SS 87NW/12

Norwest Holst Soil Engineering Ltd.

Borehole No. **3**

BOREHOLE LOG SS 8210 7692

Contract No. F4222
Location Portcawl Pool
Client Ogwr Borough Council
Method of Boring Percussion
Diameter of Borehole 150mm

Sheet 1 of 1
Chainage
Ground Level
Date 6.6.79

Description of Strata	Legend	Depth Below G.L. (m)	Thickness of Strata (m)	Type of sample	C kN/m²	φ deg	m.c. %	γ Mg/m³	N
MADEGROUND: ash, clay & hardcore		0.40	0.40	0.50					
Medium dense brown fine SAND with occasional gravel and cobbles									21
				2.00					30
				3.50					29
				5.00					27
				6.50					24
		7.40	7.00						
Very dense dark brown fine silty SAND				7.75					52
		8.35							
Firm dark grey silty CLAY with sand partings				8.50	33	0	25	1.99	
				9.50	46	0	24	2.10	
		10.00							

Key

- □ Undisturbed Sample
- ○ Disturbed Sample
- △ Water Sample
- I Penetration Test
- φ Angle of Friction
- m.c. Moisture Content
- γ Bulk Density
- N S.P.T. Value
- C Apparent Cohesion

Remarks (Observations of Ground Water etc.)

Water struck at 4.10m
Sealed offf at 9.00m
Standing at 4.10m after casing withdrawn

Water levels are subject to seasonal or tidal variations and should not be taken as constant

SS87NW/14

Norwest Holst Soil Engineering Ltd.

Borehole No. **5**

BOREHOLE LOG

SS 8202 7692

Contract No. F4222
Location Porthcawl Pool
Client Ogwr Borough Council
Method of Boring Percussion
Diameter of Borehole 150mm

Sheet 1 of 1
Chainage
Ground Level
Date 8.6.79

Description of Strata	Legend	Depth Below G.L. (m)	Thickness of Strata (m)	Type of sample	C kN/m²	φ deg	m.c. %	γ Mg/m³	N
MADEGROUND: Medium dense black clayey ash with hardcore				0.50					35
				2.00	40	26	12	1.48	
		3.75	3.75	3.50	30	24	14	1.96	
Dense light brown fine silty SAND				5.00					44
				6.50					57
		7.25	3.50						
Soft to firm dark grey silty clay with sand partings				8.00	18	0	32	1.82	
				9.50	35	10	24	1.95	
		10.00							

Key

- □ Undisturbed Sample
- ○ Disturbed Sample
- △ Water Sample
- I Penetration Test
- φ Angle of Friction
- m.c. Moisture Content
- γ Bulk Density
- N S.P.T. Value
- C Apparent Cohesion

Remarks (Observations of Ground Water etc.)

Water seepages at 5.75m
Standing level 6.00m

Water levels are subject to seasonal or tidal variations and should not be taken as constant

SS87NW/15

Norwest Holst Soil Engineering Ltd.

BOREHOLE LOG

Borehole No. 6

SS 8198 7691

Contract No. F4222
Location Portcawl Pool
Client Ogwr Borough Council
Method of Boring Percussion
Diameter of Borehole 150mm

Sheet 1 of 1
Chainage
Ground Level
Date 8.6.79

Description of Strata	Legend	Depth Below G.L. (m)	Thickness of Strata (m)	Type of sample	C kN/m²	φ deg	m.c. %	γ Mg/m³	N
MADEGROUND: Stiff dark brown sandy stony CLAY				0.50					28
		2.25	2.25	2.00					
Dense light brown fine SAND with occasional gravel				3.50					42
				5.00					33
				6.50					34
		7.25	5.00						
Firm brown very sandy CLAY				7.50					
		7.75	0.50		40	0	16	2.04	
Firm dark brown silty CLAY									
		9.25	1.50	9.00					
Brown clayey SAND & GRAVEL		9.60	0.35		30	30	17	2.14	
Pale grey LIMESTONE		10.00							

Key

- □ Undisturbed Sample
- ○ Disturbed Sample
- △ Water Sample
- I Penetration Test
- φ Angle of Friction
- m.c. Moisture Content
- γ Bulk Density
- N S.P.T. Value
- C Apparent Cohesion

Remarks (Observations of Ground Water etc.)

Borehole dry

Water levels are subject to seasonal or tidal variations and should not be taken as constant

SS87NW/21

GLAMORGAN COUNTY COUNCIL ROADS & BRIDGES DEPARTMENT

MATERIALS LABORATORY

BOREHOLE LOG AND TEST RESULTS

Site: **Porthcawl Approach Road, Nottage to Esplanade, Porthcawl.**

Borehole No: **4** Position: **See attached plan.**

Date: **6th July,1967**

Depth From ft. in	Depth To ft. in	Thickness	Description of strata	Depth below surface ft. in	NMC	LL	PL	PI	SPT
0 0	0 8 (0.2)	0 8	LOOSE brown fine SAND with a trace of medium gravel						
0 8	6 0 (1.83)	5 4	MODERATELY COMPACT brown fine SAND and coarse GRAVEL with a few cobbles	0 8 to 3 6	10				
				3 6 to 6 0	10				
6 0	9 0 (2.74)	3 0	MODERATELY COMPACT fine brown SAND	6 6 to 7 6	23				30
9 0	13 7 (4.14)	4 7 Penetrated	MODERATELY COMPACT brown fine SAND and coarse medium GRAVEL with a few small cobbles	12 7 to 13 7	21				15

Water had to be added to assist drilling

NMC - Natural Moisture Content LL Liquid Limit

NATIONAL GRID REFERENCE : SS 8203 7963

SS87/7

STRATIGRAPHICAL LOG

DESCRIPTION OF STRATA (colour, grain size & lithology)			THICKNESS M	DEPTH m
OVERBURDEN	BROWN/RED	SOFT/MEDIUM	2	2
SAND + GRAVELD (DRY)	BROWN	VERY SOFT	5	7
LIMESTONE	GREY + RED	HARD	10	17
CALCITE	WHITE	MEDIUM	1	18
LIMESTONE	GREY/RED	HARD	3	21
WATER (1,000 G.P.H.)				
LIMESTONE	GREY/RED	HARD	6	27
WATER (3,000 G.P.H.)				
LIMESTONE	GREY/RED	HARD	4	31
WATER (5000G.P.H.)				
LIMESTONE	GREY/RED	HARD	11	42
WATER (10,000 G.P.H.)				
LIMESTONE POSSIBILY GAINING MORE WATER	GREY/RED	HARD	8	50

APPENDIX 5 - Groundsure Report

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

Porthcawl, Eastern Promenade, Porthcawl , CF36 5TS,

Order Details

Date: 21/01/2021

Your ref: EMS_663326_874859

Our Ref: EMS-663326_874859

Client: emapsite

Site Details

Location: 282032 176903

Area: 0.98 ha

Authority: Pen-y-bont ar Ogwr - Bridgend County Borough Council

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	Historical industrial land uses	8	12	44	29	-
18	1.2	Historical tanks	0	0	13	12	-
19	1.3	Historical energy features	0	0	10	16	-
21	1.4	Historical petrol stations	0	0	0	0	-
21	1.5	Historical garages	0	0	2	3	-
21	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**
22	2.1	Historical industrial land uses	9	14	48	33	-
26	2.2	Historical tanks	0	0	18	19	-
28	2.3	Historical energy features	0	0	16	34	-
30	2.4	Historical petrol stations	0	0	0	0	-
30	2.5	Historical garages	0	0	3	6	-
Page	**Section**	**Waste and landfill**	**On site**	**0-50m**	**50-250m**	**250-500m**	**500-2000m**
32	3.1	Active or recent landfill	0	0	0	0	-
32	3.2	Historical landfill (BGS records)	0	0	0	0	-
33	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
33	3.4	Historical landfill (EA/NRW records)	0	1	0	0	-
33	3.5	Historical waste sites	0	0	0	0	-
33	3.6	Licensed waste sites	0	0	0	0	-
34	3.7	Waste exemptions	0	0	1	2	-
Page	**Section**	**Current industrial land use**	**On site**	**0-50m**	**50-250m**	**250-500m**	**500-2000m**
35	4.1	Recent industrial land uses	0	1	17	-	-
37	4.2	Current or recent petrol stations	0	0	0	0	-
37	4.3	Electricity cables	0	0	0	0	-
37	4.4	Gas pipelines	0	0	0	0	-
37	4.5	Sites determined as Contaminated Land	0	0	0	0	-

37	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
38	4.7	Regulated explosive sites	0	0	0	0	-
38	4.8	Hazardous substance storage/usage	0	0	0	0	-
38	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
38	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
38	**4.11**	**Licensed pollutant release (Part A(2)/B)**	0	0	1	0	-
39	4.12	Radioactive Substance Authorisations	0	0	0	0	-
39	**4.13**	**Licensed Discharges to controlled waters**	0	0	0	1	-
39	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
40	4.15	Pollutant release to public sewer	0	0	0	0	-
40	4.16	List 1 Dangerous Substances	0	0	0	0	-
40	4.17	List 2 Dangerous Substances	0	0	0	0	-
40	**4.18**	**Pollution Incidents (EA/NRW)**	0	0	0	7	-
41	4.19	Pollution inventory substances	0	0	0	0	-
41	4.20	Pollution inventory waste transfers	0	0	0	0	-
42	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
43	**5.1**	**Superficial aquifer**	Identified (within 500m)				
45	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
47	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
48	**5.4**	**Groundwater vulnerability- soluble rock risk**	Identified (within 0m)				
49	5.5	Groundwater vulnerability- local information	None (within 0m)				
50	**5.6**	**Groundwater abstractions**	0	0	0	0	4
51	5.7	Surface water abstractions	0	0	0	0	0
52	**5.8**	**Potable abstractions**	0	0	0	0	2
52	5.9	Source Protection Zones	0	0	0	0	-
52	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
53	6.1	Water Network (OS MasterMap)	0	0	0	-	-

53	6.2	Surface water features	0	0	0	-	-
54	**6.3**	**WFD Surface water body catchments**	1	-	-	-	-
54	**6.4**	**WFD Surface water bodies**	0	0	1	-	-
55	**6.5**	**WFD Groundwater bodies**	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
56	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
56	7.2	Historical Flood Events	0	0	0	-	-
56	7.3	Flood Defences	0	0	0	-	-
56	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
57	7.5	Flood Storage Areas	0	0	0	-	-
58	7.6	Flood Zone 2	None (within 50m)				
58	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
59	**8.1**	**Surface water flooding**	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
61	**9.1**	**Groundwater flooding**	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
62	**10.1**	**Sites of Special Scientific Interest (SSSI)**	0	0	0	0	1
63	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
63	**10.3**	**Special Areas of Conservation (SAC)**	0	0	0	0	1
64	10.4	Special Protection Areas (SPA)	0	0	0	0	0
64	10.5	National Nature Reserves (NNR)	0	0	0	0	0
64	**10.6**	**Local Nature Reserves (LNR)**	0	0	0	0	1
64	**10.7**	**Designated Ancient Woodland**	0	0	0	0	5
65	10.8	Biosphere Reserves	0	0	0	0	0
65	10.9	Forest Parks	0	0	0	0	0
65	10.10	Marine Conservation Zones	0	0	0	0	0
66	10.11	Green Belt	0	0	0	0	0
66	10.12	Proposed Ramsar sites	0	0	0	0	0

66	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
66	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
66	10.15	Nitrate Sensitive Areas	0	0	0	0	0
67	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
68	10.17	SSSI Impact Risk Zones	0	-	-	-	-
68	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
69	11.1	World Heritage Sites	0	0	0	-	-
70	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
70	11.3	National Parks	0	0	0	-	-
70	**11.4**	**Listed Buildings**	0	0	1	-	-
71	**11.5**	**Conservation Areas**	0	0	1	-	-
71	11.6	Scheduled Ancient Monuments	0	0	0	-	-
71	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
72	**12.1**	**Agricultural Land Classification**	Grade 3b (within 250m)				
73	12.2	Open Access Land	0	0	0	-	-
73	12.3	Tree Felling Licences	0	0	0	-	-
73	12.4	Environmental Stewardship Schemes	0	0	0	-	-
73	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
74	13.1	Priority Habitat Inventory	0	0	0	-	-
74	13.2	Habitat Networks	0	0	0	-	-
74	13.3	Open Mosaic Habitat	0	0	0	-	-
74	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
75	**14.1**	**10k Availability**	Identified (within 500m)				
76	**14.2**	**Artificial and made ground (10k)**	1	0	0	0	-
77	**14.3**	**Superficial geology (10k)**	2	0	2	2	-

78	14.4	Landslip (10k)	0	0	0	0	-
79	14.5	Bedrock geology (10k)	1	0	4	4	-
80	14.6	Bedrock faults and other linear features (10k)	0	0	2	9	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
82	15.1	50k Availability	Identified (within 500m)				
83	15.2	Artificial and made ground (50k)	1	1	0	1	-
84	15.3	Artificial ground permeability (50k)	1	1	-	-	-
85	15.4	Superficial geology (50k)	1	0	2	1	-
86	15.5	Superficial permeability (50k)	Identified (within 50m)				
86	15.6	Landslip (50k)	0	0	0	0	-
86	15.7	Landslip permeability (50k)	None (within 50m)				
87	15.8	Bedrock geology (50k)	1	0	4	3	-
88	15.9	Bedrock permeability (50k)	Identified (within 50m)				
88	15.10	Bedrock faults and other linear features (50k)	0	0	2	1	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
89	16.1	BGS Boreholes	7	1	1	-	-
Page	Section	Natural ground subsidence					
91	17.1	Shrink swell clays	Negligible (within 50m)				
92	17.2	Running sands	Low (within 50m)				
94	17.3	Compressible deposits	Moderate (within 50m)				
96	17.4	Collapsible deposits	Very low (within 50m)				
97	17.5	Landslides	Very low (within 50m)				
98	17.6	Ground dissolution of soluble rocks	Low (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	BritPits	0	0	0	1	-
101	18.3	Surface ground workings	2	8	6	-	-
102	18.4	Underground workings	0	0	0	0	0
102	18.5	Historical Mineral Planning Areas	0	0	0	1	-

102	**18.6**	**Non-coal mining**	1	0	0	0	0
103	18.7	Mining cavities	0	0	0	0	0
103	18.8	JPB mining areas	None (within 0m)				
103	18.9	Coal mining	None (within 0m)				
103	18.10	Brine areas	None (within 0m)				
104	18.11	Gypsum areas	None (within 0m)				
104	18.12	Tin mining	None (within 0m)				
104	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
105	**19.1**	**Radon**	Between 5% and 10% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
106	**20.1**	**BGS Estimated Background Soil Chemistry**	2	2	-	-	-
106	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
107	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
108	21.1	Underground railways (London)	0	0	0	-	-
108	21.2	Underground railways (Non-London)	0	0	0	-	-
109	21.3	Railway tunnels	0	0	0	-	-
109	**21.4**	**Historical railway and tunnel features**	10	3	5	-	-
110	21.5	Royal Mail tunnels	0	0	0	-	-
110	**21.6**	**Historical railways**	0	0	1	-	-
110	21.7	Railways	0	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: 18/09/2019

Site Area: 0.98ha

Recent site history - 2017 aerial photograph

Capture Date: 25/05/2017

Site Area: 0.98ha

Recent site history - 2012 aerial photograph

Capture Date: 26/05/2012

Site Area: 0.98ha

Recent site history - 2009 aerial photograph

Capture Date: 17/09/2009

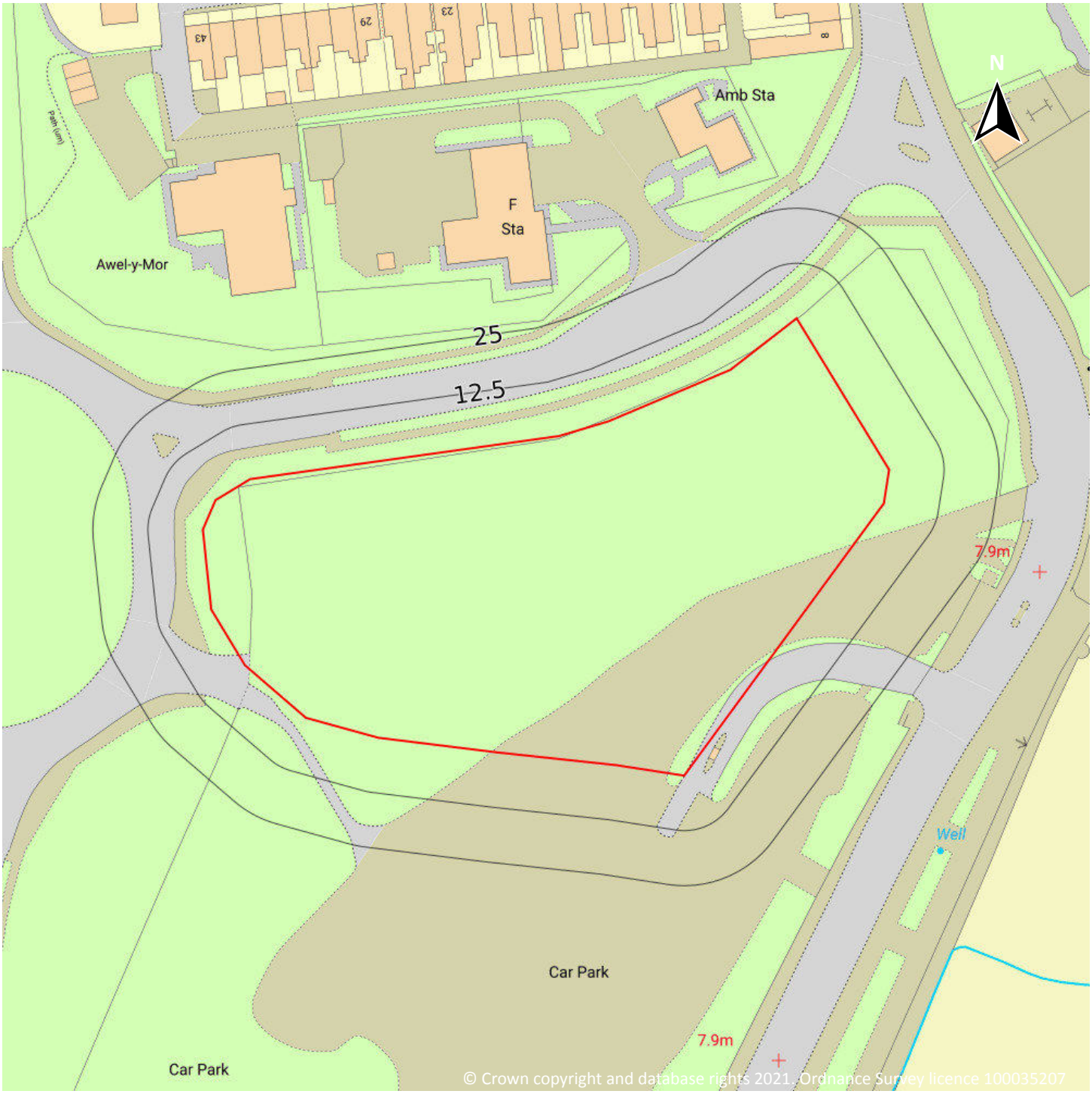
Site Area: 0.98ha

Recent site history - 2000 aerial photograph

Capture Date: 21/07/2000

Site Area: 0.98ha

OS MasterMap site plan



Site Area: 0.98ha

1 Past land use

Site Outline

Search buffers in metres (m)

- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

1.1 Historical industrial land uses

Records within 500m	93

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**	**Dock**	**1876**	**355725**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Ship Building Yard**	**1876**	**328777**
A	**On site**	**Smithy**	**1876**	**332525**
B	**On site**	**Railway Sidings**	**1900**	**346466**
B	**On site**	**Railway Sidings**	**1947 - 1948**	**350515**
B	**On site**	**Dock**	**1900 - 1914**	**350793**
B	**On site**	**Railway Sidings**	**1876**	**354790**
B	**On site**	**Railway Sidings**	**1914**	**360035**
2	3m W	Unspecified Ground Workings	1948	334522
C	12m SE	Mineral Railway Sidings	1978	366455
C	12m SE	Mineral Railway Sidings	1991	366917
3	27m N	Unspecified Pit	1876	336466
D	37m NW	Fire Station	1978	356416
D	37m NW	Fire Station	1991	370403
B	45m SW	Unspecified Pit	1914 - 1947	376876
B	46m SW	Unspecified Pit	1948	357082
B	46m SW	Unspecified Ground Workings	1900	334525
E	46m E	Unspecified Commercial/Industrial	1948	350920
E	47m SE	Unspecified Heap	1876	327888
E	47m E	Unspecified Commercial/Industrial	1947 - 1948	365314
B	54m W	Cuttings	1969	337092
F	59m NW	Unspecified Tank	1947	343445
F	61m NW	Unspecified Tank	1948	376785
B	66m SW	Unspecified Tank	1876	320266
E	67m E	Tramway Sidings	1914	324071
G	77m SW	Railway Station	1947 - 1948	349448
H	92m NW	Police Station	1991	359920
H	92m NW	Police Station	1978	360412
B	100m SW	Railway Building	1900	323984

ID	Location	Land use	Dates present	Group ID
G	102m SW	Unspecified Ground Workings	1900	334524
C	103m S	Railway Building	1978	364793
C	103m S	Railway Building	1991	380113
C	106m S	Railway Building	1947	378304
G	108m SW	Unspecified Pit	1914	343329
G	111m SW	Unspecified Pit	1876	370077
H	119m NW	Railway Building	1948	323983
G	134m SW	Railway Building	1900	323985
E	135m NE	Unspecified Tanks	1948	328483
I	139m SW	Sawmill	1876	339217
E	140m NE	Unspecified Tank	1947	320265
E	154m NE	Unspecified Tank	1947	320264
H	156m NW	Railway Building	1947	360205
H	159m NW	Railway Building	1948	350144
4	160m W	Unspecified Heap	1876	327901
H	164m NW	Railway Building	1900	342259
K	167m NE	Railway Sidings	1947	340719
E	175m NE	Unspecified Tank	1947	320269
E	177m E	Unspecified Tank	1947	320268
L	189m E	Unspecified Tank	1914	320267
E	191m NE	Unspecified Tank	1947 - 1948	358244
L	198m E	Engine Shed	1914	322394
K	208m NE	Gas Works	1914	349213
K	214m NE	Gas Works	1876	357974
M	217m N	Railway Station	1914	354586
K	219m NE	Gas Works	1900	346855
K	221m NE	Gasometer	1876	367094
K	222m NE	Unspecified Tank	1914	320263

ID	Location	Land use	Dates present	Group ID
M	222m N	Railway Station	1876	379355
K	226m NE	Gasometer	1900	371551
M	228m N	Railway Station	1900	361470
N	234m SW	Police Station	1969	332728
K	238m NE	Water Works	1900	332030
K	241m NE	Unspecified Tank	1914 - 1947	363106
K	244m NE	Unspecified Tanks	1948	328484
K	263m NE	Unspecified Tank	1947	340524
K	268m NE	Unspecified Tank	1969 - 1978	369799
N	273m SW	Fire Station	1969	330993
P	290m E	Sand Pits	1948	322623
Q	319m N	Railway Sidings	1876	357892
R	328m N	Railway Sidings	1914	346585
R	329m N	Railway Sidings	1947 - 1948	367487
Q	339m N	Railway Sidings	1914	363763
T	348m SW	Lifeboat Station	1876	329082
U	355m E	Unspecified Pit	1969 - 1978	368626
U	355m E	Unspecified Pit	1991	378208
R	376m N	Lime Works	1900 - 1914	348038
5	404m SW	Lifeboat Station	1900	329083
V	411m SW	Unspecified Pit	1876	336458
R	415m N	Unspecified Quarry	1876	353479
R	416m N	Tramway Sidings	1900	324073
V	421m SW	Unspecified Ground Workings	1900	334523
W	428m S	Unspecified Tank	1991	341484
W	428m S	Unspecified Tank	1978	359873
R	431m N	Lime Kiln	1914	331915
R	432m N	Unspecified Quarry	1900	355538

ID	Location	Land use	Dates present	Group ID
R	442m N	Unspecified Ground Workings	1948	334520
6	449m NE	Unspecified Heap	1978	327889
7	483m E	Unspecified Pit	1991	336463
8	484m NW	Unspecified Quarry	1914	325517
Z	487m S	Coastguard Station	1900	358366
Z	489m S	Coastguard Station	1876	346356
Z	489m S	Coastguard Station	1914 - 1947	367062
Z	489m S	Coastguard Station	1948	367415

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**25**

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 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
B	58m SW	Unspecified Tank	1943 - 1965	42887
F	63m NW	Unspecified Tank	1943	40743
F	65m NW	Unspecified Tank	1965	42828
B	101m SW	Unspecified Tank	1880 - 1919	40828
H	113m NW	Unspecified Tank	1919	38828
L	198m E	Unspecified Tank	1919	38812
K	211m NE	Tanks	1943	39752
K	211m NE	Gas Works	1919	44305
K	216m NE	Gas Works	1880 - 1899	40295
K	223m NE	Gasometer	1880 - 1899	41860

ID	Location	Land use	Dates present	Group ID
K	225m NE	Gasometer	1919	39904
K	244m NE	Unspecified Tank	1943	38813
K	244m NE	Gasometer	1919	39905
M	253m N	Unspecified Tank	1996	42771
M	253m N	Unspecified Tank	1993	43647
M	253m N	Unspecified Tank	1976	44252
M	254m N	Unspecified Tank	1962 - 1987	42524
K	263m NE	Gas Holder	1988	42035
K	264m NE	Gas Holder	1965	43447
K	264m NE	Gas Holder	1966	43672
K	266m NE	Unspecified Tank	1943	38814
M	276m N	Unspecified Tank	1880	38826
T	364m SW	Unspecified Tank	1943 - 1976	41413
T	368m SW	Unspecified Tank	1995	43378
Z	497m S	Unspecified Tank	1880 - 1976	41341

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**26**

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 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
J	148m N	Electricity Substation	1976 - 1996	20624
J	149m N	Electricity Transformer	1968	19975
J	151m N	Electricity Substation	1962 - 1987	20702

ID	Location	Land use	Dates present	Group ID
K	211m NE	Gas Works	1919	21726
K	216m NE	Gas Works	1880 - 1899	21811
I	220m SW	Electricity Substation	1976	23626
K	223m NE	Gasometer	1880 - 1899	22827
K	225m NE	Gasometer	1919	20044
I	227m SW	Electricity Substation	1995	21939
K	244m NE	Gasometer	1919	20045
K	263m NE	Gas Holder	1966 - 1988	20559
K	264m NE	Gas Holder	1965	22253
O	275m NW	Electricity Substation	1962 - 1996	23585
S	337m N	Electricity Transformer	1968	19973
S	337m N	Electricity Substation	1962 - 1996	20211
R	408m N	Electricity Substation	1992 - 1995	23399
V	426m SW	Electricity Substation	1976	19585
V	446m SW	Electricity Substation	1995	20346
X	449m W	Electricity Substation	1995	21993
X	449m W	Electricity Substation	1995	22519
X	451m W	Electricity Substation	1976	22633
Y	470m NW	Electricity Transformer	1968	19972
Y	470m NW	Electricity Substation	1962 - 1996	22394
P	471m E	Electricity Substation	1965 - 1966	22817
P	482m E	Electricity Substation	1988 - 1992	22339
P	483m E	Electricity Substation	1995	22836

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 un-grouped 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	5

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 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
I	177m SW	Garage	1965	6681
N	242m W	Garage	1965 - 1976	7893
O	269m NW	Garage	1968 - 1976	7471
O	269m NW	Garage	1965 - 1993	7787
O	271m NW	Garage	1962 - 1987	7747

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

Site Outline

Search buffers in metres (m)

- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

2.1 Historical industrial land uses

Records within 500m	104

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 22**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Railway Sidings**	**1900**	**346466**
A	**On site**	**Railway Sidings**	**1947**	**350515**
A	**On site**	**Dock**	**1914**	**350793**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Ship Building Yard**	**1876**	**328777**
A	**On site**	**Railway Sidings**	**1914**	**360035**
A	**On site**	**Smithy**	**1876**	**332525**
A	**On site**	**Railway Sidings**	**1876**	**354790**
A	**On site**	**Railway Sidings**	**1948**	**350515**
B	**On site**	**Dock**	**1876**	**355725**
B	2m S	Dock	1900	350793
1	3m W	Unspecified Ground Workings	1948	334522
C	12m SE	Mineral Railway Sidings	1991	366917
C	12m SE	Mineral Railway Sidings	1978	366455
2	27m N	Unspecified Pit	1876	336466
D	37m NW	Fire Station	1991	370403
D	37m NW	Fire Station	1978	356416
A	45m SW	Unspecified Pit	1947	376876
A	45m SW	Unspecified Pit	1914	376876
A	46m SW	Unspecified Pit	1948	357082
A	46m SW	Unspecified Ground Workings	1900	334525
E	46m E	Unspecified Commercial/Industrial	1948	350920
E	47m SE	Unspecified Heap	1876	327888
E	47m E	Unspecified Commercial/Industrial	1947	365314
A	54m W	Cuttings	1969	337092
F	59m NW	Unspecified Tank	1947	343445
F	61m NW	Unspecified Tank	1948	376785
A	66m SW	Unspecified Tank	1876	320266
E	67m E	Tramway Sidings	1914	324071
G	77m SW	Railway Station	1947	349448
G	81m SW	Railway Station	1948	349448
H	92m NW	Police Station	1991	359920

ID	Location	Land Use	Date	Group ID
H	92m NW	Police Station	1978	360412
A	100m SW	Railway Building	1900	323984
G	102m SW	Unspecified Ground Workings	1900	334524
C	103m S	Railway Building	1991	380113
C	103m S	Railway Building	1978	364793
C	106m S	Railway Building	1947	378304
G	108m SW	Unspecified Pit	1914	343329
G	111m SW	Unspecified Pit	1876	370077
H	119m NW	Railway Building	1948	323983
G	134m SW	Railway Building	1900	323985
E	135m NE	Unspecified Tanks	1948	328483
I	139m SW	Sawmill	1876	339217
E	140m NE	Unspecified Tank	1947	320265
E	154m NE	Unspecified Tank	1947	320264
H	156m NW	Railway Building	1947	360205
H	159m NW	Railway Building	1948	350144
3	160m W	Unspecified Heap	1876	327901
H	164m NW	Railway Building	1900	342259
K	167m NE	Railway Sidings	1947	340719
E	175m NE	Unspecified Tank	1947	320269
K	177m NE	Unspecified Commercial/Industrial	1948	365314
E	177m E	Unspecified Tank	1947	320268
L	189m E	Unspecified Tank	1914	320267
E	191m NE	Unspecified Tank	1948	358244
E	194m NE	Unspecified Tank	1947	358244
L	198m E	Engine Shed	1914	322394
K	208m NE	Gas Works	1914	349213
K	214m NE	Gas Works	1876	357974

ID	Location	Land Use	Date	Group ID
M	217m N	Railway Station	1914	354586
K	219m NE	Gas Works	1900	346855
K	221m NE	Gasometer	1876	367094
K	222m NE	Unspecified Tank	1914	320263
M	222m N	Railway Station	1876	379355
K	226m NE	Gasometer	1900	371551
M	228m N	Railway Station	1900	361470
N	234m SW	Police Station	1969	332728
K	238m NE	Water Works	1900	332030
K	241m NE	Unspecified Tank	1914	363106
K	244m NE	Unspecified Tanks	1948	328484
K	245m NE	Unspecified Tank	1947	363106
K	263m NE	Unspecified Tank	1947	340524
K	268m NE	Unspecified Tank	1969	369799
K	268m NE	Unspecified Tank	1978	369799
N	273m SW	Fire Station	1969	330993
P	290m E	Sand Pits	1948	322623
Q	319m N	Railway Sidings	1876	357892
R	328m N	Railway Sidings	1914	346585
R	329m N	Railway Sidings	1947	367487
Q	339m N	Railway Sidings	1914	363763
T	348m SW	Lifeboat Station	1876	329082
U	355m E	Unspecified Pit	1991	378208
U	355m E	Unspecified Pit	1969	368626
U	355m E	Unspecified Pit	1978	368626
R	376m N	Lime Works	1914	348038
4	404m SW	Lifeboat Station	1900	329083
V	411m SW	Unspecified Pit	1876	336458

ID	Location	Land Use	Date	Group ID
R	415m N	Unspecified Quarry	1876	353479
R	416m N	Tramway Sidings	1900	324073
R	417m N	Lime Works	1900	348038
V	421m SW	Unspecified Ground Workings	1900	334523
W	428m S	Unspecified Tank	1991	341484
W	428m S	Unspecified Tank	1978	359873
R	431m N	Lime Kiln	1914	331915
R	432m N	Unspecified Quarry	1900	355538
R	442m N	Unspecified Ground Workings	1948	334520
5	449m NE	Unspecified Heap	1978	327889
6	483m E	Unspecified Pit	1991	336463
7	484m NW	Unspecified Quarry	1914	325517
Z	487m S	Coastguard Station	1900	358366
Z	489m S	Coastguard Station	1947	367062
Z	489m S	Coastguard Station	1914	367062
Z	489m S	Coastguard Station	1876	346356
Z	489m S	Coastguard Station	1948	367415

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**37**

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 22**

ID	Location	Land Use	Date	Group ID
A	58m SW	Unspecified Tank	1943	42887
A	58m SW	Unspecified Tank	1965	42887
F	63m NW	Unspecified Tank	1943	40743

ID	Location	Land Use	Date	Group ID
F	65m NW	Unspecified Tank	1965	42828
A	101m SW	Unspecified Tank	1899	40828
A	101m SW	Unspecified Tank	1880	40828
A	101m SW	Unspecified Tank	1919	40828
H	113m NW	Unspecified Tank	1919	38828
L	198m E	Unspecified Tank	1919	38812
K	211m NE	Gas Works	1919	44305
K	211m NE	Tanks	1943	39752
K	216m NE	Gas Works	1899	40295
K	216m NE	Gas Works	1880	40295
K	223m NE	Gasometer	1899	41860
K	223m NE	Gasometer	1880	41860
K	225m NE	Gasometer	1919	39904
K	244m NE	Gasometer	1919	39905
K	244m NE	Unspecified Tank	1943	38813
M	253m N	Unspecified Tank	1996	42771
M	253m N	Unspecified Tank	1993	43647
M	253m N	Unspecified Tank	1976	44252
M	254m N	Unspecified Tank	1962	42524
M	254m N	Unspecified Tank	1987	42524
K	263m NE	Gas Holder	1988	42035
K	264m NE	Gas Holder	1965	43447
K	264m NE	Gas Holder	1965	43447
K	264m NE	Gas Holder	1966	43672
K	266m NE	Unspecified Tank	1943	38814
M	276m N	Unspecified Tank	1880	38826
T	364m SW	Unspecified Tank	1943	41413
T	365m SW	Unspecified Tank	1976	41413

ID	Location	Land Use	Date	Group ID
T	365m SW	Unspecified Tank	1965	41413
T	368m SW	Unspecified Tank	1995	43378
T	368m SW	Unspecified Tank	1995	43378
Z	497m S	Unspecified Tank	1880	41341
Z	498m S	Unspecified Tank	1976	41341
Z	498m S	Unspecified Tank	1965	41341

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**50**

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 22**

ID	Location	Land Use	Date	Group ID
J	148m N	Electricity Substation	1996	20624
J	148m N	Electricity Substation	1993	20624
J	149m N	Electricity Substation	1976	20624
J	149m N	Electricity Transformer	1968	19975
J	151m N	Electricity Substation	1962	20702
J	151m N	Electricity Substation	1987	20702
K	211m NE	Gas Works	1919	21726
K	216m NE	Gas Works	1899	21811
K	216m NE	Gas Works	1880	21811
I	220m SW	Electricity Substation	1976	23626
K	223m NE	Gasometer	1899	22827
K	223m NE	Gasometer	1880	22827
K	225m NE	Gasometer	1919	20044
I	227m SW	Electricity Substation	1995	21939

ID	Location	Land Use	Date	Group ID
I	227m SW	Electricity Substation	1995	21939
K	244m NE	Gasometer	1919	20045
K	263m NE	Gas Holder	1988	20559
K	264m NE	Gas Holder	1965	22253
K	264m NE	Gas Holder	1965	22253
K	264m NE	Gas Holder	1966	20559
O	275m NW	Electricity Substation	1976	23585
O	276m NW	Electricity Substation	1996	23585
O	276m NW	Electricity Substation	1993	23585
O	277m NW	Electricity Substation	1962	23585
O	277m NW	Electricity Substation	1987	23585
S	337m N	Electricity Substation	1976	20211
S	337m N	Electricity Transformer	1968	19973
S	339m N	Electricity Substation	1996	20211
S	339m N	Electricity Substation	1993	20211
S	339m N	Electricity Substation	1962	20211
S	339m N	Electricity Substation	1987	20211
R	408m N	Electricity Substation	1992	23399
R	410m N	Electricity Substation	1995	23399
V	426m SW	Electricity Substation	1976	19585
V	446m SW	Electricity Substation	1995	20346
V	446m SW	Electricity Substation	1995	20346
X	449m W	Electricity Substation	1995	22519
X	449m W	Electricity Substation	1995	21993
X	451m W	Electricity Substation	1976	22633
Y	470m NW	Electricity Substation	1976	22394
Y	470m NW	Electricity Transformer	1968	19972
Y	471m NW	Electricity Substation	1962	22394

ID	Location	Land Use	Date	Group ID
Y	471m NW	Electricity Substation	1987	22394
Y	471m NW	Electricity Substation	1996	22394
Y	471m NW	Electricity Substation	1993	22394
P	471m E	Electricity Substation	1966	22817
P	472m E	Electricity Substation	1965	22817
P	482m E	Electricity Substation	1988	22339
P	482m E	Electricity Substation	1992	22339
P	483m E	Electricity Substation	1995	22836

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	9

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'.

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
I	177m SW	Garage	1965	6681
N	242m W	Garage	1965	7893
N	243m W	Garage	1976	7893
O	269m NW	Garage	1965	7787
O	269m NW	Garage	1976	7471

ID	Location	Land Use	Date	Group ID
O	269m NW	Garage	1968	7471
O	270m NW	Garage	1993	7787
O	271m NW	Garage	1987	7747
O	271m NW	Garage	1962	7747

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Waste exemptions

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	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	1

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 32**

ID	Location	Details		
1	44m N	Site Address: Sandy Bay Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded 31/12/1960 Last Recorded: 31/12/1974

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

3.5 Historical waste sites

Records within 500m	0

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

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

3.6 Licensed waste sites

Records within 500m	0

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

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

3.7 Waste exemptions

Records within 500m	3

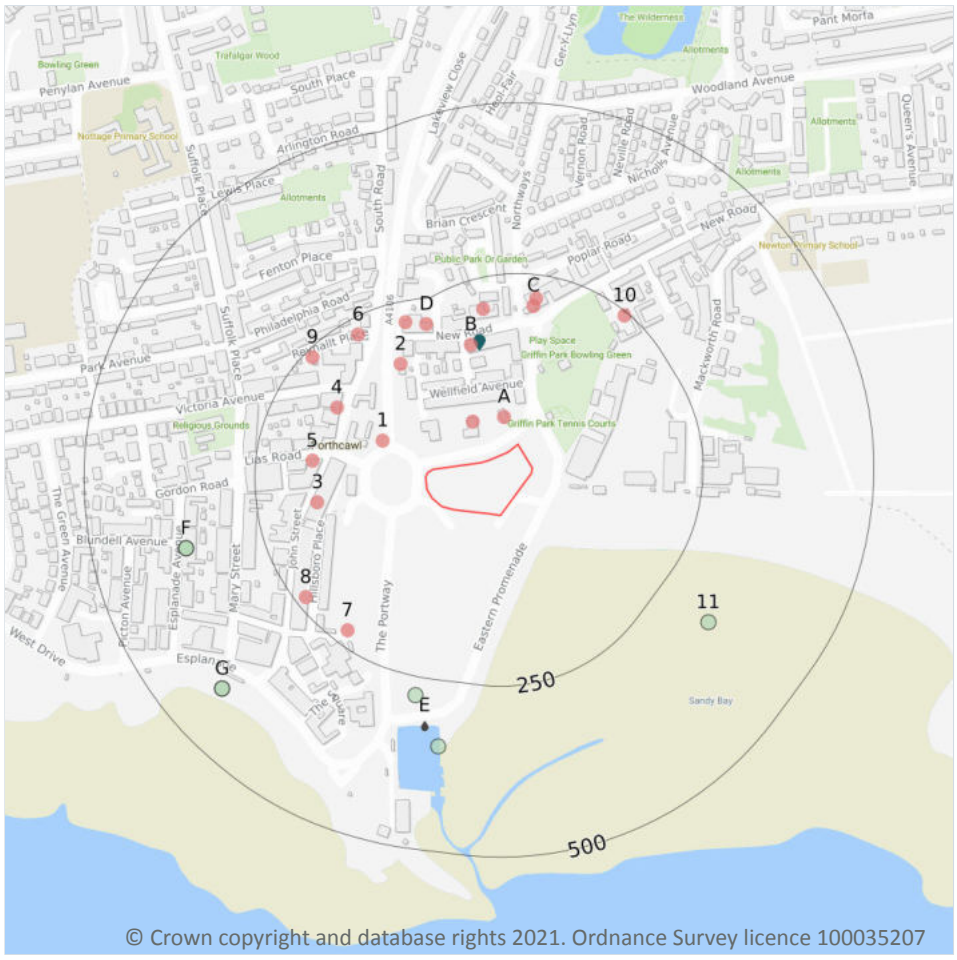
Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 32**

ID	Location	Site	Reference	Category	Sub-Category	Description
2	207m W	Pearn's Pharmacies Ltd, 88 John Street, Porthcawl, Pen-y-bont ar Ogwr, CF36 3BD	NRW-WME040088	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
A	386m NE	104 New Road 0 Porthcawl Pen-y-bont ar Ogwr CF365DE	NRW-WME001768	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
A	386m NE	104 New Road, Porthcawl, Pen-y-bont ar Ogwr, CF36 5DE	NRW-WME001768	Treating waste exemption	Waste Exemption - Non-Agricultural	Sorting and de-naturing of controlled drugs for disposal

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
- 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	18

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 35**

ID	Location	Company	Address	Activity	Category
A	45m NW	Porthcawl Ambulance Station	Ambulance Station, Eastern Promenade, Porthcawl, Mid Glamorgan, CF36 5TS	Ambulance and Medical Transportation Services	Health Support Services
A	61m N	Porthcawl Fire Station	Rear Wellfield Drive, Porthcawl, Mid Glamorgan, CF36 5TS	Fire Brigade Stations	Central and Local Government

ID	Location	Company	Address	Activity	Category
1	81m NW	Mast	Mid Glamorgan, CF36	Telecommunications Features	Infrastructure and Facilities
2	161m N	Electricity Sub Station	Mid Glamorgan, CF36	Electrical Features	Infrastructure and Facilities
3	162m W	Specsavers Hearcare	59, John Street, Porthcawl, Mid Glamorgan, CF36 3AY	Disability and Mobility Equipment	Consumer Products
B	162m NW	A & C Interiors	30, New Road, Porthcawl, Mid Glamorgan, CF36 5DN	Curtains and Blinds	Consumer Products
4	164m NW	S D Flooring	92a, John Street, Porthcawl, Mid Glamorgan, CF36 3DT	Construction Completion Services	Construction Services
5	168m W	Print Centre Porthcawl	3, Lias Road, Porthcawl, Mid Glamorgan, CF36 3AH	Published Goods	Industrial Products
C	204m N	Porthcawl Furnishing	51, New Road, Porthcawl, Mid Glamorgan, CF36 5DH	Furniture	Consumer Products
B	205m N	Station Hill Garage	New Road, Porthcawl, Mid Glamorgan, CF36 5DL	Vehicle Repair, Testing and Servicing	Repair and Servicing
D	212m N	Station Hill Garage	17b, New Road, Porthcawl, Mid Glamorgan, CF36 5DL	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	215m N	S B Machines	53a, New Road, Porthcawl, Mid Glamorgan, CF36 5DH	Hobby, Sports and Pastime Products	Consumer Products
D	219m N	Ross Computing Ltd	7a, New Road, Porthcawl, Mid Glamorgan, CF36 5DL	Electrical Equipment Repair and Servicing	Repair and Servicing
6	226m NW	The Fireplace Centre	126, John Street, Porthcawl, Mid Glamorgan, CF36 3DT	Fireplaces and Mantelpieces	Consumer Products
7	228m SW	Electricity Sub Station	Mid Glamorgan, CF36	Electrical Features	Infrastructure and Facilities
8	235m SW	Fone Xcellence	13, John Street, Porthcawl, Mid Glamorgan, CF36 3AP	Electrical Equipment Repair and Servicing	Repair and Servicing
9	239m NW	Electricity Sub Station	Mid Glamorgan, CF36	Electrical Features	Infrastructure and Facilities
10	245m NE	Depots	Mid Glamorgan, CF36	Container and Storage	Transport, Storage and Delivery

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	**0**

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.

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	1

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 35**

ID	Location	Address	Details	
B	160m N	Soapy's Drive In Drycleaners, The Old Banana Stores, Wellfield Crescent, Off New Road, Porthcawl, CF36 5DN	Process: Dry Cleaning Status: Current Permit Permit Type: Part 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	1

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 35**

ID	Location	Address	Details	
E	318m S	SWO.E.PROMENADE P'CAWL, P'CAWL	Effluent Type: UNSPECIFIED Permit Number: BW3200501 Permit Version: 1 Receiving Water: DOCK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 20/10/1989 Effective Date: 20/10/1989 Revocation Date: 28/03/2002

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	7

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 35**

ID	Location	Details	
E	276m S	Incident Date: 30/07/2014 Incident Identification: 1262587 Pollutant: Specific Waste Materials Pollutant Description: Contaminated Soil	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
11	337m SE	Incident Date: 30/04/2014 Incident Identification: 1231598 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Location	Details	
E	346m S	Incident Date: 16/06/2002 Incident Identification: 85196 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
F	363m W	Incident Date: 18/11/2016 Incident Identification: 1606920 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: No Details Air Impact: Category 4 (No Impact)
F	363m W	Incident Date: 18/11/2016 Incident Identification: 1606920 Pollutant: - Pollutant Description: -	Water Impact: Category 4 (No Impact) Land Impact: No Details Air Impact: Category 4 (No Impact)
G	414m SW	Incident Date: 10/06/2016 Incident Identification: 1603186 Pollutant: General Biodegradable Materials and Waste Pollutant Description: Algae	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
G	414m SW	Incident Date: 10/06/2016 Incident Identification: 1603186 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) 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.

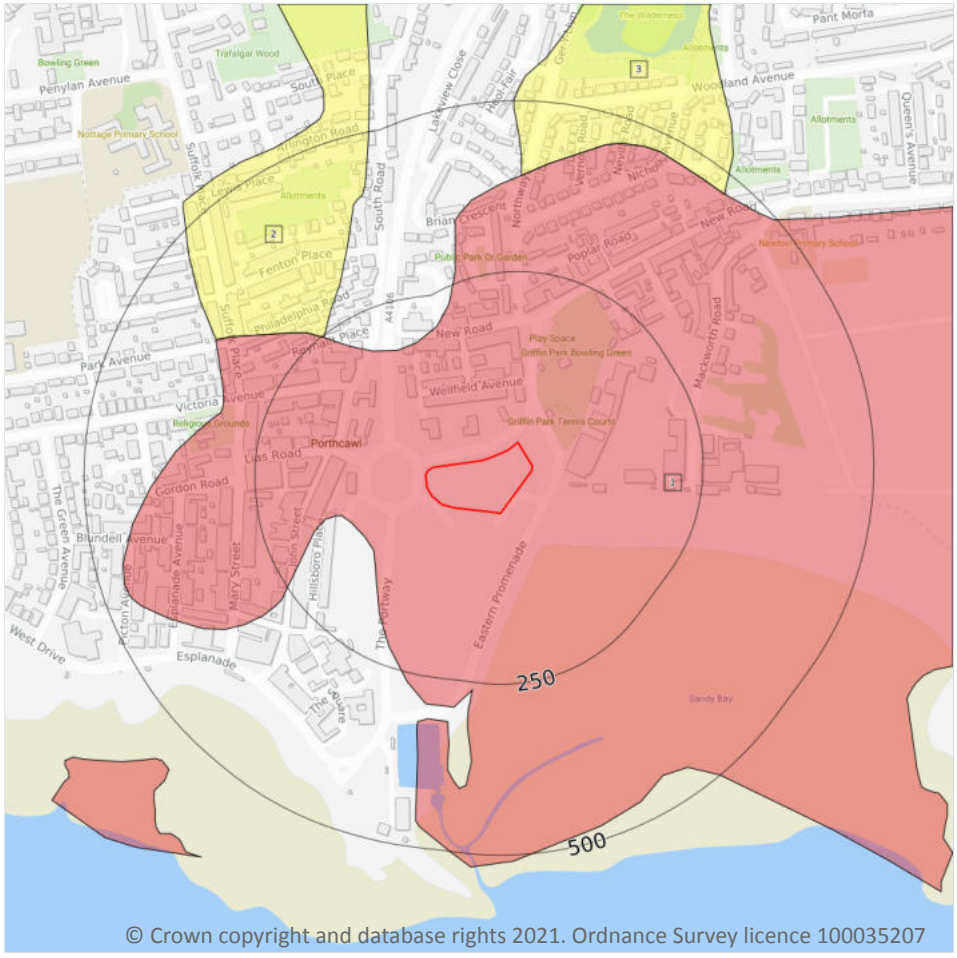
4.21 Pollution inventory radioactive waste

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



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	3

Aquifer status of groundwater held within superficial geology.

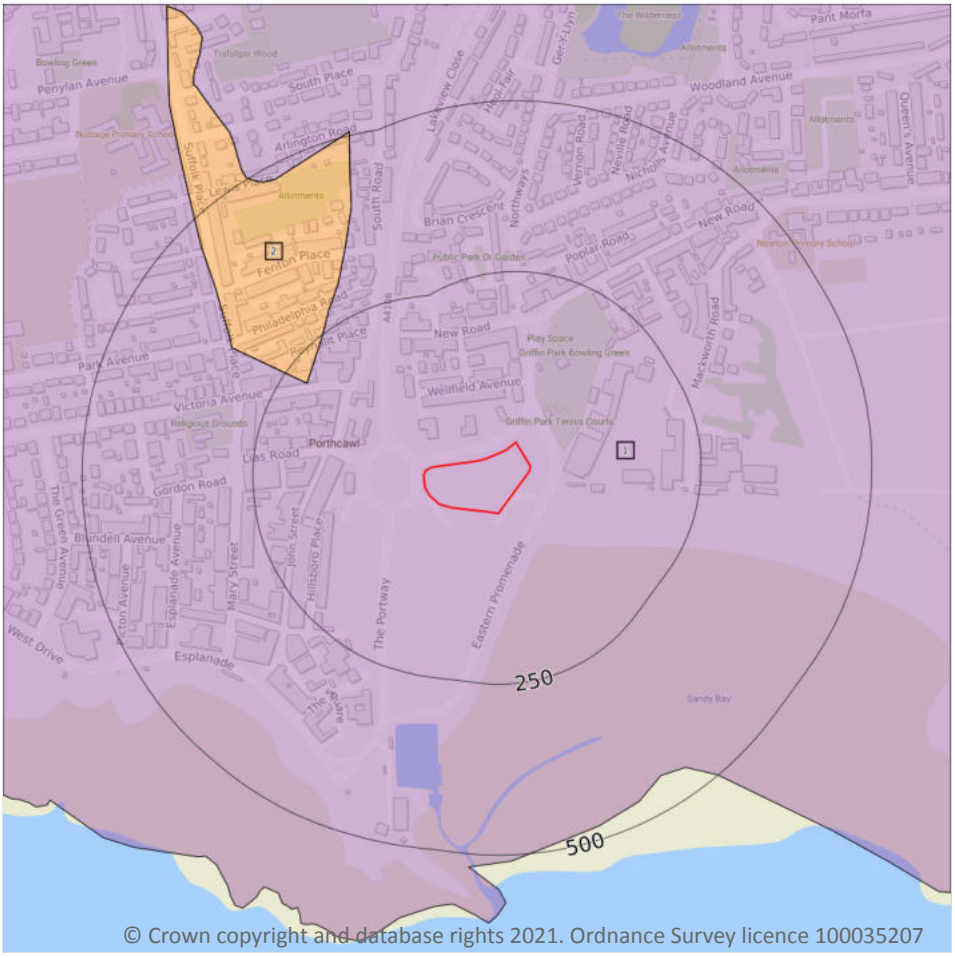
Features are displayed on the Hydrogeology map on **page 43**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	247m NW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

ID	Location	Designation	Description
3	391m N	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	2

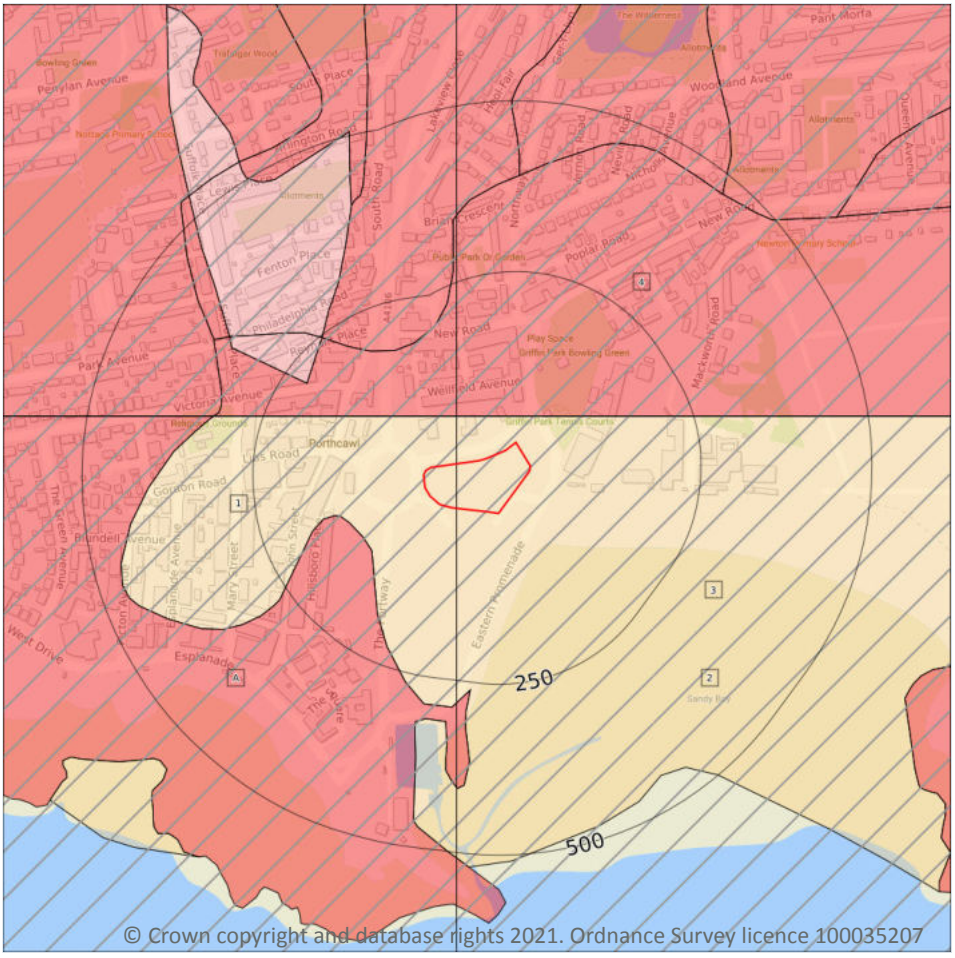
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 45**

ID	Location	Designation	Description
1	**On site**	**Principal**	**Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers**
2	216m NW	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons 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



Site Outline

Search buffers in metres (m)

Superficial vulnerability
- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability
- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information
- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	3

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 47**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year**	**Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures**
3	**On site**	**Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year**	**Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures**
4	38m N	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: >550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal 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	**2**

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
2	**Very significant soluble rocks are likely to be present with a moderate possibility of localised natural subsidence or dissolution-related degradation of bedrock, especially in adverse conditions such as concentrated surface or subsurface water flow.**	**2.0%**
A	**Very significant soluble rocks are likely to be present with a moderate possibility of localised natural subsidence or dissolution-related degradation of bedrock, especially in adverse conditions such as concentrated surface or subsurface water flow.**	**2.0%**

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

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- Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	4

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 50**

ID	Location	Details	
-	1167m N	Status: Historical Licence No: 21/58/33/0004 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: BOREHOLE Data Type: Point Name: Blundell Easting: 282230 Northing: 178120	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 05/07/1991 Version End Date: -
-	1565m NE	Status: Historical Licence No: 21/58/33/0008 Details: Water Bottling Direct Source: EAW Groundwater Point: BOREHOLE AT THE WHITE WHEAT Data Type: Point Name: Porthcawl Water Company Limited Easting: 283070 Northing: 178180	Annual Volume (m^3): 18250 Max Daily Volume (m^3): 50 Original Application No: - Original Start Date: 01/07/2003 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2008 Version End Date: -
-	1565m NE	Status: Historical Licence No: 21/58/33/0008 Details: Water Bottling - Medium Direct Source: - Point: - Data Type: Point Name: - Easting: 283070 Northing: 178180	Annual Volume (m^3): 18250 Max Daily Volume (m^3): - Original Application No: - Original Start Date: Apr 1 2008 12:00AM Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	1590m N	Status: Historical Licence No: 21/58/33/0006 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: BOREHOLE AT TY TALBOT Data Type: Point Name: Joseph Easting: 282020 Northing: 178550	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 25/06/1986 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	0

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.

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

5.8 Potable abstractions

Records within 2000m	2

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 50**

ID	Location	Details	
-	1565m NE	Status: Historical Licence No: 21/58/33/0008 Details: Water Bottling Direct Source: EAW Groundwater Point: BOREHOLE AT THE WHITE WHEAT Data Type: Point Name: Porthcawl Water Company Limited Easting: 283070 Northing: 178180	Annual Volume (m^3): 18250 Max Daily Volume (m^3): 50 Original Application No: - Original Start Date: 01/07/2003 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2008 Version End Date: -
-	1565m NE	Status: Historical Licence No: 21/58/33/0008 Details: Water Bottling - Medium Direct Source: - Point: - Data Type: Point Name: - Easting: 283070 Northing: 178180	Annual Volume (m^3): 18250 Max Daily Volume (m^3): - Original Application No: - Original Start Date: Apr 1 2008 12:00AM Expiry Date: - Issue No: - Version Start Date: - Version End Date: -

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.

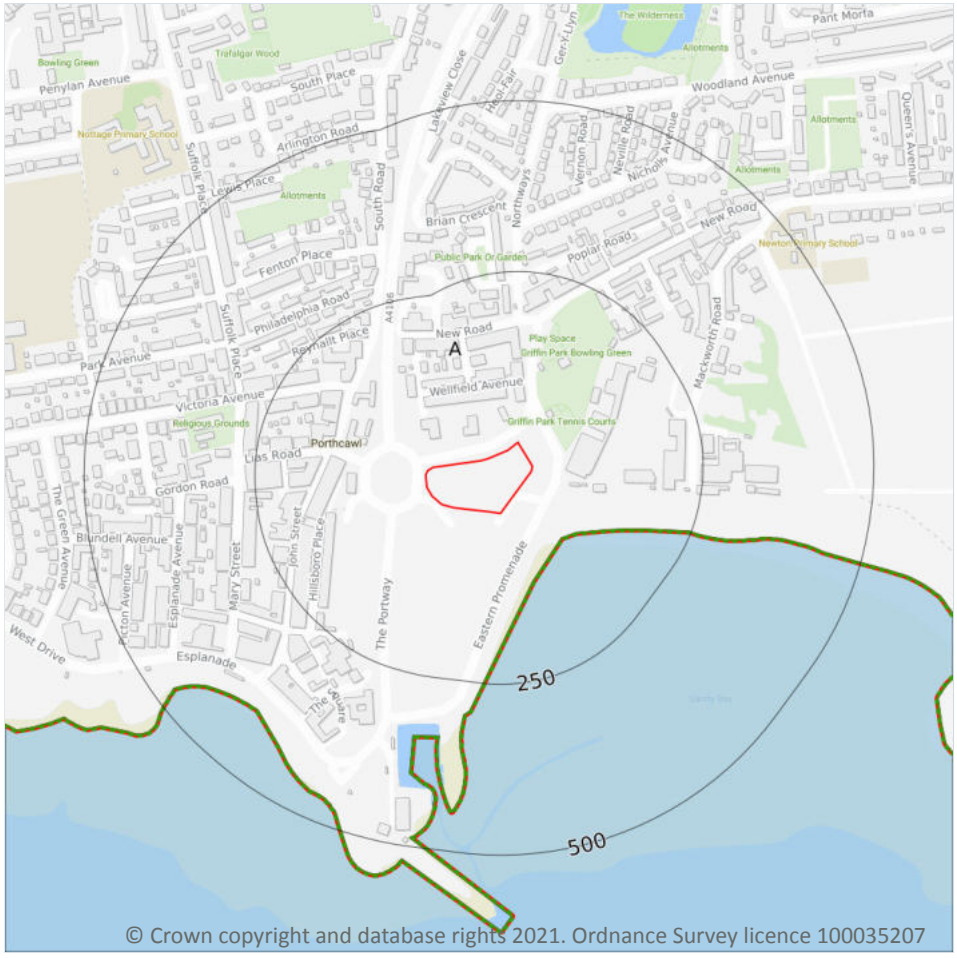
5.10 Source Protection Zones (confined aquifer)

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



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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	0

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

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	0

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.

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

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 53**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	**On site**	**Coastal catchment**	**Not part of a river WB catchment**	**240**	**Ogmore**	**Tawe to Cadoxton**

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 53**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
1	93m SE	Coastal	Bristol Channel Outer North	GB611008590001	Moderate	Good	Moderate	2016

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 53**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	**On site**	**Swansea Southern Carboniferous Limestone**	**GB41001G201300**	**Poor**	**Poor**	**Good**	**2016**

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

7 River and coastal flooding

7.1 Risk of Flooding from Rivers and Sea (RoFRaS)

Records within 50m	0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

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	0

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.

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

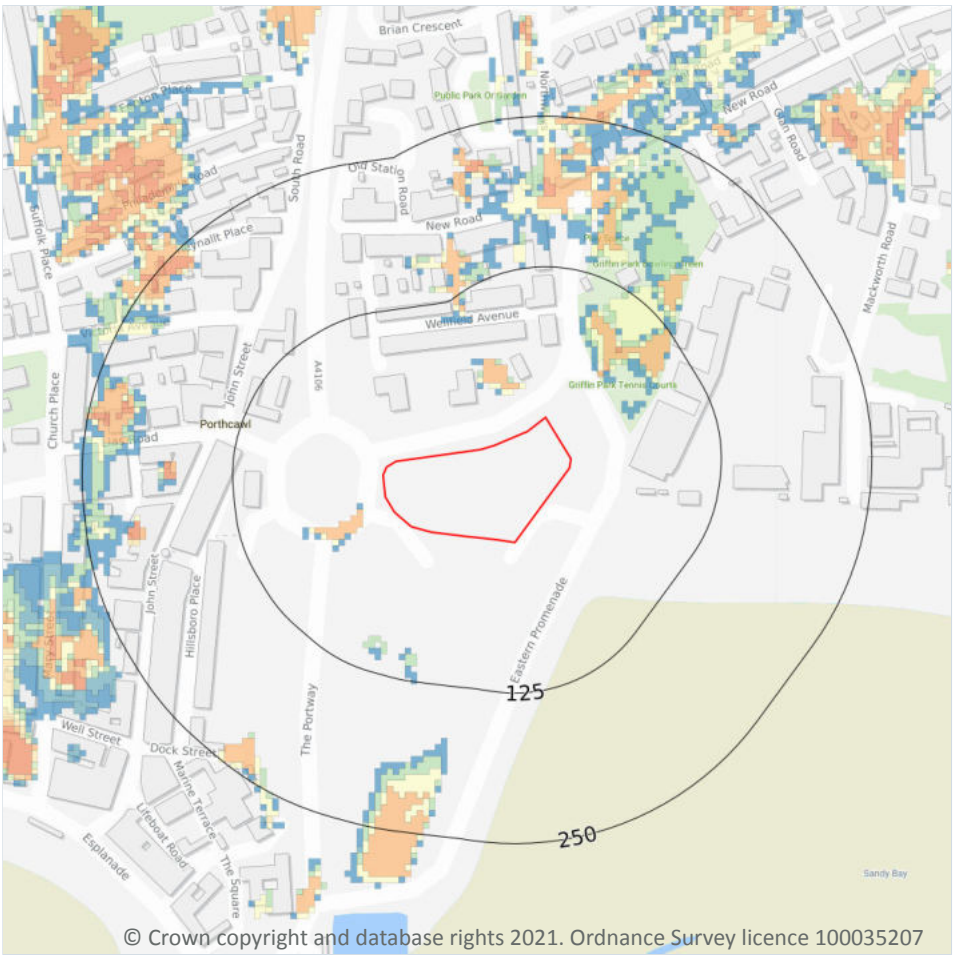
7.7 Flood Zone 3

Records within 50m	0

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.

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

8 Surface water flooding



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Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**Negligible**
Highest risk within 50m	**1 in 30 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 59**

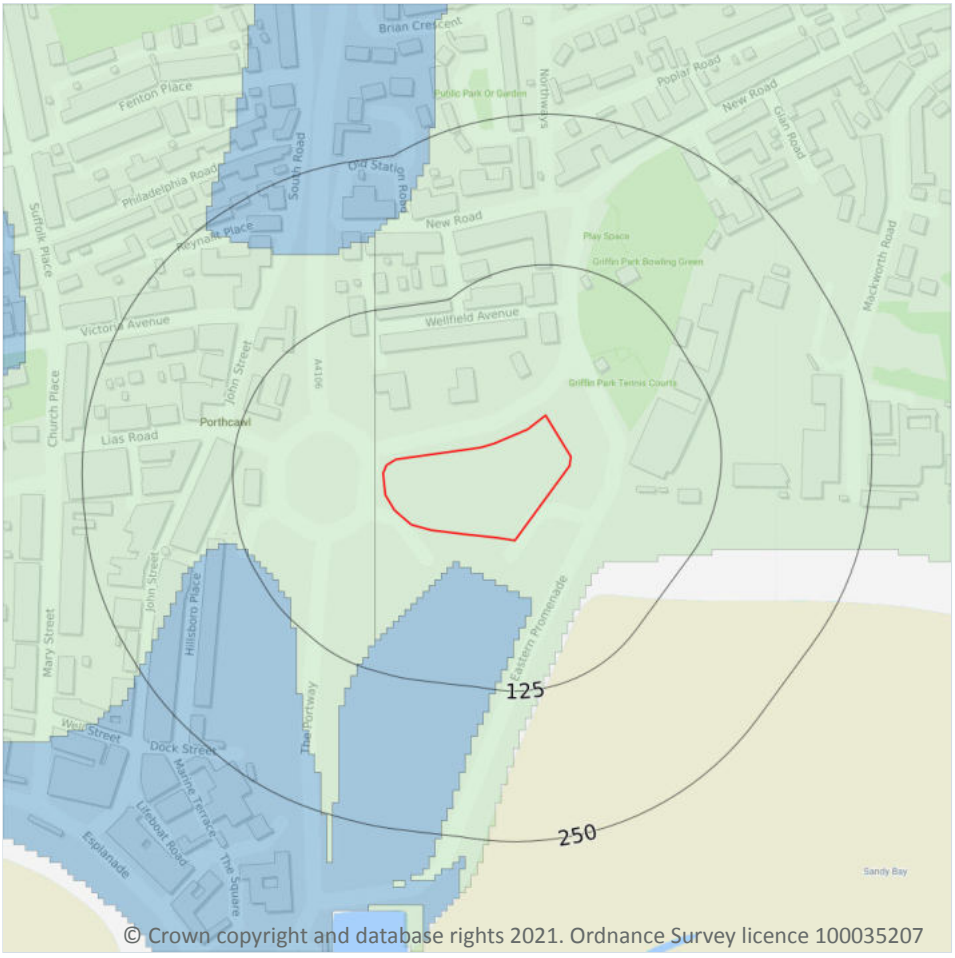
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site	**Low**
Highest risk within 50m	**Low**

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 61**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

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Site Outline

Search buffers in metres (m)

- Sites of Special Scientific Interest (SSSI)
- Special Areas of Conservation (SAC)
- Local Nature Reserves (LNR)
- Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	1

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 62**

ID	Location	Name	Data source
-	1646m E	Merthyr Mawr	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	0

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.

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	1

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 62**

ID	Location	Name	Features of interest	Habitat description	Data source
-	1646m E	Kenfig / Cynffig	Intertidal mudflats and sandflats; Cord-grass swards; Atlantic salt meadows; Shifting dunes; Shifting dunes with marram; Dune grassland; Coastal dune heathland; Dunes with sea-buckthorn; Dunes with creeping willow; Humid dune slacks; Calcium-rich nutrient-poor lakes, lochs and pools; Dry grasslands and scrublands on chalk or limestone; Alder woodland on floodplains; Great crested newt; Lesser horseshoe bat; Petalwort; Fen orchid.	Broad-leaved deciduous woodland; Coastal sand dunes, Sand beaches, Machair; Inland water bodies (Standing water, Running water); Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Bogs, Marshes, Water fringed vegetation, Fens	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	0

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.

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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.

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	1

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.

Features are displayed on the Environmental designations map on **page 62**

ID	Location	Name	Data source
2	1038m W	LOCK'S COMMON	Natural Resources Wales

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

10.7 Designated Ancient Woodland

Records within 2000m	5

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 62**

ID	Location	Name	Woodland Type
A	605m N	Unknown	Ancient Semi Natural Woodland
1	619m N	Unknown	Restored Ancient Woodland Site
A	684m N	Unknown	Ancient Semi Natural Woodland
-	1424m N	Unknown	Ancient Semi Natural Woodland
-	1566m N	Unknown	Ancient Semi Natural Woodland

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	0

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.

This data is sourced from Natural England.

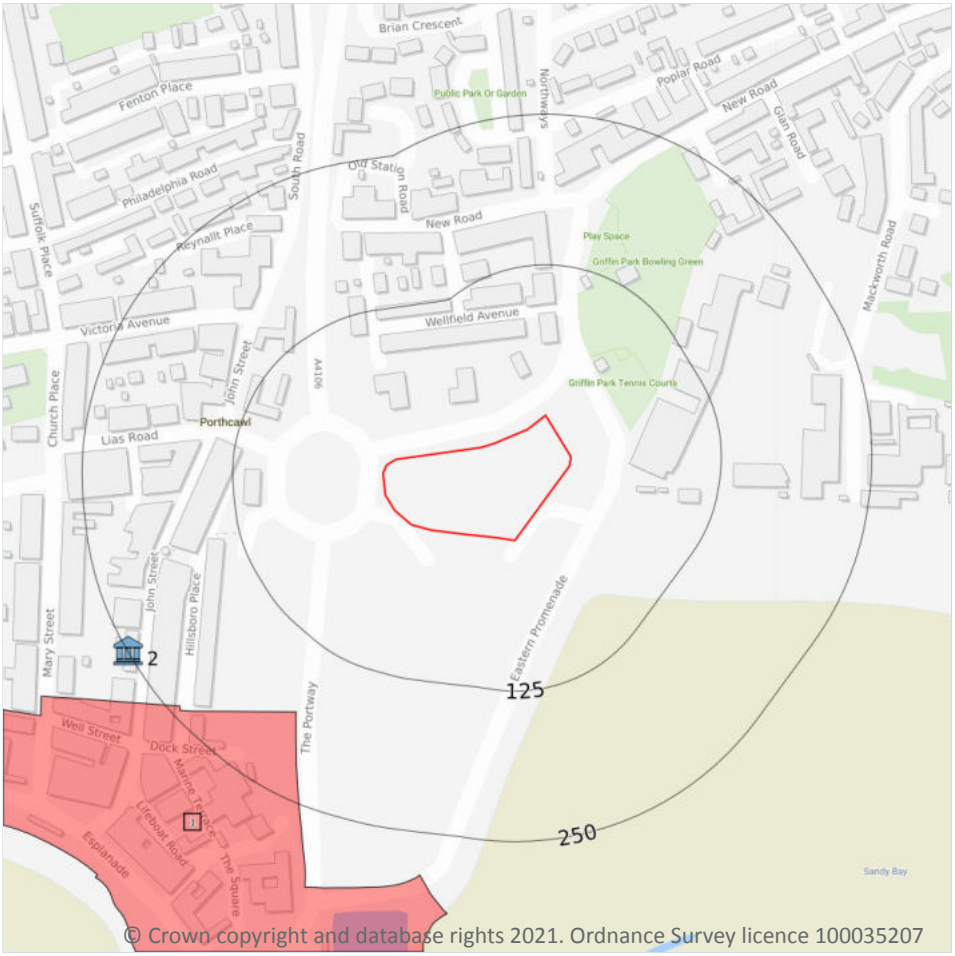
10.18 SSSI Units

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



Site Outline

Search buffers in metres (m)

- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

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	1

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.

Features are displayed on the Visual and cultural designations map on **page 69**

ID	Location	Name	Grade	Reference Number	Listed date
2	250m SW	The Old Police Station, In The Town Centre On The Main Shopping Street	II	11354	22/02/1989

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

11.5 Conservation Areas

Records within 250m	1

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.

Features are displayed on the Visual and cultural designations map on **page 69**

ID	Location	Name	District	Date of designation
1	183m SW	Porthcawl	BRIDGEND	1973-08-31

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

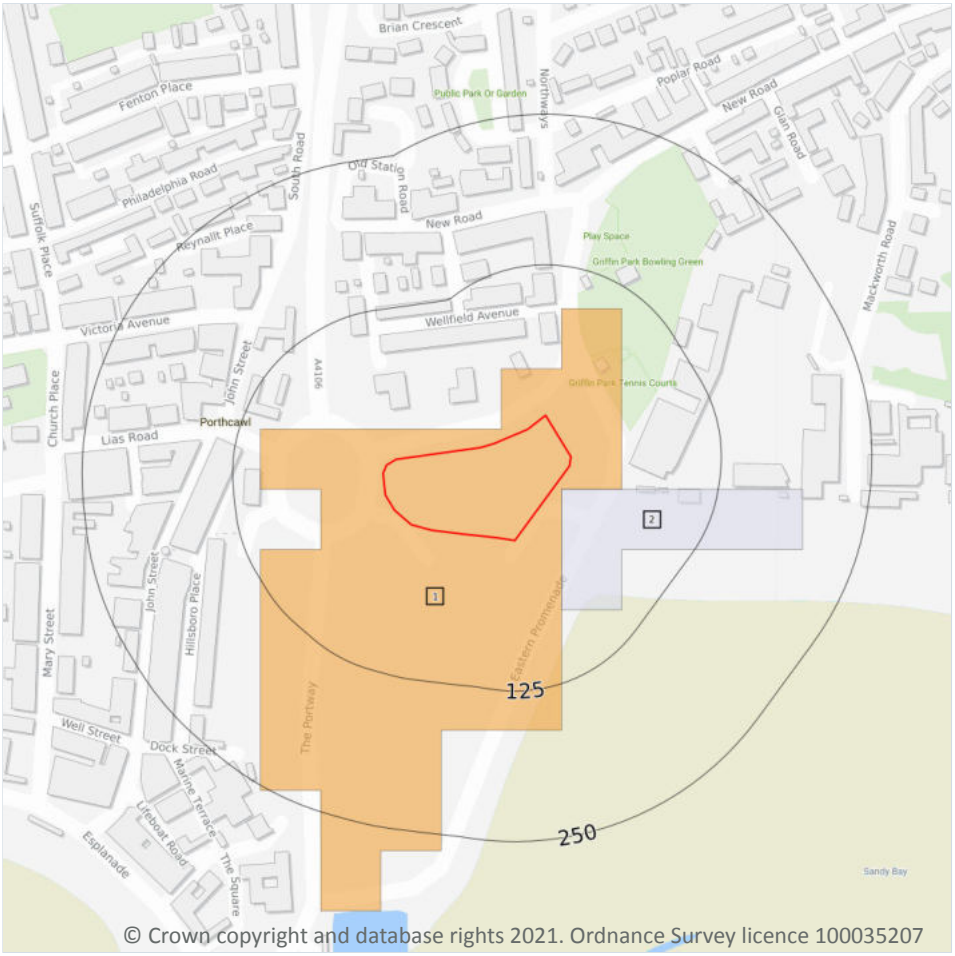
11.7 Registered Parks and Gardens

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 English Heritage, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Timber felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	2

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 72**

ID	Location	Classification	Description
1	**On site**	**Grade 2**	**Good quality agricultural land**
2	6m SE	Grade 3b	Moderate quality agricultural land

This data is sourced from Natural Resources Wales.

12.2 Open Access Land

Records within 250m	0

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.

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.

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

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 75**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SS87NW**

This data is sourced from the British Geological Survey.

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

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Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	1

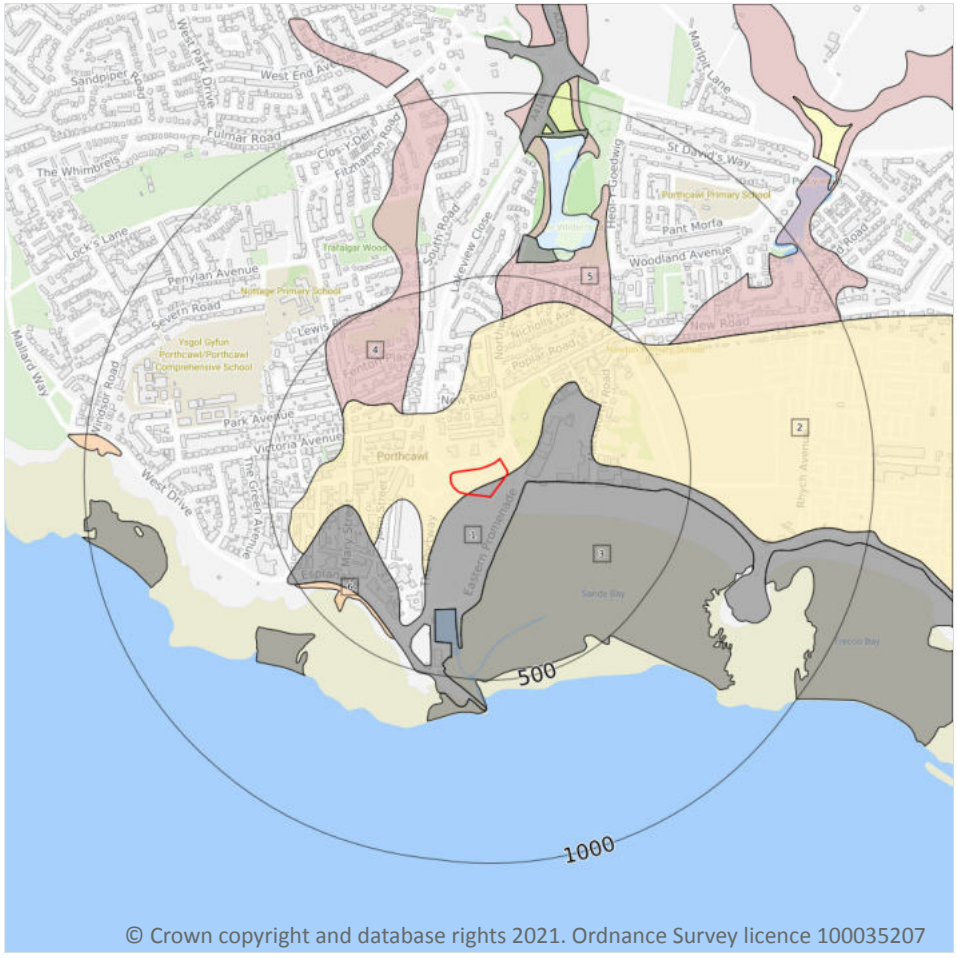
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 76**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**Made Ground (Undivided)**	**Artificial Deposit**

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



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Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m	6

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.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 77**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**SUPD-UKNOWN**	**Superficial Deposits - Unknown/unclassified Entry**	**Unknown/unclassified Entry**
2	**On site**	**BSA-S**	**Blown Sand - Sand**	**Sand**
3	56m SE	BCHD-S	Beach Deposits - Sand	Sand

ID	Location	LEX Code	Description	Rock description
4	211m NW	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
5	381m N	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
6	392m SW	STOB-V	Storm Beach Deposits - Gravel	Gravel

This data is sourced from the British Geological Survey.

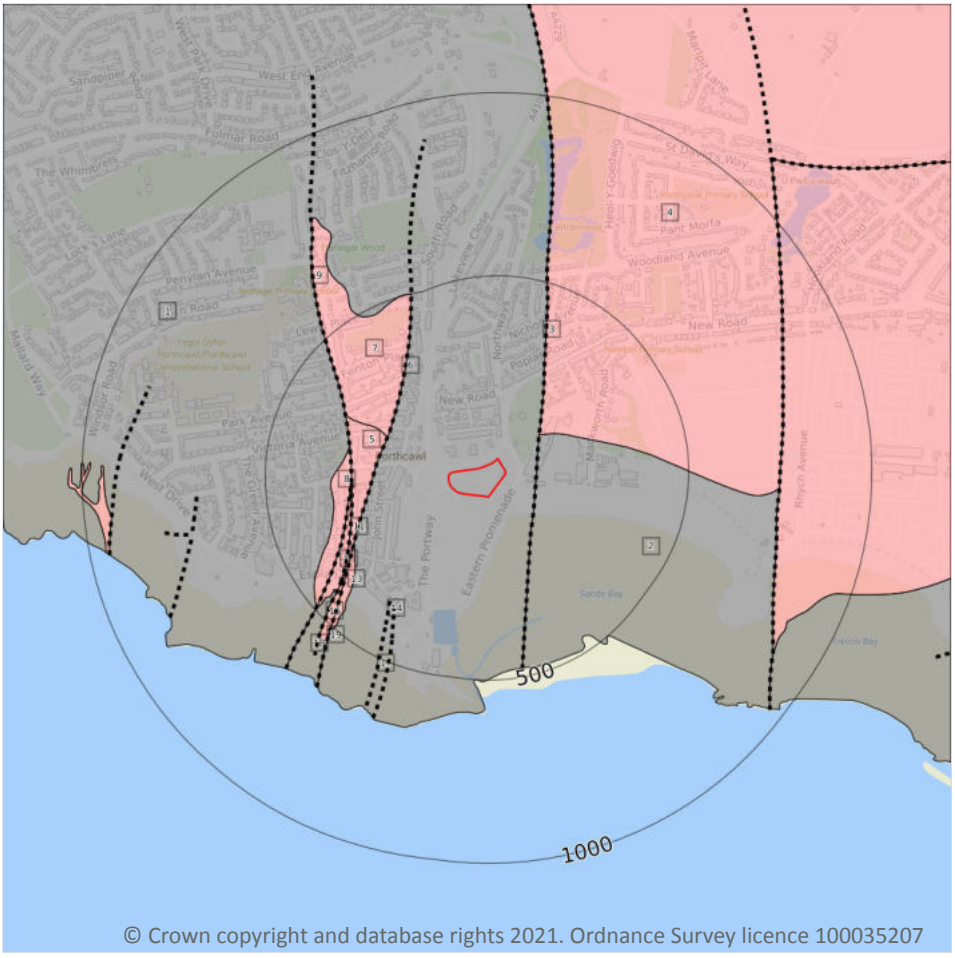
14.4 Landslip (10k)

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



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m	9

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.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 79**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**OHL-LSMD**	**Oxwich Head Limestone Formation - Interbedded Limestone And Mudstone**	**Brigantian Age - Asbian Age**
2	84m E	OHL-LSMD	Oxwich Head Limestone Formation - Interbedded Limestone And Mudstone	Brigantian Age - Asbian Age

ID	Location	LEX Code	Description	Rock age
4	130m NE	MMMF-CONG	Mercia Mudstone Group (marginal Facies) - Conglomerate	Triassic Period
5	195m NW	MMMF-CONG	Mercia Mudstone Group (marginal Facies) - Conglomerate	Triassic Period
7	197m NW	MMG-MDST	Mercia Mudstone Group - Mudstone	Rhaetian Age - Early Triassic Epoch
8	265m W	MMMF-CONG	Mercia Mudstone Group (marginal Facies) - Conglomerate	Triassic Period
10	265m W	MMMF-CONG	Mercia Mudstone Group (marginal Facies) - Conglomerate	Triassic Period
13	305m SW	MMMF-CONG	Mercia Mudstone Group (marginal Facies) - Conglomerate	Triassic Period
18	420m SW	OHL-LSMD	Oxwich Head Limestone Formation - Interbedded Limestone And Mudstone	Brigantian Age - Asbian Age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	**11**

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.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 79**

ID	Location	Category	Description
3	84m E	FAULT	Normal fault, inferred; crossmarks on downthrow side
6	195m NW	FAULT	Normal fault, inferred; crossmarks on downthrow side
9	265m W	FAULT	Normal fault, inferred; crossmarks on downthrow side
11	265m W	FAULT	Normal fault, inferred; crossmarks on downthrow side
12	265m W	FAULT	Normal fault, inferred; crossmarks on downthrow side
14	349m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
15	362m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
16	394m SW	FAULT	Normal fault, observed; crossmark on downthrow side
17	418m SW	FAULT	Normal fault, observed; crossmark on downthrow side

ID	Location	Category	Description
19	422m SW	FAULT	Normal fault, observed; crossmark on downthrow side
20	437m SW	FAULT	Normal fault, observed; crossmark on downthrow side

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 82**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW261_262_sker_point_and_bridgend_v4**

This data is sourced from the British Geological Survey.

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

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Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m	3

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 83**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**MADE GROUND (UNDIVIDED)**	**ARTIFICIAL DEPOSIT**
2	24m S	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	311m S	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

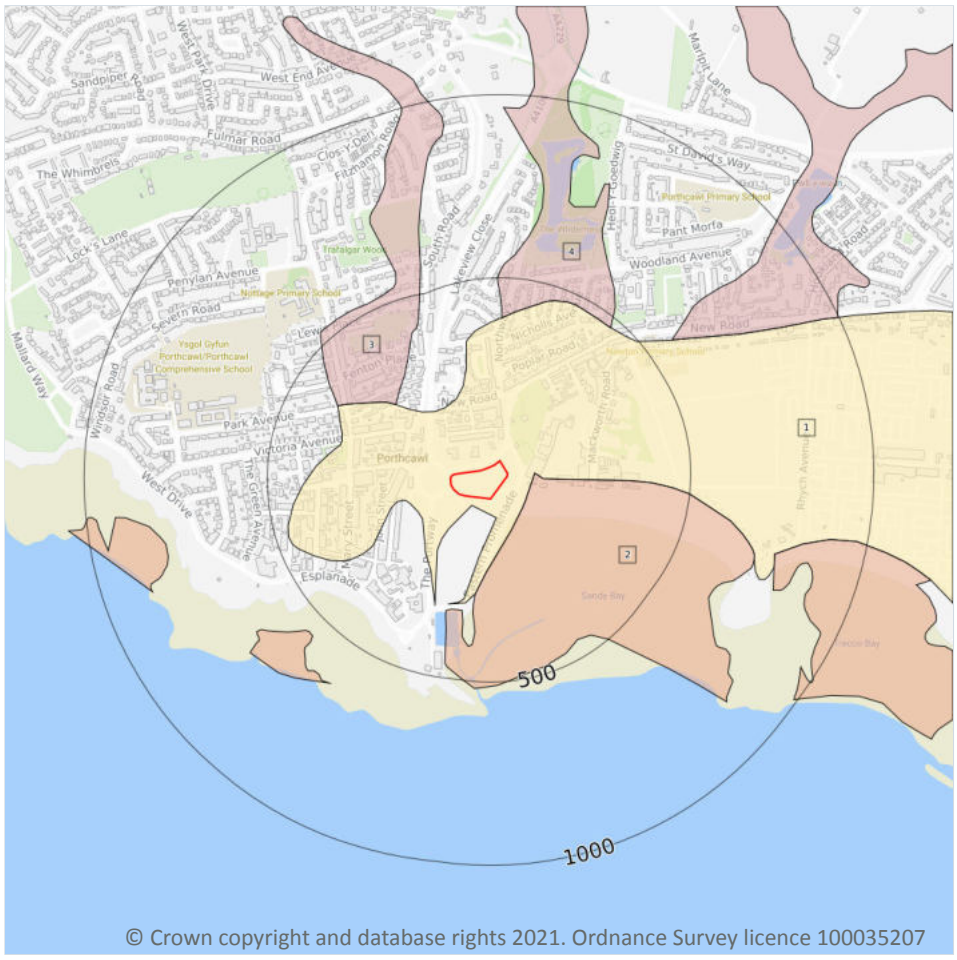
Records within 50m	2

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).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Very High**	**Low**
24m S	Mixed	Very High	Low

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	4

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 85**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**BSA-S**	**BLOWN SAND**	**SAND**
2	69m E	MBD-S	MARINE BEACH DEPOSITS	SAND
3	247m NW	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
4	391m N	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

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**	**High**	**High**

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.

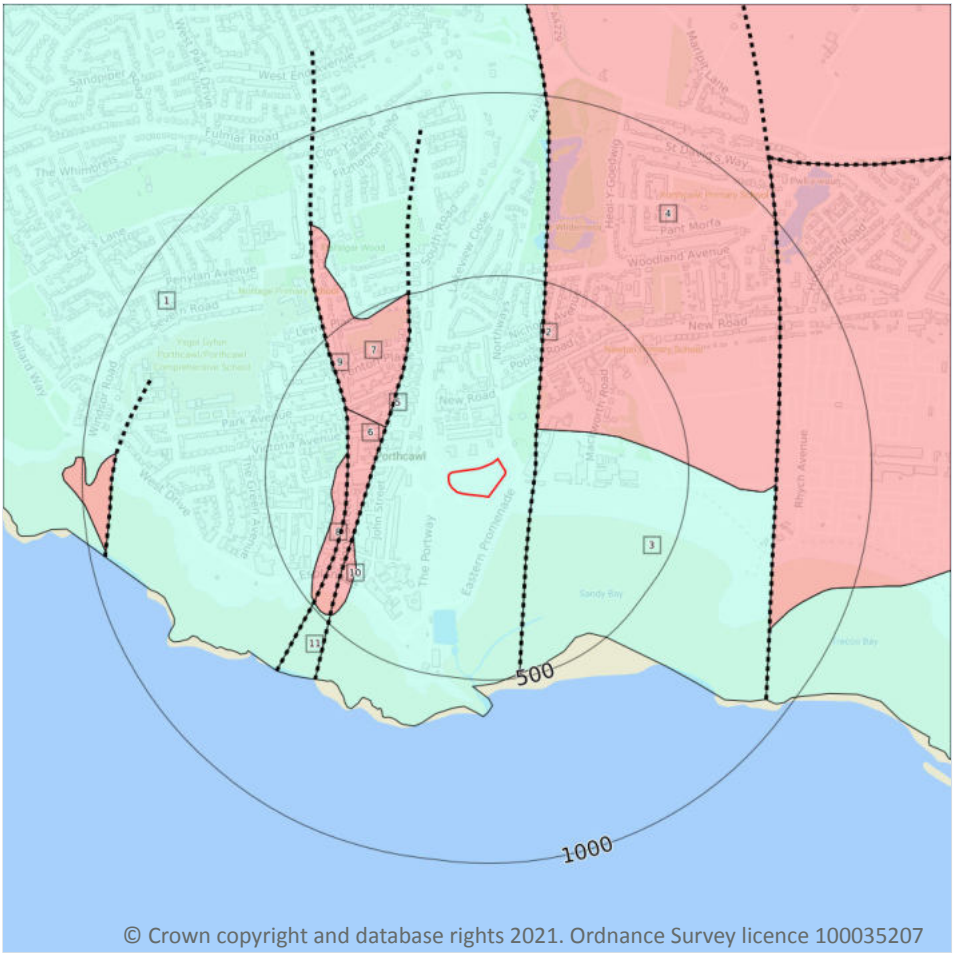
15.7 Landslip permeability (50k)

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.

15.8 Bedrock geology (50k)

Records within 500m	8

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 87**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**OHL-LMST**	**OXWICH HEAD LIMESTONE FORMATION - LIMESTONE**	**VISEAN**
3	80m E	OHL-LMST	OXWICH HEAD LIMESTONE FORMATION - LIMESTONE	VISEAN
4	134m NE	MMMF-CONG	MERCIA MUDSTONE GROUP (MARGINAL FACIES) - CONGLOMERATE	-

ID	Location	LEX Code	Description	Rock age
6	204m W	MMMF-CONG	MERCIA MUDSTONE GROUP (MARGINAL FACIES) - CONGLOMERATE	-
7	216m NW	MMG-MDST	MERCIA MUDSTONE GROUP - MUDSTONE	-
8	276m W	MMMF-CONG	MERCIA MUDSTONE GROUP (MARGINAL FACIES) - CONGLOMERATE	-
10	298m SW	MMMF-CONG	MERCIA MUDSTONE GROUP (MARGINAL FACIES) - CONGLOMERATE	-
11	480m SW	OHL-LMST	OXWICH HEAD LIMESTONE FORMATION - LIMESTONE	VISEAN

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**	**Very High**	**High**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**3**

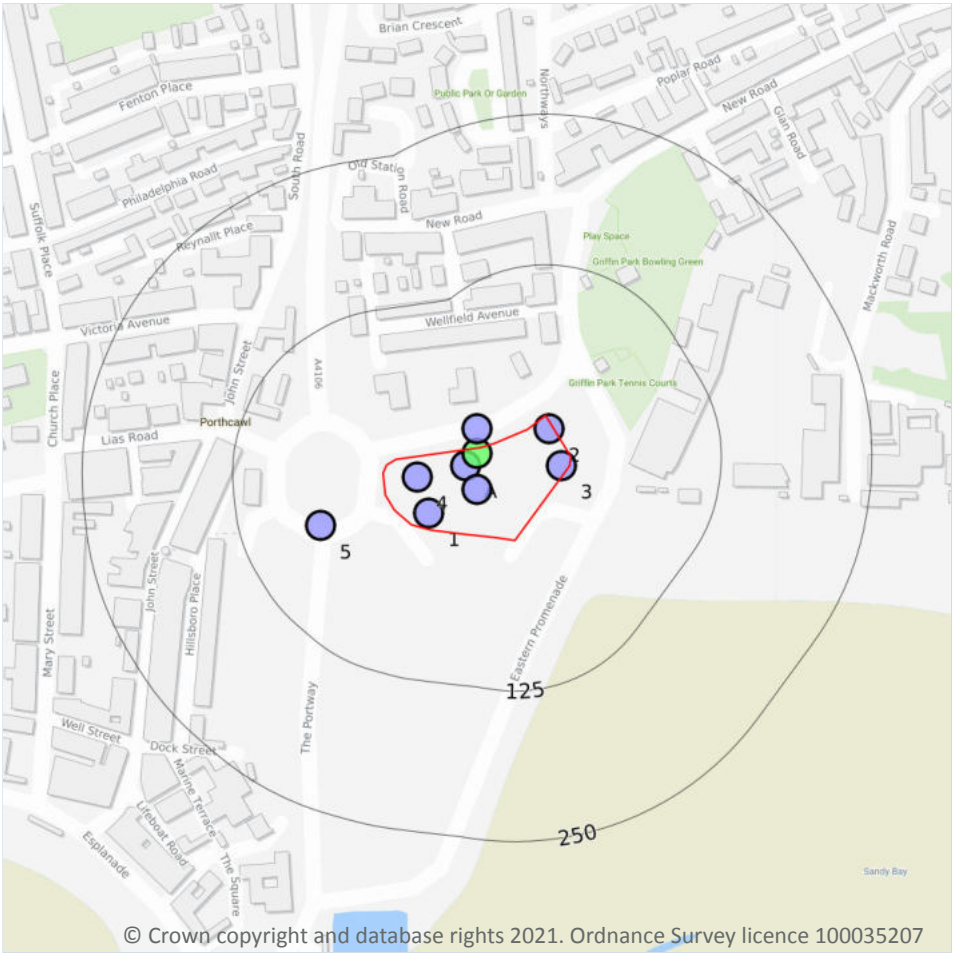
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 87**

ID	Location	Category	Description
2	80m E	FAULT	Fault, inferred, displacement unknown
5	204m W	FAULT	Fault, inferred, displacement unknown
9	276m W	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m	9

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.

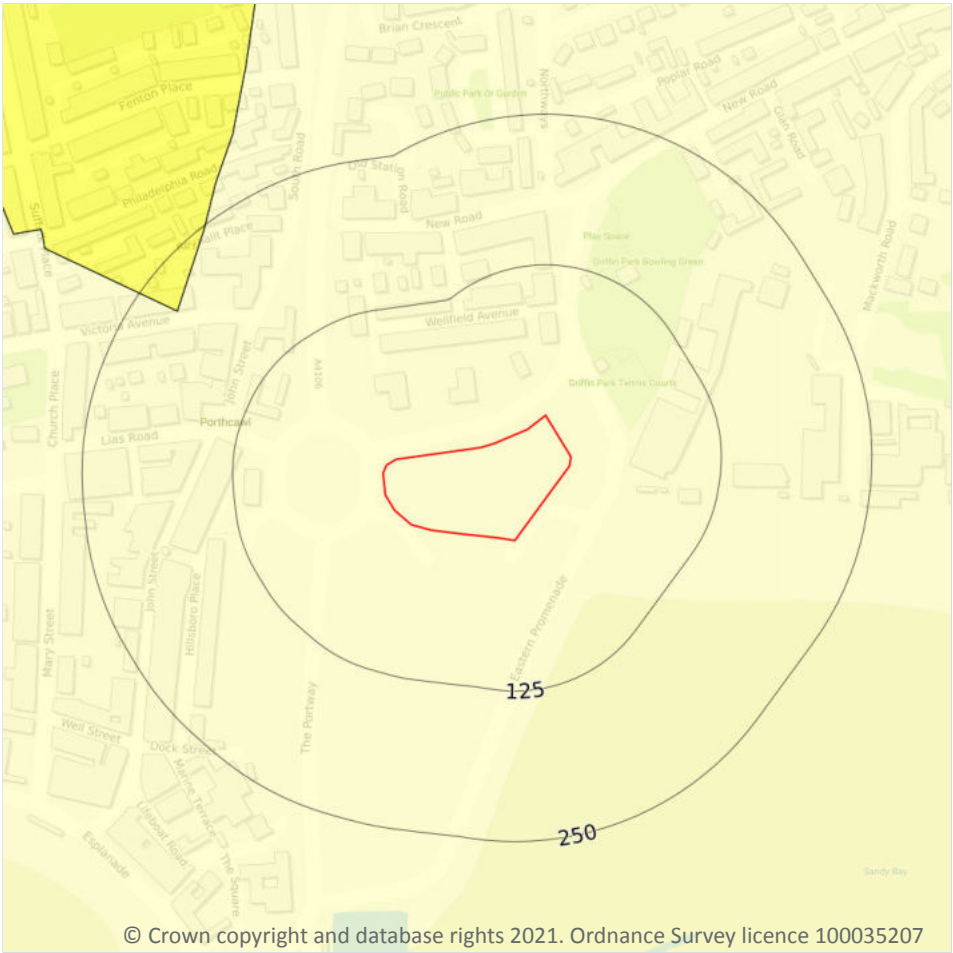
Features are displayed on the Boreholes map on **page 89**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	**On site**	**281990 176880**	**SWIMMING POOL PORTHCAWL 1**	**10.0**	**N**	**372545**
2	**On site**	**282090 176950**	**SWIMMING POOL PORTHCAWL 4**	**10.0**	**N**	**372548**
3	**On site**	**282100 176920**	**SWIMMING POOL PORTHCAWL 3**	**10.0**	**N**	**372547**

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	**On site**	**281980 176910**	**SWIMMING POOL PORTHCAWL 6**	**10.0**	**N**	**372550**
A	**On site**	**282020 176920**	**SWIMMING POOL PORTHCAWL 5**	**10.0**	**N**	**372549**
A	**On site**	**282030 176930**	**GROVE GOLF COURSE, PORTHCAWL**	**15.24**	**N**	**372573**
A	**On site**	**282030 176900**	**SWIMMING POOL PORTHCAWL 2**	**10.0**	**N**	**372546**
A	16m N	282030 176950	PORTHCAWL APPROACH ROAD. NO.4	4.14	N	372556
5	59m SW	281900 176870	PORTHCAWL APPROACH ROAD. NO.1	6.55	N	372553

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

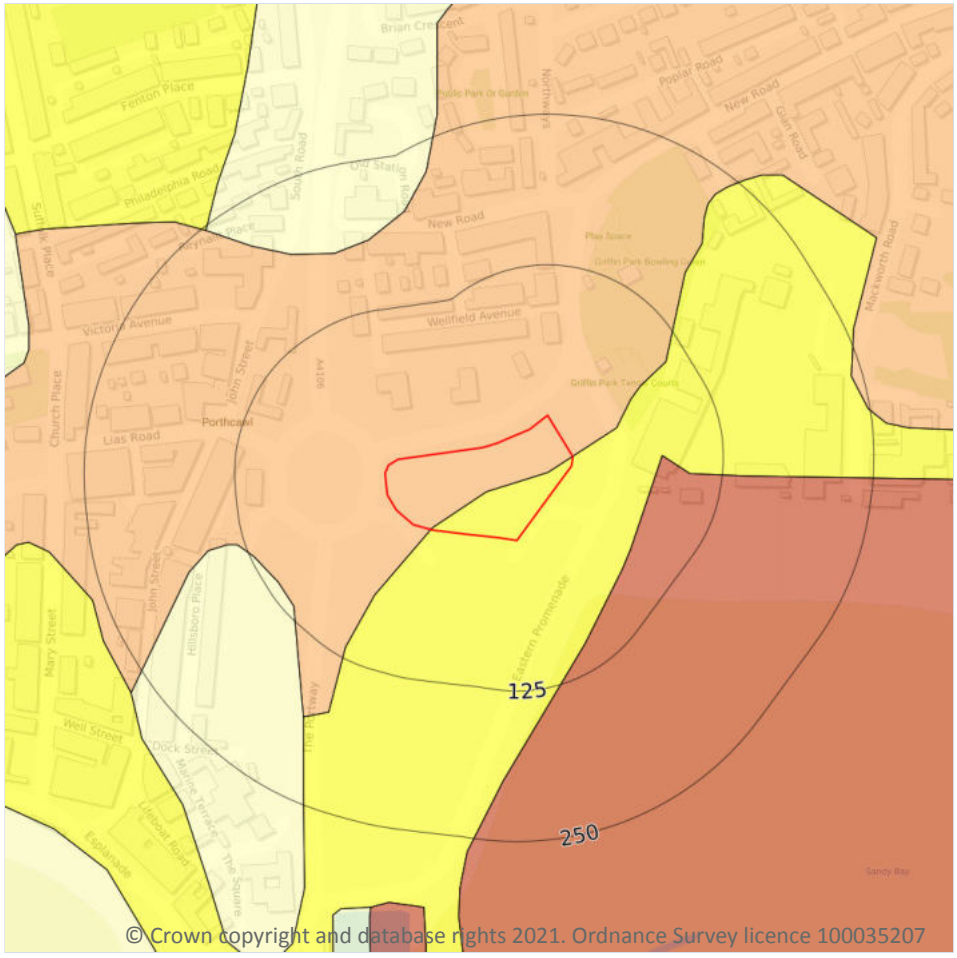
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 91**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	2

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.

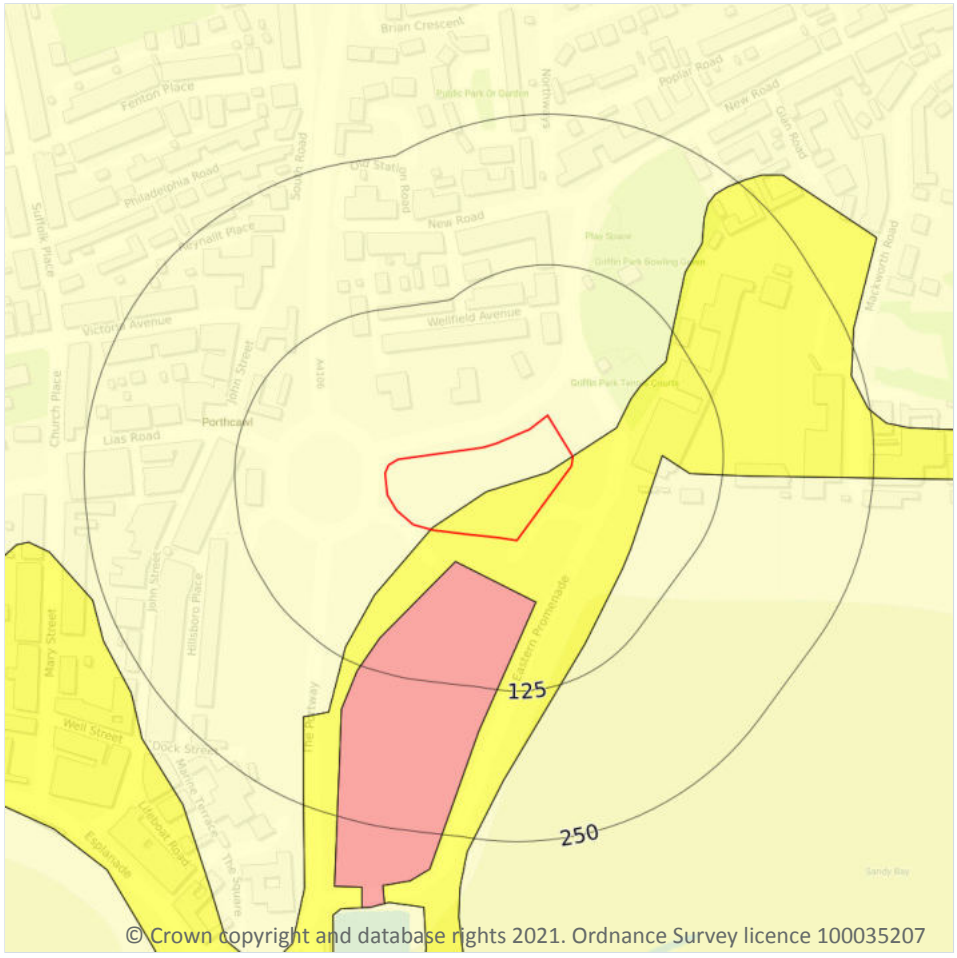
Features are displayed on the Natural ground subsidence - Running sands map on **page 92**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**

Location	Hazard rating	Details
On site	**Low**	**Running sand conditions may be 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



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	3

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.

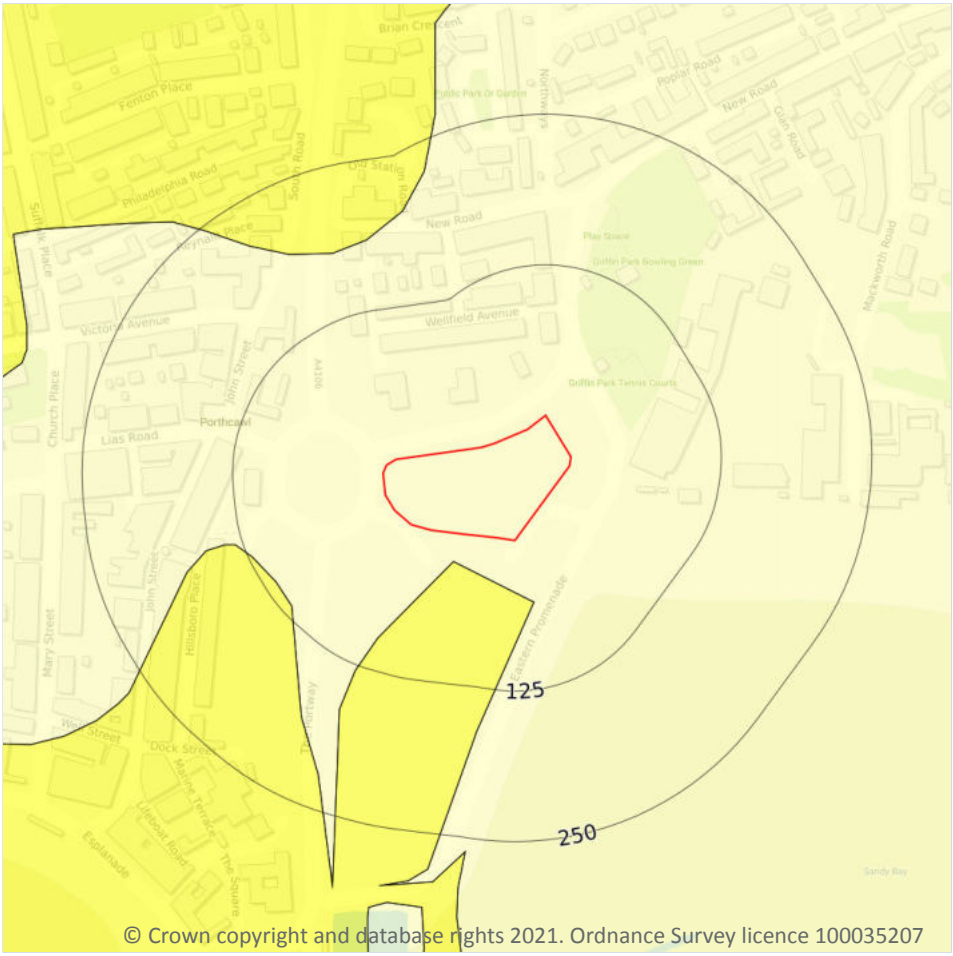
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 94**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Very low**	**Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.**

Location	Hazard rating	Details
24m S	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



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	2

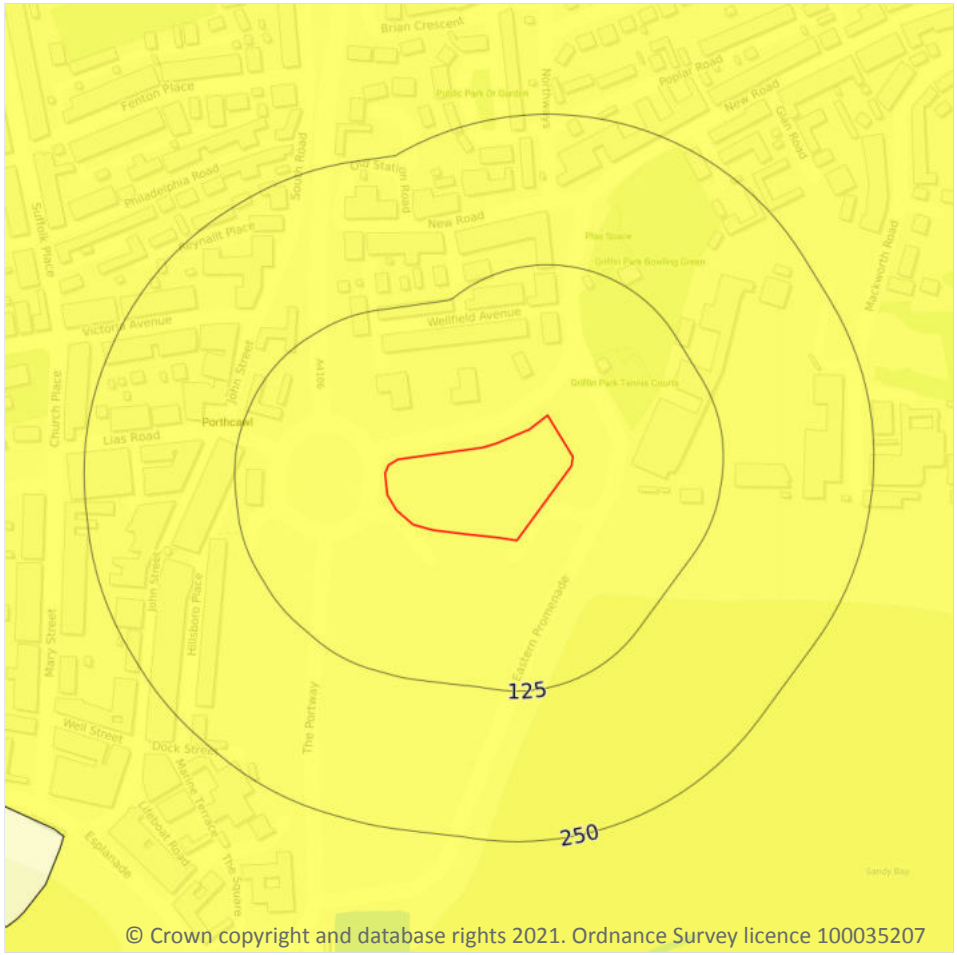
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

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.**
24m S	Very low	Deposits with potential to collapse when loaded and saturated are unlikely 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

17.5 Landslides

Records within 50m	1

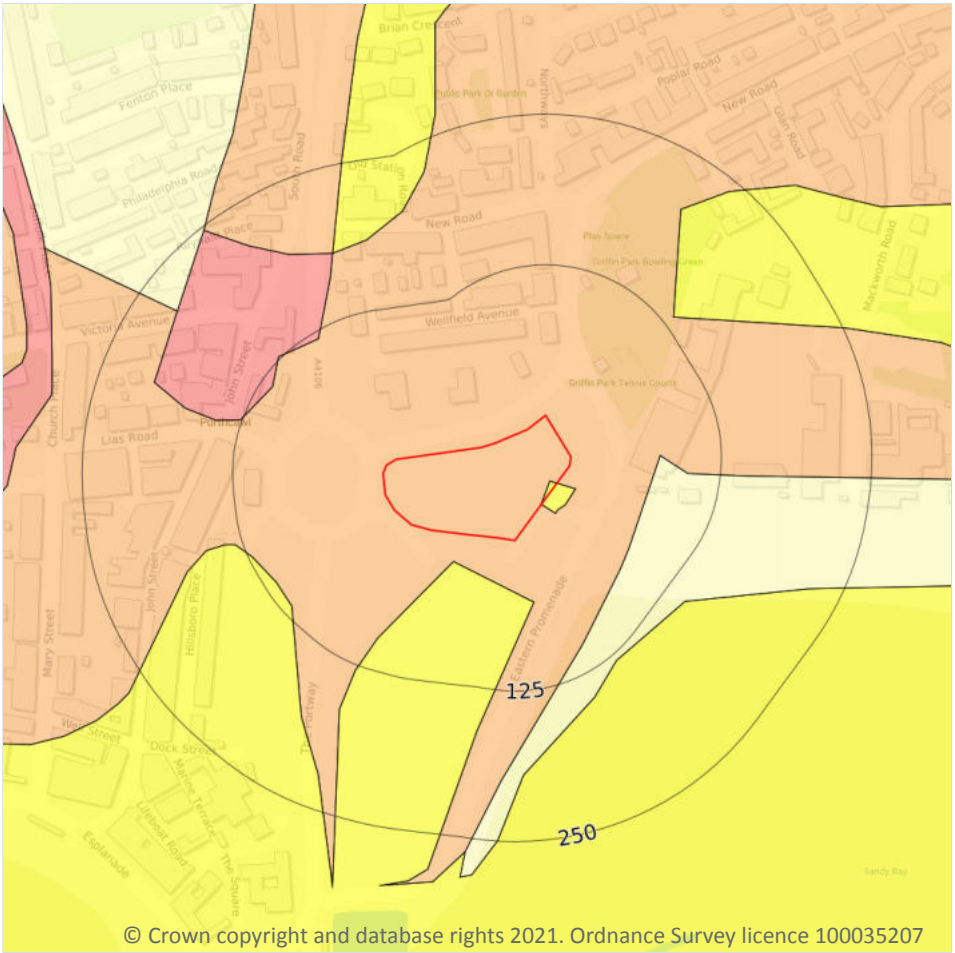
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

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.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	3

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.

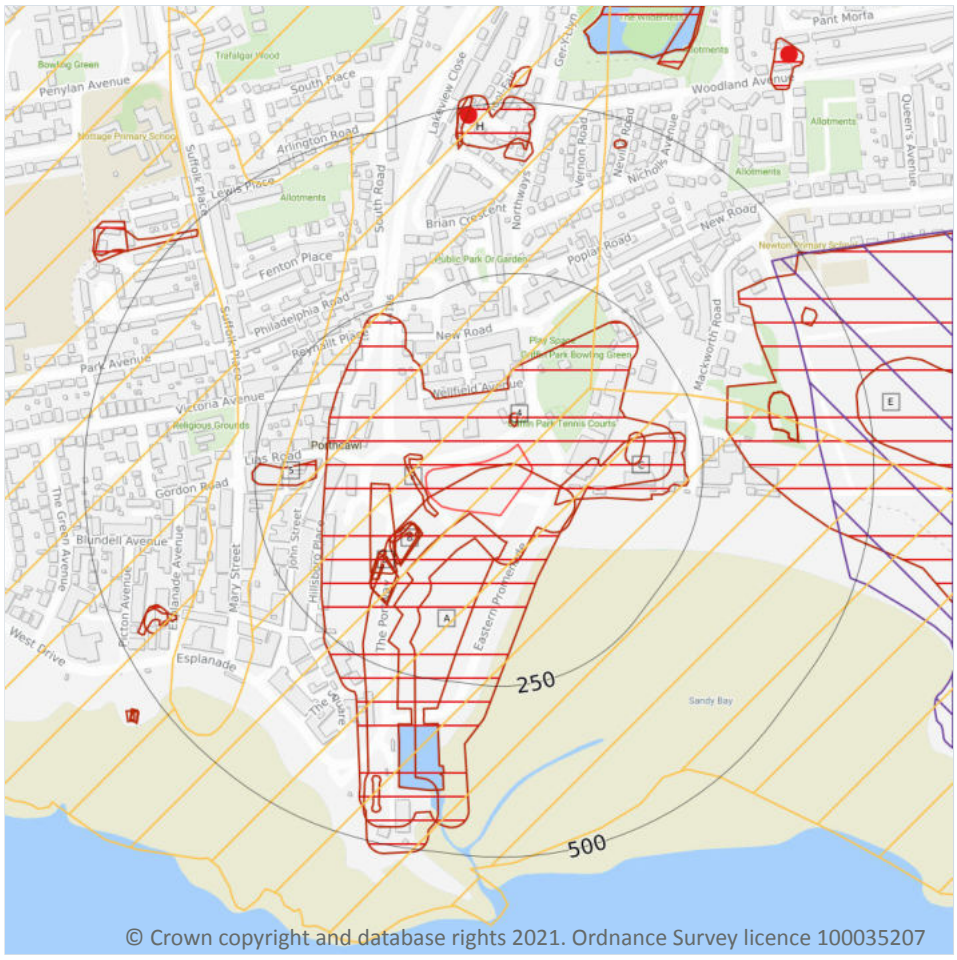
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 98**

Location	Hazard rating	Details
On site	**Very low**	**Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.**

Location	Hazard rating	Details
On site	**Low**	**Soluble rocks are present within the ground. Some dissolution features may be present. Potential for difficult ground conditions are at a level where they may be considered, localised subsidence need not be considered except in exceptional circumstances.**
24m S	Very low	Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities



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Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

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 Peter Brett Associates (PBA).

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
H	488m N	Name: Porthcawl Lime Works Address: Porthcawl, BRIDGEND, Mid Glamorgan Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	16

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
2	**On site**	**Dock**	**1914**	**1:10560**
A	**On site**	**Dock**	**1876**	**1:10560**
A	2m S	Dock	1900	1:10560
3	3m W	Unspecified Ground Workings	1948	1:10560
4	27m N	Unspecified Pit	1876	1:10560
B	45m SW	Unspecified Pit	1947	1:10560
B	45m SW	Unspecified Pit	1914	1:10560
B	46m SW	Unspecified Pit	1948	1:10560
B	46m SW	Unspecified Ground Workings	1900	1:10560
C	47m SE	Unspecified Heap	1876	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
B	54m W	Cuttings	1969	1:10560
D	102m SW	Unspecified Ground Workings	1900	1:10560
D	108m SW	Unspecified Pit	1914	1:10560
D	111m SW	Unspecified Pit	1876	1:10560
C	137m E	Pond	1969	1:10560
5	160m W	Unspecified Heap	1876	1:10560

This is 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	1

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.

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

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
E	420m E	Newton point	Not available	Not available	Not available	Not available

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	1

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).

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

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Not available**	**Vein Mineral**	**B**	**Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered**

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 Peter Brett Associates (PBA).

18.8 JPB mining areas

Records on site	**0**

Areas which could be affected by former coal 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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

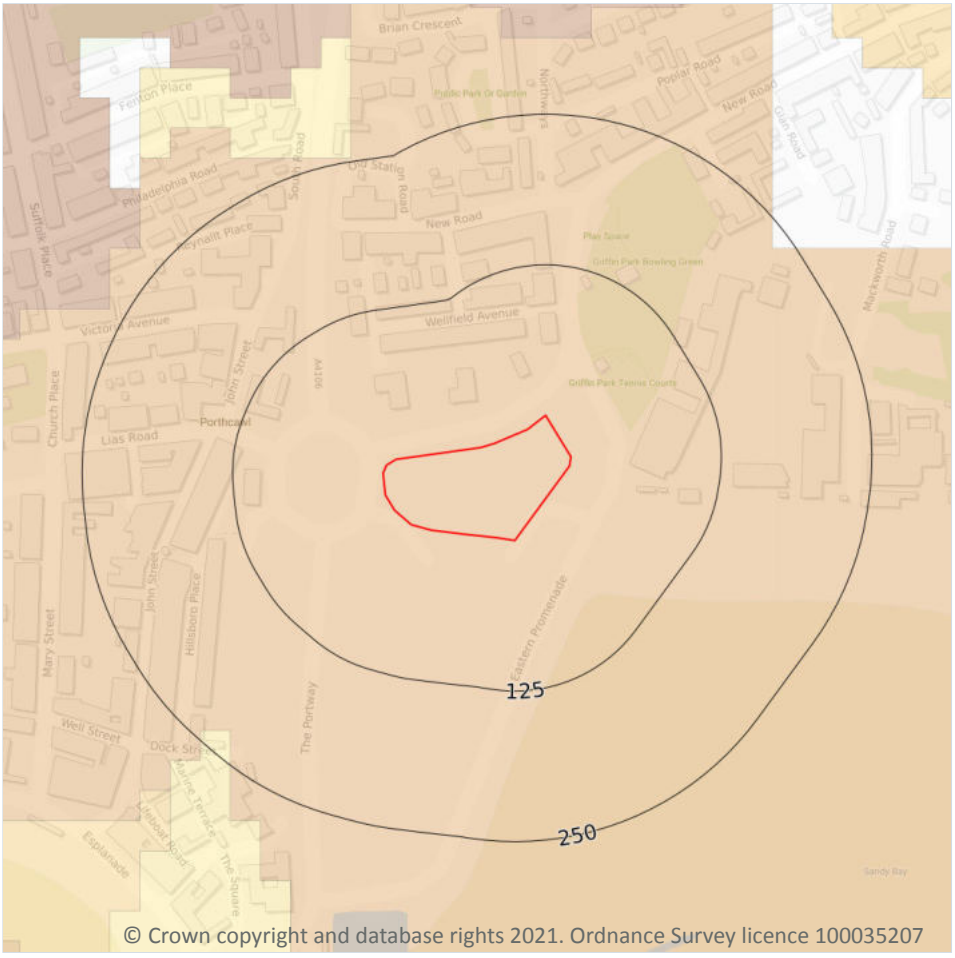
18.13 Clay mining

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



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

19.1 Radon

Records on site	1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 105**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 5% and 10%**	**Basic**

This data is sourced from the British Geological Survey and Public Health England.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	4

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 km^2. 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 km^2; 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 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
39m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
39m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 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 km^2).

This data is sourced from the British Geological Survey.

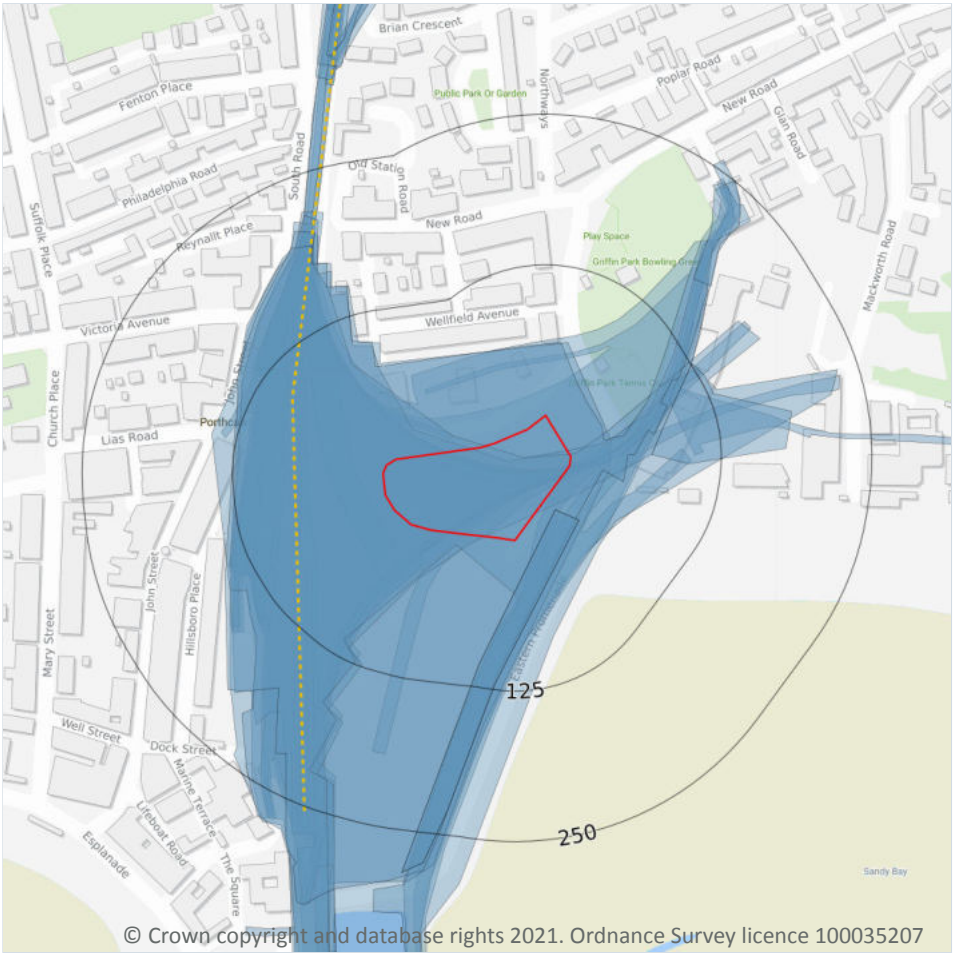
20.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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 km^2.

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects



Site Outline

Search buffers in metres (m)

- Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

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	18

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 108**

Location	Land Use	Year of mapping	Mapping scale
On site	**Railway Sidings**	**1965**	**2500**
On site	**Railway Sidings**	**1899**	**2500**
On site	**Railway Sidings**	**1880**	**2500**
On site	**Railway Sidings**	**1919**	**2500**
On site	**Railway Sidings**	**1943**	**2500**
On site	**Railway Sidings**	**1900**	**10560**
On site	**Railway Sidings**	**1947**	**10560**
On site	**Railway Sidings**	**1914**	**10560**
On site	**Railway Sidings**	**1876**	**10560**
On site	**Railway Sidings**	**1948**	**10560**
2m S	Railway Sidings	1965	2500
12m SE	Mineral Railway Sidings	1991	10000
12m SE	Mineral Railway Sidings	1978	10000
67m E	Tramway Sidings	1914	10560
85m W	Railway Sidings	1965	2500
86m NW	Railway Sidings	1965	2500
94m NE	Tramway Sidings	1919	2500

Location	Land Use	Year of mapping	Mapping scale
167m NE	Railway Sidings	1947	10560

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 108**

Location	Description
73m W	Dismantled

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0

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

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.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.

APPENDIX 6 - CIRIA Risk Assessment Methodology

Contaminated Land Risk Assessment

Contaminated Land Risk Assessment is a technique that identifies and considers the associated risk, determines whether the risks are significant and whether action needs to be taken. The four main stages of risk assessment are:

Hazard Identification ⇨ Hazard Assessment ⇨ Risk Estimation ⇨ Risk Evaluation

CLR11 outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. The starting point of the risk assessment is to identify the context of the problem and the objectives of the process. Under CLR11, three tiers of risk assessment exist - Preliminary, Generic Quantitative and Detailed Quantitative.

Formulating and developing a conceptual model for the site is an important requirement of risk assessment, this supports the identification and assessment of pollutant linkages. Development of the conceptual model forms the main part of preliminary risk assessment, and the model is subsequently refined or revised as more information and understanding is obtained through the risk assessment process.

Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the likelihood and the consequences of an event must be taken into account when assessing risk.

The risk assessment process needs to take into account the degree of confidence required in decisions. Identification of uncertainties is an essential step in risk assessment.

The likelihood of an event is classified on a four-point system using the following terms and definitions from CIRIA C552:

- High likelihood: There is a pollution linkage and an event appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution;

- Likely: There is a pollution linkage and all the elements are present and in the right place, which means it is probable that an event will occur. Circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term;

- Low likelihood: There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain even over a longer period such event would take place, and is less likely in the short term;

- Unlikely: There is a pollution linkage but circumstances are such that it is improbable the event would occur even in the long term.

The severity is also classified using a system based on CIRIA C552. The terms and definitions are:

- Severe: Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. A short-term risk to a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
  Examples – High concentrations of contaminant on surface of recreation area, major spillage of contaminants from site into controlled waters, explosion causing building to collapse;

- **Medium**: Chronic damage to human health ('significant harm' as defined in DETR 2000). Pollution of sensitive water resources. A significant change in a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
  Examples - Concentrations of contaminants exceed the generic assessment criteria, leaching of contaminants from a site to a Principal or Secondary Aquifer, death of species within a designated nature reserve;

- **Mild**: Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures, services or the environment;
  Examples – Pollution of non-classified groundwater or damage to buildings rendering it unsafe to occupy.

- **Minor**: harm, not necessarily significant harm, which may result in financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by use of personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.
  Examples – Presence of contaminants at such concentrations PPE is required during site work, loss of plants in landscaping scheme or discolouration of concrete.

Once the likelihood and severity have been determined, a risk category can be assigned using the table below.

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very Low	Very low

Definitions of the risk categories obtained from the above table are as follows together with an assessment of the further work that might be required:

- **Very high**: There is a high probability that severe harm could arise to a designated receptor from an identified hazard or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability. Urgent investigation and remediation are likely to be required;

- **High**: Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required and remedial works may be necessary in the short term and are likely over the longer term;

- **Moderate**: It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it would be more likely to be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term;

- **Low**: It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild;

- **Very Low**: There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

APPENDIX 7 - Exploratory Hole Logs

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **BH1**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282057.75 - 176872.09	Hole Type CP
Location: PORTHCAWL		Level: 7.70	Scale 1:50
Client: ALDI STORES LTD		Dates: 01/02/2021 - 01/02/2021	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
					0.10	7.60		MADE GROUND: Gravel surfacing.
					0.20	7.50		MADE GROUND: Light brown slightly clayey sand and gravel subbase. Gravel is subangular fine to coarse of mixed lithology.
		0.50	B					MADE GROUND: Black very sandy ashy gravel. Gravel is subangular to subrounded fine to coarse of mixed lithology including brick, plastic, metal and glass.
		0.50	ES					
		1.00	ES					
		1.20	D					
		1.20		N=9 (2,2/3,2,2,2)				
		1.50	ES					
		1.70	B					
		2.00	D					
		2.00	ES					
		2.00		N=10 (1,2/3,3,2,2)				
		2.50	B					
		3.00	D					
		3.00	ES					
		3.00		50 (4,12/50 for 145mm)				
					3.50	4.20		MADE GROUND: Concrete obstruction
		3.50	B					
		4.00		50 (25 for 10mm/50 for 0mm)	4.00	3.70		End of borehole at 4.00 m

Remarks

1. Inspection pit dug to 1.20m 2. No groundwater encountered. 3. Chiselling from 3.50m to 3.80m for 1/2 hour and from 3.80m to 4.00m for 1/2 hour. 4. Standpipe installed to 3.50m; 1.00m plain, 2.50m slotted. 5. Pit terminated at 4.0m due to concrete obstruction possibly relating to dock wall. 6. All PID results were recorded as 0.00

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **BH2**

Sheet 1 of 2

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282034.97 - 176889.45	Hole Type CP
Location: PORTHCAWL		Level: 7.78	Scale 1:50
Client: ALDI STORES LTD		Dates: 02/02/2021 - 03/02/2021	Logged By SM

Samples and In Situ Testing			Depth (m)	Level (m)	Stratum Description
Depth (m)	Type	Results			
			0.30	7.48	MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
0.50	B		0.55	7.23	MADE GROUND: Dark brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology.
0.50	ES				
1.00	ES				Loose light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
1.20	D				
1.20		N=6 (2,1/2,1,1,2)			
1.50	ES				
1.70	B				
2.00	ES				
2.00		N=7 (2,2/2,2,1,2)			
2.50	B				
			2.80	4.98	Loose to medium dense light brown fine to medium SAND and GRAVEL. Gravel is subangular fine to coarse of mixed lithology.
3.00	D				
3.00		N=10 (3,2/3,3,2,2)			
3.50	B				
4.00	D				
4.00		N=9 (2,2/2,2,3,2)			
4.50	B				
5.00	D				
5.00		N=7 (2,2/1,2,2,2)			
5.50	B				
6.00	D				
6.00		N=9 (2,3/2,2,3,2)	6.20	1.58	Firm grey slightly gravelly silty CLAY. Gravel is subangular fine to coarse of mixed lithology.
6.50	B				
7.50	D		7.50	0.28	Loose to medium dense grey slightly gravelly silty fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
7.50		N=7 (2,2/1,2,2,2)			
8.00	B				
9.00	D				
9.00		N=10 (2,3/3,3,2,2)			
9.50	B				
10.00	D				

Water Strikes: 4.00

Well: Installation to 9.00m; 6.00m plain, 3.00m slotted.

Legend: 1 2 3 4 5 6 7 8 9 10

Continued on next sheet

Remarks

1. Inspection pit dug to 1.20m 2. Groundwater encountered at 7.50m rising to 4.30m after 20 minutes. 3. Chiselling from 11.50m to 12.00m for 1 hour. 4. Standpipe installed to 9.00m; 6.00m plain, 3.00m slotted. 5. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **BH2**

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282034.97 - 176889.45	Hole Type CP
Location: PORTHCAWL		Level: 7.78	Scale 1:50
Client: ALDI STORES LTD		Dates: 02/02/2021 - 03/02/2021	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		10.00		N=9 (3,2/2,2,2,3)				
		10.50	B		10.50	-2.72		Weak red brown LIMESTONE moderately weathered recovered as subangular coarse gravel.
		11.00	D					
		11.50	B					
		11.50		50 (25 for 125mm/50 for 45mm)				
		12.00	D		12.00	-4.22		End of borehole at 12.00 m
		12.00		50 (25 for 35mm/50 for 5mm)				

Remarks

1. Inspection pit dug to 1.20m 2. Groundwater encountered at 7.50m rising to 4.30m after 20 minutes. 3. Chiselling from 11.50m to 12.00m for 1 hour. 4. Standpipe installed to 9.00m; 6.00m plain, 3.00m slotted. 5. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **BH3**

Sheet 1 of 2

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282060.18 - 176929.25	Hole Type CP
Location: PORTHCAWL		Level: 7.68	Scale 1:50
Client: ALDI STORES LTD		Dates: 03/02/2021 - 04/02/2021	Logged By SM

Samples and In Situ Testing						
Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
			0.20	7.48		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
0.50	B					MADE GROUND: Dark brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic.
0.50	ES					
1.00	ES					
1.20	D					
1.20		N=10 (2,2/3,3,2,2)				
1.50	ES					
1.70	B					
			1.80	5.88		Loose to medium dense light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to coarse of mixed lithology.
2.00	D					
2.00	ES					
2.00		N=8 (2,2/2,2,2,2)				
2.50	B					
3.00	ES					
3.00		N=21 (6,5/4,5,6,6)				
3.50	B		3.50	4.18		Dense to very dense brown slightly gravelly fine to medium SAND and GRAVEL. Gravel is subangular fine to medium of mixed lithology.
4.00	D					
4.00		N=32 (7,8/9,8,7,8)				
4.50	B					
5.00	D					
5.00		N=50 (25 for 105mm/50 for 225mm)				
5.50	B					
			5.90	1.78		Firm grey slightly gravelly silty CLAY. Gravel is subangular fine to coarse of mixed lithology.
6.00	D					
6.00		N=10 (2,3/2,2,3,3)				
6.50	B					
7.00	D		7.00	0.68		Medium dense grey slightly gravelly silty fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
7.50	B					
7.50		N=15 (2,3/4,4,3,4)				
8.00	D					
8.50	B					
9.00	D					*Dense at 9.00m bgl.*
9.00		N=33 (4,4/7,7,9,10)				
10.00	B					

Well: Water Strikes

Continued on next sheet

Remarks

1. Inspection pit dug to 1.20m 2. Groundwater encountered at 7.60m rising to 4.50m after 20 minutes 3. Slow drilling from 3.50m to 4.00m for 1 hour, from 4.00m to 4.50m for 1 hour, from 4.50m to 5.00m 1 hour and from 5.00m to 5.50m for 1 hour. 4. Chiselling from 12.70m to 13.00m for 1 hour. 5. Standpipe installed to 9.00m; 6.00m plain, 3.00m slotted. 6. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **BH3**

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282060.18 - 176929.25	Hole Type CP
Location: PORTHCAWL		Level: 7.68	Scale 1:50
Client: ALDI STORES LTD		Dates: 03/02/2021 - 04/02/2021	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		10.50 10.50	D	N=19 (3,4/4,4,5,6)				
					10.90	-3.22		Firm to stiff grey slightly gravelly silty CLAY. Gravel is subangular fine to coarse of mixed lithology.
		12.00 12.00	B	N=18 (5,4/4,5,4,5)				
		12.50	D					
					12.70	-5.02		Weak red brown LIMESTONE moderately weathered recovered as subangular coarse gravel.
		13.00 13.00	B	50 (25 for 30mm/50 for 10mm)	13.00	-5.32		End of borehole at 13.00 m

Remarks

1. Inspection pit dug to 1.20m 2. Groundwater encountered at 7.60m rising to 4.50m after 20 minutes 3. Slow drilling from 3.50m to 4.00m for 1 hour, from 4.00m to 4.50m for 1 hour, from 4.50m to 5.00m 1 hour and from 5.00m to 5.50m for 1 hour. 4. Chiselling from 12.70m to 13.00m for 1 hour. 5. Standpipe installed to 9.00m; 6.00m plain, 3.00m slotted. 6. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **BH4**

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282064.74 - 176903.29	Hole Type CP
Location: PORTHCAWL		Level: 7.89	Scale 1:50
Client: ALDI STORES LTD		Dates: 05/02/2021 - 08/02/2021	Logged By SM

Samples and In Situ Testing						
Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
			0.20	7.69		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
0.50	B					
0.50	ES					
1.00	ES		1.00	6.89		MADE GROUND: Dark brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic.
1.20	D					
1.20		N=9 (2,2/3,2,2,2)				Loose light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
1.50	ES					
1.70	B					
2.00	D					
2.00	ES					
2.00		N=8 (2,1/2,2,2,2)				
3.00	D					
3.00		N=8 (2,2/3,2,2,1)				
3.50	B					
4.00	D		4.00	3.89		Very dense light brown gravelly fine to medium SAND and GRAVEL. Gravel is subangular fine to coarse of mixed lithology.
4.00		N=50 (10,12/50 for 240mm)				
4.50	B					
5.00	D					
5.00		50 (25 for 125mm/50 for 205mm)				
5.50	B					
6.00	D					
6.00		N=19 (4,5/6,4,4,5)	6.10	1.79		Medium dense brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
6.50	B					
7.00	D					
7.50	B					
7.50		N=12 (3,2/4,3,3,2)				
8.00	D					
8.50	B					
9.00	D					
9.00		N=23 (8,9/4,6,6,7)				
9.50	B					

Well: Water Strikes

Depth scale: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Continued on next sheet

Remarks

1. Inspection pit dug to 1.20m 2. Groundwater encountered at 7.50m rising to 4.30m after 20 minutes 3. Slow drilling from 4.00m to 4.50m for 1 hour and from 4.50m to 5.00m for 1 hour. 4. Chiselling from 13.50m to 13.70m for 1 hour. 5. Standpipe installed to 9.00m; 6.00m plain, 3.00m slotted. 6. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **BH4**

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282064.74 - 176903.29	Hole Type CP
Location: PORTHCAWL		Level: 7.89	Scale 1:50
Client: ALDI STORES LTD		Dates: 05/02/2021 - 08/02/2021	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
		10.50 10.50	D	N=22 (6,6/5,5,6,6)					
		11.00	B						11
		11.50	D		11.60	-3.71		Firm to stiff red brown slightly sandy gravelly CLAY. Gravel is subangular to subrounded fine to medium of mixed lithology including limestone	
		12.00 12.00	D	N=36 (7,7/8,9,9,10)					12
									13
		13.50 13.50	D	N=50 (7,7/11,12,13,14)	13.50	-5.61		Weak red brown LIMESTONE moderately weathered recovered as subangular coarse gravel.	
		13.70		N=50 (12,12/50 for 240mm)	13.70	-5.81		End of borehole at 13.50 m	14
									15
									16
									17
									18
									19
									20

Remarks

1. Inspection pit dug to 1.20m 2. Groundwater encountered at 7.50m rising to 4.30m after 20 minutes 3. Slow drilling from 4.00m to 4.50m for 1 hour and from 4.50m to 5.00m for 1 hour. 4. Chiselling from 13.50m to 13.70m for 1 hour. 5. Standpipe installed to 9.00m; 6.00m plain, 3.00m slotted. 6. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS01**

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282059.57 - 176885.63	Hole Type WS
Location: PORTHCAWL		Level: 7.83	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Samples and In Situ Testing						
Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
			0.10	7.73		MADE GROUND: Gravel surfacing
0.20 0.30	ES ES					MADE GROUND: Dark brown gravelly fine to coarse sand. Gravel is angular to subangular fine to medium of mixed lithology including brick and plastic.
			1.00	6.83		NO RECOVERY
1.20		N=9 (1,1/2,2,2,3)				
			1.50	6.33		Medium dense light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
2.00 2.00	D	N=10 (2,3/3,2,2,3)				
3.00 3.00	D	N=23 (2,3/4,5,7,7)				
4.00 4.00	D	N=15 (5,6/5,4,3,3)				
5.00	D		5.00	2.83		

Well: 1 2 3 4 5

Water Strikes: ▼ 4.00

Continued on next sheet

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. Groundwater encountered at 4.5m bgl. 3. Standpipe installed to 3.00m bgl: 1.00m plain pipe, 2.00m slotted pipe. 4. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS01**

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282059.57 - 176885.63	Hole Type WS
Location: PORTHCAWL		Level: 7.83	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		5.00		N=14 (3,4/4,3,4,3)				End of borehole at 5.00 m

6

7

8

9

10

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. Groundwater encountered at 4.5m bgl. 3. Standpipe installed to 3.00m bgl: 1.00m plain pipe, 2.00m slotted pipe. 4. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS02**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282076.36 - 176921.40	Hole Type WS
Location: PORTHCAWL		Level: 7.93	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
		0.20	ES		0.20	7.73		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.	
								Loose light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.	1
		1.20		N=7 (1,1/2,1,2,2)					
		2.00 2.00	D	N=9 (2,2/3,2,2,2)					2
		3.00 3.00	ES	N=23 (1,2/3,5,7,8)				*Becoming medium dense at 3.00m bgl.*	3
		4.00 4.00	ES	50 (9,12/50 for 105mm)	4.00	3.93		*Becoming very dense at 4.0m bgl.* End of borehole at 4.00 m	4
									5

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. No groundwater encountered. 3. Standpipe installed to 4.00m bgl: 1.00m plain pipe, 3.00m slotted pipe. 4. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS03**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282055.22 - 176906.37	Hole Type WS
Location: PORTHCAWL		Level: 7.99	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
		0.20	ES		0.40	7.59		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.	
		1.20 1.20	D	N=6 (1,2/1,1,2,2)				Loose light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.	1
		2.00 2.00	D	N=11 (2,1/2,3,3,3)				*Becoming medium dense at 2.00m bgl.*	2
		3.00 3.00	D	N=27 (1,3/4,7,8,8)					3
		4.00 4.00	D	50 (7,9/50 for 105mm)	4.00	3.99		*Becoming very dense at 4.0m bgl.* End of borehole at 4.00 m	4
									5

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. No groundwater encountered. 3. Standpipe installed to 3.00m bgl: 1.00m plain pipe, 2.00m slotted pipe. 4. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS04**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282042.02 - 176906.34	Hole Type WS
Location: PORTHCAWL		Level: 7.89	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
		0.20	ES		0.30	7.59		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.	
		1.00	D					Loose light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.	1
		1.20		N=8 (1,1/2,2,2,2)					
		2.00 2.00	D	N=10 (2,2/3,2,3,2)				*Becoming medium dense at 2.00m bgl.*	2
		3.00 3.00	D	N=16 (1,1/2,4,5,5)					3
		4.00 4.00	D	N=50 (7,7/9,10,12,19)	4.00	3.89		*Becoming very dense at 4.0m bgl.* End of borehole at 4.00 m	4
									5

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. No groundwater encountered. 3. Standpipe installed to 4.00m bgl: 1.00m plain pipe, 3.00m slotted pipe. 4. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS05**

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282042.93 - 176884.49	Hole Type WS
Location: PORTHCAWL		Level: 7.72	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
		0.20	ES		0.40	7.32		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.	
		1.20 1.20	ES	N=7 (1,1/1,2,1,3)				Loose light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.	1
		2.00 2.00	D	N=10 (1,2/2,2,3,3)				*Becoming medium dense at 2.00m bgl.*	2
		3.00 3.00	D	N=24 (2,2/3,5,7,9)					3
		4.00 4.00	D	N=31 (6,6/7,9,9,6)				*Dense at 4.0m bgl.*	4
		5.00	D		5.00	2.72		Continued on next sheet	5

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. No groundwater encountered. 3. Standpipe installed to 3.00m bgl: 1.00m plain pipe, 2.00m slotted pipe. 4. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS05**

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282042.93 - 176884.49	Hole Type WS
Location: PORTHCAWL		Level: 7.72	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		5.00		N=21 (5,5/4,5,6,6)				End of borehole at 5.00 m

6

7

8

9

10

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. No groundwater encountered. 3. Standpipe installed to 3.00m bgl: 1.00m plain pipe, 2.00m slotted pipe. 4. All PID results were recorded as 0.00.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS06**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282009.63 - 176904.87	Hole Type WS
Location: PORTHCAWL		Level: 8.02	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.30	D		0.40	7.62		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
		1.20 1.20	D	N=8 (1,2/2,1,2,3)				Loose light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
		2.00 2.00	D	N=12 (2,2/3,3,3,3)				*Becoming medium dense at 2.00m bgl.*
		3.00 3.00	D	N=20 (2,4/4,5,5,6)				
		4.00 4.00	D	N=50 (6,7/13,12,13,12)	4.00	4.02		*Becoming very dense at 4.0m bgl.* End of borehole at 4.00 m

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. No groundwater encountered. 3. Borehole backfilled. 4. All PID results were recorded as 0.00

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS07**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282052.10 - 176875.07	Hole Type WS
Location: PORTHCAWL		Level: 7.61	Scale 1:25
Client: ALDI STORES LTD		Dates: 04/02/2021 -	Logged By SM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
					0.20	7.41		MADE GROUND: Gravel surfacing	
								MADE GROUND: Dark brown gravelly fine to coarse sand. Gravel is angular to subangular fine to medium of mixed lithology including brick and plastic.	1
		1.20		N=8 (1,2/2,1,2,3)					
		1.40	D		1.30	6.31		Loose light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.	
		2.00 2.00	D	N=10 (2,3/2,3,3,2)				*Becoming medium dense at 2.00m bgl.*	2
		3.00 3.00	D	N=17 (3,3/4,4,5,4)					3
		4.00 4.00	D	N=27 (5,6/6,7,7,7)					4
		5.00		N=24 (4,6/7,5,5,7)	5.00	2.61		End of borehole at 5.00 m	5

Remarks

1. Hand excavated inspection pit to 1.20m bgl. 2. No groundwater encountered. 3. Borehole backfilled. 4. All PID results were recorded as 0.00.

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **SuDS1**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282033.37 - 176903.60 Level: 7.94	Date 03/02/2021
Location: PORTHCAWL		Dimensions (m): 1.5 × 0.6 Depth 1.50	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.20	ES		0.30	7.64		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
	1.20	D					Light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
	1.50	B		1.50	6.44		End of pit at 1.50 m

Remarks: 1. No groundwater encountered 2. Soil percolation testing carried out. 3. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **SuDS2**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282088.16 - 176937.34 Level: 7.48	Date 03/02/2021
Location: PORTHCAWL		Dimensions (m): 1 × 0.6 Depth 1.70	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES					MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
				0.30	7.18		
	0.40	ES					MADE GROUND: Light brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic.
				0.50	6.98		Light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
	1.20	D					
	1.50	B					
				1.70	5.78		End of pit at 1.70 m

Remarks: 1. No groundwater encountered 2. Soil percolation testing carried out. 3. All PID results were recorded as 0.00

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **TP01**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282068.91 - 176883.63 Level: 7.87	Date 02/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 2.50	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							MADE GROUND: Light brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology.
				0.30	7.56		MADE GROUND: Black very sandy ashy gravel. Gravel is subangular to subrounded fine to coarse of mixed lithology including brick, plastic, metal and glass.
	0.50	ES					
	1.00	ES					
	1.50	ES					
				1.70	6.16		Light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
	2.00 2.00	B D					
	2.50	D		2.50	5.36		End of pit at 2.50 m

Remarks: 1. No groundwater encountered. 2. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **TP02**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282035.68 - 176879.54 Level: 7.73	Date 02/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 2.30	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES					MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
				0.20	7.53		
	0.30	ES					MADE GROUND: Light brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic.
				0.40	7.33		Light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
	1.00	D					
	2.00	B					
	2.00	D					
				2.30	5.43		End of pit at 2.30 m

Remarks: 1. No groundwater encountered. 2. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **TP03**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282014.13 - 176885.89 Level: 7.86	Date 02/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 1.50	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES		0.15	7.71		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
	0.30	ES		0.50	7.36		MADE GROUND: Light brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic.
	0.90	D					Light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
	1.00	D					
	1.50	D		1.50	6.36		End of pit at 1.50 m

1
2
3
4
5

Remarks: 1. No groundwater encountered. 2. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **TP04**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282018.87 - 176902.93 Level: 7.89	Date 02/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 2.00	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES		0.20	7.69		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
	0.40	ES		0.40	7.49		MADE GROUND: Light brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic.
	1.00	ES					Light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
	1.80	D					
	2.00	B		2.00	5.89		End of pit at 2.00 m

1 2 3 4 5

Remarks: 1. No groundwater encountered. 2. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **TP05**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 281998.30 - 176903.25 Level: 8.38	Date 02/02/2021
Location: PORTHCAWL		Dimensions (m):	Scale 1:25
Client: ALDI STORES LTD		Depth 2.00	Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES		0.20	8.18		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
	0.50	ES					MADE GROUND: Dark brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic.
	1.50	ES		2.00	6.38		End of pit at 2.00 m

Remarks: 1. No groundwater encountered. 2. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **TP06**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 281976.94 - 176912.26 Level: 9.14	Date 02/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 2.20	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES		0.10	9.04		MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
	0.50	ES		0.70	8.44		MADE GROUND: Orange brown slightly clayey gravelly sand. Gravel is subangular fine to coarse of mixed lithology including brick.
	1.00	ES		2.20	6.94		MADE GROUND: Light brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic. End of pit at 2.20 m

1 2 3 4 5

Remarks: 1. No groundwater encountered. 2. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **TP07**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282012.37 - 176924.81 Level: 8.42	Date 02/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 1.80	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES					MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
				0.30	8.12		Light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
	1.20	D					
	1.50	B					
	1.80	D		1.80	6.62		End of pit at 1.80 m

1 2 3 4 5

Remarks: 1. No groundwater encountered. 2. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **TP08**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282041.22 - 176921.28 Level: 7.86	Date 02/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 2.00	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES					MADE GROUND: Dark brown slightly sandy slightly gravelly clayey topsoil. Gravel is angular to subrounded fine to coarse of mixed lithology including brick.
				0.30	7.56		
	0.40	ES					MADE GROUND: Light brown slightly clayey sand and gravel. Gravel is subangular fine to coarse of mixed lithology including brick and plastic.
				0.50	7.36		Light brown slightly gravelly fine to medium SAND. Gravel is subangular fine to medium of mixed lithology.
	1.00	B					
	1.00	D					
	2.00	D		2.00	5.86		End of pit at 2.00 m

Remarks: 1. No groundwater encountered. 2. All PID results were recorded as 0.00.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **Trench1**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282053.74 - 176871.76 Level: 7.64	Date 03/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 2.10	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10	7.54		MADE GROUND: Gravel surfacing.
				0.30	7.34		MADE GROUND: Light brown slightly clayey sand and gravel subbase. Gravel is subangular fine to coarse of mixed lithology.
				2.10	5.54		MADE GROUND: Black very sandy ashy gravel. Gravel is subangular to subrounded fine to coarse of mixed lithology including brick, plastic, metal and glass. End of pit at 2.10 m

1 2 3 4 5

Remarks: 1. No groundwater encountered. 2. Possible dock wall encountered at 2.1m bgl.

Stability: Unstable

Trial Pit Log

GROUNDTECH CONSULTING

Trialpit No **Trench2**

Sheet 1 of 1

Project Name: ALDI PORTHCAWL	Project No. GRO-21015	Co-ords: 282054.65 - 176873.40 Level: 7.66	Date 03/02/2021
Location: PORTHCAWL		Dimensions (m): Depth 2.10	Scale 1:25
Client: ALDI STORES LTD			Logged SM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10	7.56		MADE GROUND: Gravel surfacing.
				0.30	7.36		MADE GROUND: Light brown slightly clayey sand and gravel subbase. Gravel is subangular fine to coarse of mixed lithology.
							MADE GROUND: Black very sandy ashy gravel. Gravel is subangular to subrounded fine to coarse of mixed lithology including brick, plastic, metal and glass.
				2.10	5.56		End of pit at 2.10 m

1 2 3 4 5

Remarks: 1. No groundwater encountered. 2. Possible dock wall encountered at 2.1m bgl.

Stability: Unstable

Project Id:	GRO-21015	Title:	Site Plan
Project Title:	ALDI PORTHCAWL	Scale:	1:1500
Location:	PORTHCAWL	Engineer:	SM
Client:	ALDI STORES LTD	Contractor:	

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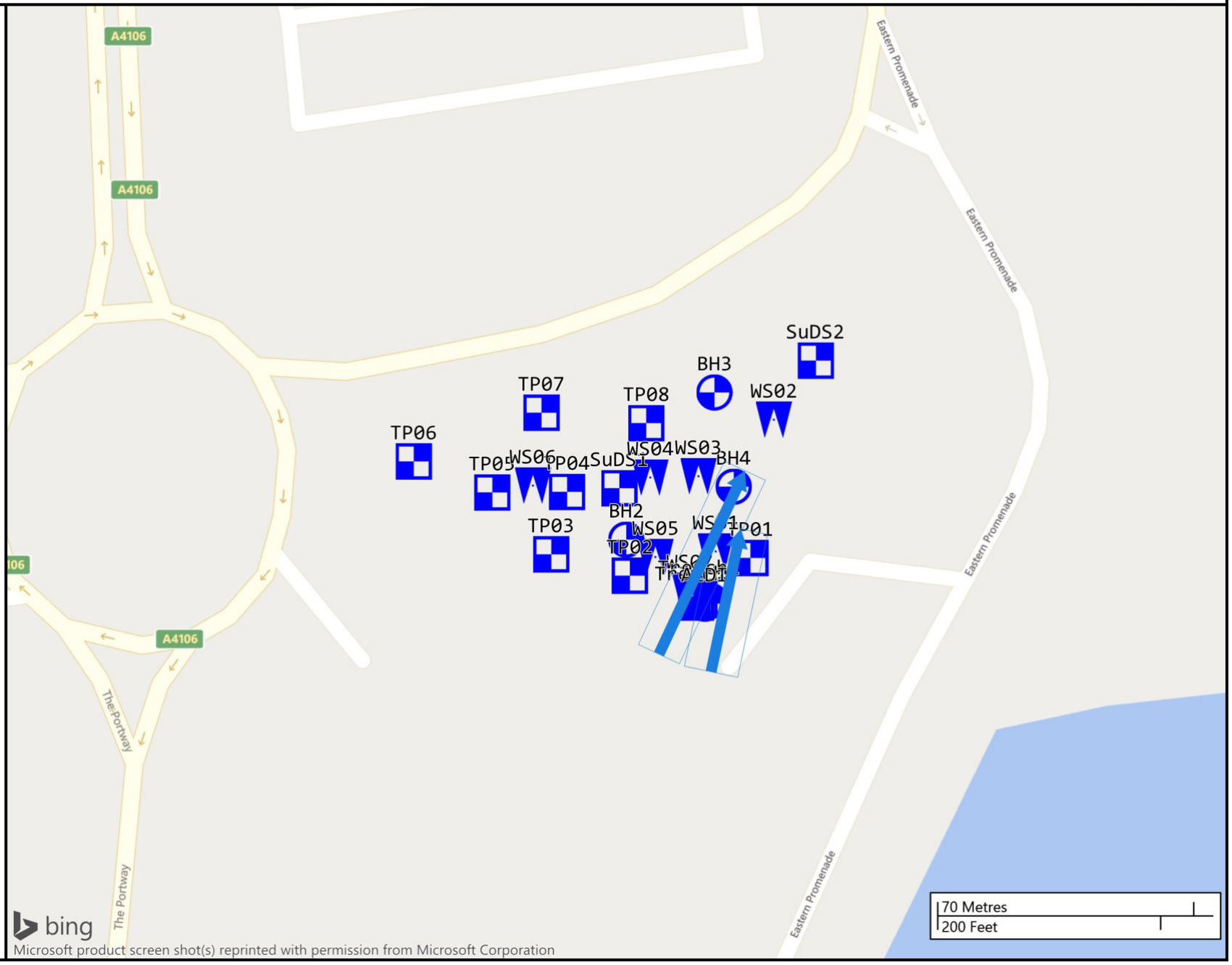
Legend Key

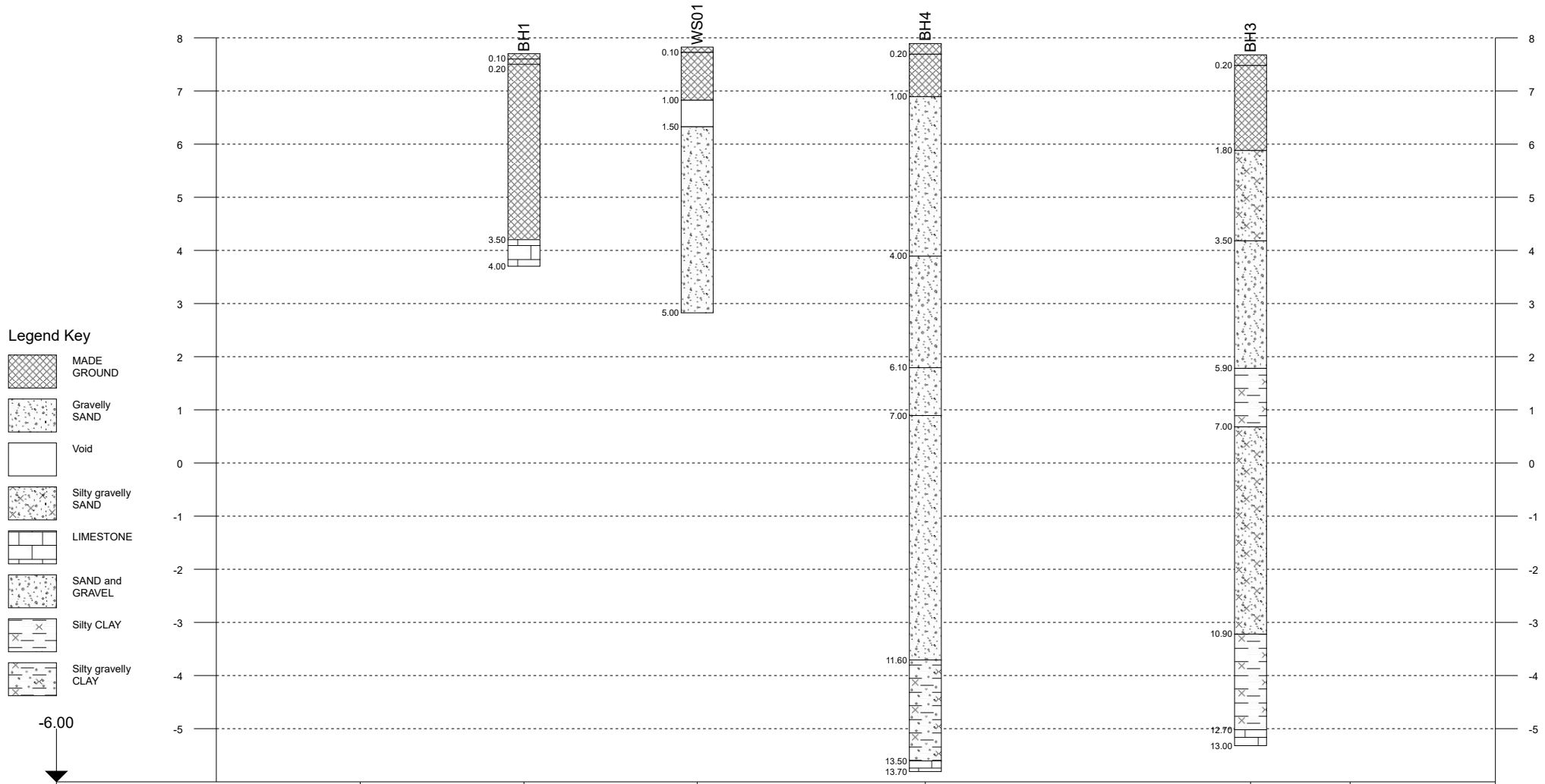
- Sections - Section line 1
- Sections - Section line 2
- Locations By Type - Empty
- Locations By Type - CP
- Locations By Type - TP
- Locations By Type - WS



Project Id: GRO-21015
Project Title: ALDI PORTHCAWL
Location: PORTHCAWL
Client: ALDI STORES LTD

Title: Section line 1
Vertical Scale: 1:108
Horizontal Scale: 1:452
Engineer: SM

GROUNDTECH CONSULTING



Chainage (m)	0.00	12.89	26.53	44.49	70.09	77.93
Offset (m)		3.21	2.28	1.71	4.57	
Elevation (mAOD)		7.70	7.83	7.89	7.68	

APPENDIX 8 - Geo-Environmental Testing (Soils)

Certificate of Analysis

Certificate Number	21-03748	*Issued:*	02-Mar-21
Client	Groundtech Consulting Ltd First Floor Lloyd House Orford Ct Leigh Warrington WN7 3XJ		
Our Reference	21-03748		
Client Reference	21015		
Order No	1566		
Contract Title	Aldi Porthcawl		
Description	5 Soil samples, 3 Leachate samples.		
Date Received	23-Feb-21		
Date Started	23-Feb-21		
Date Completed	02-Mar-21		
Test Procedures	Identified by prefix DETSn (details on request).		
Notes	Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.		

Approved By

Adam Fenwick
Contracts Manager

UKAS TESTING
2139

Summary of Chemical Analysis
Soil Samples

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805646	1805647	1805648	1805649	1805650
			.Sample ID	BH1	BH2	BH3	SUDS 1	SUDS 2
			Depth	1.00	0.50	0.50	0.20	0.40
			Other ID					
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL
			Sampling Date	02/02/2021	02/02/2021	02/02/2021	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**					
Metals								
Arsenic	DETSC 2301#	0.2	mg/kg	23	16	17	18	62
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.4	0.3	0.5	1.0	1.9
Cadmium	DETSC 2301#	0.1	mg/kg	0.6	0.3	0.4	1.1	1.2
Chromium	DETSC 2301#	0.15	mg/kg	15	7.9	17	20	25
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	95	39	66	97	99
Lead	DETSC 2301#	0.3	mg/kg	110	110	61	230	780
Mercury	DETSC 2325#	0.05	mg/kg	0.14	0.11	0.07	0.18	3.8
Nickel	DETSC 2301#	1	mg/kg	22	12	20	20	22
Selenium	DETSC 2301#	0.5	mg/kg	1.0	< 0.5	2.6	1.4	1.7
Zinc	DETSC 2301#	1	mg/kg	170	120	140	400	700
Inorganics								
pH	DETSC 2008#		pH	8.2	9.0	7.9	6.7	8.6
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.3	0.2	0.2	0.6	0.2
Organic matter	DETSC 2002#	0.1	%	9.2	1.6	8.0	16	6.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	54	32	30	45	140
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5				< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2				< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5				< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4				< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10				< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9				< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5				< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6				< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4				< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10				< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10				< 10
Fuel Identification	*	o provide an interpretation			e information to provide an interpretation			
EPH (C10-C40)	DETSC 3311#	10	mg/kg	410	< 10	48	61	1100
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01				< 0.01

Key: * -not accredited. # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Summary of Chemical Analysis
Soil Samples

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805646	1805647	1805648	1805649	1805650
			.Sample ID	BH1	BH2	BH3	SUDS 1	SUDS 2
			Depth	1.00	0.50	0.50	0.20	0.40
			Other ID					
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL
			Sampling Date	02/02/2021	02/02/2021	02/02/2021	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	0.04	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.07	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.97	0.08	0.24	0.17	0.29
Anthracene	DETSC 3303	0.03	mg/kg	0.23	< 0.03	0.05	< 0.03	0.05
Fluoranthene	DETSC 3303#	0.03	mg/kg	1.8	0.12	0.52	0.29	0.55
Pyrene	DETSC 3303#	0.03	mg/kg	1.5	0.08	0.41	0.22	0.42
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.57	0.04	0.18	0.08	0.17
Chrysene	DETSC 3303	0.03	mg/kg	0.88	0.07	0.27	0.20	0.29
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.94	0.06	0.22	0.16	0.26
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.35	< 0.03	0.09	0.05	0.10
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.59	< 0.03	0.13	0.07	0.15
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.33	< 0.03	0.07	0.06	0.08
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.12	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.41	< 0.03	0.07	0.06	0.10
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	8.9	0.46	2.3	1.4	2.5
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	0.8	< 0.3

Key: * -not accredited. # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805646	1805650
			.Sample ID	BH1	SUDS 2
			Depth	1.00	0.40
			Other ID		
			Sample Type	SOIL	SOIL
			Sampling Date	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s
Test	**Method**	**LOD**	**Units**		
VOCs					
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805646	1805650
			.Sample ID	BH1	SUDS 2
			Depth	1.00	0.40
			Other ID		
			Sample Type	SOIL	SOIL
			Sampling Date	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s
Test	**Method**	**LOD**	**Units**		
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
SVOCs					
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	0.2	0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	0.5
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805646	1805650
			.Sample ID	BH1	SUDS 2
			Depth	1.00	0.40
			Other ID		
			Sample Type	SOIL	SOIL
			Sampling Date	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	0.3	1.5

Key: * -not accredited. n/s -not supplied.

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl
Sample Id BH1 1.00

Sample Numbers 1805646 1805651
Date Analysed 02/03/2021

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	20.0	3	5	6
DETSC 2003# Loss On Ignition	%	14.0	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311# TPH (C10 - C40)	mg/kg	410.0	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	36.0	100	n/a	n/a
DETSC 2008# pH	pH Units	8.2	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	1.4	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached* mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	1.3	0.013	0.5	2	25
DETSC 2306 Barium as Ba	11	0.11	20	100	300
DETSC 2306 Cadmium as Cd	0.033	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	0.27	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	1.1	< 0.02	2	50	100
DETSC 2306 Mercury as Hg	0.023	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	7.3	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	< 0.50	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	0.78	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.81	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	1.8	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	< 1.3	< 0.01	4	50	200
DETSC 2055 Chloride as Cl	8200	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	< 100	< 0.1	10	150	500
DETSC 2055 Sulphate as SO4	4000	< 100	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	42000	420	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	6.3
DETSC 2009 Conductivity uS/cm	59.8
* Temperature*	20.0
Mass of Sample Kg*	0.120
Mass of dry Sample Kg*	0.102
Stage 1	
Volume of Leachant L2*	0.997
Volume of Eluate VE1*	0.94

Disclaimer: *The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.06 ** DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.*

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl
Sample Id BH3 0.50

Sample Numbers 1805648 1805652
Date Analysed 02/03/2021

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	15.0	3	5	6
DETSC 2003# Loss On Ignition	%	10.0	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311# TPH (C10 - C40)	mg/kg	48.0	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	4.9	100	n/a	n/a
DETSC 2008# pH	pH Units	7.9	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	1.2	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached* mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	0.3	< 0.01	0.5	2	25
DETSC 2306 Barium as Ba	2.2	< 0.1	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	< 0.25	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	0.76	< 0.02	2	50	100
DETSC 2306 Mercury as Hg	< 0.010	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	1.9	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	< 0.50	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	0.36	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	< 0.17	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.54	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	< 1.3	< 0.01	4	50	200
DETSC 2055 Chloride as Cl	2000	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	< 100	< 0.1	10	150	500
DETSC 2055 Sulphate as SO4	2600	< 100	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	30000	300	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	6.3
DETSC 2009 Conductivity uS/cm	42.2
* Temperature*	20.0

Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.096

Stage 1

Volume of Leachant L2*	0.946
Volume of Eluate VE1*	0.91

Disclaimer: *The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.06 ** DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.*

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl
Sample Id SUDS 2 0.40

Sample Numbers 1805650 1805653
Date Analysed 02/03/2021

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	13.0	3	5	6
DETSC 2003# Loss On Ignition	%	11.0	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311# TPH (C10 - C40)	mg/kg	1100.0	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	230.0	100	n/a	n/a
DETSC 2008# pH	pH Units	8.6	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	2.5	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached* mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	3	0.03	0.5	2	25
DETSC 2306 Barium as Ba	7.3	< 0.1	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	< 0.25	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	1.1	< 0.02	2	50	100
DETSC 2306 Mercury as Hg	0.022	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	2.3	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	< 0.50	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	0.84	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.25	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.74	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	< 1.3	< 0.01	4	50	200
DETSC 2055 Chloride as Cl	1800	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	< 100	< 0.1	10	150	500
DETSC 2055 Sulphate as SO4	11000	110	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	46000	460	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	6.4
DETSC 2009 Conductivity uS/cm	65.8
* Temperature*	20.0
Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.096
Stage 1	
Volume of Leachant L2*	0.944
Volume of Eluate VE1*	0.9

Disclaimer: *The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.06 ** DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.*

Summary of Asbestos Analysis
Soil Samples

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1805646	BH1 1.00	SOIL	NAD	none	Colin Patrick
1805647	BH2 0.50	SOIL	Chrysotile	bundle of Chrysotile fibres	Colin Patrick
1805648	BH3 0.50	SOIL	NAD	none	Colin Patrick
1805649	SUDS 1 0.20	SOIL	NAD	none	Colin Patrick
1805650	SUDS 2 0.40	SOIL	Chrysotile	bundles of Chrysotile fibres	Colin Patrick

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

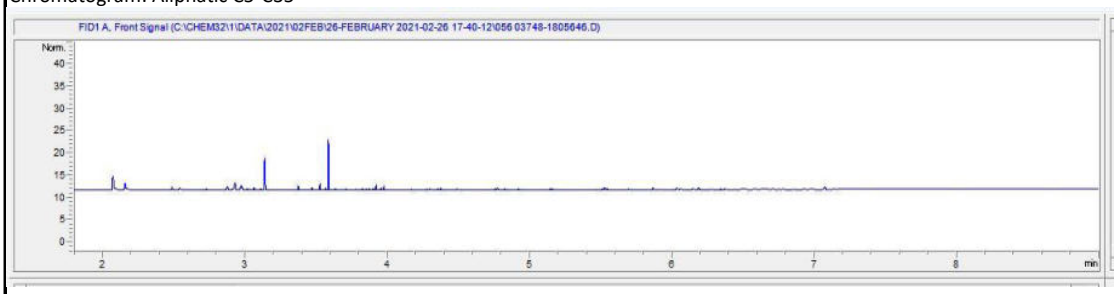
Summary of Chemical Analysis
Chromatograms

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl

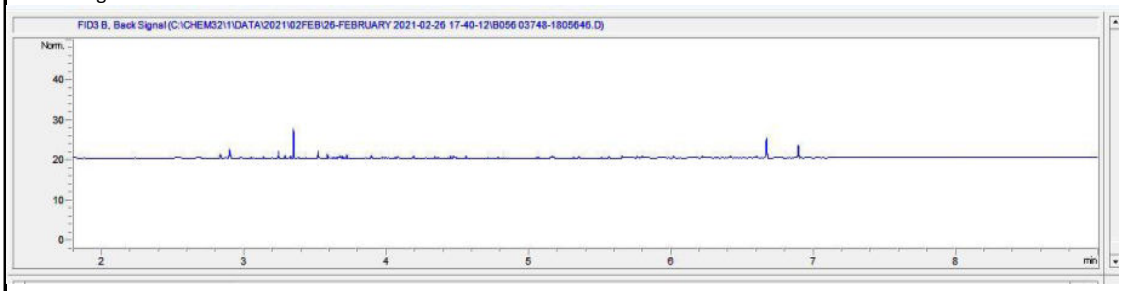
Lab No	1805646
.Sample ID	BH1
Depth	1
Other ID	
Sample Type	SOIL
Sampling Date	02/02/2021
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatic C5-C35 *



Chromatogram: Aromatic C5-C35 *



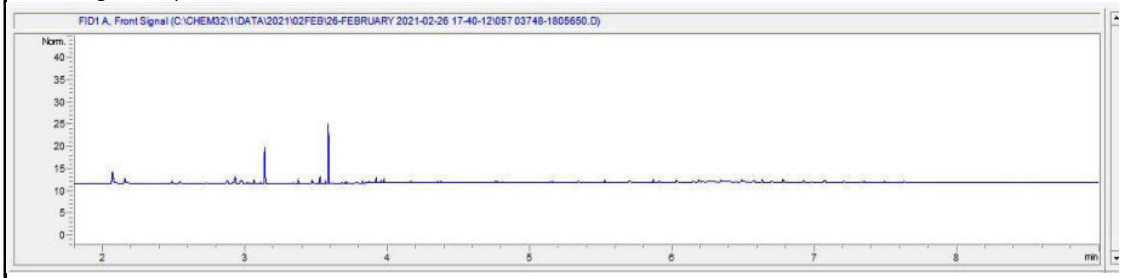
Summary of Chemical Analysis
Chromatograms

Our Ref 21-03748
Client Ref 21015
Contract Title Aldi Porthcawl

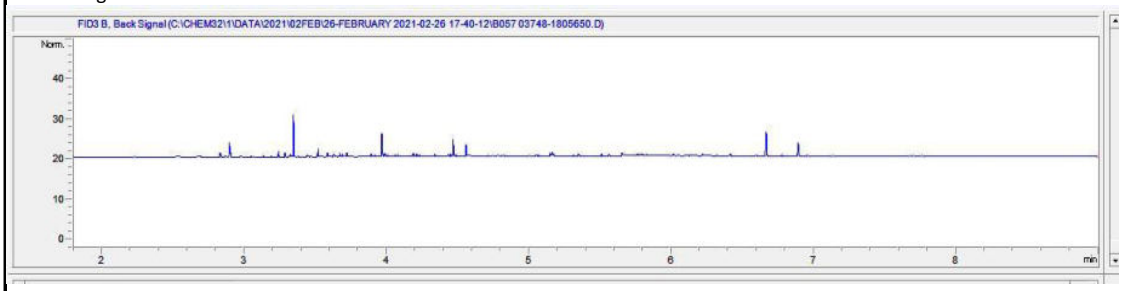
Lab No	1805650
.Sample ID	SUDS 2
Depth	0.4
Other ID	
Sample Type	SOIL
Sampling Date	02/02/2021
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatic C5-C35 *



Chromatogram: Aromatic C5-C35 *



Information in Support of the Analytical Results

Our Ref 21-03748
Client Ref 21015
Contract Aldi Porthcawl

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1805646	BH1 1.00 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805647	BH2 0.50 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805648	BH3 0.50 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805649	SUDS 1 0.20 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 1L		
1805650	SUDS 2 0.40 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 1L		
1805651	BH1 1.00 LEACHATE	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805652	BH3 0.50 LEACHATE	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805653	SUDS 2 0.40 LEACHATE	02/02/21	GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report

Certificate of Analysis

Certificate Number	21-03789	*Issued:*	03-Mar-21
Client	Groundtech Consulting Ltd First Floor Lloyd House Orford Ct Leigh Warrington WN7 3XJ		
Our Reference	21-03789		
Client Reference	21015		
Order No	1566		
Contract Title	Aldi Porthcawl		
Description	6 Soil samples, 2 Leachate samples.		
Date Received	23-Feb-21		
Date Started	23-Feb-21		
Date Completed	03-Mar-21		
Test Procedures	Identified by prefix DETSn (details on request).		
Notes	Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.		

Approved By

Adam Fenwick
Contracts Manager

UKAS TESTING
2139

Summary of Chemical Analysis
Soil Samples

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805977	1805978	1805979	1805980	1805981	1805982
			.Sample ID	WS01	WS02	WS03	TP01	TP02	TP03
			Depth	0.80	0.20	0.20	0.50	0.30	0.10
			Other ID						
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sampling Date	04/02/2021	04/02/2021	04/02/2021	02/02/2021	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Asbestos Quantification	DETSC 1102	0.001	%	0.31	0.016		0.41		
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	35	17	16	29	8.8	15
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.0	0.3	0.5	0.9	0.3	0.5
Cadmium	DETSC 2301#	0.1	mg/kg	2.0	0.5	1.1	0.8	0.2	0.5
Chromium	DETSC 2301#	0.15	mg/kg	180	27	56	27	7.0	21
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	130	97	82	54	15	64
Lead	DETSC 2301#	0.3	mg/kg	1300	100	120	440	48	100
Mercury	DETSC 2325#	0.05	mg/kg	2.2	0.14	0.17	1.7	0.22	0.12
Nickel	DETSC 2301#	1	mg/kg	34	25	24	8.4	4.8	18
Selenium	DETSC 2301#	0.5	mg/kg	3.9	5.9	4.1	< 0.5	1.9	2.4
Zinc	DETSC 2301#	1	mg/kg	2500	180	300	470	58	140
Inorganics									
pH	DETSC 2008#		pH	8.1	7.2	9.8	8.7	8.3	7.6
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	0.3	0.3	0.1	0.2	0.3
Organic matter	DETSC 2002#	0.1	%	4.6	7.5	9.5	2.7	1.7	4.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	120	190	79	43	17	17
Petroleum Hydrocarbons									
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	2.6				< 1.5	
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	4.0				< 1.2	
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	8.3				< 1.5	
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	120				< 3.4	
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	140				< 10	
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	4.1				< 0.9	
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	11				< 0.5	
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	26				< 0.6	
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	450				< 1.4	
Aromatic C5-C35	DETSC 3072*	10	mg/kg	490				< 10	
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	630				< 10	
Fuel Identification	*	trace that is unidentifiable				a trace that is unidentifiable			
EPH (C10-C40)	DETSC 3311#	10	mg/kg	870	89	630	670	55	90

Key: * -not accredited. # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Summary of Chemical Analysis
Soil Samples

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805977	1805978	1805979	1805980	1805981	1805982
			.Sample ID	WS01	WS02	WS03	TP01	TP02	TP03
			Depth	0.80	0.20	0.20	0.50	0.30	0.10
			Other ID						
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sampling Date	04/02/2021	04/02/2021	04/02/2021	02/02/2021	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01	
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01	
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01	
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01	
MTBE	DETSC 3321	0.01	mg/kg	< 0.01				< 0.01	
PAHs									
Naphthalene	DETSC 3303#	0.03	mg/kg	0.25	< 0.03	0.05	0.12	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.10	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.25	< 0.03	0.05	0.10	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.34	< 0.03	0.34	0.22	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	4.1	0.12	3.2	1.6	0.10	0.15
Anthracene	DETSC 3303	0.03	mg/kg	0.86	< 0.03	3.7	0.28	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	4.7	0.23	20	1.9	0.21	0.42
Pyrene	DETSC 3303#	0.03	mg/kg	3.5	0.18	16	1.3	0.17	0.39
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	1.5	0.07	6.5	0.50	0.07	0.17
Chrysene	DETSC 3303	0.03	mg/kg	1.6	0.14	5.2	0.67	0.15	0.31
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	1.3	0.12	4.6	0.56	0.14	0.35
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.53	0.04	1.8	0.21	0.04	0.12
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.86	0.06	4.0	0.37	0.06	0.19
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.29	0.03	1.6	0.14	0.04	0.10
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.12	< 0.03	0.41	0.05	< 0.03	0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.42	0.03	1.8	0.16	0.04	0.12
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	21	0.97	70	8.2	1.0	2.3
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Key: * -not accredited. # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805977	1805981
			.Sample ID	WS01	TP02
			Depth	0.80	0.30
			Other ID		
			Sample Type	SOIL	SOIL
			Sampling Date	04/02/2021	02/02/2021
			Sampling Time	n/s	n/s
Test	**Method**	**LOD**	**Units**		
VOCs					
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805977	1805981
			.Sample ID	WS01	TP02
			Depth	0.80	0.30
			Other ID		
			Sample Type	SOIL	SOIL
			Sampling Date	04/02/2021	02/02/2021
			Sampling Time	n/s	n/s
Test	**Method**	**LOD**	**Units**		
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
SVOCs					
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1805977	1805981
			.Sample ID	WS01	TP02
			Depth	0.80	0.30
			Other ID		
			Sample Type	SOIL	SOIL
			Sampling Date	04/02/2021	02/02/2021
			Sampling Time	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	0.2	< 0.1

Key: * -not accredited. n/s -not supplied.

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl
Sample Id WS01 0.80

Sample Numbers 1805977 1805983
Date Analysed 02/03/2021

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	4.2	3	5	6
DETSC 2003# Loss On Ignition	%	5.1	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311# TPH (C10 - C40)	mg/kg	870.0	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	30.0	100	n/a	n/a
DETSC 2008# pH	pH Units	8.1	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	1.6	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached* mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	2.5	0.025	0.5	2	25
DETSC 2306 Barium as Ba	6.5	< 0.1	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	< 0.25	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	1.3	< 0.02	2	50	100
DETSC 2306 Mercury as Hg	0.038	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	2.5	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	< 0.50	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	1.7	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.33	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.32	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	3.9	0.039	4	50	200
DETSC 2055 Chloride as Cl	2100	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	160	1.6	10	150	500
DETSC 2055 Sulphate as SO4	5500	< 100	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	31000	310	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	5.9
DETSC 2009 Conductivity uS/cm	44.8
* Temperature*	20.0

Mass of Sample Kg*	0.100
Mass of dry Sample Kg*	0.094

Stage 1

Volume of Leachant L2*	0.931
Volume of Eluate VE1*	0.9

Disclaimer: *The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.06 ** DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.*

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl
Sample Id TP01 0.50

Sample Numbers 1805980 1805984
Date Analysed 02/03/2021

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	9.0	3	5	6
DETSC 2003# Loss On Ignition	%	5.1	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311# TPH (C10 - C40)	mg/kg	670.0	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	77.0	100	n/a	n/a
DETSC 2008# pH	pH Units	8.7	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	2.9	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached* mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	7.4	0.074	0.5	2	25
DETSC 2306 Barium as Ba	9	< 0.1	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	< 0.25	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	1.6	< 0.02	2	50	100
DETSC 2306 Mercury as Hg	0.034	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	2.8	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	< 0.50	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	1.3	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.37	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.65	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	< 1.3	< 0.01	4	50	200
DETSC 2055 Chloride as Cl	1900	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	< 100	< 0.1	10	150	500
DETSC 2055 Sulphate as SO4	6100	< 100	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	34000	340	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	5.9
DETSC 2009 Conductivity uS/cm	48.2
* Temperature*	20.0

Mass of Sample Kg*	0.100
Mass of dry Sample Kg*	0.092

Stage 1

Volume of Leachant L2*	0.916
Volume of Eluate VE1*	0.85

Disclaimer: *The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.06 ** DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.*

Summary of Asbestos Analysis
Soil Samples

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1805977	WS01 0.80	SOIL	Crocidolite Chrysotile	Chrysotile in microscopic cement and bundles of Chrysotile and Crocidolite in soil	Rebecca Burgess
1805978	WS02 0.20	SOIL	Chrysotile	Bundles of Chrysotile fibres	Rebecca Burgess
1805979	WS03 0.20	SOIL	NAD	none	Rebecca Burgess
1805980	TP01 0.50	SOIL	Crocidolite Chrysotile	Chrysotile in microscopic loose fibrous asbestos debris and bundles of Chrysotile and Crocidolite in soil	Rebecca Burgess
1805981	TP02 0.30	SOIL	NAD	none	Rebecca Burgess
1805982	TP03 0.10	SOIL	NAD	none	Rebecca Burgess

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Summary of Asbestos Quantification Analysis
Soil Samples

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

		Lab No	1805977	1805978	1805980
		.Sample ID	WS01	WS02	TP01
		Depth	0.80	0.20	0.50
		Other ID			
		Sample Type	SOIL	SOIL	SOIL
		Sampling Date	04/02/2021	04/02/2021	02/02/2021
		Sampling Time			
Test	**Method**	**Units**			
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	**0.307**	**0.016**	**0.408**
Gravimetric Quantification (a)	DETSC 1102	Mass %	0.197	na	0.179
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	0.110	0.016	0.229
Quantification by PCOM (c)	DETSC 1102	Mass %	na	na	na
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na	na	na
Breakdown of Gravimetric Analysis (a)					
Mass of Sample		g	23.45	24.74	24.05
ACMs present*		type	Cement		LFAD
Mass of ACM in sample		g	0.31		0.05
% ACM by mass		%	1.31		0.21
% asbestos in ACM		%	15.00		85
% asbestos in sample		%	0.197		0.179
Breakdown of Detailed Gravimetric Analysis (b)					
% Amphibole bundles in sample		Mass %	0.015	na	0.003
% Chrysotile bundles in sample		Mass %	0.095	0.016	0.226
Breakdown of PCOM Analysis (c)					
% Amphibole fibres in sample		Mass %	na	na	na
% Chrysotile fibres in sample		Mass %	na	na	na
Breakdown of Potentially Respirable Fibre Analysis (d)					
Amphibole fibres		Fibres/g	na	na	na
Chrysotile fibres		Fibres/g	na	na	na

* Denotes test or material description outside of UKAS accreditation.
% asbestos in Asbestos Containing Materials (ACMs) is determined by
by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
# denotes deviating sample

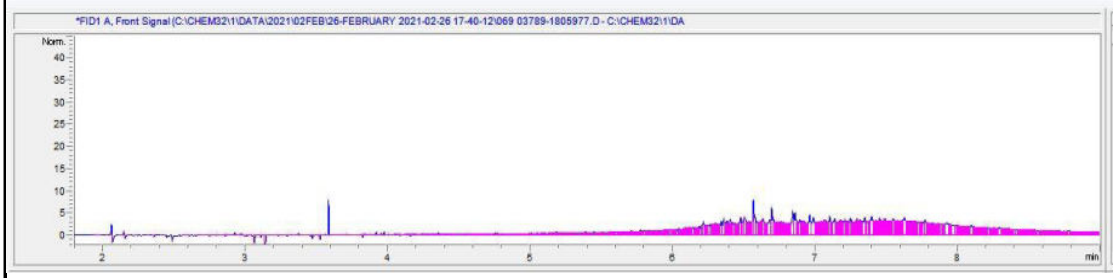
Summary of Chemical Analysis
Chromatograms

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

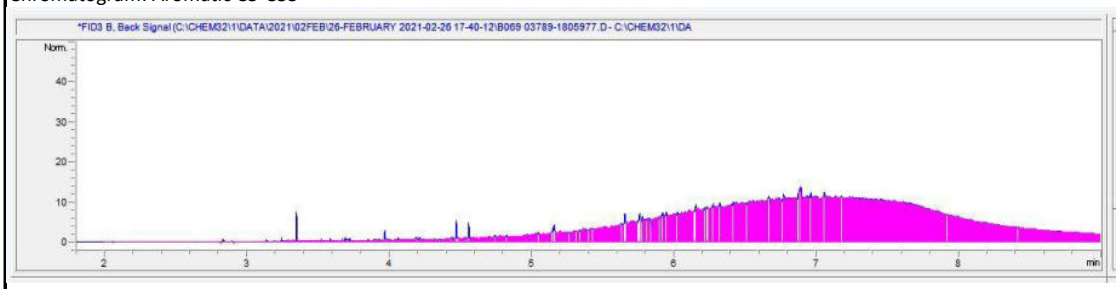
Lab No	1805977
.Sample ID	WS01
Depth	0.8
Other ID	
Sample Type	SOIL
Sampling Date	02/04/2021
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatic C5-C35 *



Chromatogram: Aromatic C5-C35 *



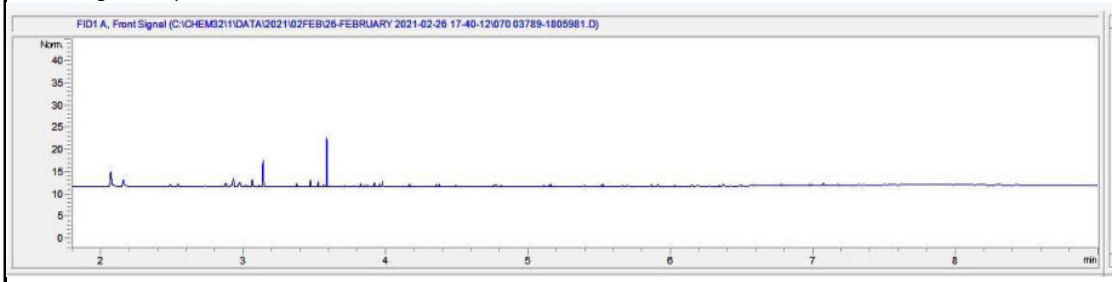
Summary of Chemical Analysis
Chromatograms

Our Ref 21-03789
Client Ref 21015
Contract Title Aldi Porthcawl

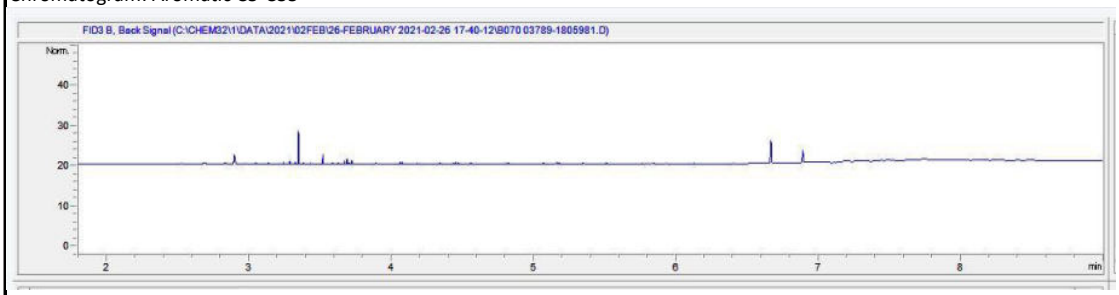
Lab No	1805981
.Sample ID	TP02
Depth	0.3
Other ID	
Sample Type	SOIL
Sampling Date	02/02/2021
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatic C5-C35 *



Chromatogram: Aromatic C5-C35 *



Information in Support of the Analytical Results

Our Ref 21-03789
Client Ref 21015
Contract Aldi Porthcawl

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1805977	WS01 0.80 SOIL	04/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805978	WS02 0.20 SOIL	04/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805979	WS03 0.20 SOIL	04/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805980	TP01 0.50 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805981	TP02 0.30 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805982	TP03 0.10 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805983	WS01 0.80 LEACHATE	04/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1805984	TP01 0.50 LEACHATE	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		

Key: G-Glass P-Plastic J-Jar T-Tub

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report

Certificate of Analysis

Certificate Number	21-02964	*Issued:*	18-Feb-21
Client	Groundtech Consulting Ltd First Floor Lloyd House Orford Ct Leigh Warrington WN7 3XJ		
Our Reference	21-02964		
Client Reference	21015		
Order No	1566		
Contract Title	Aldi Porthcawl		
Description	4 Soil samples.		
Date Received	10-Feb-21		
Date Started	10-Feb-21		
Date Completed	18-Feb-21		
Test Procedures	Identified by prefix DETSn (details on request).		
Notes	Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.		

Approved By

Adam Fenwick
Contracts Manager

UKAS TESTING
2139

Summary of Chemical Analysis
Soil Samples

Our Ref 21-02964
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1800603	1800604	1800605	1800606
			.Sample ID	TP04	TP06	TP07	TP08
			Depth	0.40	1.00	0.10	0.40
			Other ID				
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	02/02/2021	02/02/2021	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
Metals							
Arsenic	DETSC 2301#	0.2	mg/kg	24	11	50	62
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	0.5	0.2	0.7	1.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.7	0.1	1.4	1.1
Chromium	DETSC 2301#	0.15	mg/kg	33	4.0	25	31
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	89	12	70	110
Lead	DETSC 2301#	0.3	mg/kg	87	19	210	710
Mercury	DETSC 2325#	0.05	mg/kg	0.08	< 0.05	< 0.05	4.3
Nickel	DETSC 2301#	1	mg/kg	31	4.1	18	18
Selenium	DETSC 2301#	0.5	mg/kg	1.7	< 0.5	2.2	0.7
Zinc	DETSC 2301#	1	mg/kg	210	41	310	730
Inorganics							
pH	DETSC 2008#		pH	7.8	8.5	7.8	9.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	< 0.1	0.1
Organic matter	DETSC 2002#	0.1	%	3.6	1.7	6.8	7.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	19	< 10	22	87
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg				< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg				< 10
Fuel Identification	*	a trace the contains peaks that resemble that of PAH's					
EPH (C10-C40)	DETSC 3311#	10	mg/kg	140	< 10	< 10	460
Benzene	DETSC 3321#	0.01	mg/kg				< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg				< 0.01
Toluene	DETSC 3321#	0.01	mg/kg				< 0.01
Xylene	DETSC 3321#	0.01	mg/kg				< 0.01
MTBE	DETSC 3321	0.01	mg/kg				< 0.01

Key: * -not accredited. # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Summary of Chemical Analysis
Soil Samples

Our Ref 21-02964
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1800603	1800604	1800605	1800606
			.Sample ID	TP04	TP06	TP07	TP08
			Depth	0.40	1.00	0.10	0.40
			Other ID				
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	02/02/2021	02/02/2021	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.05
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.06	0.08	< 0.03	0.54
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.06
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.12	0.15	0.05	0.81
Pyrene	DETSC 3303#	0.03	mg/kg	0.09	0.11	0.03	0.60
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.03	0.04	< 0.03	0.24
Chrysene	DETSC 3303	0.03	mg/kg	0.05	0.10	0.03	0.33
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.03	0.07	< 0.03	0.26
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	< 0.03	0.11
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.03	0.04	< 0.03	0.17
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.03	0.04	< 0.03	0.11
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	< 0.03	0.09
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.45	0.70	0.12	3.4
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Key: * -not accredited. # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-02964
Client Ref 21015
Contract Title Aldi Porthcawl

Lab No	1800606
.Sample ID	TP08
Depth	0.40
Other ID	
Sample Type	SOIL
Sampling Date	02/02/2021
Sampling Time	n/s

Test	Method	LOD	Units	
VOCs				
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-02964
Client Ref 21015
Contract Title Aldi Porthcawl

Lab No	1800606
.Sample ID	TP08
Depth	0.40
Other ID	
Sample Type	SOIL
Sampling Date	02/02/2021
Sampling Time	n/s

Test	Method	LOD	Units	
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01
SVOCs				
Phenol	DETSC 3433	0.1	mg/kg	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	0.2
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 21-02964
Client Ref 21015
Contract Title Aldi Porthcawl

Lab No	1800606
.Sample ID	TP08
Depth	0.40
Other ID	
Sample Type	SOIL
Sampling Date	02/02/2021
Sampling Time	n/s

Test	Method	LOD	Units	
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	0.9

Key: * -not accredited. n/s -not supplied.

Summary of Asbestos Analysis
Soil Samples

Our Ref 21-02964
Client Ref 21015
Contract Title Aldi Porthcawl

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1800603	TP04 0.40	SOIL	NAD	none	Jordan Farley
1800604	TP06 1.00	SOIL	NAD	none	Jordan Farley
1800605	TP07 0.10	SOIL	NAD	none	Jordan Farley
1800606	TP08 0.40	SOIL	Chrysotile	Chrysotile present in visible paper/card product fragments	Jordan Farley

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

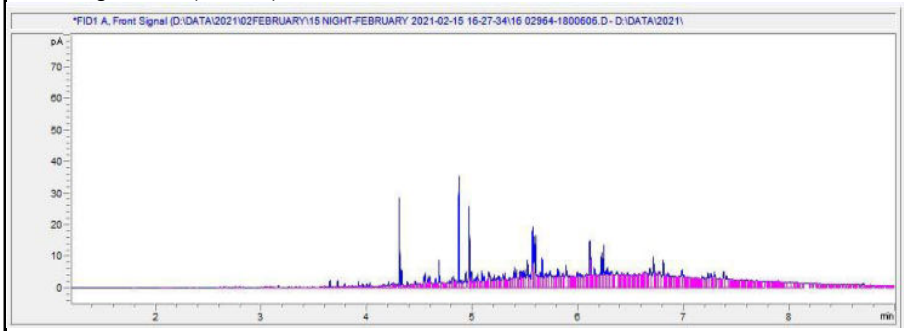
Summary of Chemical Analysis
Chromatograms

Our Ref 21-02964
Client Ref 21015
Contract Title Aldi Porthcawl

Lab No	1800606
.Sample ID	TP08
Depth	0.4
Other ID	
Sample Type	SOIL
Sampling Date	02/02/2021
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: EPH (C10-C40) *



Information in Support of the Analytical Results

Our Ref 21-02964
Client Ref 21015
Contract Aldi Porthcawl

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1800603	TP04 0.40 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1800604	TP06 1.00 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1800605	TP07 0.10 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1800606	TP08 0.40 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		

Key: G-Glass P-Plastic J-Jar T-Tub

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report

Certificate of Analysis

Certificate Number	21-03880	*Issued:*	26-Feb-21
Client	Groundtech Consulting Ltd First Floor Lloyd House Orford Ct Leigh Warrington WN7 3XJ		
Our Reference	21-03880		
Client Reference	21015		
Order No	(not supplied)		
Contract Title	Aldi Porthcawl		
Description	3 Soil samples.		
Date Received	24-Feb-21		
Date Started	24-Feb-21		
Date Completed	26-Feb-21		
Test Procedures	Identified by prefix DETSn (details on request).		
Notes	Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.		

Approved By

Adam Fenwick
Contracts Manager

UKAS TESTING
2139

Summary of Chemical Analysis
Soil Samples

Our Ref 21-03880
Client Ref 21015
Contract Title Aldi Porthcawl

			Lab No	1806572	1806573	1806574
			.Sample ID	BH1	BH2	BH3
			Depth	2.00	1.00	1.50
			Other ID			
			Sample Type	SOIL	SOIL	SOIL
			Sampling Date	02/02/2021	02/02/2021	02/02/2021
			Sampling Time	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
Inorganics						
pH	DETSC 2008#		pH	7.8	8.6	8.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	86	23	29
Sulphur as S, Total	DETSC 2320	0.01	%	0.11	0.07	0.04
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.11	0.14	0.06

Key: # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Information in Support of the Analytical Results

Our Ref 21-03880
Client Ref 21015
Contract Aldi Porthcawl

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1806572	BH1 2.00 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1806573	BH2 1.00 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		
1806574	BH3 1.50 SOIL	02/02/21	GJ 250ml, GJ 60ml, PT 500ml		

Key: G-Glass P-Plastic J-Jar T-Tub

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report

APPENDIX 9 - Geo-Environmental Testing (Groundwater)

Element Materials Technology
Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

P: +44 (0) 1244 833780
F: +44 (0) 1244 833781

W: www.element.com

Groundtech Consulting Limited
PO Box 499
Manchester
M28 8EE

Attention :	Steffan Mullen
Date :	4th March, 2021
Your reference :	GRO-21015
Our reference :	Test Report 21/2957 Batch 1
Location :	Porthcawl Aldi
Date samples received :	2nd March, 2021
Status :	Final report
Issue :	1

Three samples were received for analysis on 2nd March, 2021 of which three were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Bruce Leslie
Project Manager

Element Materials Technology Environmental UK Limited
Registered in England and Wales
Registered Office: 10 Lower Grosvenor Place, London, SW1W 0EN
Company Registration No: 11371415

Element Materials Technology

Client Name: Groundtech Consulting Limited
Reference: GRO-21015
Location: Porthcawl Aldi
Contact: Steffan Mullen
EMT Job No: 21/2957

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

EMT Sample No.	1-6	7-12	13-18										
Sample ID	BH2	BH3	BH4										
Depth											Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	V HN N P G	V HN N P G	V HN N P G										
Sample Date	02/03/2021	02/03/2021	02/03/2021										
Sample Type	Liquid	Liquid	Liquid										
Batch Number	1	1	1								LOD/LOR	Units	Method No.
Date of Receipt	02/03/2021	02/03/2021	02/03/2021										
Dissolved Arsenic	2.6	3.6	3.1								<2.5	ug/l	TM30/PM14
Dissolved Boron	56	59	62								<12	ug/l	TM30/PM14
Dissolved Cadmium	<0.5	<0.5	<0.5								<0.5	ug/l	TM30/PM14
Total Dissolved Chromium	1.8	2.8	1.9								<1.5	ug/l	TM30/PM14
Dissolved Copper	<7	<7	<7								<7	ug/l	TM30/PM14
Dissolved Lead	<5	<5	<5								<5	ug/l	TM30/PM14
Dissolved Mercury	<1	<1	<1								<1	ug/l	TM30/PM14
Dissolved Nickel	<2	<2	<2								<2	ug/l	TM30/PM14
Dissolved Zinc	4	<3	4								<3	ug/l	TM30/PM14
Total Hardness Dissolved (as CaCO3)	264	185	194								<1	mg/l	TM30/PM14
PAH MS													
Naphthalene	<0.1	<0.1	<0.1								<0.1	ug/l	TM4/PM30
Acenaphthylene	<0.013	<0.013	<0.013								<0.013	ug/l	TM4/PM30
Acenaphthene	<0.013	<0.013	<0.013								<0.013	ug/l	TM4/PM30
Fluorene	<0.014	<0.014	<0.014								<0.014	ug/l	TM4/PM30
Phenanthrene	<0.011	<0.011	<0.011								<0.011	ug/l	TM4/PM30
Anthracene	<0.013	<0.013	<0.013								<0.013	ug/l	TM4/PM30
Fluoranthene	<0.012	<0.012	<0.012								<0.012	ug/l	TM4/PM30
Pyrene	<0.013	<0.013	<0.013								<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	<0.015	<0.015	<0.015								<0.015	ug/l	TM4/PM30
Chrysene	<0.011	<0.011	<0.011								<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene	<0.018	<0.018	<0.018								<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	<0.016	<0.016	<0.016								<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	<0.011	<0.011	<0.011								<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.01	<0.01	<0.01								<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	<0.011	<0.011	<0.011								<0.011	ug/l	TM4/PM30
PAH 16 Total	<0.195	<0.195	<0.195								<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	<0.01	<0.01	<0.01								<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	<0.01	<0.01	<0.01								<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	84	84	85								<0	%	TM4/PM30
VOC TICs	ND	ND	ND									None	TM15/PM10
Methyl Tertiary Butyl Ether	<0.1	<0.1	<0.1								<0.1	ug/l	TM15/PM10
Benzene	<0.5	<0.5	<0.5								<0.5	ug/l	TM15/PM10
Toluene	<5	<5	<5								<5	ug/l	TM15/PM10
Ethylbenzene	<1	<1	<1								<1	ug/l	TM15/PM10
m/p-Xylene	<2	<2	<2								<2	ug/l	TM15/PM10
o-Xylene	<1	<1	<1								<1	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	99	100	97								<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	105	104	103								<0	%	TM15/PM10
EPH (C8-C40)	<10	<10	<10								<10	ug/l	TM5/PM30

Element Materials Technology

Client Name: Groundtech Consulting Limited
Reference: GRO-21015
Location: Porthcawl Aldi
Contact: Steffan Mullen
EMT Job No: 21/2957

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

EMT Sample No.	1-6	7-12	13-18										
Sample ID	BH2	BH3	BH4										
Depth											Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	V HN N P G	V HN N P G	V HN N P G										
Sample Date	02/03/2021	02/03/2021	02/03/2021										
Sample Type	Liquid	Liquid	Liquid										
Batch Number	1	1	1								LOD/LOR	Units	Method No.
Date of Receipt	02/03/2021	02/03/2021	02/03/2021										
TPH CWG													
Aliphatics													
>C5-C6	<10	<10	<10								<10	ug/l	TM36/PM12
>C6-C8	<10	<10	<10								<10	ug/l	TM36/PM12
>C8-C10	<10	<10	<10								<10	ug/l	TM36/PM12
>C10-C12	<5	<5	<5								<5	ug/l	TM5/PM16/PM30
>C12-C16	<10	<10	<10								<10	ug/l	TM5/PM16/PM30
>C16-C21	<10	<10	<10								<10	ug/l	TM5/PM16/PM30
>C21-C35	<10	<10	<10								<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-35	<10	<10	<10								<10	ug/l	TM5/TM36/PM12/PM16/PM30
Aromatics													
>C5-EC7	<10	<10	<10								<10	ug/l	TM36/PM12
>EC7-EC8	<10	<10	<10								<10	ug/l	TM36/PM12
>EC8-EC10	<10	<10	<10								<10	ug/l	TM36/PM12
>EC10-EC12	<5	<5	<5								<5	ug/l	TM5/PM16/PM30
>EC12-EC16	<10	<10	<10								<10	ug/l	TM5/PM16/PM30
>EC16-EC21	<10	<10	<10								<10	ug/l	TM5/PM16/PM30
>EC21-EC35	<10	<10	<10								<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35	<10	<10	<10								<10	ug/l	TM5/TM36/PM12/PM16/PM30
Total aliphatics and aromatics(C5-35)	<10	<10	<10								<10	ug/l	TM5/TM36/PM12/PM16/PM30
Phenol	<0.01	<0.01	<0.01								<0.01	mg/l	TM26/PM0
Sulphate as SO4	32.9	27.1	32.7								<0.5	mg/l	TM38/PM0
Total Cyanide	<0.01	<0.01	<0.01								<0.01	mg/l	TM89/PM0
Hexavalent Chromium	<0.006	<0.006	<0.006								<0.006	mg/l	TM38/PM0
Dissolved Organic Carbon	<2	<2	<2								<2	mg/l	TM60/PM0
pH	8.59	7.99	7.96								<0.01	pH units	TM73/PM0

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: Groundtech Consulting Limited
Reference: GRO-21015
Location: Porthcawl Aldi
Contact: Steffan Mullen
EMT Job No: 21/2957

VOC Report : **Liquid**

EMT Sample No.	1-6	7-12	13-18									
Sample ID	BH2	BH3	BH4									
Depth												
COC No / misc												
Containers	V HN N P G	V HN N P G	V HN N P G									
Sample Date	02/03/2021	02/03/2021	02/03/2021									
Sample Type	Liquid	Liquid	Liquid									
Batch Number	1	1	1									
Date of Receipt	02/03/2021	02/03/2021	02/03/2021									
VOC MS												
Dichlorodifluoromethane	<2	<2	<2								<2	ug/l	TM15/PM10
Methyl Tertiary Butyl Ether	<0.1	<0.1	<0.1								<0.1	ug/l	TM15/PM10
Chloromethane	<3	<3	<3								<3	ug/l	TM15/PM10
Vinyl Chloride	<0.1	<0.1	<0.1								<0.1	ug/l	TM15/PM10
Bromomethane	<1	<1	<1								<1	ug/l	TM15/PM10
Chloroethane	<3	<3	<3								<3	ug/l	TM15/PM10
Trichlorofluoromethane	<3	<3	<3								<3	ug/l	TM15/PM10
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3								<3	ug/l	TM15/PM10
Dichloromethane (DCM)	<5	<5	<5								<5	ug/l	TM15/PM10
trans-1-2-Dichloroethene	<3	<3	<3								<3	ug/l	TM15/PM10
1,1-Dichloroethane	<3	<3	<3								<3	ug/l	TM15/PM10
cis-1-2-Dichloroethene	<3	<3	<3								<3	ug/l	TM15/PM10
2,2-Dichloropropane	<1	<1	<1								<1	ug/l	TM15/PM10
Bromochloromethane	<2	<2	<2								<2	ug/l	TM15/PM10
Chloroform	<2	<2	<2								<2	ug/l	TM15/PM10
1,1,1-Trichloroethane	<2	<2	<2								<2	ug/l	TM15/PM10
1,1-Dichloropropene	<3	<3	<3								<3	ug/l	TM15/PM10
Carbon tetrachloride	<2	<2	<2								<2	ug/l	TM15/PM10
1,2-Dichloroethane	<2	<2	<2								<2	ug/l	TM15/PM10
Benzene	<0.5	<0.5	<0.5								<0.5	ug/l	TM15/PM10
Trichloroethene (TCE)	<3	<3	<3								<3	ug/l	TM15/PM10
1,2-Dichloropropane	<2	<2	<2								<2	ug/l	TM15/PM10
Dibromomethane	<3	<3	<3								<3	ug/l	TM15/PM10
Bromodichloromethane	<2	<2	<2								<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene	<2	<2	<2								<2	ug/l	TM15/PM10
Toluene	<5	<5	<5								<5	ug/l	TM15/PM10
trans-1-3-Dichloropropene	<2	<2	<2								<2	ug/l	TM15/PM10
1,1,2-Trichloroethane	<2	<2	<2								<2	ug/l	TM15/PM10
Tetrachloroethene (PCE)	<3	<3	<3								<3	ug/l	TM15/PM10
1,3-Dichloropropane	<2	<2	<2								<2	ug/l	TM15/PM10
Dibromochloromethane	<2	<2	<2								<2	ug/l	TM15/PM10
1,2-Dibromoethane	<2	<2	<2								<2	ug/l	TM15/PM10
Chlorobenzene	<2	<2	<2								<2	ug/l	TM15/PM10
1,1,1,2-Tetrachloroethane	<2	<2	<2								<2	ug/l	TM15/PM10
Ethylbenzene	<1	<1	<1								<1	ug/l	TM15/PM10
m/p-Xylene	<2	<2	<2								<2	ug/l	TM15/PM10
o-Xylene	<1	<1	<1								<1	ug/l	TM15/PM10
Styrene	<2	<2	<2								<2	ug/l	TM15/PM10
Bromoform	<2	<2	<2								<2	ug/l	TM15/PM10
Isopropylbenzene	<3	<3	<3								<3	ug/l	TM15/PM10
1,1,2,2-Tetrachloroethane	<4	<4	<4								<4	ug/l	TM15/PM10
Bromobenzene	<2	<2	<2								<2	ug/l	TM15/PM10
1,2,3-Trichloropropane	<3	<3	<3								<3	ug/l	TM15/PM10
Propylbenzene	<3	<3	<3								<3	ug/l	TM15/PM10
2-Chlorotoluene	<3	<3	<3								<3	ug/l	TM15/PM10
1,3,5-Trimethylbenzene	<3	<3	<3								<3	ug/l	TM15/PM10
4-Chlorotoluene	<3	<3	<3								<3	ug/l	TM15/PM10
tert-Butylbenzene	<3	<3	<3								<3	ug/l	TM15/PM10
1,2,4-Trimethylbenzene	<3	<3	<3								<3	ug/l	TM15/PM10
sec-Butylbenzene	<3	<3	<3								<3	ug/l	TM15/PM10
4-Isopropyltoluene	<3	<3	<3								<3	ug/l	TM15/PM10
1,3-Dichlorobenzene	<3	<3	<3								<3	ug/l	TM15/PM10
1,4-Dichlorobenzene	<3	<3	<3								<3	ug/l	TM15/PM10
n-Butylbenzene	<3	<3	<3								<3	ug/l	TM15/PM10
1,2-Dichlorobenzene	<3	<3	<3								<3	ug/l	TM15/PM10
1,2-Dibromo-3-chloropropane	<2	<2	<2								<2	ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3	<3	<3								<3	ug/l	TM15/PM10
Hexachlorobutadiene	<3	<3	<3								<3	ug/l	TM15/PM10
Naphthalene	<2	<2	<2								<2	ug/l	TM15/PM10
1,2,3-Trichlorobenzene	<3	<3	<3								<3	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	99	100	97								<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	105	104	103								<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: Groundtech Consulting Limited

Reference: GRO-21015

Location: Porthcawl Aldi

Contact: Steffan Mullen

Matrix : Liquid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
21/2957	1	BH2		1-6	No interpretation possible
21/2957	1	BH3		7-12	No interpretation possible
21/2957	1	BH4		13-18	No interpretation possible

Client Name: Groundtech Consulting Limited
Reference: GRO-21015
Location: Porthcawl Aldi
Contact: Steffan Mullen

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 21/2957						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 21/2957

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

HWOL ACRONYMS AND OPERATORS USED

HS	Headspace Analysis.
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent.
CU	Clean-up - e.g. by florisil, silica gel.
1D	GC - Single coil gas chromatography.
Total	Aliphatics & Aromatics.
AL	Aliphatics only.
AR	Aromatics only.
2D	GC-GC - Double coil gas chromatography.
#1	EH_Total but with humics extracted.
#2	EU_Total but with fatty acids extracted.
_	Operator - underscore to separate acronyms (exception for +).
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry.

EMT Job No: 21/2957

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16/PM30	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE/Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM5/TM36	please refer to TM5 and TM36 for method details	PM12/PM16/PM30	please refer to PM16/PM30 and PM12 for method details				
TM15	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.				
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.				
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.				
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.				
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.				

EMT Job No: 21/2957

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.				
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM0	No preparation is required.				

APPENDIX 10 - Geotechnical Testing

LABORATORY REPORT

4043

Contract Number: PSL21/1249

Report Date: 18 February 2021

Client's Reference:

Client Name: Groundtech Consulting
First Floor
Lloyd House
Orford Court
Greenfold Way
WN7 3XJ

For the attention of: Steffan Mullan

Contract Title: Porthcawl

Date Received: 11/2/2021
Date Commenced: 11/2/2021
Date Completed: 18/2/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins (Director)	R Berriman (Quality Manager)	S Royle (Laboratory Manager)
L Knight (Senior Technician)	S Eyre (Senior Technician)	T Watkins (Senior Technician)

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SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
BH2		B	1.20		Brown very gravelly slightly clayey silty SAND.
BH3		B	2.00		Brown very sandy slightly silty GRAVEL with cobbles.
BH4		B	2.00		Brown very gravelly slightly silty SAND.
TP01		B	2.00		Brown gravelly silty SAND.
SuDS2		B	1.50		Brown slightly gravelly silty SAND.

PARTICLE SIZE DISTRIBUTION TEST

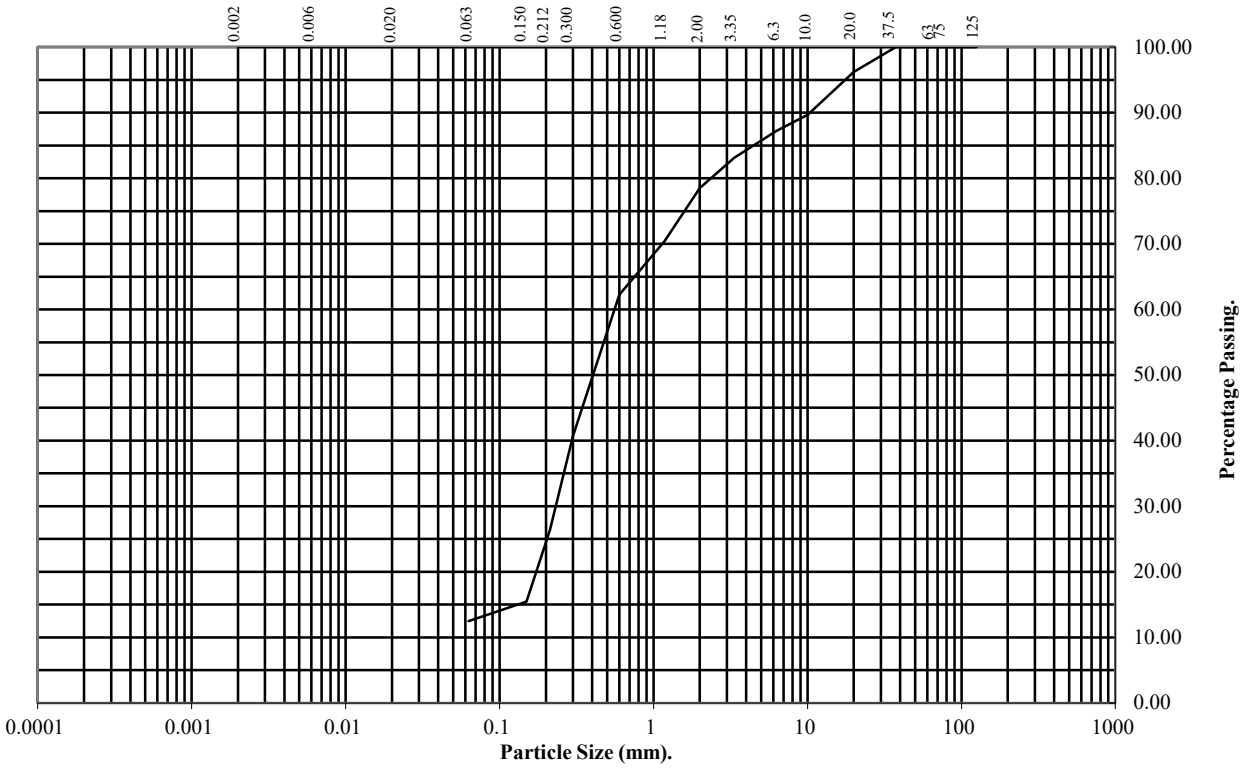
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **BH2** **Top Depth (m):** **1.20**

Sample Number: **Base Depth(m):**

Sample Type: **B**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	96
10	90
6.3	87
3.35	83
2	78
1.18	70
0.6	62
0.3	41
0.212	26
0.15	15
0.063	12

Soil Fraction	Total Percentage
Cobbles	0
Gravel	22
Sand	66
Silt/Clay	12

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Porthcawl**	**Contract No:** PSL21/1249 **Client Ref:**

PARTICLE SIZE DISTRIBUTION TEST

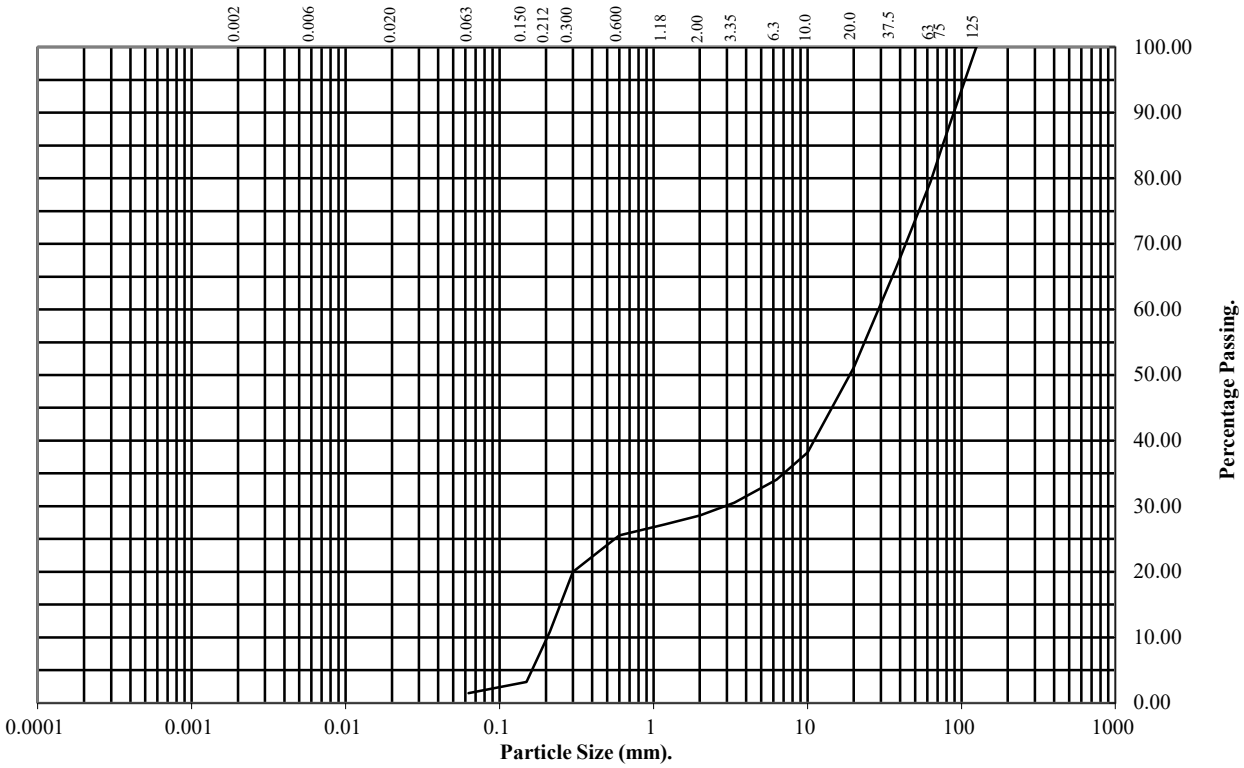
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **BH3** **Top Depth (m):** **2.00**

Sample Number: **Base Depth(m):**

Sample Type: **B**



BS Test Sieve (mm)	Percentage Passing
125	100
75	85
63	79
37.5	66
20	51
10	38
6.3	34
3.35	31
2	29
1.18	27
0.6	26
0.3	20
0.212	11
0.15	3
0.063	1

Soil Fraction	Total Percentage
Cobbles	21
Gravel	50
Sand	28
Silt/Clay	1

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043

PSL Professional Soils Laboratory

Porthcawl

Contract No: PSL21/1249

Client Ref:

PARTICLE SIZE DISTRIBUTION TEST

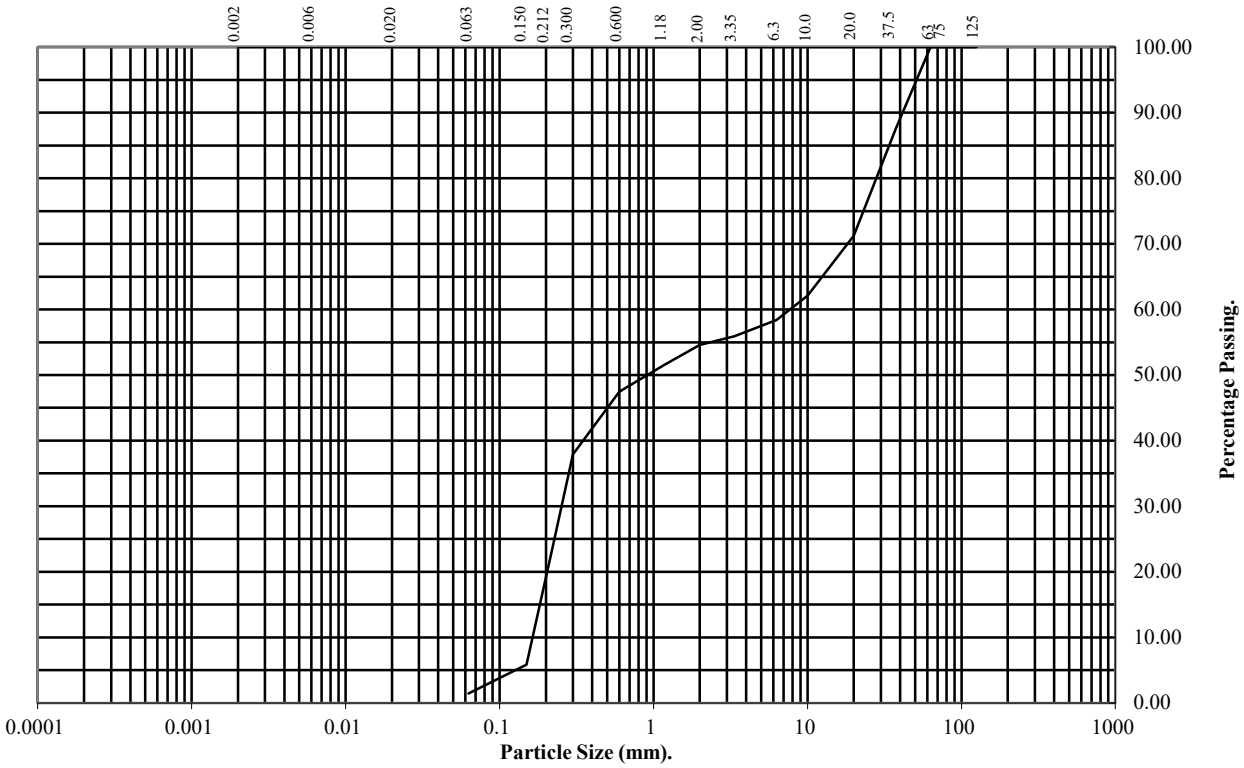
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **BH4** **Top Depth (m):** **2.00**

Sample Number: **Base Depth(m):**

Sample Type: **B**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	88
20	71
10	62
6.3	58
3.35	56
2	55
1.18	52
0.6	47
0.3	38
0.212	22
0.15	6
0.063	1

Soil Fraction	Total Percentage
Cobbles	0
Gravel	45
Sand	54
Silt/Clay	1

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Porthcawl**	**Contract No:** PSL21/1249 **Client Ref:**

PARTICLE SIZE DISTRIBUTION TEST

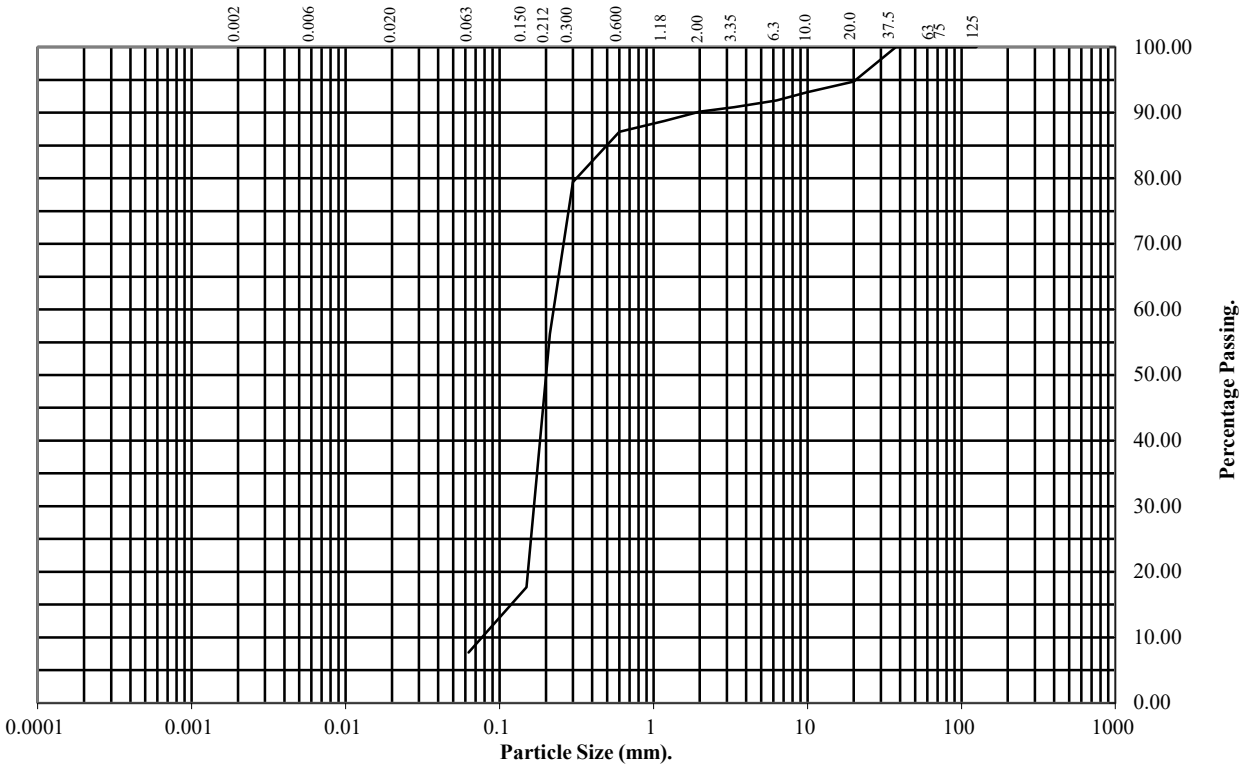
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: TP01 **Top Depth (m):** 2.00

Sample Number: **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	95
10	93
6.3	92
3.35	91
2	90
1.18	89
0.6	87
0.3	79
0.212	56
0.15	18
0.063	8

Soil Fraction	Total Percentage
Cobbles	0
Gravel	10
Sand	82
Silt/Clay	8

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043	PSL Professional Soils Laboratory	Porthcawl	**Contract No:** PSL21/1249 **Client Ref:**

PARTICLE SIZE DISTRIBUTION TEST

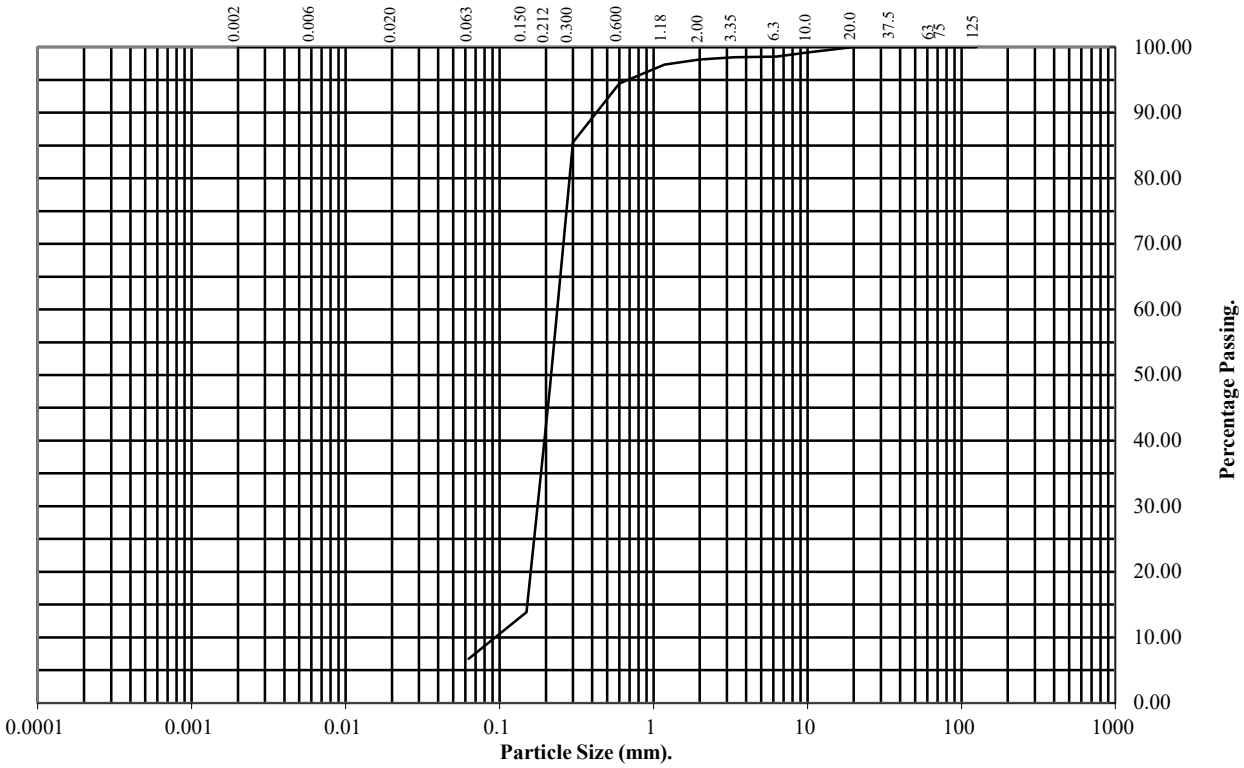
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SuDS2** **Top Depth (m):** **1.50**

Sample Number: **Base Depth(m):**

Sample Type: **B**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	100
10	99
6.3	99
3.35	98
2	98
1.18	97
0.6	94
0.3	85
0.212	48
0.15	14
0.063	7

Soil Fraction	Total Percentage
Cobbles	0
Gravel	2
Sand	91
Silt/Clay	7

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Porthcawl**	**Contract No:** PSL21/1249 **Client Ref:**

APPENDIX 11 - Permanent Gas Monitoring Results

PERMANENT GROUND GAS MONITORING FORM

GROUNDTECH CONSULTING

SITE NAME:	*ALDI PORTHCAWL*	**ENGINEER:**	*Sam Flaherty*
CLIENT:	*ALDI STORES LTD*	**DATE:**	*16/02/2021*
JOB NO:	*21015*		

Pressure Trend:	*Steady*	**Weather:**	*Overcast*	**Equipment:**	*GFM 436*

Ambient:	O_2 (%v/v)	CH_4 (%v/v)	CO_2 (%v/v)	LEL	H_2S (ppm)	CO (ppm)
Start	20.8	0.0	0.0	0.0	0.0	0.0
Finish	20.7	0.0	0.0	0.0	0.0	0.0

BH Ref.	Gas Flow Rate (l/hr)		Borehole Pressure (mb)	Methane (%v/v)			Carbon Dioxide (%v/v)		Oxygen (%v/v)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		Q_{hg} CO_2 (l/hr)	Q_{hg} CH_4 (l/hr)	Atmos Press (mb)	PID (ppm)	Sheen (Y/N)	Depth to Water (m bgl)
	Peak	Steady		Peak	Steady	LEL	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady						
BH01	0.0	0.0	0.00	0.0	0.0	0.0	2.4	1.4	17.5	18.4	0.0	0.0	0.0	0.0	0.0024	0.0000	1003	-	N	3.32
BH02	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	20.8	20.8	0.0	0.0	0.0	0.0	0.0000	0.0000	1003	-	N	3.69
BH03	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	20.8	20.8	0.0	0.0	0.0	0.0	0.0000	0.0000	1003	-	N	3.89
BH04	0.0	0.0	0.00	0.0	0.0	0.0	0.2	0.0	20.5	20.8	0.0	0.0	0.0	0.0	0.0002	0.0000	1003	-	N	4.21
WS01	0.0	0.0	0.00	0.0	0.0	0.0	0.3	0.3	20.2	20.2	0.0	0.0	0.0	0.0	0.0003	0.0000	1003	-	N	NGW
WS02	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	20.8	20.8	0.0	0.0	0.0	0.0	0.0000	0.0000	1003	-	N	NGW
WS03	0.0	0.0	0.00	0.0	0.0	0.0	0.7	0.7	19.8	19.8	0.0	0.0	0.0	0.0	0.0007	0.0000	1003	-	N	NGW
WS04	0.0	0.0	0.00	0.0	0.0	0.0	0.3	0.2	20.2	20.3	0.0	0.0	0.0	0.0	0.0003	0.0000	1003	-	N	NGW
WS05	0.0	0.0	0.00	0.0	0.0	0.0	1.0	0.1	19.5	20.2	0.0	0.0	0.0	0.0	0.0010	0.0000	1003	-	N	NGW

Notes:

APPENDIX 12 - Soil Percolation Test Results

ALDI PORTHCAWL
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SOIL PERCOLATION TEST

GROUNDTECH CONSULTING

Sheet 1 of 2

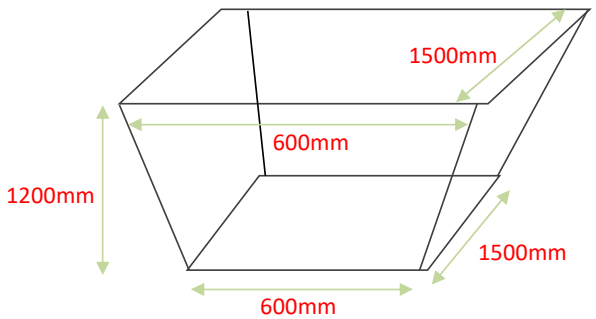
Date of Test: 03/02/2021

POSITION: SuDS1
TEST 1

Weather: Sunny, clear

Engineer: *S Mullen*
Checked: *S Flaherty*

Trial Pit Measurements



Pit Depth (mm):	1200
Pit Details:	Open with no stone filling
Groundwater Level:	NGW

Test Data

Time Elapsed (mins)	Depth to Water Level (mm)
0	400
1	440
2	470
3	490
5	520
6	570
10	660
15	740
20	820
30	920
40	970
50	1010
60	1100
75	1200

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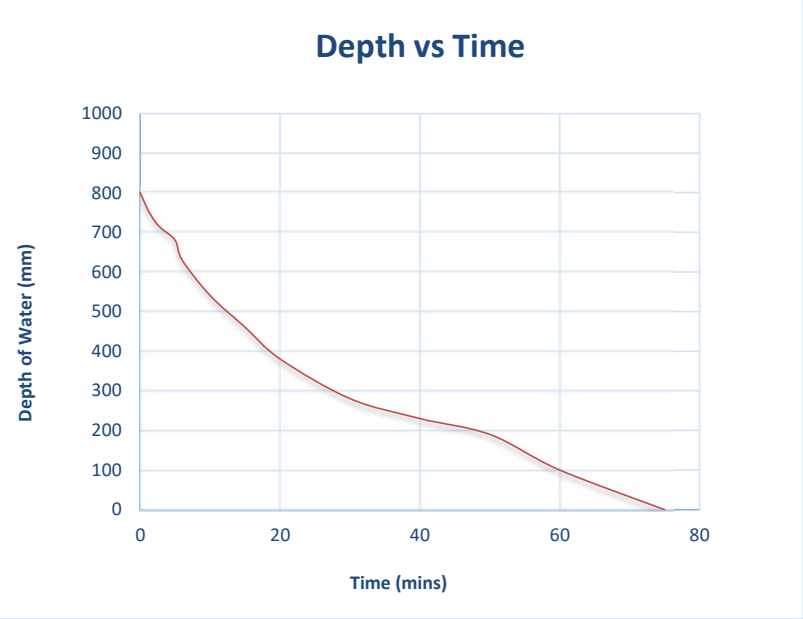
Sheet 2 of 2

SOIL PERCOLATION TEST

POSITION: SuDS1
TEST 1



Volume of Pit (m^3)	1.08
Void Ratio of Infill	1
Volume of Infill (m^3)	N/A
Volume of Water in Pit (m^3)	0.72

Compliancy Check:

Water Level at 75% effective depth (mm)	600
Water Level at 25% effective depth (mm)	200

Compliant with BRE 365

Soil Infiltration Rate Calculation

Water Level 1	600
Water Level 2	200
Time to Drain from Level 1 to Level 2 (mins)	30
Volume of water discharged (m^3)	0.36

Discharge Area (m^2)	1.68
Soil Infiltration Rate (m/min)	0.007142857
Soil Infiltration Rate (m/sec)	***1.19E-04***

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SOIL PERCOLATION TEST

GROUNDTECH CONSULTING

Sheet 1 of 2

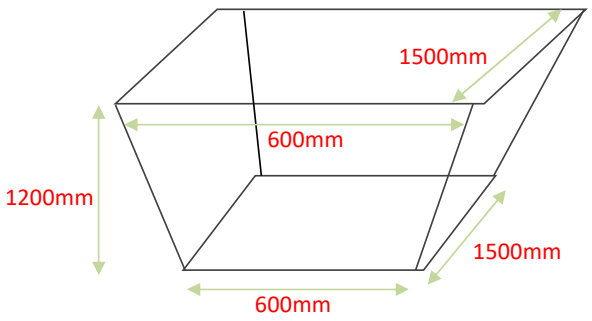
Date of Test: 03/02/2021

POSITION: SuDS1
TEST 2

Weather: Sunny, clear

Engineer: *S Mullen*
Checked: *S Flaherty*

Trial Pit Measurements



Pit Depth (mm):	1200
Pit Details:	Open with no stone filling
Groundwater Level:	NGW

Test Data

Time Elapsed (mins)	Depth to Water Level (mm)
0	440
1	460
2	470
3	480
5	510
6	540
10	660
15	730
20	770
30	860
40	940
50	990
60	1050
75	1200

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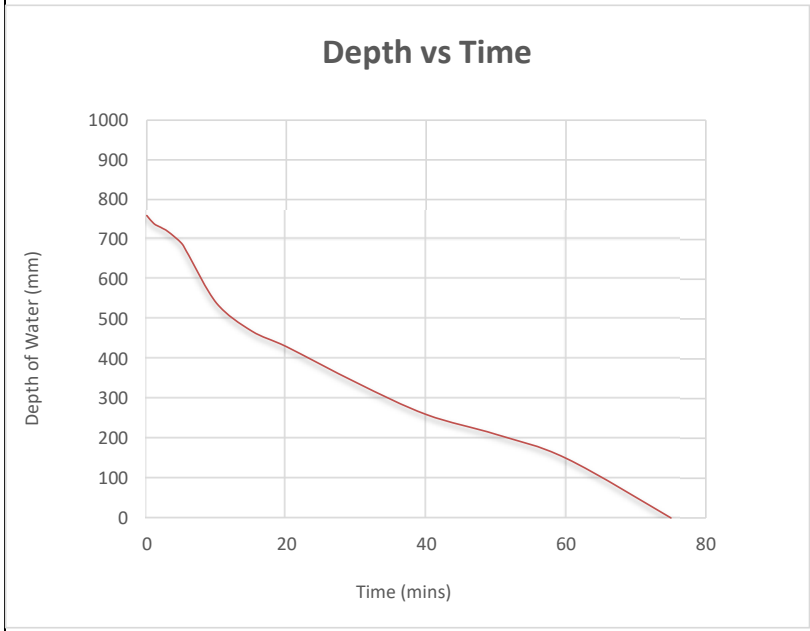
Sheet 2 of 2

SOIL PERCOLATION TEST

POSITION: SuDS1
TEST 2



Volume of Pit (m^3)	1.08
Void Ratio of Infill	1
Volume of Infill (m^3)	N/A
Volume of Water in Pit (m^3)	0.684

Compliancy Check:

Water Level at 75% effective depth (mm)	570
Water Level at 25% effective depth (mm)	190

Compliant with BRE 365

Soil Infiltration Rate Calculation

Water Level 1	570
Water Level 2	190
Time to Drain from Level 1 to Level 2 (mins)	39
Volume of water discharged (m^3)	0.342

Discharge Area (m^2)	1.596
Soil Infiltration Rate (m/min)	0.005494505
Soil Infiltration Rate (m/sec)	***9.16E-05***

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SOIL PERCOLATION TEST

GROUNDTECH CONSULTING

Sheet 1 of 2

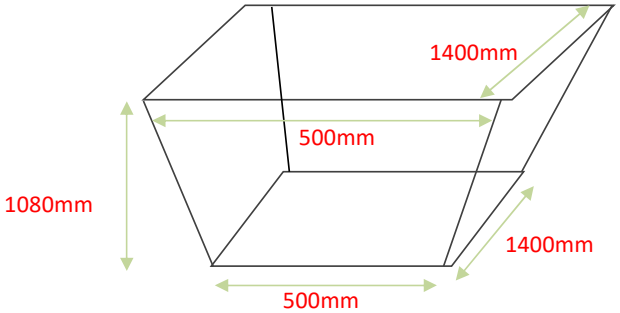
Date of Test: 03/02/2021

POSITION: SuDS1
TEST 3

Weather: Sunny, clear

Engineer: *S Mullen*
Checked: *S Flaherty*

Trial Pit Measurements



Pit Depth (mm):	1200
Pit Details:	Open with no stone filling
Groundwater Level:	NGW

Test Data

Time Elapsed (mins)	Depth to Water Level (mm)
0	400
1	420
2	440
3	460
5	470
6	490
10	530
15	640
20	710
30	860
40	920
50	960
60	1090
75	1200

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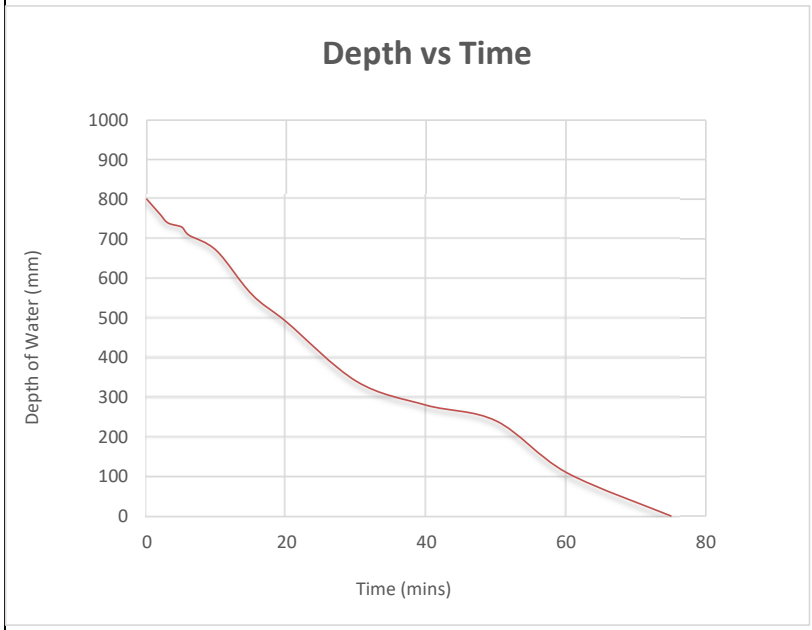
Sheet 2 of 2

SOIL PERCOLATION TEST

POSITION: SuDS1
TEST 3



Volume of Pit (m^3)	0.84
Void Ratio of Infill	0.3
Volume of Infill (m^3)	0.84
Volume of Water in Pit (m^3)	0.168

Compliancy Check:

Water Level at 75% effective depth (mm)	600
Water Level at 25% effective depth (mm)	200

Compliant with BRE 365

Soil Infiltration Rate Calculation

Water Level 1	600
Water Level 2	200
Time to Drain from Level 1 to Level 2 (mins)	39
Volume of water discharged (m^3)	0.28

Discharge Area (m^2)	1.52
Soil Infiltration Rate (m/min)	0.004723347
Soil Infiltration Rate (m/sec)	***7.87E-05***

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SOIL PERCOLATION TEST

GROUNDTECH CONSULTING

Sheet 1 of 2

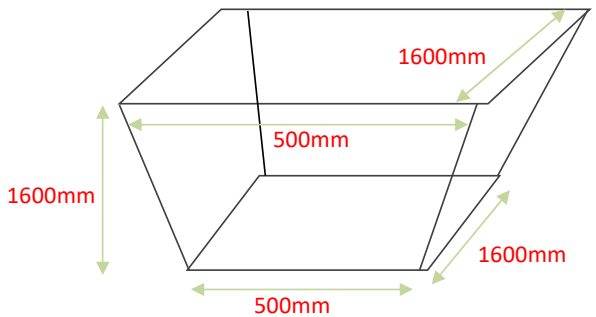
Date of Test: 03/02/2021

POSITION: SuDS2
TEST 1

Weather: Sunny, clear

Engineer: *S Mullen*
Checked: *S Flaherty*

Trial Pit Measurements



Pit Depth (mm):	1600
Pit Details:	Open with no stone filling
Groundwater Level:	NGW

Test Data

Time Elapsed (mins)	Depth to Water Level (mm)
0	350
1	390
2	420
3	470
5	510
6	580
10	800
15	910
20	1010
30	1260
40	1600

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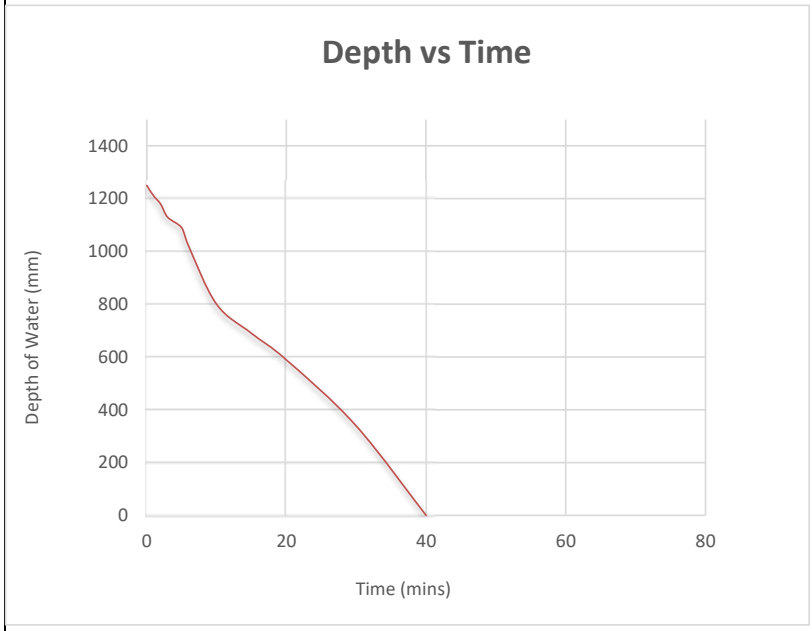
Sheet 2 of 2

SOIL PERCOLATION TEST

POSITION: SuDS2
TEST 1



Volume of Pit (m^3)	1.28
Void Ratio of Infill	0.3
Volume of Infill (m^3)	1.28
Volume of Water in Pit (m^3)	0.3

Compliancy Check:

Water Level at 75% effective depth (mm)	937.5
Water Level at 25% effective depth (mm)	312.5

Compliant with BRE 365

Soil Infiltration Rate Calculation

Water Level 1	937.5
Water Level 2	312.5
Time to Drain from Level 1 to Level 2 (mins)	23.5
Volume of water discharged (m^3)	0.5

Discharge Area (m^2)	2.625
Soil Infiltration Rate (m/min)	0.0081054
Soil Infiltration Rate (m/sec)	***1.35E-04***

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SOIL PERCOLATION TEST

GROUNDTECH CONSULTING

Sheet 1 of 2

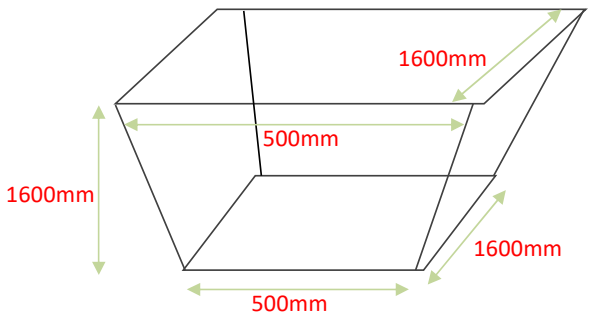
Date of Test: 03/02/2021

POSITION: SuDS2
TEST 2

Weather: Sunny, clear

Engineer: *S Mullen*
Checked: *S Flaherty*

Trial Pit Measurements



Pit Depth (mm):	1600
Pit Details:	Open with no stone filling
Groundwater Level:	NGW

Test Data

Time Elapsed (mins)	Depth to Water Level (mm
0	400
1	560
2	620
3	660
5	700
6	740
10	920
15	1050
20	1280
30	1390
40	1600

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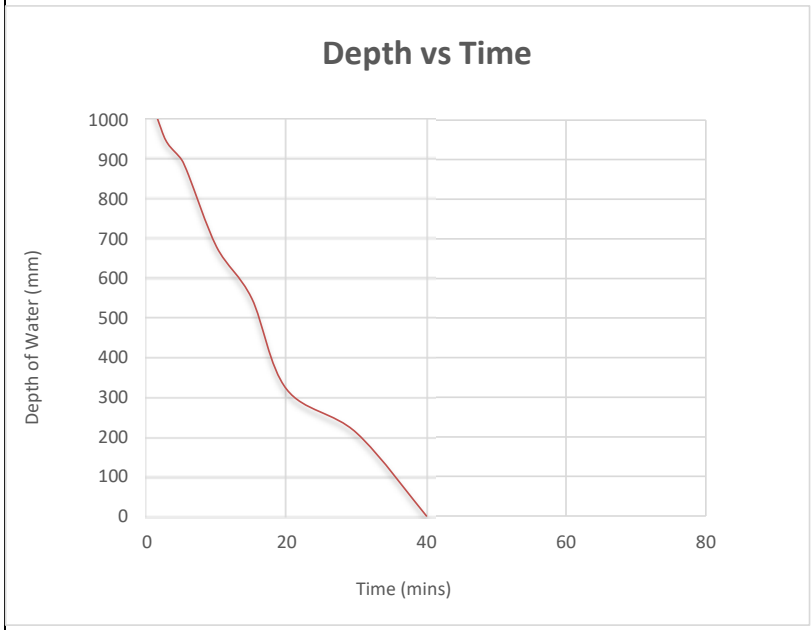
Sheet 2 of 2

SOIL PERCOLATION TEST

POSITION: SuDS2
TEST 2



Volume of Pit (m^3)	1.536
Void Ratio of Infill	1
Volume of Infill (m^3)	N/A
Volume of Water in Pit (m^3)	1.152

Compliancy Check:

Water Level at 75% effective depth (mm)	900
Water Level at 25% effective depth (mm)	300

Compliant with BRE 365

Soil Infiltration Rate Calculation

Water Level 1	900
Water Level 2	300
Time to Drain from Level 1 to Level 2 (mins)	17
Volume of water discharged (m^3)	0.576

Discharge Area (m^2)	2.64
Soil Infiltration Rate (m/min)	0.0128342
Soil Infiltration Rate (m/sec)	***2.14E-04***

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SOIL PERCOLATION TEST

GROUNDTECH CONSULTING

Sheet 1 of 2

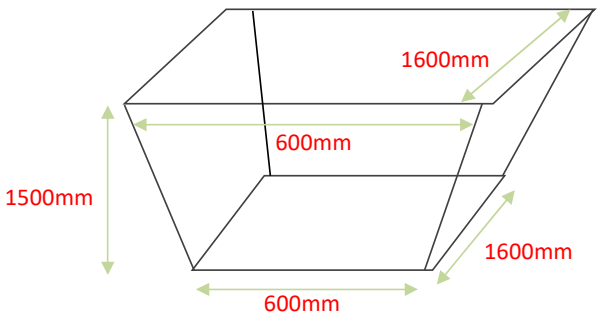
Date of Test: 03/02/2021

POSITION: SuDS2
TEST 3

Weather: Sunny, clear

Engineer: *S Mullen*
Checked: *S Flaherty*

Trial Pit Measurements



Pit Depth (mm):	1500
Pit Details:	Open with no stone filling
Groundwater Level:	NGW

Test Data

Time Elapsed (mins)	Depth to Water Level (mm)
0	340
1	360
2	400
3	420
5	460
6	480
10	620
15	790
20	850
30	920
40	1260
50	1500

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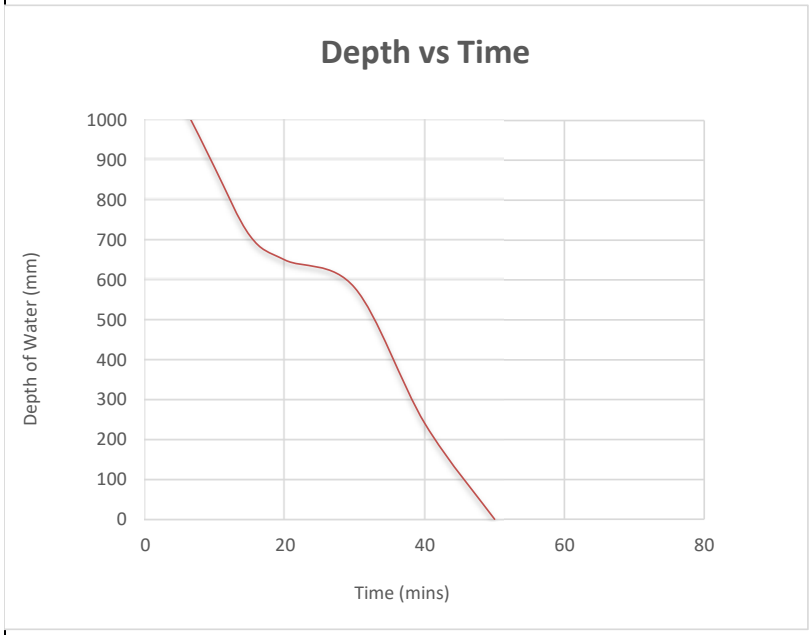
Sheet 2 of 2

SOIL PERCOLATION TEST

POSITION: SuDS2
TEST 3



Volume of Pit (m^3)	1.44
Void Ratio of Infill	1
Volume of Infill (m^3)	N/A
Volume of Water in Pit (m^3)	1.1136

Compliancy Check:

Water Level at 75% effective depth (mm)	870
Water Level at 25% effective depth (mm)	290

Compliant with BRE 365

Soil Infiltration Rate Calculation

Water Level 1	870
Water Level 2	290
Time to Drain from Level 1 to Level 2 (mins)	28
Volume of water discharged (m^3)	0.5568

Discharge Area (m^2)	2.552
Soil Infiltration Rate (m/min)	0.007792208
Soil Infiltration Rate (m/sec)	***1.30E-04***

APPENDIX 13 - Tier 1 Generic Screening Values

Proposed End Use	Unit	Residential with Plant Uptake			Commercial			Source
SOM	%	1	2.5	6	1	2.5	6	
Arsenic	mg/kg	32	32	32	640	640	640	SGVs
Beryllium	mg/kg	1.7	1.7	1.7	12	12	12	LQM S4ULs
Boron (water soluble)	mg/kg	290	290	290	240000	240000	240000	LQM S4ULs
Cadmium	mg/kg	10	10	10	230	230	230	SGVs
Chromium (Total)	mg/kg	910	910	910	8600	8600	8600	LQM S4ULs
Chromium (VI)	mg/kg	21	21	21	49	49	49	DEFRA C4SLs
Copper	mg/kg	2400	2400	2400	68000	68000	68000	LQM S4ULs
Lead	mg/kg	200	200	200	2300	2300	2300	DEFRA C4SLs
Organic Mercury	mg/kg	1.2	1.2	1.2	26	26	26	LQM S4ULs
Nickel	mg/kg	130	130	130	1800	1800	1800	SGVs
Selenium	mg/kg	350	350	350	13000	13000	13000	SGVs
Vanadium	mg/kg	410	410	410	9000	9000	9000	LQM S4ULs
Zinc	mg/kg	3700	3700	3700	730000	730000	730000	LQM S4ULs
Aliphatic EC 5 - 6	mg/kg	42	78	160	3200 (304) sol	5900 (558) sol	12000 (1150) sol	LQM S4ULs
Aliphatic EC 6 - 8	mg/kg	100	230	530	7800 (144) sol	17000 (322) sol	40000 (736) sol	LQM S4ULs
Aliphatic EC 8 - 10	mg/kg	27	65	150	2000 (78) sol	4800 (190) sol	11000 (451) vap	LQM S4ULs
Aliphatic EC 10 - 12	mg/kg	130 (48) vap	330 (118) vap	760 (283) vap	9700 (48) sol	23000 (118) vap	47000 (283) vap	LQM S4ULs
Aliphatic EC 12 - 16	mg/kg	1100 (24) sol	2400 (59) sol	4300 (142) sol	59000 (24) sol	82000 (59) sol	90000 (142) sol	LQM S4ULs
Aliphatic EC 16 - 35	mg/kg	65000 (8.48) f,sol	92000 (21) f,sol	110000 f	1600000 f	1700000 f	1800000 f	LQM S4ULs
Aliphatic EC 35 - 44	mg/kg	65000 (8.48) f,sol	92000 (21) f,sol	110000 f	1600000 f	1700000 f	1800000 f	LQM S4ULs
Aromatic EC 5 - 7	mg/kg	70	140	300	26000 (1220) sol	46000 (2260) sol	86000 (4710) sol	LQM S4ULs
Aromatic EC 7 - 8	mg/kg	130	290	660	56000 (869) vap	110000 (1920)	180000 (4360)	LQM S4ULs
Aromatic EC 8 - 10	mg/kg	34	83	190	3500 (613) vap	8100 (1500) vap	17000 (3580)	LQM S4ULs
Aromatic EC 10 - 12	mg/kg	74	180	380	16000 (364) sol	28000 (899) sol	34000 (2150) sol	LQM S4ULs
Aromatic EC 12 -16	mg/kg	140	330	660	36000 (169) sol	37000	38000	LQM S4ULs
Aromatic EC 16 - 21	mg/kg	260 f	540 f	930 f	28000 f	28000 f	28000 f	LQM S4ULs
Aromatic EC 21 - 35	mg/kg	1100 f	1500 f	1700 f	28000 f	28000 f	28000 f	LQM S4ULs
Aromatic EC 35 - 44	mg/kg	1100 f	1500 f	1700 f	28000 f	28000 f	28000 f	LQM S4ULs
Benzene	mg/kg	0.33	0.33	0.33	95	95	95	SGVs
Toluene	mg/kg	610	610	610	4400	4400	4400	SGVs
Ethyl Benzene	mg/kg	350	350	350	2800	2800	2800	SGVs
Xylene - o	mg/kg	250	250	250	2600	2600	2600	SGVs
Xylene - m	mg/kg	240	240	240	3500	3500	3500	SGVs
Xylene - p	mg/kg	230	230	230	3200	3200	3200	SGVs
MTBE (methyl tert-butyl	mg/kg	49	84	160	7900	13000	24000	CL:AIRE 2010
Acenaphthene	mg/kg	210	510	1100	84000 (57) sol	97000 (141) sol	100000	LQM SAULs
Acenaphthylene	mg/kg	170	420	920	83000 (86.1) sol	97000 (212) sol	100000	LQM S4ULs
Anthracene	mg/kg	2400	5400	11000	520000	540000	540000	LQM S4ULs
Benz(a)anthracene	mg/kg	7.2	11	13	170	170	180	LQM S4ULs
Benzo(a)pyrene	mg/kg	2.2	2.7	5*	35	35	77*	DEFRA C4SL*/LQM
Benzo(b)fluoranthene	mg/kg	2.6	3.3	3.7	44	44	45	LQM S4ULs
Benzo(ghi)perylene	mg/kg	320	340	350	3900	4000	4000	LQM S4ULs
Benzo(k)fluoranthene	mg/kg	77	93	100	1200	1200	1200	LQM S4ULs
Chrysene	mg/kg	15	22	27	350	350	350	LQM S4ULs
Dibenz(ah)anthracene	mg/kg	0.24	0.28	0.3	3.5	3.6	3.6	LQM S4ULs
Fluoranthene	mg/kg	280	560	890	23000	23000	23000	LQM S4ULs
Fluorene	mg/kg	170	400	860	63000 (30.9) sol	68000	71000	LQM S4ULs
Indeno(123-cd)pyrene	mg/kg	27	36	41	500	510	510	LQM S4ULs
Naphthalene	mg/kg	2.3 f	5.6 f	13 f	190 f (76.4) sol	460 f (183) sol	1100 f (432) sol	LQM S4ULs
Phenanthrene	mg/kg	95	220	440	22000	22000	23000	LQM S4ULs
Pyrene	mg/kg	620	1200	2000	54000	54000	54000	LQM S4ULs

Proposed End Use	Unit	Residential with Plant Uptake			Commercial			Source
SOM	%	1	2.5	6	1	2.5	6	
Phenol	*mg/kg*	*420*	*420*	*420*	*3200*	*3200*	*3200*	*SGVs*
Chlorophenols	*mg/kg*	*0.87* [#]	*2*	*4.5*	*3500*	*4000*	*4300*	*LQM S4ULs*
Pentachlorophenol	*mg/kg*	*0.22*	*0.52*	*1.2*	*400*	*400*	*400*	*LQM S4ULs*
Carbon disulphide	*mg/kg*	*0.14*	*0.29*	*0.62*	*11*	*22*	*47*	*LQM S4ULs*
Hexachlorobutadiene	*mg/kg*	*0.29*	*0.7*	*1.6*	*31*	*66*	*120*	*LQM S4ULs*
1,1,1,2 Tetrachloroethane	*mg/kg*	*1.6*	*3.4*	*7.5*	*270*	*550*	*1100*	*LQM S4ULs*
1,1,1 Trichloroethane	*mg/kg*	*8.8*	*18*	*39*	*660*	*1300*	*3000*	*LQM S4ULs*
Trichloroethene	*mg/kg*	*0.016*	*0.034*	*0.075*	*1.2*	*2.6*	*5.7*	*LQM S4ULs*
Tetrachoromethane	*mg/kg*	*0.026*	*0.056*	*0.13*	*2.9*	*6.3*	*14*	*LQM S4ULs*
1,2-Dichloroethane	*mg/kg*	*0.0071*	*0.011*	*0.019*	*0.67*	*0.97*	*1.7*	*LQM S4ULs*
Chloroethene (Vinyl	*mg/kg*	*0.00064*	*0.00087*	*0.0014*	*0.059*	*0.077*	*0.12*	*LQM S4ULs*
Trichloromethane	*mg/kg*	*0.91*	*1.7*	*3.4*	*99*	*170*	*350*	*LQM S4ULs*
Tetrachloroethene	*mg/kg*	*0.18*	*0.39*	*0.9*	*19*	*42*	*95*	*LQM S4ULs*
Hexachlorobenzene	*mg/kg*	*1.8 (0.2)* [vap]	*3.3 (0.5)* [vap]	*4.9*	*110 (0.2)* [vap]	*120*	*120*	*LQM S4ULs*
Pentachlorobenzene	*mg/kg*	*5.8*	*12*	*22*	*640 (43)* [sol]	*770 (107)* [sol]	*830*	*LQM S4ULs*
1,2,4,5-Tetrachlorobenzene	*mg/kg*	*0.33*	*0.77*	*1.6*	*42 (19.7)* [sol]	*72 (49.1)* [sol]	*96*	*LQM S4ULs*
1,2,3,5-Tetrachlorobenzene	*mg/kg*	*0.66*	*1.69*	*3.7*	*49 (39.4)* [vap]	*120 (98.1)* [vap]	*240 (235)* [vap]	*LQM S4ULs*
1,2,3,4-Tetrachlorobenzene	*mg/kg*	*15*	*36*	*78*	*1700 (122)* [vap]	*3080 (304)* [vap]	*4400 (728)* [vap]	*LQM S4ULs*
1,3,5-Trichlorobenzene	*mg/kg*	*0.33*	*0.81*	*1.9*	*23*	*55*	*130*	*LQM S4ULs*
1,2,4-Trichlorobenzene	*mg/kg*	*2.6*	*6.4*	*15*	*220*	*530*	*1300*	*LQM S4ULs*
1,2,3-Trichlorobenzene	*mg/kg*	*1.5*	*3.6*	*8.6*	*102*	*250*	*590*	*LQM S4ULs*
1,4-dichlorobenzene	*mg/kg*	*61* [†]	*150* [†]	*350* [†]	*4400* [†] *(224)* [vap]	*10000* [†] *(540)*	*25000* [†] *(1280)*	*LQM S4ULs*
1,3-dichlorobenzene	*mg/kg*	*0.4*	*1*	*2.3*	*30*	*73*	*170*	*LQM S4ULs*
1,2-Dichlorobenzene	*mg/kg*	*23*	*55*	*130*	*2000 (571)* [sol]	*4800 (1370)* [sol]	*11000 (3240)* [sol]	*LQM S4ULs*
Chlorobenzene	*mg/kg*	*0.46*	*1*	*2.4*	*56*	*130*	*290*	*LQM S4ULs*
Gamma-	*mg/kg*	*0.06*	*0.14*	*0.33*	*67*	*69*	*70*	*LQM S4ULs*
Beta-	*mg/kg*	*0.085*	*0.2*	*0.46*	*65*	*65*	*65*	*LQM S4ULs*
Alpaha -	*mg/kg*	*0.23*	*0.55*	*1.2*	*170*	*180*	*180*	*LQM S4ULs*
Beta -Endosulfan	*mg/kg*	*7*	*17*	*39*	*6300 (0.00007)*	*7800 (0.0002)*	*8700*	*LQM S4ULs*
Alpha-Endosulfan	*mg/kg*	*7.4*	*18*	*41*	*5600 (0.003)* [vap]	*7400 (0.007)* [vap]	*8400 (0.016)* [vap]	*LQM S4ULs*
Dichlorvos	*mg/kg*	*0.032*	*0.066*	*0.14*	*140*	*140*	*140*	*LQM S4ULs*
Atrazine	*mg/kg*	*3.3*	*7.6*	*17.4*	*9300*	*9400*	*9400*	*LQM S4ULs*
Dieldrin	*mg/kg*	*0.97*	*2*	*3.5*	*170*	*170*	*170*	*LQM S4ULs*
Aldrin	*mg/kg*	*5.7*	*6.6*	*7.1*	*170*	*170*	*170*	*LQM S4ULs*
HMX	*mg/kg*	*5.7*	*13*	*26*	*110000*	*110000*	*110000*	*LQM S4ULs*
2,4,6-Trinitrotoulene	*mg/kg*	*1.6*	*3.7*	*8.1*	*1000*	*1000*	*1000*	*LQM S4ULs*
RDX	*mg/kg*	*120*	*250*	*540*	*210000*	*210000*	*210000*	*LQM S4ULs*

[sol] S4UL exceeds the solubility saturation limit (which is presented in brackets)

[vap] S4ULS presented exceeds the vapour saturation limit, which is presented in brackets

[†] For naphthalene, the S4UL is based on a comparison of inhalation exposure with the TDI_{Inhal} for localised affects

[†] S4UL based on comparison of inhalation exposure with inhalation TDI for localised effects

[dir] S4ULs based on a threshold protecive direct skin contact with phenol (guideline in brackets based on health effects following long term exposure provided for illustation only

APPENDIX 14 - JIWG Receptor Decision Tool

JIWG

Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Project Reference	GRO-21015
Site Name	Aldi Porthcawl
Client	Aldi Ltd
Run by	SM
Date	04-Mar-21
Scenario details	

Decision Support Tool for CAR2012 Work Categories

Stage 1

Hazard Factors

		Score
Select ACM type (run model for each type to generate 'Worst Case' output)	Free dispersed fibres/fibre bundles	2
Extent of degradation of ACMs at outset of work	Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Distribution of Visible Asbestos Across Affected Area	Occasional/random occurrences of visible contamination by ACMs	1
Amount of asbestos fibre in selected ACM/fibre type as % of host material	Large quantities - >0.1 %wt/wt	4
Sub-total		**15**

Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs

Hazard ranking **Medium**

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.
It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2

Exposure Factors		Score
Anticipated airborne fibre concentration - Control Limit or SALI?	<0.01 fibres/ml	1
Anticipated duration of exposure to asbestos	> 2 hours in a 7 day period and Up to 10 hours in a day (e.g. full time occupational exposure)	4
Activity type and effect on deterioration of ACMs during work	Sampling, manual or mechanical (significant deterioration expected)	2
Best description of primary host material matrix (soil/made ground)	Coarse to Fine Sand	2
Respirable fibre index for ACM - RIVM report 711701034 (2003)	Low	2
Sub-total		11
Exposure ranking		Medium
Combined hazard and exposure ranking	26	Medium

Stage 3

Risk Assessment Outputs

Probable Licensing Status	Non-Licensed Work
RPE*	EN140 with P3 filter half mask
Dust Suppression**	Localised mechanical dust suppression
Hygiene/Decontamination***	Localised and enhanced personal decontamination facilities

*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.
**Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)
***Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis

JIWG

Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Decision Support Tool for Receptor Risk Ranking

Stage 1

Hazard Identification		Score
Select ACM type (run model for each type to generate 'Worst Case' output)	Free dispersed fibres/fibre bundles	2
Extent of degradation of ACMs	Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Distribution of Visible Asbestos Across Affected Area	Occasional/random occurrences of visible contamination by ACMs	1
Asbestos fibre type	Mainly amphibole and chrysotile mixtures, including trace crocidolite	2
Sub-total		13
Hazard ranking		Medium

Stage 2

Emission Factors		Score
Amount of asbestos fibre in selected ACM/fibre type as % of host material	Large quantities - ≥0.1 %wt/wt	4
Respirable fibre index for ACM - RIVM report 711701034 (2003)	Low	2
Activity type and effect on deterioration of ACMs	Low disturbance, minimal deterioration expected	2
Best description of primary host material matrix	Coarse to Fine Sand	2
Sub-total		10
Exposure ranking		Medium

Stage 3

Pathway and Receptor Sensitivity		Score	
Receptor category	Commercial/industrial	No score required	
Age of Receptor	Young adult (>16 and <24)	2	
Duration of exposure/site occupancy	< 1 hour in any single day (e.g. frequent but short exposure event)	1	
Receptor ranking		3	Low
Combined hazard, exposure and receptor ranking			Medium
Pathway: Distance of Receptor from Source	In or within 10m of area of disturbance	4	
Pathway: Depth to impacted material	Material buried at shallow depth, potential to be disturbed by excavation	C	
Pathway ranking		4C	Low
Overall ranking			Low

Project Reference	GRO-21015

Site Name	ALDI PORTHCAWL
Client	ALDI STORES LIMITED

Run by	RICHARD WYATT
Date	04-Mar-21
Reviewed by	JD

Characterisation of scenario being evaluated	

Interpretation of scenario ranking by DST	

APPENDIX 15 - HazWasteOnline Classification Report

HazWasteOnline™

Waste Classification Report

YRTBL-WTQ2T-UFFS8

Job name

21-02964

Description/Comments

Project

GRO-21015

Site

Aldi Porthcawl

Related Documents

#	Name	Description
1	21-02964.hwol	.hwol file used to create the Job

Waste Stream Template

Example waste stream template for contaminated soils

Classified by

Name:
Sam Flaherty
Date:
05 Mar 2021 12:00 GMT
Telephone:
0800 1613730

Company:
Groundtech Consulting Limited
PO Box 499
Manchester
M28 8EE

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	-
Advanced Hazardous Waste Classification	-

Report

Created by: Sam Flaherty
Created date: 05 Mar 2021 12:00 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	TP04/0.40/2021-02-02		Non Hazardous		2
2	TP06/1.00/2021-02-02		Non Hazardous		4
3	TP07/0.10/2021-02-02		Non Hazardous		6
4	TP08/0.40/2021-02-02		Hazardous	HP 7	8

Classification of sample: TP04/0.40/2021-02-02

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP04/0.40/2021-02-02

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		24	mg/kg	1.32	31.688	mg/kg	0.00317 %		
2		boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.5	mg/kg	3.22	1.61	mg/kg	0.000161 %		
3		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		33	mg/kg	1.462	48.231	mg/kg	0.00482 %		
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1	mg/kg	2.27	<2.27	mg/kg	<0.000227 %		**<LOD**
6		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		89	mg/kg	1.126	100.204	mg/kg	0.01 %		
7		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	87	mg/kg	1.56	135.704	mg/kg	0.0087 %		
8		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.08	mg/kg	1.353	0.108	mg/kg	0.0000108 %		
9		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31	mg/kg	2.976	92.264	mg/kg	0.00923 %		
10		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1.7	mg/kg	2.554	4.342	mg/kg	0.000434 %		
11		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		210	mg/kg	2.774	582.571	mg/kg	0.0583 %		
12		TPH (C6 to C40) petroleum group			TPH		140	mg/kg		140	mg/kg	0.014 %		
13		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				0.2	mg/kg	1.884	0.377	mg/kg	0.0000377 %		
14		pH			PH		7.8	pH		7.8	pH	7.8 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-052-00-2	202-049-5	91-20-3									
16	•	acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-917-1	208-96-8									
17	•	acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-469-6	83-32-9									
18	•	fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-695-5	86-73-7									
19	•	phenanthrene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
			201-581-5	85-01-8									
20	•	anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			204-371-1	120-12-7									
21	•	fluoranthene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
			205-912-4	206-44-0									
22	•	pyrene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-032-00-3	200-028-5	50-32-8									
28	•	indeno[123-cd]pyrene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
30	•	benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-883-8	191-24-2									
31	•	monohydric phenols				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		**<LOD**
				P1186									
										Total:	0.109 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Not flammable at this concentration.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.014%)

Classification of sample: TP06/1.00/2021-02-02

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP06/1.00/2021-02-02

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11	mg/kg	1.32	14.524	mg/kg	0.00145 %		
2		boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.2	mg/kg	3.22	0.644	mg/kg	0.0000644 %		
3		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.1	mg/kg	1.142	0.114	mg/kg	0.0000114 %		
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		4	mg/kg	1.462	5.846	mg/kg	0.000585 %		
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1	mg/kg	2.27	<2.27	mg/kg	<0.000227 %		**<LOD**
6		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		12	mg/kg	1.126	13.511	mg/kg	0.00135 %		
7		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19	mg/kg	1.56	29.636	mg/kg	0.0019 %		
8		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		**<LOD**
9		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		4.1	mg/kg	2.976	12.203	mg/kg	0.00122 %		
10		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		**<LOD**
11		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		41	mg/kg	2.774	113.74	mg/kg	0.0114 %		
12		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
13		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		**<LOD**
14		pH			PH		8.5	pH		8.5	pH	8.5 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-052-00-2	202-049-5	91-20-3									
16	•	acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-917-1	208-96-8									
17	•	acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-469-6	83-32-9									
18	•	fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-695-5	86-73-7									
19	•	phenanthrene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
			201-581-5	85-01-8									
20	•	anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			204-371-1	120-12-7									
21	•	fluoranthene				0.15	mg/kg		0.15	mg/kg	0.000015 %		
			205-912-4	206-44-0									
22	•	pyrene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		601-032-00-3	200-028-5	50-32-8									
28	•	indeno[123-cd]pyrene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
30	•	benzo[ghi]perylene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
			205-883-8	191-24-2									
31	•	monohydric phenols				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		**<LOD**
				P1186									
										Total:	0.0195 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP07/0.10/2021-02-02

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP07/0.10/2021-02-02

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		50	mg/kg	1.32	66.016	mg/kg	0.0066 %		
2		boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.7	mg/kg	3.22	2.254	mg/kg	0.000225 %		
3		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4	mg/kg	1.142	1.599	mg/kg	0.00016 %		
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25	mg/kg	1.462	36.539	mg/kg	0.00365 %		
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1	mg/kg	2.27	<2.27	mg/kg	<0.000227 %		**<LOD**
6		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		70	mg/kg	1.126	78.812	mg/kg	0.00788 %		
7		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	210	mg/kg	1.56	327.561	mg/kg	0.021 %		
8		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		**<LOD**
9		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18	mg/kg	2.976	53.573	mg/kg	0.00536 %		
10		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2.2	mg/kg	2.554	5.618	mg/kg	0.000562 %		
11		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		310	mg/kg	2.774	859.985	mg/kg	0.086 %		
12		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
13		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		**<LOD**
14		pH			PH		7.8	pH		7.8	pH	7.8 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-052-00-2	202-049-5	91-20-3									
16	•	acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-917-1	208-96-8									
17	•	acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-469-6	83-32-9									
18	•	fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-695-5	86-73-7									
19	•	phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-581-5	85-01-8									
20	•	anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			204-371-1	120-12-7									
21	•	fluoranthene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
			205-912-4	206-44-0									
22	•	pyrene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-032-00-3	200-028-5	50-32-8									
28	•	indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
30	•	benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-883-8	191-24-2									
31	•	monohydric phenols				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		**<LOD**
				P1186									
										Total:	0.133 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP08/0.40/2021-02-02

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
TP08/0.40/2021-02-02

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

zinc chromate: (compound conc.: 0.203%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		62	mg/kg	1.32	81.86	mg/kg	0.00819 %		
2		boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.4	mg/kg	3.22	4.508	mg/kg	0.000451 %		
3		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		31	mg/kg	1.462	45.308	mg/kg	0.00453 %		
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1	mg/kg	2.27	<2.27	mg/kg	<0.000227 %		**<LOD**
6		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		110	mg/kg	1.126	123.848	mg/kg	0.0124 %		
7		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	710	mg/kg	1.56	1107.469	mg/kg	0.071 %		
8		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		4.3	mg/kg	1.353	5.82	mg/kg	0.000582 %		
9		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18	mg/kg	2.976	53.573	mg/kg	0.00536 %		
10		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		0.7	mg/kg	2.554	1.788	mg/kg	0.000179 %		
11		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		730	mg/kg	2.774	2025.127	mg/kg	0.203 %		
12		TPH (C6 to C40) petroleum group			TPH		460	mg/kg		460	mg/kg	0.046 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
13		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		603-181-00-X	216-653-1	1634-04-4									
14		benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		601-020-00-8	200-753-7	71-43-2									
15		toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		601-021-00-3	203-625-9	108-88-3									
16		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		601-023-00-4	202-849-4	100-41-4									
17		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.1	mg/kg	1.884	0.188	mg/kg	0.0000188 %		
		006-007-00-5											
19		pH				9.4	pH		9.4	pH	9.4 pH		
				PH									
20		naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		601-052-00-2	202-049-5	91-20-3									
21		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-917-1	208-96-8									
22		acenaphthene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
			201-469-6	83-32-9									
23		fluorene				0.4	mg/kg		0.4	mg/kg	0.00004 %		
			201-695-5	86-73-7									
24		phenanthrene				5.2	mg/kg		5.2	mg/kg	0.00052 %		
			201-581-5	85-01-8									
25		anthracene				0.8	mg/kg		0.8	mg/kg	0.00008 %		
			204-371-1	120-12-7									
26		fluoranthene				6.8	mg/kg		6.8	mg/kg	0.00068 %		
			205-912-4	206-44-0									
27		pyrene				5.2	mg/kg		5.2	mg/kg	0.00052 %		
			204-927-3	129-00-0									
28		benzo[a]anthracene				2.7	mg/kg		2.7	mg/kg	0.00027 %		
		601-033-00-9	200-280-6	56-55-3									
29		chrysene				2.4	mg/kg		2.4	mg/kg	0.00024 %		
		601-048-00-0	205-923-4	218-01-9									
30		benzo[b]fluoranthene				2.8	mg/kg		2.8	mg/kg	0.00028 %		
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
		601-036-00-5	205-916-6	207-08-9									
32		benzo[a]pyrene; benzo[def]chrysene				2.7	mg/kg		2.7	mg/kg	0.00027 %		
		601-032-00-3	200-028-5	50-32-8									
33		indeno[123-cd]pyrene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
			205-893-2	193-39-5									
34		dibenz[a,h]anthracene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
		601-041-00-2	200-181-8	53-70-3									
35		benzo[ghi]perylene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
			205-883-8	191-24-2									
36		phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
37		1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		**<LOD**
			203-458-1, 200-863-5	107-06-2, 75-34-3									
38		tetrachloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-028-00-4	204-825-9	127-18-4									

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
39		carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
40		trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
41		vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
42		hexachlorobenzene	602-065-00-6	204-273-9	118-74-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
43	•	monohydric phenols			P1186		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		**<LOD**
44		1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
45	•	2,2-dichloropropane		209-832-0	594-20-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
46	•	bromochloromethane		200-826-3	74-97-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
47		chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
48		1,1,1-trichloroethane; methyl chloroform	602-013-00-2	200-756-3	71-55-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
49		1,1-dichloropropene	602-031-00-0	209-253-3	563-58-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
50		1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
51		dibromomethane	602-003-00-8	200-824-2	74-95-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
52	•	bromodichloromethane		200-856-7	75-27-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
53		1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
54	•	trans-1,3-dichloropropene		431-460-4	10061-02-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
55		1,1,2-trichloroethane	602-014-00-8	201-166-9	79-00-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
56	•	1,3-dichloropropane		205-531-3	142-28-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
57	•	dibromochloromethane		204-704-0	124-48-1		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
58		1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
59		chlorobenzene	602-033-00-1	203-628-5	108-90-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
60	•	1,1,1,2-tetrachloroethane		211-135-1	630-20-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
61		styrene	601-026-00-0	202-851-5	100-42-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
62		bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
63		bromobenzene	602-060-00-9	203-623-8	108-86-1		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
64		1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
65		mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
66	•	tert-butylbenzene		202-632-4	98-06-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
67		1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
68		sec-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
			205-227-0	135-98-8									
69		4-isopropyltoluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
			202-796-7	99-87-6									
70		1,3-dichlorbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-067-00-7	208-792-1	541-73-1									
71		1,4-dichlorobenzene; p-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-035-00-2	203-400-5	106-46-7									
72		n-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
			203-209-7	104-51-8									
73		1,2-dichlorobenzene; o-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-034-00-7	202-425-9	95-50-1									
74		1,2-dibromo-3-chloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-021-00-6	202-479-3	96-12-8									
75		1,2,4-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-087-00-6	204-428-0	120-82-1									
76		hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
			201-765-5	87-68-3									
77		1,2,3-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
			201-757-1	87-61-6									
78		aniline				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		612-008-00-7	200-539-3	62-53-3									
79		benzyl alcohol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		603-057-00-5	202-859-9	100-51-6									
80		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]									
81		bis(2-chloroethyl) ether				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		603-029-00-2	203-870-1	111-44-4									
82		3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]									
83		bis(2-chloroethoxy)methane				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
			203-920-2	111-91-1									
84		2,4-dichlorophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		604-011-00-7	204-429-6	120-83-2									
85		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		604-014-00-3	200-431-6	59-50-7									
86		2-methyl naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
			202-078-3	91-57-6									
87		hexachlorocyclopentadiene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		602-078-00-7	201-029-3	77-47-4									
88		2,4,6-trichlorophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		604-018-00-5	201-795-9	88-06-2									
89		2,4,5-trichlorophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		604-017-00-X	202-467-8	95-95-4									
90		2-chloronaphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
			202-079-9	91-58-7									
91		2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]									
92		4-nitrophenol; p-nitrophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		609-015-00-2	202-811-7	100-02-7									

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
93	●	dibenzofuran		205-071-3	132-64-9		0.2	mg/kg		0.2	mg/kg	0.00002 %		
94		2,6-dinitrotoluene	609-049-00-8	210-106-0	606-20-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
95		2,3,4,6-tetrachlorophenol	604-013-00-8	200-402-8	58-90-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
96	●	diethyl phthalate		201-550-6	84-66-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
97	●	4-chlorophenylphenylether		230-281-7	7005-72-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
98		DNOC (ISO); 4,6-dinitro-o-cresol	609-020-00-X	208-601-1	534-52-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
99		diphenylamine	612-026-00-5	204-539-4	122-39-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
100	●	4-bromophenylphenylether		202-952-4	101-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
101		pentachlorophenol	604-002-00-8	201-778-6	87-86-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
102		dibutyl phthalate; DBP	607-318-00-4	201-557-4	84-74-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
103		BBP; benzyl butyl phthalate	607-430-00-3	201-622-7	85-68-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
104		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP	607-317-00-9	204-211-0	117-81-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
105	●	di-n-octyl phthalate		204-214-7	117-84-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
106	●	dimethyl phthalate		205-011-6	131-11-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
107		azobenzene	611-001-00-6	203-102-5	103-33-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
108	●	carbazole		201-696-0	86-74-8		0.9	mg/kg		0.9	mg/kg	0.00009 %		
109		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		**<LOD**
110		cumene; [1] propylbenzene [2]	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		**<LOD**
111		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		**<LOD**
112		2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
113		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		**<LOD**
114		dinitrobenzene; [1] 1,4-dinitrobenzene; [2] 1,3-dinitrobenzene; [3] 1,2-dinitrobenzene [4]	609-004-00-2	246-673-6 [1] 202-833-7 [2] 202-776-8 [3] 208-431-8 [4]	25154-54-5 [1] 100-25-4 [2] 99-65-0 [3] 528-29-0 [4]		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		**<LOD**
											Total:	0.355 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Not flammable at this concentration.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.046%)

Appendix A: Classifier defined and non CLP determinands

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **monohydric phenols** (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)
Data source: CLP combined data
Data source date: 26 Mar 2019
Hazard Statements: Acute Tox. 3 H301 , Acute Tox. 3 H311 , Acute Tox. 3 H331 , Skin Corr. 1B H314 , Skin Corr. 1B H314 >= 3 %, Skin Irrit. 2 H315 1 £ conc. < 3 %, Eye Irrit. 2 H319 1 £ conc. < 3 %, Muta. 2 H341 , STOT RE 2 H373 , Aquatic Chronic 2 H411

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **1,1-dichloroethane and 1,2-dichloroethane (combined)** (EC Number: 203-458-1, 200-863-5, CAS Number: 107-06-2, 75-34-3)

Description/Comments: Combines the hazard statements and risk phrases for 1,1-dichloroethane and 1,2-dichloroethane
Data source: N/a
Data source date: 14 Oct 2016
Hazard Statements: Flam. Liq. 2 H225 , Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 1B H350 , Aquatic Chronic 3 H412

- **2,2-dichloropropane** (EC Number: 209-832-0, CAS Number: 594-20-7)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H332 , Flam. Liq. 2 H225 , Acute Tox. 4 H302 , Acute Tox. 4 H312 , Eye Irrit. 2 H319

- **bromochloromethane** (EC Number: 200-826-3, CAS Number: 74-97-5)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H312 , Skin Corr. 1B H314 , Eye Dam. 1 H318 , Acute Tox. 4 H332 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Ozone 1 H420

- **bromodichloromethane** (EC Number: 200-856-7, CAS Number: 75-27-4)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Muta. 1B H340 , Carc. 1B H350 , Repr. 1A H360

- **trans-1,3-dichloropropene** (EC Number: 431-460-4, CAS Number: 10061-02-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Acute Tox. 3 H301 , Asp. Tox. 1 H304 , Acute Tox. 3 H311 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Irrit. 2 H319 , Acute Tox. 4 H332 , STOT SE 3 H335 , Aquatic Chronic 1 H410

- **1,3-dichloropropane** (EC Number: 205-531-3, CAS Number: 142-28-9)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H332 , Flam. Liq. 2 H225 , Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335

- **dibromochloromethane** (EC Number: 204-704-0, CAS Number: 124-48-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 4 H312 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 4 H332 , STOT SE 3 H335 , STOT SE 3 H336 , Muta. 2 H341 , Aquatic Chronic 2 H411

- **1,1,1,2-tetrachloroethane** (EC Number: 211-135-1, CAS Number: 630-20-6)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , Eye Dam. 1 H318 , Acute Tox. 4 H332 , Carc. 2 H351 , Acute Tox. 4 H312 , Aquatic Chronic 3 H412 , Skin Irrit. 2 H315

- **tert-butylbenzene** (EC Number: 202-632-4, CAS Number: 98-06-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , Acute Tox. 4 H332 , STOT SE 3 H335 , Asp. Tox. 1 H304 , Aquatic Chronic 2 H411

- **sec-butylbenzene** (EC Number: 205-227-0, CAS Number: 135-98-8)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Aquatic Chronic 2 H411

- **4-isopropyltoluene** (EC Number: 202-796-7, CAS Number: 99-87-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Chronic 2 H411

- **n-butylbenzene** (EC Number: 203-209-7, CAS Number: 104-51-8)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 3 H301 , Acute Tox. 2 H310 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Irrit. 2 H319 , Acute Tox. 2 H330 , Carc. 2 H351 , Repr. 2 H361 , STOT SE 2 H371 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **1,2,3-trichlorobenzene** (EC Number: 201-757-1, CAS Number: 87-61-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , STOT SE 3 H336 , Aquatic Acute 1 H400 , Aquatic Chronic 3 H410

- **bis(2-chloroethoxy)methane** (EC Number: 203-920-2, CAS Number: 111-91-1)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 3 H301 , Acute Tox. 4 H312 , Acute Tox. 1 H330 , Acute Tox. 2 H330 , STOT SE 1 H370 , STOT RE 2 H373

- **2-methyl naphthalene** (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , STOT SE 3 H336 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **2-chloronaphthalene** (EC Number: 202-079-9, CAS Number: 91-58-7)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **dibenzofuran** (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 4 H312 , Acute Tox. 4 H332 , Aquatic Chronic 2 H411

- **diethyl phthalate** (EC Number: 201-550-6, CAS Number: 84-66-2)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Skin Irrit. 2 H315 , Acute Tox. 3 H331 , Acute Tox. 3 H311 , STOT SE 3 H335 , STOT RE 2 H373 , Repr. 2 H361 , Acute Tox. 4 H302 , STOT SE 3 H336 , Skin Sens. 1 H317 , Aquatic Chronic 1 H410

- **4-chlorophenylphenylether** (EC Number: 230-281-7, CAS Number: 7005-72-3)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **4-bromophenylphenylether** (EC Number: 202-952-4, CAS Number: 101-55-3)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **di-n-octyl phthalate** (EC Number: 204-214-7, CAS Number: 117-84-0)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Repr. 2 H361 , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Eye Irrit. 2 H319 , Aquatic Chronic 4 H413

- **dimethyl phthalate** (EC Number: 205-011-6, CAS Number: 131-11-3)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , STOT SE 3 H335 , STOT SE 3 H336 , Repr. 2 H361 , Aquatic Chronic 3 H412

- **carbazole** (EC Number: 201-696-0, CAS Number: 86-74-8)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Muta. 2 H341 , Carc. 2 H351 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Acute Tox. 3 H331 , Acute Tox. 3 H311 , Acute Tox. 3 H301

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass (edit as required)

chromium in chromium(VI) compounds {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case species based on hazard statements/molecular weight (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2021.60.4685.9008 (01 Mar 2021)
HazWasteOnline Database: 2021.60.4685.9008 (01 Mar 2021)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2019 - UK: 2019 No. 720 of 27th March 2019
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
POPs Regulation 2019 - Regulation (EU) 2019/1021 of 20 June 2019

HazWasteOnline™

Waste Classification Report

L5NBP-8K97D-M22EA

Job name

21-03748

Description/Comments

Project

GRO-21015

Site

Aldi Porthcawl (2)

Related Documents

#	Name	Description
1	21-03748.hwol	.hwol file used to create the Job

Waste Stream Template

Example waste stream template for contaminated soils

Classified by

Name:
Sam Flaherty
Date:
05 Mar 2021 12:03 GMT
Telephone:
0800 1613730

Company:
Groundtech Consulting Limited
PO Box 499
Manchester
M28 8EE

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	-
Advanced Hazardous Waste Classification	-

Report

Created by: Sam Flaherty
Created date: 05 Mar 2021 12:03 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	BH1/1.00/2021-02-02		Non Hazardous		2
2	BH2/0.50/2021-02-02		Non Hazardous		8
3	BH3/0.50/2021-02-02		Non Hazardous		10
4	SUDS 1/0.20/2021-02-02		Hazardous	HP 7	12
5	SUDS 2/0.40/2021-02-02		Hazardous	HP 7, HP 11	15

Classification of sample: BH1/1.00/2021-02-02

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH1/1.00/2021-02-02

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		23	mg/kg	1.32	30.367	mg/kg	0.00304 %		
2		boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.4	mg/kg	3.22	4.508	mg/kg	0.000451 %		
3		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6	mg/kg	1.142	0.685	mg/kg	0.0000685 %		
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		15	mg/kg	1.462	21.923	mg/kg	0.00219 %		
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1	mg/kg	2.27	<2.27	mg/kg	<0.000227 %		**<LOD**
6		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		95	mg/kg	1.126	106.959	mg/kg	0.0107 %		
7		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	110	mg/kg	1.56	171.58	mg/kg	0.011 %		
8		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.14	mg/kg	1.353	0.189	mg/kg	0.0000189 %		
9		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		22	mg/kg	2.976	65.478	mg/kg	0.00655 %		
10		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1	mg/kg	2.554	2.554	mg/kg	0.000255 %		
11		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		170	mg/kg	2.774	471.605	mg/kg	0.0472 %		
12		TPH (C6 to C40) petroleum group			TPH		410	mg/kg		410	mg/kg	0.041 %		
13		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
14		benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
15		toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		601-023-00-4	202-849-4	100-41-4									
17		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.3	mg/kg	1.884	0.565	mg/kg	0.0000565 %		
		006-007-00-5											
19		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
20		naphthalene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
		601-052-00-2	202-049-5	91-20-3									
21		acenaphthylene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
			205-917-1	208-96-8									
22		acenaphthene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
			201-469-6	83-32-9									
23		fluorene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
			201-695-5	86-73-7									
24		phenanthrene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
			201-581-5	85-01-8									
25		anthracene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
			204-371-1	120-12-7									
26		fluoranthene				3.4	mg/kg		3.4	mg/kg	0.00034 %		
			205-912-4	206-44-0									
27		pyrene				2.8	mg/kg		2.8	mg/kg	0.00028 %		
			204-927-3	129-00-0									
28		benzo[a]anthracene				2.8	mg/kg		2.8	mg/kg	0.00028 %		
		601-033-00-9	200-280-6	56-55-3									
29		chrysene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
		601-048-00-0	205-923-4	218-01-9									
30		benzo[b]fluoranthene				3.3	mg/kg		3.3	mg/kg	0.00033 %		
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				1.4	mg/kg		1.4	mg/kg	0.00014 %		
		601-036-00-5	205-916-6	207-08-9									
32		benzo[a]pyrene; benzo[def]chrysene				2.9	mg/kg		2.9	mg/kg	0.00029 %		
		601-032-00-3	200-028-5	50-32-8									
33		indeno[123-cd]pyrene				1.4	mg/kg		1.4	mg/kg	0.00014 %		
			205-893-2	193-39-5									
34		dibenz[a,h]anthracene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
		601-041-00-2	200-181-8	53-70-3									
35		benzo[ghi]perylene				1.5	mg/kg		1.5	mg/kg	0.00015 %		
			205-883-8	191-24-2									
36		phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
37		1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		**<LOD**
			203-458-1, 200-863-5	107-06-2, 75-34-3									
38		tetrachloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-028-00-4	204-825-9	127-18-4									
39		carbon tetrachloride; tetrachloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-008-00-5	200-262-8	56-23-5									
40		trichloroethylene; trichloroethene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-027-00-9	201-167-4	79-01-6									
41		vinyl chloride; chloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-023-00-7	200-831-0	75-01-4									
42		hexachlorobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		**<LOD**
		602-065-00-6	204-273-9	118-74-1									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
43		polychlorobiphenyls; PCB				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
44		aniline				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		612-008-00-7	200-539-3	62-53-3									
45		benzyl alcohol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		603-057-00-5	202-859-9	100-51-6									
46		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]									
47		bis(2-chloroethyl) ether				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		603-029-00-2	203-870-1	111-44-4									
48		3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]									
49		bis(2-chloroethoxy)methane				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			203-920-2	111-91-1									
50		2,4-dichlorophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-011-00-7	204-429-6	120-83-2									
51		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-014-00-3	200-431-6	59-50-7									
52		2-methyl naphthalene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
			202-078-3	91-57-6									
53		hexachlorocyclopentadiene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-078-00-7	201-029-3	77-47-4									
54		2,4,6-trichlorophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-018-00-5	201-795-9	88-06-2									
55		2,4,5-trichlorophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-017-00-X	202-467-8	95-95-4									
56		2-chloronaphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			202-079-9	91-58-7									
57		2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]									
58		4-nitrophenol; p-nitrophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		609-015-00-2	202-811-7	100-02-7									
59		dibenzofuran				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-071-3	132-64-9									
60		2,6-dinitrotoluene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		609-049-00-8	210-106-0	606-20-2									
61		2,3,4,6-tetrachlorophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-013-00-8	200-402-8	58-90-2									
62		diethyl phthalate				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-550-6	84-66-2									
63		4-chlorophenylphenylether				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			230-281-7	7005-72-3									
64		DNOC (ISO); 4,6-dinitro-o-cresol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		609-020-00-X	208-601-1	534-52-1									
65		diphenylamine				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		612-026-00-5	204-539-4	122-39-4									
66		4-bromophenylphenylether				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			202-952-4	101-55-3									
67		pentachlorophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-002-00-8	201-778-6	87-86-5									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
68		dibutyl phthalate; DBP				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		607-318-00-4	201-557-4	84-74-2									
69		BBP; benzyl butyl phthalate				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		607-430-00-3	201-622-7	85-68-7									
70		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		607-317-00-9	204-211-0	117-81-7									
71	•	di-n-octyl phthalate				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-214-7	117-84-0									
72	•	dimethyl phthalate				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-011-6	131-11-3									
73		azobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		611-001-00-6	203-102-5	103-33-3									
74	•	carbazole				0.3	mg/kg		0.3	mg/kg	0.00003 %		
			201-696-0	86-74-8									
75		1,1-dichloroethylene; vinylidene chloride				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-025-00-8	200-864-0	75-35-4									
76	•	2,2-dichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			209-832-0	594-20-7									
77	•	bromochloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			200-826-3	74-97-5									
78		chloroform; trichloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-006-00-4	200-663-8	67-66-3									
79		1,1,1-trichloroethane; methyl chloroform				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-013-00-2	200-756-3	71-55-6									
80		1,1-dichloropropene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-031-00-0	209-253-3	563-58-6									
81		1,2-dichloropropane; propylene dichloride				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-020-00-0	201-152-2	78-87-5									
82		dibromomethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-003-00-8	200-824-2	74-95-3									
83	•	bromodichloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			200-856-7	75-27-4									
84		1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]									
85	•	trans-1,3-dichloropropene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			431-460-4	10061-02-6									
86		1,1,2-trichloroethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-014-00-8	201-166-9	79-00-5									
87	•	1,3-dichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-531-3	142-28-9									
88	•	dibromochloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			204-704-0	124-48-1									
89		1,2-dibromoethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-010-00-6	203-444-5	106-93-4									
90		chlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-033-00-1	203-628-5	108-90-7									
91	•	1,1,1,2-tetrachloroethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			211-135-1	630-20-6									
92		styrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-026-00-0	202-851-5	100-42-5									
93		bromoform; tribromomethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-007-00-X	200-854-6	75-25-2									
94		bromobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-060-00-9	203-623-8	108-86-1									
95		1,2,3-trichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-062-00-X	202-486-1	96-18-4									
96		mesitylene; 1,3,5-trimethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-025-00-5	203-604-4	108-67-8									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
97		tert-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-632-4	98-06-6									
98		1,2,4-trimethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-043-00-3	202-436-9	95-63-6									
99		sec-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-227-0	135-98-8									
100		4-isopropyltoluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-796-7	99-87-6									
101		1,3-dichlorbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-067-00-7	208-792-1	541-73-1									
102		1,4-dichlorobenzene; p-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-035-00-2	203-400-5	106-46-7									
103		n-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			203-209-7	104-51-8									
104		1,2-dichlorobenzene; o-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-034-00-7	202-425-9	95-50-1									
105		1,2-dibromo-3-chloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-021-00-6	202-479-3	96-12-8									
106		1,2,4-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-087-00-6	204-428-0	120-82-1									
107		hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-765-5	87-68-3									
108		1,2,3-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-757-1	87-61-6									
109		monohydric phenols				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
				P1186									
110		2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]									
111		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]									
112		dinitrobenzene; [1] 1,4-dinitrobenzene; [2] 1,3-dinitrobenzene; [3] 1,2-dinitrobenzene [4]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		609-004-00-2	246-673-6 [1] 202-833-7 [2] 202-776-8 [3] 208-431-8 [4]	25154-54-5 [1] 100-25-4 [2] 99-65-0 [3] 528-29-0 [4]									
113		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]									
114		cumene; [1] propylbenzene [2]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]									
115		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]									
										Total:	0.126 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Not flammable as this concentration.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.041%)