

## Envirocheck<sup>®</sup> Report:

### Mining and Ground Stability Datasheet

#### Order Details:

**Order Number:**

312082408\_1\_1

**Customer Reference:**

Pathfinder

**National Grid Reference:**

526410, 436970

**Slice:**

A

**Site Area (Ha):**

39.95

**Search Buffer (m):**

500

#### Site Details:

Pathfinder

#### Client Details:

Ms K Thompson

ERM

2nd Floor, Exchequer Court

33 St Mary Axe

London

EC3A 8AA

Report Section and Details	Page Number
<b>Summary</b>	-
<p>The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer selected.</p> <p>For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cavities Data, Historical Land Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data (1:50,000).</p>	
<b>Mining and Natural Cavities Data</b>	-
<p>The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities.</p> <p>Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.</p>	
<b>Historical Land Use Information (1:2,500)</b>	1
<p>The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative.</p> <p>For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.</p>	
<b>Historical Land Use Information (1:10,000)</b>	2
<p>The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses.</p> <p>For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.</p>	
<b>Ground Stability Data (1:50,000)</b>	3
<p>The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.</p>	
<b>Historical Map List</b>	4
<p>The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.</p>	
<b>Data Currency</b>	5
<b>Data Suppliers</b>	6
<b>Useful Contacts</b>	7

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The brine subsidence data relating to the Droitwich area as provided in this report is derived from JPB studies and physical monitoring undertaken annually over more than 35 years. For more detailed interpretation contact enquiries@jpb.co.uk. JPB retain the copyright and intellectual rights to this data and accept no liability for any loss or damage, including in direct or consequential loss, arising from the use of this data.

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Data Type	Page Number	On Site	0 to 250m	251 to 500m
<b>Mining and Natural Cavities Data</b>				
BGS Recorded Mineral Sites				
Coal Mining Affected Areas			n/a	n/a
Man Made Mining Cavities				
Mining Instability			n/a	n/a
Natural Cavities				
Non Coal Mining Areas of Great Britain				n/a
Potential Mining Areas				
<b>Historical Land Use Information (1:2,500)</b>				
Extractive Industries or Potential Excavations from 1855-1909 (100m)				n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)				n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)				n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)				n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)	pg 1		1	n/a
Subterranean Features (100m)				n/a
<b>Historical Land Use Information (1:10,000)</b>				
Air Shafts				
Disturbed Ground				
General Quarrying				
Heap, unknown constituents				
Mineral Railway				
Mining & quarrying general				
Mining of coal & lignite				
Quarrying of sand & clay, operation of sand & gravel pits				
Former Marshes				
Potentially Infilled Land (Non-Water)				
Potentially Infilled Land (Water)	pg 2	1		
<b>Ground Stability Data (1:50,000)</b>				
CBSCB Compensation District			n/a	n/a
Brine Pumping Related Features				
Brine Subsidence Solution Area				
Potential for Collapsible Ground Stability Hazards	pg 3	Yes	Yes	n/a
Potential for Compressible Ground Stability Hazards	pg 3	Yes		n/a
Potential for Ground Dissolution Stability Hazards	pg 3	Yes		n/a
Potential for Landslide Ground Stability Hazards	pg 3	Yes	Yes	n/a
Potential for Running Sand Ground Stability Hazards	pg 3	Yes	Yes	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 3	Yes	Yes	n/a
Salt Mining Related Features				

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	<b>Extractive Industries or Potential Excavations from 1950-1980</b> Use: Pond First Map Published 1976 Date: Last Map Published N/A Date:	A12NE (NE)	53	-	527261 437424

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1855	A12SE (E)	0	-	527248 437237

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>CBSCB Compensation District</b> The site does not fall within the brine compensation area.				
	<b>Brine Subsidence Solution Area</b> The site does not fall within the brine subsidence solution area.				
3	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	2	526410 436973
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A7NW (S)	0	2	526371 436814
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12NW (NE)	39	2	527232 437484
4	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A7NW (S)	0	2	526371 436814
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	2	526410 436973
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	2	526410 436973
5	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12NW (NE)	0	2	527233 437366
6	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A12NW (NE)	0	2	527157 437436
7	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	2	526410 436973
8	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12NW (NE)	36	2	527230 437470
9	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NE (E)	188	2	527577 436881
10	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A16SW (NE)	234	2	527108 437599
11	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	2	526410 436973
12	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A7NW (S)	0	2	526371 436814
13	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12NW (NE)	39	2	527232 437484
14	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	2	526410 436973
15	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A7NW (S)	0	2	526371 436814
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A16SW (NE)	39	2	526978 437756

The following mapping has been analysed for Historical Land Use Information (1:2,500):

1:2,500	Mapsheet	Published Date
Ordnance Survey Plan	TA2636	1975
Ordnance Survey Plan	TA2636	1975
Ordnance Survey Plan	TA2636	1975
Ordnance Survey Plan	TA2636	1975
Ordnance Survey Plan	TA2636	1975
Ordnance Survey Plan	TA2736	1975
Ordnance Survey Plan	TA2536	1976
Ordnance Survey Plan	TA2536	1976
Ordnance Survey Plan	TA2537	1976
Ordnance Survey Plan	TA2637	1976
Ordnance Survey Plan	TA2637	1976
Ordnance Survey Plan	TA2637	1976
Ordnance Survey Plan	TA2637	1976
Ordnance Survey Plan	TA2737	1976








The following mapping has been analysed for Historical Land Use Information (1:10,000):

1:10,560	Mapsheet	Published Date
Yorkshire	213_00	1855
Yorkshire	228_00	1855
Yorkshire	213_SW	1892
Yorkshire	228_NW	1892
Yorkshire	213_SW	1910
Yorkshire	228_NW	1910
Yorkshire	228_NW	1951
Yorkshire	213_SW	1952
Ordnance Survey Plan	TA23NE	1956
Ordnance Survey Plan	TA23NW	1956
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	TA23NE	1978
Ordnance Survey Plan	TA23NW	1978



Mining and Cavities Data	Version	Update Cycle
<b>BGS Recorded Mineral Sites</b> British Geological Survey - National Geoscience Information Service	November 2022	Bi-Annually
<b>Coal Mining Affected Areas</b> The Coal Authority - Property Searches	February 2023	Annual Rolling Update
<b>Man Made Mining Cavities</b> Stantec UK Ltd	December 2022	Bi-Annually
<b>Mining Instability</b> Ove Arup & Partners	June 1998	Not Applicable
<b>Natural Cavities</b> Stantec UK Ltd	December 2022	Bi-Annually
<b>Non Coal Mining Areas of Great Britain</b> British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	Version	Update Cycle
<b>Subterranean Features</b> Landmark Information Group Limited	June 2022	Bi-Annually
Ground Stability Data (1:50,000)	Version	Update Cycle
<b>CBSCB Compensation District</b> Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
<b>Potential for Collapsible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	April 2020	As notified
<b>Potential for Compressible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Ground Dissolution Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Landslide Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Running Sand Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Brine Subsidence Solution Area</b> Johnson Poole & Bloomer	December 2020	

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
British Geological Survey	 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	 The Coal Authority
Ove Arup	
Stantec UK Ltd	
Wardell Armstrong	 wardell armstrong your earth our world
Johnson Poole & Bloomer	

Contact	Name and Address	Contact Details
1	<b>The Coal Authority - Property Searches</b> 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: <a href="mailto:groundstability@coal.gov.uk">groundstability@coal.gov.uk</a> Website: <a href="http://www2.groundstability.com">www2.groundstability.com</a>
2	<b>British Geological Survey - Enquiry Service</b> British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: <a href="mailto:enquiries@bgs.ac.uk">enquiries@bgs.ac.uk</a> Website: <a href="http://www.bgs.ac.uk">www.bgs.ac.uk</a>
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