

Project Burrows Yard		Exploratory Hole ID M02a
Job No 10013618	Date 04/12/2017	
Contractor		Sheet Page 2 of 8



M02a



M02a

Client Neath Port Talbot County Council	Checker	Approver
---	----------------	-----------------

Project Burrows Yard		Exploratory Hole ID M02b
Job No 10013618	Date 04/12/2017	
Contractor		Sheet Page 3 of 8



M02b



M02b

Client Neath Port Talbot County Council	Checker	Approver
--	---------	----------

Project Burrows Yard		Exploratory Hole ID M02c
Job No 10013618	Date 04/12/2017	
Contractor		Sheet Page 4 of 8



M02c



M02c

Client Neath Port Talbot County Council	Checker	Approver
---	----------------	-----------------

Project Burrows Yard		Exploratory Hole ID M03a
Job No 10013618	Date 05/12/2017	
Contractor		Sheet Page 5 of 8



M03a



M03a

Client Neath Port Talbot County Council	Checker	Approver
---	----------------	-----------------

Project Burrows Yard		Exploratory Hole ID M03b
Job No 10013618	Date 05/12/2017	
Contractor		Sheet Page 6 of 8



M03b



M03b

Client Neath Port Talbot County Council	Checker	Approver
---	----------------	-----------------

Project Burrows Yard		Exploratory Hole ID M04a
Job No 10013618	Date 04/12/2017	
Contractor		Sheet Page 7 of 8



M04a



M04a

Client Neath Port Talbot County Council	Checker	Approver
--	---------	----------

Project Burrows Yard		Exploratory Hole ID M05a
Job No 10013618	Date 05/12/2017	
Contractor		Sheet Page 8 of 8

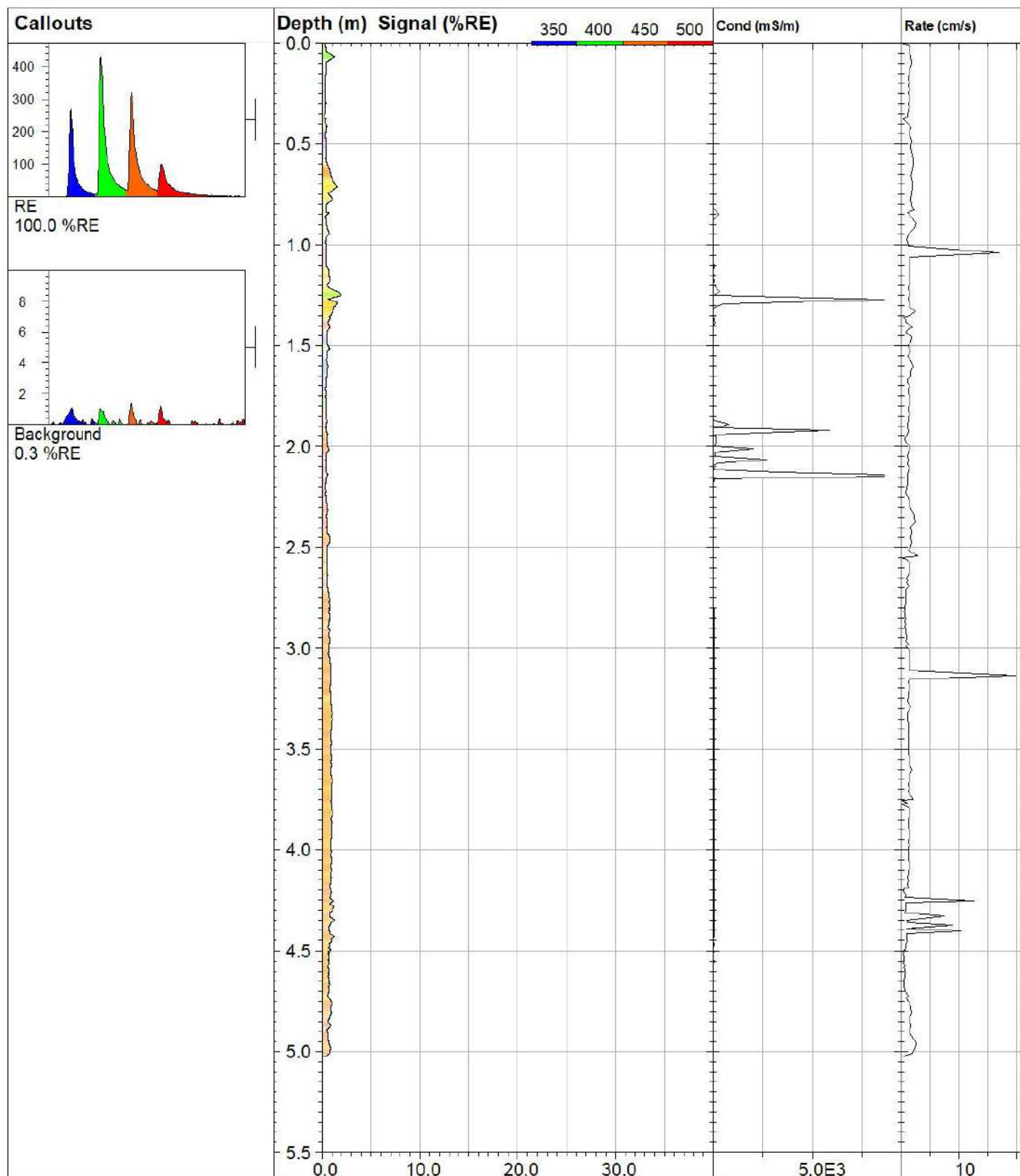


M05a



M05a

Client Neath Port Talbot County Council	Checker	Approver
--	---------	----------



**DAKOTA
TECHNOLOGIES**

FARGO, ND 701.237.4908
WWW.DAKOTATECHNOLOGIES.COM

LIF01a

Site:
Burrows Yard

Client / Job:
Neath Port Talbot County

Operator / Unit:
J.Partridge / UVOST1001

Y Coord.(Lat-N) / System:
Unavailable / NA

X Coord.(Lng-E) / Fix:
Unavailable / NA

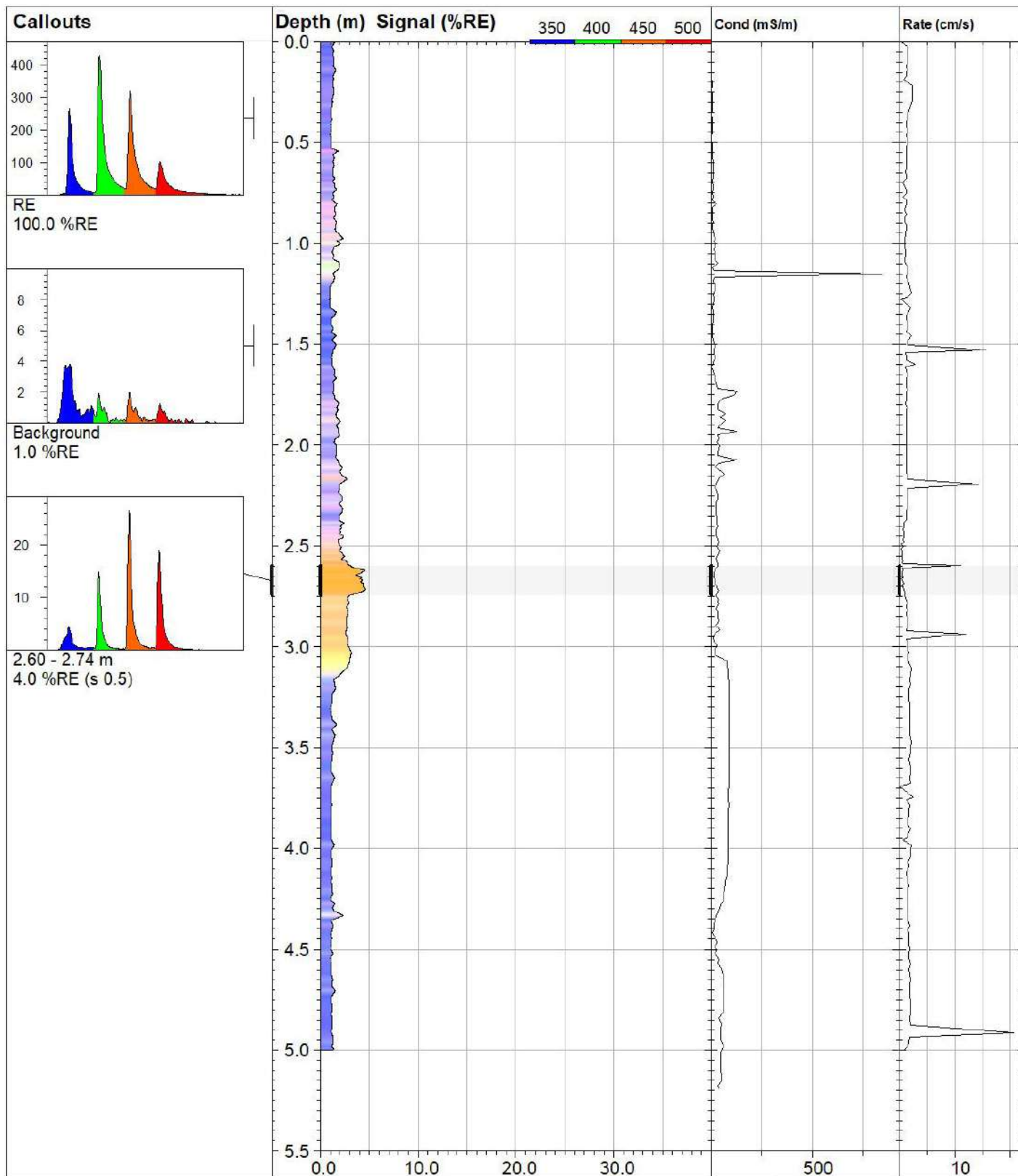
Elevation:
Unavailable

UVOST By Dakota
www.DakotaTechnologies.com

Final depth:
5.02 m

Max signal:
1.9 %RE @ 1.25 m

Date & Time:
2018-12-07 11:21 GMTST



**DAKOTA
TECHNOLOGIES**

FARGO, ND 701.237.4908
WWW.DAKOTATECHNOLOGIES.COM

LIF02a

Site:
Burrows Yard

Client / Job:
Neath Port Talbot County

Operator / Unit:
J.Partridge / UVOST1001

Y Coord.(Lat-N) / System:
Unavailable / NA

X Coord.(Lng-E) / Fix:
Unavailable / NA

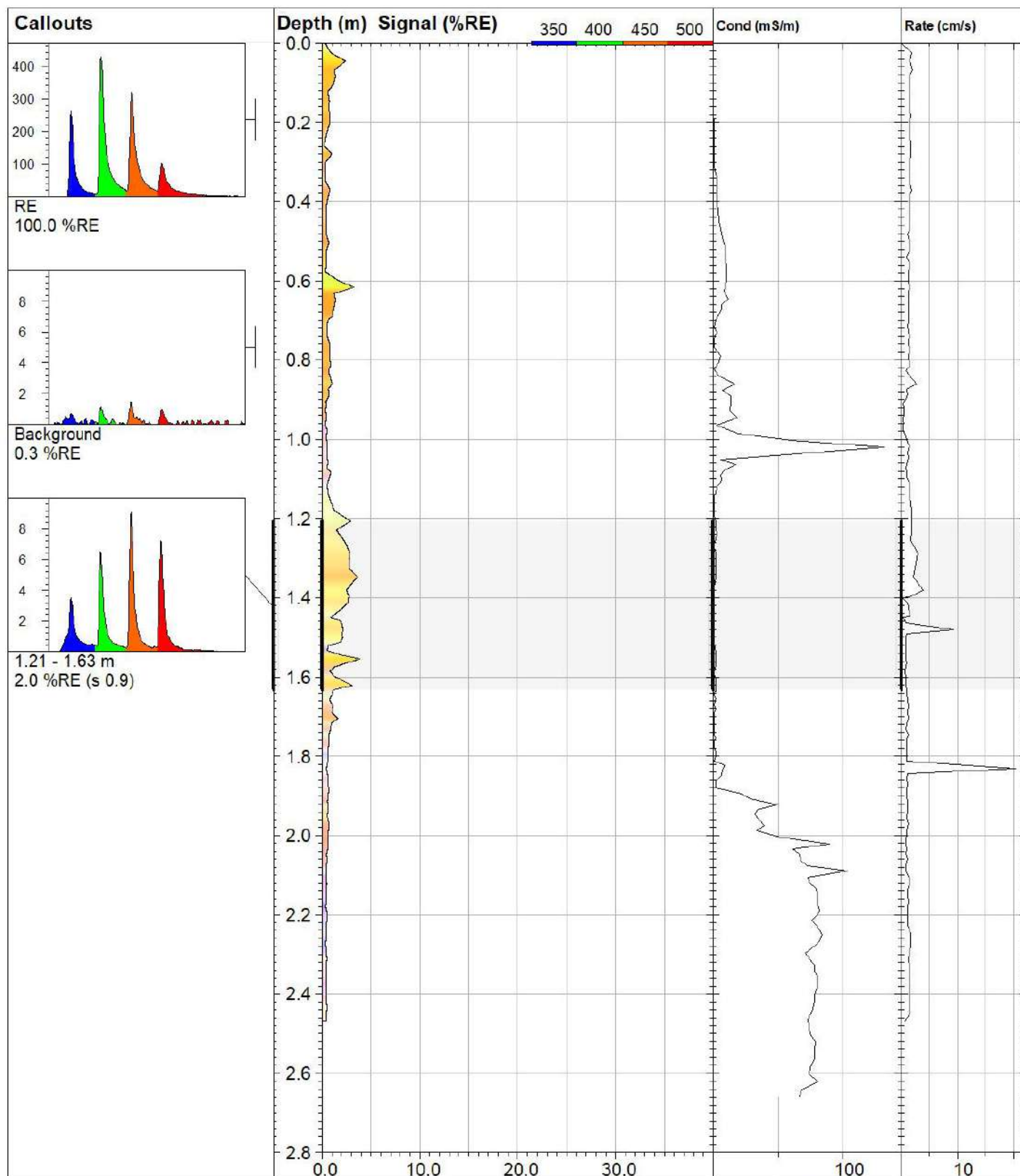
Elevation:
Unavailable

UVOST By Dakota
www.DakotaTechnologies.com

Final depth:
5.00 m

Max signal:
4.7 %RE @ 2.71 m

Date & Time:
2018-12-07 13:20 GMTST



**DAKOTA
TECHNOLOGIES**

FARGO, ND 701.237.4908
WWW.DAKOTATECHNOLOGIES.COM

LIF03a

Site:
Burrows Yard

Client / Job:
Neath Port Talbot County

Operator / Unit:
J.Partridge / UVOST1001

Y Coord.(Lat-N) / System:
Unavailable / NA

X Coord.(Lng-E) / Fix:
Unavailable / NA

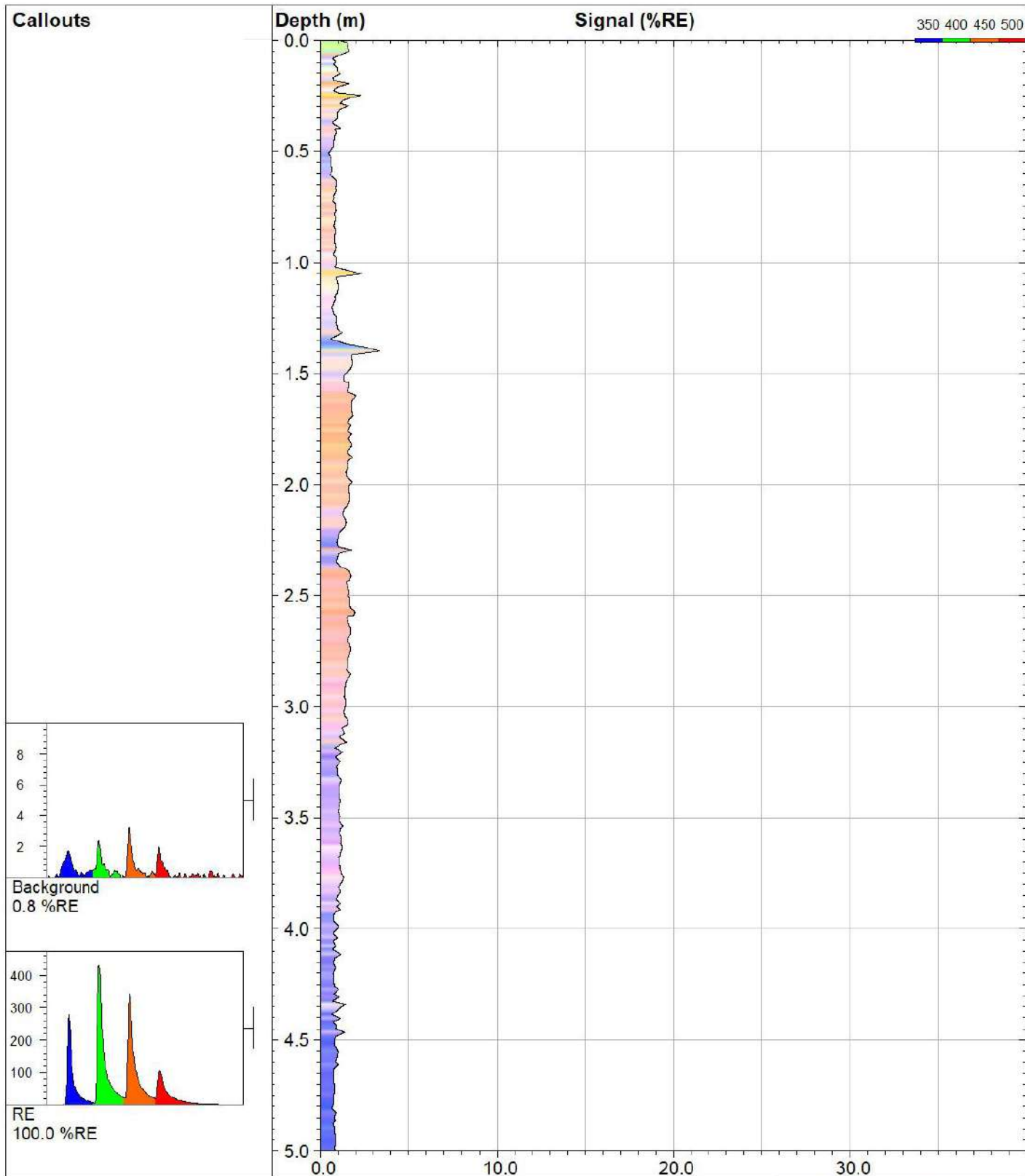
Elevation:
Unavailable

UVOST By Dakota
www.DakotaTechnologies.com

Final depth:
2.47 m

Max signal:
3.9 %RE @ 1.55 m

Date & Time:
2018-12-07 10:50 GMTST



WWW.DAKOTATECHNOLOGIES.COM

LIF05

UVOST® By Dakota

www.DakotaTechnologies.com

Site:
Burrows Yard

Y Coord.(Lat-N) / System:
Unavailable / NA

Final depth:
5.01 m

Client / Job:
Neath Port Talbot County

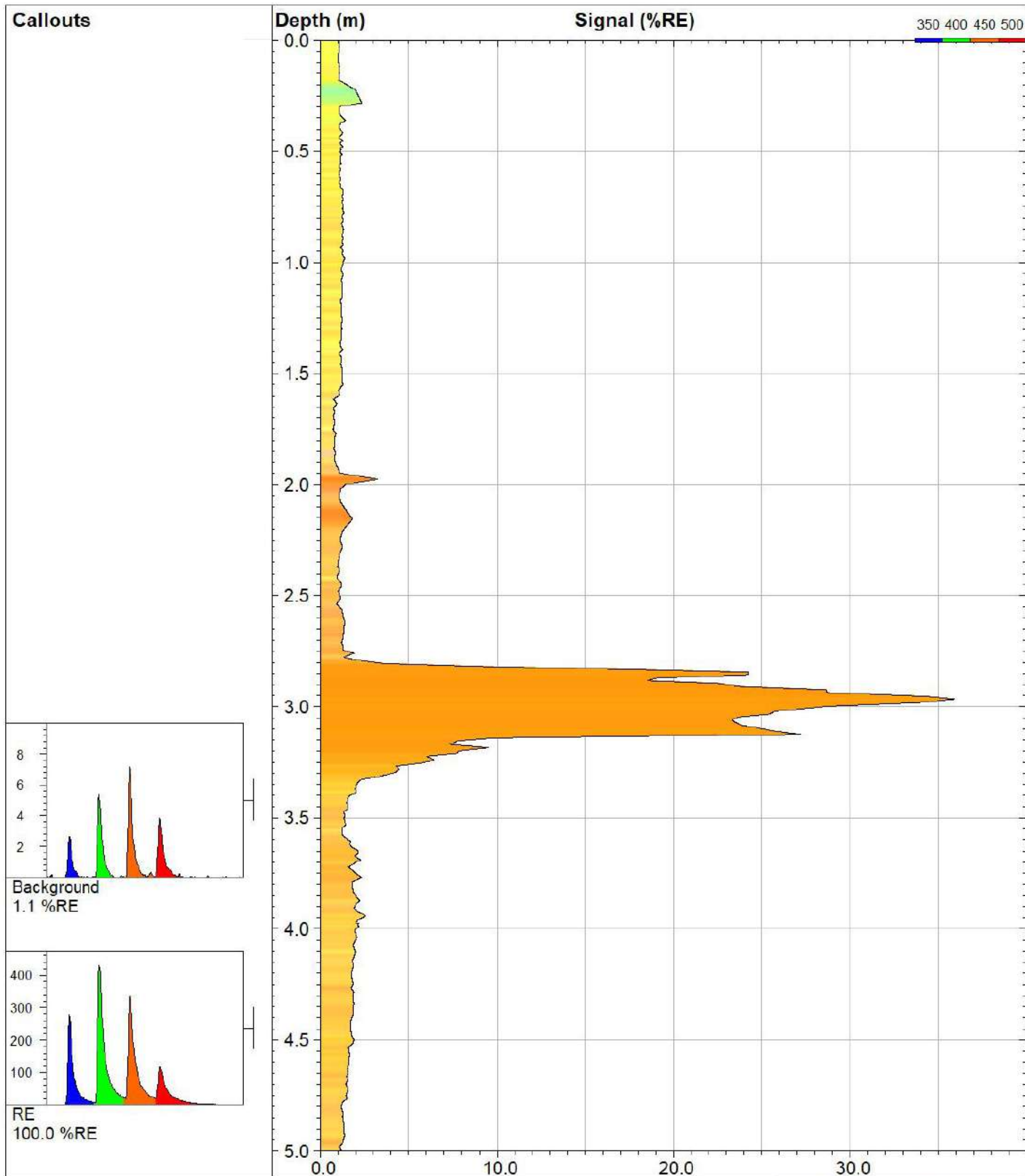
X Coord.(Lng-E) / Fix:
Unavailable / NA

Max signal:
3.3 %RE @ 1.40 m

Operator / Unit:
J.Partridge / UVOST1001

Elevation:
Unavailable

Date & Time:
2018-12-07 14:05 GMTST



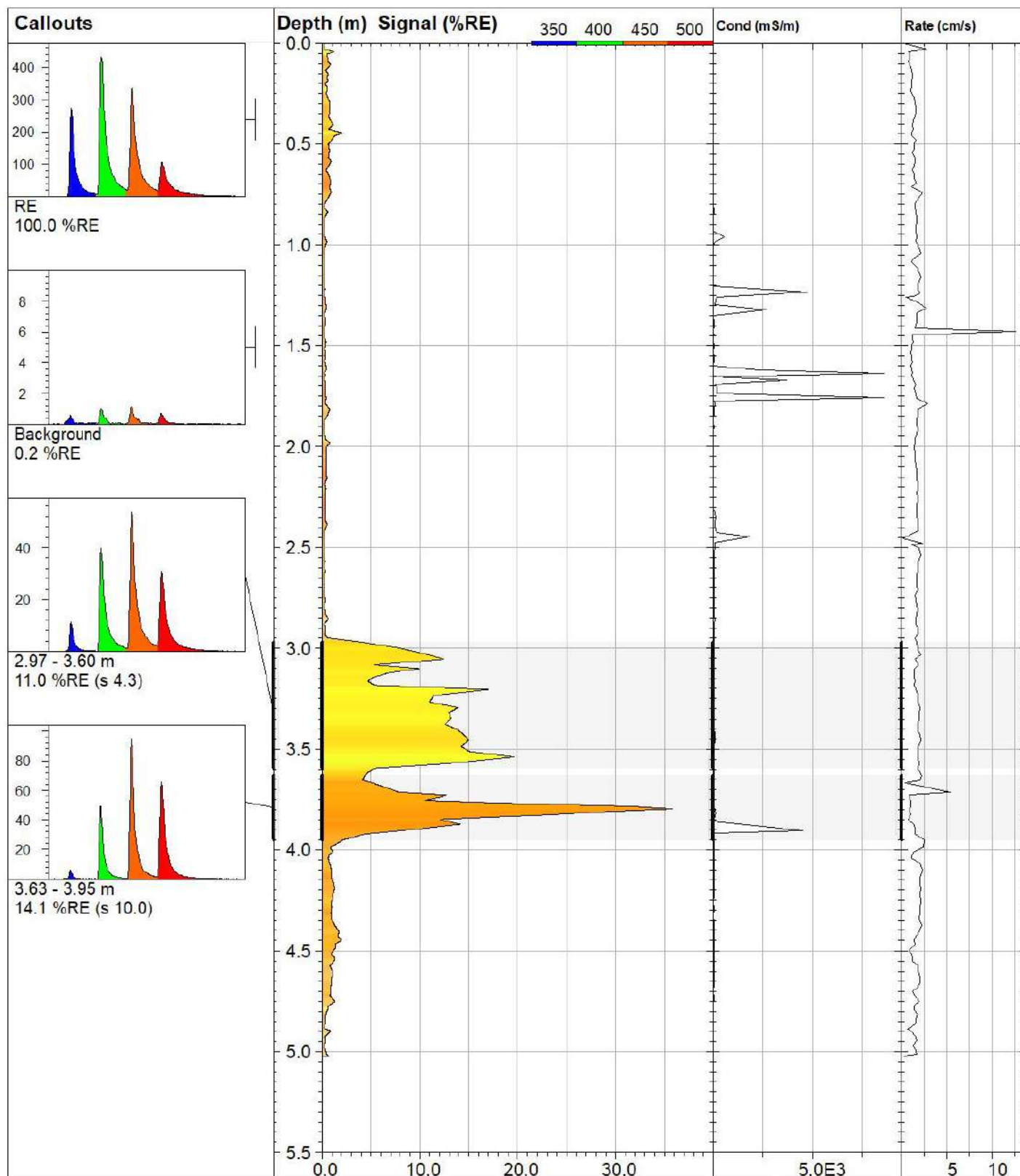
WWW.DAKOTATECHNOLOGIES.COM

LIF06

UVOST® By Dakota

www.DakotaTechnologies.com

Site: Burrows Yard	Y Coord.(Lat-N) / System: Unavailable / NA	Final depth: 5.04 m
Client / Job: Neat Port Talbot County B	X Coord.(Lng-E) / Fix: Unavailable / NA	Max signal: 35.9 %RE @ 2.97 m
Operator / Unit: J.Partridge / UVOST1001	Elevation: Unavailable	Date & Time: 2017-12-06 10:42 GMTST



**DAKOTA
TECHNOLOGIES**

FARGO, ND 701.237.4908
WWW.DAKOTATECHNOLOGIES.COM

LIF07a

Site:
Burrows Yard

Client / Job:
Neath Port Talbot County

Operator / Unit:
J.Partridge / UVOST1001

Y Coord.(Lat-N) / System:
Unavailable / NA

X Coord.(Lng-E) / Fix:
Unavailable / NA

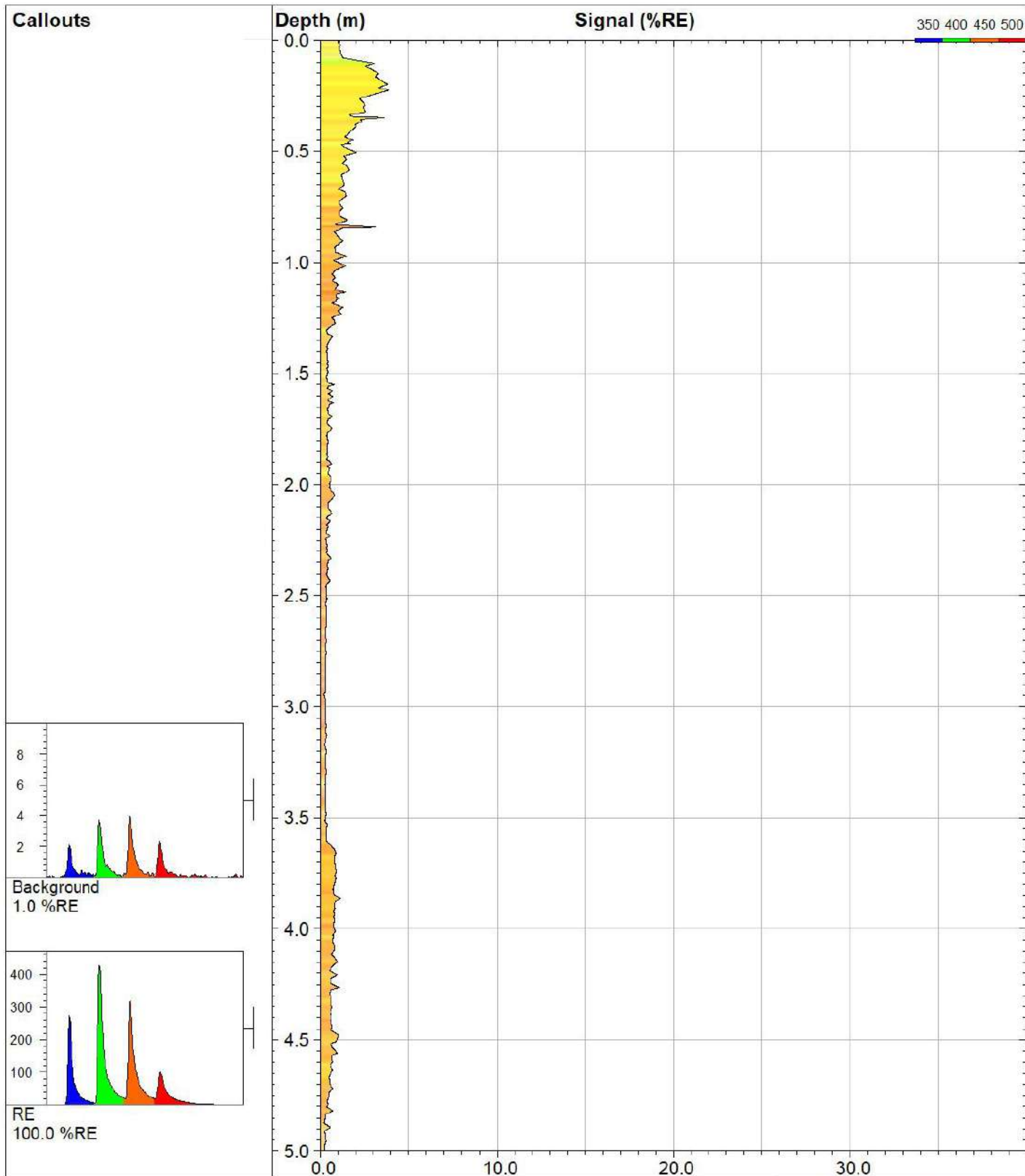
Elevation:
Unavailable

UVOST By Dakota
www.DakotaTechnologies.com

Final depth:
5.02 m

Max signal:
35.9 %RE @ 3.80 m

Date & Time:
2017-12-06 16:12 GMTST



WWW.DAKOTATECHNOLOGIES.COM

LIF08

UVOST® By Dakota

www.DakotaTechnologies.com

Site:
Burrows Yard

Y Coord.(Lat-N) / System:
Unavailable / NA

Final depth:
5.07 m

Client / Job:
Neath Port Talbot County

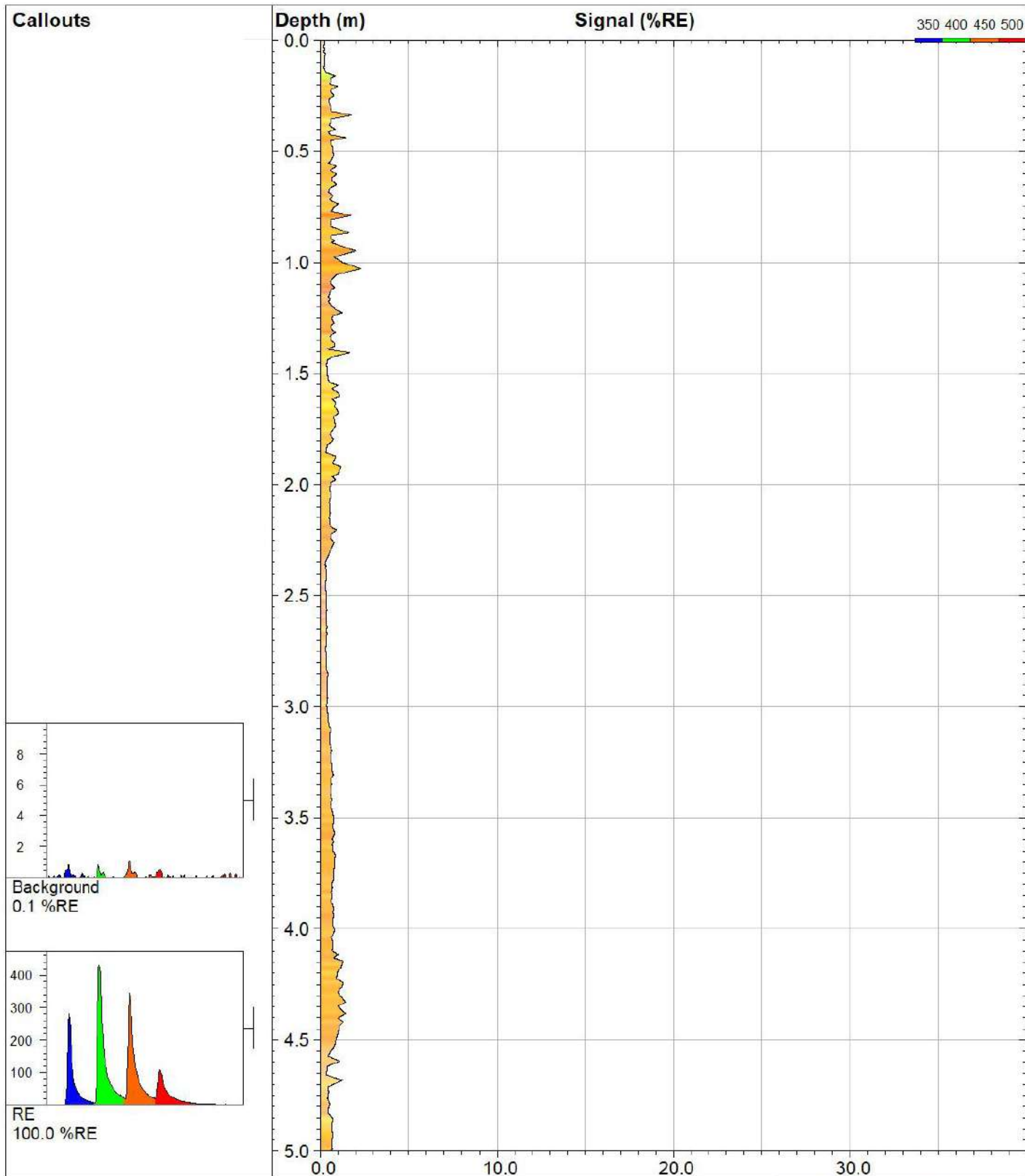
X Coord.(Lng-E) / Fix:
Unavailable / NA

Max signal:
3.9 %RE @ 0.23 m

Operator / Unit:
J.Partridge / UVOST1001

Elevation:
Unavailable

Date & Time:
2018-12-07 09:21 GMTST



WWW.DAKOTATECHNOLOGIES.COM

LIF09

UVOST® By Dakota

www.DakotaTechnologies.com

Site:

Burrows Yard

Y Coord.(Lat-N) / System:

Unavailable / NA

Final depth:

5.00 m

Client / Job:

Neath Port Talbot County

X Coord.(Lng-E) / Fix:

Unavailable / NA

Max signal:

2.3 %RE @ 1.03 m

Operator / Unit:

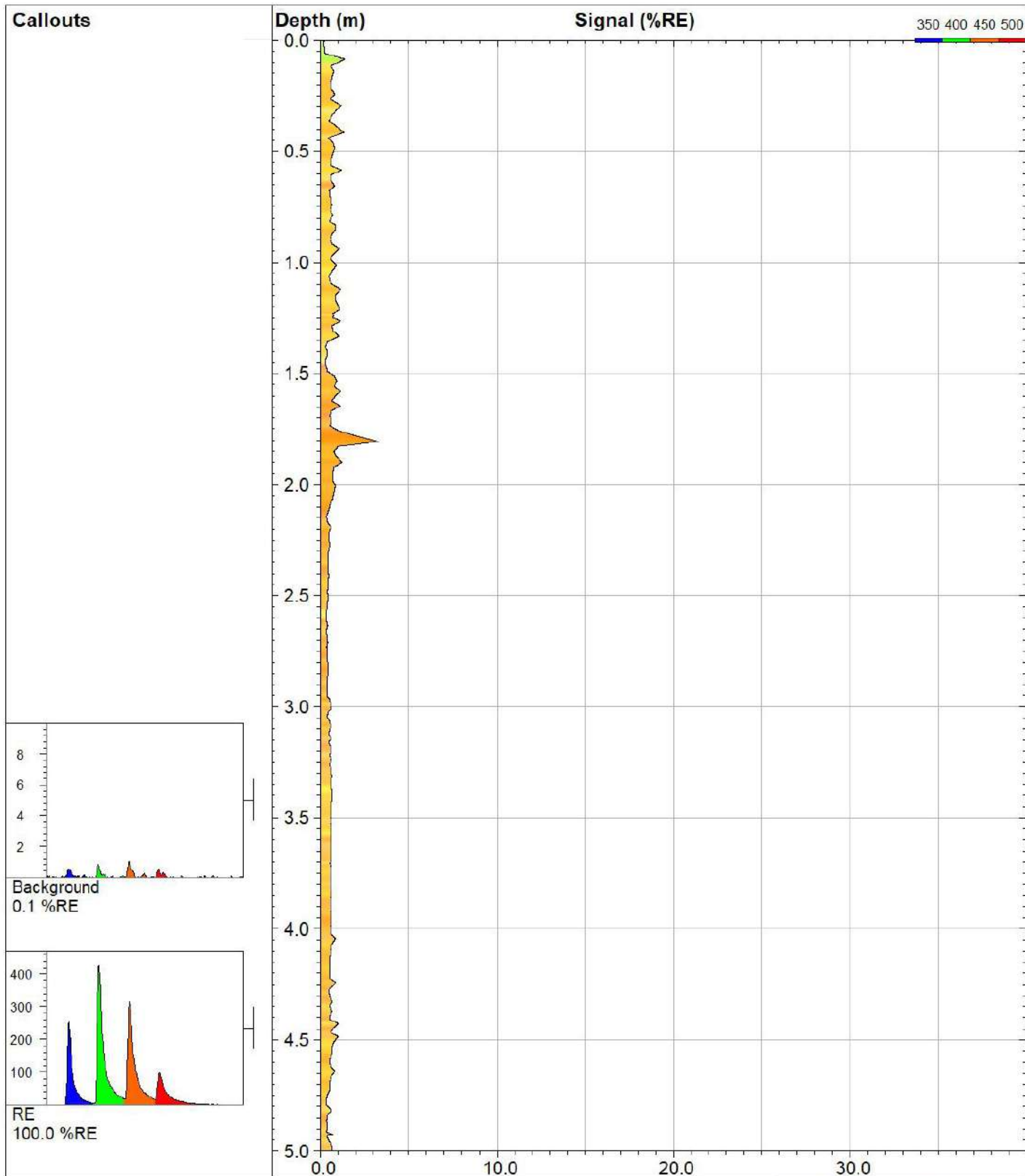
J.Partridge / UVOST1001

Elevation:

Unavailable

Date & Time:

2018-12-07 10:06 GMTST



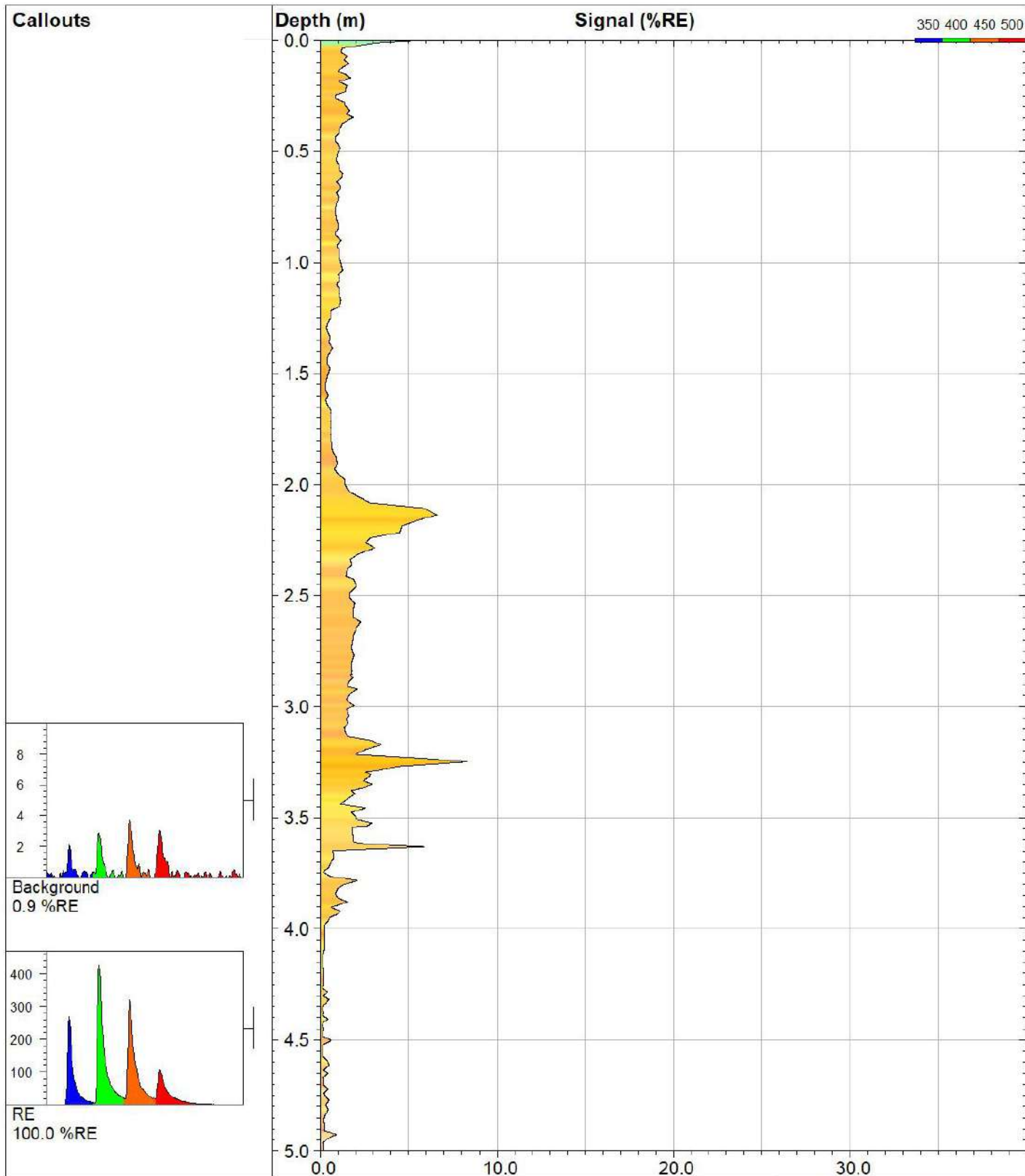
WWW.DAKOTATECHNOLOGIES.COM

LIF10

UVOST® By Dakota

www.DakotaTechnologies.com

Site: Burrows Yard	Y Coord.(Lat-N) / System: Unavailable / NA	Final depth: 5.03 m
Client / Job: Neat Port Talbot County B	X Coord.(Lng-E) / Fix: Unavailable / NA	Max signal: 3.3 %RE @ 1.81 m
Operator / Unit: J.Partridge / UVOST1001	Elevation: Unavailable	Date & Time: 2017-12-06 15:18 GMTST



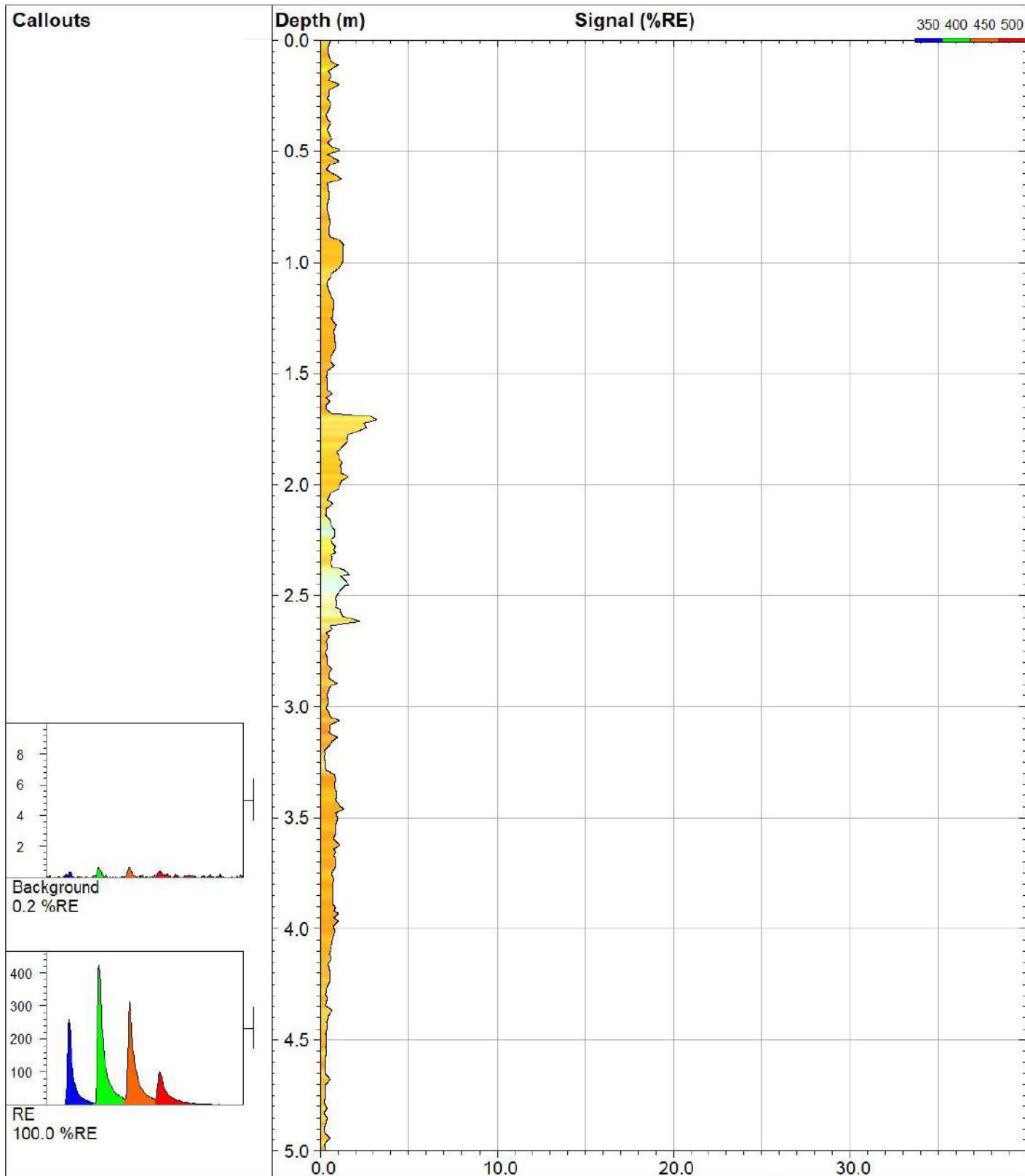
WWW.DAKOTATECHNOLOGIES.COM

LIF12

UVOST® By Dakota

www.DakotaTechnologies.com

Site: Burrows Yard	Y Coord.(Lat-N) / System: Unavailable / NA	Final depth: 5.10 m
Client / Job: Neat Port Talbot County B	X Coord.(Lng-E) / Fix: Unavailable / NA	Max signal: 8.3 %RE @ 3.25 m
Operator / Unit: J.Partridge / UVOST1001	Elevation: Unavailable	Date & Time: 2017-12-06 11:22 GMTST



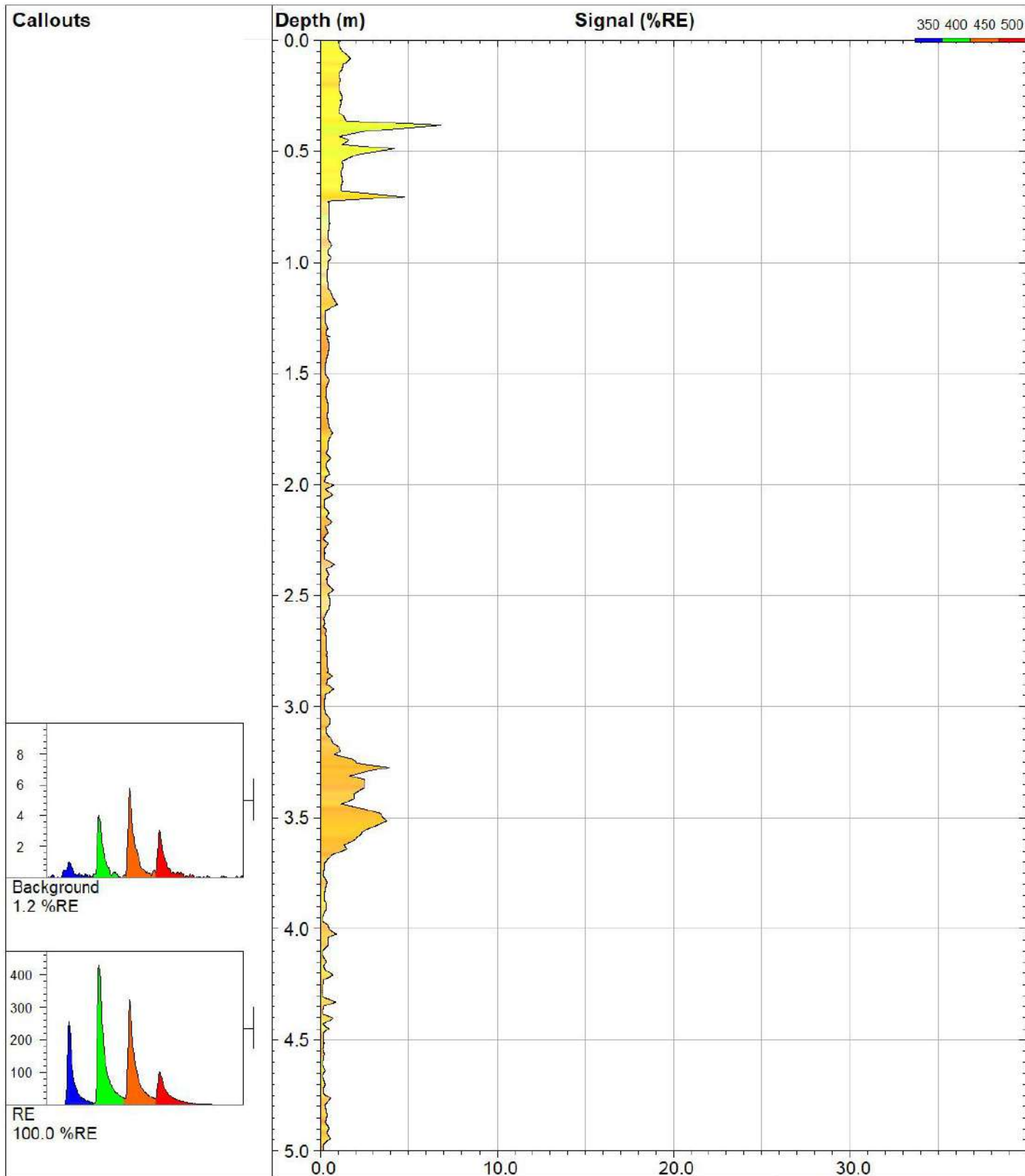
WWW.DAKOTATECHNOLOGIES.COM

LIF13

UVOST® By Dakota

www.DakotaTechnologies.com

Site: Burrows Yard	Y Coord.(Lat-N) / System: Unavailable / NA	Final depth: 5.01 m
Client / Job: Neat Port Talbot County B	X Coord.(Lng-E) / Fix: Unavailable / NA	Max signal: 3.2 %RE @ 1.71 m
Operator / Unit: J.Partridge / UVOST1001	Elevation: Unavailable	Date & Time: 2017-12-06 12:29 GMTST



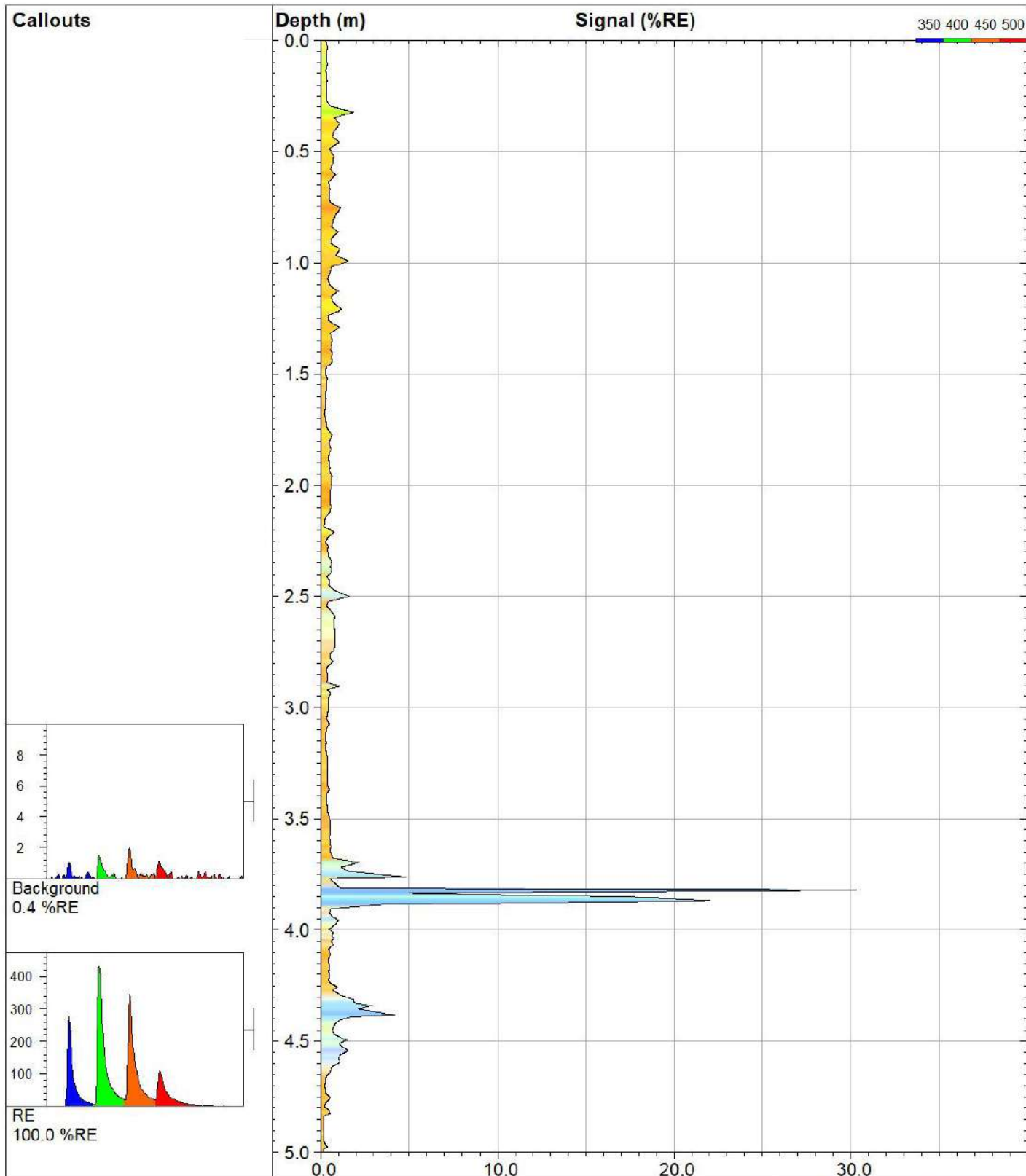
WWW.DAKOTATECHNOLOGIES.COM

LIF14

UVOST® By Dakota

www.DakotaTechnologies.com

Site: Burrows Yard	Y Coord.(Lat-N) / System: Unavailable / NA	Final depth: 5.03 m
Client / Job: Neat Port Talbot County B	X Coord.(Lng-E) / Fix: Unavailable / NA	Max signal: 6.8 %RE @ 0.38 m
Operator / Unit: J.Partridge / UVOST1001	Elevation: Unavailable	Date & Time: 2017-12-06 11:54 GMTST



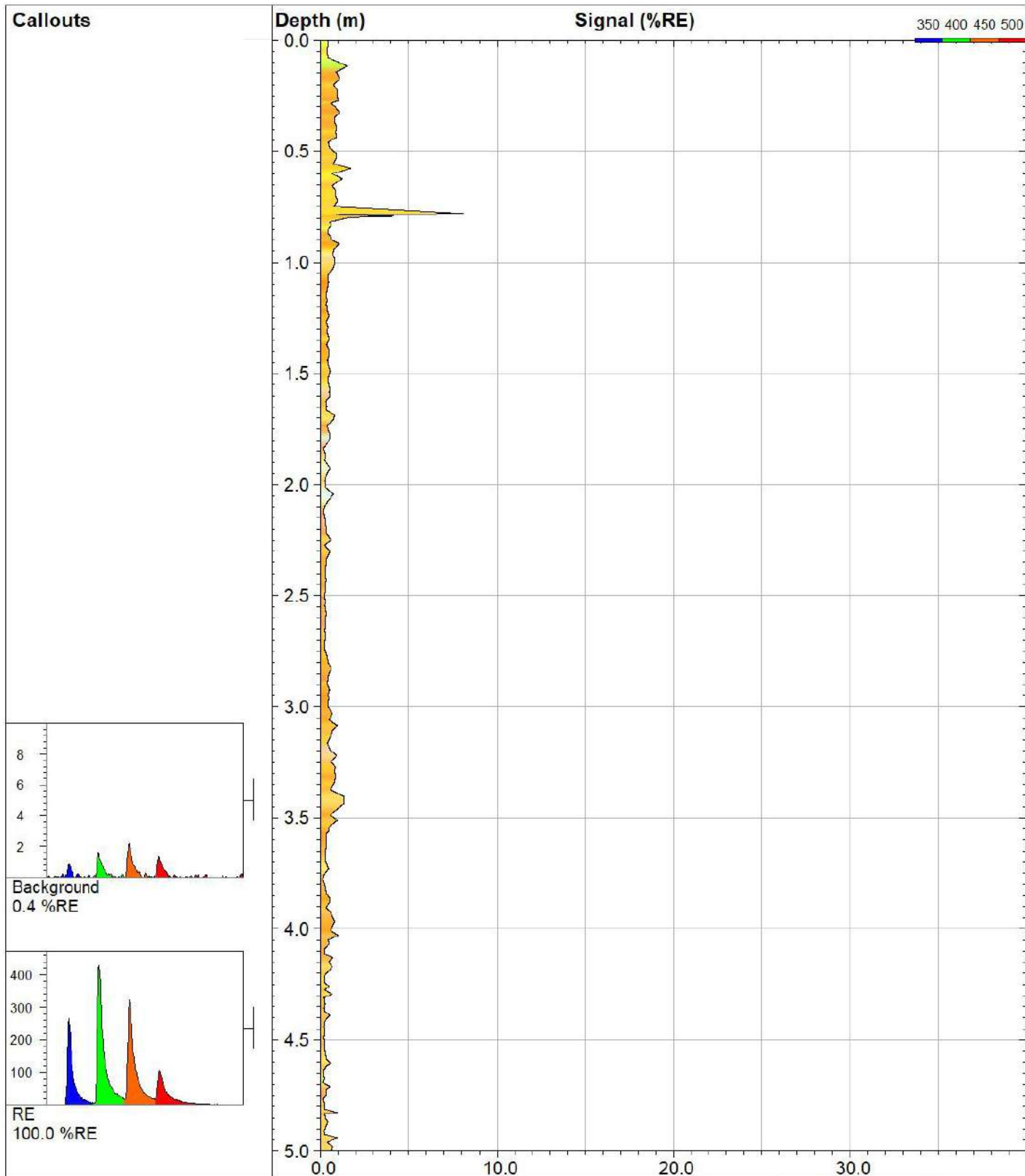
WWW.DAKOTATECHNOLOGIES.COM

LIF15

UVOST® By Dakota

www.DakotaTechnologies.com

Site: Burrows Yard	Y Coord.(Lat-N) / System: Unavailable / NA	Final depth: 5.01 m
Client / Job: Neat Port Talbot County B	X Coord.(Lng-E) / Fix: Unavailable / NA	Max signal: 31.1 %RE @ 3.82 m
Operator / Unit: J.Partridge / UVOST1001	Elevation: Unavailable	Date & Time: 2017-12-06 13:18 GMTST



WWW.DAKOTATECHNOLOGIES.COM

LIF16

UVOST® By Dakota

www.DakotaTechnologies.com

Site:
Burrows Yard

Y Coord.(Lat-N) / System:
Unavailable / NA

Final depth:
5.02 m

Client / Job:
Neat Port Talbot County B

X Coord.(Lng-E) / Fix:
Unavailable / NA

Max signal:
8.1 %RE @ 0.78 m

Operator / Unit:
J.Partridge / UVOST1001

Elevation:
Unavailable

Date & Time:
2017-12-06 14:44 GMTST

APPENDIX D

MONITORING DATA

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:10013618

Site:Burrows Yard

Date:16/01/2018

Monitoring Engineer:Maxime Peyre

Task ManagerJonny Aykroyd

Weather:Sunny

Multiprobe No:

Well ID:ABH01D

Time:10:10

NAPL deptlNo

DTW:2.87m

DTB:9.88m

Sample at:9.00

Sampling Method:Low flow

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	8	9.08	9.52	9.85	9.98	10.01	10.08	No odour/No colour
µS/cm ^c	647	588	575	568	566	566	564	
µS	445	408	405	404	404	404	403	
DO%	651	28.6	27.1	26.2	25.7	25.6	25.5	
DO mg/L	6.42	3.27	3.09	2.96	2.89	2.89	2.87	Volume of water removed during pumping:1.2L
pH	6.35	6.23	6.23	6.26	6.28	6.29	6.3	
ORP	-125.5	-127.4	-132.3	-145.1	-149.3	-150.6	-151.9	Containers Collected:2x300mL and 2xVIALS
DTW	2.87						2.87	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:ABH01S

Time:10:57

NAPL deptlNo

DTW:2.89m

DTB:5.95

Sample at:5.00

Sampling Method:Low flow

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	8.73	9.63	9.85	9.98	9.97	10.17	10.15	No odour/No colour
µS/cm ^c	398	541	542	542	540	538	539	
µS	272	382	384	386	386	386	386	
DO%	110.6	95.4	93.4	92.3	92.4	91.6	92.2	
DO mg/L	12.72	10.83	10.56	10.41	10.43	10.27	10.35	Volume of water removed during pumping1.2L
pH	6.63	6.63	6.67	6.7	6.72	6.75	6.76	
ORP	-193.9	-221.1	-229.1	-234.8	-238.8	-241.3	-243.8	Containers Collected:2x300mL and 2xVIALS
DTW	2.89						2.89	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:10013618

Site:Burrows Yard

Date:16/01/2018

Monitoring Engineer:Maxime Peyre

Task ManagerJonny Aykroyd

Weather:Cloudy

Multiprobe No:

Well ID:ABH02D

Time:12:05

NAPL deptlno

DTW:2.88

DTB:8.55

Sample at:7.00

Sampling Method:Low flow

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	9.72	9.71	10	10.2	10.29	10.09	9.87	No odour/No colour
µS/cm ^c	502	501	502	502	502	502	503	
µS	355	354	358	360	361	359	357	
DO%	23.9	16.2	17.6	16.6	15.6	14.4	14.5	
DO mg/L	2.63	1.84	1.98	1.86	1.74	1.62	1.62	Volume of water removed during pumping:1.4L
pH	6.36	6.27	6.25	6.23	6.21	6.16	6.14	
ORP	-192.7	-181.3	-162.1	-159.3	-162.1	-192.4	-199.1	Containers Collected:2x300mL and 2xVIALS
DTW	2.88						2.88	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:ABH02S

Time:13:10

NAPL deptlno

DTW:2.89

DTB:5.55

Sample at:4.50

Sampling Method:Low flow

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	11.04	10.66	10.62	10.72	10.78	10.88	10.94	No odour/No colour
µS/cm ^c	660	677	679	679	683	681	682	
µS	484	491	493	494	497	497	499	
DO%	109.5	99.1	96.8	94.8	93.8	93.1	93	
DO mg/L	12.05	11	10.74	10.5	10.38	10.27	10.25	Volume of water removed during pumping1.4L
pH	6.46	6.45	6.46	6.46	6.46	6.46	6.46	
ORP	-240.9	-248.2	-250.1	-250.8	-252.6	-252.1	-253.2	Containers Collected:2x300mL and 2xVIALS
DTW	2.89						2.89	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:10013618

Site:Burrows Yard

Date:17/01/2018

Monitoring Engineer:Maxime Peyre

Task ManagerJonny Aykroyd

Weather:Sunny

Multiprobe No:

Well ID:ABH03D

Time:10:10

NAPL deptlNo

DTW:2.90m

DTB:8.78m

Sample at:8.00

Sampling Method:Low flow

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	8.78	8.74	8.71	8.5	8.73	8.83	8.81	No smell/slightly cloudy
µS/cm ^c	536	561	631	654	670	672	673	
µS	372	387	435	448	462	464	465	
DO%	97.7	76	68.6	69	72.4	70.9	65.1	
DO mg/L	11.28	8.82	7.97	8.03	8.4	8.22	64.7	Volume of water removed during pumping:1.7L
pH	7.24	7.58	6.62	6.48	6.41	6.38	6.35	
ORP	-230.8	-250.9	-275.2	-290.4	-287	-290.7	-296.4	Containers Collected:2x300mL and 2xVIALS
DTW	2.90				2.90			

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:ABH03S

Time:10:29

NAPL deptlNo

DTW:2.90m

DTB:6.16

Sample at:5.50

Sampling Method:Low flow

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	8.9	9.55	10.21	10.27	10.43	10.5	10.58	No smell/slightly cloudy
µS/cm ^c	621	655	675	681	700	697	697	
µS	431	463	484	490	505	504	504	
DO%	101.7	90.1	86.1	85.1	84.3	83.9	83.6	
DO mg/L	11.7	10.22	9.66	9.48	9.39	9.33	9.3	Volume of water removed during pumping1.7L
pH	6.41	6.46	6.48	6.48	6.49	6.48	6.48	
ORP	-237.8	-234.6	-252.7	-287.6	-299.8	-301.7	-302.5	Containers Collected:2x300mL and 2xVIALS
DTW	2.90				2.90			

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:

10013618

Site:

Burrows Yard

Date:

17/01/2018

Monitoring Engineer:

Maxime Peyre

Task Manager

Jonny Aykroyd

Weather:

Sunny

Multiprobe No:

Well ID:

ABH04

Time:

11:30

NAPL deptl

No

DTW:

2.90m

DTB:

6.20

Sample at:

5.50

Sampling Method:

Low flow

								Groundwater Comments (colour, sediment, odour etc.):
	0	5	10	15	20	25	30	No smell/slightly cloudy
°C	10.48	11.11	11.21	11.22	11.1	11.16	11.25	
µS/cm ^c	774	772	777	779	781	782	781	
µS	576	568	572	574	572	576	576	
DO%	36.7	17.9	17.1	8.6	7.2	6.5	6	
DO mg/L	3.06	2.06	1.88	0.94	0.76	0.71	0.66	Volume of water removed during pumping: 1.5L
pH	6.72	6.7	6.66	6.65	6.65	6.65	6.65	
ORP	-177	-272.1	-293.6	-301.5	-305.8	-308.8	-311.1	Containers Collected: 2x300mL and 2xVIALS
DTW	2.90						2.90	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:

10013618

Site:

Burrows Yard

Date:

13/02/2018

Monitoring Engineer:

Maxime Peyre

Task Manager

Jonny Aykroyd

Weather:

Raining

Multiprobe No:

Well ID:

ABH01D

Time:

10:37

NAPL deptl

No

DTW:

2.91m

DTB:

9.82

Sample at:

7.00

Sampling Method:

Low flow

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	9.22	9.43	9.55	9.62	9.73	9.88	9.98	No odour/No colour
µS/cm ^c	548.6	500.7	460.3	451.3	445.7	443.7	442.3	
µS	380.5	351.4	324.7	318.5	315.6	315.7	315.4	
DO%	10.3	9.98	8.5	8.2	7.9	7.8	7.3	Volume of water removed during pumping: 1.5L
DO mg/L	1.53	1.03	0.96	0.9	0.84	0.8	0.78	
pH	7.63	7.05	6.73	6.61	6.5	6.44	6.43	
ORP	220.1	204.3	188.6	182.6	183.4	174.1	172.4	Containers Collected: 2x300mL and 2xVIALS
DTW	2.91m						2.91m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:

ABH01S

Time:

11:42

NAPL deptl

No

DTW:

2.91m

DTB:

5.85

Sample at:

5.00

Sampling Method:

Low flow

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	8.92	9.6	9.85	9.98	9.97	10.17	10.15	No odour/No colour
µS/cm ^c	549.4	558.7	558.7	557.8	556.7	557.2	556.8	
µS	380.4	394.7	398.9	399.6	401.4	401.7	402.7	
DO%	11.6	8.9	7.2	7.1	6.6	6.8	6.9	Volume of water removed during pumping 1.4L
DO mg/L	1.46	0.95	0.77	0.7	0.68	0.7	0.71	
pH	6.82	6.95	7.02	7.03	7.06	7.07	7.08	
ORP	-69.6	-76.2	-80.7	-81.9	-84.4	-86	-86.8	Containers Collected: 2x300mL and 2xVIALS
DTW	2.91m						2.91m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:

10013618

Site:

Burrows Yard

Date:

13/02/2018

Monitoring Engineer:

Maxime Peyre

Task Manager

Jonny Aykroyd

Weather:

Cloudy

Multiprobe No:

Well ID:

ABH02D

Time:

12:48

NAPL deptl

no

DTW:

2.81m

DTB:

8.64m

Sample at:

7.00

Sampling Method:

Low flow

051015202530								Groundwater Comments (colour, sediment, odour etc.):
°C	9.94	10.34	10.71	10.8	10.9	11.04	11.19	No odour/No colour
µS/cm ^c	371	371.3	370.1	368.6	367.7	367.4	366	
µS	264.1	267.6	269	268.7	269.5	269.5	269.3	
DO%	9.2	8.4	8.1	7.9	7.9	7.9	7.9	
DO mg/L	1.01	0.92	0.89	0.86	0.86	0.86	0.86	Volume of water removed during pumping:1.4L
pH	6.24	6.18	6.15	6.14	6.14	6.13	6.12	
ORP	208.5	214.5	216.5	224.4	223.1	225.1	237	Containers Collected:2x300mL and 2xVIALS
DTW	2.81						2.81	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:

ABH02S

Time:

13:50

NAPL deptl

no

DTW:

2.90

DTB:

5.65

Sample at:

5.00

Sampling Method:

Low flow

051015202530								Groundwater Comments (colour, sediment, odour etc.):
°C	12.1	12.01	11.86	11.41	11.24	10.99	10.76	No odour/No colour
µS/cm ^c	503.5	505.1	506.6	507.7	510	510.3	513.5	
µS	379.6	379.8	379.4	376.1	376.1	373.8	373	
DO%	12.1	7.9	7.6	7.1	6.7	6.6	6.4	
DO mg/L	9.9	0.84	0.81	0.76	0.72	0.71	0.7	Volume of water removed during pumping1.4L
pH	6.5	6.51	6.52	6.52	6.52	6.53	6.53	
ORP	242.7	264.5	267.7	274.4	267.1	267.6	264.9	Containers Collected:2x300mL and 2xVIALS
DTW	2.9						2.9	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:

10013618

Site:

Burrows Yard

Date:

14/02/2018

Monitoring Engineer:

Maxime Peyre

Task Manager

Jonny Aykroyd

Weather:

Raining

Multiprobe No:

Well ID:

ABH03D

Time:

11:36

NAPL deptl

No

DTW:

2.91

DTB:

8.7

Sample at:

7.00

Sampling Method:

Low flow

051015202530								Groundwater Comments (colour, sediment, odour etc.):
°C	8.31	8.55	8.69	8.78	8.87	8.86	8.89	No smell/slightly cloudy
µS/cm ^c	583.1	579.9	581.5	581.7	580.4	578.5	580.3	
µS	397.4	397.7	400.4	401.5	401.4	400.1	491.8	
DO%	15.1	8	7.1	6.7	6.5	6.1	6.9	
DO mg/L	1.65	0.91	0.82	0.77	0.74	0.7	6.67	Volume of water removed during pumping:1.2L
pH	6.51	6.46	6.41	6.4	6.39	6.39	6.38	
ORP	196.8	185.6	179	175.5	173.5	178	172.8	Containers Collected:2x300mL and 2xVIALS
DTW	2.91						2.91	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:

ABH03S

Time:

10:31

NAPL deptl

No

DTW:

2.90m

DTB:

6

Sample at:

5.50

Sampling Method:

Low flow

051015202530								Groundwater Comments (colour, sediment, odour etc.):
°C	10.07	9.78	9.4	9.34	9.3	9.21	9.22	No smell/slightly cloudy
µS/cm ^c	589.2	574.9	571.8	572.1	571.3	572.2	574.6	
µS	421.9	407.7	401.2	400.8	400	398.5	401.4	
DO%	11.5	10.2	8.82	8.7	8.5	8.1	6.9	
DO mg/L	1.28	1.14	0.99	0.99	0.96	0.92	0.78	Volume of water removed during pumping1.3L
pH	7.48	7.34	7.01	6.91	6.84	6.78	6.72	
ORP	208.1	207.8	188.3	179.4	174.4	170.8	169.3	Containers Collected:2x300mL and 2xVIALS
DTW	2.90						2.90	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:

10013618

Site:

Burrows Yard

Date:

13/02/2018

Monitoring Engineer:

Maxime Peyre

Task Manager

Jonny Aykroyd

Weather:

Showers

Multiprobe No:

Well ID:

ABH04

Time:

14:51

NAPL deptl

No

DTW:

2.71m

DTB:

5.90

Sample at:

5.00

Sampling Method:

Low flow

								Groundwater Comments (colour, sediment, odour etc.):
	0	5	10	15	20	25	30	No smell/slightly cloudy
°C	11.13	11.22	11.46	11.5	11.6	11.69	11.73	
µS/cm ^c	688.4	686.2	690.3	689	692.2	691.6	691.9	
µS	501.4	506	511.8	511.5	516.6	515.8	516.6	
DO%	7.8	6.7	4.8	4.2	3.4	3.1	3.2	
DO mg/L	1.06	0.71	0.52	0.45	0.36	0.33	0.34	Volume of water removed during pumping: 1.5L
pH	6.7	6.24	6.74	6.75	6.25	6.75	6.15	
ORP	16.8	11.7	12.2	14	5.5	4.3	-6.2	Containers Collected: 2x300mL and 2xVIALS
DTW	2.71						2.71	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:	10013618
Site:	Burrows Yard
Date:	12/03/2018

Monitoring Engineer:	Maxime Peyre
Task Manager	Jonny Aykroyd
Weather:	Cloudy
Multiprobe No:	YSI 40

Well ID:	ABH01D	Time:	10:26	NAPL deptl	No	DTW:	2.88m	DTB:	9.8	Sample at:	7.00	Sampling Method:	Low flow
----------	--------	-------	-------	------------	----	------	-------	------	-----	------------	------	------------------	----------

	0	5	10	15	20	25	30	Groundwater Comments (colour, sediment, odour etc.):
°C	12.2	12.3	12.4	12.7	12.6	12.4	12.2	No odour/No colour
µS/cm ^c	557.2	552.4	547.4	529	515.4	502.1	481.7	
µS	421.1	419.1	415.6	404.9	392.6	380.2	363.5	
DO%	45.2	12.7	10.5	9.3	8.1	7.7	6.5	
DO mg/L	4.29	1.34	1.11	0.99	0.86	0.83	0.69	Volume of water removed during pumping: 0.8L
pH	6.77	6.72	6.72	6.71	6.71	6.71	6.7	
ORP	181.9	181	180.1	179.5	177.7	177.1	176.4	Containers Collected: 2x300mL and 2xVIALS
DTW	2.88m						2.88m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:	ABH01S	Time:	11:15	NAPL deptl	No	DTW:	2.88m	DTB:	5.84	Sample at:	5.00	Sampling Method:	Low flow
----------	--------	-------	-------	------------	----	------	-------	------	------	------------	------	------------------	----------

0 5 10 15 20 25 30								Groundwater Comments (colour, sediment, odour etc.):
°C	11.2	11.3	11.4	11.5	11.6	11.6	11.6	No odour/No colour but small orange suspended material
µS/cm ^c	564.3	569.1	571.5	573.4	573.2	573.2	573.5	
µS	416.2	420.6	423.6	425.3	426	426	425.5	
DO%	56.1	12.4	8.1	7.2	6.4	6.6	6.2	
DO mg/L	5.79	1.33	0.88	0.79	0.7	0.72	0.67	Volume of water removed during pumping 0.6L
pH	7.08	7.19	7.23	7.24	7.26	7.28	7.28	
ORP	-5.2	-87.4	-105	-113	-129.5	-130.9	-134.2	Containers Collected: 2x300mL and 2xVIALS
DTW	2.88m						2.88m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:10013618

Site:Burrows Yard

Date:13/03/2018

Monitoring Engineer:Maxime Peyre

Task ManagerJonny Aykroyd

Weather:Sunny

Multiprobe No:YSI 40

Well ID:ABH02D

Time:10:15

NAPL deptlno

DTW:2.94m

DTB:8.63m

Sample at:7.00

Sampling Method:Low flow

051015202530								Groundwater Comments (colour, sediment, odour etc.):
°C	11	11.3	11.6	11.5	11.6	11.5	11.6	No odour/No colour
µS/cm ^c	372.8	370.4	370.1	370.7	368.8	369.4	369.7	
µS	273.4	273.6	275.1	275.4	274.2	274.5	274.8	
DO%	18.7	10.2	8.4	7.4	6.9	6.5	6.4	
DO mg/L	1.98	1.14	0.94	0.8	0.75	0.71	0.69	Volume of water removed during pumping:0.8L
pH	6.56	6.47	6.43	6.42	6.39	6.39	6.38	
ORP	126.6	134.3	138.8	142	145.6	146.8	148.5	Containers Collected:2x300mL and 2xVIALS
DTW	2.94m						2.94m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:ABH02S

Time:11:11

NAPL deptlno

DTW:2.94

DTB:5.98

Sample at:5.50

Sampling Method:Low flow

051015202530								Groundwater Comments (colour, sediment, odour etc.):
°C	10.8	11.2	11.2	11.3	11.3	11.3	11.4	No odour/No colour
µS/cm ^c	488.2	496.3	497.4	496.6	495.8	496.8	496.8	
µS	355.7	365.2	365.8	366.5	366.2	366.6	367.3	
DO%	20.1	5.9	5.3	5.2	5.1	5	4.8	
DO mg/L	1.88	0.84	0.58	0.56	0.56	0.54	0.53	Volume of water removed during pumping1L
pH	6.69	6.69	6.68	6.68	6.67	6.67	6.68	
ORP	144.3	141.5	140.7	139.7	139.5	139.2	139	Containers Collected:2x300mL and 2xVIALS
DTW	2.94m						2.94m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:10013618

Site:Burrows Yard

Date:12/03/2018

Monitoring Engineer:Maxime Peyre

Task ManagerJonny Aykroyd

Weather:Raining

Multiprobe No:YSI 40

Well ID:ABH03D

Time:12:35

NAPL deptlNo

DTW:2.88

DTB:8.84

Sample at:7.00

Sampling Method:Low flow

051015202530								Groundwater Comments (colour, sediment, odour etc.):
°C	10.9	11.2	11.2	11.3	11.2	11.1	11.1	No odour/No colour
µS/cm ^c	585.9	593	596.6	598.4	600.1	502.2	600.7	
µS	428.8	436.7	439.6	441.9	442.3	441.9	441.3	
DO%	39	9	7.7	7.4	6.7	7.1	6.4	
DO mg/L	4.2	0.98	0.85	0.81	0.72	0.78	0.7	Volume of water removed during pumping:0.7L
pH	6.68	6.58	6.56	6.56	6.55	6.56	6.55	
ORP	45.2	68.9	77.8	86.4	89.7	92.5	94.1	Containers Collected:2x300mL and 2xVIALS
DTW	2.88m						2.88m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

Well ID:ABH03S

Time:13:21

NAPL deptlNo

DTW:2.76m

DTB:6.03

Sample at:5.50

Sampling Method:Low flow

051015202530								Groundwater Comments (colour, sediment, odour etc.):
°C	10.6	10.7	10.7	10.7	10.7	10.6	10.6	No odour/No colour
µS/cm ^c	792	703	687.1	673.7	657.4	648.2	646.7	
µS	574	511	493.7	489.3	457.4	469.4	469	
DO%	23	10.7	9	8.7	9.2	8.6	8.2	
DO mg/L	2.56	1.19	1	0.36	1.03	0.97	0.91	Volume of water removed during pumping0.9L
pH	7.04	6.93	6.92	6.87	6.86	6.85	6.85	
ORP	100.6	94.4	94.9	95	96.1	96.2	96.7	Containers Collected:2x300mL and 2xVIALS
DTW	2.76m						2.76m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

LOW-FLOW MONITORING RECORDING SHEET

Projec Number:

10013618

Site:

Burrows Yard

Date:

12/03/2018

Monitoring Engineer:

Maxime Peyre

Task Manager

Jonny Aykroyd

Weather:

Cloudy

Multiprobe No:

Well ID:

ABH04

Time:

14:38

NAPL deptl

No

DTW:

2.67m

DTB:

5.99

Sample at:

4.00

Sampling Method:

Low flow

								Groundwater Comments (colour, sediment, odour etc.):
	0	5	10	15	20	25	30	No odour/No clour
°C	10.7	10.9	11	11.1	11.2	11.3	11.3	
µS/cm ^c	653.9	622.8	653.8	659.7	665.9	666.9	666.4	
µS	476.8	477.4	476.7	404.4	490	492.5	492.2	
DO%	45.9	10	8.9	7.7	6.4	5.8	5.8	
DO mg/L	4.43	1.1	0.98	0.84	0.71	0.64	0.63	Volume of water removed during pumping: 0.7L
pH	6.95	6.94	6.94	6.94	6.94	6.95	6.95	
ORP	2.7	-19.3	-21.5	-30.7	-40.3	-44.8	-47.8	Containers Collected: 2x300mL and 2xVIALS
DTW	2.67m						2.67m	

Well Condition	Is Well Cover Damaged?	Cover Bolts Present?	Water Inside Cover?	Bung Present?	Surrounding Condition (e.g. Sunken? Etc)	Other Comments (e.g. Maintenance Required? Obstruction in Pipe)
	No	Yes	Yes	Yes	Good	-

APPENDIX E

GEOTECHNICAL LABORATORY TEST DATA



Laboratory Report



GEO Site & Testing Services Ltd

Contract Number: 37611

Client Ref: **10013618**

Report Date: **21-12-2017**

Client PO:

Client **Arcadis**
Fortran Rd
St Mellons
Cardiff
CF3 0EY

Contract Title: **Burrows Yard**
For the attention of: **Laura Cohu**

Date Received: **13-12-2017**
Date Commenced: **13-12-2017**
Date Completed: **21-12-2017**

Test Description	Qty
PSD Wet Sieve method 1377 : 1990 Part 2 : 9.2 - * UKAS	2
Disposal of Samples on Project	1

Notes: Observations and Interpretations are outside the UKAS Accreditation

* - denotes test included in laboratory scope of accreditation

- denotes test carried out by approved contractor

@ - denotes non accredited tests

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 Signatories:

Alex Wynn (Associate Director) - Ben Sharp (Contracts Manager) - Emma Sharp (Office Manager)

Paul Evans (Quality/Technical Manager) - Richard John (Advanced Testing Manager) - Sean Penn (Administrative Assistant)

Vaughan Edwards (Managing Director) - Wayne Honey (Administrative/Quality Assistant)

GEO Site & Testing Services Ltd

Unit 3-4, Heol Aur, Dafen Ind Estate, Dafen, Llanelli, Carmarthenshire SA14 8QN

Tel: 01554 784040 Fax: 01554 784041 info@gstl.co.uk gstl.co.uk



PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve, Clause 9.2

Contract Number

37611

Borehole/Pit No.

ABH01

Site Name

Burrows Yard

Sample No.

Soil Description

Brown slightly silty slightly fine to coarse sandy fine to coarse
GRAVEL.(With some cobbles)

Depth Top

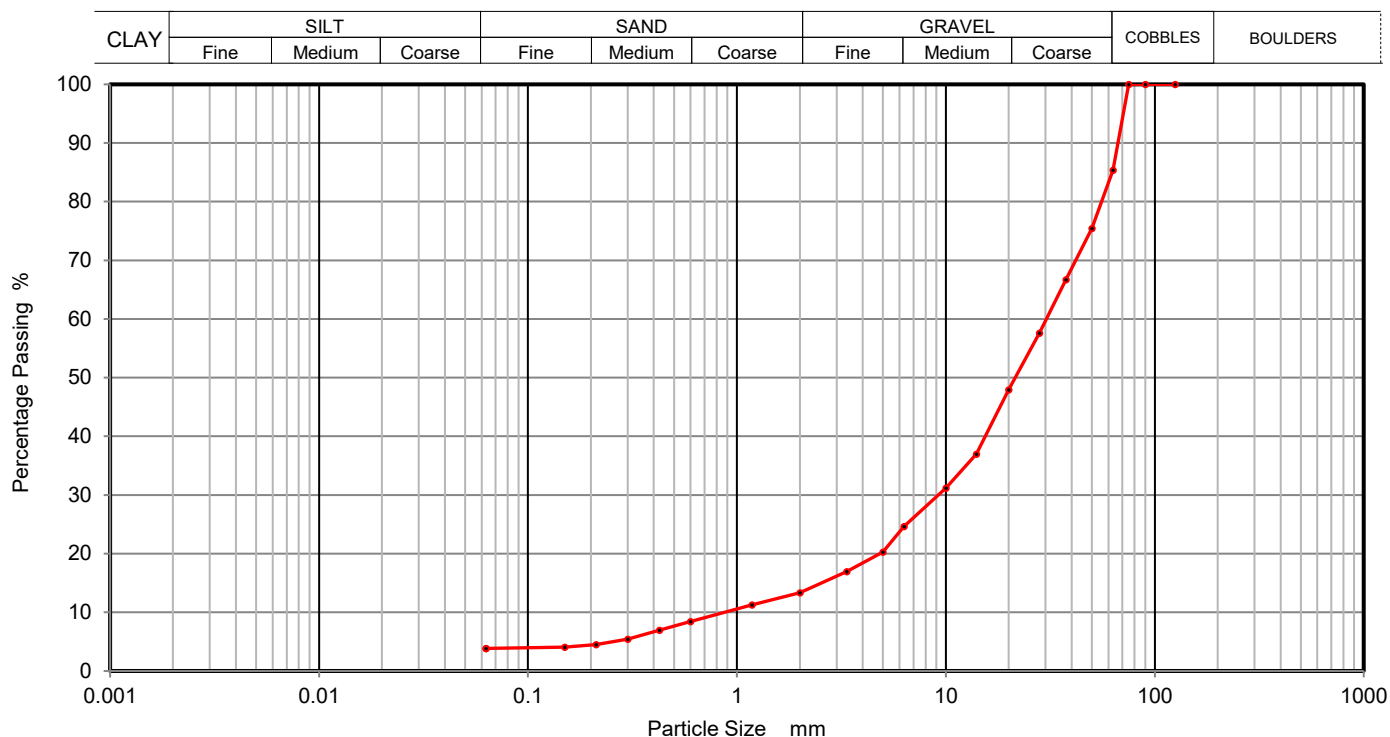
7.00

Depth Base

10.00

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	
90	100	0.0060	
75	100	0.0019	
63	85		
50	75		
37.5	67		
28	58		
20	48		
14	37		
10	31		
6.3	25		
5	20		
3.35	17		
2	13		
1.18	11		
0.6	8		
0.425	7		
0.3	5		
0.212	5		
0.15	4		
0.063	4		

Sample Proportions	% dry mass
Cobbles	15
Gravel	72
Sand	9
Silt and Clay	4

Grading Analysis	
Uniformity Coefficient	

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	20/12/2017	Sean Penn	
RO/MH	Approved	21/12/2017	Ben Sharp	





PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve, Clause 9.2

Contract Number

37611

Borehole/Pit No.

ABH03

Site Name

Burrows Yard

Sample No.

Soil Description

Grey slightly clayey slightly silty slightly fine to coarse sandy fine to coarse GRAVEL.(With some cobbles)

Depth Top

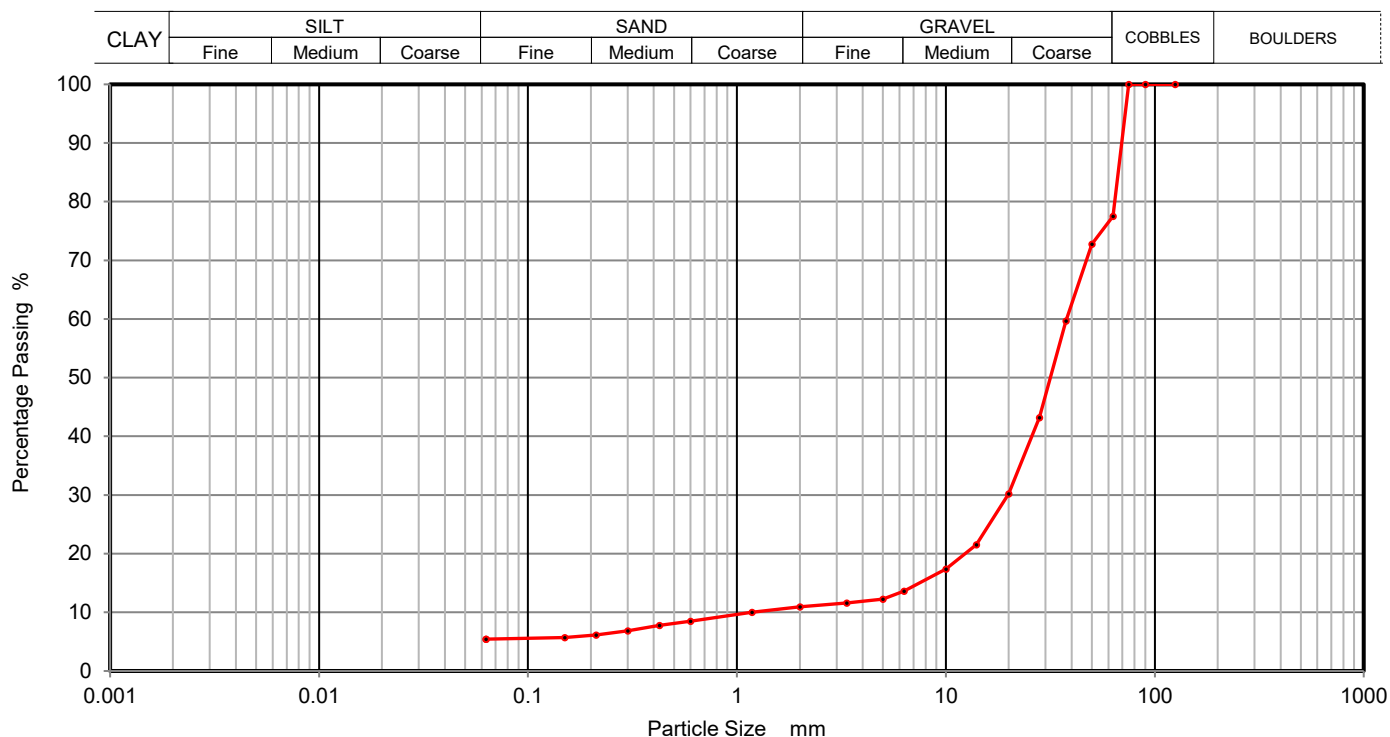
5.00

Depth Base

5.50

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	
90	100	0.0060	
75	100	0.0019	
63	78		
50	73		
37.5	60		
28	43		
20	30		
14	22		
10	17		
6.3	14		
5	12		
3.35	12		
2	11		
1.18	10		
0.6	8		
0.425	8		
0.3	7		
0.212	6		
0.15	6		
0.063	5		

Sample Proportions	% dry mass
Cobbles	22
Gravel	67
Sand	6
Silt and Clay	5

Grading Analysis	
Uniformity Coefficient	

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	20/12/2017	Sean Penn	
RO/MH	Approved	21/12/2017	Ben Sharp	



APPENDIX F

GEO-ENVIRONMENTAL LABORATORY TEST DATA