

Figure 3
Atmospheric Pressure Trends During Ground Gas Monitoring Events

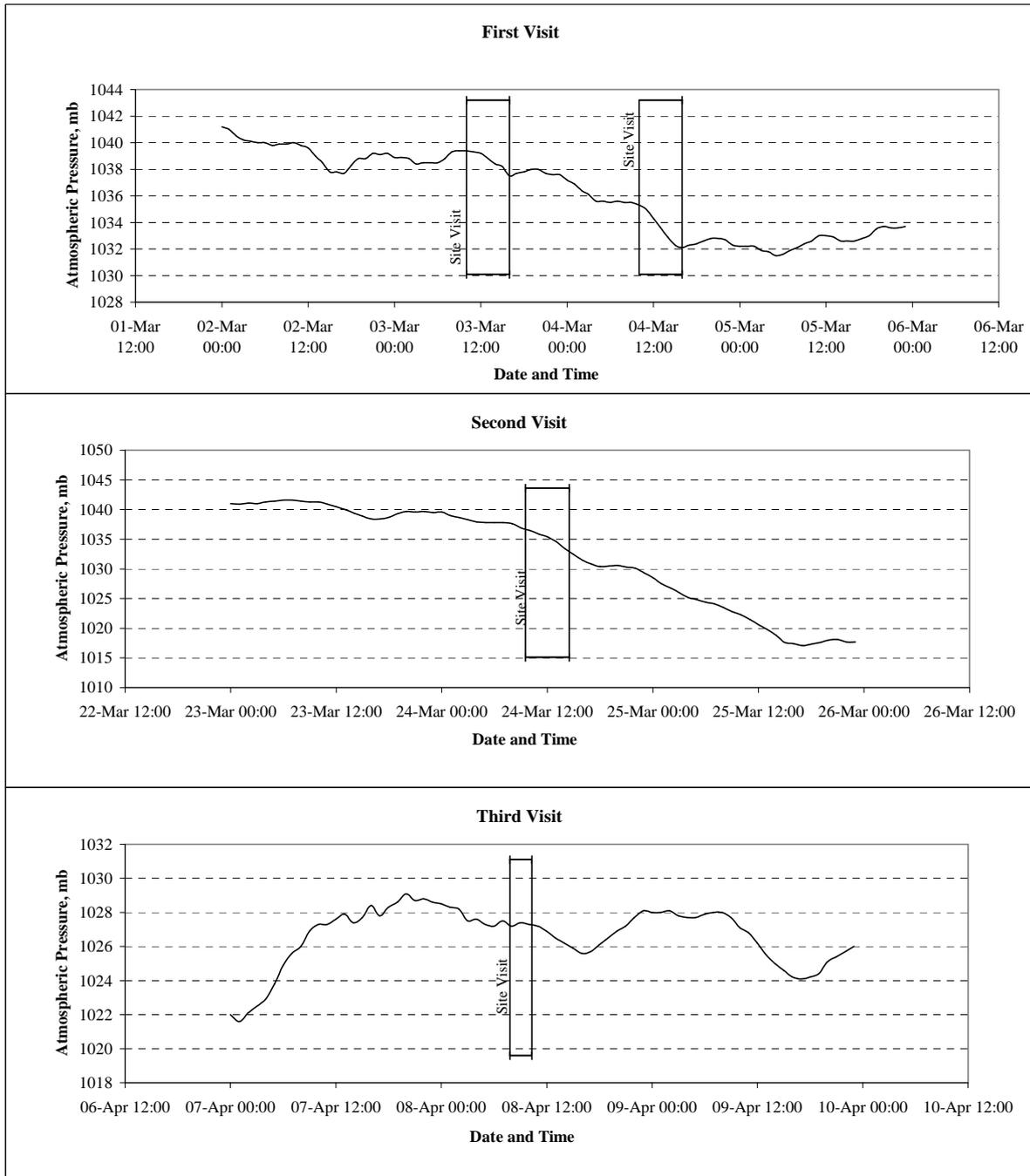
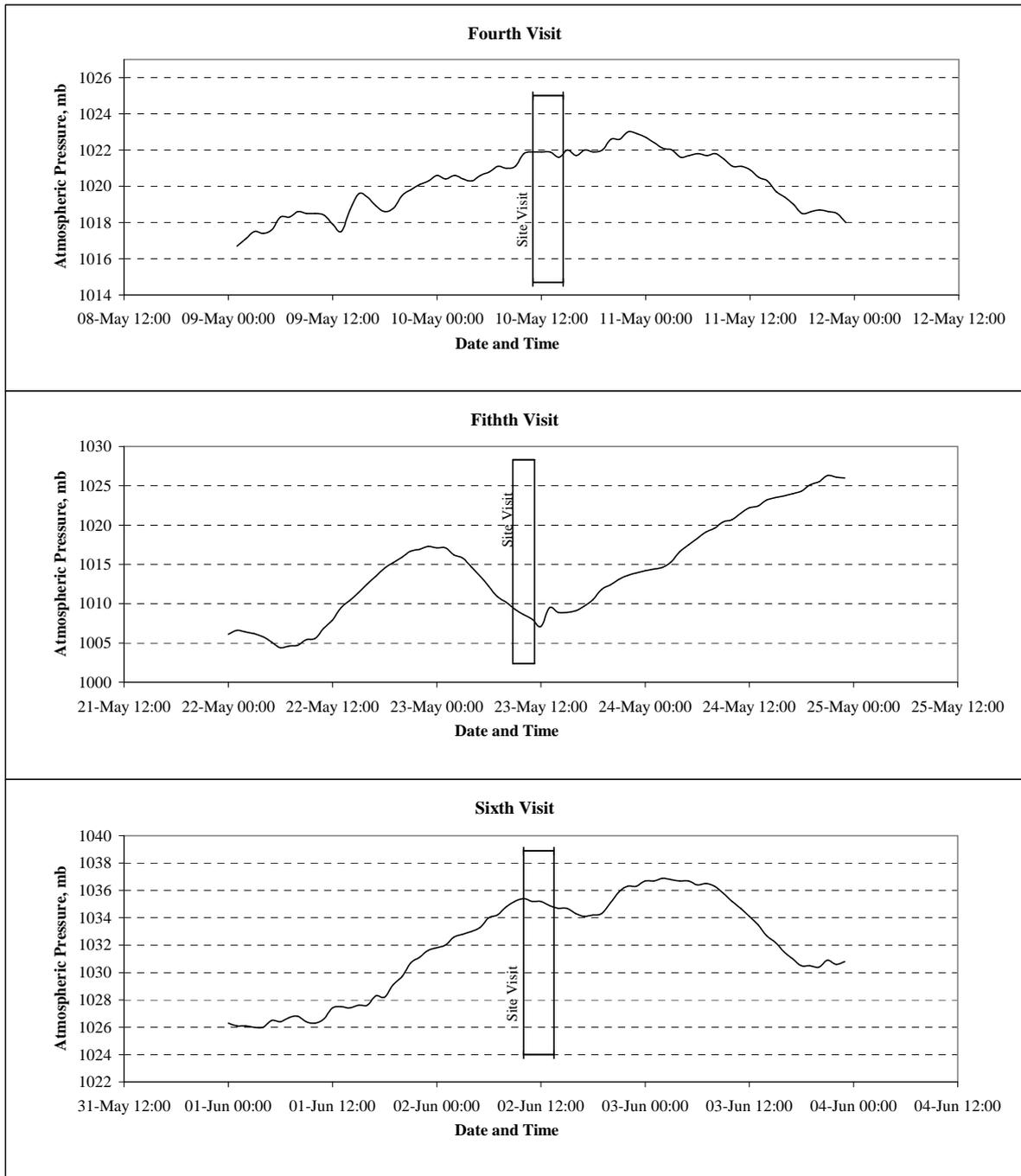


Figure 3
Atmospheric Pressure Trends During Ground Gas Monitoring Events



APPENDICES

Appendix A
Legislative Context and Regulatory Guidance

APPENDIX A Regulatory and Legislative Context

Land contamination is generally dealt with by the following types of regulation:

- Acts of Parliament to investigate and remedy harm caused by land contamination;
- Conditions placed upon Planning Permissions for the redevelopment of land; and,
- Acts of Parliament and Regulations for the control of waste.

In England land contamination is identified and dealt with through Acts / Regulations including:

- [The Contaminated Land \(England\) Regulations \(2006\)](#);
- [Part IIA of the Environmental Protection Act \(1990\)](#);
- [The Environment Act 1995](#);
- [The Town and Country Planning Act \(1990\)](#);
- [The Environmental Permitting \(England and Wales\) Regulations \(2007\)](#);
- [The Water Resources Act \(1991\)](#);
- [The Water Act \(2003\)](#);
- [The Environmental Damage \(Prevention and Remediation\) Regulations 2009](#); and,
- [The Groundwater \(England and Wales\) Regulations \(2009\)](#).

Part IIA of the Environmental Protection Act 1990

Part IIA of the Environmental Protection Act 1990 (which was inserted by Section 57 of the Environment Act 1995) created a regime for the identification and remediation of contaminated land. Section 78A(2) of the Environmental Protection Act 1990 defines contaminated land for the purposes of Part IIA as:

‘any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that;
(a) significant harm is being caused or there is a significant possibility of such harm being caused; or
(b) pollution of controlled waters is being, or is likely to be caused.’¹

Harm is defined under section 78A of the Environmental Protection Act as meaning ‘harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property’. Types of harm are related to specific receptors in order to determine whether they can be regarded as “significant”, as defined in Table A of Annex 3 of the DEFRA (2006)² statutory guidance.

Part IIA sets the definition of contaminated land within the context of the ‘suitable for use’ approach. The legal definition of contaminated land is also discussed within Statutory Guidance released by DEFRA (2008)³.

The government has recognised the following objectives with regard to contaminated land for England (DEFRA, 2006):

- *to identify and remove unacceptable risks to human health and the environment from contaminated land,*
- *to reduce the pressure on green field land and to encourage the reuse of land that may*

¹ Definition to be amended to “significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused” under the Water Act 2003

² [Environmental Protection Act 1990: Part 2A. Contaminated Land. DEFRA Circular 01/2006](#)

³ [Guidance on the legal definition of contaminated land. DEFRA July 2008](#)

- have been subject to potentially contaminative uses, and*
- *to seek to ensure a proportionate, manageable and economically sustainable approach to the cost burdens faced by individuals, companies and society as a whole.'*

The 'suitable for use' approach underlies these objectives, and is based on the principles of risk assessment, including the concept of the 'pollutant linkage'.

In the event that there are unacceptable levels of risk posed by a site, a remediation notice can be served under the contaminated land regime introduced under Part IIA of the Environmental Protection Act 1990.

Regulation of Development on Land Affected by Contamination

Management of risks from contamination in development of land is also regulated in the England under the Town and Country Planning Act 1990. Land contamination is a material planning consideration within this planning regime. The Local Planning Authority may impose conditions on the development during planning that include preliminary risk assessment, site investigation, risk assessment and remediation. The Environment Agency may use its role as a statutory consultee to provide the Local Planning Authority with advice.

Assessment of risk is again based on the pollutant linkage concept. The aim of risk management in the development should be to render the land suitable for the proposed use and, therefore, to prevent consideration of the site under Part IIA.

ODPM Planning Policy Statement 23 (PPS23): Planning and Pollution Control and its Annex 2: Development on Land Affected by Contamination provides guidance on the relationship between development and the management of risks from land contamination caused by historical use. The Building Regulations 2000, made under the Building Act 1984, also require measures to be taken to protect new buildings and their occupants from the effects of contamination. Guidance on the requirements is provided in Approved Document C - Site preparation and resistance to contaminants and moisture, published by ODPM in 2004.

Voluntary Remediation Action

Voluntary remediation action on contamination resulting from historical activities can often anticipate future remediation requirements, such as through the Planning regime, and is encouraged (DEFRA, 2006), especially where the site is not being assessed under Part IIA.

Environmental Damage

The Environmental Damage (Prevention and Remediation) Regulations 2009 came into force on 1st March 2009 to implement EC Directive 2004/35 on environmental liability with regard to the prevention and remedying of environmental damage.

These Regulations do not apply retrospectively; environmental damage that took place before the Regulations came into force (1st March 2009), or damage that takes place (or is likely to take place) after that date but is caused by an incident, event or emission that occurred before that date are exempt from the requirements of the Regulations.

The Regulation is concerned with preventing environmental damage. It requires that all operators of activities that cause an imminent threat of environmental damage to take all reasonably practical steps to prevent the damage. Where damage has already been caused, the operator must take all reasonably practical steps to prevent further damage from occurring.

Non-statutory regulatory technical guidance documents

The non-statutory regulatory technical guidance for England on the assessment of land contamination, primarily released as part of the Contaminated Land Exposure Assessment (CLEA) methodology (DEFRA and EA) has recently been updated. The following documents currently present guiding principles in investigating and assessing potentially contaminated land, which are generally adopted in considering sites within any of the legal frameworks discussed above, or when considering voluntary remediation action:

- *Investigation of potentially contaminated sites – Code of Practice* (British Standard 10175: 2011).
- *Contaminated Land Report CLR11 Model Procedures for the Management of Land Contamination.* (DEFRA and EA, 2004).
- *Human health toxicological assessment of contaminants in soil* Environment Agency Science Report SC050021/SR2 (EA, 2009)
- *Updated technical background to the CLEA model* Environment Agency Science Report SC050021/SR3 (EA, 2009)
- *Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values* Environment Agency Science Report SC050021/SR7 (EA, 2008)
- *An ecological risk assessment framework for contaminants in soil.* Environment Agency Science Report SC070009/SR1 and related reports S2a-e
- *Groundwater Protection: Policy and Practice*, Environment Agency GP3 Parts 1-4
- *Remedial Targets Methodology: Hydrogeological Risk Assessment for Land Contamination* (EA of England and Wales, 2006) developed in consultation with the Scottish Environment Protection Agency (SEPA) and the Northern Ireland Heritage and Environment Service.
- *Assessing risks posed by hazardous ground gases to buildings* Report C665 (CIRIA, 2007)
- *BS 8485:2007 Code of practice for the characterization and remediation from ground gas in affected developments*(British Standards Institution, 2007)
- *Risk Based Corrective Action (RBCA) Methodology* (ASTM designation E1739-95, E2081-00).
- *DoE Industry Profiles*

Appendix B
Proposed Redevelopment Plans

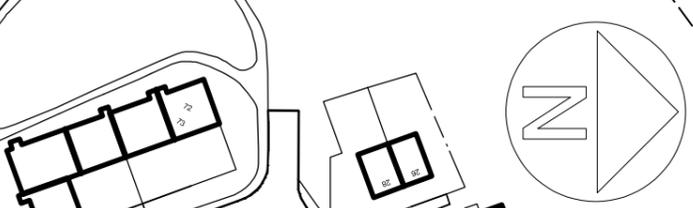
Bizmaker Limited
Forge Lane, Dewsbury
Masterplan

West + Macheil

Existing trees retained

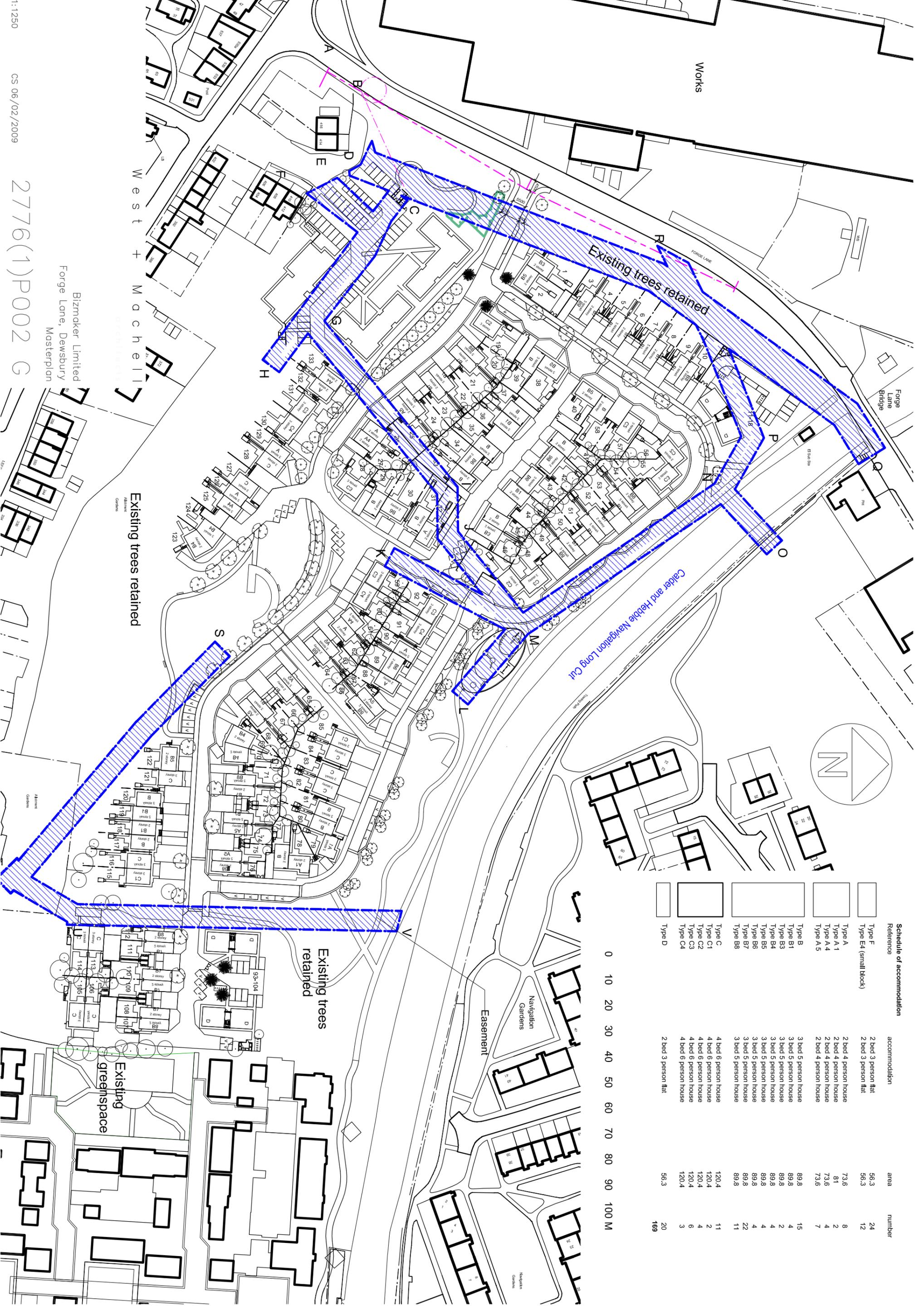
Existing trees retained

Existing greenspace



Reference	Schedule of accommodation	area	number
Type F	2 bed 3 person flat	56.3	24
Type E4 (small block)	2 bed 3 person flat	56.3	12
Type A	2 bed 4 person house	73.6	8
Type A 1	2 bed 4 person house	81	2
Type A 4	2 bed 4 person house	73.6	4
Type A 5	2 bed 4 person house	73.6	7
Type B	3 bed 5 person house	89.8	15
Type B 1	3 bed 5 person house	89.8	4
Type B 3	3 bed 5 person house	89.8	2
Type B 4	3 bed 5 person house	89.8	2
Type B 5	3 bed 5 person house	89.8	4
Type B 6	3 bed 5 person house	89.8	4
Type B 7	3 bed 5 person house	89.8	22
Type B 8	3 bed 5 person house	89.8	11
Type C	4 bed 6 person house	120.4	11
Type C 1	4 bed 6 person house	120.4	2
Type C 2	4 bed 6 person house	120.4	4
Type C 3	4 bed 6 person house	120.4	6
Type C 4	4 bed 6 person house	120.4	3
Type D	2 bed 3 person flat	56.3	20
			169

0 10 20 30 40 50 60 70 80 90 100 M



Appendix C
Gas Monitoring Results – ARCADIS 2010-2011

Gas Monitoring Data - 2nd-4th March 2011

Location	Time	Date	Depth to Water (mbgl) from top of casing	Height of casing above surrounding ground level	Depth To Water (m bgl)	Borehole elevation (mASD)	Groundwater elevation (mASD)	Depth to Base (mbgl)	Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO	H ₂ S	Gas Flow Rate		Gas Screening Values* (l/hr)		Remarks	
											Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)			Peak (ppm)	Peak (ppm)	Peak (l/hr)	Steady (l/hr)		Methane
BH5*	15:30	03.03.11	1.762	0.00	1.762	38.514	36.752	6.67	1033	-0.31	<1	<1	<0.1	<0.1	0.2	0.1	20.6	20.7	<1	<1	<0.1	<0.1	<0.01	<0.01		
BH5A*	16:39	04.03.11	4.153	0.00	4.153	40.323	36.170	8.18	1028	-0.27	<1	<1	<0.1	<0.1	0.1	0.1	21.0	21.0	<1	<1	<0.1	<0.1	<0.01	<0.01		
CP101	12:43	02.03.11	-	-	-	38.118	-	-	1036	-0.41	<1	<1	<0.1	<0.1	0.1	0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01		
CP102	16:20	03.03.11	1.763	0.47	1.293	38.151	36.858	7.17	1033	-0.34	<1	<1	<0.1	<0.1	0.1	<0.1	20.9	21.0	<1	<1	<0.1	<0.1	<0.01	<0.01		
CP103	10:49	04.03.11	1.453	0.39	1.063	38.026	36.963	8.74	1031	-0.38	<1	<1	<0.1	<0.1	<0.1	<0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01		
CP104	10:16	03.03.11	2.129	0.30	1.829	38.848	37.019	7.95	1036	-0.50	<1	<1	<0.1	<0.1	<0.1	<0.1	20.5	20.5	1	<1	<0.1	<0.1	<0.01	<0.01		
WS101	16:02	04.03.11	1.929	0.47	1.459	38.280	36.821	2.46	1028	-0.28	<1	<1	<0.1	<0.1	0.3	0.3	20.4	20.4	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS102	16:12	04.03.11	2.284	0.52	1.764	38.734	36.970	2.50	1028	-0.33	<1	<1	<0.1	<0.1	1.4	1.4	19.4	19.4	<1	<1	<0.1	<0.1	<0.01	0.01		
WS103	16:19	04.03.11	2.545	0.53	2.015	38.650	36.635	4.67	1028	-0.33	<1	<1	<0.1	<0.1	1.9	1.9	19.1	19.1	<1	<1	0.5	<0.1	<0.01	0.02		
WS104	14:28	04.03.11	1.662	0.42	1.242	38.000	36.758	1.81	1029	-0.28	<1	<1	<0.1	<0.1	1.0	1.0	19.2	19.2	<1	<1	1.0	1.0	<0.01	0.01		
WS105	16:58	04.03.11	2.006	0.51	1.496	38.412	36.916	3.29	1028	-0.27	1	1	0.1	0.1	0.7	0.6	19.7	19.7	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS106	15:08	03.03.11	1.707	0.05	1.657	38.346	36.689	2.37	1034	-0.30	<1	<1	<0.1	<0.1	2.1	2.1	18.1	18.1	1	<1	<0.1	<0.1	<0.01	0.02		
WS107	14:07	03.03.11	2.312	0.51	1.802	38.526	36.724	3.47	1034	-0.32	<1	<1	<0.1	<0.1	0.8	0.8	19.2	19.2	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS108	12:59	04.03.11	1.094	0.12	0.974	37.857	36.883	2.60	1030	-0.28	<1	<1	<0.1	<0.1	0.3	0.3	19.8	19.8	8	<1	<0.1	<0.1	<0.01	<0.01		
WS109	12:00	04.03.11	1.414	0.54	0.874	37.844	36.970	4.33	1031	-0.33	<1	<1	<0.1	<0.1	0.3	0.2	20.5	20.5	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS110	12:08	02.03.11	0.809	0.14	0.669	37.768	37.099	2.70	1035	-0.34	<1	<1	<0.1	<0.1	0.5	0.5	20.2	20.2	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS111	13:32	02.03.11	0.662	0.14	0.522	37.581	37.059	1.66	1035	-0.32	<1	<1	<0.1	<0.1	0.4	0.4	20.0	20.0	4	<1	<0.1	<0.1	<0.01	<0.01		
WS112	UTR	-	-	0.00	-	37.283	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS113	16:32	04.03.11	DRY	0.12	Dry	40.956	Dry	4.57	1028	-0.27	<1	<1	<0.1	<0.1	0.4	0.4	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS114	12:39	03.03.11	2.896	0.10	2.796	38.612	35.816	3.87	1035	-0.38	<1	<1	<0.1	<0.1	0.7	0.2	20.1	20.1	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS115	13:04	02.03.11	3.015	0.53	2.485	39.517	37.032	4.36	1034	-0.32	<1	<1	<0.1	<0.1	1.5	1.5	18.5	18.5	3	<1	-0.1	<0.1	<0.01	0.02		
WS116	10:57	03.03.11	1.627	0.56	1.067	38.099	37.032	2.88	1036	-0.47	<1	<1	<0.1	<0.1	1.0	1.0	19.4	19.4	<1	<1	<0.1	<0.1	<0.01	0.01		
WS117	09:33	03.03.11	2.322	0.52	1.802	38.869	37.067	3.15	1036	-0.53	<1	<1	<0.1	<0.1	1.3	1.3	18.5	18.5	<1	<1	<0.1	<0.1	<0.01	0.01		
WS118	10:33	04.03.11	DRY	0.56	Dry	38.391	Dry	1.96	1031	-0.42	<1	<1	<0.1	<0.1	1.2	0.4	19.6	20.1	1	<1	<0.1	<0.1	<0.01	0.01	CO2 did not stabilise. Readings fluctuated	
WS119	09:30	04.03.11	2.168	0.56	1.608	38.638	37.030	4.05	1031	-0.44	<1	<1	<0.1	<0.1	2.1	2.1	19.0	19.1	<1	<1	<0.1	<0.1	<0.01	0.02		
WS120	08:50	04.03.11	2.543	0.47	2.073	39.758	37.685	3.04	1032	-0.44	<1	<1	<0.1	<0.1	4.3	4.3	14.0	14.1	<1	<1	<0.1	<0.1	<0.01	0.04		

Notes:

* Monitoring well installed as part of Exploration Associates Investigations

mbgl metres below ground level

mAOD metres above ordnance datum

mb millibar

Gas Monitoring Data - 24th March 2011

Location	Time	Date	Depth to Water (mbgl) from top of casing	Height of casing above surrounding ground level	Depth To Water (m bgl)	Borehole elevation (mASD)	Groundwater elevation (mASD)	Depth to Base (mbgl)	Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO		H ₂ S		Gas Flow Rate		Gas Screening Values* (l/hr)		Remarks
											Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)	Peak (ppm)	Peak (ppm)	Peak (l/hr)	Steady (l/hr)	Methane	Carbon-dioxide			
BH5*	14.10	24/03/2011	1.897	0.00	1.897	38.514	36.617	6.67	1030	0.10	<1	<1	<0.1	<0.1	<0.1	<0.1	20.6	20.7	<1	<1	<0.1	<0.1	<0.01	<0.01			
BH2*	14.16	24/03/2011	1.939	0.10	1.839	38.727	36.888	8.67	1030	0.11	<1	<1	<0.1	<0.1	<0.1	<0.1	20.9	20.9	<1	<1	<0.1	<0.1	<0.01	<0.01			1" pipe - no bung or gas tap
BH15*	14.25	24/03/2011	4.873	0.12	4.753	41.410	36.657	11.15	1030	0.12	1	1	0.1	0.1	1.4	1.4	19.3	19.3	<1	<1	<0.1	<0.1	<0.01	<0.01			2" pipe - no bung or gas tap
BH5A*	10.56	24/03/2011	4.174	0.00	4.174	40.323	36.149	8.18	1032	-0.03	<1	<1	<0.1	<0.1	<0.1	<0.1	20.2	20.2	<1	<1	<0.1	<0.1	<0.01	<0.01			Vandalised - Bung & gas tap not in place before taking gas reading
CP101	14.02	24/03/2011	1.678	0.39	1.288	38.118	36.83	-	1030	0.10	<1	<1	<0.1	<0.1	<0.1	<0.1	20.7	20.7	2	<1	<0.1	<0.1	<0.01	<0.01			
CP102	10.16	24/03/2011	1.876	0.47	1.406	38.151	36.745	7.17	1033	-0.23	<1	<1	<0.1	<0.1	0.1	0.1	19.9	19.9	<1	<1	<0.1	<0.1	<0.01	<0.01			
CP103	13.23	24/03/2011	1.539	0.39	1.149	38.026	36.877	8.74	1030	0.09	<1	<1	<0.1	<0.1	<0.1	<0.1	20.7	20.7	3	<1	<0.1	<0.1	<0.01	<0.01			Vandalised - Bung & gas tap missing. Lid missing from casing
CP104	12.31	24/03/2011	2.256	0.30	1.956	38.848	36.892	7.95	1031	0.15	<1	<1	<0.1	<0.1	<0.1	<0.1	20.7	20.7	<1	<1	<0.1	<0.1	<0.01	<0.01			
WS101	10.01	24/03/2011	1.654	0.00	1.654	38.280	36.626	2.46	1033	-0.28	<1	<1	<0.1	<0.1	0.3	0.3	19.5	19.5	<1	<1	<0.1	<0.1	<0.01	<0.01			Vandalised - Casing removed. DTW measured from top of pipe ~ groundlevel.
WS102	10.35	24/03/2011	1.970	0.00	1.970	38.734	36.764	2.50	1033	-0.13	<1	<1	<0.1	<0.1	3.4	3.3	15.6	15.7	1	<1	<0.1	<0.1	<0.01	0.01			Vandalised - Gas tap missing - bung in place - Casing removed. DTW measured form top of pipe ~ groundlevel
WS103	10.43	24/03/2011	2.847	0.53	2.317	38.650	36.333	4.67	1033	-0.08	<1	<1	<0.1	<0.1	2.7	2.7	17.3	17.3	<1	<1	0.1	0.1	<0.01	<0.01			
WS104	9.40	24/03/2011	DRY	0.00	-	38.000	-	1.40	1033	-0.32	<1	<1	<0.1	<0.1	0.8	0.7	19.2	19.2	<1	<1	<0.1	<0.1	<0.01	<0.01			Vandalised - Top of gas tap missing so open to air - casing removed. DTW measured form top of pipe ~ groundlevel.
WS105	9.30	24/03/2011	2.128	0.51	1.618	38.412	36.794	3.29	1033	-0.38	<1	<1	<0.1	<0.1	1.1	1.1	19.0	19.0	<1	<1	<0.1	<0.1	<0.01	<0.01			
WS106	11.09	24/03/2011	1.815	0.05	1.765	38.346	36.581	2.37	1032	0.00	<1	<1	<0.1	<0.1	2.0	2.0	18.2	18.2	<1	<1	<0.1	<0.1	<0.01	<0.01			
WS107	11.03	24/03/2011	2.424	0.51	1.914	38.526	36.612	3.47	1032	-0.03	<1	<1	<0.1	<0.1	0.8	0.8	18.7	18.7	<1	<1	<0.1	<0.1	<0.01	<0.01			
WS108	13.37	24/03/2011	1.207	0.12	1.087	37.857	36.77	2.60	1030	0.11	<1	<1	<0.1	<0.1	0.6	0.6	19.5	19.5	<1	<1	<0.1	<0.1	<0.01	<0.01			
WS109	13.28	24/03/2011	1.152	0.12	1.032	37.844	36.812	4.33	1030	0.10	<1	<1	<0.1	<0.1	<0.1	<0.1	20.7	20.7	<1	<1	<0.1	<0.1	<0.01	<0.01			Vandalised - Bung & gas tap missing - casing removed. DTW measured form top of pipe ~ 12cm above groundlevel
WS110	11.25	24/03/2011	0.942	0.14	0.802	37.768	36.966	2.70	1032	0.07	1	1	0.1	0.1	0.6	0.6	19.5	19.5	<1	<1	0.1	0.1	<0.01	<0.01			
WS111	11.34	24/03/2011	0.789	0.14	0.649	37.581	36.932	1.66	1032	-0.89	1	1	0.1	0.1	0.2	0.2	19.9	19.9	2	<1	-10.1	-7.9	<0.01	<0.01			
WS112	11.47	24/03/2011	0.442	0.00	0.442	37.283	36.841	-	1031	0.08	1	1	0.1	0.1	0.9	0.9	19.6	19.6	<1	<1	0.1	0.1	<0.01	<0.01			Bottom part of gas tap missing.
WS113	10.51	24/03/2011	DRY	0.00	-	40.956	-	4.57	1032	-0.07	<1	<1	<0.1	<0.1	0.4	0.3	19.6	19.6	<1	<1	<0.1	<0.1	<0.01	<0.01			Vandalised - concrete broken - casing can be lifted out. DTW measured form top of pipe ~ groundlevel.
WS114	12.06	24/03/2011	2.123	0.10	2.023	38.612	36.589	3.87	1031	0.13	<1	<1	<0.1	<0.1	0.1	0.1	20.3	20.3	<1	<1	<0.1	<0.1	<0.01	<0.01			
WS115	11.55	24/03/2011	3.133	0.53	2.603	39.517	36.914	4.36	1031	0.09	1	1	0.1	0.1	1.8	1.8	17.1	17.1	1	<1	0.3	0.1	<0.01	<0.01			
WS116	12.16	24/03/2011	1.428	0.15	1.278	38.099	36.821	2.88	1031	0.15	<1	<1	<0.1	<0.1	0.6	0.6	19.8	19.8	<1	<1	<0.1	<0.1	<0.01	<0.01			Vandalised - bung and gas tap not in place before taking readings. DTW measured form top of pipe ~ 15cm above
WS117	12.23	24/03/2011	2.455	0.52	1.935	38.869	36.934	3.15	1031	0.18	<1	<1	<0.1	<0.1	1.3	1.3	18.5	18.5	<1	<1	<0.1	<0.1	<0.01	<0.01			
WS118	12.46	24/03/2011	DRY	0.56	-	38.391	-	1.91	1031	0.15	<1	<1	<0.1	<0.1	0.3	0.3	20.2	20.2	2	<1	<0.1	<0.1	<0.01	<0.01			
WS119	13.54	24/03/2011	2.293	0.56	1.733	38.638	36.905	4.05	1030	0.11	<1	<1	<0.1	<0.1	2.8	2.2	14.3	15.6	<1	<1	<0.1	<0.1	<0.01	<0.01			
WS120	13.43	24/03/2011	2.727	0.47	2.257	39.758	37.501	3.04	1030	0.11	<1	<1	<0.1	<0.1	4.6	4.6	7.5	7.5	<1	<1	<0.1	<0.1	<0.01	0.01			Vandalised - concrete broken - casing can be lifted out.

Notes: * Monitoring well installed as part of Exploration Associates Investigations
 mbgl metres below ground level
 mAOD metres above ordnance datum
 mb millibar

Gas Monitoring Data - 8th April 2011

Location	Time	Date	Depth to Water (mbgl)	Borehole elevation (mASD)	Groundwater elevation (mASD)	Depth to Base (mbgl)	Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO (ppm)	H ₂ S (ppm)	Gas Flow Rate		Gas Screening Values* (l/hr)		Remarks	
									Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)			Peak (l/hr)	Steady (l/hr)	Methane	Carbon-dioxide		
									BH5*	08:40	08/04/2011	1.999	38.514	36.515	6.700	1024			-0.14	<1	<1	<0.1		<0.1
BH2*	07:55	08/04/2011	1.830	38.727	36.897	2.590	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1" pipe - no bung or gas tap
BH15*	07:58	08/04/2011	4.815	41.410	36.595	10.490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2" pipe, no bung or gas tap
BH5A*	08:21	08/04/2011	4.259	40.323	36.064	8.150	1024	-0.20	<1	<1	<0.1	<0.1	0.1	0.1	20.7	20.8	<1	<1	<0.1	<0.1	<0.01	<0.01		
CP101	09:20	08/04/2011	1.519	38.118	36.599	7.680	1024	-0.09	<1	<1	<0.1	<0.1	<0.1	<0.1	20.8	20.8	<1	<1	<0.1	<0.1	<0.01	<0.01		
CP102	08:30	08/04/2011	1.543	38.151	36.608	6.700	1024	-0.27	<1	<1	<0.1	<0.1	<0.1	<0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01		
CP103	08:45	08/04/2011	1.266	38.026	36.760	9.300	1024	-0.14	<1	<1	<0.1	<0.1	<0.1	<0.1	20.9	20.9	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - Bung & gas tap missing.	
CP104	09:00	08/04/2011	2.078	38.848	36.770	7.700	1024	-0.13	<1	<1	<0.1	<0.1	<0.1	<0.1	20.8	20.8	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS101	08:04	08/04/2011	1.700	38.280	36.580	2.000	1024	-0.27	<1	<1	<0.1	<0.1	0.2	0.2	20.8	20.8	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS102	08:13	08/04/2011	2.000	38.734	36.734	2.060	1024	-0.26	<1	<1	<0.1	<0.1	3.8	3.8	16.4	16.4	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - Bung & gas tap missing.	
WS103	08:18	08/04/2011	2.293	38.650	36.357	4.100	1024	-0.24	<1	<1	<0.1	<0.1	3.3	3.3	18.3	18.3	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS104	08:08	08/04/2011	Dry	38.000	-	1.400	1024	-0.26	<1	<1	<0.1	<0.1	0.3	0.3	20.8	20.8	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS105	08:00	08/04/2011	1.720	38.412	36.692	2.720	1024	-0.20	<1	<1	<0.1	<0.1	0.7	0.4	20.0	20.4	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - Bung & gas tap missing.	
WS106	08:35	08/04/2011	1.842	38.346	36.504	2.300	1024	-0.23	<1	<1	<0.1	<0.1	1.1	1.1	19.7	19.7	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS107	08:25	08/04/2011	2.000	38.526	36.526	2.930	1024	-0.21	<1	<1	<0.1	<0.1	0.9	0.9	20.0	20.0	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS108	09:30	08/04/2011	1.184	37.857	36.673	2.430	1024	-0.41	<1	<1	<0.1	<0.1	1.2	1.2	19.4	19.4	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS109	09:12	08/04/2011	1.154	37.844	36.690	3.900	1024	-0.10	<1	<1	<0.1	<0.1	<0.1	<0.1	20.7	20.7	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - Bung & gas tap missing.	
WS110	10:10	08/04/2011	0.980	37.768	36.788	2.520	1024	0.02	<1	<1	<0.1	<0.1	4.8	4.8	16.0	16.0	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS111	10:03	08/04/2011	0.769	37.581	36.812	2.500	1024	-4.55	<1	<1	<0.1	<0.1	0.7	0.7	18.9	18.9	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS112	10:20	08/04/2011	0.555	37.283	36.728	2.100	1024	0.05	<1	<1	<0.1	<0.1	0.9	0.3	20.0	20.3	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS113	08:18	08/04/2011	Dry	40.956	-	4.400	1024	-0.24	<1	<1	<0.1	<0.1	0.1	0.1	20.7	20.7	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - Bung & gas tap missing.	
WS114	09:50	08/04/2011	1.570	38.612	37.042	3.700	1024	-0.03	<1	<1	<0.1	<0.1	0.1	0.1	20.5	20.5	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS115	09:56	08/04/2011	2.780	39.517	36.737	3.780	1024	-0.01	<1	<1	<0.1	<0.1	2.4	2.4	16.7	16.7	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS116	08:55	08/04/2011	1.467	38.099	36.632	2.240	1024	-0.13	<1	<1	<0.1	<0.1	0.7	0.7	20.4	20.4	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS117	09:05	08/04/2011	2.100	38.869	36.769	2.670	1024	-0.10	<1	<1	<0.1	<0.1	1.1	1.1	19.9	19.9	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS118	08:50	08/04/2011	Dry	38.391	-	1.450	1024	-0.13	<1	<1	<0.1	<0.1	1.2	1.2	20.0	20.0	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS119	09:40	08/04/2011	1.943	38.638	36.695	3.470	1024	-0.05	<1	<1	<0.1	<0.1	2.2	1.6	16.4	17.8	<1	<1	<0.1	<0.1	<0.01	<0.01		
WS120	09:35	08/04/2011	2.678	39.758	37.080	2.850	1024	-0.07	<1	<1	<0.1	<0.1	3.1	3.1	14.0	14.0	<1	<1	<0.1	<0.1	<0.01	<0.01		

Notes:

- * Monitoring well installed as part of Exploration Associates Investigations
- mbgl metres below ground level
- mAOD metres above ordnance datum
- mb millibar

Gas Monitoring Data - 10th May 2011

Location	Time	Date	Depth to Water (mbgl)	Borehole elevation (mASD)	Groundwater elevation (mASD)	Depth to Base (mbgl)	Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO (ppm)	H ₂ S (ppm)	Gas Flow Rate		Gas Screening Values* (l/hr)		Remarks
									Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)			Peak (l/hr)	Steady (l/hr)	Methane	Carbon-dioxide	
BH5*	12:14	10/05/2011	2.190	38.514	36.324	6.67	1021	0.18	3	3	0.2	0.2	3.0	3.0	16.7	16.7	<1	<1	<0.1	<0.1	<0.01	<0.01	
BH2*	14:15	10/05/2011	1.970	38.727	36.757	2.93	1018	0.02	<1	<1	<0.1	<0.1	<0.1	<0.1	20.2	20.2	<1	<1	<0.1	<0.1	<0.01	<0.01	1" pipe - no bung or gas tap
BH15*	14:05	10/05/2011	4.980	41.410	36.430	10.47	1018	0.02	1	1	0.1	0.1	1.0	1.0	19.2	19.2	<1	<1	<0.1	<0.1	<0.01	<0.01	
BH5A*	12:25	10/05/2011	4.283	40.323	36.040	8.13	1021	0.22	<1	<1	<0.1	<0.1	<0.1	<0.1	20.0	20.0	<1	<1	<0.1	<0.1	<0.01	<0.01	
CP101	13:14	10/05/2011	1.560	38.118	36.558	7.67	1021	0.76	<1	<1	<0.1	<0.1	<0.1	<0.1	20.4	20.4	<1	<1	<0.1	<0.1	<0.01	<0.01	
CP102	12:45	10/05/2011	1.695	38.151	36.456	6.69	1021	0.76	<1	<1	<0.1	<0.1	<0.1	<0.1	20.3	20.3	<1	<1	<0.1	<0.1	<0.01	<0.01	
CP103	11:54	10/05/2011	-	38.026	-	-	1021	0.00	5	5	0.3	0.3	0.3	0.3	18.5	18.5	<1	<1	<0.1	<0.1	<0.01	<0.01	
CP104	11:36	10/05/2011	2.222	38.848	36.626	7.61	1021	0.09	6	6	0.3	0.3	<0.1	<0.1	20.0	20.0	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - rock pushed into pipe, unable to remove bung for water readings.
WS101	14:17	10/05/2011	1.840	38.280	36.440	2.04	1018	0.18	<1	<1	<0.1	<0.1	0.7	0.7	19.1	19.1	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS102	12:40	10/05/2011	2.070	38.734	36.664	2.09	1021	0.22	<1	<1	<0.1	<0.1	3.4	3.4	17.1	17.1	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - Gas tap missing
WS103	12:35	10/05/2011	2.420	38.650	36.230	4.13	1021	0.22	<1	<1	<0.1	<0.1	3.2	3.2	17.3	17.3	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS104	14:20	10/05/2011	Dry	38.000	-	1.39	1018	0.18	1	<1	0.1	<0.1	1.5	1.5	18.8	18.8	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - bung pushed into pipe.
WS105	14:10	10/05/2011	1.905	38.412	36.507	2.72	1018	0.02	<1	<1	<0.1	<0.1	1.4	1.4	19.0	19.0	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS106	12:07	10/05/2011	1.980	38.346	36.366	2.27	1021	0.18	5	5	0.3	0.3	3.5	3.5	15.8	15.8	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS107	12:20	10/05/2011	2.168	38.526	36.358	2.96	1021	0.22	<1	<1	<0.1	<0.1	1.1	1.1	19.1	19.1	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS108	13:07	10/05/2011	1.323	37.857	36.534	2.43	1021	0.76	<1	<1	<0.1	<0.1	0.4	0.3	19.9	20.0	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS109	12:00	10/05/2011	1.255	37.844	36.589	3.78	1021	0.11	5	5	0.3	0.3	0.2	0.1	19.7	19.8	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS110	11:00	10/05/2011	1.100	37.768	36.668	2.50	1021	-0.02	7	7	0.4	0.4	3.9	3.9	17.5	17.5	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS111	11:04	10/05/2011	0.900	37.581	36.681	1.48	1021	-0.08	9	9	0.5	0.5	3.6	3.6	14.7	14.7	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS112	11:10	10/05/2011	0.650	37.283	36.633	2.05	1021	0.18	8	8	0.4	0.4	1.7	1.7	19.0	19.0	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS113	12:30	10/05/2011	Dry	40.956	-	4.40	1021	0.22	<1	<1	<0.1	<0.1	<0.1	<0.1	20.1	20.1	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS114	11:22	10/05/2011	1.539	38.612	37.073	3.59	1021	1.15	7	7	0.4	0.4	0.5	0.1	19.5	19.7	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS115	11:16	10/05/2011	2.832	39.517	36.685	3.73	1021	0.18	8	8	0.4	0.4	3.6	3.6	17.1	17.1	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS116	11:41	10/05/2011	1.520	38.099	36.579	2.23	1021	0.03	5	5	0.3	0.3	0.1	0.1	20.1	20.1	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS117	11:29	10/05/2011	2.240	38.869	36.629	2.61	1021	0.01	6	6	0.3	0.3	<0.1	<0.1	19.8	19.8	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS118	11:48	10/05/2011	Dry	38.391	-	1.37	1021	0.04	5	5	0.3	0.3	0.7	0.7	19.5	19.0	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS119	12:55	10/05/2011	2.085	38.638	36.553	3.51	1021	0.76	<1	<1	<0.1	<0.1	1.3	1.2	17.7	17.7	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS120	13:00	10/05/2011	2.712	39.758	37.046	2.85	1021	0.70	<1	<1	<0.1	<0.1	1.4	0.5	18.6	19.4	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised - No bung

Notes:
 * Monitoring well installed as part of Exploration Associates Investigations
 mbgl metres below ground level
 mAOD metres above ordnance datum
 mb millibar

Gas Monitoring Data - 23rd May 2011

Location	Time	Date	Depth to Water (mbgl)	Borehole elevation (mASD)	Groundwater elevation (mASD)	Depth to Base (mbgl)	Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO (ppm)	H ₂ S (ppm)	Gas Flow Rate		Gas Screening Values* (l/hr)		Remarks
									Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)			Peak (l/hr)	Steady (l/hr)	Methane	Carbon-dioxide	
BH5*	09:20	23/05/2011	2.170	38.514	36.344	6.69	1008	-0.13	1	<1	0.1	<0.1	3.6	3.6	17.1	17.1	<1	<1	<0.1	<0.1	<0.01	<0.01	
BH2*	11:15	23/05/2011	2.030	38.727	36.697	5.63	1008	0.01	1	1	0.1	0.1	<0.1	<0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01	1" pipe - no bung or gas tap
BH15*	11:25	23/05/2011	5.001	41.410	36.409	10.05	1008	0.00	1	1	0.1	0.1	1.0	1.0	19.8	19.8	<1	<1	<0.1	<0.1	<0.01	<0.01	
BH5A*	09:25	23/05/2011	4.329	40.323	35.994	8.11	1008	-0.14	1	1	0.1	0.1	<0.1	<0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
CP101	10:10	23/05/2011	1.630	38.118	36.488	7.7	1008	0.01	1	1	0.1	0.1	<0.1	<0.1	20.5	20.5	<1	<1	<0.1	<0.1	<0.01	<0.01	
CP102	10:02	23/05/2011	1.745	38.151	36.406	6.70	1008	-0.10	1	1	0.1	0.1	<0.1	<0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01	
CP103	10:30	23/05/2011	-	38.026	-	-	1008	-0.06	1	1	0.1	0.1	<0.1	<0.1	20.5	20.5	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
CP104	10:45	23/05/2011	2.340	38.848	36.508	7.59	1008	-0.10	1	1	0.1	0.1	<0.1	<0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS101	09:57	23/05/2011	1.900	38.280	36.380	2.02	1008	-0.10	1	1	0.1	0.1	0.9	0.2	20.0	20.0	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS102	09:50	23/05/2011	Dry	38.734	-	2.09	1008	-0.14	1	1	0.1	0.1	0.7	0.7	19.8	19.8	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS103	09:45	23/05/2011	2.476	38.650	36.174	4.16	1008	-0.10	1	1	0.1	0.1	4.1	4.1	17.0	17.0	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS104	10:07	23/05/2011	Dry	38.000	-	1.40	1008	-0.10	1	1	0.1	0.1	0.7	0.7	20.2	20.2	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS105	11:20	23/05/2011	1.916	38.412	36.496	2.70	1008	0.10	1	1	0.1	0.1	1.9	1.6	19.0	19.0	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS106	09:25	23/05/2011	2.043	38.346	36.303	2.30	1008	-0.10	1	<1	0.1	<0.1	3.6	3.6	17.1	17.1	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS107	09:30	23/05/2011	2.222	38.526	36.304	2.95	1008	-0.14	<1	<1	<0.1	<0.1	1.0	1.0	20.1	20.1	<1	<1	0.1	<0.1	<0.01	<0.01	
WS108	11:00	23/05/2011	1.453	37.857	36.404	2.50	1008	-0.06	1	1	0.1	0.1	1.1	0.4	18.5	19.6	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS109	10:15	23/05/2011	1.360	37.844	36.484	3.82	1008	-0.10	1	1	0.1	0.1	0.3	0.2	20.4	20.5	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS110	08:45	23/05/2011	1.160	37.768	36.608	2.54	1008	-0.20	<1	<1	<0.1	<0.1	1.2	1.2	20.0	20.0	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS111	08:50	23/05/2011	1.111	37.581	36.470	1.50	1008	-0.20	<1	<1	<0.1	<0.1	0.6	0.2	20.1	20.4	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS112	08:55	23/05/2011	0.770	37.283	36.513	2.00	1008	-0.20	<1	<1	<0.1	<0.1	0.2	0.1	20.3	20.4	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS113	09:40	23/05/2011	Dry	40.956	-	4.41	1008	-0.14	1	1	0.1	0.1	0.4	<0.1	20.2	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS114	09:15	23/05/2011	1.497	38.612	37.115	3.74	1008	-0.14	<1	<1	<0.1	<0.1	0.4	0.3	20.4	20.4	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS115	09:07	23/05/2011	2.952	39.517	36.565	3.83	1008	-0.14	<1	<1	<0.1	<0.1	3.0	3.0	18.1	18.1	<1	<1	0.1	<0.1	<0.01	<0.01	
WS116	10:50	23/05/2011	1.580	38.099	36.519	2.26	1008	-0.06	1	1	0.1	0.1	<0.1	<0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS117	10:35	23/05/2011	2.301	38.869	36.568	2.60	1008	-0.06	1	1	0.1	0.1	<0.1	<0.1	20.6	20.6	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised
WS118	10:25	23/05/2011	Dry	38.391	-	1.40	1008	-0.05	1	1	0.1	0.1	0.2	0.2	20.5	20.5	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS119	11:05	23/05/2011	2.087	38.638	36.551	3.46	1008	0.00	1	1	0.1	0.1	1.9	1.9	16.4	16.4	<1	<1	<0.1	<0.1	<0.01	<0.01	
WS120	11:10	23/05/2011	2.780	39.758	36.978	2.87	1008	0.00	1	1	0.1	0.1	2.7	2.7	16.0	19.5	<1	<1	<0.1	<0.1	<0.01	<0.01	Vandalised

Notes:

* Monitoring well installed as part of Exploration Associates Investigations

mbgl metres below ground level

mAOD metres above ordnance datum

mb millibar

Gas Monitoring Data - 2nd June 2011

Location	Date	Depth to Water (mbgl) from top of casing	Height of casing above surrounding ground level	Depth To Water (m bgl)	Borehole elevation (mASD)	Groundwater elevation (mASD)	Depth to Base (mbgl)	Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO		H ₂ S		Gas Flow Rate		Gas Screening Values* (l/hr)		Remarks			
										Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)	Peak (ppm)	Peak (ppm)	Peak (l/hr)	Steady (l/hr)	Methane	Carbon-dioxide						
BH5*	02/06/2011	2.190	0.00	2.19	38.514	36.324	6.7	1031	0.43	2	1	0.1	0.1	1.6	1.2	18.8	18.5	<1	<1	<0.1	<0.1	<0.01	<0.01						
BH2*	02/06/2011	2.340	0.10	2.24	38.727	36.487	6.02	1031	0.44	2	1	0.1	0.1	0.2	<1	20.3	20.3	<1	<1	<0.1	<0.1	<0.01	<0.01					1" pipe - no bung or gas tap	
BH15*	02/06/2011	-	0.12	-	41.410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2" pipe, no bung or gas tap	
BH5A*	02/06/2011	-	0.00	-	40.323	-	4.41	1031	0.47	1	1	0.1	0.1	0.3	0.4	19.9	19.5	<1	<1	<0.1	<0.1	<0.01	<0.01					Well dry. Vandalised - Bung & gas tap not in place before taking gas reading.	
CP101	02/06/2011	2.080	0.00	2.08	38.118	36.038	8.06	1031	0.50	1	1	0.1	0.1	<0.1	<0.1	20.0	19.9	<1	<1	<0.1	<0.1	<0.01	<0.01						
CP102	02/06/2011	2.200	0.47	1.73	38.151	36.421	7.11	1032	0.52	1	1	0.1	0.1	<0.1	<0.1	20.0	20.0	2	<1	<1	<0.1	<0.1	<0.01	<0.01					
CP103	02/06/2011	-	0.39	-	38.026	-	-	1032	0.46	1	1	0.1	0.1	<0.1	<0.1	20.2	20.2	<1	<1	<0.1	<0.1	<0.01	<0.01					Bung stuck in well Vandalised - gas tap missing. Lid missing from casing	
CP104	02/06/2011	2.680	0.30	2.38	38.848	36.468	7.91	1032	0.41	1	1	0.1	0.1	<0.1	<0.1	20.3	20.0	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS101	02/06/2011	2.010	0.00	2.01	38.280	36.270	2.10	1032	0.53	1	1	0.1	0.1	1.7	1.4	18.4	17.8	<1	<1	<0.1	<0.1	<0.01	<0.01					Vandalised - Casing removed. DTW measured from top of pipe ~ groundlevel.	
WS102	02/06/2011	-	0.00	-	38.734	-	-	1031	0.50	1	1	0.1	0.1	2.1	2.0	17.6	17.5	<1	<1	<0.1	<0.1	<0.01	<0.01					Vandalised - Gas tap missing - bung in place - Casing removed. Well blocked	
WS103	02/06/2011	2.910	0.53	2.38	38.650	36.270	4.54	1031	0.53	1	1	0.1	0.1	4.0	3.9	15.8	15.6	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS104	02/06/2011	Drv	0.00	Drv	38.000	Drv	-	1032	0.54	1	1	0.1	0.1	1.1	0.6	19.7	19.2	<1	<1	<0.1	<0.1	<0.01	<0.01					Vandalised - Top of gas tap missing so open to air - casing removed. well blocked. DTW measured form top of pipe ~ groundlevel.	
WS105	02/06/2011	2.550	0.51	2.04	38.412	36.372	3.27	1031	0.51	1	1	0.1	0.1	2.0	1.8	18.6	18.3	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS106	02/06/2011	2.120	0.05	2.07	38.346	36.276	2.31	1032	0.54	1	1	0.1	0.1	2.7	2.6	17.3	17.2	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS107	02/06/2011	2.720	0.51	2.21	38.526	36.316	3.41	1032	0.47	1	1	0.1	0.1	0.7	0.7	19.0	18.9	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS108	02/06/2011	1.680	0.12	1.56	37.857	36.297	2.53	1032	0.49	1	1	0.1	0.1	1.4	1.3	17.9	17.6	3	<1	<1	<0.1	<0.1	<0.01	<0.01					
WS109	02/06/2011	1.530	0.12	1.41	37.844	36.434	3.88	1032	0.52	1	1	0.1	0.1	0.5	0.4	19.7	19.3	1	<0	<1	<0.1	<0.1	<0.01	<0.01					Vandalised - Bung & gas tap missing - casing removed. DTW measured form top of pipe ~ 12cm above groundlevel
WS110	02/06/2011	1.280	0.14	1.14	37.768	36.628	2.52	1031	0.17	1	1	0.1	0.1	2.6	2.4	17.1	17.0	1	<0	<1	<0.1	<0.1	<0.01	<0.01					
WS111	02/06/2011	-	0.14	-	37.581	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS112	02/06/2011	0.820	0.00	0.82	37.283	36.463	2.02	1032	0.30	1	1	0.1	0.1	<0.1	<0.1	19.9	19.8	<1	<1	<0.1	<0.1	<0.01	<0.01					Bottom part of gas tap missing.	
WS113	02/06/2011	Drv	0.00	Drv	40.956	Drv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Vandalised - concrete broken - casing can be lifted out. DTW measured form top of pipe ~ groundlevel.
WS114	02/06/2011	1.480	0.10	1.38	38.612	37.232	3.70	1032	0.36	1	1	0.1	0.1	0.4	0.1	19.9	19.7	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS115	02/06/2011	3.570	0.53	3.04	39.517	36.477	4.29	1032	0.31	1	1	0.1	0.1	0.3	0.1	19.9	19.7	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS116	02/06/2011	1.840	0.15	1.69	38.099	36.409	2.42	1032	0.37	1	1	0.1	0.1	<0.1	<0.1	20.0	19.8	<1	<1	<0.1	<0.1	<0.01	<0.01					Vandalised - bung and gas tap not in place before taking readings. DTW measured form top of pipe ~ 15cm above groundlevel	
WS117	02/06/2011	2.920	0.52	2.40	38.869	36.469	3.15	1032	0.45	1	1	0.1	0.1	0.8	0.8	19.4	19.3	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS118	02/06/2011	Drv	0.56	Drv	38.391	Drv	1.89	1032	0.40	1	1	0.1	0.1	1.0	1.0	20.0	19.5	<1	<1	<0.1	<0.1	<0.01	<0.01					Well dry	
WS119	02/06/2011	2.700	0.56	2.14	38.638	36.498	3.96	1032	0.49	2	1	0.1	0.1	2.6	2.5	14.9	14.8	<1	<1	<0.1	<0.1	<0.01	<0.01						
WS120	02/06/2011	2.790	0.47	2.32	39.758	37.438	2.95	1032	0.49	1	1	0.1	0.1	1.6	1.5	17.7	17.4	<1	<1	<0.1	<0.1	<0.01	<0.01					Vandalised - concrete broken - casing can be lifted out.	

Notes:
 * Monitoring well installed as part of Exploration Associates Investigations
 mbgl metres below ground level
 mAOD metres above ordnance datum
 mb millibar

Appendix D
Atmospheric Pressure Data



Pressure data for Bingley, 14m

Date	Hour	Pressure (mb)
02-Mar-11	0	1041.2
02-Mar-11	1	1041
02-Mar-11	2	1040.5
02-Mar-11	3	1040.2
02-Mar-11	4	1040.1
02-Mar-11	5	1040
02-Mar-11	6	1040
02-Mar-11	7	1039.8
02-Mar-11	8	1039.9
02-Mar-11	9	1039.9
02-Mar-11	10	1040
02-Mar-11	11	1039.8
02-Mar-11	12	1039.6
02-Mar-11	13	1039
02-Mar-11	14	1038.5
02-Mar-11	15	1037.8
02-Mar-11	16	1037.8
02-Mar-11	17	1037.7
02-Mar-11	18	1038.3
02-Mar-11	19	1038.8
02-Mar-11	20	1038.8
02-Mar-11	21	1039.2
02-Mar-11	22	1039.1
02-Mar-11	23	1039.2
03-Mar-11	0	1038.9
03-Mar-11	1	1038.9
03-Mar-11	2	1038.8
03-Mar-11	3	1038.4
03-Mar-11	4	1038.5
03-Mar-11	5	1038.5
03-Mar-11	6	1038.5
03-Mar-11	7	1038.8
03-Mar-11	8	1039.3
03-Mar-11	9	1039.4
03-Mar-11	10	1039.4
03-Mar-11	11	1039.3
03-Mar-11	12	1039.2
03-Mar-11	13	1038.8
03-Mar-11	14	1038.4
03-Mar-11	15	1038.2
03-Mar-11	16	1037.5
03-Mar-11	17	1037.7
03-Mar-11	18	1037.8
03-Mar-11	19	1038
03-Mar-11	20	1038
03-Mar-11	21	1037.7
03-Mar-11	22	1037.6
03-Mar-11	23	1037.6
04-Mar-11	0	1037.2
04-Mar-11	1	1036.9
04-Mar-11	2	1036.4
04-Mar-11	3	1036.1
04-Mar-11	4	1035.6
04-Mar-11	5	1035.6
04-Mar-11	6	1035.5
04-Mar-11	7	1035.6
04-Mar-11	8	1035.5
04-Mar-11	9	1035.5
04-Mar-11	10	1035.3
04-Mar-11	11	1035
04-Mar-11	12	1034.3
04-Mar-11	13	1033.6
04-Mar-11	14	1032.9
04-Mar-11	15	1032.3
04-Mar-11	16	1032.1
04-Mar-11	17	1032.3
04-Mar-11	18	1032.4
04-Mar-11	19	1032.6
04-Mar-11	20	1032.8
04-Mar-11	21	1032.8
04-Mar-11	22	1032.7
04-Mar-11	23	1032.3
05-Mar-11	0	1032.2

Date	Hour	Pressure (mb)
23-Mar-11	0	1041
23-Mar-11	1	1040.9
23-Mar-11	2	1041.1
23-Mar-11	3	1041
23-Mar-11	4	1041.3
23-Mar-11	5	1041.4
23-Mar-11	6	1041.6
23-Mar-11	7	1041.6
23-Mar-11	8	1041.4
23-Mar-11	9	1041.3
23-Mar-11	10	1041.3
23-Mar-11	11	1040.9
23-Mar-11	12	1040.5
23-Mar-11	13	1040
23-Mar-11	14	1039.4
23-Mar-11	15	1038.9
23-Mar-11	16	1038.4
23-Mar-11	17	1038.4
23-Mar-11	18	1038.7
23-Mar-11	19	1039.3
23-Mar-11	20	1039.7
23-Mar-11	21	1039.6
23-Mar-11	22	1039.7
23-Mar-11	23	1039.5
24-Mar-11	0	1039.6
24-Mar-11	1	1039
24-Mar-11	2	1038.3
24-Mar-11	3	1038.3
24-Mar-11	4	1037.9
24-Mar-11	5	1037.8
24-Mar-11	6	1037.8
24-Mar-11	7	1037.8
24-Mar-11	8	1037.6
24-Mar-11	9	1036.9
24-Mar-11	10	1036.5
24-Mar-11	11	1035.9
24-Mar-11	12	1035.4
24-Mar-11	13	1034.6
24-Mar-11	14	1033.4
24-Mar-11	15	1032.4
24-Mar-11	16	1031.5
24-Mar-11	17	1030.8
24-Mar-11	18	1030.4
24-Mar-11	19	1030.5
24-Mar-11	20	1030.6
24-Mar-11	21	1030.3
24-Mar-11	22	1030.1
24-Mar-11	23	1029.3
25-Mar-11	0	1028.5
25-Mar-11	1	1027.5
25-Mar-11	2	1026.8
25-Mar-11	3	1026
25-Mar-11	4	1025.2
25-Mar-11	5	1024.8
25-Mar-11	6	1024.4
25-Mar-11	7	1024.1
25-Mar-11	8	1023.5
25-Mar-11	9	1022.8
25-Mar-11	10	1022.3
25-Mar-11	11	1021.5
25-Mar-11	12	1020.6
25-Mar-11	13	1019.8
25-Mar-11	14	1018.8
25-Mar-11	15	1017.6
25-Mar-11	16	1017.4
25-Mar-11	17	1017.1
25-Mar-11	18	1017.3
25-Mar-11	19	1017.6
25-Mar-11	20	1018
25-Mar-11	21	1018.1
25-Mar-11	22	1017.7
25-Mar-11	23	1017.7



Pressure data for Bingley, 14 m

Date	Hour	Pressure (mb)
07-Apr-11	0	1022
07-Apr-11	1	1021.6
07-Apr-11	2	1022.1
07-Apr-11	3	1022.5
07-Apr-11	4	1022.9
07-Apr-11	5	1023.8
07-Apr-11	6	1024.9
07-Apr-11	7	1025.6
07-Apr-11	8	1026
07-Apr-11	9	1026.9
07-Apr-11	10	1027.3
07-Apr-11	11	1027.3
07-Apr-11	12	1027.6
07-Apr-11	13	1027.9
07-Apr-11	14	1027.4
07-Apr-11	15	1027.7
07-Apr-11	16	1028.4
07-Apr-11	17	1027.8
07-Apr-11	18	1028.3
07-Apr-11	19	1028.6
07-Apr-11	20	1029.1
07-Apr-11	21	1028.7
07-Apr-11	22	1028.8
07-Apr-11	23	1028.6
08-Apr-11	0	1028.5
08-Apr-11	1	1028.3
08-Apr-11	2	1028.2
08-Apr-11	3	1027.5
08-Apr-11	4	1027.6
08-Apr-11	5	1027.3
08-Apr-11	6	1027.2
08-Apr-11	7	1027.5
08-Apr-11	8	1027.2
08-Apr-11	9	1027.4
08-Apr-11	10	1027.3
08-Apr-11	11	1027.2
08-Apr-11	12	1026.9
08-Apr-11	13	1026.5
08-Apr-11	14	1026.2
08-Apr-11	15	1025.9
08-Apr-11	16	1025.6
08-Apr-11	17	1025.7
08-Apr-11	18	1026.1
08-Apr-11	19	1026.5
08-Apr-11	20	1026.9
08-Apr-11	21	1027.2
08-Apr-11	22	1027.7
08-Apr-11	23	1028.1
09-Apr-11	0	1028
09-Apr-11	1	1028
09-Apr-11	2	1028.1
09-Apr-11	3	1027.8
09-Apr-11	4	1027.7
09-Apr-11	5	1027.7
09-Apr-11	6	1027.9
09-Apr-11	7	1028
09-Apr-11	8	1028
09-Apr-11	9	1027.7
09-Apr-11	10	1027.1
09-Apr-11	11	1026.8
09-Apr-11	12	1026.2
09-Apr-11	13	1025.5
09-Apr-11	14	1025
09-Apr-11	15	1024.6
09-Apr-11	16	1024.2
09-Apr-11	17	1024.1
09-Apr-11	18	1024.2
09-Apr-11	19	1024.4
09-Apr-11	20	1025.1
09-Apr-11	21	1025.4
09-Apr-11	22	1025.7
09-Apr-11	23	1026

Date	Hour	Pressure (mb)
09-May-11	0	1016.2
09-May-11	1	1016.7
09-May-11	2	1017
09-May-11	3	1017.5
09-May-11	4	1017.4
09-May-11	5	1017.6
09-May-11	6	1018.3
09-May-11	7	1018.3
09-May-11	8	1018.6
09-May-11	9	1018.5
09-May-11	10	1018.5
09-May-11	11	1018.4
09-May-11	12	1017.9
09-May-11	13	1017.5
09-May-11	14	1018.7
09-May-11	15	1019.6
09-May-11	16	1019.4
09-May-11	17	1018.9
09-May-11	18	1018.6
09-May-11	19	1018.8
09-May-11	20	1019.5
09-May-11	21	1019.8
09-May-11	22	1020.1
09-May-11	23	1020.3
10-May-11	0	1020.6
10-May-11	1	1020.4
10-May-11	2	1020.6
10-May-11	3	1020.4
10-May-11	4	1020.3
10-May-11	5	1020.6
10-May-11	6	1020.8
10-May-11	7	1021.1
10-May-11	8	1021
10-May-11	9	1021.1
10-May-11	10	1021.8
10-May-11	11	1021.9
10-May-11	12	1021.9
10-May-11	13	1021.9
10-May-11	14	1021.6
10-May-11	15	1022
10-May-11	16	1021.7
10-May-11	17	1022
10-May-11	18	1021.9
10-May-11	19	1022
10-May-11	20	1022.6
10-May-11	21	1022.6
10-May-11	22	1023
10-May-11	23	1022.9
11-May-11	0	1022.7
11-May-11	1	1022.4
11-May-11	2	1022.1
11-May-11	3	1022
11-May-11	4	1021.6
11-May-11	5	1021.7
11-May-11	6	1021.8
11-May-11	7	1021.7
11-May-11	8	1021.8
11-May-11	9	1021.5
11-May-11	10	1021.1
11-May-11	11	1021.1
11-May-11	12	1020.9
11-May-11	13	1020.5
11-May-11	14	1020.3
11-May-11	15	1019.7
11-May-11	16	1019.4
11-May-11	17	1019
11-May-11	18	1018.5
11-May-11	19	1018.6
11-May-11	20	1018.7
11-May-11	21	1018.6
11-May-11	22	1018.5
11-May-11	23	1018

Pressure data for Bingley, 14 m

Date	Hour	Pressure (mb)
22-May-11	0	1006.1
22-May-11	1	1006.6
22-May-11	2	1006.4
22-May-11	3	1006.2
22-May-11	4	1005.8
22-May-11	5	1005.1
22-May-11	6	1004.4
22-May-11	7	1004.6
22-May-11	8	1004.7
22-May-11	9	1005.4
22-May-11	10	1005.6
22-May-11	11	1006.9
22-May-11	12	1007.9
22-May-11	13	1009.5
22-May-11	14	1010.4
22-May-11	15	1011.4
22-May-11	16	1012.5
22-May-11	17	1013.5
22-May-11	18	1014.5
22-May-11	19	1015.2
22-May-11	20	1015.9
22-May-11	21	1016.7
22-May-11	22	1016.9
22-May-11	23	1017.3
23-May-11	0	1017.1
23-May-11	1	1017.1
23-May-11	2	1016.2
23-May-11	3	1015.8
23-May-11	4	1014.7
23-May-11	5	1013.5
23-May-11	6	1012.1
23-May-11	7	1010.9
23-May-11	8	1010.2
23-May-11	9	1009.3
23-May-11	10	1008.6
23-May-11	11	1008
23-May-11	12	1007.1
23-May-11	13	1009.5
23-May-11	14	1008.9
23-May-11	15	1008.9
23-May-11	16	1009.1
23-May-11	17	1009.7
23-May-11	18	1010.5
23-May-11	19	1011.8
23-May-11	20	1012.4
23-May-11	21	1013.1
23-May-11	22	1013.6
23-May-11	23	1013.9
24-May-11	0	1014.2
24-May-11	1	1014.4
24-May-11	2	1014.6
24-May-11	3	1015.3
24-May-11	4	1016.6
24-May-11	5	1017.5
24-May-11	6	1018.3
24-May-11	7	1019.1
24-May-11	8	1019.6
24-May-11	9	1020.4
24-May-11	10	1020.7
24-May-11	11	1021.5
24-May-11	12	1022.2
24-May-11	13	1022.4
24-May-11	14	1023.2
24-May-11	15	1023.5
24-May-11	16	1023.7
24-May-11	17	1024
24-May-11	18	1024.3
24-May-11	19	1025.1
24-May-11	20	1025.5
24-May-11	21	1026.3
24-May-11	22	1026.1
24-May-11	23	1026

Date	Hour	Pressure (mb)
01-Jun-11	0	1026.3
01-Jun-11	1	1026.1
01-Jun-11	2	1026.1
01-Jun-11	3	1026
01-Jun-11	4	1026
01-Jun-11	5	1026.5
01-Jun-11	6	1026.4
01-Jun-11	7	1026.7
01-Jun-11	8	1026.8
01-Jun-11	9	1026.4
01-Jun-11	10	1026.3
01-Jun-11	11	1026.6
01-Jun-11	12	1027.4
01-Jun-11	13	1027.5
01-Jun-11	14	1027.4
01-Jun-11	15	1027.6
01-Jun-11	16	1027.6
01-Jun-11	17	1028.3
01-Jun-11	18	1028.2
01-Jun-11	19	1029.1
01-Jun-11	20	1029.7
01-Jun-11	21	1030.7
01-Jun-11	22	1031.1
01-Jun-11	23	1031.6
02-Jun-11	0	1031.8
02-Jun-11	1	1032
02-Jun-11	2	1032.6
02-Jun-11	3	1032.8
02-Jun-11	4	1033
02-Jun-11	5	1033.3
02-Jun-11	6	1034
02-Jun-11	7	1034.2
02-Jun-11	8	1034.8
02-Jun-11	9	1035.2
02-Jun-11	10	1035.4
02-Jun-11	11	1035.2
02-Jun-11	12	1035.2
02-Jun-11	13	1034.9
02-Jun-11	14	1034.7
02-Jun-11	15	1034.7
02-Jun-11	16	1034.3
02-Jun-11	17	1034.1
02-Jun-11	18	1034.2
02-Jun-11	19	1034.3
02-Jun-11	20	1035.1
02-Jun-11	21	1035.9
02-Jun-11	22	1036.3
02-Jun-11	23	1036.3
03-Jun-11	0	1036.7
03-Jun-11	1	1036.7
03-Jun-11	2	1036.9
03-Jun-11	3	1036.8
03-Jun-11	4	1036.7
03-Jun-11	5	1036.7
03-Jun-11	6	1036.4
03-Jun-11	7	1036.5
03-Jun-11	8	1036.3
03-Jun-11	9	1035.8
03-Jun-11	10	1035.2
03-Jun-11	11	1034.7
03-Jun-11	12	1034.1
03-Jun-11	13	1033.5
03-Jun-11	14	1032.7
03-Jun-11	15	1032.2
03-Jun-11	16	1031.5
03-Jun-11	17	1031
03-Jun-11	18	1030.5
03-Jun-11	19	1030.5
03-Jun-11	20	1030.4
03-Jun-11	21	1030.9
03-Jun-11	22	1030.6
03-Jun-11	23	1030.8

Appendix E
Calibration Certificate for Landfill Gas Analyser

Sure-Safe Ltd

College Farm Business Centre
North End, Meldreth
Royston, Herts
SG8 6NT

Tel: 01763 262649
Fax: 01763 263134

Service@sure-safe.com

CERTIFICATE OF CALIBRATION

Certificate number: GA10526_2/6521
Date of check: 8 November 2010
Product: GA2000
Serial No: GA10526

5
 11/5/11

Calibration checked at: 17.8°C to 28.3°C

Primary Gas Channels

Methane (CH ₄)		Carbon Dioxide (CO ₂)	
Certified Gas (%)	Reading (%)	Certified Gas (%)	Reading (%)
50.13	49.70	49.87	50.18
15.01	15.10	15.01	14.68
5.01	5.10	5.00	4.80

Oxygen (O ₂)	
Certified Gas(%)	Reading (%)
20.93	20.96

Barometer	
Certified (mb)	Reading (mb)
0959	0960

Additional Gas Cells		
Gas	Certified Gas (ppm)	Reading (ppm)
CO	516.3	515.0
H ₂ S	50.6	50.7

Internal Flow		
Normal (l/hr)	Applied (l/hr)	Measured (l/hr)
5	5.1	5.1
10	10.1	10

All gases are traceable to National Standards.

Engineers Signature:

Date: 08/11/10

Instrument Service Report

Unit Type: GA2000		Part Number: GA2K1-E101		Date: 27-May-2011		Next Service Due: 28-Nov-2011		Customer Name: Arcadis UK Limited	
Serial Number: GA10526									
Actions/Investigation Description					Result		Comments		
Inwards Assessment Complete					Yes				
Serial Number Check					Yes				
Serial Comms Test					Pass				
Unit Updated To Latest Hardware Status					Yes				
Latest Firmware (Software)					Yes		Software version is V3.12		
O2 Sensor Require Replacing					No				
Chemical Sensor Require Replacing					Yes		CO sensor replaced		
Battery Requires Replacing					No				
Filters Replaced					Yes				
Memory Cleared					Yes				
Backlight Operation					Yes				
Instrument Charges Correctly					Yes				
Relevant Accessory Recognition					Yes				
Pump Flow Test					Pass		Pump flow greater than 300ml/min		
Pump Vacuum Test					Pass		Pump vacuum greater than -350mBar		
Instrument Flow Fails Correctly					Yes		Flow fail point calibrated to less than 30 seconds		
Pressure Systems Test					Pass		Rectified leak		
Service Details: Service Scheme		<input checked="" type="checkbox"/>		Service Engineer: David Edwards		Calibration Engineer: Ricky Cottrill		Approved By: Phillip Handy	
Standard Service		<input type="checkbox"/>						Signature:	

CERTIFICATION OF CALIBRATION



ISSUED BY: GEOTECH LABORATORY

Date Of Calibration: 25 May, 2011

Certificate Number: GA10526 1/7416

Page 1 of 1 Pages

Approved by Signatory

GEOTECHNICAL INSTRUMENTS (UK) LTD

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Tel: +44 (0) 1926 338111 Fax: +44 (0) 1926 338110

E-mail: service@geotech.co.uk

Web site: www.geotech.co.uk

Phil Handy

Laboratory Inspection

Customer: *Arcadis UK Limited*

Accounts Payable
Craven Court
Willie Snaith Road
Newmarket
Suffolk
CB8 7FA
UNITED KINGDOM

Description: Gas Analyser

Model: GA2000

Serial Number: GA10526

NE-5

Methane (CH ₄)	
Certified Gas (%)	Instrument Reading (%)
50.01	49.32
15.01	15.24
5.01	5.10

Carbon Dioxide (CO ₂)	
Certified Gas (%)	Instrument Reading (%)
49.99	50.40
14.97	14.80
5.00	4.86

Oxygen (O ₂)	
Certified Gas (%)	Instrument Reading (%)
21.00	21.05

Barometer (mb)	
Reference	Reading
1012mb	1013mb

Additional Gas Cells		
Gas	Instrument Reading (ppm)	Certified Gas (ppm)
CO	515.4	515.0
H ₂ S	50.8	50.7

Internal Flow		
Normal (l/hr)	Applied (l/hr)	Measured (l/hr)
10	10	9.76
5	5	4.94

All concentrations are molar.

CH₄, CO₂ readings recorded at: 32.2°C

O₂ readings recorded at: 24.1°C

Barometric Pressure: 1012mb

Method of Test: The analyser is calibrated in a temperature controlled chamber using reference gases.

End of Certificate