Waste Management licence No: 30273 Annual Tonnage: 24999	Issue Date: 28/02/2003 Effective Date: - Modified: 27/10/2010 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
D	369m NW	Site Name: - Site Address: Sims Newport, Newport Docks, Newport, Newport, NP20 2WE Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: TP3495FK EPR reference: - Operator: Sims Group U K Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 28/02/2003 Effective Date: 28/02/2003 Modified: - Surrendered Date: 23/07/2015 Expiry Date: - Cancelled Date: - Status: Surrendered
D	369m NW	Site Name: - Site Address: Sims Newport, Newport Docks, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: TP3495FK EPR reference: - Operator: - Waste Management licence No: 30273 Annual Tonnage: 0	Issue Date: 28/02/2003 Effective Date: 28/02/2003 Modified: - Surrendered Date: 23/07/2015 Expiry Date: - Cancelled Date: - Status: Surrender
D	369m NW	Site Name: - Site Address: Sims Newport, Newport Docks, Gwent, Newport, Newport, NP20 2WE Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: TP3495FK EPR reference: - Operator: Sims Group U K Ltd Waste Management licence No: 30273 Annual Tonnage: 0	Issue Date: 28/02/2003 Effective Date: 28/02/2003 Modified: - Surrendered Date: 23/07/2015 Expiry Date: - Cancelled Date: - Status: Surrender

ID	Location	Details		
D	369m NW	Site Name: - Site Address: Sims Newport, Newport Docks, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: - Environmental Permitting Regulations (Waste) Licence Number: TP3495FK EPR reference: - Operator: Sims Group U K Ltd Waste Management licence No: 30273 Annual Tonnage: 0	Issue Date: 28/02/2003 Effective Date: 28/02/2003 Modified: - Surrendered Date: 23/07/2015 Expiry Date: - Cancelled Date: - Status: Surrender
D	369m NW	Site Name: - Site Address: Sims Newport, Newport Docks, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: - Environmental Permitting Regulations (Waste) Licence Number: TP3495FK EPR reference: - Operator: Sims Group U K Ltd Waste Management licence No: 30273 Annual Tonnage: 0	Issue Date: 28/02/2003 Effective Date: 28/02/2003 Modified: - Surrendered Date: 23/07/2015 Expiry Date: - Cancelled Date: - Status: Surrender
D	380m W	Site Name: Newport Weee Facility (weee) Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: BP3992SG/S003 Operator: Sims Group U K Ltd Waste Management licence No: 100605 Annual Tonnage: 0	Issue Date: 28/10/2008 Effective Date: - Modified: 21/02/2011 Surrendered Date: 2.01507e+016 Expiry Date: 0 Cancelled Date: 0 Status: Surrendered
E	416m W	Site Name: - Site Address: Newport Weee Facility (weee), South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: - Environmental Permitting Regulations (Waste) Licence Number: BP3992SG EPR reference: - Operator: Sims Group U K Ltd Waste Management licence No: 100605 Annual Tonnage: 0	Issue Date: 28/10/2008 Effective Date: 28/10/2008 Modified: - Surrendered Date: 22/07/2015 Expiry Date: - Cancelled Date: - Status: Surrender



ID	Location	Details		
E	416m W	Site Name: Newport Weee Facility Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: BP3992SG/A001 Operator: Sims Group U K Limited Waste Management licence No: 100605 Annual Tonnage: 74999	Issue Date: 28/10/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
E	416m W	Site Name: Newport Weee Facility Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: 75kte WEEE Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: BP3992SG/A001 Operator: Sims Group U K Limited Waste Management licence No: 100605 Annual Tonnage: 74999	Issue Date: 28/10/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
E	416m W	Site Name: Newport Weee Facility (weee) Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: BP3992SG/A001 Operator: Sims Group U K Limited (weee Plant) Waste Management licence No: 100605 Annual Tonnage: 74999	Issue Date: 28/10/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
E	416m W	Site Name: Newport Weee Facility (weee) Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: EA/EPR/BP3992SG/V002 Operator: Sims Group U K Ltd Waste Management licence No: 100605 Annual Tonnage: 74999	Issue Date: 28/10/2008 Effective Date: - Modified: 21/02/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified



ID	Location	Details		
E	416m W	Site Name: Newport Weee Facility (weee) Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: BP3992SG/V002 Operator: Sims Group U K Ltd Waste Management licence No: 100605 Annual Tonnage: 74999	Issue Date: 28/10/2008 Effective Date: - Modified: 21/02/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
E	416m W	Site Name: Newport Weee Facility Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: Sims Group U K Ltd, Long Marston, Stratford Upon Avon, Warks, CV37 8AQ	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: - Operator: Sims Group U K Limited Waste Management licence No: 100605 Annual Tonnage: 0	Issue Date: 10/28/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
E	416m W	Site Name: - Site Address: Newport Weee Facility (weee), South Dock, Newport, Newport, NP20 2WE Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3992SG EPR reference: - Operator: Sims Group U K Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 28/10/2008 Effective Date: 28/10/2008 Modified: - Surrendered Date: 22/07/2015 Expiry Date: - Cancelled Date: - Status: Surrendered
E	416m W	Site Name: Newport Weee Facility Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: Sims Group U K Ltd, Long Marston, Stratford Upon Avon, Warks, CV37 8AQ	Type of Site: Physical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: EA/EPR/BP3992SG/A001 Operator: Sims Group U K Limited Waste Management licence No: 100605 Annual Tonnage: 74999	Issue Date: 10/28/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
E	416m W	Site Name: Newport Weee Facility (weee) Site Address: West Quay, Westway Road, South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIM062 EPR reference: EA/EPR/BP3992SG/V002 Operator: Sims Group U K Limited Waste Management licence No: 100605 Annual Tonnage: 74999	Issue Date: 28/10/2008 Effective Date: - Modified: 21/02/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
E	416m W	Site Name: - Site Address: Newport Weee Facility (weee), South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3992SG EPR reference: - Operator: - Waste Management licence No: 100605 Annual Tonnage: 0	Issue Date: 28/10/2008 Effective Date: 28/10/2008 Modified: - Surrendered Date: 22/07/2015 Expiry Date: - Cancelled Date: - Status: Surrender
E	416m W	Site Name: - Site Address: Newport Weee Facility (weee), South Dock, Newport, Gwent, NP20 2WE Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: - Environmental Permitting Regulations (Waste) Licence Number: BP3992SG EPR reference: - Operator: Sims Group U K Ltd Waste Management licence No: 100605 Annual Tonnage: 0	Issue Date: 28/10/2008 Effective Date: 28/10/2008 Modified: - Surrendered Date: 22/07/2015 Expiry Date: - Cancelled Date: - Status: Surrender
E	416m W	Site Name: - Site Address: Newport Weee Facility (weee), South Dock, Gwent, Newport, Newport, NP20 2WE Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3992SG EPR reference: - Operator: Sims Group U K Ltd Waste Management licence No: 100605 Annual Tonnage: 0	Issue Date: 28/10/2008 Effective Date: 28/10/2008 Modified: - Surrendered Date: 22/07/2015 Expiry Date: - Cancelled Date: - Status: Surrender

This data is sourced from the Environment Agency and Natural Resources Wales.



3.7 Waste exemptions

Records within 500m

10

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 27**

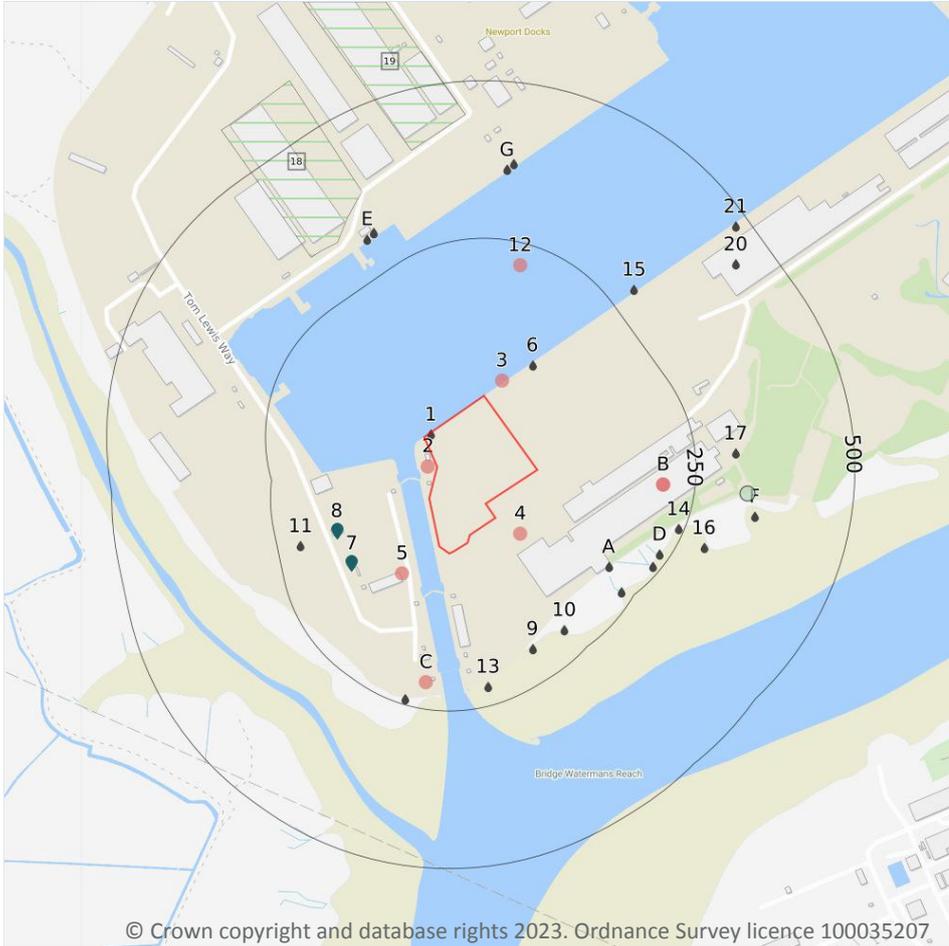
ID	Location	Site	Reference	Category	Sub-Category	Description
A	153m SW	Speedy Asset Services Limited, Tom Lewis Way, West Side, South Dock, Newport, Newport, NP20 2WZ	NRW-WME042270	Storing waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Storage of waste in secure containers
A	153m SW	Speedy Asset Services Limited, Tom Lewis Way, West Side, South Dock, Newport, Newport, NP20 2WZ	NRW-WME042270	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	199m E	Scott Timber Ltd, Scott Pallets, Tom Lewis Way, Newport, Newport, NP202WF	NRW-WME028654	Treating waste exemption	Not on a farm	Manual treatment of waste
B	199m E	Scott Timber Ltd, Scott Pallets, Tom Lewis Way, Newport, Newport, NP202WF	NRW-WME028654	Using waste exemption	Not on a farm	Use of waste for a specified purpose
B	199m E	Scott Timber Ltd, Scott Pallets, Tom Lewis Way, Newport, Newport, NP202WF	NRW-WME028654	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
B	199m E	Road Maintenance Services Limited, TOM LEWIS WAY, ALEXANDRA DOCK, NEWPORT, NP202WF	NRW-WME036256	Using waste exemption	Not on a farm	Use of waste in construction
B	199m E	Road Maintenance Services Limited, TOM LEWIS WAY, NEWPORT, NP202WF	NRW-WME036259	Storing waste exemption	Not on a farm	Storage of waste in a secure place
2	311m NE	Associated British Ports, Associated British Ports, Alexandra Docks, Newport, Newport, NP20 2UW	NRW-WME075145	Storing waste exemption	Not on a farm	Storage of waste in a secure place



ID	Location	Site	Reference	Category	Sub-Category	Description
F	488m E	Associated British Ports, Associated British Ports, Alexandra Docks, Newport, Newport, Newport, NP20 2UW	NRW- WME053378	Using waste exemption	Not on a farm	Use of mulch
F	500m E	Associated British Ports, Associated British Ports, Alexandra Docks, Newport, Newport, Newport, NP20 2UW	NRW- WME053379	Using waste exemption	Not on a farm	Use of mulch

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Control of Major Accident Hazards
- ◆ Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

8

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Company	Address	Activity	Category
2	13m W	Electricity Sub Station	Gwent, NP20	Electrical Features	Infrastructure and Facilities
3	37m N	Travelling Crane	Gwent, NP20	Travelling Cranes and Gantries	Industrial Features
4	46m SE	Tank	Gwent, NP20	Tanks (Generic)	Industrial Features



ID	Location	Company	Address	Activity	Category
5	73m SW	Electricity Sub Station	Gwent, NP20	Electrical Features	Infrastructure and Facilities
B	199m E	Sims Recycling Solutions Newport Weee Recycling Plant	South Dock, Alexandra Docks, Newport, Gwent, NP20 2WE	Recycling, Reclamation and Disposal	Recycling Services
B	200m E	Saica	South Dock, Alexandra Docks, Newport, Gwent, NP20 2WE	Packaging	Industrial Products
C	208m S	Mast	Gwent, NP20	Telecommunications Features	Infrastructure and Facilities
12	215m N	South Dock	Gwent, NP20	Moorings and Unloading Facilities	Water

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m

0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.



4.5 Sites determined as Contaminated Land

Records within 500m

0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

2

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Company	Address	Operational status	Tier
18	331m NW	Mole Valley Forage Services Limited	Mole Valley Forage Services Limited, Newport, 8 shed, North Side, South Dock, Alexandra Docks, Newport, Gwent, NP20 2NQ	Current COMAH Site	COMAH Lower Tier Operator
19	406m N	Origin UK Operations Limited	Origin UK Operations Limited, Alexandra Dock, West Way Road, South Dock, Newport, Gwent, NP9 2WZ	Current COMAH Site	COMAH Lower Tier Operator

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.



4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m

2

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Address	Details	
7	140m SW	Severn Sands Ltd, North Dock, East Way Road, Lockhead, Alexandra Docks, Newport, South Wales, NP20 2WZ	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
8	153m SW	Lafarge Aggregates, Lockhead, Alexandra Dock, Newport, South Wales, NP20 2WZ	Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part A2 & B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m

24

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Address	Details	
1	On site	NEWPORT DOCKS	Effluent Type: UNSPECIFIED Permit Number: AN0033342 Permit Version: 1 Receiving Water: SEVERN ESTUARY	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 10/09/1987 Effective Date: 10/09/1987 Revocation Date: 06/03/1995
6	89m NE	NEWPORT DOCKS	Effluent Type: UNSPECIFIED Permit Number: AN0033341 Permit Version: 1 Receiving Water: SEVERN ESTUARY	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 10/09/1987 Effective Date: 10/09/1987 Revocation Date: 07/10/1992
A	190m SE	SCA PACKAGING ALEXANDRA DOCKS, SCA PACKAGING NEWPORT, ALEXANDRA DOCKS, Newport, WALES	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: AB0041901 Permit Version: 2 Receiving Water: River Usk Estuary	Status: Effective Issue date: 10/11/1964 Effective Date: 27/06/2000 Revocation Date: -
9	196m S	NEWPORT DOCKS	Effluent Type: UNSPECIFIED Permit Number: AN0033367 Permit Version: 1 Receiving Water: SEVERN ESTUARY	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 10/09/1987 Effective Date: 10/09/1987 Revocation Date: 07/10/1992
10	205m SE	PREMISES AT NEWPORT DOCKS, NEWPORT DOCKS, Newport, NEWPORT CBC, NP20 2NP	Effluent Type: - Permit Number: AN0033333 Permit Version: 2 Receiving Water: River Usk	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
11	214m SW	New Plasterboard Manufacturing Plant, Tom Lewis Way, ABP Alexandra Docks, Newport, NP20 2WZ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: CB3291CD Permit Version: 1 Receiving Water: Ebbw River	Status: Effective Issue date: 06/08/2021 Effective Date: 06/08/2021 Revocation Date: -
13	220m S	PREMISES AT NEWPORT DOCKS, Newport, NEWPORT CBC, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033334 Permit Version: 2 Receiving Water: River Usk	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -



ID	Location	Address	Details	
A	230m SE	PREMISES AT NEWPORT DOCKS, Newport, NEWPORT CBC, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033366 Permit Version: 2 Receiving Water: River Usk	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
D	234m SE	PREMISES AT NEWPORT DOCKS, NEWPORT DOCKS, Newport, NEWPORT CBC, NP20 2NP	Effluent Type: - Permit Number: AN0033365 Permit Version: 2 Receiving Water: River Usk	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
D	238m SE	PREMISES AT NEWPORT DOCKS, Newport, NEWPORT CBC, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033332 Permit Version: 2 Receiving Water: River Usk	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
14	241m E	PREMISES AT NEWPORT DOCKS, Newport, NEWPORT CBC, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033331 Permit Version: 2 Receiving Water: River Usk	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
C	241m S	NEWPORT DOCKS ACCOMMODATION AT SOUT, NEWPORT DOCKS ACCOMMODATION AT S, ACCOMMODATION AT SOUTH LOCKS	Effluent Type: UNSPECIFIED Permit Number: AC0133601 Permit Version: 1 Receiving Water: UNSPECIFIED	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 20/11/1981 Effective Date: 20/11/1981 Revocation Date: 25/09/1992
15	289m NE	NEWPORT DOCKS	Effluent Type: UNSPECIFIED Permit Number: AN0033340 Permit Version: 1 Receiving Water: SEVERN ESTUARY	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 10/09/1987 Effective Date: 10/09/1987 Revocation Date: 07/10/1992
16	290m E	ALEXANDRA DOCKS NEWPORT, Alexandra Docks, Newport, NEWPORT CBC, WALES	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0267401 Permit Version: 1 Receiving Water: Usk Estuary	Status: Effective Issue date: 17/10/1996 Effective Date: 17/10/1996 Revocation Date: -
E	308m NW	NEWPORT DOCKS	Effluent Type: UNSPECIFIED Permit Number: AN0033301 Permit Version: 1 Receiving Water: SEVERN ESTUARY	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 10/09/1987 Effective Date: 10/09/1987 Revocation Date: 06/03/1995
E	311m N	PREMISES AT NEWPORT DOCKS, Newport, Gwent, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033302 Permit Version: 2 Receiving Water: SOUTH DOCK	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -



ID	Location	Address	Details	
E	311m N	PREMISES AT NEWPORT DOCKS, NEWPORT, GWENT, WALES, NP20 2NP	Effluent Type: UNSPECIFIED Permit Number: AN0033302 Permit Version: 2 Receiving Water: SOUTH DOCK	Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
17	313m E	PREMISES AT NEWPORT DOCKS, Newport, Gwent, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033330 Permit Version: 2 Receiving Water: River Usk	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
F	350m E	PREMISES AT NEWPORT DOCKS, Newport, NEWPORT CBC, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033364 Permit Version: 2 Receiving Water: River Usk	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
G	359m N	PREMISES AT NEWPORT DOCKS, NEWPRT, Gwent, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033303 Permit Version: 2 Receiving Water: SOUTH DOCK	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
G	359m N	PREMISES AT NEWPORT DOCKS, NEWPRT, GWENT, WALES, NP20 2NP	Effluent Type: UNSPECIFIED Permit Number: AN0033303 Permit Version: 2 Receiving Water: SOUTH DOCK	Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
G	371m N	METAL RECYCLING SITE SIMS GROUP UK, METAL RECYCLING SITE, SIMS GROUP UK LTD, NORTH SIDE SOUTH DOCK, ALEXANDRA DOCKS, NP20 2WE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: AN0364401 Permit Version: 1 Receiving Water: NORTH SIDE SOUTH DOCK	Status: Effective Issue date: 12/06/2004 Effective Date: 12/06/2004 Revocation Date: -
20	443m NE	PREMISES AT NEWPORT DOCKS, NEWPORT DOCKS, Newport, NEWPORT CBC, NP20 2NP	Effluent Type: - Permit Number: AN0033339 Permit Version: 2 Receiving Water: SOUTH DOCK	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -
21	478m NE	PREMISES AT NEWPORT DOCKS, Newport, Gwent, WALES, NP20 2NP	Effluent Type: - Permit Number: AN0033338 Permit Version: 2 Receiving Water: SOUTH DOCK	Status: Effective Issue date: 03/11/1992 Effective Date: 03/02/1993 Revocation Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.



4.14 Pollutant release to surface waters (Red List)

Records within 500m	0
---------------------	---

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0
---------------------	---

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0
---------------------	---

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	0
---------------------	---

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1
---------------------	---

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Details	
F	333m E	Incident Date: 03/01/2018 Incident Identification: 1800060 Pollutant: Oils and Fuels Pollutant Description: Gas and Fuel Oils	Water Impact: Category 2 (Significant) Land Impact: No Details Air Impact: No Details

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	0
----------------------------	----------

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0
----------------------------	----------

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

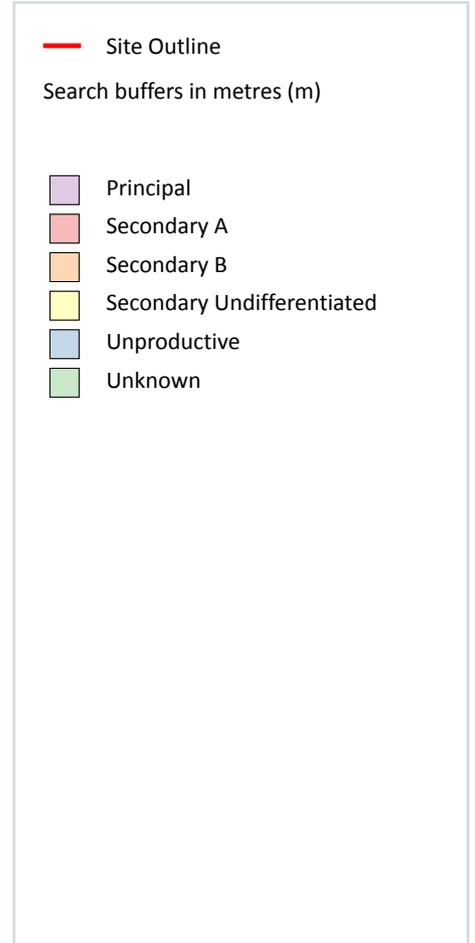
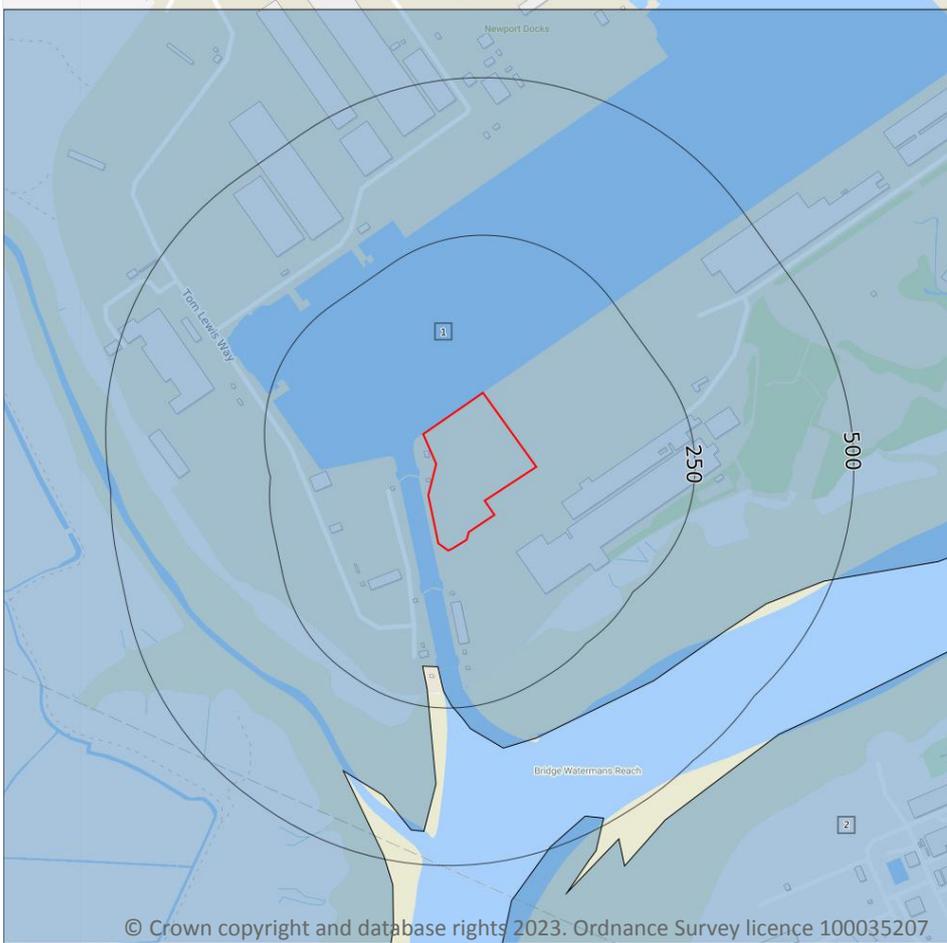
4.21 Pollution inventory radioactive waste

Records within 500m	0
----------------------------	----------

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m

2

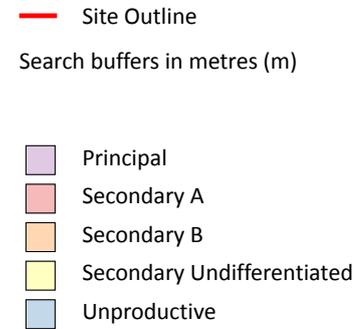
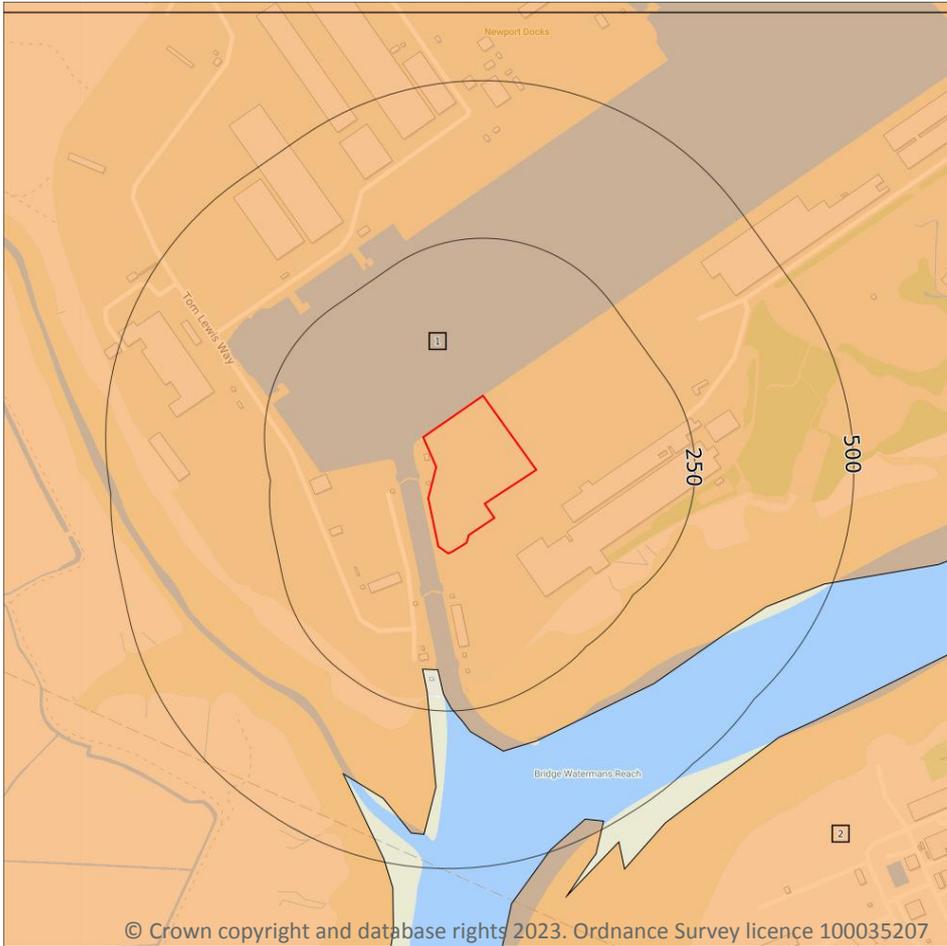
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 47**

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	473m S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

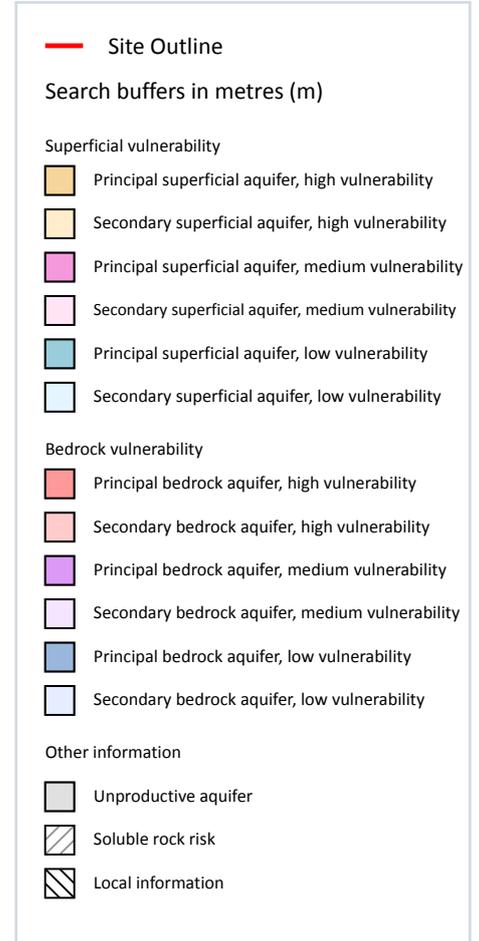
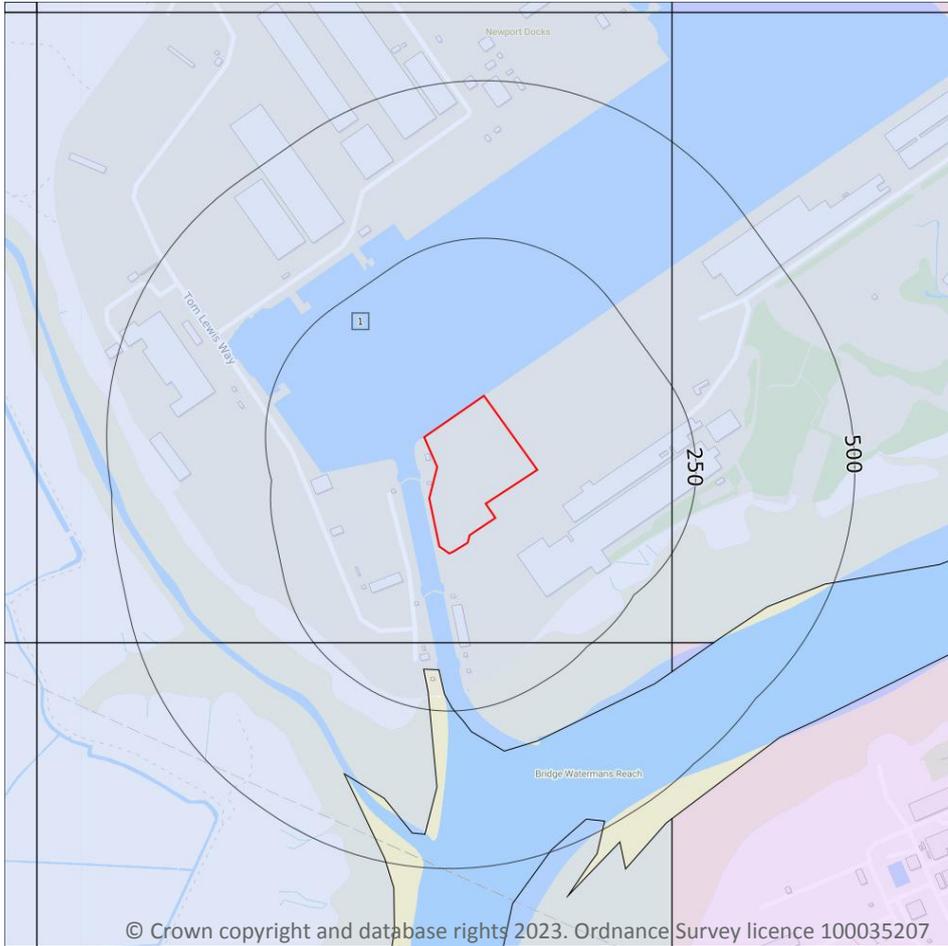
Features are displayed on the Bedrock aquifer map on **page 48**

ID	Location	Designation	Description
1	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
2	473m S	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

1

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 50**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: >550mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
------------------------	----------

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

5.5 Groundwater vulnerability- local information

Records on site	0
------------------------	----------

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



5.6 Groundwater abstractions

Records within 2000m

0

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m

2

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 52**

ID	Location	Details	
-	1921m E	Status: Historical Licence No: 20/56/72/0040 Details: Evaporative Cooling Direct Source: EAW Surface Water Point: LAGOON AT ALPHASTEEL Data Type: Point Name: Alphasteel Limited Easting: 333650 Northing: 184750	Annual Volume (m ³): 20000 Max Daily Volume (m ³): 320 Original Application No: - Original Start Date: 26/04/1995 Expiry Date: - Issue No: 100 Version Start Date: 25/11/1999 Version End Date: -
-	1932m NW	Status: Historical Licence No: 20/56/11/0013 Details: General use relating to Secondary Category (Medium Loss) Direct Source: EAW Surface Water Point: DOCK FEEDER AT PILLGWENLLY TO WHITEHEAD Data Type: Point Name: Corus UK Ltd Easting: 330800 Northing: 186100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 22/10/1973 Expiry Date: - Issue No: 102 Version Start Date: 17/04/2000 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m

0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m

0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

11

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 55**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	25m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
5	180m S	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	192m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	203m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	203m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	208m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	231m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	232m SE	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	235m SE	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	239m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	240m E	Tidal river or stream.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

7

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 55**



This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	2
------------------------	----------

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 55**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	Coastal catchment	Not part of a river WB catchment	142	Ebbw Sirhowy	South East Valleys
A	On site	Coastal catchment	Not part of a river WB catchment	156	Usk below Abergavenny	Usk

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	1
---------------------------	----------

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site.

Features are displayed on the Hydrology map on **page 55**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
6	190m S	Transitional	USK	GB530905415404	Moderate	Good	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site

1

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

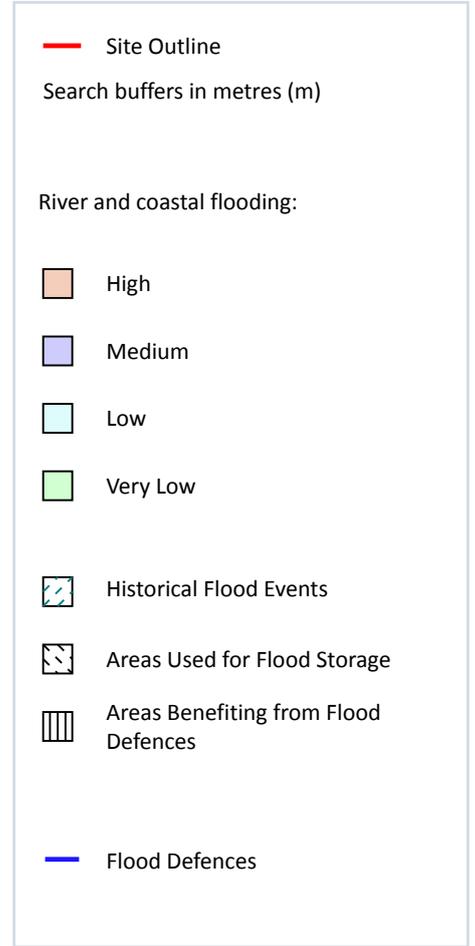
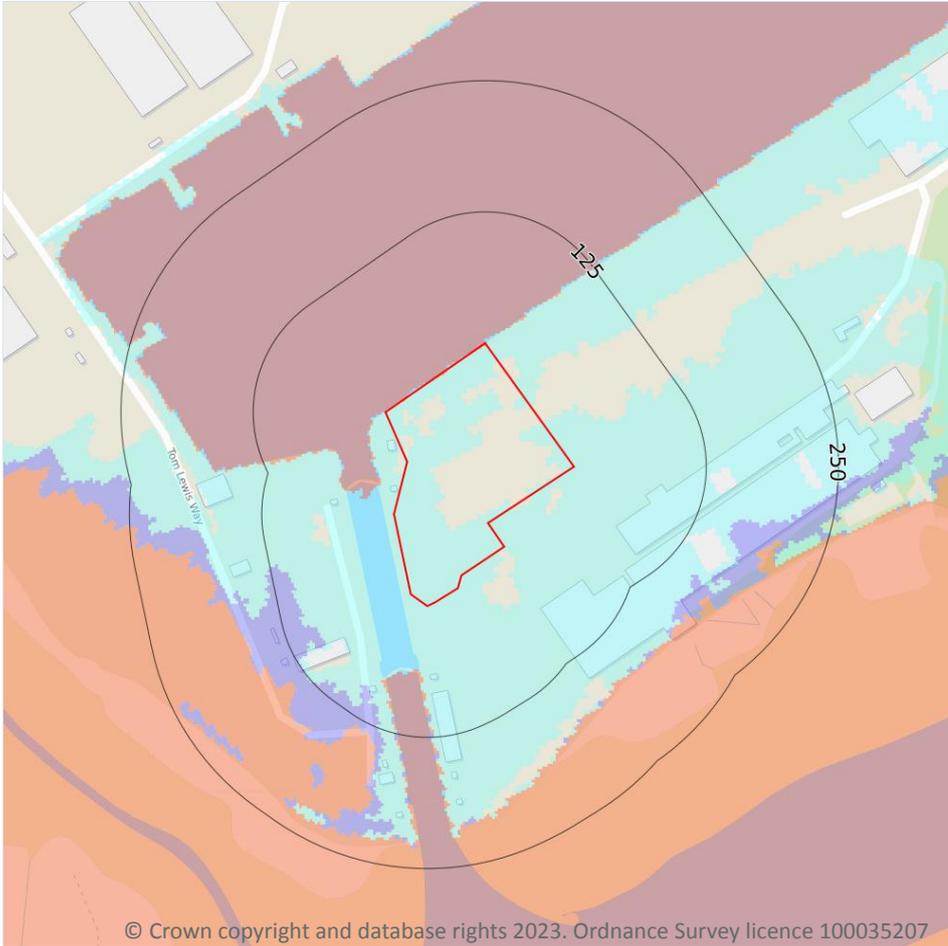
Features are displayed on the Hydrology map on **page 55**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	SE Valleys Eastern Devonian Old Red Sandstone	GB40902G204700	Good	Good	Good	2017

This data is sourced from the Environment Agency and Natural Resources Wales.



7 River and coastal flooding



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7.1 Risk of flooding from rivers and the sea

Records within 50m

2

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on **page 59**

Distance	Flood risk category
On site	High
0 - 50m	High

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	0
----------------------------	----------

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	0
----------------------------	----------

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m	0
----------------------------	----------

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

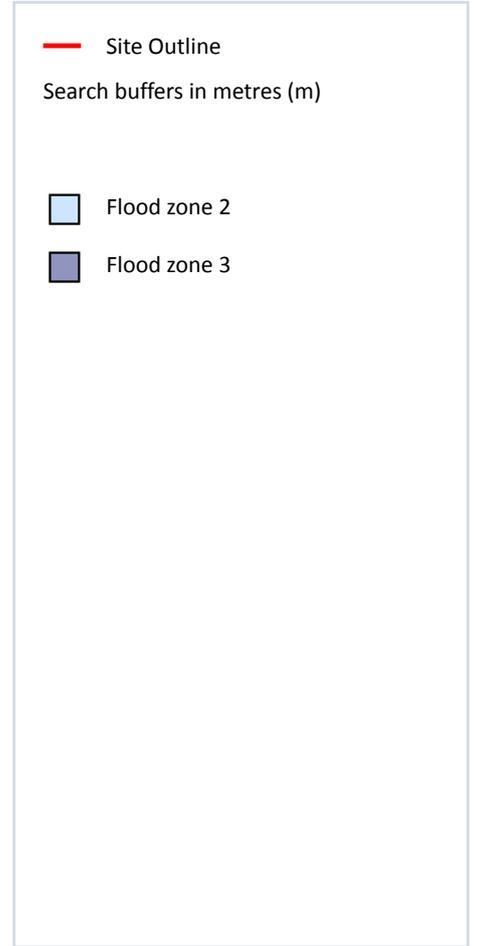
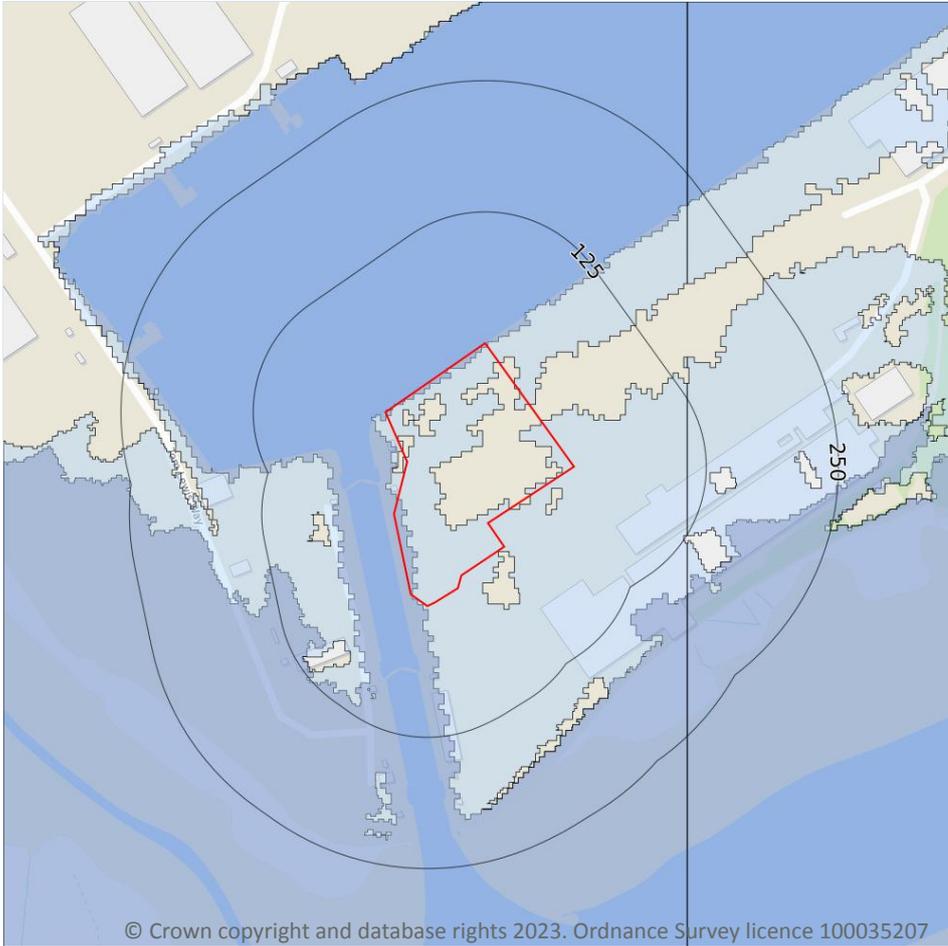
7.5 Flood Storage Areas

Records within 250m	0
----------------------------	----------

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones



7.6 Flood Zone 2

Records within 50m

1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on **page 59**

Location	Type
On site	Zone 2 - (Fluvial /Tidal Models)

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m

1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 59**

Location	Type
On site	Zone 3 - (Fluvial /Tidal Models)

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 100 year, 0.1m - 0.3m

Highest risk within 50m

1 in 100 year, 0.1m - 0.3m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 63**

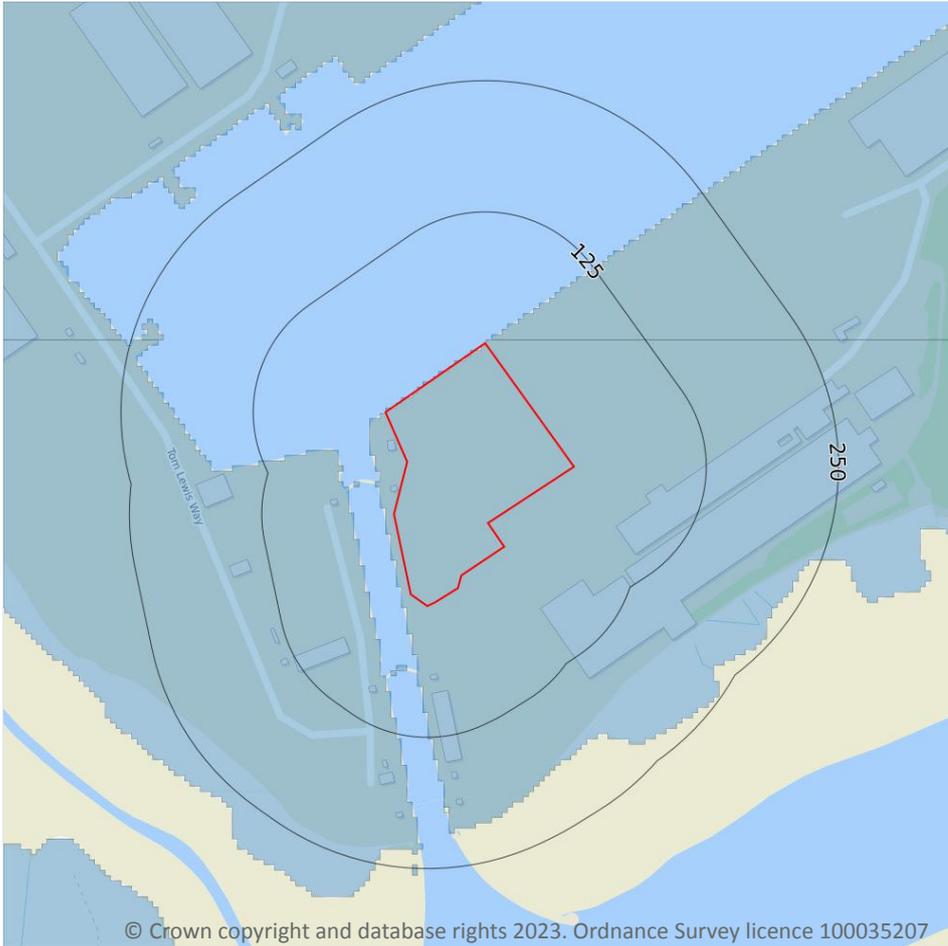
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.1m and 0.3m
1 in 250 year	Between 0.1m and 0.3m
1 in 100 year	Between 0.1m and 0.3m
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Negligible

Highest risk within 50m

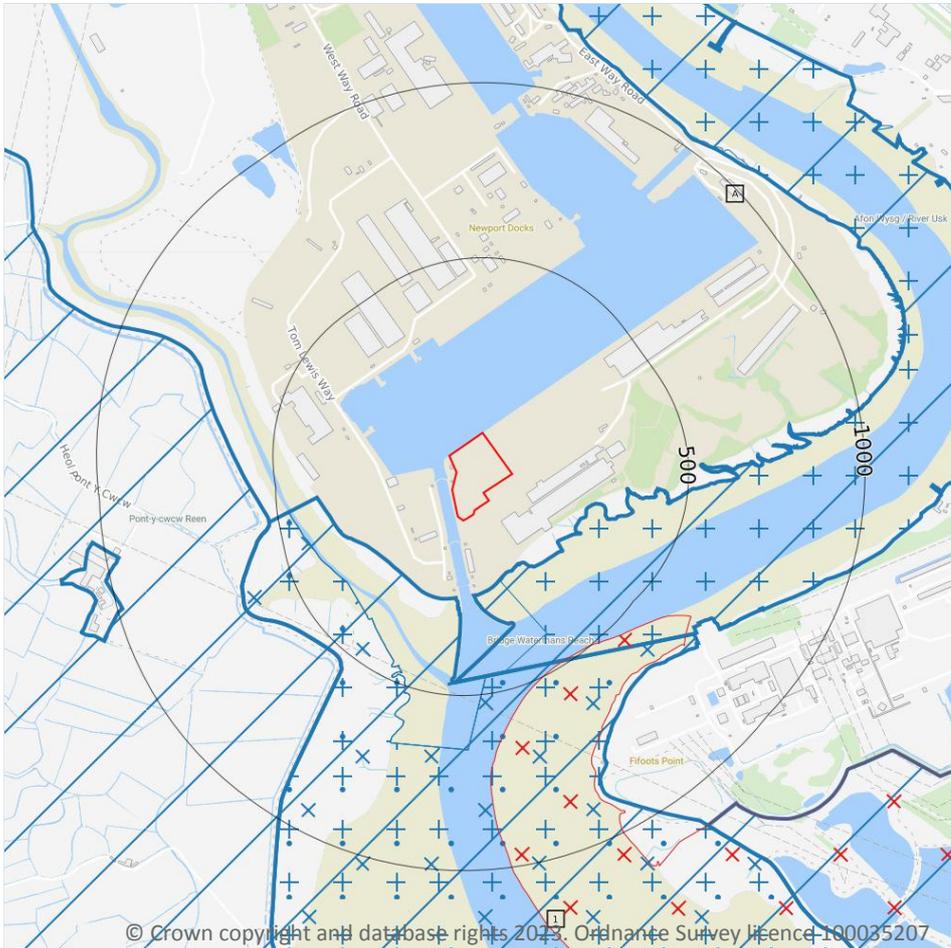
Negligible

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 65**

This data is sourced from Ambient Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- × Conserved wetland sites (Ramsar sites)
- + Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- × National Nature Reserves (NNR)
- ▨ Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

6

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on **page 66**

ID	Location	Name	Data source
A	189m SE	River Usk (Lower Usk) / Afon Wysg (Wysg Isaf)	Natural Resources Wales

ID	Location	Name	Data source
1	222m S	Severn Estuary	Natural Resources Wales
3	524m SW	Gwent Levels - St. Brides	Natural Resources Wales
4	1108m SE	Gwlyptiroedd Casnewydd / Newport Wetlands	Natural Resources Wales
-	1739m S	Severn Estuary	Natural Resources Wales
-	1928m SW	Gwent Levels - St. Brides	Natural Resources Wales

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

1

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

Features are displayed on the Environmental designations map on **page 66**

ID	Location	Site	Details
B	364m SW	Name: Severn Estuary (Wales) Site status: - Data source: Natural Resources Wales	<p>Overview: The estuary's classic funnel shape, unique in Britain, is a factor causing the Severn to have the second-largest tidal range in the world (after the Bay of Fundy, Canada). This tidal regime results in plant and animal communities typical of the extreme physical conditions of liquid mud and tide swept sand and rock. The species-poor invertebrate community includes high densities of ragworms, lugworms and other invertebrates forming an important food source for passage and wintering waders. A further consequence of the large tidal range is the extensive intertidal zone, one of the largest in the UK, comprising mudflats, sand banks, shingle, and rocky platforms. Glassworts and annual sea-blite colonise the open mud, with beds of all three species of eelgrass <i>Zostera</i> occurring on more sheltered mud and sandbanks. Large expanses of common cord-grass also occur on the outer marshes. Heavily grazed saltmarsh fringes the estuary with a range of saltmarsh types present. The middle marsh sward is dominated by common saltmarsh-grass with typical associated species. In the upper marsh, red fescue and saltmarsh rush become more prominent.</p> <p>Ramsar criteria: Ramsar criterion 1 Due to immense tidal range (second-largest in world), this affects both the physical environment and biological communities. Habitats Directive Annex I features present on the pSAC include: H1110 Sandbanks which are slightly covered by sea water all the time H1130 Estuaries H1140 Mudflats and sandflats not covered by seawater at low tide H1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)</p> <p>Ramsar criterion 3 Due to unusual estuarine communities, reduced diversity and high productivity.</p> <p>Ramsar criterion 4 This site is important for the run of migratory fish between sea and river via estuary. Species include Salmon <i>Salmo salar</i>, sea trout <i>S. trutta</i>, sea lamprey <i>Petromyzon marinus</i>, river lamprey <i>Lampetra fluviatilis</i>, allis shad <i>Alosa alosa</i>, twaite shad <i>A. fallax</i>, and eel <i>Anguilla anguilla</i>. It is also of particular importance for migratory birds during spring and autumn. Ramsar criterion 8</p> <p>The fish of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded. Salmon <i>Salmo salar</i>, sea trout <i>S. trutta</i>, sea lamprey <i>Petromyzon marinus</i>, river lamprey <i>Lampetra fluviatilis</i>, allis shad <i>Alosa alosa</i>, twaite shad <i>A. fallax</i>, and eel <i>Anguilla anguilla</i> use the Severn Estuary as a key migration route to their spawning grounds in the many tributaries that flow into the estuary. The site is important as a feeding and nursery ground for many fish species particularly allis shad <i>Alosa alosa</i> and twaite shad <i>A. fallax</i> which feed on mysid shrimps in the salt wedge.</p>

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.3 Special Areas of Conservation (SAC)

Records within 2000m

2

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

Features are displayed on the Environmental designations map on **page 66**

ID	Location	Name	Features of interest	Habitat description	Data source
A	189m SE	River Usk / Afon Wysg	Estuaries; Intertidal mudflats and sandflats; Atlantic salt meadows; Rivers with floating vegetation often dominated by water-crowfoot; Beech forests on neutral to rich soils; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Bog woodland; Alder woodland on floodplains; Sea lamprey; Brook lamprey; River lamprey; Allis shad; Twaite shad; Atlantic salmon; Bullhead; Freshwater pearl mussel; White-clawed (or Atlantic stream) crayfish; Lesser horseshoe bat; Otter.	Improved grassland; Dry grassland, Steppes; Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Bogs, Marshes, Water fringed vegetation, Fens; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland	Natural Resources Wales
B	365m SW	Severn Estuary (Wales)	Subtidal sandbanks; Estuaries; Intertidal mudflats and sandflats; Reefs; Glasswort and other annuals colonising mud and sand; Cord-grass swards; Atlantic salt meadows; Shifting dunes; Sea lamprey; River lamprey; Allis shad; Twaite shad.	Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	Natural Resources Wales

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m

1

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

Features are displayed on the Environmental designations map on **page 66**



ID	Location	Name	Species of interest	Habitat description	Data source
B	365m SW	Severn Estuary (Wales)	Tundra swan; Common shelduck; Gadwall; Common redshank; Greater white-fronted goose; Dunlin	Coastal sand dunes, Sand beaches, Machair; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Improved grassland; Salt marshes, Salt pastures, Salt steppes	Natural Resources Wales

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	1
-----------------------------	----------

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

Features are displayed on the Environmental designations map on **page 66**

ID	Location	Name	Data source
2	490m SE	Newport Wetlands	Natural Resources Wales

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m	0
-----------------------------	----------

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m	3
-----------------------------	----------

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 66**

ID	Location	Name	Woodland Type
-	1571m W	Unknown	Restored Ancient Woodland Site
-	1590m W	Unknown	Ancient Woodland Site of Unknown Category
-	1599m W	Unknown	Restored Ancient Woodland Site

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0
-----------------------------	----------

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0
-----------------------------	----------

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0
-----------------------------	----------

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0
-----------------------------	----------

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.



10.16 Nitrate Vulnerable Zones

Records within 2000m

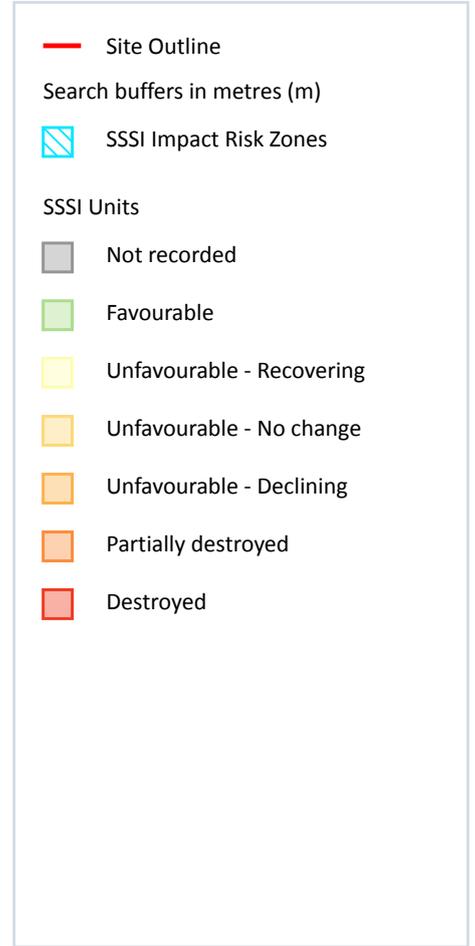
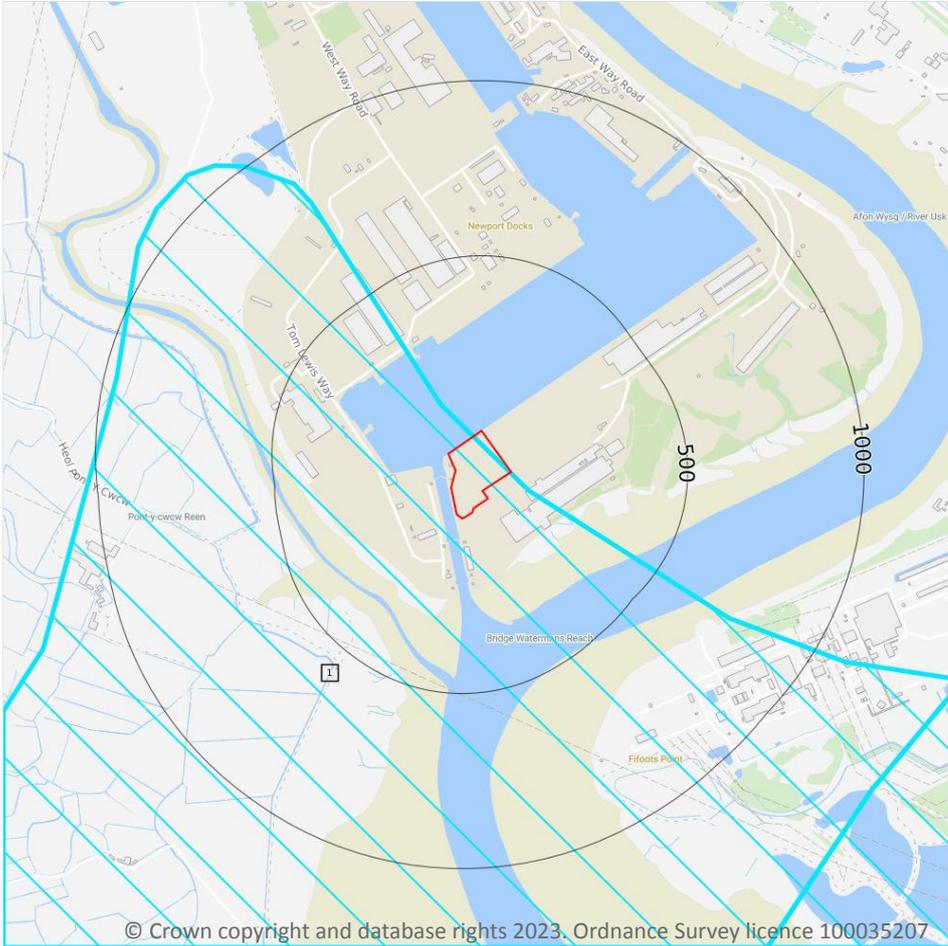
0

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

This data is sourced from Natural England and Natural Resources Wales.



SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 74**

ID	Location	Type of developments requiring consultation
1	On site	<p>All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures.</p> <p>Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals.</p> <p>Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines.</p> <p>Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction.</p> <p>Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha.</p> <p>Residential - Residential development of 10 units or more.</p> <p>Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units.</p> <p>Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill.</p>

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0
-----------------------------	----------

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.



This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

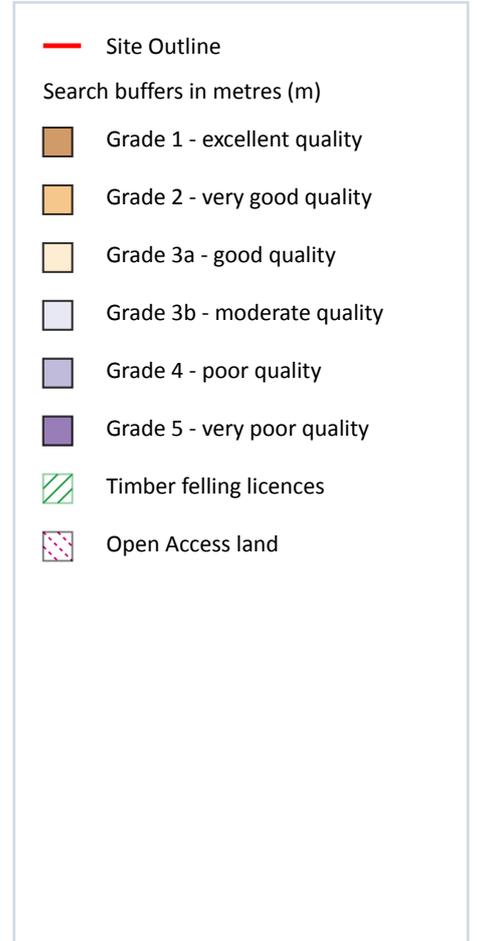
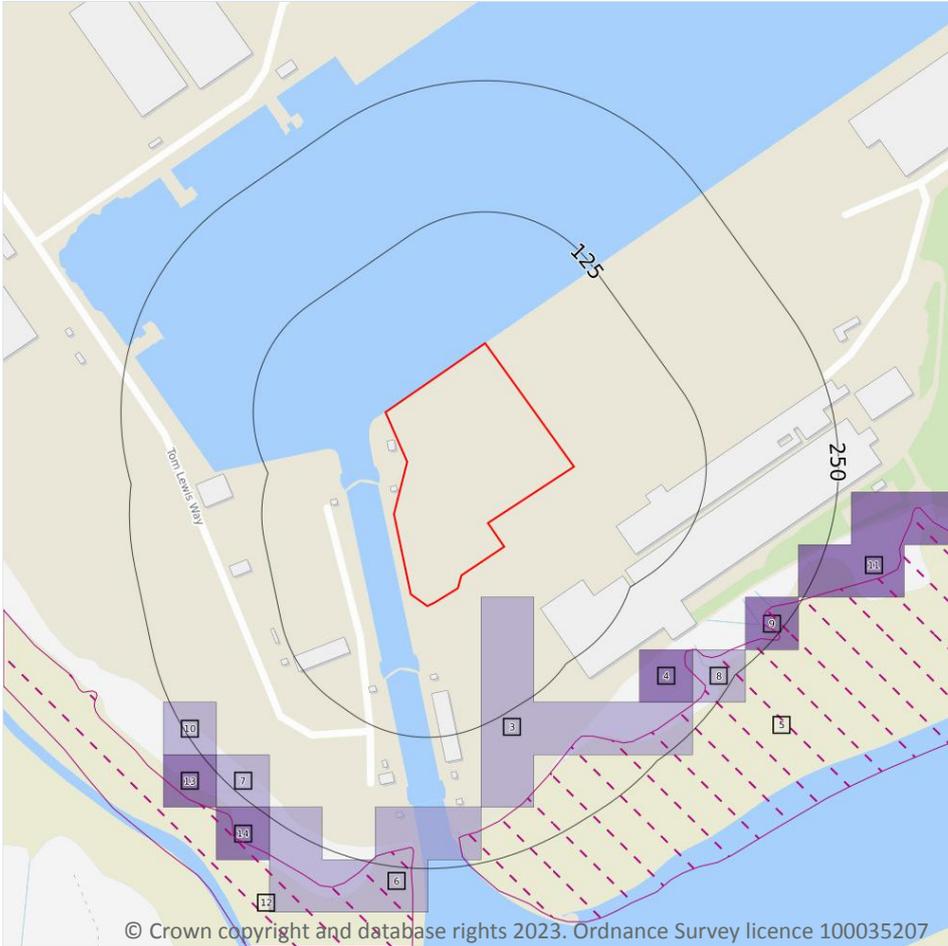
Records within 250m

0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



12.1 Agricultural Land Classification

Records within 250m

10

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 78**

ID	Location	Classification	Description
3	23m S	Grade 4	Poor quality agricultural land
4	161m SE	Grade 5	Very poor quality agricultural land
6	192m S	Grade 4	Poor quality agricultural land

ID	Location	Classification	Description
7	203m SW	Grade 4	Poor quality agricultural land
8	203m SE	Grade 4	Poor quality agricultural land
9	204m SE	Grade 5	Very poor quality agricultural land
10	211m SW	Grade 4	Poor quality agricultural land
11	225m E	Grade 5	Very poor quality agricultural land
13	239m SW	Grade 5	Very poor quality agricultural land
14	243m SW	Grade 5	Very poor quality agricultural land

This data is sourced from Natural Resources Wales.

12.2 Open Access Land

Records within 250m

2

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

Features are displayed on the Agricultural designations map on **page 78**

ID	Location	Name	Classification	Other relevant legislation
5	183m SE	-	Open Access Other Statutory Access Land	-
12	230m S	-	Open Access Other Statutory Access Land	-

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.



12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m

0

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

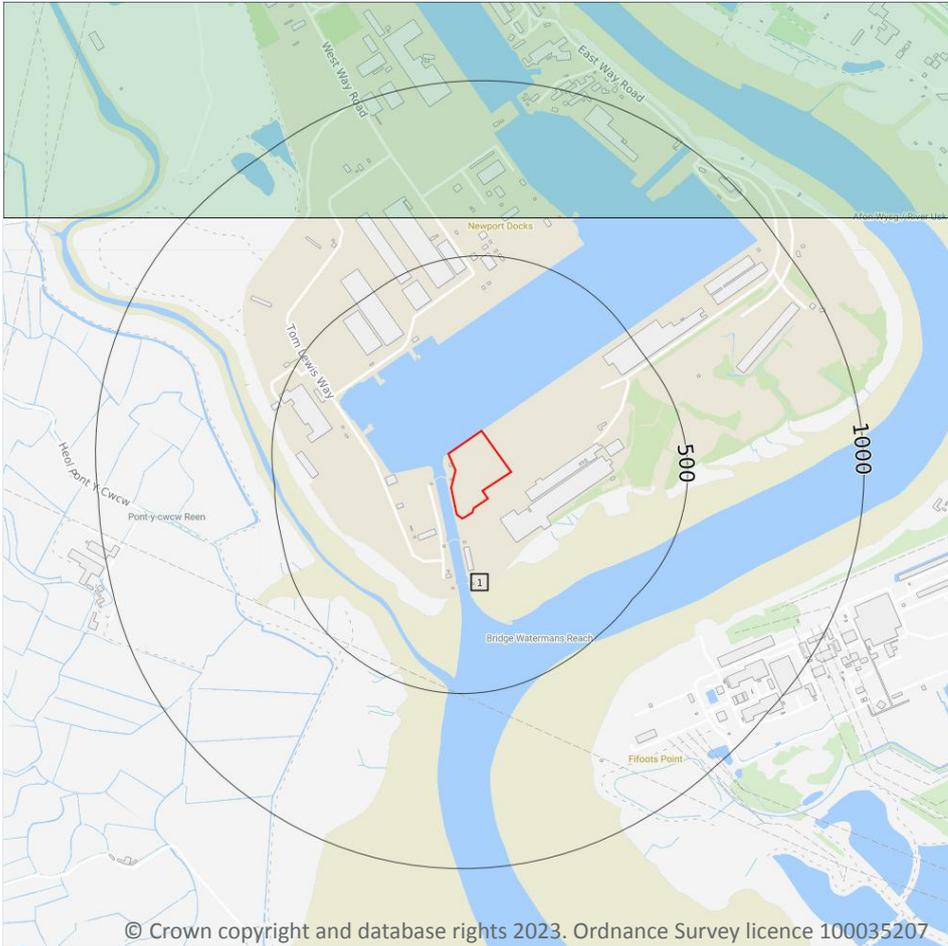
0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
 Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

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14.1 10k Availability

Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 82**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	No coverage	No coverage	No coverage	NoCov

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m

0

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline
 Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 86**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW249_newport_v4

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

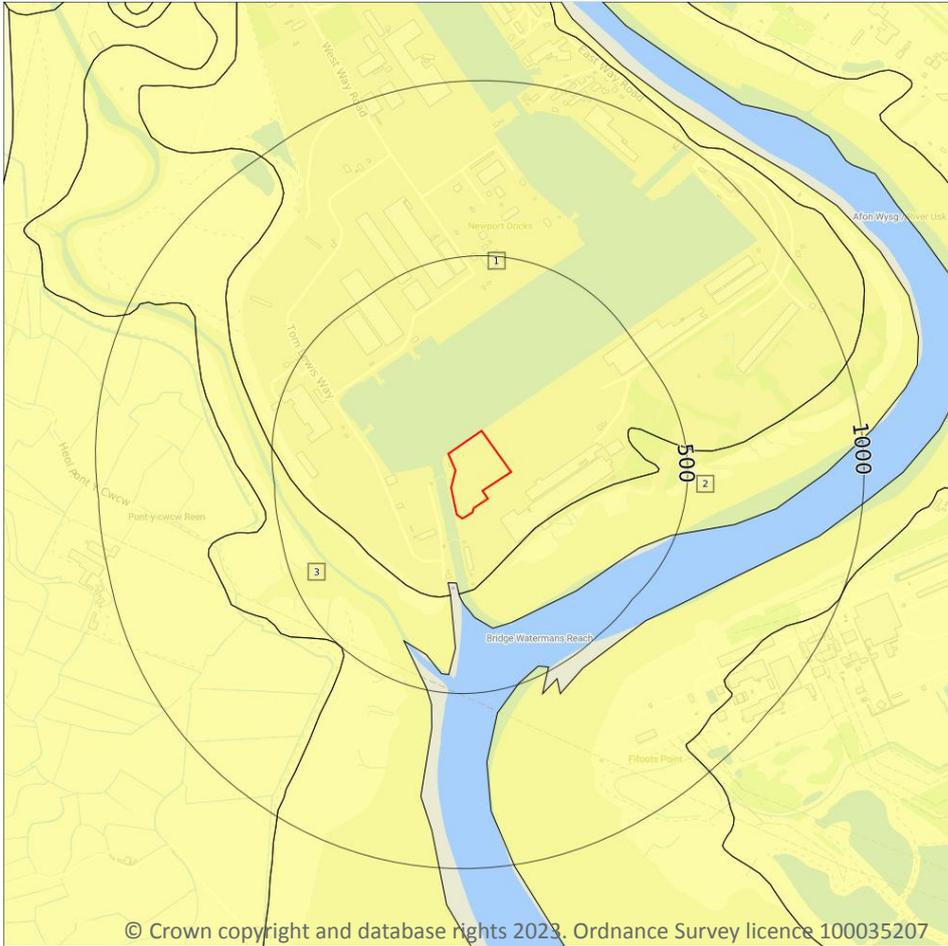
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
-  Landslip (50k)
- Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

3

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 88**

ID	Location	LEX Code	Description	Rock description
1	On site	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
2	155m SE	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
3	222m S	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1
---------------------------	----------

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Low	Very Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0
----------------------------	----------

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

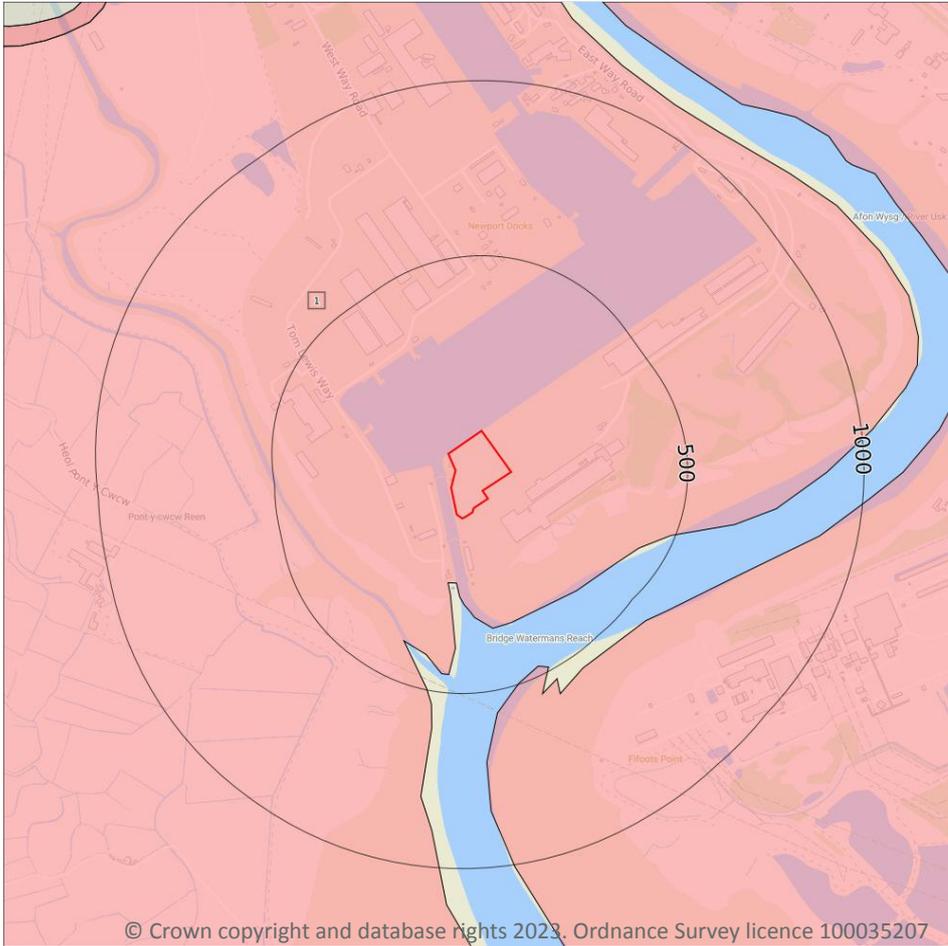
15.7 Landslip permeability (50k)

Records within 50m	0
---------------------------	----------

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (50k)
- Bedrock geology (50k)
Please see table for more details.

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15.8 Bedrock geology (50k)

Records within 500m

1

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 90**

ID	Location	LEX Code	Description	Rock age
1	On site	MMG-MDST	MERCIA MUDSTONE GROUP - MUDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

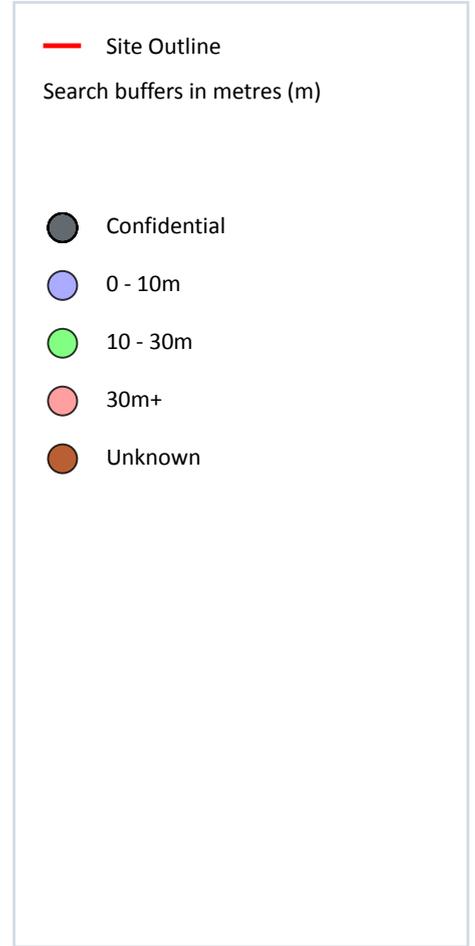
0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



16 Boreholes



16.1 BGS Boreholes

Records within 250m

1

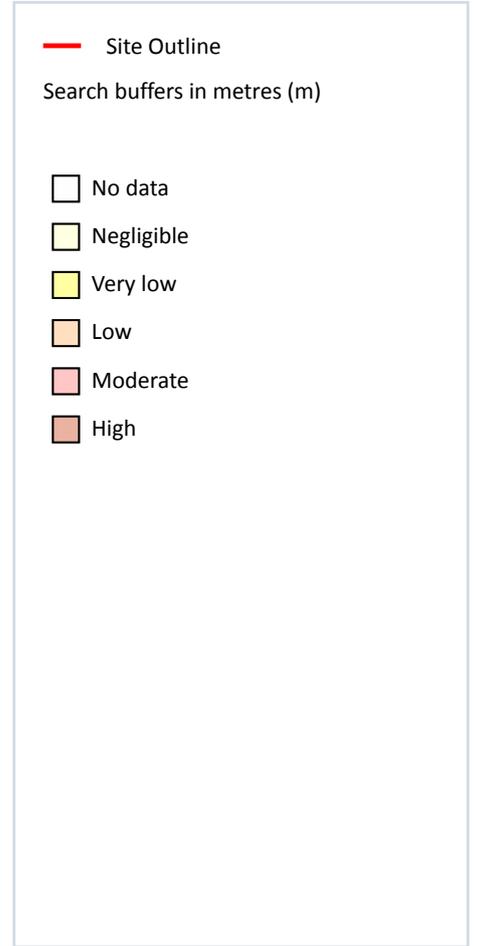
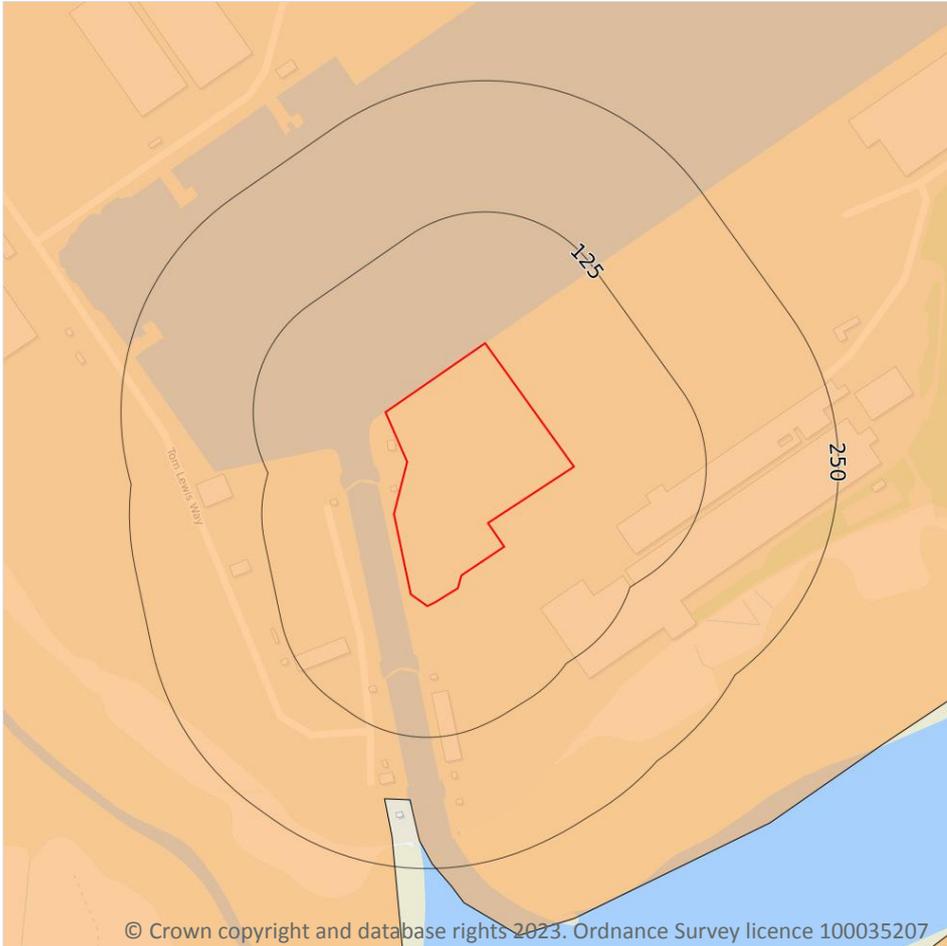
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 92**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	125m SW	331540 184070	NEWPORT DOCKS, SOUTH DOCK. 3	15.85	N	385335

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

1

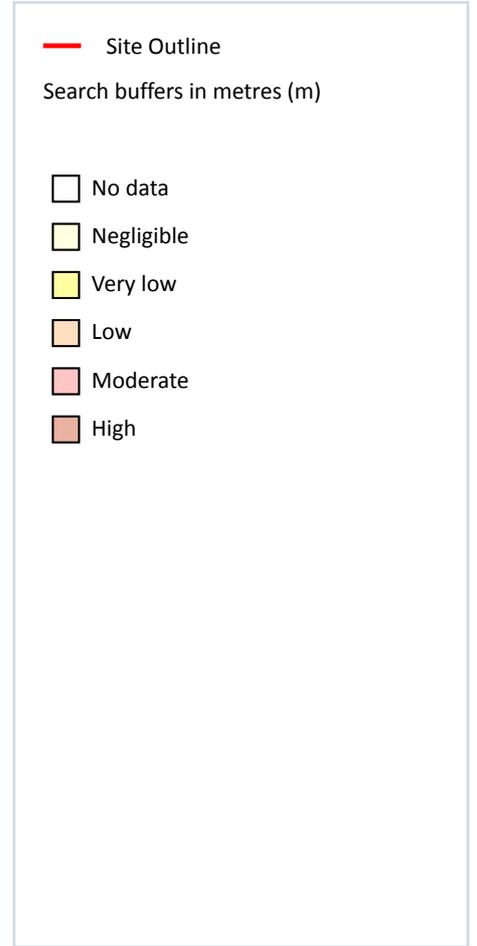
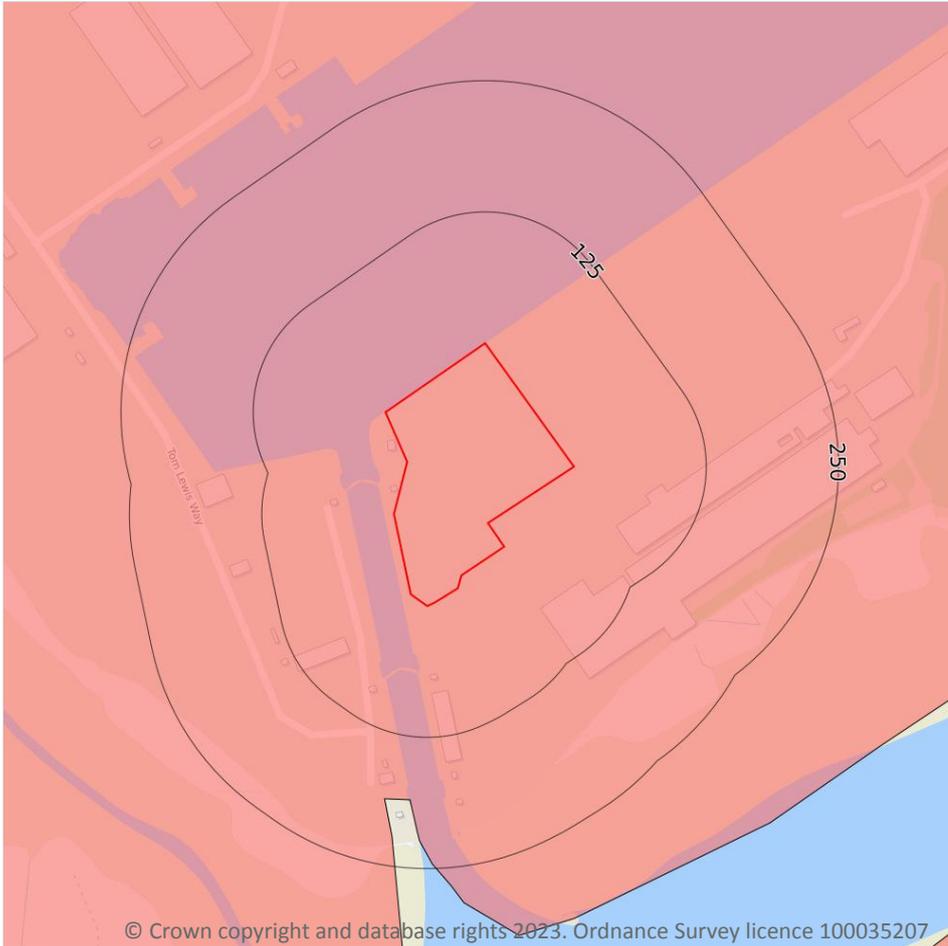
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 93**

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

1

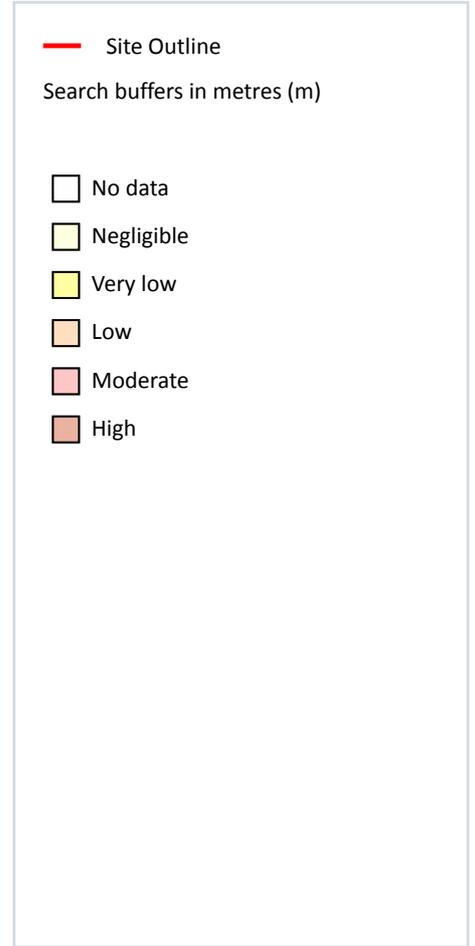
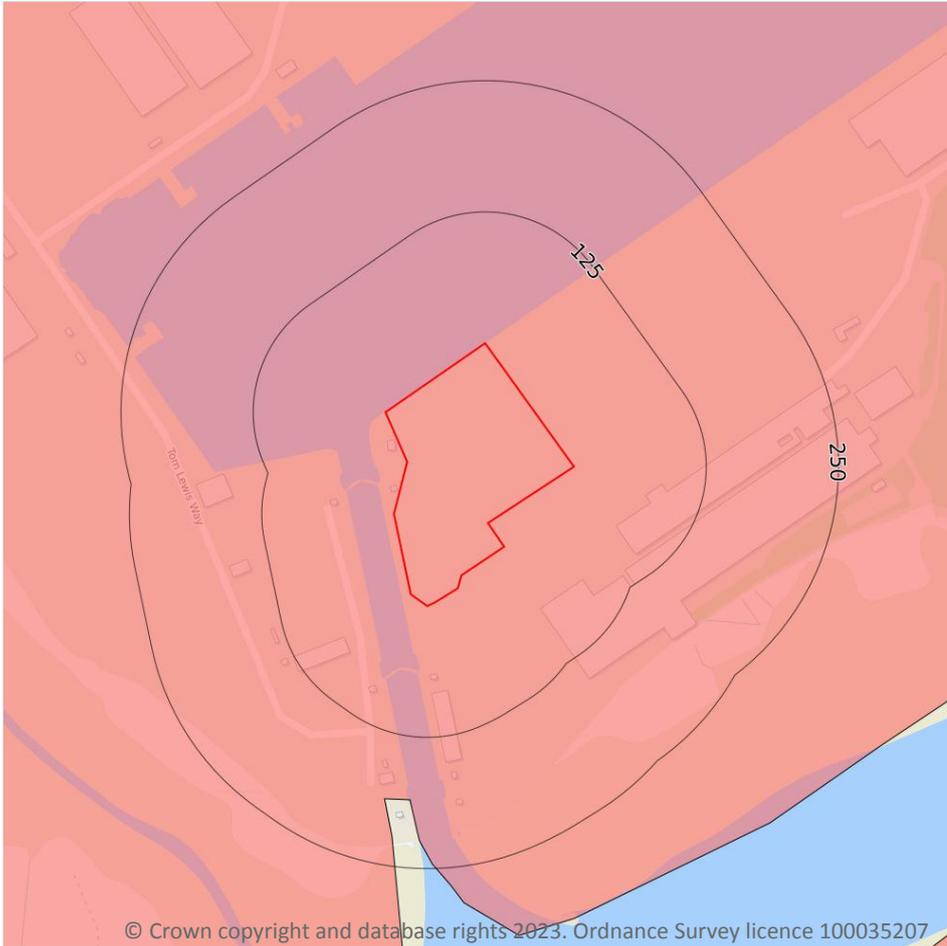
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 94**

Location	Hazard rating	Details
On site	Moderate	Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



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17.3 Compressible deposits

Records within 50m

1

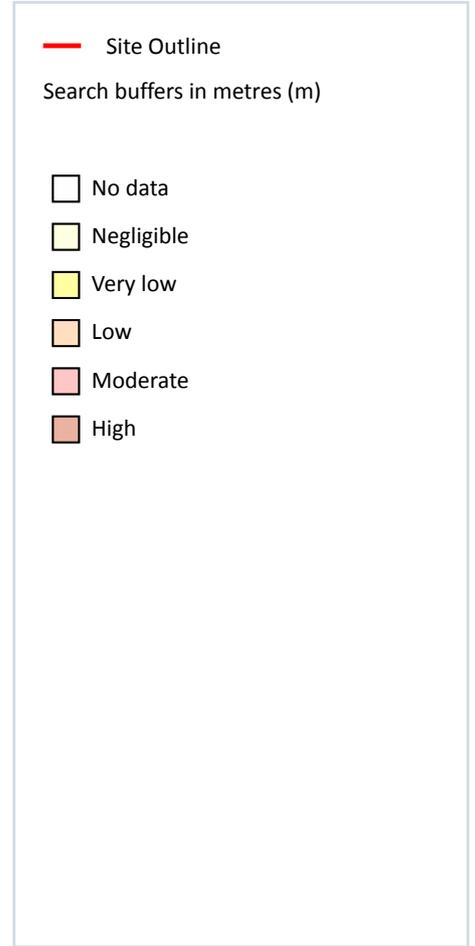
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 95**

Location	Hazard rating	Details
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 96**

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



— Site Outline
Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

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17.5 Landslides

Records within 50m

4

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 97**

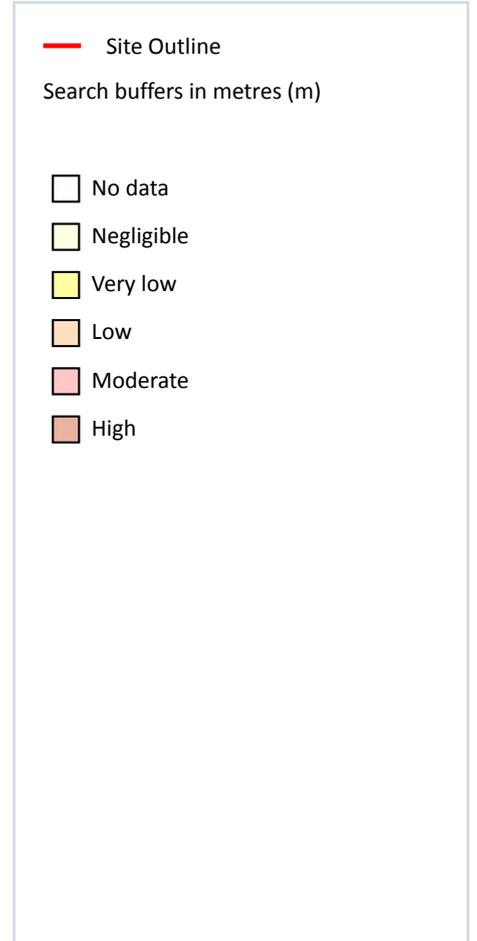
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

Location	Hazard rating	Details
On site	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
9m SW	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.
20m SW	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

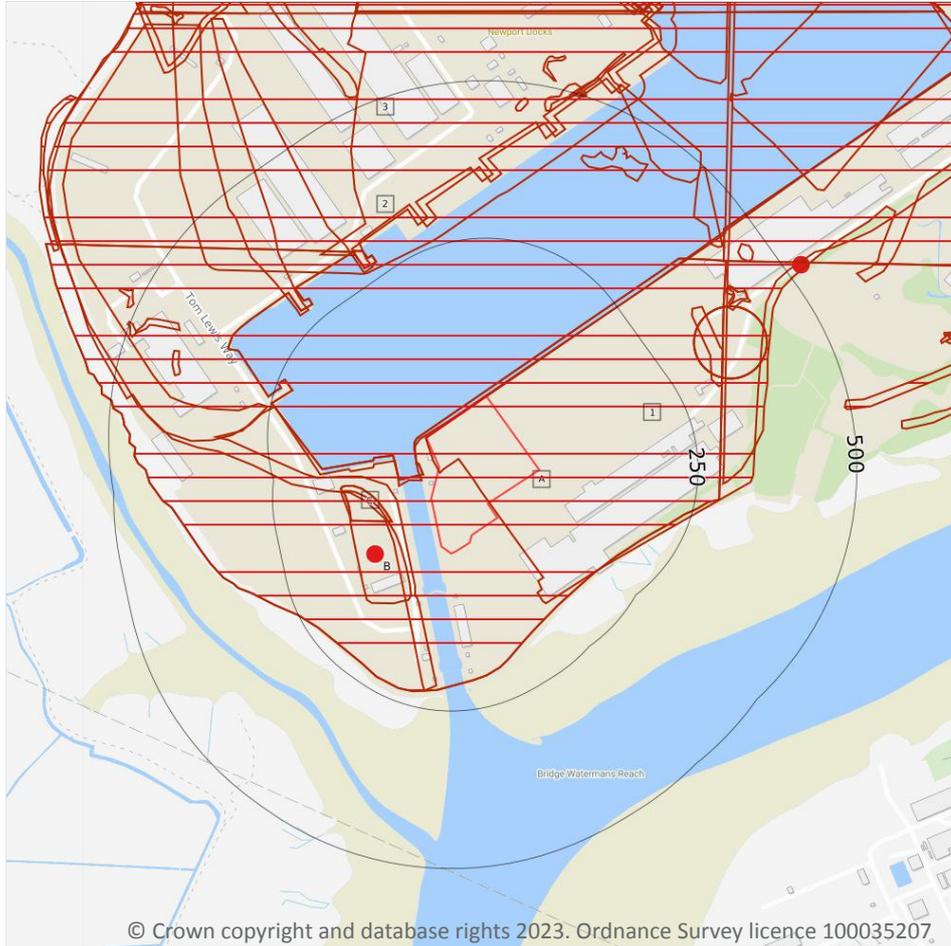
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 99**

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities



18.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

1

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining, ground workings and natural cavities map on **page 100**

ID	Location	Details	Description
B	104m SW	Name: North Dock Address: NEWPORT, Gwent Commodity: Marine Sand & Gravel Status: Active	Type: Sea, river or canal wharf where mineral commodities are unloaded and stored Status description: Site which is actively extracting mineral products, or in the case of wharfs and rail depots, is actively handling minerals

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

8

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 100**

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Quay	1956	1:10560
A	On site	Docks	1922	1:10560
A	On site	Docks	1922	1:10560
2	0m N	Docks	1922	1:10560
3	53m SW	Dock	1956	1:10560
B	62m SW	Unspecified Pit	1922	1:10560
C	68m SW	Unspecified Pit	1922	1:10560
C	68m SW	Unspecified Pit	1922	1:10560

This data is sourced from Ordnance Survey/Groundsure.



18.4 Underground workings

Records within 1000m

0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site

0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.



18.9 Coal mining

Records on site	0
-----------------	---

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0
-----------------	---

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
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Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

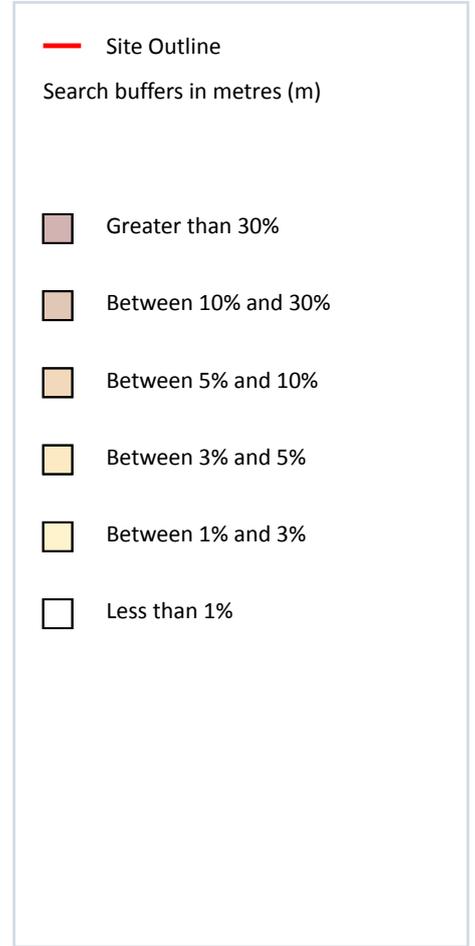
18.13 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon



19.1 Radon

Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 104**

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None

This data is sourced from the British Geological Survey and UK Health Security Agency.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

1

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

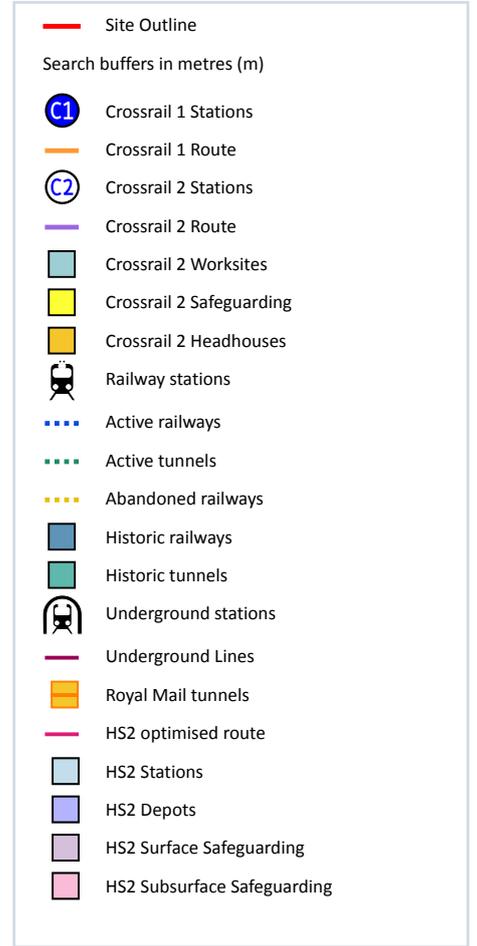
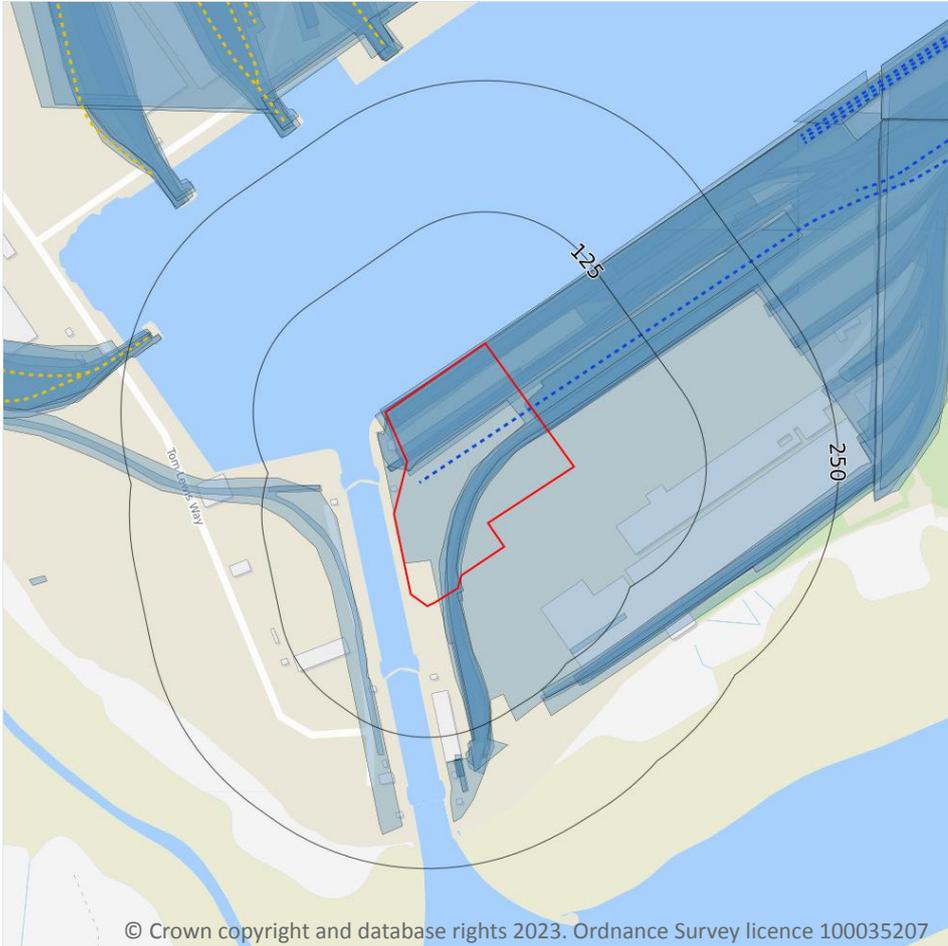
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The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects



21.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

45

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 107**

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1968	1250
On site	Railway Sidings	1955	1250
On site	Railway Sidings	1955	2500
On site	Railway Sidings	1968	2500
On site	Railway Sidings	1989	1250
On site	Railway Sidings	1920	2500
On site	Railway Sidings	1922	10560
On site	Railway Sidings	1950	10560
On site	Railway Sidings	1956	10560
52m SW	Railway Sidings	1955	2500
53m SW	Railway Sidings	1956	10560
74m W	Railway Sidings	1955	1250
116m SE	Railway Sidings	1920	2500
126m S	Railway Sidings	1922	10560
129m S	Railway Sidings	1920	2500
141m NE	Railway Sidings	1989	1250
141m SE	Railway Sidings	1955	2500



Location	Land Use	Year of mapping	Mapping scale
141m SE	Railway Sidings	1955	1250
144m S	Railway Sidings	1956	2500
149m S	Railway Sidings	1965	2500
149m S	Railway Sidings	1956	1250
149m S	Railway Sidings	1989	2500
150m S	Railway Sidings	1966	1250
150m S	Railway Sidings	1989	2500
151m S	Railway Sidings	1965	2500
151m S	Railway Sidings	1966	1250
161m SE	Railway Sidings	1968	2500
167m SE	Railway Sidings	1968	1250
191m NE	Railway Sidings	1968	1250
191m NE	Railway Sidings	1955	1250
218m E	Railway Sidings	1956	2500
219m E	Railway Sidings	1956	1250
223m NW	Railway Sidings	1955	1250
231m NW	Railway Sidings	1922	10560
233m NW	Railway Sidings	1920	2500
234m NW	Railway Sidings	1922	10560
238m E	Railway Sidings	1920	2500
238m NE	Railway Sidings	1920	2500
238m NE	Railway Sidings	1955	2500
238m NE	Railway Sidings	1968	2500
239m NE	Railway Sidings	1968	1250
239m NE	Railway Sidings	1955	1250
240m E	Railway Sidings	1955	2500
240m E	Railway Sidings	1955	1250
247m E	Railway Sidings	1920	2500

This data is sourced from Ordnance Survey/Groundsure.



21.5 Royal Mail tunnels

Records within 250m

0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m

1

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

Features are displayed on the Railway infrastructure and projects map on **page 107**

Location	Description
236m NW	Abandoned

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m

1

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

Features are displayed on the Railway infrastructure and projects map on **page 107**

Location	Name	Type
On site		rail

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.



21.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



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Map Name: County Series

Map date: 1882

Scale: 1:10,560

Printed at: 1:10,560



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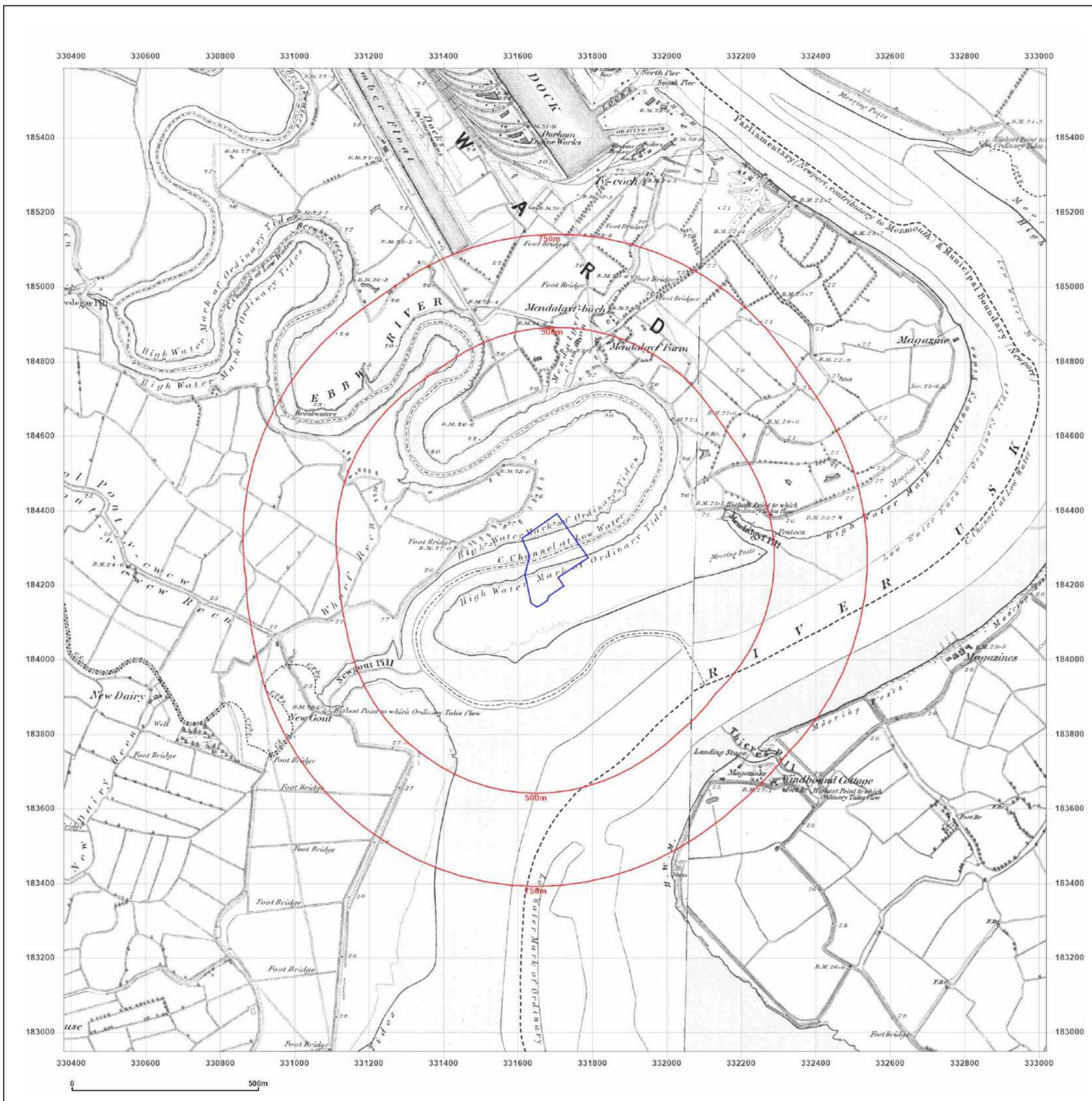


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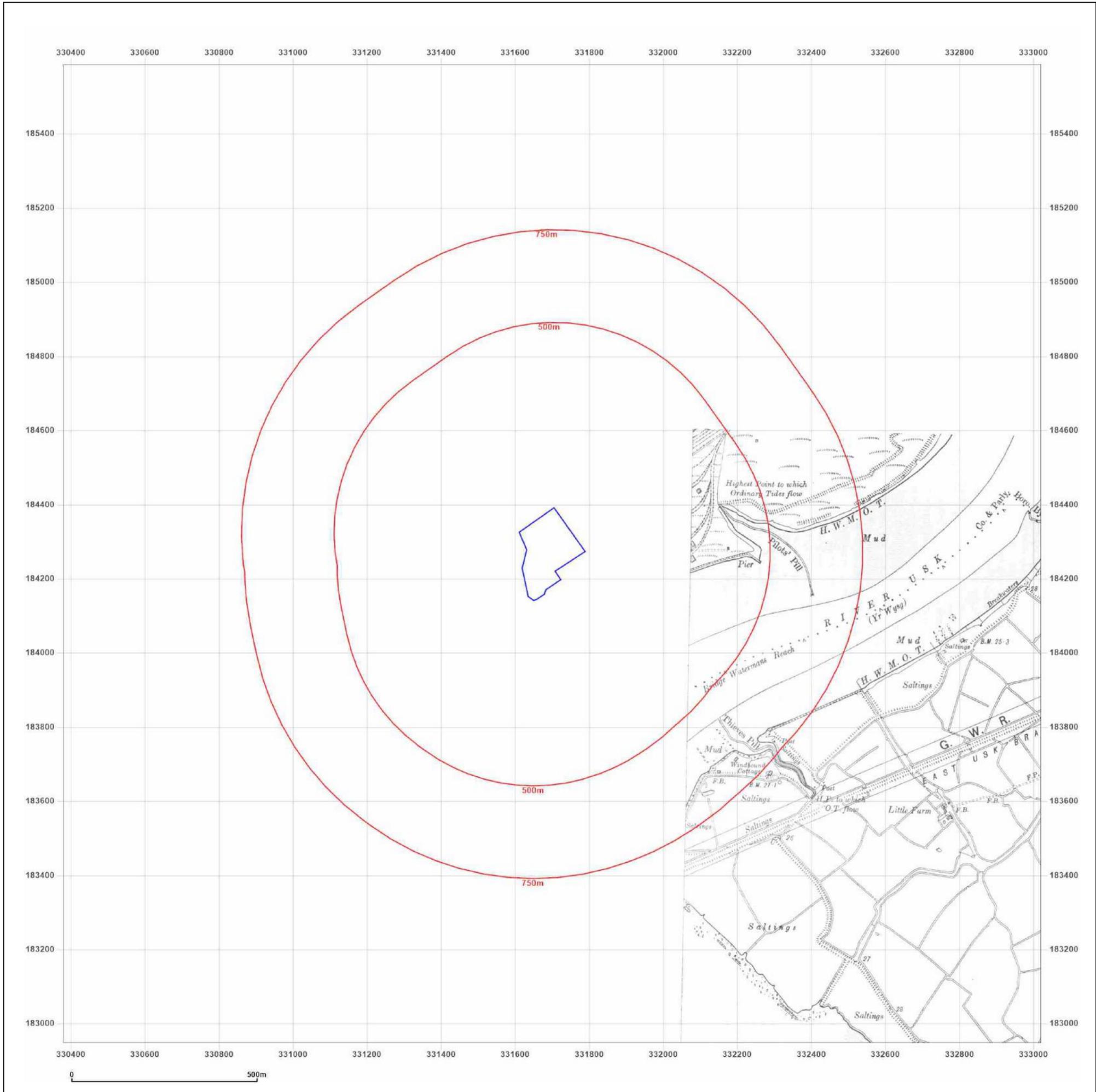
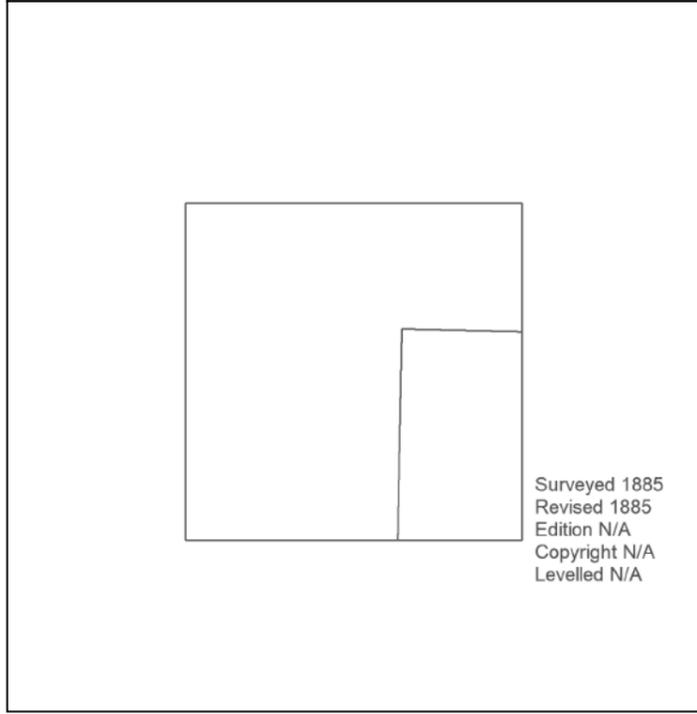
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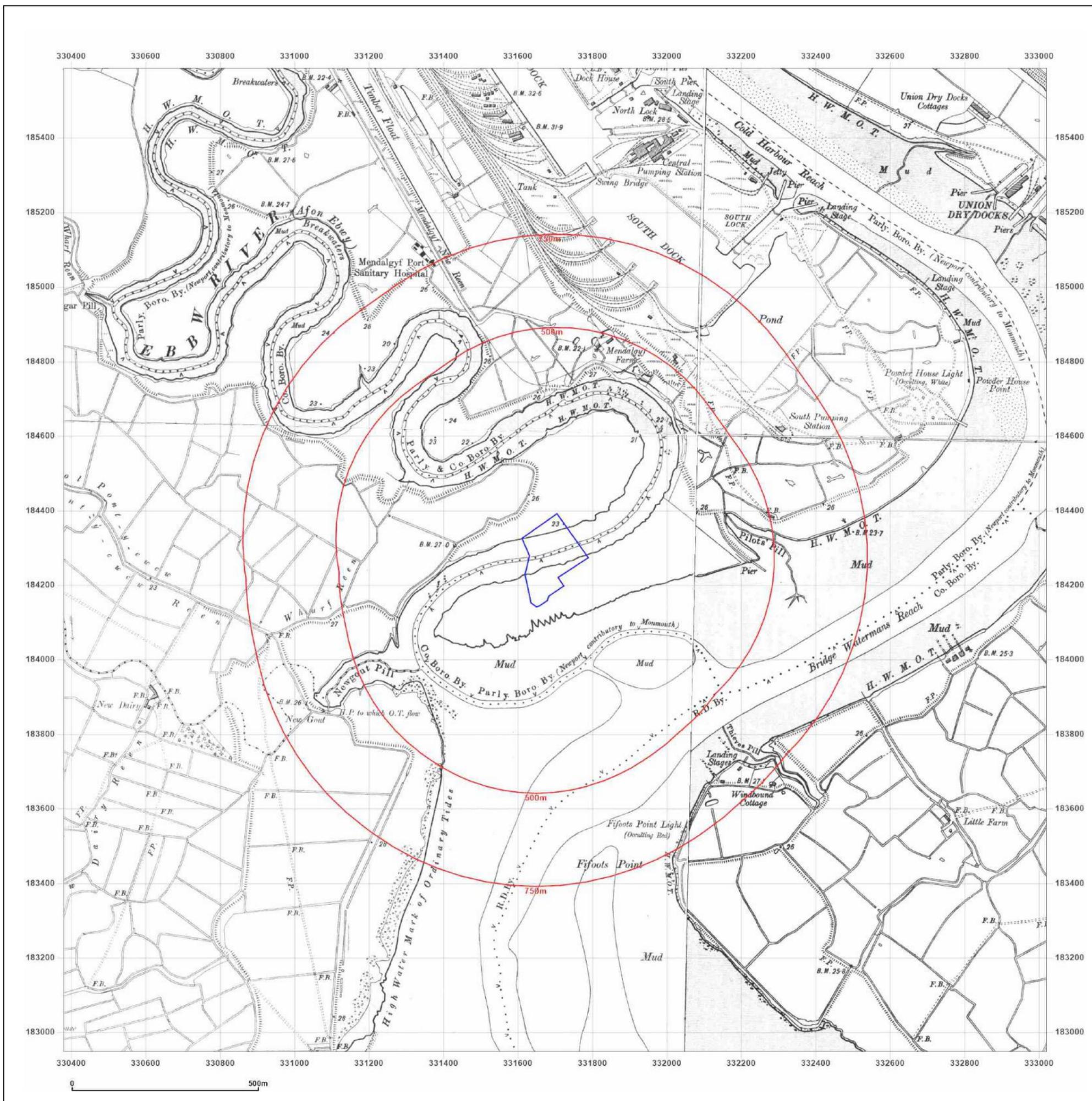


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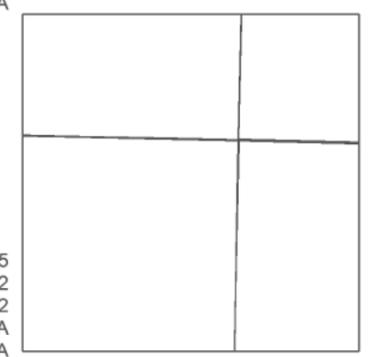
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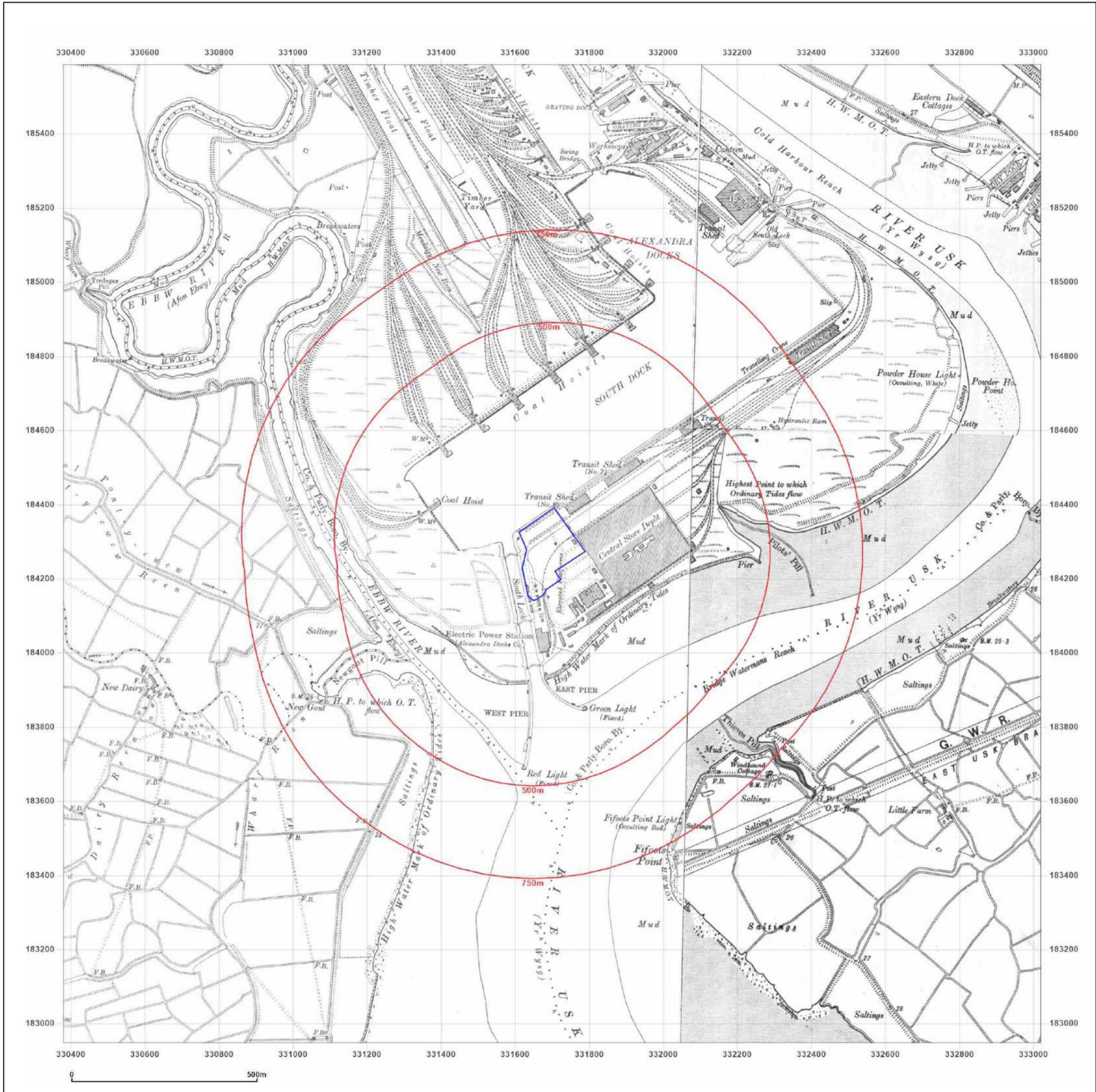


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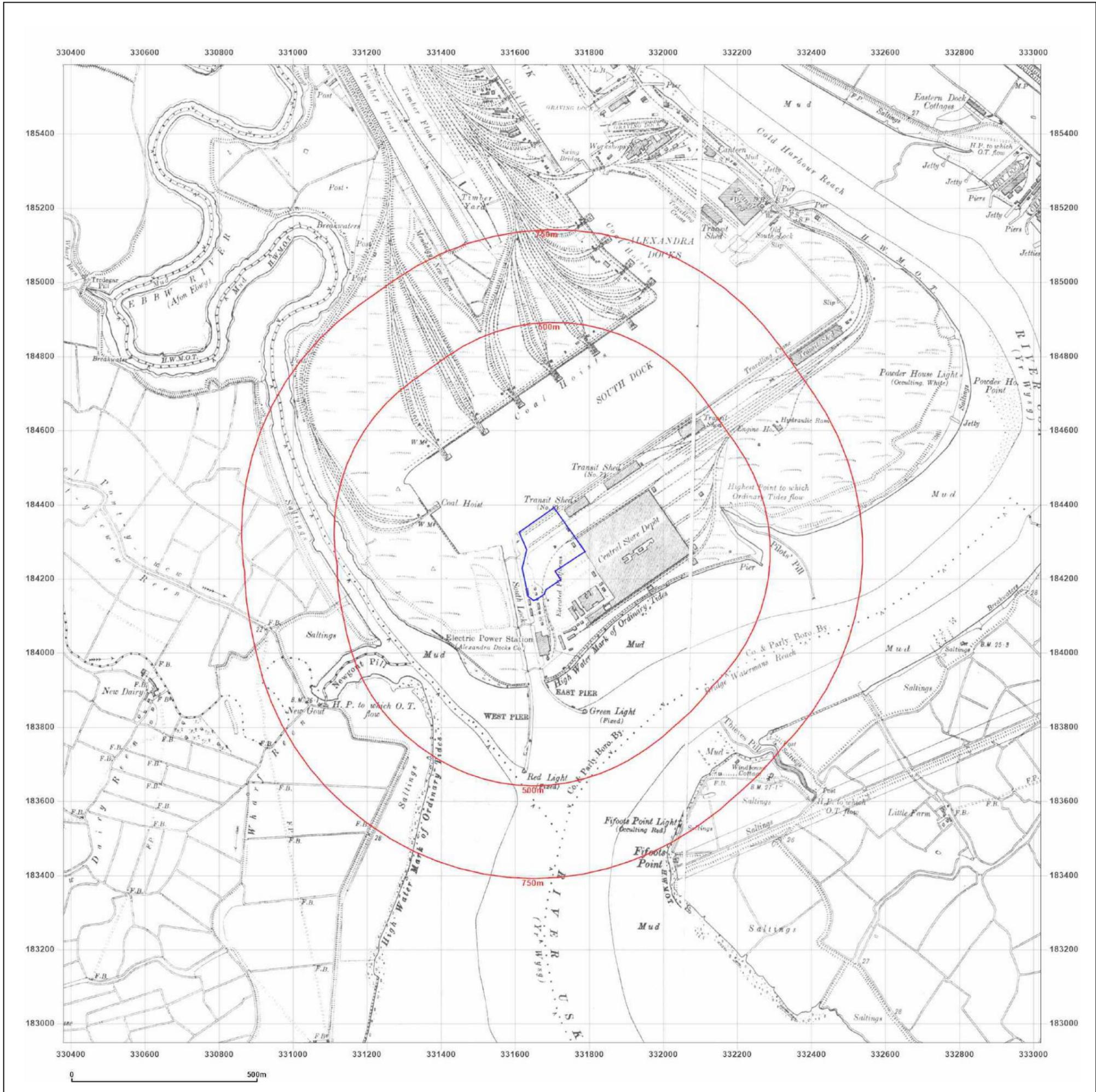
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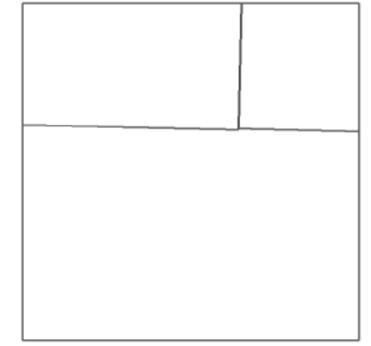
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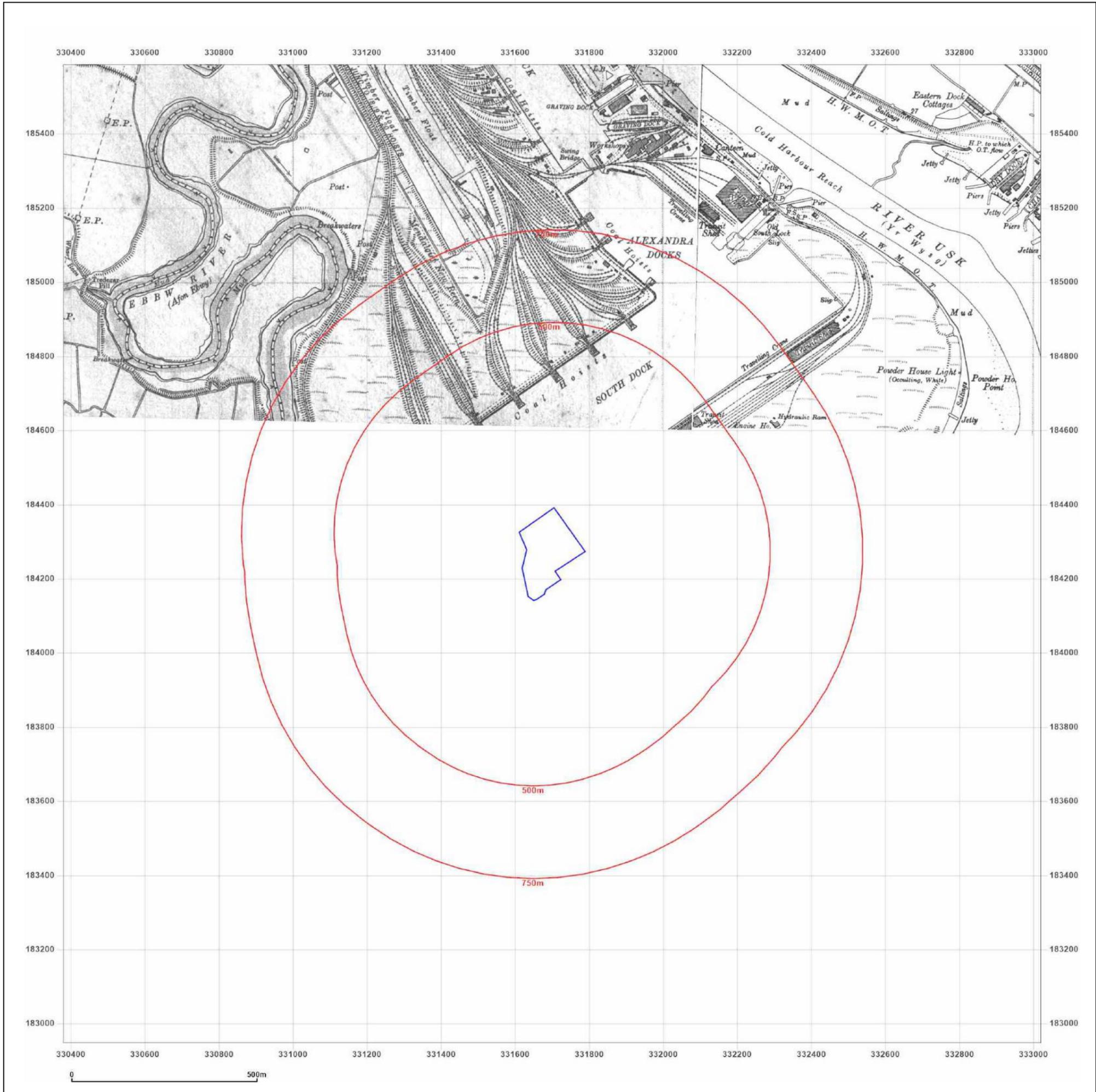


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Map Name: County Series

Map date: 1949-1950

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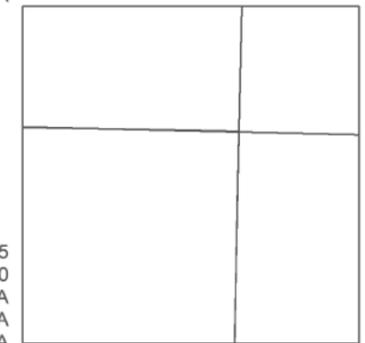


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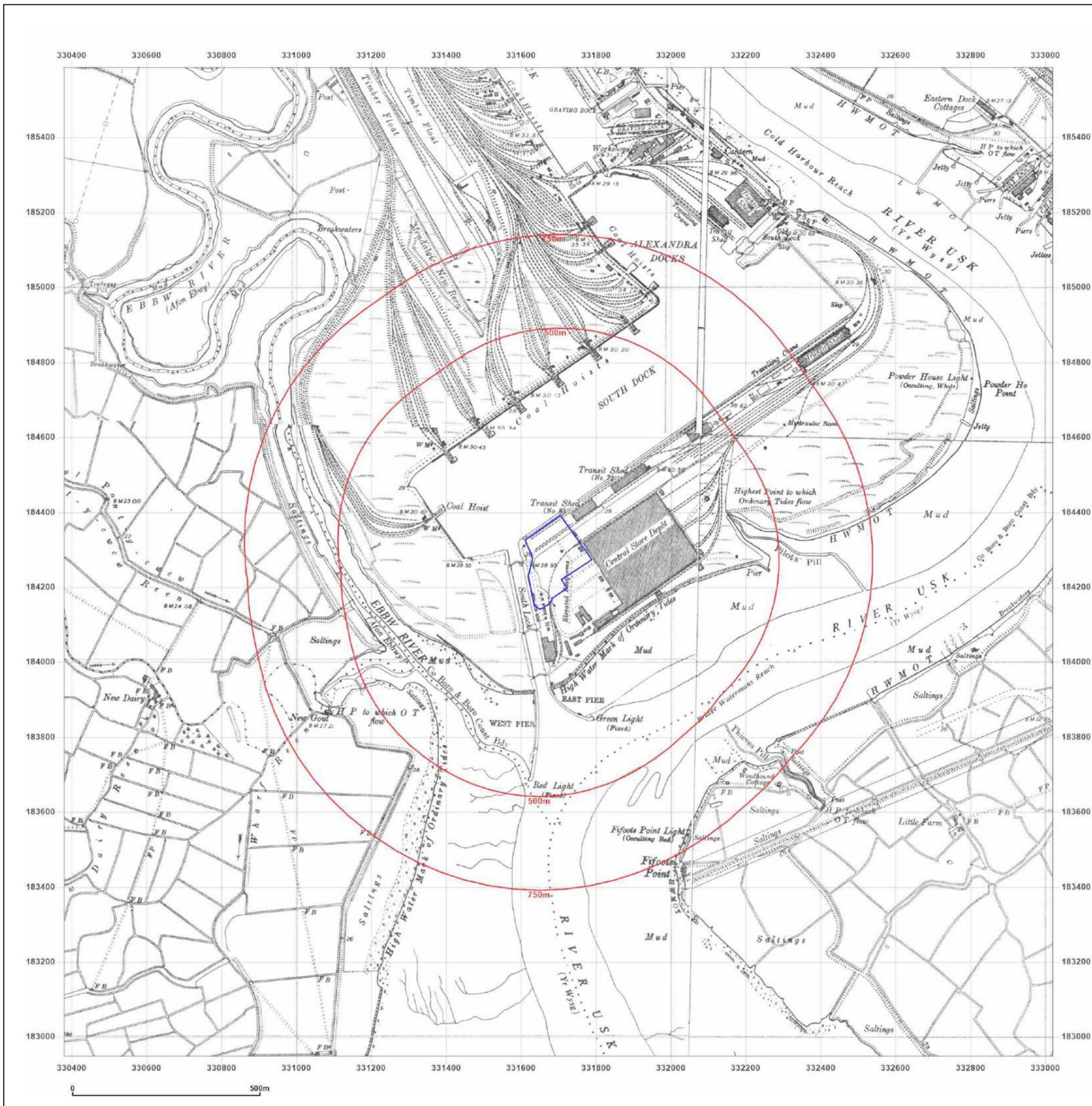


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 Revised 1956
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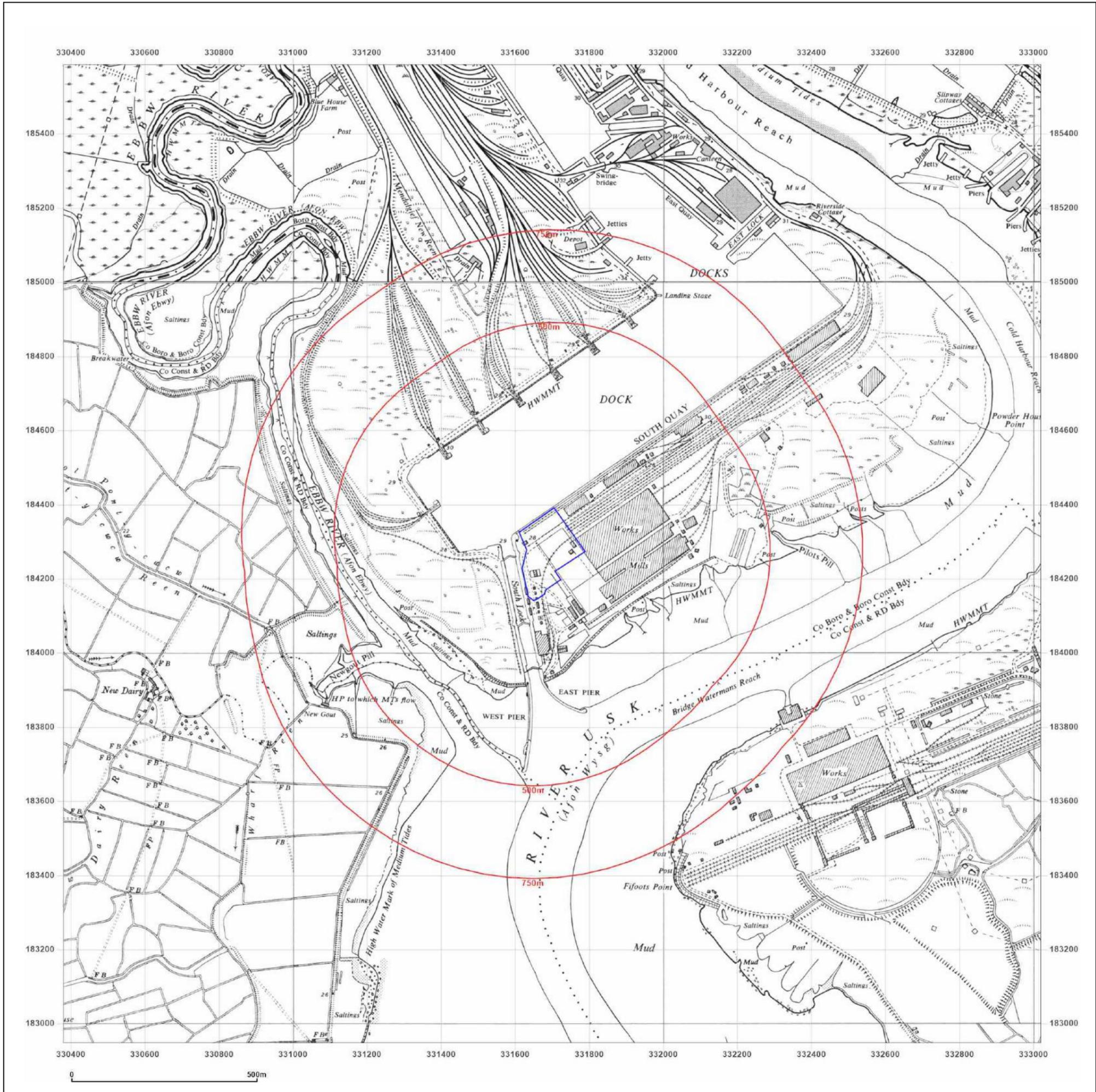
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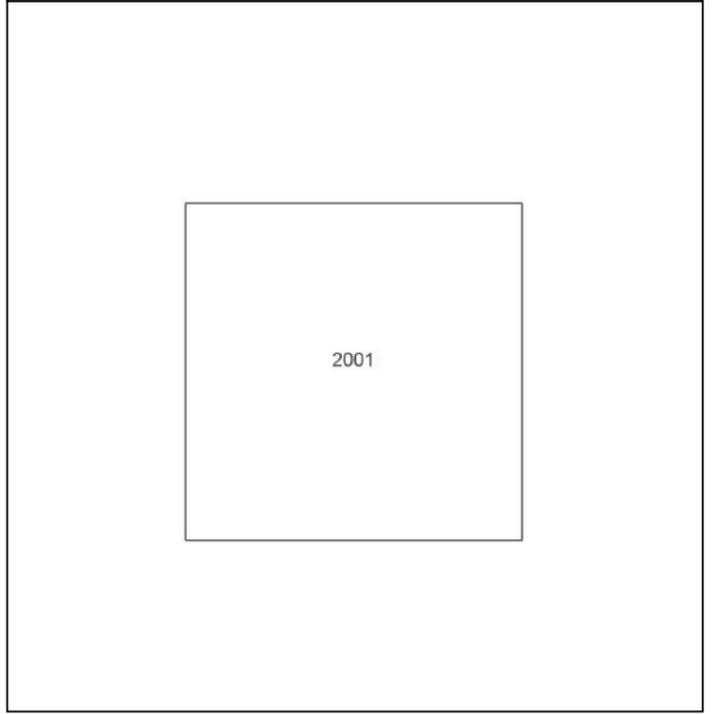
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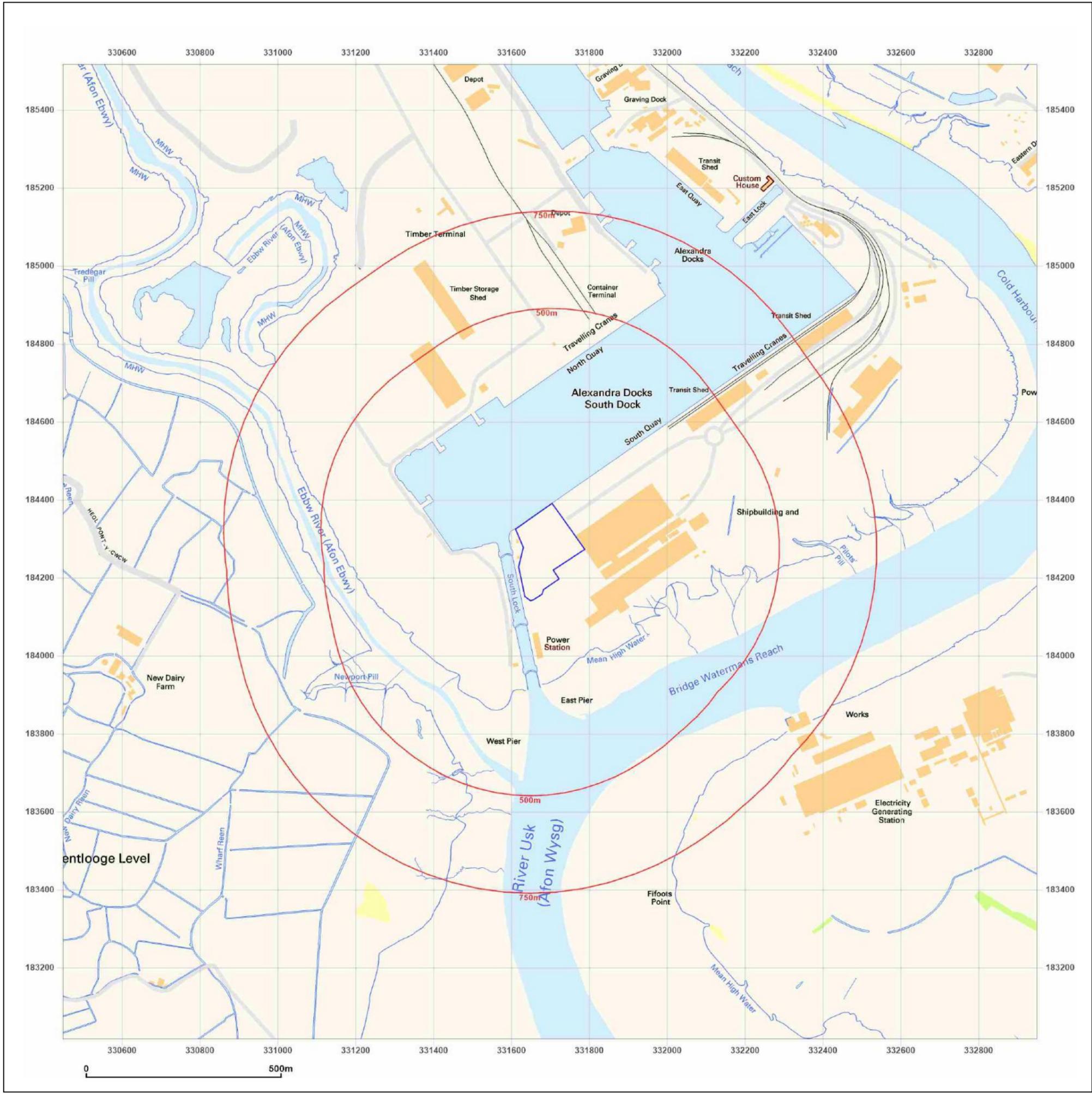
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Production date: 13 January 2023

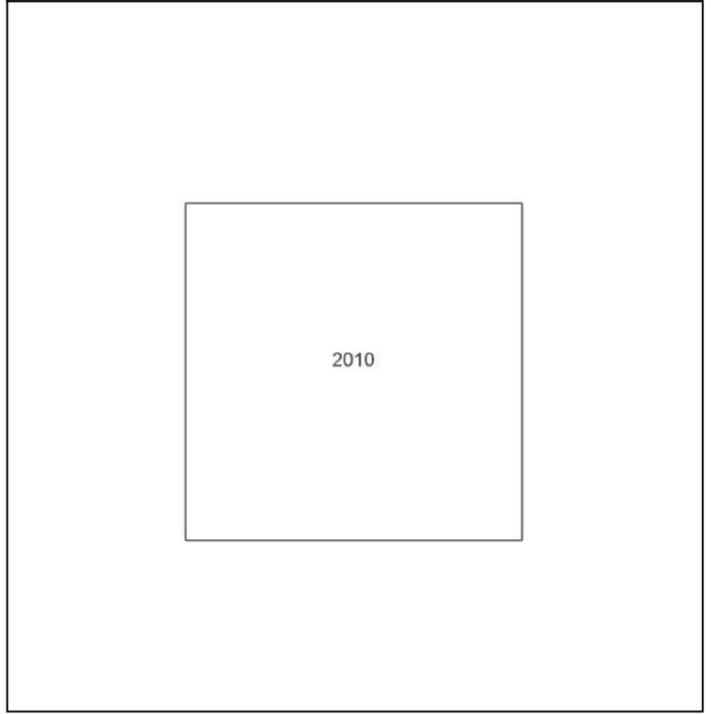
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:
 ASSOCIATED BRITISH PORTS,
 EAST WAY ROAD, ALEXANDRA
 DOCKS, NEWPORT, NP20 2UW

Client Ref: ABP_Newport
Report Ref: HMD-142-9296477
Grid Ref: 331699, 184267

Map Name: National Grid
Map date: 2010
Scale: 1:10,000
Printed at: 1:10,000



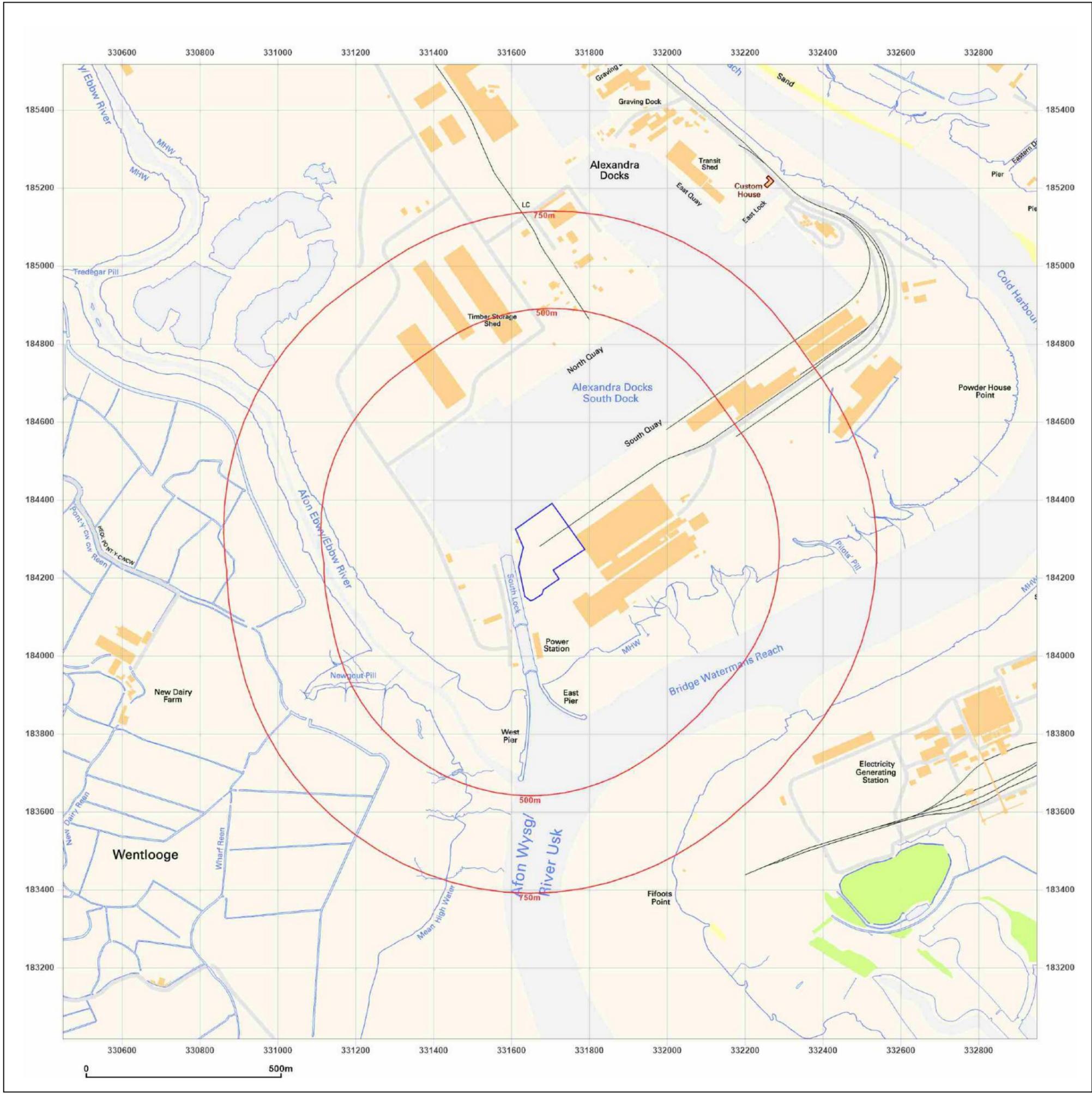
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Production date: 13 January 2023

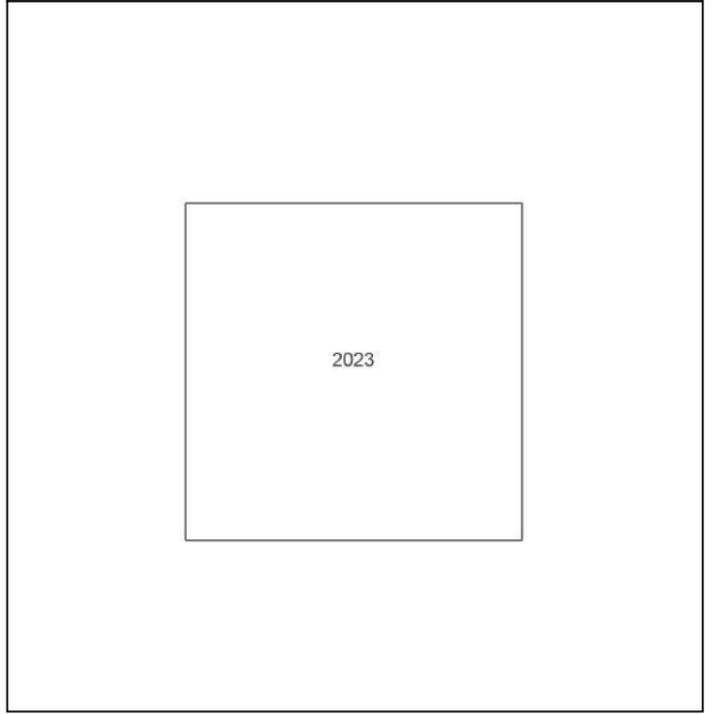
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 ASSOCIATED BRITISH PORTS,
 EAST WAY ROAD, ALEXANDRA
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Client Ref: ABP_Newport
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Map date: 2023
Scale: 1:10,000
Printed at: 1:10,000



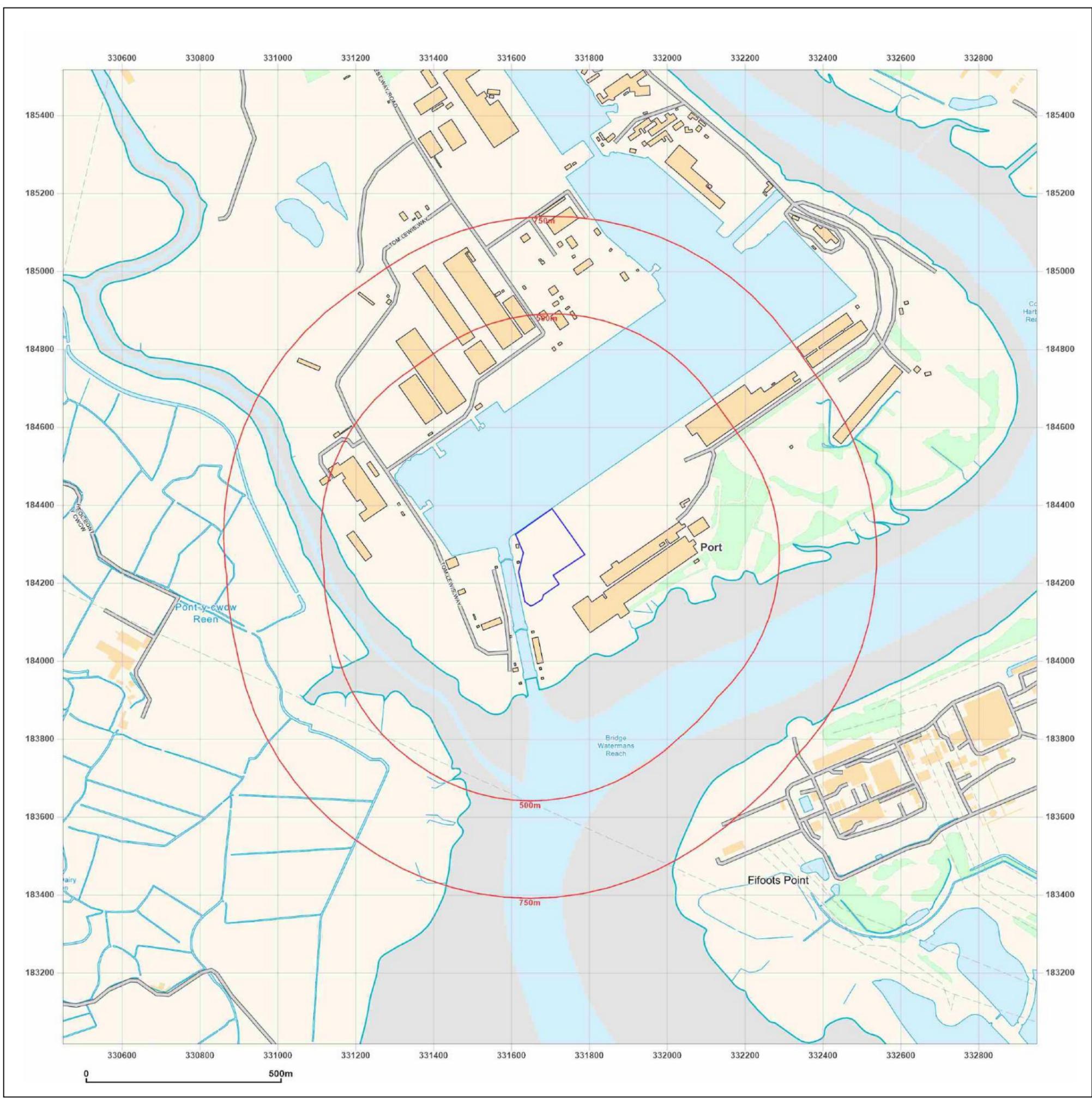
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APPENDIX C

Borehole Logs

Contract: South Side, South Dock, ABP Newport- Site Investigation

Borehole No.

Client: ExCAL Limited

BH01

Date: 14/02/2023

Job Number: 238-03-05

Ground Level:

Location: South Side, South Dock

Engineer: A Davis

Coordinates:

X 331638.147, Y 184179.926

Run Details					Test Details			STRATA					Water	Install/ Backfill
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend		
1	0.10				0.00 - 0.10			0.00 - 0.10		0.10	Concrete		0.10	
					0.10 - 0.50	BS1		0.10 - 0.50		(0.40)	Sub-base / Slag / Ironstone		(0.40)	
2	0.50				0.50 - 1.00	BS2		0.50 - 1.00		0.50	Black Ash / Crushed Bricks		0.50	
					1.00 - 1.50	CPT3	N=11 (5, 5, 5, 3, 2, 1)	1.00 - 1.50		(0.50)	Light Brown Sands and Gravels		(0.50)	
3	1.00				1.00 - 2.00	BS4		1.00 - 2.00		1.00			Light Grey Soft Clay	
					2.00 - 2.50	BS5		2.00 - 2.50		(1.50)	2.50			
4	2.50				2.50 - 3.00	BS6		2.50 - 3.00		2.50	Stiff Red Gravelly Marl		2.50	
					3.00 - 3.50	CPT7	N=4 (1, 1, 1, 1, 1, 1)	3.00 - 3.50		(1.50)			(1.50)	
5	4.00				3.00 - 4.00	BS8		2.50 - 4.00		4.00	Sands / Grey Clay / Cobbles		4.00	
					4.00 - 5.00	BS9		4.00 - 5.00		(1.50)			(1.50)	
6	5.00				5.00 - 5.50	CPT10	N=22 (5, 5, 5, 6, 5, 6)	5.00 - 5.50		5.00	Sands / Grey Clay / Cobbles		5.00	
					5.00 - 6.00	BS11		2.50 - 4.00		(2.00)			(2.00)	
7	6.00				6.00 - 7.00	BS12		6.00 - 7.00		6.00	Sands / Grey Clay / Cobbles		6.00	
					7.00 - 7.50	CPT13	N=19 (4, 4, 5, 5, 5, 4)	6.00 - 7.00		(1.00)			(1.00)	
8														
9														
10														

Drilling Progress and Water Observations					Groundwater			Flush			
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns

14/02/2023			200mm		6.00m			Medium inflow - Raised to 5.1m after 20 minutes			
------------	--	--	-------	--	-------	--	--	---	--	--	--

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 7.00m. Concrete, bentonite and 50mm slotted/plain pipes used for borehole. Water tight well cover installed flush with G.L. for future monitoring. Borehole terminated on engineer's instruction.



ExCAL House
Capel Hendre Industrial Estate
Ammanford
Carmarthenshire
SA18 3SJ
Tel: 01269 831606 Fax: 01269 84867
Website: www.excaluk.com E-mail: info@excaluk.com

Operator:
A Jones

Logged By:
A Davis

Sheet No.
1 of 1

Scale:
1:60.83

All measurements in metres unless otherwise stated

Contract: South Side, South Dock, ABP Newport- Site Investigation
 Client: ExCAL Limited

Borehole No.
BH02

Dates: 15/02/2023

Job Number: 238-03-05

Ground Level:

Location: South Side, South Dock

Engineer: A Davis

Coordinates:
 X 331657.404, Y 184245.479

Run Details					Test Details			STRATA							
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend	Depth (Thickness)	Water	Install/Backfill
0.10					0.10 - 0.10			0.00 - 0.10		0.10	Concrete		0.10		
					0.10 - 0.50	BS1		0.10 - 0.50		(0.40)	Sub-base / Stone / Concrete		(0.40)		
0.50					0.50 - 1.00	BS2		0.50 - 1.40		0.50	Dense Sand / Gravel / Some Medium Sized Cobbles		0.50		
1					1.00 - 1.50	CPT3	N=9 (6, 5, 4, 1, 2, 2)	0.50 - 1.40		(0.90)			(0.90)		
					1.00 - 2.00	BS4				1.40	Soft Grey Clay with Some Cobbles		1.40		
2					2.00 - 3.00	BS5									
3					3.00 - 3.50	CPT6	N=2 (0, 0, 1, 0, 0, 1)	1.40 - 3.00		(1.60)			(1.60)		
					3.00 - 4.00	BS7				3.00			3.00		
4					4.00 - 5.00	BS8									
5					5.00 - 5.50	CPT9	N=2 (0, 1, 0, 1, 0, 1)								
					5.00 - 6.00	BS10									
6					6.00 - 7.00	BS11					Soft Grey / Brown / Red Clay			1	
7					7.00 - 7.50	CPT12	N=2 (0, 1, 0, 1, 0, 1)								
					7.00 - 8.00	BS13									
8					8.00 - 9.00	BS14									
9					9.00 - 10.00	BS15		3.00 - 9.00		(6.00)			(6.00)		
					9.00 - 10.00	BS15				9.00	Soft Slightly Black Clay		9.00		
10					10.00 - 11.00	BS16									
11					11.00 - 12.00	BS17		9.00 - 11.00		(3.00)			(3.00)		
					11.00 - 12.00	BS17				11.00	Stiff Brown Silty Clay		11.00		
12					12.00 - 13.00	BS18									
13					13.00 - 14.00	BS19									
14					14.00 - 15.00	BS20		11.00 - 14.00		(3.00)			(3.00)		
					14.00 - 15.00	BS20				14.00	Gravels		14.00	1	
15					14.00 - 15.00			14.00 - 15.00		(1.00)			(1.00)		
					14.00 - 15.00					15.00			15.00		

Drilling Progress and Water Observations					Groundwater			Flush			
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
15/02/2023			200mm					Fast Inflow - Raised to 6m after 20 minutes			

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 15.00m. Concrete, bentonite and 50mm slotted/plain pipes used for borehole. Water tight well cover installed flush with G.L. for future monitoring. Borehole terminated on engineer's instruction.



ExCAL House
 Capel Hendre Industrial Estate
 Ammanford
 Carmarthenshire
 SA18 3SU
 Tel: 01269 831606 Fax: 01269 84867
 Website: www.excaluk.com E-mail: info@excaluk.com

Operator:
A Jones

Logged By:
A Davis

Sheet No.
1 of 1

Scale:
1:60.83

All measurements in metres unless otherwise stated

Contract: South Side, South Dock, ABP Newport- Site Investigation
 Client: ExCAL Limited

Borehole No.
BH03

Dates: 13/02/2023

Job Number: 238-03-05

Ground Level:

Location: South Side, South Dock

Engineer: A Davis

Coordinates:

X 331712.143, Y 184270.482

Run Details					Test Details			STRATA					Water	Install/ Backfill	
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend			Depth (Thickness)
0.10								0.00 - 0.10		0.10	Concrete		0.10		
1.00								0.10 - 1.00		(0.90) 1.00	MADE GROUND - Sub-base Slag / Ironstone / Bricks / Concrete		(0.90) 1.00		
1.50								1.00 - 1.50		(0.50) 1.50	Ash / Black Soft Clay / Boulder		(0.50) 1.50		
											Borehole terminated as rig could not penetrate through boulder, causing the casing to enter at an angle.				

Drilling Progress and Water Observations					Groundwater			Flush			
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
13/02/2023			200mm								

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 1.50m. Borehole reinstated with bentonite and concrete. Borehole terminated on engineer's instruction.



ExCAL House
 Capel Hendre Industrial Estate
 Ammanford
 Carmarthenshire
 SA18 3SJ
 Tel: 01269 831606 Fax: 01269 84867
 Website: www.excaluk.com E-mail: info@excaluk.com

Operator:
A Jones

Logged By:
A Davis

Sheet No.
1 of 1

Scale:
1:60.83

All measurements in metres unless otherwise stated

Contract: South Side, South Dock, ABP Newport- Site Investigation
 Client: ExCAL Limited

Borehole No.
BH05

Dates: 10/02/2023

Job Number: 238-03-05

Ground Level:

Location: South Side, South Dock

Engineer: A Davis

Coordinates:

X 331718.274, Y 184353.103

Run Details					Test Details			STRATA					Water	Install/ Backfill
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend		
0.15								0.00 - 0.15		0.15	Concrete		0.15	
										(0.35)	Sub-base Slag /Bricks		(0.35)	
0.50					0.50 - 1.00	BS1		0.15 - 0.50		0.50			0.50	
1					1.00 - 1.50	CPT2	N=2 (0, 0, 1, 0, 0, 1)							
					1.00 - 2.00	BS3								
2					2.00 - 3.00	BS4								
3					3.00 - 3.50	CPT5	N=8 (1, 1, 2, 2, 2, 2)							
					3.00 - 4.00	BS6								
					4.00 - 5.00	BS7								
5	5.00				5.00 - 5.50	CPT8	N=4 (1, 1, 1, 1, 1, 1)	0.50 - 5.00		(4.50)			(4.50)	
					5.00 - 6.00	BS9				5.00			5.00	
6					6.00 - 7.00	BS10								
7					7.00 - 7.50	CPT11	N=4 (1, 1, 1, 1, 1, 1)							
					7.00 - 8.00	BS12								
8					8.00 - 9.00	BS13								
9					9.00 - 9.50	CPT14	N=4 (1, 1, 1, 1, 1, 1)							
					9.00 - 10.00	BS15								
10					10.00 - 11.00	BS16								
11	11.00				11.00 - 12.00	BS17		5.00 - 11.00		(6.00)			(6.00)	
12					12.00 - 13.00	BS18				11.00			11.00	
13					13.00 - 14.00	BS19								
14					14.00 - 15.00	BS20								
15	15.00							11.00 - 15.00		(4.00)			(4.00)	
										15.00			15.00	

Drilling Progress and Water Observations					Groundwater			Flush			
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
10/02/2023			200mm		14.00m						

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 15.00m. Concrete, bentonite and 50mm slotted/plain pipes used for borehole. Water tight well cover installed flush with G.L. for future monitoring. Borehole terminated on engineer's instruction.

APPENDIX D

Laboratory Analysis Results

Project:	23030236	Sample Number:	23030236-001	23030236-002	23030236-003	23030236-004	23030236-005	23030236-006	23030236-007	23030236-008	23030236-009	23030236-010	23030236-011	23030236-012	23030236-013	23030236-014	23030236-015
Customer:	EXCAL Limited	Customer Reference:	BH01 - 1m	BH01 - 1.3m - Asbestos	BH01 - 3m	BH01 - 5m	BH01 - 7m	BH02 - 2m	BH02 - 1.3m - Asbestos	BH02 - 4m	BH02 - 8m	BH02 - 13m	BH05 - 2m	BH05 - 1.3m - Asbestos	BH05 - 4m	BH05 - 8m	BH05 - 13m
Customer Site:	South Side, South Dock - ABP Newport	Matrix:	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample	Soil Sample
Report Created:	13/03/2023	Sampling Date:	20/02/2023 08:00	20/02/2023 08:00	20/02/2023 08:15	20/02/2023 08:30	20/02/2023 08:45	20/02/2023 09:00	20/02/2023 09:00	20/02/2023 09:15	20/02/2023 09:30	20/02/2023 09:45	20/02/2023 10:00	20/02/2023 10:00	20/02/2023 10:15	20/02/2023 10:03	20/02/2023 10:45
Method	Analyte	Units															
BTEXHSA	Benzene^	µg/kg	<11	<15	<13	<12	<13			<15	<15	<14	<15		<15	<15	<14
BTEXHSA	Ethylbenzene^	µg/kg	<11	<15	<13	<12	<13			<15	<15	<14	<15		<15	<15	<14
BTEXHSA	m/p-Xylene^	µg/kg	<22	<30	<27	<24	<26			<30	<29	<28	<30		<29	<30	<28
BTEXHSA	o-Xylene^	µg/kg	<11	<15	<13	<12	<13			<15	<15	<14	<15		<15	<15	<14
BTEXHSA	Toluene^	µg/kg	<11	<15	<13	<12	<13			<15	<15	<14	<15		<15	<15	<14
CLANDPREP	Description of Solid Material	-	SILT	CLAY	CLAY	CLAY	CLAY			CLAY	CLAY	CLAY	CLAY		CLAY	CLAY	CLAY
CLANDPREP	Total Moisture at 35°C	%	9.2	33.5	24.4	17.8	21.9			32.4	30.9	27.5	32.7		32	34	29.6
GROHSA/BTEXHSA	>C6-C7 Aliphatic^	mg/kg	<0.220	<0.301	<0.265	<0.243	<0.256			<0.296	<0.289	<0.276	<0.297		<0.294	<0.303	<0.284
GROHSA/BTEXHSA	>C7-C8 Aliphatic^	mg/kg	<0.220	<0.301	<0.265	<0.243	<0.256			<0.296	<0.289	<0.276	<0.297		<0.294	<0.303	<0.284
GROHSA/BTEXHSA	>C7-C8 Aromatic^	mg/kg	<0.011	<0.015	<0.013	<0.012	<0.013			<0.015	<0.015	<0.014	<0.015		<0.015	<0.015	<0.014
GROHSA/BTEXHSA	>C8-C10 Aliphatic^	mg/kg	<0.220	<0.301	<0.265	<0.243	<0.256			<0.296	<0.289	<0.276	<0.297		<0.294	<0.303	<0.284
GROHSA/BTEXHSA	>C8-C10 Aromatic^	mg/kg	<0.044	<0.060	<0.053	<0.049	<0.052			<0.060	<0.059	<0.056	<0.060		<0.059	<0.061	<0.057
GROHSA/BTEXHSA	C5-C6 Aliphatic^	mg/kg	<0.220	<0.301	<0.265	<0.243	<0.256			<0.296	<0.289	<0.276	<0.297		<0.294	<0.303	<0.284
GROHSA/BTEXHSA	C5-C7 Aromatic^	mg/kg	<0.011	<0.015	<0.013	<0.012	<0.013			<0.015	<0.015	<0.014	<0.015		<0.015	<0.015	<0.014
GROHSA/BTEXHSA	Total GRO C5-C10^	mg/kg	<0.220	<0.301	<0.265	<0.243	<0.256			<0.296	<0.289	<0.276	<0.297		<0.294	<0.303	<0.284
ICPMSS	Antimony as Sb^	mg/kg	0.9	0.5	0.2	<0.1	0.2			0.1	0.1	<0.1	0.4		0.2	0.2	<0.1
ICPMSS	Arsenic as As^	mg/kg	4.2	10.4	9.9	10.4	9.3			12	11.2	8.5	12.3		15.1	14.9	10.9
ICPMSS	Cadmium as Cd^	mg/kg	0.8	0.3	0.3	0.3	0.4			0.4	0.4	0.5	0.3		0.3	0.3	0.2
ICPMSS	Copper as Cu^	mg/kg	23.6	18.1	14.3	12.2	41.5			15.9	14.7	10.3	21		17.1	18.2	14.1
ICPMSS	Lead as Pb^	mg/kg	35.1	25.6	17.3	11.8	16.7			19.1	17.5	15.8	23.9		21.1	25	17.5
ICPMSS	Manganese as Mn^	mg/kg	19160	788.2	652.2	623.7	803			777.2	692.3	623.7	778.8		921.3	834	627.4
ICPMSS	Mercury as Hg^	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
ICPMSS	Molybdenum as Mo^	mg/kg	1.6	0.7	0.6	0.5	<0.5			<0.5	0.5	<0.5	1.3		0.6	0.5	<0.5
ICPMSS	Nickel as Ni^	mg/kg	17.1	30.9	28.5	25	26			32.2	32.4	26.6	35		35.4	37.8	30.4
ICPMSS	Selenium as Se^	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
ICPMSS	Total Chromium as Cr^	mg/kg	252.6	32.2	25.1	19.5	25.3			35.7	36.5	30.4	37.7		40.4	43.8	30.6
ICPMSS	Vanadium as V^	mg/kg	687	44.2	33.4	26.1	33.8			46.7	47.4	39	51.8		53.2	56.9	39.7
ICPMSS	Zinc as Zn^	mg/kg	61.5	104.4	76.1	64	86.6			89	84.7	75.6	94.7		100	104.5	82.9
ICPMSSW (Dissolved)-LPL1	Antimony as Sb	mg/l	0.005	0.002	<0.001	<0.001	0.002			<0.001	0.002	0.002	0.003		0.001	0.003	0.002
ICPMSSW (Dissolved)-LPL1	Arsenic as As	mg/l	0.006	0.004	0.005	0.003	0.003			0.001	0.004	0.004	0.003		0.004	0.006	0.005
ICPMSSW (Dissolved)-LPL1	Cadmium as Cd	mg/l	0.0004	0.00021	0.00021	0.00017	0.00011			0.00007	0.00024	0.00038	0.00023		0.00023	0.00037	0.00024
ICPMSSW (Dissolved)-LPL1	Copper as Cu	mg/l	0.003	<0.001	<0.001	<0.001	<0.001			0.003	0.003	<0.001	<0.001		<0.001	<0.001	0.001
ICPMSSW (Dissolved)-LPL1	Lead as Pb	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
ICPMSSW (Dissolved)-LPL1	Manganese as Mn	mg/l	0.12	<0.002	2.17	0.535	2.09			<0.002	0.081	0.189	0.249		0.127	0.092	0.093
ICPMSSW (Dissolved)-LPL1	Mercury as Hg	mg/l	<0.0003	0.00023	<0.0003	<0.0003	<0.0003			<0.0003	<0.0003	<0.0003	<0.0003		<0.0003	<0.0003	<0.0003
ICPMSSW (Dissolved)-LPL1	Molybdenum as Mo	mg/l	0.072	0.033	0.029	0.024	0.024			0.009	0.083	0.084	0.102		0.085	0.098	0.097
ICPMSSW (Dissolved)-LPL1	Nickel as Ni	mg/l	0.005	<0.001	0.005	0.005	0.002			<0.001	0.003	0.004	0.001		0.003	0.007	0.005
ICPMSSW (Dissolved)-LPL1	Selenium as Se	mg/l	0.002	0.004	0.001	0.001	<0.001			<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
ICPMSSW (Dissolved)-LPL1	Total Chromium as Cr	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
ICPMSSW (Dissolved)-LPL1	Vanadium as V	mg/l	0.006	0.442	0.001	0.001	0.002			0.002	0.002	0.003	0.003		0.002	0.003	0.002
ICPMSSW (Dissolved)-LPL1	Zinc as Zn	mg/l	0.004	0.003	0.003	0.005	0.002			<0.002	0.003	0.012	0.005		0.003	0.005	0.002
ICPSOIL	Aluminium as Al^	mg/kg	46500	19700	14900	10300	13500			21300	21100	16200	24000		23600	25400	18500
ICPSOIL	Barium as Ba^	mg/kg	1120	67	47.6	37.8	111			67.9	41.8	36.7	125		48.7	46.8	41.4
ICPSOIL	Beryllium as Be^	mg/kg	2.2	0.87	0.7	0.56	0.68			0.89	0.83	0.71	1.12		1.01	1.07	0.81
ICPSOIL	Boron as B^	mg/kg	50	24	18	12	17			33	36	31	39		37	43	39
ICPSOIL	Iron as Fe^	mg/kg	80400	33000	31300	28900	30800			34200	31400	27600	35200		35300	37700	30800
ICPSOIL	Titanium as Ti^	mg/kg	2010	109	92.1	69.7	103			112	119	107	167		123	120	103
ICPWATVAR (Dissolved)-LPL1	Aluminium as Al	mg/l	0.02	0.15	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	0.01		0.01	0.01	<0.01
ICPWATVAR (Dissolved)-LPL1	Barium as Ba	mg/l	0.02	0.01	0.05	0.02	0.05			0.02	0.01	0.02	0.04		0.02	0.01	0.02
ICPWATVAR (Dissolved)-LPL1	Beryllium as Be	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
ICPWATVAR (Dissolved)-LPL1	Boron as B	mg/l	1.65	0.14	0.41	0.41	0.33			0.2	1.14	1.27	0.68		1.06	1.59	1.69
ICPWATVAR (Dissolved)-LPL1	Iron as Fe	mg/l	0.01	<0.01	0.01	0.01	<0.01			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01

Determinand	Reported Units	6% Soil Organic Matter Presumed S4L1 & CASL's		
		Commercial Limits	Units	Pass/Fail
Benzene	µg/kg	90	mg/kg	✓
Ethylbenzene	µg/kg	27000 (vapour) 2840	mg/kg	✓
m&p xylene	µg/kg	m-xylene: 31000 soluble (mg/kg) 3460 (mg/kg) 31000000 soluble	n/a	✓
o-xylene	µg/kg	33000 (soluble (mg/kg)) 2620 (mg/kg) 33000000 (soluble (µg/kg)) 2620000 (µg/kg)	mg/kg	✓
Toluene	µg/kg	180000 vapour (mg/kg) 4360 (mg/kg) 180000000 vapour (µg/kg) 4360000 (µg/kg)	mg/kg µg/kg	✓
N/A				
Moisture Content	%	n/a	n/a	n/a
Aliphatic TPH >C6-C8	mg/kg	40000 (736 vapour)	mg/kg	✓
Aliphatic TPH >C6-C8	mg/kg	40000 (736 vapour)	mg/kg	✓
Aromatic TPH > C7-C8	mg/kg	180000 (4360 vapour)	mg/kg	✓
Aliphatic TPH >C8-C10	mg/kg	11000 (451 vapour)	mg/kg	✓
Aromatic TPH > C8-C10	mg/kg	17000 (3580 vapour)	mg/kg	✓
Aliphatic TPH >C5-C6	mg/kg	12000 (1150 soluble)	mg/kg	✓
Aromatic TPH > C5-C7	mg/kg	86000 (4710 soluble)	mg/kg	✓
N/A				
Antimony	mg/kg	n/a	n/a	n/a
Arsenic	mg/kg	640	mg/kg	✓
Cadmium	mg/kg	190	mg/kg	✓
Copper	mg/kg	68000	mg/kg	✓
Lead	mg/kg	2300	mg/kg	✓
Manganese	mg/kg	n/a	n/a	n/a
Mercury	mg/kg	Elemental Mercury: 58 (vapour) / 25.8 Inorganic Mercury: 1100 Methylmercury: 320	mg/kg	✓
Molybdenum	mg/kg	n/a	n/a	n/a
Nickel	mg/kg	980	mg/kg	✓
Selenium	mg			

SVOC	Benzo[b]fluoranthene ^A	mg/kg	26.3	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
SVOC	Benzo[g,h,i]perylene ^A	mg/kg	6.5	<0.8	<0.7	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<3.7	<3.8	<3.6
SVOC	Benzo[k]fluoranthene ^A	mg/kg	9.9	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
SVOC	Benzoic Acid ^A	mg/kg	<2.8	<0.8	<0.7	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7	<3.7	<3.8	<3.6
SVOC	Benzyl alcohol ^A	mg/kg	<2.8	<0.8	<0.7	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<3.7	<3.8	<3.6
SVOC	Biphenyl ^A	mg/kg	1.7	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	bis(2-Chloroethoxy)methane ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	bis(2-Chloroethyl)ether ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	bis(2-Chloroisopropyl)ether ^A	mg/kg	<2.8	<0.8	<0.7	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<3.7	<3.8	<3.6
SVOC	bis(2-Ethylhexyl)phthalate ^A	mg/kg	<1.1	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
SVOC	Butylbenzylphthalate ^A	mg/kg	<1.1	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
SVOC	Carbazole ^A	mg/kg	18.3	<0.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<2.2	<2.3	<2.1
SVOC	Chrysene ^A	mg/kg	23.5	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
SVOC	Coronene ^A	mg/kg	<1.7	<0.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<2.2	<2.3	<2.1
SVOC	Dibenzo[a,h]anthracene ^A	mg/kg	<2.8	<0.7	<0.7	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<3.7	<3.8	<3.6
SVOC	Dibenzofuran ^A	mg/kg	10.4	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Diethylphthalate ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Dimethylphthalate ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Di-n-butylphthalate ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Di-n-octylphthalate ^A	mg/kg	<1.1	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
SVOC	Diphenyl ether ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Fluoranthene ^A	mg/kg	58.1	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
SVOC	Fluorene ^A	mg/kg	17.2	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
SVOC	Hexachlorobenzene ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Hexachlorobutadiene ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Hexachlorocyclopentadiene ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Hexachloroethane ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Indeno[1,2,3-cd]pyrene ^A	mg/kg	8.6	<0.8	<0.7	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<3.7	<3.8	<3.6
SVOC	Isophorone ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Naphthalene ^A	mg/kg	4.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Nitrobenzene ^A	mg/kg	<2.8	<0.8	<0.7	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<3.7	<3.8	<3.6
SVOC	N-Nitroso-di-n-propylamine ^A	mg/kg	<5.0	<1.4	<1.2	<1.1	<1.2	<1.2	<1.3	<1.3	<1.2	<1.3	<6.6	<6.8	<6.4
SVOC	N-Nitrosodiphenylamine ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Pentachlorophenol ^A	mg/kg	<2.8	<0.8	<0.7	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<3.7	<3.8	<3.6
SVOC	Phenanthrene ^A	mg/kg	62.1	<0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Phenol ^A	mg/kg	<0.6	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.7	<0.8	<0.7
SVOC	Pyrene ^A	mg/kg	38.8	<0.3	<0.3	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<1.5	<1.5	<1.4
TPHFIDUS (Aliphatic)	>C10-C12 (Aliphatic) ^A	mg/kg	<4.41	<6.02	<5.29	<4.87	<5.12	<5.12	<5.92	<5.79	<5.52	<5.94	<5.88	<6.06	<5.68
TPHFIDUS (Aliphatic)	>C12-C16 (Aliphatic) ^A	mg/kg	6.28	<6.02	<5.29	<4.87	<5.12	<5.12	<5.92	<5.79	<5.52	<5.94	7.88	<6.06	<5.68
TPHFIDUS (Aliphatic)	>C16-C21 (Aliphatic) ^A	mg/kg	9.04	<6.02	7.77	7.17	<5.12	<5.12	<5.92	<5.79	<5.52	<5.94	23.3	<6.06	<5.68
TPHFIDUS (Aliphatic)	>C21-C35 (Aliphatic) ^A	mg/kg	28	<15.0	15.2	17.8	14.1	14.1	<14.8	<14.5	<13.8	<14.9	28.3	<15.2	<14.2
TPHFIDUS (Aliphatic)	Total TPH >C8-C40 (Aliphatic) ^A	mg/kg	56.4	<30.1	34	34.7	28.7	28.7	<29.6	<28.9	<27.6	<29.7	63.1	<30.3	<28.4
TPHFIDUS (Aromatic)	>C10-C12 (Aromatic) ^A	mg/kg	11.6	<6.02	<5.29	<4.87	<5.12	<5.12	<5.92	<5.79	<5.52	<5.94	<5.88	<6.06	<5.68
TPHFIDUS (Aromatic)	>C12-C16 (Aromatic) ^A	mg/kg	93.3	<6.02	8.92	<4.87	7.2	7.2	<5.92	<5.79	<5.52	<5.94	<5.88	<6.06	<5.68
TPHFIDUS (Aromatic)	>C16-C21 (Aromatic) ^A	mg/kg	316	<6.02	11.9	<5.79	9.6	9.6	<5.92	<5.79	<5.52	<5.94	22	<6.06	<5.68
TPHFIDUS (Aromatic)	>C21-C35 (Aromatic) ^A	mg/kg	704	<15.0	17.4	21.5	17.6	17.6	<16.5	<14.5	<13.8	<14.9	31.2	<15.2	<14.2
TPHFIDUS (Aromatic)	Total TPH >C8-C40 (Aromatic) ^A	mg/kg	1160	<30.1	49.2	48.6	47.1	47.1	39.5	<28.9	<27.6	<30.3	63.3	<30.3	<28.4
VOCHSAS	1,1,1,2-Tetrachloroethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,1,1-Trichloroethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,1,2,2-Tetrachloroethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,1,2-Trichloroethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,1-Dichloroethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,1-Dichloroethene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,1-Dichloropropene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,2,3-Trichlorobenzene ^A	µg/kg	<3	<5	<4	<4	<4	<4	<5	<5	<4	<5	<5	<5	<5
VOCHSAS	1,2,3-Trichloropropane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,2,4-Trichlorobenzene ^A	µg/kg	<3	<5	<4	<4	<4	<4	<5	<5	<4	<5	<5	<5	<5
VOCHSAS	1,2,4-Trimethylbenzene ^A	µg/kg	7	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,2-Dibromo-3-chloropropane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,2-Dibromoethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,2-Dichlorobenzene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,2-Dichloroethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,2-Dichloropropane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,3,5-Trimethylbenzene ^A	µg/kg	6	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,3-Dichlorobenzene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,3-Dichloropropane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	1,4-Dichlorobenzene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	2,2-Dichloropropane ^A	µg/kg	<2	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
VOCHSAS	2-Chlorotoluene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	4-Chlorotoluene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	Benzene ^A	µg/kg	9	<2	<1	<1	2	2	3	<2	<1	<2	<2	<2	<2
VOCHSAS	Bromobenzene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	Bromochloromethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	Bromodichloromethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	Bromoform ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	Bromomethane ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	Carbon Tetrachloride ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2
VOCHSAS	Chlorobenzene ^A	µg/kg	<1	<2	<1	<1	<1	<1	<2	<2	<1	<2	<2	<2	<2



Environmental
Chemistry

Certificate of Analysis

Client: ExCAL Limited

Project: 23030309

Quote: BEC230128670 V1.2

Project Ref: 238-03-05

Site: South Side, South Dock - ABP Newport

Contact: Anita Davis

Address: Capel Hendre Industrial Estate
Ammanford
Carmarthenshire
SA18 3SJ

E-Mail: anita.davis@excaluk.com

Phone: 1

No. Samples Received: 3

Date Received: 03/03/2023

Analysis Date: 17/03/2023

Date Issued: 17/03/2023

Report Type: Final Version 01

This report supersedes any versions previously issued by the laboratory

A handwritten signature in black ink, appearing to read 'A. M. Kirby', with a horizontal line underneath.

Reported by Customer Service Co-Ordinator
Angela Kirby



Client: ExCAL Limited
Project Name: 238-03-05-South Side, South Dock - ABP Newport
Project No: 23030309
Date Issued: 17/03/2023

Samples Analysed

<u>Text ID</u>	<u>Sample Reference</u>	<u>Sampling Date</u>	<u>Sample Type</u>	<u>Sample Description</u>
23030309-001	BH01 7m	20/02/2023 08:45:00	WATER	Ground Water
23030309-002	BH02 15m	20/02/2023 09:45:00	WATER	Ground Water
23030309-003	BH05 15m	20/02/2023 10:45:00	WATER	Ground Water



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030309
 Date Issued: 17/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003
					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
>C6-C7 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.1	mg/l	N		<0.500 _D	<0.100	<0.100
>C7-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.1	mg/l	N		<0.500 _D	<0.100 _B	<0.100 _B
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.005	mg/l	U		<0.025 _D	<0.005* _B	<0.005* _B
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.1	mg/l	N		<0.500 _D	<0.100 _B	<0.100 _B
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.02	mg/l	U		<0.100 _D	<0.020* _B	<0.020* _B
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.1	mg/l	N		<0.500 _D	<0.100	<0.100
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.005	mg/l	U		<0.025 _D	<0.005	<0.005
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.1	mg/l	U		<0.500 _D	<0.100	<0.100
Conductivity at 25°C	PHCONDW	100	µS/cm	U		3810	23200	20700
pH	PHCONDW	1	pH units	U		7.3	7.4	7.7
Chromium (VI) as Cr	KONENS	0.003	mg/l	U		<0.003	<0.003	<0.003
Complex Cyanide	SFAPI	0.02	mg/l	U		<0.02	<0.02	<0.02
Free Cyanide	SFAPI	0.02	mg/l	U		<0.02	<0.02	<0.02
Phenol Index	SFAPI	0.05	mg/l	U		<0.05	0.23	0.16
Total Cyanide	SFAPI	0.02	mg/l	U		<0.02	<0.02	<0.02
Antimony as Sb	ICPMSWT (Total)	0.001	mg/l	U		<0.010 _D	<0.010 _D	<0.010 _D
Arsenic as As	ICPMSWT (Total)	0.001	mg/l	U		<0.010 _D	0.041	0.050
Cadmium as Cd	ICPMSWT (Total)	0.00002	mg/l	U		0.00076	0.00116	0.00077
Total Chromium as Cr	ICPMSWT (Total)	0.001	mg/l	U		<0.010 _D	<0.010 _D	<0.010 _D



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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003
					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
Copper as Cu	ICPMSWT (Total)	0.001	mg/l	U	<0.010 _D	<0.010 _D	<0.010 _D	
Lead as Pb	ICPMSWT (Total)	0.001	mg/l	U	<0.010 _D	<0.010 _D	<0.010 _D	
Manganese as Mn	ICPMSWT (Total)	0.002	mg/l	U	1.51	0.211	0.151	
Molybdenum as Mo	ICPMSWT (Total)	0.001	mg/l	U	0.025	<0.010 _D	0.034	
Nickel as Ni	ICPMSWT (Total)	0.001	mg/l	U	0.013	0.016	0.017	
Selenium as Se	ICPMSWT (Total)	0.001	mg/l	U	<0.010 _D	0.022	0.025	
Mercury as Hg	ICPMSWT (Total)	0.00003	mg/l	U	<0.00030 _D	<0.00030 _D	<0.00030 _D	
Vanadium as V	ICPMSWT (Total)	0.001	mg/l	U	0.020	0.041	0.034	
Zinc as Zn	ICPMSWT (Total)	0.002	mg/l	U	<0.020 _D	<0.020 _D	0.028	
Aluminium as Al	ICPWATVART (Total)	0.01	mg/l	U	<0.10 _D	<0.10 _D	0.40	
Barium as Ba	ICPWATVART (Total)	0.01	mg/l	U	<0.10 _D	<0.10 _D	0.12	
Beryllium as Be	ICPWATVART (Total)	0.01	mg/l	N	<0.10 _D	<0.10 _D	<0.10 _D	
Boron as B	ICPWATVART (Total)	0.01	mg/l	U	0.57	3.49	3.67	
Iron as Fe	ICPWATVART (Total)	0.01	mg/l	U	<0.10 _D	<0.10 _D	0.16	
Total Sulphur as SO4	ICPWATVART (Total)	3	mg/l	U	292	<30 _D	<30 _D	
Titanium as Ti	ICPWATVART (Total)	0.01	mg/l	N	<0.10 _D	<0.10 _D	<0.10 _D	
Benzene HS_1D_AR	BTEXHSA	5	µg/l	U	<25 _D	<5	<5	
Ethylbenzene HS_1D_AR	BTEXHSA	5	µg/l	U	<25 _D	<5* _B	<5* _B	
m/p-Xylene HS_1D_AR	BTEXHSA	10	µg/l	U	<50 _D	<10* _B	<10* _B	



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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003
					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
o-Xylene HS_1D_AR	BTEXHSA	5	µg/l	U	<25 _D	<5	<5	
Toluene HS_1D_AR	BTEXHSA	5	µg/l	U	<25 _D	<5* _B	<5* _B	
Acenaphthene	PAHMSW	0.01	µg/l	U	1.29	0.01	0.03	
Acenaphthylene	PAHMSW	0.01	µg/l	U	<0.40 _D	<0.01	0.01	
Anthracene	PAHMSW	0.01	µg/l	U	1.56	<0.01	0.03	
Benzo[a]anthracene	PAHMSW	0.01	µg/l	U	2.58	<0.01	0.04	
Benzo[a]pyrene	PAHMSW	0.01	µg/l	U	2.81	<0.01	0.02	
Benzo[b]fluoranthene	PAHMSW	0.01	µg/l	U	3.49	<0.01	0.03	
Benzo[g,h,i]perylene	PAHMSW	0.01	µg/l	U	1.03	<0.01	0.01	
Benzo[k]fluoranthene	PAHMSW	0.01	µg/l	U	1.38	<0.01	0.01	
Chrysene	PAHMSW	0.01	µg/l	U	2.30	<0.01	0.04	
Dibenzo[a,h]anthracene	PAHMSW	0.01	µg/l	U	<0.40 _D	<0.01	<0.01	
Fluoranthene	PAHMSW	0.01	µg/l	U	<0.40 _D	<0.01	<0.01	
Fluorene	PAHMSW	0.01	µg/l	U	1.67	<0.01	0.04	
Indeno[1,2,3-cd]pyrene	PAHMSW	0.01	µg/l	U	1.02	<0.01	<0.01	
Naphthalene	PAHMSW	0.01	µg/l	U	0.88	<0.01	0.02	
Phenanthrene	PAHMSW	0.01	µg/l	U	5.35	0.02	0.05	
Pyrene	PAHMSW	0.01	µg/l	U	6.85	0.01	0.12	
Total PAH 16	PAHMSW	0.16	µg/l	U	33.4	0.17	0.50	



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Analysis Results

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					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
PCB 101	PCBECD	0.01	µg/l	N	NA	<0.01	<0.01	
PCB 118	PCBECD	0.01	µg/l	N	NA	<0.01	<0.01	
PCB 138	PCBECD	0.01	µg/l	N	NA	<0.01	<0.01	
PCB 153	PCBECD	0.01	µg/l	N	NA	<0.01	<0.01	
PCB 180	PCBECD	0.01	µg/l	N	NA	<0.01	<0.01	
PCB 28	PCBECD	0.01	µg/l	N	NA	<0.01	<0.01	
PCB 52	PCBECD	0.01	µg/l	N	NA	<0.01	<0.01	
1,2,4-Trichlorobenzene	SVOC SW	0.005	mg/l	N	<0.005	<0.005	<0.100 D	
1,2-Dichlorobenzene	SVOC SW	0.005	mg/l	N	<0.005	<0.005	<0.100 D	
1,3-Dichlorobenzene	SVOC SW	0.005	mg/l	N	<0.005	<0.005	<0.100 D	
1,4-Dichlorobenzene	SVOC SW	0.005	mg/l	N	<0.005	<0.005	<0.100 D	
1-Methylnaphthalene	SVOC SW	0.002	mg/l	N	<0.002	<0.002	<0.040 D	
2,4,5-Trichlorophenol	SVOC SW	0.02	mg/l	N	<0.020	<0.020	<0.400 D	
2,4,6-Trichlorophenol	SVOC SW	0.02	mg/l	N	<0.020	<0.020	<0.400 D	
2,4-Dichlorophenol	SVOC SW	0.02	mg/l	N	<0.020	<0.020	<0.400 D	
2,4-Dimethylphenol	SVOC SW	0.02	mg/l	N	<0.020	<0.020	<0.400 D	
2,4-Dinitrophenol	SVOC SW	0.01	mg/l	N	<0.010	<0.010	<0.200 D	
2,4-Dinitrotoluene	SVOC SW	0.005	mg/l	N	<0.005	<0.005	<0.100 D	
2,6-Dinitrotoluene	SVOC SW	0.005	mg/l	N	<0.005	<0.005	<0.100 D	

Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003
					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
2-Chloronaphthalene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
2-Chlorophenol	SVOC SW	0.02	mg/l	N		<0.020	<0.020	<0.400 D
2-Methylnaphthalene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
2-Methylphenol	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
2-Nitroaniline	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
2-Nitrophenol	SVOC SW	0.02	mg/l	N		<0.020	<0.020	<0.400 D
3- & 4-Methylphenol	SVOC SW	0.02	mg/l	N		<0.020	<0.020	<0.400 D
3-Nitroaniline	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
4,6-Dinitro-2-methylphenol	SVOC SW	0.05	mg/l	N		<0.050	<0.050	<1.00 D
4-Bromophenyl-phenylether	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
4-Chloro-3-methylphenol	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
4-Chloroaniline	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
4-Chlorophenol	SVOC SW	0.02	mg/l	N		<0.020	<0.020	<0.400 D
4-Chlorophenyl-phenylether	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
4-Nitroaniline	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
4-Nitrophenol	SVOC SW	0.05	mg/l	N		<0.050	<0.050	<1.00 D
Acenaphthene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Acenaphthylene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Anthracene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D



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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003
					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
Azobenzene	SVOC SW	0.01	mg/l	N		<0.010	<0.010	<0.200 D
Benzo[a]anthracene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Benzo[a]pyrene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Benzo[b]fluoranthene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Benzo[g,h,i]perylene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Benzo[k]fluoranthene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Benzoic Acid	SVOC SW	0.1	mg/l	N		<0.100	<0.100	<2.00 D
Benzyl alcohol	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Biphenyl	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
bis(2-Chloroethoxy)methane	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
bis(2-Chloroethyl)ether	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
bis(2-Chloroisopropyl)ether	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
bis(2-Ethylhexyl)phthalate	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Butylbenzylphthalate	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Carbazole	SVOC SW	0.01	mg/l	N		<0.010	<0.010	<0.200 D
Chrysene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Coronene	SVOC SW	0.05	mg/l	N		<0.050	<0.050	<1.00 D
Dibenzo[a,h]anthracene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Dibenzofuran	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D

Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003
					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
Diethylphthalate	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Dimethylphthalate	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Di-n-butylphthalate	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Di-n-octylphthalate	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Diphenyl ether	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Fluoranthene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Fluorene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Hexachlorobenzene	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Hexachlorobutadiene	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Hexachlorocyclopentadiene	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Hexachloroethane	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Indeno[1,2,3-cd]pyrene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Isophorone	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Naphthalene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D
Nitrobenzene	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
N-Nitroso-di-n-propylamine	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
N-Nitrosodiphenylamine	SVOC SW	0.005	mg/l	N		<0.005	<0.005	<0.100 D
Pentachlorophenol	SVOC SW	0.05	mg/l	N		<0.050	<0.050	<1.00 D
Phenanthrene	SVOC SW	0.002	mg/l	N		<0.002	<0.002	<0.040 D

Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003
					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
Phenol	SVOCSSW	0.02	mg/l	N		<0.020	<0.020	<0.400 _D
Pyrene	SVOCSSW	0.002	mg/l	N		<0.002	<0.002	<0.040 _D
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFID (Aliphatic)	0.01	mg/l	U		<0.40 _D	<0.01	<0.01
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFID (Aliphatic)	0.01	mg/l	U		<0.40 _D	<0.01	<0.01
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFID (Aliphatic)	0.01	mg/l	U		0.40* _B	<0.01* _B	0.01* _B
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFID (Aliphatic)	0.01	mg/l	U		2.68	<0.01	0.03
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFID (Aliphatic)	0.01	mg/l	U		3.54	0.01	0.06
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFID (Aromatic)	0.01	mg/l	U		<0.40* _{B,D}	<0.01* _B	<0.01* _B
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFID (Aromatic)	0.01	mg/l	U		<0.40 _D	<0.01	<0.01
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFID (Aromatic)	0.01	mg/l	U		<0.40 _D	<0.01	<0.01
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFID (Aromatic)	0.01	mg/l	U		0.73	<0.01	0.01
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFID (Aromatic)	0.01	mg/l	U		1.37	0.02	0.04
1,1,1,2-Tetrachloroethane	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
1,1,1-Trichloroethane	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
1,1,2,2-Tetrachloroethane	VOCHSAW	1	µg/l	N		<5 _D	<1	<1
1,1,2-Trichloroethane	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
1,1-Dichloroethane	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
1,1-Dichloroethene	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
1,1-Dichloropropene	VOCHSAW	1	µg/l	U		<5 _D	<1	<1



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Analysis Results

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					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
1,2,3-Trichlorobenzene	VOCHSAW	5	µg/l	U	<25 D	<5	<5	
1,2,3-Trichloropropane	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
1,2,4-Trichlorobenzene	VOCHSAW	5	µg/l	U	<25 D	<5	<5	
1,2,4-Trimethylbenzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
1,2-Dibromo-3-chloropropane	VOCHSAW	5	µg/l	U	<25 D	<5	<5	
1,2-Dibromoethane	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
1,2-Dichlorobenzene	VOCHSAW	5	µg/l	U	<25 D	<5	<5	
1,2-Dichloroethane	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
1,2-Dichloropropane	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
1,3,5-Trimethylbenzene	VOCHSAW	0.6	µg/l	U	<3.0 D	<0.6	<0.6	
1,3-Dichlorobenzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
1,3-Dichloropropane	VOCHSAW	1	µg/l	N	<5 D	<1	<1	
1,4-Dichlorobenzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
2,2-Dichloropropane	VOCHSAW	1	µg/l	N	<5 D	<1	<1	
2-Chlorotoluene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
4-Chlorotoluene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
Benzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
Bromobenzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
Bromochloromethane	VOCHSAW	1	µg/l	U	<5 D	<1	<1	



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					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
Bromodichloromethane	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
Bromoform	VOCHSAW	1	µg/l	U		<5* _{B,D}	<1* _B	<1* _B
Bromomethane	VOCHSAW	5	µg/l	N		<25 _D	<5	<5
Carbon Tetrachloride	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
Chlorobenzene	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
Chloroethane	VOCHSAW	5	µg/l	U		<25 _D	<5	<5
Chloroform	VOCHSAW	5	µg/l	U		<25 _D	<5	<5
Chloromethane	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
cis 1,2-Dichloroethene	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
cis 1,3-Dichloropropene	VOCHSAW	1	µg/l	N		<5 _D	<1	<1
Dibromochloromethane	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
Dibromomethane	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
Dichlorodifluoromethane	VOCHSAW	1	µg/l	N		<5 _D	<1	<1
Ethylbenzene	VOCHSAW	0.5	µg/l	U		<2.5 _D	<0.5	<0.5
Hexachlorobutadiene	VOCHSAW	5	µg/l	U		<25 _D	<5	<5
iso-Propylbenzene	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
m and p-Xylene	VOCHSAW	1	µg/l	U		<5 _D	<1	<1
MTBE	VOCHSAW	1	µg/l	N		<5 _D	<1	<1
Naphthalene	VOCHSAW	5	µg/l	U		<25 _D	<5	<5



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030309
 Date Issued: 17/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003
					Customer ID	BH01 7m	BH02 15m	BH05 15m
					Sample Type	WATER	WATER	WATER
					Sampling Date	20/02/2023	20/02/2023	20/02/2023
n-Butylbenzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
o-Xylene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
p-Isopropyltoluene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
Propylbenzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
sec-Butylbenzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
Styrene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
tert-Butylbenzene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
Tetrachloroethene	VOCHSAW	5	µg/l	U	<25 D	<5	<5	
Toluene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
trans 1,2-Dichloroethene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
trans 1,3-Dichloropropene	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
Trichloroethene	VOCHSAW	5	µg/l	U	<25 D	<5	<5	
Trichlorofluoromethane	VOCHSAW	1	µg/l	U	<5 D	<1	<1	
Vinyl Chloride	VOCHSAW	1	µg/l	U	<5 D	<1	<1	



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030309
 Date Issued: 17/03/2023

Deviating Sample Report

<u>Sample Reference</u>	<u>Text ID</u>	<u>Method Code</u>	Incorrect Container	Incorrect Label	Headspace	Incorrect/No Preservative	No Sampling Date	Holding Time
BH01 7m	23030309-001	BTEXHSA						✓
BH01 7m	23030309-001	GROHSA/BTEXHSA						✓
BH01 7m	23030309-001	PAHMSW						✓
BH01 7m	23030309-001	PHCONDW						✓
BH01 7m	23030309-001	TPHFID (Aliphatic)						✓
BH01 7m	23030309-001	TPHFID (Aromatic)						✓
BH01 7m	23030309-001	VOCHSAW						✓
BH02 15m	23030309-002	PAHMSW						✓
BH02 15m	23030309-002	PHCONDW						✓
BH02 15m	23030309-002	TPHFID (Aliphatic)						✓
BH02 15m	23030309-002	TPHFID (Aromatic)						✓
BH02 15m	23030309-002	VOCHSAW						✓
BH05 15m	23030309-003	PAHMSW						✓
BH05 15m	23030309-003	PHCONDW						✓
BH05 15m	23030309-003	TPHFID (Aliphatic)						✓
BH05 15m	23030309-003	TPHFID (Aromatic)						✓
BH05 15m	23030309-003	VOCHSAW						✓



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030309
 Date Issued: 17/03/2023

Analysis Method

<u>Method Code</u>	<u>Method Description</u>	<u>Analysis Method</u>
BTEXHSA	BTEX by GCFID	Unfiltered
GROHSA/BTEXHSA	GRO CWG (C5-C10) Ali/Aro Split	Unfiltered
ICPMSWT (Total)	Antimony (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Arsenic (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Cadmium (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Chromium (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Copper (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Lead (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Manganese (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Mercury (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Molybdenum (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Nickel (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Selenium (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Vanadium (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Zinc (Tot.) in Water by ICPMS	Unfiltered
ICPWATVART (Total)	Aluminium (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Barium (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Beryllium (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Boron (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Iron (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Titanium (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Total Sulphur as SO4 (Tot.) in Water	Unfiltered
KONENS	Chromium VI (Hexavalent) by Colorimetry	Filtered
PAHMSW	16 PAHs by GCMS	Unfiltered
PCBECD	PCBs, ICES 7 Congeners	Unfiltered
PHCONDW	Electrical Conductivity @ 25°C	Unfiltered
PHCONDW	pH	Unfiltered
SFAPI	Cyanide (Complex) by SFA	Unfiltered
SFAPI	Cyanide (Free) by SFA	Unfiltered
SFAPI	Cyanide (Total) by SFA	Unfiltered
SFAPI	Phenol Index (Total) by SFA	Unfiltered
SVOCSW	SVOCs (Target List) by GCMS	Unfiltered
TPHFID (Aliphatic)	TPH (CWG) Aliphatic Split with Carbon Banding	Unfiltered
TPHFID (Aromatic)	TPH (CWG) Aromatic Split with Carbon Banding	Unfiltered
VOCHSAW	VOCs (Target List) by GCMS	Unfiltered



Client: ExCAL Limited
Project Name: 238-03-05-South Side, South Dock - ABP Newport
Project No: 23030309
Date Issued: 17/03/2023

Result Report Notes

Letters alongside results signify that the result has associated report notes.
The report notes are as follows:

<u>Letter</u>	<u>Note</u>
A	Due to the matrix of the sample the laboratory has had to deviate from our standard protocols to be able to process the sample and provide a result. Where applicable the accreditation has been removed and this should be taken into consideration when utilising the data.
B	The QC associated with this result has not wholly met the QMS requirements, the accreditation has therefore been removed. However, the Laboratory has confidence in the performance of the method as a whole and that the integrity of the data has not been significantly compromised.
C	Due to matrix interference, the internal standard and/or surrogate has not met the QMS requirements. This should be taken into consideration when utilising the data.
D	A non-standard volume or mass has been used for this test which has resulted in a raised detection limit.
E	Due to the parameter value being beyond our calibration range (and following the maximum size of dilution allowed, where applicable), the result cannot be quantified and as such the result will appear as a greater than symbol (>) with the accreditation removed. This data should be used for indicative purposes only.
F	Based on the sample history, appearance and smell a dilution was applied prior to testing. Unfortunately, the result is either above (>) or below (<) our calibration range. Results above our calibration range have accreditation removed. The data should be used for indicative purposes only.
G	The day 5 oxygen reading was below the capability of the instrument to detect, and therefore the calculated BOD has been reported unaccredited for guidance purposes only.

HWOL Acronym Key

<u>Acronym</u>	<u>Description</u>
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e everything extracted by the solvent(s)
CU	Clean up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
+	Operator to indicate cumulative e.g. EH_CU+HS_1D_Total



Client: ExCAL Limited
Project Name: 238-03-05-South Side, South Dock - ABP Newport
Project No: 23030309
Date Issued: 17/03/2023

Additional Information

This report refers to samples as received. SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

The accreditation codes are as follows:

- U = UKAS accredited analysis
- M = MCERT accredited analysis
- N = Unaccredited analysis

Any units marked with ^ signify results are reported on a dry weight basis of 105 ° c.

All Air Dried and Ground Samples (ADG) are oven dried at less than 35° c.

This report shall not be reproduced except in full, without written approval of the laboratory.

Opinions and interpretations given are outside the scope of our UKAS accreditation.

Any samples marked with * are not covered by our scope of UKAS accreditation. If applicable, further report notes have been added.

Any solid samples where the Major Constituents are not one of the following (Sand, Silt, Clay, Made Ground) are not one of our accredited matrix types.

Any samples marked with ‡ have had MCERTS accreditation removed for this result

Any samples marked with a tick in the deviant table is deviant for the specific reason.

Any samples reported as IS, NA, ND mean the following:

- IS = Insufficient Sample to complete analysis
- NA = Sample is not amenable for the required analysis
- ND = Results cannot be determined

Items listed with a 'SUB' method code prefix have been carried out by an external subcontracted laboratory.

Our deviating sample report does not include deviancy information for Subcontracted analysis. Please see the report from the subcontracted lab for information regarding any deviancies for this analysis.

Summaries of analysis methods are available upon request.

End of Certificate of Analysis



Environmental
Chemistry

Certificate of Analysis

Client: ExCAL Limited

Project: 23030236

Quote: BEC230128670 V1.2

Project Ref: 238-03-05

Site: South Side, South Dock - ABP Newport

Contact: Anita Davis

Address: Capel Hendre Industrial Estate
Ammanford
Carmarthenshire
SA18 3SJ

E-Mail: anita.davis@excaluk.com

Phone: 1

No. Samples Received: 15

Date Received: 02/03/2023

Analysis Date: 13/03/2023

Date Issued: 13/03/2023

Report Type: Final Version 01

This report supersedes any versions previously issued by the laboratory

A handwritten signature in black ink that reads 'J. Hannah'.

Reported by Customer Service Co-Ordinator
Jacqui Hannah
01283 204384



Client: ExCAL Limited
Project Name: 238-03-05-South Side, South Dock - ABP Newport
Project No: 23030236
Date Issued: 13/03/2023

Samples Analysed

<u>Text ID</u>	<u>Sample Reference</u>	<u>Sampling Date</u>	<u>Sample Type</u>	<u>Sample Description</u>
23030236-001	BH01 - 1m	20/02/2023 08:00:00	SOLID	Soil Sample
23030236-002	BH01 - 1-3m - Asbestos	20/02/2023 08:00:00	SOLID	Soil Sample
23030236-003	BH01 - 3m	20/02/2023 08:15:00	SOLID	Soil Sample
23030236-004	BH01 - 5m	20/02/2023 08:30:00	SOLID	Soil Sample
23030236-005	BH01 - 7m	20/02/2023 08:45:00	SOLID	Soil Sample
23030236-006	BH02 - 2m	20/02/2023 09:00:00	SOLID	Soil Sample
23030236-007	BH02 - 1-3m - Asbestos	20/02/2023 09:00:00	SOLID	Soil Sample
23030236-008	BH02 - 4m	20/02/2023 09:15:00	SOLID	Soil Sample
23030236-009	BH02 - 8m	20/02/2023 09:30:00	SOLID	Soil Sample
23030236-010	BH02 - 13m	20/02/2023 09:45:00	SOLID	Soil Sample
23030236-011	BH05 - 2m	20/02/2023 10:00:00	SOLID	Soil Sample
23030236-012	BH05 - 1-3m - Asbestos	20/02/2023 10:00:00	SOLID	Soil Sample
23030236-013	BH05 - 4m	20/02/2023 10:15:00	SOLID	Soil Sample
23030236-014	BH05 - 8m	20/02/2023 10:03:00	SOLID	Soil Sample
23030236-015	BH05 - 13m	20/02/2023 10:45:00	SOLID	Soil Sample



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004			
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos	BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
>C6-C7 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.220		<0.301	<0.265			
>C7-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.220		<0.301	<0.265			
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg [^]	UM		<0.011		<0.015	<0.013			
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.220		<0.301* _B	<0.265* _B			
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.04	mg/kg [^]	UM		<0.044		<0.060	<0.053			
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.220		<0.301	<0.265			
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg [^]	UM		<0.011		<0.015	<0.013			
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.220		<0.301	<0.265			
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM		10.4		8.0	8.0			
Chromium (VI) as Cr	KONENS	0.1	mg/kg [^]	N		<0.1		<0.1	<0.1			
Complex Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.6		<0.8	<0.7			
Free Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.6		<0.8	<0.7			
Phenol Index	SFAPI	0.5	mg/kg [^]	U		<0.6		<0.8	<0.7			
Total Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.6		<0.8	<0.7			
Antimony as Sb	ICPMSS	0.1	mg/kg [^]	U		0.9		0.5	0.2			
Arsenic as As	ICPMSS	0.3	mg/kg [^]	UM		4.2		10.4	9.9			
Cadmium as Cd	ICPMSS	0.2	mg/kg [^]	UM		0.8		0.3	0.3			
Copper as Cu	ICPMSS	1.6	mg/kg [^]	UM		23.6		18.1	14.3			
Lead as Pb	ICPMSS	0.7	mg/kg [^]	UM		35.1		25.6	17.3			

Client: ExCAL Limited
 Project Name:
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
>C6-C7 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.243		<0.256			<0.296	
>C7-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.243		<0.256			<0.296	
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg [^]	UM		<0.012		<0.013			<0.015	
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.243* _B		<0.256* _B			<0.296* _B	
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.04	mg/kg [^]	UM		<0.049		<0.052			<0.060	
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.243		<0.256			<0.296	
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg [^]	UM		<0.012		<0.013			<0.015	
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.243		<0.256			<0.296	
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM		8.1		8.4			8.5	
Chromium (VI) as Cr	KONENS	0.1	mg/kg [^]	N		<0.1		<0.1			<0.1	
Complex Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.6		<0.6			<0.7	
Free Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.6		<0.6			<0.7	
Phenol Index	SFAPI	0.5	mg/kg [^]	U		<0.6		<0.6			<0.7	
Total Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.6		<0.6			<0.7	
Antimony as Sb	ICPMSS	0.1	mg/kg [^]	U		<0.1		0.2			0.1	
Arsenic as As	ICPMSS	0.3	mg/kg [^]	UM		10.4		9.3			12.0	
Cadmium as Cd	ICPMSS	0.2	mg/kg [^]	UM		0.3		0.4			0.4	
Copper as Cu	ICPMSS	1.6	mg/kg [^]	UM		12.2		41.5			15.9	
Lead as Pb	ICPMSS	0.7	mg/kg [^]	UM		11.8		16.7			19.1	

Client: ExCAL Limited
 Project Name:
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
>C6-C7 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.289	<0.276	<0.297				
>C7-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.289	<0.276	<0.297				
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg^	UM		<0.015	<0.014	<0.015				
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.289* _B	<0.276* _B	<0.297* _B				
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.04	mg/kg^	UM		<0.059	<0.056	<0.060				
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.289	<0.276	<0.297				
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg^	UM		<0.015	<0.014	<0.015				
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.289	<0.276	<0.297				
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM		8.3	8.3	8.2				
Chromium (VI) as Cr	KONENS	0.1	mg/kg^	N		<0.1	<0.1	<0.1				
Complex Cyanide	SFAPI	0.5	mg/kg^	UM		<0.7	<0.7	<0.7				
Free Cyanide	SFAPI	0.5	mg/kg^	UM		<0.7	<0.7	<0.7				
Phenol Index	SFAPI	0.5	mg/kg^	U		<0.7	<0.7	<0.7				
Total Cyanide	SFAPI	0.5	mg/kg^	UM		<0.7	<0.7	<0.7				
Antimony as Sb	ICPMSS	0.1	mg/kg^	U		0.1	<0.1	0.4				
Arsenic as As	ICPMSS	0.3	mg/kg^	UM		11.2	8.5	12.3				
Cadmium as Cd	ICPMSS	0.2	mg/kg^	UM		0.4	0.5	0.3				
Copper as Cu	ICPMSS	1.6	mg/kg^	UM		14.7	10.3	21.0				
Lead as Pb	ICPMSS	0.7	mg/kg^	UM		17.5	15.8	23.9				

Client: ExCAL Limited
 Project Name:
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
>C6-C7 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.294		<0.303		<0.284	
>C7-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.294		<0.303		<0.284	
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg [^]	UM		<0.015		<0.015		<0.014	
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.294* _B		<0.303* _B		<0.284* _B	
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.04	mg/kg [^]	UM		<0.059		<0.061		<0.057	
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.294		<0.303		<0.284	
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg [^]	UM		<0.015		<0.015		<0.014	
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM		<0.294		<0.303		<0.284	
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM		8.1		8.2		8.2	
Chromium (VI) as Cr	KONENS	0.1	mg/kg [^]	N		<0.1		<0.1		<0.1	
Complex Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.7		<0.8		<0.7	
Free Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.7		<0.8		<0.7	
Phenol Index	SFAPI	0.5	mg/kg [^]	U		<0.7		<0.8		<0.7	
Total Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.7		<0.8		<0.7	
Antimony as Sb	ICPMSS	0.1	mg/kg [^]	U		0.2		0.2		<0.1	
Arsenic as As	ICPMSS	0.3	mg/kg [^]	UM		15.1		14.9		10.9	
Cadmium as Cd	ICPMSS	0.2	mg/kg [^]	UM		0.3		0.3		0.2	
Copper as Cu	ICPMSS	1.6	mg/kg [^]	UM		17.1		18.2		14.1	
Lead as Pb	ICPMSS	0.7	mg/kg [^]	UM		21.1		25.0		17.5	



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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001		002		003		004	
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID	
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Manganese as Mn	ICPMSS	1	mg/kg^	UM		19160			788.2			652.2	
Mercury as Hg	ICPMSS	0.5	mg/kg^	UM		<0.5			<0.5			<0.5	
Molybdenum as Mo	ICPMSS	0.5	mg/kg^	UM		1.6			0.7			0.6	
Nickel as Ni	ICPMSS	2	mg/kg^	UM		17.1			30.9			28.5	
Selenium as Se	ICPMSS	0.5	mg/kg^	UM		<0.5			<0.5			<0.5	
Total Chromium as Cr	ICPMSS	1.2	mg/kg^	UM		252.6			32.2			25.1	
Vanadium as V	ICPMSS	0.6	mg/kg^	N		687.0			44.2			33.4	
Zinc as Zn	ICPMSS	16	mg/kg^	UM		61.5			104.4			76.1	
Aluminium as Al	ICPSOIL	10	mg/kg^	U		46500			19700			14900	
Barium as Ba	ICPSOIL	0.5	mg/kg^	UM		1120			67.0			47.6	
Beryllium as Be	ICPSOIL	0.1	mg/kg^	U		2.20			0.87			0.70	
Boron as B	ICPSOIL	10	mg/kg^	N		50			24			18	
Iron as Fe	ICPSOIL	36	mg/kg^	UM		80400			33000			31300	
Titanium as Ti	ICPSOIL	6	mg/kg^	N		2010			109			92.1	
Water Soluble Sulphate as SO4 by Mass	ICPWSS	20	mg/kg^	UM		344			1980			1110	
Antimony as Sb	ICPMSW (Dissolved)	0.001	mg/l	U	0.005			0.002			<0.001		
Arsenic as As	ICPMSW (Dissolved)	0.001	mg/l	U	0.006			0.002			0.004		
Cadmium as Cd	ICPMSW (Dissolved)	0.00002	mg/l	U	0.00040			0.00021			0.00021		
Total Chromium as Cr	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001			<0.001			<0.001		

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Manganese as Mn	ICPMSS	1	mg/kg^	UM		623.7		803.0			777.2	
Mercury as Hg	ICPMSS	0.5	mg/kg^	UM		<0.5		<0.5			<0.5	
Molybdenum as Mo	ICPMSS	0.5	mg/kg^	UM		0.5		<0.5			<0.5	
Nickel as Ni	ICPMSS	2	mg/kg^	UM		25.0		26.0			32.2	
Selenium as Se	ICPMSS	0.5	mg/kg^	UM		<0.5		<0.5			<0.5	
Total Chromium as Cr	ICPMSS	1.2	mg/kg^	UM		19.5		25.3			35.7	
Vanadium as V	ICPMSS	0.6	mg/kg^	N		26.1		33.8			46.7	
Zinc as Zn	ICPMSS	16	mg/kg^	UM		64.0		86.6			89.0	
Aluminium as Al	ICPSOIL	10	mg/kg^	U		10300		13500			21300	
Barium as Ba	ICPSOIL	0.5	mg/kg^	UM		37.8		111			67.9	
Beryllium as Be	ICPSOIL	0.1	mg/kg^	U		0.56		0.68			0.89	
Boron as B	ICPSOIL	10	mg/kg^	N		12		17			33	
Iron as Fe	ICPSOIL	36	mg/kg^	UM		28900		30800			34200	
Titanium as Ti	ICPSOIL	6	mg/kg^	N		69.7		103			112	
Water Soluble Sulphate as SO4 by Mass	ICPWSS	20	mg/kg^	UM		471		170			388	
Antimony as Sb	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001		0.002			<0.001	
Arsenic as As	ICPMSW (Dissolved)	0.001	mg/l	U		0.005		0.003			0.001	
Cadmium as Cd	ICPMSW (Dissolved)	0.00002	mg/l	U		0.00017		0.00011			0.00007	
Total Chromium as Cr	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001		<0.001			<0.001	

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Manganese as Mn	ICPMSS	1	mg/kg^	UM		692.3		778.8		921.3		
Mercury as Hg	ICPMSS	0.5	mg/kg^	UM		<0.5		<0.5		<0.5		
Molybdenum as Mo	ICPMSS	0.5	mg/kg^	UM		0.5		<0.5		1.3		
Nickel as Ni	ICPMSS	2	mg/kg^	UM		32.4		26.6		35.0		
Selenium as Se	ICPMSS	0.5	mg/kg^	UM		<0.5		<0.5		<0.5		
Total Chromium as Cr	ICPMSS	1.2	mg/kg^	UM		36.5		30.4		37.7		
Vanadium as V	ICPMSS	0.6	mg/kg^	N		47.4		39.0		51.8		
Zinc as Zn	ICPMSS	16	mg/kg^	UM		84.7		75.6		94.7		
Aluminium as Al	ICPSOIL	10	mg/kg^	U		21100		16200		24000		
Barium as Ba	ICPSOIL	0.5	mg/kg^	UM		41.8		36.7		125		
Beryllium as Be	ICPSOIL	0.1	mg/kg^	U		0.83		0.71		1.12		
Boron as B	ICPSOIL	10	mg/kg^	N		36		31		38		
Iron as Fe	ICPSOIL	36	mg/kg^	UM		31400		27600		35200		
Titanium as Ti	ICPSOIL	6	mg/kg^	N		119		107		167		
Water Soluble Sulphate as SO4 by Mass	ICPWSS	20	mg/kg^	UM		335		193		249		
Antimony as Sb	ICPMSW (Dissolved)	0.001	mg/l	U		0.002		0.002		0.003		
Arsenic as As	ICPMSW (Dissolved)	0.001	mg/l	U		0.004		0.004		0.003		
Cadmium as Cd	ICPMSW (Dissolved)	0.00002	mg/l	U		0.00024		0.00038		0.00023		
Total Chromium as Cr	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001		<0.001		<0.001		

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID		013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m		
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Manganese as Mn	ICPMSS	1	mg/kg^	UM		905.7		834.0		627.4		
Mercury as Hg	ICPMSS	0.5	mg/kg^	UM		<0.5		<0.5		<0.5		
Molybdenum as Mo	ICPMSS	0.5	mg/kg^	UM		0.6		0.5		<0.5		
Nickel as Ni	ICPMSS	2	mg/kg^	UM		35.4		37.8		30.4		
Selenium as Se	ICPMSS	0.5	mg/kg^	UM		<0.5		<0.5		<0.5		
Total Chromium as Cr	ICPMSS	1.2	mg/kg^	UM		40.4		43.8		30.6		
Vanadium as V	ICPMSS	0.6	mg/kg^	N		53.2		56.9		39.7		
Zinc as Zn	ICPMSS	16	mg/kg^	UM		100.0		104.5		82.9		
Aluminium as Al	ICPSOIL	10	mg/kg^	U		23600		25400		18500		
Barium as Ba	ICPSOIL	0.5	mg/kg^	UM		48.7		46.8		41.4		
Beryllium as Be	ICPSOIL	0.1	mg/kg^	U		1.01		1.07		0.81		
Boron as B	ICPSOIL	10	mg/kg^	N		37		43		39		
Iron as Fe	ICPSOIL	36	mg/kg^	UM		35300		37700		30800		
Titanium as Ti	ICPSOIL	6	mg/kg^	N		123		120		103		
Water Soluble Sulphate as SO4 by Mass	ICPWSS	20	mg/kg^	UM		322		281		192		
Antimony as Sb	ICPMSW (Dissolved)	0.001	mg/l	U	0.001		0.003		0.002			
Arsenic as As	ICPMSW (Dissolved)	0.001	mg/l	U	0.004		0.006		0.005			
Cadmium as Cd	ICPMSW (Dissolved)	0.00002	mg/l	U	0.00023		0.00037		0.00024			
Total Chromium as Cr	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001		<0.001		<0.001			



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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001		002		003		004	
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID	
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U		0.003			0.005			<0.001	
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001			<0.001			<0.001	
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U		0.120			<0.002			2.17	
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U		<0.00003			0.00023			<0.00003	
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U		0.072			0.011			0.033	
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U		0.005			<0.001			0.005	
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U		0.002			0.004			0.001	
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U		0.006			0.442			0.001	
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U		0.004			0.003			0.003	
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U		0.02			0.15			<0.01	
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U		0.02			0.01			0.05	
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N		<0.01			<0.01			<0.01	
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U		1.65			0.14			0.41	
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U		0.01			<0.01			0.01	
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N		<0.01			<0.01			<0.01	
Benzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<11			<15			<13
Ethylbenzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<11			<15			<13
m/p-Xylene HS_1D_AR	BTEXHSA	20	µg/kg^	UM			<22			<30			<27
o-Xylene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<11			<15			<13

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001		<0.001			0.003	
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001		<0.001			<0.001	
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U		2.09		0.535			<0.002	
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U		<0.00003		<0.00003			<0.00003	
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U		0.029		0.024			0.009	
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U		0.005		0.002			<0.001	
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U		0.001		<0.001			<0.001	
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U		0.001		<0.001			0.002	
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U		0.005		0.002			<0.002	
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U		<0.01		<0.01			<0.01	
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U		0.05		0.05			0.02	
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N		<0.01		<0.01			<0.01	
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U		0.43		0.33			0.20	
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U		0.01		<0.01			<0.01	
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N		<0.01		<0.01			<0.01	
Benzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<12		<13			<15
Ethylbenzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<12		<13			<15
m/p-Xylene HS_1D_AR	BTEXHSA	20	µg/kg^	UM			<24		<26			<30
o-Xylene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<12		<13			<15

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U		0.003		<0.001		0.002		
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001		<0.001		<0.001		
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U		0.081		0.189		0.249		
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U		<0.00003		<0.00003		<0.00003		
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U		0.083		0.084		0.102		
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U		0.003		0.004		0.001		
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001		<0.001		0.002		
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U		0.002		0.002		0.003		
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U		0.003		0.012		0.005		
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U		<0.01		<0.01		0.01		
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U		0.01		0.02		0.04		
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N		<0.01		<0.01		<0.01		
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U		1.14		1.27		0.68		
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U		<0.01		<0.01		<0.01		
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N		<0.01		<0.01		<0.01		
Benzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<15		<14		<15	
Ethylbenzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<15		<14		<15	
m/p-Xylene HS_1D_AR	BTEXHSA	20	µg/kg^	UM			<29		<28		<30	
o-Xylene HS_1D_AR	BTEXHSA	10	µg/kg^	UM			<15		<14		<15	

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001		0.002		0.001		
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001		<0.001		<0.001		
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U	0.127		0.092		0.093		
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U	<0.00003		<0.00003		<0.00003		
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U	0.085		0.098		0.097		
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U	0.003		0.007		0.005		
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U	0.001		<0.001		<0.001		
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U	0.002		0.003		0.002		
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U	0.003		0.005		0.002		
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.01		0.01		<0.01		
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.02		0.01		0.02		
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01		<0.01		<0.01		
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U	1.06		1.59		1.69		
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U	<0.01		<0.01		<0.01		
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01		<0.01		<0.01		
Benzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM		<15		<15		<14	
Ethylbenzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM		<15		<15		<14	
m/p-Xylene HS_1D_AR	BTEXHSA	20	µg/kg^	UM		<29		<30		<28	
o-Xylene HS_1D_AR	BTEXHSA	10	µg/kg^	UM		<15		<15		<14	



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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004			
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos	BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Toluene HS_1D_AR	BTEXHSA	10	µg/kg [^]	UM		<11		<15	<13			
Acenaphthene	PAHMSUS	0.08	mg/kg [^]	UM		14.2		<0.12	<0.11			
Acenaphthylene	PAHMSUS	0.08	mg/kg [^]	U		0.95* _B		<0.12* _B	<0.11* _B			
Anthracene	PAHMSUS	0.08	mg/kg [^]	U		18.0		<0.12	<0.11			
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg [^]	UM		28.2		<0.12	<0.11			
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg [^]	UM		21.0		<0.12	<0.11			
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg [^]	UM		27.8		<0.12	<0.11			
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg [^]	UM		10.6		<0.12	<0.11			
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg [^]	UM		10.0		<0.12	<0.11			
Chrysene	PAHMSUS	0.08	mg/kg [^]	UM		22.0		<0.12	<0.11			
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg [^]	UM		3.79		<0.12	<0.11			
Fluoranthene	PAHMSUS	0.08	mg/kg [^]	UM		49.4		0.12* _B	0.13* _B			
Fluorene	PAHMSUS	0.08	mg/kg [^]	UM		18.4		<0.12	<0.11			
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg [^]	UM		12.7		<0.12	<0.11			
Naphthalene	PAHMSUS	0.08	mg/kg [^]	UM		6.12		<0.12	<0.11			
Phenanthrene	PAHMSUS	0.08	mg/kg [^]	UM		57.5		<0.12	0.16			
Pyrene	PAHMSUS	0.08	mg/kg [^]	UM		40.8		<0.12	<0.11			
Total PAH 16	PAHMSUS	1.28	mg/kg [^]	U		365		1.93	1.78			
PCB 101	PCBECD	5	µg/kg [^]	UM		<5.51		<7.52	<6.61			

Client: ExCAL Limited
 Project Name:
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Toluene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12		<13			<15	
Acenaphthene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Acenaphthylene	PAHMSUS	0.08	mg/kg^	U		<0.10* _B		<0.10* _B			<0.12* _B	
Anthracene	PAHMSUS	0.08	mg/kg^	U		<0.10		<0.10			<0.12	
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Chrysene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Fluoranthene	PAHMSUS	0.08	mg/kg^	UM		0.11* _B		<0.10* _B			<0.12* _B	
Fluorene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Naphthalene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Phenanthrene	PAHMSUS	0.08	mg/kg^	UM		0.14		<0.10			<0.12	
Pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.10		<0.10			<0.12	
Total PAH 16	PAHMSUS	1.28	mg/kg^	U		1.61		<1.64			<1.89	
PCB 101	PCBECD	5	µg/kg^	UM		<6.08		<6.40			<7.40	

Client: ExCAL Limited
 Project Name:
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Toluene HS_1D_AR	BTEXHSA	10	µg/kg^	UM		<15		<14		<15		
Acenaphthene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Acenaphthylene	PAHMSUS	0.08	mg/kg^	U		<0.12		<0.11		<0.12		
Anthracene	PAHMSUS	0.08	mg/kg^	U		<0.12		<0.11		<0.12		
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Chrysene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Fluorene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.12* _B		<0.11* _B		<0.12* _B		
Naphthalene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Phenanthrene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.11		<0.12		
Total PAH 16	PAHMSUS	1.28	mg/kg^	U		<1.85		<1.77		<1.90		
PCB 101	PCBECD	5	µg/kg^	UM		<7.24		<6.90		<7.43		

Client: ExCAL Limited
 Project Name:
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Toluene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<15		<15		<14	
Acenaphthene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Acenaphthylene	PAHMSUS	0.08	mg/kg^	U		<0.12		<0.12		<0.11	
Anthracene	PAHMSUS	0.08	mg/kg^	U		<0.12		<0.12		<0.11	
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Chrysene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Fluorene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.12* _B		<0.12* _B		<0.11* _B	
Naphthalene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Phenanthrene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.12		<0.12		<0.11	
Total PAH 16	PAHMSUS	1.28	mg/kg^	U		<1.88		<1.94		<1.82	
PCB 101	PCBECD	5	µg/kg^	UM		<7.35		<7.58		<7.10	



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001		002		003		004	
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID	
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
PCB 118	PCBECD	5	µg/kg [^]	UM		<5.51		<7.52		<6.61			
PCB 138	PCBECD	5	µg/kg [^]	UM		<5.51		<7.52		<6.61			
PCB 153	PCBECD	5	µg/kg [^]	UM		<5.51		<7.52		<6.61			
PCB 180	PCBECD	5	µg/kg [^]	UM		<5.51		<7.52		<6.61			
PCB 28	PCBECD	5	µg/kg [^]	UM		<5.51		<7.52		<6.61			
PCB 52	PCBECD	5	µg/kg [^]	UM		<5.51		<7.52		<6.61			
1,2,4-Trichlorobenzene	SVOC ^{SW}	0.1	mg/kg [^]	N		<0.6 ^D		<0.2		<0.1			
1,2-Dichlorobenzene	SVOC ^{SW}	0.1	mg/kg [^]	U		<0.6 ^D		<0.2		<0.1			
1,3-Dichlorobenzene	SVOC ^{SW}	0.1	mg/kg [^]	U		<0.6 ^D		<0.2		<0.1			
1,4-Dichlorobenzene	SVOC ^{SW}	0.1	mg/kg [^]	U		<0.6 ^D		<0.2		<0.1			
1-Methylnaphthalene	SVOC ^{SW}	0.1	mg/kg [^]	U		3.4* ^B		<0.2* ^B		<0.1* ^B			
2,4,5-Trichlorophenol	SVOC ^{SW}	0.1	mg/kg [^]	U		<0.6 ^D		<0.2		<0.1			
2,4,6-Trichlorophenol	SVOC ^{SW}	0.1	mg/kg [^]	U		<0.6 ^D		<0.2		<0.1			
2,4-Dichlorophenol	SVOC ^{SW}	0.1	mg/kg [^]	U		<0.6 ^D		<0.2		<0.1			
2,4-Dimethylphenol	SVOC ^{SW}	0.1	mg/kg [^]	U		<0.6 ^D		<0.2		<0.1			
2,4-Dinitrophenol	SVOC ^{SW}	0.5	mg/kg [^]	N		<2.8 ^D		<0.8		<0.7			
2,4-Dinitrotoluene	SVOC ^{SW}	0.2	mg/kg [^]	U		<1.1 ^D		<0.3		<0.3			
2,6-Dinitrotoluene	SVOC ^{SW}	0.5	mg/kg [^]	U		<2.8 ^D		<0.8		<0.7			
2-Chloronaphthalene	SVOC ^{SW}	0.1	mg/kg [^]	U		<0.6 ^D		<0.2		<0.1			

Client: ExCAL Limited
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
PCB 118	PCBECD	5	µg/kg [^]	UM		<6.08		<6.40			<7.40	
PCB 138	PCBECD	5	µg/kg [^]	UM		<6.08		<6.40			<7.40	
PCB 153	PCBECD	5	µg/kg [^]	UM		<6.08		<6.40			<7.40	
PCB 180	PCBECD	5	µg/kg [^]	UM		<6.08		<6.40			<7.40	
PCB 28	PCBECD	5	µg/kg [^]	UM		<6.08		<6.40			<7.40	
PCB 52	PCBECD	5	µg/kg [^]	UM		<6.08		<6.40			<7.40	
1,2,4-Trichlorobenzene	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1			<0.1	
1,2-Dichlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
1,3-Dichlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
1,4-Dichlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
1-Methylnaphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.1* _B		<0.1* _B			<0.1* _B	
2,4,5-Trichlorophenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
2,4,6-Trichlorophenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
2,4-Dichlorophenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
2,4-Dimethylphenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
2,4-Dinitrophenol	SVOC SW	0.5	mg/kg [^]	N		<0.6		<0.6			<0.7	
2,4-Dinitrotoluene	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3			<0.3	
2,6-Dinitrotoluene	SVOC SW	0.5	mg/kg [^]	U		<0.6		<0.6			<0.7	
2-Chloronaphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	

Client: ExCAL Limited
 Project Name:
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 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
PCB 118	PCBECD	5	µg/kg [^]	UM		<7.24		<6.90		<7.43		
PCB 138	PCBECD	5	µg/kg [^]	UM		<7.24		<6.90		<7.43		
PCB 153	PCBECD	5	µg/kg [^]	UM		<7.24		<6.90		<7.43		
PCB 180	PCBECD	5	µg/kg [^]	UM		<7.24		<6.90		<7.43		
PCB 28	PCBECD	5	µg/kg [^]	UM		<7.24		<6.90		<7.43		
PCB 52	PCBECD	5	µg/kg [^]	UM		<7.24		<6.90		<7.43		
1,2,4-Trichlorobenzene	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1		<0.1		
1,2-Dichlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
1,3-Dichlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
1,4-Dichlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
1-Methylnaphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.1* _B		<0.1* _B		<0.1* _B		
2,4,5-Trichlorophenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
2,4,6-Trichlorophenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
2,4-Dichlorophenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
2,4-Dimethylphenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
2,4-Dinitrophenol	SVOC SW	0.5	mg/kg [^]	N		<0.7		<0.7		<0.7		
2,4-Dinitrotoluene	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
2,6-Dinitrotoluene	SVOC SW	0.5	mg/kg [^]	U		<0.7		<0.7		<0.7		
2-Chloronaphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		

Client: ExCAL Limited
 Project Name:
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
PCB 118	PCBECD	5	µg/kg^	UM		<7.35		<7.58		<7.10	
PCB 138	PCBECD	5	µg/kg^	UM		<7.35		<7.58		<7.10	
PCB 153	PCBECD	5	µg/kg^	UM		<7.35		<7.58		<7.10	
PCB 180	PCBECD	5	µg/kg^	UM		<7.35		<7.58		<7.10	
PCB 28	PCBECD	5	µg/kg^	UM		<7.35		<7.58		<7.10	
PCB 52	PCBECD	5	µg/kg^	UM		<7.35		<7.58		<7.10	
1,2,4-Trichlorobenzene	SVOCSW	0.1	mg/kg^	N		<0.7 _D		<0.8 _D		<0.7 _D	
1,2-Dichlorobenzene	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	
1,3-Dichlorobenzene	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	
1,4-Dichlorobenzene	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	
1-Methylnaphthalene	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	
2,4,5-Trichlorophenol	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	
2,4,6-Trichlorophenol	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	
2,4-Dichlorophenol	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	
2,4-Dimethylphenol	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	
2,4-Dinitrophenol	SVOCSW	0.5	mg/kg^	N		<3.7 _D		<3.8 _D		<3.6 _D	
2,4-Dinitrotoluene	SVOCSW	0.2	mg/kg^	U		<1.5* _{B,D}		<1.5* _{B,D}		<1.4* _{B,D}	
2,6-Dinitrotoluene	SVOCSW	0.5	mg/kg^	U		<3.7 _D		<3.8 _D		<3.6 _D	
2-Chloronaphthalene	SVOCSW	0.1	mg/kg^	U		<0.7 _D		<0.8 _D		<0.7 _D	



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004			
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos	BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
2-Chlorophenol	SVOC	0.1	mg/kg [^]	U		<0.6 _D		<0.2	<0.1			
2-Methylnaphthalene	SVOC	0.1	mg/kg [^]	U		5.2		<0.2	<0.1			
2-Methylphenol	SVOC	0.1	mg/kg [^]	U		<0.6 _D		<0.2	<0.1			
2-Nitroaniline	SVOC	0.5	mg/kg [^]	N		<2.8 _D		<0.8	<0.7			
2-Nitrophenol	SVOC	0.1	mg/kg [^]	U		<0.6 _D		<0.2	<0.1			
3- & 4-Methylphenol	SVOC	0.1	mg/kg [^]	U		<0.6 _D		<0.2	<0.1			
3-Nitroaniline	SVOC	0.5	mg/kg [^]	N		<2.8 _D		<0.8	<0.7			
4,6-Dinitro-2-methylphenol	SVOC	0.2	mg/kg [^]	N		<1.1 _D		<0.3	<0.3			
4-Bromophenyl-phenylether	SVOC	0.1	mg/kg [^]	U		<0.6 _D		<0.2	<0.1			
4-Chloro-3-methylphenol	SVOC	0.1	mg/kg [^]	U		<0.6 _D		<0.2	<0.1			
4-Chloroaniline	SVOC	0.5	mg/kg [^]	N		4.5		<0.8	<0.7			
4-Chlorophenol	SVOC	0.5	mg/kg [^]	U		<2.8 _D		<0.8	<0.7			
4-Chlorophenyl-phenylether	SVOC	0.1	mg/kg [^]	U		<0.6 _D		<0.2	<0.1			
4-Nitroaniline	SVOC	0.6	mg/kg [^]	N		<3.3 _D		<0.9	<0.8			
4-Nitrophenol	SVOC	0.5	mg/kg [^]	N		<2.8 _D		<0.8	<0.7			
Acenaphthene	SVOC	0.1	mg/kg [^]	U		11.8		<0.2	<0.1			
Acenaphthylene	SVOC	0.1	mg/kg [^]	U		0.6		<0.2	<0.1			
Anthracene	SVOC	0.1	mg/kg [^]	U		16.2		<0.2	<0.1			
Azobenzene	SVOC	0.3	mg/kg [^]	N		<1.7 _D		<0.5	<0.4			

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
2-Chlorophenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
2-Methylnaphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
2-Methylphenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
2-Nitroaniline	SVOC SW	0.5	mg/kg [^]	N		<0.6		<0.6				<0.7
2-Nitrophenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
3- & 4-Methylphenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
3-Nitroaniline	SVOC SW	0.5	mg/kg [^]	N		<0.6		<0.6				<0.7
4,6-Dinitro-2-methylphenol	SVOC SW	0.2	mg/kg [^]	N		<0.2		<0.3				<0.3
4-Bromophenyl-phenylether	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
4-Chloro-3-methylphenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
4-Chloroaniline	SVOC SW	0.5	mg/kg [^]	N		<0.6		<0.6				<0.7
4-Chlorophenol	SVOC SW	0.5	mg/kg [^]	U		<0.6		<0.6				<0.7
4-Chlorophenyl-phenylether	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
4-Nitroaniline	SVOC SW	0.6	mg/kg [^]	N		<0.7		<0.8				<0.9
4-Nitrophenol	SVOC SW	0.5	mg/kg [^]	N		<0.6		<0.6				<0.7
Acenaphthene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Acenaphthylene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Anthracene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Azobenzene	SVOC SW	0.3	mg/kg [^]	N		<0.4		<0.4				<0.4

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
2-Chlorophenol	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
2-Methylnaphthalene	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
2-Methylphenol	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
2-Nitroaniline	SVOC SW	0.5	mg/kg^	N		<0.7		<0.7		<0.7		
2-Nitrophenol	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
3- & 4-Methylphenol	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
3-Nitroaniline	SVOC SW	0.5	mg/kg^	N		<0.7		<0.7		<0.7		
4,6-Dinitro-2-methylphenol	SVOC SW	0.2	mg/kg^	N		<0.3		<0.3		<0.3		
4-Bromophenyl-phenylether	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
4-Chloro-3-methylphenol	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
4-Chloroaniline	SVOC SW	0.5	mg/kg^	N		<0.7		<0.7		<0.7		
4-Chlorophenol	SVOC SW	0.5	mg/kg^	U		<0.7		<0.7		<0.7		
4-Chlorophenyl-phenylether	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
4-Nitroaniline	SVOC SW	0.6	mg/kg^	N		<0.9		<0.8		<0.9		
4-Nitrophenol	SVOC SW	0.5	mg/kg^	N		<0.7		<0.7		<0.7		
Acenaphthene	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
Acenaphthylene	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
Anthracene	SVOC SW	0.1	mg/kg^	U		<0.1		<0.1		<0.1		
Azobenzene	SVOC SW	0.3	mg/kg^	N		<0.4		<0.4		<0.4		

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
2-Chlorophenol	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
2-Methylnaphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
2-Methylphenol	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
2-Nitroaniline	SVOC SW	0.5	mg/kg [^]	N		<3.7 _D		<3.8 _D		<3.6 _D	
2-Nitrophenol	SVOC SW	0.1	mg/kg [^]	U		<0.7* _{B,D}		<0.8* _{B,D}		<0.7* _{B,D}	
3- & 4-Methylphenol	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
3-Nitroaniline	SVOC SW	0.5	mg/kg [^]	N		<3.7 _D		<3.8 _D		<3.6 _D	
4,6-Dinitro-2-methylphenol	SVOC SW	0.2	mg/kg [^]	N		<1.5 _D		<1.5 _D		<1.4 _D	
4-Bromophenyl-phenylether	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
4-Chloro-3-methylphenol	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
4-Chloroaniline	SVOC SW	0.5	mg/kg [^]	N		<3.7 _D		<3.8 _D		<3.6 _D	
4-Chlorophenol	SVOC SW	0.5	mg/kg [^]	U		<3.7 _D		<3.8 _D		<3.6 _D	
4-Chlorophenyl-phenylether	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
4-Nitroaniline	SVOC SW	0.6	mg/kg [^]	N		<4.4 _D		<4.6 _D		<4.3 _D	
4-Nitrophenol	SVOC SW	0.5	mg/kg [^]	N		<3.7 _D		<3.8 _D		<3.6 _D	
Acenaphthene	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Acenaphthylene	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Anthracene	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Azobenzene	SVOC SW	0.3	mg/kg [^]	N		<2.2 _D		<2.3 _D		<2.1 _D	



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001		002		003		004	
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID	
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Benzo[a]anthracene	SVOC SW	0.2	mg/kg [^]	U		24.4				<0.3			<0.3
Benzo[a]pyrene	SVOC SW	0.2	mg/kg [^]	U		18.1				<0.3			<0.3
Benzo[b]fluoranthene	SVOC SW	0.2	mg/kg [^]	U		26.3				<0.3			<0.3
Benzo[g,h,i]perylene	SVOC SW	0.5	mg/kg [^]	U		6.5* _B				<0.8* _B			<0.7* _B
Benzo[k]fluoranthene	SVOC SW	0.2	mg/kg [^]	U		8.9				<0.3			<0.3
Benzoic Acid	SVOC SW	0.5	mg/kg [^]	N		<2.8 _D				<0.8			<0.7
Benzyl alcohol	SVOC SW	0.5	mg/kg [^]	U		<2.8* _{B,D}				<0.8* _B			<0.7* _B
Biphenyl	SVOC SW	0.1	mg/kg [^]	U		1.7				<0.2			<0.1
bis(2-Chloroethoxy)methane	SVOC SW	0.1	mg/kg [^]	U		<0.6 _D				<0.2			<0.1
bis(2-Chloroethyl)ether	SVOC SW	0.1	mg/kg [^]	U		<0.6 _D				<0.2			<0.1
bis(2-Chloroisopropyl)ether	SVOC SW	0.5	mg/kg [^]	U		<2.8 _D				<0.8			<0.7
bis(2-Ethylhexyl)phthalate	SVOC SW	0.2	mg/kg [^]	U		<1.1 _D				<0.3			<0.3
Butylbenzylphthalate	SVOC SW	0.2	mg/kg [^]	U		<1.1 _D				<0.3			<0.3
Carbazole	SVOC SW	0.3	mg/kg [^]	N		18.3				<0.5			<0.4
Chrysene	SVOC SW	0.2	mg/kg [^]	U		23.5				<0.3			<0.3
Coronene	SVOC SW	0.3	mg/kg [^]	N		<1.7 _D				<0.5			<0.4
Dibenzo[a,h]anthracene	SVOC SW	0.5	mg/kg [^]	U		<2.8* _{B,D}				<0.8* _B			<0.7* _B
Dibenzofuran	SVOC SW	0.1	mg/kg [^]	U		10.4				<0.2			<0.1
Diethylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.6 _D				<0.2			<0.1

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Benzo[a]anthracene	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3			<0.3	
Benzo[a]pyrene	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3			<0.3	
Benzo[b]fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3			<0.3	
Benzo[g,h,i]perylene	SVOC SW	0.5	mg/kg [^]	U		<0.6* _B		<0.6* _B			<0.7* _B	
Benzo[k]fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3			<0.3	
Benzoic Acid	SVOC SW	0.5	mg/kg [^]	N		<0.6		<0.6			<0.7	
Benzyl alcohol	SVOC SW	0.5	mg/kg [^]	U		<0.6* _B		<0.6* _B			<0.7* _B	
Biphenyl	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
bis(2-Chloroethoxy)methane	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
bis(2-Chloroethyl)ether	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
bis(2-Chloroisopropyl)ether	SVOC SW	0.5	mg/kg [^]	U		<0.6		<0.6			<0.7	
bis(2-Ethylhexyl)phthalate	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3			<0.3	
Butylbenzylphthalate	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3			<0.3	
Carbazole	SVOC SW	0.3	mg/kg [^]	N		<0.4		<0.4			<0.4	
Chrysene	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3			<0.3	
Coronene	SVOC SW	0.3	mg/kg [^]	N		<0.4		<0.4			<0.4	
Dibenzo[a,h]anthracene	SVOC SW	0.5	mg/kg [^]	U		<0.6* _B		<0.6* _B			<0.7* _B	
Dibenzofuran	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	
Diethylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1			<0.1	

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Benzo[a]anthracene	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Benzo[a]pyrene	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Benzo[b]fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Benzo[g,h,i]perylene	SVOC SW	0.5	mg/kg [^]	U		<0.7* _B		<0.7* _B		<0.7* _B		
Benzo[k]fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Benzoic Acid	SVOC SW	0.5	mg/kg [^]	N		<0.7		<0.7		<0.7		
Benzyl alcohol	SVOC SW	0.5	mg/kg [^]	U		<0.7* _B		<0.7* _B		<0.7* _B		
Biphenyl	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
bis(2-Chloroethoxy)methane	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
bis(2-Chloroethyl)ether	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
bis(2-Chloroisopropyl)ether	SVOC SW	0.5	mg/kg [^]	U		<0.7		<0.7		<0.7		
bis(2-Ethylhexyl)phthalate	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Butylbenzylphthalate	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Carbazole	SVOC SW	0.3	mg/kg [^]	N		<0.4		<0.4		<0.4		
Chrysene	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Coronene	SVOC SW	0.3	mg/kg [^]	N		<0.4		<0.4		<0.4		
Dibenzo[a,h]anthracene	SVOC SW	0.5	mg/kg [^]	U		<0.7* _B		<0.7* _B		<0.7* _B		
Dibenzofuran	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
Diethylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Benzo[a]anthracene	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Benzo[a]pyrene	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Benzo[b]fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Benzo[g,h,i]perylene	SVOC SW	0.5	mg/kg [^]	U		<3.7* _{B,D}		<3.8* _{B,D}		<3.6* _{B,D}	
Benzo[k]fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Benzoic Acid	SVOC SW	0.5	mg/kg [^]	N		<3.7 _D		<3.8 _D		<3.6 _D	
Benzyl alcohol	SVOC SW	0.5	mg/kg [^]	U		<3.7* _{B,D}		<3.8* _{B,D}		<3.6* _{B,D}	
Biphenyl	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
bis(2-Chloroethoxy)methane	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
bis(2-Chloroethyl)ether	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
bis(2-Chloroisopropyl)ether	SVOC SW	0.5	mg/kg [^]	U		<3.7 _D		<3.8 _D		<3.6 _D	
bis(2-Ethylhexyl)phthalate	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Butylbenzylphthalate	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Carbazole	SVOC SW	0.3	mg/kg [^]	N		<2.2 _D		<2.3 _D		<2.1 _D	
Chrysene	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Coronene	SVOC SW	0.3	mg/kg [^]	N		<2.2 _D		<2.3 _D		<2.1 _D	
Dibenzo[a,h]anthracene	SVOC SW	0.5	mg/kg [^]	U		<3.7* _{B,D}		<3.8* _{B,D}		<3.6* _{B,D}	
Dibenzofuran	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Diethylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001		002		003		004	
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID	
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Dimethylphthalate	SVOC	0.1	mg/kg [^]	U		<0.6 _D			<0.2			<0.1	
Di-n-butylphthalate	SVOC	0.1	mg/kg [^]	U		<0.6 _D			<0.2			<0.1	
Di-n-octylphthalate	SVOC	0.2	mg/kg [^]	U		<1.1 _D			<0.3			<0.3	
Diphenyl ether	SVOC	0.1	mg/kg [^]	U		<0.6 _D			<0.2			<0.1	
Fluoranthene	SVOC	0.2	mg/kg [^]	U		58.1			<0.3			<0.3	
Fluorene	SVOC	0.2	mg/kg [^]	U		17.2			<0.3			<0.3	
Hexachlorobenzene	SVOC	0.1	mg/kg [^]	U		<0.6* _{B,D}			<0.2* _B			<0.1* _B	
Hexachlorobutadiene	SVOC	0.1	mg/kg [^]	N		<0.6 _D			<0.2			<0.1	
Hexachlorocyclopentadiene	SVOC	0.1	mg/kg [^]	N		<0.6 _D			<0.2			<0.1	
Hexachloroethane	SVOC	0.1	mg/kg [^]	U		<0.6 _D			<0.2			<0.1	
Indeno[1,2,3-cd]pyrene	SVOC	0.5	mg/kg [^]	U		8.6* _B			<0.8* _B			<0.7* _B	
Isophorone	SVOC	0.1	mg/kg [^]	N		<0.6 _D			<0.2			<0.1	
Naphthalene	SVOC	0.1	mg/kg [^]	U		4.1			<0.2			<0.1	
Nitrobenzene	SVOC	0.5	mg/kg [^]	U		<2.8* _{B,D}			<0.8* _B			<0.7* _B	
N-Nitroso-di-n-propylamine	SVOC	0.9	mg/kg [^]	N		<5.0 _D			<1.4			<1.2	
N-Nitrosodiphenylamine	SVOC	0.1	mg/kg [^]	N		<0.6 _D			<0.2			<0.1	
Pentachlorophenol	SVOC	0.5	mg/kg [^]	N		<2.8 _D			<0.8			<0.7	
Phenanthrene	SVOC	0.1	mg/kg [^]	U		62.1			<0.2			0.1	
Phenol	SVOC	0.1	mg/kg [^]	U		<0.6 _D			<0.2			<0.1	

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Dimethylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Di-n-butylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Di-n-octylphthalate	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3				<0.3
Diphenyl ether	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3				<0.3
Fluorene	SVOC SW	0.2	mg/kg [^]	U		<0.2		<0.3				<0.3
Hexachlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.1* _B		<0.1* _B				<0.1* _B
Hexachlorobutadiene	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1				<0.1
Hexachlorocyclopentadiene	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1				<0.1
Hexachloroethane	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Indeno[1,2,3-cd]pyrene	SVOC SW	0.5	mg/kg [^]	U		<0.6* _B		<0.6* _B				<0.7* _B
Isophorone	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1				<0.1
Naphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Nitrobenzene	SVOC SW	0.5	mg/kg [^]	U		<0.6* _B		<0.6* _B				<0.7* _B
N-Nitroso-di-n-propylamine	SVOC SW	0.9	mg/kg [^]	N		<1.1		<1.2				<1.3
N-Nitrosodiphenylamine	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1				<0.1
Pentachlorophenol	SVOC SW	0.5	mg/kg [^]	N		<0.6		<0.6				<0.7
Phenanthrene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1
Phenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1				<0.1

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Dimethylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
Di-n-butylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
Di-n-octylphthalate	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Diphenyl ether	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
Fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Fluorene	SVOC SW	0.2	mg/kg [^]	U		<0.3		<0.3		<0.3		
Hexachlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.1* _B		<0.1* _B		<0.1* _B		
Hexachlorobutadiene	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1		<0.1		
Hexachlorocyclopentadiene	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1		<0.1		
Hexachloroethane	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
Indeno[1,2,3-cd]pyrene	SVOC SW	0.5	mg/kg [^]	U		<0.7* _B		<0.7* _B		<0.7* _B		
Isophorone	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1		<0.1		
Naphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
Nitrobenzene	SVOC SW	0.5	mg/kg [^]	U		<0.7* _B		<0.7* _B		<0.7* _B		
N-Nitroso-di-n-propylamine	SVOC SW	0.9	mg/kg [^]	N		<1.3		<1.2		<1.3		
N-Nitrosodiphenylamine	SVOC SW	0.1	mg/kg [^]	N		<0.1		<0.1		<0.1		
Pentachlorophenol	SVOC SW	0.5	mg/kg [^]	N		<0.7		<0.7		<0.7		
Phenanthrene	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		
Phenol	SVOC SW	0.1	mg/kg [^]	U		<0.1		<0.1		<0.1		

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Dimethylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Di-n-butylphthalate	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Di-n-octylphthalate	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Diphenyl ether	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Fluoranthene	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Fluorene	SVOC SW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
Hexachlorobenzene	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Hexachlorobutadiene	SVOC SW	0.1	mg/kg [^]	N		<0.7 _D		<0.8 _D		<0.7 _D	
Hexachlorocyclopentadiene	SVOC SW	0.1	mg/kg [^]	N		<0.7 _D		<0.8 _D		<0.7 _D	
Hexachloroethane	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Indeno[1,2,3-cd]pyrene	SVOC SW	0.5	mg/kg [^]	U		<3.7 _D		<3.8 _D		<3.6 _D	
Isophorone	SVOC SW	0.1	mg/kg [^]	N		<0.7 _D		<0.8 _D		<0.7 _D	
Naphthalene	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Nitrobenzene	SVOC SW	0.5	mg/kg [^]	U		<3.7 _D		<3.8 _D		<3.6 _D	
N-Nitroso-di-n-propylamine	SVOC SW	0.9	mg/kg [^]	N		<6.6 _D		<6.8 _D		<6.4 _D	
N-Nitrosodiphenylamine	SVOC SW	0.1	mg/kg [^]	N		<0.7 _D		<0.8 _D		<0.7 _D	
Pentachlorophenol	SVOC SW	0.5	mg/kg [^]	N		<3.7 _D		<3.8 _D		<3.6 _D	
Phenanthrene	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	
Phenol	SVOC SW	0.1	mg/kg [^]	U		<0.7 _D		<0.8 _D		<0.7 _D	



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030236
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004			
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos	BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Pyrene	SVOC _{SW}	0.2	mg/kg [^]	U		38.8		<0.3	<0.3			
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg [^]	U		<4.41		<6.02	<5.29			
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg [^]	U		6.28		<6.02	<5.29			
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg [^]	U		9.04		<6.02	7.77			
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	10	mg/kg [^]	U		28.0		<15.0	15.2			
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	20	mg/kg [^]	U		56.4		<30.1	34.0			
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg [^]	U		11.6		<6.02	<5.29			
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg [^]	U		93.3		<6.02	8.92			
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg [^]	U		316		<6.02	11.9			
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	10	mg/kg [^]	U		704		<15.0	17.4			
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	20	mg/kg [^]	U		1160		<30.1	49.2			
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,1,2,2-Tetrachloroethane	VOCHSAS	1	µg/kg [^]	N		<1 c		<2	<1			
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,1-Dichloroethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,1-Dichloroethene	VOCHSAS	1	µg/kg [^]	U		<1 c		<2	<1			
1,1-Dichloropropene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg [^]	UM		<3 c		<5	<4			

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Pyrene	SVOCSW	0.2	mg/kg^	U		<0.2		<0.3			<0.3	
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<4.87		<5.12			<5.92	
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<4.87		<5.12			<5.92	
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		7.17		<5.12			<5.92	
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	10	mg/kg^	U		17.8		14.1			<14.8	
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	20	mg/kg^	U		34.7		28.7			<29.6	
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<4.87		<5.12			<5.92	
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<4.87		7.20			<5.92	
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		9.94		9.60			8.42	
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	10	mg/kg^	U		21.5		17.6			16.5	
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	20	mg/kg^	U		48.6		47.1			39.5	
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
1,1,2,2-Tetrachloroethane	VOCHSAS	1	µg/kg^	N		<1		<1			<2	
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
1,1-Dichloroethane	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
1,1-Dichloroethene	VOCHSAS	1	µg/kg^	U		<1		<1			<2	
1,1-Dichloropropene	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg^	UM		<4		<4			<5	

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Pyrene	SVOCSW	0.2	mg/kg^	U		<0.3	<0.3	<0.3	<0.3			
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<5.79	<5.52	<5.94	<5.94			
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<5.79	<5.52	<5.94	<5.94			
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<5.79	<5.52	<5.94	<5.94			
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	10	mg/kg^	U		<14.5	<13.8	<14.9	<14.9			
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	20	mg/kg^	U		<28.9	<27.6	<29.7	<29.7			
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<5.79	<5.52	<5.94	<5.94			
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<5.79	<5.52	<5.94	<5.94			
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<5.79	<5.52	<5.94	<5.94			
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	10	mg/kg^	U		<14.5	<13.8	<14.9	<14.9			
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	20	mg/kg^	U		<28.9	<27.6	<29.7	<29.7			
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg^	UM		<2	<1	<2	<2			
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg^	UM		<2	<1	<2	<2			
1,1,2,2-Tetrachloroethane	VOCHSAS	1	µg/kg^	N		<2	<1	<2	<2			
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg^	UM		<2	<1	<2	<2			
1,1-Dichloroethane	VOCHSAS	1	µg/kg^	UM		<2	<1	<2	<2			
1,1-Dichloroethene	VOCHSAS	1	µg/kg^	U		<2	<1	<2	<2			
1,1-Dichloropropene	VOCHSAS	1	µg/kg^	UM		<2	<1	<2	<2			
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg^	UM		<5	<4	<5	<5			

Client: ExCAL Limited
 Project Name:
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 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Pyrene	SVOCSW	0.2	mg/kg [^]	U		<1.5 _D		<1.5 _D		<1.4 _D	
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg [^]	U		<5.88		<6.06		<5.68	
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg [^]	U		7.88		<6.06		<5.68	
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg [^]	U		23.3		<6.06		<5.68	
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	10	mg/kg [^]	U		28.3		<15.2		<14.2	
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	20	mg/kg [^]	U		63.1		<30.3		<28.4	
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg [^]	U		<5.88		<6.06		<5.68	
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg [^]	U		<5.88		<6.06		<5.68	
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg [^]	U		22.0		<6.06		<5.68	
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	10	mg/kg [^]	U		31.2		<15.2		<14.2	
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	20	mg/kg [^]	U		63.3		<30.3		<28.4	
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2* _B		<2* _B	
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,1,2,2-Tetrachloroethane	VOCHSAS	1	µg/kg [^]	N		<2		<2		<2	
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2* _B		<2* _B	
1,1-Dichloroethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,1-Dichloroethene	VOCHSAS	1	µg/kg [^]	U		<2		<2		<2	
1,1-Dichloropropene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg [^]	UM		<5		<5		<5	



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030236
 Date Issued: 13/03/2023



Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004			
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos	BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg [^]	N		<3 c		<5	<4			
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg [^]	UM		7* B,C		<2* B	<1* B			
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg [^]	U		<1 c		<2	<1			
1,2-Dibromoethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,2-Dichloroethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,2-Dichloropropane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg [^]	UM		6 c		<2	<1			
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,3-Dichloropropane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
2,2-Dichloropropane	VOCHSAS	2	µg/kg [^]	UM		<2 c		<3	<3			
2-Chlorotoluene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
4-Chlorotoluene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Benzene	VOCHSAS	1	µg/kg [^]	UM		9 c		<2	<1			
Bromobenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Bromochloromethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Bromodichloromethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg [^]	N		<4		<4			<5	
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg [^]	UM		<1* _B		<1* _B			<2* _B	
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg [^]	U		<1		<1			<2	
1,2-Dibromoethane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
1,2-Dichloroethane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
1,2-Dichloropropane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
1,3-Dichloropropane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
2,2-Dichloropropane	VOCHSAS	2	µg/kg [^]	UM		<3		<3			<3	
2-Chlorotoluene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
4-Chlorotoluene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Benzene	VOCHSAS	1	µg/kg [^]	UM		<1		2			3	
Bromobenzene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Bromochloromethane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Bromodichloromethane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg [^]	N		<5		<4		<5		
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg [^]	UM		<2* _B		<1* _B		<2* _B		
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg [^]	U		<2		<1		<2		
1,2-Dibromoethane	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
1,2-Dichloroethane	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
1,2-Dichloropropane	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
1,3-Dichloropropane	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
2,2-Dichloropropane	VOCHSAS	2	µg/kg [^]	UM		<3		<3		<3		
2-Chlorotoluene	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
4-Chlorotoluene	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
Benzene	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
Bromobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
Bromochloromethane	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		
Bromodichloromethane	VOCHSAS	1	µg/kg [^]	UM		<2		<1		<2		

Client: ExCAL Limited
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg [^]	N		<5		<5		<5	
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg [^]	UM		<2* _B		<2		<2	
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg [^]	U		<2		<2		<2	
1,2-Dibromoethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,2-Dichloroethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,2-Dichloropropane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<2* _B		<2* _B	
1,3-Dichloropropane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
2,2-Dichloropropane	VOCHSAS	2	µg/kg [^]	UM		<3		<3* _B		<3* _B	
2-Chlorotoluene	VOCHSAS	1	µg/kg [^]	UM		<2		<2* _B		<2* _B	
4-Chlorotoluene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Benzene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Bromobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Bromochloromethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Bromodichloromethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	



Client: ExCAL Limited
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001		002		003		004	
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID	
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Bromoform	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Bromomethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Carbon Tetrachloride	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Chlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Chloroethane	VOCHSAS	2	µg/kg [^]	UM		<2 c		<3		<3			
Chloroform	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Chloromethane	VOCHSAS	3	µg/kg [^]	U		<3* B,C		<5* B		<4* B			
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg [^]	UM		<6 c		<8		<7			
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Dibromochloromethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Dibromomethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Dichlorodifluoromethane	VOCHSAS	1	µg/kg [^]	N		<1 c		<2		<1			
Ethylbenzene	VOCHSAS	2	µg/kg [^]	UM		2 c		<3		<3			
Hexachlorobutadiene	VOCHSAS	2	µg/kg [^]	N		<2 c		<3		<3			
iso-Propylbenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
m and p-Xylene	VOCHSAS	4	µg/kg [^]	UM		15 c		<6		<6			
MTBE	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2		<1			
Naphthalene	VOCHSAS	5	µg/kg [^]	UM		4530		36		21			
n-Butylbenzene	VOCHSAS	1	µg/kg [^]	U		<1 c		<2		<1			

Client: ExCAL Limited
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Bromoform	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Bromomethane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Carbon Tetrachloride	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Chlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Chloroethane	VOCHSAS	2	µg/kg [^]	UM		<3		<3			<3	
Chloroform	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Chloromethane	VOCHSAS	3	µg/kg [^]	U		<4* _B		<4* _B			<5* _B	
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg [^]	UM		<7		<6			<8	
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Dibromochloromethane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Dibromomethane	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Dichlorodifluoromethane	VOCHSAS	1	µg/kg [^]	N		<1		<1			<2	
Ethylbenzene	VOCHSAS	2	µg/kg [^]	UM		<3		<3			<3	
Hexachlorobutadiene	VOCHSAS	2	µg/kg [^]	N		<3		<3			<3	
iso-Propylbenzene	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
m and p-Xylene	VOCHSAS	4	µg/kg [^]	UM		<5		<5			<7	
MTBE	VOCHSAS	1	µg/kg [^]	UM		<1		<1			<2	
Naphthalene	VOCHSAS	5	µg/kg [^]	UM		<7		<6			<8	
n-Butylbenzene	VOCHSAS	1	µg/kg [^]	U		<1		<1			<2	

Client: ExCAL Limited
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Bromoform	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Bromomethane	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Carbon Tetrachloride	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Chlorobenzene	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Chloroethane	VOCHSAS	2	µg/kg^	UM		<3		<3		<3		
Chloroform	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Chloromethane	VOCHSAS	3	µg/kg^	U		<5* _B		<4* _B		<5* _B		
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg^	UM		<8		<7		<8		
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Dibromochloromethane	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Dibromomethane	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Dichlorodifluoromethane	VOCHSAS	1	µg/kg^	N		<2		<1		<2		
Ethylbenzene	VOCHSAS	2	µg/kg^	UM		<3		<3		<3		
Hexachlorobutadiene	VOCHSAS	2	µg/kg^	N		<3		<3		<3		
iso-Propylbenzene	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
m and p-Xylene	VOCHSAS	4	µg/kg^	UM		<6		<6		<6		
MTBE	VOCHSAS	1	µg/kg^	UM		<2		<1		<2		
Naphthalene	VOCHSAS	5	µg/kg^	UM		<8		<7		<8		
n-Butylbenzene	VOCHSAS	1	µg/kg^	U		<2		<1		<2		

Client: ExCAL Limited
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Bromoform	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Bromomethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Carbon Tetrachloride	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Chlorobenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Chloroethane	VOCHSAS	2	µg/kg [^]	UM		<3		<3		<3	
Chloroform	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Chloromethane	VOCHSAS	3	µg/kg [^]	U		<5* _B		<5		<5	
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg [^]	UM		<8		<8		<8	
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Dibromochloromethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Dibromomethane	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Dichlorodifluoromethane	VOCHSAS	1	µg/kg [^]	N		<2		<2		<2	
Ethylbenzene	VOCHSAS	2	µg/kg [^]	UM		<3		<3		<3	
Hexachlorobutadiene	VOCHSAS	2	µg/kg [^]	N		<3		<3		<3	
iso-Propylbenzene	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
m and p-Xylene	VOCHSAS	4	µg/kg [^]	UM		<6		<6		<6	
MTBE	VOCHSAS	1	µg/kg [^]	UM		<2		<2		<2	
Naphthalene	VOCHSAS	5	µg/kg [^]	UM		<8		21		<8	
n-Butylbenzene	VOCHSAS	1	µg/kg [^]	U		<2		<2		<2	



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004			
					Customer ID	BH01 - 1m		BH01 - 1-3m - Asbestos	BH01 - 3m		BH01 - 5m	
					Sample Type	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
o-Xylene	VOCHSAS	2	µg/kg [^]	UM		4 c		<3	<3			
p-Isopropyltoluene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Propylbenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
sec-Butylbenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Styrene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
tert-Butylbenzene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Tetrachloroethene	VOCHSAS	3	µg/kg [^]	UM		<3 c		<5	<4			
Toluene	VOCHSAS	5	µg/kg [^]	UM		14 c		<8	<7			
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Trichloroethene	VOCHSAS	1	µg/kg [^]	U		<1 c		<2	<1			
Trichlorofluoromethane	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Vinyl Chloride	VOCHSAS	1	µg/kg [^]	UM		<1 c		<2	<1			
Total Moisture at 35°C	CLANDPREP	0.1	%	N		9.2		33.5	24.4			
Description of Solid Material	CLANDPREP		-	N		SILT		CLAY	CLAY			
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N		0.150		0.150	0.150			
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N		0		0	0			
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N		0		0	0			
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N		0.242		0.285	0.210			

Client: ExCAL Limited
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	005		006		007	008	
					Customer ID	BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos	BH02 - 4m	
					Sample Type	LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
o-Xylene	VOCHSAS	2	µg/kg^	UM		<3		<3			<3	
p-Isopropyltoluene	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
Propylbenzene	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
sec-Butylbenzene	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
Styrene	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
tert-Butylbenzene	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
Tetrachloroethene	VOCHSAS	3	µg/kg^	UM		<4		<4			<5	
Toluene	VOCHSAS	5	µg/kg^	UM		<7		<6			<8	
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
Trichloroethene	VOCHSAS	1	µg/kg^	U		<1		<1			<2	
Trichlorofluoromethane	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
Vinyl Chloride	VOCHSAS	1	µg/kg^	UM		<1		<1			<2	
Total Moisture at 35°C	CLANDPREP	0.1	%	N		17.8		21.9			32.4	
Description of Solid Material	CLANDPREP		-	N		CLAY		CLAY			CLAY	
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N		0.150		0.150			0.150	
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N		0		0			0	
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N		0		0			0	
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N		0.212		0.266			0.243	

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 Project Name:
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	009		010		011		012
					Customer ID	BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
o-Xylene	VOCHSAS	2	µg/kg^	UM		<3		<3			<3	
p-Isopropyltoluene	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
Propylbenzene	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
sec-Butylbenzene	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
Styrene	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
tert-Butylbenzene	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
Tetrachloroethene	VOCHSAS	3	µg/kg^	UM		<5		<4			<5	
Toluene	VOCHSAS	5	µg/kg^	UM		<8		<7			<8	
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
Trichloroethene	VOCHSAS	1	µg/kg^	U		<2		<1			<2	
Trichlorofluoromethane	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
Vinyl Chloride	VOCHSAS	1	µg/kg^	UM		<2		<1			<2	
Total Moisture at 35°C	CLANDPREP	0.1	%	N		30.9		27.5			32.7	
Description of Solid Material	CLANDPREP		-	N		CLAY		CLAY			CLAY	
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N		0.150		0.150			0.150	
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N		0		0			0	
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N		0		0			0	
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N		0.249		0.236			0.219	

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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	013		014		015	
					Customer ID	BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
o-Xylene	VOCHSAS	2	µg/kg^	UM		<3		<3		<3	
p-Isopropyltoluene	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
Propylbenzene	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
sec-Butylbenzene	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
Styrene	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
tert-Butylbenzene	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
Tetrachloroethene	VOCHSAS	3	µg/kg^	UM		<5		<5		<5	
Toluene	VOCHSAS	5	µg/kg^	UM		<8		<8		<8	
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
Trichloroethene	VOCHSAS	1	µg/kg^	U		<2		<2		<2	
Trichlorofluoromethane	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
Vinyl Chloride	VOCHSAS	1	µg/kg^	UM		<2		<2		<2	
Total Moisture at 35°C	CLANDPREP	0.1	%	N		32.0		34.0		29.6	
Description of Solid Material	CLANDPREP		-	N		CLAY		CLAY		CLAY	
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N		0.150		0.150		0.150	
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N		0		0		0	
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N		0		0		0	
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N		0.210		0.226		0.234	



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Analysis Results

					001		002		003		004	
					BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID	
					20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Analysis	Method Code	MDL	Units	Accred.								
Weight of Sample Leached (kg)	Leachate Prep CEN 2:1		kg	N		0.208			0.165		0.240	
Asbestos Identification	SUB020		-	N			NAIIS					

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Analysis Results

					005		006		007		008	
					BH01 - 7m		BH02 - 2m		BH02 - 1-3m - Asbestos		BH02 - 4m	
					LPL	SOLID	LPL	SOLID	SOLID	LPL	SOLID	
					20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Analysis	Method Code	MDL	Units	Accred.								
Weight of Sample Leached (kg)	Leachate Prep CEN 2:1		kg	N		0.238		0.184				0.207
Asbestos Identification	SUB020		-	N					NAIS			

Client: ExCAL Limited
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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID		009		010		011		012	
					Customer ID		BH02 - 8m		BH02 - 13m		BH05 - 2m		BH05 - 1-3m - Asbestos	
					Sample Type		LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID	
					Sampling Date		20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	
Weight of Sample Leached (kg)	Leachate Prep CEN 2:1		kg	N		0.201		0.214		0.231				
Asbestos Identification	SUB020		-	N								NAIIS		

Client: ExCAL Limited
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Analysis Results

					Sample ID		013		014		015	
					Customer ID		BH05 - 4m		BH05 - 8m		BH05 - 13m	
					Sample Type		LPL	SOLID	LPL	SOLID	LPL	SOLID
					Sampling Date		20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023	20/02/2023
Analysis	Method Code	MDL	Units	Accred.								
Weight of Sample Leached (kg)	Leachate Prep CEN 2:1		kg	N		0.240		0.224				0.216
Asbestos Identification	SUB020		-	N								

CERTIFICATE OF ANALYSIS

ANALYSIS REQUESTED BY: SOCOTEC UK Ltd
Environmental Chemistry
PO Box 100
Burton upon Trent
Staffordshire
DE15 0XD

CONTRACT NO: S31397-2

DATE OF ISSUE: 13.03.23

DATE SAMPLES RECEIVED: 06.03.23

DATE ANALYSIS COMPLETED: 13.03.23

DESCRIPTION: Three soil/loose aggregate samples.

ANALYSIS REQUESTED: Qualitative analysis of samples for determination of presence/type of asbestos.

METHODS:

Our method involves initial examination of the samples followed by detailed analysis of representative sub-samples. The sub-samples are analysed qualitatively for asbestos by polarised light and dispersion staining as described by the Health and Safety Executive in HSG 248.

RESULTS:

Initial Screening

No asbestos was detected in any of soil samples by stereo-binocular and polarised light microscopy.

A summary of the results is given in Table 1.



CONTRACT NO: S31397-2
DATE OF ISSUE: 13.03.23

RESULTS: (cont.)

Table 1: Qualitative Results

SOCOTEC Job I.D: 23030236

IOM sample number	SOCOTEC Sample ID	Client Sample ID	ACM type detected	PLM result
S31397-2	23030236-002	BH01 - 1-3m - Asbestos	-	No Asbestos Detected
S31397-3	23030236-007	BH02 - 1-3m - Asbestos	-	No Asbestos Detected
S31397-4	23030236-012	BH05 - 1-3m - Asbestos	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

COMMENTS:

IOM Consulting cannot accept responsibility for samples that have been incorrectly collected or despatched by external clients.

Any opinions and interpretations expressed herein are out with the scope of our UKAS accreditation.

AUTHORISED BY:
D Third
Laboratory Analyst



Client: ExCAL Limited
 Project Name: 238-03-05-South Side, South Dock - ABP Newport
 Project No: 23030236
 Date Issued: 13/03/2023

Deviating Sample Report

<u>Sample Reference</u>	<u>Text ID</u>	<u>Method Code</u>	Incorrect Container	Incorrect Label	Headspace	Incorrect/No Preservative	No Sampling Date	Holding Time
BH01 - 1m	23030236-001	BTEXHSA						✓
BH01 - 1m	23030236-001	SFAPI						✓
BH01 - 1m	23030236-001	SFAPI						✓
BH01 - 1m	23030236-001	SFAPI						✓
BH01 - 1m	23030236-001	SFAPI						✓
BH01 - 1m	23030236-001	SFAPI						✓
BH01 - 1m	23030236-001	SVOCSW						✓
BH01 - 3m	23030236-003	BTEXHSA						✓
BH01 - 3m	23030236-003	GROHSA/BTEXHSA						✓
BH01 - 3m	23030236-003	SFAPI						✓
BH01 - 3m	23030236-003	SFAPI						✓
BH01 - 3m	23030236-003	SFAPI						✓
BH01 - 3m	23030236-003	SFAPI						✓
BH01 - 3m	23030236-003	SFAPI						✓
BH01 - 3m	23030236-003	SVOCSW						✓
BH01 - 5m	23030236-004	BTEXHSA						✓
BH01 - 5m	23030236-004	GROHSA/BTEXHSA						✓
BH01 - 5m	23030236-004	SFAPI						✓
BH01 - 5m	23030236-004	SFAPI						✓
BH01 - 5m	23030236-004	SFAPI						✓
BH01 - 5m	23030236-004	SFAPI						✓
BH01 - 5m	23030236-004	SFAPI						✓
BH01 - 5m	23030236-004	SFAPI						✓
BH01 - 5m	23030236-004	SVOCSW						✓
BH01 - 7m	23030236-005	BTEXHSA						✓
BH01 - 7m	23030236-005	GROHSA/BTEXHSA						✓
BH01 - 7m	23030236-005	SFAPI						✓
BH01 - 7m	23030236-005	SFAPI						✓
BH01 - 7m	23030236-005	SFAPI						✓
BH01 - 7m	23030236-005	SFAPI						✓
BH01 - 7m	23030236-005	SFAPI						✓
BH01 - 7m	23030236-005	SFAPI						✓
BH01 - 7m	23030236-005	SVOCSW						✓
BH02 - 2m	23030236-006	BTEXHSA						✓
BH02 - 2m	23030236-006	GROHSA/BTEXHSA						✓
BH02 - 2m	23030236-006	SFAPI						✓
BH02 - 2m	23030236-006	SFAPI						✓
BH02 - 2m	23030236-006	SFAPI						✓
BH02 - 2m	23030236-006	SFAPI						✓



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BH02 - 2m	23030236-006	SVOCSW							✓
BH02 - 4m	23030236-008	BTEXHSA							✓
BH02 - 4m	23030236-008	GROHSA/BTEXHSA							✓
BH02 - 4m	23030236-008	SFAPI							✓
BH02 - 4m	23030236-008	SFAPI							✓
BH02 - 4m	23030236-008	SFAPI							✓
BH02 - 4m	23030236-008	SFAPI							✓
BH02 - 4m	23030236-008	SFAPI							✓
BH02 - 4m	23030236-008	SVOCSW							✓
BH02 - 8m	23030236-009	BTEXHSA							✓
BH02 - 8m	23030236-009	GROHSA/BTEXHSA							✓
BH02 - 8m	23030236-009	SFAPI							✓
BH02 - 8m	23030236-009	SFAPI							✓
BH02 - 8m	23030236-009	SFAPI							✓
BH02 - 8m	23030236-009	SFAPI							✓
BH02 - 8m	23030236-009	SFAPI							✓
BH02 - 8m	23030236-009	SVOCSW							✓
BH02 - 13m	23030236-010	BTEXHSA							✓
BH02 - 13m	23030236-010	GROHSA/BTEXHSA							✓
BH02 - 13m	23030236-010	SFAPI							✓
BH02 - 13m	23030236-010	SFAPI							✓
BH02 - 13m	23030236-010	SFAPI							✓
BH02 - 13m	23030236-010	SFAPI							✓
BH02 - 13m	23030236-010	SFAPI							✓
BH02 - 13m	23030236-010	SVOCSW							✓
BH05 - 2m	23030236-011	BTEXHSA							✓
BH05 - 2m	23030236-011	GROHSA/BTEXHSA							✓
BH05 - 2m	23030236-011	SFAPI							✓
BH05 - 2m	23030236-011	SFAPI							✓
BH05 - 2m	23030236-011	SFAPI							✓
BH05 - 2m	23030236-011	SFAPI							✓
BH05 - 2m	23030236-011	SFAPI							✓
BH05 - 2m	23030236-011	SVOCSW							✓
BH05 - 4m	23030236-013	BTEXHSA							✓
BH05 - 4m	23030236-013	GROHSA/BTEXHSA							✓
BH05 - 4m	23030236-013	SFAPI							✓
BH05 - 4m	23030236-013	SFAPI							✓
BH05 - 4m	23030236-013	SFAPI							✓
BH05 - 4m	23030236-013	SFAPI							✓
BH05 - 4m	23030236-013	SFAPI							✓
BH05 - 4m	23030236-013	SVOCSW							✓
BH05 - 8m	23030236-014	BTEXHSA							✓
BH05 - 8m	23030236-014	GROHSA/BTEXHSA							✓
BH05 - 8m	23030236-014	SFAPI							✓
BH05 - 8m	23030236-014	SFAPI							✓
BH05 - 8m	23030236-014	SFAPI							✓



Client: ExCAL Limited
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BH05 - 8m	23030236-014	SFAPI								✓
BH05 - 8m	23030236-014	SVOCSW								✓
BH05 - 13m	23030236-015	BTEXHSA								✓
BH05 - 13m	23030236-015	GROHSA/BTEXHSA								✓
BH05 - 13m	23030236-015	SFAPI								✓
BH05 - 13m	23030236-015	SFAPI								✓
BH05 - 13m	23030236-015	SFAPI								✓
BH05 - 13m	23030236-015	SFAPI								✓
BH05 - 13m	23030236-015	SFAPI								✓
BH05 - 13m	23030236-015	SVOCSW								✓



Client: ExCAL Limited
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 Project No: 23030236
 Date Issued: 13/03/2023

Analysis Method

<u>Method Code</u>	<u>Method Description</u>	<u>Analysis Method</u>
BTEXHSA	BTEX by GCFID	As Received
CLANDPREP	Basic Solid Description	As Received
CLANDPREP	DW35 - CLand Prep and Dry Weight Correction to 35°C	As Received
GROHSA/BTEXHSA	GRO CWG (C5-C10) Ali/Aro Split	As Received
ICPMSS	Antimony in Solids by ICPMS	Air Dried & Ground
ICPMSS	Arsenic in Solids by ICPMS	Air Dried & Ground
ICPMSS	Cadmium in Solids by ICPMS	Air Dried & Ground
ICPMSS	Chromium in Solids by ICPMS	Air Dried & Ground
ICPMSS	Copper in Solids by ICPMS	Air Dried & Ground
ICPMSS	Lead in Solids by ICPMS	Air Dried & Ground
ICPMSS	Manganese in Solids by ICPMS	Air Dried & Ground
ICPMSS	Mercury in Solids by ICPMS	Air Dried & Ground
ICPMSS	Molybdenum in Solids by ICPMS	Air Dried & Ground
ICPMSS	Nickel in Solids by ICPMS	Air Dried & Ground
ICPMSS	Selenium in Solids by ICPMS	Air Dried & Ground
ICPMSS	Vanadium in Solids by ICPMS	Air Dried & Ground
ICPMSS	Zinc in Solids by ICPMS	Air Dried & Ground
ICPMSW (Dissolved)	Antimony (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Arsenic (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Cadmium (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Chromium (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Copper (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Lead (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Manganese (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Mercury (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Molybdenum (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Nickel (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Selenium (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Vanadium (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Zinc (Diss.) in Lab Leachate by ICPMS	Filtered
ICPSOIL	Aluminium in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Barium in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Beryllium in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Boron in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Iron in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Titanium in Solids by ICPOES	Air Dried & Ground
ICPWATVAR (Dissolved)	Aluminium (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Barium (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Beryllium (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Boron (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Iron (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Titanium (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWSS	Sulphate as SO4 (Water Soluble)	Air Dried & Ground
KONENS	Chromium VI (Hexavalent) by Colorimetry	Air Dried & Ground
Leachate Prep CEN 2:1	Leachate Prep, 1-Stage 2:1 (BSEN 12457-1)	As Received
PAHMSUS	16 PAHs by GCMS	As Received
PCBECD	PCBs, ICES 7 Congeners	As Received
PHSOIL	pH (2.5:1)	As Received
SFAPI	Cyanide (Complex) by SFA	As Received
SFAPI	Cyanide (Free) by SFA	As Received



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SFAPI	Cyanide (Total) by SFA	As Received
SFAPI	Phenol Index (Total) by SFA	As Received
SUB020	Asbestos Stage 1: Screen & ID	
SVOCSW	SVOCs (Target List) by GCMS	As Received
TPHFIDUS (Aliphatic)	TPH (CWG) Aliphatic Split with Carbon Banding	As Received
TPHFIDUS (Aromatic)	TPH (CWG) Aromatic Split with Carbon Banding	As Received
VOCHSAS	VOCs (Target List) by GCMS	As Received

Result Report Notes

Letters alongside results signify that the result has associated report notes.
 The report notes are as follows:

<u>Letter</u>	<u>Note</u>
A	Due to the matrix of the sample the laboratory has had to deviate from our standard protocols to be able to process the sample and provide a result. Where applicable the accreditation has been removed and this should be taken into consideration when utilising the data.
B	The QC associated with this result has not wholly met the QMS requirements, the accreditation has therefore been removed. However, the Laboratory has confidence in the performance of the method as a whole and that the integrity of the data has not been significantly compromised.
C	Due to matrix interference, the internal standard and/or surrogate has not met the QMS requirements. This should be taken into consideration when utilising the data.
D	A non-standard volume or mass has been used for this test which has resulted in a raised detection limit.
E	Due to the parameter value being beyond our calibration range (and following the maximum size of dilution allowed, where applicable), the result cannot be quantified and as such the result will appear as a greater than symbol (>) with the accreditation removed. This data should be used for indicative purposes only.
F	Based on the sample history, appearance and smell a dilution was applied prior to testing . Unfortunately, the result is either above (>) or below (<) our calibration range. Results above our calibration range have accreditation removed. The data should be used for indicative purposes only.
G	The day 5 oxygen reading was below the capability of the instrument to detect, and therefore the calculated BOD has been reported unaccredited for guidance purposes only.

HWOL Acronym Key

<u>Acronym</u>	<u>Description</u>
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e everything extracted by the solvent(s)
CU	Clean up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
+	Operator to indicate cumulative e.g. EH_CU+HS_1D_Total



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Additional Information

This report refers to samples as received. SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

The accreditation codes are as follows:

- U = UKAS accredited analysis
- M = MCERT accredited analysis
- N = Unaccredited analysis

Any units marked with ^ signify results are reported on a dry weight basis of 35° c.

All Air Dried and Ground Samples (ADG) are oven dried at less than 35° c.

This report shall not be reproduced except in full, without written approval of the laboratory.

Opinions and interpretations given are outside the scope of our UKAS accreditation.

Any samples marked with * are not covered by our scope of UKAS accreditation. If applicable, further report notes have been added.

Any solid samples where the Major Constituents are not one of the following (Sand, Silt, Clay, Made Ground) are not one of our accredited matrix types.

Any samples marked with ‡ have had MCERTS accreditation removed for this result

Any samples marked with a tick in the deviant table is deviant for the specific reason.

Any samples reported as IS, NA, ND mean the following:

- IS = Insufficient Sample to complete analysis
- NA = Sample is not amenable for the required analysis
- ND = Results cannot be determined

Items listed with a 'SUB' method code prefix have been carried out by an external subcontracted laboratory.

Our deviating sample report does not include deviancy information for Subcontracted analysis. Please see the report from the subcontracted lab for information regarding any deviancies for this analysis.

Summaries of analysis methods are available upon request.

End of Certificate of Analysis