

Project : **Leconfield, Cleator Moor**

Client : **West Lakes Renaissance**

Method :

Co-ordinates:
Ground Level :

Start Date : 12/03/07
Finish Date : 13/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes
							Depth (m)	Type	
MADE GROUND: Grass and moss over dark brown clayey TOPSOIL with many roots and rootlets.			0.50				0.30	B	
MADE GROUND: Grey, red brown and black angular to sub-angular fine to coarse GRAVEL of slag and occasional brick.							0.60	B	
							1.60	S D B	N=11 (3,2/2,1,3,5)
			2.90				2.50	S U	N=9 (2,3/3,2,2,2) 35blows
Firm to stiff orange brown sandy, slightly gravelly CLAY. Gravel is angular to sub-rounded fine to coarse of sandstone, mudstone, siltstone and coal.							3.00	D	
Becoming stiff from 3.6mbgl.							3.60	S D B	N=25 (7,5/6,6,6,7)
							4.60	B	
							5.50	D	
							6.00	S D B	50 (5,7/8,14,18,10 for 70m
							7.00	D	
							7.50	B	
			8.20						
Grey LIMESTONE (recovered as chippings via chiselling).									
			9.10						
Exploratory hole complete at 9.10 m									

Remarks:

1. Inspection pit hand excavated to 0.5mbgl.
2. Groundwater not observed.
3. Chiselling: 7.5 to 7.7mbgl took 0.5 hours, 7.75 to 8.0 mbgl took 0.75 hours, 8.0 - 8.35mbgl took 1 hour, 8.45-8.80mbgl took 1 hour.
4. Backfilled with arisings.

JOB NUMBER E11683

Logged By : AC

Checked By :

Project : **Leconfield, Cleator Moor**

Client : **West Lakes Renaissance**

Method :

Co-ordinates:
Ground Level :

Start Date : 15/03/07
Finish Date : 15/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes
							Depth (m)	Type	
MADE GROUND: Grass over brown clayey TOPSOIL			0.10						
MADE GROUND: Stiff orange brown mottled grey, slightly sandy, slightly gravelly CLAY. Gravel is angular to sub-rounded, fine to coarse of sandstone, mudstone, siltstone and coal.			0.60				0.60	B	
Stiff brown sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of sandstone, mudstone, siltstone and coal.							1.55	B	
From 3.8mbgl becoming very stiff to hard.									
At 6.50mbgl cobble of limestone noted.					▽ 6.50				
Exploratory hole complete at 7.40 m			7.40						

Remarks:

1. Groundwater strike at 6.50mbgl.
2. Chiselling: from 2.10 to 2.30mbgl - took 0.5 hours, 7.10-7.30mbgl took 2 hours, 7.30 to 7.40mbgl took 1.5 hours.
3. Borehole terminated at 7.40mbgl due to obstruction.

JOB NUMBER E11683

Logged By : AC

Checked By :




Project : **Leconfield, Cleator Moor**

Client : **West Lakes Renaissance**

Method :

Co-ordinates:
Ground Level :

Start Date : 13/03/07
Finish Date : 15/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes
							Depth (m)	Type	
MADE GROUND: Brown and grey sandy angular to sub-angular fine to coarse GRAVEL of limestone.			0.30 0.40						
MADE GROUND: Concrete.							0.50	B	
MADE GROUND: Grey angular to sub-angular fine to coarse GRAVEL of slag. Slag is very compact. Poor recovery due to chiselling from 0.8mbgl. Strong sulphurous odour noted between 0.4 and 2.0mbgl.			2.00				1.50	B	
MADE GROUND: Light grey angular to sub-angular fine to coarse GRAVEL of slag. Sulphurous odour noted between 2.0-4.5mbgl.							2.50	S D B	N=27 (2,4/6,7,7,7)
							3.50	S D B	46 (6,10/12,14,8,12 for 50r
			4.50				4.50	S D B	N=3 (5,3/1)
							5.50	D	
							6.05	S D B	N=17 (8,3/3,5,5,4)
							7.50	S D B	N=50 (4,8/11,17,12,10)
Exploratory hole complete at 8.10 m									

Remarks:


1. Inspection pit hand excavated to 0.8mbgl
2. Groundwater not observed.
3. Chiselling: 0.8-1.15mbgl took 0.75 hours, 1.15-1.45mbgl took 1 hour, 1.45-2.0 took 1.75hours, 6.35-6.75mbgl took 0.75 hours, 775-8.10mbgl took 1 hour.
4. 50mm standpipe installed to 6.0mbgl.

JOB NUMBER E11683

Logged By : AC

Checked By :

<div><div>White Young Green</div></div>	<div>WHITE YOUNG GREEN ENVIRONMENTAL</div> <div>Ground Technologies and Investigations</div> <div>Regatta House, Clippers Quay, Manchester M50 3XP.</div> <div>Tel. 0161 872 3223. Fax. 0161 872 3193</div>	<div>Borehole Number</div> <div>BH1</div>						
		<div>Sheet 1 of 3</div> <div>Scale 1:50</div>						
<div>Project Name: Leconfield , Cleator Moor</div>		<div>Client: West Lakes Renaissance</div>						
<div>Method: Rotary and Cable Percussion.</div>	<div>Co-ordinates -</div> <div>Ground Level: -</div>	<div>Dates: 20/03/2007 to 26/03/2007</div>						
<div>Stratum Description</div>	<div>Legend</div>	<div>Depth (m) Level (AOD)</div> <div>Depth (m)</div> <div>Type</div> <div>Results/Remarks</div> <div>Hole Casing</div> <div>Water Strikes</div> <div>Backfill / Installation</div>						
<div>MADE GROUND: Grass and moss over brown clayey TOPSOIL.</div>		<div>0.10</div>						
<div>MADE GROUND: Firm red brown slightly sandy, slightly gravelly CLAY. Gravel is angular to sub-angular fine to coarse of ash, slag, sandstone, mudstone, siltstone and coal.</div>		<div>0.70</div>						
<div>MADE GROUND: Grey and blue grey GRAVEL of slag.</div>		<div>1</div>						
		<div>2</div>						
		<div>3</div>						
		<div>4</div>						
		<div>5</div>						
<div>MADE GROUND: Brown sandy slightly gravelly CLAY.</div>		<div>6</div>	<div>6.00</div>					
<div>Stiff red brown and brown sandy slightly gravelly CLAY. Gravel is angular to sub-rounded fine to coarse of sandstone, mudstone, siltstone and coal.</div>		<div>7</div>	<div>6.50</div>	<div>6.50-6.95</div>	<div>B</div>		<div>6.50 150mm</div>	
				<div>7.10-7.55</div>	<div>U</div>	<div>70 blows</div>		
<div>Light brown sandy, slightly gravelly CLAY/ SILT with fine laminations of silt. Gravel is sub-angular to sub-rounded fine and medium grained of mudstone and siltstone.</div>		<div>8</div>	<div>7.70</div>	<div>7.65</div>	<div>D</div>			
				<div>7.80-8.20</div>	<div>B</div>			
<div>Moderately weak, very thinly bedded grey LIMESTONE. Distinctly weathered to partially weathered.</div>		<div>9</div>	<div>8.80</div>					
			<div>9.70</div>					
<div>Continued next sheet</div>				<div>Type</div>				
<div>Remarks: 1. Rotary Openhole from 0.0-6.5mbgl 2. Cable Percussion Drilling from 6.50 to 9.90mbgl. 3. Rotary Coring from 9.70mbgl. 4. Groundwater encountered at 8.0mbgl on 25/03/07</div>						<div>Job No:</div> <div>Logged By:</div> <div>Checked By:</div>	<div>E11683</div> <div>AC</div>	

	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193		Borehole BH1 Number	
			Sheet 2 of 3 Scale 1:50	
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance		
Method: Rotary and Cable Percussion.		Co-ordinates - Ground Level: -		Dates: 20/03/2007 to 26/03/2007
Stratum Description		Legend	Depth (m) Level (AOD)	Depth (m) TCR
Moderately weak grey with light brown staining LIMESTONE with thin laminations of dark grey mudstone. Distinctly weathered. Discontinuities where present are closely spaced horizontal, planar, undulating and smooth.			10.00	9.70 -11.30
Weak grey and dark grey MUDSTONE with thin laminations of grey limestone. Recovered non-intact as medium and coarse gravel in a clay matrix. Distinctly weathered.			11	53 0 0 NI
Weak to moderately weak, dark grey and grey black MUDSTONE / SHALE. Partially weathered. Discontinuities where present are very thinly to thinly spaced sub-horizontal (0-15degrees) planar, smooth, open. Light grey clay residue noted on some surfaces.			11.30	
Between 12.50 and 13.50mbgl, recovered non-intact as a fine to coarse gravel in a clay matrix. In places, red brown clay residue was noted forming part of the matrix.			12	NI
Non-intact between 13.68 to 13.79mbgl At 13.8mbgl, small to medium gravel sized nodules of iron pyrite crystals noted in-between fracture surfaces and/or forming part of the matrix.			13	NI
From 14.5mbgl, fossil shell and plant impressions noted on surfaces. Between 14.7 and 15.20mbgl, small to medium gravel sized nodules of iron pyrite crystals noted in-between fracture surfaces and/or forming part of the matrix.			14	NI
Between 16.30 and 16.5mbgl, thin bands of red brown clay residue (possibly haematite) noted on fracture surfaces.			15	70 15 8 NI
Strong light grey medium and coarse grained SANDSTONE. Slightly weathered. Discontinuities are widely spaced, horizontal and sub-vertical planar, irregular. Wide patches of iron pyrite and haematite crystals noted on surfaces. Many thin veins (5mm to 15mm) of white and yellow white to cream of dolomite and quartz noted running through the core and along fracture surfaces.			16	
Strong light grey coarse grained SANDSTONE. Slightly weathered. Discontinuities are widely spaced sub-horizontal and sub-vertical planar, irregular. Wide dolomite crystallisation, reddish staining and patches of iron pyrite crystals present on most surfaces. Many thin to medium veins (5mm to 40mm) of white and yellow white to cream of dolomite and quartz noted running throughout the core.			16.50	
Between 17.85 to 18.05mbgl very thinly spaced sub-horizontal fractures note. Core is recovered non-intact. Iron pyrite crystallisation noted along all fracture surfaces and red-brown clay infill noted along 3 surfaces.			17	9.090
Between 18.25 to 18.55mbgl: large amount of (up to 20mm) dolomite crystallisation noted along a sub-vertical fracture. In places, large dolomite crystals (5-10mm) visible. Iron pyrite crystallisation also present on top of the dolomite.			17.25	
Continued next sheet			18	100 51 47
			19	12.33
				TCR SCR RQD FI
Remarks: 1. Rotary Openhole from 0.0-6.5mbgl 2. Cable Percussion Drilling from 6.50 to 9.90mbgl. 3. Rotary Coring from 9.70mbgl. 4. Groundwater encountered at 8.0mbgl on 25/03/07		Job No: E11683 Logged By: AC Checked By:		



Ground Technologies and Investigations

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Sheet 3 of 3
Scale 1:50



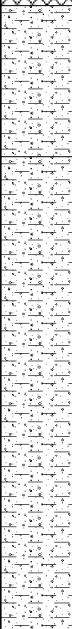

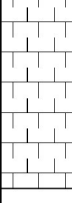
Client: West Lakes Renaissance



Co-ordinates -
Ground Level: -


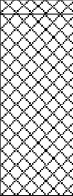






Dates: 20/03/2007 to 26/03/2007



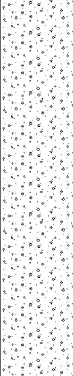



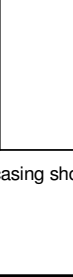

End of Borehole at 25.50 m


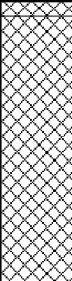
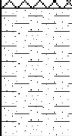


Job No: E11683
 Logged By: AC
 Checked By:

	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193		Borehole Number BH2					
			Sheet 1 of 2 Scale 1:50					
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance						
Method: Rotary open hole.		Co-ordinates 0E - 0N Ground Level: -		Dates: 20/03/2007				
Stratum Description		Legend	Depth (m) Level (AOD)	Samples & In Situ Testing Depth (m) Type Results/Remarks	Hole Casing Water Strikes Backfill / Installation			
MADE GROUND: Grass over brown clayey sandy TOPSOIL. MADE GROUND: Grey and blue grey GRAVEL of slag.			0.10					
			1					
MADE GROUND: Blue grey GRAVEL of slag.			2	2.00				
MADE GROUND: Dark grey GRAVEL of slag.			2.70					
Brown and red brown sandy, slightly gravelly CLAY.			3	3.00				
Firm to stiff red brown sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of sandstone, mudstone, siltstone, coal, limestone.			4	4.00				
			5					
			6					
			7					
			7.20					
Boulder (Driller's Description)			8					
			8.30					
BOULDERS			8.60					
8.6-?? Brown fine to coarse SAND and medium and coarse grained GRAVEL of sandstone and limestone. ?? - 10.5 Grey LIMESTONE.			9					
Continued next sheet				Type				
Remarks: 1. Groundwater encountered at 1mbgl. 2. Boulder(s) encountered between 7.2-8.6mbgl. 3. No further progress at 10.5mbgl on limestone, borehole abandoned.					Job No: E11683 Logged By: AC Checked By:			




	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193	Borehole Number BH2						
		Sheet 2 of 2 Scale 1:50						
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance						
Method: Rotary open hole.	Co-ordinates 0E - 0N Ground Level: -	Dates: 20/03/2007						
Stratum Description	Legend	Depth (m) Level (AOD)	Depth (m)	Type	Results/Remarks	Hole Casing	Water Strikes	Backfill / Installation
8.6-?? Brown fine to coarse SAND and medium and coarse grained GRAVEL of sandstone and limestone. ?? - 10.5 Grey LIMESTONE.		10.50						
----- End of Borehole at 10.50 m		11						
		12						
		13						
		14						
		15						
		16						
		17						
		18						
		19						
Remarks: 1. Groundwater encountered at 1mbgl. 2. Boulder(s) encountered between 7.2-8.6mbgl. 3. No further progress at 10.5mbgl on limestone, borehole abandoned.						Job No: E11683 Logged By: AC Checked By:		

	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193	Borehole Number BH3							
		Sheet 1 of 2 Scale 1:50							
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance							
Method:	Co-ordinates - Ground Level: -	Dates: 13/03/2007							
Stratum Description		Legend	Depth (m) Level (AOD)	Samples & In Situ Testing		Hole Casing	Water Strikes	Backfill / Installation	
MADE GROUND: Topsoil (driller's description).			0.10	Depth (m)	Type	Results/Remarks			
MADE GROUND: Foundry slag (driller's description).			1						
Orange brown firm CLAY. (driller's description).			1.30						
Stiff light sandy glacial till. (driller's description).			1.50						
			2						
			3						
			4						
			5						
			6						
			7						
			8						
			9						
			9.90						
Continued next sheet				Type					
Remarks: 1. Took 4 hours to advance casing from 10.30-12.80mbgl through gravels, casing shoe destroyed.						Job No: E11683			
						Logged By: AC			
						Checked By:			

	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193	Borehole Number BH3						
		Sheet 2 of 2 Scale 1:50						
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance						
Method:	Co-ordinates - Ground Level: -	Dates: 13/03/2007						
Stratum Description	Legend	Depth (m) Level (AOD)	Depth (m)	Type	Results/Remarks	Hole Casing	Water Strikes	Backfill / Installation
Very hard boulder (driller's description).		10.30						
Brown sand and gravel course (driller's description).								
		11						
		12						
		12.80						
		13						
		14						
		15						
		16						
		17						
		18						
		19						
Remarks: 1. Took 4 hours to advance casing from 10.30-12.80mbgl through gravels, casing shoe destroyed.						Job No: E11683		
						Logged By: AC		
						Checked By:		

	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193	Borehole Number BH3A							
		Sheet 1 of 1 Scale 1:50							
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance							
Method:	Co-ordinates - Ground Level: -	Dates: 15/03/2007							
Stratum Description		Legend	Depth (m) Level (AOD)	Samples & In Situ Testing		Hole Casing	Water Strikes	Backfill / Installation	
MADE GROUND: Topsoil (driller's description).			0.10	Depth (m)	Type	Results/Remarks			
MADE GROUND: Very compact grey foundry slag. (driller's description).									
Red brown sandy CLAY (possibly fill) (driller's description).			1.90						
Grey boulder			2.80						
Stiff red brown sandy CLAY. (glacial till) (driller's description).			3.60						
End of Borehole at 6.40 m			6.40				6.40 165mm		
			7						
			8						
			9						
Remarks: 1. Groundwater not observed.						Job No: E11683 Logged By: AC Checked By:			

<div><div>White Young Green</div></div>	<div><div>WHITE YOUNG GREEN ENVIRONMENTAL</div><div>Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193</div></div>	<div>Borehole Number</div> <div>BH5A</div>						
		<div>Sheet 1 of 1 Scale 1:50</div>						
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance						
Method:		Co-ordinates - Ground Level: -	Dates: 22/03/2007					
Stratum Description		Legend	<div>Depth (m) Level (AOD)</div> <div>Depth (m) Type</div> <div>Results/Remarks</div> <div>Hole Casing</div> <div>Water Strikes</div> <div>Backfill / Installation</div>					
MADE GROUND: TOPSOIL (driller's description).		<div><div></div><div>0.80</div><div>1</div><div>2</div><div>2.60</div><div>3</div><div>4</div><div>4.00</div><div>5</div><div>6</div><div>7</div><div>8</div><div>9</div></div>						
MADE GROUND: Foundry SLAG (driller's description).								
MADE GROUND: Brown firm gravelly CLAY (driller's description).								
End of Borehole at 4.00 m								
Remarks: 1. No groundwater observed.		Job No: E11683 Logged By: AC Checked By:						

	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193	Borehole Number BH7							
		Sheet 1 of 1 Scale 1:50							
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance							
Method:	Co-ordinates - Ground Level: -	Dates: 22/03/2007							
Stratum Description		Legend	Depth (m) Level (AOD)	Samples & In Situ Testing		Hole Casing	Water Strikes	Backfill / Installation	
MADE GROUND: TOPSOIL (driller's description).			0.10	Depth (m)	Type	Results/Remarks			
MADE GROUND: Foundry SLAG (driller's description).									
			1						
			2						
			3						
			4						
			5						
			6						
			7						
			8						
Glacial Till. (driller's description)			8.70						
			9						
End of Borehole at 9.50 m			9.50						
Remarks: 1. Groundwater encountered at 3.60mbgl.						Type			
						Job No:	E11683		
						Logged By:	AC		
						Checked By:			



Ground Technologies and Investigations

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Sheet 1 of 1
Scale 1:50





Client: West Lakes Renaissance





Co-ordinates -
Ground Level: -

Dates: 19/03/2007

End of Borehole at 6.00 m

Job No: E11683
 Logged By: AC
 Checked By:

	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193	Borehole Number BH9						
		Sheet 1 of 1 Scale 1:50						
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance						
Method:	Co-ordinates - Ground Level: -	Dates: 21/03/2007						
Stratum Description	Legend	Depth (m) Level (AOD)	Samples & In Situ Testing		Hole Casing	Water Strikes	Backfill / Installation	
Glacial Till (driller's description).		1	Depth (m)	Type	Results/Remarks			
MADE GROUND: Foundry slag (driller's description).		1.50 2 3 4 5 6						
Brown glacial till (driller's description).		6.50						
End of Borehole at 7.00 m		7 7.00						
		8						
		9						
Remarks:					Job No: E11683 Logged By: AC Checked By:			

	WHITE YOUNG GREEN ENVIRONMENTAL Ground Technologies and Investigations Regatta House, Clippers Quay, Manchester M50 3XP. Tel. 0161 872 3223. Fax. 0161 872 3193		Borehole Number R1		
			Sheet 1 of 2 Scale 1:50		
Project Name: Leconfield , Cleator Moor		Client: West Lakes Renaissance			
Method:		Co-ordinates - Ground Level: -		Dates: 15/03/2007	
Stratum Description		Legend	Depth (m) Level (AOD)	Samples & In Situ Testing Depth (m) Type Results/Remarks	Hole Casing Water Strikes Backfill / Installation
MADE GROUND: Grass and reeds over brown clayey TOPSOIL.			0.05		
MADE GROUND: Grey angular to sub-angular fine to coarse GRAVEL of slag.			0.60		
MADE GROUND: Firm red brown sandy, slightly gravelly CLAY. Gravel is angular to sub-angular, fine to coarse of sandstone, mudstone, siltstone, slag and ash.			1		
			2		
			3		
Blue grey GRAVEL of slag and ash.			3.00		
			4		
			5		
			6		
			6.20		
Brown sandy, slightly gravelly CLAY.			7		
			8		
			9		
Continued next sheet				Type	
Remarks: 1. Groundwater strike at 10.30mbgl with steady ingress. 2. Borehole terminated at 12mbgl as unable to advance casing through dense gravels.				Job No: E11683 Logged By: AC Checked By:	


**WHITE YOUNG GREEN
ENVIRONMENTAL**

Ground Technologies and Investigations

Regatta House, Clippers Quay, Manchester. M50 3XP
Tel. 0161 872 3223 Fax. 0161 872 3193Borehole
Number **WS1**Sheet 1 of 1
Scale 1:50Project : **Leconfield, Cleator Moor**Client : **West Lakes Renaissance**

Method :

Co-ordinates:
Ground Level :Start Date : 21/03/07
Finish Date : 21/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test Depth (m)	Type	Notes
MADE GROUND: Tarmac			0.12				0.20	C	N=39 (12,21/13,12,9,5)
MADE GROUND: Grey sandy angular to subangular fine to coarse GRAVEL of slag.			0.48						
MADE GROUND: Firm red brown gravelly CLAY. Gravel is angular to subangular fine and medium grained of slag.			0.56				0.60	C	27 (16,9 for 30mm/19 for 23mm)
MADE GROUND: Grey angular to subangular fine to coarse GRAVEL of slag.			0.80						
Window Sample hole completed at 0.80 m									

Remarks:

1. Window sample hole cored from GL to 0.12mbgl.
2. Backfilled with grout.

JOB NUMBER **E11683**Logged By : **AC**

Checked By :



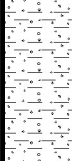
**WHITE YOUNG GREEN
ENVIRONMENTAL**

Ground Technologies and Investigations

Regatta House, Clippers Quay, Manchester. M50 3XP
Tel. 0161 872 3223 Fax. 0161 872 3193Borehole
Number **WS2**Sheet 1 of 1
Scale 1:50Project : **Leconfield, Cleator Moor**Client : **West Lakes Renaissance**

Method :

Co-ordinates:
Ground Level :Start Date : 21/03/07
Finish Date : 21/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes	
							Depth (m)	Type		
MADE GROUND: Tarmac	  		0.16		0.30 ▽		0.16	C	N=48 (8,17/22,16,6,4)	
MADE GROUND: Grey sandy angular to subangular fine to coarse GRAVEL of ash and slag.			0.40							
Firm brown and red brown gravelly CLAY. Gravel is angular to sub-angular fine to coarse of ash, slag, sandstone, mudstone and siltstone.								0.65	C	N=22 (3,6/5,6,7,4)
								1.20	C	N=10 (2,3/2,4,2,2)
----- Window Sample hole completed at 1.65 m			1.65							

Remarks:

1. Window sample hole cored from GL-0.16mbgl.
2. Groundwater seeoage at 0.3mbgl.
3. Backfilled with grout.


JOB NUMBER **E11683**Logged By : **AC**

Checked By :

**WHITE YOUNG GREEN
ENVIRONMENTAL**

Ground Technologies and Investigations

Regatta House, Clippers Quay, Manchester. M50 3XP
Tel. 0161 872 3223 Fax. 0161 872 3193Borehole
Number **WS3**Sheet 1 of 1
Scale 1:50Project : **Leconfield, Cleator Moor**Client : **West Lakes Renaissance**Method : **Window Sample Hole.**Co-ordinates:
Ground Level :Start Date : 21/03/07
Finish Date : 21/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes
							Depth (m)	Type	
MADE GROUND: Tarmac			0.10				0.10	C	N=36 (8,11/9,9,10,8)
MADE GROUND: Grey sandy angular to subangular fine to coarse GRAVEL of ash, brick and slag.			0.30						
MADE GROUND: Firm brown gravelly CLAY. Gravel is angular to subangular fine to coarse of ash, slag, brick, sandstone, mudstone and siltstone.			0.55						
MADE GROUND: Grey angular to subangular fine to coarse GRAVEL of slag. Strong sulphurous odour noted between 0.55-0.65mbgl.			0.65				0.65	C	(75 for 55mm)
Window Sample hole completed at 0.65 m									

Remarks:

1. Window Sample Hole cored from GL - 0.1mbgl
2. Backfilled with grout.


JOB NUMBER **E11683**Logged By : **AC**

Checked By :

**WHITE YOUNG GREEN
ENVIRONMENTAL**

Ground Technologies and Investigations

Regatta House, Clippers Quay, Manchester. M50 3XP
Tel. 0161 872 3223 Fax. 0161 872 3193Borehole
Number **WS4**Sheet 1 of 1
Scale 1:50Project : **Leconfield, Cleator Moor**Client : **West Lakes Renaissance**Method : **Window Sample Hole.**Co-ordinates:
Ground Level :Start Date : 21/03/07
Finish Date : 21/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes
							Depth (m)	Type	
MADE GROUND: Tarmac. Recovered non-intact as a coarse gravel.			0.12				0.12	C	N=46 (10,15 for 55mm/27,12,4,3)
MADE GROUND: Dark grey slightly clayey, slightly sandy angular to sub-angular fine to coarse GRAVEL of ash and slag.					0.60 ▽		0.60	C	N=14 (2,2/2,3,5,4)
MADE GROUND: Firm red brown gravelly CLAY. Gravel is angular to sub-rounded fine to coarse of ash, slag, sandstone and mudstone.			1.00						
			1.55				1.10	C	N=13 (2,2/3,5,3,2)
Window Sample hole completed at 1.55 m									

Remarks:

1. WS hole cored from ground level - 0.12mbgl
2. Groundwater seepage at 0.6mbgl
3. Backfilled with grout


JOB NUMBER **E11683**Logged By : **AC**

Checked By :

**WHITE YOUNG GREEN
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Ground Technologies and Investigations

Regatta House, Clippers Quay, Manchester. M50 3XP
Tel. 0161 872 3223 Fax. 0161 872 3193Borehole
Number **WS5**Sheet 1 of 1
Scale 1:50Project : **Leconfield, Cleator Moor**Client : **West Lakes Renaissance**Method : **Window Sample Hole.**Co-ordinates:
Ground Level :Start Date : 21/03/07
Finish Date : 21/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes
							Depth (m)	Type	
MADE GROUND: Tarmac			0.05				0.05	C	N=37 (10,10/11,12,8,6)
MADE GROUND: Grey angular to sub-angular fine to coarse GRAVEL of ash and slag.			0.60				0.60	C	N=9 (4,2/2,2,2,3)
MADE GROUND: Brown sandy angular to sub-angular fine to coarse GRAVEL of ash with occasional slag.			1.10				1.10	C	N=12 (3,2/3,3,3,3)
Window Sample hole completed at 1.55 m			1.55						

Remarks:

1. Cored from 0.0 - 0.05mbgl.
2. Groundwater seepage at 0.4mbgl.
3. Backfilled with grout.

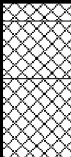
JOB NUMBER **E11683**Logged By : **AC**

Checked By :

**WHITE YOUNG GREEN
ENVIRONMENTAL**

Ground Technologies and Investigations

Regatta House, Clippers Quay, Manchester. M50 3XP
Tel. 0161 872 3223 Fax. 0161 872 3193Borehole
Number **WS6**Sheet 1 of 1
Scale 1:50Project : **Leconfield, Cleator Moor**Client : **West Lakes Renaissance**Method : **Window Sample Hole.**Co-ordinates:
Ground Level :Start Date : 21/03/07
Finish Date : 21/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes
							Depth (m)	Type	
MADE GROUND: Tarmac			0.12				0.12	C	N=38 (9,10/9,12,11,6)
MADE GROUND: Grey and brown angular to sub-angular fine to coarse GRAVEL of ash and slag.			0.50						
MADE GROUND: Light grey angular to sub-angular fine to coarse GRAVEL of slag.			1.05				0.60	C	50 (4,3/4,10,23,13 for 60mm)
Window Sample hole completed at 1.05 m									

Remarks:

1. Cored from 0.0 - 0.12mbgl
2. Backfilled with grout.

JOB NUMBER E11683

Logged By : AC

Checked By :

Project : **Leconfield, Cleator Moor**Client : **West Lakes Renaissance**Method : **Window Sample Hole.**Co-ordinates:
Ground Level :Start Date : 21/03/07
Finish Date : 21/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test Depth (m)	Type	Notes
MADE GROUND: Grass over brown gravelly TOPSOIL			0.10						
MADE GROUND: Red brown and dark grey slightly clayey angular to sub-angular fine to coarse GRAVEL of ash and slag with occasional brick.							0.50	D	
							1.00	C	N=9 (2,2/2,3,2,2)
MADE GROUND: Soft red brown gravelly CLAY. Gravel is angular to sub-angular fine to coarse of ash, slag and brick.			1.40				1.50	D	
							2.00	S	N=7 (1,1/2,1,2,2)
Band of angular coarse gravel of slag with strong sulphurous odour noted between 2.3 and 2.4mbgl .							2.50	D	
							3.00	C	N=6 (2,1/1,1,2,2)
			3.45						
Window Sample hole completed at 3.45 m									

Remarks:

1. Backfilled with arisings.
2. Grounwater not observed.

JOB NUMBER E11683



Logged By : AC

Checked By :

**WHITE YOUNG GREEN
ENVIRONMENTAL**

Ground Technologies and Investigations

Regatta House, Clippers Quay, Manchester. M50 3XP
Tel. 0161 872 3223 Fax. 0161 872 3193Borehole
Number **WS8**Sheet 1 of 1
Scale 1:50Project : **Leconfield, Cleator Moor**Client : **West Lakes Renaissance**Method : **Window Sample Hole.**Co-ordinates:
Ground Level :Start Date : 21/03/07
Finish Date : 21/03/07

Description	Legend	Ground Level	Reduced Level (mOD)	Depth (m)	Casing (m)	Water Strike (m)	Installation/ Backfill	Sample Test		Notes	
								Depth (m)	Type		
MADE GROUND: Grass over brown sandy TOPSOIL.				0.20							
MADE GROUND: Brown and grey clayey angular fine to coarse GRAVEL of ash, slag and sandstone with some angular cobbles of slag.				0.60				0.50	D		
MADE GROUND: Soft red brown gravelly CLAY. Gravel is angular to sub-rounded fine to coarse of slag, ash, sandstone, mudstone and siltstone.									1.00	S D	N=7 (0,2/2,2,1,2)
									1.50	D	
									2.00	S	N=7 (1,1/2,2,1,2)
									2.50	D	
									3.00	S D	N=5 (1,1/1,1,2,1)
Window Sample hole completed at 3.45 m			3.45								

Remarks:


1. Backfilled with arisings.
2. Groundwater not observed.

JOB NUMBER E11683

Logged By : AC

Checked By :

Project : Leconfield, Cleator Moor		Client :						
Method: JCB Excavator		Co-ordinates: Ground Level :				Start Date: 05/03/07 Finish Date: 05/03/07		
Description	Legend	Reduced Level (mOD)	Depth (m)	Water Strike (m)	Backfill	Sample Test		Notes
						Depth (m)	Type	
TOPSOIL			0.05					
MADE GROUND: White and grey, sub-angular and angular, fine to coarse GRAVEL of slag.						0.50	D	
MADE GROUND: Grey brown very clayey SAND with little sub-angular, coarse gravel of slag.			1.50			1.55	D	
MADE GROUND: Brown very clayey gravelly SAND. Gravel is sub-angular and sub-rounded, fine to coarse mudstone and slag. with occasional sub-rounded cobbles of mudstone at 3.3mbgl			3.00			3.00	D	
Trial Pit completed at 4.10m bgl			4.10			4.00	D	
Stability: Groundwater Observations: Water seepage at 0.5mbgl Remarks:		Pit Dimensions: Length: - Width: - Orientation:		JOB NUMBER Logged By : Checked By : AM				

Project : Leconfield, Cleator Moor		Client :						
Method: JCB Excavator		Co-ordinates: Ground Level :				Start Date: 05/03/07 Finish Date: 05/03/07		
Description	Legend	Reduced Level (mOD)	Depth (m)	Water Strike (m)	Backfill	Sample Test		Notes
						Depth (m)	Type	
TOPSOIL: Topsoil with rootlets MADE GROUND: Brown sub-angular and sub-rounded, fine to coarse GRAVEL of slag with pockets of gravelly clay. with occasional sub-rounded and sub-angular cobbles of slag between 0.05 and 3.6mbgl.			0.05					
						0.40	D	
						1.70	D	
						2.50	D	
			3.60			3.50	D	
Trial Pit completed at 3.60m bgl								
Stability: Groundwater Observations: Water seepage at ground level (0.0 mbgl) Remarks:								
			Pit Dimensions: Length: - Width: - Orientation:			JOB NUMBER Logged By : AM Checked By :		

Project : Leconfield, Cleator Moor		Client :						
Method: JCB Excavator		Co-ordinates: Ground Level :				Start Date: 05/03/07 Finish Date: 05/03/07		
Description	Legend	Reduced Level (mOD)	Depth (m)	Water Strike (m)	Backfill	Sample Test		Notes
						Depth (m)	Type	
TOPSOIL			0.10					
MADE GROUND: Brown gravelly SAND. Gravel is sub-angular, fine to coarse slag. becoming clayey at 0.6mbgl						0.70	D	
						1.80	D	
MADE GROUND: Brown gravelly clayey SAND. Gravel is sub-angular and angular, fine to coarse slag and brick.						2.60	D	
MADE GROUND: Brown sub-angular and angular, fine to coarse GRAVEL of ash, slag, brick and mudstone			2.30					
			2.60					
MADE GROUND: Brown sub-angular and angular, fine to coarse GRAVEL of ash, slag, brick and mudstone			3.00					
Trial Pit completed at 3.00m bgl								
<div> <div> Stability: Groundwater Observations: Water seepage at 1.8 mbgl. Remarks: </div> <div> Pit Dimensions: Length: - Width: - Orientation: </div> <div> JOB NUMBER Logged By : Checked By : </div> </div>								



Ground Technologies and Investigations

Trial Pit
Number

JOB NUMBER
 Logged By : AM
 Checked By :



Ground Technologies and Investigations

Trial Pit
Number

TP5

Logged By : AM
Checked By :

Project : **Leconfield, Cleator Moor**

Client :

Method: **JCB Excavator**

Co-ordinates:
Ground Level :

Start Date: 06/03/07
Finish Date: 06/03/07

Description	Legend	Reduced Level (mOD)	Depth (m)	Water Strike (m)	Backfill	Sample Test		Notes
						Depth (m)	Type	
TOPSOIL			0.10					
MADE GROUND: Light grey sub-angular and angular, fine to coarse GRAVEL of slag with slight sulphuric odour. with pockets of fine to coarse sand at 0.25m						0.25	D	
			1.00			1.00	D	
MADE GROUND: Black SAND and GRAVEL. Sand is fine to coarse grained. Gravel is sub-angular and angular, fine to coarse slag.						2.00	D	
			2.20					
MADE GROUND: White sub-angular and angular, fine to coarse GRAVEL of slag with pockets of fine to coarse sand.						2.80	D	
			3.00					
Trial Pit completed at 3.00m bgl								

Stability:
Groundwater Observations: No groundwater encountered.
Remarks:

Pit Dimensions:
Length: -
Width: -
Orientation:

JOB NUMBER

Logged By : AM
Checked By :

WHITE YOUNG GREEN ENVIRONMENTAL

Ground Technologies and Investigations


Regatta House, Clippers Quay, Manchester, M50 3XP
Tel: 0161 872 3223 Fax: 0161 872 3193

Trial Pit
Number **TP7**

Sheet 1 of 1

Scale 1:50

Project : Leconfield, Cleator Moor		Client :						
Method: JCB Excavator		Co-ordinates: Ground Level :				Start Date: 06/03/07 Finish Date: 06/03/07		
Description	Legend	Reduced Level (mOD)	Depth (m)	Water Strike (m)	Backfill	Sample Test		Notes
						Depth (m)	Type	
TOPSOIL			0.10					
MADE GROUND: Brown gravelly CLAY. Gravel is sub-angular and sub-rounded, fine to coarse slag, mudstone and brick							0.50	D
MADE GROUND: Grey sub-angular and angular, fine to coarse GRAVEL of slag			1.30				1.40	D
			2.30				B	
Trial Pit completed at 2.50m bgl			2.50					
Stability: Groundwater Observations: No groundwater encountered. Remarks:		Pit Dimensions: Length: - Width: - Orientation:		JOB NUMBER Logged By : AM Checked By :				

Project : Leconfield, Cleator Moor		Client :						
Method: JCB Excavator		Co-ordinates: Ground Level :				Start Date: 06/03/07 Finish Date: 06/03/07		
Description	Legend	Reduced Level (mOD)	Depth (m)	Water Strike (m)	Backfill	Sample Test		Notes
						Depth (m)	Type	
TOPSOIL			0.10					
MADE GROUND: Brown gravelly CLAY. Gravel is sub-angular and angular, fine to coarse slag and mudstone			0.50			0.40	D	
MADE GROUND: Grey angular and sub-angular, fine to coarse GRAVEL of slag			1.40			1.00	D	
MADE GROUND: Dark brown soft very sandy gravelly CLAY. Gravel is sub-angular, angular, fine to coarse slag, brick and mudstone			3.20			2.00	D	
becoming red brown at 2.2mbgl								
with occasional sub-rounded cobbles of slag at 3.5mbgl			3.70				D	
Trial Pit completed at 3.70m bgl								
Stability: Groundwater Observations: No groundwater encountered. Remarks:		Pit Dimensions: Length: - Width: - Orientation:		JOB NUMBER Logged By : Checked By : AM				