



CARL BRO GROUP

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JOB No.		73.0432.01		PROJECT NAME		GRIMETHORPE COLLIERY							
NATIONAL GRID REF.		441623.71E 408018.04N		BOREHOLE No.		GNP219							
GROUND SURFACE ELEVATION		67.53m AOD		TYPE OF BORING		ROTARY							
START DATE		04/11/1997		DIAMETER (mm)		120							
END DATE		06/11/1997											

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE BACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
MADE GROUND. *		0.70	66.83								
Soft, brown CLAY. *		2.10	65.43								
Soft, brown MUDSTONE. *		5.80	61.73								
Soft, grey MUDSTONE. *		7.50	60.03								
Grey MUDSTONE. *		9.00	58.53	9.00							
Greyish brown with dark grey and brown staining on discontinuities MUDSTONE, weak.								10			
Continued next sheet.											

REMARKS:

- Open hole drilling from ground level to 9.0m depth.
- Rotary coring from 9.0m to 54.0m depth.
- Borehole backfilled to surface with cement/bentonite grout.

Drilled By: Drill Sure Logged By: DMT	KEY: NI Non-intact Water level NA Not-applicable Driller's description CL Core loss	SCALE 1:50 Sheet 1 of 6
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JOB No. 73.0432.01

PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441683.71E 408018.04N
GROUND SURFACE ELEVATION 67.53mAOD
START DATE 04/11/1997
END DATE 06/11/1997

BOREHOLE No. GNP219
TYPE OF BORING ROTARY
DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE BACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Greyish brown with dark grey and brown staining on discontinuities MUDDSTONE, weak.		11.30	55.23		100	84	41	>25			
								NI			
Brownish grey with dark grey and brown staining on discontinuities MUDDSTONE, weak, locally moderately weak.				12.00				>25			
								NI			
		13.42	54.11					15			
Black COAL, weak.		13.73	53.80		100	65	17	NI			
Very stiff, grey, very silty CLAY		13.91	53.62					NA			
								NI			
Brownish grey with dark grey and brown staining on discontinuities MUDDSTONE, weak, locally moderately weak.				15.00				5			
								NI			
From 15.0m to 15.16m depth with light grey, fine grained sandstone, strong.								0			
								>25			
		16.60	50.93		100	88	49	>25			
Light grey with brown staining on discontinuities, fine grained SANDSTONE, strong.		17.40	50.13					1			
				18.00				12			
Brownish grey with brown staining on discontinuities, very silty MUDDSTONE, weak and moderately weak.								NI			
		18.90	48.63								
Grey MUDDSTONE, moderately weak, locally weak.					88	67	35	>25			
								7			

Continued next sheet.

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY: ☒ Water level NA Not-applicable
NI Non-intact Driller's description CL Core loss

SCALE 1:50
Sheet 2 of 6



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PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441683.71E 408018.04N
GROUND SURFACE ELEVATION 67.53mAOD
START DATE 04/11/1997
END DATE 06/11/1997

BOREHOLE No. GNP219
TYPE OF BORING ROTARY
DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE/BLACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Grey MUDSTONE, moderately weak, locally weak.								10			
From 21.0 m to 21.45m depth becoming dark grey				21.00				NI			
		21.85	45.68					3			
Grey, locally with brown staining on discontinuities SILTSTONE, moderately strong, locally moderately weak with occasional thin and thick laminae of light grey, fine grained sandstone					93	90	67	5			
		23.54	43.99					4			
Light grey, fine grained SANDSTONE, strong.		23.77	43.76					0			
		24.00	43.53	24.00				NI			
Dark grey, carbonaceous MUDSTONE, moderately weak		24.27	43.26					3			
		24.55	42.98					NI			
Grey MUDSTONE, moderately weak		24.95	42.58					3			
Black COAL, weak with a little pyrite mineralisation.								4			
Grey MUDSTONE, weak, locally moderately weak					100	90	64				
		26.60	40.93					3			
Grey MUDSTONE, moderately weak and moderately strong with occasional thin laminae of light grey sandstone.				27.00				7			
Light grey, very silty MUDSTONE, moderately strong, locally moderately weak		27.95	39.58					4			
		28.50	39.03		100	97	53	8			
Grey MUDSTONE, moderately weak and moderately strong								13			
From 29.25m depth becoming dark grey		29.50	38.03								
As Sheet 4 Continued next sheet				30.00							

REMARKS:

Drilled By Drill Sure
Logged By DMT

KEY: ☒ Water level NA Not-applicable
NI Non-intact Drifter's description CL Core loss

SCALE 1:50
Sheet 3 of 6



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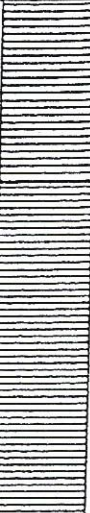
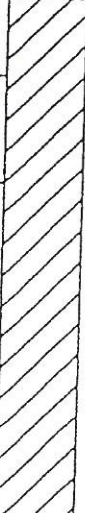
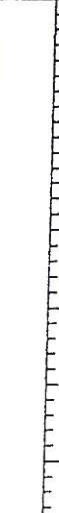
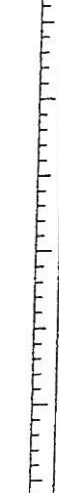
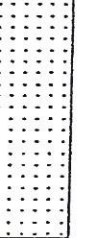
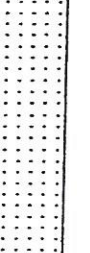
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JOB No. 73.0432.01

PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441683.71E 408018.04N
GROUND SURFACE ELEVATION 67.53mAOD
START DATE 04/11/1997
END DATE 06/11/1997

BOREHOLE No. GNP219
TYPE OF BORING ROTARY
DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND- PIPE BACK- FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Light grey, very silty MUDESTONE, moderately weak From 30.3m depth moderately strong.		31.20	36.33	30.00	100	95	80	10			
Grey, very silty MUDESTONE, moderately strong.				2							
				5							
				5							
Grey SILTSTONE, moderately strong with some thin and thick laminae of light grey, fine grained sandstone.		33.40	34.13	33.00	100	98	76	3			
				2							
				6							
				10							
Light grey SANDSTONE, strong, locally moderately strong with some thin and thick laminae of grey siltstone.		36.60	30.93	36.00	86	84	75	CL			
				2							
				4							
				4							
Light grey, fine and medium grained SANDSTONE, strong and very strong with occasional dark grey and grey, impersistent thin laminae of siltstone and mudstone.		38.20	29.33	39.00				3			
								CL			
								1			

Continued next sheet.

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY:

NI Non-intact
Water level
NA Not-applicable
Driller's description
CL Core loss

SCALE 1:50
Sheet 4 of 6

JOB No.		73.0432.01		PROJECT NAME		GRIMETHORPE COLLIERY					
NATIONAL GRID REF.		441683.71E 408018.04N		BOREHOLE No.		GNP219					
GROUND SURFACE ELEVATION		67.53mA00		TYPE OF BORING		ROTARY					
START DATE		04/11/1997		DIAMETER (mm)		120					
END DATE		05/11/1997									
STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE/BLACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Light grey, fine and medium grained SANDSTONE, strong and very strong with occasional dark grey and grey, impersistent thin laminae of siltstone and mudstone.				42.00	79	79	75	3			
								1			
								1			
								3			
								2			
								3			
								3			
								3			
								4			
								2			
				45.00	100	100	100				
				48.00	100	100	97				
					100	100	95				

Continued next sheet.

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY:  Water level NA Not-applicable
NI Non-intact * Driller's description CL Core loss

SCALE 1:50
Sheet 5 of 6



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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441683.71E 408018.04N BOREHOLE No. GNP219
GROUND SURFACE ELEVATION 67.53mAOD TYPE OF BORING ROTARY
START DATE 04/11/1997
END DATE 06/11/1997 DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND- PIPE/ BACK- FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH
Light grey, fine and medium grained SANDSTONE, strong and very strong with occasional dark grey and grey, impersistent thin laminae of siltstone and mudstone.				51.00	100	100	98	9			
								2			
								4			
								2			
Borehole complete at 54.00 m.		54.00	13.53	54.00							

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY: Water level NA Not-applicable
NI Non-intact * Driller's description CL Core loss

SCALE 1:50
Sheet 6 of 6



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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441680.69E 407655.41N
GROUND SURFACE ELEVATION 56.31mAOD
START DATE 31/10/1997
END DATE 04/11/1997
BOREHOLE No. GNP220
TYPE OF BORING ROTARY
DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND- PIPE/ BACK- FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
MADE GROUND. *											
		5.60	50.71								
Brown MUDSTONE. *											
		8.00	48.31								
Grey MUDSTONE. *											
		9.00	47.31	9.00							
Light grey MUDSTONE, weak and moderately weak.								CL			
								>25			
Continued next sheet.											

REMARKS:

1. Open hole drilling from ground level to 9.0m depth.
2. Rotary coring from 9.0m to 54.0m depth.
3. Borehole fitted with flush fitting stopcock cover.
4. Combined groundwater/gas monitoring installation installed with gas tap and slotted section between 18.0m and 51.0m depth.
5. Pipe OD = 63mm, ID = 50mm, slots = 1mm.

Drilled By: Drill Sure
Logged By: DMT

KEY: NI Non-intact Water level NA Not-applicable
Driller's description CL Core loss

SCALE 1:50
Sheet 1 of 6



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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441680.69E 407655.41N BOREHOLE No. GNP220
GROUND SURFACE ELEVATION 56.31mAOD TYPE OF BORING ROTARY
START DATE 31/10/1997
END DATE 04/11/1997 DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE/BACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Light grey MUDSTONE, weak and moderately weak.		10.25	46.06	12.00	90	56	20	NI			
Grey and dark grey, thinly and thickly laminated SILTSTONE, weak and moderately weak.		10.80	45.51								
Grey MUDSTONE, weak and moderately weak.		11.75	44.56								
Dark grey MUDSTONE, very weak and weak.		12.00	44.31								
Light grey MUDSTONE		14.00	42.31	15.00	100	48	20	10			
From 13.0m depth with occasional brown staining on discontinuities.											
Grey with occasional brown staining on discontinuities SILTSTONE, moderately weak locally moderately strong with some light grey, fine grained, thin and thick laminae of sandstone.											
		18.00	38.31	18.00	100	85	16	>25			
Light grey with brown discolouration in vicinity of discontinuities, fine and medium grained SANDSTONE, strong, locally moderately weak and weak with occasional impersistent, thin laminae of grey siltstone		18.00	38.31	18.00	100	100	83	3			
								1			

Continued next sheet.

REMARKS:

Drilled By: Drili Sure
Logged By: DMT

KEY: Water level NA Not-applicable
 NI Non-intact CL Core loss

SCALE 1:50
Sheet 2 of 6



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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441690.69E 407655.41N BOREHOLE No. GNP220
GROUND SURFACE ELEVATION 56.31mAOD TYPE OF BORING ROTARY
START DATE 31/10/1997
END DATE 04/11/1997 DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND- PIPE/ BACK- FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Light grey with brown discolouration in vicinity of discontinuities, fine and medium grained SANDSTONE, strong, locally moderately weak and weak with occasional impersistent, thin laminae of grey siltstone.		23.75	32.56	21.00	100	93	53	4			
								5			
								>25			
								8			
Light grey, fine and medium grained SANDSTONE, strong with occasional impersistent thin laminae of grey siltstone and mudstone.		24.00	32.56	24.00	100	100	100	2			
								2			
								1			
								1			
								CL			
								>25			
		27.00	32.56	27.00	92	88	58	2			
								3			
				30.00							

Continued next sheet.

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY: NI Non-intact Water level
NA Not-applicable
Diller's description CL Core loss

SCALE 1:50
Sheet 3 of 6



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NATIONAL GRID REF. 441680.69E 407655.41N BOREHOLE No. GNP220
GROUND SURFACE ELEVATION 56.31mAOD TYPE OF BORING ROTARY
START DATE 31/10/1997
END DATE 04/11/1997 DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND- PIPE/ BACK- FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Light grey, fine and medium grained SANDSTONE, strong with occasional impersistent thin laminae of grey siltstone and mudstone.				30.00				1			
					100	100	98	2			
								1			
				33.00				1			
					100	100	95	3			
								2			
				36.00				2			
					100	100	100	4			
								2			
				39.00				3			

Continued next sheet.

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY: NI Non-intact Water level NA Not-applicable
Driller's description CL Core loss

SCALE 1:50
Sheet 4 of 6



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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441680.69E 407655.11N BOREHOLE No. GNP220
GROUND SURFACE ELEVATION 56.31mAOD TYPE OF BORING ROTARY
START DATE 31/10/1997
END DATE 04/11/1997 DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE/BACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Light grey, fine and medium grained SANDSTONE, strong with occasional impersistent thin laminae of grey siltstone and mudstone.				42.00	100	100	90	3			
								2			
								4			
								4			
								1			
Grey MUDSTONE, moderately weak		47.85	8.46	45.00	100	100	92	4			
								1			
								2			
								2			
								0			
From 48.6m to 49.25m depth becoming dark grey.		48.00						CL			
								10			
								11			
From 49.6m to 50.4m					98	95	49				
Continued next sheet.											

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY: NI Non-intact Water level * NA Not-applicable
Driller's description CL Core loss

SCALE 1:50
Sheet 5 of 6



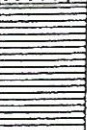
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NATIONAL GRID REF. 441680.69E 407655.41N BOREHOLE No. GNP220
GROUND SURFACE ELEVATION 56.31mAOD TYPE OF BORING ROTARY
START DATE 31/10/1997
END DATE 04/11/1997 DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND- PIPE/ BACK- FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Grey MUDSTONE, moderately weak		50.60	5.71	51.00				NI			
From 50.4m depth becoming very silty.		51.50	4.81					3			
Light grey, fine grained SANDSTONE, strong with some thin and thick laminae of grey siltstone.		52.35	3.96					5			
Grey MUDSTONE, moderately strong.		52.85	3.46	54.00	67	67	54	2			
Dark grey MUDSTONE, moderately weak.		54.00	2.31					3			
Grey SILTSTONE, moderately strong with occasional thin laminae of light grey, fine grained sandstone.								CL			
Borehole complete at 54.00 m.											

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY: NI Non-intact Water level * Driller's description NA Not-applicable CL Core loss

SCALE 1:50
Sheet 6 of 6



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JOB No. 73.0432.01

PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441479.56E 407968.73N

GROUND SURFACE ELEVATION 50.92mAOD

START DATE 17/10/1997

END DATE 20/10/1997

BOREHOLE No. GNP221

TYPE OF BORING ROTARY

DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE/BACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
MADE GROUND. *		0.70	50.22								
Soft, brown CLAY. *		2.10	48.82								
Soft, brown MUDSTONE. *		4.20	46.72								
Grey MUDSTONE. *		4.50	46.42	4.50							
Grey with brown staining on discontinuities MUDSTONE, weak and moderately weak		6.23	44.69		63	51	9	CL			
Grey with brown staining on discontinuities SILTSTONE, moderately weak, locally moderately strong, with occasional thin laminae of light grey, fine grained sandstone.		7.48	43.44	7.50				NI			
Grey with brown staining on discontinuities MUDSTONE, moderately weak								3			
								3			
								20			
From 8.8m to 9.4m depth, - dark grey.					67	33	15	NI			
Continued next sheet.											

REMARKS:

1. Open hole drilling from ground level to 4.5m depth.
2. Rotary coring from 4.5m to 45.0m depth.
3. Borehole backfilled to surface with cement/bentonite grout.

Drilled By: Drill Sure
Logged By: DMT

KEY:

NI Non-intact

Water level

NA Not-applicable

Driller's description

CL Core loss

SCALE 1:50
Sheet 1 of 5



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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441479.56E 407968.73N
GROUND SURFACE ELEVATION 50.92m AOD
START DATE 17/10/1997
END DATE 20/10/1997

BOREHOLE No. GNP221
TYPE OF BORING ROTARY
DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE/BACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Grey with brown staining on discontinuities MUDSTONE, moderately weak.		10.20	40.72	10.50				5			
Grey with brown staining on discontinuities, very silty MUDSTONE, moderately strong, locally moderately weak.								NI			
					93	66	30	7			
								NI			
								2			
								NI			
From 13.05m to 13.2m depth, - grey mudstone, weak.				13.00				>25			
								13			
		14.70	36.22		94	73	14	NI			
Grey with brown staining on discontinuities SILTSTONE, moderately strong, locally moderately weak with occasional thin laminae of light grey, fine grained sandstone.								>25			
		15.78	35.14								
Light grey with brown staining on discontinuities, fine grained SANDSTONE, strong, locally moderately strong with occasional thin laminae of grey siltstone.				16.00				4			
		16.56	34.36								
Grey, very silty MUDSTONE, moderately weak.		16.76	34.16					NI			
					85	73	54	3			
Light grey with brown staining on discontinuities, fine grained SANDSTONE, strong, locally moderately strong with occasional thin laminae of grey siltstone.		17.75	33.17					NA			
								CL			
Greenish grey and brown, fine SAND, (POSSIBLE FAULT ZONE).		18.20	32.72	18.20							
								10			
Light grey with brown staining on discontinuities, fine grained SANDSTONE, strong, locally moderately strong with occasional thin laminae of grey siltstone.					86	73	39	3			

Continued next sheet.

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY: Water level
NI Non-intact
NA Not-applicable
CL Core loss
Driller's description

SCALE 1:50
Sheet 2 of 5



CARL BRO GROUP

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Leeds
LS7 4DN

Tel: 0113 2379222
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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441479.56E 407968.73N
GROUND SURFACE ELEVATION 50.92mAOD
START DATE 17/10/1997
END DATE 20/10/1997
BOREHOLE No. GNP221
TYPE OF BORING ROTARY
DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE/BACK-FILL DETAIL 3	GROUNDWATER	
										LEVEL	DEPTH (m)
Light grey with brown staining on discontinuities, fine grained SANDSTONE, strong, locally moderately strong with occasional thin laminae of grey siltstone.		20.02	30.90					>25			
		20.37	30.55					6			
Grey, very silty MUDDSTONE, moderately weak		21.10	29.82	21.20				9			
Light grey, fine grained SANDSTONE, strong, locally moderately strong with occasional thin laminae of grey siltstone.		21.75	29.17					13			
Grey SILTSTONE, moderately strong with occasional thin and thick laminae of light grey, fine grained sandstone.					99	90	40	1			
								4			
Light grey, fine grained SANDSTONE, strong, locally moderately strong with occasional thin and thick laminae of grey siltstone.								3			
From 22.7m to 22.8m depth, - thin bed of grey siltstone, moderately strong.				24.20				7			
From 23.4m to 23.6m depth, - grey, thinly laminated siltstone, moderately strong.								1			
From 24.95m to 25.05m depth, - grey, very silty mudstone, weak.		25.20	25.72		94	91	74	0			
Light grey, fine and medium grained SANDSTONE, strong, locally very strong with occasional impersistent thin laminae of grey and dark grey siltstone and mudstone.				27.20				10			
					86	83	73	0			
								2			

Continued next sheet.

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY:

NI Non-intact

Water level

NA Not-applicable

Driller's description

CL Core loss

SCALE 1:50
Sheet 3 of 5



CARL BRO GROUP

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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441479.56E 407968.73N
GROUND SURFACE ELEVATION 50.92mAOD
START DATE 17/10/1997
END DATE 20/10/1997
BOREHOLE No. GNP221
TYPE OF BORING ROTARY
DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND-PIPE/BACK-FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Light grey, fine and medium grained SANDSTONE, strong, locally very strong with occasional impersistent thin laminae of grey and dark grey siltstone and mudstone.		31.05	19.87	30.20				4			
Grey, very silty MUDDSTONE, moderately strong.		31.20	19.72					1			
Grey MUDDSTONE, moderately weak.		31.40	19.52					NI			
Dark grey MUDDSTONE, weak.		31.52	19.40		99	70	46				
Black COAL, weak.		31.62	19.30								
Grey MUDDSTONE, weak.		31.72	19.20								
Light grey, fine grained SANDSTONE, moderately strong.		32.66	18.26					>25			
From 32.4m depth becoming strong.		33.05	17.87					>25			
Grey MUDDSTONE, moderately strong.		33.65	17.27	33.20				4			
Grey SILTSTONE, strong with contorted thin and thick laminae of light grey, fine grained sandstone.		34.95	15.97		100	80	53	>25			
Grey MUDDSTONE, moderately weak.		36.16	14.76					2			
Light grey, fine grained SANDSTONE, strong with occasional thin laminae of grey siltstone.		37.40	13.52	36.20				4			
From 35.6m to 35.77m depths, grey, very silty mudstone, moderately weak.								13			
Grey, very silty MUDDSTONE, moderately strong, locally moderately weak.								5			
Grey MUDDSTONE, moderately weak, locally moderately strong.					94	92	30	7			
				39.20				10			
								>25			

Continued next sheet.

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY: ☒ Water level
NI Non-intact
NA Not-applicable
D Driller's description
CL Core loss

SCALE 1:50
Sheet 4 of 5



CARL BRO GROUP

Newton House
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Tel: 0113 2378222
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JOB No. 73.0432.01 PROJECT NAME GRIMETHORPE COLLIERY

NATIONAL GRID REF. 441479.56E 407968.73N
GROUND SURFACE ELEVATION 50.92mAOD
START DATE 17/10/1997
END DATE 20/10/1997
BOREHOLE No. GNP221
TYPE OF BORING ROTARY
DIAMETER (mm) 120

STRATA DESCRIPTION	LEGEND	DEPTH (m)	A.O.D. LEVEL	RUN	TCR (%)	SCR (%)	RQD (%)	FI	STAND- PIPE/ BACK- FILL DETAILS	GROUNDWATER	
										LEVEL	DEPTH (m)
Grey MUDSTONE, moderately weak, locally moderately strong.					73	57	19				
		41.85	9.07	42.00				20			
Grey SILTSTONE, moderately strong with some thin laminae of light grey, fine grained sandstone.		42.20	8.72					NI			
		42.65	8.27					10			
Dark grey MUDSTONE, moderately strong.								2			
Grey SILTSTONE, strong with some thin laminae of light grey, fine grained sandstone.		43.50	7.42		90	72	50	7			
Grey MUDSTONE, moderately weak and moderately strong.		43.97	6.95					>25			
Grey, very silty MUDSTONE, moderately strong.		44.13	6.79					NI			
Dark grey, locally grey MUDSTONE, moderately strong and moderately weak with some thin laminae of light grey, fine grained sandstone.		44.95	5.97	45.00				10			
		45.00	5.92					NI			
Black COAL, weak.											
Borehole complete at 45.00 m.											

REMARKS:

Drilled By: Drill Sure
Logged By: DMT

KEY:

NI Non-intact

Water level

Driller's description

NA Not-applicable

CL Core loss

SCALE 1:50
Sheet 5 of 5

IMCBH BOREHOLES



IMC

Borehole Record

BH4A

Sheet 1 of 6

Client ☒ Saxon and Ward

Co-ordinates 441456.58 mE

Site Grimethorpe

408231.96 mN

Methods Rotary Air Flush. OPEN HOLE. GEOLOGIST'S INTERPRETATION OF GEOPHYSICAL LOG.

Ground Level 61.16 mOD

GROUND WATER**STRATA RECORDS****DRILLING RECORDS**

Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCR %	RQD %	If	Remarks
			60.86	0.30		TOPSOIL							
						MUDSTONE silty to base.							
		1.00		(2.20)									
		2.00											
			58.66	2.50									
			58.51	2.65		COAL							
						SILTSTONE with sandy bands.							
		3.00											
			57.66	3.50		SANDSTONE							
		4.00											
		5.00		(3.50)									
		6.00											
		7.00	54.16	7.00		MUDSTONE with silty bands.							
		8.00		(2.30)									
		9.00											
			51.86	9.30		COAL							
			51.71	9.45		MUDSTONE							

Continued next sheet

Progress of Hole

Date Depth Casing Water Remarks

Water Strike

Date 03/12/97 Depth 39.00 Rose To 39.00 Time 20

Scale 1:50

Logged by AJA

Fig No 5A



IMC

Borehole Record

BH4A

Sheet 2 of 6

Client Saxon and Ward

Co-ordinates 441456.58 mE

Site Grimethorpe

408231.96 mN

Methods Rotary Air Flush. OPEN HOLE. GEOLOGIST'S INTERPRETATION OF GEOPHYSICAL LOG.

Ground Level 61.16 mOD

GROUND WATER**STRATA RECORDS****DRILLING RECORDS**

Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCRR %	QD %	If	Remarks
		11.00		(3.05)		MUDSTONE							
		12.00											
			48.66	12.50		SANDSTONE							
		13.00		(1.25)									
			47.41	13.75									
		14.00		14.00		MUDSTONE							
			47.16										
			46.99	14.17		COAL							
						MUDSTONE							
		15.00											
		16.00		(4.08)									
		17.00											
		18.00											
			42.91	18.25									
		19.00		(1.75)		SANDSTONE with silty bands.							
			41.16	20.00									

Continued next sheet

End of Hole
Date Depth Casing Water Remarks
03/12/97 39.00 39.00 20

Scale 1:50

Logged by AJA

Fig No 5A



IMC

Borehole Record

BH4A

Sheet 3 of 6

Client	Saxon and Ward	Co-ordinates	441456.58 mE
Site	Grimethorpe		408231.96 mN
Methods	Rotary Air Flush. OPEN HOLE. GEOLOGIST'S INTERPRETATION OF GEOPHYSICAL LOG.		Ground Level 61.16 mOD

GROUND WATER			STRATA RECORDS				DRILLING RECORDS						
Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCR %	RQD %	If	Remarks
			41.15	20.00		SANDSTONE with silty bands.							
						MUDSTONE							
		21.00											
		22.00											
		23.00											
		24.00		(8.00)									
		25.00											
		26.00											
		27.00											
		28.00	33.16	28.00		SANDSTONE silty to base.							
				(1.25)									
		29.00	31.91	29.25		MUDSTONE							
			31.16	30.00		Continued next sheet							

End of Hole	Water Strike
Date	Date
Depth	Depth
Casing	Rose To
Water	Time
Remarks	

Scale 1:50

Logged by AJA

Fig No 5A



IMC

Borehole Record

BH4A

Sheet 4 of 6

Client	Saxon and Ward	Co-ordinates	441456.58 mE
Site	Grimethorpe		408231.96 mN
Methods	Rotary Air Flush. OPEN HOLE. GEOLOGIST'S INTERPRETATION OF GEOPHYSICAL LOG.	Ground Level	61.16 mOD

GROUND WATER**STRATA RECORDS****DRILLING RECORDS**

Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCRR %	RQD %	If	Remarks
			31.16	30.00		MUDSTONE							
						MUDSTONE silty with sandy horizons.							
		31.00											
		32.00		(4.50)									
		33.00											
		34.00											
		26.66		34.50		MUDSTONE							
		35.00											
		25.66		35.50		SANDSTONE with silty mudstone bands.							
		36.00											
		37.00		(3.00)									
		38.00											
		22.66		38.50		MUDSTONE silty.							
		39.00											
				(2.50)									

Continued next sheet

of Hole
Date Depth Casing Water Remarks Water Strike
03/12/97 39.00 39.00 20

Scale 1:50

Logged by AJA

Fig No 5A



IMC

Borehole Record

BH4A

Sheet 5 of 6

Client	Saxon and Ward	Co-ordinates	441456.58 mE
Site	Grimethorpe		408231.96 mN
Methods	Rotary Air Flush. OPEN HOLE. GEOLOGIST'S INTERPRETATION OF GEOPHYSICAL LOG.	Ground Level	61.16 mOD

GROUND WATER**STRATA RECORDS****DRILLING RECORDS**

Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCR %	RQD %	If	Remarks
		41.00	20.16	41.00		MUDSTONE silty.							
		42.00	18.91	42.25	(1.25)	SANDSTONE silty.							
		43.00	17.66	43.50	(1.25)	SANDSTONE							
		44.00	16.86	44.30		MUDSTONE							
		45.00			(1.90)	MUDSTONE silty.							
		46.00	14.96	46.20		SANDSTONE							
		47.00			(1.60)								
		48.00	13.36	47.80		MUDSTONE							
		49.00			(2.70)								

Continued next sheet

Progress of Hole	Water Strike
Date	Date
Depth	Depth
Casing	Rose To
Water	Time
Remarks	

Scale 1:50

Logged by AJA

Fig No 5A



IMC

Borehole Record

BH4A

Sheet 6 of 6

Client Saxon and Ward

Co-ordinates 441456.58 mE

Site Grimethorpe

408231.96 mN

Methods Rotary Air Flush. OPEN HOLE. GEOLOGIST'S INTERPRETATION OF GEOPHYSICAL LOG.

Ground Level 61.16 mOD

GROUND WATER

STRATA RECORDS

DRILLING RECORDS

Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCRR %	QD %	If	Remarks
			10.66	50.50		MUDSTONE							
						End of Borehole at 51.50 m							
		51.00											
		52.00											
		53.00											
		54.00											
		55.00											
		56.00											
		57.00											
		58.00											
		59.00											

Date of Hole

Depth Casing Water Remarks

Water Strike

Date 03/12/97

Depth 39.00

Rose To 39.00

Time 20

Scale 1:50

Logged by AJA

Fig No 5A



IMC

Borehole Record

BH5

Sheet 1 of 4

Client	Saxon and Ward	Co-ordinates	441554.81 mE
Site	Grimethorpe		408188.03 mN
Methods	Rotary Air Flush.	Ground Level	61.57 mOD

GROUND WATER**STRATA RECORDS****DRILLING RECORDS**

Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCR %	RQD %	If	Remarks
			61.47	0.10		TOPSOIL (Drillers description).							
						Brown CLAY (Drillers description).							
		1.00		(1.20)									
			60.27	1.30		Brown MUDSTONE weathered soft. (Drillers description).							
		2.00											
		3.00					0.00 - 5.50	0	-	-	-		Open hole drilling to 5.50m.
		4.00		(4.20)									
		5.00											
			56.07	5.50		LOST CORE assumed in mudstone.							
			55.97	5.60		Grey MUDSTONE with few ironstone nodules, very weak. Core broken.							
		6.00		(0.60)									
			55.37	6.20		Grey MUDSTONE with many silty and fine sandy laminae. Weak.							
		7.00					5.50 - 8.50	0	97	41	24		Cored from 8.50 - 29.50m
				(1.95)									
		8.00											
			53.42	8.15		Buff grey SANDSTONE weathered, ironstaining in vertical joint, silty and micaceous laminae, cross bedded, moderately strong.							
			53.07	(0.35)									
				8.50		LOST CORE assumed in mudstone.							
			52.77	(0.30)									
		9.00		8.80		MUDSTONE Dark Grey.							
				(2.06)									
							8.50 - 11.50	0	75	26	-		Mudstone

Chiselling From To Hours Water Strike Date Depth Rose To Time Progress of Hole Date Depth Casing Water Remarks

Scale 1:50

Logged by AJA

Fig No 6

Open hole from 0.00m to 5.50m core from 5.00m to 29.5m open hole from 29.5m to 33.00m.



IMC

Borehole Record

BH5

Sheet 2 of 4

Client	Saxon and Ward	Co-ordinates	441554.81 mE
Site	Grimethorpe		408188.03 mN
Methods	Rotary Air Flush.	Ground Level	61.57 mOD

GROUND WATER			STRATA RECORDS				DRILLING RECORDS					
Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCR %	RQD %	Remarks
						MUDSTONE Dark Grey.	8.50 - 11.50	0	75	26	-	Mudstone weak / broken.
			50.71	10.86								
		11.00	50.57	11.00		COAL Dull and bright banded, fissile, weathered.						
			50.47	11.10		Grey MUDSTONE SEATEARTH very weak.						
				(0.40)		LOST core assumed in MUDSTONE SEATEARTH						
			50.07	11.50		Grey MUDSTONE slightly silty throughout, with fine silty laminae to base. Moderately weak.						
		12.00		(0.88)								
			49.19	12.38		Dark grey MUDSTONE with silty laminae, and occasional flaser bedded sandy bands. Moderately strong.						
				(0.48)								
		13.00	48.71	12.86		Grey SANDSTONE fine grained flaser bedded, with occasional silty bands. Moderately strong.	11.50 - 14.50	0	100	93	45	
			48.44	13.13								
			48.40	13.12		MUDSTONE IRONSTONE band						
			48.28	13.29		Black MUDSTONE weak.						
				(1.10)		Grey MUDSTONE SEATEARTH highly weathered, with plant roots throughout amorphous (non Bedded / Homogenous).						
		14.00										
			47.18	14.39		COAL bright brittle.						
			47.07	14.50		LOST CORE						
				(0.30)								
		15.00	46.77	14.80		Grey MUDSTONE seatearth with plant remains. Weak.						
			46.47	15.10		Grey MUDSTONE SEATEARTH silty to sandy. Amorphous non-bedded, plant remains throughout. Non Listric. Non oily. Moderately strong.						
				(1.08)								
		16.00					14.50 - 17.50	0	90	33	30	
			45.39	16.18		Grey MUDSTONE with fine silty and sandy laminae. Moderately strong.						
				(0.84)								
		17.00	44.55	17.02		light SILTSTONE SEATEARTH amorphous (non bedded). sandy in part, with plant remains. listric surfaces. (oily).						
				(0.48)								
			44.07	17.50		LOST CORE.						
			43.85	(0.22)								
				17.72		Grey SANDSTONE SILTSTONE SEATEARTH Many plant remains (roots). Strong.						
				(0.40)								
		18.00	43.45	18.12		Grey SILTSTONE with mudstone bands and plant remains. Vertical joints. Moderately strong.						
				(0.30)								
			43.15	18.42		Grey MUDSTONE slightly silty, Weak.						
				(0.74)								
		19.00					17.50 - 20.50	0	92	92	23	
			42.41	19.16		Grey MUDSTONE silty, fine flaser bedding, micaceous laminae, moderately strong.						
				(0.40)								
			42.01	19.56		Grey MUDSTONE non silty (oily). Weak. Vertical joint near top.						

From To Hours Water Strike Date Depth Rose To Time Progress of Hole Date Depth Casing Water Remarks

Scale 1:50

Logged by AJA

Fig No 6

Open hole from 0.00m to 5.50m core from 5.00m to 29.5m open hole from 29.5m to 33.00m.



Borehole Record

BH5

Sheet 3 of 4

Client	Saxon and Ward	Co-ordinates	441554.81 mE
Site	Grimethorpe		408188.03 mN
Methods	Rotary Air Flush.	Ground Level	61.57 mOD

GROUND WATER			STRATA RECORDS				DRILLING RECORDS						
Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCRR %	RQD %	If	Remarks
				(0.94)		Grey MUDSTONE non silty (oily). Weak. Vertical joint near top.							
			41.07	20.50									
			40.82	20.75		LOST CORE							
		21.00				Grey to dark grey MUDSTONE SEATEARTH, many plant remains and listric surfaces, weak to moderately strong.							
				(0.97)									
			39.85	21.72									
		22.00	39.64	(0.21) 21.93		Dark grey black MUDSTONE SEATEARTH Listric surfaces. (Oily).	20.50 - 23.50	0	92	92	46		
						Grey MUDSTONE with occasional ironstone nodules. Slightly silty, sealy, Moderately strong to moderately weak.							
				(1.57)									
		23.00											
			38.07	23.50									
				(0.46)		LOST CORE.							
		24.00	37.61	23.96		Grey MUDSTONE with frequent silty / micaceous laminae, occasional sandy bands, massive. (marginal for brick use?)							
		25.00					23.50 - 26.50	0	85	81	81		
				(2.54)									
		26.00											
			35.07	26.50		Dark grey MUDSTONE silty, with many fine sandy laminae. Ironstone nodules and bands to base. Moderately strong.							
		27.00											
		28.00					26.50 - 29.50	0	67	63	30		
				(3.00)									
		29.00											
			32.07	29.50		Grey MUDSTONE silty with sandy bands. (Drillers description).							
						Continued next sheet							

Coring From	To	Hours	Water Strike Date	Strike Depth	Rose To	Time	Progress of Hole Date	Depth	Casing	Water	Remarks	Scale	1:50
												Logged by	AJA

Open hole from 0.00m to 5.50m core from 5.00m to 29.5m open hole from 29.5m to 33.00m.

Fig No 6



IMC

Borehole Record

BH5

Sheet 4 of 4

Client	Saxon and Ward	Co-ordinates	441554.81 mE
Site	Grimethorpe		408188.03 mN
Methods	Rotary Air Flush.	Ground Level	61.57 mOD

GROUND WATER**STRATA RECORDS****DRILLING RECORDS**

Strike	Well	Depth (m)	Level (mOD)	Stratum Base	Key	Description	Depth	W %	TCR %	SCR %	RQD %	If	Remarks
		31.00		(3.50)		Grey MUDSTONE silty with sandy bands. (Drillers description).	29.50 - 33.00	0	-	-	-		Open hole drilling 29.5 - 33.0m
		32.00											
		33.00	28.57	33.00		End of Borehole at 33.00 m							
		34.00											
		35.00											
		36.00											
		37.00											
		38.00											
		39.00											

Drilling From	To	Hours	Water Strike Date	Strike Depth	Rose To	Time	Progress of Hole Date	Depth	Casing	Water	Remarks
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Scale 1:50

Logged by AJA

Fig No 6

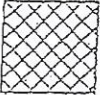
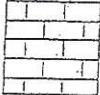
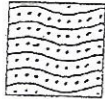
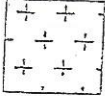
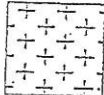
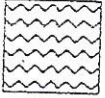
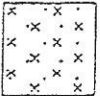
Open hole from 0.00m to 5.50m core from 5.00m to 29.5m open hole from 29.5m to 33.00m.

2002 BOREHOLES

Allied Exploration & Geotechnics Limited

Key Sheet

Symbols and Abbreviations : Explanation Of Legends Used

Soils	Rocks		
	Sedimentary	Metamorphic	Igneous
 Made Ground	 Chalk		
 Boulders & Cobbles	 Limestone	 Coarse grained	 Coarse grained
 Gravel	 Conglomerate		
 Sand	 Breccia	 Medium grained	 Medium grained
 Silt	 Sandstone		
 Clay	 Siltstone	 Fine grained	 Fine grained
 Peat	 Mudstone		
 Topsoil	 Shale		
Note:- Composite soil types will be signified by combined symbols e.g.	 Coal		
	 Pyroclastic		
	 Gypsum		
 Silty sand			





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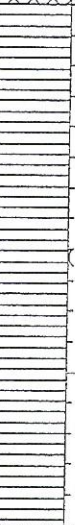
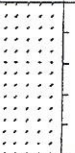
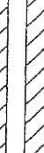
DRILLHOLE LOG

Status:-

FINAL

Date:- 15/07/02

Project:		Carlton Main Brickworks		DRILLHOLE No	
Client:		Waste Recycling Group		BH-02/03	
Location:		Nr, Barnsley, Yorkshire			
Method & Equipment:		Rotary Openhole using a Dando 220		Ground Level(m(AOD)):	Date:
				31.80-34.61	26-04-02
				Sheet:	1 of 5

RUN DETAILS			STRATA				Geo logy	Instru- ment	Backfill	
Depth	TCR (SCR) RQD	(SPT) Fracture Index	Red'cd Level	Legend	Depth (Thick- ness)	DESCRIPTION				
						Discontinuities				Main
					(1.80)	0.00-18.00m ... rotary openhole drilling.	MADE GROUND (Soft brown black sandy gravelly clay. Gravel is fine to coarse angular and consists of ash and sandstone).			
			30.00		(1.70)		Weak grey weathered MUDSTONE.			
			28.30		(3.50)		Weak fine grained grey SANDSTONE.			

Drilling Progress and Water Observations								GENERAL REMARKS	
Date	Depth	Casing	Core Dia mm	Strike	Water Standing	Type	Flush Returns		
26/04/02	0.00	0.00						(1) Water strike at 10.00m BGL.	
26/04/02	18.00	3.00	76mm	10.00		Air	100%		

All dimensions in metres Scale 1:25	For Explanation of Symbols and Abbreviations see Key Sheets	Checked By: <i>AG</i>	Logged By: C. Jobe	Contract No. 3264
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Date Printed:- 15/07/02

Form AEG22/

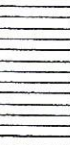
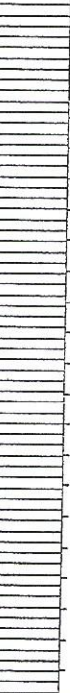
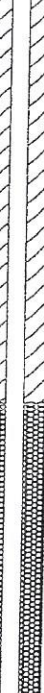


ALLIED EXPLORATION & GEOTECHNICS LTD

DRILLHOLE LOG

Status:-
FINAL
Date:- 15/07/02

Project: Carlton Main Brickworks		DRILLHOLE No BH-02/03	
Client: Waste Recycling Group	Location: Nr, Barnsley, Yorkshire		
Method & Equipment: Rotary Openhole using a Dando 220		Ground Level(m(AOD)): 31.80 34.61	Date: 26-04-02
		Sheet: 2 of 5	

RUN DETAILS			STRATA					Geo logy	Instru-ment	Backfill	
Depth	TCR (SCR) RQD	(SPT) Fracture Index	Red'cd Level	Legend	Depth (Thick-ness)	DESCRIPTION					
						Discontinuities	Detail				Main
			27.00		(1.30) 4.80			(As sheet 1 of 5) Weak fine grained grey SANDSTONE.			
			26.50		(0.50) 5.30			Weak grey weathered MUDSTONE.			
			26.10		(0.40) 5.70			Weak fine grained grey SANDSTONE.			
								Weak grey weathered MUDSTONE.			

Drilling Progress and Water Observations									GENERAL REMARKS
Date	Depth	Casing	Core Dia mm	Strike	Water Standing	Type	Flush Returns		
26/04/02	0.00	0.00							
26/04/02	18.00	3.00	76mm	10.00		Air	100%		(1) Water strike at 10.00m BGL.

All dimensions in metres Scale 1:25	For Explanation of Symbols and Abbreviations see Key Sheets	Checked By: AGG	Logged By: C. Jobe	Contract No. 3264
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Date Printed:- 15/07/02

Form AEG22/

DRILLHOLE LOG

Status:-

FINAL

Date:- 15/07/02

Project: Carlton Main Brickworks			DRILLHOLE No	
Client: Waste Recycling Group		Location: Nr, Barnsley, Yorkshire		BH-02/03
Method & Equipment: Rotary Openhole using a Dando 220		Ground Level(m(AOD)): 31.80 34.6	Date: 26-04-02	Sheet: 3 of 5

[illegible]

Drilling Progress and Water Observations								GENERAL REMARKS
Date	Depth	Casing	Core Dia mm	Strike	Water Standing	Type	Flush Returns	
26/04/02	0.00	0.00						(1) Water strike at 10.00m BGL.
26/04/02	18.00	3.00	76mm	10.00		Air	100%	

All dimensions in metres Scale 1:25	For Explanation of Symbols and Abbreviations see Key Sheets	Checked By: A. R. G. P.	Logged By: C. Jobe	Contract No. 3264
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Form AEG22/



ALLIED EXPLORATION & GEOTECHNICS LTD

DRILLHOLE LOG

Status:-

FINAL

Date:- 15/07/02

Project: Carlton Main Brickworks		DRILLHOLE No BH-02/03	
Client: Waste Recycling Group		Location: Nr, Barnsley, Yorkshire	
Method & Equipment: Rotary Openhole using a Dando 220		Ground Level(m(AOD)): 31.80 34.61	Date: 26-04-02
		Sheet: 5 of 5	

RUN DETAILS					STRATA			Geology	Instrument	Backfill	
Depth	TCR (SCR) RQD	(SPT) Fracture Index	Red'cd Level	Legend	Depth (Thickness)	DESCRIPTION					
						Discontinuities	Detail				Main
			13.80		18.00		(As sheet 4 of 5) Weak grey weathered MUDSTONE.				
							Drillhole complete at 18.00m BGL.				

Drilling Progress and Water Observations									GENERAL REMARKS
Date	Depth	Casing	Core Dia mm	Strike	Water Standing	Type	Flush Returns		
26/04/02	0.00	0.00							
26/04/02	18.00	3.00	76mm	10.00		Air	100%		(1) Water strike at 10.00m BGL.

All dimensions in metres Scale 1:25	For Explanation of Symbols and Abbreviations see Key Sheets	Checked By: R. J. O'Leary	Logged By: C. Jobe	Contract No. 3264
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Date Printed:- 15/07/02

Form AEG22/

2005 BOREHOLES

Grey Sandstone

Metres Metres Borehole Type of soil Consistency Weathering
BH05/05 441414E 408017N SL 46.08mAOD

		<u>9-11.20</u>			
		Grey-Dark grey	Mudstone	Silty	
		<u>11.20-14.20</u>			
		Dark grey	Mudstone	Silty	
		<u>14.20-17.20</u>			
		Dark grey	Mudstone	Silty	
		<u>17.20-20.20</u>			
17.2	18.7	Grey-Dark grey	Mudstone	Silty	
18.7	19.25	Grey-Dark grey	Mudstone	Sandy	
19.25	20.2	Grey-Dark grey	Mudstone	Silty	
		<u>20.20-23.0</u>			
		Grey-Dark grey	Mudstone		Weathered
		<u>23-26</u>			
		Grey-Dark grey	Mudstone		Weathered
		<u>26-29</u>			
		Grey-Dark grey	Mudstone		Weathered
		<u>29-32</u>			
		Grey-Dark grey	Mudstone		Weathered
		<u>32-35</u>			
		Grey-Dark grey	Mudstone		Weathered
		<u>35-38</u>			
		Grey-Dark grey	Mudstone		Weathered
		<u>35-38</u>			
		Grey-Dark grey	Mudstone		

BH05/06 441417E 408111N SL 35.96mAOD

		<u>1.50-3.70</u>			
		Grey-Dark grey	Mudstone	Silty	
		<u>3.70-6.70</u>			
3.7	4.6	Grey	Sandstone	Silty	
4.6	6.7	Grey-Dark grey	Mudstone	Silty	
		<u>6.70-9.70</u>			
6.7	7.4	Grey	Mudstone	Sandy/silty	
7.4	9.7	Grey-Dark grey	Mudstone	Silty	
		<u>9.70-12.70</u>			
		Grey	Mudstone	Silty	
		<u>12.70-15.70</u>			
		Grey	Mudstone	Silty	
		<u>15.70-18</u>			
		Grey-Dark grey	Mudstone	Silty	