All out of date and/or Client confidential information redacted - 09/08/16

SITE INVESTIGATION OF THE FORMER BANBURY GAS WORKS

INTERPRETATIVE REPORT

FOR

S GRUNDON (WASTE) LIMITED

Author of Report:	Supervisor:	Auditor:
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R/EN2498.PN.2.1.5

STATUS: FIRST ISSUE
DATE: MARCH 2002

APPENDIX A

Site Plans

Site Location Plan

Site Services Plan

Exploratory Hole Location Plan

Waterman Environmental
Consulting Engineers and Scientists

CALTHORPE HOUSE 30 HAGLEY ROAD BIRMINGHAM B16 8QY
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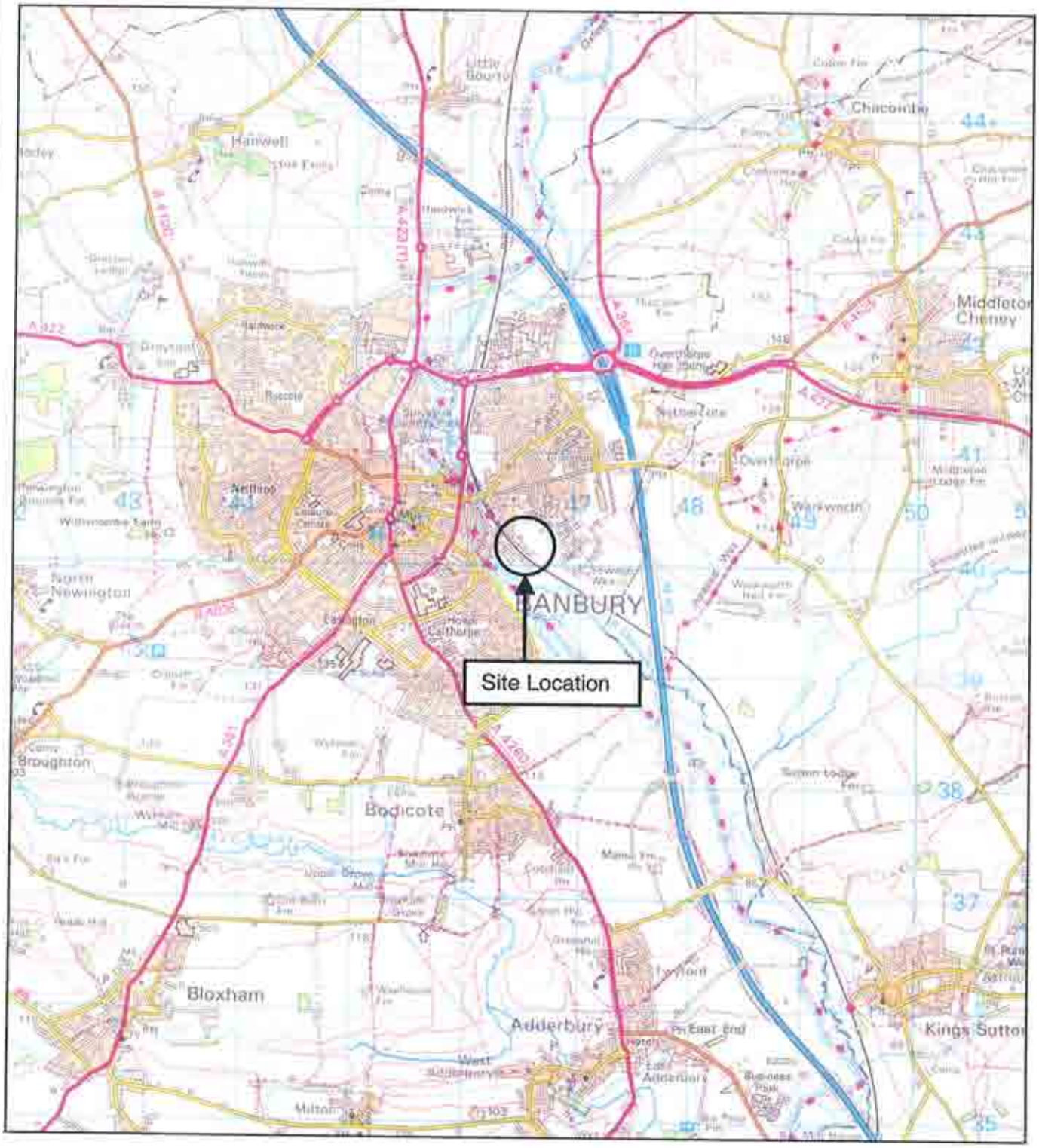
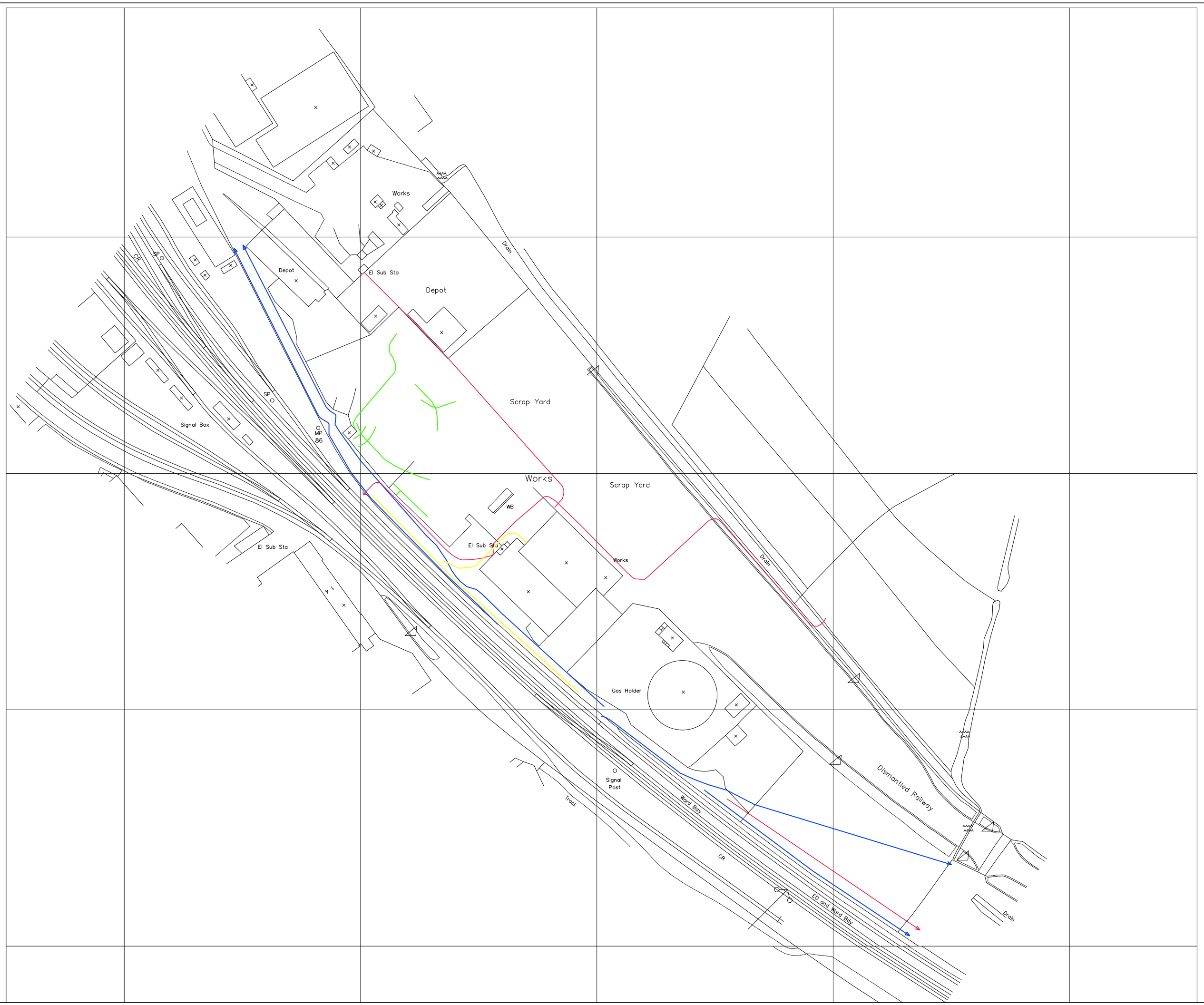
Job No :- EN2498	Figure No :- 1
Title :- Banbury Gasworks Site Location Plan	
Date :- March 2002	Scale :- 1:50,000
	Drawn by :- A.Byng





GENERAL NOTES

LEGEND:

- GAS MAIN
- ELECTRIC
- MAIN SEWER
- SITE DRAINAGE

REV:	DATE	DESCRIPTION	BY

AMENDMENTS

PROJECT:–

BANBURY

TITLE:–

SERVICES PLAN

CLIENT:–

S. Grundon Waste Ltd

ARCHITECT:–

–

Waterman Environmental
Consulting Engineers & Scientists

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Drawing Status:–

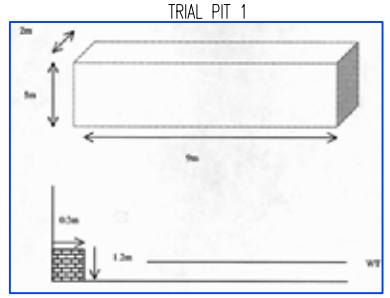
PRELIMINARY

Designed by:–	PN	Checked by:–		Project No:–
Drawn by:–	MC	Date:–	11/02/02	EN2498
Scales:– work to figured dimensions only	1:750 (@A1)			Computer File No:– S/SH/EN2498/96/WSA96_03

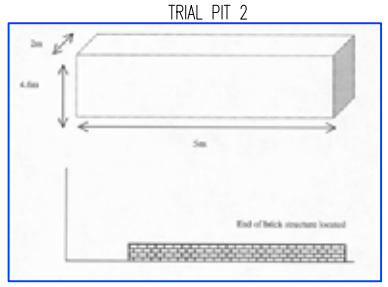
Publisher	Zone	Category	Number	Revision
WE	SA	96	03	A01

A1-ENV, WSA02_SU, WSA96_SVS

TRIAL PIT 1



TRIAL PIT 2



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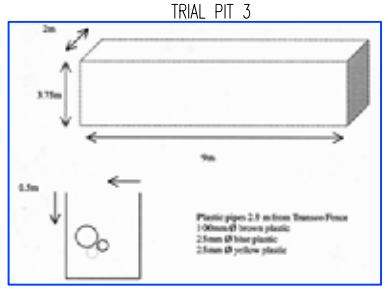

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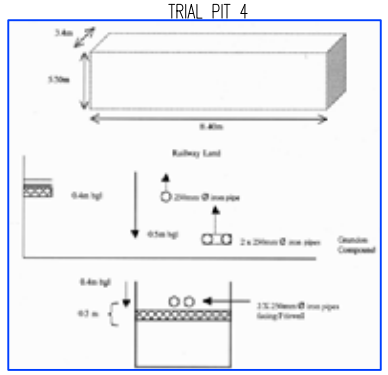
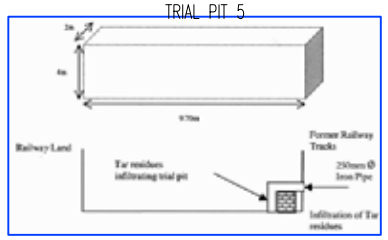
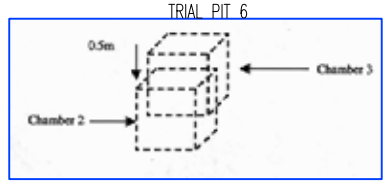


TRIAL PIT 5



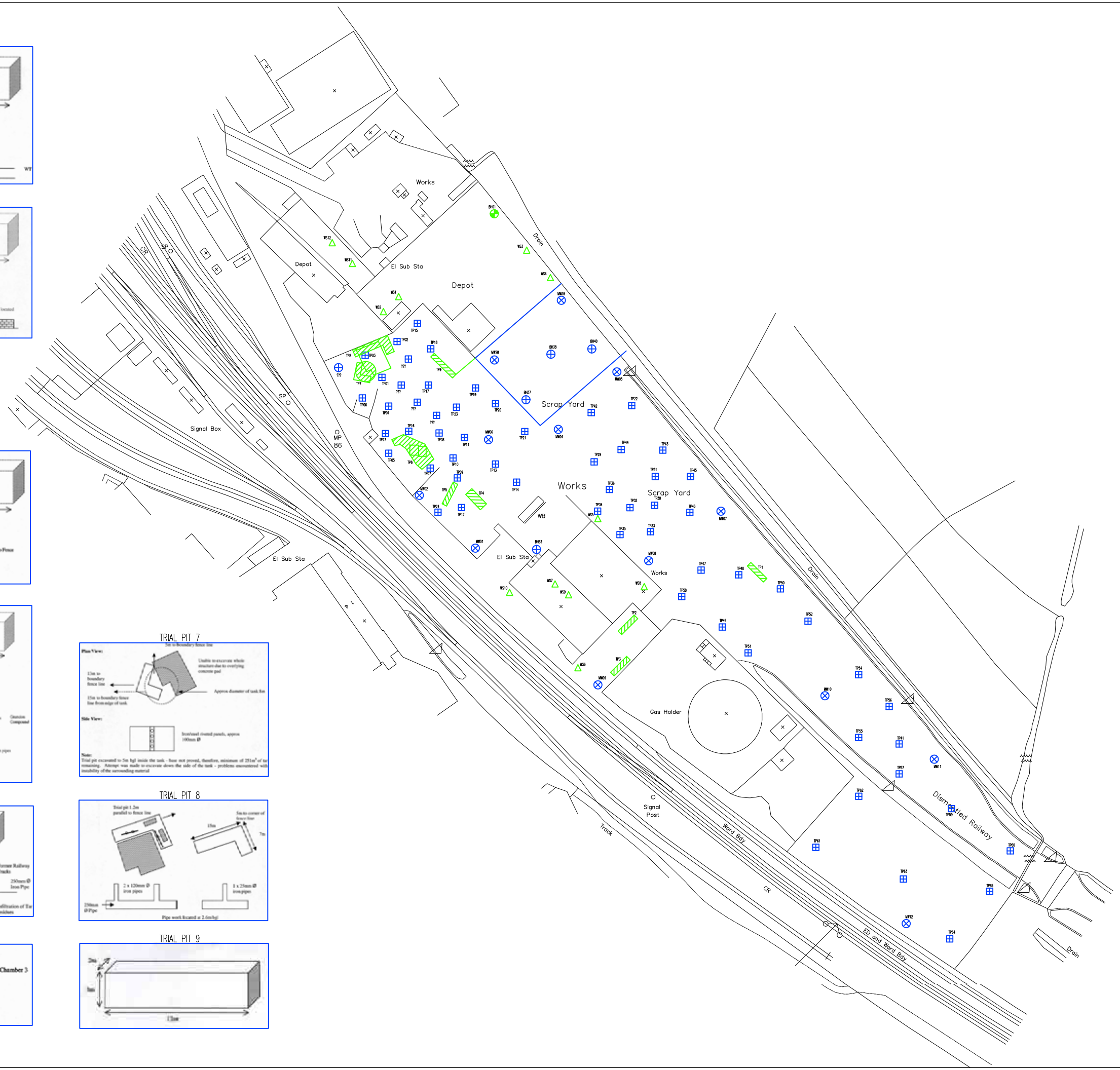
TRIAL PIT 6



TRIAL PIT 7

TRIAL PIT 8

TRIAL PIT 9



GENERAL NOTES

1. DO NOT SCALE FROM THIS DRAWING.

LEGEND

- MW07 AEA PROBEHOLE LOCATIONS
- BH38 AEA BOREHOLE LOCATIONS
- TP16 AEA TRIAL PIT LOCATIONS
- BH01 WATERMAN ENVIRONMENTAL BOREHOLES
- TP16 WATERMAN ENVIRONMENTAL PROBEHOLES
- TP9 WATERMAN ENVIRONMENTAL TRIAL PITS

PHOTOGRAPH TABLE

TRIAL PIT NUMBER	PLATE NUMBERS
1	1, 2
2	3, 4
3	5, 6, 7
4	8, 9, 10, 11
5	12, 13, 14, 15
6	16, 17, 18, 19, 20, 21,
7	22, 23, 24, 25, 26,
8	27, 28, 29, 30, 31, 32
9	33, 34

REV:	DATE	DESCRIPTION	BY

AMENDMENTS

PROJECT:-

BANBURY

TITLE:-

EXPLORATORY HOLE LOCATION PLAN

CLIENT:- S. Grundon Waste Ltd

ARCHITECT:- -

Waterman Environmental
Consulting Engineers & Scientists

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Drawing Status:- **PRELIMINARY**

Designed by:- PN	Checked by:-		Project No:- EN2498
Drawn by:- MC	Date:- FEB 2002		
Scales:- 1:750 (@A1)			Computer File No:- S/SH/EN2498/80/WSA80_02

Publisher	Zone	Category	Number	Revision
WE	SA	80	02	A01

A1-ENV, WSA02_SU

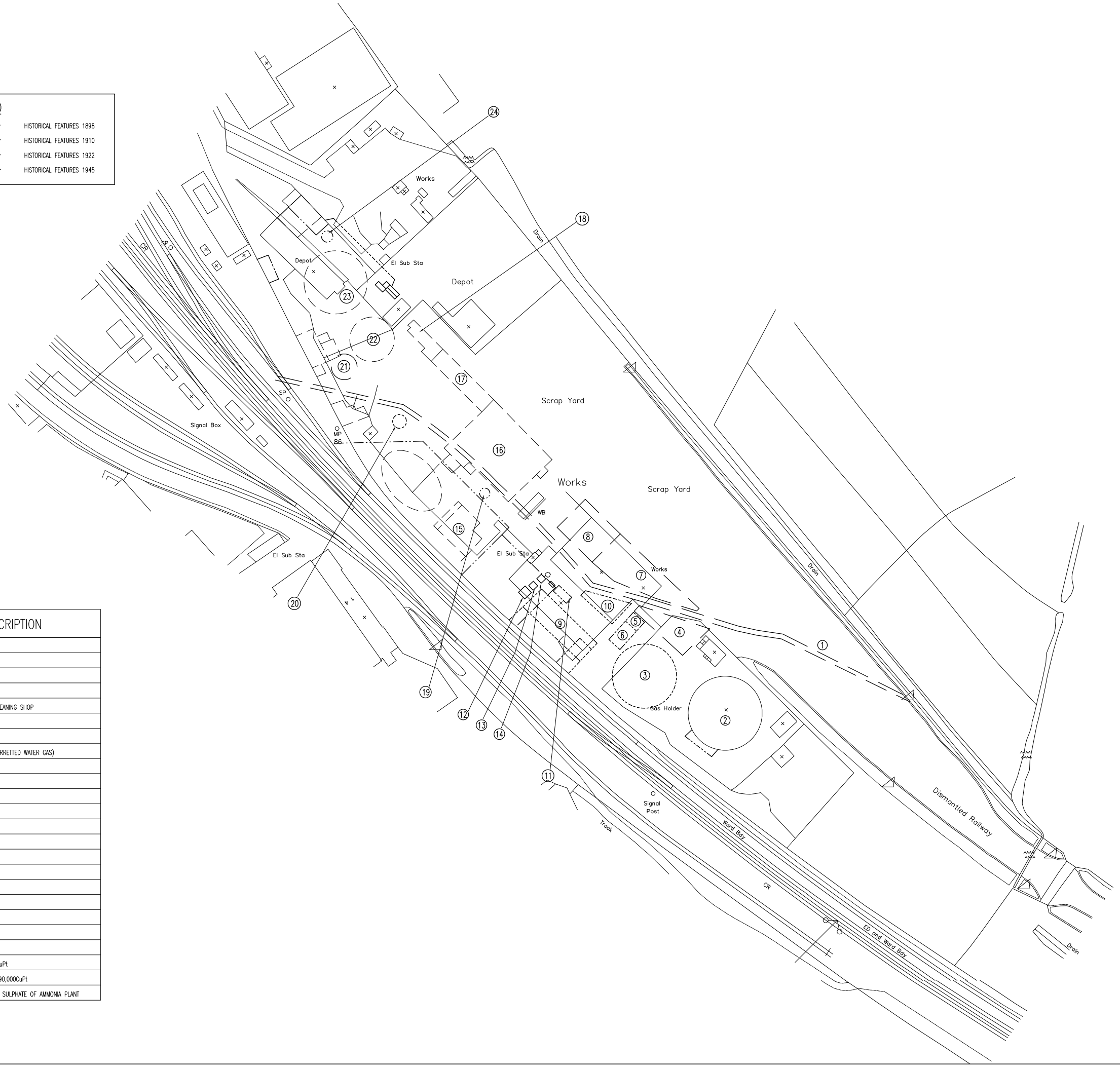
APPENDIX B

Historical Site Plan

Historical Map Extracts

LEGEND

- HISTORICAL FEATURES 1898
- HISTORICAL FEATURES 1910
- HISTORICAL FEATURES 1922
- HISTORICAL FEATURES 1945



NO:	DESCRIPTION
1	RAILWAY SIDINGS
2	GAS HOLDER No: 4
3	GAS HOLER No: 3
4	COAL STACK
5	FITTING & COOKER CLEANING SHOP
6	GAS TESTING ROOM
7	COAL STACK
8	CWG PURIFIER (CARBURRETTED WATER GAS)
9	COAL GAS PURIFIER
10	COAL STACK
11	TAR & LIQUOR WELL
12	GENERAL STORES
13	GAS OIL STORE
14	GARAGE
15	HOUSE & GARDENS
16	RETORT HOUSE
17	CWG PLANT
18	SULPHATE PLANT
19	TAR & LIQUOR WELL
20	TAR & LIQUOR WELL
21	TAR & LIQUOR WELL
22	CWG HOLDER 40,000CuPt
23	No: 2 GAS HOLDER 190,000CuPt
24	GAS TESTING ROOM & SULPHATE OF AMMONIA PLANT

GENERAL NOTES

1. LOCATIONS OF HISTORICAL FEATURES ARE APPROXIMATE ONLY.
2. DO NOT SCALE FROM THIS DRAWING.

REV:	DATE	DESCRIPTION	BY
A01	11/2/02	DESCRIPTIONS OF HISTORICAL FEATURES ADDED & PLAN CHANGED TO COLOUR	MC

AMENDMENTS

PROJECT:-
BANBURY

TITLE:-
HISTORICAL FEATURES PLAN

CLIENT:-
S. Grundon Waste Ltd

ARCHITECT:-
-

Waterman Environmental
Consulting Engineers & Scientists
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Drawing Status:-
PRELIMINARY

Designed by:-	NL	Checked by:-		Project No:-
Drawn by:-	MC	Date:-	Nov 2001	EN2498
Scales:- unit to figured dimension only	1:750 (@A1)			Computer File No:- S/SH/EN2498/80/WSA80_01_A02

Publisher	Zone	Category	Number	Revision
WE	SA	80	01	A02

A1-ENV, WSA02_SU

APPENDIX C

Exploratory Hole Records

Boreholes WEBH01

Trial Trenches TP1 to TP9

Window Sample Probes WS01 to WS12

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site	Borehole Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	1

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
LIGHT CABLE PERCUSSIVE	150mm Cased to 5.50m		S. GRUNDON SERVICES LIMITED	M2141
	Location	**Dates**	**Engineer**	**Sheet**
	AS PLAN	08/01/02 - 08/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records
0.20-0.70	B			
0.70	D			
0.70	D			
0.70-1.00	B			
1.00	D			
1.00	D			
1.20-1.65	U			
1.85	D			
1.90	D			
1.90-2.35	U			
2.60-3.05	SPT N 5			1,1,1,1,2,1
2.55	D			
2.60-3.05	D			
2.60-3.10	B			
3.60-4.10	B			Medium inflow(1) at 3.40m, rose to 2.50m in 20 mins, sealed at 5.50m.
4.10-4.55	D			
3.60-4.05	SPT N=4			1,1,1,1,1,1
4.10-4.55	SPT N=15			1,2,3,3,4,5
4.10-4.60	B			
5.20	D			
5.20	D			
5.20-5.55	U			
5.60	D			HP55.60m, c=250+KPa
6.60-7.05	SPT N=19			6,8,10,11,14,14
6.60-7.05	D			
8.20-8.57	SPT 50/220			8,11,14,15,21/70
8.20-8.57	D			
8.20	D			
8.20	D			08/01/02:DRY

Level (mOD)	Depth m (Thickness)	Description
	0.10	MADE GROUND: gravel sized fragments of stone
	(0.60) 0.70	MADE GROUND: greyish brown silty very sandy fine to coarse gravel sized fragments of brick, stone and concrete with some cobble sized fragments of brick and concrete
	(1.20) 1.90	MADE GROUND: dark greyish brown very clayey silty fine to coarse sand with many fine to coarse gravel sized fragments of stone, brick and occasional concrete, with occasional cobble sized fragments of brick and concrete and with some roots
	(0.60) 2.50	Friable light greyish brown and brown mottled sandy silty CLAY
	(1.60) 4.10	Very soft brown sandy silty CLAY with much angular to subangular fine gravel and with some bands of brown clayey silty fine to coarse sand
	(1.10) 5.20	Medium dense brown clayey silty very sandy subangular to rounded fine to medium GRAVEL
	(3.40) 8.60	Very stiff fissured grey silty CLAY
		Borehole completed at 8.60m

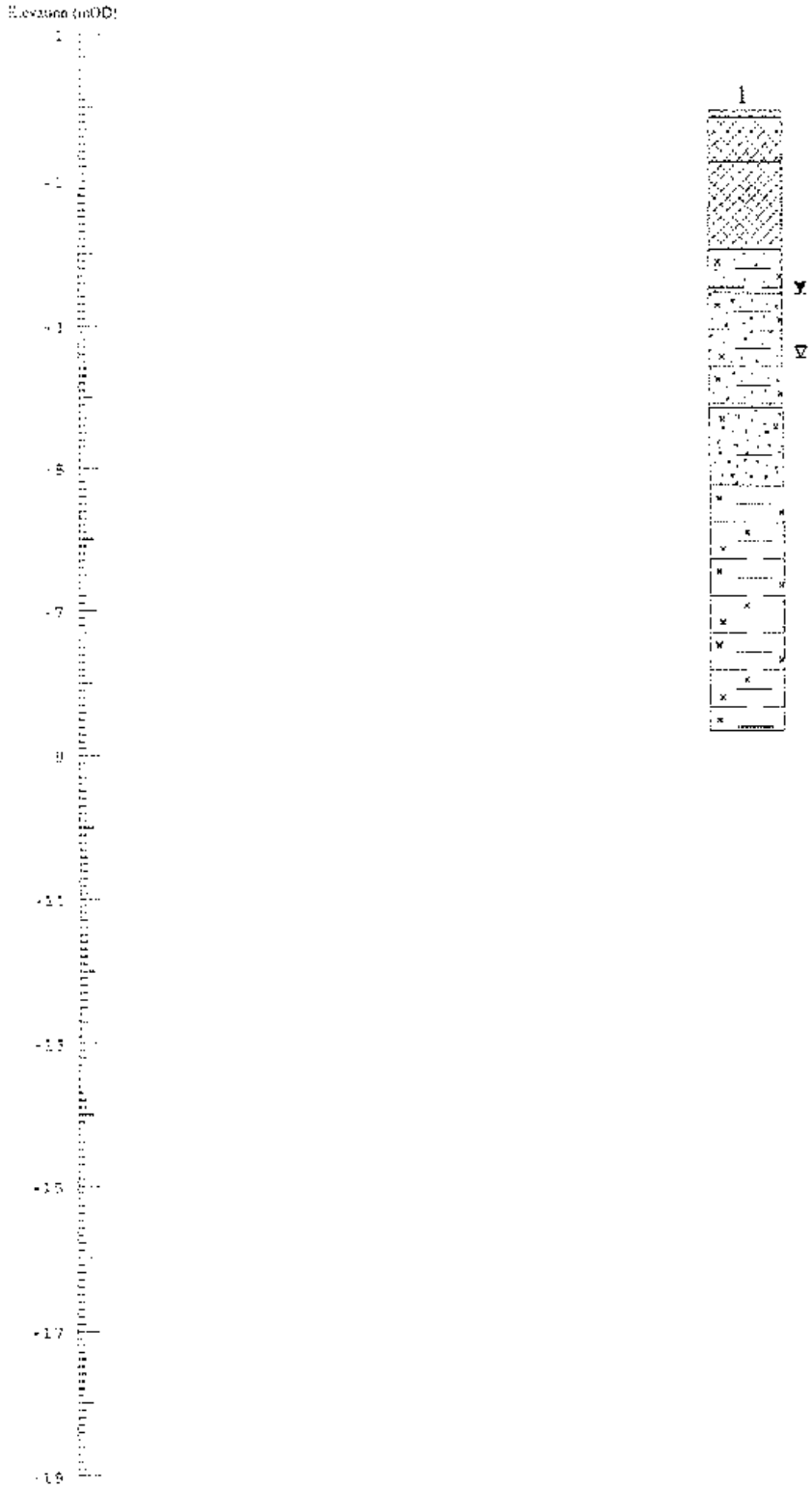
Remarks

Hand excavated inspection pit from GL to 1.20m to check for services - 1.5 hours. HP - Hand Penetrometer test. On completion backfilled with cement/Bentonite grout from 8.60m to 5.20m and installed a 50mm diameter mdpe gas monitoring standpipe with a gas valve and gravel surround to 5.20m, a Bentonite seal from 5.00m to 2.50m, a 50mm diameter mdpe gas monitoring standpipe with a gas valve and gravel surround to 2.50m, a Bentonite seal from 1.00m to 0.25m and a concreted in protective cover from 0.25m to GL.

See key sheet for symbols and abbreviations

Scale (approx)	Logged By
1:50	DJ/DAP

Figure No. M2141.1



Key To Legends

- MADE GROUND
- Clayey silty sandy GRAVEL
- Silty CLAY
- Groundwater Strike
- Silty sandy CLAY
- Strike Rise Level
- Silty sandy gravelly CLAY

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Nominal Section

Site: MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	Date Drawn: 14/Feb/02	Date Checked:	Sheet: 1/1	Job Number: M2142
Client: S. GRUNDON SERVICES LIMITED	Drawn By:	Checked By:	Scale: 1:100@[V]	Figure No:

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Standard Penetration Test Results

Site . MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE

Client . S. GRUNDON SERVICES LIMITED

Engineer . WATERMAN ENVIRONMENTAL

Job Number: J22142

Sheet: 1/1

Borehole Number	Depth at start m	Depth at end m	Test Type	Seating Blows per 75mm		Blows for each successive 75mm penetration				Result	Comments
				1	2	1	2	3	4		
1	2.60	3.05	SPT	1	1	1	1	2	1	N=5	
1	3.60	4.05	SPT	1	1	1	1	1	1	N=4	No recovery
1	4.10	4.55	SPT	1	2	3	3	4	5	N=15	
1	6.60	7.05	SPT	6	8	10	11	14	14	N=49	
1	8.20	8.57	SPT	8	11	14	15	21/70		50/220mm	

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site	Borehole Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	WS1

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING			S. GRUNDON SERVICES LIMITED	M2141

Location	Dates	Engineer	Sheet
AS PLAN	09/01/02 - 09/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records
				0.20m to 1.00m - 95% recovery
0.30	D			
0.50	D			
0.60	D			
0.70	D			
0.80	D			
1.00	D			1.00m to 2.00m - 95% recovery
1.20	D			
1.20	D			
1.90	D			
1.90	D			2.00m to 3.00m - 95% recovery
2.20	D			
2.20	D			
				Medium inflow(1) at 3.00m, rose to 2.70m in 20 mins, not sealed. 3.00m to 4.00m - 75% recovery
4.00	D			09/01/02:2.78m
4.00	D			

Level (mOD)	Depth m (Thickness)	Description
	(0.20) 0.20	MADE GROUND: concrete floor slab
	(0.40) 0.60	MADE GROUND: dark orange brown angular gravel and cobble sized fragments of brick (no visible contamination, no odour)
	(0.20) 0.80	MADE GROUND: dark grey slightly silty fine to medium sand (hydrocarbon odour, possibly stained dark grey)
	(0.40) 1.20	Orange brown fine to medium SAND with occasional angular medium to coarse sandstone gravel (no visible contamination, no odour)
	(1.00) 2.20	Soft to firm, in places firm, green grey mottled light grey silty CLAY with thin partings at 2.00m of fine to medium sand (dark grey stained spots otherwise no visible contamination, no odour)
	(1.80) 4.00	Soft to firm dark grey and grey slightly organic slightly sandy silty CLAY (stained dark grey spots, hydrocarbon and tar odour throughout)
		Borehole completed at 4.00m

Remarks

Cored concrete from GL to 0.20m
Casing 90mm to 1.00m, 80mm to 2.00m, 60mm to 3.00m, 50mm to 4.00m
Unable to sample water, hole collapsed to 2.80m
On completion backfilled with arisings and reinstated concrete floor slab

See key sheet for symbols and abbreviations

Scale (approx)	Logged By
1:25	ML/DF

Figure No.
M2141.WS1

SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site: MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE

Borehole Number: WS2

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING			S. GRUNDON SERVICES LIMITED	M2141
Location	**Dates**	**Engineer**		**Sheet**
AS PLAN	09/01/02 - 09/01/02	WATERMAN ENVIRONMENTAL		1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
				GL to 1.00m - 95% recovery			MADE GROUND: brown sandy angular gravel and cobble sized fragments of flint and concrete (no visible contamination, no odour)		
0.50	D					(0.60)			
0.50	D								
0.60	D					0.60			
							MADE GROUND: dark grey sand sized ash and fine to medium gravel sized fragments of slag (possible heavy metal contamination, no odour)		
1.00	D			1.00m to 2.00m - 75% recovery		(0.60)			
1.20	D					1.20			
							Soft to firm light grey mottled grey brown silty CLAY with occasional rotting relict rootlets (slight hydrocarbon and tar odour, organic local penetrative grey staining along root tracts		
1.80	D					(0.80)			
2.00	D			2.00m to 3.00m - 90% recovery		2.00			
2.00	D						Soft grey brown organic sandy silty CLAY (slight hydrocarbon and tar odour throughout)		
				3.00m to 4.00m - 85% recovery		(2.00)			
3.30	D						....at 3.30m: local dark grey staining		
3.30	D								
4.00	D			09/01/02:DRY		4.00			
4.00	D						Borehole completed at 4.00m		

Remarks

Casing 200mm to 1.00m, 180mm to 2.00m, 150mm to 3.00m, 150mm to 4.00m
On completion backfilled with arisings

Scale (Approx): 1:25 | Logged By: ML/GP | Figure No: M2141.WS2

See key sheet for symbols and abbreviations

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site: MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE			Borehole Number: WS3
Boring Method: WINDOW SAMPLING	Diameter: 90mm to 1.00m, 80mm to 2.00m, 60mm to 3.00m	Ground Level (mOD):	Client: S. GRUNDON SERVICES LIMITED	Job Number: M2141
	Location: AS PLAN	Dates: 09/01/02 - 09/01/02	Engineer: WATERMAN ENVIRONMENTAL	Sheet: 1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
				GL to 1.00m - 95% recovery		(0.50)	MADE GROUND: grey angular gravel sized fragments of flint and concrete (no visible contamination, no odour)		
0.30	D								
0.40	D					0.50			
0.60	D					(0.50)	MADE GROUND: yellow brown angular coarse gravel and cobble sized fragments of sandstone (no visible contamination, no odour)		
0.70	D					1.00			
				1.00m to 2.00m - 5% recovery		(1.00)	MADE GROUND: no recovery as pushing cobble sized fragments ahead of barrel		
				2.00m to 3.00m - 95% recovery		2.00			
2.10	D					(0.50)	Firm green grey organic silty CLAY (slight tar and hydrocarbon odour, no visible staining)		
2.20	D					2.50			
2.60	D					(0.50)	Firm light brown organic sandy silty CLAY (slight tar and hydrocarbon odour, no visible staining)		
2.70	D								
				09/01/02:DRY		3.00			
							Borehole completed at 3.00m		

Remarks
Sides collapsed to 0.60m on removal of 60mm diameter barrel, no further progress possible
On completion backfilled with arisings

See key sheet for symbols and abbreviations

Scale (approx)	Logged By
1:25	ML/ZP

Figure No: M2141.WS3

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site	Borehole Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	WS4

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING			S. GRUNDON SERVICES LIMITED	M2141
	Location	**Dates**	**Engineer**	**Sheet**
	AS PLAN	09/01/02 - 09/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description
				GL to 1.00m - 85% recovery			
0.30	D						MADE GROUND: brown sandy angular gravel sized fragments of flint and concrete (no visible contamination, no odour)
0.30	D					(0.40)	
						0.40	
0.60	D						MADE GROUND: firm grey and light grey silty clay with occasional to some angular fine to coarse gravel sized fragments of brick (no visible contamination, no odour)
0.70	D						
				1.00m to 2.00m - 95% recovery		(1.00)	
1.40	D					1.40	
1.50	D					(0.50)	Firm to stiff grey brown and light grey silty CLAY with occasional rotting rootlets (no visible contamination, no odour)
1.90	D					1.90	
2.00	D			2.00m to 3.00m - 90% recovery		(0.30)	Firm orange brown mottled light grey organic slightly sandy silty CLAY (slight tar and hydrocarbon odour, no visible staining)
2.20	D					2.20	
2.30	D						Soft becoming soft to firm grey brown and orange brown sandy silty CLAY (slight hydrocarbon and tar odour, stained dark grey
				Medium inflow(1) at 3.00m, rose to 2.65m in 20 mins, not sealed. 3.00m to 4.00m - 75% recovery		(1.80)	
3.70	D						
4.00	D			09/01/02:2.50m		4.00	
							Borehole completed at 4.00m

Remarks
Casing 90mm to 1.00m, 80mm to 2.00m, 60mm to 3.00m, 50mm to 4.00m
Unable to sample water, borehole collapsed to 2.80m
On completion backfilled with arisings

Scale (approx)	Logged By
1:25	MH/[illegible]

Figure No. M2141.WS4

See key sheet for symbols and abbreviations

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site	Borehole Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	WS5

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING			S. GRUNDON SERVICES LIMITED	M2141
	Location	**Dates**	**Engineer**	**Sheet**
	AS PLAN	09/01/02 - 09/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
						(0.20)	MADE GROUND: concrete floor slab		
0.20	D			0.25m to 1.00m - 90% recovery		0.20			
0.30	D					(0.30)	MADE GROUND: dark grey ashy sandy angular gravel sized fragments of flint and concrete (no visible contamination, no odour)		
0.50	D					0.50	MADE GROUND: firm dark grey slightly sandy silty clay with occasional to some angular fine to coarse gravel sized fragments of slag (no visible contamination, no odour)		
0.80	D								
				1.00m to 2.00m - 95% recovery		(1.10)			
1.50	D					1.60	Soft to firm, in places firm, light grey and grey brown silty CLAY with occasional rotting rootlets (stained dark grey below 2.50m, slight tar odour throughout)		
1.60	D								
				2.00m to 3.00m - 80% recovery					
						(1.50)			
2.50	D								▼
2.60	D								
				Medium inflow(1) at 3.00m, rose to 2.50m in 20 mins, not sealed.					▽1
3.10	D			3.00m to 4.00m - 85% recovery		3.10	Brown and orange brown slightly silty fine to medium SAND (no visible contamination, no odour)		
3.20	D								
						(0.90)			
4.00	D			09/01/02:2.38m		4.00			
4.00	D						Borehole completed at 4.00m		

Remarks

Cored concrete from GL to 0.25m
Casing 90mm to 1.00m, 80mm to 2.00m, 60mm to 3.00m, 50mm to 4.00m
Unable to sample water, borehole collapsed to 2.50m
On completion backfilled with arisings and reinstated concrete slab

See Key sheet for symbols and abbreviations

Scale (approx)	Logged By	Figure No.
1:25	ML/JT	M2141.WS5

SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site	Borehole Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	WS6

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING	90mm to 0.50m		S. GRUNDON SERVICES LIMITED	M2141
	Location	**Dates**	**Engineer**	**Sheet**
	AS PLAN	09/01/02 - 09/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
				GL to 0.50m - 60% recovery		(0.50)	MADE GROUND: grey angular gravel sized fragments of stone and brick (no visible contamination, no odour)		
				09/01/02:DRY		0.50	Obstruction at 0.50m		
							Borehole completed at .50m		

Remarks
On completion backfilled with arisings

Scale (approx)	Logged By
1:25	ML/DT

Figure No.
M2141.WS6

See key sheet for symbols and abbreviations

SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel: (01772) 561135 Fax (01772) 204907

Site	Borehole Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	WS6A

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING	90mm to 0.40m		S. GRUNDON SERVICES LIMITED	M2141

Location	Dates	Engineer	Sheet
AS PLAN	09/01/02 - 09/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
				GL to 0.40m - 60% recovery		(0.40)	MADE GROUND: grey angular gravel sized fragments of stone and brick (no visible contamination, no odour)		
				09/01/02:DRY		0.40	Obstruction at 0.40m		
							Borehole completed at .40m		

Remarks
On completion backfilled with arisings

Scale (approx) 1:25

Logged By MR/DAP

Figure No. M2141.WS6A

See key sheet for symbols and abbreviations

SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site: VERCON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE			Borehole Number: WS6B
Boring Method: WINDOW SAMPLING	Diameter: 90mm to 0.40m	Ground Level (mOD):	Client: S. GRUNDON SERVICES LIMITED	Job Number: M2141
	Location: AS PLAN	Dates: 09/01/02 - 09/01/02	Engineer: WATERMAN ENVIRONMENTAL	Sheet: 1/1

Depth (m)	Samples / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				GL to 0.40m - 60% recovery			MADE GROUND: grey angular gravel sized fragments of stone and brick (no visible contamination, no odour)		
						(0.40)	Obstruction at 0.40m		
				09/01/02:DRY		0.40	Borehole completed at .40m		

Remarks
On completion backfilled with arisings

Scale (approx): 1:25
Logged By: ML/DP
Figure No

See key sheet for symbols and abbreviations

M2141.WS6B

SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site	Borehole Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	WS8

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING			S. GRUNDON SERVICES LIMITED	M2341

Location	Dates	Engineer	Sheet
AS PLAN	10/01/02 - 10/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
						(0.20)	MADE GROUND: concrete floor slab		
				0.20m to 1.00m - 95% recovery		0.20			
						(0.30)	MADE GROUND: grey slightly silty angular fine to coarse gravel sized fragments of limestone (no visible contamination, no odour)		
0.50	D					0.50			
0.80	D					(0.70)	MADE GROUND: soft to fine, in places firm, grey brown ashy slightly sandy silty clay with occasional angular fine to medium gravel sized fragments of brick (slight tar odour, slight dark grey staining around brick fragments)		
				1.00m to 2.00m - 90% recovery					
1.20	D					1.20			
1.40	D					(0.80)	Firm, in places soft to firm, organic grey and dark grey silty CLAY with occasional rotting rootlets (tar and hydrocarbon odour, penetrative dark grey staining along root bands)		
2.00	D			Slow inflow(1) at 2.00m, rose to 2.20m in 20 mins.		2.00			
2.20	D			2.00m to 3.00m - 65% recovery			Soft grey brown and orange brown sandy silty CLAY with some subrounded to subangular fine to medium flint gravel (slight tar odour, no staining)		
						(0.90)			
				3.00m to 4.00m - 90% recovery		2.90	Dark grey silty fine to medium SAND with occasional rounded to subangular fine to medium flint gravel (tar odour, stained dark grey throughout)		
3.80	D					(1.10)			
4.00	D			10/01/02:2.00m		4.00			
							Borehole completed at 4.00m		

Remarks

Cored concrete from GL to 0.20m
Casing 90mm to 1.00m, 80mm to 2.00m, 65mm to 3.00m, 50mm to 4.00m
On completion backfilled with arisings and reinstated concrete floor slab

Scale (approx)	Logged By
1:25	ML/DP

Figure No
M2341.WS8

See key sheet for symbols and abbreviations

SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site: MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE

Borehole Number: WS9

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING	50mm to 1.00m 80mm to 2.00m 60mm to 3.00m		S. GRUNDON SERVICES LIMITED	M2241
	Location	**Dates**	**Engineer**	**Sheet**
	AS PLAN	10/01/02 - 10/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
						(0.20)	MADE GROUND: concrete floor slab		
				0.20m to 1.00m - 85% recovery		0.20			
						(0.20)	MADE GROUND: grey angular fine to coarse gravel sized fragments of limestone (no visible contamination, no odour)		
0.50	D					0.40			
0.80	D						MADE GROUND: dark grey ashy sandy angular gravel and cobble sized fragments of slag (potential heavy metal coloration)		
				1.00m to 2.00m - 95% recovery		(1.40)			
1.70	B						....at 1.70m: hydrocarbon and tar seepage		
1.70	D					1.80			
1.80	D						Soft dark grey organic slightly sandy silty CLAY with occasional rotting rootlets (hydrocarbon and tar odour, stained dark grey throughout)		
2.30	D			Medium inflow(1) at 2.00m. 2.00m to 3.00m - 60% recovery					
						(1.20)			
3.00	D			10/01/02		3.00			
3.00	B						Borehole completed at 3.00m		

Remarks
Sawed concrete from GL to 0.20m
Unable to monitor rise in groundwater on encountering as sides collapsed
Sides collapsed to 1.50m on removal of 60mm diameter barrel, no further progress possible
On completion backfilled with arisings and reinstated concrete floor slab

See key sheet for symbols and abbreviations

Scale (approx): 1:25
Logged By: ML/DP
Figure No.: M2241.WS9

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site	MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE
Borehole Number	WS10
Boring Method	WINDOW SAMPLING
Diameter	
Ground Level (mOD)	
Client	S. GRUNDON SERVICES LIMITED
Job Number	M2141
Location	AS PLAN
Dates	10/01/02 - 10/01/02
Engineer	WATERMAN ENVIRONMENTAL
Sheet	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
				0.10m to 1.00m - 95% recovery		(0.10) 0.10	MADE GROUND: bituminous macadam surfacing		
						(0.40)	MADE GROUND: yellow brown slightly silty angular fine to coarse gravel sized fragments of limestone (no visible contamination, no odour)		
0.50	D					0.50			
0.60	D			1.00m to 2.00m - 90% recovery		(1.50)	Soft to firm dark grey becoming grey organic slightly sandy silty CLAY with some rotting rootlets (tar and hydrocarbon odour, stained dark grey)		▼1
2.00	D			2.00m to 3.00m - 95% recovery		2.00			
2.10	D			Medium inflow(1) at 3.00m, rose to 1.76m in 20 mins, not sealed. 3.00m to 4.00m - 60% recovery		(2.00)	Brown clayey silty fine to medium SAND with some to much angular fine to medium flint gravel (slight tar odour, no visible staining)		∇1
4.00	D			10/01/02:1.70m		4.00			
4.00	D						Borehole completed at 4.00m		

Remarks
Casing 90mm to 1.00m, 80mm to 2.00m, 60mm to 3.00m, 50mm to 4.00m
On completion backfilled with arisings to GL

See key sheet for symbols and abbreviations

Scale (approx)	Logged By
1:25	ML/DD

Figure No.
M2141.WS10

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site: MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE			Borehole Number: WS11
Boring Method: WINDOW SAMPLING	Diameter: 90mm to 0.40m	Ground Level (mOD):	Client: S. GRUNDON SERVICES LIMITED	Job Number: M2141
	Location: AS PLAN	Dates: 10/01/02 - 10/01/02	Engineer: WATERMAN ENVIRONMENTAL	Sheet: 1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
				GL to 0.40m - 90% recovery		(0.40)	MADE GROUND: brown sandy angular to subrounded fine to coarse gravel and cobble sized fragments of flint, brick and concrete (no visible contamination, no odour) Obstruction at 0.40m		
0.40 0.40	D D			10/01/02:DRY		0.40			
							Borehole completed at .40m		

Remarks
On completion backfilled with arisings

See key sheet for symbols and abbreviations

Scale (approx)	Logged by
1:25	ML/DP

Figure No: M2141.WS11

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site: MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE				Borehole Number: W11A
Boring Method: WINDOW SAMPLING	Diameter: 90mm to 0.50m	Ground Level (mOD):	Client: S. GRUNDON SERVICES LIMITED	Job Number: M2141
	Location: AS PLAN	Dates: 10/01/02 - 10/01/02	Engineer: WATERMAN ENVIRONMENTAL	Sheet: 1/1

Depth (m)	Samples / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				GL to 0.50m - 95% recovery		(0.50)	MADE GROUND: brown sandy angular to subrounded fine to coarse gravel and cobble sized fragments of flint, brick and concrete (no visible contamination, no odour)		
							Obstruction at 0.50m		
				10/01/02:DRY		0.50			
							Borehole completed at .50m		

Remarks
On completion backfilled with arisings

Scale (approx)	Logged By
1:00	ML/DP

Figure No: M2141.W11A

See key sheet for symbols and abbreviations

SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site	Borehole Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	WS12

Boring Method	Diameter	Ground Level (mOD)	Client	Job Number
WINDOW SAMPLING			S. GRUNDON SERVICES LIMITED	M2141

Location	Dates	Engineer	Sheet
AS PLAN	10/01/02 - 10/01/02	WATERMAN ENVIRONMENTAL	1/1

Depth m	Samples / Tests	Casing Depth m	Water Depth m	Field Records	Level (mOD)	Depth m (Thickness)	Description	Legend	Water
				GL to 1.00m - 90% recovery					
0.30	D					(0.50)	MADE GROUND: brown slightly silty slightly sandy angular fine to coarse gravel sized fragments of flint, concrete and brick (no visible contamination, no odour)		
0.40	D					0.50			
0.60	D					(0.30)	MADE GROUND: dark grey silty sand sized ash and fine to medium gravel sized fragments of slag (possible metal contamination, slight tar odour)		
0.70	D					0.80			
1.00	D			1.00m to 2.00m - 85% recovery			Soft to firm light grey brown organic slightly sandy silty CLAY with some rotting rootlets (slight tar and hydrocarbon odour)		
1.00	D					(1.20)			
2.00	D			2.00m to 3.00m - 95% recovery		2.00			
2.00	D						Orange brown and light brown clayey silty fine to medium SAND with some to much angular to rounded fine to medium flint gravel (slight tar odour, no visible contamination)		∇_1
				Medium inflow(1) at 3.00m, rose to 2.55m in 20 mins. not sealed. 3.00m to 4.00m - 65% recovery		(2.00)			Q_1
4.00	D			10/01/02:2.50m		4.00			
4.00	D						Borehole completed at 4.00m		

Remarks

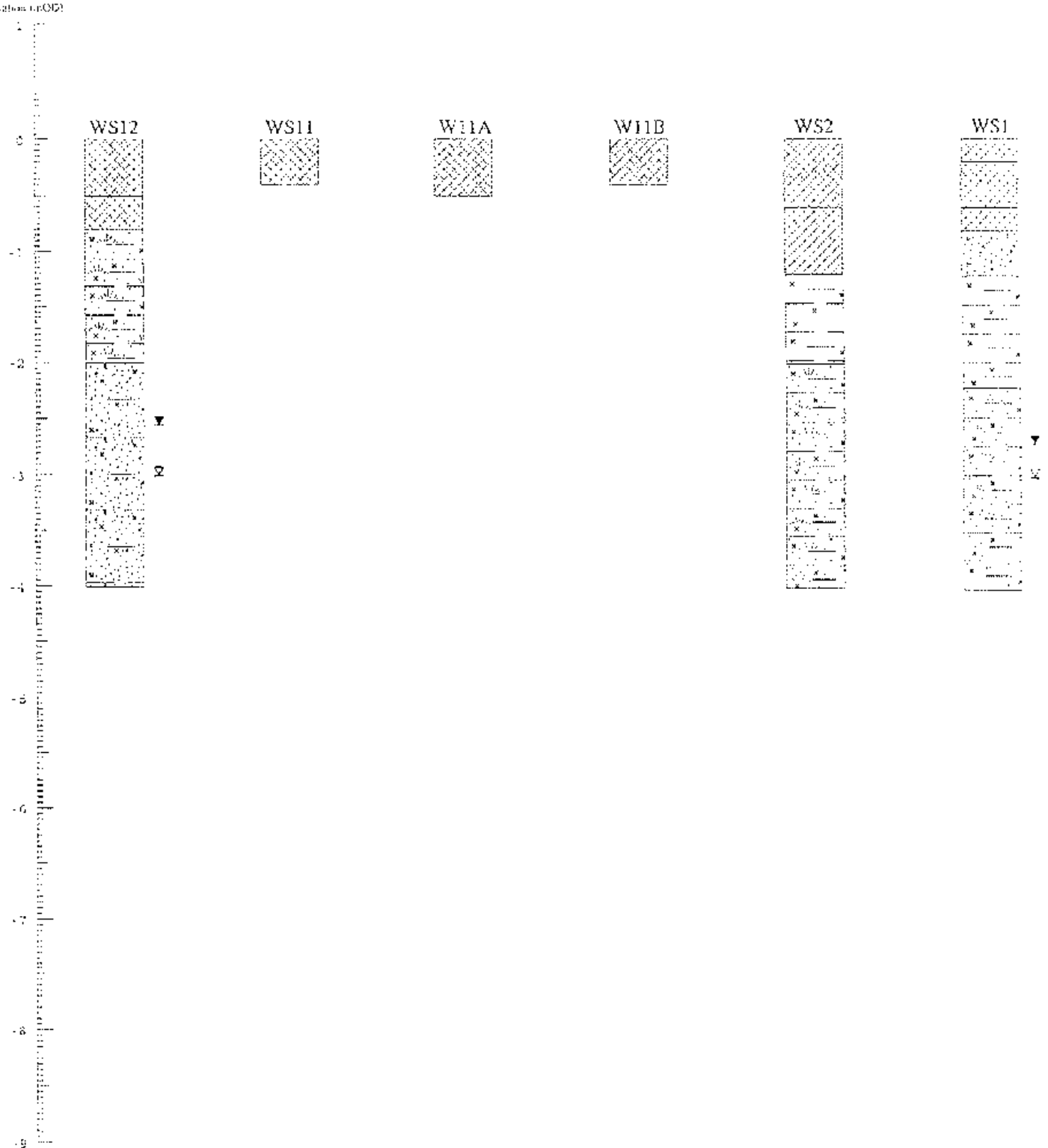
Casing 200mm to 1.00m, 180mm to 2.00m, 160mm to 3.00m, 150mm to 4.00m
Sides collapsed to 2.50m
On completion backfilled with arisings

Scale	Logged By
1:25	ML/DP

Figure No

M2141.WS12

See key sheet for symbols and abbreviations



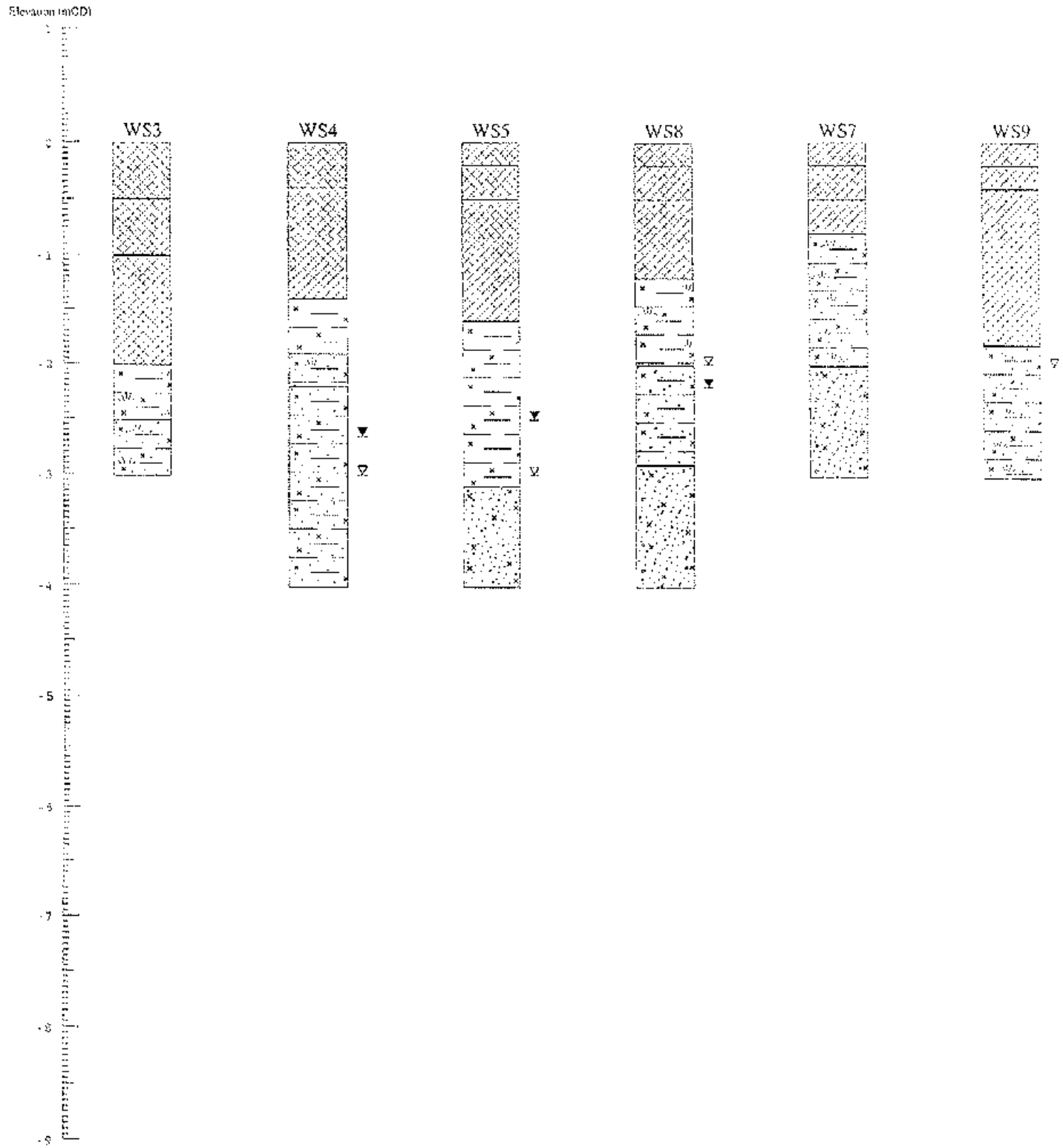
Key To Legends

- MADE GROUND
- Silty CLAY
- Silty sandy peaty CLAY
- Gravelly SAND
- Clayey silty gravelly SAND
- Groundwater Strike
- Strike Rise Level

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS: Tel. (01772) 561135 Fax (01772) 204907

Nominal Section

Site	Date Drawn	Date Checked	Sheet	Job Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	14/Feb/02		1/2	20161
Client	**Drawn By**	**Checked By**	**Scale**	**Figure No**
S GRUNDON SERVICES LIMITED			1:50 [V]	



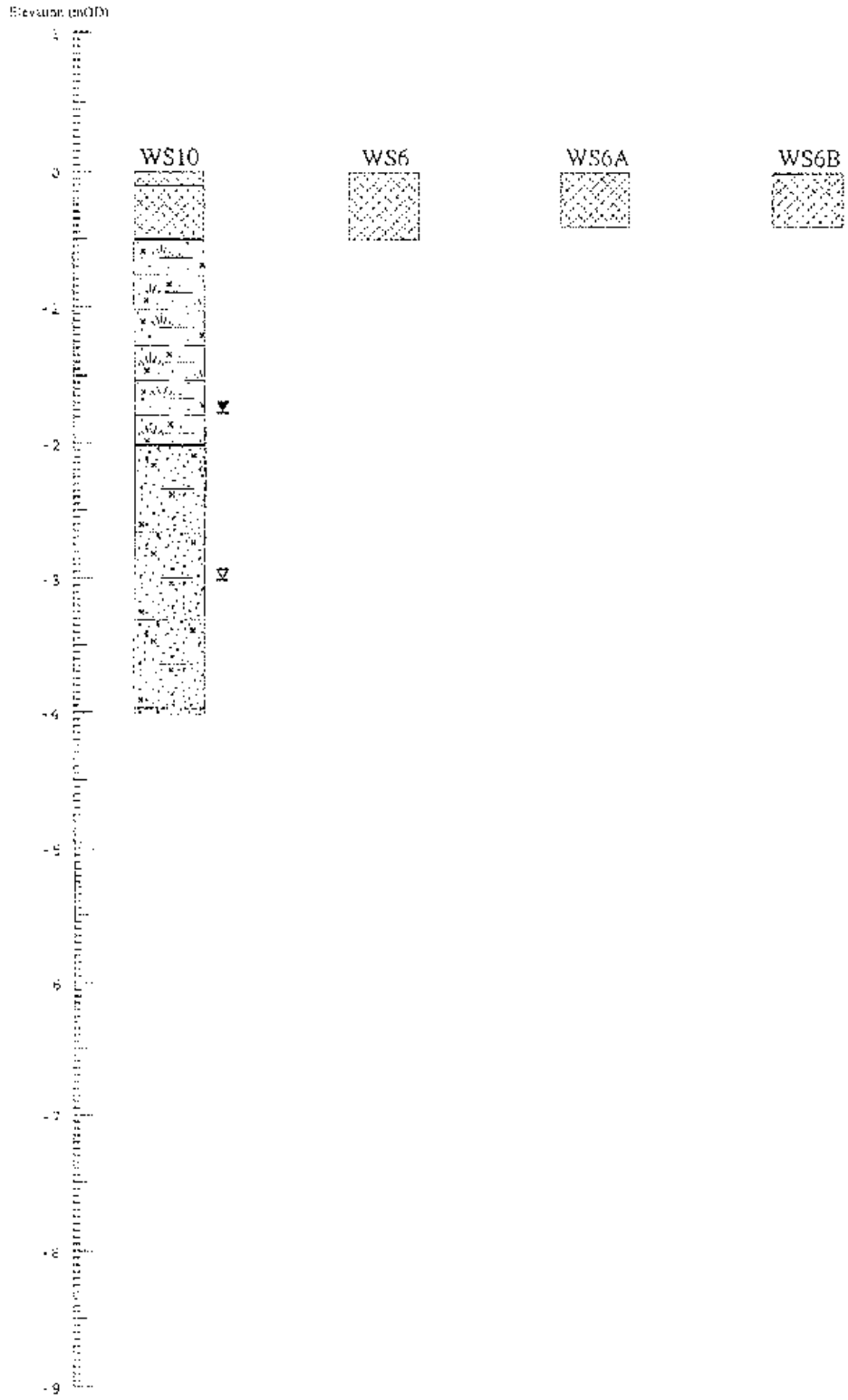
Key To Legends

- MADE GROUND
- Silty CLAY
- Silty sandy CLAY
- Silty sandy gravelly CLAY
- Silty sandy peaty CLAY
- Silty peaty CLAY
- Silty SAND
- Silty gravelly SAND
- Groundwater Strike
- Strike Rise Level

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204807

Nominal Section

Site	Date Drawn	Date Checked	Sheet	Job Number
MORTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	14/Feb/02		2/3	M2161
Client	**Drawn By**	**Checked By**	**Scale**	**Figure No.**
S. GRUNDON SERVICES LIMITED			1:50 (V)	



Key To Legends

MADE GROUND

Silty sandy peaty CLAY

Clayey silty gravelly SAND

Groundwater Strike

Strike Rise Level

SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561139 Fax (01772) 204807

Nominal Section

Site	Date Drawn	Date Checked	Sheet	Job Number
MERTON STREET DEPOT, STATION ROAD, BANBURY, OXFORDSHIRE	14/Feb/02		3/3	02342
Client	**Drawn By**	**Checked By**	**Scale**	**Figure No.**
E. DRINKON SERVICES LIMITED			1:50 (V)	

EN2498

TRIAL TRENCH DESCRIPTIONS

BANBURY GASWORKS

TRIAL PIT 1

0	0.70	MADE GROUND	Loose dark brown coarse sandy CLAY with much brick and concrete gravel and occasional fragments of asbestos cement tile
0.70	0.95	MADE GROUND	Loose dark brown coarse sand with much ash and brick gravel
0.95	1.70	ALLUVIUM	Soft to firm dark grey CLAY with occasional well rounded gravel (strong gasworks type odour)
1.70	5.00	ALLUVIUM	Firm dark grey fine sandy CLAY (strong gasworks type odour)

TRIAL PIT 2

0	0.30	MADE GROUND	Loose flint gravel
0.30	0.60	MADE GROUND	Loose dark brown coarse sand with occasional whole bricks and well rounded cobbles. 50mm Ø iron pipe intact at 0.6m bgl located north west/south east
0.60	1.60	MADE GROUND	Soft light grey brown sandy clay, becoming wet with depth
1.60	4.60	MADE GROUND	Soft dark grey sandy clay with occasional brick gravel (strong gasworks odour)

TRIAL PIT 3

0	0.25	MADE GROUND	Loose flint gravel
0.25	1.70	MADE GROUND	Loose dark brown coarse sand with occasional whole bricks and well rounded cobbles.
1.70	3.75	MADE GROUND	Soft light grey brown sandy clay, becoming wet with depth (strong gasworks type odour)

TRIAL PIT 4

0	0.40	MADE GROUND	Dense whole brick and concrete gravel
0.40	0.70	MADE GROUND	Concrete pad
0.70	2.30	MADE GROUND	Soft dark grey blue clay with much coarse sand and brick gravel (strong gasworks odour)
2.30	3.40	ALLUVIUM	Dense coarse SAND with much well rounded gravel (strong gasworks odour)
3.40	5.30	ALLUVIUM	Stiff dark grey green laminated clay

TRIAL PIT 5

0	0.35	MADE GROUND	Dense whole brick with ash and concrete gravel
0.35	1.00	MADE GROUND	Moderately dense dark brown coarse sand with brick gravel
1.00	2.50	MADE GROUND	Soft dark grey blue clay with much coarse sand and brick gravel (strong gasworks odour)
2.50	3.50	ALLUVIUM	Dense very coarse SAND with much well rounded gravel (strong gasworks odour)
3.50	4.00	ALLUVIUM	Stiff dark grey green laminated clay

TRIAL PIT 6

0	0.35	MADE GROUND	Dense whole brick with ash
0.35	1.00	MADE GROUND	Moderately dense dark brown coarse sand with brick gravel
1.00	2.00	MADE GROUND	Soft dark grey blue clay with much coarse sand and brick gravel (strong gasworks odour)
2.00	3.50	ALLUVIUM	Dense very coarse SAND with much well rounded gravel (Significant amounts of tar and bitumous residues present)
3.50	4.00	ALLUVIUM	Stiff dark grey green laminated clay

TRIAL PIT 7

0	0.35	MADE GROUND	Dense whole and part brick (compacted)
0.35	1.00	MADE GROUND	Soft to firm dark brown grey clay with much brick gravel
1.00	5.00	MADE GROUND	Black viscous tar/water residue

TRIAL PIT 8

0	1.20	MADE GROUND	Loose whole and part brick
1.20	1.50	MADE GROUND	Layer of white fibrous asbestos cladding, approx 1.8m long
1.50	2.80	MADE GROUND	Loose dark brown coarse sand with much brick gravel
2.80	3.50	ALLUVIUM	Soft dark grey sandy clay with much well rounded gravel (Strong gas works odour). Rapid inflow of groundwater.

APPENDIX D

Trial Trench Photographs

Plates 1 to 34

Waterman Environmental
Consulting Engineers and Scientists

Calthorpe House 30 Hagley Road Edgbaston Birmingham B16 8QY
Telephone 0121 454 5858 Fax 0121 454 6288
E-mail benvironmental@waterman-group.co.uk

Job No:-EN2498	Plates:- 1 & 2
Title:- Banbury Gasworks Trial Pit 1	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 1: North western face of trial pit - upper sequence of made ground with contaminated alluvium beneath

Plate 2: South eastern face of trial pit - significant contamination of alluvium (strong gas works odour)

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Job No:-EN2498	Plates:- 3 & 4
Title:- Banbury Gasworks Trial Pit 2	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 3: 25mm Ø iron pipe located in made ground, trending northwest/southeast

Plate 4: Brick structure running northeast/southwest

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E-mail benvironmental@waterman-group.co.uk

Job No:-EN2498	Plates:- 5 & 6
Title:- Banbury Gasworks Trial Pit 3	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 5: Rapid inflow of groundwater from Transco compound to southeast

Plate6: 3No services encountered on northwestern face of trial pit

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Job No:-EN2498	Plates:- 7 & 8
Title:- Banbury Gasworks Trial Pit 3 & 4	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 7: Rapid inflow of groundwater from Transco compound to southeast

Plate 8: 2 x 250mm Ø iron pipework - Strong gas works odour noted

Waterman Environmental
Consulting Engineers and Scientists

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Job No:-EN2498	Plates:- 9 & 10
Title:- Banbury Gasworks Trial Pit 4	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 9: Concrete pad located at 0.4m bgl

Plate 10: Alluvial sand and gravel beneath concrete pad - Strong gas works odour noted

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E-mail benvironmental@waterman-group.co.uk

Job No:-EN2498	Plates:- 11 & 12
Title:- Banbury Gasworks Trial Pit 4 & 5	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 11: Underground pipework and contaminated groundwater - strong gas works odour noted

Plate 12: Significant inflow of tarry residues through north face of trial pit

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Job No:-EN2498	Plates:- 13 & 14
Title:- Banbury Gasworks Trial Pit 5	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

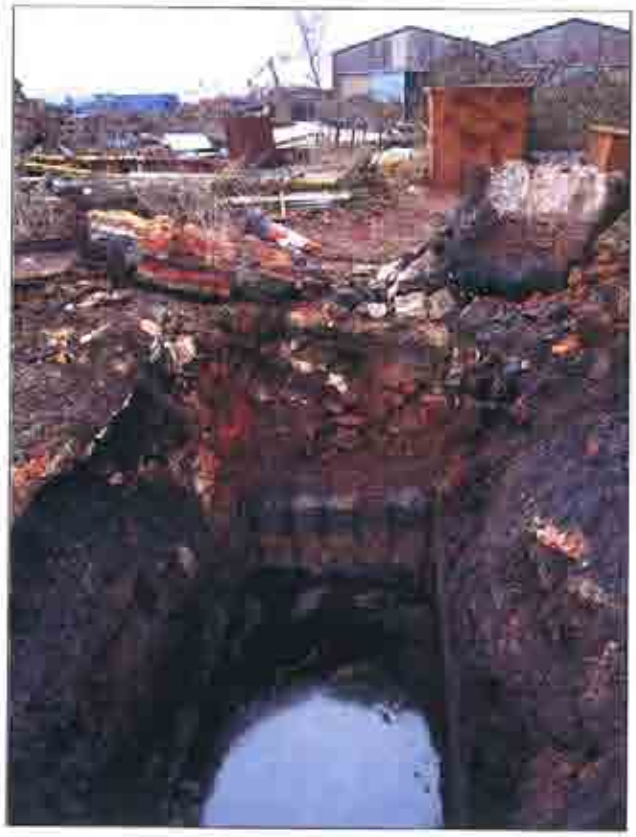

Plate 13: Free product encountered within made ground and alluvium

Plate 14: Free product floating on groundwater

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Job No:-EN2498	Plates:- 15 & 16
Title:- Banbury Gasworks Trial Pit 5 & 6	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 15: Significant influx of tarry residues on the northwestern face of the trial pit

Plate 16: Southern wall of Chamber 1 with significant volume of tarry residues

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Job No:-EN2498	Plates:- 17 & 18
Title:- Banbury Gasworks Trial Pit 6	
Date:- March 2002	Scale: NTS
	Drawn By:- A Byng

Plate 17: Western wall of Chamber 1 with significant volume of tarry residues

Plate 18: Vaulted roof of Chamber 2 with significant volume of tarry residues

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Job No:-EN2498	Plates:- 19 & 20
Title:- Banbury Gasworks Trial Pit 6	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 19: Western wall of Chamber 3 with significant volume of tarry residues

Plate 20: Dividing wall between Chambers 1 and 2

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Job No:-EN2498	Plates:- 21 & 22
Title:- Banbury Gasworks Trial Pit 6 & 7	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 21: Western wall of Chamber 3 with 250mm Ø iron pipe at 1.2m bgl

Plate 22: Riveted iron panels of underground vessel

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Job No:-EN2498	Plates:- 23 & 24
Title:- Banbury Gasworks Trial Pit 7	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 23: Contaminated residues within vessel

Plate 24: Contaminated residues contained in vessel

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Job No:-EN2498	Plates:- 25 & 26
Title:- Banbury Gasworks Trial Pit 7	
Date:- March 2002	Scale: NTS
	Drawn By:- A Byng

Plate 25: Plan view of contents of vessel - compacted brick hardcore cover

Plate 26: Contaminated residues contained in vessel with concrete pad to the north

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Job No:-EN2498	Plates:- 27 & 28
Title:- Banbury Gasworks Trial Pit 8	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 27: Western face of trial trench

Plate 28: Layer of potentially fibrous asbestos (0.3m thick x 1.8m long) encountered at 1.2m bgl

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Job No:-EN2498	Plates:- 29 & 30
Title:- Banbury Gasworks Trial Pit 8	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 29: Close-up of potential asbestos containing material

Plate 30: Contaminated water rising to surface from redundant pipework on the northern face of trial trench (noxious ammonia odour)

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Job No:-EN2498	Plates:- 31 & 32
Title:- Banbury Gasworks Trial Pit 8	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

Plate 31: Contaminated water rising to surface from redundant pipework on the northeastern face of trial trench (noxious ammonia odour)

Plate 32: Brick foundation noted at 2.8m bgl - unable to excavate further north due to existing fence line

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Job No:-EN2498	Plates:- 33 & 34
Title:- Banbury Gasworks Trial Pit 9	
Date:- March 2002	Scale: NTS Drawn By:- A Byng

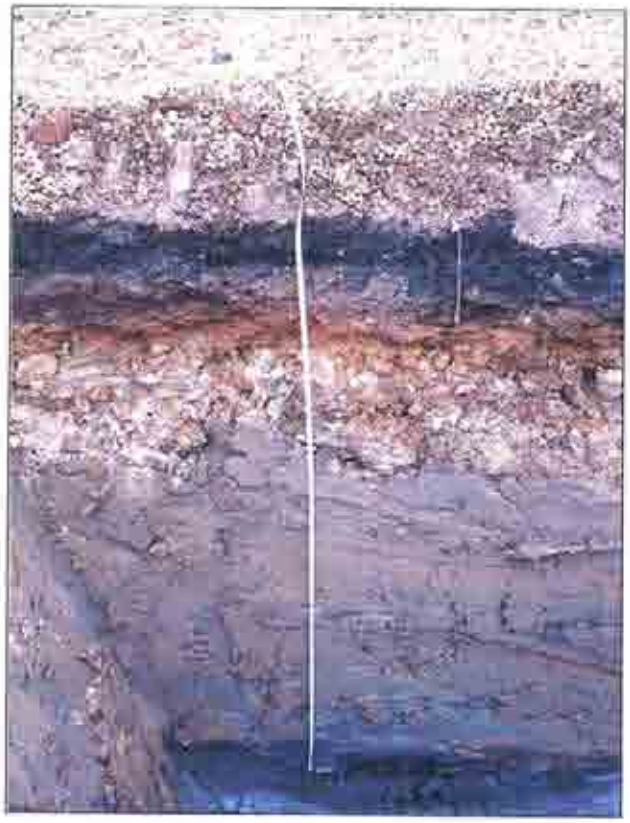


Plate 33: Profile of trial trench to the northeast

Plate 34: Significant contamination of alluvium beneath existing Grundon carpark area

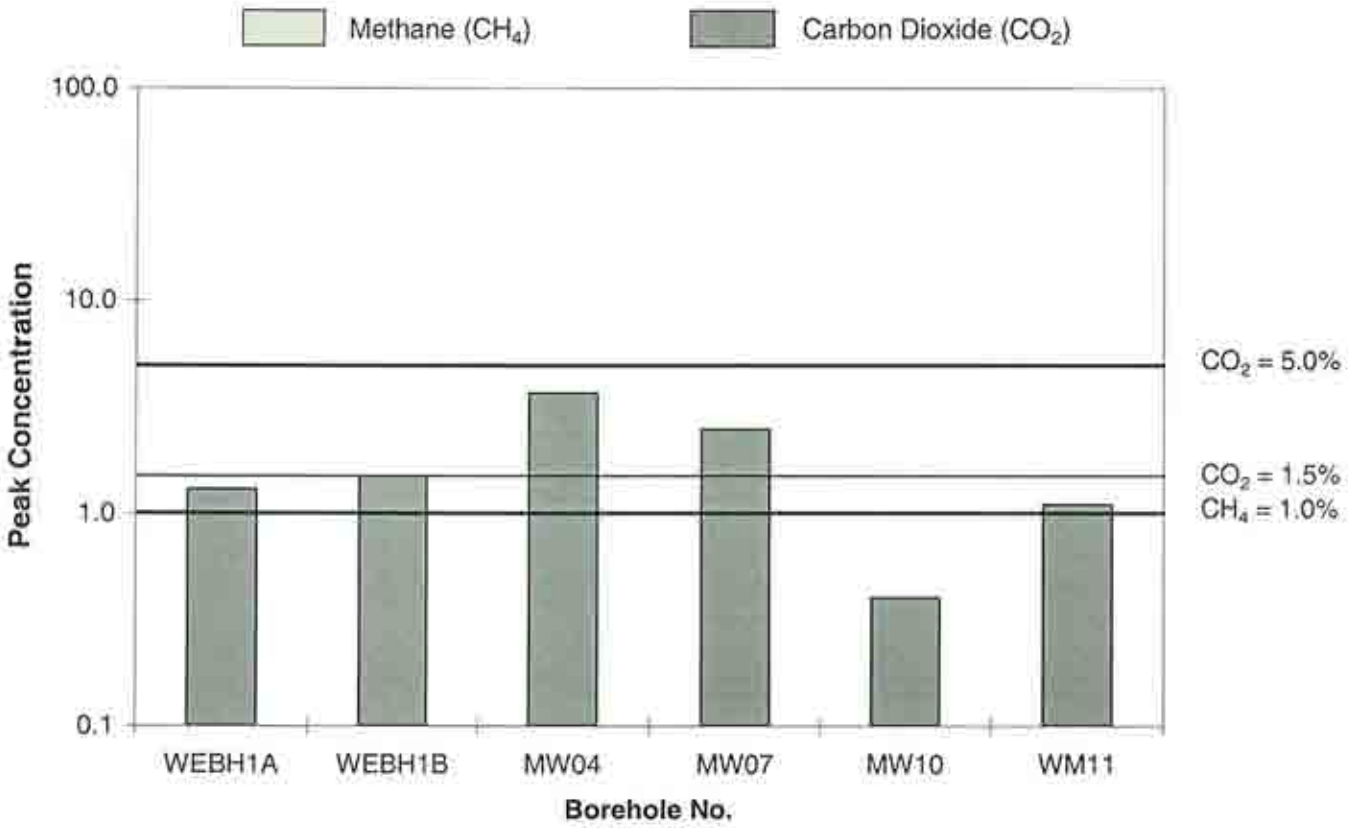
APPENDIX E

Site Monitoring Records

Water and Gas Monitoring Results 25/01/02, 01/02/02 & 08/02/02

Equipment List

SUMMARY OF GAS CONCENTRATIONS OVER MONITORING PERIOD



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Telephone 0121 454 6958 Fax. 0121 454 6288

Job No.: EN2498	Date: 25/1/2
Title: Gas Monitoring Record Form for Grundon Ltd	
Operator: PK	Time: AM

Weather Conditions: Wet and windy.

Surface Ground Conditions: Wet

Barometric Pressure Trend (24hr): 1014

Previous Calibration Date: January 2002

Ambient Air Concentration (% Vol.)	Methane	Carbon Dioxide	Oxygen	Barometric Pressure, mb
Before	<0.1	<0.1	21	1006
During	<0.1	<0.1	20.8	1004
After	<0.1	<0.1	20.7	1001

Monitoring Point		Gas Concentration (%)									
		Peak				Steady					
BH No.	Depth to Water (m bgl)	CH_4	CO_2	O_2	Flammable Gas (ppm)	CH_4	CO_2	O_2	Flammable Gas (ppm)	Gas Emission Rate (l/hr)	Observations/Comments
WEBH1A	2.41	<0.1	0.8	20.7	NR	<0.1	0.6	20.7	NR	<0.1	
WEBH1B	2.42	<0.1	1.5	19.9	NR	<0.1	1.5	19.9	NR	<0.1	
MW04	2.42	<0.1	2.3	17.6	NR	<0.1	2.2	17.6	NR	<0.1	No gas tap
MW07	2.15	<0.1	2.5	17.4	NR	<0.1	2.4	17.4	NR	<0.1	No gas tap
MW10	2.04	<0.1	0.4	20.6	NR	<0.1	0.3	20.6	NR	<0.1	No gas tap
WM11	2.15	<0.1	1.1	20.1	NR	<0.1	0.3	20.3	NR	<0.1	No gas tap

Waterman Environmental
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CALTHORPE HOUSE 59 HAGLEY ROAD BIRMINGHAM B16 8QY
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Job No.: EN2498	Date: 1/2/2
Title: Gas Monitoring Record Form for Grundon Ltd	
Operator: PK	Time: AM

Weather Conditions: Wet and windy.

Surface Ground Conditions: Wet

Barometric Pressure Trend (24hr): 996

Previous Calibration Date: January 2002

Ambient Air Concentration (% Vol.)	Methane	Carbon Dioxide	Oxygen	Barometric Pressure, mb
Before	<0.1	<0.1	21.1	996
During	<0.1	<0.1	21.8	952
After	<0.1	<0.1	21.7	948

Monitoring Point		Gas Concentration (%)									
		Peak				Steady					
BH No.	Depth to Water (m bgl)	CH_4	CO_2	O_2	Flammable Gas (ppm)	CH_4	CO_2	O_2	Flammable Gas (ppm)	Gas Emission Rate (l/hr)	Observations/Comments
WEBH1A	2.18	<0.1	1.3	21.4	NR	<0.1	1.3	21.4	NR	<0.1	
WEBH1B	2.02	<0.1	1.1	20.9	NR	<0.1	1.1	20.9	NR	<0.1	
MW04	2.18	<0.1	3.7	14.6	NR	<0.1	3.1	15.2	NR	<0.1	No gas tap
MW07	2.01	<0.1	0.9	20.1	NR	<0.1	0.7	20.1	NR	<0.1	No gas tap
MW10	1.67	<0.1	0.1	20.9	NR	<0.1	0.1	20.9	NR	<0.1	No gas tap
WM11	1.9	<0.1	0.2	20.9	NR	<0.1	0.2	20.9	NR	<0.1	No gas tap

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Job No.: EN2498	Date: 8/2/2
Title: Gas Monitoring Record Form for Grundon Ltd	
Operator: PK	Time: AM

Weather Conditions: Wet and windy.

Surface Ground Conditions: Wet

Barometric Pressure Trend (24hr): 997

Previous Calibration Date: January 2002

Ambient Air Concentration (% Vol.)	Methane	Carbon Dioxide	Oxygen	Barometric Pressure, mb
Before	<0.1	<0.1	21.1	997
During	<0.1	<0.1	20.1	999
After	<0.1	<0.1	20.8	996

Monitoring Point		Gas Concentration (%)									
		Peak				Steady					
BH No.	Depth to Water: (m bgl)	CH_4	CO_2	O_2	Flammable Gas (ppm)	CH_4	CO_2	O_2	Flammable Gas (ppm)	Gas Emission Rate (l/hr)	Observations/Comments
WEBH1A	2.41	<0.1	0.8	20.6	NR	<0.1	0.9	20.6	NR	<0.1	
WEBH1B	2.42	<0.1	0.8	20.1	NR	<0.1	1.1	20.1	NR	<0.1	
MW04	2.14	<0.1	0.9	20.1	NR	<0.1	1.0	20.1	NR	<0.1	No gas tap
MW07	2.06	<0.1	2.1	17.3	NR	<0.1	2.3	17.3	NR	<0.1	No gas tap
MW10	1.71	<0.1	0.1	20.9	NR	<0.1	<0.1	20.9	NR	<0.1	No gas tap
WM11	1.84	<0.1	<0.1	21.1	NR	<0.1	<0.1	21.1	NR	<0.1	No gas tap

GROUNDWATER MONITORING EQUIPMENT LIST

Equipment	Description	Range/Accuracy
pH / Temperature Meter	Hanna Instruments pH and Temperature Meter	0.00 - 1.04 / ± 0.0.5 pH 0.0 - 60^{0}C / ± 0.5^{0}C

ROUND 1: 25/01/01

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: WEBH 1 A
Job number: EN2498	Main use: Monitoring Well
Date/time: 25/1/2 AM	Producing formation: Alluvium
Weather conditions: Cold, raining	Screened depth (mbgl): 3.0-5.2
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.41
Depth to base of well (mbgl):	5.24
Water column thickness (m):	2.83
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.72
Water level (Site grid):	1.69

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 3

Flow rate (l/min): NR

Stable pH, oxygen and EC? Yes

Hole de-watered? No

Comments:

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: Brown

Odour: None

Turbidity: Moderate

Sediment content and description: Some sandy sediment

FIELD MEASUREMENTS

Temp (°C) 10.2	pH 7.06	Conductivity (mS/cm@25°C): 1.5	Filtered? No
Dissolved oxygen (mg/l): NR		Dissolved oxygen (%sat.): NR	Cooled? No

ANALYSIS

Analytical suite instructed: British Gas Suite (detection limits to DWS)

Lab used: Robertson Laboratories

Date/time despatched: 25/1/2

COMMENTS

0.8% Peak CO_2

No free product detected by interface probe

ROUND 1: 25/01/01

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: WEBH 1 B
Job number: EN2498	Main use: Monitoring Well
Date/time: 25/1/2 AM	Producing formation: Made Ground
Weather conditions: Cold, raining	Screened depth (mbgl): 1.0-2.5
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.42
Depth to base of well (mbgl):	2.71
Water column thickness (m):	0.29
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.72
Water level (Site grid):	1.7

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 0

Flow rate (l/min): NR

Stable pH, oxygen and EC? NR

Hole de-watered? No

Comments: Slow recharge

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: NR

Odour: NR

Turbidity: NR

Sediment content and description:

FIELD MEASUREMENTS

Temp (°C) NR	pH NR	Conductivity (mS/cm@25°C): NR	Filtered? No
Dissolved oxygen (mg/l): NR		Dissolved oxygen (%sat.): NR	Cooled? No

ANALYSIS

Analytical suite instructed: None

Lab used: Robertson Laboratories

Date/time despatched: NA

COMMENTS

1.5% Peak CO_2

Insufficient water to sample

No free product detected by interface probe

ROUND 1: 25/01/01

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: MW04
Job number: EN2498	Main use: Monitoring Well
Date/time: 25/1/2 AM	Producing formation: Alluvium
Weather conditions: Cold, raining	Screened depth (mbgl): 2.7-5.7
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.42
Depth to base of well (mbgl):	3.76
Water column thickness (m):	1.34
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.88
Water level (Site grid):	1.54

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 3

Flow rate (l/min): NR

Stable pH, oxygen and EC? Yes

Hole de-watered? No

Comments:

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: Dark Brown

Odour: Hydrocarbon odour

Turbidity: Moderate

Sediment content and description: Sandy sediment

FIELD MEASUREMENTS

Temp (°C) 10.1	pH 7.24	Conductivity (mS/cm@25°C): 1.0mS/cm	Filtered? No
Dissolved oxygen (mg/l): NR		Dissolved oxygen (%sat.): NR	Cooled? No

ANALYSIS

Analytical suite instructed: British Gas Suite (detection limits to DWS)

Lab used: Robertson Laboratories

Date/time despatched: 25/1/2

COMMENTS

2.3% Peak CO_2

Visible hydrocarbon contamination

No free product detected by interface probe

ROUND 1: 25/01/01

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: MW07
Job number: EN2498	Main use: Monitoring Well
Date/time: 25/1/2 AM	Producing formation: Alluvium
Weather conditions: Cold, raining	Screened depth (mbgl): 2.7-5.2
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.15
Depth to base of well (mbgl):	3.63
Water column thickness (m):	1.48
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.68
Water level (Site grid):	1.47

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 3

Flow rate (l/min): NR

Stable pH, oxygen and EC? Yes

Hole de-watered? No

Comments:

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: Light Brown

Odour: None

Turbidity: Moderate

Sediment content and description: Some sandy sediment

FIELD MEASUREMENTS

Temp (°C) NR	pH NR	Conductivity (mS/cm@25°C): NR	Filtered? No
Dissolved oxygen (mg/l): NR	Dissolved oxygen (%sat.): NR		Cooled? No

ANALYSIS

Analytical suite instructed: British Gas Suite (detection limits to DWS)

Lab used: Robertson Laboratories

Date/time despatched: 25/1/2

COMMENTS

2.5% Peak CO_2

No free product detected by interface probe

ROUND 1: 25/01/01

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: MW10
Job number: EN2498	Main use: Monitoring Well
Date/time: 25/1/2 AM	Producing formation: Alluvium
Weather conditions: Cold, raining	Screened depth (mbgl): 2.0-5.0
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.04
Depth to base of well (mbgl):	3.67
Water column thickness (m):	1.63
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.52
Water level (Site grid):	1.52

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 3

Flow rate (l/min): NR

Stable pH, oxygen and EC? Yes

Hole de-watered? No

Comments:

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: Light Brown

Odour: None

Turbidity: Moderate

Sediment content and description: Sandy sediment

FIELD MEASUREMENTS

Temp (°C) 9.0	pH 7.7	Conductivity (mS/cm@25°C): 0.99	Filtered? No
Dissolved oxygen (mg/l): NR		Dissolved oxygen (%sat.): NR	Cooled? No

ANALYSIS

Analytical suite instructed: British Gas Suite (detection limits to DWS)

Lab used: Robertson Laboratories

Date/time despatched: 25/1/2

COMMENTS

0.4% Peak CO_2

No free product detected by interface probe

ROUND 1: 25/01/01

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: MW11
Job number: EN2498	Main use: Monitoring Well
Date/time: 25/1/2 AM	Producing formation: Alluvium
Weather conditions: Cold, raining	Screened depth (mbgl): 2.0-5.0
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.15
Depth to base of well (mbgl):	4.09
Water column thickness (m):	1.94
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.41
Water level (Site grid):	1.74

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 3

Flow rate (l/min): NR

Stable pH, oxygen and EC? Yes

Hole de-watered? No

Comments:

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: Light Brown

Odour: None

Turbidity: Moderate

Sediment content and description: Some sandy sediment

FIELD MEASUREMENTS

Temp (°C) 9.3	pH 7.2	Conductivity (mS/cm@25°C): 1.82	Filtered? No
Dissolved oxygen (mg/l): NR		Dissolved oxygen (%sat.): NR	Cooled? No

ANALYSIS

Analytical suite instructed: British Gas Suite (detection limits to DWS)

Lab used: Robertson Laboratories

Date/time despatched: 25/1/2

COMMENTS

1.1% Peak CO_2

No free product detected by interface probe

ROUND 2: 01/02/02

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: WEBH 1 A
Job number: EN2498	Main use: Monitoring Well
Date/time: 1/2/2 AM	Producing formation: Alluvium
Weather conditions: Cold, raining	Screened depth (mbgl): 3.0-5.2
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.18
Depth to base of well (mbgl):	5.20
Water column thickness (m):	3.02
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.72
Water level (Site grid):	1.46

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 3

Flow rate (l/min): NR

Stable pH, oxygen and EC? Yes

Hole de-watered? No

Comments:

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: Brown

Odour: None

Turbidity: Moderate

Sediment content and description: Some sandy sediment

FIELD MEASUREMENTS

Temp (°C) 10.6 pH 6.80 Conductivity (mS/cm@25°C): NR Filtered? No

Dissolved oxygen (mg/l): NR Dissolved oxygen (%sat.): NR Cooled? No

ANALYSIS

Analytical suite instructed: British Gas Suite (detection limits to DWS)

Lab used: Robertson Laboratories

Date/time despatched: 1/2/2

COMMENTS

0.8% Peak CO_2

No free product detected by interface probe

ROUND 2: 01/02/02

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: WEBH 1 B
Job number: EN2498	Main use: Monitoring Well
Date/time: 1/2/2 AM	Producing formation: Made Ground
Weather conditions: Cold, raining	Screened depth (mbgl): 1.0-2.5
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.02
Depth to base of well (mbgl):	2.70
Water column thickness (m):	0.68
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.72
Water level (Site grid):	1.3

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 0

Flow rate (l/min): NR

Stable pH, oxygen and EC? NR

Hole de-watered? No

Comments: Slow recharge

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: NR

Odour: NR

Turbidity: NR

Sediment content and description: NR

FIELD MEASUREMENTS

Temp (°C) NR	pH NR	Conductivity (mS/cm@25°C): NR	Filtered? No
Dissolved oxygen (mg/l): NR		Dissolved oxygen (%sat.): NR	Cooled? No

ANALYSIS

Analytical suite instructed: None

Lab used: Robertson Laboratories

Date/time despatched: NA

COMMENTS

1.1% Peak CO_2

Insufficient water to sample

No free product detected by interface probe

ROUND 3: 01/02/02

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: WEBH 1 B
Job number: EN2498	Main use: Monitoring Well
Date/time: 1/2/2 AM	Producing formation: Made Ground
Weather conditions: Cold, raining	Screened depth (mbgl): 1.0-2.5
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.04
Depth to base of well (mbgl):	2.75
Water column thickness (m):	0.71
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.72
Water level (Site grid):	1.32

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 0

Flow rate (l/min): NR

Stable pH, oxygen and EC? NR

Hole de-watered? No

Comments: Slow recharge

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: NR

Odour: NR

Turbidity: NR

Sediment content and description: NR

FIELD MEASUREMENTS

Temp (°C) NR pH NR Conductivity (mS/cm@25°C): NR Filtered? No

Dissolved oxygen (mg/l): NR Dissolved oxygen (%sat.): NR Cooled? No

ANALYSIS

Analytical suite instructed: None

Lab used: Robertson Laboratories

Date/time despatched: NA

COMMENTS

1.1% Peak CO_2

Insufficient water to sample

No free product detected by interface probe

ROUND 3: 01/02/02

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: MW04
Job number: EN2498	Main use: Monitoring Well
Date/time: 8/2/2 AM	Producing formation: Alluvium
Weather conditions: Cold, raining	Screened depth (mbgl): 2.7-5.7
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	2.14
Depth to base of well (mbgl):	3.91
Water column thickness (m):	1.77
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.88
Water level (Site grid):	1.26

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 3

Flow rate (l/min): NR

Stable pH, oxygen and EC? Yes

Hole de-watered? No

Comments:

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: Dark Brown

Odour: Hydrocarbon odour

Turbidity: Moderate

Sediment content and description: Sandy sediment

FIELD MEASUREMENTS

Temp (°C) 10.5 pH 7.25 Conductivity (mS/cm@25°C): 1.03mS/cm Filtered? No

Dissolved oxygen (mg/l): NR Dissolved oxygen (%sat.): NR Cooled? No

ANALYSIS

Analytical suite instructed: British Gas Suite (detection limits to DWS)

Lab used: Robertson Laboratories

Date/time despatched: 8/2/2

COMMENTS

1.0% Peak CO_2

Visible and olfactory hydrocarbon contamination

No free product detected by interface probe

ROUND 3: 08/02/02

WATERMAN ENVIRONMENTAL-GROUNDWATER MONITORING RECORD SHEET

Site name: Banbury Gas Works	Name of sampler: P Kirkby
Client/owner: Grundon	Borehole no.: MW11
Job number: EN2498	Main use: Monitoring Well
Date/time: 8/2/2 AM	Producing formation: Alluvium
Weather conditions: Cold, raining	Screened depth (mbgl): 2.0-5.0
Wellhead conditions: Good	Internal diameter (I.D.) (mm) 50

WATER LEVELS

Pre-purge water level (mbgl)	1.84
Depth to base of well (mbgl):	4.25
Water column thickness (m):	2.41
Datum levelled to (e.g. standpipe, cover level etc)	Cover Level
Level of datum (Site grid):	0.41
Water level (Site grid):	1.43

SAMPLE METHOD

Watera/ Grundfos/ Other: Bailer

Number of well volumes purged (3 minimum): 3

Flow rate (l/min): NR

Stable pH, oxygen and EC? Yes

Hole de-watered? No

Comments:

I.D. (mm)	Volume per unit metre depth (l)	Minimum purge volume per unit metre depth (l)
10	0.1	0.3
20	0.3	0.9
25	0.5	1.5
50	2.0	6.0
75	4.4	13.2
100	7.9	23.7
125	12.3	36.9
150	17.7	53.1
200	31.4	94.2
300	70.7	212

SAMPLE DESCRIPTION

Colour: Light Brown

Odour: None

Turbidity: Moderate

Sediment content and description: none

FIELD MEASUREMENTS

Temp (°C) 9.4	pH 7.14	Conductivity (mS/cm@25°C): 1.40	Filtered? No
Dissolved oxygen (mg/l): NR	Dissolved oxygen (%sat.): NR		Cooled? No

ANALYSIS

Analytical suite instructed: British Gas Suite (detection limits to DWS)

Lab used: Robertson Laboratories

Date/time despatched: 8/2/2

COMMENTS

No free product detected by interface probe

APPENDIX F

Chemical Test Results

Soil Results

Leachate Results

Groundwater Results

Robertson

CERTIFICATE OF ANALYSIS

Date :	1/2/2002	Date rec'd :	14/1/2002
Certificate No :	15975	Our Ref :	358-125
Your Ref :	EN2498 Banbury Gas Works		

For the attention of :

Paul Nixon
Waterman Environmental
Calthorpe House
30 Hagley Road
Edgbaston
Birmingham
B16 8QY

Janet Hunt,
LABORATORY MANAGER

Robertson Laboratories, Llandudno, North Wales LL30 1SA, United Kingdom
Telephone 01492 581811 Facsimile 01492 592030

UKAS TESTING
0956

ANALYSIS OF SOIL SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2496 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP9 1.0 271626	TP9 4.0 271628	TP1 3.0 271631	TP1 4.0 271632	TP2 1.5 271634	TP2 4.0 271635
pH		7.8	7.2	8.3	8.9	7.1	7.5
Chloride (mg/Kg)		7.20	12.30	5.30	20	5.90	10.10
Water Soluble Sulphate (g/L SO_4)		0.32	0.03	0.04	0.04	0.12	0.15
Ammonia as NH_4 (mg/Kg)		1.70	113	4	75.30	104	30.40
Total Cyanide (mg/Kg)		<1	<1	<1	<1	<1	<1
Free Cyanide (mg/Kg)		<1	<1	<1	<1	<1	<1
Complex Cyanide (mg/Kg)		<1	<1	<1	<1	<1	<1
Loss On Ignition (%)		6.6	9.2	4.2	7.2	13.4	8.9
Arsenic (mg/Kg)		12	18	74	14	18	54
Cadmium (mg/Kg)		<1.0	<1.0	2.5	<1.0	<1.0	1.3
Chromium (mg/Kg)		68	71	37	69	96	103
Copper (mg/Kg)		33	18	89	17	28	38
Elemental Sulphur (mg/Kg)		20	100	20	570	1120	80
Iron (%)		5.1	7.1	14	5.3	6.5	9.7
Lead (mg/Kg)		46	35	69	29	56	103
Mercury (mg/Kg)		0.13	<0.10	0.20	<0.10	0.18	0.40
Nickel (mg/Kg)		77	37	99	38	50	73
Selenium (mg/Kg)		<3	<3	<3	<3	<3	<3
Water Soluble Boron (mg/Kg)		0.8	2.0	2.4	1.3	1.5	0.4
Zinc (mg/Kg)		126	87	448	102	119	160
BTEX (HS)/GCMS (µg/Kg)							
Benzene		<2	8	<2	<2	<2	<2
Toluene		<2	3	<2	<2	<2	<2
Ethylbenzene		<2	36	<2	<2	<2	<2
m/p-Xylenes		<2	47	<2	<2	<2	<2
o-Xylenes		<2	36	<2	<2	<2	<2
Loss on drying (%)							
Wt. loss on drying (% of wet)		21.0	21.4	8.3	19.4	29.7	17.1
Retained on 2mm sieve (% of dry)		0.0	0.0	51.4	26.1	0.0	26.1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0955

ANALYSIS OF SOIL SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. / depth(m) / LAB ID.	TP3 1.0 271636	TP4 1.5 271637	TP4 4.0 271638	TP4 5.0 271639	TP5 1.5 271641	TP5 4.0 271642
pH		8.2	7.1	7.7	8.3	7.6	7.3
Chloride (mg/Kg)		6.20	20	13.50	68	18.40	13.90
Water Soluble Sulphate (g/L SO_4)		0.03	0.08	0.15	0.13	0.07	0.19
Ammonia as NH_4 (mg/Kg)		0.90	97.70	187	45.80	2.50	5.70
Total Cyanide (mg/Kg)		<1	<1	<1	<1	<1	<1
Free Cyanide (mg/Kg)		<1	<1	<1	<1	<1	<1
Complex Cyanide (mg/Kg)		<1	<1	<1	<1	<1	<1
Loss On Ignition (%)		9.7	13.5	5.0	5.4	34.9	7.0
Arsenic (mg/Kg)		164	20	39	9	16	39
Cadmium (mg/Kg)		3.2	<1.0	1.1	<1.0	<1.0	1.7
Chromium (mg/Kg)		319	85	89	71	74	82
Copper (mg/Kg)		17	31	26	32	15	109
Elemental Sulphur (mg/Kg)		60	60	480	100	10	90
Iron (%)		2.9	5.7	11	4.9	5.3	8.7
Lead (mg/Kg)		69	65	33	24	25	193
Mercury (mg/Kg)		0.11	0.22	<0.10	<0.10	<0.10	0.54
Nickel (mg/Kg)		172	43	89	70	43	68
Selenium (mg/Kg)		<3	<3	<3	<3	<3	<3
Water Soluble Boron (mg/Kg)		0.3	2.6	0.6	2.2	0.5	0.4
Zinc (mg/Kg)		418	115	146	93	91	260
BTEX (HS)/GCMS (µg/Kg)							
Benzene		<2	6	<2	<2	<2	<2
Toluene		<2	<2	<2	<2	<2	<2
Ethylbenzene		<2	2	<2	<2	<2	<2
m/p-Xylenes		<2	17	<2	<2	<2	<2
o-Xylenes		<2	47	<2	<2	<2	<2
Loss on drying (%)							
Wt. loss on drying (% of wet)		16.1	28.4	13.1	15.2	17.3	20.8
Retained on 2mm sieve (% of dry)		39.1	0.0	70.0	0.0	23.1	24.9

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0056

ANALYSIS OF SOIL SAMPLES

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP6 3.0 271643	TP6 4.0 271644	TP7 5.0 271647	TP8 0.9 271648	TP8 1.5 271649	WS2 3.3 271694
pH		8.9	8.5	7.7	7.6	8.2	7.2
Chloride (mg/Kg)		834	21	149	17.90	7.40	19
Water Soluble Sulphate (g/L SO_4)		0.31	0.50	0.36	1.3	0.10	0.05
Ammonia as NH_4 (mg/Kg)		641	344	226	1.20	3.30	29.90
Total Cyanide (mg/Kg)		24	10	49	486	<1	2
Free Cyanide (mg/Kg)		1	<1	3	12	<1	<1
Complex Cyanide (mg/Kg)		23	10	46	474	<1	2
Loss On Ignition (%)		US	5.8	US	21.5	5.2	3.8
Arsenic (mg/Kg)		67	72	101	79	12	26
Cadmium (mg/Kg)		3.5	1.3	2.3	4.2	<1.0	<1.0
Chromium (mg/Kg)		99	78	81	92	77	69
Copper (mg/Kg)		42	55	84	293	32	22
Elemental Sulphur (mg/Kg)		880	<10	2850	110	<10	420
Iron (%)		17	8.1	7.0	12	5.4	7.1
Lead (mg/Kg)		100	114	867	6810	70	23
Mercury (mg/Kg)		1.9	0.15	1.0	3.4	<0.10	<0.10
Nickel (mg/Kg)		82	68	58	111	72	57
Selenium (mg/Kg)		<3	<3	<3	<3	<3	<3
Water Soluble Boron (mg/Kg)		0.7	0.4	6.5	7.5	3.1	1.3
Zinc (mg/Kg)		402	129	785	2218	175	93
BTEX (HS)/GCMS (µg/Kg)							
Benzene		100000#	<2	180000#	<2	20	<10
Toluene		200000#	<2	120000#	<2	15	<10
Ethylbenzene		15600	<2	100000#	<2	5	<10
m/p-Xylenes		150000#	<2	140000#	<2	7	<10
o-Xylenes		70000#	<2	77000#	<2	4	<10
Loss on drying (%)							
Wt. loss on drying (% of wet)		16.0	63.1	12.3	23.4	22.4	17.3
Retained on 2mm sieve (% of dry)		0.0	87.0	0.0	35.0	0.0	7.3

Please see comments following results.
QA data not reported
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0958

ANALYSIS OF SOIL SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP9 1.0 271626	TP9 4.0 271628	TP1 3.0 271631	TP1 4.0 271632	TP2 1.5 271634	TP2 4.0 271635
Semi-volatile Organics (mg/Kg)							
Napthalene		<1	<10	<1	<1	<1	<1
Acenaphthylene		<1	<10	<1	<1	<1	<1
Acenaphthene		<1	<10	<1	<1	<1	<1
Fluorene		<1	<10	<1	<1	<1	<1
Phenanthrene		<1	<10	<1	<1	<1	2
Anthracene		<1	<10	<1	<1	<1	1
Fluoranthene		<1	<10	<1	<1	<1	5
Pyrene		<1	<10	<1	<1	<1	4
Benzo(a)anthracene		<1	<10	<1	<1	<1	2
Chrysene		<1	<10	<1	<1	<1	2
Benzo(b)fluoranthene		<1	<10	<1	<1	<1	2
Benzo(k)fluoranthene		<1	<10	<1	<1	<1	2
Benzo(a)pyrene		<1	<10	<1	<1	<1	2
Indeno(1,2,3-cd)pyrene		<1	<10	<1	<1	<1	1
Di-benz(a,h,)anthracene		<1	<10	<1	<1	<1	<1
Benzo(g,h,i)perylene		<1	<10	<1	<1	<1	1
2-Methyl Naphthalene		<1	<10	<1	<1	<1	<1
Dibenzofuran		<1	<10	<1	<1	<1	<1
Phenol		<1	<10	<1	<1	<1	<1
2-Chlorophenol		<1	<10	<1	<1	<1	<1
2-Methyl phenol		<1	<10	<1	<1	<1	<1
4-Methyl Phenol		<1	<10	<1	<1	<1	<1
2-Nitrophenol		<1	<10	<1	<1	<1	<1
2,4-dimethylphenol		<1	<10	<1	<1	<1	<1
1,4-dichlorobenzene		<1	<10	<1	<1	<1	<1
1,3-dichlorobenzene		<1	<10	<1	<1	<1	<1
1,2-dichlorobenzene		<1	<10	<1	<1	<1	<1
Benzyl Alcohol		<1	<10	<1	<1	<1	<1
2-Chloro Naphthalene		<1	<10	<1	<1	<1	<1
2,4,6-Trichlorophenol		<1	<10	<1	<1	<1	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0958

ANALYSIS OF SOIL SAMPLES

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP9 1.0 271626	TP9 4.0 271628	TP1 3.0 271631	TP1 4.0 271632	TP2 1.5 271634	TP2 4.0 271635
2,4,5-Trichlorophenol		<1	<10	<1	<1	<1	<1
2,4 dichlorophenol		<1	<10	<1	<1	<1	<1
2,6 dichlorophenol		<1	<10	<1	<1	<1	<1
4-chloro-3-methylphenol		<1	<10	<1	<1	<1	<1
Benzoic Acid		<1	<10	<1	<1	<1	<1
2,3,4,6-tetrachlorophenol		<1	<10	<1	<1	<1	<1
1,2,4-trichlorophenol		<1	<10	<1	<1	<1	<1
Azobenzene		<1	<10	<1	<1	<1	<1
Dibutyl Phthalate		<1	<10	<1	<1	<1	<1
Dimethyl Phthalate		<1	<10	<1	<1	<1	<1
Diethyl Phthalate		<1	<10	<1	<1	<1	<1
Dioctyl Phthalate		<1	<10	<1	<1	<1	<1
Benzyl butyl Phthalate		<1	<10	<1	<1	<1	<1
Bis(2-ethylhexl) Phthalate		<1	<10	<1	<1	<1	<1
Hexachlorobenzene		<1	<10	<1	<1	<1	<1
p-Chloroaniline		<1	<10	<1	<1	<1	<1
p-Nitroaniline		<1	<10	<1	<1	<1	<1
o-Nitroaniline		<1	<10	<1	<1	<1	<1
1-chloro-4-phenoxybenzene		<1	<10	<1	<1	<1	<1
2,2'-oxybispropane		<1	<10	<1	<1	<1	<1
N-Nitrosodi n propylamine		<1	<10	<1	<1	<1	<1
Hexachloroethane		<1	<10	<1	<1	<1	<1
Nitrobenzene		<1	<10	<1	<1	<1	<1
3,5,5-trimethyl-2-cyclohexen-1-one		<1	<10	<1	<1	<1	<1
Bis(2-chloroethoxy)-methane		<1	<10	<1	<1	<1	<1
Hexachloro,1,3-buitadiene		<1	<10	<1	<1	<1	<1
Hexachlorocyclopentadiene		<1	<10	<1	<1	<1	<1
2,6-dinitrotoluene		<1	<10	<1	<1	<1	<1
1-Methyl-2,4-dinitrobenzene		<1	<10	<1	<1	<1	<1
2-methyl-4,6-dinitrophenol		<1	<10	<1	<1	<1	<1
N-Nitrosodiphenylamine		<1	<10	<1	<1	<1	<1
4-bromophenyl phenyl ether		<1	<10	<1	<1	<1	<1
Aniline		<1	<10	<1	<1	<1	<1
Ethyl dichoroethyl		<1	<10	<1	<1	<1	<1
Pentachlorophenol		<1	<10	<1	<1	<1	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0958

ANALYSIS OF SOIL SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP3 1.0 271636	TP4 1.5 271637	TP4 4.0 271638	TP4 5.0 271639	TP5 1.5 271641	TP5 4.0 271642
Semi-volatile Organics (mg/Kg)							
Napthalene		1	<10	2	1	4	3
Acenaphthylene		<1	<10	<2	<1	<1	<1
Acenaphthene		<1	<10	<2	<1	<1	<1
Fluorene		<1	<10	<2	<1	<1	<1
Phenanthrene		1	<10	2	<1	<1	4
Anthracene		1	<10	<2	<1	<1	<1
Fluoranthene		2	<10	2	<1	<1	6
Pyrene		2	<10	<2	<1	<1	5
Benzo(a)anthracene		1	<10	<2	<1	<1	3
Chrysene		1	<10	<2	<1	<1	3
Benzo(b)fluoranthene		1	<10	<2	<1	<1	2
Benzo(k)fluoranthene		1	<10	<2	<1	<1	2
Benzo(a)pyrene		1	<10	<2	<1	<1	3
Indeno(1,2,3-cd)pyrene		1	<10	<2	<1	<1	2
Di-benz(a,h,)anthracene		<1	<10	<2	<1	<1	<1
Benzo(g,h,i)perylene		1	<10	<2	<1	<1	2
2-Methyl Naphthalene		<1	<10	<2	<1	1	<1
Dibenzofuran		<1	<10	<2	<1	<1	<1
Phenol		<1	<10	<2	<1	6	5
2-Chlorophenol		<1	<10	<2	<1	<1	<1
2-Methyl phenol		<1	<10	<2	<1	2	2
4-Methyl Phenol		<1	<10	<2	<1	<1	<1
2-Nitrophenol		<1	<10	<2	<1	<1	<1
2,4-dimethylphenol		<1	<10	<2	<1	<1	<1
1,4-dichlorobenzene		<1	<10	<2	<1	<1	<1
1,3-dichlorobenzene		<1	<10	<2	<1	<1	<1
1,2-dichlorobenzene		<1	<10	<2	<1	<1	<1
Benzyl Alcohol		<1	<10	<2	<1	<1	<1
2-Chloro Naphthalene		<1	<10	<2	<1	<1	<1
2,4,6-Trichlorophenol		<1	<10	<2	<1	<1	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

ANALYSIS OF SOIL SAMPLES

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT iD. depth(m) LAB ID.	TP3 1.0 271636	TP4 1.5 271637	TP4 4.0 271638	TP4 5.0 271639	TP5 1.5 271641	TP5 4.0 271642
2,4,5-Trichlorophenol		<1	<10	<2	<1	<1	<1
2,4 dichlorophenol		<1	<10	<2	<1	<1	<1
2,6 dichlorophenol		<1	<10	<2	<1	<1	<1
4-chloro-3-methylphenol		<1	<10	<2	<1	<1	<1
Benzoic Acid		<1	<10	<2	<1	<1	<1
2,3,4,6-tetrachlorophenol		<1	<10	<2	<1	<1	<1
1,2,4-trichlorophenol		<1	<10	<2	<1	<1	<1
Azobenzene		<1	<10	<2	<1	<1	<1
Dibutyl Phthalate		<1	<10	<2	<1	<1	<1
Dimethyl Phthalate		<1	<10	<2	<1	<1	<1
Diethyl Phthalate		<1	<10	<2	<1	<1	<1
Dioctyl Phthalate		<1	<10	<2	<1	<1	<1
Benzyl butyl Phthalate		<1	<10	<2	<1	<1	<1
Bis(2-ethylhexl) Phthalate		<1	<10	<2	<1	<1	<1
Hexachlorobenzene		<1	<10	<2	<1	<1	<1
p-Chloroaniline		<1	<10	<2	<1	<1	<1
p-Nitroaniline		<1	<10	<2	<1	<1	<1
o-Nitroaniline		<1	<10	<2	<1	<1	<1
1-chloro-4-phenoxybenzene		<1	<10	<2	<1	<1	<1
2,2'-oxybispropane		<1	<10	<2	<1	<1	<1
N-Nitrosodi n propylamine		<1	<10	<2	<1	<1	<1
Hexachloroethane		<1	<10	<2	<1	<1	<1
Nitrobenzene		<1	<10	<2	<1	<1	<1
3,5,5-trimethyl-2-cyclohexen-1-one		<1	<10	<2	<1	<1	<1
Bis(2-chloroethoxy)-methane		<1	<10	<2	<1	<1	<1
Hexachloro,1,3-butadiene		<1	<10	<2	<1	<1	<1
Hexachlorocyclopentadiene		<1	<10	<2	<1	<1	<1
2,6-dinitrotoluene		<1	<10	<2	<1	<1	<1
1-Methyl-2,4-dinitrobenzene		<1	<10	<2	<1	<1	<1
2-methyl-4,6-dinitrophenol		<1	<10	<2	<1	<1	<1
N-Nitrosodiphenylamine		<1	<10	<2	<1	<1	<1
4-bromophenyl phenyl ether		<1	<10	<2	<1	<1	<1
Aniline		<1	<10	<2	<1	<1	<1
Ethyl dichoroethyl		<1	<10	<2	<1	<1	<1
Pentachlorophenol		<1	<10	<2	<1	<1	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson

UKAS TESTING
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ANALYSIS OF SOIL SAMPLES

Robertson

Date rec'd : 14/1/2002
Our Ref. : 368-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP6 3.0 271643	TP6 4.0 271644	TP7 5.0 271647	TP8 0.9 271648	TP8 1.5 271649
Semi-volatile Organics (mg/Kg)						
Napthalene		1300	4	1500	10	3
Acenaphthylene		250	2	138	25	<1
Acenaphthene		<100	1	398	10	<1
Fluorene		142	1	181	10	<1
Phenanthrene		483	6	563	87	1
Anthracene		173	5	181	37	<1
Fluoranthene		307	12	107	156	<1
Pyrene		246	9	147	128	<1
Benzo(a)anthracene		109	5	<100	74	<1
Chrysene		<100	4	<100	78	<1
Benzo(b)fluoranthene		<100	3	<100	51	<1
Benzo(k)fluoranthene		<100	3	<100	50	<1
Benzo(a)pyrene		104	4	<100	61	<1
Indeno(1,2,3-cd)pyrene		<100	2	<100	35	<1
Di-benz(a,h,)anthracene		<100	1	<100	12	<1
Benzo(g,h,i)peryiene		<100	1	<100	34	<1
2-Methyl Naphthalene		274	1	1600	<10	2
Dibenzofuran		151	2	57	<10	<1
Phenol		<100	2	<100	<10	<1
2-Chlorophenol		<100	<1	<100	<10	<1
2-Methyl phenol		<100	<1	<100	<10	<1
4-Methyl Phenol		<100	<1	<100	<10	<1
2-Nitrophenol		<100	<1	<100	<10	<1
2,4-dimethylphenol		<100	<1	<100	<10	<1
1,4-dichlorobenzene		<100	<1	<100	<10	<1
1,3-dichlorobenzene		<100	<1	<100	<10	<1
1,2-dichlorobenzene		<100	<1	<100	<10	<1
Benzyl Alcohol		<100	<1	<100	<10	<1
2-Chloro Naphthalene		<100	<1	<100	<10	<1
2,4,6-Trichlorophenol		<100	<1	<100	<10	<1

Please see comments following results.
QA data not reported.
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UKAS TESTING
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ANALYSIS OF SOIL SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

CLIENT ID	LAB ID	TPH/GC (mg/kg)	Characterisation
TP4 depth(m) 4.0	271638	<10	-
TP4 depth(m) 5.0	271639	<10	-
TP5 depth(m) 1.5	271641	<10	-
TP5 depth(m) 4.0	271642	180	No characteristic profile - possibly includes PAH's
TP6 depth(m) 3.0	271643	4300	No characteristic profile - possibly includes PAH's
TP6 depth(m) 4.0	271644	990	No characteristic profile - possibly includes PAH's
TP7 depth(m) 5.0	271647	75900	No characteristic profile - within the diesel range
TP8 depth(m) 0.9	271648	1830	No characteristic profile - possibly includes PAH's
TP8 depth(m) 1.5	271649	<10	-
WS2 depth(m) 3.3	271694	580	Heavily weathered diesel

QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson. Please see comments following results.

UKAS TESTING
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ANALYSIS OF WATER SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP3 1.5 271620	TP4 0.5 271621	TP5 4.0 271622	TP6 0.3 271623	TP7 0.5 271624	TP8 1.5 271625
pH		7.9	6.9	7.1	7.5	7.8	7.1
Nitrate (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrite (mg/L)		<0.50	3.60	<0.50	1.60	<0.50	<0.50
Sulphide (mg/L)		<0.05	0.17	<0.05	<0.05	<0.05	<0.05
Sulphate (mg/L)		90.0	3601.0	581.0	126.0	7.8	768.0
Chloride (mg/L)		74	488	31	77	87	28
Ammonia as NH_4 (mg/L)		0.5	1120	81.7	74.4	75.0	9.6
Electrical Conductivity (µS/cm)		677	3600	1426	1149	1617	1699
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		<0.01	0.03	<0.01	<0.01	0.02	0.02
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
BTEX (HS)/GCMS (µg/L)							
Benzene		<1	2400	<1	3100	6800	600
Toluene		<1	1700	<1	1000	770	380
Ethylbenzene		<1	135	<1	139	590	150
m/p-Xylenes		<1	800	<1	1000	570	250
o-Xylenes		<1	400	<1	500	380	170
Total Organic Carbon (mg/L)		2.2	294.0	8.4	77.9	80.8	24.2

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson

UKAS TESTING
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ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358/125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP9 4.0 271628L	TP1 3.0 271631L	TP1 4.0 271632L	TP4 1.5 271637L	TP6 3.0 271643L
pH		7.0	8.0	6.3	6.9	8.7
Nitrite (mg/L)		1	<0.50	<0.50	<0.50	<0.50
Nitrate (mg/L)		<1	<1	<1	<1	<1
Chloride (mg/L)		26	18.40	16.10	1.70	44
Sulphide (mg/L)		<0.05	<0.05	<0.05	<0.05	0.07
Sulphate (mg/L)		2.2	6.4	3.4	5.1	26
Total Cyanide (mg/L)		<0.05	<0.05	<0.05	<0.05	0.59
Free Cyanide (mg/L)		<0.050	<0.050	<0.050	<0.050	<0.050
Complex Cyanide (mg/L)		<0.050	<0.050	<0.050	<0.050	0.59
Thiocyanate (mg/L)		<0.50	<0.50	<0.50	<0.50	6.7
Electrical Conductivity (µS/cm)		39	84	40	48	464
Ammonia as NH_4 (mg/L)		1.7	<0.1	1.8	1.3	50.5
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		0.96	0.16	0.27	0.13	1.4
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	<0.02	<0.02	0.03
Total Organic Carbon (mg/L)		8.2	0.7	5.8	8.6	263.9

Please see comments following results.
QA data not reported.
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UKAS TESTING
0955

ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP6 4.0 271644L	TP6 3.0 271646L	BH01 5.2 271652L	BH01 8.2 271653L	WS12 2.0 271655L
pH		8.1	7.9	7.9	8.8	7.7
Nitrite (mg/L)		<0.50	<0.50	<0.50	<0.50	<0.50
Nitrate (mg/L)		<1	<1	<1	<1	<1
Chloride (mg/L)		5	4.40	4.30	4.90	7.90
Sulphide (mg/L)		<0.05	<0.05	<0.05	<0.05	<0.05
Sulphate (mg/L)		109	4.4	17.7	26	3.6
Total Cyanide (mg/L)		<0.05	<0.05	<0.05	<0.05	<0.05
Free Cyanide (mg/L)		<0.050	<0.050	<0.050	<0.050	<0.050
Complex Cyanide (mg/L)		<0.050	<0.050	<0.050	<0.050	<0.050
Thiocyanate (mg/L)		<0.50	<0.50	<0.50	<0.50	<0.50
Electrical Conductivity (µS/cm)		424	217	118	158	107
Ammonia as NH_4 (mg/L)		20.3	4.7	0.3	3.9	<0.1
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		0.12	0.13	0.24	<0.08	<0.08
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (mg/L)		<0.02	0.04	<0.02	<0.02	<0.02
Total Organic Carbon (mg/L)		2.0	4.8	1.5	1.0	2.6

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
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ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358--125
Your Ref. : EN2496 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	WS10 2.0-2.1 271658L	WS10 4.0 271659L	WS9 3.0 271660L	WS8 3.5-4.0 271664L	WS8 1.8-2.2 271669L	WS7 0.3-0.4 271671L
pH		7.6	8.4	7.9	7.9	7.1	7.4
Nitrite (mg/L)		<0.50	<0.50	<0.50	<0.50	<0.50	<0 50
Nitrate (mg/L)		<1	<1	<1	<1	<1	28
Chloride (mg/L)		7.70	3.40	2.20	3.50	1.80	3.90
Sulphide (mg/L)		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sulphate (mg/L)		8.3	4.2	13.0	20.0	24	1205
Total Cyanide (mg/L)		0.17	<0.05	0.63	<0.05	<0.05	3.20
Free Cyanide (mg/L)		0.060	<0 050	<0.050	<0.050	<0.050	0.15
Complex Cyanide (mg/L)		0.11	<0.050	0.63	<0.050	<0.050	3.0
Thiocyanate (mg/L)		<0.50	<0.50	<0.50	<0.50	<0.50	0.92
Electrical Conductivity (µS/cm)		111	223	212	297	124	1750
Ammonia as NH_4 (mg/L)		11.9	32 0	11.4	25.3	11.6	0.2
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		0.20	<0.06	2.6	0.16	0.67	1.9
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02	0.03
Total Organic Carbon (mg/L)		3.3	0.7	4.1	3.0	2.3	9.6

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The mater al analysed above was not sampled at source by Robertson.

UKAS TESTING
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ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	WS7 2.0-3.0 271672L	WS5 2.5-2.6 271674L	WS4 2.2-2.3 271676L	WS5 4.0 271680L	WS4 1.9-2.0 271681L
pH		7.4	7.2	7.5	8.0	7.7
Nitrite (mg/L)		1.50	<0.50	<0.50	<0.50	<0.50
Nitrate (mg/L)		15.60	<1	<1	<1	<1
Chloride (mg/L)		1.80	0.90	0.90	0.70	1.60
Sulphide (mg/L)		<0.05	<0.05	0.25	<0.05	<0.05
Sulphate (mg/L)		547	12.9	5.6	3.1	5.1
Total Cyanide (mg/L)		0.17	0.15	<0.05	0.19	<0.05
Free Cyanide (mg/L)		<0.050	<0.050	<0.050	<0.050	<0.050
Complex Cyanide (mg/L)		0.17	0.15	<0.050	0.19	<0.050
Thiocyanate (mg/L)		<0.50	<0.50	<0.50	<0.50	<0.50
Electrical Conductivity (µS/cm)		1240	73	53	107	109
Ammonia as NH_4 (mg/L)		14.0	0.9	0.1	0.7	<0.1
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		<0.08	0.15	4.9	5.0	4.5
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	<0.02	<0.02	0.03
Total Organic Carbon (mg/L)		1.8	2.3	2.5	1.1	3.5

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0956

ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	WS4 0.5-0.7 271683L	WS4 3.7-4.0 271687L	WS2 0.6-1.0 271690L	WS1 4.0 271696L
pH		8.0	7.8	7.9	6.6
Nitrite (mg/L)		<0.50	<0.50	<0.50	<0.50
Nitrate (mg/L)		1.50	<1	<1	<1
Chloride (mg/L)		1.40	1.30	1	4.50
Sulphide (mg/L)		<0.05	<0.05	<0.05	<0.05
Sulphate (mg/L)		14.1	9.2	11.4	16.6
Total Cyanide (mg/L)		<0.05	<0.05	<0.05	<0.05
Free Cyanide (mg/L)		<0.050	<0.050	<0.050	<0.050
Complex Cyanide (mg/L)		<0.050	<0.050	<0.050	<0.050
Thiocyanate (mg/L)		<0.50	<0.50	<0.50	<0.50
Electrical Conductivity (µS/cm)		196	172	134	91
Ammonia as NH_4 (mg/L)		<0.1	0.8	<0.1	4.7
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		<0.08	2.4	0.18	0.18
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		<0.01	<0.01	<0.01	<0.01
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	<0.02	<0.02
Total Organic Carbon (mg/L)		1.8	1.3	3.9	2.4

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
3956

ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP9 4.0 271628L	TP1 3.0 271631L	TP1 4.0 271632L	TP4 1.5 271637L	TP6 3.0 271643L	TP6 4.0 271644L
Semi-volatile Organics (µg/L)							
Napthalene		26	2	4	<10	3900	<1
Acenaphthylene		<5	1	<4	<10	<1000	3
Acenaphthene		8	<1	<4	<10	<1000	3
Fluorene		7	<1	<4	<10	<1000	1
Phenanthrene		15	1	<4	<10	<1000	<1
Anthracene		<5	<1	<4	<10	<1000	3
Fluoranthene		<5	<1	<4	<10	<1000	3
Pyrene		<5	<1	<4	<10	<1000	2
Benzo(a)anthracene		<5	<1	<4	<10	<1000	<1
Chrysene		<5	<1	<4	<10	<1000	<1
Benzo(b)fluoranthene		<5	<1	<4	<10	<1000	<1
Benzo(k)fluoranthene		<5	<1	<4	<10	<1000	<1
Benzo(a)pyrene		<5	<1	<4	<10	<1000	<1
Indeno(1,2,3-cd)pyrene		<5	<1	<4	<10	<1000	<1
Di-benz(a,h,)anthracene		<5	<1	<4	<10	<1000	<1
Benzo(g,h,i)perylene		<5	<1	<4	<10	<1000	<1
2-Methyl Naphthalene		32	<1	<4	<10	<1000	<1
Dibenzofuran		5	1	<4	<10	<1000	2
Phenol		<5	<1	<4	<10	4800	<1
2-Chlorophenol		<5	<1	<4	<10	<1000	<1
2-Methyl phenol		<5	<1	<4	<10	<1000	<1
4-Methyl Phenol		<5	<1	<4	<10	<1000	<1
2-Nitrophenol		<5	<1	<4	<10	<1000	<1
2,4-dimethylphenol		<5	<1	14	<10	14000	<1
1,4-dichlorobenzene		<5	<1	<4	<10	<1000	<1
1,3-dichlorobenzene		<5	<1	<4	<10	<1000	<1
1,2-dichlorobenzene		<5	<1	<4	<10	<1000	<1
Benzyl Alcohol		<5	<1	<4	<10	<1000	<1
2-Chloro Naphthalene		<5	<1	<4	<10	<1000	<1
2,4,6-Trichlorophenol		<5	<1	<4	<10	<1000	<1
2,4,5-Trichlorophenol		<5	<1	<4	<10	<1000	<1
2,4 dichlorophenol		<5	<1	<4	<10	<1000	<1
2,6 dichlorophenol		<5	<1	<4	<10	<1000	<1
4-chloro-3-methylphenol		<5	<1	<4	<10	<1000	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0956

ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP9 4.0 271628L	TP1 3.0 271631L	TP1 4.0 271632L	TP4 1.5 271637L	TP6 3.0 271643L	TP6 4.0 271644L
Benzoic Acid		<5	<1	<4	<10	<1000	<1
2,3,4,6-tetrachlorophenol		<5	<1	<4	<10	<1000	<1
1,2,4-trichlorophenol		<5	<1	<4	<10	<1000	<1
Azobenzene		<5	<1	<4	<10	<1000	<1
Dibutyl Phthalate		<5	<1	<4	<10	<1000	<1
Dimethyl Phthalate		<5	<1	<4	<10	<1000	<1
Diethyl Phthalate		<5	<1	<4	<10	<1000	<1
Dioctyl Phthalate		<5	<1	<4	<10	<1000	<1
Benzyl butyl Phthalate		<5	<1	<4	<10	<1000	<1
Bis(2-ethylhexl) Phthalate		<5	<1	<4	<10	<1000	<1
Hexachlorobenzene		<5	<1	<4	<10	<1000	<1
p-Chloroaniline		<5	<1	<4	<10	<1000	<1
p-Nitroaniline		<5	<1	<4	<10	<1000	<1
o-Nitroaniline		<5	<1	<4	<10	<1000	<1
1-chloro-4-phenoxybenzene		<5	<1	<4	<10	<1000	<1
2,2'-oxybispropane		<5	<1	<4	<10	<1000	<1
N-Nitrosodi n propylamine		<5	<1	<4	<10	<1000	<1
Hexachloroethane		<5	<1	<4	<10	<1000	<1
Nitrobenzene		<5	<1	<4	<10	<1000	<1
3,5,5-trimethyl-2-cyclohexen-1-one		<5	<1	<4	<10	<1000	<1
Bis(2-chloroethoxy)-methane		<5	<1	<4	<10	<1000	<1
Hexachloro,1,3-buitadiene		<5	<1	<4	<10	<1000	<1
Hexachlorocyclopentadiene		<5	<1	<4	<10	<1000	<1
2,6-dinitrotoluene		<5	<1	<4	<10	<1000	<1
1-Methyl-2,4-dinitrobenzene		<5	<1	<4	<10	<1000	<1
2-methyl-4,6-dinitrophenol		<5	<1	<4	<10	<1000	<1
N-Nitrosodiphenylamine		<5	<1	<4	<10	<1000	<1
4-bromophenyl phenyl ether		<5	<1	<4	<10	<1000	<1
Aniline		<5	<1	<4	<10	<1000	<1
Ethyl dichoroethyl		<5	<1	<4	<10	<1000	<1
Pentachlorophenol		<5	<1	<4	<10	<1000	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0956

ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP6 3.0 271646L	BH01 5.2 271652L	BH01 8.2 271653L	WS12 2.0 271655L	WS10 2.0-2.1 271658L	WS10 4.0 271659L
Semi-volatile Organics (µg/L)							
Napthalene		<100	<100	<100	<10	<20	<5
Acenaphthylene		<100	<100	<100	<10	<20	<5
Acenaphthene		<100	<100	<100	<10	<20	<5
Fluorene		<100	<100	<100	<10	<20	<5
Phenanthrene		<100	<100	<100	<10	<20	<5
Anthracene		<100	<100	<100	<10	<20	<5
Fluoranthene		<100	<100	<100	<10	<20	<5
Pyrene		<100	<100	<100	<10	<20	<5
Benzo(a)anthracene		<100	<100	<100	<10	<20	<5
Chrysene		<100	<100	<100	<10	<20	<5
Benzo(b)fluoranthene		<100	<100	<100	<10	<20	<5
Benzo(k)fluoranthene		<100	<100	<100	<10	<20	<5
Benzo(a)pyrene		<100	<100	<100	<10	<20	<5
Indeno(1,2,3-cd)pyrene		<100	<100	<100	<10	<20	<5
Di-benz(a,h,)anthracene		<100	<100	<100	<10	<20	<5
Benzo(g,h,I)perylene		<100	<100	<100	<10	<20	<5
2-Methyl Naphthalene		<100	<100	<100	<10	<20	<5
Dibenzofuran		<100	<100	<100	<10	<20	<5
Phenol		<100	<100	<100	<10	<20	<5
2-Chlorophenol		<100	<100	<100	<10	<20	<5
2-Methyl phenol		<100	<100	<100	<10	<20	<5
4-Methyl Phenol		<100	<100	<100	<10	<20	<5
2-Nitrophenol		<100	<100	<100	<10	<20	<5
2,4-dimethylphenol		<100	<100	<100	<10	<20	<5
1,4-dichlorobenzene		<100	<100	<100	<10	<20	<5
1,3-dichlorobenzene		<100	<100	<100	<10	<20	<5
1,2-dichlorobenzene		<100	<100	<100	<10	<20	<5
Benzyl Alcohol		<100	<100	<100	<10	<20	<5
2-Chloro Naphthalene		<100	<100	<100	<10	<20	<5
2,4,6-Trichlorophenol		<100	<100	<100	<10	<20	<5
2,4,5-Trichlorophenol		<100	<100	<100	<10	<20	<5
2,4 dichlorophenol		<100	<100	<100	<10	<20	<5
2,6 dichlorophenol		<100	<100	<100	<10	<20	<5
4-chloro-3-methylphenol		<100	<100	<100	<10	<20	<5

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358 i25
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	TP6 3.0 271646L	BH01 5.2 271652L	BH01 8.2 271653L	WS12 2.0 271655L	WS10 2.0-2.1 271658L	WS10 4.0 271659L
Benzoic Acid		<100	<100	<100	<10	<20	<5
2,3,4,6-tetrachlorophenol		<100	<100	<100	<10	<20	<5
1,2,4-trichlorophenol		<100	<100	<100	<10	<20	<5
Azobenzene		<100	<100	<100	<10	<20	<5
Dibutyl Phthalate		<100	<100	<100	<10	<20	<5
Dimethyl Phthalate		<100	<100	<100	<10	<20	<5
Diethyl Phthalate		<100	<100	<100	<10	<20	<5
Dioctyl Phthalate		<100	<100	<100	<10	<20	<5
Benzyl butyl Phthalate		<100	<100	<100	<10	<20	<5
Bis(2-ethylhexl) Phthalate		<100	<100	<100	<10	<20	<5
Hexachlorobenzene		<100	<100	<100	<10	<20	<5
p-Chloroaniline		<100	<100	<100	<10	<20	<5
p-Nitroaniline		<100	<100	<100	<10	<20	<5
o-Nitroaniline		<100	<100	<100	<10	<20	<5
1-chloro-4-phenoxybenzene		<100	<100	<100	<10	<20	<5
2,2'-oxybispropane		<100	<100	<100	<10	<20	<5
N-Nitrosodi n propylamine		<100	<100	<100	<10	<20	<5
Hexachloroethane		<100	<100	<100	<10	<20	<5
Nitrobenzene		<100	<100	<100	<10	<20	<5
3,5,5-trimethyl-2-cyclohexen-1-one		<100	<100	<100	<10	<20	<5
Bis(2-chloroethoxy)-methane		<100	<100	<100	<10	<20	<5
Hexachloro,1,3-buitadiene		<100	<100	<100	<10	<20	<5
Hexachlorocyclopentadiene		<100	<100	<100	<10	<20	<5
2,6-dinitrotoluene		<100	<100	<100	<10	<20	<5
1-Methyl-2,4-dinitrobenzene		<100	<100	<100	<10	<20	<5
2-methyl-4,6-dinitrophenol		<100	<100	<100	<10	<20	<5
N-Nitrosodiphenylamine		<100	<100	<100	<10	<20	<5
4-bromophenyl phenyl ether		<100	<100	<100	<10	<20	<5
Aniline		<100	<100	<100	<10	<20	<5
Ethyl dichoroethyl		<100	<100	<100	<10	<20	<5
Pentachlorophenol		<100	<100	<100	<10	<20	<5

Please see comments following results.
CA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

ANALYSIS OF LEACHATE SAMPLES

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	WS9 3.0 271660L	WS8 3.5-4.0 271664L	WS8 1.8-2.2 271669L	WS7 0.3-0.4 271671L	WS7 2.0-3.0 271672L	WS5 2.5-2.6 271674L
Semi-volatile Organics (µg/L)							
Napthalene		<20	<2	<5	<2	<1	<1
Acenaphthylene		<20	12	10	<2	1	<1
Acenaphthene		<20	3	3	<2	<1	<1
Fluorene		<20	5	6	<2	<1	<1
Phenanthrene		<20	<2	<5	<2	<1	<1
Anthracene		<20	1	2	<2	<1	<1
Fluoranthene		27	<2	<5	<2	1	<1
Pyrene		<20	<2	<5	<2	<1	<1
Benzo(a)anthracene		<20	<2	<5	<2	<1	<1
Chrysene		<20	<2	<5	<2	<1	<1
Benzo(b)fluoranthene		<20	<2	<5	<2	<1	<1
Benzo(k)fluoranthene		<20	<2	<5	<2	<1	<1
Benzo(a)pyrene		<20	<2	<5	<2	<1	<1
Indeno(1,2,3-cd)pyrene		<20	<2	<5	<2	<1	<1
Di-benz(a,h,)anthracene		<20	<2	<5	<2	<1	<1
Benzo(g,h,I)perylene		<20	<2	<5	<2	<1	<1
2-Methyl Naphthalene		<20	<2	<5	<2	<1	<1
Dibenzofuran		23	6	4	<2	<1	<1
Phenol		<20	<2	<5	<2	<1	<1
2-Chlorophenol		<20	<2	<5	<2	<1	<1
2-Methyl phenol		<20	<2	<5	<2	<1	<1
4-Methyl Phenol		<20	<2	<5	<2	<1	<1
2-Nitrophenol		<20	<2	<5	<2	<1	<1
2,4-dimethylphenol		<20	<2	<5	<2	<1	<1
1,4-dichlorobenzene		<20	<2	<5	<2	<1	<1
1,3-dichlorobenzene		<20	<2	<5	<2	<1	<1
1,2-dichlorobenzene		<20	<2	<5	<2	<1	<1
Benzyl Alcohol		<20	<2	<5	<2	<1	<1
2-Chloro Naphthalene		<20	<2	<5	<2	<1	<1
2,4,6-Trichlorophenol		<20	<2	<5	<2	<1	<1
2,4,5-Trichlorophenol		<20	<2	<5	<2	<1	<1
2,4 dichlorophenol		<20	<2	<5	<2	<1	<1
2,6 dichlorophenol		<20	<2	<5	<2	<1	<1
4-chloro-3-methylphenol		<20	<2	<5	<2	<1	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0955

ANALYSIS OF LEACHATE SAMPLES

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	WS9 3.0 271660L	WS8 3.5-4.0 271664L	WS8 1.8-2.2 271669L	WS7 0.3-0.4 271671L	WS7 2.0-3.0 271672L	WS5 2.5-2.6 271674L
Benzoic Acid		<20	<2	<5	<2	<1	<1
2,3,4,6-tetrachlorophenol		<20	<2	<5	<2	<1	<1
1,2,4-trichlorophenol		<20	<2	<5	<2	<1	<1
Azobenzene		<20	<2	<5	<2	<1	<1
Dibutyl Phthalate		<20	<2	<5	<2	<1	<1
Dimethyl Phthalate		<20	<2	<5	<2	<1	<1
Diethyl Phthalate		<20	<2	<5	<2	<1	<1
Dioctyl Phthalate		<20	<2	<5	<2	<1	<1
Benzyl butyl Phthalate		<20	<2	<5	<2	<1	<1
Bis(2-ethylhexl) Phthalate		<20	<2	<5	<2	<1	<1
Hexachlorobenzene		<20	<2	<5	<2	<1	<1
p-Chloroaniline		<20	<2	<5	<2	<1	<1
p-Nitroaniline		<20	<2	<5	<2	<1	<1
o-Nitroaniline		<20	<2	<5	<2	<1	<1
1-chloro-4-phenoxybenzene		<20	<2	<5	<2	<1	<1
2,2'-oxybispropane		<20	<2	<5	<2	<1	<1
N-Nitrosodi n propylamine		<20	<2	<5	<2	<1	<1
Hexachloroethane		<20	<2	<5	<2	<1	<1
Nitrobenzene		<20	<2	<5	<2	<1	<1
3,5,5-trimethyl-2-cyclohexen-1-one		<20	<2	<5	<2	<1	<1
Bis(2-chloroethoxy)-methane		<20	<2	<5	<2	<1	<1
Hexachloro,1,3-buitadiene		<20	<2	<5	<2	<1	<1
Hexachlorocyclopentadiene		<20	<2	<5	<2	<1	<1
2,6-dinitrotoluene		<20	<2	<5	<2	<1	<1
1-Methyl-2,4-dinitrobenzene		<20	<2	<5	<2	<1	<1
2-methyl-4,6-dinitrophenol		<20	<2	<5	<2	<1	<1
N-Nitrosodiphenylamine		<20	<2	<5	<2	<1	<1
4-bromophenyl phenyl ether		<20	<2	<5	<2	<1	<1
Aniline		<20	<2	<5	<2	<1	<1
Ethyl dichoroethyl		<20	<2	<5	<2	<1	<1
Pentachlorophenol		<20	<2	<5	<2	<1	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

ANALYSIS OF LEACHATE SAMPLES

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	WS4 2.2-2.3 271676L	WS5 4.0 271680L	WS4 1.9-2.0 271681L	WS4 0.5-0.7 271683L	WS4 3.7-4.0 271687L
Benzoic Acid		<1	<1	<10	<1	<2
2,3,4,6-tetrachlorophenol		<1	<1	<10	<1	<2
1,2,4-trichlorophenol		<1	<1	<10	<1	<2
Azobenzene		<1	<1	<10	<1	<2
Dibutyl Phthalate		<1	<1	<10	<1	<2
Dimethyl Phthalate		<1	<1	<10	<1	<2
Diethyl Phthalate		<1	<1	<10	<1	<2
Dioctyl Phthalate		<1	<1	<10	<1	<2
Benzyl butyl Phthalate		<1	<1	<10	<1	<2
Bis(2-ethylhexl) Phthalate		<1	<1	<10	<1	<2
Hexachlorobenzene		<1	<1	<10	<1	<2
p-Chloroaniline		<1	<1	<10	<1	<2
p-Nitroaniline		<1	<1	<10	<1	<2
o-Nitroaniline		<1	<1	<10	<1	<2
1-chloro-4-phenoxybenzene		<1	<1	<10	<1	<2
2,2'-oxybispropane		<1	<1	<10	<1	<2
N-Nitrosodi n propylamine		<1	<1	<10	<1	<2
Hexachloroethane		<1	<1	<10	<1	<2
Nitrobenzene		<1	<1	<10	<1	<2
3,5,5-trimethyl-2-cyclohexen-1-one		<1	<1	<10	<1	<2
Bis(2-chloroethoxy)-methane		<1	<1	<10	<1	<2
Hexachloro,1,3-buitadiene		<1	<1	<10	<1	<2
Hexachlorocyclopentadiene		<1	<1	<10	<1	<2
2,6-dinitrotoluene		<1	<1	<10	<1	<2
1-Methyl-2,4-dinitrobenzene		<1	<1	<10	<1	<2
2-methyl-4,6-dinitrophenol		<1	<1	<10	<1	<2
N-Nitrosodiphenylamine		<1	<1	<10	<1	<2
4-bromophenyl phenyl ether		<1	<1	<10	<1	<2
Aniline		<1	<1	<10	<1	<2
Ethyl dichoroethyl		<1	<1	<10	<1	<2
Pentachlorophenol		<1	<1	<10	<1	<2

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0956

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-25
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

Additional comments (I)

Sample Lab Id. 271643 Determinand Elemental Sulphur
carried out on As Received

Sample Lab Id. 271643 Determinand Loss On Ignition
Sample would not dry

Sample Lab Id. 271647 Determinand Elemental Sulphur
carried out on as received instead of 10 mesh

Sample Lab Id. 271647 Determinand Loss On Ignition
Sample would not dry

Sample Lab Id. 271694 Determinand BTEX (HS)/GCMS
Lod's raised due to Hydrocarbon Interferences

Sample Lab Id. 271628 Determinand Semi-volatile Organics
LOD raised due to need for dilution ceused by hydrocarbon interference

Sample Lab Id. 271637 Determinand Semi-volatile Organics
LOD raised due to hydrocarbon interference

Sample Lab Id. 271643 Determinand Semi-volatile Organics
LOD raised as sample had to be diluted: compounds out of quantification range

Sample Lab Id. 271647 Determinand Semi-volatile Organics
LOD raised as compounds out of quant. range forced dilution

Sample Lab Id. 271648 Determinand Semi-volatile Organics
LOD raised as dilution done to get values in quantification range

Sample Lab Id. 271628L Determinand Semi-volatile Organics
LOD raised as only 250mL used in extraction and poor surrogate recovery

Sample Lab Id. 271632L Determinand Semi-volatile Organics
LOD raised as only 250mL used in extraction

Sample Lab Id. 271637L Determinand Semi-volatile Organics
LOD raised due to only 250mL being used in extraction and poor surrogate recovery

Sample Lab Id. 271643L Determinand Semi-volatile Organics
LOD raised as only 190mL used in extraction. Also dilution due to compounds out of quant. range.

Sample Lab Id. 271646L Determinand Semi-volatile Organics
LOD raised due to hydrocarbon interference

UKAS TESTING
0355

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

Additional comments (!)

Sample Lab Id. 271652L Determinand Semi-volatile Organics
LOD raised due to hydrocarbon interference

Sample Lab Id. 271653L Determinand Semi-volatile Organics
LOD raised due to hydrocarbon interference

Sample Lab Id. 271655L Determinand Semi-volatile Organics
LOD raised due to hydrocarbon interference

Sample Lab Id. 271658L Determinand Semi-volatile Organics
LOD raised due to only 100mL being used in extraction and also low surrogate recovery

Sample Lab Id. 271659L Determinand Semi-volatile Organics
LOD raised due to 500mL being used in extraction and low surrogate recovery

Sample Lab Id. 271660L Determinand Semi-volatile Organics
LOD raised due to 100mL being used and low surrogate recovery

Sample Lab Id. 271664L Determinand Semi-volatile Organics
LOD raised due to low surrogate recovery

Sample Lab Id. 271669L Determinand Semi-volatile Organics
LOD raised due to only 500mL being used in extraction and low surrogate recovery

Sample Lab Id. 271671L Determinand Semi-volatile Organics
LOD raised due to low surrogate recovery

Sample Lab Id. 271681L Determinand Semi-volatile Organics
LOD raised due to only 250mL being used in extraction and low surrogate recovery

Sample Lab Id. 271687L Determinand Semi-volatile Organics
LOD raised due to low surrogate recovery

UKAS TESTING
0956

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	TECHNIQUE	METHOD REFERENCE
Water Samples		
Ammonia as NH_4	Flow injection analysis/colorimetry	MEWAM Book 48 Method D
Arsenic	Direct aspiration/ICP	ELSA/54 **
BTEX (HS)/GCMS	Headspace GC-MS	ELS/V49 **
Cadmium	Direct aspiration/ICP	ELSA/54 **
Chloride	Ion chromatography	ELS/009
Chromium	Direct aspiration/ICP	ELSA/54 **
Copper	Direct aspiration/ICP	ELSA/54 **
Electrical Conductivity	Electrometry	MEWAM Book 14
Iron	Direct aspiration/ICP	ELSA/54 **
Lead	Direct aspiration/ICP	ELSA/54 **
Mercury	Direct aspiration/Cold vapour/Atomic fluorescence	ELSA/42 **
Nickel	Direct aspiration/ICP	ELSA/54 **
Nitrate	Ion chromatography	ELS/009
Nitrite	Ion chromatography	ELS/009
pH	Hydrogen ion selective electrode	ELS/001 **
Selenium	Direct aspiration/ICP	ELSA/54 **
Sulphate	Ion chromatography	ELS/009
Sulphide	Flow Injection Analysis	In house
Total Organic Carbon	Oxidation/IR	In house
Zinc	Direct aspiration/ICP	ELSA/54 **
Soil Samples		
Ammonia as NH_4 #	Colorimetry	MEWAM Book 48 Method D
Arsenic #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **
BTEX (HS)/GCMS	Headspace GC-MS	ELSA/49 **

UKAS TESTING
0956

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	TECHNIQUE	METHOD REFERENCE
Cadmium #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **
Chloride #	Aqueous extract/IC	In house
Chromium #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **
Complex Cyanide	Calculation by difference	ELSA/33 **
Copper #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **
Elemental Sulphur #	Combustion/titration	ELSA/38 **
Free Cyanide	NaOH extraction/distillation/colorimetry	ELSA/33 **
Iron #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **
Lead #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **
Loss on drying	Dried at 40°C	In house
Loss On Ignition #	Combustion	BS 1377
Mercury #	Aqua regia digest/Cold vapour/Atomic fluorescence	ELSA/52 **
Nickel #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **
NRA leachate(>100ml) #	Leachability with water	NRA
pH	Hydrogen ion selective electrode	ELS/001 **
Selenium #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **
Semi-volatile Organics	DCM extraction/GC-MS	ELSA/47 **
Total Cyanide	NaOH extraction/distillation/colorimetry	ELSA/33 **
TPH/GC	DCM extraction/GC-FID	ELSA/45
TPH/GC Characterisation	Characterisation by GC-FID	ELSA/45
Water Soluble Boron #	Aqueous extraction/ICP	ELSA/39 **
Water Soluble Sulphate #	2:1 water extract/ICP-AES	ELSA/43 **
Zinc #	Nitric/hydrochloric acid digestion/ICP	ELSA/53 **

UKAS TESTING
0956

Robertson

Date rec'd : 14/1/2002
Our Ref. : 358-125
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 1/2/2002

DETERMINAND	TECHNIQUE	METHOD REFERENCE
Leachate Samples		
Ammonia as NH_4 #	Flow injection analysis/colorimetry	MEWAM Book 48 Method D
Arsenic #	Direct aspiration/ICP	ELSA/54 **
Cadmium #	Direct aspiration/ICP	ELSA/54 **
Chloride #	Ion chromatography	ELS/009
Chromium #	Direct aspiration/ICP	ELSA/54 **
Complex Cyanide #	Calculation by difference	ELSA/33 **
Copper #	Direct aspiration/ICP	ELSA/54 **
Electrical Conductivity #	Electrometry	MEWAM Book 14
Free Cyanide #	Distillation/colorimetry	ELSA/33 **
Iron #	Direct aspiration/ICP	ELSA/54 **
Lead #	Direct aspiration/ICP	ELSA/54 **
Mercury #	Direct aspiration/Cold vapour/Atomic fluorescence	ELSA/42 **
Nickel #	Direct aspiration/ICP	ELSA/54 **
Nitrate #	Ion chromatography	ELS/009
Nitrite #	Ion chromatography	ELS/009
pH #	Hydrogen ion selective electrode	ELS/001 **
Selenium #	Direct aspiration/ICP	ELSA/54 **
Semi-volatile Organics #	DCM extraction/GC-MS	ELSA/47 **
Sulphate #	Ion chromatography	ELS/009
Sulphide #	Flow Injection Analysis	In house
Thiocyanate #	Colorimetry	ELSA/34 **
Total Cyanide #	Distillation/colorimetry	ELSA/33 **
Total Organic Carbon #	Oxidation/IR	In house
Zinc #	Direct aspiration/ICP	ELSA/54 **

UKAS TESTING
0956

ANALYSIS OF WATER SAMPLES

Date rec'd : 28/1/2002
Our Ref. : 358-127
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 7/2/2002

DETERMINAND	CLIENT ID. / LAB ID.	WEBH01A 272556	MW04 272557	MW07 272558	MW10 272559	MW11 272560
pH		6.9	7.2	-	7.2	7.3
Arsenic (mg/L)		<0.01	<0.01	-	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	-	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	-	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	-	<0.02	<0.02
Iron (mg/L)		<0.08	<0.08	-	0.15	<0.08
Lead (mg/L)		<0.01	<0.01	-	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	-	<0.001	<0.001
Nickel (mg/L)		<0.01	<0.01	-	<0.01	<0.01
Selenium (mg/L)		<0.01	<0.01	-	<0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	-	<0.02	<0.02
Ammonia as NH_4 (mg/L)		0.1	33.0	-	35.6	180
Chloride (mg/L)		154	39	-	16	56
Total Cyanide (mg/L)		<0.05	<0.05	-	<0.05	<0.05
Free Cyanide (mg/L)		<0.05	<0.05	-	0.07	<0.05
Complex Cyanide (mg/L)		<0.05	<0.05	-	0.22	<0.05
Thiocyanate (mg/L)		<0.50	<0.50	-	<0.50	<0.50
Electrical Conductivity (µS/cm)		1605	1116	-	1223	1705
Nitrate (mg/L)		4.9	<1.0	-	<1.0	2.6
Nitrite (mg/L)		2.10	<0.50	-	<0.50	1.40
Sulphate (mg/L)		225.0	36.0	-	355.0	283.0
Sulphide (mg/L)		<0.05	<0.05	-	<0.05	<0.05
Total Suspended Solids (mg/L)		3	5	-	34	7
BTEX (HS)/GCMS (µg/L)						
Benzene		<1	336	<10	3	<1
Toluene		<1	7	<10	<1	<1
Ethylbenzene		<1	24	<10	<1	<1
m/p-Xylenes		<1	48	<10	<1	<1
o-Xylenes		<1	58	<10	<1	<1
Total Organic Carbon (mg/L)		106	15.4	18.9	8.4	7.7

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson

UKAS TESTING
0956

ANALYSIS OF WATER SAMPLES

Date rec'd : 28/1/2002
Our Ref. : 358-127
Your Ref. : EN2196 Banbury Gas Works
Cert Date : 7/2/2002

DETERMINAND	CLIENT ID. / LAB ID.	WEBH01A 272556	MW04 272557	MW07 272558	MW10 272559	MW11 272560
Target PAHs (GC-FID/GC-MS) (µg/L)						
Naphthalene		<1.0	103	<1.0	<1.0	<1.0
Acenaphthylene		<1.0	2.0	1.0	<1.0	5.0
Acenaphthene		<1.0	28	<1.0	<1.0	1.0
Fluorene		<1.0	14	<1.0	<1.0	<1.0
Phenanthrene		<1.0	22	<1.0	<1.0	<1.0
Anthracene		<1.0	4.0	<1.0	<1.0	<1.0
Fluoranthene		<1.0	4.0	<1.0	<1.0	<1.0
Pyrene		<1.0	4.0	<1.0	<1.0	<1.0
Benz(a)anthracene		<1.0	<2.0	<1.0	<1.0	<1.0
Chrysene		<1.0	<2.0	<1.0	<1.0	<1.0
Benz(b)fluoranthene		<1.0	<2.0	<1.0	<1.0	<1.0
Benz(k)fluoranthene		<1.0	<2.0	<1.0	<1.0	<1.0
Benz(a)pyrene		<1.0	<2.0	<1.0	<1.0	<1.0
Indeno(1,2,3,c,d)pyrene		<1.0	<2.0	<1.0	<1.0	<1.0
Dibenz(a,h)anthracene		<1.0	<2.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene		<1.0	<2.0	<1.0	<1.0	<1.0

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0953

Robertson

Date rec'd : 26/1/2002
Our Ref. : 358-127
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 7/2/2002

DETERMINAND	TECHNIQUE	METHOD REFERENCE
Total Organic Carbon	Oxidation/IR	In house
Total Suspended Solids	Gravimetry	SMEWW 2540 D
Zinc	Direct aspiration/ICP	ELSA/54 **

** Denotes Robertson Laboratories UKAS Accredited Method
Tests not marked with this double asterisk are not included in the UKAS Accreditation Schedule for our laboratory
++ Denotes Subcontracted Analysis
Opinions and interpretations expressed herein are outside the scope of UKAS accrediation
All analysis carried out on 'as received' sample, except where otherwise indicated
# Denotes analysis carried out on sample oven-dried at 40°C for 16 hours minimum and then passed through a 2mm sieve – asbestos analysis is carried out on the dried sample prior to sieving .Where asbestos present all analysis is carried out on 'as received' sample
Asbestos determination is a qualitative method. Percentages are based on a visual estimate and are outside the scope of accreditation

Abbreviations :

MEWAM	Methods for the Examination of Water and Associated Material
ADAS	Agricultural Developement and Advistory Service
SMEWW	Standard Methods for the Examination of Water and Wastewater

US	Sample was unsuitable for analysis
IS	Insufficient sample to carry out analysis
NI	No Asbestos Identified
NA	Not Applicable
NR	Not Recognised

UKAS TESTING
0955

Robertson

CERTIFICATE OF ANALYSIS

Date :	20/2/2002	Date rec'd :	5/2/2002
Certificate No :	16059	Our Ref :	358-129
Your Ref :	EN2498 Banbury Gas Works		

For the attention of :

Patrick Kirkby
Waterman Environmental
Catthorpe House
30 Hagley Road
Edgebaston
Birmingham
B16 8QY

[redacted]

Janet Hunt,
LABORATORY MANAGER

Robertson Laboratories, Llandudno, North Wales LL30 1SA, United Kingdom
Telephone 01492 581811 Facsimile 01492 592030

UKAS TESTING
0956

ANALYSIS OF WATER SAMPLES

Date rec'd : 5/2/2002
Our Ref. : 358-129
Your Ref : EN2498 Banbury Gas Works
Cert Date : 20/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	WEBH1A 272916	MW04 2.18 272917	MW07 2.01 272918	MW10 1.67 272919	MW11 1.90 272920
pH		7.0	7.1	6.0	7.2	7.2
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		<0.08	<0.08	0.61	0.15	<0.08
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		0.06	<0.01	<0.01	<0.01	<0.01
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Ammonia as NH_4 (mg/L)		0.5	33.1	121	44.9	246
Chloride (mg/L)		147	40	58	16	39
Total Cyanide (mg/L)		<0.05	<0.05	US	0.33	<0.05
Free Cyanide (mg/L)		<0.05	<0.05	US	0.06	<0.05
Complex Cyanide (mg/L)		<0.05	<0.05	US	0.27	<0.05
Thiocyanate (mg/L)		<0.50	0.52	7.4	0.52	1.2
Electrical Conductivity (µS/cm)		1583	1150	1614	1278	1551
Nitrate (mg/L)		7.1	<1.0	<1.0	<1.0	1.5
Nitrite (mg/L)		1.3	<0.5	<0.5	<0.5	1.4
Sulphate (mg/L)		213.0	34.0	82.0	313.0	199.0
Sulphide (mg/L)		<0.05	<0.05	<0.05	<0.05	<0.05
Total Suspended Solids (mg/L)		77	372	277500	191	3458
Total Organic Carbon (mg/L)		9.2	16.1	US	9.2	6.3

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0956

ANALYSIS OF WATER SAMPLES

Date rec'd : 5/2/2002
Our Ref. : 358-129
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 20/2/2002

DETERMINAND	CLIENT ID. depth(m) LAB ID.	WEBH1A 272916	MW04 2.18 272917	MW07 2.01 272918	MW10 1.67 272919	MW11 1.90 272920
BTEX (HS)/GCMS (µg/L)						
Benzene		<1	343	96	6	<1
Toluene		2	10	57	2	1
Ethylbenzene		<1	44	8	<1	<1
m/p-Xylenes		<1	53	57	<1	<1
o-Xylenes		<1	72	30	<1	<1
Speciated Phenols/HPLC (µg/L)						
Phenol		<0.5	25.6	187	0.5	1.7
Cresols		<0.5	<0.5	1154	<0.5	2.6
Xylenols & Ethylphenols		<0.5	2.4	719	<0.5	0.9
Naphthols		<0.5	<0.5	<70	<0.5	<0.5
Trimethylphenols		<0.5	4.8	117	1.6	<0.5
Total Phenols		<2.5	32.7	2177	<2.5	5.2
Target PAH's (WHO 6) (ng/L)						
Benz(b)fluoranthene		29	1100	1000	3.9	<1.0
Benz(k)fluoranthene		16	530	410	1.7	<1.0
Benz(a)pyrene		22	1200	930	4.5	<1.0
Benzo(g,h,i)perylene		27	910	900	3.8	<1.0
Fluoranthene		16	10000	1800	30	3.4
Indeno(1,2,3,c,d)pyrene		24	530	590	2.0	<1.0

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0956

Robertson

Date rec'd : 5/2/2002
Our Ref. : 358-129
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 20/2/2002

Additional comments (I)

Sample Lab Id. 272916 Determinand BTEX (HS)/GCMS
Hydrocarbon interferences

Sample Lab Id. 272917 Determinand BTEX (HS)/GCMS
Hydrocarbon interferences

Sample Lab Id. 272918 Determinand Speciated Phenols/HPLC Naphthols
Limit of detection raised due to dilution factor

UKAS TESTING
0956

Robertson

Date rec'd : 5/2/2002
Our Ref. : 358~129
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 20/2/2002

DETERMINAND	TECHNIQUE	METHOD REFERENCE
Total Organic Carbon	Oxidation/IR	In house
Total Suspended Solids	Gravimetry	SMEWW 2540 D
Zinc	Direct aspiration/ICP	ELSA/54 **

** Denotes Robertson Laboratories UKAS Accredited Method
Tests not marked with this double asterisk are not included in the UKAS Accreditation Schedule for our laboratory
++ Denotes Subcontracted Analysis
Opinions and interpretations expressed herein are outside the scope of UKAS accrediat on
All analysis carried out on 'as received' sample, except where otherwise indicated
# Denotes analysis carried out on sample oven-dried at 40°C for 16 hours minimum and then passed through a 2mm sieve – asbestos analysis is carried out on the dried sample prior to sieving .Where asbestos present all analysis is carried out on 'as received' sample
Asbestos determination is a qualitative method. Percentages are based on a visual estimate and are outside the scope of accreditation

Abbreviations :

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ADAS	Agricultural Developement and Advistory Service
SMEWW	Standard Methods for the Examination of Water and Wastewater
US	Sample was unsuitable for analysis
IS	Insufficient sample to carry out analysis
NI	No Asbestos Identified
NA	Not Applicable
NR	Not Recognised

UKAS TESTING
0956

Robertson

CERTIFICATE OF ANALYSIS

Date :	26/2/2002	Date rec'd :	9/2/2002
Certificate No :	16092	Our Ref :	358-131
Your Ref :	EN2498 Banbury Gas Works		

For the attention of :

Patrick Kirkby
Waterman Environmental
Calthorpe House
30 Hag'ley Road
Edgebaston
Birmingham
B16 8QY

[redacted]

Janet Hunt,
LABORATORY MANAGER

Robertson Laboratories, Llandudno, North Wales LL30 1SA, United Kingdom
Telephone 01492 581811 Facsimile 01492 592030

UKAS TESTING
0956

ANALYSIS OF WATER SAMPLES

Date rec'd : 9/2/2002
Our Ref. : 358-131
Your Ref. : EN2499 Banbury Gas Works
Cert Date : 26/2/2002

DETERMINAND	CLIENT ID. / LAB ID.	MW11 273120	MW10 273121	MW07 273122	MW04 273123	WEBH1 273124
pH		7.1	7.1	7.7	7.1	6.9
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		<0.08	0.13	<0.08	0.24	<0.08
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		<0.01	<0.01	<0.01	<0.01	0.04
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Ammonia as NH_4 (mg/L)		102	39.7	72.0	27.9	0.3
Chloride (mg/L)		32	17	38	37	135
Total Cyanide (mg/L)		<0.05	0.26	<0.05	<0.05	<0.05
Free Cyanide (mg/L)		<0.05	<0.05	<0.05	<0.05	<0.05
Complex Cyanide (mg/L)		<0.05	0.26	<0.05	<0.05	<0.05
Thiocyanate (mg/L)		<0.50	0.62	2.1	<0.50	<0.50
Electrical Conductivity (µS/cm)		1464	1284	1566	1091	1544
Nitrate (mg/L)		1.7	<1.0	<1.0	<1.0	12
Nitrite (mg/L)		1	<0.50	<0.50	<0.50	0.70
Sulphate (mg/L)		167.0	351.0	93.0	26.0	216.0
Sulphide (mg/L)		<0.05	<0.05	<0.05	<0.05	<0.05
Total Suspended Solids (mg/L)		2474	139	1228	111	75
Total Organic Carbon (mg/L)		6.2	9.5	19.6	17.5	9.0
BTEX (HS)/GCMS (µg/L)						
Benzene		1	9	17	423	<1
Toluene		<1	<1	11	14	<1
Ethylbenzene		<1	<1	3	62	<1
m/p-Xylenes		<1	<1	8	56	<1
o-Xylenes		<1	<1	5	65	<1

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0956

ANALYSIS OF WATER SAMPLES

Date rec'd : 9/2/2002
Our Ref. : 358-131
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 26/2/2002

DETERMINAND / CLIENT ID. / LAB ID.	MW11 273120	MW10 273121	MW07 273122	MW04 273123	WEBH1 273124
Speciated Phenols/HPLC (µg/L)					
Phenol	1.4	1.0	-	11.8	<0.5
Cresols	5.3	1.4	-	2.3	<0.5
Xylenols & Ethylphenols	2.0	0.8	-	6.1	<0.5
Naphthols	<0.5	<0.5	-	<0.5	<0.5
Trimethylphenols	<0.5	<0.5	-	13.6	<0.5
Total Phenols	8.7	3.2	-	33.5	<2.5
Target PAH's (WHO 6) (ng/L)					
Benz(b)fluoranthene	1.20	<1.00	-	98.00	2.00
Benz(k)fluoranthene	<1.00	<1.00	-	44.00	1.00
Benz(a)pyrene	<1.00	<1.00	-	120.00	1.90
Benzo(g,h,i)perylene	<1.00	<1.00	-	86.00	2.80
Fluoranthene	6.80	<2.00	-	1400.00	34.00
Indeno(1,2,3,c,d)pyrene	<1.00	<1.00	-	56.00	<1.00
Target PAHs (GC-FID/GC-MS) (µg/L)					
Naphthalene	-	-	<1.0	-	-
Acenaphthylene	-	-	<1.0	-	-
Acenaphthene	-	-	<1.0	-	-
Fluorene	-	-	<1.0	-	-
Phenanthrene	-	-	<1.0	-	-
Anthracene	-	-	<1.0	-	-
Fluoranthene	-	-	<1.0	-	-
Pyrene	-	-	<1.0	-	-
Benz(a)anthracene	-	-	<1.0	-	-
Chrysene	-	-	<1.0	-	-
Benz(b)fluoranthene	-	-	<1.0	-	-
Benz(k)fluoranthene	-	-	<1.0	-	-
Benz(a)pyrene	-	-	<1.0	-	-
Indeno(1,2,3,c,d)pyrene	-	-	<1.0	-	-
Dibenz(a,h)anthracene	-	-	<1.0	-	-
Benzo(g,h,i)perylene	-	-	<1.0	-	-

Please see comments following results.
QA data not reported.
A list of test methods and procedures used are appended. The material analysed above was not sampled at source by Robertson.

UKAS TESTING
0956

Robertson

Date rec'd : 9/2/2002
Our Ref. : 358-131
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 26/2/2002

DETERMINAND	TECHNIQUE	METHOD REFERENCE
Water Samples		
Ammonia as NH_4	Flow injection analysis/colorimetry	MEWAM Book 48 Method D
Arsenic	Direct aspiration/ICP	ELSA/54 **
BTEX (HS)/GCMS	Headspace GC-MS	ELSA/48 **
Cadmium	Direct aspiration/ICP	ELSA/54 **
Chloride	Ion chromatography	ELS/009
Chromium	Direct aspiration/ICP	ELSA/54 **
Complex Cyanide	Calculation by difference	ELSA/33 **
Copper	Direct aspiration/ICP	ELSA/54 **
Electrical Conductivity	Electrometry	MEWAM Book 14
Free Cyanide	Distillation/colorimetry	ELSA/33 **
Iron	Direct aspiration/ICP	ELSA/54 **
Lead	Direct aspiration/ICP	ELSA/54 **
Mercury	Direct aspiration/Cold vapour/Atomic fluorescence	ELSA/42 **
Nickel	Direct aspiration/ICP	ELSA/54 **
Nitrate	Ion chromatography	ELS/009
Nitrite	Ion chromatography	ELS/009
pH	Hydrogen ion selective electrode	ELS/001 **
Selenium	Direct aspiration/ICP	ELSA/54 **
Speciated Phenols/HPLC	Large volume extraction/HPLC	In house
Sulphate	Ion chromatography	ELS/009
Sulphide	Flow Injection Analysis	In house
Target PAH's (WHO 6)	Cyclohexane extraction/HPLC with flourescence detection	
Target PAHs (GC-FID/GC-MS)	DCM extraction/GC-MS	ELSA/47 **
Target Phenols (GC/MS)	DCM extraction/GC-MS	ELSA/47 **

UKAS TESTING
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Robertson

Date rec'd : 9/2/2002
Our Ref. : 358-131
Your Ref. : EN2498 Banbury Gas Works
Cert Date : 26/2/2002

DETERMINAND	TECHNIQUE	METHOD REFERENCE
Thiocyanate	Colorimetry	ELSA/34 **
Total Cyanide	Distillation/colorimetry	ELSA/33 **
Total Organic Carbon	Oxidation/IR	In house
Total Suspended Solids	Gravimetry	SMEWW 2540 D
Zinc	Direct aspiration/ICP	ELSA/54 **

** Denotes Robertson Laboratories UKAS Accredited Method
Tests not marked with this double asterisk are not included in the UKAS Accreditation Schedule for our laboratory
++ Denotes Subcontracted Analysis
Opinions and interpretations expressed herein are outside the scope of UKAS accrediation
All analysis carried out on 'as received' sample, except where otherwise indicated
# Denotes analysis carried out on sample oven-dried at 40°C for 16 hours minimum and then passed through a 2mm sieve - asbestos analysis is carried out on the dried sample prior to sieving .Where asbestos present all analysis is carried out on 'as received' sample
Asbestos determination is a qualitative method. Percentages are based on a visual estimate and are outsice the scope of accreditation

Abbreviations :

MEWAM	Methods for the Examination of Water and Asscciated Material
ADAS	Agricultural Developement and Advistory Service
SMEWW	Standard Methods for the Examination of Water and Wastewater

US	Sample was unsuitable for analysis
IS	Insufficient sample to carry out analysis
NI	No Asbestos Identified
NA	Not Applicable
NR	Not Recognised

UKAS TESTING
0956

Date rec'd : 9/2/2002
Our Ref. : 359-'31
Your Ref. : EN2498 Banbury Gas Works
Rep Date : 25/2/2002

ANALYSIS OF WATER SAMPLES

DETERMINAND	CLIENT ID. / LAB ID.	MW11 273120	MW10 273121	MW07 273122	MW04 273123	WEBH1 273124
[illegible]		7.*	7.1	7.7	7.1	6.9
Arsenic (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium (mg/L)		<0.004	<0.004	<0.004	<0.004	<0.004
Chromium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Copper (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Iron (mg/L)		<0.08	0.13	<0.08	0.24	<0.08
Lead (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (mg/L)		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel (mg/L)		<0.01	<0.01	<0.01	<0.01	0.04
Selenium (mg/L)		<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (mg/L)		<0.02	<0.02	<0.02	<0.02	<0.02
Ammonia as NH_4 (mg/L)		102	39.7	72.0	27.9	0.3
Chloride (mg/L)		32	17	38	37	135
Complex Cyanide (mg/L)		<0.05	0.26	<0.05	<0.05	<0.05
Electrical Conductivity (µS/cm)		1464	1284	1566	1091	1544
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nitrate (mg/L)		1.7	<1.0	<1.0	<1.0	12
Nitrite (mg/L)		1	<0.50	<0.50	<0.50	0.70
Sulphate (mg/L)		167.0	351.0	93.0	26.0	216.0
Sulphide (mg/L)		<0.05	<0.05	<0.05	<0.05	<0.05
Thiocyanate (mg/L)		<0.50	0.62	2.1	<0.50	<0.50
Total Cyanide (mg/L)		<0.05	0.26	<0.05	<0.05	<0.05
Total Suspended Solids (mg/L)		2474	139	1228	111	75
Total Organic Carbon (mg/L)		6.2	9.5	19.6	17.5	9.0
BTEX (HS)/GCMS (µg/L)						
Benzene		1	9	17	425	<1
Toluene		<1	<1	11	14	<1
Ethylbenzene		<1	<1	3	62	<1
m/p-Xylenes		<1	<1	8	56	<1
o-Xylenes		<1	<1	5	65	<1
Speciated Phenols/HPLC (µg/L)						
Phenol		1.4	1.0	-	11.6	<0.5
Cresols		5.3	1.4	-	2.3	<0.5
Xylenols & Ethylphenols		2.0	0.8	-	0.1	<0.5
Naphthols		<0.5	<0.5	-	<0.5	<0.5
Trimethylphenols		<0.5	<0.5	-	13.6	<0.5
Total Phenols		8.7	3.2	-	33.5	<2.5
Target PAH's (WHO 6) (ng/L)						
Benz(b)fluoranthene		1.20	<1.00	-	28.00	2.00
Benz(k)fluoranthene		<1.00	<1.00	-	44.00	1.00
Benz(a)pyrene		<1.00	<1.00	-	120.00	1.90
Benzo(g,h,i)perylene		<1.00	<1.00	-	86.00	2.80
Fluoranthene		6.80	<2.00	-	1400.00	34.00
Indeno(1,2,3,c,d)pyrene		<1.00	<1.00	-	56.00	<1.00

Please see comments following results.
'-' Data not reported.

ite rec'd : 9/2/2002
ur Ref. : 358-131
ur Ref. : EN2498 Banbury Gas Works
re Date : 25/2/2002

NALYSIS OF WATER SAMPLES

ETERMINAND	CLIENT ID. / LAB ID.	MW11 273120	MW10 273121	MW07 273122	MW04 273123	WEBH1 273124
ul et PAHs (GC-FID/GC-MS) (µg/L)						
Naphthalene		-	-	<1.0	-	-
A enaphthylene		-	-	<1.0	-	-
A enaphthene		-	-	<1.0	-	-
Fluorene		-	-	<1.0	-	-
Phenanthrene		-	-	<1.0	-	-
A thracene		-	-	<1.0	-	-
Fluoranthene		-	-	<1.0	-	-
Pyrene		-	-	<1.0	-	-
B nz(a)anthracene		-	-	<1.0	-	-
Chrysene		-	-	<1.0	-	-
Benz(b)fluoranthene		-	-	<1.0	-	-
B nz(k)fluoranthene		-	-	<1.0	-	-
Benz(a)pyrene		-	-	<1.0	-	-
Indeno(1,2,3,c,d)pyrene		-	-	<1.0	-	-
D benz(a,h)anthracene		-	-	<1.0	-	-
Benzo(g,h,i)perylene		-	-	<1.0	-	-
[illegible] Phenols (GC/MS) (µg/L)						
2, -Dimethylphenol				[illegible]		
3,4-Dimethylphenol		-	-	<1	-	-
4 Ethylphenol		-	-	<1	-	-
2 Methylphenol		-	-	<1	-	-
3,4-Methylphenol		-	-	<1	-	-
2,3,5-Trimethylphenol		-	-	<1	-	-
2 Chlorophenol		-	-	<1	-	-
2 -Dimethylphenol		-	-	<1	-	-
2-Nitrophenol		-	-	<1	-	-
4 Nitrophenol		-	-	<1	-	-
4 Chloro,3-methylphenol		-	-	<1	-	-
2,4,6-Trichlorophenol		-	-	<1	-	-
2,4,5-Trichlorophenol		-	-	<1	-	-
2, -Dichlorophenol		-	-	<1	-	-
2,5-Dichlorophenol		-	-	<1	-	-
2,3-Dichlorophenol		-	-	<1	-	-
2, -Dichlorophenol		-	-	<1	-	-
3,4-Dichlorophenol		-	-	<1	-	-
2,4,6-Trimethylphenol		-	-	<1	-	-
2, 6-Trimethylphenol		-	-	<1	-	-
Pentachlorophenol		-	-	<1	-	-

s See comments following results.
Data not reported.