

APPENDIX 3
LABORATORY RESULTS

Concept Life Sciences

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 745484-1

Date of Report: 27-Jun-2018

Customer: Sirius Environmental
Office Suite 2
The Beacon Centre for Enterprise
Dafen
Llanelli
SA14 8LQ

Customer Contact: Mr Michael Knott

Customer Job Reference: WR7449

Customer Purchase Order: 1722/WR7449/M Knott

Customer Site Reference: Pen-y-bont

Date Job Received at Concept: 19-Jun-2018

Date Analysis Started: 19-Jun-2018

Date Analysis Completed: 27-Jun-2018

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with Section 25 of the Concept Life Sciences, Analytical Services Quality Manual



Report checked
and authorised by :
Alam Noor
Customer Service Advisor

Issued by :
Aneta Dybek-Echtermeyer
Customer Service Advisor

<p>Concept Reference: 745484</p> <p>Project Site: Pen-y-bont</p> <p>Customer Reference: WR7449</p>	
<p>Soil</p> <p>MCERTS Preparation</p>	<p>Analysed as Soil</p>

Concept Reference					745484 002	745484 004	745484 006	745484 008	745484 010
Customer Sample Reference					TP1 D4-D6	TP2 D4-D6	TP3 D4-D6	TP4 D4-D6	TP5 D4-D6
Depth					1	1	1.5	1.5	1.5
Bottom Depth					2.5	2.5	3.0	3.0	3.0
Top Depth					1	1	1.5	1.5	1.5
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	7.2	11	15	9.8	12
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 745484	
Project Site: Pen-y-bont	
Customer Reference: WR7449	
Soil	Analysed as Soil
MCERTS Preparation	

Concept Reference					745484 012	745484 014	745484 016	745484 017	745484 018
Customer Sample Reference					TP6 D4-D6	TP7 D4-D6	TP8 D4-D6	TP9 D1-D3	TP10 D1-D3
Depth					1.5	1.5	1.5	1	1.8
Bottom Depth					3.0	3.0	3.5	3.6	3.3
Top Depth					1.5	1.5	1.5	1	1.8
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	7.4	7.2	9.4	7.7	16
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

<p>Concept Reference: 745484</p> <p>Project Site: Pen-y-bont</p> <p>Customer Reference: WR7449</p>	
<p>Soil</p> <p>MCERTS Preparation</p>	<p>Analysed as Soil</p>

Concept Reference					745484 019	745484 020	745484 021	745484 022	745484 023
Customer Sample Reference					TP11 D1-D3	TP12D1-D3	TP13 D1-D3	BH1 D1-D3	BH1 D4-D6
Depth					1.5	1.5	0.0	0.75	6.0
Bottom Depth					3.0	3.0	0.3		
Top Depth					1.5	1.5	0.0	0.75	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	12	9.2	16	7.5	16
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449									
Soil		Analysed as Soil							
MCERTS Preparation									
Concept Reference					745484 024	745484 025	745484 026	745484 027	745484 028
Customer Sample Reference					BH2 D1-D3	BH2 D4-D6	BH3 D1-D3	BH3 D4-D6	BH4 D1-D3
Depth					1.0	6.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					1.0	6.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	6.5	11	4.2	11	38
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449									
Soil Analysed as Soil MCERTS Preparation									
Concept Reference				745484 029	745484 030	745484 031	745484 032	745484 033	
Customer Sample Reference				BH4 D4-D6	BH5 D1-D3	BH5 D4-D6	BH7 D1-D3	BH7 D4-D6	
Depth				6.0	1.0	3.50	0.5	3.0	
Bottom Depth									
Top Depth				6.0	1.0	3.50	0.5	3.0	
Date Sampled				13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	
Matrix Class				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	13	11	21	27	7.6
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449									
Soil					Analysed as Soil				
MCERTS Preparation									
Concept Reference					745484 034	745484 035	745484 036	745484 037	745484 038
Customer Sample Reference					BH7 D7-D9	BH7 D10-D12	BH8 D1-D3	BH8 D4-D6	BH9 D1-D3
Depth					3.10	5.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					3.10	5.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	8.4	8.1	5.0	13	6.6
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 745484										
Project Site: Pen-y-bont										
Customer Reference: WR7449										
Soil					Analysed as Soil					
MCERTS Preparation										
Concept Reference					745484 040	745484 041	745484 043	745484 044	745484 046	
Customer Sample Reference					BH9 D7-D9	BH10 D1-D3	BH10 D7-D9	BH11 D1-D3	BH11 D7-D9	
Depth					6.0	1.0	6.0	1.0	6.0	
Bottom Depth										
Top Depth					6.0	1.0	6.0	1.0	6.0	
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	11	5.2	15	6.1	15
Retained on 10mm sieve		T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 745484						
Project Site: Pen-y-bont						
Customer Reference: WR7449						
Soil		Analysed as Soil				
MCERTS Preparation						
Concept Reference				745484 047	745484 049	
Customer Sample Reference				BH12 D1-D3	BH12 D7-D9	
Depth				1.0	5.0	
Bottom Depth						
Top Depth				1.0	5.0	
Date Sampled				14-JUN-2018	14-JUN-2018	
Matrix Class				Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units		
Moisture @105C	T162	AR	0.1	%	12	19
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1

<div>Concept Reference: 745484</div> <div>Project Site: Pen-y-bont</div> <div>Customer Reference: WR7449</div>									
Soil					Analysed as Soil				
Suite 2									
Concept Reference					745484 002	745484 004	745484 006	745484 008	745484 010
Customer Sample Reference					TP1 D4-D6	TP2 D4-D6	TP3 D4-D6	TP4 D4-D6	TP5 D4-D6
Depth					1	1	1.5	1.5	1.5
Bottom Depth					2.5	2.5	3.0	3.0	3.0
Top Depth					1	1	1.5	1.5	1.5
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	19	16	15	14	17
Barium	T6	A40	1	mg/kg	92	140	210	170	180
Cadmium	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Chromium	T6	M40	1	mg/kg	11	19	15	18	13
Copper	T6	M40	1	mg/kg	97	51	40	49	66
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Molybdenum	T6	M40	2	mg/kg	3	3	3	3	3
Nickel	T6	M40	1	mg/kg	33	32	27	29	29
Lead	T6	M40	1	mg/kg	55	43	32	35	62
Antimony	T6	A40	1	mg/kg	2	2	2	2	2
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Zinc	T6	M40	1	mg/kg	150	51	46	48	120

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 2									
Analysed as Soil									
Concept Reference					745484 012	745484 014	745484 016	745484 017	745484 018
Customer Sample Reference					TP6 D4-D6	TP7 D4-D6	TP8 D4-D6	TP9 D1-D3	TP10 D1-D3
Depth					1.5	1.5	1.5	1	1.8
Bottom Depth					3.0	3.0	3.5	3.6	3.3
Top Depth					1.5	1.5	1.5	1	1.8
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	120	13	28	18	19
Barium	T6	A40	1	mg/kg	140	190	120	130	190
Cadmium	T6	M40	1	mg/kg	4	<1	<1	<1	<1
Chromium	T6	M40	1	mg/kg	8	6	14	8	20
Copper	T6	M40	1	mg/kg	66	58	77	49	53
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Molybdenum	T6	M40	2	mg/kg	4	<2	3	<2	3
Nickel	T6	M40	1	mg/kg	45	25	31	29	33
Lead	T6	M40	1	mg/kg	98	34	58	58	74
Antimony	T6	A40	1	mg/kg	4	1	2	2	2
Selenium	T6	M40	3	mg/kg	5	<3	<3	<3	<3
Zinc	T6	M40	1	mg/kg	260	28	47	57	100

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 2									
Analysed as Soil									
Concept Reference					745484 019	745484 020	745484 021	745484 022	745484 023
Customer Sample Reference					TP11 D1-D3	TP12D1-D3	TP13 D1-D3	BH1 D1-D3	BH1 D4-D6
Depth					1.5	1.5	0.0	0.75	6.0
Bottom Depth					3.0	3.0	0.3		
Top Depth					1.5	1.5	0.0	0.75	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	12	17	11	11	10
Barium	T6	A40	1	mg/kg	150	130	140	110	420
Cadmium	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Chromium	T6	M40	1	mg/kg	21	9	30	9	45
Copper	T6	M40	1	mg/kg	44	64	32	44	28
Mercury	T6	M40	1	mg/kg	1	<1	<1	<1	<1
Molybdenum	T6	M40	2	mg/kg	2	2	<2	<2	3
Nickel	T6	M40	1	mg/kg	24	36	32	29	26
Lead	T6	M40	1	mg/kg	180	75	70	45	23
Antimony	T6	A40	1	mg/kg	3	1	2	1	2
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Zinc	T6	M40	1	mg/kg	140	44	120	87	45

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 2									
Analysed as Soil									
Concept Reference					745484 024	745484 025	745484 026	745484 027	745484 028
Customer Sample Reference					BH2 D1-D3	BH2 D4-D6	BH3 D1-D3	BH3 D4-D6	BH4 D1-D3
Depth					1.0	6.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					1.0	6.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	14	12	16	9	17
Barium	T6	A40	1	mg/kg	140	190	300	150	83
Cadmium	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Chromium	T6	M40	1	mg/kg	10	36	10	23	10
Copper	T6	M40	1	mg/kg	37	23	47	77	39
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Molybdenum	T6	M40	2	mg/kg	<2	3	2	<2	<2
Nickel	T6	M40	1	mg/kg	24	26	34	29	26
Lead	T6	M40	1	mg/kg	33	23	45	22	53
Antimony	T6	A40	1	mg/kg	<1	3	1	2	1
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Zinc	T6	M40	1	mg/kg	89	51	86	58	65

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 2									
Analysed as Soil									
Concept Reference					745484 029	745484 030	745484 031	745484 032	745484 033
Customer Sample Reference					BH4 D4-D6	BH5 D1-D3	BH5 D4-D6	BH7 D1-D3	BH7 D4-D6
Depth					6.0	1.0	3.50	0.5	3.0
Bottom Depth									
Top Depth					6.0	1.0	3.50	0.5	3.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	8	28	13	23	8
Barium	T6	A40	1	mg/kg	160	180	170	700	110
Cadmium	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Chromium	T6	M40	1	mg/kg	26	9	20	27	48
Copper	T6	M40	1	mg/kg	24	38	44	160	29
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Molybdenum	T6	M40	2	mg/kg	<2	<2	4	9	<2
Nickel	T6	M40	1	mg/kg	28	26	32	72	22
Lead	T6	M40	1	mg/kg	26	35	35	120	14
Antimony	T6	A40	1	mg/kg	2	1	2	5	2
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Zinc	T6	M40	1	mg/kg	65	91	89	190	33

	<p>Concept Reference: 745484</p> <p>Project Site: Pen-y-bont</p> <p>Customer Reference: WR7449</p>	
<p>Soil</p> <p>Suite 2</p>	<p>Analysed as Soil</p>	

Concept Reference					745484 034	745484 035	745484 036	745484 037	745484 038
Customer Sample Reference					BH7 D7-D9	BH7 D10-D12	BH8 D1-D3	BH8 D4-D6	BH9 D1-D3
Depth					3.10	5.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					3.10	5.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	91	8	16	11	14
Barium	T6	A40	1	mg/kg		280	230	140	190
Cadmium	T6	M40	1	mg/kg	<1	<1	2	<1	<1
Chromium	T6	M40	1	mg/kg	26	30	10	25	9
Copper	T6	M40	1	mg/kg	38	440	57	32	36
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Molybdenum	T6	M40	2	mg/kg	9	<2	<2	<2	<2
Nickel	T6	M40	1	mg/kg	17	29	29	31	23
Lead	T6	M40	1	mg/kg	6	6	39	29	38
Antimony	T6	A40	1	mg/kg	1	2	1	1	1
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Zinc	T6	M40	1	mg/kg	41	29	290	57	110

<p>Concept Reference: 745484</p> <p>Project Site: Pen-y-bont</p> <p>Customer Reference: WR7449</p>	
<p>Soil</p> <p>Suite 2</p>	<p>Analysed as Soil</p>

Concept Reference					745484 040	745484 041	745484 043	745484 044	745484 046
Customer Sample Reference					BH9 D7-D9	BH10 D1-D3	BH10 D7-D9	BH11 D1-D3	BH11 D7-D9
Depth					6.0	1.0	6.0	1.0	6.0
Bottom Depth									
Top Depth					6.0	1.0	6.0	1.0	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	11	39	30	10	8
Barium	T6	A40	1	mg/kg	240	170	130	230	220
Cadmium	T6	M40	1	mg/kg	<1	1	<1	<1	<1
Chromium	T6	M40	1	mg/kg	42	7	27	11	28
Copper	T6	M40	1	mg/kg	20	50	39	48	32
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Molybdenum	T6	M40	2	mg/kg	2	<2	2	<2	<2
Nickel	T6	M40	1	mg/kg	26	27	36	34	35
Lead	T6	M40	1	mg/kg	21	48	53	35	28
Antimony	T6	A40	1	mg/kg	3	2	3	2	2
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Zinc	T6	M40	1	mg/kg	74	90	80	53	69

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 2					
Analysed as Soil					
Concept Reference		745484 047		745484 049	
Customer Sample Reference		BH12 D1-D3		BH12 D7-D9	
Depth		1.0		5.0	
Bottom Depth					
Top Depth		1.0		5.0	
Date Sampled		14-JUN-2018		14-JUN-2018	
Matrix Class		Sandy Soil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units	
Arsenic	T6	M40	2	mg/kg	33 30
Barium	T6	A40	1	mg/kg	280 290
Cadmium	T6	M40	1	mg/kg	<1 <1
Chromium	T6	M40	1	mg/kg	24 22
Copper	T6	M40	1	mg/kg	49 140
Mercury	T6	M40	1	mg/kg	<1 <1
Molybdenum	T6	M40	2	mg/kg	5 11
Nickel	T6	M40	1	mg/kg	46 52
Lead	T6	M40	1	mg/kg	100 55
Antimony	T6	A40	1	mg/kg	3 3
Selenium	T6	M40	3	mg/kg	<3 <3
Zinc	T6	M40	1	mg/kg	120 90

<div>Concept Reference: 745484</div> <div>Project Site: Pen-y-bont</div> <div>Customer Reference: WR7449</div>									
Soil		Analysed as Soil							
Suite 1									
Concept Reference				745484 002	745484 004	745484 006	745484 008	745484 010	
Customer Sample Reference				TP1 D4-D6	TP2 D4-D6	TP3 D4-D6	TP4 D4-D6	TP5 D4-D6	
Depth				1	1	1.5	1.5	1.5	
Bottom Depth				2.5	2.5	3.0	3.0	3.0	
Top Depth				1	1	1.5	1.5	1.5	
Date Sampled				14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	
Matrix Class				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
pH	T7	A40			6.7	7.7	7.2	7.5	6.9
Electrical Conductivity	T7	A40	10	µS/cm	2700	2300	2600	2300	2200

<div>Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449</div> <div>Soil Suite 1</div> <div>Analysed as Soil</div>									
Concept Reference				745484 012	745484 014	745484 016	745484 017	745484 018	
Customer Sample Reference				TP6 D4-D6	TP7 D4-D6	TP8 D4-D6	TP9 D1-D3	TP10 D1-D3	
Depth				1.5	1.5	1.5	1	1.8	
Bottom Depth				3.0	3.0	3.5	3.6	3.3	
Top Depth				1.5	1.5	1.5	1	1.8	
Date Sampled				14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	
Matrix Class				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
pH	T7	A40			7.6	7.8	<4.0	9.1	6.9
Electrical Conductivity	T7	A40	10	uS/cm	2100	2300	2600	2300	2700

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449										
Soil					Analysed as Soil					
Suite 1										
Concept Reference					745484 019	745484 020	745484 021	745484 022	745484 023	
Customer Sample Reference					TP11 D1-D3	TP12D1-D3	TP13 D1-D3	BH1 D1-D3	BH1 D4-D6	
Depth					1.5	1.5	0.0	0.75	6.0	
Bottom Depth					3.0	3.0	0.3			
Top Depth					1.5	1.5	0.0	0.75	6.0	
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	13-JUN-2018	13-JUN-2018	
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand		Method	Test Sample	LOD	Units					
pH		T7	A40			8.1	6.2	7.4	8.3	8.4
Electrical Conductivity		T7	A40	10	µS/cm	1400	2300	1500	1100	1300

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 1									
Concept Reference					745484 024	745484 025	745484 026	745484 027	745484 028
Customer Sample Reference					BH2 D1-D3	BH2 D4-D6	BH3 D1-D3	BH3 D4-D6	BH4 D1-D3
Depth					1.0	6.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					1.0	6.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
pH	T7	A40			9.0	7.5	7.8	7.9	7.7
Electrical Conductivity	T7	A40	10	uS/cm	2200	2200	1700	2000	1900

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 1									
Concept Reference					745484 029	745484 030	745484 031	745484 032	745484 033
Customer Sample Reference					BH4 D4-D6	BH5 D1-D3	BH5 D4-D6	BH7 D1-D3	BH7 D4-D6
Depth					6.0	1.0	3.50	0.5	3.0
Bottom Depth									
Top Depth					6.0	1.0	3.50	0.5	3.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
pH	T7	A40			6.9	8.6	7.2	7.6	7.3
Electrical Conductivity	T7	A40	10	uS/cm	2300	1600	2200	2400	2000

Concept Reference: 745484										
Project Site: Pen-y-bont										
Customer Reference: WR7449										
Soil					Analysed as Soil					
Suite 1										
Concept Reference					745484 034	745484 035	745484 036	745484 037	745484 038	
Customer Sample Reference					BH7 D7-D9	BH7 D10-D12	BH8 D1-D3	BH8 D4-D6	BH9 D1-D3	
Depth					3.10	5.0	1.0	6.0	1.0	
Bottom Depth										
Top Depth					3.10	5.0	1.0	6.0	1.0	
Date Sampled					13-JUN-2018	13-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand		Method	Test Sample	LOD	Units					
pH		T7	A40			7.8	7.9	8.6	7.2	8.3
Electrical Conductivity		T7	A40	10	µS/cm	1700	2500	2200	2100	1900

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 1									
Concept Reference					745484 040	745484 041	745484 043	745484 044	745484 046
Customer Sample Reference					BH9 D7-D9	BH10 D1-D3	BH10 D7-D9	BH11 D1-D3	BH11 D7-D9
Depth					6.0	1.0	6.0	1.0	6.0
Bottom Depth									
Top Depth					6.0	1.0	6.0	1.0	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
pH	T7	A40			7.4	9.4	7.7	7.4	7.6
Electrical Conductivity	T7	A40	10	uS/cm	2200	1900	1600	2000	2100

Concept Reference: 745484						
Project Site: Pen-y-bont						
Customer Reference: WR7449						
Soil		Analysed as Soil				
Suite 1						
Concept Reference					745484 047	745484 049
Customer Sample Reference					BH12 D1-D3	BH12 D7-D9
Depth					1.0	5.0
Bottom Depth						
Top Depth					1.0	5.0
Date Sampled					14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units		
pH	T7	A40			7.4	7.5
Electrical Conductivity	T7	A40	10	uS/cm	1200	1100

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 3									
Analysed as Soil									
Concept Reference					745484 024	745484 025	745484 026	745484 027	745484 028
Customer Sample Reference					BH2 D1-D3	BH2 D4-D6	BH3 D1-D3	BH3 D4-D6	BH4 D1-D3
Depth					1.0	6.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					1.0	6.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Ammoniacal nitrogen	T4	AR	0.5	mg/kg	49	38	<0.5	17	10
Chloride	T686	AR	1	mg/kg	2	17	2	15	2
Fluoride	T686	A40	1	mg/kg	<1	<1	<1	<1	<1
SO4(Total)	T102	A40	0.01	%	0.08	0.05	0.05	0.04	8.8
Cyanide(Total)	T546	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 3									
Analysed as Soil									
Concept Reference					745484 029	745484 030	745484 031	745484 032	745484 033
Customer Sample Reference					BH4 D4-D6	BH5 D1-D3	BH5 D4-D6	BH7 D1-D3	BH7 D4-D6
Depth					6.0	1.0	3.50	0.5	3.0
Bottom Depth									
Top Depth					6.0	1.0	3.50	0.5	3.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Ammoniacal nitrogen	T4	AR	0.5	mg/kg	15	190	13	9.0	12
Chloride	T686	AR	1	mg/kg	8	4	41	3	4
Fluoride	T686	A40	1	mg/kg	<1	<1	<1	<1	<1
SO4(Total)	T102	A40	0.01	%	0.05	0.14	0.20	0.24	<0.01
Cyanide(Total)	T546	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 3									
Analysed as Soil									
Concept Reference					745484 034	745484 035	745484 036	745484 037	745484 038
Customer Sample Reference					BH7 D7-D9	BH7 D10-D12	BH8 D1-D3	BH8 D4-D6	BH9 D1-D3
Depth					3.10	5.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					3.10	5.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Ammoniacal nitrogen	T4	AR	0.5	mg/kg	13	19	42	13	43
Chloride	T686	AR	1	mg/kg	9	8	2	13	5
Fluoride	T686	A40	1	mg/kg	<1	<1	<1	<1	<1
SO4(Total)	T102	A40	0.01	%	0.12	0.13	0.09	0.05	0.09
Cyanide(Total)	T546	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 3									
Analysed as Soil									
Concept Reference					745484 040	745484 041	745484 043	745484 044	745484 046
Customer Sample Reference					BH9 D7-D9	BH10 D1-D3	BH10 D7-D9	BH11 D1-D3	BH11 D7-D9
Depth					6.0	1.0	6.0	1.0	6.0
Bottom Depth									
Top Depth					6.0	1.0	6.0	1.0	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Ammoniacal nitrogen	T4	AR	0.5	mg/kg	10	44	16	15	66
Chloride	T686	AR	1	mg/kg	61	6	11	5	10
Fluoride	T686	A40	1	mg/kg	<1	<1	<1	<1	<1
SO4(Total)	T102	A40	0.01	%	0.04	0.06	0.03	0.06	0.09
Cyanide(Total)	T546	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484						
Project Site: Pen-y-bont						
Customer Reference: WR7449						
Soil Suite 3						
Analysed as Soil						
Concept Reference					745484 047	745484 049
Customer Sample Reference					BH12 D1-D3	BH12 D7-D9
Depth					1.0	5.0
Bottom Depth						
Top Depth					1.0	5.0
Date Sampled					14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units		
Ammoniacal nitrogen	T4	AR	0.5	mg/kg	12	9.5
Chloride	T686	AR	1	mg/kg	4	36
Fluoride	T686	A40	1	mg/kg	<1	<1
SO4(Total)	T102	A40	0.01	%	1.5	0.40
Cyanide(Total)	T546	AR	1	mg/kg	<1	<1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 4									
Analysed as Soil									
Concept Reference					745484 002	745484 004	745484 006	745484 008	745484 010
Customer Sample Reference					TP1 D4-D6	TP2 D4-D6	TP3 D4-D6	TP4 D4-D6	TP5 D4-D6
Depth					1	1	1.5	1.5	1.5
Bottom Depth					2.5	2.5	3.0	3.0	3.0
Top Depth					1	1	1.5	1.5	1.5
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Total Organic Carbon	T21	A40	0.1	%	13	9.2	14	23	14
Phenols(Mono)	T921	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 4									
Concept Reference					745484 012	745484 014	745484 016	745484 017	745484 018
Customer Sample Reference					TP6 D4-D6	TP7 D4-D6	TP8 D4-D6	TP9 D1-D3	TP10 D1-D3
Depth					1.5	1.5	1.5	1	1.8
Bottom Depth					3.0	3.0	3.5	3.6	3.3
Top Depth					1.5	1.5	1.5	1	1.8
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Total Organic Carbon	T21	A40	0.1	%	34	12	8.3	14	7.3
Phenols(Mono)	T921	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 4									
Concept Reference					745484 019	745484 020	745484 021	745484 022	745484 023
Customer Sample Reference					TP11 D1-D3	TP12D1-D3	TP13 D1-D3	BH1 D1-D3	BH1 D4-D6
Depth					1.5	1.5	0.0	0.75	6.0
Bottom Depth					3.0	3.0	0.3		
Top Depth					1.5	1.5	0.0	0.75	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Total Organic Carbon	T21	A40	0.1	%	2.0	11	3.5	22	0.5
Phenols(Mono)	T921	AR	1	ma/kg	<1	<1	<1	<1	<1

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 4									
Concept Reference					745484 024	745484 025	745484 026	745484 027	745484 028
Customer Sample Reference					BH2 D1-D3	BH2 D4-D6	BH3 D1-D3	BH3 D4-D6	BH4 D1-D3
Depth					1.0	6.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					1.0	6.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Total Organic Carbon	T21	A40	0.1	%	21	0.4	25	1.0	9.7
Phenols(Mono)	T921	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 4									
Concept Reference					745484 029	745484 030	745484 031	745484 032	745484 033
Customer Sample Reference					BH4 D4-D6	BH5 D1-D3	BH5 D4-D6	BH7 D1-D3	BH7 D4-D6
Depth					6.0	1.0	3.50	0.5	3.0
Bottom Depth									
Top Depth					6.0	1.0	3.50	0.5	3.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Total Organic Carbon	T21	A40	0.1	%	0.6	19	8.5	14	0.2
Phenols(Mono)	T921	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 4									
Concept Reference					745484 034	745484 035	745484 036	745484 037	745484 038
Customer Sample Reference					BH7 D7-D9	BH7 D10-D12	BH8 D1-D3	BH8 D4-D6	BH9 D1-D3
Depth					3.10	5.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					3.10	5.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Total Organic Carbon	T21	A40	0.1	%	<0.1	0.4	24	0.9	23
Phenols(Mono)	T921	AR	1	ma/kg	<1	<1	<1	<1	<1

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
Suite 4									
Concept Reference					745484 040	745484 041	745484 043	745484 044	745484 046
Customer Sample Reference					BH9 D7-D9	BH10 D1-D3	BH10 D7-D9	BH11 D1-D3	BH11 D7-D9
Depth					6.0	1.0	6.0	1.0	6.0
Bottom Depth									
Top Depth					6.0	1.0	6.0	1.0	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Total Organic Carbon	T21	A40	0.1	%	0.5	25	0.3	19	1.0
Phenols(Mono)	T921	AR	1	mg/kg	<1	<1	<1	<1	<1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Suite 4 Analysed as Soil					
Concept Reference		745484 047		745484 049	
Customer Sample Reference		BH12 D1-D3		BH12 D7-D9	
Depth		1.0		5.0	
Bottom Depth					
Top Depth		1.0		5.0	
Date Sampled		14-JUN-2018		14-JUN-2018	
Matrix Class		Sandy Soil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units	
Total Organic Carbon	T21	A40	0.1	%	3.3 14
Phenols(Mono)	T921	AR	1	mg/kg	<1 <1

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil PAH USEPA16 plus Coronene Analysed as Soil									
Concept Reference		745484 002		745484 004		745484 006		745484 008	
Customer Sample Reference		TP1 D4-D6		TP2 D4-D6		TP3 D4-D6		TP4 D4-D6	
Depth		1		1		1.5		1.5	
Bottom Depth		2.5		2.5		3.0		3.0	
Top Depth		1		1		1.5		1.5	
Date Sampled		14-JUN-2018		14-JUN-2018		14-JUN-2018		14-JUN-2018	
Matrix Class		Sandy Soil		Sandy Soil		Sandy Soil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	0.5	0.8	0.9	1.0	0.5
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.3	0.3	0.7	0.3	0.3
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Coronene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
PAH (Sum)	T85	M105	1.6	mg/kg	<1.6	<1.6	1.8	<1.6	<1.6

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449	
Soil	Analysed as Soil
PAH USEPA16 plus Coronene	

Concept Reference					745484 012	745484 014	745484 016	745484 017	745484 018
Customer Sample Reference					TP6 D4-D6	TP7 D4-D6	TP8 D4-D6	TP9 D1-D3	TP10 D1-D3
Depth					1.5	1.5	1.5	1	1.8
Bottom Depth					3.0	3.0	3.5	3.6	3.3
Top Depth					1.5	1.5	1.5	1	1.8
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	1.6	1.2	0.5	<0.1	0.3
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.9	0.5	0.2	0.3	3.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	1.9
Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	1.4
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.1	<0.1	<0.1	<0.1	0.7
Chrysene	T207	M105	0.1	mg/kg	0.1	<0.1	<0.1	<0.1	0.8
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.6
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.6
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.5
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Coronene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
PAH (Sum)	T85	M105	1.6	mg/ka	2.7	1.7	<1.6	<1.6	11

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449	
Soil PAH USEPA16 plus Coronene	Analysed as Soil

Concept Reference					745484 019	745484 020	745484 021	745484 022	745484 023
Customer Sample Reference					TP11 D1-D3	TP12D1-D3	TP13 D1-D3	BH1 D1-D3	BH1 D4-D6
Depth					1.5	1.5	0.0	0.75	6.0
Bottom Depth					3.0	3.0	0.3		
Top Depth					1.5	1.5	0.0	0.75	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	0.6	0.1	1.3	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.5	0.2	<0.1	0.6	<0.1
Anthracene	T207	M105	0.1	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	1.0	<0.1	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	0.9	<0.1	<0.1	<0.1	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.4	<0.1	<0.1	<0.1	<0.1
Chrysene	T207	M105	0.1	mg/kg	0.4	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.5	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.4	<0.1	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.5	<0.1	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.3	<0.1	<0.1	<0.1	<0.1
Coronene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
PAH (Sum)	T85	M105	1.6	mg/ka	5.2	<1.6	<1.6	1.8	<1.6

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
PAH USEPA16 plus Coronene									
Concept Reference					745484 024	745484 025	745484 026	745484 027	745484 028
Customer Sample Reference					BH2 D1-D3	BH2 D4-D6	BH3 D1-D3	BH3 D4-D6	BH4 D1-D3
Depth					1.0	6.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					1.0	6.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	1.0	<0.1	0.9	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.4	<0.1	0.5	<0.1	0.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Coronene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
PAH (Sum)	T85	M105	1.6	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6

Concept Reference: 745484									
Project Site: Pen-y-bont									
Customer Reference: WR7449									
Soil					Analysed as Soil				
PAH USEPA16 plus Coronene									
Concept Reference				745484 029	745484 030	745484 031	745484 032	745484 033	
Customer Sample Reference				BH4 D4-D6	BH5 D1-D3	BH5 D4-D6	BH7 D1-D3	BH7 D4-D6	
Depth				6.0	1.0	3.50	0.5	3.0	
Bottom Depth									
Top Depth				6.0	1.0	3.50	0.5	3.0	
Date Sampled				13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	
Matrix Class				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	0.9	0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.5	<0.1	<0.1	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Coronene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
PAH (Sum)	T85	M105	1.6	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6

Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Analysed as Soil PAH USEPA16 plus Coronene						
Concept Reference			745484 047		745484 049	
Customer Sample Reference			BH12 D1-D3		BH12 D7-D9	
Depth			1.0		5.0	
Bottom Depth						
Top Depth			1.0		5.0	
Date Sampled			14-JUN-2018		14-JUN-2018	
Matrix Class			Sandy Soil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units		
Naphthalene	T207	M105	0.1	mg/kg	<0.1	0.6
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	1.3
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.2
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.3
Pyrene	T207	M105	0.1	mg/kg	<0.1	1.2
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.7
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.7
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.2
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.0
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.5
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.2
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1
Coronene	T207	M105	0.1	mg/kg	<0.1	<0.1
PAH (Sum)	T85	M105	1.6	mg/kg	<1.6	8.8

Concept Reference: 745484
Project Site: Pen-y-bont
Customer Reference: WR7449

Soil
TPH (CWG) with MTBE, BTEX

Analysed as Soil

Concept Reference					745484 002	745484 004	745484 006	745484 008	745484 010
Customer Sample Reference					TP1 D4-D6	TP2 D4-D6	TP3 D4-D6	TP4 D4-D6	TP5 D4-D6
Depth					1	1	1.5	1.5	1.5
Bottom Depth					2.5	2.5	3.0	3.0	3.0
Top Depth					1	1	1.5	1.5	1.5
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzene	T209	M105	10	µg/kg	(13,110) <20	(13,110,100) <40	(100,110,13) <60	(100,13,110) <40	(13,100) <20
Toluene	T209	M105	10	µg/kg	(110) <20	(100,110) <40	(100,110) <60	(110,100) <40	(100) <20
EthylBenzene	T209	M105	10	µg/kg	(110) <20	(110,100) <40	(110,100) <60	(100,110) <40	(100) <20
M/P Xylene	T209	M105	10	µg/kg	(110) <20	(100,110) <40	(110,100) <60	(110,100) <40	(100) <20
O Xylene	T209	M105	10	µg/kg	(110) <20	(100,110) <40	(110,100) <60	(110,100) <40	(100) <20
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	(110) <20	(100,110) <40	(110,100) <60	(110,100) <40	(100) <20
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	(110) <0.200	(100,110) <0.400	(100,110) <0.600	(100,110) <0.400	(100) <0.200
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	(110) <0.20	(110,100) <0.40	(100,110) <0.60	(100,110) <0.40	(100) <0.20
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	(110) <0.20	(100,110) <0.40	(110,100) <0.60	(110,100) <0.40	(100) <0.20
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	(13) 2	(13) 2	(13) 2	(13) 2	(13) 1
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	(13) 4	(13) 4	(13) 2	(13) 3	(13) 5
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	(13) 1	(13) 2	(13) <1	(13) <1	(13) 3
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	(13) 5	(13) 8	(13) 5	(13) <2	(13) 30
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	(110) <0.20	(110,100) <0.40	(110,100) <0.60	(100,110) <0.40	(100) <0.20
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	(110) <0.20	(100,110) <0.40	(110,100) <0.60	(110,100) <0.40	(100) <0.20
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	(110) <0.20	(110,100) <0.40	(100,110) <0.60	(100,110) <0.40	(100) <0.20
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	(13) <2	(13) <2	(13) <2	(13) <2	(13) <2
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	(13) 6	(13) 8	(13) 4	(13) 7	(13) 8
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	(13) 8	(13) 9	(13) 7	(13) 3	(13) 12
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	(13) 6	(13) 9	(13) 2	(13) <1	(13) 10

Concept Reference: 745484
Project Site: Pen-y-bont
Customer Reference: WR7449

Soil
TPH (CWG) with MTBE, BTEX

Analysed as Soil

Concept Reference					745484 012	745484 014	745484 016	745484 017	745484 018
Customer Sample Reference					TP6 D4-D6	TP7 D4-D6	TP8 D4-D6	TP9 D1-D3	TP10 D1-D3
Depth					1.5	1.5	1.5	1	1.8
Bottom Depth					3.0	3.0	3.5	3.6	3.3
Top Depth					1.5	1.5	1.5	1	1.8
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzene	T209	M105	10	µg/kg	(110,13) <20	(110,13) <20	(110,13) <20	(110,13) <20	(13) <10
Toluene	T209	M105	10	µg/kg	(110) <20	(110) <20	(110) <20	(110) <20	<10
EthylBenzene	T209	M105	10	µg/kg	(110) <20	(110) <20	(110) <20	(110) <20	<10
M/P Xylene	T209	M105	10	µg/kg	(110) <20	(110) <20	(110) <20	(110) <20	<10
O Xylene	T209	M105	10	µg/kg	(110) <20	(110) <20	(110) <20	(110) <20	<10
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	(110) <20	(110) <20	(110) <20	(110) <20	<10
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	(110) <0.200	(110) <0.200	(110) <0.200	(110) <0.200	<0.100
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	(110) <0.20	(110) <0.20	(110) <0.20	(110) <0.20	<0.10
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	(110) <0.20	(110) <0.20	(110) <0.20	(110) <0.20	<0.10
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	(13) 3	(13) 2	(13) <1	(13) 2	(13) 1
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	(13) 5	(13) 3	(13) 2	(13) 4	(13) 3
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	(13) 3	(13) <1	(13) <1	(13) 2	(13) 15
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	(13) 8	(13) 3	(13) <2	(13) 6	(13) 10
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	(110) <0.20	(110) <0.20	(110) <0.20	(110) <0.20	<0.10
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	(110) <0.20	(110) <0.20	(110) <0.20	(110) <0.20	<0.10
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	(110) <0.20	(110) <0.20	(110) <0.20	(110) <0.20	<0.10
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	(13) 4	(13) <2	(13) <2	(13) <2	(13) <2
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	(13) 14	(13) 6	(13) 2	(13) 8	(13) 12
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	(13) 18	(13) 5	(13) 3	(13) 9	(13) 35
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	(13) 10	(13) <1	(13) <1	(13) 10	(13) 5



Concept Reference: 745484
Project Site: Pen-y-bont
Customer Reference: WR7449

Soil
Analysed as Soil
TPH (CWG) with MTBE, BTEX

Concept Reference					745484 019	745484 020	745484 021	745484 022	745484 023
Customer Sample Reference					TP11 D1-D3	TP12D1-D3	TP13 D1-D3	BH1 D1-D3	BH1 D4-D6
Depth					1.5	1.5	0.0	0.75	6.0
Bottom Depth					3.0	3.0	0.3		
Top Depth					1.5	1.5	0.0	0.75	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzene	T209	M105	10	µg/kg	(13) <10	(13,110) <20	(13) <10	(100,13) <20	(13) <10
Toluene	T209	M105	10	µg/kg	<10	(110) <20	<10	(100) <20	<10
EthylBenzene	T209	M105	10	µg/kg	<10	(110) <20	<10	(100) <20	<10
M/P Xylene	T209	M105	10	µg/kg	<10	(110) <20	<10	(100) <20	<10
O Xylene	T209	M105	10	µg/kg	<10	(110) <20	<10	(100) <20	<10
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	<10	(110) <20	<10	(100) <20	<10
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	<0.100	(110) <0.200	<0.100	(100) <0.200	<0.100
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(100) <0.20	<0.10
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(100) <0.20	<0.10
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 2	(13) <1	(13) 4	(13) 2
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	(13) 3	(13) 4	(13) 1	(13) 6	(13) 13
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 1	(13) <1	(13) 3	(13) 7
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	(13) 7	(13) 4	(13) <2	(13) 5	(13) 8
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(100) <0.20	<0.10
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(100) <0.20	<0.10
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(100) <0.20	<0.10
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	(13) <2	(13) <2	(13) <2	(13) 3	(13) <2
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 6	(13) <1	(13) 10	(13) <1
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	(13) 5	(13) 5	(13) <1	(13) 13	(13) 8
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	(13) 8	(13) 2	(13) <1	(13) 21	(13) <1



Concept Reference: 745484
Project Site: Pen-y-bont
Customer Reference: WR7449

Soil
Analysed as Soil
TPH (CWG) with MTBE, BTEX

Concept Reference					745484 024	745484 025	745484 026	745484 027	745484 028
Customer Sample Reference					BH2 D1-D3	BH2 D4-D6	BH3 D1-D3	BH3 D4-D6	BH4 D1-D3
Depth					1.0	6.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					1.0	6.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzene	T209	M105	10	µg/kg	(100,13) <20	(13) <10	(110,13) <20	(13) <10	(13) <10
Toluene	T209	M105	10	µg/kg	(100) <20	<10	(110) <20	<10	<10
EthylBenzene	T209	M105	10	µg/kg	(100) <20	<10	(110) <20	<10	<10
M/P Xylene	T209	M105	10	µg/kg	(100) <20	<10	(110) <20	<10	<10
O Xylene	T209	M105	10	µg/kg	(100) <20	<10	(110) <20	<10	<10
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	(100) <20	<10	(110) <20	<10	<10
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	(100) <0.200	<0.100	(110) <0.200	<0.100	<0.100
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	(100) <0.20	<0.10	(110) <0.20	<0.10	<0.10
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	(100) <0.20	<0.10	(110) <0.20	<0.10	<0.10
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) <1	(13) 2	(13) <1	(13) <1
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	(13) 2	(13) <1	(13) 4	(13) <1	(13) 3
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) <1	(13) 1	(13) <1	(13) <1
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	(13) 3	(13) 2	(13) 3	(13) <2	(13) 4
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	(100) <0.20	<0.10	(110) <0.20	<0.10	<0.10
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	(100) <0.20	<0.10	(110) <0.20	<0.10	<0.10
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	(100) <0.20	<0.10	(110) <0.20	<0.10	<0.10
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	(13) <2	(13) <2	(13) <2	(13) <2	(13) <2
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	(13) 2	(13) <1	(13) 10	(13) <1	(13) <1
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	(13) 3	(13) <1	(13) 9	(13) <1	(13) 5
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) <1	(13) 3	(13) <1	(13) 14



Concept Reference: 745484
Project Site: Pen-y-bont
Customer Reference: WR7449

Soil
TPH (CWG) with MTBE, BTEX

Analysed as Soil

Concept Reference					745484 029	745484 030	745484 031	745484 032	745484 033
Customer Sample Reference					BH4 D4-D6	BH5 D1-D3	BH5 D4-D6	BH7 D1-D3	BH7 D4-D6
Depth					6.0	1.0	3.50	0.5	3.0
Bottom Depth									
Top Depth					6.0	1.0	3.50	0.5	3.0
Date Sampled					13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018	13-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzene	T209	M105	10	µg/kg	(13) <10	(110,13) <20	(13) <10	(13) <10	(100,13) <20
Toluene	T209	M105	10	µg/kg	<10	(110) <20	40	<10	(100) <20
EthylBenzene	T209	M105	10	µg/kg	<10	(110) <20	<10	<10	(100) <20
M/P Xylene	T209	M105	10	µg/kg	<10	(110) <20	<10	<10	(100) <20
O Xylene	T209	M105	10	µg/kg	<10	(110) <20	<10	<10	(100) <20
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	<10	(110) <20	<10	<10	(100) <20
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	<0.100	(110) <0.200	<0.100	<0.100	(100) <0.200
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	<0.10	(100) <0.20
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	<0.10	1.2
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 2	(13) <1	(13) <1	(13) 8
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 4	(13) 6	(13) <1	(13) 29
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 2	(13) 3	(13) <1	(13) 26
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	(13) <2	(13) 6	(13) 7	(13) <2	(13) 12
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	<0.10	(100) <0.20
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	<0.10	(100) <0.20
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	<0.10	1.0
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	(13) <2	(13) <2	(13) <2	(13) <2	(13) 4
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 7	(13) <1	(13) <1	(13) 9
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 9	(13) 4	(13) <1	(13) 11
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) <1	(13) 1	(13) <1	(13) 2

Concept Reference: 745484
Project Site: Pen-y-bont
Customer Reference: WR7449

Soil
TPH (CWG) with MTBE, BTEX

Analysed as Soil

Concept Reference					745484 034	745484 035	745484 036	745484 037	745484 038
Customer Sample Reference					BH7 D7-D9	BH7 D10-D12	BH8 D1-D3	BH8 D4-D6	BH9 D1-D3
Depth					3.10	5.0	1.0	6.0	1.0
Bottom Depth									
Top Depth					3.10	5.0	1.0	6.0	1.0
Date Sampled					13-JUN-2018	13-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzene	T209	M105	10	µg/kg	(13) <10	(13) <10	(13,100,110) <40	(13) <10	(13,100,110) <40
Toluene	T209	M105	10	µg/kg	<10	<10	(110,100) <40	<10	(100,110) <40
EthylBenzene	T209	M105	10	µg/kg	<10	<10	(110,100) <40	<10	(100,110) <40
M/P Xylene	T209	M105	10	µg/kg	<10	<10	(100,110) <40	<10	(100,110) <40
O Xylene	T209	M105	10	µg/kg	<10	<10	(100,110) <40	<10	(100,110) <40
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	<10	<10	(100,110) <40	<10	(100,110) <40
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	<0.100	<0.100	(100,110) <0.400	<0.100	(100,110) <0.400
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	<0.10	<0.10	(110,100) <0.40	<0.10	(100,110) <0.40
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	1.0	<0.10	(100,110) <0.40	<0.10	(100,110) <0.40
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	(13) 8	(13) <1	(13) 2	(13) <1	(13) 2
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	(13) 41	(13) <1	(13) 3	(13) <1	(13) 5
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	(13) 34	(13) 2	(13) 3	(13) <1	(13) 4
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	(13) 19	(13) 2	(13) 6	(13) <2	(13) 11
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10	(110,100) <0.40	<0.10	(110,100) <0.40
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10	(100,110) <0.40	<0.10	(110,100) <0.40
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10	(110,100) <0.40	<0.10	(100,110) <0.40
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	(13) 3	(13) <2	(13) <2	(13) <2	(13) <2
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	(13) 17	(13) <1	(13) 6	(13) <1	(13) 9
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	(13) 15	(13) <1	(13) 6	(13) <1	(13) 12
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	(13) 1	(13) <1	(13) <1	(13) <1	(13) 9

Concept Reference: 745484
Project Site: Pen-y-bont
Customer Reference: WR7449

Soil
TPH (CWG) with MTBE, BTEX

Analysed as Soil

Concept Reference					745484 040	745484 041	745484 043	745484 044	745484 046
Customer Sample Reference					BH9 D7-D9	BH10 D1-D3	BH10 D7-D9	BH11 D1-D3	BH11 D7-D9
Depth					6.0	1.0	6.0	1.0	6.0
Bottom Depth									
Top Depth					6.0	1.0	6.0	1.0	6.0
Date Sampled					14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018	14-JUN-2018
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzene	T209	M105	10	µg/kg	(13) <10	(13,100) <20	(13) <10	(13,110) <20	(13) <10
Toluene	T209	M105	10	µg/kg	<10	(100) <20	<10	190	<10
EthylBenzene	T209	M105	10	µg/kg	<10	(100) <20	<10	(110) <20	<10
M/P Xylene	T209	M105	10	µg/kg	<10	(100) <20	<10	(110) <20	<10
O Xylene	T209	M105	10	µg/kg	<10	(100) <20	<10	(110) <20	<10
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	<10	(100) <20	<10	(110) <20	<10
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	<0.100	(110) <0.200	<0.100	(110) <0.200	<0.100
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(110) <0.20	<0.10
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(110) <0.20	<0.10
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 3	(13) <1	(13) 6	(13) <1
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 6	(13) <1	(13) 11	(13) 2
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 4	(13) 3	(13) 12	(13) <1
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	(13) <2	(13) 8	(13) 2	(13) 33	(13) 4
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(110) <0.20	<0.10
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(110) <0.20	<0.10
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	<0.10	(110) <0.20	<0.10	(110) <0.20	<0.10
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	(13) <2	(13) <2	(13) <2	(13) 3	(13) <2
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 9	(13) <1	(13) 14	(13) <1
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 10	(13) <1	(13) 21	(13) <1
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 7	(13) <1	(13) 21	(13) <1



Concept Reference: 745484 Project Site: Pen-y-bont Customer Reference: WR7449 Soil Analysed as Soil TPH (CWG) with MTBE, BTEX						
Concept Reference		745484 047		745484 049		
Customer Sample Reference		BH12 D1-D3		BH12 D7-D9		
Depth		1.0		5.0		
Bottom Depth						
Top Depth		1.0		5.0		
Date Sampled		14-JUN-2018		14-JUN-2018		
Matrix Class		Sandy Soil		Sandy Soil		
Determinand	Method	Test Sample	LOD	Units		
Benzene	T209	M105	10	µg/kg	(13) <10	(13) <10
Toluene	T209	M105	10	µg/kg	<10	<10
EthylBenzene	T209	M105	10	µg/kg	<10	<10
M/P Xylene	T209	M105	10	µg/kg	<10	<10
O Xylene	T209	M105	10	µg/kg	<10	<10
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	<10	<10
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	<0.100	<0.100
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	<0.10	<0.10
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	<0.10	<0.10
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 2
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	(13) 1	(13) 4
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	(13) <1	(13) 4
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	(13) 3	(13) 7
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	(13) <2	(13) <2
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 4
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 15
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	(13) <1	(13) 13

Index to symbols used in 745484-1

Value	Description
A40	Assisted dried < 40C
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
AR	As Received
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
100	LOD determined by sample aliquot used for analysis
110	LOD raised due to low internal standard recovery.
13	Results have been blank corrected.
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T85	Calc
T162	Grav (1 Dec) (105 C)
T7	Probe
T102	ICP/OES (HCl extract)
T686	Discrete Analyser
T6	ICP/OES
T21	OX/IR
T209	GC/MS (Head Space)(MCERTS)
T909	GCxGC
T2	Grav
T4	Colorimetry
T546	Colorimetry (CF)
T207	GC/MS (MCERTS)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Total Organic Carbon	T21	A40	0.1	%	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Phenols(Mono)	T921	AR	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Naphthalene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Acenaphthylene	T207	M105	0.1	mg/kg	U	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Acenaphthene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Fluorene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Phenanthrene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Anthracene	T207	M105	0.1	mg/kg	U	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Fluoranthene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Pyrene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Chrysene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Coronene	T207	M105	0.1	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
PAH (Sum)	T85	M105	1.6	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Benzene	T209	M105	10	µg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Toluene	T209	M105	10	µg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
EthylBenzene	T209	M105	10	µg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
M/P Xylene	T209	M105	10	µg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
O Xylene	T209	M105	10	µg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C10-C12 aliphatic)	T909	M105	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C12-C16 aliphatic)	T909	M105	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C16-C21 aliphatic)	T909	M105	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C21-C35 aliphatic)	T909	M105	2	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C10-C12 aromatic)	T909	M105	2	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C12-C16 aromatic)	T909	M105	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C16-C21 aromatic)	T909	M105	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
TPH (C21-C35 aromatic)	T909	M105	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Arsenic	T6	M40	2	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Barium	T6	A40	1	mg/kg	U	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Cadmium	T6	M40	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Chromium	T6	M40	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Copper	T6	M40	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Mercury	T6	M40	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Molybdenum	T6	M40	2	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Nickel	T6	M40	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Lead	T6	M40	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Antimony	T6	A40	1	mg/kg	U	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Selenium	T6	M40	3	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Zinc	T6	M40	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Ammoniacal nitrogen	T4	AR	0.5	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Chloride	T686	AR	1	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Fluoride	T686	A40	1	mg/kg	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
SO4(Total)	T102	A40	0.01	%	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Cyanide(Total)	T546	AR	1	mg/kg	M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Moisture @105C	T162	AR	0.1	%	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Retained on 10mm sieve	T2	M40	0.1	%	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
pH	T7	A40			M	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049
Electrical Conductivity	T7	A40	10	µS/cm	N	002,004,006,008,010,012,014,016-038,040-041,043-044,046-047,049