



### APPENDIX 3

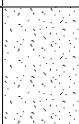
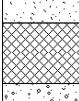
- Exploratory Hole Logs
- BGS Borehole Logs

# TRIAL PIT LOG

TrialPit No

HDP1

Sheet 1 of 1

offices	London	Kent	Derby	Cardiff	Manchester	Stirling	Project No.	Co-ords: -	Date
Project Name:	Machine Store						19579G	Level:	11/04/2016
Location:	The Old Vinyl Factory, Hayes						Dimensions (m):	2.00	Scale 1:25
Equipment:	Hand dig			Depth	1.00		1.00		Logged MSG
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	0.50 - 0.70	D,J		0.50			CONCRETE.		
				0.70			MADE GROUND: Brown reddish sandy silty clay with gravels. Gravels comprised subangular to angular, coarse to fine bricks, concrete and flints. Orangish brown sandy GRAVELS.		
				1.00			End of Pit at 1.000m		
									1
									2
									3
									4
									5
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability			Remarks		

# TRIAL PIT LOG

**TrialPit No**

## HDP2

Sheet 1 of 1

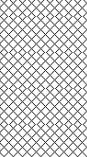
							Sheet 1 of 1
offices	London	Kent	Derby	Cardiff	Manchester	Stirling	
Project Name:	Machine Store			Project No. 19579G		Co-ords: - Level:	Date 11/04/2016
Location:	The Old Vinyl Factory, Hayes			Dimensions (m): 2.00		Scale 1:25	
Equipment:	Hand dig			Depth 0.50	1.00		Logged MSG
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results	0.50			CONCRETE.
							End of Pit at 0.500m
							1
							2
							3
							4
							5
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)			Stability	Remarks			

## TRIAL PIT LOG

TrialPit No

HDP3

Sheet 1 of 1

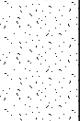
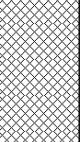
offices	London	Kent	Derby	Cardiff	Manchester	Stirling	Project No.	Co-ords: -	Date
Project Name:	Machine Store						19579G	Level:	12/04/2016
Location:	The Old Vinyl Factory, Hayes						Dimensions (m):	2.00	Scale 1:25
Equipment:	Hand dig			Depth	1.00		Depth 1.20		Logged MSG
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	0.50 - 0.70	D,J		0.50			CONCRETE.		
				1.20			MADE GROUND: Stiff dark brown clayey sand with gravels and cobbles. Gravels comprised subangular to angular, coarse to fine, bricks and concrete.		
							End of Pit at 1.200m		
									1
									2
									3
									4
									5
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability			Remarks		

# TRIAL PIT LOG

**TrialPit No**

HDP4

Sheet 1 of 1

offices	London	Kent	Derby	Cardiff	Manchester	Stirling		Sheet 1 of 1		
Project Name:	Machine Store			Project No. 19579G		Co-ords: - Level:		Date 12/04/2016		
Location:	The Old Vinyl Factory, Hayes					Dimensions (m):	2.00	Scale 1:25		
Equipment:	Hand dig					Depth 1.40	1.00	Logged MSG		
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
	Depth	Type	Results							
				0.50			CONCRETE.			
				1.20			MADE GROUND: Brown reddish sandy silty clay with gravels. Gravels comprised subangular to angular, coarse to fine bricks and flints.			
				1.30			Orangish brown sandy GRAVELS.			
							End of Pit at 1.400m			
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability			Remarks			

							<b>TRIAL PIT LOG</b>	TrialPit No <b>HDP5</b>		
offices	London	Kent	Derby	Cardiff	Manchester	Stirling	Sheet 1 of 1			
Project Name:	Machine Store			Project No.		Co-ords: -				
				19579G		Level:				
Location:	The Old Vinyl Factory, Hayes				Dimensions (m):		2.00	Scale 1:25		
Equipment:	Hand dig				Depth 1.20	1.00		Logged MSG		
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
	Depth	Type	Results				CONCRETE			
				0.20						
				0.50			MADE GROUND: Orangish brown gravelly sand. Gravels comprised subangular to angular, coarse to fine bricks and flints.			
				1.20			Orangish brown gravelly SAND.			
							End of Pit at 1.200m			
							1			
							2			
							3			
							4			
							5			
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability			Remarks			

## TRIAL PIT LOG

TrialPit No

**HDP6**

Sheet 1 of 1

offices	London	Kent	Derby	Cardiff	Manchester	Stirling	Project No.	Co-ords:	Date			
Project Name:	Machine Store						19579G	Level:	13/05/2016			
Location:	The Old Vinyl Factory, Hayes						Dimensions (m):	2.00	Scale 1:25			
Equipment:	Hand dig						Depth	1.00	Logged MSG			
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description					
	Depth	Type	Results				CONCRETE					
				0.20			MADE GROUND: Orangish brown gravelly sand. Gravels comprised subangular to angular, coarse to fine bricks and flints.					
				0.40			Orangish brown gravelly SAND.					
				1.20			End of Pit at 1.200m					
							1					
							2					
							3					
							4					
							5					
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability	Remarks							

# TRIAL PIT LOG

**TrialPit No**

HDP7

Sheet 1 of 1

offices	London	Kent	Derby	Cardiff	Manchester	Stirling		Sheet 1 of 1	
Project Name:	Machine Store			Project No.		Co-ords: -			Date
				19579G		Level:			13/05/2016
Location:	The Old Vinyl Factory, Hayes				Dimensions (m):		2.00		Scale 1:25
Equipment:	Hand dig				Depth 0.70	1.00			Logged MSG
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.40	D,J		0.20			CONCRETE.		1
				0.60			MADE GROUND: Orangish brown silty gravelly sand. Gravels comprised subangular to angular, coarse to fine bricks and flints.		2
				0.70			Orangish brown clayey SAND with occasional subangular flint.		3
							End of Pit at 0.700m		4
									5
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability			Remarks		

## TRIAL PIT LOG

TrialPit No

HDP8

Sheet 1 of 1

offices	London	Kent	Derby	Cardiff	Manchester	Stirling	Project No.	Co-ords:	Date			
Project Name:	Machine Store						19579G	Level:	13/05/2016			
Location:	The Old Vinyl Factory, Hayes						Dimensions (m):	2.00	Scale 1:25			
Equipment:							Depth 0.60	1.00	Logged MSG			
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description					
	0.40	D,J		0.20			CONCRETE.		1			
				0.50			MADE GROUND: Orangish brown gravelly sand. Gravels comprised subangular to angular, coarse to fine bricks and flints.		2			
				0.60			Orangish brown clayey SAND.		3			
							End of Pit at 0.600m		4			
									5			
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability	Remarks							

# TRIAL PIT LOG

**TrialPit No**

**MTP1601**

Sheet 1 of 1

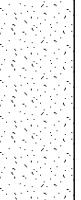
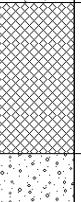
Project Details							Sheet 1 of 1	
offices		London	Kent	Derby	Cardiff	Manchester	Stirling	
Project Name:		Machine Store			Project No. 19579G		Co-ords: -	Date 12/04/2016
Location:		The Old Vinyl Factory, Hayes			Level:		Dimensions (m):	Scale 1:25
Equipment:		Bobcat E50			Depth 1.60		3.00	Logged MSG
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.60 - 1.00	D,J		0.60			Concrete with reinforcement.	
							MADE GROUND: Brown reddish sandy silty clay with gravels. Gravels comprised subangular to angular, coarse to fine bricks and flints.	
	1.40 - 1.60	D,J		1.40			Firm orangish brown silty CLAY with rare gravels. Gravels comprised subangular to angular, coarse to fine flints.	
							End of Pit at 1.600m	
				1.60				
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability			Remarks	

## TRIAL PIT LOG

**TrialPit No**

## MTP1602

Sheet 1 of 1

offices	London	Kent	Derby	Cardiff	Manchester	Stirling	Sheet 1 of 1
Project Name:	Machine Store			Project No. 19579G		Co-ords: - Level:	Date 12/04/2016
Location:	The Old Vinyl Factory, Hayes			Dimensions (m): 3.00		Scale 1:25	
Equipment:	Bobcat E50			Depth 1.50	0.60		Logged MSG
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.70 - 0.90	D,J		0.70			Concrete with reinforcement.
	1.20 - 1.40	D,J		1.20			MADE GROUND: Brown reddish sandy silty clay with gravels. Gravels comprised subangular to angular, coarse to fine bricks and flints.
				1.50			Dense organish brown sandy GRAVEL. Gravels comprised subangular to rounded, coarse to fine flints.
							End of Pit at 1.500m
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability	Remarks		

## TRIAL PIT LOG

TrialPit No

**MTP1603**

Sheet 1 of 1

offices	London	Kent	Derby	Cardiff	Manchester	Stirling	Project No.	Co-ords: -	Date			
Project Name:	Machine Store						19579G	Level:	12/04/2016			
Location:	The Old Vinyl Factory, Hayes						Dimensions (m):	3.00	Scale 1:25			
Equipment:	Bobcat E50						Depth 1.50	0.60	Logged MSG			
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description					
	0.60 - 0.90	D,J		0.60			Concrete with reinforcement.					
	1.30 - 1.50	D,J		1.30			MADE GROUND: Brown reddish sandy silty clay with gravels. Gravels comprised subangular to angular, coarse to fine bricks and flints.					
				1.50			Firm orangish brown silty CLAY with rare gravels. Gravels comprised subangular to angular, coarse to fine flints.					
							End of Pit at 1.500m					
									1			
									2			
									3			
									4			
									5			
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm)				Stability			Remarks					

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													<b>MBH01/16</b>										
Project Name: The Machine Store								Co-ords:				Sheet 1 of 2											
Location: The Old Vinyl Factory, Hayes								Level:				Scale 1:50											
Equipment:								Dates: 13/05/2016				Logged By MSG											
Well	Wtr Strk	Sample and In Situ Testing			Coring			Depth (m)	Level (m)	Legend	Stratum Description												
		Depth (m)	Type	Results	FI	TCR	SCR							RQD									
		0.80 - 1.00	B	75 (11,17/75 for 150mm) N=54 (6,8/11,13,14,16) N=44 (5,7/10,11,11,12) N=25 (5,6/5,7,7,6) 0 (17,25/0 for 0mm) Ublow=18 N=18 (2,3/4,4,5,5) Ublow=22				0.60	1.10		CONCRETE with reinforcement.												
		1.20	SPT(C)								MADE GROUND: Soft brown silty sand with gravels. Gravels comprised subangular to angular, coarse to fine, bricks concrete and flints.												
		1.20 - 1.65	B								Dense orange brown sandy GRAVEL. Gravels comprised subangular to rounded, coarse to fine flints. <u>River Terrace Gravels</u> .												
		1.75	D																				
		2.00	SPT(C)																				
		2.00 - 2.45	B																				
		2.75	D																				
		3.00	SPT(C)																				
		3.00 - 3.45	B																				
		3.75	D																				
		4.00	SPT(C)																				
		4.00 - 4.45	B																				
		4.75	D								Firm to stiff brown mottled grey silty weathered CLAY.												
		5.00	SPT(C)																				
		5.00 - 5.45	B								CLAYSTONE.												
		6.00	D																				
		6.50 - 6.95	U																				
		7.50	D								Stiff dark bluish grey slightly silty, slightly sandy fissured CLAY.												
		8.00	SPT(S)																				
		8.00 - 8.45	D																				
		9.00	D																				
		9.50 - 9.95	U																				
								Continued on Next Sheet															
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample SPT(C) = Standard Penetration Test (Cone) SPT(S) = Standard Penetration Test (Split Spoon)								<b>Remarks</b>															
HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm) FI = fracture index TCR = total core recovery SCR = solid core recovery RQD = rock quality designation																							

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											MBH01/16						
<b>offices</b> London   Kent   Derby   Cardiff   Manchester   Moray											Sheet 2 of 2						
Project Name: The Machine Store				Project No. 19579G			Co-ords:				Hole Type CP						
Location: The Old Vinyl Factory, Hayes							Level:				Scale 1:50						
Equipment:							Dates: 13/05/2016				Logged By MSG						
Well	Wtr Strk	Sample and In Situ Testing			Coring			Depth (m)	Level (m)	Legend	Stratum Description						
		Depth (m)	Type	Results	FI	TCR	SCR					RQD					
		10.50	D														
		11.00	SPT(S) D	N=24 (3,4/5,6,6,7)													
		11.00 - 11.45															
		12.00	D														
		12.50 - 12.95	U	Ublow=30													
		13.50	D														
		14.00	SPT(S) D	N=26 (3,5/5,7,7,7)													
		14.00 - 14.45															
		15.00	D														
		15.50 - 15.95	U	Ublow=35													
		16.50	D														
		17.00	SPT(S) D	N=37 (5,7/8,8,10,11)													
		17.00 - 17.50															
		18.00	D														
		18.50 - 18.95	U	Ublow=40													
		19.50	D														
		20.00	SPT(S) D	N=39 (5,7/8,9,10,12)													
		20.00 - 20.45															
							End of Borehole at 20.00m				20						
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample SPT(C) = Standard Penetration Test (Cone) SPT(S) = Standard Penetration Test (Split Spoon)							HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm) FI = fracture index TCR = total core recovery SCR = solid core recovery RQD = rock quality designation					Remarks					



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## Borehole Log

Borehole No.  
**MBH02/16**  
Sheet 1 of 3

Project Name: The Machine Store

Project No.  
19579G

Co-ords:

Hole Type  
CP

Location: The Old Vinyl Factory, Hayes

Level:

Scale  
1:50

Equipment: Dando 2000

Dates: 12/04/2016

Logged By  
MSG

Well

Wtr  
Strk

**Sample and In Situ Testing**

**Coring**

Depth (m)

Type

Results

FI

TCR

SCR

RQD

Depth (m)

Level (m)

Legend

Stratum Description



1

2

3

4

5

6

7

8

9

10

0.50

B

50 (5,17/50 for 125mm)

0.40

0.90

1.20

D

MADE GROUND: Soft brown silty sand with gravels. Gravels comprised subangular to angular, coarse to fine, bricks concrete and flints.

1.20 - 1.65

SPT(C)

50 (6,13/50 for 195mm)

0.90

1.20

B

Dense orange brown sandy GRAVEL. Gravels comprised subangular to rounded, coarse to fine flints.

2.00

D

2.00

SPT(C)

2.00 - 2.45

B

N=49 (2,7/11,14,12,12)

1.20 - 1.65

3.00

D

3.00

SPT(C)

3.00 - 3.45

B

N=30 (7,8/10,8,6,6)

1.65 - 2.00

4.00

D

4.00

SPT(C)

4.00 - 4.45

B

N=30 (7,8/10,8,6,6)

2.00 - 3.00

4.50

D

4.50

D

Firm to stiff brown mottled grey silty weathered CLAY.

3.00 - 4.00

5.00

SPT(S)

5.00 - 5.45

D

N=12 (1,1/2,3,3,4)

4.00 - 5.00

5.00

6.00

D

6.00

U

Ublow=51

5.00 - 5.45

6.50 - 6.95

D

7.00

D

7.00

Ublow=51

5.45 - 6.00

8.00

SPT(S)

8.00 - 8.45

B

N=21 (1,3/5,5,5,6)

6.00 - 8.00

9.00

D

9.00

U

Ublow=57

8.45 - 9.00

10.00

D

10.00

Continued on Next Sheet

D = small disturbed sample (tub)  
J = organic sample (amber glass jar)  
V = volatile sample (amber glass vial)  
B = bulk bag sample  
SPT(C) = Standard Penetration Test (Cone)  
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)  
PP = pocket penetrometer (kg.cm<sup>2</sup>)  
PID = photoionisation detector (ppm)  
FI = fracture index  
TCR = total core recovery  
SCR = solid core recovery  
RQD = rock quality designation

**Remarks**

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												<b>MBH02/16</b>									
Project Name: The Machine Store								Co-ords:				Sheet 2 of 3									
Location: The Old Vinyl Factory, Hayes								Level:				Scale 1:50									
Equipment: Dando 2000								Dates: 12/04/2016				Logged By MSG									
Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description									
		Depth (m)	Type	Results	FI	TCR	SCR	RQD													
		11.00	D	N=27 (1,3/5,7,7,8)								11									
		11.00	SPT(S)									11									
		11.00 - 11.45	B									11									
		12.00	D									12									
		12.50 - 12.95	U									12									
		13.00	D									13									
		14.00	D									14									
		14.00	SPT(S)									14									
		14.00 - 14.45	B									14									
		14.00										14									
		15.00	D									15									
		15.10	D									15									
		15.50 - 15.95	U									15									
		16.00	D									16									
		17.00	D									17									
		17.00	SPT(S)									17									
		17.00 - 17.45	B									17									
		18.00	D									18									
		18.50 - 18.95	U									18									
		19.00	D									19									
		20.00	D									20									
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample SPT(C) = Standard Penetration Test (Cone) SPT(S) = Standard Penetration Test (Split Spoon)								HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm) FI = fracture index TCR = total core recovery SCR = solid core recovery RQD = rock quality designation					Continued on Next Sheet								
								<b>Remarks</b>													

 <p>Idom Merebrook Ltd, East Mill, Bridgefoot, Belper, Derbyshire, DE56 2UA  t +44 (0) 1773 829 988 e consulting@merebrook.co.uk  merebrook.co.uk idom.com  AN idom GROUP COMPANY</p>								<b>Borehole Log</b>				Borehole No.		
														<b>MBH02/16</b>
Project Name: The Machine Store								Co-ords:				Sheet 3 of 3		
Location: The Old Vinyl Factory, Hayes								Level:				Hole Type CP		
Equipment: Dando 2000								Dates: 12/04/2016				Scale 1:50		
												Logged By MSG		
Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results	FI	TCR	SCR	RQD						
		20.00	SPT(S)	0 (75 for 115mm/0 for 0mm)				20.05				CLAYSTONE.		
		20.00 - 20.45	B					20.20				Stiff dark bluish grey slightly silty, slightly sandy fissured CLAY.		
		21.00	D					21.00						21
		21.50 - 21.95	B					21.30						
		22.00	D					22						
		23.00	D					23						
		23.00	SPT(S)					23						
		23.00 - 23.45	B	N=40 (7,7/8,10,10,12)				24						
		24.00	D					24						
		24.50 - 24.95	U	Ublow=100				25						
	25.00	D					25					End of Borehole at 25.00m	26	
							26						27	
							27						28	
							28						29	
							29						30	
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample SPT(C) = Standard Penetration Test (Cone) SPT(S) = Standard Penetration Test (Split Spoon)								<b>Remarks</b>						
HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm) FI = fracture index TCR = total core recovery SCR = solid core recovery RQD = rock quality designation														



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## Borehole Log

Borehole No.  
**MBH03/16**  
Sheet 1 of 3

Project Name: The Machine Store

Project No.  
19579G

Co-ords:

Hole Type  
CP

Location: The Old Vinyl Factory, Hayes

Level:

Scale  
1:50

Equipment: Dando 2000

Dates: 14/04/2016

Logged By  
MSG

Well

Wtr  
Strk

**Sample and In Situ Testing**

**Coring**

Depth (m)

Type

Results

FI

TCR

SCR

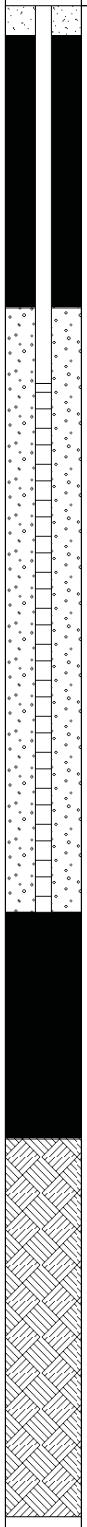
RQD

Depth (m)

Level (m)

Legend

Stratum Description



1.00

1.20

1.20 - 1.65

2.00

2.00

2.00

2.00 - 2.45

3.00

3.00

3.00 - 3.45

4.00

4.00

4.00 - 4.45

5.00

5.00 - 5.45

5.50

6.20

6.50

7.00

8.00

8.00 - 8.50

8.50

9.00

9.50

10.00

B

SPT(C)

B

D

D

SPT(C)

B

D

SPT(C)

B

D

SPT(C)

B

D

SPT(S)

D

SPT(S)

U

D

D

SPT(S)

N=20 (3,4/4,5,5,6)

Ublow=53

N=22 (3,3/4,5,6,7)

50 (6,19/50 for 115mm)

50 (5,13/50 for 150mm)

50 (4,9/50 for 225mm)

38 (7,10/38 for 228mm)

0.50

5.80

6.20

Legend:

CONCRETE with reinforcement.

Dense orange brown sandy GRAVEL. Gravels comprised subangular to rounded, coarse to fine flints.

Firm to stiff brown mottled grey silty weathered CLAY.

Stiff dark bluish grey slightly silty, slightly sandy fissured CLAY.

Continued on Next Sheet

D = small disturbed sample (tub)  
J = organic sample (amber glass jar)  
V = volatile sample (amber glass vial)  
B = bulk bag sample  
SPT(C) = Standard Penetration Test (Cone)  
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)  
PP = pocket penetrometer (kg.cm<sup>2</sup>)  
PID = photoionisation detector (ppm)  
FI = fracture index  
TCR = total core recovery  
SCR = solid core recovery  
RQD = rock quality designation

**Remarks**



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												<b>MBH03/16</b>									
Project Name: The Machine Store								Co-ords:				Sheet 3 of 3									
Location: The Old Vinyl Factory, Hayes								Level:				Scale 1:50									
Equipment: Dando 2000								Dates: 14/04/2016				Logged By MSG									
Well	Wtr Strk	Sample and In Situ Testing			Coring			Depth (m)	Level (m)	Legend	Stratum Description										
		Depth (m)	Type	Results	FI	TCR	SCR						RQD								
		20.50	D																		
		21.00	D																		
		21.50 21.50 - 21.95	SPT(S) B																		
		22.00	D																		
		23.00 - 23.45	D																		
		23.50	D																		
		24.00	D																		
		24.50 24.50 - 24.95	SPT(S) B																		
		25.00	D																		
		26.00 26.00 - 26.45	D U																		
		26.50	D																		
		27.00	D																		
		27.50	SPT()																		
		28.00	D																		
		29.00 29.00 - 29.45	D U																		
		29.50	D																		
		30.00	D																		
End of Borehole at 30.00m																					
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample SPT(C) = Standard Penetration Test (Cone) SPT(S) = Standard Penetration Test (Split Spoon)								HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm <sup>2</sup> ) PID = photoionisation detector (ppm) FI = fracture index TCR = total core recovery SCR = solid core recovery RQD = rock quality designation													
								<b>Remarks</b>													



#### APPENDIX 4

- Soil Chemistry
- Laboratory Analysis Certificates



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## Analytical Report Number : 16-18374

<b>Project / Site name:</b>	TOVF (The Old Vinyl Factory), Hayes	<b>Samples received on:</b>	24/05/2016
<b>Your job number:</b>	19579	<b>Samples instructed on:</b>	24/05/2016
<b>Your order number:</b>	16-S2-FDO-LABS	<b>Analysis completed by:</b>	31/05/2016
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	31/05/2016
<b>Samples Analysed:</b>		2 soil samples	

**Signed:** \_\_\_\_\_

Rexona Rahman  
Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

**Signed:** \_\_\_\_\_

Emma Winter  
Assistant Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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MCERTS

Analytical Report Number: 16-18374

Project / Site name: TOVF (The Old Vinyl Factory), Hayes  
Your Order No: 16-S2-FDO-LABS

Lab Sample Number		577822	577823			
Sample Reference		HP7 D	HP8 C			
Sample Number		None Supplied	None Supplied			
Depth (m)		0.40	0.40			
Date Sampled		16/05/2016	16/05/2016			
Time Taken		None Supplied	None Supplied			
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	12	11	
Total mass of sample received	kg	0.001	NONE	1.3	0.47	

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	
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**General Inorganics**

pH	pH Units	N/A	MCERTS	8.7	9.0	
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.088	0.10	
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	
Organic Matter	%	0.1	MCERTS	0.1	0.6	

**Total Phenols**

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	
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**Speciated PAHs**

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	0.40	
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.59	
Pyrene	mg/kg	0.1	MCERTS	< 0.10	0.54	
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	0.27	
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.47	
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.28	
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.22	
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.32	
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	

**Total PAH**

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	3.09	
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**Heavy Metals / Metalloids**

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	24	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	22	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	53	120	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	270	350	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	3.9	2.2	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	25	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	74	69	



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MCERTS

Analytical Report Number: 16-18374

Project / Site name: TOVF (The Old Vinyl Factory), Hayes  
Your Order No: 16-S2-FDO-LABS

Lab Sample Number	577822	577823				
Sample Reference	HP7 D	HP8 C				
Sample Number	None Supplied	None Supplied				
Depth (m)	0.40	0.40				
Date Sampled	16/05/2016	16/05/2016				
Time Taken	None Supplied	None Supplied				
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>			

**Monoaromatics**

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0			
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0			
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0			
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0			
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0			
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0			

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0			
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0			
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	12			
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	39			
<b>TPH-CWG - Aliphatic (EC5 - EC35)</b>	mg/kg	10	MCERTS	< 10	52			

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0			
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0			
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10			
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	13			
<b>TPH-CWG - Aromatic (EC5 - EC35)</b>	mg/kg	10	MCERTS	< 10	21			



**Analytical Report Number : 16-18374**

**Project / Site name: TOVF (The Old Vinyl Factory), Hayes**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
577822	HP7 D	None Supplied	0.40	Brown clay and sand with gravel.
577823	HP8 C	None Supplied	0.40	Brown clay and sand with gravel.



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MCERTS

Analytical Report Number : 16-18374



Project / Site name: TOVF (The Old Vinyl Factory), Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L023-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L076-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.



Sample ID	Other ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
HP7 D	S		16-18374	577822	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
HP7 D	S		16-18374	577822	bc	Monohydric phenols in soil	L080-PL	b
HP7 D	S		16-18374	577822	bc	Speciated EPA-16 PAHs in soil	L064-PL	b
HP7 D	S		16-18374	577822	bc	Sulphide in soil	L010-PL	c
HP7 D	S		16-18374	577822	bc	TPHCWG (Soil)	L076-PL	b
HP8 C	S		16-18374	577823	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
HP8 C	S		16-18374	577823	bc	Sulphide in soil	L010-PL	c
HP8 C	S		16-18374	577823	bc	TPHCWG (Soil)	L076-PL	b



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## Analytical Report Number : 16-18303

Replaces Analytical Report Number : 16-18303, issue no. 1

<b>Project / Site name:</b>	TOVF (The Old Vinyl Factory), Hayes	<b>Samples received on:</b>	16/05/2016
<b>Your job number:</b>	19579	<b>Samples instructed on:</b>	20/05/2016
<b>Your order number:</b>	16-S2-FDO-LABS	<b>Analysis completed by:</b>	27/05/2016
<b>Report Issue Number:</b>	2	<b>Report issued on:</b>	09/06/2016
<b>Samples Analysed:</b>	1 soil sample		

**Signed:** \_\_\_\_\_

Rexona Rahman  
Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

**Signed:** \_\_\_\_\_

Emma Winter  
Assistant Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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MCERTS

Analytical Report Number: 16-18303

Project / Site name: TOVF (The Old Vinyl Factory), Hayes  
Your Order No: 16-S2-FDO-LABS

Lab Sample Number	577449						
Sample Reference	BH01/16						
Sample Number	ES1						
Depth (m)	0.60						
Date Sampled	13/05/2016						
Time Taken	None Supplied						
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>				
Stone Content	%	0.1	NONE	< 0.1			
Moisture Content	%	N/A	NONE	15			
Total mass of sample received	kg	0.001	NONE	1.1			

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected			
------------------	------	-----	-----------	--------------	--	--	--

**General Inorganics**

pH	pH Units	N/A	MCERTS	10.1			
Total Cyanide	mg/kg	1	MCERTS	< 1			
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.025			
Sulphide	mg/kg	1	MCERTS	< 1.0			
Organic Matter	%	0.1	MCERTS	1.3			

**Total Phenols**

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0			
----------------------------	-------	---	--------	-------	--	--	--

**Speciated PAHs**

Naphthalene	mg/kg	0.05	MCERTS	< 0.05			
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10			
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10			
Fluorene	mg/kg	0.1	MCERTS	< 0.10			
Phenanthrene	mg/kg	0.1	MCERTS	0.65			
Anthracene	mg/kg	0.1	MCERTS	< 0.10			
Fluoranthene	mg/kg	0.1	MCERTS	0.83			
Pyrene	mg/kg	0.1	MCERTS	0.70			
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.44			
Chrysene	mg/kg	0.05	MCERTS	0.49			
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.39			
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.34			
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.40			
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10			
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10			
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05			

**Total PAH**

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	4.24			
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**Heavy Metals / Metalloids**

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16			
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2			
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0			
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20			
Copper (aqua regia extractable)	mg/kg	1	MCERTS	60			
Lead (aqua regia extractable)	mg/kg	1	MCERTS	390			
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.3			
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20			
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0			
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	99			



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MCERTS

Analytical Report Number: 16-18303

Project / Site name: TOVF (The Old Vinyl Factory), Hayes  
Your Order No: 16-S2-FDO-LABS

Lab Sample Number	577449						
Sample Reference	BH01/16						
Sample Number	ES1						
Depth (m)	0.60						
Date Sampled	13/05/2016						
Time Taken	None Supplied						
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>				

**Monoaromatics**

Benzene	ug/kg	1	MCERTS	< 1.0			
Toluene	ug/kg	1	MCERTS	< 1.0			
Ethylbenzene	ug/kg	1	MCERTS	< 1.0			
p & m-xylene	ug/kg	1	MCERTS	< 1.0			
o-xylene	ug/kg	1	MCERTS	< 1.0			
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0			

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1			
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1			
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1			
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0			
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0			
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0			
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	28			
<b>TPH-CWG - Aliphatic (EC5 - EC35)</b>	mg/kg	10	MCERTS	28			

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1			
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1			
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1			
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0			
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0			
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10			
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	17			
<b>TPH-CWG - Aromatic (EC5 - EC35)</b>	mg/kg	10	MCERTS	20			



**Analytical Report Number : 16-18303**

**Project / Site name: TOVF (The Old Vinyl Factory), Hayes**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
577449	BH01/16	ES1	0.60	Brown clay and sand.



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MCERTS

Analytical Report Number : 16-18303

Project / Site name: TOVF (The Old Vinyl Factory), Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L023-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L076-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

## Sample Deviation Report



Sample ID	Other ID	Sample Type	Job	Sample Number	Sample Deviation Code	Test name	Test ref	Test Deviation code
BH0116	ES1	S	16-18303	577449	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
BH0116	ES1	S	16-18303	577449	bc	Sulphide in soil	L010-PL	c
BH0116	ES1	S	16-18303	577449	bc	TPHCWG (Soil)	L076-PL	b



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## Analytical Report Number : 16-15810

<b>Project / Site name:</b>	Machine Store, TOVF	<b>Samples received on:</b>	20/04/2016
<b>Your job number:</b>	19579G	<b>Samples instructed on:</b>	20/04/2016
<b>Your order number:</b>	16-S2-FDO-LABS	<b>Analysis completed by:</b>	27/04/2016
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	27/04/2016
<b>Samples Analysed:</b>		7 soil samples	

**Signed:** \_\_\_\_\_

Rexona Rahman  
Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

**Signed:** \_\_\_\_\_

Emma Winter  
Assistant Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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MCERTS

Analytical Report Number: 16-15810

Project / Site name: Machine Store, TOVF

Your Order No: 16-S2-FDO-LABS

Lab Sample Number		563407	563408	563409	563410	563411
Sample Reference		HDP01/1	MBH02/16-1	MTP1601/1	MTP1602/1	MTP1603/1
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.50-0.70	0.30-0.90	0.60-1.00	0.70-0.90	0.60-0.90
Date Sampled		11/04/2016	11/04/2016	14/04/2016	14/04/2016	14/04/2016
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	14	12	9.0
Total mass of sample received	kg	0.001	NONE	1.1	0.91	1.1

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	Not-detected
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**General Inorganics**

pH	pH Units	N/A	MCERTS	9.5	9.5	8.4	10.2	9.9
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.068	0.11	0.13	0.11	0.080
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Organic Matter	%	0.1	MCERTS	0.9	1.2	0.6	0.3	1.2

**Total Phenols**

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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**Speciated PAHs**

Naphthalene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	0.56	0.20
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	0.54	< 0.10	< 0.10	0.19	< 0.10
Fluorene	mg/kg	0.1	MCERTS	0.51	< 0.10	< 0.10	0.22	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	6.6	0.32	< 0.10	9.7	4.8
Anthracene	mg/kg	0.1	MCERTS	0.37	< 0.10	< 0.10	9.4	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	3.8	0.50	< 0.10	3.9	2.5
Pyrene	mg/kg	0.1	MCERTS	3.2	0.42	< 0.10	2.5	1.9
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.96	0.22	< 0.10	0.44	0.52
Chrysene	mg/kg	0.05	MCERTS	1.0	0.35	< 0.05	0.95	1.1
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.53	< 0.10	< 0.10	0.37	0.54
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.35	< 0.10	< 0.10	0.39	0.47
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.42	0.23	< 0.10	0.28	0.57
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.27
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.34

**Total PAH**

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	18.5	2.04	< 1.60	29.0	13.2
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**Heavy Metals / Metalloids**

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	44	22	21	16	13
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	22	21	24	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	210	71	190	81	52
Lead (aqua regia extractable)	mg/kg	1	MCERTS	510	480	200	170	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.6	2.4	1.0	1.7	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	33	23	21	20	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	98	110	84	70



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MCERTS

Analytical Report Number: 16-15810

Project / Site name: Machine Store, TOVF

Your Order No: 16-S2-FDO-LABS

Lab Sample Number	563407	563408	563409	563410	563411
Sample Reference	HDP01/1	MBH02/16-1	MTP1601/1	MTP1602/1	MTP1603/1
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.50-0.70	0.30-0.90	0.60-1.00	0.70-0.90	0.60-0.90
Date Sampled	11/04/2016	11/04/2016	14/04/2016	14/04/2016	14/04/2016
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>		

**Monoaromatics**

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	1.4	< 1.0	< 1.0	1.1	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	5.1	< 2.0	3.4	25	100
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	54	< 8.0	190	560
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	21	440	19	580	1300
<b>TPH-CWG - Aliphatic (EC5 - EC35)</b>	mg/kg	10	MCERTS	34	500	29	790	2000

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	3.6	3.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	5.5	9.8	< 2.0	31	74
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	22	44	< 10	130	300
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	15	97	< 10	230	560
<b>TPH-CWG - Aromatic (EC5 - EC35)</b>	mg/kg	10	MCERTS	43	150	< 10	390	930



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MCERTS

Analytical Report Number: 16-15810

Project / Site name: Machine Store, TOVF

Your Order No: 16-S2-FDO-LABS



Lab Sample Number		563412	563413			
Sample Reference		MTP1603/2	HDP03/1			
Sample Number		None Supplied	None Supplied			
Depth (m)		1.30-1.50	0.50-0.70			
Date Sampled		14/04/2016	14/04/2016			
Time Taken		None Supplied	None Supplied			
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	15	11	
Total mass of sample received	kg	0.001	NONE	0.94	1.6	
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	
<b>General Inorganics</b>						
pH	pH Units	N/A	MCERTS	8.0	8.1	
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.15	0.13	
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	
Organic Matter	%	0.1	MCERTS	0.7	0.9	
<b>Total Phenols</b>						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	
<b>Speciated PAHs</b>						
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	
<b>Total PAH</b>						
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	
<b>Heavy Metals / Metalloids</b>						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	10	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	31	20	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	28	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	89	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.4	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	28	19	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	49	44	



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MCERTS

Analytical Report Number: 16-15810

Project / Site name: Machine Store, TOVF

Your Order No: 16-S2-FDO-LABS



Lab Sample Number		563412	563413				
Sample Reference		MTP1603/2	HDP03/1				
Sample Number		None Supplied	None Supplied				
Depth (m)		1.30-1.50	0.50-0.70				
Date Sampled		14/04/2016	14/04/2016				
Time Taken		None Supplied	None Supplied				
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>				
<b>Monoaromatics</b>							
Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0		
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0		
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0		
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0		
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0		
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0		

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1		
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1		
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1		
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0		
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0		
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0		
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0		
<b>TPH-CWG - Aliphatic (EC5 - EC35)</b>	mg/kg	10	MCERTS	< 10	< 10		

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1		
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1		
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1		
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0		
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0		
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10		
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10		
<b>TPH-CWG - Aromatic (EC5 - EC35)</b>	mg/kg	10	MCERTS	< 10	< 10		



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**Project / Site name: Machine Store, TOVF**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

<b>Lab Sample Number</b>	<b>Sample Reference</b>	<b>Sample Number</b>	<b>Depth (m)</b>	<b>Sample Description *</b>
563407	HDP01/1	None Supplied	0.50-0.70	Light brown loam and sand with gravel and brick.
563408	MBH02/16-1	None Supplied	0.30-0.90	Light brown loam and sand with gravel and rubble.
563409	MTP1601/1	None Supplied	0.60-1.00	Light brown loam and clay with gravel.
563410	MTP1602/1	None Supplied	0.70-0.90	Light brown loam and sand with gravel and rubble.
563411	MTP1603/1	None Supplied	0.60-0.90	Light brown loam and sand with gravel and rubble.
563412	MTP1603/2	None Supplied	1.30-1.50	Light brown loam and clay with gravel.
563413	HDP03/1	None Supplied	0.50-0.70	Brown loam and clay with gravel.



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MCERTS

Analytical Report Number : 16-15810



Project / Site name: Machine Store, TOVF

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L023-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L076-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.



Sample ID	Other ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
HDP01/1	S		16-15810	563407	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
HDP01/1	S		16-15810	563407	bc	Sulphide in soil	L010-PL	c
HDP01/1	S		16-15810	563407	bc	TPHCWG (Soil)	L076-PL	b
HDP03/1	S		16-15810	563413	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
HDP03/1	S		16-15810	563413	b	TPHCWG (Soil)	L076-PL	b
MBH02/16-1	S		16-15810	563408	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MBH02/16-1	S		16-15810	563408	bc	Sulphide in soil	L010-PL	c
MBH02/16-1	S		16-15810	563408	bc	TPHCWG (Soil)	L076-PL	b
MTP1601/1	S		16-15810	563409	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP1601/1	S		16-15810	563409	b	TPHCWG (Soil)	L076-PL	b
MTP1602/1	S		16-15810	563410	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP1602/1	S		16-15810	563410	b	TPHCWG (Soil)	L076-PL	b
MTP1603/1	S		16-15810	563411	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP1603/1	S		16-15810	563411	b	TPHCWG (Soil)	L076-PL	b
MTP1603/2	S		16-15810	563412	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP1603/2	S		16-15810	563412	b	TPHCWG (Soil)	L076-PL	b