



AA Environmental Ltd
 Units 4-8 Cholswell Court
 Shippon, Abingdon
 Oxfordshire
 OX13 6HX

Trial Pit Log

Trialpit No
TP03
 Sheet 1 of 1

Project Name: Trenchard Circle	Project No. 163408	Co-ords: - Level:	Date 01/11/2016
Location: Upper Heyford, Oxfordshire		Dimensions (m): Depth 2.00	Scale 1:25 Logged JNT
Client: Conlon Ltd			

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
▼	0.30	ES	PID=0	0.40			Brown clayey gravelly sand with occasional brick, wire, concrete and glass. [MADE GROUND]
				0.80			Highly weathered LIMESTONE recovered as limestone gravels and cobbles with silty sands.
	1.20	ES	PID=0	1.80			Highly weathered LIMESTONE recovered as a pale brown silty clay with limestone gravels and cobbles.
				2.00			Fractured LIMESTONE recovered as limestone gravels and cobbles.
							End of pit at 2.00 m

Remarks: METHOD: Machine excavated pit; CONTAMINATION: No visual or olfactory contamination; GROUNDWATER: Slow ingress at 2.0 m; NOTES: None.

Stability: Stable.





AA Environmental Ltd
 Units 4-8 Cholswell Court
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Trial Pit Log

Trialpit No
TP04
 Sheet 1 of 1

Project Name: Trenchard Circle Project No. 163408 Co-ords: - Date 01/11/2016
 Level: Level:

Location: Upper Heyford, Oxfordshire Dimensions (m): Scale 1:25

Client: Conlon Ltd Depth 2.10 Logged JNT

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
▼	0.25	ES	PID=0	0.30			Brown clayey gravelly sand with occasional brick, roots, wood, wire, concrete and glass. [MADE GROUND]
				1.00			Highly weathered LIMESTONE recovered as a pale brown silty gravelly sand.
				2.00			Highly weathered LIMESTONE recovered as a pale brown silty sand with limestone gravels and cobbles.
	1.80 - 2.00	ES	PID=0	2.10			Fractured LIMESTONE recovered as limestone gravels and cobbles.
							End of pit at 2.10 m

Remarks: METHOD: Machine excavated pit; CONTAMINATION: No visual or olfactory contamination; GROUNDWATER: Slow ingress 2.1 m; NOTES: None.

Stability: Stable.





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 Units 4-8 Cholswell Court
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Trial Pit Log

Trialpit No
TP05
 Sheet 1 of 1

Project Name: Trenchard Circle Project No. 163408 Co-ords: -
 Level: Date 01/11/2016

Location: Upper Heyford, Oxfordshire Dimensions (m):
 Depth 2.40

Client: Conlon Ltd Logged JNT

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.30 - 0.50	ES	PID=0	1.00			Brown clayey gravelly sand with pea gravels fill and occasional brick, roots, wood, wire, concrete and glass. [MADE GROUND]
	2.20	ES	PID=0			2.20	
				2.40			Fractured LIMESTONE recovered as limestone gravels and cobbles.
End of pit at 2.40 m							

Remarks: METHOD: Machine excavated pit; CONTAMINATION: No visual or olfactory contamination; GROUNDWATER: None encountered; NOTES: None.

Stability: Stable.





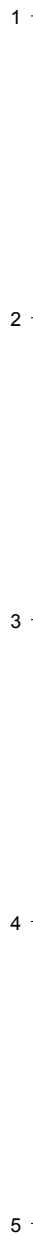
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Trial Pit Log

Trialpit No
TP06
 Sheet 1 of 1

Project Name: Trenchard Circle	Project No. 163408	Co-ords: - Level:	Date 01/11/2016
Location: Upper Heyford, Oxfordshire		Dimensions (m): Depth 1.70	Scale 1:25 Logged JNT
Client: Conlon Ltd			

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.20	ES	PID=0	0.25			Brown clayey gravelly sand with occasional brick, roots, wood, wire, concrete and glass. [MADE GROUND]
	1.50	ES	PID=0	1.30			Highly weathered LIMESTONE recovered as a pale brown silty sand with limestone gravels and cobbles.
				1.70			Fractured LIMESTONE recovered as limestone gravels and cobbles.
End of pit at 1.70 m							



Remarks: METHOD: Machine excavated pit; CONTAMINATION: No visual or olfactory contamination; GROUNDWATER: None encountered; NOTES: None.

Stability: Stable.





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 Units 4-8 Cholswell Court
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Trial Pit Log

Trialpit No
TP07
 Sheet 1 of 1

Project Name: Trenchard Circle	Project No. 163408	Co-ords: - Level:	Date 01/11/2016
Location: Upper Heyford, Oxfordshire	Dimensions (m): Depth 1.50		Scale 1:25 Logged JNT
Client: Conlon Ltd			

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.20	ES	PID=0	0.20			Brown loamy sandy topsoil with occasional brick, concrete and glass. [MADE GROUND]
			PID=0	1.40			Highly weathered LIMESTONE recovered as a pale brown silty sand with limestone gravels and cobbles.
	1.70	ES		1.50			Fractured LIMESTONE recovered as limestone gravels and cobbles.
End of pit at 1.50 m							

Remarks: METHOD: Machine excavated pit; CONTAMINATION: No visual or olfactory contamination; GROUNDWATER: None encountered; NOTES: None.

Stability: Stable.





Borehole Log

Borehole No.

BH 01

Sheet 1 of 1

Project Name: Upper Heford Remediation	Project No. 173042	Co-ords: -	Hole Type RO
Location: Upper Heyford		Level:	Scale 1:50
Client: Agetur UK		Dates: 20/02/2017 - 20/02/2017	Logged By TR

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
							TOP SOIL / CLAY. BROWN IN COLOUR** GREAT OOLITE GROUP (limestone weathered to a residual soil)		
					1.10		ROCK HEAD. YELLOW SANDSTONE** GREAT OOLITE GROUP (destructured limestone)	1	
					2.50		GREY SILTSTONE OR LIMESTONE WITH FREQUENT SOFT OR WEAK CLAY FORMATIONS THROUGHOUT** GREAT OOLITE GROUP (distinctly weathered limestone)	2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
					10.00		End of borehole at 10.00 m	10	

Remarks
 METHOD: Machine operated breaker and manually excavated pit to 1.20m, rotary drilling with air flush thereafter;
 CONTAMINATION: No visual or olfactory evidence of contamination; GROUNDWATER: Noted from approximately 2.0m;
 NOTES: ** Denotes drillers description





Borehole Log

Borehole No.

BH 02

Sheet 1 of 1

Project Name: Upper Heyford Remediation	Project No. 173042	Co-ords: -	Hole Type RO
Location: Upper Heyford	Level:		Scale 1:50
Client: Agetur UK	Dates: 21/02/2017 - 21/02/2017		Logged By TR

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					1.10			TOP SOIL / CLAY** GREAT OOLITE GROUP (limestone weathered to a residual soil)	1
								YELLOW SANDSTONE. ROCK HEAD** GREAT OOLITE GROUP (destructured limestone)	2
					2.50			GREY LIMESTONE WITH WEAK DARK GREY CLAY FORMATIONS THROUGHOUT** GREAT OOLITE GROUP (distinctly weathered limestone)	3
									4
									5
									6
									7
									8
									9
					10.00			End of borehole at 10.00 m	10

Remarks
 METHOD: Machine operated breaker and manually excavated pit to 1.20m, rotary drilling with air flush thereafter;
 CONTAMINATION: No visual or olfactory evidence of contamination; GROUNDWATER: Noted from approximately 2.0m;
 NOTES: ** Denotes drillers description





Borehole Log

Borehole No.

BH 03

Sheet 1 of 1

Project Name: Upper Heyford Remediation	Project No. 173042	Co-ords: -	Hole Type RO
Location: Upper Heyford		Level:	Scale 1:50
Client: Agetur UK		Dates: 21/02/2017 - 21/02/2017	Logged By TR

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
							TOP SOIL. CLAY** GREAT OOLITE GROUP (limestone weathered to a residual soil)		
					1.00		YELLOW SANDSTONE. ROCK HEAD** GREAT OOLITE GROUP (destructured limestone)	1	
					2.50		GREY LIMESTONE WITH DARK GREY WEAK CLAY FORMATIONS THROUGHOUT** GREAT OOLITE GROUP (distinctly weathered limestone)	2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
					10.00		End of borehole at 10.00 m	10	

Remarks
 METHOD: Machine operated breaker and manually excavated pit to 1.20m, rotary drilling with air flush thereafter;
 CONTAMINATION: No visual or olfactory evidence of contamination; GROUNDWATER: Noted from approximately 2.0m;
 NOTES: ** Denotes drillers description





Borehole Log

Borehole No.

BH 04

Sheet 1 of 1

Project Name: Upper Heyford Remediation	Project No. 173042	Co-ords: -	Hole Type RO
Location: Upper Heyford	Level:		Scale 1:50
Client: Agetur UK	Dates: 21/02/2017 - 21/02/2017		Logged By TR

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					1.00			TOP SOIL. CLAY** GREAT OOLITE GROUP (limestone weathered to a residual soil)	
									1
								YELLOW SANDSTONE. ROCK HEAD** GREAT OOLITE GROUP (destructured limestone)	
									2
					2.50			GREY LIMESTONE WITH WEAK DARK GREY FORMATIONS THROUGHOUT** GREAT OOLITE GROUP (distinctly weathered limestone)	
									3
									4
									5
									6
									7
									8
									9
					10.00			End of borehole at 10.00 m	10

Remarks
 METHOD: Machine operated breaker and manually excavated pit to 1.20m, rotary drilling with air flush thereafter;
 CONTAMINATION: No visual or olfactory evidence of contamination; GROUNDWATER: Noted from approximately 2.0m;
 NOTES: ** Denotes drillers description





Borehole Log

Borehole No.

BH 05

Sheet 1 of 1

Project Name: Upper Heyford Remediation	Project No. 173042	Co-ords: -	Hole Type RO
Location: Upper Heyford	Level:		Scale 1:50
Client: Agetur UK	Dates: 22/02/2017 - 22/02/2017		Logged By TR

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
							TOP SOIL. CLAY** GREAT OOLITE GROUP (limestone weathered to a residual soil)		
					1.00		YELLOW SANDSTONE. ROCK HEAD** GREAT OOLITE GROUP (destructured limestone)	1	
					2.50		GREY LIMESTONE WITH WEAK DARK GREY CLAY FORMATIONS THROUGHOUT** GREAT OOLITE GROUP (distinctly weathered limestone)	2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
					10.00		End of borehole at 10.00 m	10	

Remarks
 METHOD: Machine operated breaker and manually excavated pit to 1.20m, rotary drilling with air flush thereafter;
 CONTAMINATION: No visual or olfactory evidence of contamination; GROUNDWATER: Noted from approximately 2.0m;
 NOTES: ** Denotes drillers description





Borehole Log

Borehole No.

BH 06

Sheet 1 of 1

Project Name: Upper Heford Remediation

Project No.
173042

Co-ords: -

Hole Type
RO

Location: Upper Heyford

Level:

Scale
1:50

Client: Agetur UK

Dates: 22/02/2017 - 22/02/2017

Logged By
TR

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.40		TOP SOIL. CLAY** GREAT OOLITE GROUP (limestone weathered to a residual soil)		
							YELLOW SANDSTONE. ROCK HEAD. MUCH MORE SHALLOW THAN OREVIOUS BHs** GREAT OOLITE GROUP (destructured limestone)	1	
					2.00		GREY LIMESTONE. VERY INFREQUENT WEAK FORMATIONS. STRONG LIMESTONE MOST OF THE DEPTH** GREAT OOLITE GROUP (distinctly weathered limestone)	2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
					10.00		End of borehole at 10.00 m	10	

Remarks

METHOD: Machine operated breaker and manually excavated pit to 1.20m, rotary drilling with air flush thereafter;
 CONTAMINATION: No visual or olfactory evidence of contamination; GROUNDWATER: Noted from approximately 2.0m;
 NOTES: ** Denotes drillers description



APPENDIX B

Rising head test data

Average of 3 tests

K m/s	1.86E-06
K m/d	0.16

Rising Head Test Data BH02

Logger in at 1553

Logger out at 1626

Test 1		K m/s
Bail in Time	1554	1.70E-06
Test Start Time (Bailer Removed)	1558	K m/d
Starting DTW below casing (m)	1.080	0.15

Test 2		K m/s
Bail Time	1606	2.21E-06
Test Start Time (Bailer Removed)	1607	K m/d
Starting DTW below casing (m)	1.090	0.19

Test 3		K m/s
Bail Time	1616	1.66E-06
Test Start Time (Bailer Removed)	1616	K m/d
Starting DTW below casing (m)	1.090	0.14

Time (sec)	DTW below casing (m)	Drawdown (m)
45	1.360	0.280
60	1.310	0.230
90	1.240	0.160
120	1.200	0.120
150	1.165	0.085
180	1.145	0.065
210	1.130	0.050
240	1.115	0.035
270	1.110	0.030
300	1.105	0.025
330	1.100	0.020
360	1.100	0.020
420	1.095	0.015
480	1.090	0.010

Time (sec)	DTW below casing (m)	Drawdown (m)
30	1.280	0.190
60	1.275	0.185
90	1.230	0.140
120	1.180	0.090
150	1.150	0.060
180	1.130	0.040
210	1.115	0.025
240	1.110	0.020
300	1.100	0.010
360	1.100	0.010
500	1.090	0.000

Time (sec)	DTW below casing (m)	Drawdown (m)
30	1.270	0.180
60	1.270	0.180
90	1.220	0.130
120	1.185	0.095
150	1.155	0.065
180	1.135	0.045
240	1.115	0.025
300	1.115	0.025
360	1.100	0.010
480	1.095	0.005
600	1.090	0.000

Test End 1615

Test End 1626

Test End 1606

BH02 Test 1

TIME (S) H=Drawdown (m) Ln H Ln H Not included

45	0.28	-1.27
60	0.23	-1.47
90	0.16	-1.83
120	0.12	-2.12
150	0.09	-2.47
180	0.06	-2.73
210	0.05	-3.00
240	0.03	-3.35
270	0.03	-3.51
300	0.02	
330	0.02	
360	0.02	
420	0.01	
480	0.01	

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver		cm water level	average w.l. above diver before slug taken
stat_wl	1.08	mbtc	water level taken before test
base_screen	10	mbtc	
top_screen	2.6	mbtc	
L	7.4	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	1.9635E-03	m ²	depends on water level
D _{EFF}	0.05		
F	11.5651		

-3.69
-3.91
-3.91
-4.20
-4.61

Parameter	Regression	Unit
Gradient	-0.01	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-1.000	m
K_1	1.70E-06	m/s
K_2	0.15	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\{1.1(L/D)\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

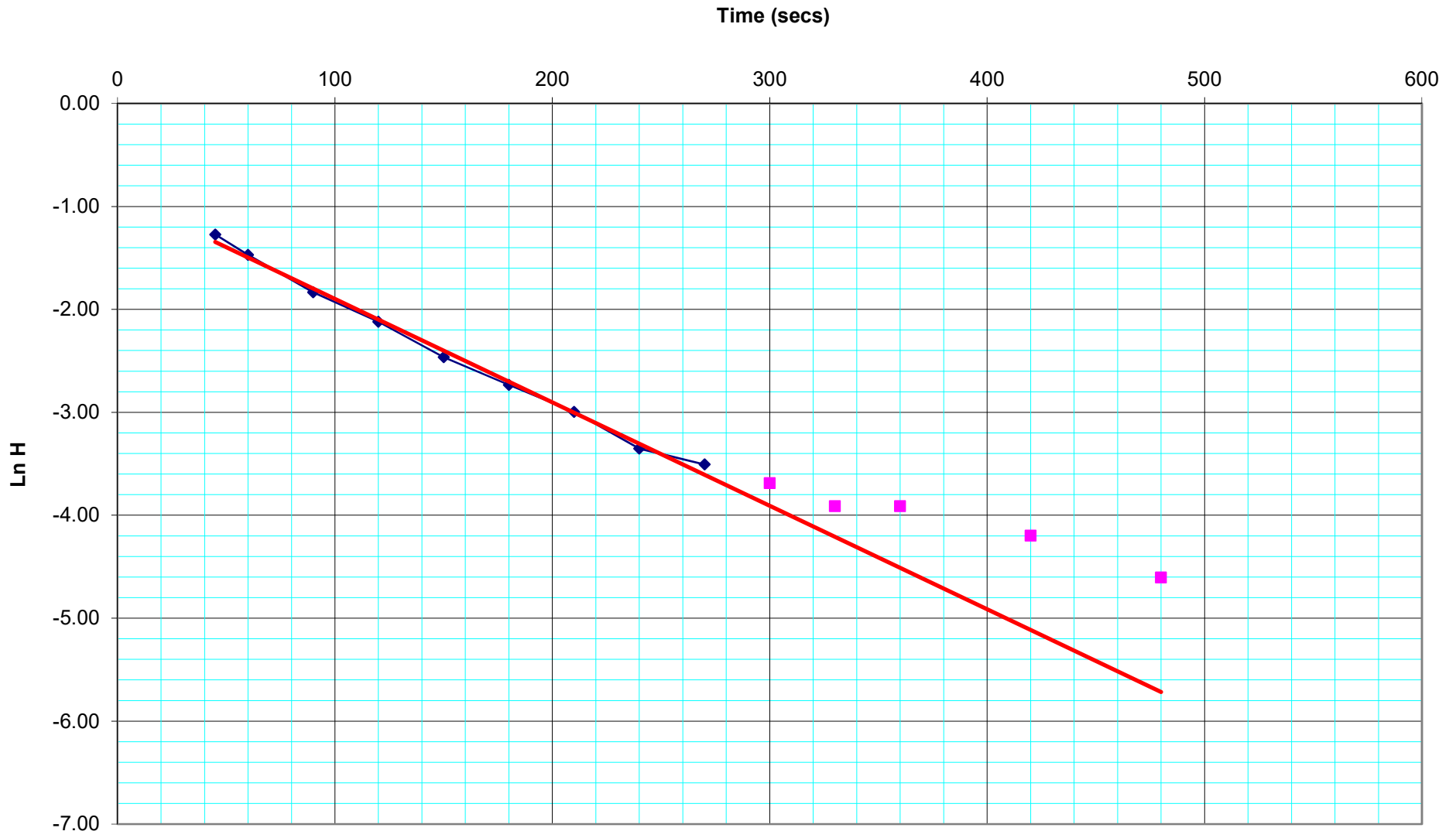
Figure 7 in BS5930 :1999

NOTES

- 1) L is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) D_casing is the "diameter of the screened pipe"
- 3) D_filter is the "diameter of the drilled hole".
- 4) A_casing is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) D_{EFF} is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) F is the formation factor.
- 7) Gradient is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH02: Rising Head Test 1



BH02 Test 2

TIME (S)	H=Drawdown (m)	Ln H	Ln H Not included
30	0.19		
60	0.19	-1.69	
90	0.14	-1.97	
120	0.09	-2.41	
150	0.06	-2.81	
180	0.04	-3.22	
210	0.02	-3.69	
240	0.02	-3.91	
300	0.01		
360	0.01		

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver	-1.66	cm water level	average w.l. above diver before slug taken
stat_wl	1.09	mbtc	water level taken before test
base_screen	10	mbtc	
top_screen	2.6	mbtc	
L	7.4	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	1.9635E-03	m ²	depends on water level
D _{EFF}	0.05		
F	11.5651		

Parameter	Regression	Unit
Gradient	-0.013	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-1.300	m
K_1	2.21E-06	m/s
K_2	0.19	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\{1.1(L/D)\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

Figure 7 in BS5930 :1999

NOTES

- 1) **L** is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) **D_casing** is the "diameter of the screened pipe"
- 3) **D_filter** is the "diameter of the drilled hole".
- 4) **A_casing** is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) **D_{EFF}** is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) **F** is the formation factor.
- 7) **Gradient** is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH02: Rising Head Test 2

$$y = -0.013x - 0.8617$$
$$R^2 = 0.9951$$



BH02 Test 3

TIME (S)	H=Drawdown (m)	Ln H	Ln H Not included
30	0.18		
60	0.18	-1.71	
90	0.13	-2.04	
120	0.10	-2.35	
150	0.06	-2.73	
180	0.04	-3.10	
240	0.02	-3.69	
300	0.02		-3.69
360	0.01	-4.61	
480	0.00		-5.30
600	0.00		

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver		cm water level	average w.l. above diver before slug taken
stat_wl	1.09	mbtc	water level taken before test
base_screen	10	mbtc	
top_screen	2.6	mbtc	
L	7.4	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	1.9635E-03	m ²	depends on water level
D _{EFF}	0.05		
F	11.5651		

Parameter	Regression	Unit
Gradient	-0.0098	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-0.980	m
K_1	1.66E-06	m/s
K_2	0.14	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\left\{1.1(L/D)\right\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

Figure 7 in BS5930 :1999

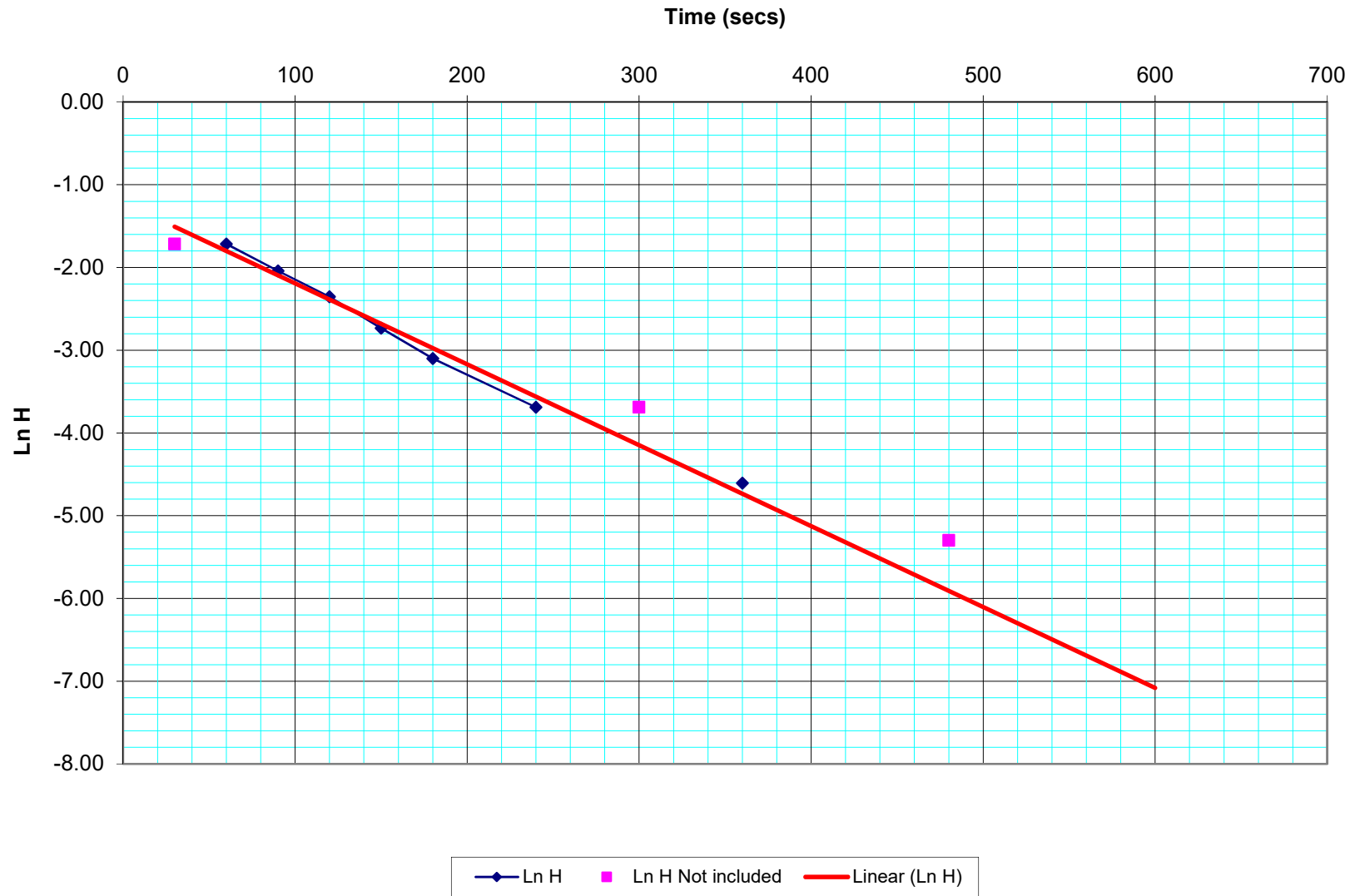
NOTES

- 1) L is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) D_casing is the "diameter of the screened pipe"
- 3) D_filter is the "diameter of the drilled hole".
- 4) A_casing is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) D_{EFF} is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) F is the formation factor.
- 7) Gradient is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH02: Rising Head Test 3

$$y = -0.0098x - 1.2145$$
$$R^2 = 0.9895$$



Rising Head Test Data BH05

Logger in at 1459

Logger out at 1547

K m/s	7.64E-07
Km/d	0.066

Test 1		K m/s
Bail Time	1504	8.83E-07
Test Start Time (Bailer Removed)	1504	Km/d
Starting DTW below casing (m)	1.400	0.076

Test 2		K m/s
Bail Time	1515	7.30E-07
Test Start Time (Bailer Removed)	1515	Km/d
Starting DTW below casing (m)	1.410	0.063

Test 3		K m/s
Bail Time	1531	6.79E-07
Test Start Time (Bailer Removed)	1532	Km/d
Starting DTW below casing (m)	1.410	0.059

Time (sec)	DTW below	Drawdown (m)
30	1.460	0.060
60	1.470	0.070
90	1.440	0.040
120	1.435	0.035
150	1.430	0.030
180	1.425	0.025
240	1.420	0.020
300	1.420	0.020
360	1.415	0.015
420	1.415	0.015
500	1.410	0.010
560	1.410	0.010
620	1.410	0.010

Time (sec)	DTW below	Drawdown (m)
30	1.480	0.070
60	1.465	0.055
90	1.460	0.050
120	1.450	0.040
150	1.440	0.030
180	1.440	0.030
240	1.435	0.025
300	1.430	0.020
360	1.425	0.015
420	1.420	0.010
540	1.415	0.005
660	1.415	0.005
780	1.410	0.000

Time (Sec)	DTW below	Drawdown (m)
30	1.470	0.060
60	1.460	0.050
90	1.450	0.040
120	1.445	0.035
180	1.440	0.030
240	1.430	0.020
360	1.425	0.015
540	1.420	0.010
840	1.415	0.005

Test End Time	1547
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Test End Time	1515
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Test End Time	1529
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BH01/10 Test 1

TIME (S) H=Drawdown (m) Ln H Ln H Not included

30	0.06	-2.81
60	0.07	
90	0.04	-3.22
120	0.04	-3.35
150	0.03	-3.51
180	0.03	-3.69
240	0.02	-3.91
300	0.02	
360	0.02	
420	0.02	
500	0.01	
560	0.01	
620	0.01	

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver		cm water level	average w.l. above diver before slug taken
stat_wl	-2.66		
base_screen	1.4	mbtc	water level taken before test
top_screen	10	mbtc	
L	2.6	mbtc	
L	7.4	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	1.9635E-03	m ²	depends on water level
D _{EFF}	0.05		
F	11.5651		

Parameter	Regression	Unit
Gradient	-0.0052	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-0.520	m
K_1	8.83E-07	m/s
K_2	0.08	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\{1.1(L/D)\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

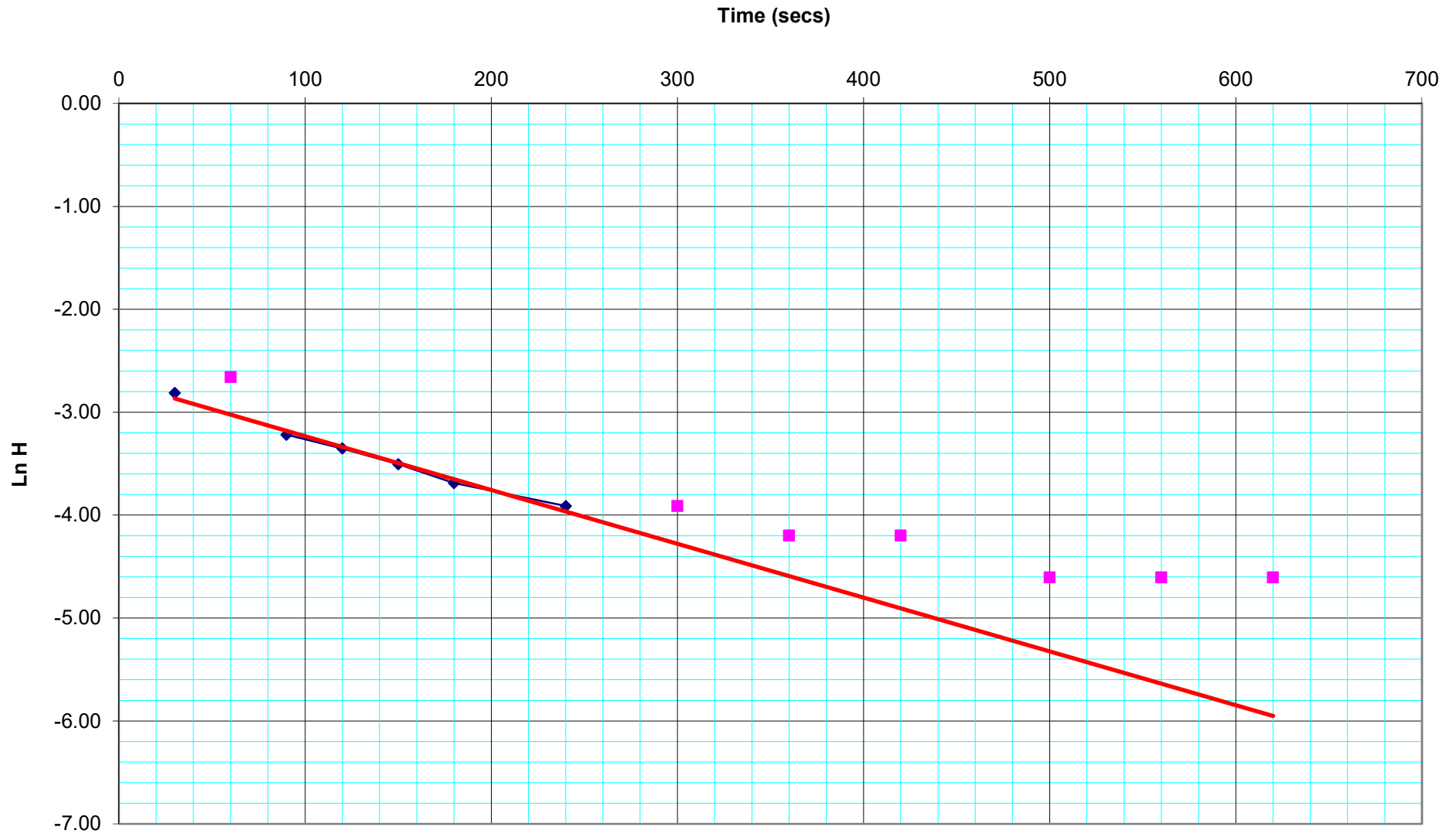
Figure 7 in BS5930 :1999

NOTES

- 1) L is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) D_casing is the "diameter of the screened pipe"
- 3) D_filter is the "diameter of the drilled hole".
- 4) A_casing is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) D_{EFF} is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) F is the formation factor.
- 7) Gradient is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH01/10: Rising Head Test 1



BH01/10 Test 2

TIME (S)	H=Drawdown (m)	Ln H	Ln H Not included
30	0.07	-2.66	
60	0.06	-2.90	
90	0.05	-3.00	
120	0.04	-3.22	
150	0.03		-3.51
180	0.03		-3.51
240	0.03		-3.69
300	0.02		-3.91
360	0.02		-4.20
420	0.01		-4.61
540	0.01		-5.30
660	0.01		-5.30
780	0.00		-5.30

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver		cm water level	average w.l. above diver before slug taken
stat_wl	1.41	mbtc	water level taken before test
base_screen	10	mbtc	
top_screen	2.6	mbtc	
L	7.4	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	1.9635E-03	m ²	depends on water level
D _{EFF}	0.05		
F	11.5651		

Parameter	Regression	Unit
Gradient	-0.0043	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-0.430	m
K_1	7.30E-07	m/s
K_2	0.06	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\{1.1(L/D)\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

Figure 7 in BS5930 :1999

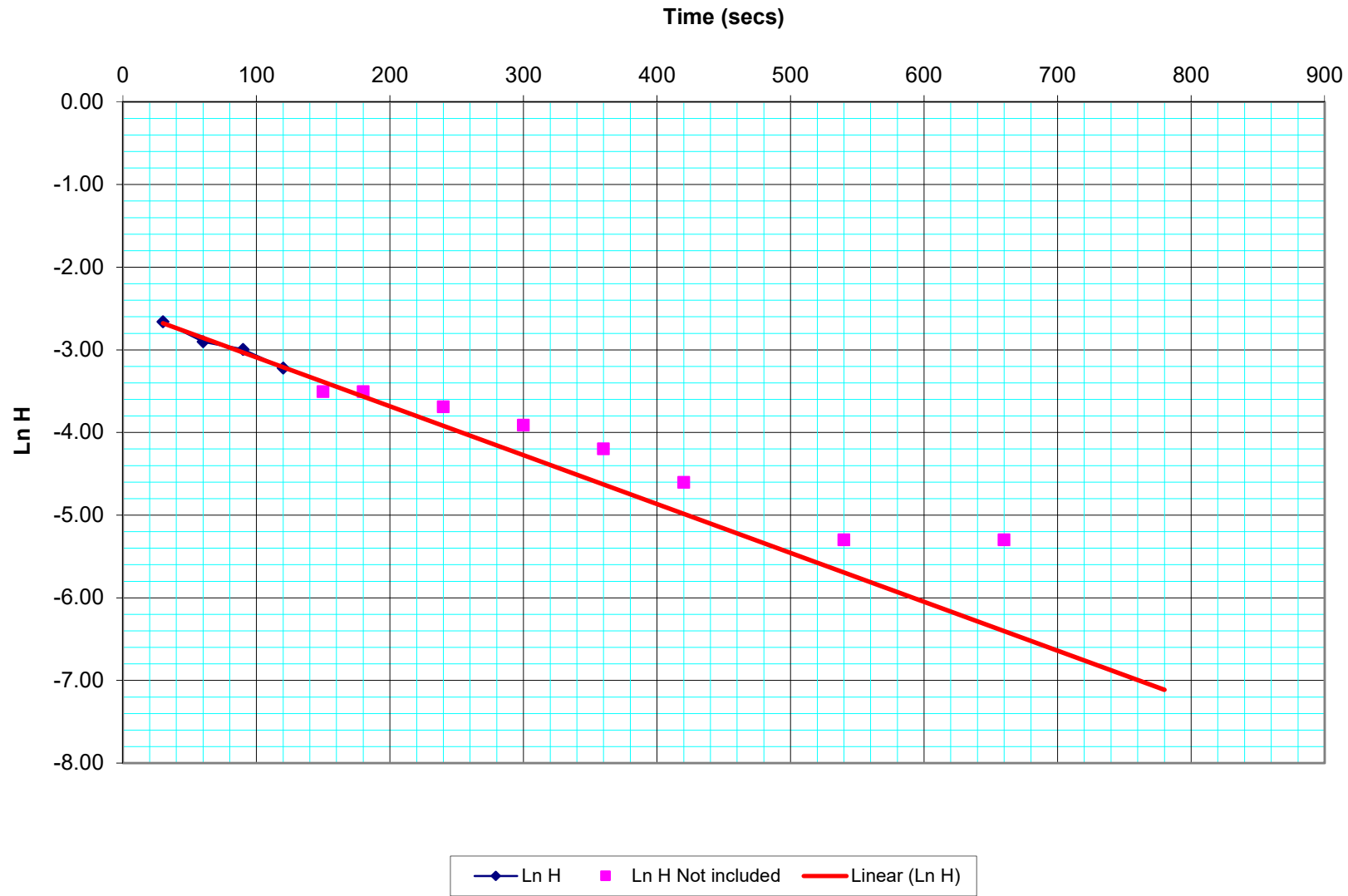
NOTES

- 1) L is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) D_casing is the "diameter of the screened pipe"
- 3) D_filter is the "diameter of the drilled hole".
- 4) A_casing is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) D_{EFF} is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) F is the formation factor.
- 7) Gradient is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH01/10: Rising Head Test 2

$$y = -0.0059x - 2.5$$
$$R^2 = 0.9763$$



BH01/10 Test 2

TIME (S)	H=Drawdown (m)	Ln H	Ln H Not included
30	0.06	-2.81	
60	0.05		
90	0.04	-3.22	
120	0.04	-3.35	
180	0.03	-3.51	
240	0.02		
360	0.02	-4.20	
540	0.01		
840	0.01		

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver		cm water level	average w.l. above diver before slug taken
stat_wl	1.41	mbtc	water level taken before test
base_screen	10	mbtc	
top_screen	2.6	mbtc	
L	7.4	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	1.9635E-03	m ²	depends on water level
D _{EFF}	0.05		
F	11.5651		

Parameter	Regression	Unit
Gradient	-0.004	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-0.400	m
K_1	6.79E-07	m/s
K_2	0.06	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\{1.1(L/D)\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

Figure 7 in BS5930 :1999

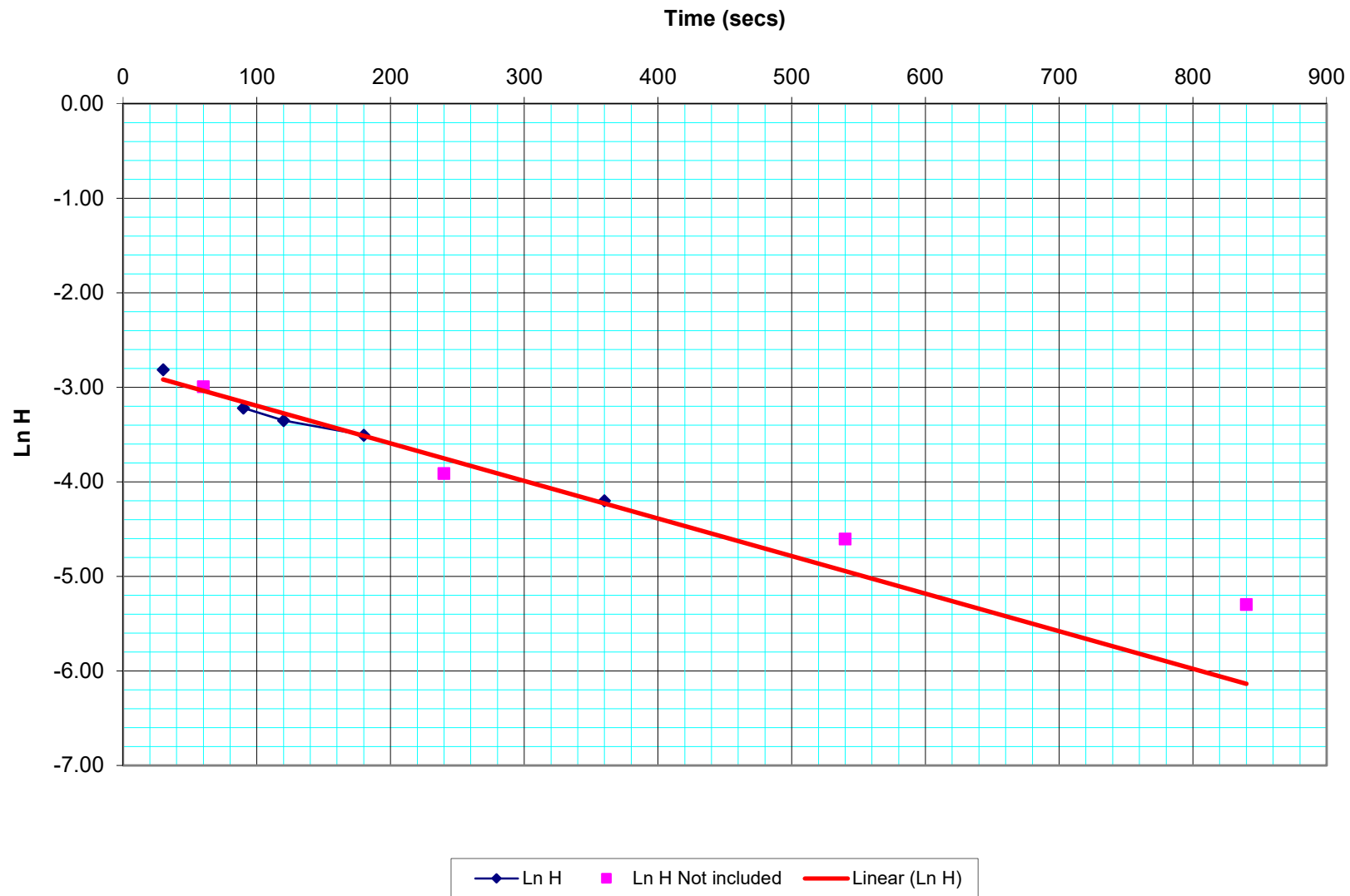
NOTES

- 1) **L** is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) **D_casing** is the "diameter of the screened pipe"
- 3) **D_filter** is the "diameter of the drilled hole".
- 4) **A_casing** is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) **D_{EFF}** is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) **F** is the formation factor.
- 7) **Gradient** is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH01/10: Rising Head Test 2

$$y = -0.004x - 2.7981$$
$$R^2 = 0.9789$$



Rising Head Test Data BH06

Logger in at 1415

Logger out at 1445

K m/s	#####
K m/d	0.57

Test 1		K m/s
Bailer in Time	1417	3.88E-06
Test Start Time (Bailer Removed)	1418	K m/d
Starting DTW below casing (m)	3.04	0.33

Test 2		K m/s
Bailer in Time	1426	7.10E-06
Test Start Time (Bailer Removed)	1428	K m/d
Starting DTW below casing (m)	3.06	0.61

Test 3		K m/s
Bailer in Time	1439	8.73E-06
Test Start Time (Bailer Removed)	1440	K m/d
Starting DTW below casing (m)	3.05	0.75

Time (sec)	DTW below casing (m)	Drawdown (m)
60	3.13	0.09
120	3.1	0.06
180	3.09	0.05
210	3.07	0.03
270	3.07	0.03
300	3.06	0.02
450	3.06	0.02

Test End Time 1426

Time (sec)	DTW below casing (m)	Drawdown (m)
15	3.4	0.34
30	3.3	0.24
60	3.22	0.16
90	3.175	0.115
120	3.14	0.08
150	3.12	0.06
180	3.1	0.04
210	3.095	0.035
240	3.085	0.025
300	3.08	0.02
360	3.07	0.01
420	3.065	0.005
540	3.06	0
660	3.05	-0.01

Test End Time 1439

Time (sec)	DTW below casing (m)	Drawdown (m)
30	3.23	0.18
60	3.175	0.125
90	3.12	0.07
120	3.1	0.05
150	3.085	0.035
180	3.07	0.02
210	3.065	0.015
240	3.06	0.01
270	3.055	0.005
300	3.05	0

Test End Time 1445

BH01/10 Test 1

TIME (S) H=Drawdown (m) Ln H Ln H Not included

60	0.09	-2.41
120	0.06	-2.81
180	0.05	
210	0.03	-3.51
270	0.03	
300	0.02	-3.91
450	0.02	

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver		cm water level	average w.l. above diver before slug taken
stat_wl	3.04	mbtc	water level taken before test
base_screen	10	mbtc	
top_screen	2.6	mbtc	
L	6.96	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	6.6759E-03	m ²	depends on water level
D _{EFF}	0.092195445		
F	11.0223		

Parameter	Regression	Unit
Gradient	-0.0064	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-0.640	m
K_1	3.88E-06	m/s
K_2	0.33	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\{1.1(L/D)\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

Figure 7 in BS5930 :1999

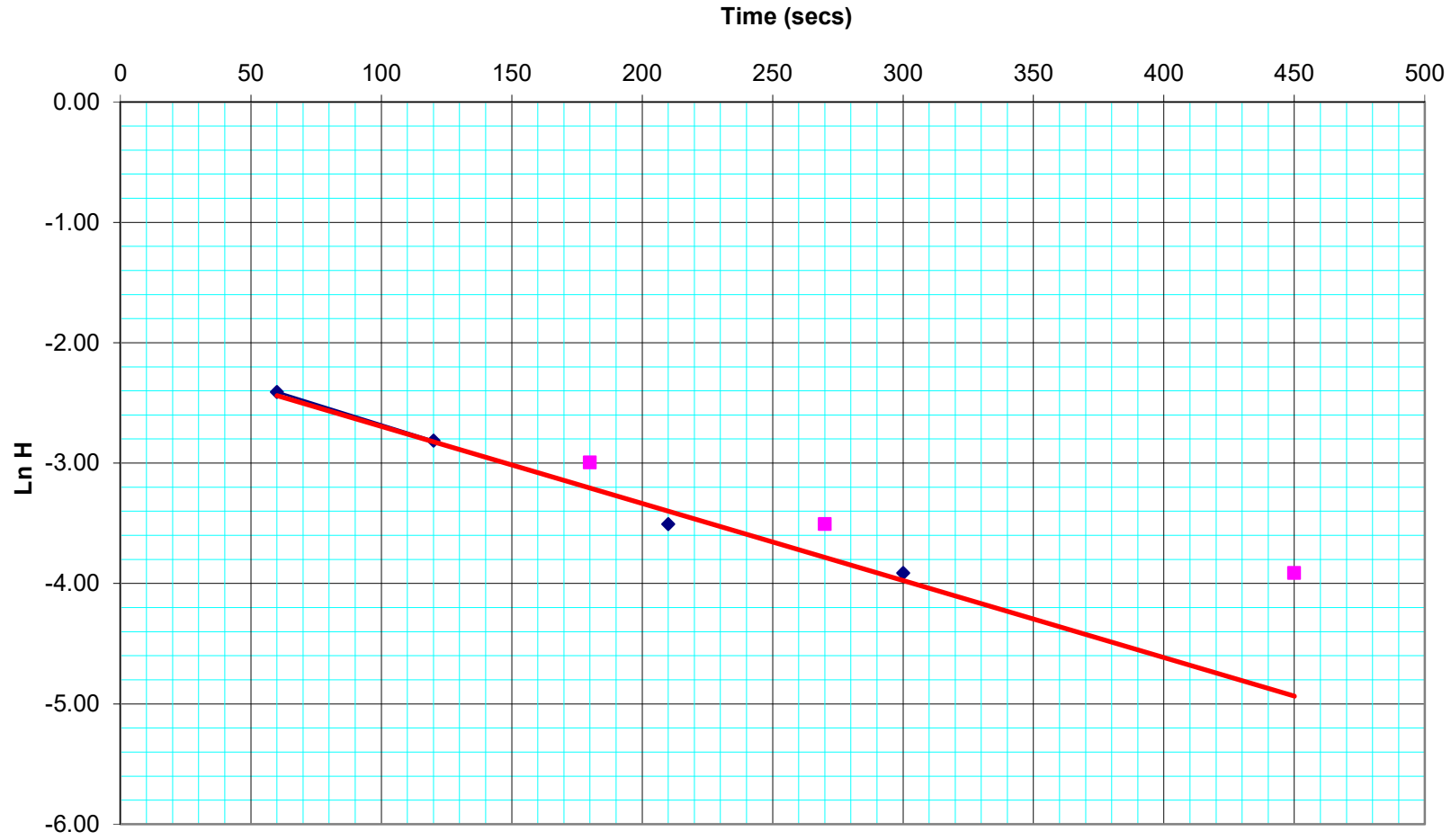
NOTES

- 1) L is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) D_casing is the "diameter of the screened pipe"
- 3) D_filter is the "diameter of the drilled hole".
- 4) A_casing is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) D_{EFF} is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) F is the formation factor.
- 7) Gradient is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH01/10: Rising Head Test 1

$$y = -0.0064x - 2.056$$
$$R^2 = 0.9879$$



◆ Ln H ■ Ln H Not included — Linear (Ln H)

BH01/10 Test 2

TIME (S)	H=Drawdown (m)	Ln H	Ln H Not included
15	0.34		
30	0.24	-1.43	
60	0.16	-1.83	
90	0.12	-2.16	
120	0.08	-2.53	
150	0.06	-2.81	
180	0.04	-3.22	
210	0.04		
240	0.02		
300	0.02		
360	0.01		
420	0.00		
540	0.00		

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver	-1.08	cm water level	average w.l. above diver before slug taken
stat_wl	3.06	mbtc	water level taken before test
base_screen	10	mbtc	
top_screen	2.6	mbtc	
L	6.94	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	6.6759E-03	m ²	depends on water level
D _{EFF}	0.092195445		
F	10.9975		

Parameter	Regression	Unit
Gradient	-0.0117	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-1.170	m
K_1	7.10E-06	m/s
K_2	0.61	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\{1.1(L/D)\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

Figure 7 in BS5930 :1999

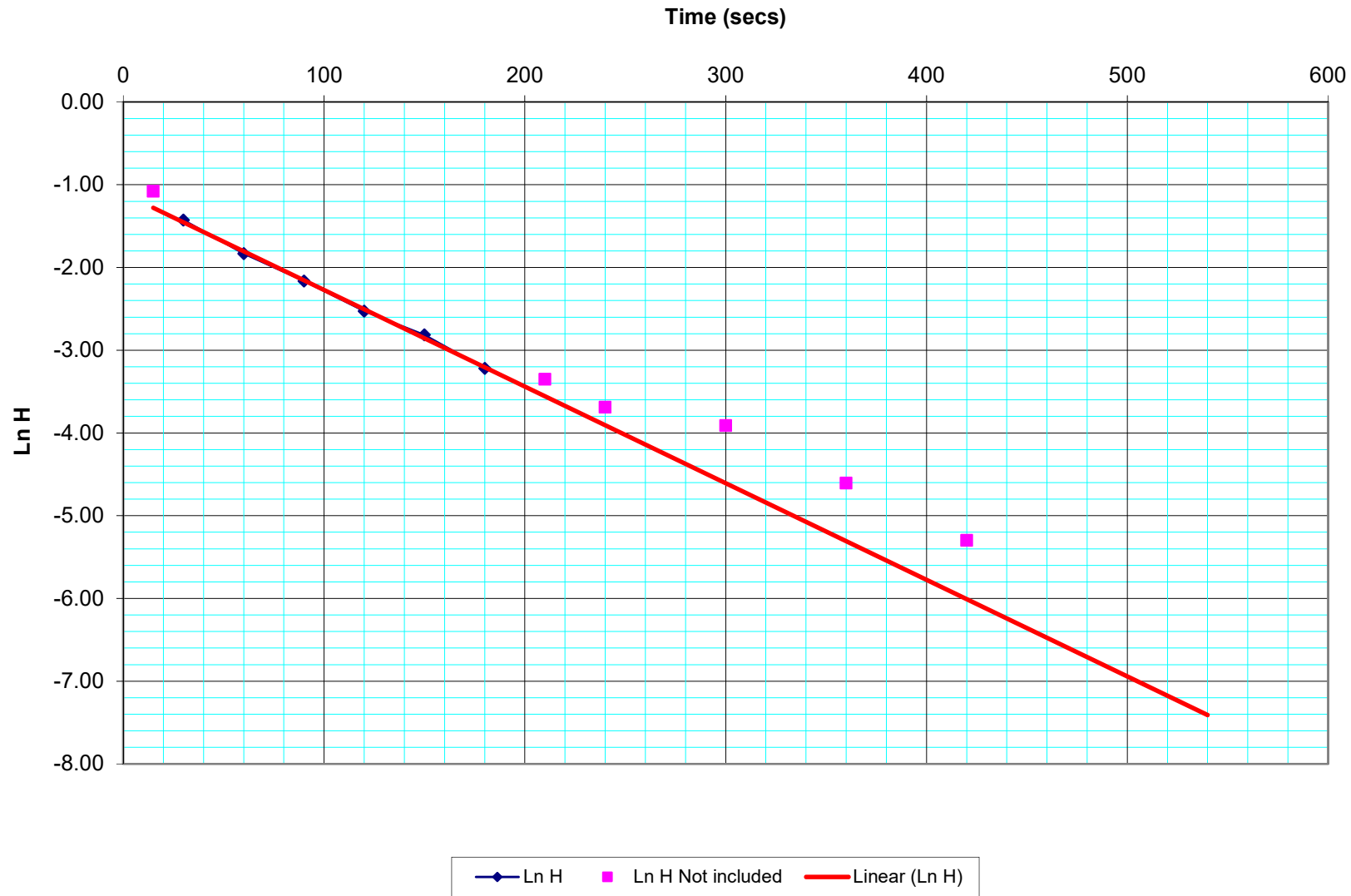
NOTES

- 1) L is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) D_casing is the "diameter of the screened pipe"
- 3) D_filter is the "diameter of the drilled hole".
- 4) A_casing is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) D_{EFF} is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) F is the formation factor.
- 7) Gradient is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH01/10: Rising Head Test 2

$$y = -0.0117x - 1.1037$$
$$R^2 = 0.9982$$



BH01/10 Test 2

TIME (S)	H=Drawdown (m)	Ln H	Ln H Not included
30	0.18	-1.71	
60	0.13	-2.08	
90	0.07	-2.66	
120	0.05	-3.00	
150	0.04	-3.35	
180	0.02	-3.91	
210	0.02	-4.20	
240	0.01	-4.61	
270	0.01	-5.30	

Parameter	Value	Unit	Comment (see NOTES also)
Average stable water level of diver		cm water level	average w.l. above diver before slug taken
stat_wl	3.05	mbtc	water level taken before test
base_screen	10	mbtc	
top_screen	2.6	mbtc	
L	6.95	m	length of response zone
D_casing	0.05	m	diameter of casing
D_filter	0.15	m	diameter of drilled well
Porosity filter	0.3		porosity of gravel pack estimated
A_casing	6.6759E-03	m ²	depends on water level
D _{EFF}	0.092195445		
F	11.0099		

Parameter	Regression	Unit
Gradient	-0.0144	
T1	0	s
T2	100	s
Ln_H1	0.000	m
Ln_H2	-1.440	m
K_1	8.73E-06	m/s
K_2	0.75	m/d

$$F = \frac{2.32\pi(L/D)}{\ln\left(\{1.1(L/D)\} + \sqrt{1 + 1.1(L/D)^2}\right)}$$

Figure 7 in BS5930 :1999

NOTES

- 1) **L** is the "length of the response zone". It is calculated by means of an IF function so you don't have to calculate it every time.
- 2) **D_casing** is the "diameter of the screened pipe"
- 3) **D_filter** is the "diameter of the drilled hole".
- 4) **A_casing** is the "area of the casing" and it depends on where the static water level lies with respect to the top of the screened pipe. It automatically filled by a IF function.
- 5) **D_{EFF}** is a checking value. If all parameters have been correctly inserted then it's values will be near the D_casing value.
- 6) **F** is the formation factor.
- 7) **Gradient** is the slope of the regression taken from the associated chart

NB All cells where your intervention is not necessary have been locked.

BH01/10: Rising Head Test 2

$$y = -0.0144x - 1.2651$$
$$R^2 = 0.9944$$



APPENDIX C

Laboratory certificates



Final Report

Report No.: 16-26771-1

Initial Date of Issue: 08-Nov-2016

Client AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Jack Taylor

Project 163408 Conlon - Trenchard Circle,
Upper Heyford


Quotation No.: **Date Received:** 03-Nov-2016

Order No.: **Date Instructed:** 03-Nov-2016

No. of Samples: 23

Turnaround (Wkdays): 3 **Results Due:** 07-Nov-2016

Date Approved: 08-Nov-2016

Approved By:


Details: Keith Jones, Technical Manager

Project: 163408 Conlon - Trenchard Circle, Upper Heyford

		Chemtest Job No.:		16-26771		16-26771		16-26771		16-26771		16-26771		16-26771		16-26771		
Client: AA Environmental Ltd		Chemtest Sample ID.:		373987		373989		373990		373992		373994		373995		373996		
Quotation No.:		Client Sample ID.:		TP01		TP02		TP02		TP03		TP04		TP04		TP05		
		Sample Type:		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
		Top Depth (m):		0.20		0.20		1.80		0.30		0.25		1.80		0.30		
		Bottom Depth (m):																
		Date Sampled:		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		
		Asbestos Lab:		COVENTRY		COVENTRY		COVENTRY		COVENTRY		COVENTRY		COVENTRY		COVENTRY		
		Asbestos LOD																
Determinand	Accred.	SOP	Units	LOD	No Asbestos Detected		No Asbestos Detected		No Asbestos Detected		No Asbestos Detected		No Asbestos Detected		No Asbestos Detected		No Asbestos Detected	
ACM Type	U	2192		N/A														
Asbestos Identification	U	2192	%	0.001														
Moisture	N	2030	%	0.020	16		11		10		11		14		10		12	
pH	U	2010		N/A	8.2		8.5		8.5		8.2		8.8		8.7		8.3	
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	0.64		< 0.40		0.51		< 0.40		< 0.40		< 0.40		0.74	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	< 0.010		0.15		0.019		0.29		< 0.010		< 0.010		0.38	
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50		< 0.50		1.6		< 0.50		< 0.50		< 0.50		< 0.50	
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.50	1.6		1.2		2.1		1.1		1.5		1.1		1.1	
Arsenic	U	2450	mg/kg	1.0	21		15		24		25		18		25		28	
Cadmium	U	2450	mg/kg	0.10	0.25		< 0.10		0.22		0.21		< 0.10		0.10		0.25	
Chromium	U	2450	mg/kg	1.0	36		5.0		25		23		4.5		13		25	
Copper	U	2450	mg/kg	0.50	7.2		2.3		8.0		7.7		1.3		5.2		8.8	
Mercury	U	2450	mg/kg	0.10	< 0.10		< 0.10		< 0.10		0.19		< 0.10		< 0.10		< 0.10	
Nickel	U	2450	mg/kg	0.50	22		6.1		17		17		4.3		12		20	
Lead	U	2450	mg/kg	0.50	26		3.4		23		24		2.3		14		18	
Selenium	U	2450	mg/kg	0.20	0.68		< 0.20		< 0.20		< 0.20		< 0.20		< 0.20		< 0.20	
Vanadium	U	2450	mg/kg	5.0	63		7.5		47		42		12		30		56	
Zinc	U	2450	mg/kg	0.50	41		5.0		38		54		8.4		19		45	
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50		< 0.50		< 0.50		< 0.50		< 0.50		< 0.50		< 0.50	
Total Organic Carbon	U	2625	%	0.20	1.1		0.94		1.9		3.7		5.1		1.4		2.4	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0		< 5.0		< 5.0		< 5.0		< 5.0		< 5.0		< 5.0	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	
Aromatic TPH >C21-C35	N	2680	mg/kg	1.0	< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0		< 1.0	

Results - Soil

Project: 163408 Conlon - Trenchard Circle, Upper Heyford

		Chemtest Job No.:		16-26771		16-26771		16-26771		16-26771		16-26771		16-26771	
Client: AA Environmental Ltd		Chemtest Sample ID.:		373987		373989		373990		373992		373994		373996	
Quotation No.:		Client Sample ID.:		TP01		TP02		TP02		TP03		TP04		TP05	
		Sample Type:		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
		Top Depth (m):		0.20		0.20		1.80		0.30		0.25		0.30	
		Bottom Depth (m):										1.80		0.20	
		Date Sampled:		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016	
		Asbestos Lab:		COVENTRY		COVENTRY		COVENTRY		COVENTRY		COVENTRY		COVENTRY	
		LOD													
Determinand	Accred.	SOP	Units	LOD											
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

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		Chemtest Job No.:		16-26771		16-26771		16-26771		16-26771		16-26771		16-26771		16-26771		
Client: AA Environmental Ltd		Chemtest Sample ID.:		374001		374002		374003		374004		374005		374006		374007		
Quotation No.:		Client Sample ID.:		TP07		TP08		TP09		TP10		TP11		TP12		TP13		
		Sample Type:		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
		Top Depth (m):		1.40		2.00		1.10		0.60		1.80		1.00		1.00		
		Bottom Depth (m):																
		Date Sampled:		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		01-Nov-2016		
		Asbestos Lab:		COVENTRY														
Determinand	Accred.	SOP	Units	LOD														
ACM Type	U	2192		N/A														
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected													
Moisture	N	2030	%	0.020	8.5	15	11	11	14	12	11	14	11	11	12	14	11	12
pH	U	2010		N/A	8.7													
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40													
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	< 0.010													
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50													
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.50	0.96													
Arsenic	U	2450	mg/kg	1.0	14													
Cadmium	U	2450	mg/kg	0.10	< 0.10													
Chromium	U	2450	mg/kg	1.0	3.3													
Copper	U	2450	mg/kg	0.50	1.2													
Mercury	U	2450	mg/kg	0.10	< 0.10													
Nickel	U	2450	mg/kg	0.50	4.7													
Lead	U	2450	mg/kg	0.50	1.9													
Selenium	U	2450	mg/kg	0.20	< 0.20													
Vanadium	U	2450	mg/kg	5.0	6.6													
Zinc	U	2450	mg/kg	0.50	3.3													
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50													
Total Organic Carbon	U	2625	%	0.20	5.0													
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	17	75	75	4.3	13	4.3	2.4	34	35	49	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	98	570	2400	260	68	2.4	34	35	49	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	530	480	77	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	1200	5600	730	120	730	120	120	120	120	120	120	120	120
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	12	180	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	140	1300	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	120	760	82	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	N	2680	mg/kg	1.0	< 1.0	34	97	34	4.5	34	4.5	34	4.5	34	4.5	34	4.5	34

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		Chemtest Job No.:	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771
		Chemtest Sample ID.:	374001	374002	374003	374004	374005	374006	374007	374008	374009	374009	374009
		Client Sample ID.:	TP07	TP08	TP09	TP10	TP11	TP12	TP13	TP14	TP15	TP15	TP15
		Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):	1.40	2.00	1.10	0.60	1.80	1.00	1.00	1.00	1.00	1.00	1.00
		Bottom Depth (m):											
		Date Sampled:	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016
		Asbestos Lab:	COVENTRY										
Determinand	Accred.	SOP	Units	LOD									
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	310	2300	7900	2300	7900	2300	7900
Total Petroleum Hydrocarbons	N	2680	mg/kg	10	< 10	< 10	1500	7900	7900	7900	7900	7900	7900
Naphthalene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Acenaphthylene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Acenaphthene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Fluorene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Phenanthrene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Benzo[a]anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Chrysene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Benzo[a]pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	< 0.10	< 0.10							
Total Of 16 PAH's	U	2700	mg/kg	2.0	< 2.0	< 2.0							
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30							

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		Chemtest Job No.:	16-26771	16-26771	16-26771	16-26771	16-26771
Client: AA Environmental Ltd		Chemtest Sample ID.:	374010	374011	374012	374013	374013
Quotation No.:		Client Sample ID.:	TP16	TP17	TP18	TP18	TP18
		Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):	1.80	1.50	0	0.90	0.90
		Bottom Depth (m):			0.10		
		Date Sampled:	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016
		Asbestos Lab:					
Determinand	Accred.	SOP	Units	LOD			
ACM Type	U	2192		N/A			
Asbestos Identification	U	2192	%	0.001			
Moisture	N	2030	%	0.020	10	9.4	9.7
pH	U	2010		N/A			
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40			
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010			
Cyanide (Total)	U	2300	mg/kg	0.50			
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.50			
Arsenic	U	2450	mg/kg	1.0			
Cadmium	U	2450	mg/kg	0.10			
Chromium	U	2450	mg/kg	1.0			
Copper	U	2450	mg/kg	0.50			
Mercury	U	2450	mg/kg	0.10			
Nickel	U	2450	mg/kg	0.50			
Lead	U	2450	mg/kg	0.50			
Selenium	U	2450	mg/kg	0.20			
Vanadium	U	2450	mg/kg	5.0			
Zinc	U	2450	mg/kg	0.50			
Chromium (Hexavalent)	N	2490	mg/kg	0.50			
Total Organic Carbon	U	2625	%	0.20			
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	35
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	98
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	360
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	260
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	110
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	110000
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	77
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	27
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	15000
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	11000
Aromatic TPH >C21-C35	N	2680	mg/kg	1.0	< 1.0	< 1.0	3700
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Client: AA Environmental Ltd		Chemtest Job No.:	16-26771	16-26771	16-26771	16-26771
Quotation No.:		Chemtest Sample ID.:	374010	374011	374012	374013
		Client Sample ID.:	TP16	TP17	TP18	TP18
		Sample Type:	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):	1.80	1.50	0	0.90
		Bottom Depth (m):			0.10	
		Date Sampled:	01-Nov-2016	01-Nov-2016	01-Nov-2016	01-Nov-2016
		Asbestos Lab:				
Determinand	Accred.	SOP	Units	LOD		
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	250
Total Petroleum Hydrocarbons	N	2680	mg/kg	10	< 10	140000
Naphthalene	U	2700	mg/kg	0.10		
Acenaphthylene	U	2700	mg/kg	0.10		
Acenaphthene	U	2700	mg/kg	0.10		
Fluorene	U	2700	mg/kg	0.10		
Phenanthrene	U	2700	mg/kg	0.10		
Anthracene	U	2700	mg/kg	0.10		
Fluoranthene	U	2700	mg/kg	0.10		
Pyrene	U	2700	mg/kg	0.10		
Benzo[a]anthracene	U	2700	mg/kg	0.10		
Chrysene	U	2700	mg/kg	0.10		
Benzo[b]fluoranthene	U	2700	mg/kg	0.10		
Benzo[k]fluoranthene	U	2700	mg/kg	0.10		
Benzo[a]pyrene	U	2700	mg/kg	0.10		
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10		
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10		
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10		
Total Of 16 PAH's	U	2700	mg/kg	2.0		
Total Phenols	U	2920	mg/kg	0.30		

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Determinand	Accred.	SOP	Units	LOD	Chemtest Job No.:	16-26771
pH	U	1010		N/A	Chemtest Sample ID.:	373991
Sulphate	U	1220	mg/l	1.0	Client Sample ID.:	TP02
Cyanide (Total)	U	1300	mg/l	0.050	Sample Type:	WATER
Magnesium	U	1415	mg/l	0.50	Top Depth (m):	2.00
Arsenic (Dissolved)	U	1450	µg/l	1.0	Date Sampled:	01-Nov-2016
Boron (Dissolved)	U	1450	µg/l	20		
Cadmium (Dissolved)	U	1450	µg/l	0.080		
Copper (Dissolved)	U	1450	µg/l	1.0		
Mercury (Dissolved)	U	1450	µg/l	0.50		
Nickel (Dissolved)	U	1450	µg/l	1.0		
Lead (Dissolved)	U	1450	µg/l	1.0		
Selenium (Dissolved)	U	1450	µg/l	1.0		
Vanadium (Dissolved)	U	1450	µg/l	1.0		
Zinc (Dissolved)	U	1450	µg/l	1.0		
Chromium (Total)	U	1450	µg/l	1.0		
Chromium (Hexavalent)	U	1490	µg/l	20		
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10		
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10		
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10		
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10		
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10		
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10		
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10		
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10		
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0		
Aromatic TPH >C5-C7	N	1675	µg/l	0.10		
Aromatic TPH >C7-C8	N	1675	µg/l	0.10		
Aromatic TPH >C8-C10	N	1675	µg/l	0.10		
Aromatic TPH >C10-C12	N	1675	µg/l	0.10		
Aromatic TPH >C12-C16	N	1675	µg/l	0.10		
Aromatic TPH >C16-C21	N	1675	µg/l	0.10		
Aromatic TPH >C21-C35	N	1675	µg/l	0.10		
Aromatic TPH >C35-C44	N	1675	µg/l	0.10		
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0		
Total Petroleum Hydrocarbons	N	1675	µg/l	10		
Naphthalene	U	1700	µg/l	0.10		
Acenaphthylene	U	1700	µg/l	0.10		
Acenaphthene	U	1700	µg/l	0.10		
Fluorene	U	1700	µg/l	0.10		

Project: 163408 Conlon - Trenchard Circle, Upper Heyford

Client: AA Environmental Ltd	Chemtest Job No.: 16-26771			
Quotation No.:	Chemtest Sample ID.: 373991			
	Client Sample ID.: TP02			
	Sample Type: WATER			
	Top Depth (m): 2.00			
	Date Sampled: 01-Nov-2016			
Determinand	Accred.	SOP	Units	LOD
Phenanthrene	U	1700	µg/l	0.10
Anthracene	U	1700	µg/l	0.10
Fluoranthene	U	1700	µg/l	0.10
Pyrene	U	1700	µg/l	0.10
Benzo[a]anthracene	U	1700	µg/l	0.10
Chrysene	U	1700	µg/l	0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10
Benzo[a]pyrene	U	1700	µg/l	0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10
Total Of 16 PAH's	U	1700	µg/l	2.0
Benzene	U	1760	µg/l	1.0
Toluene	U	1760	µg/l	1.0
Ethylbenzene	U	1760	µg/l	1.0
m & p-Xylene	U	1760	µg/l	1.0
o-Xylene	U	1760	µg/l	1.0
Total Phenols	U	1920	mg/l	0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44 Aromatics: >C5-C7, >C7-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44	Pentane extraction / GCxGC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

SOP	Title	Parameters included	Method summary
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44 Aromatics: >C5-C7, >C7-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and Trimethylphenols Note: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

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- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 16-26968-1

Initial Date of Issue: 08-Nov-2016

Client AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
Mark Anderson
Matthew Lawman
Penny Hearn
Richard Heath
Sam Muir

Project 163408 Conlon - Trenchard Circle,
Upper Heyford

Quotation No.:

Order No.:

No. of Samples: 3

Turnaround (Wkdays): 3

Date Approved: 08-Nov-2016

Date Received: 04-Nov-2016

Date Instructed: 04-Nov-2016

Results Due: 08-Nov-2016

Approved By:



Details: Keith Jones, Technical Manager

Project: 163408 Conlon - Trenchard Circle, Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		16-26968	
Quotation No.:		Chemtest Sample ID.:		374543	
		Client Sample ID.:		TP29	
		Sample Type:		SOIL	
		Top Depth (m):		1.30	
		Date Sampled:		03-Nov-2016	
		03-Nov-2016			
Determinand	Accred.	SOP	Units	LOD	
Moisture	N	2030	%	0.020	7.4
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	81
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	920
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	4800
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	3800
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	470
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	10000
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	71
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	430
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	940
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	360
Aromatic TPH >C21-C35	N	2680	mg/kg	1.0	30
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	1800
Total Petroleum Hydrocarbons	N	2680	mg/kg	10	12000

Project: 163408 Conlon - Trenchard Circle, Upper Heyford

Client: AA Environmental Ltd	Chemtest Job No.: 16-26968			
Quotation No.:	Chemtest Sample ID.: 374536			
	Client Sample ID.: TP21			
	Sample Type: WATER			
	Top Depth (m): 0.80			
	Date Sampled: 03-Nov-2016			
Determinand	Accred.	SOP	Units	LOD
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10

SOP	Title	Parameters included	Method summary
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8- C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44 Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Pentane extraction / GCxGC FID detection
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44 Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

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Consolidated Soil Results - Residential with Homegrown Produce

Site: Trenchard Circle, Upper Heyford
 Project Reference: 163408
 Client: Conlon
 Strata: **ALL Strata**

Sample Location

Notes:
KEY
 Exceedance of SGV
 Below Limit of Detection

Sample Ref
 Depth (top)
 Depth (bottom)
 Lab Report
 Sample Date
 Originator
 Strata

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	TP01	TP02	TP02	TP03	TP04	TP04	TP05	TP06	TP07	TP07	TP08	TP09	
pH	pH unit	0.1	6 to 9	8.8	10		373987	373989	373990	373992	373994	373995	373996	373998	374000	374001	374002	374003	
Boron (Hot Water Soluble)	mg/kg	0.4	290	1.1	10		0.20	0.20	1.80	0.30	0.25	1.80	0.30	0.20	0.20	1.40	2.00	1.10	
Cyanide (Total)	mg/kg	0.5	20	1.6	10														
Sulphide (Easily Liberatable)	mg/kg	0.5		9.8	10														
Arsenic	mg/kg	1	37	30	10		16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	
Cadmium	mg/kg	0.1	11	0.25	10		1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	
Chromium	mg/kg	1	910	36	10		AAE	AAE	AAE	AAE	AAE	AAE	AAE	AAE	AAE	AAE	AAE	AAE	
Copper	mg/kg	0.5	2400	9	10														
Mercury	mg/kg	0.1	1.2	0.19	10														
Nickel	mg/kg	0.5	180	22	10														
Lead	mg/kg	0.5	200	60	10														
Selenium	mg/kg	0.2	250	0.68	10														
Vanadium	mg/kg	5	410	63	10														
Zinc	mg/kg	0.5	3700	54	10														
Chromium (Hexavalent)	mg/kg	0.5	6	0.5	10														
Total Organic Carbon	%	0.2	3	5.1	10														
Aliphatic TPH >C5-C6	mg/kg	0.1	42	1	24		1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C6-C8	mg/kg	0.1	100	390	24		1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C8-C10	mg/kg	0.1	27	2100	24		1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C10-C12	mg/kg	1	130	8600	24		3	7	7	7	7	7	7	7	7	7	7	7	98
Aliphatic TPH >C12-C16	mg/kg	1	1100	47000	24		3	7	7	7	7	7	7	7	7	7	7	7	530
Aliphatic TPH >C16-C21	mg/kg	1	65000	34000	24		7	7	7	7	7	7	7	7	7	7	7	7	480
Aliphatic TPH >C21-C35	mg/kg	1	65000	14000	24		7	7	7	7	7	7	7	7	7	7	7	7	77
Aliphatic TPH >C35-C44	mg/kg	1	65000	1	24		7	7	7	7	7	7	7	7	7	7	7	7	7
Total Aliphatic Hydrocarbons	mg/kg	5		1100000	24		5	5	5	5	5	5	5	5	5	5	5	5	1200
Aromatic TPH >C5-C7	mg/kg	0.1	70	1	24		1	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C7-C8	mg/kg	0.1	130	1	24		1	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C8-C10	mg/kg	0.1	34	77	24		2	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C10-C12	mg/kg	1	74	2100	24		3	7	7	7	7	7	7	7	7	7	7	7	12
Aromatic TPH >C12-C16	mg/kg	1	140	15000	24		3	7	7	7	7	7	7	7	7	7	7	7	140
Aromatic TPH >C16-C21	mg/kg	1	260	11000	24		3	7	7	7	7	7	7	7	7	7	7	7	120
Aromatic TPH >C21-C35	mg/kg	1	1100	3700	24		1	7	7	7	7	7	7	7	7	7	7	7	34
Aromatic TPH >C35-C44	mg/kg	1	1100	1	24		7	7	7	7	7	7	7	7	7	7	7	7	7
Total Aromatic Hydrocarbons	mg/kg	5		31000	24		5	5	5	5	5	5	5	5	5	5	5	5	310
TPH C6-C10	mg/kg	1																	
TPH C10-C21	mg/kg	1																	
TPH C21-C40	mg/kg	1																	
Total Petroleum Hydrocarbons	mg/kg	10		140000	24		10	10	10	10	10	10	10	10	10	10	10	10	1500
Naphthalene	mg/kg	0.1	2.3	0.1	10		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



Consolidated Soil Results - Residential with Homegrown Produce

Site: Trenchard Circle, Upper Heyford
 163408
 Conlon
 Strata: **ALL Strata**

Sample Location

TP01	TP02	TP02	TP03	TP04	TP04	TP05	TP06	TP07	TP07	TP08	TP09
373987	373989	373990	373992	373994	373995	373996	373998	374000	374001	374002	374003
0.20	0.20	1.80	0.30	0.25	1.80	0.30	0.20	0.20	1.40	2.00	1.10
16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771
1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16
AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe

Sample Ref
 Depth (top)
 Depth (bottom)
 Lab Report
 Sample Date
 Originator
 Strata

No. Exceedances

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances
Acenaphthylene	mg/kg	0.1	170	0.1	10	0.1
Acenaphthene	mg/kg	0.1	210	0.1	10	0.1
Fluorene	mg/kg	0.1	170	0.1	10	0.1
Phenanthrene	mg/kg	0.1	95	0.1	10	0.1
Anthracene	mg/kg	0.1	2400	0.1	10	0.1
Fluoranthene	mg/kg	0.1	280	0.1	10	0.1
Pyrene	mg/kg	0.1	620	0.1	10	0.1
Benzo[a]anthracene	mg/kg	0.1	7.2	0.1	10	0.1
Chrysene	mg/kg	0.1	15	0.1	10	0.1
Benzo[b]fluoranthene	mg/kg	0.1	2.6	0.1	10	0.1
Benzo[k]fluoranthene	mg/kg	0.1	77	0.1	10	0.1
Benzo[a]pyrene	mg/kg	0.1	2.2	0.1	10	0.1
Indeno[1,2,3-c,d]Pyrene	mg/kg	0.1	27	0.1	10	0.1
Dibenz[a,h]Anthracene	mg/kg	0.1	0.24	0.1	10	0.1
Benzo[g,h,i]perylene	mg/kg	0.1	320	0.1	10	0.1
Total Of 16 PAH's	mg/kg	2		2	10	2
Total Phenols	mg/kg	0.3	280	0.3	10	0.3
Asbestos	Type	If present	Detected			
Asbestos % (if present)	%	0.001				
Benzene	mg/kg	0.1	0.087			
Toluene	mg/kg	0.1	130			
Ethylbenzene	mg/kg	0.1	47			
m-Xylene	mg/kg	0.1	59			
p-Xylene	mg/kg	0.1	56			
O-Xylene	mg/kg	0.1	60			

Exceedance of SGV
 Below Limit of Detection



Consolidated Soil Results - Residential with Homegrown Produce

Site: Trenchard Circle, Upper Heyford
 Project Reference: 163408
 Client: Conlon
 Strata: ALL Strata

Sample Location

TP10	TP11	TP12	TP13	TP14	TP15	TP16	TP17	TP18	TP18	TP29	TP37
374004	374005	374006	374007	374008	374009	374010	374011	374012	374013	374543	374547
0.60	1.80	1.00	1.00	1.00	1.00	1.80	1.50	0	0.90	1.30	0.60
								0.10			
16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26968	16-26968
1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	3/11/16	3/11/16
AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe

Sample Ref Depth (top)
 Depth (bottom)
 Lab Report
 Sample Date
 Originator
 Strata

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances
pH	pH unit	0.1	6 to 9	8.8	10	
Boron (Hot Water Soluble)	mg/kg	0.4	290	1.1	10	
Cyanide (Total)	mg/kg	0.5	20	1.6	10	
Sulphide (Easily Liberatable)	mg/kg	0.5		9.8	10	
Arsenic	mg/kg	1	37	30	10	
Cadmium	mg/kg	0.1	11	0.25	10	
Chromium	mg/kg	1	910	36	10	
Copper	mg/kg	0.5	2400	9	10	
Mercury	mg/kg	0.1	1.2	0.19	10	
Nickel	mg/kg	0.5	180	22	10	
Lead	mg/kg	0.5	200	60	10	
Selenium	mg/kg	0.2	250	0.68	10	
Vanadium	mg/kg	5	410	63	10	
Zinc	mg/kg	0.5	3700	54	10	
Chromium (Hexavalent)	mg/kg	0.5	6	0.5	10	
Total Organic Carbon	%	0.2	3	5.1	10	3
Aliphatic TPH >C5-C6	mg/kg	0.1	42	1	24	1
Aliphatic TPH >C6-C8	mg/kg	0.1	100	390	24	1
Aliphatic TPH >C8-C10	mg/kg	0.1	27	2100	24	4
Aliphatic TPH >C10-C12	mg/kg	1	130	8600	24	3
Aliphatic TPH >C12-C16	mg/kg	1	1100	47000	24	3
Aliphatic TPH >C16-C21	mg/kg	1	65000	34000	24	2500
Aliphatic TPH >C21-C35	mg/kg	1	65000	14000	24	110
Aliphatic TPH >C35-C44	mg/kg	1	65000	1	24	1
Total Aliphatic Hydrocarbons	mg/kg	5	110000		24	5600
Aromatic TPH >C5-C7	mg/kg	0.1	70	1	24	1
Aromatic TPH >C7-C8	mg/kg	0.1	130	1	24	1
Aromatic TPH >C8-C10	mg/kg	0.1	34	77	24	2
Aromatic TPH >C10-C12	mg/kg	1	74	2100	24	3
Aromatic TPH >C12-C16	mg/kg	1	140	15000	24	3
Aromatic TPH >C16-C21	mg/kg	1	260	11000	24	3
Aromatic TPH >C21-C35	mg/kg	1	1100	3700	24	1
Aromatic TPH >C35-C44	mg/kg	1	1100	1	24	1
Total Aromatic Hydrocarbons	mg/kg	5	31000		24	2300
TPH C6-C10	mg/kg	1				
TPH C10-C21	mg/kg	1				
TPH C21-C40	mg/kg	1				
Total Petroleum Hydrocarbons	mg/kg	10	140000		24	7900
Naphthalene	mg/kg	0.1	2.3	0.1	10	



Consolidated Soil Results - Residential with Homegrown Produce

Site: Trenchard Circle, Upper Heyford
Project Reference: 163408
Client: Conlon
Strata: ALL Strata
Notes:
KEY
Exceedance of SGV
Below Limit of Detection

Sample Location
 163408
Sample Ref
 Depth (top)
 Depth (bottom)
Lab Report
 Sample Date
 Originator
 Strata

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	TP10	TP11	TP12	TP13	TP14	TP15	TP16	TP17	TP18	TP18	TP29	TP37	
Acenaphthylene	mg/kg	0.1	170	0.1	10		374004	374005	374006	374007	374008	374009	374010	374011	374012	374013	374543	374547	
Acenaphthene	mg/kg	0.1	210	0.1	10		0.60	1.80	1.00	1.00	1.00	1.00	1.80	1.50	0	0.90	1.30	0.60	
Fluorene	mg/kg	0.1	170	0.1	10										0.10				
Phenanthrene	mg/kg	0.1	95	0.1	10		16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26771	16-26968	16-26968	
Anthracene	mg/kg	0.1	2400	0.1	10		1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	1/11/16	3/11/16	3/11/16	
Fluoranthene	mg/kg	0.1	280	0.1	10		AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe	AAe
Pyrene	mg/kg	0.1	620	0.1	10														
Benzo[a]anthracene	mg/kg	0.1	7.2	0.1	10														
Chrysene	mg/kg	0.1	15	0.1	10														
Benzo[b]fluoranthene	mg/kg	0.1	2.6	0.1	10														
Benzo[k]fluoranthene	mg/kg	0.1	77	0.1	10														
Benzo[a]pyrene	mg/kg	0.1	2.2	0.1	10														
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	27	0.1	10														
Dibenz(a,h)Anthracene	mg/kg	0.1	0.24	0.1	10														
Benzo[g,h,i]perylene	mg/kg	0.1	320	0.1	10														
Total Of 16 PAH's	mg/kg	2		2	10														
Total Phenols	mg/kg	0.3	280	0.3	10														
Asbestos	Type	If present	Detected					N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T
Asbestos % (if present)	%	0.001																	
Benzene	mg/kg	0.1	0.087																
Toluene	mg/kg	0.1	130																
Ethylbenzene	mg/kg	0.1	47																
m-Xylene	mg/kg	0.1	59																
p-Xylene	mg/kg	0.1	56																
O-Xylene	mg/kg	0.1	60																



Final Report

Report No.: 17-04338-1

Initial Date of Issue: 24-Feb-2017

Client: AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Agetur-Upper Heyford
Remediation

Quotation No.:	Date Received:	22-Feb-2017
Order No.:	Date Instructed:	22-Feb-2017
No. of Samples: 2		
Turnaround (Wkdays): 3	Results Due:	24-Feb-2017
Date Approved: 24-Feb-2017		

Approved By:


Details: Glynn Harvey, Laboratory Manager

Project: 173042 Agetur-Upper Heyford Remediation

Client: AA Environmental Ltd		Chemtest Job No.:		17-04338	17-04338	
Quotation No.:		Chemtest Sample ID.:		415559	415560	
Order No.:		Client Sample Ref.:		NW	NE	
		Client Sample ID.:		WS1	WS2	
		Sample Type:		WATER	WATER	
		Date Sampled:		20-Feb-2017	20-Feb-2017	
Determinand	Accred.	SOP	Units	LOD		
pH	U	1010		N/A	8.1	8.3
Electrical Conductivity	U	1020	µS/cm	1.0	830	530
Total Dissolved Solids	N		mg/l	1.0	500	320
Chloride	U	1220	mg/l	1.0	21	43
Ammoniacal Nitrogen	U	1220	mg/l	0.010	0.16	0.093
Nitrite	U	1220	mg/l	0.020	0.13	0.049
Nitrate	U	1220	mg/l	0.50	5.1	8.9
Sulphate	U	1220	mg/l	1.0	73	140
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	< 0.050	< 0.050
Potassium	U	1415	mg/l	0.50	2.6	5.6
Magnesium	U	1415	mg/l	0.50	2.3	2.8
Sodium	U	1415	mg/l	0.50	19	44
Total Hardness as CaCO3	U	1270	mg/l	15	270	440
Arsenic (Dissolved)	U	1450	µg/l	1.0	1.8	< 1.0
Boron (Dissolved)	U	1450	µg/l	20	690	660
Cadmium (Dissolved)	U	1450	µg/l	0.080	< 0.080	< 0.080
Copper (Dissolved)	U	1450	µg/l	1.0	1.5	< 1.0
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50
Nickel (Dissolved)	U	1450	µg/l	1.0	1.3	1.6
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1.0	1.0	1.2
Vanadium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	6.4	10
Chromium (Total)	U	1450	µg/l	1.0	< 1.0	< 1.0
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	440	620
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	540	1300
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	240	120
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	1200	2100
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	160	190

Project: 173042 Agetur-Upper Heyford Remediation

Client: AA Environmental Ltd		Chemtest Job No.:		17-04338	17-04338	
Quotation No.:		Chemtest Sample ID.:		415559	415560	
Order No.:		Client Sample Ref.:		NW	NE	
		Client Sample ID.:		WS1	WS2	
		Sample Type:		WATER	WATER	
		Date Sampled:		20-Feb-2017	20-Feb-2017	
Determinand	Accred.	SOP	Units	LOD		
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	360	1300
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	190	530
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	710	2000
Total Petroleum Hydrocarbons	N	1675	µg/l	10	1900	4100
Naphthalene	U	1700	µg/l	0.10	< 0.10	< 0.10
Acenaphthylene	U	1700	µg/l	0.10	< 0.10	< 0.10
Acenaphthene	U	1700	µg/l	0.10	< 0.10	< 0.10
Fluorene	U	1700	µg/l	0.10	< 0.10	< 0.10
Phenanthrene	U	1700	µg/l	0.10	< 0.10	< 0.10
Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10
Fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10
Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10
Chrysene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1700	µg/l	2.0	< 2.0	< 2.0
Benzene	U	1760	µg/l	1.0	< 1.0	< 1.0
Toluene	U	1760	µg/l	1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0
o-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1270	Total Hardness of Waters	Total hardness	Calculation applied to calcium and magnesium results, expressed as mg l-1 CaCO ₃ equivalent.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-pphenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8- C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44 Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Pentane extraction / GCxGC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 17-05108-1

Initial Date of Issue: 06-Mar-2017

Client: AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Agetur - Upper Heyford
Remediation

Quotation No.:	Date Received:	02-Mar-2017
Order No.:	Date Instructed:	02-Mar-2017
No. of Samples: 6		
Turnaround (Wkdays): 3	Results Due:	06-Mar-2017
Date Approved: 06-Mar-2017		

Approved By:

Details: Martin Dyer, Laboratory Manager

Project: 173042 Agetur - Upper Heyford Remediation

Client: AA Environmental Ltd	Chemtest Job No.:		17-05108	17-05108	17-05108	17-05108	17-05108	17-05108	17-05108	
Quotation No.:	Chemtest Sample ID.:		419201	419202	419203	419204	419205	419206	419206	
Order No.:	Client Sample Ref.:		R1	R1	R1	R1	R1	R1	R1	
	Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06	BH06	
	Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	Date Sampled:		28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	
Determinand	Accred.	SOP	Units	LOD						
pH	U	1010		N/A	8.1	8.1	8.1	8.2	8.1	8.1
Electrical Conductivity	U	1020	µS/cm	1.0	470	470	530	510	820	540
Total Dissolved Solids	N		mg/l	1.0	280	280	320	310	500	320
Chloride	U	1220	mg/l	1.0	39	37	29	23	33	63
Ammoniacal Nitrogen	U	1220	mg/l	0.010	0.33	0.33	0.45	0.28	0.42	0.37
Nitrite	U	1220	mg/l	0.020	0.063	0.035	0.070	0.24	0.69	0.057
Nitrate	U	1220	mg/l	0.50	< 0.50	< 0.50	1.1	< 0.50	5.5	20
Sulphate	U	1220	mg/l	1.0	89	76	120	110	280	51
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Potassium	U	1415	mg/l	0.50	1.4	2.1	3.2	6.4	6.9	1.5
Magnesium	U	1415	mg/l	0.50	4.4	5.2	6.8	11	14	3.5
Sodium	U	1415	mg/l	0.50	28	26	26	27	64	44
Total Hardness as CaCO3	U	1270	mg/l	15	320	350	390	330	510	380
Arsenic (Dissolved)	U	1450	µg/l	1.0	3.5	1.3	< 1.0	1.0	1.3	< 1.0
Boron (Dissolved)	U	1450	µg/l	20	850	670	420	740	780	720
Cadmium (Dissolved)	U	1450	µg/l	0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080
Copper (Dissolved)	U	1450	µg/l	1.0	9.0	2.8	1.9	< 1.0	1.2	< 1.0
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.55
Nickel (Dissolved)	U	1450	µg/l	1.0	38	12	7.9	6.4	9.5	5.0
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1.0	1.9	1.1	2.4	11	12	1.6
Vanadium (Dissolved)	U	1450	µg/l	1.0	1.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	7.7	4.1	6.4	4.5	11	1.9
Chromium (Total)	U	1450	µg/l	1.0	4.9	2.8	11	4.3	3.7	3.4
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Project: 173042 Agetur - Upper Heyford Remediation

Client: AA Environmental Ltd		Chemtest Job No.:		17-05108	17-05108	17-05108	17-05108	17-05108	17-05108
Quotation No.:		Chemtest Sample ID.:		419201	419202	419203	419204	419205	419206
Order No.:		Client Sample Ref.:		R1	R1	R1	R1	R1	R1
		Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06
		Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
		Date Sampled:		28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017
Determinand	Accred.	SOP	Units	LOD					
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10
Naphthalene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1700	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Benzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1270	Total Hardness of Waters	Total hardness	Calculation applied to calcium and magnesium results, expressed as mg l-1 CaCO ₃ equivalent.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-pphenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8- C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44 Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Pentane extraction / GCxGC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 17-05981-1
Initial Date of Issue: 14-Mar-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir
Sam Muir

Project: 173042 Upper Heyford

Quotation No.: **Date Received:** 10-Mar-2017

Order No.: **Date Instructed:** 10-Mar-2017

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 14-Mar-2017

Date Approved: 14-Mar-2017

Approved By:



Details: Keith Jones, Technical Manager

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-05981	17-05981	17-05981	17-05981	17-05981	17-05981	
Quotation No.:		Chemtest Sample ID.:		423333	423334	423335	423336	423337	423338	
		Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06	
		Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	
		Date Sampled:		09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	
Determinand	Accred.	SOP	Units	LOD						
pH	U	1010		N/A	8.2	8.1	8.1	8.1	8.1	7.5
Electrical Conductivity	U	1020	µS/cm	1.0	620	530	600	460	760	730
Total Dissolved Solids	N		mg/l	1.0	370	320	360	280	460	440
Chloride	U	1220	mg/l	1.0	28	39	31	14	19	57
Ammoniacal Nitrogen	U	1220	mg/l	0.010	0.12	0.18	0.20	0.13	0.16	0.14
Nitrite	U	1220	mg/l	0.020	0.033	0.027	0.022	< 0.020	0.32	0.12
Nitrate	U	1220	mg/l	0.50	2.3	< 0.50	0.80	< 0.50	21	19
Sulphate	U	1220	mg/l	1.0	150	75	120	67	230	52
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Potassium	U	1415	mg/l	0.50	0.88	1.7	1.4	7.8	3.8	1.2
Magnesium	U	1415	mg/l	0.50	3.8	5.1	5.2	16	7.0	2.8
Sodium	U	1415	mg/l	0.50	30	32	31	24	33	50
Total Hardness as CaCO3	U	1270	mg/l	15	380	330	380	440	480	350
Arsenic (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Boron (Dissolved)	U	1450	µg/l	20	640	550	710	620	750	580
Cadmium (Dissolved)	U	1450	µg/l	0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080
Copper (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	1.5	2.6	1.4
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nickel (Dissolved)	U	1450	µg/l	1.0	1.6	1.2	1.9	1.8	2.1	2.2
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1.0	1.0	< 1.0	< 1.0	< 1.0	1.6	< 1.0
Vanadium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	9.7	3.4	5.8	35	19	9.7
Chromium (Total)	U	1450	µg/l	1.0	2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-05981	17-05981	17-05981	17-05981	17-05981	17-05981
Quotation No.:		Chemtest Sample ID.:		423333	423334	423335	423336	423337	423338
		Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06
		Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
		Date Sampled:		09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017
Determinand	Accred.	SOP	Units	LOD					
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10
Naphthalene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1700	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Benzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1270	Total Hardness of Waters	Total hardness	Calculation applied to calcium and magnesium results, expressed as mg l-1 CaCO ₃ equivalent.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-pphenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8- C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44 Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Pentane extraction / GCxGC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk

APPENDIX D

Wellhead parameters

BH1	Time	pH	ORP	Conductiv	DO	Temperature
	30.08313	7.31	45.7	764.7	1.32	8.85
	60.02564	7.29	43.2	761.6	1.3	9.02
	90.02658	7.27	41.1	759.3	1.29	9.16

BH2	Time	pH	ORP	Conductiv	DO	Temperature
	30.102	7.1	50.3	706.5	2.1	8.03
	60.02689	7.08	47.1	711.4	1.11	8.08
	90.02802	7.07	44.1	712.6	0.7	8.23
	120.0256	7.07	41.3	711.2	0.55	8.33
	150.0276	7.06	38.5	711.6	0.5	8.42

BH3	Time	pH	ORP	Conductiv	DO	Temperature
	30.08754	7.23	57.4	794.2	2.56	8.94
	60.02556	7.21	54.1	789	2.34	9.27
	90.02468	7.2	52.1	785	2.23	9.44
	120.027	7.19	50.9	781.6	2.23	9.56


BH4	Time	pH	ORP	Conductiv	DO	Temperature
	30.09393	7.29	65.3	711.9	1.35	9.51
	60.02942	7.29	59.7	712.3	1.25	9.53
	90.02397	7.29	55.3	712.9	1.17	9.54

BH5	Time	pH	ORP	Conductiv	DO	Temperature
	30.10577	7.29	49.7	988.8	5.96	8.85
	60.02574	7.28	45.7	987.8	6.01	8.87
	90.02403	7.27	42.7	986.5	6.13	8.89


BH6	Time	pH	ORP	Conductiv	DO	Temperature
	30.09153	7.26	54.6	846.7	4.73	7.35
	60.02663	7.24	49.8	840.3	4.51	7.7
	90.02637	7.23	46	835	4.37	7.91
	120.0259	7.22	43	832	4.28	8.04
	150.0283	7.21	40.6	829.4	4.23	8.13

Appendix D
Remedial Photo Plates




Comment VE1 excavated down to rock. VS01 taken from eastern boundary.	Project 173042
	Reference Plate 1
	Date 06/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment VE2 excavated down to rock/clay.	Project 173042
	Reference Plate 2
	Date 06/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com



Comment VE3 excavated down to rock/clay.	Project 173042
	Reference Plate 3
	Date 06/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment VE4 before removal of UST, note stained soils that has to be left insitu so as not to undermine site boundary fence (VS06).	Project 173042
	Reference Plate 4
	Date 06/10/17
	Originator Richard Heath
	 <div style="float: right;"> AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com </div>




<p>Comment</p> <p>View of 4500 litre underground storage tank (UST) found in northeast corner of the site (VE4).</p>	<p>Project 173042</p>
	<p>Reference Plate 5</p>
	<p>Date 06/10/17</p>
	<p>Originator Richard Heath</p>
	<p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p>






Comment View of removed UST.	Project 173042
	Reference Plate 6
	Date 06/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of backfill of VE1 to VE3.	Project 173042
	Reference Plate 7
	Date 06/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of VE5 dug to rock.	Project 173042
	Reference Plate 8
	Date 09/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of VE6 being dug to rock.	Project 173042
	Reference Plate 9
	Date 10/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




<p>Comment</p> <p>View of VE7 dug to rock along northern site boundary (location of VS12). Note slight hydrocarbon staining that could not be dug out as it would undermine the site boundary fence.</p>	<p>Project 173042</p>
	<p>Reference Plate 10</p>
	<p>Date 10/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p>AAe Environmental Consultants</p> </div> <div style="text-align: right;"> <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div> </div>




Comment View of Oxygen Release Compound (ORC) application along hydrocarbon stained eastern boundary (VE5, VE1 and VE2).	Project 173042
	Reference Plate 11
	Date 11/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of ORC application along eastern boundary (VE3).	Project 173042
	Reference Plate 12
	Date 10/10/17
	Originator Richard Heath
	 <div style="float: right;"> AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com </div>




Comment View of ORC application in VE5.	Project 173042
	Reference Plate 13
	Date 10/10/17
	Originator Richard Heath
	 <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p>




Comment View of placement of ORC in base of UST hole in northeast site corner (VE4).	Project 173042
	Reference Plate 14
	Date 10/10/17
	Originator Richard Heath
	 <div style="float: right;"> AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com </div>




<p>Comment</p> <p>View of concrete being placed in base of UST excavation.</p>	<p>Project 173042</p>
	<p>Reference Plate 15</p>
	<p>Date 10/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




<p>Comment</p> <p>View of pipework and stained soils in the southeast corner of VE5. Note pipework left in and heading south under the road and offsite.</p>	<p>Project 173042</p>
	<p>Reference Plate 16</p>
	<p>Date 10/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p>Environmental Consultants</p> </div> <div style="text-align: right;"> <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div> </div>




Comment View of VE5 being backfilled.	Project 173042
	Reference Plate 17
	Date 10/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of VE8 being dug to rock.	Project 173042
	Reference Plate 18
	Date 11/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




<p>Comment</p> <p>View of VE6 and VE8 being backfilled.</p>	<p>Project 173042</p>
	<p>Reference Plate 19</p>
	<p>Date 11/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




Comment View of VE9 being excavated to rock note hydrocarbon stained soils being excavated.	Project 173042
	Reference Plate 20
	Date 12/10/17
	Originator Richard Heath
	 <div style="float: right; text-align: right;"> AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com </div>




Comment View of VE9 being backfilled.	Project 173042
	Reference Plate 21
	Date 12/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




<p>Comment</p> <p>View following rolling of northeast corner of the site.</p>	<p>Project 173042</p>
	<p>Reference Plate 22</p>
	<p>Date 12/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




<p>Comment</p> <p>View of VE10 once grossly impacted material has been removed.</p>	<p>Project 173042</p>
	<p>Reference Plate 23</p>
	<p>Date 13/10/16</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




<p>Comment</p> <p>View of VE11 once grossly impacted material has been removed.</p>	<p>Project 173042</p>
	<p>Reference Plate 24</p>
	<p>Date 13/10/16</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




<p>Comment</p> <p>VE12 being excavated, note hydrocarbon stained material being excvated.</p>	<p>Project 173042</p>
	<p>Reference Plate 25</p>
	<p>Date 16/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




<p>Comment</p> <p>VE13 following removal of grossly impacted material.</p>	<p>Project 173042</p>
	<p>Reference Plate 26</p>
	<p>Date 17/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




Comment VE10 to VE13 being backfilled	Project 173042
	Reference Plate 27
	Date 17/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




<p>Comment</p> <p>VE10 to VE13 being rolled.</p>	<p>Project</p> <p>173042</p>
	<p>Reference</p> <p>Plate 28</p>
	<p>Date</p> <p>18/10/17</p>
	<p>Originator</p> <p>Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p> AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com </p> </div>



<p>Comment</p> <p>View of stockpile clean backfill material.</p>	<p>Project 173042</p>
	<p>Reference Plate 29</p>
	<p>Date 11/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




Comment View of off-site stockpile of hydrocarbon impacted soils that have been removed from site.	Project 173042
	Reference Plate 30
	Date 19/10/17
	Originator Richard Heath
	 <div style="float: right;"> AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com </div>




<p>Comment</p> <p>View of VE14 before removal of pipework and taking of VS26 and VS27.</p>	<p>Project 173042</p>
	<p>Reference Plate 31</p>
	<p>Date 17/10/17</p>
	<p>Originator Richard Heath</p>
	<p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p>





Comment View of VE15 once grossly impacted material had been removed.	Project 173042
	Reference Plate 32
	Date 18/10/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




<p>Comment</p> <p>View of VE16 being excavated, note hydrocarbon stained material being removed from excavation.</p>	<p>Project 173042</p>
	<p>Reference Plate 33</p>
	<p>Date 18/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




<p>Comment</p> <p>View of VE17 being backfilled following removal of grossly impacted material.</p>	<p>Project 173042</p>
	<p>Reference Plate 34</p>
	<p>Date 18/10/17</p>
	<p>Originator Richard Heath</p>
	<p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p>





<p>Comment</p> <p>View of VE18 with 4500 litre UST present.</p>	<p>Project 173042</p>
	<p>Reference Plate 35</p>
	<p>Date 19/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div>




<p>Comment</p> <p>View of UST hole pumped of water and being filled with ORC. Note water main on left of the photo (it was turned off on the morning of the works).</p>	<p>Project 173042</p>
	<p>Reference Plate 36</p>
	<p>Date 19/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p>Environmental Consultants</p> </div> <div style="text-align: right;"> <p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p> </div> </div>




<p>Comment</p> <p>View of typical VE19 pipe trench (following removal of pipework).</p>	<p>Project 173042</p>
	<p>Reference Plate 37</p>
	<p>Date 19/10/17</p>
	<p>Originator Richard Heath</p>
	<p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p>





Comment View of VE20 being down to clean rock, note hydrocarbon stained surface of the strata yet to be dug out.	Project 173042
	Reference Plate 38
	Date 20/10/17
	Originator Richard Heath
	 <div style="float: right;"> AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com </div>




<p>Comment</p> <p>View of VE21 following excavation of grossly impacted material.</p>	<p>Project 173042</p>
	<p>Reference Plate 39</p>
	<p>Date 20/10/17</p>
	<p>Originator Richard Heath</p>
	<div style="display: flex; align-items: center;">  <p> AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com </p> </div>




<p>Comment</p> <p>View of VE22 being dug out of grossly impacted material. Note the hydrocarbon staining on the sidewalls of the excavation. This material on the edge northern and eastern of the excavation left insitu failed the remedial criteria and had to be dug out (VS56 and VS57).</p>	<p>Project 173042</p>
	<p>Reference Plate 40</p>
	<p>Date 20/10/17</p>
	<p>Originator Richard Heath</p>
	<p>AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com</p>






Comment View of VS27 validation failure being dug out and re-validated (VS75-79).	Project 173042
	Reference Plate 41
	Date 02/11/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of VS44 validation failure being dug out and re-validated (VS67-71).	Project 173042
	Reference Plate 42
	Date 02/11/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of VTP01.	Project 173042
	Reference Plate 43
	Date 03/11/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of VTP02.	Project 173042
	Reference Plate 44
	Date 03/11/17
	Originator Richard Heath
	 Environmental Consultants

AA Environmental Limited
Units 4-8 Cholswell Court
Shippon, Abingdon
OX13 6HX
T: (01235) 536042
F: (01235) 523849
info@aae-llp.com
www.aae-llp.com




Comment View of VTP03.	Project 173042
	Reference Plate 45
	Date 03/11/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com




Comment View of VTP04.	Project 173042
	Reference Plate 46
	Date 03/11/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com



Comment View of VTP05.	Project 173042
	Reference Plate 47
	Date 03/11/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com



Comment View of VTP06.	Project 173042
	Reference Plate 48
	Date 03/11/17
	Originator Richard Heath
	 AA Environmental Limited Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com

Appendix E
Laboratory Certificates of Analysis



Final Report

Report No.: 17-26682-1
Initial Date of Issue: 13-Oct-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Upper Heyford

Quotation No.:		Date Received:	11-Oct-2017
Order No.:	173042	Date Instructed:	11-Oct-2017
No. of Samples:	7		
Turnaround (Wkdays):	3	Results Due:	13-Oct-2017
Date Approved:	13-Oct-2017		

Approved By:



Details: Robert Monk, Technical Manager

Results - Soil

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:										
Quotation No.:	Chemtest Sample ID.:											
Order No.: 173042	Client Sample Ref.:		Client Sample ID.:		Sample Type:		Top Depth (m):		Bottom Depth (m):		Date Sampled:	
	VE1E		VS01		SOIL		0.80		1.30		06-Oct-2017	
	VE2E		VS02		SOIL		0.80		1.30		06-Oct-2017	
	VE2B		VS03		SOIL		1.50		1.55		06-Oct-2017	
	VE3E		US04		SOIL		1.00		1.50		09-Oct-2017	
	VE3B		US05		SOIL		1.50		1.50		09-Oct-2017	
	VE4E		US06		SOIL		1.00		1.50		09-Oct-2017	
	VE4B		US07		SOIL		2.50				09-Oct-2017	
Determinand	Accred.	SOP	Units	LOD								
Moisture	N	2030	%	0.020	22	21	26	12	15	18	16	
Soil Colour	N	2040		N/A	Brown	Brown	Grey	Grey	Grey	Brown	Grey	
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones	Stones	
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay	Clay	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	27	< 1.0	
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	160	< 1.0	
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	150	< 1.0	
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	7.0	< 1.0	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	350	< 5.0	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	33	< 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	8.4	< 1.0	
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	42	< 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	390	< 10	

SOP	Title	Parameters included	Method summary
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

Report Information

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- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 17-27165-1

Initial Date of Issue: 19-Oct-2017

Client AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project 173042 Upper Heyford

Quotation No.: **Date Received:** 16-Oct-2017

Order No.: 173042 **Date Instructed:** 16-Oct-2017

No. of Samples: 7

Turnaround (Wkdays): 3 **Results Due:** 18-Oct-2017

Date Approved: 19-Oct-2017

Approved By:



Details: Glynn Harvey, Laboratory Manager

Results - Soil

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:										
Quotation No.:	Chemtest Sample ID.:											
Order No.: 173042	Client Sample Ref.:		Units		LOD							
	Client Sample ID.:		N/A		Brown		Grey		Brown		Brown	
	Sample Type:		N/A		Stones		Stones		Stones		Stones	
	Top Depth (m):		N/A		Clay		Clay		Clay		Sand	
	Bottom Depth (m):		N/A		Clay		Clay		Clay		Sand	
	Date Sampled:		N/A		Clay		Clay		Clay		Sand	
	Date Sampled:		N/A		Clay		Clay		Clay		Sand	
Determinand	Accred.	SOP	Units	LOD	17-27165	17-27165	17-27165	17-27165	17-27165	17-27165	17-27165	17-27165
Moisture	N	2030	%	0.020	14	21	13	12	15	11	10	
Soil Colour	N	2040		N/A	Brown	Grey	Brown	Brown	Grey	Brown	Brown	
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones	Stones	
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Sand	Sand	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.2	< 1.0	< 1.0	
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	74	< 1.0	< 1.0	
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	370	< 1.0	< 1.0	
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	270	< 1.0	< 1.0	
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	210	< 1.0	< 1.0	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.3	< 1.0	< 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	930	< 5.0	< 5.0	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.7	< 1.0	< 1.0	
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	80	< 1.0	< 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	130	< 1.0	< 1.0	
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	58	< 1.0	< 1.0	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	270	< 5.0	< 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	1200	< 10	< 10	

SOP	Title	Parameters included	Method summary
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

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- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

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Sample Deviation Codes

- A - Date of sampling not supplied
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- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 17-27434-1

Initial Date of Issue: 20-Oct-2017

Client AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project 173042 Upper Heyford

Quotation No.: **Date Received:** 18-Oct-2017

Order No.: 173042 **Date Instructed:** 18-Oct-2017

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 20-Oct-2017

Date Approved: 20-Oct-2017

Approved By:



Details: Glynn Harvey, Laboratory Manager

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-27434	17-27434	17-27434	17-27434	17-27434	17-27434	
Quotation No.:		Chemtest Sample ID.:		526644	526645	526646	526647	526648	526649	
Order No.: 173042		Client Sample Ref.:		VE9N	VE9B	VE9S	VE10N	VE10B	VE11B	
		Client Sample ID.:		VS15	VS16	VS17	VS18	VS19	VS20	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.7	1.1	0.5	0.9	1.2	1.05	
		Bottom Depth (m):		1.1		1.0	1.2			
		Date Sampled:		13-Oct-2017	13-Oct-2017	13-Oct-2017	13-Oct-2017	13-Oct-2017	16-Oct-2017	
Determinand	Accred.	SOP	Units	LOD						
Moisture	N	2030	%	0.020	16	15	11	16	15	17
Soil Colour	N	2040		N/A	Brown	Green, Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Roots, Stones	Stones	Stones	Stones	NONE	Stones
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	< 10

SOP	Title	Parameters included	Method summary
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

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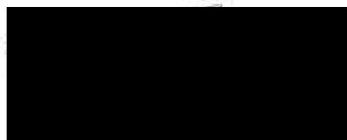
Final Report

Report No.: 17-27633-1
Initial Date of Issue: 24-Oct-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Upper Heyford

Quotation No.:		Date Received:	20-Oct-2017
Order No.:	173042	Date Instructed:	20-Oct-2017
No. of Samples:	11		
Turnaround (Wkdays):	3	Results Due:	24-Oct-2017
Date Approved:	24-Oct-2017		

Approved By:



Details: Glynn Harvey, Laboratory Manager

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:											
Quotation No.:	Chemtest Sample ID.:	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633
Order No.: 173042	Client Sample Ref.:	VE12B	VE11S	VE13 W	VE13 N	VE13 B	VE14 B	VE14 B	VE15 B	B			
	Client Sample ID.:	VS21	VS22	VS23	VS24	VS25	VS26	VS27	VS28	VS29			
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
	Top Depth (m):	1.0	0.7	1.0	1.0	1.3	0.25	0.5	1.3	1.5			
	Bottom Depth (m):		1.0	1.30	1.30								
	Date Sampled:	17-Oct-2017	17-Oct-2017	17-Oct-2017	17-Oct-2017	17-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017
Determinand	Accred.	SOP	Units	LOD									
Moisture	N	2030	%	0.020	13	17	20	14	16	11	13	12	12
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	8.5	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	210	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	420	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	130	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	770	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	3.1	< 1.0	< 1.0	17	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	8.3	< 1.0	< 1.0	12	< 1.0	< 1.0	56	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	14	< 1.0	< 1.0	15	< 1.0	< 1.0	21	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	22	< 5.0	< 5.0	31	< 5.0	< 5.0	94	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	22	< 10	< 10	31	< 10	< 10	860	< 10	< 10

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-27633	17-27633	
Quotation No.:		Chemtest Sample ID.:		527614	527615	
Order No.: 173042		Client Sample Ref.:		VE16 B	VE17 B	
		Client Sample ID.:		VS30	VS31	
		Sample Type:		SOIL	SOIL	
		Top Depth (m):		1.5	1.5	
		Bottom Depth (m):				
		Date Sampled:		18-Oct-2017	19-Oct-2017	
Determinand	Accred.	SOP	Units	LOD		
Moisture	N	2030	%	0.020	14	14
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10

SOP	Title	Parameters included	Method summary
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Amended Report

Report No.: 17-27867-2

Initial Date of Issue: 26-Oct-2017 **Date of Re-Issue:** 01-Nov-2017

Client: AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Upper Heyford

Quotation No.: **Date Received:** 23-Oct-2017

Order No.: 173042 **Date Instructed:** 23-Oct-2017

No. of Samples: 26

Turnaround (Wkdays): 8 **Results Due:** 01-Nov-2017

Date Approved: 01-Nov-2017

Approved By:


Details: Martin Dyer, Laboratory Manager

Results - Soil

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:											
Quotation No.:	Chemtest Sample ID.:	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867
Order No.: 173042	Client Sample Ref.:	528450	528451	528452	528453	528454	528455	528456	528457	528458			
	Client Sample ID.:	VE18	VE18	VE18	VE18	VE19	VE19	VE19	VE19	VE19	VE19	VE19	VE19
	Client Sample ID.:	VS35	VS36	VS37	VS38	VS39	VS40	VS41	VS42	VS43	VS43	VS43	VS43
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):	3.5	3.5	3.5	3.5	1.7	1.2	1.4	1.3	1.2			
	Bottom Depth (m):	4.0	4.0	4.0	4.0								
	Date Sampled:	19-Oct-2017	19-Oct-2017	19-Oct-2017	19-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017
Determinand	Accred.	SOP	Units	LOD									
Moisture	N	2030	%	0.020	15	23	17	16	15	11	14	12	15
Soil Colour	N	2040		N/A	Beige	Grey	Beige	Grey	Brown	Beige	Brown	Beige	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones	Sand, Clay	Stones	Stones
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Sand, Clay	Sand	Sand	Sand, Clay
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Results - Soil

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:											
Quotation No.:	Chemtest Sample ID.:												
Order No.: 173042	Client Sample Ref.:												
	Client Sample ID.:												
	Sample Type:												
	Top Depth (m):												
	Bottom Depth (m):												
	Date Sampled:												
Determinand	Accred.	SOP	Units	LOD	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867
Moisture	N	2030	%	0.020	13	16	17	19	10	12	10	12	10
Soil Colour	N	2040		N/A	Beige	Brown	Brown	Brown	Beige	Brown	Beige	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Clay	Clay	Clay	Sand	Sand	Clay	Sand	Sand
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	2.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.5	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	42	< 1.0	< 1.0	< 1.0	57	54	< 1.0	67	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	39	< 1.0	< 1.0	< 1.0	76	67	< 1.0	70	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	90	< 1.0	< 1.0	< 1.0	18	18	< 1.0	26	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	170	< 5.0	< 5.0	< 5.0	150	140	< 5.0	170	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	5.5	< 1.0	< 1.0	5.8	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	150	10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	150	16	< 5.0	< 5.0	5.8	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	320	16	< 10	< 10	160	140	< 10	170	< 10

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	
Quotation No.:		Chemtest Sample ID.:		528470	528471	528472	528473	528474	528475	
Order No.: 173042		Client Sample Ref.:		VE19	VE19	VE19	VE15	VE17	VE16	
		Client Sample ID.:		VS53	VS54	VS55	VS32	VS33	VS34	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		1.4	1.4	1.4	0.7	0.9	0.9	
		Bottom Depth (m):					1.3	1.2	1.2	
		Date Sampled:		20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	
Determinand	Accred.	SOP	Units	LOD						
Moisture	N	2030	%	0.020	16	15	13	15	14	13
Soil Colour	N	2040		N/A	Brown	Brown	Brown			
Other Material	N	2040		N/A	Stones	Stones	Stones			
Soil Texture	N	2040		N/A	Clay	Clay, Sand	Sand			
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	< 10

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-27867	17-27867	
Quotation No.:		Chemtest Sample ID.:		528460	528461	
		Client Sample ID.:		GAC IN	GAC OUT	
		Sample Type:		WATER	WATER	
		Date Sampled:		20-Oct-2017	20-Oct-2017	
Determinand	Accred.	SOP	Units	LOD		
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	11	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	120	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	260	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	200	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	580	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	580	< 10

SOP	Title	Parameters included	Method summary
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44 Aromatics: >C5-C7, >C7-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44	Pentane extraction / GCxGC FID detection
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44 Aromatics: >C5-C7, >C7-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44	Dichloromethane extraction / GCxGC FID detection

Report Information

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- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 17-27937-1
Initial Date of Issue: 26-Oct-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Upper Heyford

Quotation No.: **Date Received:** 24-Oct-2017

Order No.: 173042 **Date Instructed:** 24-Oct-2017

No. of Samples: 4

Turnaround (Wkdays): 3 **Results Due:** 26-Oct-2017

Date Approved: 26-Oct-2017

Approved By:



Details: Glynn Harvey, Laboratory Manager

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-27937	17-27937	17-27937	17-27937	
Quotation No.:		Chemtest Sample ID.:		529012	529013	529014	529015	
Order No.: 173042		Client Sample Ref.:		VE21 N	VE21 E	VE21 S	VE21 W	
		Client Sample ID.:		VS56	VS57	VS58	VS59	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		1.55	1.55	1.55	1.55	
		Bottom Depth (m):		2.00	2.00	2.00	2.00	
		Date Sampled:		20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	
Determinand	Accred.	SOP	Units	LOD				
Moisture	N	2030	%	0.020	13	10	11	13
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	NONE	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	34	40	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	220	170	13	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	1100	740	110	85
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	830	560	97	70
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	150	97	28	30
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	2400	1600	240	180
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	23	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	200	120	21	3.8
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	200	130	1.7	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	51	38	12	2.4
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	440	320	35	6.2
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	2800	1900	280	190

SOP	Title	Parameters included	Method summary
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

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Uncertainty of measurement for the determinands tested are available upon request

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All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

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Sample Deviation Codes

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- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 17-29152-1
Initial Date of Issue: 07-Nov-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Upper Heyford

Quotation No.: **Date Received:** 03-Nov-2017

Order No.: 173042 **Date Instructed:** 03-Nov-2017

No. of Samples: 3

Turnaround (Wkdays): 3 **Results Due:** 07-Nov-2017

Date Approved: 07-Nov-2017

Approved By:



Details: Glynn Harvey, Laboratory Manager

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-29152	17-29152	17-29152	
Quotation No.:		Chemtest Sample ID.:		534222	534223	534224	
Order No.: 173042		Client Sample Ref.:		VE22E	VE22S	VE22N	
		Client Sample ID.:		VS60	VS61	VS62	
		Sample Type:		SOIL	SOIL	SOIL	
		Top Depth (m):		1.20	1.50	1.40	
		Bottom Depth (m):		1.50	1.80	1.70	
		Date Sampled:		31-Oct-2017	31-Oct-2017	31-Oct-2017	
Determinand	Accred.	SOP	Units	LOD			
Moisture	N	2030	%	0.020	9.5	11	15
Soil Colour	N	2040		N/A	Beige	Beige	Beige
Other Material	N	2040		N/A	Stones	Stones	Stones, Brick
Soil Texture	N	2040		N/A	Loam	Loam	Loam
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10

SOP	Title	Parameters included	Method summary
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

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All results are expressed on a dry weight basis

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- C - Sample not received in appropriate containers
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Sample Retention and Disposal

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All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 17-29189-1
Initial Date of Issue: 07-Nov-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Upper Heyford

Quotation No.: **Date Received:** 03-Nov-2017

Order No.: 173042 **Date Instructed:** 03-Nov-2017

No. of Samples: 12

Turnaround (Wkdays): 3 **Results Due:** 07-Nov-2017

Date Approved: 07-Nov-2017

Approved By:

Details: Martin Dyer, Laboratory Manager

Results - Soil

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.: 17-29189											
Quotation No.:		Chemtest Sample ID.:											
Order No.: 173042		Client Sample Ref.:											
		Client Sample ID.:											
		Sample Type:											
		Top Depth (m):											
		Bottom Depth (m):											
		Date Sampled:											
Determinand	Accred.	SOP	Units	LOD	17-29189	17-29189	17-29189	17-29189	17-29189	17-29189	17-29189	17-29189	17-29189
Moisture	N	2030	%	0.020	14	13	14	14	12	11	10	14	
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Beige	Beige	
Other Material	N	2040		N/A	Stones	Stones, Roots	Stones, Roots	Stones, Roots	Stones, Roots	Stones, Roots	Stones, Roots	Stones	
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay, Sand	Clay	Clay	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	2.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	6.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	8.5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-29189	17-29189	17-29189	17-29189	
Quotation No.:		Chemtest Sample ID.:		534370	534371	534372	534373	
Order No.: 173042		Client Sample Ref.:		45B	VE22N	VE22E	VE22W	
		Client Sample ID.:		VS71	VS72	VS73	VS74	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		1.40	1.70	1.60	1.60	
		Bottom Depth (m):			2.00	1.80	1.70	
		Date Sampled:		01-Nov-2017	02-Nov-2017	02-Nov-2017	02-Nov-2017	
Determinand	Accred.	SOP	Units	LOD				
Moisture	N	2030	%	0.020	14	14	11	12
Soil Colour	N	2040		N/A	Beige	Beige, Brown	Beige	Beige
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10

SOP	Title	Parameters included	Method summary
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

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- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Amended Report

Report No.: 17-29340-2

Initial Date of Issue: 08-Nov-2017 **Date of Re-Issue:** 15-Nov-2017

Client: AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 173042 Upper Heyford

Quotation No.: **Date Received:** 06-Nov-2017

Order No.: 173042 **Date Instructed:** 06-Nov-2017

No. of Samples: 13

Turnaround (Wkdays): 3 **Results Due:** 08-Nov-2017

Date Approved: 15-Nov-2017

Approved By:


Details: Glynn Harvey, Laboratory Manager

Results - Soil

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:												
Quotation No.:	Chemtest Sample ID.:													
Order No.: 173042	Client Sample Ref.:													
	Client Sample ID.:													
	Sample Type:													
	Top Depth (m):													
	Bottom Depth (m):													
	Date Sampled:													
Determinand	Accred.	SOP	Units	LOD	17-29340	17-29340	17-29340	17-29340	17-29340	17-29340	17-29340	17-29340	17-29340	
Moisture	N	2030	%	0.020	11	11	12	11	11	11	11	10	11	9.3
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Beige	Beige
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Loam	Loam	Clay	Clay	Clay	Loam	Clay	Clay	Clay	Sand
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	6.7	7.0	11	5.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	16	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	6.7	23	29	5.2	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	23	29	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-29340	17-29340	17-29340	17-29340	
Quotation No.:		Chemtest Sample ID.:		535085	535086	535087	535088	
Order No.: 173042		Client Sample Ref.:		VTP03	VTP04	VTP05	VTP06	
		Client Sample ID.:		VS84	VS85	VS86	VS87	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.7	0.75	1.0	0.6	
		Bottom Depth (m):		1.2	1.0	1.2	0.8	
		Date Sampled:		03-Nov-2017	03-Nov-2017	03-Nov-2017	03-Nov-2017	
Determinand	Accred.	SOP	Units	LOD				
Moisture	N	2030	%	0.020	12	19	9.8	9.9
Soil Colour	N	2040		N/A	Beige	Beige	Beige	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Loam	Loam	Sand	Sand
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10

SOP	Title	Parameters included	Method summary
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
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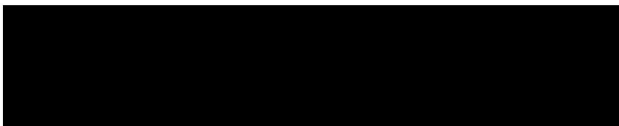


Final Report

Report No.: 17-05108-1
Initial Date of Issue: 06-Mar-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir
Project: 173042 Agetur - Upper Heyford
Remediation

Quotation No.:	Date Received:	02-Mar-2017
Order No.:	Date Instructed:	02-Mar-2017
No. of Samples: 6		
Turnaround (Wkdays): 3	Results Due:	06-Mar-2017
Date Approved: 06-Mar-2017		

Approved By:



Details: Martin Dyer, Laboratory Manager

Project: 173042 Agetur - Upper Heyford Remediation

Client: AA Environmental Ltd		Chemtest Job No.:		17-05108	17-05108	17-05108	17-05108	17-05108	17-05108	
Quotation No.:		Chemtest Sample ID.:		419201	419202	419203	419204	419205	419206	
Order No.:		Client Sample Ref.:		R1	R1	R1	R1	R1	R1	
		Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06	
		Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	
		Date Sampled:		28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	
Determinand	Accred.	SOP	Units	LOD						
pH	U	1010		N/A	8.1	8.1	8.1	8.2	8.1	8.1
Electrical Conductivity	U	1020	µS/cm	1.0	470	470	530	510	820	540
Total Dissolved Solids	N		mg/l	1.0	280	280	320	310	500	320
Chloride	U	1220	mg/l	1.0	39	37	29	23	33	63
Ammoniacal Nitrogen	U	1220	mg/l	0.010	0.33	0.33	0.45	0.28	0.42	0.37
Nitrite	U	1220	mg/l	0.020	0.063	0.035	0.070	0.24	0.69	0.057
Nitrate	U	1220	mg/l	0.50	< 0.50	< 0.50	1.1	< 0.50	5.5	20
Sulphate	U	1220	mg/l	1.0	89	76	120	110	280	51
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Potassium	U	1415	mg/l	0.50	1.4	2.1	3.2	6.4	6.9	1.5
Magnesium	U	1415	mg/l	0.50	4.4	5.2	6.8	11	14	3.5
Sodium	U	1415	mg/l	0.50	28	26	26	27	64	44
Total Hardness as CaCO3	U	1270	mg/l	15	320	350	390	330	510	380
Arsenic (Dissolved)	U	1450	µg/l	1.0	3.5	1.3	< 1.0	1.0	1.3	< 1.0
Boron (Dissolved)	U	1450	µg/l	20	850	670	420	740	780	720
Cadmium (Dissolved)	U	1450	µg/l	0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080
Copper (Dissolved)	U	1450	µg/l	1.0	9.0	2.8	1.9	< 1.0	1.2	< 1.0
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.55
Nickel (Dissolved)	U	1450	µg/l	1.0	38	12	7.9	6.4	9.5	5.0
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1.0	1.9	1.1	2.4	11	12	1.6
Vanadium (Dissolved)	U	1450	µg/l	1.0	1.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	7.7	4.1	6.4	4.5	11	1.9
Chromium (Total)	U	1450	µg/l	1.0	4.9	2.8	11	4.3	3.7	3.4
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Project: 173042 Agetur - Upper Heyford Remediation

Client: AA Environmental Ltd	Chemtest Job No.:		17-05108	17-05108	17-05108	17-05108	17-05108	17-05108	17-05108	
Quotation No.:	Chemtest Sample ID.:		419201	419202	419203	419204	419205	419206	419206	
Order No.:	Client Sample Ref.:		R1	R1	R1	R1	R1	R1	R1	
	Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06	BH06	
	Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	Date Sampled:		28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	28-Feb-2017	
Determinand	Accred.	SOP	Units	LOD						
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1700	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Benzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1270	Total Hardness of Waters	Total hardness	Calculation applied to calcium and magnesium results, expressed as mg l-1 CaCO ₃ equivalent.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-pphenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8- C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44 Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Pentane extraction / GCxGC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report No.: 17-05981-1
Initial Date of Issue: 14-Mar-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir
Sam Muir

Project: 173042 Upper Heyford

Quotation No.: **Date Received:** 10-Mar-2017

Order No.: **Date Instructed:** 10-Mar-2017

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 14-Mar-2017

Date Approved: 14-Mar-2017

Approved By:



Details: Keith Jones, Technical Manager

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-05981	17-05981	17-05981	17-05981	17-05981	17-05981	
Quotation No.:		Chemtest Sample ID.:		423333	423334	423335	423336	423337	423338	
		Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06	
		Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	
		Date Sampled:		09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	
Determinand	Accred.	SOP	Units	LOD						
pH	U	1010		N/A	8.2	8.1	8.1	8.1	8.1	7.5
Electrical Conductivity	U	1020	µS/cm	1.0	620	530	600	460	760	730
Total Dissolved Solids	N		mg/l	1.0	370	320	360	280	460	440
Chloride	U	1220	mg/l	1.0	28	39	31	14	19	57
Ammoniacal Nitrogen	U	1220	mg/l	0.010	0.12	0.18	0.20	0.13	0.16	0.14
Nitrite	U	1220	mg/l	0.020	0.033	0.027	0.022	< 0.020	0.32	0.12
Nitrate	U	1220	mg/l	0.50	2.3	< 0.50	0.80	< 0.50	21	19
Sulphate	U	1220	mg/l	1.0	150	75	120	67	230	52
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Potassium	U	1415	mg/l	0.50	0.88	1.7	1.4	7.8	3.8	1.2
Magnesium	U	1415	mg/l	0.50	3.8	5.1	5.2	16	7.0	2.8
Sodium	U	1415	mg/l	0.50	30	32	31	24	33	50
Total Hardness as CaCO3	U	1270	mg/l	15	380	330	380	440	480	350
Arsenic (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Boron (Dissolved)	U	1450	µg/l	20	640	550	710	620	750	580
Cadmium (Dissolved)	U	1450	µg/l	0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080
Copper (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	1.5	2.6	1.4
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nickel (Dissolved)	U	1450	µg/l	1.0	1.6	1.2	1.9	1.8	2.1	2.2
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1.0	1.0	< 1.0	< 1.0	< 1.0	1.6	< 1.0
Vanadium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	9.7	3.4	5.8	35	19	9.7
Chromium (Total)	U	1450	µg/l	1.0	2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-05981	17-05981	17-05981	17-05981	17-05981	17-05981
Quotation No.:		Chemtest Sample ID.:		423333	423334	423335	423336	423337	423338
		Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06
		Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
		Date Sampled:		09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017	09-Mar-2017
Determinand	Accred.	SOP	Units	LOD					
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10
Naphthalene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1700	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Benzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1270	Total Hardness of Waters	Total hardness	Calculation applied to calcium and magnesium results, expressed as mg l-1 CaCO ₃ equivalent.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-pphenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44 Aromatics: >C5-C7, >C7-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44	Pentane extraction / GCxGC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

Report Information

Key

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- M MCERTS and UKAS accredited
- N Unaccredited
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- > "greater than"

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The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

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- A - Date of sampling not supplied
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- D - Broken Container

Sample Retention and Disposal

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All water samples will be retained for 14 days from the date of receipt

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customerservices@chemtest.co.uk



Final Report

Report No.: 17-06937-1

Initial Date of Issue: 24-Mar-2017

Client AA Environmental Ltd

Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX

Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project 173042 Trenchard Circle Upper Heyford

Quotation No.:		Date Received:	22-Mar-2017
Order No.:		Date Instructed:	22-Mar-2017
No. of Samples:	6		
Turnaround (Wkdays):	3	Results Due:	24-Mar-2017
Date Approved:	24-Mar-2017		

Approved By:

Details:  Robert Monk, Technical Development Chemist

Project: 173042 Trenchard Circle Upper Heyford

Client: AA Environmental Ltd	Chemtest Job No.:		17-06937	17-06937	17-06937	17-06937	17-06937	17-06937	17-06937	
Quotation No.:	Chemtest Sample ID.:		428493	428494	428495	428496	428497	428498	428498	
Order No.:	Client Sample Ref.:		R3	R3	R3	R3	R3	R3	R3	
	Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06		
	Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	Date Sampled:		20-Mar-2017	20-Mar-2017	20-Mar-2017	20-Mar-2017	20-Mar-2017	20-Mar-2017	20-Mar-2017	
Determinand	Accred.	SOP	Units	LOD						
pH	U	1010		N/A	7.9	7.9	7.9	7.9	7.8	7.8
Electrical Conductivity	U	1020	µS/cm	1.0	680	670	700	580	1000	840
Total Dissolved Solids	N		mg/l	1.0	410	400	420	350	600	510
Chloride	U	1220	mg/l	1.0	41	39	29	11	26	64
Ammoniacal Nitrogen	U	1220	mg/l	0.010	1.3	1.5	1.4	1.9	2.0	2.0
Nitrite	U	1220	mg/l	0.020	< 0.020	< 0.020	< 0.020	< 0.020	0.31	0.058
Nitrate	U	1220	mg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.3	17
Sulphate	U	1220	mg/l	1.0	76	76	87	50	270	61
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Potassium	U	1415	mg/l	0.50	1.8	2.1	1.9	5.5	4.1	1.8
Magnesium	U	1415	mg/l	0.50	15	10	6.8	13	8.5	3.6
Sodium	U	1415	mg/l	0.50	33	28	25	13	30	47
Total Hardness as CaCO3	U	1270	mg/l	15	360	380	380	340	510	380
Arsenic (Dissolved)	U	1450	µg/l	1.0	1.9	1.3	1.2	1.6	1.1	< 1.0
Boron (Dissolved)	U	1450	µg/l	20	130	51	44	150	72	72
Cadmium (Dissolved)	U	1450	µg/l	0.080	0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080
Copper (Dissolved)	U	1450	µg/l	1.0	2.7	< 1.0	< 1.0	< 1.0	1.1	< 1.0
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nickel (Dissolved)	U	1450	µg/l	1.0	10	< 1.0	< 1.0	< 1.0	1.6	< 1.0
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.7	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1.0	1.4	< 1.0	< 1.0	< 1.0	1.5	1.1
Vanadium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	48	4.6	4.3	3.1	8.5	4.8
Chromium (Total)	U	1450	µg/l	1.0	5.8	1.9	1.7	1.0	1.1	2.6
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Project: 173042 Trenchard Circle Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-06937	17-06937	17-06937	17-06937	17-06937	17-06937
Quotation No.:		Chemtest Sample ID.:		428493	428494	428495	428496	428497	428498
Order No.:		Client Sample Ref.:		R3	R3	R3	R3	R3	R3
		Client Sample ID.:		BH01	BH02	BH03	BH04	BH05	BH06
		Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
		Date Sampled:		20-Mar-2017	20-Mar-2017	20-Mar-2017	20-Mar-2017	20-Mar-2017	20-Mar-2017
Determinand	Accred.	SOP	Units	LOD					
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10
Naphthalene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1700	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Benzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1270	Total Hardness of Waters	Total hardness	Calculation applied to calcium and magnesium results, expressed as mg l-1 CaCO ₃ equivalent.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-pphenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8- C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44 Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Pentane extraction / GCxGC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

Report Information

Key

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- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk

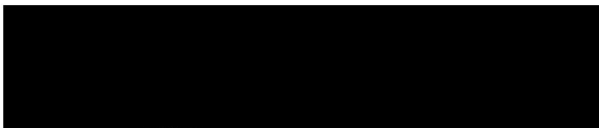
Final Report

Report No.: 17-29333-1
Initial Date of Issue: 08-Nov-2017
Client: AA Environmental Ltd
Client Address: Units 4 to 8
Cholswell Court
Shippon
Abingdon
Oxfordshire
OX136HX
Contact(s): Carrie Lorton
Ed Brown
Jack Taylor
John McCusker
Mark Anderson
Matthew Lawman
Richard Heath
Sam Muir

Project: 17342 Upper Heyford

Quotation No.:		Date Received:	06-Nov-2017
Order No.:	173042	Date Instructed:	06-Nov-2017
No. of Samples:	6		
Turnaround (Wkdays):	3	Results Due:	08-Nov-2017
Date Approved:	08-Nov-2017		

Approved By:



Details: Martin Dyer, Laboratory Manager

Project: 17342 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:		17-29333	17-29333	17-29333	17-29333	17-29333	17-29333
Quotation No.:		Chemtest Sample ID.:		535050	535051	535052	535053	535054	535055
Order No.: 173042		Client Sample Ref.:		BH01	BH02	BH03	BH04	BH05	BH06
		Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
		Date Sampled:		03-Nov-2017	03-Nov-2017	03-Nov-2017	03-Nov-2017	03-Nov-2017	03-Nov-2017
Determinand	Accred.	SOP	Units	LOD					
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10

SOP	Title	Parameters included	Method summary
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5-C6, >C6-C8, >C8- C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44 Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Pentane extraction / GCxGC FID detection

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- I/S Insufficient Sample
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- N/E not evaluated
- < "less than"
- > "greater than"

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Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk

Appendix F
Consolidated Validation Data

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:						17-26682	17-26682	17-26682	17-26682	17-26682	17-26682	17-26682	17-27165	17-27165	17-27165
Quotation No.:		Chemtest Sample ID.:						522881	522882	522883	522884	522885	522886	522887	525248	525249	525250
Order No.: 173042		Client Sample Ref.:						VE1E	VE2E	VE2B	VE3E	VE3B	VE4E	VE4B	VE5 E	VE5 S	VE6 N
		Client Sample ID.:						VS01	VS02	VS03	VS04	VS05	VS06	VS07	VS08	VS09	VS10
		Sample Type:						SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):						0.80	0.80	1.50	1.00	1.50	1.00	2.50	1.0	1.0	0.6
		Bottom Depth (m):						1.30	1.30	1.55	1.50		1.50		1.3	1.3	1.1
		Date Sampled:						06-Oct-2017	06-Oct-2017	06-Oct-2017	09-Oct-2017	09-Oct-2017	09-Oct-2017	09-Oct-2017	10-Oct-2017	10-Oct-2017	11-Oct-2017
Determinand	Accred.	SOP	Units	LOD	MAX	GW Screening Value	Screening Value										
Moisture	N	2030	%	0.020	26.00			22	21	26	12	15	18	16	14.00	21.00	13.00
Soil Colour	N	2040		N/A				Brown	Brown	Grey	Grey	Grey	Brown	Grey	Brown	Grey	Brown
Other Material	N	2040		N/A				Stones	Stones	Stones	Stones	Stones	Stones	Stones,	Stones	Stones	Stones
Soil Texture	N	2040		N/A				Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	0.00	2.50		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	0.00	120.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	4.20	500.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	74.00	1900.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	27	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	370.00	11000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	160	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	420.00	560000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	150	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	210.00	511000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	7.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	6.30	454000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	930.00			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	350	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	0.00	0.20		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	0.00	6.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	0.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	3.70	20.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	80.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	33	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	130.00	22.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	8.4	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	58.00	120.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	0.00	100.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	270.00			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	42	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	1200.00			< 10	< 10	< 10	< 10	< 10	390	< 10	< 10	< 10	< 10

Project: 173042 Upper Heyford

Client: AA Environmental Ltd		Chemtest Job No.:						17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633	17-27633
Quotation No.:		Chemtest Sample ID.:						527605	527606	527607	527608	527609	527610	527611	527612	527613	527614
Order No.: 173042		Client Sample Ref.:						VE12B	VE11S	VE13 W	VE13 N	VE13 B	VE14 B	VE14 B	VE15 B	B	VE16 B
		Client Sample ID.:						VS21	VS22	VS23	VS24	VS25	VS26	VS27	VS28	VS29	VS30
		Sample Type:						SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):						1.0	0.7	1.0	1.0	1.3	0.25	0.5	1.3	1.5	1.5
		Bottom Depth (m):							1.0	1.30	1.30						
		Date Sampled:						17-Oct-2017	17-Oct-2017	17-Oct-2017	17-Oct-2017	17-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017
Determinand	Accred.	SOP	Units	LOD	MAX	GW Screening Value	Screening Value										
Moisture	N	2030	%	0.020	26.00			13.00	17.00	20.00	14.00	16.00	11.00	13.00	12.00	12.00	14.00
Soil Colour	N	2040		N/A				Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A				Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A				Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	0.00	2.50		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	0.00	120.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	4.20	500.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	74.00	1900.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	8.50	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	370.00	11000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	210.00	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	420.00	560000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	420.00	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	210.00	511000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	130.00	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	6.30	454000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	930.00			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	770.00	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	0.00	0.20		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	0.00	6.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	0.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	3.70	20.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	80.00	30.00		< 1.0	< 1.0	< 1.0	3.10	< 1.0	< 1.0	17.00	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	130.00	22.00		8.30	< 1.0	< 1.0	12.00	< 1.0	< 1.0	56.00	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	58.00	120.00		14.00	< 1.0	< 1.0	15.00	< 1.0	< 1.0	21.00	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	0.00	100.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	270.00			22.00	< 5.0	< 5.0	31.00	< 5.0	< 5.0	94.00	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	1200.00			22.00	< 10	< 10	31.00	< 10	< 10	860.00	< 10	< 10	< 10

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Client: AA Environmental Ltd		Chemtest Job No.:						17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867	17-27867
Quotation No.:		Chemtest Sample ID.:						528456	528457	528458	528459	528462	528463	528464	528465	528466	528467
Order No.: 173042		Client Sample Ref.:						VE19	VE19	VE19	VE19	VE19	VE19	VE19	VE20N	VE20E	VE20S
		Client Sample ID.:						VS41	VS42	VS43	VS44	VS45	VS46	VS47	VS48	VS49	VS50
		Sample Type:						SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):						1.4	1.3	1.2	1.2	1.4	1.4	1.4	1.5	1.5	1.5
		Bottom Depth (m):													2.0	2.0	2.0
		Date Sampled:						20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017
Determinand	Accred.	SOP	Units	LOD	MAX	GW Screening Value	Screening Value										
Moisture	N	2030	%	0.020	26.00			14.00	12.00	15.00	13.00	16.00	17.00	19.00	10.00	12.00	10.00
Soil Colour	N	2040		N/A				Brown	Beige	Brown	Beige	Brown	Brown	Brown	Beige	Brown	Beige
Other Material	N	2040		N/A				Sand, Clay	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A				Sand	Sand	Sand, Clay	Sand	Clay	Clay	Clay	Sand	Sand	Clay
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	0.00	2.50		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	0.00	120.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	4.20	500.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	74.00	1900.00		< 1.0	< 1.0	< 1.0	2.80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	370.00	11000.00		< 1.0	< 1.0	< 1.0	42.00	< 1.0	< 1.0	< 1.0	57.00	54.00	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	420.00	560000.00		< 1.0	< 1.0	< 1.0	39.00	< 1.0	< 1.0	< 1.0	76.00	67.00	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	210.00	511000.00		< 1.0	< 1.0	< 1.0	90.00	< 1.0	< 1.0	< 1.0	18.00	18.00	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	6.30	454000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	930.00			< 5.0	< 5.0	< 5.0	170.00	< 5.0	< 5.0	< 5.0	150.00	140.00	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	0.00	0.20		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	0.00	6.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	0.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	3.70	20.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	80.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	130.00	22.00		< 1.0	< 1.0	< 1.0	< 1.0	5.50	< 1.0	< 1.0	5.80	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	58.00	120.00		< 1.0	< 1.0	< 1.0	150.00	10.00	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	0.00	100.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	270.00			< 5.0	< 5.0	< 5.0	150.00	16.00	< 5.0	< 5.0	5.80	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	1200.00			< 10	< 10	< 10	320.00	16.00	< 10	< 10	160.00	140.00	< 10

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Client: AA Environmental Ltd		Chemtest Job No.:						17-27867	17-27867	17-27867	17-27867	17-27867	17-27937	17-27937	17-27937	17-27937	17-29152
Quotation No.:		Chemtest Sample ID.:						528468	528469	528470	528471	528472	529012	529013	529014	529015	534222
Order No.: 173042		Client Sample Ref.:						VE20W	VE20B	VE19	VE19	VE19	VE21 N	VE21 E	VE21 S	VE21 W	VE22E
		Client Sample ID.:						VS51	VS52	VS53	VS54	VS55	VS56	VS57	VS58	VS59	VS60
		Sample Type:						SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):						1.5	2.0	1.4	1.4	1.4	1.55	1.55	1.55	1.55	1.20
		Bottom Depth (m):						2.0					2.00	2.00	2.00	2.00	1.50
		Date Sampled:						20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	20-Oct-2017	31-Oct-2017
Determinand	Accred.	SOP	Units	LOD	MAX	GW Screening Value	Screening Value										
Moisture	N	2030	%	0.020	26.00			12.00	10.00	16.00	15.00	13.00	13.00	10.00	11	13	9.50
Soil Colour	N	2040		N/A				Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Beige
Other Material	N	2040		N/A				Stones	Stones	Stones	Stones	Stones	Stones	NONE	Stones	Stones	Stones
Soil Texture	N	2040		N/A				Sand	Sand	Clay	Clay, Sand	Sand	Sand	Sand	Sand	Sand	Loam
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	0.00	2.50		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	0.00	120.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	4.20	500.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	34.00	40.00	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	74.00	1900.00		4.50	< 1.0	< 1.0	< 1.0	< 1.0	220.00	170.00	13	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	370.00	11000.00		67.00	< 1.0	< 1.0	< 1.0	< 1.0	1100.00	740.00	110	85	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	420.00	560000.00		70.00	< 1.0	< 1.0	< 1.0	< 1.0	830.00	560.00	97	70	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	210.00	511000.00		26.00	< 1.0	< 1.0	< 1.0	< 1.0	150.00	97.00	28	30	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	6.30	454000.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	930.00			170.00	< 5.0	< 5.0	< 5.0	< 5.0	2400.00	1600.00	240	180	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	0.00	0.20		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	0.00	6.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	0.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	3.70	20.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	23.00	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	80.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	200.00	120.00	21	3.8	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	130.00	22.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	200.00	130.00	1.7	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	58.00	120.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	51.00	38.00	12	2.4	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	0.00	100.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	270.00			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	440.00	320.00	35	6.2	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	1200.00			170.00	< 10	< 10	< 10	< 10	2800.00	1900.00	280	190	< 10

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Client: AA Environmental Ltd		Chemtest Job No.:						17-29340	17-29340	17-29340	17-29340
Quotation No.:		Chemtest Sample ID.:						535085	535086	535087	535088
Order No.: 173042		Client Sample Ref.:						VTP03	VTP04	VTP05	VTP06
		Client Sample ID.:						VS84	VS85	VS86	VS87
		Sample Type:						SOIL	SOIL	SOIL	SOIL
		Top Depth (m):						0.7	0.75	1.0	0.6
		Bottom Depth (m):						1.2	1.0	1.2	0.8
		Date Sampled:						03-Nov-2017	03-Nov-2017	03-Nov-2017	03-Nov-2017
Determinand	Accred.	SOP	Units	LOD	MAX	GW Screening Value	Screening Value				
Moisture	N	2030	%	0.020	26.00			12	19	9.8	9.9
Soil Colour	N	2040		N/A				Beige	Beige	Beige	Brown
Other Material	N	2040		N/A				Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A				Loam	Loam	Sand	Sand
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	0.00	2.50		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	0.00	120.00		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	4.20	500.00		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	74.00	1900.00		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	370.00	11000.00		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	420.00	560000.00		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	210.00	511000.00		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	6.30	454000.00		< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	930.00			< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	0.00	0.20		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	0.00	6.00		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	0.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	3.70	20.00		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	80.00	30.00		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	130.00	22.00		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	58.00	120.00		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	0.00	100.00		< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	270.00			< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	1200.00			< 10	< 10	< 10	< 10