APPENDIX D

GROUND GAS MONITORING DATA

GAS MONITORING RESULTS

Job Number:	06/3908/9		Site Name:	Foulstone & Wombwell School, Barnsley

	VISIT NUMBER	1	2	3	4	5	6	7	8	9	10
	DATE	28/09/06	04/10/06	12/10/06	18/10/06	26/10/06	30/10/06				
BH	ATMOSPHERIC PRESSURE (mB)	999	1003	1014	999	1003	1002				
	AIR TEMPERATURE (^{O}C)	20	15	15	16	15	12				
	CLOUD COVER	Light	Nil	Light	Light	Overcast	Overcast				
	WIND VELOCITY (MPH)	Moderate	Nil	Light	Light	Light	Light				
	PRECIPITATION	Nil	Nil	Nil	Nil	Nil	Nil				
	STATE OF GROUND	Dry	Damp	Dry	Damp	Damp	Damp				
1	CH_4 (%)	Nil	Nil	Nil	Nil	Nil	Nil				
	CO_2 (%)	0.9	5.1	0.3	5.7	2.3	3.1				
	O_2 (%)	18.4	7.0	20.2	4.0	15.5	14.2				
	H_2S (p.p.m.)	Nil	Nil	Nil	Nil	Nil	Nil				
	CO (p.p.m.)	Nil	Nil	Nil	Nil	Nil	Nil				
	FLOW (l/hr)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
	STANDING WATER LEVEL (m)	Dry	Dry	Dry	Dry	Dry	Dry				
3	CH_4 (%)	Nil	Nil	Nil	Nil	Nil	Nil				
	CO_2 (%)	0.1	1.1	Nil	3.0	0.5	0.7				
	O_2 (%)	20.4	19.3	20.5	17.7	19.9	19.4				
	H_2S (p.p.m.)	Nil	Nil	Nil	Nil	Nil	Nil				
	CO (p.p.m.)	Nil	Nil	Nil	Nil	Nil	Nil				
	FLOW (l/hr)	<0.1	<0.1	0.1	<0.1	<0.1	<0.1				
	STANDING WATER LEVEL (m)	Dry	Dry	Dry	Dry	Dry	Dry				
5	CH_4 (%)	Nil	Nil	Nil	Nil	Nil	Nil				
	CO_2 (%)	Nil	0.1	2.0	2.2	2.0	2.1				
	O_2 (%)	20.5	20.3	18.3	17.1	18.5	17.8				
	H_2S (p.p.m.)	Nil	Nil	Nil	Nil	Nil	Nil				
	CO (p.p.m.)	Nil	Nil	Nil	Nil	Nil	Nil				
	FLOW (l/hr)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
	STANDING WATER LEVEL (m)	Dry	Dry	Dry	Dry	Dry	Dry				
6	CH_4 (%)	Nil	Nil	Nil	Nil	Nil	Nil				
	CO_2 (%)	4.6	0.1	0.3	0.5	0.4	0.3				
	O_2 (%)	17.1	20.2	20.1	20.0	20.0	20.1				
	H_2S (p.p.m.)	Nil	Nil	Nil	Nil	Nil	Nil				
	CO (p.p.m.)	Nil	Nil	Nil	Nil	Nil	Nil				
	FLOW (l/hr)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
	STANDING WATER LEVEL (m)	Dry	Dry	Dry	Dry	Dry	Dry				

INSTRUMENT: GAS DATA LMSxi GAS ANALYSER

Test Date and Conditions	
Date	22/3/2006
Atmospheric Pressure	1003 - Bar
Ambient Temp	17°C

GAS DATA LTD
Pegasus House
Seven Stars Estate
Wheler Rd
Coventry
CV3 4LB
Tel 02476303311 Fax 02476307711

LMS FINAL INSPECTION & CALIBRATION CERTIFICATE

INSTRUMENT DETAILS			
Serial No	5105	CUSTOMER	CC GEOTECHNICAL
S/W Version	4.19a - LTBxV		

INSTRUMENT CHECKS			
Keyboard	✓	Clock Set / Running	✓
Pump In/Out	✓	Labels Fitted	✓
Display Contrast	✓	Recalibration Due	27/01/2007

GASES					
CH4		CO2		O2	
Test %	Reading %	Test %	Reading %	Test %	Reading
0 accept +/- 0.1	0	0 accept +/- 0.1	0	0 accept +/- 0.1	0
5 accept 4.9-5.1	5.0	10 accept 9.8-10.2	10.0	21 accept 20.5-21.2	20.9
50 accept 48.0-52.0	50.0	40 accept 37.0-45.0	40.0		
Environics Serial No : 3268					

PRESSURES			
Absolute/Relative		Differential	
Atmos accept current +/-1	1003	0.0	
Atmos + 50 mbar accept current +48-+52	1054	+30 mbar accept 29.5-30.5	
Atmos - 50 mbar accept current -48--52	954	-30 mbar accept -29.5--30.5	

TEMPERATURE	
Applied °C	Reading °C
0 accept -0.1-+0.1	0
25 accept 24.5-25.5	25.0
40 accept 37.5-40.5	40.0

OPTIONS					
Borehole Flow (See other sheet)	X	LEL	✓	Temp Probe (see above)	X
Extraction Flow	X			Toxic Gasses (see other sheet)	✓

PACKING						
Charger	UK ✓	US ✓	Euro ✓	Sample Pipe	Standard ✓	Flow ✓
Manual	✓			Serial Cable	✓	
Leather Bag	✓			Software	✓	
Tap	✓			Cal Certificate	✓	

Tested .....[redacted].....

Approved .....[redacted].....

Test Date and Conditions	
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(OPTIONS)

INSTRUMENT DETAILS			
Serial No	5105	CUSTOMER	CC GEOTECHNICAL
S/W Version	G4.19a - LTBXV		

Toxic Gasses

Gas Type	Range	Tested @	Reading
H_2S	0-200 ppm	100 ppm	100 ppm
CO	0-1000 ppm	1000 ppm	1000 ppm

Cross Gas Effects

Applied gas		Readings			
Type	Concentration	Toxic 1: H_2S	Toxic 2: CO	Toxic 3:	Toxic 4:
H_2S	100 ppm	100 ppm	0 ppm		
CO	1000 ppm	90 ppm	1000 ppm		

Flow Tests - Low Range Option

Target Flow	-5 L/Hr	0 L/Hr	5 L/Hr	10 L/Hr	20 L/Hr
Applied					
Flow Reading	accept applied +/-0.5	accept applied +/-0.0	accept applied +/-0.5	accept applied +/-0.7	accept applied +/-1.0
dp Applied (Pa)		0			
dp Reading (Pa)	accept applied +/-5	accept applied +/-0.0	accept applied +/-5	accept applied +/-10	accept applied +/-20

Flow Tests - High Range Option

Target Flow	-30 L/Hr	0 L/Hr	30 L/Hr	60 L/Hr	180 L/Hr
Applied					
Flow Reading	accept applied +/-3.0	accept applied +/-0.0	accept applied +/-3.0	accept applied +/-4.0	accept applied +/-15
dp Applied (Pa)		0			
dp Reading (Pa)	accept applied +/-15	accept applied +/-0.0	accept applied +/-15	accept applied +/-50	accept applied +/-200

Tested [redacted] Approved [redacted]