APPENDIX 7

GAS MONITORING RESULTS

FWS CONSULTANTS LTD

Environmental and Geological Consultants

Merrington House, PO Box 11, Merrington Lane Trading Estate, Spennymoor, Co Durham, DL16 7UU
Tel: 01388 420633 Fax: 01388 819705 Web: www.fwsconsultants.com

DODWORTH ROAD, BARNSLEY		GAS MONITORING CERTIFICATE		Page 1
DATE:	02 March 2006	INSTRUMENT:	Geotechnical Instruments Infra-Red Gas Analyser (MKIIC) Gas Data GF60 Gas Flow meter	
TIME:	1015 – 1515 hrs	WEATHER CONDITIONS:	Cloud: 0/8, Sunny, Light Wind, Dry, 8°C	
TESTED BY:	M Lakey	AIR PRESSURE:	981 - 983 mbar (Steady)	

BH	Methane (CH_4 % by volume)	Carbon Dioxide (CO_2 % by volume)	Oxygen (O_2 % by volume)	Water Level (m bgl)	Flow rate (l/hour average flow)
BH 1	0.1	0.6	18.7	4.76	<0.1
BH 2	<0.1	1.2	18.9	2.24	<0.1
BH 3	<0.1	(0.6) 0.2	18.4	2.05	<0.1
BH 4	0.5	(0.2) <0.1	12.4	1.36	0.1
BH 5	0.1	1.1	13.5	Dry	<0.1
BH 6	(0.1) <0.1	1.0	19.7	0.47	<0.1
MB 2	<0.1	1.0	19.8	4.65	-0.3
MB 4	<0.1	5.0	15.5	2.81	-0.6
MB 8	<0.1	6.7	12.2	2.81	-0.3

Detection limits: 0.1% CH_4, 0.1% CO_2, 0.1% O_2, 0.1 l/hour flow rate

Notes: 1 Gas sample type – accumulated
2 Average gas flow taken over 60 seconds
3 Figures in brackets refer to maximum CO_2 and CH_4

SIGNED: M. Lakey..... **DATE:** 03 MAR 2006.....

DIRECTORS: F W Smith PhD. F.I.M.M.M. C.Eng. C.Sci B D B Underwood BSc. MSc. M.I.M.M.M. C.Sci CONSULTANTS: J P L Dearlove PhD J M Overy BSc. Hons. (Civ. Eng.) MIHT FGS C Flett BSc. MSc. FGS D Breckon BSc. MIHT. FGS M Lakey BSc. MSc C Adams PhD. FGS C P Bell BSc ASSOCIATES: N Rendell BSc. C.Geol. FGS D J Haynes PhD

FWS Consultants Ltd
Company Registration No: 3944252

constructionline

FWS CONSULTANTS LTD

Environmental and Geological Consultants

Merrington House, PO Box 11, Merrington Lane Trading Estate, Spennymoor, Co Durham, DL16 7UU
Tel: 01388 420633 Fax: 01388 819705 Web: www.fwsconsultants.com

DODWORTH ROAD, BARNSLEY		GAS MONITORING CERTIFICATE		Page 1
DATE:	07 March 2006	INSTRUMENT:	Geotechnical Instruments Infra-Red Gas Analyser (MKIIC) Gas Data GF60 Gas Flow meter	
TIME:	0800 - 0930 hrs	WEATHER CONDITIONS:	Cloud: 8/8, Drizzle / Occasional showers, No Wind, 5°C	
TESTED BY:	M Lakey	AIR PRESSURE:	995 - 996mbar (Steady)	

BH	Methane (CH_4 % by volume)	Carbon Dioxide (CO_2 % by volume)	Oxygen (O_2 % by volume)	Water Level (m bgl)	Flow rate (l/hour average flow)
BH 1	<0.1	0.7	20.1	4.75	-0.3
BH 2	<0.1	1.6	18.7	2.27	<0.1
BH 3	<0.1	0.2	17.8	2.26	0.1
BH 4	0.5	<0.1	11.6	1.71	<0.1
BH 5	<0.1	1.1	13.0	Dry	<0.1
BH 6	<0.1	0.3	20.1	0.49	<0.1
MB 2	<0.1	0.8	20.3	4.63	-0.1
MB 4	<0.1	4.8	12.6	2.82	-0.3
MB 8	<0.1	6.2	14.6	2.81	-0.1

Detection limits: 0.1% CH_4, 0.1% CO_2, 0.1% O_2, 0.1 l/hour flow rate

Notes: 1 Gas sample type – accumulated
2 Average gas flow taken over 60 seconds
3 Figures in brackets refer to maximum CO_2 and CH_4

SIGNED: M.L. Lakey ..... **DATE:** 08 MAR 2006 .....

DIRECTORS: F W Smith PhD. F.I.M.M.M. C.Eng. C.Sci B D B Underwood BSc. MSc. M.I.M.M.M. C.Sci CONSULTANTS: J P L Dearlove PhD J M Overy BSc. Hons. (Civ. Eng.) MIHT FGS C Flett BSc. MSc. FGS D Breckon BSc. MIHT. FGS M Lakey BSc. MSc C Adams PhD. FGS C P Bell BSc ASSOCIATES: N Rendell BSc. C.Geol. FGS D J Haynes PhD

FWS Consultants Ltd
Company Registration No: 3944252

constructionline

FWS CONSULTANTS LTD

Environmental and Geological Consultants

Merrington House, PO Box 11, Merrington Lane Trading Estate, Spennymoor, Co Durham, DL16 7UU
Tel: 01388 420633 Fax: 01388 819705 Web: www.fwsconsultants.com

DODWORTH ROAD, BARNSLEY		GAS MONITORING CERTIFICATE		Page 1
DATE:	16 March 2006	INSTRUMENT:	Geotechnical Instruments Infra-Red Gas Analyser (MKIIC) Gas Data GF60 Gas Flow meter	
TIME:	1130 – 1300 hrs	WEATHER CONDITIONS:	Cloud: 8/8, Snow showers, No Wind, 4°C	
TESTED BY:	M Lakey	AIR PRESSURE:	1012 - 1013 mbar (Steady)	

BH	Methane (CH_4 % by volume)	Carbon Dioxide (CO_2 % by volume)	Oxygen (O_2 % by volume)	Water Level (m bgl)	Flow rate (l/hour average flow)
BH 1	<0.1	0.7	19.2	4.55	0.2
BH 2	<0.1	1.8	17.8	2.06	-0.2
BH 3	<0.1	0.3	14.8	1.31	0.3
BH 4	0.7	(0.2) 0.1	7.1	1.61	<0.1
BH 5	<0.1	1.8	10.5	Dry	0.2
BH 6	<0.1	0.3	20.3	0.46	<0.1
MB 2	<0.1	0.7	19.8	4.42	<0.1
MB 4	<0.1	5.6	16.5	2.52	<0.1
MB 8	<0.1	4.7	15.6	2.55	<0.1

Detection limits: 0.1% CH_4, 0.1% CO_2, 0.1% O_2, 0.1 l/hour flow rate

Notes: 1 Gas sample type – accumulated
2 Average gas flow taken over 60 seconds
3 Figures in brackets refer to maximum CO_2 and CH_4

SIGNED: M R Lakey **DATE:** 17 MAR 2006

DIRECTORS: F W Smith PhD. F.I.M.M.M. C.Eng. C.Sci B D B Underwood BSc. MSc. M.I.M.M.M. C.Sci CONSULTANTS: J P L Dearlove PhD J M Overy BSc. Hons. (Civ. Eng.) MIHT FGS C Flett BSc. MSc. FGS D Breckon BSc. MIHT. FGS M Lakey BSc. MSc C Adams PhD. FGS C P Bell BSc ASSOCIATES: N Rendell BSc. C.Geol. FGS D J Haynes PhD

FWS Consultants Ltd
Company Registration No: 3944252

constructionline

FWS CONSULTANTS LTD

Environmental and Geological Consultants

Merrington House, PO Box 11, Merrington Lane Trading Estate, Spennymoor, Co Durham, DL16 7UU
Tel: 01388 420633 Fax: 01388 819705 Web: www.fwsconsultants.com

DODWORTH ROAD, BARNSLEY		GAS MONITORING CERTIFICATE		Page 1
DATE:	22 March 2006	INSTRUMENT:	Geotechnical Instruments Infra-Red Gas Analyser (MKIIC) Gas Data GF60 Gas Flow meter	
TIME:	1230 - 1400 hrs	WEATHER CONDITIONS:	Cloud: 2/8, Sunny, Dry, Light Wind, 8°C	
TESTED BY:	M Lakey	AIR PRESSURE:	995 - 996 mbar (Steady)	

BH	Methane (CH_4 % by volume)	Carbon Dioxide (CO_2 % by volume)	Oxygen (O_2 % by volume)	Water Level (m bgl)	Flow rate (l/hour average flow)
BH 1	<0.1	0.6	19.4	4.46	-0.2
BH 2	<0.1	1.6	18.2	2.15	<0.1
BH 3	<0.1	0.1	14.5	1.56	<0.1
BH 4	0.5	(0.1) <0.1	5.0	1.64	0.2
BH 5	<0.1	1.7	10.4	Dry	<0.1
BH 6	<0.1	<0.1	20.9	0.47	<0.1
MB 2	<0.1	0.7	19.7	4.34	<0.1
MB 4	<0.1	5.0	18.1	2.47	<0.1
MB 8	<0.1	6.0	6.5	2.42	<0.1

Detection limits: 0.1% CH_4, 0.1% CO_2, 0.1% O_2, 0.1 l/hour flow rate

Notes: 1 Gas sample type – accumulated
2 Average gas flow taken over 60 seconds
3 Figures in brackets refer to maximum CO_2 and CH_4

SIGNED: M Lakey ..... **DATE:** 23 MAR 2006 .....

DIRECTORS: F W Smith PhD. F.I.M.M.M. C.Eng. C.Sci B D B Underwood BSc. MSc. M.I.M.M.M. C.Sci CONSULTANTS: J P L Dearlove PhD J M Overy BSc. Hons. (Civ. Eng.) MIHT FGS C Flett BSc. MSc. FGS D Breckon BSc. MIHT. FGS M Lakey BSc. MSc C Adams PhD. FGS C P Bell BSc ASSOCIATES: N Rendell BSc. C.Geol. FGS D J Haynes PhD

FWS Consultants Ltd
Company Registration No: 3944252

constructionline