WINDOW SAMPLING RECORD

BH No. **SWS29**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 14/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
ES	0.50			MADE GROUND: Scrub vegetation over grey/brown very clayey gravelly SAND. Gravel is angular of sandstone, brick and concrete. High content of angular cobbles of sandstone, brick and concrete.				
D	1.20	N=37 (7,7/8,9,8,12)	1	*at 1.00m SPT may not be fully representative owing to cobble content.*				
		N=1 (0,0/0,1,0,0)	2	MADE GROUND: Extremely soft extremely low strength brown mottled grey slightly sandy slightly gravelly CLAY/SILT. High plasticity (field description). Gravel is angular of sandstone, clinker, charcoal and ash.	2.00	100.00		
D	2.40			*from 2.60m becoming firm low strength*				
ES	2.50	31.0						
		N=7 (1,1/1,2,2,2)	3	MADE GROUND: Soft low strength dark grey/brown very sandy very gravelly CLAY with occasional cobble sized inclusions of black gelatinous substance. Low plasticity (field description). Gravel is angular of sandstone, concrete and brick.	3.00	99.00		
ES	3.50			*at 3.60m PID - 0.4ppm*				
ES	3.60							
D	3.70							
		50 (25 for 60mm/50 for 85mm)	4	End of Borehole at 4.00m	4.00	98.00		
			5					
			6					
			7					
			8					
			9					

Remarks and Water Observations:

1. Borehole terminated at 4.00m bgl due to collapse. 2. Groundwater encountered at 2.00m bgl. 3. Hand shear vane results presented as an average of a set of three. 4. Ground gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD) 102.00m AOD
Easting: 430173614.50
Northing: 394280895.49

Fig No. SWS29

WINDOW SAMPLING RECORD

BH No. **SWS30**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 15/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: JF | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Strong grey reinforced CONCRETE comprising 70% clasts 10% small voids. Clasts are sub-angular fine to coarse gravel sized fragments of flint.	0.18	94.90		
				MADE GROUND: Firm brown very gravelly sandy CLAY. Low plasticity (field description). Gravel is sub-angular to angular of sandstone, mudstone, brick and concrete.	0.56	94.52		
		50 (25 for 125mm/50 for 285mm)	1	MADE GROUND: Orangish brown slightly clayey sandy GRAVEL of sub-angular sandstone.	1.00	94.08		
				End of Borehole at 1.00m				
			2					
			3					
			4					
			5					
			6					
			7					
			8					
			9					

Remarks and Water Observations:

1. Hard standing cored out using 200mm diameter diamond tipped corer. 2. Borehole terminated at 1.00m bgl due to refusal (assumed sandstone cobble). 3. Groundwater not encountered. 4. Backfilled with arisings on completion. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
95.08m AOD
Easting:
430197568.16
Northing:
394028383.84

Fig No.
SWS30

WINDOW SAMPLING RECORD

BH No. **SWS30A**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 15/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: JF | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
ES	0.20			MADE GROUND: Strong grey reinforced CONCRETE comprising 70% clasts 10% small voids. Clasts are sub-angular fine to coarse gravel sized fragments of flint.	0.16	94.94		
ES	0.60			MADE GROUND: Soft very sandy gravelly CLAY. Low plasticity (field description). Gravel is sub-angular of sandstone, mudstone, coal and brick.				
B	1.00 - 2.00	N=7	1	*between 0.50m and 0.60m faint hydrocarbon odour. PID - 0.0ppm*				
ES	1.00	(2,2/1,2,2,2)		MADE GROUND: Soft low strength brown very sandy CLAY. Low plasticity (field description). (Possible reworked ALLUVIUM)	1.10	94.00		
ES	1.50							
		50 (11,11/50 for 275mm)	2	End of Borehole at 2.00m	2.00	93.10		
			3					
			4					
			5					
			6					
			7					
			8					
			9					

Remarks and Water Observations:

1. Hard standing cored out using 200mm diameter diamond tipped corer. 2. Borehole terminated at 2.00m bgl due to refusal (assumed sandstone cobble). 3. Groundwater not encountered. 4. Ground gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
95.10m AOD
Easting:
430202112.32
Northing:
394035020.50

Fig No.
SWS30A

WINDOW SAMPLING RECORD

BH No. **SWS31**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 06/01/2016

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By:
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Red/grey gravelly SAND of angular brick, concrete and sandstone. High content of angular cobbles of brick and concrete.	0.25	95.09		
				End of Borehole at 0.25m				

1
2
3
4
5
6
7
8
9

Remarks and Water Observations:

1. Borehole terminated at 0.25m bgl on concrete. 2. Groundwater not encountered. 3. Backfilled with arisings upon completion. 4. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
95.34m AOD
Easting:
430199309.12
Northing:
394076476.91

Fig No.
SWS31

WINDOW SAMPLING RECORD

BH No. **SWS31A**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 06/01/2016

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By:
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Strong grey reinforced CONCRETE comprising of 70% angular fine to coarse gravel sized fragments of limestone and 10% small voids.	0.13	95.21		
				End of Borehole at 0.13m				

1
2
3
4
5
6
7
8
9

Remarks and Water Observations:

1. Borehole terminated at 0.13m bgl on steel (assumed steel girder). 2. Groundwater not encountered. 3. Backfilled with arisings upon completion. 4. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
95.34m AOD
Easting:
430200449.00
Northing:
394069782.06

Fig No.
SWS31A

WINDOW SAMPLING RECORD

BH No. **SWS31B**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 06/01/2016

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By:
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Strong grey reinforced CONCRETE comprising of 70% angular fine to coarse gravel sized fragments of limestone and 10% small voids.	0.13	95.21		
				End of Borehole at 0.13m				

1
2
3
4
5
6
7
8
9

Remarks and Water Observations:

1. Borehole terminated at 0.13m bgl on steel (assumed steel girder). 2. Groundwater not encountered. 3. Backfilled with arisings upon completion. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
95.34m AOD
Easting:
430200164.03
Northing:
394063372.09

Fig No.
SWS31B

WINDOW SAMPLING RECORD

BH No. **SWS31C**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 06/01/2016

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By:
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Strong grey reinforced CONCRETE comprising of 70% angular fine to coarse gravel sized fragments of limestone and 10% small voids.	0.20	95.14		
				End of Borehole at 0.20m				

1
2
3
4
5
6
7
8
9

Remarks and Water Observations:

1. Borehole terminated at 0.13m bgl (assumed steel). 2. Groundwater not encountered. 3. Backfilled with arisings upon completion. 4. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
95.34m AOD

Easting:
430198881.67

Northing:
394053970.81

Fig No.
SWS31C

WINDOW SAMPLING RECORD

BH No. **SWS31D**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 06/01/2016

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By:
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Strong grey reinforced CONCRETE comprising of 70% angular fine to coarse gravel sized fragments of limestone and 10% small voids.	0.20	95.05		
				End of Borehole at 0.20m				

1
2
3
4
5
6
7
8
9

Remarks and Water Observations:

1. Borehole terminated at 0.13m bgl (assumed steel girder). 2. Groundwater not encountered. 3. Backfilled with arisings upon completion. 4. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
95.25m AOD
Easting:
430200306.51
Northing:
394092003.27

Fig No.
SWS31D

WINDOW SAMPLING RECORD

BH No. **SWS33**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 15/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: JF | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
ES	0.20			MADE GROUND: Firm low strength brown very gravelly sandy CLAY. Low plasticity (field description). Gravel is sub-angular to angular of sandstone, concrete and brick with occasional wood fragments.				
B	0.50							
ES	0.60							
		N=16 (1,1/3,4,6,3)	1	*at 1.00m brick cobble.*				
		25.0						
ES	2.00	N=5 (1,1/1,1,1,2)	2	MADE GROUND: Soft low strength brownish grey gravelly CLAY with occasional inclusions of organic debris. Low plasticity (field description). Gravel is rounded to sub-rounded of sandstone and mudstone. (Possible reworked ALLUVIUM).	2.00	96.20		
ES	2.20							
		30.0						
		N=7 (3,2/2,1,2,2)	3					
ES	3.20	20.0						
		N=8 (1,1/1,2,2,3)	4	MADE GROUND: Soft low strength moist grey very sandy slightly gravelly CLAY with occasional inclusions of organic debris. Low plasticity (field description). Gravel is sub-angular fine of brick. (Possible reworked ALLUVIUM).	4.00	94.20		
ES	4.50							
B	4.60 - 5.00			*at 4.00m sub-angular sandstone cobble.*				
		50 (13,10/50 for 255mm)	5	*at 5.00m refusal owing to possible concrete obstruction.* End of Borehole at 5.00m	5.00	93.20		
			6					
			7					
			8					
			9					

Remarks and Water Observations:

1. Boreholes terminated at 5.00m bgl due to refusal (assumed concrete obstruction). 2. Groundwater encountered at 4.50m bgl. 3. Hand shear vane results presented as an average of a set of three. 4. Ground gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD) 98.20m AOD
Easting: 430144099.84
Northing: 394158873.74

Fig No. SWS33

WINDOW SAMPLING RECORD

BH No. **SWS34**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 15/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: JF | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
B ES	0.00 - 1.00 0.20			MADE GROUND: Soft dark brown very gravelly sandy CLAY. Low plasticity (field description). Gravel is sub-angular to angular of concrete, sandstone, ash and clinker with occasional coal fragments.				
ES	0.70							
ES	1.20	N=3 (2,1/1,0,1,1)	1	MADE GROUND: Very loose brown slightly clayey sandy GRAVEL of sub-angular to angular brick, concrete, ash, clinker, sandstone and coal.	1.00	98.37		
D	2.00	N=3 (2,1/1,0,1,1)	2					
ES	2.50			Very soft low strength brownish grey very sandy CLAY with occasional inclusions of organic debris. High plasticity (field description). Faint natural organic odour. (ALLUVIUM)	2.20	97.17		
B D	3.00 - 4.00 3.00	N=4 (1,0/1,1,1,1)	3					
B	4.00 - 5.00	N=8 (2,2/1,2,2,3)	4	*between 4.00m and 5.00m becoming orangish grey.*				
		N=34 (4,7/9,10,7,8)	5	Dense orangish brown slightly clayey sandy GRAVEL of sub-angular to sub-rounded sandstone. (Possible ALLUVIUM)	4.80	94.57		
		50 (25 for 105mm/50 for 285mm)	6	End of Borehole at 5.80m	5.80	93.57		
			7					
			8					
			9					

Remarks and Water Observations:

1. Borehole terminated at 5.80m bgl due to refusal (assumed sandstone cobble). 2. Groundwater not encountered. 3. Ground gas and groundwater monitoring well installed as detailed above. 4. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
99.37m AOD
Easting:
430102540.84
Northing:
394184243.21

Fig No.
SWS34

WINDOW SAMPLING RECORD

BH No. **SWS35**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 11/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: J-C.R | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
ES	0.10			MADE GROUND: Strong grey ASPHALT comprising of 70% angular fine to coarse gravel size fragments of limestone and 10% small voids. With 10mm rebar.	0.04	105.52		
D	0.20				0.30	105.26		
ES	0.40			MADE GROUND: Grey brown sandy silty GRAVEL of angular brick and concrete.				
D	0.50				0.80	104.76		
D	0.90			MADE GROUND: Light yellow sandy GRAVEL of sub-angular sandstone, brick and concrete.				
ES	1.00	N=4 (1,1/1,1,1,1)	1	MADE GROUND: Loose dark grey black sandy clayey ashy GRAVEL of sub-angular ash, brick and clinker.				
		N=6 (3,2/2,2,1,1)	2					
ES	2.70			MADE GROUND: Very stiff friable brown grey sandy gravelly CLAY. Low plasticity. Gravel is sub-angular of sandstone and concrete.	2.60	102.96		
D	2.80	N=2 (1,0/1,0,1,0)	3					
		N=6 (2,1/1,2,2,1)	4					
					4.80	100.76		
D	5.00	N=9 (2,2/2,2,2,3)	5	Very stiff medium strength brown grey sandy gravelly CLAY. Intermediate plasticity. Gravel is sub-angular of sandstone. (Completely weathered MILLSTONE GRIT FORMATION)				
ES	5.10			*from 5.00m becoming firm low/medium strength*				
		N=14 (2,3/2,5,4,3)	6	*from 6.00m firm medium strength*				
		N=31 (5,5/7,7,8,9)	7	End of Borehole at 7.00m	7.00	98.56		
			8					
			9					

Remarks and Water Observations:

1. Hard standing cored out using 200mm diameter diamond tipped corer. 2. Borehole terminated at 7.00m (assumed sandstone cobble). 3. Groundwater not encountered. 4. Gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
105.56m AOD
Easting:
430069426.79
Northing:
394200084.22

Fig No.
SWS35

WINDOW SAMPLING RECORD

BH No. **SWS38**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 15/12/2015

Method: Track mounted window samle rig
Scale: 1:47

Logged By: JF | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
ES	0.20			MADE GROUND: Soft to firm brown very gravelly sandy CLAY. Low plasticity (field description). Gravel is sub-angular to angular of sandstone and brick.				
ES	0.90	N=19 (2,4,3,4,6,6)	1	*at 1.00m brick cobble*				
ES	1.20							
ES	1.60	N=4 (2,1/1,1,1,1)	2	MADE GROUND: Soft low strength dark brown very gravelly sandy CLAY. Low plasticity (field description). Gravel is sub-angular to angular of sandstone, mudstone, and brick with occasional glass, concrete and plastic fragments.	1.60	97.26		
ES	2.50			*at 2.50m rare fragments of fabric.*				
B D	3.00 - 3.50 3.00	N=0 (0,0/0,0,0,0)	3	*from 3.00m becoming very soft extremely low strength material*				
ES	3.90	50 (2,1/50 for 20mm)	4	*at 3.90m very faint natural organic odour.* *at 4.00m refusal owing to possible concrete obstruction.* End of Borehole at 4.00m	4.00	94.86		
			5					
			6					
			7					
			8					
			9					

Remarks and Water Observations:

1. Borehole terminated at 4.00m bgl due to refusal (assumed concrete obstruction). 2. Groundwater encountered at 3.50m bgl. 3. Ground gas and groundwater monitoring well installed as detailed above. 4. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
98.86m AOD
Easting:
430009080.33
Northing:
394348327.89

Fig No.
SWS38

WINDOW SAMPLING RECORD

BH No. **SWS41**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 11/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: J-C.R | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
ES	0.10			MADE GROUND: Strong grey ASPHALT comprising of 70% angular fine to coarse gravel sized fragments of limestone and 10% small voids.	0.08	105.98		
D	0.20				0.35	105.71		
D	0.40			MADE GROUND: Grey brown sandy silty GRAVEL of angular brick and concrete.				
ES	0.50							
D	1.00	N=2 (1,0/1,0,1,0)	1	MADE GROUND: Dark grey black clayey ashy sandy GRAVEL of angular to sub-angular brick and concrete.	0.95	105.11		
ES	1.20			MADE GROUND: Very loose orangish brown sandy GRAVEL of sub-angular brick.				
		N=2 (1,0/1,1,0,0)	2					
		N=5 (1,2/1,1,1,2)	3	*from 3.00m becoming loose*				
		N=6 (2,2/2,2,1,1)	4					
ES	4.30			MADE GROUND: Loose dark grey black clayey ashy sandy GRAVEL of sub-angular brick and concrete.	4.20	101.86		
D	4.40							
D	4.80			Firm medium strength dark grey sandy gravelly CLAY. High plasticity. Gravel is sub-angular of mudstone. (Possible ALLUVIUM)	4.80	101.26		
ES	4.90	N=10 (2,2/2,3,2,3)	5					
D	5.80			Stiff high strength orangish brown sandy gravelly CLAY. Low plasticity. Gravel is sub-angular of sandstone. (Completely weathered MILLSTONE GRIT FORMATION)	5.70	100.36		
ES	5.90	N=26 (4,4/5,6,7,8)	6		6.00	100.06		
				End of Borehole at 6.00m				
			7					
			8					
			9					

Remarks and Water Observations:

1. Hard standing cored using 200mm diameter diamond tipped corer. 2. Borehole terminated at 6.00m bgl (assumed sandstone cobble). 3. Groundwater not encountered. 4. Gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
106.06m AOD
Easting:
430015525.46
Northing:
394271311.04

Fig No.
SWS41

WINDOW SAMPLING RECORD

BH No. **SWS42**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 11/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: J-C.R | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
ES D	0.30 0.40			MADE GROUND: Strong grey CONCRETE comprising of 70% clasts and 10% small voids. Clasts are angular fine to coarse gravel sized fragments of limestone.	0.20 0.41	100.93 100.72		
ES D	0.90 1.00	N=5 (2,2/1,2,1,1)	1	MADE GROUND: Grey brown sandy silty GRAVEL of angular brick and concrete. MADE GROUND: Light yellow sandy GRAVEL of sub-angular sandstone, brick and concrete.	0.80	100.33		
		N=4 (1,0/1,1,1,1)	2	Soft low strength grey sandy very gravelly CLAY. Gravel is sub-angular of sandstone. (ALLUVIUM)				
		N=5 (0,0/1,1,1,2)	3					
D ES	3.60 3.70			Soft orangish brown sandy very gravelly CLAY. Low plasticity (field description). Gravel is sub-angular of sandstone.	3.60	97.53		
		50 (25 for 5mm/50 for 10mm)	4	(Completely weathered MILLSTONE GRIT FORMATION) End of Borehole at 4.00m	4.00	97.13		
			5					
			6					
			7					
			8					
			9					

Remarks and Water Observations:

1. Hard standing cored out using 200mm diamond tipped corer. 2. Borehole terminated at 4.00m bgl (assumed sandstone cobble). 3. Groundwater not encountered. 4. Gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD)
101.13m AOD
Easting:
430251614.40
Northing:
394243084.72

Fig No.
SWS42

WINDOW SAMPLING RECORD

BH No. **SWS43**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 09/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Medium dense black SAND and GRAVEL of ash and clinker with occasional angular fragments of brick and concrete. Occasional clayey pockets.				
ES	0.70							
		N=14 (3,5/4,3,4,3)	1					
		N=9 (1,1/1,1,2,5)	2	*from 2.00m becoming loose*				
				Soft to firm medium strength greenish grey slightly gravelly sandy CLAY/SILT. Low plasticity (field description). Gravel is fine to medium angular to sub-rounded of sandstone. (ALLUVIUM)	2.70	97.35		
ES	2.90	N=12 (2,2/2,3,3,4)	3					
		18.0		*from 3.70m becoming very soft very low strength*				
D	3.80							
D	4.00	N=15 (4,7/5,4,3,3)	4	Firm medium strength grey occasionally mottled orange/brown sandy gravelly CLAY. Low plasticity (field description). Gravel is angular to sub-angular of sandstone. (Possible ALLUVIUM)	3.90	96.15		
		12.0		*from 4.00m poor recovery*				
		N=16 (2,2/3,3,5,5)	5	Firm medium strength grey slightly silty gravelly CLAY. Low plasticity (field description). Gravel is of angular tabular mudstone. (Completely weathered MILLSTONE GRIT FORMATION)	4.90	95.15		
D	5.80							
		N=39 (5,6/8,9,10,12)	6	End of Borehole at 6.00m	6.00	94.05		
			7					
			8					
			9					

Remarks and Water Observations:

1. Borehole terminated at 6.00m bgl due to collapse. 2. Groundwater encountered at 2.50m bgl. 3. Hand shear vane results presented as an average of a set of three. 4. Ground gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client.

GL (m AOD) 100.05m AOD
Easting: 430319633.18
Northing: 394174118.36

Fig No. SWS43

WINDOW SAMPLING RECORD

BH No. **SWS44**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 06/01/2016

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By:
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Strong grey reinforced CONCRETE comprising of 70% angular fine to coarse gravel sized fragments of limestone and 10% small voids.				
				MADE GROUND: Loose to very loose black slightly silty gravelly SAND of angular clinker and ash.	0.66	99.82		
ES	1.20	N=6 (2,1/1,1,2,2)	1					
		N=3 (1,1/1,0,1,1)	2					
		N=3 (1,1/0,1,1,1)	3					
ES	3.50							
		N=4 (2,1/1,1,1,1)	4	*from 3.80m pockets of brown slightly gravelly sandy CLAY upto 300mm thick. Gravel is sub-angular of sandstone*				
		N=4 (1,1/2,0,1,1)	5					
		N=4 (2,0/1,1,1,1)	6	End of Borehole at 6.00m	6.00	94.48		
			7					
			8					
			9					

Remarks and Water Observations:

1. Hard standing cored out using 200mm diameter diamond tipped corer. 2. Borehole terminated at 6.00m bgl due to collapse. 3. Groundwater not encountered. 4. Ground gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client. Nearest ground level taken as hole completed internally.

GL (m AOD) 100.48m AOD
Easting: 430241511.15
Northing: 394091366.65

Fig No. SWS44

WINDOW SAMPLING RECORD

BH No. **SWS44**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 06/01/2016

Method: Track mounted window sample rig
Scale: 1:47

Logged By: GB | Checked By:
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Strong grey reinforced CONCRETE comprising of 70% angular fine to coarse gravel sized fragments of limestone and 10% small voids.				
				MADE GROUND: Loose to very loose black slightly silty gravelly SAND of angular clinker and ash.	0.66	99.82		
ES	1.20	N=6 (2,1/1,1,2,2)	1					
		N=3 (1,1/1,0,1,1)	2					
		N=3 (1,1/0,1,1,1)	3					
ES	3.50							
		N=4 (2,1/1,1,1,1)	4	*from 3.80m pockets of brown slightly gravelly sandy CLAY upto 300mm thick. Gravel is sub-angular of sandstone*				
		N=4 (1,1/2,0,1,1)	5					
		N=4 (2,0/1,1,1,1)	6	End of Borehole at 6.00m	6.00	94.48		
			7					
			8					
			9					

Remarks and Water Observations:

1. Hard standing cored out using 200mm diameter diamond tipped corer. 2. Borehole terminated at 6.00m bgl due to collapse. 3. Groundwater not encountered. 4. Ground gas and groundwater monitoring well installed as detailed above. 5. Ground level and coordinates taken from topographical survey supplied by client. Nearest ground level taken as hole completed internally.

GL (m AOD) 100.48m AOD
Easting: 430241511.15
Northing: 394091366.65

Fig No. SWS44

WINDOW SAMPLING RECORD

BH No. **SWS45**
Sheet 1 of 1

Site: Oughtibridge Mill
Contract No: C6485A

Client: ASE II Developments Ltd
Date: 11/12/2015

Method: Track mounted window sample rig
Scale: 1:47

Logged By: J-C.R | Checked By: G.H
Driller: RP Drilling

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	(N) {PID} Shear Vane	Ground-water	Description	Depth (m)	Level (m AOD)	Legend	Well
				MADE GROUND: Strong grey reinforced CONCRETE comprising of 70% angular fine to coarse gravel sized fragments of limestone and 10% small voids.	0.30	95.04		
				End of Borehole at 0.30m				

1
2
3
4
5
6
7
8
9

Remarks and Water Observations:

1. Hard standing corded using 200mm diameter diamond tipped corer. 2. Borehole terminated at 0.30m bgl due to reinforced concrete. 4. Ground level and coordinates taken from topographical survey supplied by client. Nearest ground level taken owing to hole being undertaken internally.

GL (m AOD)
95.34m AOD
Easting:
430439824.97
Northing:
394024082.52

Fig No.
SWS45

Borehole Log

Borehole No. **BH201**

Sheet 1 of 1

Project Name:	Oughtibridge Paper Mill, Sheffield	Project No. G145072	Co-ords:	430034.01 - 394348.35	Hole Type DS/ROH
Location:	Wharncliffe Side, Sheffield		Level:	98.27	Scale 1:50
Client:	WSP		Dates:	03/02/2015 - 03/02/2015	Logged By Peter Williams

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 1.20	B					MADE GROUND: Moist dark brown sandy gravelly clay. Gravel is fine to coarse, sub angular to angular of concrete, bricks and sandstone.
		0.30	ES					*As above but cobbles of sandstone, occasional embedded rootlets and ash, occasional plastic waste.*
		0.60	ES					
		1.00	ES					
		1.20		N=18 (2,3/3,3,1,1,11)	1.20	97.07		MADE GROUND: Moist yellowish brown clayey sandy fine sub angular gravel of concrete and brick, sandstone with occasional ash.
		1.20 - 1.65	SPTL S					*No Recovery*
		2.00	ES		2.00	96.27		*As Above but fine to coarse sub rounded to angular gravel of brick.*
		2.00		N=7 (1,1/1,1,2,3)				MADE GROUND: Moist dark brown sandy gravelly clay. Gravel is fine to cobble sized, sub rounded to sub angular of brick, concrete and sandstone.
		2.00 - 2.45	SPTL S					
		2.00 - 3.00	B					*As above but with occasional embedded rootlets and a slight tar odour.*
		3.00		N=15 (3,5/3,3,4,5)	3.00	95.27		MADE GROUND: Wet dark grey/black clayey sandy fine to coarse sub rounded to angular gravel of brick, concrete and sandstone. Occasional ash.
		3.00 - 3.45	SPTL S					
		3.00 - 4.00	B					
		4.00	ES					*MADE GROUND: Wet soft to firm black slightly sandy gravelly clay. Gravel is fine, sub angular of mudstone and brick, with ash.*
		4.00		N=22 (2,3/5,4,7,6)				
		4.00 - 4.45	SPTL S					
		4.00 - 5.00	B					
		5.00	ES		5.00	93.27		Firm to stiff dark grey slightly sandy gravelly CLAY. Gravel is fine, sub angular of mudstone and sandstone. Evidence of de structured mudstone.
		5.00		N=32 (3,6/7,7,9,9)				
		5.00 - 5.45	SPTL S					
		5.00 - 6.00	B					*As above but gravel is fine to medium sub angular to angular.*
		6.00	ES		6.00	92.27		End of borehole at 6.00 m
		6.00		N=35 (5,6/7,9,8,11)				
		6.00 - 6.45	SPTL S					

Remarks

Backfilled with arisings. Groundwater not encountered. MC305 Rig

AGS

Borehole Log

Borehole No. **BH202**

Sheet 1 of 1

Project Name:	Oughtibridge Paper Mill, Sheffield	Project No. G145072	Co-ords:	430057.57 - 394337.39	Hole Type ROH
Location:	Wharncliffe Side, Sheffield		Level:	97.18	Scale 1:50
Client:	WSP		Dates:	04/02/2015 - 04/02/2015	Logged By Peter Williams

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		1.20		50 (1,1/50 for 245mm)				MADE GROUND: Wet dark grey very clayey slightly sandy fine to medium sub angular gravel of brick, concrete and sandstone.
		1.20 - 1.65	SPTLS					
		2.00		N=0 (75 for 10mm/0,0,0,0)	2.00	95.18		End of borehole at 2.00 m
		2.00 - 2.45	SPTLS					

Remarks

Backfilled with arisings. Moved position to BH202A due to concrete obstruction. MC 305 Rig

Borehole Log

Borehole No. **BH202A**

Sheet 1 of 1

Project Name:	Oughtibridge Paper Mill, Sheffield	Project No. G145072	Co-ords:	430052.40 - 394347.47	Hole Type DS/ROH
Location:	Wharncliffe Side, Sheffield		Level:	97.67	Scale 1:50
Client:	WSP		Dates:	04/02/2015 - 05/02/2015	Logged By Peter Williams

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.00 - 1.20	B					MADE GROUND: Moist soft dark grey slightly sandy gravelly clay. Gravel is fine, sub rounded to sub angular of brick, concrete rubble. Infrequent ash infilling, plastic waste present
		0.30	ES					
		0.60	ES		0.60	97.07		MADE GROUND: Wet dark brownish grey very clayey slightly sandy fine to medium sub rounded to sub angular gravel of brick, concrete rubble and sandstone. Occasional black staining on surfaces and ash infilling.
		1.00	ES					
		1.00 - 2.00	B					
		1.20		N=11 (1,1/1,1,2,7)				
	▼	1.20 - 1.65	SPTL S					*MADE GROUND: Wet soft dark brownish grey slightly silty sandy gravelly clay. Gravel is fine of brick, concrete rubble, sandstone and mudstone. Slight tar odour and occasional ash infilling.*
		2.00	ES					
		2.00		N=33 (10,9/8,8,7,10)				*No Recovery.*
		2.00 - 2.45	SPTL S					
		2.00 - 3.00	B					*As above but fine to coarse gravel of brick, concrete rubble, sandstone and mudstone. Occasional organic matter and embedded rootlets*
		3.00	ES					*As above but with slight tar odour.*
		3.00		N=18 (3,3/3,4,5,6)				*As above but cobbles of sandstone.*
		3.00 - 4.00	B					
		4.00	ES					
		4.00		N=50 (5,12/50 for 290mm)				
		4.00 - 4.45	SPTL S					
		5.00	SPTL S		5.00	92.67		Firm to stiff dark grey slightly silty gravelly CLAY. Gravel is fine, sub angular of mudstone. Evidence of de structured mudstone.
		5.00		N=50 (8,8/50 for 290mm)				
		6.50	SPTL S					
		6.50		N=50 (7,9/50 for 260mm)				
		8.00	SPTL S		8.00	89.67		End of borehole at 8.00 m
		8.00		N=42 (5,4/5,5,14,18)				

Remarks

Backfilled with gravel/ arisings to 6m. Bentonite plug at 6m between made ground and natural strata. Slotted pipe between 5 and 1m with gravel. Plain pipe between 1m to ground level with bentonite. Stand up cover installed/ concreted into position. Groundwater encountered at 1.5m bgl.

Borehole Log

Borehole No. **BH203**

Sheet 1 of 1

Project Name:	Oughtibridge Paper Mill, Sheffield	Project No. G145072	Co-ords:	430084.38 - 394229.96	Hole Type DS/ROH
Location:	Wharncliffe Side, Sheffield		Level:	98.50	Scale 1:50
Client:	WSP		Dates:	05/02/2015 - 06/02/2015	Logged By Peter Williams

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 1.20	B					MADE GROUND: Wet grey slightly silty very gravelly clay. Gravel is fine to coarse sub angular of brick, concrete and sandstone. Occasional embedded rootlets.
		0.30	ES					
		0.60	ES					
		1.00	ES					
		1.20	SPTL S	N=50 (9,13/50 for 245mm)				*As above but with slight tar odour.* *Open holed due to sandstone boulder obstruction.*
		1.20						
	▼	2.00	SPTL S	N=50 (25 for 75mm/50 for 235mm)	2.00	96.50		MADE GROUND: Moist greyish brown slightly clayey sandy fine to medium sub angular gravel of concrete and sandstone. Slight tar odour. *Open holed due to sandstone boulder obstruction.*
		2.00						
		3.00		N=5 (0,1/1,2,1,1)	3.00	95.50		MADE GROUND: Wet dark grey silty slightly gravelly clay. Gravel is fine, sub angular of brick and mudstone. Slight black staining on surfaces and decomposing odour present. *No Recovery in dynamic sample liner due to soft clay*
		3.00 - 3.45	SPTL S					
		4.00	ES		4.00	94.50		MADE GROUND: Moist dark grey slightly silty clayey fine to cobble sized, sub rounded to sub angular gravel of brick and sandstone. Strong decomposing odour present.
		4.00		N=23 (4,4/5,5,5,8)				
		4.00 - 4.45	SPTL S					
		4.00 - 5.00	B					
		5.00	SPTL S	50 (7,9/50 for 245mm)				
		5.00						
		6.00	SPTL S	N=22 (1,3/3,5,7,7)	6.00	92.50		End of borehole at 6.00 m
		6.00						

Remarks

Backfilled with arisings. Groundwater encountered at 2m bgl. MC 305 Rig

WSP UK Ltd Telephone: +44 20 7314 5000 Fax: +44 20 7314 5111	**BOREHOLE LOG**	Hole No. **BH204**
	Project Oughtibridge Papermill	Sheet 1 of 1
Job No 70006973	Client SCA	Date 12-11-14 13-11-14

Contractor / Driller	Method/Plant Used	Logged By	Co-Ordinates (NGR)	Ground Level (m AOD)
Van Elle	Dynamic Sampling & Rotary Drilling / Comacchio 305	J.Milner	E 430271.898 N 394198.438	100.644

SAMPLES & TESTS							STRATA					Install / Backfill
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m2)	P.Pen (kN/m2)	Water	Elev. (mAOD)	Depth (Thick-ness)	Description	Legend	Geology	Dia. mm
							100.44	0.20	Reinforced CONCRETE. (MADE GROUND)		CONC	
							100.34	0.30	Loose dark grey sandy fine to medium rounded to angular GRAVEL of concrete, red brick and various lithologies. Inclusions of paper pulp. (MADE GROUND)		MG	
0.30-0.80	B											
0.50	ES		0				99.94	0.70			MG	
							99.84	0.80	0.20 - 0.70 Moist.		CONC	
									Loose black fine and medium angular GRAVEL of coal. Minor inclusions of white tile and terracotta. Coal tar odour. (MADE GROUND)			
1.20	SPT	1,1,1 1,1,1 N=4(S)	0						CONCRETE slab. (MADE GROUND)			
1.50-2.00	D	(x2)							Soft dark greyish black occasionally light greyish orange very silty gravelly CLAY. Gravel is fine to coarse rounded to angular of brick, coal and sandstone. Frequent rootlets and red brick cobbles. (MADE GROUND)			
1.50	ES											
2.00	ES		0					(2.70)			MG	
2.00-2.45	SPT	2,2,2 2,1,1 N=6(S)	0						0.80 - 3.50 Moist.			
2.50	ES											
2.60	D											
2.90	ES		0						2.90 - 3.00 Soft black organic CLAY band. High rootlet content. Organic odour.			
3.00-3.45	D	(x2)										
3.00-3.45	SPT	1,1,1 1,1,1 N=4(S)					97.14	3.50				
						1			Medium dense to dense light grey mottled orange clayey sandy GRAVEL. Gravel is fine to medium rounded to angular sandstone. (MILLSTONE GRIT)			
4.00-4.50	B								4.00 Wet. Occasional sandstone cobbles.			
4.00-4.95	SPT	4,9,8 7,6,11 N=32(S)	0									
4.50	D											
4.50	ES											
5.00-5.45	SPT	5,9,7 6,7,8 N=28(S)						(4.20)			MSG	
6.50-6.95	SPT	6,8,7 7,9,13 N=36(S)					92.94	7.70				
								(0.50)	Very weak thinly laminated distinctly weathered dark grey MUDSTONE. Orange staining along joints. (MILLSTONE GRIT)		MSG	
8.00	SPT	4,5,7 7,6,10 N=30(S)					92.44	8.20				
									Weak thinly laminated dark greyish black MUDSTONE. (MILLSTONE GRIT)			
8.50-9.00	B											
8.50	D							(1.25)			MSG	
9.00-9.45	SPT	8,12,16 12,16,6 N=50/ 0.26(S)					91.19	9.45				
									Terminated at 9.45 m bgl.		END	

Boring Progress					
Date	Time	Depth	Casing Dpt	Dia. (mm)	Water Dpt
12-11-14	16.30	2.00	1.20		
13-11-14	16.45	9.45	7.50		

Chiselling				Water Added	
From	To	Hours	Tool	From	To

Water Strikes					
Date	Time	Strike	Minutes	Standing	Casing
13-11-14		4.00			3.00

General Remarks
1. Inspection pit excavated from GL to 1.2 m bgl.
2. Dynamic sampling 1.2 to 6.7 m bgl.
3. Rotary drilling 6.7 to 8.0 m bgl.
4. Dynamic sampling 8.0 to 9.0 m bgl.
5. Groundwater encountered as seepage at 4.0 m bgl.

Scale 1:62.5

Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.

08 WSP BH LOG 70006973 - OUGHIBRIDGE GINT FILE.GPJ WSPETEMPLATE1.03.GDT 10/3/15

WSP UK Ltd

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BOREHOLE LOG

Hole No. **BH205**

Project: Oughtibridge Papermill

Sheet: 1 of 1

Job No	Client	Date
70006973	SCA	11-11-14 12-11-14

Contractor / Driller	Method/Plant Used	Logged By	Co-Ordinates (NGR)	Ground Level (m AOD)
Van Elle	Dynamic Sampling & Rotary Drilling / Comacchio 305	J.Milner	E 430292.362 N 394061.941	95.356

SAMPLES & TESTS							STRATA						Install / Backfill
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m2)	P.Pen (kN/m2)	Water	Elev. (mAOD)	Depth (Thick-ness)	Description		Legend	Geology	Dia. 50 mm
							95.21	0.15	ASPHALT. (MADE GROUND)			TARMAC	
0.30	ES		0					(1.05)	Loose brown sandy fine to coarse angular to very angular GRAVEL of concrete, brick, asphalt and sandstone. Occasional concrete and sandstone cobbles. (MADE GROUND)			MG	
0.70-1.20 0.80	B ES		0				94.16	1.20					
1.20-1.65	SPT	1,1,1 1,1,1 N=4(S)	0				93.96	1.40	Loose fine to medium rounded to sub angular GRAVEL of various lithologies. Occasional paper and building material inclusions. (MADE GROUND)			MG	
1.30 1.35 1.80	ES BLK D	(x2)				▼1		(1.10)	1.20 - 4.50 Wet Soft dark grey mottled black organic sandy CLAY. (ALLUVIUM) 2.00 - 2.50 No recovery.			ALV	
2.50-2.95	SPT	2,3,2 2,3,3 N=10(S)					92.86	2.50					
							92.36	(0.50) 3.00	Medium dense dark greyish black mottled orange slightly clayey sandy fine to coarse rounded to angular GRAVEL of sandstone. Frequent sandstone cobbles. (MILLSTONE GRIT)			MSG	
3.40 3.50	ES D	(x2)	0						3.00 - 3.40 No recovery. Medium dense dark greyish black mottled orange slightly clayey sandy fine to coarse rounded to angular GRAVEL of sandstone. Frequent sandstone cobbles. (MILLSTONE GRIT)				
4.00	SPT	6,18,10 4,3,4 N=21(S)						(1.10)				MSG	
4.50-5.00 4.50	B ES		0				90.86	4.50					
5.00	SPT	1,2,2 5,7,9 N=23(S)							Very weak thinly laminated dark grey MUDSTONE. Occasional orange staining along joints. (MILLSTONE GRIT)				
6.30 6.50	ES D		0					(3.95)				MSG	
6.50-6.95	SPT	6,10,18 24,8,0 N=50/ 0.16(S)											
8.00-8.45	SPT	8,12,14 24,12,0 N=50/ 0.195(S)					86.91	8.45					
									Terminated at 8.45 m bgl.			END	

Boring Progress

Date	Time	Depth	Casing Dpt	Dia. (mm)	Water Dpt
11-11-14	16.45	5.00	4.00		1.2
12-11-14	16.30	8.45	7.50		3.0

Water Strikes

Date	Time	Strike	Minutes	Standing	Casing
11-11-14		2.00			1.50

Chiselling

From	To	Hours	Tool

Water Added

From	To

General Remarks

1. Inspection pit excavated from GL to 1.2 m bgl.
2. Dynamic sampling 1.2 to 6.5 m bgl.
3. Rotary drilling 6.5 to 8.0 m bgl.
4. Groundwater encountered at 2.0 m bgl.

Scale 1:62.5

Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.

WSP UK Ltd

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BOREHOLE LOG

Hole No. **BH206**

Project: Oughtibridge Papermill

Sheet: 1 of 1

Job No	Client	Date
70006973	SCA	05-11-14 06-11-14

Contractor / Driller	Method/Plant Used	Logged By	Co-Ordinates (NGR)	Ground Level (m AOD)
Van Elle	Dynamic Sampling & Rotary Drilling / Comacchio 305	J.Milner	E 430287.491 N 393996.216	95.711

SAMPLES & TESTS							STRATA					Install / Backfill
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m2)	P.Pen (kN/m2)	Water	Elev. (mAOD)	Depth (Thick-ness)	Description	Legend	Geology	Dia. 50 mm
0.00-1.00	B								Dense dark brownish black very sandy fine to coarse rounded to very angular GRAVEL of sandstone, red brick and river pebbles. Sand is fine to coarse. (MADE GROUND)			
0.30	ES		0					(0.70)			MG	
							95.01	0.70	0.00 - 2.00 Moist.			
									Soft locally firm dark brownish grey gravelly sandy CLAY. Gravel is fine and medium angular of various lithologies. Sand is fine to coarse. (MADE GROUND)			
1.00	ES		0									
1.20	SPT	2,2,4 5,4,4 N=17(S)						(1.30)	1.30 - 1.40 Light greyish orange sandstone band.		MG	
1.20-2.00	B											
1.50	D					▼1						
							93.71	2.00	1.80 - 2.00 Soft black sandy silty organic CLAY. Inclusions of decayed wood bark and rootlets. Organic odour.			
2.00	ES		0						Soft locally firm dark brownish grey slightly gravelly sandy CLAY. Gravel is fine and medium angular of various lithologies. Sand is fine to coarse. (ALLUVIUM)			
								(1.40)	2.00 - 3.00 No recovery.		ALV	
3.00	SPT	4,5,6 6,6,5 N=23(S)							2.00 - 5.70 Wet.			
							92.31	3.40	3.00 Gravel content decreasing.			
3.00	D	(x2)							Medium dense reddish orange mottled brownish black slightly clayey sandy fine to coarse rounded to angular GRAVEL of sandstone and various lithologies. (MILLSTONE GRIT)			
4.00	SPT	3,7,10 8,6,7 N=31(S)	0									
4.00	ES							(2.30)			MSG	
5.00	SPT	5,5,5 5,5,8 N=23(S)										
5.00-5.70	B		0									
5.00	D											
							90.01	5.70				
5.50	ES								Thinly laminated dark greyish black with orange staining along joints distinctly weathered MUDSTONE. Frequent white speckles. (MILLSTONE GRIT)			
6.00	D							(1.30)			MSG	
6.50	SPT	7,8,8 11,10,12 N=41(S)										
							88.71	7.00				
6.50	ES								Dense thinly laminated dark greyish black MUDSTONE. (MILLSTONE GRIT)			
7.50	D							(1.45)			MSG	
8.00	SPT	6,5,8 10,9,13 N=40(S)										
							87.26	8.45				
									Terminated at 8.45 m bgl.		END	

Boring Progress					
Date	Time	Depth	Casing Dpt	Dia. (mm)	Water Dpt
05-11-14	16.30	4.60	3.00		3.0
06-11-14	16.45	8.45	6.00		3.0

Chiselling				Water Added	
From	To	Hours	Tool	From	To

Water Strikes					
Date	Time	Strike	Minutes	Standing	Casing
05-11-14		2.00			

General Remarks
1. Inspection pit excavated from GL to 1.2 m bgl.
2. Dynamic sampling 1.2 to 8.0 m bgl.
3. Groundwater encountered at 2.0 m bgl.
4. At 2.0 m bgl, SPT sinking under hammer weight.

Scale 1:62.5

Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.

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BOREHOLE LOG

Hole No. **BH207**

Project: Oughtibridge Papermill

Sheet: 1 of 1

Job No	Client	Date
70006973	SCA	07-11-14 10-11-14

Contractor / Driller	Method/Plant Used	Logged By	Co-Ordinates (NGR)	Ground Level (m AOD)
Van Elle	Dynamic Sampling & Rotary Drilling / Comacchio 305	J.Milner	E 430424.938 N 394083.357	100.532

SAMPLES & TESTS							STRATA						Install / Backfill
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m2)	P.Pen (kN/m2)	Water	Elev. (mAOD)	Depth (Thick-ness)	Description	Legend	Geology		Dia. mm
							100.33	0.20	Reinforced CONCRETE.		CONC		
0.20-1.20	B								Dark brown slightly clayey very sandy fine to coarse angular to very angular GRAVEL of red brick. Occasional brick cobbles. Sand is fine to coarse. (MADE GROUND)		MG		
0.50	ES		0				99.83	0.70					
1.00	ES		0						0.20 - 1.70 Moist.				
1.20	SPT	1,1,1 1,2,3 N=7(S)						(1.00)	Soft locally firm greyish brown occasionally orangish black sandy gravelly CLAY. Gravel is fine and medium angular of various lithologies. (MILLSTONE GRIT)		MSG		
1.20	D		0			1	98.83	1.70					
1.20-1.65	D						98.63	1.90	Soft black very silty organic CLAY. Organic odour.		MSG		
1.80	ES								Soft locally firm to stiff greyish brown occasionally orangish black sandy gravelly CLAY. Gravel is fine and medium angular of sandstone and various lithologies.Occasional decayed rootlets and sandstone cobbles. (MILLSTONE GRIT)				
2.00	SPT	3,5,6 5,7,8 N=26(S)											
2.00-3.00	B		0										
2.00-2.45	D												
2.80	ES												
3.00	SPT	2,3,4 7,5,9 N=25(S)											
3.00	D												
4.00	SPT	5,4,4 3,5,3 N=15(S)	0					(4.60)			MSG		
4.00-4.45	D												
4.00	ES												
4.50-5.00	B												
4.50	D												
5.00	SPT	1,2,3 1,4,2 N=10(S)											
5.00-5.45	D					2							
6.00	ES		0				94.03	6.50					
6.50	SPT	2,4,6 7,6,6 N=25(S)							Medium dense greyish brown clayey GRAVEL. Gravel is fine to medium rounded to angular sandstone. (MILLSTONE GRIT)				
6.50	D	(x2)	0						6.50 - 9.50 Wet.				
6.50-6.95	D												
7.00	ES												
8.00	SPT	4,4,4 3,7,9 N=23(S)						(3.00)			MSG		
8.00-8.45	D												
9.00-9.45	D						91.03	9.50					
9.50	SPT	6,12,17 16,17,0 N=50(S)							Thinly laminated dark greyish black MUDSTONE. Frequent white speckles. (MILLSTONE GRIT)				
10.50	SPT	3,3,2 2,2,2 N=8(S)						(1.50)			MSG		
10.50	D						89.53	11.00					
									Terminated at 11.0 m bgl.		END		

Boring Progress

Date	Time	Depth	Casing Dpt	Dia. (mm)	Water Dpt
07-11-14	16.30	6.00	4.50		4.5
10-11-14	16.30	11.00	9.00		6.0

Chiselling

From	To	Hours	Tool

Water Added

From	To

Water Strikes

Date	Time	Strike	Minutes	Standing	Casing
07-11-14		1.90			1.50
07-11-14		6.00			4.50

General Remarks

1. Inspection pit excavated from GL to 1.2 m bgl.
2. Dynamic sampling from 1.2 to 7.0 m bgl.
3. Rotary drilling from 7.0 to 10.5 m bgl.
4. Dynamic sampling from 10.5 to 11.0 m bgl.
5. Groundwater encountered at 1.9 m bgl and 6.0 m bgl.

Scale 1:71.875

Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.

Borehole Log

Borehole No. **BH208**

Sheet 1 of 2

Project Name:	Oughtibridge Paper Mill, Sheffield	Project No. G145072	Co-ords:	430644.99 - 393925.24	Hole Type DS/ROH
Location:	Wharncliffe Side, Sheffield		Level:	94.78	Scale 1:50
Client:	WSP		Dates:	03/11/2014 - 04/11/2014	Logged By Peter Williams

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20	94.58		MADE GROUND- Asphalt
		0.30	ES					Slightly moist soft grey slightly sandy gravelly CLAY. Gravel is fine to medium, sub rounded to sub angular of sandstone (Weathered Millstone Grit Formation)
		1.00	ES					
		1.20	D					
		1.20 - 1.45	SPTL S		1.40	93.38		
		1.20 - 2.00	B					Moist firm greyish brown gravelly CLAY. Gravel is medium to coarse , sub rounded to sub angular of sandstone (Weathered Millstone Grit Formation)
		1.65		N=4 (1,1/1,1,1,1)				
		2.00	D		2.00	92.78		Moist firm black/grey organic slightly sandy gravelly CLAY. Gravel is fine, sub rounded of sandstone (Weathered Millstone Grit Formation)
		2.00	ES					
		2.00 - 2.45	SPTL S					
		2.45		N=5 (1,1/1,1,1,2)				
		2.70	D		2.70	92.08		Moist firm brown sandy gravelly CLAY. Gravel is fine, sub rounded of sandstone (Weathered Millstone Grit Formation)
		2.70 - 3.00	B					
		3.00	D		3.00	91.78		Moist firm grey sandy CLAY. Sand is fine to coarse. (Weathered Millstone Grit Formation)
		3.45	D		3.45	91.33		Wet stiff to very stiff, grey with orange bands, slightly sandy gravelly CLAY. Gravel is fine to medium, sub rounded to sub angular of sandstone Grey from 4.0m. (Weathered Millstone Grit Formation)
		3.45 - 3.90	SPTL S					
		3.45 - 4.00	B					
		3.90		28 (47 for 105mm/28 for 290mm)				
		4.00	D					
		4.00	ES					
		4.00 - 4.45	SPTL S					
		4.00 - 5.00	B					
		4.45		N=17 (4,3/4,4,4,5)				
		4.70 - 5.00	D					
		5.00	ES					
		5.00 - 5.45	SPTL S		5.60	89.18		Wet stiff to very stiff dark grey mottled orange, slightly sandy very gravelly CLAY. Gravel is fine to medium, sub angular of sandstone and mudstone (Weathered Millstone Grit Formation)
		5.30	D					
		5.45		N=23 (5,5/5,5,5,8)				
		5.60	B					
		5.70	D					
		6.00	ES		6.40	88.38		
		6.00 - 6.30	B		6.50	88.28		Hard de structured dark grey stained orange MUDSTONE Recovered as a gravelly clay/ clayey gravel of mudstone and sandstone. (Weathered Millstone Grit Formation)
		6.30	D					
		6.30 - 6.50	B					
		6.50	D					Distinctly weathered, extremely weak, extremely thinly bedded grey with orange staining along bedding plains MUDSTONE. Some brown staining on surfaces. Typically recovered as a clayey fine, sub rounded to sub angular Gravel of mudstone and sandstone (Weathered Millstone Grit Formation)
		6.50 - 6.95	SPTL S					
		6.50 - 7.00	B					
		6.95		N=41 (7,8/8,11,10,12)				
		8.00	ES					
		8.00 - 8.45	SPTL S					
		8.20 - 8.50	B					
		8.45		N=40 (6,5/8,10,9,13)				
		8.50	D					
		9.50 - 9.95	SPTL S					
					10.00	84.78		Continued on next sheet

Remarks

Water at 3m. Formation names supplied by WSP Engineer. MC305 Rig

Borehole Log

Borehole No. **BH208**

Sheet 2 of 2

Project Name:	Oughtibridge Paper Mill, Sheffield	Project No. G145072	Co-ords:	430644.99 - 393925.24	Hole Type ROH
Location:	Wharncliffe Side, Sheffield		Level:	94.78	Scale 1:50
Client:	WSP		Dates:	03/11/2014 - 04/11/2014	Logged By Peter Williams

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		9.95		N=43 (3,6/6,11,13,13)				End of borehole at 10.00 m
		10.00	D					
		10.00	B					

11 12 13 14 15 16 17 18 19 20

Remarks

Water at 3m. Formation names supplied by WSP Engineer. MC305 Rig

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Borehole Number BH101

Site: Oughtibridge Paper Mill	Location: Wharncliff Side, South Yorkshire, S35 0DN	Ground Level (mASD): 100.00	Hole Diameter (mm): 115	Scale 1:45
Client: Georgia Pacific		Easting: 430223 Northing: 394253	Well Diameter (mm): 50 Filter Material: 1-3mm sand	Logged by: RB
Project: 31789100	Date: 27/11/2014	Method: Comacchio 205		Checked by:

STRATA RECORD | IN SITU TESTS / SAMPLES | Sheet 1 of 1

Description	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value
MADE GROUND: Concrete with metal rebar	0.10	99.90					
MADE GROUND: Dark greyish brown slightly clayey sandy GRAVEL. Sand is fine to coarse of some ash. Gravel is angular to sub-rounded, fine to coarse of brick, sandstone, concrete, some timber and some soft plastic. Some cobbles of brick and concrete. Becoming darker grey and wetter with depth. Weak hydrocarbon odour at 0.75m bgl.			PID	0.30-0.50	<1		
			PID	0.70-0.75	1		
	0.80	99.20	D	0.80-1.00	<1		
	0.90	99.10	PID				
			PID	1.20-1.50	<1		
MADE GROUND: Reworked greyish brown mottled dark grey and brown sandy slightly gravelly CLAY (firm). Gravel is sub-angular to sub-rounded, fine to coarse of sandstone. Wood and plant remains.			PID	1.80-2.10	<1		
			PID	2.20-2.50	<1		
Firm greyish brown mottled orange sandy slightly gravelly CLAY. Gravel is rounded to sub-rounded, fine to medium of sandstone. Twigs and plant remains noted throughout. Becomes soft at 1.6m bgl. Black organic rich pocket with twigs and roots at 1.4m bgl. Black organic rich pocket with twigs and roots at 2.75m bgl.			D PID	2.60-2.80	<1		
			PID	3.20-3.50	<1		
			PID	4.50-5.00	<1		
Brown sandy slightly gravelly CLAY. Gravel is rounded to sub-rounded fine to medium of sandstone.	5.80	94.20	PID	5.80-6.00	<1		
	6.10	93.90					
Brown clayey sandy GRAVEL. Sand is fine to coarse. Gravel is rounded to sub-rounded, fine to coarse of sandstone. Some sandstone cobbles.			PID	6.40-6.60	<1		
			PID	7.00-7.50	<1		
End of Borehole at 8.00 m	8.00	92.00					

Well Details: D S

Water Level: 4.515m bgl

Key:
- D Disturbed Sample
- B Bulk Sample
- U Undisturbed Sample
- J Jar Sample
- ▽ Water Strike
- ▼ Standing Water Level
- PPT Pocket Penetrometer Test
- PID Photoionisation Detector
- SPT Standard Penetration Test (Uncorrected)

Remarks: No groundwater strike encountered. Groundwater resting at 4.515m bgl on completion of the well.

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Borehole Number **BH102**

Site: Oughtibridge Paper Mill	Location: Wharncliff Side, South Yorkshire, S35 0DN	Ground Level (mASD):	Hole Diameter (mm): -	Scale 1:45
Client: Georgia Pacific		Easting: 430223 Northing: 394253	Well Diameter (mm): - Filter Material:	Logged by: RB
Project: 31789100	Date: 27/11/2014	Method: Hand dug pit		Checked by:

STRATA RECORD | IN SITU TESTS / SAMPLES | Sheet 1 of 1

Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: Grass over brown sandy gravelly CLAY TOPSOIL. Gravel is angular to sub-rounded, fine to medium of brick, sandstone and concrete. Roots and rootlets noted.		0.10		PID	0.30-0.50	<1			S	
MADE GROUND: Greyish brown clayey sandy GRAVEL. Sand is fine to coarse of some ash. Gravel is angular to sub-angular, fine to coarse of brick, concrete, sandstone, rare metal and occassional clinker. Occassional cobbles of concrete and sandstone.		0.50								
End of Borehole at 0.50 m										

Key:
- D Disturbed Sample
- B Bulk Sample
- U Undisturbed Sample
- J Jar Sample
- ▽ Water Strike
- ▼ Standing Water Level
- PPT Pocket Penetrometer Test
- PID Photoionisation Detector
- SPT Standard Penetration Test (Uncorrected)

Remarks: Refused on boulders of concrete and cobbles of brick. No groundwater strike encountered.

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Borehole Number BH102A

Site: Oughtibridge Paper Mill	Location: Wharncliff Side, South Yorkshire, S35 0DN	Ground Level (mASD): 99.77	Hole Diameter (mm): 115	Scale 1:45
Client: Georgia Pacific		Easting: 430223 Northing: 394253	Well Diameter (mm): 50 Filter Material: 1-3mm sand	Logged by: RB
Project: 31789100	Date: 27/11/2014	Method: Comacchio 205		Checked by:

STRATA RECORD | IN SITU TESTS / SAMPLES | Sheet 1 of 1

Description	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value
MADE GROUND: Concrete.	0.15	99.62	PID	0.20-0.30	<1		
MADE GROUND: Dark grey slightly clayey sandy GRAVEL. Sand is fine to coarse of ash. Gravel is angular to sub-angular, fine to coarse of clinker and concrete.	0.30	99.47	D				
			PID	0.40-0.50	<1		
			PID	0.55-0.75	<1		
MADE GROUND: Dark greyish brown slightly clayey sandy GRAVEL. Sand is fine to coarse of ash. Gravel is angular to sub-rounded, fine to coarse of concrete, brick, sandstone, some hard plastic, some soft plastic and some clinker. Hydrocarbon odour at 0.7m bgl.	0.80	98.97	PID	0.80-0.90	1.3		
			PID	1.00-1.10	1		
			PID	1.40-1.80	<1		
MADE GROUND: Greenish grey brown sandy gravelly CLAY (firm). Gravel is angular to sub-angular, fine to coarse of brick, quartz and sandstone. Cobbles of sandstone noted. Becoming soft at 2.5m bgl with some black staining.			PID	1.90-2.10	<1		
			PID	2.30-2.50	1.1		
MADE GROUND: Reworked orangish brown sandy gravelly CLAY (soft). Gravel is sub-angular to sub-rounded, fine to coarse of sandstone.	2.50	97.27	PID	2.60-2.90	1.2		
			D				
			PID	3.10-3.40	<1		
Orangish brown sandy gravelly CLAY. Gravel is sub-angular to sub-rounded, fine to coarse of sandstone and shale. Increase in gravel at 3.3m bgl.	3.30	96.47	PID	3.40-4.20	1.2		
			PID	4.50-5.00	1.8		
Pale brown clayey sandy GRAVEL. Gravel is rounded to sub-rounded, fine to coarse of sandstone. Cobbles of sandstone.	5.30	94.47	PID	5.30-6.00	2		
End of Borehole at 8.00 m	8.00	91.77					

Well Details: D, S

Water Level: 4

Key:
- D Disturbed Sample
- B Bulk Sample
- U Undisturbed Sample
- J Jar Sample
- ▽ Water Strike
- ▼ Standing Water Level
- PPT Pocket Penetrometer Test
- PID Photoionisation Detector
- SPT Standard Penetration Test (Uncorrected)

Remarks: No groundwater strike encountered. Groundwater resting at 4.279m bgl in subsequent monitoring visit

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Borehole Number BH103

Site: Oughtibridge Paper Mill	Location: Wharncliff Side, South Yorkshire, S35 0DN	Ground Level (mASD): 100.23	Hole Diameter (mm): 115	Scale 1:45
Client: Georgia Pacific		Easting: 430223 Northing: 394253	Well Diameter (mm): 50 Filter Material: 1-3mm sand	Logged by: RB
Project: 31789100	Date: 25/11/2014	Method: Comacchio 205		Checked by:

STRATA RECORD | IN SITU TESTS / SAMPLES | Sheet 1 of 1

Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: Greyish brown clayey sandy GRAVEL. Gravel is angular to sub-angular, fine to coarse of brick, concrete, occassional pottery pipe fragments, quartz, occassional clinker and rare timber. Frequent cobbles of brick, concrete and black bituminous surfacing.				PID D	0.30-0.50	<1			D S	
				PID	1.20-1.40	<1				
MADE GROUND: Dark greyish brown slightly clayey sandy GRAVEL. Gravel is angular to sub-angular, fine to coarse of brick, sandstone, clinker and some concrete. Concrete decreases with depth. Clinker becomes more frequent with depth.		1.40	98.83	PID	1.50-2.20	<1				
				PID	2.40-2.80	<1				
Brown clayey sandy GRAVEL band at 3.1 to 3.2m bgl.		3.30	96.93	D PID	3.30-3.50 3.30-3.70	<1				
MADE GROUND: Reworked dark grey brown with pale orangish brown and with dark grey mottling sandy slightly gravelly CLAY (soft). Gravel is sub-angular, fine to medium of clinker. Pocket of clinker at 3.55m bgl.		3.70	96.53	PID PID PID	3.70-3.80 3.80-4.00 4.00-4.40	<1 <1 <1				
Pale brown mottled orange, grey and dark orangish brown sandy slightly gravelly CLAY (firm). Gravel is sub-rounded, fine to coarse of sandstone.		4.40	95.83	PID	4.40-4.50	<1				
Pale brown clayey slightly sandy GRAVEL. Sand is fine. Gravel is sub-angular, coarse of shale.		4.65	95.58	PID	4.70-4.80	<1				
Pale brown mottled orange, grey and dark orangish brown sandy slightly gravelly CLAY (firm). Gravel is sub-rounded, fine to coarse of sandstone.		5.10	95.13	PID PID	5.10-5.15 5.15-6.00	<1 <1				
Pale orangish brown slightly clayey sandy GRAVEL. Gravel is rounded to sub-rounded, coarse of sandstone. Frequent sandstone cobbles.		6.00	94.23							
End of Borehole at 6.00 m										

Key:
- D Disturbed Sample
- B Bulk Sample
- U Undisturbed Sample
- J Jar Sample
- ▽ Water Strike
- ▼ Standing Water Level
- PPT Pocket Penetrometer Test
- PID Photoionisation Detector
- SPT Standard Penetration Test (Uncorrected)

Remarks: No groundwater strike encountered. Groundwater resting at 4.120m bgl on completion of the well.

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Borehole Number BH104

Site: Oughtibridge Paper Mill	Location: Wharncliff Side, South Yorkshire, S35 0DN	Ground Level (mASD): 100.36	Hole Diameter (mm): 115	Scale 1:45
Client: Georgia Pacific		Easting: 430223 Northing: 394253	Well Diameter (mm): 50 Filter Material: 1-3mm sand	Logged by: RB
Project: 31789100	Date: 25/11/2014	Method: Comacchio 205		Checked by:

STRATA RECORD | IN SITU TESTS / SAMPLES | Sheet 1 of 1

Description	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: Orangish brown slightly clayey gravelly SAND. Sand is fine to coarse of some ash. Gravel is angular to sub-angular, fine to coarse of brick, concrete and glass.	0.10	100.26	PID	0.20-0.50	<1				
MADE GROUND: Dark brownish grey gravelly SAND. Sand is fine to coarse of ash. Gravel is angular to sub-rounded, fine to coarse of concrete, occassional brick, occassional polystyrene and some clinker. Waste black cable noted at 0.2m bgl.			PID D	0.80-1.00 0.90-1.00	<1				
Sandstone cobble at 1.6m bgl.			PID	1.70-2.00	<1				
MADE GROUND: Dark greyish brown slightly gravelly SAND. Sand is fine to coarse of some ash. Gravel is sub-angular, fine to medium of concrete. Rootlets noted.	2.10 2.40	98.26 97.96	PID	2.10-2.40 2.50-2.90	<1 <1				
MADE GROUND: Dark grey sandy GRAVEL. Sand is fine to coarse of ash. Gravel is angular to sub-rounded, fine to coarse of frequent clinker and some coal.			PID PID PID D	3.20-3.50 3.70-3.90 4.20-4.50	<1 <1 <1				
MADE GROUND: Reworked dark greyish brown sandy CLAY (soft). Sand is fine. Roots and rootlets noted. Becoming light grey mottled orange at 4.95 to 5.15m bgl.	4.75 5.15	95.61 95.21	PID	4.80-5.10	<1				
Very soft Light grey and orange mottled sandy slightly gravelly CLAY. Gravel is sub-rounded, fine to coarse of sandstone.Becoming increasingly sandy with depth. Becoming soft at 5.8m bgl.	5.90	94.46	PID	5.50-5.80	<1				
Light greyish brown slightly clayey cobbly GRAVEL. Gravel is sub-rounded, coarse of sandstone.									
End of Borehole at 8.00 m	8.00	92.36							

Key:
- D Disturbed Sample
- B Bulk Sample
- U Undisturbed Sample
- J Jar Sample
- ▽ Water Strike
- ▼ Standing Water Level
- PPT Pocket Penetrometer Test
- PID Photoionisation Detector
- SPT Standard Penetration Test (Uncorrected)

Remarks: Groundwater strike encountered at 5.9m bgl rising to 5.38m bgl after 20 minutes. On completion of the well, groundwater resting at 4.96m bgl.

APPENDIX C

GAS AND GROUNDWATER MONITORING RESULTS

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 06/01/2016 - 07/01/2016

Job No: C6485A
Visit No: 1 **of** 12
Operator: DL/JF **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
Former Landfill Area																										
SWS19	10.0	9.9	>>	>>	0.8	0.7	3	1	ND	ND	10.8	11.0	ND	ND	ND	ND	ND	NA	0.01	0.0007	1.55	3.07	100.11	98.56	MG - C (1.0 - 3.0m)	No odour or sheen
SWS20	ND	ND	ND	ND	2.6	2.5	1	ND	1	ND	17.9	18.0	0.1	ND	ND	ND	ND	NA	NA	0.0025	4.70	4.90	100.55	95.85	MG - G/C- ALL (1.0 - 5.0m)	No odour or sheen
SWS21	0.7	ND	ND	ND	3.0	2.9	1	ND	ND	ND	18.1	18.2	0.3	ND	ND	ND	ND	NA	0.0007	0.0029	4.27	4.96	100.21	95.94	MG - G (1.0 - 5.0m)	No odour or sheen
SWS22	ND	ND	ND	ND	4.2	4.1	1	ND	1	ND	2.6	3.1	ND	ND	-7.4	-7.3	-4	30	NA	0.2993	2.81	4.51	100.65	97.84	NAT - C - ALL (4.0 - 5.0m)	No odour or sheen
SWS26	0.2	ND	4.0	ND	3.4	3.2	1	ND	ND	ND	13.2	13.7	2.1	ND	ND	ND	ND	NA	0.0002	0.0032	ND	2.67	101.11	NA	MG - C (1.0 - 2.8m)	
SWS27B	5.1	4.6	>>	>>	5.8	5.2	1	ND	ND	ND	ND	ND	3.0	ND	ND	ND	ND	NA	0.0051	0.0052	3.32	4.04	102.21	98.89	MG - G - C (1.0 - 4.0m)	Slight hydrocarbon odour, no sheen
SWS28	**Not Monitored as part of this Visit - Not Located/Identified**																									
SWS29	0.4	ND	ND	ND	0.5	0.7	1	ND	1	ND	18.5	18.7	NR	ND	ND	ND	ND	NA	0.0004	0.0007	3.85	3.90	102.00	98.15	MG - G - C (1.0 - 4.0m)	No odour or sheen
SWS42	0.1	ND	ND	ND	7.5	7.2	1	0	ND	ND	ND	ND	5.3	ND	ND	ND	ND	NA	0.0001	0.0072	2.42	3.73	101.13	98.71	MG - G/C - ALL (0.5 - 3.6m)	No odour or sheen
SWS43	0.1	ND	ND	ND	ND	ND	1	0	ND	ND	20.3	20.3	1.5	ND	ND	ND	ND	NA	0.0001	NA	0.36	4.45	100.05	99.69	NAT - C - ALL & MSG (3.5 - 5.0m)	Hydrocarbon odour on dip tape, no sheen.
SBH06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	NA	3.08	8.08	100.52	97.44	NAT - C - MSG & BRMSG (4.5 - 8.7m)	No odour or sheen
SBH07	ND	ND	ND	ND	ND	ND	5	1	ND	ND	20.5	20.6	2.5	ND	ND	ND	ND	NA	NA	NA	4.05	7.55	100.75	96.70	NAT - C/G - ALL (6.0 - 7.9m)	No odour or sheen
SBH08	0.2	ND	ND	ND	0.2	0.1	3	1	ND	ND	20.1	20.3	1.2	ND	ND	ND	ND	NA	0.0002	0.0001	4.34	10.37	101.32	96.98	NAT - G - ALL & C - MSG (7.0 - 11.2m)	No odour or sheen
SBH09	1.5	0.2	14.5	0.5	0.5	0.5	3	1	ND	ND	14.2	19.0	NR	ND	-1.3	-0.3	-5	75	0.0195	0.0015	2.00	8.80	102.59	100.59	NAT - C - ALL & G - MSG (4.5 - 9.3m)	No odour or sheen
SBH10	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	20.2	20.3	NR	ND	ND	ND	ND	NA	NA	NA	0.33	7.50	101.37	101.04	NAT - G - ALL (6.0 - 8.0m)	No odour or sheen
BH204 - S - (WSP)	ND	ND	ND	ND	1.1	1.1	1	ND	1	ND	19.9	19.9	0.6	ND	ND	ND	ND	NA	NA	0.0011	1.97	2.10	100.60	98.63	MG - C (1.0 - 2.0m)	No odour or sheen
BH204 - D - (WSP)	0.6	ND	ND	ND	2.6	2.2	1	ND	1	ND	7.7	9.4	1.2	ND	23.0	ND	3	30	0.138	0.0022	2.66	6.66	100.60	97.94	NAT - G - MSG (3.6 - 6.5m)	No odour or sheen
BH101 (19mm) - (Arcadis)	55.0	55.0	4.0	4.0	13.0	13.0	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	NA	0.055	0.013	ND	2.07	97.09	NA	MG - C (1.0 - 2.0m)	
BH101 (50mm) - (Arcadis)	52.0	50.0	>>	>>	13.5	13.5	ND	ND	ND	ND	ND	0.7	NA	NA	ND	ND	ND	NA	0.052	0.0135	4.20	7.90	97.09	92.89	NAT - C / G (4.0 - 8.0m)	No odour or sheen
BH103 (Arcadis)	**Not Monitored as part of this Visit - Not Located/Identified**																									
Max	**55.0**	**55.0**	**14.5**	**4.0**	**13.0**	**13.0**	**5**	**1**	**1**	**ND**	**20.5**	**20.6**	**5.3**	**ND**	**23.0**	**-0.3**	**3.0**	**75**	**0.1380**	**0.2993**	**4.70**	**10.37**	**102.59**	**101.04**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**0.0001**	**0.0001**	**0.33**	**2.07**	**97.09**	**95.85**		

ND - Not detected
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NAT - Natural
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G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.

METEOROLOGICAL AND SITE INFORMATION: (Select correct box with X or enter data, as applicable)

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight	X	Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			984	Start			986	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			3	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 06/01/2016 - 07/01/2016

Job No: C6485A
Visit No: 1 **of** 12
Operator: DL/JF **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	ND	10.0	4.9	4.8	1	ND	1	ND	8.9	9.3	NA	NA	ND	ND	ND	NA	NA	0.0048	2.00	2.04	95.10	93.10	MG - C (0.5 - 2.0m)	No odour or sheen
SBH11	ND	ND	ND	ND	4.0	3.7	1	ND	1	ND	9.6	10.7	NA	30	ND	ND	ND	NA	NA	0.0037	2.18	4.13	95.08	92.90	MG - G (0.5 - 4.1m)	Slight hydrocarbon odour, free-product at surface of water (brown in colour).
Max	**ND**	**ND**	**ND**	**10.0**	**4.9**	**4.8**	**1**	**ND**	**1**	**ND**	**9.6**	**10.7**	**ND**	**30**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0048**	**2.18**	**4.13**	**95.10**	**93.10**		
Min	**ND**	**ND**	**ND**	**ND**	**4.0**	**3.7**	**1**	**ND**	**1**	**ND**	**8.9**	**9.3**	**0.0**	**30.0**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0037**	**2.00**	**2.04**	**95.08**	**92.90**		

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Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.

METEOROLOGICAL AND SITE INFORMATION:

(Select correct box with X or enter data, as applicable)

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight	X	Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			984	Start			986	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			3	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 06/01/2016 - 07/01/2016

Job No: C6485A
Visit No: 1 **of** 12
Operator: DL/JF **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	0.3	0.2	4.2	4.2	7.7	0.9	ND	ND	ND	ND	6.5	19.8	ND	ND	ND	ND	ND	NA	0.0003	0.0009	1.20	4.37	98.20	97.00	MG - C (2.5 - 4.5m)	No odour or sheen
SWS34	0.7	ND	ND	ND	1.7	1.1	1	ND	1	ND	18.5	18.8	NA	ND	4.1	-2.3	ND	60 secs	0.0287	0.0253	0.82	4.54	99.37	98.55	NAT - C - G - ALL (2.5 - 5.0m)	No odour or sheen
SWS35	ND	ND	1.3	ND	1.3	1.3	ND	ND	ND	ND	19.9	19.9	NA	ND	ND	ND	ND	NA	NA	0.0013	0.15	4.90	105.56	105.41	MG - G - C (0.5 - 4.8m)	No odour or sheen
SWS38	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND	12.0	12.0	NA	ND	ND	ND	ND	NA	NA	NA	2.02	3.74	98.86	96.84	MG - C (1.0 - 4.0m)	No odour or sheen
SWS41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.0	20.1	NA	ND	ND	ND	ND	NA	NA	NA	4.32	4.41	106.06	101.74	MG - G (0.5 - 4.5m)	No odour or sheen
SBH13	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND	18.1	18.9	NA	ND	ND	ND	ND	NA	NA	NA	1.22	7.74	98.33	97.11	NAT - G - ALL & BRMSG (6.5 - 8.0m)	No odour, slight sheen
SBH14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.0	19.0	NA	ND	ND	ND	ND	NA	NA	NA	4.85	10.50	105.53	100.68	NAT - C - ALL & MSG (8.5 - 10.0m)	No odour or sheen
SBH15	ND	ND	ND	ND	0.1	0.1	1	ND	ND	ND	20.6	20.6	NA	ND	ND	ND	ND	NA	NA	0.0001	1.60	5.35	96.57	94.97	NAT - G - ALL & BRMSG (4.0 - 5.9m)	No odour or sheen
SBH16	ND	ND	ND	ND	0.2	0.1	ND	ND	ND	ND	19.8	20.0	NA	ND	ND	ND	ND	NA	NA	0.0001	2.66	4.64	97.00	94.34	NAT - G - ALL & BRMSG (4.5 - 5.15m)	No odour or sheen
BH202A (WSP)	**No Gas Tap Fitted, Gas Tap installed by Sirius**																									
Max	**0.7**	**0.2**	**4.2**	**4.2**	**7.7**	**1.3**	**1**	**ND**	**1**	**ND**	**20.6**	**20.6**	**ND**	**ND**	**4.1**	**-2.3**	**ND**	**NA**	**0.0287**	**0.0253**	**4.85**	**10.50**	**106.06**	**105.41**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**6.5**	**12.0**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**0.0003**	**0.0001**	**0.15**	**3.74**	**96.57**	**94.34**		

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Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.

METEOROLOGICAL AND SITE INFORMATION: (Select correct box with X or enter data, as applicable)

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight	X	Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			984	Start			986	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			3	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 06/01/2016 - 07/01/2016

Job No: C6485A
Visit No: 1 **of** 12
Operator: DL/JF **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Mill Area																										
SWS01	ND	ND	ND	ND	1.7	1.7	ND	ND	ND	ND	14.0	19.8	1.3	ND	ND	ND	ND	NA	NA	0.0017	1.53	3.53	95.72	94.19	NAT - C - MSG (1.0 - 3.6m)	No odour or sheen
SWS02A	ND	ND	ND	ND	4.0	3.0	ND	ND	ND	ND	16.0	20.1	1.1	ND	ND	ND	ND	NA	NA	0.003	1.53	3.53	94.72	93.19	NAT - C - ALL (1.5 - 3.5m)	No odour or sheen
SWS07	ND	ND	ND	ND	0.8	0.7	1	ND	ND	ND	20.0	20.1	11.5	ND	ND	ND	ND	NA	NA	0.0007	1.67	2.10	95.37	93.70	NAT - C - MSG (1.0 - 2.0m)	Hydrocarbon odour on dip tape, no sheen
SWS08A	0.6	0.5	14.0	13.5	2.8	2.7	1	0	ND	ND	11.9	12.1	0.2	ND	ND	ND	ND	NA	0.0006	0.0027	2.27	3.97	95.33	93.06	NAT - C - ALL (1.0 - 4.0m)	No odour or sheen
SWS11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17.8	20.1	1.8	ND	ND	ND	ND	NA	NA	NA	1.43	4.98	100.36	98.93	NAT - C - ALL & MSG (1.0 - 5.0m)	No odour or sheen
SWS13	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	19.6	19.6	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.85	99.06	NA	MG - G (0.5 - 0.8m)	
SWS14	ND	ND	ND	ND	1.0	1.0	ND	ND	ND	ND	17.7	19.5	1.9	ND	0.1	0.1	ND	NA	NA	0.001	ND	1.93	100.03	NA	MG - G (0.5 - 2.0m)	
SWS09	ND	ND	5.5	ND	3.8	3.8	ND	ND	ND	ND	13.9	13.9	ND	ND	ND	ND	ND	NA	NA	0.0038	2.40	2.50	95.49	93.09	C - MG - ALL (0.5 - 3.0m)	No odour or sheen
SWS44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.5	20.2	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.97	100.48	NA	MG - G (1.0 - 3.0m)	
SBH01	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	20.4	20.5	10.5	ND	ND	ND	ND	NA	NA	NA	2.23	6.17	95.35	93.12	MG - G/C/G - ALL & C - MSG (1.5 - 7.0m)	Slight hydrocarbon odour, no sheen
SBH03	ND	ND	ND	ND	0.4	0.3	3	1	1	0	20.3	20.3	3.4	ND	0.8	ND	ND	3	NA	0.0003	1.83	8.00	95.46	93.63	NAT - C/G - ALL & C- MSG (2.5 - 8.0m)	No odour or sheen
SBH04	ND	ND	ND	ND	0.1	0.1	1	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0001	1.60	6.10	95.43	93.83	NAT - C/G - ALL & C - MSG -BRMSG (2.0 - 6.7m)	No odour or sheen
SBH05	**Not Monitored as part of this Visit - Borehole flooded unable to monitor.**																								MG - G/C - C - ALL & MSG (2.4 - 8.0m)	No odour or sheen
BH208 - D - (WSP)	22.4	ND	41.2	ND	0.7	ND	ND	ND	ND	ND	20.4	20.0	ND	ND	ND	ND	ND	NA	0.0224	NA	1.65	4.64	94.78	93.13	NAT - C - ALL & MSG (1.0 - 5.0m)	Slight sheen, no odour
BH208 - S - (WSP)	**Not Monitored as part of this Visit**																								MG - NAT C (0.5 - 1.0m)	
BH207 - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.0	20.6	1.9	ND	ND	ND	ND	NA	NA	NA	ND	7.60	100.53	NA	NAT - C - G - MSG (5.0 - 8.0m)	
BH205 - S - (WSP)	ND	ND	ND	ND	0.3	0.3	1	ND	ND	ND	15.7	15.9	0.3	ND	ND	ND	ND	NA	NA	0.0003	0.73	0.86	95.35	94.62	MG - G (0.5 - 1.0m)	No odour or sheen
BH205 - D - (WSP)	ND	ND	ND	ND	0.4	0.4	3	ND	ND	ND	16.1	16.2	1.3	ND	ND	ND	ND	NA	NA	0.0004	1.30	8.50	95.35	94.05	NAT - C - ALL & G - MSG (1.0 - 4.0m)	No odour or sheen
MW101 (URS)	ND	ND	ND	ND	0.8	0.8	ND	ND	ND	ND	19.4	19.4	ND	ND	ND	ND	ND	NA	NA	0.0008	ND	5.20	NR	NA	MG - G (1.5 - 5.5m)	
Max	**22.4**	**0.5**	**41.2**	**13.5**	**4.0**	**3.8**	**3**	**1**	**1**	**0**	**20.5**	**20.6**	**11.5**	**ND**	**0.8**	**0.1**	**ND**	**3**	**0.0224**	**0.0038**	**2.40**	**8.50**	**100.53**	**98.93**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**11.9**	**12.1**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**0.0006**	**0.0001**	**0.73**	**0.85**	**94.72**	**93.06**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.

METEOROLOGICAL AND SITE INFORMATION: (Select correct box with X or enter data, as applicable)

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight	X	Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			984	Start			986	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			3	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 20/01/2016 - 21/01/2016

Job No: C6485A
Visit No: 2 **of** 12
Operator: DL/AW **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	0.2	0.2	5.3	5.3	0.3	0.3	1	ND	1	ND	16.7	16.7	ND	ND	ND	ND	ND	NA	0.0002	0.0003	2.43	3.05	100.11	97.68	MG - C	
SWS20	ND	ND	ND	ND	0.3	0.3	1	ND	1	ND	20.3	20.3	0.1	ND	ND	ND	ND	NA	NA	0.0003	4.70	4.90	100.55	95.85	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	1.5	1.5	1	ND	1	ND	18.8	18.8	3.6	ND	ND	ND	ND	NA	NA	0.0015	4.20	5.00	100.21	96.01	MG - G	
SWS22 (Pre Purge)	ND	ND	ND	ND	0.7	0.7	1	ND	1	ND	18.5	18.5	0.4	ND	0.6	0.6	2	3	NA	0.0042	3.09	4.87	100.65	97.56	NAT - C - ALL	
SWS22 (Post Purge)	ND	ND	ND	ND	1.3	1.3	ND	ND	ND	ND	18.6	18.6	NR	ND	0.5	0.5	1	NA	NA	0.0065	4.35	4.87	100.65	96.30	NAT - C - ALL	
SWS26	ND	ND	ND	ND	0.8	0.8	1	ND	1	ND	19.2	19.2	ND	ND	ND	ND	ND	NA	NA	0.0008	ND	2.66	101.11	NA	MG - C	
SWS27B	1.5	1.5	36.1	36.1	2.0	2.0	1	ND	1	ND	10.2	10.2	1.9	ND	ND	ND	ND	NA	0.0015	0.002	3.37	3.98	102.21	98.84	MG - G - C	
SWS28	37.4	37.4	>>>	>>>	23.0	23.0	1	ND	1	ND	8.3	8.3	0.2	ND	ND	ND	ND	NA	0.0374	0.023	2.45	3.79	102.21	99.76	MG - G/C	
SWS29	ND	ND	ND	ND	0.3	0.3	1	ND	1	ND	20.3	20.3	0.2	ND	ND	ND	ND	NA	NA	0.0003	ND	3.87	102.00	NA	MG - G - C	
SWS42	ND	ND	ND	ND	4.3	4.3	ND	ND	ND	ND	9.4	20.2	0.4	ND	1.0	1.0	3	NA	NA	0.043	2.47	3.70	101.13	98.66	MG - G/C - ALL	
SWS43	ND	ND	ND	ND	ND	ND	1	ND	1	ND	20.3	20.3	ND	ND	4.3	4.3	20	15	NA	NA	0.45	4.55	100.05	99.60	NAT - C - ALL & MSG	
SBH06 (Pre Purge)	ND	ND	ND	ND	ND	ND	1	ND	1	ND	22.1	22.1	0.9	ND	ND	ND	ND	NA	NA	NA	3.36	8.08	100.52	97.16	NAT - C - MSG & BRMSG	
SBH06 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.1	20.5	NR	ND	0.5	0.5	1	NA	NA	0.001	6.58	8.10	100.52	93.94	NAT - C - MSG & BRMSG	
SBH07 (Pre Purge)	ND	ND	ND	ND	ND	ND	1	ND	1	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	NA	NA	4.14	7.54	100.75	96.61	NAT - C/G - ALL	
SBH07 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.6	NR	ND	ND	ND	ND	NA	NA	0.0001	6.58	7.54	100.75	94.17	NAT - C/G - ALL	
SBH08	ND	ND	ND	ND	0.1	0.1	ND	ND	1	ND	20.0	20.4	0.8	ND	20.0	20.0	6	NA	NA	0.02	4.44	10.24	101.32	96.88	NAT - G - ALL & C - MSG	Unable to monitor post purge owing to recharge being too fast.
SBH09	ND	ND	ND	ND	0.1	0.1	1	ND	1	ND	20.3	20.3	0.8	ND	ND	ND	ND	NA	NA	0.0001	2.11	8.70	102.59	100.48	NAT - C/G - ALL & C - MSG	
SBH10 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.9	20.6	0.7	ND	1.5	1.5	5	NA	NA	NA	4.17	7.56	101.37	97.20	NAT - G - ALL	
SBH10 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.2	20.2	NR	ND	1.0	1.0	3	NA	NA	0.002	6.75	7.56	101.37	94.62	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	0.7	0.4	1	ND	1	ND	10.0	10.0	0.2	ND	6.0	6.0	ND	NA	NA	0.024	1.97	2.07	100.60	98.63	MG - C	
BH204 - D - (WSP)	ND	ND	ND	ND	0.3	0.3	1	ND	1	ND	18.6	18.6	0.2	ND	ND	ND	ND	NA	NA	0.0003	2.55	6.80	100.60	98.05	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	17.4	17.4	>>>	>>>	3.6	3.6	1	ND	1	ND	13.7	13.7	0.3	ND	ND	ND	ND	NA	0.0174	0.0036	ND	2.07	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis)	14.8	14.8	>>>	>>>	4.4	4.4	1	ND	1	ND	13.7	13.7	0.3	ND	ND	ND	ND	NA	0.0148	0.0044	4.43	7.91	97.09	92.66	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	ND	ND	2.8	2.8	1	ND	1	ND	15.8	15.8	0.2	ND	ND	ND	ND	NA	NA	0.0028	4.03	6.24	100.23	96.20	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	0.8	0.8	1	ND	1	ND	19.2	19.2	0.2	ND	ND	ND	ND	NA	NA	0.0008	ND	2.00	100.23	NA	MG - G	
Max	**37.4**	**37.4**	**36.1**	**36.1**	**23.0**	**23.0**	**1**	**ND**	**1**	**ND**	**22.1**	**22.1**	**3.6**	**ND**	**20.0**	**20.0**	**20.0**	**15**	**0.0374**	**0.0430**	**6.75**	**10.24**	**102.59**	**100.48**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**8.3**	**8.3**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**0.0002**	**0.0001**	**0.45**	**2.00**	**97.09**	**92.66**		

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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

(Select correct box with X or enter data, as applicable)

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			1003	Start			1001	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			1	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 20/01/2016 - 21/01/2016
Job No: C6485A
Visit No: 2 **of** 12
Operator: DL/AW **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	**Well not monitored as part of this visit - Not located**																								MG - C (0.5 - 2.0m)	
SBH11	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.2	20.3	0.9	40	ND	ND	ND	NA	NA	0.0004	2.62	4.11	95.08	92.46	MG - G (0.5 - 4.1m)	Slight hydrocarbon odour, free-product at surface of water (brown in colour).
Max	**ND**	**ND**	**ND**	**ND**	**0.4**	**0.4**	**ND**	**ND**	**ND**	**ND**	**20.2**	**20.3**	**0.9**	**40**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0004**	**2.62**	**4.11**	**95.08**	**92.46**		
Min	**ND**	**ND**	**ND**	**ND**	**0.4**	**0.4**	**ND**	**ND**	**ND**	**ND**	**20.2**	**20.3**	**0.9**	**40.0**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0004**	**2.62**	**4.11**	**95.08**	**92.46**		

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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

(Select correct box with X or enter data, as applicable)

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			1003	Start			1001	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			1	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 20/01/2016 - 21/01/2016

Job No: C6485A
Visit No: 2 **of** 12
Operator: DL/AW **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	ND	ND	0.7	0.7	1	ND	1	ND	19.3	19.3	ND	ND	ND	ND	ND	NA	NA	0.0007	2.28	4.42	98.20	95.92	MG - C	
SWS34	ND	ND	ND	ND	0.7	0.7	1	ND	1	ND	20.4	20.6	1.4	ND	ND	ND	ND	NA	NA	0.0007	1.25	4.75	99.37	98.12	NAT - C - G - ALL	
SWS35	ND	ND	ND	ND	0.8	0.8	1	ND	1	ND	19.9	19.9	0.1	ND	ND	ND	ND	NA	NA	0.0008	4.89	4.91	105.56	100.67	MG - G - C	
SWS38	ND	ND	ND	ND	0.6	0.6	1	ND	1	ND	13.6	13.6	0.2	ND	ND	ND	ND	NA	NA	0.0006	2.16	3.64	98.86	96.70	MG - C	
SWS41	ND	ND	ND	ND	0.5	0.5	3	1	1	ND	20.0	20.0	1.5	ND	ND	ND	ND	NA	NA	0.0005	ND	4.13	106.06	NA	MG - G	
SBH13 (Pre purge)	ND	ND	1.7	1.7	ND	ND	ND	ND	ND	ND	19.6	20.4	0.1	ND	2.1	2.1	6	NA	NA	NA	6.70	7.57	98.33	91.63	NAT - G - ALL & BRMSG	
SBH13 (Post Purge)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.1	20.3	NR	ND	2.1	2.1	8	NA	NA	0.00832	7.10	7.59	98.33	91.23	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	ND	ND	1	ND	1	ND	20.4	20.4	0.7	ND	0.4	0.4	2	3	NA	NA	6.37	10.50	105.53	99.16	NAT - C - ALL & MSG	
SBH15	ND	ND	ND	ND	0.2	0.2	1	ND	1	ND	20.3	20.3	NR	ND	ND	ND	ND	NA	NA	0.0002	2.01	5.05	96.57	94.56	NAT - G - ALL & BRMSG	
SBH16 (Pre Purge)	ND	ND	ND	ND	0.8	0.8	ND	ND	ND	ND	19.5	20.1	ND	ND	1.5	1.5	5	NA	NA	0.012	3.04	4.63	97.00	93.96	NAT - G - ALL & BRMSG	
SBH16 (Post Purge)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	19.6	19.7	ND	ND	0.5	0.5	2	NA	NA	0.0025	4.54	4.63	97.00	92.46	NAT - G - ALL & BRMSG	
BH202A (WSP)	ND	ND	ND	ND	0.8	0.8	ND	ND	ND	ND	19.5	20.3	312.0	ND	ND	ND	ND	NA	NA	0.0008	2.12	6.21	97.76	95.64	MG - G	
Max	**ND**	**ND**	**1.7**	**1.7**	**0.8**	**0.8**	**3**	**1**	**1**	**ND**	**20.4**	**20.6**	**312**	**ND**	**2.1**	**2.1**	**8.0**	**3**	**NA**	**0.0120**	**7.10**	**10.50**	**106.06**	**100.67**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**13.6**	**13.6**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0002**	**1.25**	**3.64**	**96.57**	**91.23**		

ND - Not detected
NR - Not recorded
NA - Non applicable
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MG - Made ground
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G - Granular

ALL- Alluvium
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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION: (Select correct box with X or enter data, as applicable)

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			9:00	Start			16:00	End		
Barometric pressure (mbar):			1003	Start			1001	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			1	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 20/01/2016 - 21/01/2016

Job No: C6485A
Visit No: 2 **of** 12
Operator: DL/AW **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Mill Area																										
SWS01	ND	ND	ND	ND	1.0	1.0	ND	ND	ND	ND	17.3	20.3	ND	ND	0.5	0.5	ND	NA	NA	0.005	1.42	3.51	95.72	94.30	NAT - C - MSG	
SWS02A (Pre Purge)	ND	ND	ND	ND	3.1	2.7	ND	ND	ND	ND	18.4	20.0	312.0	ND	ND	ND	ND	NA	NA	0.0027	1.26	3.14	94.72	93.46	NAT - C - ALL	
SWS02A (Post Purge)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.4	20.7	NR	ND	ND	ND	ND	NA	NA	NA	2.73	3.34	94.72	91.99	NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	20.5	20.7	1.6	ND	ND	ND	1	2	NA	0.0007	1.95	2.07	95.37	93.42	NAT - C	
SWS08A (Pre Purge)	ND	ND	ND	ND	2.6	2.6	ND	ND	ND	ND	14.3	20.1	ND	ND	ND	ND	ND	NA	NA	0.0026	2.42	3.97	95.33	92.91	NAT - C - ALL	
SWS08A (Post Purge)	ND	ND	ND	ND	1.5	1.5	ND	ND	ND	ND	17.9	20.2	NR	ND	ND	ND	ND	NA	NA	0.0015	3.50	3.97	95.33	91.83	NAT - C - ALL	
SWS11	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	18.7	20.3	0.4	ND	ND	ND	ND	NA	NA	0.0006	4.02	5.69	100.36	96.34	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	20	24	1	1	17.3	20.3	5.7	ND	1.0	ND	1	2	NA	NA	0.62	0.83	99.06	98.44	MG - G	
SWS14	ND	ND	ND	ND	0.7	0.5	ND	ND	ND	ND	19.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0005	ND	1.93	100.03	NA	MG - G	
SWS09	ND	ND	ND	ND	3.5	3.5	ND	ND	ND	ND	15.6	15.6	0.1	ND	ND	ND	ND	NA	NA	0.0035	2.23	2.50	95.49	93.26	C - MG - ALL	
SWS44	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.7	20.9	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	2.97	100.48	NA	MG - G	
SBH01 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.4	12.7	ND	ND	ND	ND	NA	NA	0.0001	2.34	6.04	95.35	93.01	MG - G/C/G - ALL & C- MSG	
SBH01 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.7	12.3	ND	ND	ND	ND	NA	NA	0.0001	5.00	6.04	95.35	90.35	MG - G/C/G - ALL & C - MSG	
SBH03	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.5	20.9	1.9	ND	ND	ND	ND	NA	NA	0.0003	1.94	7.90	95.46	93.52	NAT - C/G - ALL & C - MSG	Unable to monitor post purge owing to recharge being too fast.
SBH04	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.4	20.8	0.1	ND	ND	ND	ND	NA	NA	0.0005	1.75	5.92	95.43	93.68	NAT - C/G - ALL & C - MSG -BRMSG	Unable to monitor post purge owing to recharge being too fast.
SBH05	ND	ND	ND	ND	0.3	0.2	ND	ND	ND	ND	20.4	20.7	0.5	ND	1.5	1.5	5	1	NA	0.003	2.18	6.94	99.79	97.61	MG - G/C - C - ALL & MSG	Unable to monitor post purge owing to recharge being too fast.
BH208 - D - (WSP)	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	16.8	20.4	ND	ND	ND	ND	ND	NA	NA	0.0007	1.48	3.50				
BH208 - S - (WSP)	**Not monitored as part this visit**																								NAT - C - ALL & MSG	
BH207 - (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.3	20.8	0.1	ND	ND	ND	ND	NA	NA	0.0001	4.04	7.20	100.53	NA	NAT - C - G - MSG	
BH205 - S - (WSP)	**Unable to monitor, Gas Tap Damaged. Tap replaced**																								MG - G	
BH205 - D - (WSP)	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	16.8	20.4	ND	ND	ND	ND	ND	NA	NA	0.0007	1.48	3.50	95.35	93.87	NAT - C - ALL & G - MSG	
MW101 (URS)	ND	ND	ND	ND	1.6	1.6	ND	ND	ND	ND	20.1	20.4	0.3	ND	ND	ND	ND	NA	NA	0.0016	ND	2.54	NR	NA	MG - G	
Max	**ND**	**ND**	**ND**	**ND**	**3.5**	**3.5**	**20**	**24**	**1**	**1**	**20.7**	**20.9**	**312**	**ND**	**1.5**	**1.5**	**5.0**	**2**	**NA**	**0.0050**	**5.00**	**7.90**	**100.53**	**98.44**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**14.3**	**15.6**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0001**	**0.62**	**0.83**	**94.72**	**90.35**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION: (Select correct box with X or enter data, as applicable)

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			9:00	Start			16:00	End		
Barometric pressure (mbar):			1003	Start			1001	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			1	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 03/02/2016 - 04/02/2016

Job No: C6485A
Visit No: 3 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	26.0	26.0	58.6	58.6	0.6	0.6	3	3	ND	ND	15.7	15.7	ND	ND	ND	ND	ND	NA	0.026	0.0006	1.84	3.04	100.11	98.27	MG - C	
SWS20	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	20.4	20.8	ND	ND	ND	ND	ND	NA	NA	NA	4.67	4.90	100.55	95.88	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	1.8	1.8	ND	ND	ND	ND	18.9	18.9	ND	ND	ND	ND	ND	NA	NA	0.0018	4.28	4.97	100.21	95.93	MG - G	
SWS22 (Pre Purge)	ND	ND	ND	ND	0.3	0.2	ND	ND	ND	ND	20.3	20.3	ND	ND	1.1	ND	4	5	NA	0.0002	3.26	4.80	100.65	97.39	NAT - C - ALL	
SWS22 (Post Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	0.0003	4.45	4.80	100.65	96.20	NAT - C - ALL	
SWS26	ND	ND	ND	ND	1.2	1.2	ND	ND	ND	ND	19.6	19.6	ND	ND	ND	ND	ND	NA	NA	0.0012	ND	2.67	101.11	NA	MG - C	
SWS27B	1.9	1.9	44.2	44.2	2.4	2.4	ND	ND	ND	ND	10.1	10.1	ND	ND	ND	ND	ND	NA	0.0019	0.0024	3.35	3.98	102.21	98.86	MG - G - C	
SWS28	23.5	23.5	13.7	13.7	16.0	16.0	ND	ND	ND	ND	12.0	12.0	ND	ND	ND	ND	ND	NA	0.0235	0.016	1.73	3.79	102.21	100.48	MG - G/C	
SWS29	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	3.87	102.00	NA	MG - G - C	
SWS42	ND	ND	6.5	ND	3.0	3.0	ND	ND	ND	ND	10.2	10.2	ND	ND	-0.3	-0.3	1	1	NA	0.009	2.46	3.70	101.13	98.67	MG - G/C - ALL	
SWS43	ND	ND	ND	ND	0.2	0.1	ND	ND	ND	ND	20.4	21.0	ND	ND	ND	ND	ND	NA	NA	0.0001	0.67	4.53	100.05	99.38	NAT - C - ALL & MSG	
SBH06 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.7	ND	ND	-0.1	-0.1	ND	NA	NA	NA	3.47	7.95	100.52	97.05	NAT - C - MSG & BRMSG	
SBH06 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	6.23	7.95	101.52	95.29	NAT - C - MSG & BRMSG	
SBH07 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.9	20.7	ND	ND	-0.3	-0.3	ND	NA	NA	NA	4.20	7.43	100.75	96.55	NAT - C/G - ALL	
SBH07 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.1	ND	ND	-0.1	-0.1	ND	NA	NA	0.0001	7.08	7.43	101.75	94.67	NAT - C/G - ALL	
SBH08 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	NA	4.45	10.18	101.32	96.87	NAT - G - ALL & C - MSG	
SBH08 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	8.95	10.18	101.32	92.37	NAT - G - ALL & C - MSG	
SBH09 (Pre Purge)	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	20.3	20.4	ND	ND	-0.6	-0.6	-2	NA	NA	NA	2.43	8.67	102.59	100.16	NAT - C/G - ALL & C - MSG	
SBH09 (Post Purge)	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	20.3	20.4	ND	ND	ND	ND	ND	NA	NA	NA	4.77	8.67	102.59	97.82	NAT - C - ALL & G - MSG	
SBH10 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	4.06	7.56	101.37	97.31	NAT - G - ALL	
SBH10 (Post Purge)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.1	20.3	ND	ND	ND	ND	ND	NA	NA	NA	5.08	7.56	101.37	96.29	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	1.0	ND	0.2	ND	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	NA	1.97	2.07	100.60	98.63	MG - C	
BH204 - D - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.8	20.8	ND	ND	-5.2	-3.1	-24	10	NA	NA	3.17	6.76	100.60	97.43	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.8	21.3	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.09	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis)	9.8	9.8	ND	ND	5.4	5.4	ND	ND	ND	ND	11.7	11.7	ND	ND	ND	ND	ND	NA	0.0098	0.0054	4.42	7.95	97.09	92.67	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	ND	ND	2.8	2.8	ND	ND	ND	ND	16.4	16.4	ND	ND	-0.7	-0.7	-3	5	NA	0.0196	4.01	6.22	100.23	96.22	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	**Unable to monitor gas tap damaged. Tap replaced.**																								MG - G	
Max	**26.0**	**26.0**	**58.6**	**58.6**	**16.0**	**16.0**	**3**	**3**	**ND**	**ND**	**20.8**	**21.3**	**ND**	**ND**	**1.1**	**-0.1**	**4.0**	**10**	**0.0260**	**0.0196**	**8.95**	**10.18**	**102.59**	**100.48**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**0.0001**	**0.0001**	**0.67**	**2.07**	**97.09**	**92.37**		

ND - Not detected
NR - Not recorded
NA - Non applicable

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D - Deep

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NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			1005	Start			1003	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			2	Before			5	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.9

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 03/02/2016 - 04/02/2016

Job No: C6485A
Visit No: 3 **of** 12
Operator: DL/AW **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	9.7	9.7	0.6	0.6	ND	ND	ND	ND	19.0	19.0	ND	ND	ND	ND	ND	NA	NA	0.0006	ND	2.02	95.10	NA	MG - C	
SBH11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.4	ND	930	ND	ND	ND	NA	NA	NA	3.40	4.11	95.08	91.68	MG - G	
Max	**ND**	**ND**	**9.7**	**9.7**	**0.6**	**0.6**	**ND**	**ND**	**ND**	**ND**	**20.1**	**20.4**	**ND**	**930**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0006**	**3.40**	**4.11**	**95.10**	**91.68**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**19.0**	**19.0**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**3.40**	**2.02**	**95.08**	**91.68**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			1005	Start			1003	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			2	Before			5	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.9

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 03/02/2016 - 04/02/2016

Job No: C6485A
Visit No: 3 **of** 12
Operator: DL/AW **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	18.2	18.2	ND	ND	ND	ND	ND	NA	NA	0.0003	2.60	4.43	98.20	95.60	MG - C	
SWS34 (Pre Purge)	ND	ND	ND	ND	0.9	0.7	ND	ND	ND	ND	20.2	20.4	ND	ND	2.5	ND	ND	NA	NA	0.0007	1.10	4.72	99.37	98.27	NAT - C - G - ALL	
SWS34 (Post Purge)	ND	ND	1.0	ND	0.5	0.4	ND	ND	ND	ND	20.2	20.7	ND	ND	ND	ND	ND	NA	NA	0.0004	2.96	4.72	99.37	96.41	NAT - C - G - ALL	
SWS35	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	0.0006	ND	4.95	105.56	NA	MG - G - C	
SWS38	0.1	0.1	21.5	21.5	0.7	0.7	ND	ND	ND	ND	9.6	9.6	ND	ND	ND	ND	ND	NA	0.0001	0.0007	2.07	3.68	98.86	96.79	MG - C	
SWS41	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.3	20.4	ND	ND	ND	ND	ND	NA	NA	0.0002	ND	4.14	106.06	NA	MG - G	
SBH13 (Pre purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.4	ND	ND	ND	ND	ND	NA	NA	NA	1.58	7.57	98.33	96.75	NAT - G - ALL & BRMSG	
SBH13 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	0.0001	6.58	7.57	99.33	92.75	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	NA	0.0005	ND	10.50	105.53	NA	NAT - C - ALL & MSG	
SBH15 (Pre Purge)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0004	1.88	5.37	96.57	94.69	NAT - G - ALL & BRMSG	
SBH15 (Post Purge)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.2	20.0	ND	ND	ND	ND	ND	NA	NA	0.0004	4.83	5.37	96.57	91.74	NAT - G - ALL & BRMSG	
SBH16 (Pre Purge)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	NA	0.0005	2.98	4.62	97.00	94.02	NAT - G - ALL & BRMSG	
SBH16 (Post Purge)	ND	ND	ND	ND	0.6	0.4	ND	ND	ND	ND	20.4	20.2	ND	ND	ND	ND	ND	NA	NA	0.0004	4.50	4.62	97.00	92.50	NAT - G - ALL & BRMSG	
BH202A (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.5	ND	ND	ND	ND	ND	NA	NA	NA	2.06	6.22	97.76	95.70	MG - G	
Max	**0.1**	**0.1**	**21.5**	**21.5**	**0.9**	**0.7**	**ND**	**ND**	**ND**	**ND**	**20.4**	**20.7**	**ND**	**ND**	**2.5**	**ND**	**ND**	**NA**	**0.0001**	**0.0007**	**6.58**	**10.50**	**106.06**	**98.27**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**9.6**	**9.6**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0001**	**1.10**	**3.68**	**96.57**	**91.74**		

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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			1005	Start			1003	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			2	Before			5	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.9

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 03/02/2016 - 04/02/2016

Job No: C6485A
Visit No: 3 **of** 12
Operator: DL/AW **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
Former Mill Area																										
SWS01	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	20.8	21.1	ND	ND	ND	ND	ND	NA	NA	NA	1.30	3.50	95.72	94.42	NAT - C - MSG	
SWS02A	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0002	2.07	3.36	94.72	92.65	NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.2	20.6	ND	ND	ND	ND	ND	NA	NA	0.0005	1.92	2.05	95.37	93.45	NAT - C	
SWS08A	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0005	2.29	3.95	95.33	93.04	NAT - C - ALL	
SWS11	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.1	20.4	ND	ND	ND	ND	ND	NA	NA	0.0004	1.54	5.70	100.36	98.82	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	0.46	0.83	99.06	98.60	MG - G	
SWS14	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	19.9	19.9	ND	ND	6.5	6.5	3	1	NA	0.026	ND	1.94	100.03	NA	MG - G	
SWS09	ND	ND	ND	ND	2.4	2.4	ND	ND	ND	ND	14.4	14.4	ND	ND	ND	ND	ND	NA	NA	0.0024	2.20	2.50	95.49	93.29	C - MG - ALL	
SWS44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.6	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.98	100.48	NA	MG - G	
SBH01 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.7	ND	ND	ND	ND	ND	NA	NA	NA	2.40	5.97	95.35	92.95	MG - G/C/G - ALL & C- MSG	
SBH01 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.2	20.4	ND	ND	ND	ND	ND	NA	NA	NA	5.10	5.97	95.35	90.25	MG - G/C/G - ALL & C - MSG	
SBH03 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	19.7	20.6	ND	ND	ND	ND	ND	NA	NA	0.0001	1.88	7.84	95.46	93.58	NAT - C/G - ALL & C - MSG	
SBH03 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.2	20.4	ND	ND	ND	ND	D	NA	NA	0.0002	4.17	7.84	95.46	91.29	NAT - C/G - ALL & C - MSG	
SBH04 (Pre Purge)	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	20.3	20.8	ND	ND	-0.3	-0.3	-1.0	1	NA	NA	1.74	5.64	95.43	93.69	NAT - C/G - ALL & C - MSG -BRMSG	
SBH04 (Post Purge)	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	20.1	20.5	ND	ND	ND	ND	ND	NA	NA	NA	3.85	5.64	95.43	91.58	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	20.4	20.7	ND	ND	ND	ND	ND	NA	NA	NA	2.98	6.92	99.79	96.81	MG - G/C - C - ALL & MSG	
BH208 - D - (WSP)																									NAT - C - ALL & MSG	
BH208 - S - (WSP)													**Unable to Locate**													
BH207 - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.9	20.9	ND	ND	ND	ND	ND	NA	NA	NA	4.85	7.20	100.53	95.68	NAT - C - G - MSG	
BH205 - S - (WSP)	ND	ND	10.2	ND	0.4	0.4	ND	ND	ND	ND	19.8	19.8	ND	ND	ND	ND	ND	NA	NA	0.0004	ND	0.89	95.35	NA	MG - G	
BH205 - D - (WSP)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.0	20.0	ND	ND	-0.1	-0.1	ND	NA	NA	0.0004	1.50	3.50	95.35	93.85	NAT - C - ALL & G - MSG	
MW101 (URS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.8	ND	ND	ND	ND	ND	NA	NA	NA	ND	5.25	NR	NA	MG - G	
Max	**ND**	**ND**	**10.2**	**ND**	**2.4**	**2.4**	**ND**	**ND**	**ND**	**ND**	**20.9**	**21.1**	**ND**	**ND**	**6.5**	**6.5**	**3.0**	**1**	**NA**	**0.0260**	**5.10**	**7.84**	**100.53**	**98.82**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**14.4**	**14.4**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0001**	**0.46**	**0.83**	**94.72**	**90.25**		

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ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			1005	Start			1003	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			2	Before			5	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.9

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 25/08/2015
Date of next calibration: 25/02/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 16/02/2016 - 17/02/2016

Job No: C6485A
Visit No: 4 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	1.1	0.6	57.7	15.1	0.8	0.8	5	5	ND	ND	13.6	13.6	ND	ND	ND	ND	ND	NA	0.0011	0.0008	2.18	3.05	100.11	97.93	MG - C	
SWS20	ND	ND	1.1	ND	1.2	1.2	ND	ND	ND	ND	19.6	19.6	ND	ND	ND	ND	ND	NA	NA	0.0012	4.65	4.87	100.55	95.90	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	20.0	20.0	ND	ND	-0.9	-0.9	-3	1	NA	0.0063	4.30	4.97	100.21	95.91	MG - G	
SWS22 (Pre Purge)	ND	ND	ND	ND	0.5	0.3	ND	ND	ND	ND	19.6	19.6	ND	ND	1.3	ND	5	NA	NA	0.0003	3.21	4.80	100.65	97.44	NAT - C - ALL	
SWS22 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.2	20.7	ND	ND	ND	ND	ND	NA	NA	0.0001	4.45	4.80	100.65	96.20	NAT - C - ALL	
SWS26	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	19.7	19.7	ND	ND	ND	ND	ND	NA	NA	0.0007	ND	2.70	101.11	NA	MG - C	
SWS27B	0.1	0.1	2.6	2.6	0.7	0.7	ND	ND	ND	ND	18.4	18.4	ND	ND	ND	ND	ND	NA	0.0001	0.0007	3.45	4.00	102.21	98.76	MG - G - C	
SWS28	9.4	9.4	ND	ND	15.4	15.4	ND	ND	ND	ND	11.2	11.2	ND	ND	ND	ND	ND	NA	0.0094	0.0154	2.68	3.80	102.21	99.53	MG - G/C	
SWS29	ND	ND	1.8	ND	0.1	0.1	ND	ND	ND	ND	20.9	20.9	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	3.90	102.00	NA	MG - G - C	
SWS42	ND	ND	ND	ND	2.3	2.3	ND	ND	ND	ND	14.7	14.7	ND	ND	-1.1	-1.1	-3	NA	NA	0.0253	2.47	3.70	101.13	98.66	MG - G/C - ALL	
SWS43	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	20.8	20.8	ND	ND	ND	ND	ND	NA	NA	NA	0.52	4.50	100.05	99.53	NAT - C - ALL & MSG	
SBH06 (Pre Purge)	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	20.7	20.9	ND	ND	ND	ND	ND	NA	NA	NA	3.42	7.93	100.52	97.10	NAT - C - MSG & BRMSG	
SBH06 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.8	ND	ND	ND	ND	ND	NA	NA	NA	6.00	7.93	101.52	95.52	NAT - C - MSG & BRMSG	
SBH07 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.7	ND	ND	-0.3	-0.3	ND	NA	NA	NA	4.16	7.45	100.75	96.59	NAT - C/G - ALL	
SBH07 (Post Purge)	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	NA	7.13	7.45	101.75	94.62	NAT - C/G - ALL	
SBH08 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.0	20.9	ND	ND	-1.1	-1.1	-3	1	NA	0.0011	4.47	10.10	101.32	96.85	NAT - G - ALL & C - MSG	
SBH08 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.4	ND	ND	ND	ND	ND	NA	NA	NA	8.42	10.10	101.32	92.90	NAT - G - ALL & C - MSG	
SBH09 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.8	21.0	ND	ND	ND	ND	ND	NA	NA	0.0001	2.18	8.70	102.59	100.41	NAT - C/G - ALL & C - MSG	
SBH09 (Post Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.3	20.6	ND	ND	ND	ND	ND	NA	NA	0.0003	5.11	8.70	102.59	97.48	NAT - C - ALL & G - MSG	
SBH10 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.0	20.0	ND	ND	2.4	2.4	5	1	NA	0.0024	4.26	7.58	101.37	97.11	NAT - G - ALL	
SBH10 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.0	20.1	ND	ND	ND	ND	ND	NA	NA	0.0001	6.37	7.58	101.37	95.00	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	17.1	17.1	ND	ND	ND	ND	ND	NA	NA	0.0001	1.96	2.06	100.60	98.64	MG - C	
BH204 - D - (WSP)	ND	ND	1.0	ND	0.3	0.3	ND	ND	ND	ND	19.4	19.4	ND	ND	ND	ND	ND	NA	NA	0.0003	3.12	6.60	100.60	97.48	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	3.2	3.2	56.2	56	6.8	1.9	ND	ND	ND	ND	15.4	15.4	ND	ND	ND	ND	ND	NA	0.0032	0.0019	ND	2.11	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis) (Pre Purge)	ND	ND	2.7	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0002	4.41	7.94	97.09	92.68	NAT - C/G	
BH101 (50mm) - (Arcadis) (Post Purge)	ND	ND	ND	ND	1.2	1.2	ND	ND	ND	ND	20.3	20.9	ND	ND	ND	ND	ND	NA	NA	0.0012	5.03	7.94	97.09	92.06	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	3.2	ND	0.3	0.3	ND	ND	ND	ND	20.5	20.7	ND	ND	ND	ND	ND	NA	NA	0.0003	4.06	6.22	100.23	96.17	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.9	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.00	100.23	NA	MG - G	
Max	**9.4**	**9.4**	**57.7**	**56.2**	**15.4**	**15.4**	**5**	**5**	**ND**	**ND**	**20.9**	**21.0**	**ND**	**ND**	**2.4**	**2.4**	**5.0**	**1**	**0.0094**	**0.0253**	**8.42**	**10.10**	**102.59**	**100.41**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**11.2**	**11.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.52**	**2.00**	**97.09**	**92.06**		

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NA - Non applicable

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D - Deep

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G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09.50	Start			16.30	End		
Barometric pressure (mbar):			1018	Start			1014	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 16/02/2016 - 17/02/2016

Job No: C6485A
Visit No: 4 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.8	20.6	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.05	95.10	NA	MG - C	
SBH11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.6	ND	950	ND	ND	ND	NA	NA	NA	3.40	4.10	95.08	NA	MG - G	
Max	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**20.2**	**20.6**	**ND**	**950**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**3.40**	**4.10**	**95.10**	**NR**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**19.8**	**20.6**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**3.40**	**2.05**	**95.08**	**0.00**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09.50	Start			16.30	End		
Barometric pressure (mbar):			1018	Start			1014	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 16/02/2016 - 17/02/2016

Job No: C6485A
Visit No: 4 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	19.8	20.3	ND	ND	2.6	2.6	1	1	NA	0.0078	2.87	4.47	98.20	95.33	MG - C	
SWS34 (Pre Purge)	ND	ND	0.3	ND	0.8	0.8	ND	ND	ND	ND	20.0	20.4	ND	ND	ND	ND	ND	NA	NA	0.0008	1.34	4.73	99.37	98.03	NAT - C - G - ALL	
SWS34 (Post Purge)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	19.9	20.5	ND	ND	ND	ND	ND	NA	NA	0.0004	3.15	4.73	99.37	96.22	NAT - C - G - ALL	
SWS35	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	0.0002	ND	4.93	105.56	NA	MG - G - C	
SWS38	ND	ND	0.3	ND	0.6	0.6	ND	ND	ND	ND	15.7	15.7	ND	ND	ND	ND	ND	NA	NA	0.0006	2.26	3.60	98.86	96.60	MG - C	
SWS41	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.7	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	4.15	106.06	NA	MG - G	
SBH13 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.8	ND	ND	ND	ND	ND	NA	NA	NA	1.66	7.54	98.33	96.67	NAT - G - ALL & BRMSG	
SBH13 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.0	20.2	ND	ND	ND	ND	ND	NA	NA	0.0001	6.22	7.54	99.33	93.11	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	19.8	20.4	ND	ND	ND	ND	ND	NA	NA	0.0003	ND	10.50	105.53	NA	NAT - C - ALL & MSG	
SBH15 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.8	ND	ND	ND	ND	ND	NA	NA	0.0001	2.00	5.40	96.57	94.57	NAT - G - ALL & BRMSG	
SBH15 (Post Purge)	ND	ND	ND	ND	0.2	0.1	ND	ND	ND	ND	20.6	21.3	ND	ND	ND	ND	ND	NA	NA	0.0001	5.09	5.40	96.57	91.48	NAT - G - ALL & BRMSG	
SBH16 (Pre Purge)	ND	ND	ND	ND	0.2	0.1	ND	ND	ND	ND	20.0	20.6	ND	ND	ND	ND	ND	NA	NA	0.0001	3.05	4.62	97.00	93.95	NAT - G - ALL & BRMSG	
SBH16 (Post Purge)	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	NA	4.55	4.62	97.00	92.45	NAT - G - ALL & BRMSG	
BH202A (WSP) (Pre Purge)	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	NA	0.0007	2.12	6.25	97.76	95.64	MG - G	
BH202A (WSP) (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.9	ND	ND	ND	ND	ND	NA	NA	0.0001	2.62	6.25	97.76	95.14	MG - G	
Max	**ND**	**ND**	**0.3**	**ND**	**0.8**	**0.8**	**ND**	**ND**	**ND**	**ND**	**20.6**	**21.3**	**ND**	**ND**	**2.6**	**2.6**	**1.0**	**1**	**NA**	**0.0078**	**6.22**	**10.50**	**106.06**	**98.03**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**15.7**	**15.7**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.34**	**3.60**	**96.57**	**91.48**		

ND - Not detected
NR - Not recorded
NA - Non applicable
S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular
ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09.50	Start			16.30	End		
Barometric pressure (mbar):			1018	Start			1014	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 16/02/2016 - 17/02/2016

Job No: C6485A
Visit No: 4 **of** 12
Operator: DL **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
Former Mill Area																										
SWS01	ND	ND	4.3	ND	ND	ND	ND	ND	ND	ND	20.4	20.9	ND	ND	ND	ND	ND	NA	NA	NA	1.32	3.50	95.72	94.40	NAT - C - MSG	
SWS02A (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.3	20.8	ND	ND	ND	ND	ND	NA	NA	0.0001	1.20	3.35	94.72	93.52	NAT - C - ALL	
SWS02A (Post Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.4	20.7	ND	ND	ND	ND	ND	NA	NA	0.0003	2.36	3.35	94.72	92.36	NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.5	20.7	0.7	ND	ND	ND	ND	NA	NA	0.0005	1.60	2.09	95.37	93.77	NAT - C	
SWS08A	0.1	0.1	22.1	ND	2.7	2.7	ND	ND	ND	ND	12.9	12.9	ND	ND	ND	ND	ND	NA	0.0001	0.0027	2.15	3.95	95.33	93.18	NAT - C - ALL	
SWS11	ND	ND	1.2	ND	0.7	0.7	ND	ND	ND	ND	19.1	19.1	ND	ND	ND	ND	ND	NA	NA	0.0007	1.69	5.67	100.36	98.67	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.7	ND	ND	ND	ND	ND	NA	NA	NA	0.60	0.84	99.06	98.46	MG - G	
SWS14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.8	ND	ND	ND	ND	ND	NA	NA	NA	ND	1.90	100.03	NA	MG - G	
SWS09	ND	ND	ND	ND	1.8	1.8	ND	ND	ND	ND	18.3	18.3	ND	ND	ND	ND	ND	NA	NA	0.0018	1.60	2.63	95.49	93.89	C - MG - ALL	
SWS44	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	20.9	20.9	ND	ND	ND	ND	ND	NA	NA	0.0006	ND	2.95	100.48	NA	MG - G	
SBH01 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.2	20.4	ND	ND	ND	ND	ND	NA	NA	0.0001	2.16	6.00	95.35	93.19	MG - G/C/G - ALL & C- MSG	
SBH01 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	NA	4.00	6.00	95.35	91.35	MG - G/C/G - ALL & C - MSG	
SBH03 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.7	ND	ND	ND	ND	ND	NA	NA	0.0001	1.70	7.8	95.46	93.76	NAT - C/G - ALL & C - MSG	
SBH03 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.0	20.6	ND	ND	ND	ND	ND	NA	NA	NA	3.16	7.8	95.46	92.30	NAT - C/G - ALL & C - MSG	
SBH04 (Pre Purge)	1.0	ND	10.8	10.8	ND	ND	3	1	1	1	20.6	21.2	ND	ND	ND	ND	ND	NA	0.001	NA	0.70	4.70	95.43	94.73	NAT - C/G - ALL & C - MSG -BRMSG	
SBH04 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.8	21.0	ND	ND	ND	ND	ND	NA	NA	0.0002	2.32	4.70	95.43	93.11	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.9	ND	ND	ND	ND	ND	NA	NA	NA	2.20	6.90	99.79	97.59	MG - G/C - C - ALL & MSG	
SBH05 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.2	20.7	ND	ND	ND	ND	ND	NA	NA	0.0001	4.10	6.90	99.79	95.69	MG - G/C - C - ALL & MSG	
BH208 - D - (WSP)	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	20.4	20.9	ND	ND	ND	ND	ND	NA	NA	NA	1.60	4.63	99.79	98.19	NAT - C - G - MSG	
BH208 - S - (WSP)	ND	ND	ND	ND	1.8	1.8	ND	ND	ND	ND	17.0	20.5	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.90	99.79	NA	Unknown	
BH207 - (WSP) (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.8	ND	ND	ND	ND	ND	NA	NA	NA	4.24	7.22	95.35	91.11	NAT - C - G - MSG	
BH207 - (WSP) (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.8	ND	ND	ND	ND	ND	NA	NA	NA	7.01	7.22	95.35	88.34	MG - G	
BH205 - S - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.0	21.4	ND	ND	-0.7	-0.7	-2	1	NA	NA	ND	0.82	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.9	21.3	ND	ND	ND	ND	ND	NA	NA	NA	1.45	3.50	95.35	93.90	MG - G	
MW101 (URS)	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	20.4	21.1	ND	ND	ND	ND	ND	NA	NA	0.0006	ND	5.21	NR	NA	MG - G	
Max	**1.0**	**0.1**	**22.1**	**10.8**	**2.7**	**2.7**	**3**	**1**	**1**	**1**	**21.0**	**21.4**	**0.7**	**ND**	**-0.7**	**-0.7**	**-2.0**	**1**	**0.0010**	**0.0027**	**7.01**	**7.80**	**100.48**	**98.67**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**12.9**	**12.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.60**	**0.82**	**94.72**	**88.34**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09.50	Start			16.30	End		
Barometric pressure (mbar):			1018	Start			1014	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 01/03/2016 - 02/03/2016

Job No: C6485A
Visit No: 5 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	2.7	2.7	63.4	63.4	1.2	1.2	ND	ND	ND	ND	7.3	7.3	ND	ND	-4.8	ND	-22	10	0.1296	0.0012	2.21	3.05	100.11	97.90	MG - C	
SWS20	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.2	20.2	ND	ND	0.4	0.4	1	2	NA	0.002	4.73	4.89	100.55	95.82	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	1.7	1.7	ND	ND	ND	ND	18.7	18.7	ND	ND	ND	ND	ND	NA	NA	0.0017	4.32	4.92	100.21	95.89	MG - G	
SWS22 (Pre Purge)	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	19.5	19.5	ND	ND	2.1	2.1	8	5	NA	0.0126	3.13	4.84	100.65	97.52	NAT - C - ALL	
SWS22 (Post Purge)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.4	20.7	ND	ND	ND	ND	ND	NA	NA	0.0004	4.50	4.84	100.65	96.15	NAT - C - ALL	
SWS26	ND	ND	3.1	ND	0.4	0.4	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0004	ND	2.67	101.11	NA	MG - C	
SWS27B	2.5	2.5	62.6	62.6	2.4	2.4	ND	ND	ND	ND	10.2	10.2	ND	ND	ND	ND	ND	NA	0.0025	0.0024	3.34	3.98	102.21	98.87	MG - G - C	
SWS28	30.7	30.7	92.6	92.6	2.4	2.4	ND	ND	ND	ND	9.1	9.1	ND	ND	ND	ND	ND	NA	0.0307	0.0024	2.29	3.75	102.21	99.92	MG - G/C	
SWS29	ND	ND	ND	ND	0.2	0.1	ND	ND	ND	ND	20.7	21.0	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	3.87	102.00	NA	MG - G - C	
SWS42	ND	ND	ND	ND	4.0	4.0	ND	ND	ND	ND	8.7	8.7	ND	ND	ND	ND	ND	NA	NA	0.004	2.47	3.70	101.13	98.66	MG - G/C - ALL	
SWS43	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.7	20.8	ND	ND	-0.4	-0.4	-1	2	NA	0.0004	0.82	4.53	100.05	99.23	NAT - C - ALL & MSG	
SBH06 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	21.0	ND	ND	-0.2	ND	ND	NA	NA	NA	3.38	8.00	100.52	97.14	NAT - C - MSG & BRMSG	
SBH06 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.9	ND	ND	ND	ND	ND	NA	NA	NA	6.10	8.00	101.52	95.42	NAT - C - MSG & BRMSG	
SBH07 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.9	ND	ND	ND	ND	ND	NA	NA	NA	4.10	7.45	100.75	96.65	NAT - C/G - ALL	
SBH07 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.6	ND	ND	ND	ND	ND	NA	NA	NA	7.00	7.45	101.75	94.75	NAT - C/G - ALL	
SBH08 (Pre Purge)	ND	ND	12.7	ND	ND	ND	ND	ND	ND	ND	20.0	21.0	ND	ND	ND	ND	ND	NA	NA	NA	4.37	10.13	101.32	96.95	NAT - G - ALL & C - MSG	
SBH08 (Post Purge)	ND	ND	4.5	ND	0.2	ND	ND	ND	ND	ND	20.5	20.9	ND	ND	ND	ND	ND	NA	NA	NA	8.00	10.13	101.32	93.32	NAT - G - ALL & C - MSG	
SBH09 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	21.4	ND	ND	ND	ND	ND	NA	NA	NA	2.43	8.05	102.59	100.16	NAT - C/G - ALL & C - MSG	
SBH09 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.7	21.1	ND	ND	ND	ND	ND	NA	NA	0.0001	5.40	8.05	102.59	97.19	NAT - C - ALL & G - MSG	
SBH10 (Pre Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	0.0002	4.12	7.50	101.37	97.25	NAT - G - ALL	
SBH10 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.3	20.7	ND	ND	ND	ND	ND	NA	NA	0.0002	6.77	7.50	101.37	94.60	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	11.3	11.3	ND	ND	ND	ND	ND	NA	NA	0.0002	1.89	2.07	100.60	98.71	MG - C	
BH204 - D - (WSP)	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	0.0015	NA	2.90	6.60	100.60	97.70	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	3.2	3.2	94.7	94.7	1.7	1.7	ND	ND	ND	ND	18.4	18.4	ND	ND	ND	ND	ND	NA	0.0032	0.0017	ND	2.08	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis) (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.8	21.0	ND	ND	ND	ND	ND	NA	NA	0.0001	4.48	7.92	97.09	92.61	NAT - C/G	
BH101 (50mm) - (Arcadis) (Post Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.6	21.4	ND	ND	ND	ND	ND	NA	NA	0.0003	5.00	7.92	97.09	92.09	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.7	21.3	ND	ND	ND	ND	ND	NA	NA	0.0001	3.92	6.20	100.23	96.31	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	21.3	ND	ND	ND	ND	ND	NA	NA	NA	2.02	2.04	100.23	98.21	MG - G	
Max	**30.7**	**30.7**	**94.7**	**94.7**	**4.0**	**4.0**	**ND**	**ND**	**ND**	**ND**	**20.8**	**21.4**	**ND**	**ND**	**2.1**	**2.1**	**8.0**	**10**	**0.1296**	**0.0126**	**8.00**	**10.13**	**102.59**	**100.16**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**7.3**	**7.3**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.82**	**2.04**	**97.09**	**92.09**		

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ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight	X	Moderate		Heavy		
Time monitoring performed:			9.00	Start			16.00	End		
Barometric pressure (mbar):			990	Start			988	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			3	Before			8	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 01/03/2016 - 02/03/2016

Job No: C6485A
Visit No: 5 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	17.7	17.7	ND	ND	-0.7	-0.7	-1	2	NA	0.0028	ND	2.02	95.10	NA	MG - C	
SBH11	0.4	ND	20.8	ND	2.2	2.2	ND	ND	ND	ND	15.2	15.2	ND	540	ND	ND	ND	NA	0.0004	NA	3.22	4.17	95.08	91.86	MG - G	
Max	**0.4**	**ND**	**20.8**	**ND**	**2.2**	**2.2**	**ND**	**ND**	**ND**	**ND**	**17.7**	**17.7**	**ND**	**540**	**-0.7**	**-0.7**	**-0.7**	**2**	**0.0004**	**0.0028**	**3.22**	**4.17**	**95.10**	**91.86**		
Min	**ND**	**ND**	**ND**	**ND**	**0.4**	**0.4**	**ND**	**ND**	**ND**	**ND**	**15.2**	**15.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**3.22**	**2.02**	**95.08**	**91.86**		

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Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight	X	Moderate		Heavy		
Time monitoring performed:			9:00	Start			16:00	End		
Barometric pressure (mbar):			990	Start			988	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			3	Before			8	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check:	**CH_4**	0.0	**CO_2**	0.0	**O_2**	20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 01/03/2016 - 02/03/2016

Job No: C6485A
Visit No: 5 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	19.0	19.0	ND	ND	ND	ND	ND	NA	NA	0.0003	2.87	4.42	98.20	95.33	MG - C	
SWS34 (Pre Purge)	ND	ND	ND	ND	1.0	1.0	ND	ND	ND	ND	20.5	20.6	ND	ND	11.8	11.8	72	10	NA	0.118	1.37	4.70	99.37	98.00	NAT - C - G - ALL	
SWS34 (Post Purge)	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	20.3	20.8	ND	ND	4.2	4.2	3	2	NA	0.0252	3.25	4.70	99.37	96.12	NAT - C - G - ALL	
SWS35	ND	ND	6.5	ND	1.3	1.3	ND	ND	ND	ND	19.6	19.6	ND	ND	ND	ND	ND	NA	NA	0.0013	ND	4.90	105.56	NA	MG - G - C	
SWS38	ND	ND	1.7	ND	1.1	1.1	ND	ND	ND	ND	10.1	10.1	ND	ND	ND	ND	ND	NA	NA	0.0011	2.14	3.62	98.86	96.72	MG - C	
SWS41	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.6	20.9	ND	ND	ND	ND	ND	NA	NA	0.0005	ND	4.13	106.06	NA	MG - G	
SBH13 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.8	21.4	ND	ND	ND	ND	ND	NA	NA	NA	1.70	7.53	98.33	96.63	NAT - G - ALL & BRMSG	
SBH13 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	21.1	ND	ND	ND	ND	ND	NA	NA	NA	7.00	7.53	99.33	92.33	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	0.0004	6.31	10.51	105.53	NA	NAT - C - ALL & MSG	
SBH15 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	21.4	ND	ND	ND	ND	ND	NA	NA	NA	2.04	5.34	96.57	94.53	NAT - G - ALL & BRMSG	
SBH15 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.9	ND	ND	ND	ND	ND	NA	NA	NA	4.80	5.34	96.57	91.77	NAT - G - ALL & BRMSG	
SBH16 (Pre Purge)	ND	ND	ND	ND	1.4	0.7	ND	ND	ND	ND	18.7	18.7	ND	ND	ND	ND	ND	NA	NA	0.0007	3.05	4.60	97.00	93.95	NAT - G - ALL & BRMSG	
SBH16 (Post Purge)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	19.8	19.8	ND	ND	ND	ND	ND	NA	NA	0.0005	4.40	4.60	97.00	92.60	NAT - G - ALL & BRMSG	
BH202A (WSP) (Pre Purge)	ND	ND	ND	ND	0.9	0.9	ND	ND	ND	ND	19.5	19.5	ND	ND	ND	ND	ND	NA	NA	0.0009	2.06	6.20	97.76	95.70	MG - G	
BH202A (WSP) (Post Purge)	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	0.0007	3.00	6.20	97.76	94.76	MG - G	
Max	**ND**	**ND**	**6.5**	**ND**	**1.4**	**1.3**	**ND**	**ND**	**ND**	**ND**	**20.8**	**21.4**	**ND**	**ND**	**11.8**	**11.8**	**72.0**	**10**	**NA**	**0.1180**	**7.00**	**10.51**	**106.06**	**98.00**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**10.1**	**10.1**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.37**	**3.62**	**96.57**	**91.77**		

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Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight	X	Moderate		Heavy		
Time monitoring performed:			9:00	Start			16:00	End		
Barometric pressure (mbar):			990	Start			988	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			3	Before			8	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 01/03/2016 - 02/03/2016

Job No: C6485A
Visit No: 5 **of** 12
Operator: DL **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
Former Mill Area																										
SWS01	ND	ND	12.9	ND	0.2	0.2	ND	ND	ND	ND	20.4	20.8	ND	ND	ND	ND	ND	NA	NA	0.0002	1.19	3.50	95.72	94.53	NAT - C - MSG	
SWS02A (Pre Purge)	ND	ND	1.7	ND	0.1	0.1	ND	ND	ND	ND	20.6	21.0	ND	ND	ND	ND	ND	NA	NA	0.0001	1.04	3.36	94.72	93.68	NAT - C - ALL	
SWS02A (Post Purge)	ND	ND	0.8	ND	0.2	0.2	ND	ND	ND	ND	20.7	20.8	ND	ND	ND	ND	ND	NA	NA	0.0002	2.25	3.36	94.72	92.47	NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.6	21.2	ND	ND	0.9	0.9	3.0	5	NA	0.0036	1.81	2.07	95.37	93.56	NAT - C	
SWS08A	ND	ND	ND	ND	2.3	2.3	ND	ND	ND	ND	14.0	14.0	ND	ND	ND	ND	ND	NA	NA	0.0023	2.39	3.95	95.33	92.94	NAT - C - ALL	
SWS11	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	NA	0.0005	1.68	6.15	100.36	98.68	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.8	ND	ND	ND	ND	ND	NA	NA	NA	0.72	0.85	99.06	98.34	MG - G	
SWS14	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	18.9	18.9	ND	ND	ND	ND	ND	NA	NA	0.0005	ND	1.93	100.03	NA	MG - G	
SWS09	ND	ND	ND	ND	1.0	1.0	ND	ND	ND	ND	16.2	16.2	ND	ND	ND	ND	ND	NA	NA	0.001	2.25	2.48	95.49	93.24	C - MG - ALL	
SWS44	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.4	20.7	ND	ND	ND	ND	ND	NA	NA	0.0002	ND	2.98	100.48	NA	MG - G	
SBH01 (Pre Purge)	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	20.5	20.9	ND	ND	ND	ND	ND	NA	NA	NA	2.17	6.00	95.35	93.18	MG - G/C/G - ALL & C- MSG	
SBH01 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	0.0002	4.80	6.00	95.35	90.55	MG - G/C/G - ALL & C - MSG	
SBH03 (Pre Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	0.0002	1.97	7.81	95.46	93.49	NAT - C/G - ALL & C - MSG	
SBH03 (Post Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0003	4.7	7.87	95.46	90.76	NAT - C/G - ALL & C - MSG	
SBH04 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	21.2	ND	ND	2.4	2.4	9.0	5	NA	NA	1.73	5.60	95.43	93.70	NAT - C/G - ALL & C - MSG -BRMSG	
SBH04 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.9	ND	ND	2.0	2.0	3.0	5	NA	NA	3.38	5.60	95.43	92.05	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05 (Pre Purge)	ND	ND	2.0	ND	0.4	0.3	ND	ND	ND	ND	20.5	20.7	ND	ND	ND	ND	ND	NA	NA	0.0003	2.39	6.90	99.79	97.40	MG - G/C - C - ALL & MSG	
SBH05 (Post Purge)	ND	ND	4.2	ND	0.4	0.4	ND	ND	ND	ND	20.3	20.7	ND	ND	ND	ND	ND	NA	NA	0.0004	4.05	6.90	99.79	95.74	MG - G/C - C - ALL & MSG	
BH208 - D - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.8	21.2	ND	ND	ND	ND	ND	NA	NA	NA	1.63	4.61	99.79	98.16	NAT - C - G - MSG	
BH208 - S - (WSP)	5.9	4.9	96.3	96.3	4.6	4.6	ND	ND	ND	ND	8.2	20.4	ND	ND	ND	ND	ND	NA	0.0059	0.0046	0.93	0.96	99.79	98.86	MG - NAT C	
BH207 - (WSP) (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.8	ND	ND	ND	ND	ND	NA	NA	NA	3.96	7.21	95.35	91.39	NAT - C - G - MSG	
BH207 - (WSP) (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.8	21.1	ND	ND	ND	ND	ND	NA	NA	NA	7.00	7.21	95.35	88.35	MG - G	
BH205 - S - (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	0.85	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.5	20.7	ND	ND	-0.3	-0.3	ND	NA	NA	0.0003	1.48	3.51	95.35	93.87	MG - G	
MW101 (URS)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.6	20.9	ND	ND	ND	ND	ND	NA	NA	0.0003	ND	5.20	NR	NA	MG - G	
Max	**5.9**	**4.9**	**96.3**	**96.3**	**4.6**	**4.6**	**ND**	**ND**	**ND**	**ND**	**20.8**	**21.2**	**ND**	**ND**	**2.4**	**2.4**	**9.0**	**5**	**0.0059**	**0.0046**	**7.00**	**7.87**	**100.48**	**98.86**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**8.2**	**14.0**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.72**	**0.85**	**94.72**	**88.35**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	[ ] Dry	[ ] Moist	[X] Wet	[ ] Snow	[ ] Frozen
Wind:	[ ] Calm	[ ] Light	[X] Moderate	[ ] Strong	
Cloud cover:	[ ] None	[ ] Slight	[X] Cloudy	[ ] Overcast	
Precipitation:	[ ] None	[ ] Slight	[X] Moderate	[ ] Heavy	
Time monitoring performed:		9.00 Start		16.00 End	
Barometric pressure (mbar):		990 Start		988 End	
Pressure trend (Daily):		[X] Falling	[ ] Steady	[ ] Rising	
Source:	www.wunderground.com				
Air Temperature (Deg. C):		3 Before		8 After	

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 15/03/2016 - 16/03/2016

Job No: C6485A
Visit No: 6 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	8.0	8.0	99.4	99.4	2.3	2.3	ND	ND	ND	ND	1.5	1.5	ND	ND	-4.0	ND	-13	5	0.32	0.0023	2.33	3.03	100.11	97.78	MG - C	
SWS20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	NA	4.70	4.87	100.55	95.85	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	3.0	3.0	ND	ND	ND	ND	16.8	16.8	ND	ND	ND	ND	ND	NA	NA	0.003	4.33	5.00	100.21	95.88	MG - G	
SWS22 (Pre Purge)	ND	ND	ND	ND	1.7	1.7	ND	ND	ND	ND	14.6	14.6	ND	ND	ND	ND	ND	NA	NA	0.0017	3.32	4.81	100.65	97.33	NAT - C - ALL	
SWS22 (Post Purge)	ND	ND	ND	ND	1.2	1.2	ND	ND	ND	ND	17.1	17.1	ND	ND	ND	ND	ND	NA	NA	0.0012	4.13	4.81	100.65	96.52	NAT - C - ALL	
SWS26	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	0.0001	2.44	2.67	101.11	NA	MG - C	
SWS27B	1.4	ND	32.8	22.2	1.3	1.3	ND	ND	ND	ND	12.9	12.9	ND	ND	ND	ND	ND	NA	0.0014	0.0013	3.48	3.98	102.21	98.73	MG - G - C	
SWS28 (Pre Purge)	26.7	13.5	98.4	98.4	18.1	5.9	ND	ND	ND	ND	13.3	13.3	ND	ND	ND	ND	ND	NA	0.0267	0.0059	2.31	3.75	102.21	99.90	MG - G/C	
SWS28 (Post Purge)	16.8	ND	78.4	78.4	12.1	2.3	ND	ND	ND	ND	16.6	16.6	ND	ND	ND	ND	ND	NA	0.0168	0.0023	3.27	3.75	102.21	98.94	MG - G/C	
SWS29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	NA	ND	3.85	102.00	NA	MG - G - C	
SWS42	ND	ND	ND	ND	6.9	6.9	ND	ND	ND	ND	2.5	2.5	ND	ND	ND	ND	ND	NA	NA	0.0069	2.51	3.70	101.13	98.62	MG - G/C - ALL	
SWS43 (Pre Purge)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	17.9	17.9	ND	ND	ND	ND	ND	NA	NA	0.0005	0.85	4.50	100.05	99.20	NAT - C - ALL & MSG	
SWS43 (Post Purge)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	18.1	18.1	ND	ND	ND	ND	ND	NA	NA	0.0005	4.10	4.50	100.05	95.95	NAT - C - ALL & MSG	
SBH06 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	NA	NA	3.52	8.00	100.52	97.00	NAT - C - MSG & BRMSG	
SBH06 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.0	20.4	ND	ND	ND	ND	ND	NA	NA	0.0002	6.15	8.00	101.52	95.37	NAT - C - MSG & BRMSG	
SBH07 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	4.47	7.41	100.75	96.28	NAT - C/G - ALL	
SBH07 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	0.0001	7.01	7.41	101.75	94.74	NAT - C/G - ALL	
SBH08 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	NA	NA	4.50	10.12	101.32	96.82	NAT - G - ALL & C - MSG	
SBH08 (Post Purge)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	19.3	19.3	ND	ND	ND	ND	ND	NA	NA	0.0004	8.49	10.12	101.32	92.83	NAT - G - ALL & C - MSG	
SBH09 (Pre Purge)	ND	ND	ND	ND	0.5	0.3	ND	ND	ND	ND	19.7	19.7	ND	ND	ND	ND	ND	NA	NA	0.0003	2.40	8.65	102.59	100.19	NAT - C/G - ALL & C - MSG	
SBH09 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	NA	0.0002	5.50	8.65	102.59	97.09	NAT - C - ALL & G - MSG	
SBH10 (Pre Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	15.8	15.8	ND	ND	ND	ND	ND	NA	NA	0.0003	4.22	7.50	101.37	97.15	NAT - G - ALL	
SBH10 (Post Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	18.6	18.6	ND	ND	ND	ND	ND	NA	NA	0.0003	7.00	7.50	101.37	94.37	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	7.4	7.4	ND	ND	ND	ND	ND	NA	NA	0.0005	1.91	2.07	100.60	98.69	MG - C	
BH204 - D - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	NA	3.10	6.60	100.60	97.50	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	5.6	4.7	52.8	52.8	3.0	2.5	ND	ND	ND	ND	14.7	14.7	ND	ND	ND	ND	ND	NA	0.0056	0.0025	ND	2.10	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis) (Pre Purge)	22.9	22.3	76.6	76.6	7.1	6.8	ND	ND	ND	ND	7.4	7.4	ND	ND	ND	ND	ND	NA	0.0229	0.0068	4.77	7.90	97.09	92.32	NAT - C/G	
BH101 (50mm) - (Arcadis) (Post Purge)	10.1	10.1	46.5	46.5	4.2	1.7	ND	ND	ND	ND	12.9	12.9	ND	ND	ND	ND	ND	NA	0.0101	0.0017	7.55	7.90	97.09	89.54	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	19.6	19.6	ND	ND	ND	ND	ND	NA	NA	0.0003	4.00	6.20	100.23	96.23	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	NA	NA	1.97	2.05	100.23	98.26	MG - G	
Max	**26.7**	**22.3**	**99.4**	**99.4**	**18.1**	**6.9**	**ND**	**ND**	**ND**	**ND**	**20.5**	**20.5**	**ND**	**ND**	**-4.0**	**ND**	**-13.0**	**5**	**0.3200**	**0.0069**	**8.49**	**10.12**	**102.59**	**100.19**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1.5**	**1.5**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.85**	**2.05**	**97.09**	**89.54**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			830	Start			1600	End		
Barometric pressure (mbar):			1017	Start			1016	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			7	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.2

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 15/03/2016 - 16/03/2016

Job No: C6485A
Visit No: 6 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	19.9	19.9	ND	ND	-0.1	-0.1	ND	NA	NA	0.0002	ND	2.00	95.10	NA	MG - C	
SBH11	ND	ND	6.6	ND	1.4	0.6	ND	ND	ND	ND	18.2	18.2	ND	ND	ND	ND	ND	NA	NA	NA	3.22	3.97	95.08	91.86	MG - G	
Max	**ND**	**ND**	**6.6**	**ND**	**1.4**	**0.6**	**ND**	**ND**	**ND**	**ND**	**19.9**	**19.9**	**ND**	**ND**	**-0.1**	**-0.1**	**ND**	**NA**	**NA**	**0.0002**	**3.22**	**3.97**	**95.10**	**91.86**		
Min	**ND**	**ND**	**ND**	**ND**	**0.2**	**0.2**	**ND**	**ND**	**ND**	**ND**	**18.2**	**18.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**3.22**	**2.00**	**95.08**	**91.86**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			8:30	Start			16:00	End		
Barometric pressure (mbar):			1017	Start			1016	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			7	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.2

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 15/03/2016 - 16/03/2016

Job No: C6485A
Visit No: 6 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33 (Pre Purge)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	NA	0.0005	2.67	4.40	98.20	95.53	MG - C	
SWS33 (Post Purge)	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	19.3	19.3	ND	ND	ND	ND	ND	NA	NA	0.0007	4.00	4.40	98.20	94.20	MG - C	
SWS34 (Pre Purge)	ND	ND	ND	ND	1.5	1.5	ND	ND	ND	ND	19.5	19.5	ND	ND	2.5	2.5	10	5	NA	0.0375	1.08	4.70	99.37	98.29	NAT - C - G - ALL	
SWS34 (Post Purge)	ND	ND	ND	ND	0.9	0.9	ND	ND	ND	ND	18.2	18.2	ND	ND	ND	ND	ND	NA	NA	0.0009	2.95	4.70	99.37	96.42	NAT - C - G - ALL	
SWS35	ND	ND	ND	ND	1.1	1.1	ND	ND	ND	ND	19.1	19.1	ND	ND	ND	ND	ND	NA	NA	0.0011	ND	4.91	105.56	NA	MG - G - C	
SWS38	ND	ND	ND	ND	1.1	1.1	ND	ND	ND	ND	17.2	17.2	ND	ND	ND	ND	ND	NA	NA	0.0011	2.12	3.60	98.86	96.74	MG - C	
SWS41	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	NA	0.0006	ND	4.15	106.06	NA	MG - G	
SBH13 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.0	20.4	ND	ND	ND	ND	ND	NA	NA	NA	1.75	7.45	98.33	96.58	NAT - G - ALL & BRMSG	
SBH13 (Post Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	NA	0.0003	7.00	7.45	99.33	92.33	NAT - G - ALL & BRMSG	
SBH14 (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	19.9	20.2	ND	ND	ND	ND	ND	NA	NA	0.0001	6.32	10.54	105.53	NA	NAT - C - ALL & MSG	
SBH14 (Post Purge)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	19.6	19.6	ND	ND	ND	ND	ND	NA	NA	0.0005	8.50	10.54	105.53	NA	NAT - C - ALL & MSG	
SBH15 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.0	20.3	ND	ND	ND	ND	ND	NA	NA	NA	1.92	5.35	96.57	94.65	NAT - G - ALL & BRMSG	
SBH15 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	0.0002	5.00	5.35	96.57	91.57	NAT - G - ALL & BRMSG	
SBH16 (Pre Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0003	4.48	4.60	97.00	92.52	NAT - G - ALL & BRMSG	
SBH16 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	0.0001	4.55	4.60	97.00	92.45	NAT - G - ALL & BRMSG	
BH202A (WSP) (Pre Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.1	20.4	ND	ND	ND	ND	ND	NA	NA	0.0002	2.15	6.20	97.76	95.61	MG - G	
BH202A (WSP) (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.1	20.6	ND	ND	ND	ND	ND	NA	NA	0.0002	4.00	6.20	97.76	93.76	MG - G	
Max	**ND**	**ND**	**ND**	**ND**	**1.5**	**1.5**	**ND**	**ND**	**ND**	**ND**	**20.5**	**20.6**	**ND**	**ND**	**2.5**	**2.5**	**10.0**	**5**	**NA**	**0.0375**	**8.50**	**10.54**	**106.06**	**98.29**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**17.2**	**17.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.08**	**3.60**	**96.57**	**91.57**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None		Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			8:30	Start			16:00	End		
Barometric pressure (mbar):			1017	Start			1016	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			7	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.2

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 15/03/2016 - 16/03/2016

Job No: C6485A
Visit No: 6 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Mill Area																										
SWS01 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	2.0	2.0	6	2	NA	NA	1.37	3.50	95.72	94.35	NAT - C - MSG	
SWS01 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.3	ND	ND	ND	ND	ND	NA	NA	NA	2.88	3.50	95.72	92.84	NAT - C - MSG	
SWS02A (Pre Purge)	ND	ND	ND	ND	6.8	6.8	ND	ND	ND	ND	12.5	12.5	ND	ND	0.5	0.5	ND	NA	NA	0.034	1.12	3.35	94.72	93.60	NAT - C - ALL	
SWS02A (Post Purge)	ND	ND	ND	ND	5.2	4.6	ND	ND	ND	ND	16.9	16.9	ND	ND	ND	ND	ND	NA	NA	0.0046	2.70	3.35	94.72	92.02	NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.3	20.5	ND	ND	2.0	2.0	ND	NA	NA	0.004	1.97	2.07	95.37	93.40	NAT - C	
SWS08A (Pre Purge)	ND	ND	ND	ND	5.9	5.9	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0059	2.40	3.97	95.33	92.93	NAT - C - ALL	
SWS08A (Post Purge)	ND	ND	ND	ND	5.1	5.0	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	NA	0.005	3.62	3.97	95.33	91.71	NAT - C - ALL	
SWS11 (Pre Purge)	ND	ND	ND	ND	2.1	2.1	ND	ND	ND	ND	16.2	16.2	ND	ND	3.5	ND	11	5	NA	0.0021	1.73	6.15	100.36	98.63	NAT - C - ALL & MSG	
SWS11 (Post Purge)	ND	ND	ND	ND	2.8	1.7	ND	ND	ND	ND	17.3	17.3	ND	ND	ND	ND	ND	NA	NA	0.0017	5.25	6.15	100.36	95.11	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.8	19.8	ND	ND	ND	ND	ND	NA	NA	NA	0.70	0.85	99.06	98.36	MG - G	
SWS14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	NA	ND	1.90	100.03	NA	MG - G	
SWS09	ND	ND	ND	ND	1.7	1.7	ND	ND	ND	ND	18.2	18.2	ND	ND	ND	ND	ND	NA	NA	0.0017	2.31	2.50	95.49	93.18	C - MG - ALL	
SWS44	ND	ND	ND	ND	1.3	1.3	ND	ND	ND	ND	18.2	18.2	ND	ND	ND	ND	ND	NA	NA	0.0013	ND	3.00	100.48	NA	MG - G	
SBH01 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.5	ND	ND	ND	ND	ND	NA	NA	NA	2.24	6.00	95.35	93.11	MG - G/C/G - ALL & C- MSG	
SBH01 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.0	20.3	ND	ND	ND	ND	ND	NA	NA	NA	5.40	6.00	95.35	89.95	MG - G/C/G - ALL & C - MSG	
SBH03 (Pre Purge)	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	ND	20.2	20.8	ND	ND	ND	ND	ND	NA	NA	NA	2.06	7.80	95.46	93.40	NAT - C/G - ALL & C - MSG	
SBH03 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.0	20.3	ND	ND	ND	ND	ND	NA	NA	NA	7.15	7.80	95.46	88.31	NAT - C/G - ALL & C - MSG	
SBH04 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	NA	3.45	5.58	95.43	91.98	NAT - C/G - ALL & C - MSG -BRMSG	
SBH04 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.5	ND	ND	ND	ND	ND	NA	NA	NA	5.03	5.58	95.43	90.40	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.7	18.7	ND	ND	3.0	3.0	12	6	NA	NA	2.44	6.90	99.79	97.35	MG - G/C - C - ALL & MSG	
SBH05 (Post Purge)	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	ND	20.1	20.5	ND	ND	ND	ND	ND	NA	NA	0.0002	6.02	6.90	99.79	93.77	MG - G/C - C - ALL & MSG	
BH208 - D - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.9	20.5	ND	ND	ND	ND	ND	NA	NA	NA	1.70	4.60	99.79	98.09	NAT - C - G - MSG	
BH208 - S - (WSP)	20.7	20.7	85.2	85.2	6.1	6.1	ND	ND	ND	ND	8.6	8.6	ND	ND	3.0	3.0	14	6	0.621	0.183	ND	0.97	99.79	NA	MG - NAT C	
BH207 - (WSP) (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	0.0001	4.12	7.20	95.35	91.23	NAT - C - G - MSG	
BH207 - (WSP) (Post Purge)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	19.5	19.5	ND	ND	ND	ND	ND	NA	NA	0.0004	5.88	7.20	95.35	89.47	MG - G	
BH205 - S - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.85	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	19.8	19.8	ND	ND	ND	ND	ND	NA	NA	0.0001	1.63	3.50	95.35	93.72	MG - G	
MW101 (URS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.4	ND	ND	ND	ND	ND	NA	NA	NA	ND	5.18	NR	NA	MG - G	
Max	**20.7**	**20.7**	**85.2**	**85.2**	**6.8**	**6.8**	**ND**	**ND**	**ND**	**ND**	**20.5**	**20.8**	**ND**	**ND**	**3.5**	**3.0**	**14.0**	**6**	**0.6210**	**0.1830**	**7.15**	**7.80**	**100.48**	**98.63**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**8.6**	**8.6**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.70**	**0.85**	**94.72**	**88.31**		

ND - Not detected
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NA - Non applicable

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ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			8.30	Start			16.00	End		
Barometric pressure (mbar):			1017	Start			1016	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			7	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.2

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 29/03/2016

Job No: C6485A
Visit No: 7 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	21.5	ND	ND	ND	ND	ND	NA	NA	NA	1.67	3.04	100.11	98.44	MG - C	
SWS20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	21.3	ND	ND	ND	ND	ND	NA	NA	NA	4.69	4.90	100.55	95.86	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.9	ND	ND	ND	ND	ND	NA	NA	NA	4.44	5.00	100.21	95.77	MG - G	
SWS22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	21.8	ND	ND	-4.5	ND	15	5	NA	NA	3.42	4.80	100.65	97.23	NAT - C - ALL	
SWS26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.8	21.8	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.69	101.11	NA	MG - C	
SWS27B	5.6	5.6	100+	100+	4.6	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	0.0056	0.0046	3.39	4.02	102.21	98.82	MG - G - C	
SWS28	56.3	56.3	100+	100+	39.2	39.2	ND	ND	ND	ND	8.1	8.1	ND	ND	ND	ND	ND	NA	0.0563	0.0392	2.02	3.77	102.21	100.19	MG - G/C	
SWS29	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	21.9	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	3.87	102.00	NA	MG - G - C	
SWS42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	21.8	ND	ND	ND	ND	ND	NA	NA	NA	2.44	3.73	101.13	98.69	MG - G/C - ALL	
SWS43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	21.4	ND	ND	ND	ND	ND	NA	NA	NA	0.92	4.50	100.05	99.13	NAT - C - ALL & MSG	
SBH06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.6	ND	ND	ND	ND	ND	NA	NA	NA	3.50	8.00	100.52	97.02	NAT - C - MSG & BRMSG	
SBH07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	21.7	ND	ND	ND	ND	ND	NA	NA	NA	4.50	7.40	100.75	96.25	NAT - C/G - ALL	
SBH08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	21.9	ND	ND	ND	ND	ND	NA	NA	NA	4.29	10.05	101.32	97.03	NAT - G - ALL & C - MSG	
SBH09	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.1	20.5	ND	ND	ND	ND	ND	NA	NA	NA	2.32	8.66	102.59	100.27	NAT - C/G - ALL & C - MSG	
SBH10	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	14.7	14.7	ND	ND	ND	ND	ND	NA	NA	0.0001	6.84	7.50	101.37	94.53	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.1	21.4	ND	ND	ND	ND	ND	NA	NA	0.0002	1.90	2.05	100.60	98.70	MG - C	
BH204 - D - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	21.6	ND	ND	ND	ND	ND	NA	NA	NA	3.12	6.60	100.60	97.48	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	21.7	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	2.10	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis)	16.9	14.2	100+	100+	4.4	3.6	ND	ND	ND	ND	14.2	14.2	ND	ND	ND	ND	ND	NA	0.0169	0.0036	4.53	7.93	97.09	92.56	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	ND	ND	2.5	2.5	ND	ND	ND	ND	17.7	17.7	ND	ND	ND	ND	ND	NA	NA	0.0025	4.15	6.24	100.23	96.08	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	21.4	ND		ND	ND	ND	NA	NA	NA	ND	2.04	100.23	NA	MG - G	
Max	**56.3**	**56.3**	**ND**	**ND**	**39.2**	**39.2**	**ND**	**ND**	**ND**	**ND**	**20.8**	**21.9**	**ND**	**ND**	**-4.5**	**ND**	**15.0**	**5**	**0.0563**	**0.0392**	**6.84**	**10.05**	**102.59**	**100.27**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.92**	**2.04**	**97.09**	**92.56**		

ND - Not detected
NR - Not recorded
NA - Non applicable

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D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong	
Cloud cover:		None		Slight	X	Cloudy		Overcast	
Precipitation:		None	X	Slight		Moderate		Heavy	
Time monitoring performed:			09:00	Start			16:30	End	
Barometric pressure (mbar):			981	Start			992	End	
Pressure trend (Daily):				Falling		Steady	X	Rising	
Source:	www.wunderground.com								
Air Temperature (Deg. C):			4	Before			8	After	

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.4

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 29/03/2016

Job No: C6485A
Visit No: 7 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	ND	ND	1.7	1.7	ND	ND	ND	ND	10.8	10.8	ND	ND	ND	ND	ND	NA	NA	0.0017	ND	2.04	95.10	NA	MG - C	
SBH11	ND	ND	ND	ND	2.4	1.1	ND	ND	ND	ND	16.5	16.5	ND	NA	ND	ND	ND	NA	NA	0.0011	ND	ND	95.08	NA	MG - G	Unable to measure water level, product thickness and base of hole owing to blockage within install pipework
Max	**ND**	**ND**	**ND**	**ND**	**2.4**	**1.7**	**ND**	**ND**	**ND**	**ND**	**16.5**	**16.5**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0017**	**DRY**	**2.04**	**95.10**	**NR**		
Min	**ND**	**ND**	**ND**	**ND**	**1.7**	**1.1**	**ND**	**ND**	**ND**	**ND**	**10.8**	**10.8**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0011**	**0.00**	**2.04**	**95.08**	**0.00**		

ND - Not detected
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NA - Non applicable

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D - Deep

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NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None	X	Slight		Moderate		Heavy		
Time monitoring performed:			9:00	Start			16:30	End		
Barometric pressure (mbar):			981	Start			992	End		
Pressure trend (Daily):				Falling		Steady	X	Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			8	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.2

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 29/03/2016

Job No: C6485A
Visit No: 7 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	21.0	ND	ND	ND	ND	ND	NA	NA	NA	2.80	4.44	98.20	95.40	MG - C	
SWS34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.5	ND	ND	ND	ND	ND	NA	NA	NA	1.09	4.71	99.37	98.28	NAT - C - G - ALL	
SWS35	ND	ND	ND	ND	1.1	1.1	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	NA	0.0011	ND	4.90	105.56	NA	MG - G - C	
SWS38	ND	ND	ND	ND	1.0	1.0	ND	ND	ND	ND	9.5	9.5	ND	ND	ND	ND	ND	NA	NA	0.001	2.04	3.60	98.86	96.82	MG - C	
SWS41	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.4	20.8	ND	ND	ND	ND	ND	NA	NA	0.0003	ND	4.13	106.06	NA	MG - G	
SBH13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	21.0	ND	ND	ND	ND	ND	NA	NA	NA	1.52	7.50	98.33	96.81	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.7	ND	ND	ND	ND	ND	NA	NA	0.0002	6.40	10.15	105.53	NA	NAT - C - ALL & MSG	
SBH15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	21.5	ND	ND	ND	ND	ND	NA	NA	NA	1.85	5.36	96.57	94.72	NAT - G - ALL & BRMSG	
SBH16	ND	ND	ND	ND	1.4	1.1	ND	ND	ND	ND	16.3	16.6	ND	ND	ND	ND	ND	NA	NA	0.0011	2.90	4.63	97.00	94.10	NAT - G - ALL & BRMSG	
BH202A (WSP)	ND	ND	ND	ND	1.5	1.5	ND	ND	ND	ND	19.0	19.0	ND	ND	ND	ND	ND	NA	NA	0.0015	1.77	6.20	97.76	95.99	MG - G	
Max	**ND**	**ND**	**ND**	**ND**	**1.5**	**1.5**	**ND**	**ND**	**ND**	**ND**	**20.5**	**21.5**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.0015**	**6.40**	**10.15**	**106.06**	**98.28**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**9.5**	**9.5**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.09**	**3.60**	**96.57**	**94.10**		

ND - Not detected
NR - Not recorded
NA - Non applicable

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MG - Made ground
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G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong	
Cloud cover:		None		Slight	X	Cloudy		Overcast	
Precipitation:		None	X	Slight		Moderate		Heavy	
Time monitoring performed:			8:30	Start			16.30	End	
Barometric pressure (mbar):			982	Start			991	End	
Pressure trend (Daily):				Falling		Steady	X	Rising	
Source:	www.wunderground.com								
Air Temperature (Deg. C):			4	Before			8	After	

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.2

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 29/03/2016

Job No: C6485A
Visit No: 7 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Mill Area																										
SWS01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.8	19.8	ND	ND	ND	ND	ND	NA	NA	NA	0.90	3.54	95.72	94.82	NAT - C - MSG	
SWS02A	ND	ND	ND	ND	7.0	7.0	ND	ND	ND	ND	11.1	11.1	ND	ND	2.0	ND	7	2	NA	0.007	1.17	3.39	94.72	93.55	NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	0.0007	1.90	2.05	95.37	93.47	NAT - C	
SWS08A	ND	ND	ND	ND	2.0	2.0	ND	ND	ND	ND	14.8	14.8	ND	ND	ND	ND	ND	NA	NA	0.002	2.36	3.90	95.33	92.97	NAT - C - ALL	
SWS11	0.7	0.6	29.8	15.6	ND	ND	ND	ND	ND	ND	18.5	18.5	ND	ND	ND	ND	ND	NA	0.0007	NA	1.87	6.16	100.36	98.49	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.4	ND	ND	ND	ND	ND	NA	NA	NA	0.75	0.85	99.06	98.31	MG - G	
SWS14	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	19.7	19.7	ND	ND	ND	ND	ND	NA	NA	0.0002	ND	1.94	100.03	NA	MG - G	
SWS09	ND	ND	ND	ND	3.9	3.9	ND	ND	ND	ND	11.9	11.9	ND	ND	ND	ND	ND	NA	NA	0.0039	2.22	2.45	95.49	93.27	C - MG - ALL	
SWS44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	NA	NA	ND	3.00	100.48	NA	MG - G	
SBH01	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	19.7	19.7	ND	ND	ND	ND	ND	NA	NA	0.0004	2.33	6.00	95.35	93.02	MG - G/C/G - ALL & C- MSG	
SBH03	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	18.8	18.8	ND	ND	ND	ND	ND	NA	NA	0.0003	2.20	7.80	95.46	93.26	NAT - C/G - ALL & C - MSG	
SBH04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.8	ND	ND	2.0	2.0	7	4	NA	NA	1.85	5.58	95.43	93.58	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.2	21.2	ND	ND	3.0	ND	13	6	NA	NA	2.45	6.88	99.79	97.34	MG - G/C - C - ALL & MSG	
BH208 - D - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	NA	NA	1.71	4.55	99.79	98.08	NAT - C - G - MSG	
BH208 - S - (WSP)	42.0	40.7	100+	100+	8.3	8.0	ND	ND	ND	ND	ND	ND	ND	ND	2.0	ND	12	4	0.84	0.008	ND	0.95	99.79	NA	Unknown	
BH207 - (WSP)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	19.6	19.6	ND	ND	ND	ND	ND	NA	NA	0.0004	3.83	7.24	95.35	91.52	NAT - C - G - MSG	
BH205 - S - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	21.3	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.85	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	21.4	ND	ND	ND	ND	ND	NA	NA	NA	1.00	3.50	95.35	94.35	MG - G	
MW101 (URS)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.0	20.4	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	5.20	NR	NA	MG - G	
Max	**42.0**	**40.7**	**29.8**	**15.6**	**8.3**	**8.0**	**ND**	**ND**	**ND**	**ND**	**21.2**	**21.4**	**ND**	**ND**	**3.0**	**2.0**	**13.0**	**6**	**0.8400**	**0.0080**	**3.83**	**7.80**	**100.48**	**98.49**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.75**	**0.85**	**94.72**	**91.52**		

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Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong	
Cloud cover:		None		Slight	X	Cloudy		Overcast	
Precipitation:		None	X	Slight		Moderate		Heavy	
Time monitoring performed:			09:00	Start			16:30	End	
Barometric pressure (mbar):			982	Start			991	End	
Pressure trend (Daily):				Falling		Steady	X	Rising	
Source:	www.wunderground.com								
Air Temperature (Deg. C):			4	Before			8	After	

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.4

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 12/04/2016

Job No: C6485A
Visit No: 8 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.6	ND	ND	2.5	2.5	10	3	NA	NA	1.74	3.07	100.11	98.37	MG - C	
SWS20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.4	ND	ND	0.7	0.7	3	1	NA	NA	4.72	4.90	100.55	95.83	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	1.7	1.7	ND	ND	ND	ND	18.4	18.4	ND	ND	-12.1	-12.1	-77	7	NA	0.2057	4.49	5.00	100.21	95.72	MG - G	
SWS22	ND	ND	5.5	ND	0.7	ND	ND	ND	ND	ND	16.8	16.8	ND	ND	ND	ND	ND	NA	NA	NA	3.03	4.80	100.65	97.62	NAT - C - ALL	
SWS26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.70	101.11	NA	MG - C	
SWS27B	3.1	3.1	70.2	70.2	2.7	2.7	ND	ND	ND	ND	7.3	7.3	ND	ND	ND	ND	ND	NA	0.0031	0.0027	3.40	4.00	102.21	98.81	MG - G - C	
SWS28	26.3	26.3	100.0	100.0	21.4	21.4	ND	ND	ND	ND	8.9	8.9	ND	ND	ND	ND	ND	NA	0.0263	0.0214	2.00	3.99	102.21	100.21	MG - G/C	
SWS29	ND	ND	1.8	1.8	0.3	0.3	ND	ND	ND	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	NA	0.0003	ND	3.88	102.00	NA	MG - G - C	
SWS42	ND	ND	2.9	ND	2.2	ND	ND	ND	ND	ND	14.5	14.5	ND	ND	ND	ND	ND	NA	NA	NA	2.48	3.72	101.13	98.65	MG - G/C - ALL	
SWS43	ND	ND	2.0	ND	ND	ND	ND	ND	ND	ND	20.3	20.5	ND	ND	ND	ND	ND	NA	NA	NA	0.60	4.53	100.05	99.45	NAT - C - ALL & MSG	
SBH06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.5	ND	ND	ND	ND	ND	NA	NA	NA	3.44	7.97	100.52	97.08	NAT - C - MSG & BRMSG	
SBH07	ND	ND	0.2	0.2	ND	ND	ND	ND	ND	ND	20.1	20.5	ND	ND	ND	ND	ND	NA	NA	NA	3.85	7.25	100.75	96.90	NAT - C/G - ALL	
SBH08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	NA	4.30	10.02	101.32	97.02	NAT - G - ALL & C - MSG	
SBH09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.4	ND	ND	ND	ND	ND	NA	NA	NA	2.30	8.65	102.59	100.29	NAT - C/G - ALL & C - MSG	
SBH10	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	15.7	15.7	ND	ND	0.3	0.3	1	1	NA	0.0006	6.92	7.50	101.37	94.45	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	6.9	ND	0.2	ND	ND	ND	ND	ND	14.1	14.1	ND	ND	ND	ND	ND	NA	NA	NA	1.98	2.10	100.60	98.62	MG - C	
BH204 - D - (WSP)	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	19.7	19.7	ND	ND	ND	ND	ND	NA	NA	NA	2.63	6.60	100.60	97.97	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	7.5	7.5	100.0	100.0	2.1	2.1	ND	ND	ND	ND	16.8	16.8	ND	ND	ND	ND	ND	NA	0.0075	0.0021	ND	2.10	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis)	8.6	8.6	100.0	100.0	4.9	4.9	ND	ND	ND	ND	12.9	12.9	ND	ND	ND	ND	ND	NA	0.0086	0.0049	4.50	7.94	97.09	92.59	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	19.9	19.9	ND	ND	ND	ND	ND	NA	NA	0.0006	4.02	6.25	100.23	96.21	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.04	100.23	NA	MG - G	
Max	**26.3**	**26.3**	**100.0**	**100.0**	**21.4**	**21.4**	**ND**	**ND**	**ND**	**ND**	**20.4**	**20.6**	**ND**	**ND**	**2.5**	**2.5**	**10.0**	**7**	**0.0263**	**0.2057**	**6.92**	**10.02**	**102.59**	**100.29**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**7.3**	**7.3**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.60**	**2.04**	**97.09**	**92.59**		

ND - Not detected
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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight		Moderate		Heavy		
Time monitoring performed:			09:00	Start			16:30	End		
Barometric pressure (mbar):			990	Start			991	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			8	Before			10	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.4

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 12/04/2016

Job No: C6485A
Visit No: 8 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	ND	ND	2.4	2.4	ND	ND	ND	ND	12.7	12.7	ND	ND	1.9	1.9	8	3	NA	0.0456	ND	2.05	95.10	NA	MG - C	
SBH11	ND	ND	ND	ND	8.3	8.3	ND	ND	ND	ND	3.5	3.5	ND	NR	2.1	2.1	8	3	NA	0.1743	1.95	NR	95.08	NA	MG - G	Oil/water recorded at 1.95m, base of hole not proven due to blockage.
Max	**ND**	**ND**	**ND**	**ND**	**8.3**	**8.3**	**ND**	**ND**	**ND**	**ND**	**12.7**	**12.7**	**ND**	**ND**	**2.1**	**2.1**	**8.0**	**3**	**NA**	**0.1743**	**1.95**	**2.05**	**95.10**	**NR**		
Min	**ND**	**ND**	**ND**	**ND**	**2.4**	**2.4**	**ND**	**ND**	**ND**	**ND**	**3.5**	**3.5**	**ND**	**ND**	**1.9**	**1.9**	**8.0**	**3**	**NA**	**0.0456**	**1.95**	**2.05**	**95.08**	**0.00**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
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C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight		Moderate	X	Heavy		
Time monitoring performed:			09:00	Start			16:00	End		
Barometric pressure (mbar):			990	Start			991	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			8	Before			10	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.4

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 12/04/2016

Job No: C6485A
Visit No: 8 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	19.3	19.3	ND	ND	1.6	1.6	8	3	NA	0.0016	2.84	4.43	98.20	95.36	MG - C	
SWS34	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.1	20.6	ND	ND	ND	ND	ND	NA	NA	0.0001	1.20	4.70	99.37	98.17	NAT - C - G - ALL	
SWS35	ND	ND	7.1	ND	0.8	ND	ND	ND	ND	ND	19.4	19.4	ND	ND	1.8	1.8	7	3	NA	NA	ND	4.93	105.56	NA	MG - G - C	
SWS38	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	15.3	15.3	ND	ND	ND	ND	ND	NA	NA	0.0005	2.28	3.57	98.86	96.58	MG - C	
SWS41	ND	ND	15.4	ND	0.3	ND	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	NA	ND	4.13	106.06	NA	MG - G	
SBH13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	NA	1.59	7.50	98.33	96.74	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.2	20.3	ND	ND	ND	ND	ND	NA	NA	NA	6.30	10.50	105.53	NA	NAT - C - ALL & MSG	
SBH15	ND	ND	14.1	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	NA	1.98	5.36	96.57	94.59	NAT - G - ALL & BRMSG	
SBH16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.7	ND	ND	ND	ND	ND	NA	NA	NA	3.02	4.59	97.00	93.98	NAT - G - ALL & BRMSG	
BH202A (WSP)	ND	ND	2.4	ND	0.1	0.1	ND	ND	ND	ND	20.3	20.4	ND	ND	ND	ND	ND	NA	NA	0.0001	2.19	6.20	97.76	95.57	MG - G	
Max	**ND**	**ND**	**15.4**	**ND**	**0.8**	**0.5**	**ND**	**ND**	**ND**	**ND**	**20.4**	**20.7**	**ND**	**ND**	**1.8**	**1.8**	**8.0**	**3**	**NA**	**0.0016**	**6.30**	**10.50**	**106.06**	**98.17**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**15.3**	**15.3**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.20**	**3.57**	**96.57**	**93.98**		

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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight		Moderate	X	Heavy		
Time monitoring performed:			09:00	Start			16:00	End		
Barometric pressure (mbar):			990	Start			991	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			8	Before			10	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.4

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 12/04/2016

Job No: C6485A
Visit No: 8 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Mill Area																										
SWS01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.7	ND	ND	-4.8	-4.8	-21	NA	NA	NA	0.80	3.52	95.72	94.92	NAT - C - MSG	
SWS02A	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	18.8	18.8	ND	ND	-1.2	-1.2	-4	3	NA	0.006	0.92	3.39	94.72	93.80	NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.2	20.6	ND	ND	ND	ND	ND	NA	NA	0.0003	1.94	2.05	95.37	93.43	NAT - C	
SWS08A	ND	ND	ND	ND	2.3	2.3	ND	ND	ND	ND	13.7	13.7	ND	ND	ND	ND	ND	NA	NA	0.0023	2.37	3.93	95.33	92.96	NAT - C - ALL	
SWS11	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.3	20.3	ND	ND	2.5	2.5	8	2	NA	0.005	1.62	5.30	100.36	98.74	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.6	ND	ND	ND	ND	ND	NA	NA	NA	0.84	0.85	99.06	98.22	MG - G	
SWS14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	NA	ND	1.95	100.03	NA	MG - G	
SWS09	ND	ND	ND	ND	2.1	2.1	ND	ND	ND	ND	15.8	15.8	ND	ND	ND	ND	ND	NA	NA	0.0021	2.24	2.50	95.49	93.25	C - MG - ALL	
SWS44	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	0.0003	ND	3.00	100.48	NA	MG - G	
SBH01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.7	ND	ND	ND	ND	ND	NA	NA	NA	2.17	6.00	95.35	93.18	MG - G/C/G - ALL & C- MSG	
SBH03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.6	ND	ND	1.1	1.1	4	3	NA	NA	1.89	7.73	95.46	93.57	NAT - C/G - ALL & C - MSG	
SBH04	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.2	20.4	ND	ND	ND	ND	ND	NA	NA	NA	1.72	5.57	95.43	93.71	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.6	ND	ND	ND	ND	ND	NA	NA	NA	2.09	6.85	99.79	97.70	MG - G/C - C - ALL & MSG	
BH208 - D - (WSP)	0.2	ND	37.7	ND	ND	ND	ND	ND	ND	ND	20.3	20.6	ND	ND	ND	ND	ND	NA	0.0002	NA	1.32	4.68	99.79	98.47	NAT - C - G - MSG	
BH208 - S - (WSP)	19.2	19.2	100.0	100.0	2.5	2.5	ND	ND	ND	ND	20.3	10.9	ND	ND	5.0	1.5	5	2	0.96	0.0375	ND	0.95	99.79	NA	Unknown	
BH207 - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	NA	3.85	7.72	95.35	91.50	NAT - C - G - MSG	
BH205 - S - (WSP)	0.2	ND	5.5	ND	0.1	ND	ND	ND	ND	ND	19.6	19.6	ND	ND	ND	ND	ND	NA	0.0002	NA	ND	0.87	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	19.7	19.7	ND	ND	ND	ND	ND	NA	NA	NA	1.43	3.52	95.35	93.92	MG - G	
MW101 (URS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.4	ND	ND	ND	ND	ND	NA	NA	NA	ND	5.15	NR	NA	MG - G	
Max	**19.2**	**19.2**	**100.0**	**100.0**	**2.5**	**2.5**	**ND**	**ND**	**ND**	**ND**	**20.4**	**20.7**	**ND**	**ND**	**5.0**	**2.5**	**8.0**	**3**	**0.9600**	**0.0375**	**3.85**	**7.73**	**100.48**	**98.74**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**13.7**	**10.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.80**	**0.85**	**94.72**	**91.50**		

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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:		Dry		Moist	X	Wet		Snow		Frozen
Wind:		Calm		Light	X	Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight		Moderate	X	Heavy		
Time monitoring performed:			09:00	Start			16:00	End		
Barometric pressure (mbar):			990	Start			991	End		
Pressure trend (Daily):			X	Falling		Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			8	Before			10	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.4

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 26/04/2016

Job No: C6485A
Visit No: 9 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	ND	ND	1.2	1.2	0.8	0.8	ND	ND	ND	ND	14.5	14.5	ND	ND	0.5	0.5	1	1	NA	0.006	1.87	3.07	100.11	98.24	MG - C	
SWS20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.5	ND	ND	ND	ND	ND	NA	NA	NA	4.70	4.90	100.55	95.85	MG - G/C- ALL	
SWS21	ND	ND	1.2	ND	1.2	1.2	ND	ND	ND	ND	18.8	18.8	ND	ND	ND	ND	ND	NA	NA	NA	4.44	4.97	100.21	95.77	MG - G	
SWS22	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	NA	NA	3.04	4.80	100.65	97.61	NAT - C - ALL	
SWS26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.70	101.11	NA	MG - C	
SWS27B	1.0	1.0	24.4	24.4	1.5	1.5	ND	ND	ND	ND	11.9	11.9	ND	ND	0.4	0.4	1	1	0.004	0.006	3.62	3.97	102.21	98.59	MG - G - C	
SWS28	24.2	24.2	100.0	100.0	18.4	18.4	ND	ND	ND	ND	11.7	11.7	ND	ND	0.2	0.2	ND	1	0.0484	0.0368	2.44	3.72	102.21	99.77	MG - G/C	
SWS29	0.1	ND	2.7	ND	2.4	1.6	ND	ND	ND	ND	18.9	18.9	ND	ND	0.3	0.3	ND	1	0.0003	0.0048	ND	3.87	102.00	NA	MG - G - C	
SWS42	ND	ND	ND	ND	1.6	1.6	ND	ND	ND	ND	16.8	16.8	ND	ND	0.3	0.3	1	1	NA	0.0048	2.52	3.73	101.13	98.61	MG - G/C - ALL	
SWS43 (Pre-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	0.77	4.50	100.05	99.28	NAT - C - ALL & MSG	
SWS43 (Post-Purge)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.2	20.6	ND	ND	ND	ND	ND	NA	NA	NA	2.72	4.50	101.05	98.33	NAT - C - ALL & MSG	
SBH06 (Pre-Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.6	ND	ND	0.4	0.1	1	1	NA	0.0002	3.39	7.91	100.52	97.13	NAT - C - MSG & BRMSG	
SBH06 (Post-Purge)	ND	ND	ND	ND	0.2	0.1	ND	ND	ND	ND	20.4	20.6	ND	ND	0.1	0.1	ND	1	NA	0.0001	3.70	7.90	101.52	97.82	NAT - C - MSG & BRMSG	
SBH07 (Pre-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	NA	4.09	7.40	100.75	96.66	NAT - C/G - ALL	
SBH07 (Post-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	5.02	7.40	101.75	96.73	NAT - C/G - ALL	
SBH08	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	0.0006	4.31	10.88	101.32	97.01	NAT - G - ALL & C - MSG	
SBH09	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0001	2.37	8.65	102.59	100.22	NAT - C/G - ALL & C - MSG	
SBH10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.0	19.0	ND	ND	0.3	0.3	1	NA	NA	NA	3.90	7.50	101.37	97.47	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	16.6	16.6	ND	ND	ND	ND	ND	NA	NA	0.0002	1.97	2.10	100.60	98.63	MG - C	
BH204 - D - (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	19.8	19.8	ND	ND	0.2	0.2	ND	1	NA	0.0004	2.65	6.60	100.60	97.95	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	20.4	20.4	100.0	100.0	5.7	5.7	ND	ND	ND	ND	11..5	11.5	ND	ND	0.5	0.5	1	1	0.102	0.285	ND	2.10	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis)	7.3	7.3	100.0	100.0	4.5	4.5	ND	ND	ND	ND	13.4	13.4	ND	ND	ND	ND	ND	NA	0.0073	0.0045	4.63	7.90	97.09	92.46	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	2.3	2.3	0.8	0.8	ND	ND	ND	ND	19.4	19.4	ND	ND	0.2	0.2	ND	1	NA	0.0016	3.92	6.20	100.23	96.31	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	0.1	0.1	ND	1	NA	NA	ND	2.00	100.23	#VALUE!	MG - G	
Max	**24.2**	**24.2**	**100.0**	**100.0**	**18.4**	**18.4**	**ND**	**ND**	**ND**	**ND**	**20.5**	**20.6**	**ND**	**ND**	**0.5**	**0.5**	**1.0**	**1**	**0.1020**	**0.2850**	**5.02**	**10.88**	**102.59**	**100.22**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**11.7**	**11.5**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.77**	**2.10**	**97.09**	**92.46**		

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ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:15	Start			16:15	End		
Barometric pressure (mbar):			992	Start			993	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:

Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 26/04/2016
Job No: C6485A
Visit No: 9 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.1	20.1	ND	ND	1.3	1.3	5	2	NA	0.0039	2.00	2.04	95.10	NA	MG - C (0.5 - 2.0m)	
SBH11	0.7	0.7	16.1	ND	0.4	0.4	ND	ND	ND	ND	20.0	20.0	ND	ND	1.8	1.6	7	3	0.0126	0.0064	ND	NR	95.08	NA	MG - G (0.5 - 4.1m)	Unable to measure water level, product thickness and base of hole owing to blockage within install pipework
Max	**0.7**	**0.7**	**16.1**	**ND**	**0.4**	**0.4**	**ND**	**ND**	**ND**	**ND**	**20.1**	**20.1**	**ND**	**ND**	**1.8**	**1.6**	**7.0**	**3**	**0.0126**	**0.0064**	**2.00**	**2.04**	**95.10**	**NR**		
Min	**ND**	**ND**	**ND**	**ND**	**0.3**	**0.3**	**ND**	**ND**	**ND**	**ND**	**20.0**	**20.0**	**ND**	**ND**	**1.3**	**1.3**	**5.0**	**2**	**NA**	**0.0039**	**2.00**	**2.04**	**95.08**	**0.00**		

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C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:15	Start			16:15	End		
Barometric pressure (mbar):			992	Start			993	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 26/04/2016

Job No: C6485A
Visit No: 9 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	19.6	19.6	ND	ND	0.9	0.9	3	1	NA	0.0009	2.90	4.45	98.20	95.30	MG - C	
SWS34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.7	ND	ND	0.7	0.4	2	1	NA	NA	1.40	4.72	99.37	97.97	NAT - C - G - ALL	
SWS35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.5	ND	ND	ND	ND	ND	NA	NA	NA	2.06	4.93	105.56	NA	MG - G - C	
SWS38	ND	ND	ND	ND	0.8	0.8	ND	ND	ND	ND	12.7	12.7	ND	ND	ND	ND	ND	NA	NA	0.0008	2.15	3.59	98.86	96.71	MG - C	
SWS41	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.2	20.6	ND	ND	ND	ND	ND	NA	NA	0.0003	ND	4.13	106.06	NA	MG - G	
SBH13 (Pre-Purge)	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	20.3	20.6	ND	ND	0.6	0.6	2	1	NA	NA	1.68	7.50	98.33	96.65	NAT - G - ALL & BRMSG	
SBH13 (Post-Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.4	20.5	ND	ND	ND	ND	ND	NA	NA	0.0002	2.95	7.50	99.33	96.38	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.3	20.4	ND	ND	0.2	0.2	ND	1	NA	0.0004	6.40	10.50	105.53	NA	NAT - C - ALL & MSG	
SBH15 (Pre-Purge)	ND	ND	10.2	ND	ND	ND	ND	ND	ND	ND	19.5	19.5	ND	ND	ND	ND	ND	NA	NA	NA	2.00	5.35	96.57	94.57	NAT - G - ALL & BRMSG	
SBH15 (Post-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.6	ND	ND	ND	ND	ND	NA	NA	NA	2.60	5.35	97.57	94.97	NAT - G - ALL & BRMSG	
SBH16 (Pre-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.1	ND	ND	ND	ND	ND	NA	NA	NA	3.03	4.60	97.00	93.97	NAT - G - ALL & BRMSG	
SBH16 (Post-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.4	ND	ND	ND	ND	ND	NA	NA	NA	3.40	4.60	98.00	94.60	NAT - G - ALL & BRMSG	
BH202A (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0001	2.20	6.20	97.76	95.56	MG - G	
Max	**ND**	**ND**	**10.2**	**ND**	**0.8**	**0.8**	**ND**	**ND**	**ND**	**ND**	**20.4**	**20.7**	**ND**	**ND**	**0.9**	**0.9**	**3.0**	**1**	**NA**	**0.0009**	**6.40**	**10.50**	**106.06**	**97.97**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**12.7**	**12.7**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.40**	**3.59**	**96.57**	**93.97**		

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Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:15	Start			16:15	End		
Barometric pressure (mbar):			992	Start			993	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 26/04/2016

Job No: C6485A
Visit No: 9 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Mill Area																										
SWS01 (Pre-purge)	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	0.2	0.2	ND	1	NA	NA	0.74	3.51	95.72	94.98	NAT - C - MSG	
SWS01 (Post-purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	0.0001	2.54	3.51	95.72	93.18	NAT - C - MSG	
SWS02A (Pre-purge)	0.2	0.2	5.5	5.5	1.5	1.5	ND	ND	ND	ND	17.4	17.4	ND	ND	1.4	1.4	5	3	0.0028	0.021	1.20	3.38	94.72	93.52	NAT - C - ALL	
SWS02A (Post-purge)	ND	ND	ND	ND	0.7	0.6	ND	ND	ND	ND	19.3	19.3	ND	ND	ND	ND	ND	NA	NA	0.0006	2.24	3.38	94.72	92.48	NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0001	2.02	2.05	95.37	93.35	NAT - C	
SWS08A (Pre-purge)	ND	ND	ND	ND	1.7	1.7	ND	ND	ND	ND	15.9	15.9	ND	ND	1.4	1.4	5	3	NA	0.0238	2.52	3.92	95.33	92.81	NAT - C - ALL	
SWS08A (Post-purge)	ND	ND	ND	ND	0.9	0.9	ND	ND	ND	ND	16.5	16.5	ND	ND	ND	ND	ND	NA	NA	0.0009	3.04	3.92	95.33	92.29	NAT - C - ALL	
SWS11 (Pre-purge)	ND	ND	9.4	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	NA	1.84	5.30	100.36	98.52	NAT - C - ALL & MSG	
SWS11 (Post-purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	NA	2.50	5.30	100.36	97.86	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.7	ND	ND	ND	ND	ND	NA	NA	NA	0.83	0.85	99.06	98.23	MG - G	
SWS14	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	1.95	100.03	NA	MG - G	
SWS09	ND	ND	ND	ND	3.3	3.3	ND	ND	ND	ND	16.4	16.4	ND	ND	1.5	1.5	5	4	NA	0.0495	2.17	2.50	95.49	93.32	C - MG - ALL	
SWS44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.5	ND	ND	ND	ND	ND	NA	NA	NA	ND	3.00	100.48	NA	MG - G	
SBH01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.5	ND	ND	ND	ND	ND	NA	NA	NA	2.17	6.00	95.35	NA	MG - G/C/G - ALL & C- MSG	
SBH03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	2.00	7.7	95.46	93.46	NAT - C/G - ALL & C - MSG	
SBH04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	0.3	0.3	1	1	NA	NA	1.77	5.55	95.43	93.66	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	0.1	0.1	ND	1	NA	NA	2.34	6.84	99.79	97.45	MG - G/C - C - ALL & MSG	
BH208 - S - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	1.1	1.1	4	3	NA	NA	ND	0.98	99.79	NA	NAT - C - G - MSG	
BH208 - D- (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	1.3	1.3	4	3	NA	NA	1.74	4.60	99.79	98.05	NAT - C - G - MSG	
BH207 - (WSP)	ND	ND	ND	ND	0.4	0.1	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	NA	NA	3.88	7.22	95.35	91.47	NAT - C - G - MSG	
BH205 - S - (WSP)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	19.2	19.2	ND	ND	ND	ND	ND	NA	NA	0.0004	ND	0.87	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	ND	ND	0.8	ND	0.2	0.2	ND	ND	ND	ND	19.8	19.8	ND	ND	10.0	10.0	57	5	NA	0.02	1.50	3.50	95.35	93.85	MG - G	
MW101 (URS)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	5.18	NR	NA	MG - G	
Max	**0.2**	**0.2**	**9.4**	**5.5**	**3.3**	**3.3**	**ND**	**ND**	**ND**	**ND**	**20.6**	**20.7**	**ND**	**ND**	**10.0**	**10.0**	**57.0**	**5**	**0.0028**	**0.0495**	**3.88**	**7.70**	**100.48**	**98.52**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**15.9**	**15.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.74**	**0.85**	**94.72**	**91.47**		

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NR - Not recorded
NA - Non applicable

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ALL- Alluvium
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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:15	Start			16:15	End		
Barometric pressure (mbar):			992	Start			193	End		
Pressure trend (Daily):				Falling	x	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			4	Before			6	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.6

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 10/05/2016

Job No: C6485A
Visit No: 10 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	ND	ND	ND	ND	0.8	ND	ND	ND	ND	ND	15.3	15.3	ND	ND	-3.5	-3.5	-9	2	NA	NA	1.78	3.05	100.11	98.33	MG - C	
SWS20	ND	ND	21.1	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	4.70	4.90	100.55	95.85	MG - G/C- ALL	
SWS21	ND	ND	1.9	ND	0.7	0.7	ND	ND	ND	ND	19.7	19.7	ND	ND	ND	ND	ND	NA	NA	0.0007	4.30	4.95	100.21	95.91	MG - G	
SWS22 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	0.2	0.2	ND	2	NA	NA	2.98	4.80	100.65	97.67	NAT - C - ALL	
SWS22 (Post Purge)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	0.1	ND	ND	NA	NA	NA	4.35	4.80	100.65	96.30	NAT - C - ALL	
SWS26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.70	101.11	NA	MG - C	
SWS27B	1.7	ND	40.4	40.4	1.3	1.3	ND	ND	ND	ND	14.0	14.0	ND	ND	ND	ND	ND	NA	0.0017	0.0013	3.48	3.95	102.21	98.73	MG - G - C	
SWS28	23.4	23.4	100.0	100.0	17.2	17.2	ND	ND	ND	ND	12.2	12.2	ND	ND	ND	ND	ND	NA	0.0234	0.0172	2.76	3.70	102.21	99.45	MG - G/C	
SWS29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	ND	3.87	102.00	NA	MG - G - C	
SWS42	0.1	ND	3.2	ND	3.5	ND	ND	ND	ND	ND	13.2	13.2	ND	ND	ND	ND	ND	NA	0.0001	NA	2.38	3.70	101.13	98.75	MG - G/C - ALL	
SWS43 (Pre Purge)	ND	ND	1.0	ND	0.2	0.2	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0002	1.00	4.50	100.05	99.05	NAT - C - ALL & MSG	
SWS43 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	4.06	4.50	100.05	95.99	NAT - C - ALL & MSG	
SBH06 (Pre Purge)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	3.35	7.90	100.52	97.17	NAT - C - MSG & BRMSG	
SBH06 (Post Purge)	ND	ND	ND	ND	0.4	0.2	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	0.0002	6.06	7.90	100.52	94.46	NAT - C - MSG & BRMSG	
SBH07	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	4.10	7.37	100.75	96.65	NAT - C/G - ALL	
SBH08	0.2	0.1	4.8	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	0.0002	NA	4.36	10.06	101.32	96.96	NAT - G - ALL & C - MSG	
SBH09 (Pre Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0002	2.52	8.62	102.59	100.07	NAT - C/G - ALL & C - MSG	
SBH09 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	4.17	8.62	102.59	98.42	NAT - C/G - ALL & C - MSG	
SBH10 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	4.17	7.50	101.37	97.20	NAT - G - ALL	
SBH10 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	0.0002	5.71	7.50	101.37	95.66	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	NA	2.00	2.10	100.60	98.60	MG - C	
BH204 - D - (WSP)	ND	ND	16.6	ND	0.2	0.2	ND	ND	ND	ND	14.8	14.8	ND	ND	ND	ND	ND	NA	NA	0.0002	2.62	6.60	100.60	97.98	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	9.4	8.0	100.0	100.0	3.6	3.6	ND	ND	ND	ND	15.7	15.7	ND	ND	ND	ND	ND	NA	0.0094	0.0036	ND	2.10	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis)	0.6	0.6	14.6	14.6	0.4	0.4	ND	ND	ND	ND	15.1	15.1	ND	ND	ND	ND	ND	NA	0.0006	0.0004	4.52	7.90	97.09	92.57	NAT - C/G	
BH103 (50mm) - (Arcadis)	0.2	ND	5.4	ND	0.4	0.4	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	0.0002	0.0004	3.83	6.20	100.23	96.40	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.04	100.23	NA	MG - G	
Max	**23.4**	**23.4**	**100.0**	**100.0**	**17.2**	**17.2**	**ND**	**ND**	**ND**	**ND**	**20.7**	**20.7**	**ND**	**ND**	**0.2**	**0.2**	**-9.0**	**2**	**0.0234**	**0.0172**	**6.06**	**10.06**	**102.59**	**100.07**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**12.2**	**12.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.00**	**2.04**	**97.09**	**92.57**		

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MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight		Moderate	X	Heavy		
Time monitoring performed:			09:00	Start			16:00	End		
Barometric pressure (mbar):			996	Start			994	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			9	Before			13	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:

Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 10/05/2016

Job No: C6485A
Visit No: 10 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	0.1	ND	22.8	ND	1.2	1.2	ND	ND	ND	ND	18.0	18.0	ND	ND	ND	ND	ND	NA	0.0001	0.0012	ND	2.20	95.10	NA	MG - C	
SBH11	0.1	ND	7.8	ND	0.8	0.8	ND	ND	ND	ND	19.2	19.2	ND	ND	ND	ND	ND	NA	0.0001	0.0008	NR	NR	95.08	NA	MG - G	Unable to measure water level, product thickness and base of hole owing to blockage within install pipework
Max	**0.1**	**ND**	**22.8**	**ND**	**1.2**	**1.2**	**ND**	**ND**	**ND**	**ND**	**19.2**	**19.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**0.0001**	**0.0012**	**DRY**	**2.20**	**95.10**	**NA**		
Min	**0.1**	**ND**	**7.8**	**ND**	**0.8**	**0.8**	**ND**	**ND**	**ND**	**ND**	**18.0**	**18.0**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**0.0001**	**0.0008**	**NR**	**2.20**	**95.08**	**NR**		

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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight		Moderate	X	Heavy		
Time monitoring performed:			09:00	Start			16:00	End		
Barometric pressure (mbar):			996	Start			994	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			9	Before			13	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 10/05/2016

Job No: C6485A
Visit No: 10 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	0.8	ND	18.5	ND	0.1	0.1	ND	ND	ND	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	0.0008	0.0001	2.97	4.45	98.20	95.23	MG - C	
SWS34 (Pre Purge)	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	20.4	20.4	ND	ND	0.2	0.2	ND	1	NA	0.0012	1.33	4.73	99.37	98.04	NAT - C - G - ALL	
SWS34 (Post Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0003	3.00	4.73	99.37	96.37	NAT - C - G - ALL	
SWS35	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	2.32	5.35	105.56	103.24	MG - G - C	
SWS38	ND	ND	ND	ND	1.0	1.0	ND	ND	ND	ND	14.5	14.5	ND	ND	ND	ND	ND	NA	NA	0.001	2.41	3.60	98.86	96.45	MG - C	
SWS41	0.1	ND	6.7	ND	0.2	0.2	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	0.0001	0.0002	ND	4.10	106.06	NA	MG - G	
SBH13 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	0.3	0.3	ND	2	NA	NA	1.61	7.50	98.33	96.72	NAT - G - ALL & BRMSG	
SBH13 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	5.88	7.50	98.33	92.45	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	NA	6.42	10.50	105.53	99.11	NAT - C - ALL & MSG	
SBH15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	2.24	5.35	96.57	94.33	NAT - G - ALL & BRMSG	
SBH16 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	0.1	0.1	ND	1	NA	NA	3.02	4.60	97.00	93.98	NAT - G - ALL & BRMSG	
SBH16 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	0.3	0.3	ND	NA	NA	NA	4.55	4.60	97.00	92.45	NAT - G - ALL & BRMSG	
BH202A (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	2.26	6.20	97.76	95.50	MG - G	
Max	**0.8**	**ND**	**18.5**	**ND**	**1.0**	**1.0**	**ND**	**ND**	**ND**	**ND**	**20.7**	**20.7**	**ND**	**ND**	**0.3**	**0.3**	**ND**	**2**	**0.0008**	**0.0012**	**6.42**	**10.50**	**106.06**	**103.24**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**14.5**	**14.5**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.33**	**3.60**	**96.57**	**92.45**		

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Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight		Moderate	X	Heavy		
Time monitoring performed:			09:00	Start			16:00	End		
Barometric pressure (mbar):			996	Start			994	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			9	Before			13	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 10/05/2016

Job No: C6485A
Visit No: 10 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Mill Area																										
SWS01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	1.06	3.51	95.72	94.66	NAT - C - MSG	
SWS02A (Pre Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	0.0001	0.90	3.37	94.72	93.82	NAT - C - ALL	
SWS02A (Post Purge)	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	2.87	3.37	94.72	91.85	NAT - C - ALL	
SWS07	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.05	95.37	NA	NAT - C	
SWS08A	ND	ND	ND	ND	0.9	0.9	ND	ND	ND	ND	17.2	17.2	ND	ND	ND	ND	ND	NA	NA	0.0009	2.48	3.92	95.33	92.85	NAT - C - ALL	
SWS11	ND	ND	ND	ND	0.6	0.2	ND	ND	ND	ND	20.2	20.4	ND	ND	2.2	2.2	ND	10	NA	0.0044	1.60	5.30	100.36	98.76	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.86	99.06	NA	MG - G	
SWS14	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	0.0002	ND	1.95	100.03	NA	MG - G	
SWS09	ND	ND	1.8	ND	2.0	2.0	ND	ND	ND	ND	17.2	17.2	ND	ND	ND	ND	ND	NA	NA	0.002	2.30	2.46	95.49	93.19	C - MG - ALL	
SWS44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	ND	3.00	100.48	NA	MG - G	
SBH01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	0.3	0.3	ND	1	NA	NA	2.48	6.00	95.35	92.87	MG - G/C/G - ALL & C- MSG	
SBH03 (Pre Purge)	ND	ND	1.5	ND	0.1	0.1	ND	ND	ND	ND	20.6	20.6	ND	ND	0.3	0.3	ND	1	NA	0.0003	2.06	7.70	95.46	93.40	NAT - C/G - ALL & C - MSG	
SBH03 (Post Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.5	ND	ND	0.2	0.2	ND	1	NA	0.0004	3.04	7.70	95.46	92.42	NAT - C/G - ALL & C - MSG	
SBH04	0.1	ND	3.2	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	0.0001	NA	2.16	5.51	95.43	93.27	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	2.20	6.82	99.79	97.59	MG - G/C - C - ALL & MSG	
BH208 - S - (WSP)	19.3	19.3	100.0	100.0	4.3	4.3	ND	ND	ND	ND	13.4	13.4	ND	ND	ND	ND	ND	NA	0.0193	0.0043	ND	0.93	99.79	NA	NAT - C - G - MSG	
BH208 - D- (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	1.43	4.60	99.79	98.36	NAT - C - G - MSG	
BH207 - (WSP)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.6	20.6	ND	ND	0.1	0.1	ND	1	NA	0.0003	3.97	7.20	95.35	91.38	NAT - C - G - MSG	
BH205 - S - (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.0	20.0	ND	ND	ND	ND	ND	NA	NA	0.0002	ND	0.83	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	0.1	ND	3.6	ND	0.2	0.2	ND	ND	ND	ND	20.1	20.1	ND	ND	0.2	0.2	ND	1	0.0002	0.0004	1.50	3.50	95.35	93.85	MG - G	
MW101 (URS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	ND	5.15	NR	NA	MG - G	
Max	**19.3**	**19.3**	**100.0**	**100.0**	**4.3**	**4.3**	**ND**	**ND**	**ND**	**ND**	**20.7**	**20.7**	**ND**	**ND**	**2.2**	**2.2**	**ND**	**10**	**0.0193**	**0.0044**	**3.97**	**7.70**	**100.48**	**98.76**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**13.4**	**13.4**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.90**	**0.83**	**94.72**	**91.38**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None		Slight	X	Cloudy		Overcast		
Precipitation:		None		Slight		Moderate	X	Heavy		
Time monitoring performed:			09:00	Start			16:00	End		
Barometric pressure (mbar):			996	Start			994	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			9	Before			13	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.7

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 24/05/2016

Job No: C6485A
Visit No: 11 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	0.1	0.1	3.9	3.9	0.2	0.2	ND	ND	ND	ND	19.9	19.9	ND	ND	0.6	0.6	2	3	0.0006	0.0012	2.20	3.07	100.11	97.91	MG - C	
SWS20	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	19.8	20.6	ND	ND	1.2	1.2	5	4	NA	NA	4.68	4.90	100.55	95.87	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	1.4	1.4	ND	ND	ND	ND	19.2	19.2	ND	ND	1.5	1.5	6	3	NA	0.021	4.42	5.00	100.21	95.79	MG - G	
SWS22 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	ND	ND	-2.1	-2.1	-7	3	NA	NA	3.10	4.80	100.65	97.55	NAT - C - ALL	
SWS22 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.8	ND	ND	ND	ND	ND	NA	NA	NA	4.13	4.80	100.65	96.52	NAT - C - ALL	
SWS26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.8	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.70	101.11	NA	MG - C	
SWS27B	2.4	2.4	59.5	59.5	1.8	1.8	ND	ND	ND	ND	12.2	12.2	ND	ND	0.8	0.2	2	1	0.0192	0.0036	3.57	3.93	102.21	98.64	MG - G - C	
SWS28	22.7	22.7	100.0	100.0	17.5	17.5	ND	ND	ND	ND	12.0	12.0	ND	ND	0.6	0.6	2	1	0.1362	0.105	3.01	3.77	102.21	99.20	MG - G/C	
SWS29	ND	ND	ND	ND	2.1	2.1	ND	ND	ND	ND	17.6	17.6	ND	ND	1.0	1.0	3	2	NA	0.021	ND	3.90	102.00	NA	MG - G - C	
SWS42	ND	ND	ND	ND	1.4	1.4	ND	ND	ND	ND	17.4	17.4	ND	ND	0.3	0.3	ND	1	NA	0.0042	2.67	3.72	101.13	98.46	MG - G/C - ALL	
SWS43 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.7	ND	ND	0.6	0.6	2	1	NA	NA	1.05	4.50	100.05	99.00	NAT - C - ALL & MSG	
SWS43 (Post Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.5	20.6	ND	ND	0.2	0.2	ND	1	NA	0.0002	3.60	4.50	100.05	96.45	NAT - C - ALL & MSG	
SBH06 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.7	ND	ND	0.7	0.7	2	1	NA	NA	3.41	7.93	100.52	97.11	NAT - C - MSG & BRMSG	
SBH06 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	0.4	0.4	1	1	NA	NA	5.12	7.93	100.52	95.40	NAT - C - MSG & BRMSG	
SBH07 (Pre-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	1.2	1.2	5	3	NA	NA	2.39	7.43	100.75	98.36	NAT - C/G - ALL	
SBH07 (Post-Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0001	6.10	7.43	100.75	94.65	NAT - C/G - ALL	
SBH08 (Pre-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.9	ND	ND	0.6	0.6	1	1	NA	NA	4.44	10.13	101.32	96.88	NAT - G - ALL & C - MSG	
SBH08 (Post-Purge)	ND	ND	ND	ND	0.4	0.4	ND	ND	ND	ND	20.3	20.3	ND	ND	ND	ND	ND	NA	NA	0.0004	7.44	10.13	101.32	93.88	NAT - G - ALL & C - MSG	
SBH09 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.8	ND	ND	0.8	0.8	3	2	NA	NA	2.77	8.60	102.59	99.82	NAT - C/G - ALL & C - MSG	
SBH09 (Post Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.8	ND	ND	0.4	0.4	1	1	NA	NA	4.20	8.60	102.59	98.39	NAT - C/G - ALL & C - MSG	
SBH10 (Pre Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.9	ND	ND	0.4	0.4	1	1	NA	NA	3.40	7.50	101.37	97.97	NAT - G - ALL	
SBH10 (Post Purge)	ND	ND	ND	ND	0.2	0.1	ND	ND	ND	ND	20.4	20.7	ND	ND	0.2	0.2	1	1	NA	0.0002	5.82	7.50	101.37	95.55	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	17.9	17.9	ND	ND	-0.1	-0.1	-1	1	NA	0.0002	2.03	2.12	100.60	98.57	MG - C	
BH204 - D - (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.5	ND	ND	2.3	2.3	9	5	NA	0.0046	2.75	6.57	100.60	97.85	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	0.1	0.1	3.8	3.8	0.4	0.3	ND	ND	ND	ND	20.2	20.2	ND	ND	ND	ND	ND	NA	0.0001	0.0003	ND	2.10	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis)	7.3	7.3	100.0	100.0	4.1	4.1	ND	ND	ND	ND	13.1	13.1	ND	ND	2.3	2.3	9	5	0.1679	0.0943	4.77	7.90	97.09	92.32	NAT - C/G	
BH103 (50mm) - (Arcadis)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.7	20.7	ND	ND	0.6	0.6	2	2	NA	0.0018	4.02	6.27	100.23	96.21	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.8	ND	ND	0.1	0.1	1	1	NA	NA	ND	2.04	100.23	NA	MG - G	
Max	**22.7**	**22.7**	**100.0**	**100.0**	**17.5**	**17.5**	**ND**	**ND**	**ND**	**ND**	**20.7**	**20.9**	**ND**	**ND**	**2.3**	**2.3**	**9.0**	**5**	**0.1679**	**0.1050**	**7.44**	**10.13**	**102.59**	**99.82**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**12.0**	**12.0**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.05**	**2.04**	**97.09**	**92.32**		

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G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:00	Start			15:00	End		
Barometric pressure (mbar):			1010	Start			1010	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			8	Before			11	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:

Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 24/05/2016

Job No: C6485A
Visit No: 11 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	ND	ND	0.1	ND	ND	1	NA	NA	ND	2.04	95.10	NA	MG - C	
SBH11	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.1	20.1	ND	ND	0.3	ND	ND	1	NA	0.0002	NR	NR	95.08	NR	MG - G	
Max	**ND**	**ND**	**ND**	**ND**	**0.2**	**0.2**	**ND**	**ND**	**ND**	**ND**	**20.4**	**20.4**	**ND**	**ND**	**0.3**	**ND**	**ND**	**1**	**NA**	**0.0002**	**DRY**	**2.04**	**95.10**	**NA**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**20.1**	**20.1**	**ND**	**ND**	**0.1**	**ND**	**ND**	**1**	**NA**	**NA**	**NR**	**2.04**	**95.08**	**NR**		

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NA - Non applicable

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D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:00	Start			15:00	End		
Barometric pressure (mbar):			1010	Start			1010	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			8	Before			11	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 24/05/2016

Job No: C6485A
Visit No: 11 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	18.9	18.9	ND	ND	0.2	0.2	ND	1	NA	0.0006	2.97	4.40	98.20	95.23	MG - C	
SWS34 (Pre-Purge)	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	0.0006	1.35	4.70	99.37	98.02	NAT - C - G - ALL	
SWS34 (Post-Purge)	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0005	2.85	4.70	99.37	96.52	NAT - C - G - ALL	
SWS35	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	20.7	21.0	ND	ND	0.2	0.2	ND	1	NA	NA	2.04	4.90	105.56	103.52	MG - G - C	
SWS38	ND	ND	ND	ND	1.3	1.3	ND	ND	ND	ND	13.0	13.0	ND	ND	ND	ND	ND	NA	NA	0.0013	2.35	3.55	98.86	96.51	MG - C	
SWS41	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.4	20.4	ND	ND	0.2	0.2	ND	NA	NA	0.0006	ND	4.10	106.06	NA	MG - G	
SBH13 (Pre-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.7	ND	ND	0.7	0.7	2	1	NA	NA	1.73	7.50	98.33	96.60	NAT - G - ALL & BRMSG	
SBH13 (Post-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.6	ND	ND	0.2	0.2	1	1	NA	NA	5.66	7.50	98.33	92.67	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	6.60	10.50	105.53	98.93	NAT - C - ALL & MSG	
SBH15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.6	ND	ND	0.2	0.2	1	1	NA	NA	2.21	5.35	96.57	94.36	NAT - G - ALL & BRMSG	
SBH16 (Pre-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.9	ND	ND	0.1	0.1	ND	1	NA	NA	3.07	4.60	97.00	93.93	NAT - G - ALL & BRMSG	
SBH16 (Post-Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	4.55	4.60	97.00	92.45	NAT - G - ALL & BRMSG	
BH202A (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.8	21.0	ND	ND	ND	ND	ND	NA	NA	NA	2.22	6.20	97.76	95.54	MG - G	
Max	**ND**	**ND**	**0.5**	**ND**	**1.3**	**1.3**	**ND**	**ND**	**ND**	**ND**	**20.8**	**21.0**	**ND**	**ND**	**0.7**	**0.7**	**2.0**	**1**	**NA**	**0.0013**	**6.60**	**10.50**	**106.06**	**103.52**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**13.0**	**13.0**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.35**	**3.55**	**96.57**	**92.45**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

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ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:00	Start			15:00	End		
Barometric pressure (mbar):			1010	Start			1010	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			8	Before			11	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:

Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 24/05/2016

Job No: C6485A
Visit No: 11 **of** 12
Operator: DL **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
Former Mill Area																										
SWS01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	20.6	ND	ND	ND	ND	ND	NA	NA	NA	1.22	3.50	95.72	94.50	NAT - C - MSG	
SWS02A	**B/H LOST UNDER TOPSOIL MOUND**																								NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.8	ND	ND	0.2	0.2	ND	1	NA	0.0004	1.87	2.05	94.72	92.85	NAT - C	
SWS08A	ND	ND	ND	ND	1.1	1.1	ND	ND	ND	ND	17.4	17.4	ND	ND	ND	ND	ND	NA	NA	0.0011	2.45	3.90	95.37	NA	NAT - C - ALL	
SWS11	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0005	1.78	5.28	95.33	93.55	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.7	ND	ND	ND	ND	ND	NA	NA	NA	0.84	0.85	100.36	99.52	MG - G	
SWS14	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.7	20.7	ND	ND	0.1	0.1	ND	1	NA	0.0001	1.87	1.94	99.06	97.19	MG - G	
SWS09	ND	ND	ND	ND	2.2	2.2	ND	ND	ND	ND	17.1	17.1	ND	ND	0.4	0.4	1	1	NA	0.0088	2.33	2.45	100.03	97.70	C - MG - ALL	
SWS44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.8	ND	ND	ND	ND	ND	NA	NA	NA	ND	3.00	95.49	NA	MG - G	
SBH01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.6	ND	ND	ND	ND	ND	NA	NA	NA	2.32	6.00	100.48	98.16	MG - G/C/G - ALL & C- MSG	
SBH03 (Pre-Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	0.0001	2.10	7.8	95.35	93.25	NAT - C/G - ALL & C - MSG	
SBH03 (Post-Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.5	20.8	ND	ND	0.3	0.3	1	1	NA	0.0009	3.60	7.8	95.35	91.75	NAT - C/G - ALL & C - MSG	
SBH04	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.7	ND	ND	ND	ND	ND	NA	NA	0.0001	1.72	5.57	95.43	93.71	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.6	20.6	ND	ND	0.2	0.2	ND	NA	NA	0.0006	2.46	6.85	99.79	97.33	MG - G/C - C - ALL & MSG	
BH208 - S - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.9	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.91	99.79	NA	NAT - C - G - MSG	
BH208 - D- (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	0.0002	1.55	4.60	99.79	98.24	NAT - C - G - MSG	
BH207 - (WSP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	NA	4.00	7.00	95.35	NA	NAT - C - G - MSG	
BH205 - S - (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	0.87	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	ND	ND	1.8	ND	0.1	0.1	ND	ND	ND	ND	20.6	20.6	ND	ND	0.4	0.4	1	1	NA	0.0004	1.54	2.62	95.35	93.81	MG - G	
MW101 (URS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	ND	5.12	NR	NA	MG - G	
Max	**ND**	**ND**	**1.8**	**ND**	**2.2**	**2.2**	**ND**	**ND**	**ND**	**ND**	**20.7**	**20.9**	**ND**	**ND**	**0.4**	**0.4**	**1.0**	**1**	**NA**	**0.0088**	**4.00**	**7.80**	**100.48**	**99.52**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**17.1**	**17.1**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**0.84**	**0.85**	**94.72**	**91.75**		

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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:		Calm	X	Light		Moderate		Strong		
Cloud cover:		None	X	Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:00	Start			15:00	End		
Barometric pressure (mbar):			1010	Start			1010	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			8	Before			11	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:

Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 07/06/2016

Job No: C6485A
Visit No: 12 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
Former Landfill Area																										
SWS19	0.1	0.1	3.1	3.1	0.5	0.4	ND	ND	ND	ND	18.0	18.0	ND	ND	ND	ND	ND	NA	0.0001	0.0004	1.37	3.07	100.11	98.74	MG - C	
SWS20	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.6	21.5	ND	ND	ND	ND	ND	NA	NA	NA	4.87	4.90	100.55	95.68	MG - G/C- ALL	
SWS21	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.6	20.6	ND	ND	ND	ND	ND	NA	NA	0.0005	4.56	4.93	100.21	95.65	MG - G	
SWS22 (Pre - Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.2	20.2	ND	ND	0.1	0.1	ND	1	NA	0.0003	3.75	4.80	100.65	96.90	NAT - C - ALL	
SWS22 (Post - Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.6	ND	ND	ND	ND	ND	NA	NA	0.0002	4.42	4.80	100.65	96.23	NAT - C - ALL	
SWS26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	20.7	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.67	101.11	NR	MG - C	
SWS27B	2.0	2.0	46.5	46.5	1.4	1.4	ND	ND	ND	ND	15.2	15.2	ND	ND	0.3	0.3	1	1	0.006	0.0042	3.57	3.95	102.21	98.64	MG - G - C	
SWS28	13.6	13.6	100.0	100.0	10.2	10.2	ND	ND	ND	ND	15.7	15.7	ND	ND	1.1	1.1	4	2	0.1496	0.1122	3.17	3.70	102.21	99.04	MG - G/C	
SWS29	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	20.6	22.0	ND	ND	0.6	0.6	2	1	NA	NA	ND	3.86	102.00	NA	MG - G - C	
SWS42	ND	ND	ND	ND	2.1	2.1	ND	ND	ND	ND	16.6	16.6	ND	ND	0.6	0.6	2	1	NA	0.0126	2.52	3.70	101.13	98.61	MG - G/C - ALL	
SWS43	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	0.0001	1.54	4.50	100.05	98.51	NAT - C - ALL & MSG	
SBH06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	21.2	ND	ND	ND	ND	ND	NA	NA	NA	4.82	7.93	100.52	95.70	NAT - C - MSG & BRMSG	
SBH07 (Pre - Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	21.6	ND	ND	1.2	1.2	4	3	NA	NA	2.31	7.40	100.75	98.44	NAT - C/G - ALL	
SBH07 (Post - Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.8	21.0	ND	ND	ND	ND	ND	NA	NA	NA	6.83	7.40	100.75	93.92	NAT - C/G - ALL	
SBH08 (Pre - Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.5	21.8	ND	ND	0.6	0.6	2	1	NA	NA	6.00	10.05	101.32	95.32	NAT - G - ALL & C - MSG	
SBH08 (Post - Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	20.8	ND	ND	0.4	0.4	1	1	NA	NA	7.72	10.05	101.32	93.60	NAT - G - ALL & C - MSG	
SBH09 (Pre - Purge)	0.1	ND	3.6	ND	0.3	0.3	ND	ND	ND	ND	20.7	21.5	ND	ND	0.9	0.9	4	1	0.0009	0.0027	3.09	8.60	102.59	99.50	NAT - C/G - ALL & C - MSG	
SBH09 (Post - Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.3	20.6	ND	ND	ND	ND	ND	NA	NA	0.0001	7.00	8.60	102.59	95.59	NAT - C/G - ALL & C - MSG	
SBH10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	21.5	ND	ND	0.2	0.2	1	1	NA	NA	5.03	7.50	101.37	96.34	NAT - G - ALL	
BH204 - S - (WSP)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	15.7	15.7	ND	ND	ND	ND	ND	NA	NA	0.0003	2.00	2.04	100.60	98.60	MG - C	
BH204 - D - (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.4	ND	ND	0.3	0.3	ND	1	NA	0.0003	3.70	6.58	100.60	96.90	NAT - G - MSG	
BH101 (19mm) - (Arcadis)	0.3	ND	8.4	ND	0.1	0.1	ND	ND	ND	ND	21.5	21.5	ND	ND	ND	ND	ND	NA	0.0003	0.0001	ND	2.10	97.09	NA	MG - C	
BH101 (50mm) - (Arcadis)	4.1	4.1	92.9	92.9	1.2	1.2	ND	ND	ND	ND	18.9	18.9	ND	ND	0.4	0.4	2	1	0.0164	0.0048	4.95	7.90	97.09	92.14	NAT - C/G	
BH103 (50mm) - (Arcadis)	0.2	ND	5.6	ND	ND	ND	ND	ND	ND	ND	20.8	21.9	ND	ND	0.2	0.2	1	1	0.0004	NA	5.62	6.20	100.23	94.61	MG - G/C - NAT - C/G	
BH103 (19mm) - (Arcadis)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5	21.8	ND	ND	ND	ND	ND	NA	NA	NA	ND	2.05	100.23	NA	MG - G	
Max	**13.6**	**13.6**	**100.0**	**100.0**	**10.2**	**10.2**	**ND**	**ND**	**ND**	**ND**	**21.5**	**22.0**	**ND**	**ND**	**1.2**	**1.2**	**4.0**	**3**	**0.1496**	**0.1122**	**7.72**	**10.05**	**102.59**	**99.50**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**15.2**	**15.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.37**	**2.04**	**97.09**	**92.14**		

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BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:	X	Calm		Light		Moderate		Strong		
Cloud cover:	X	None		Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:30	Start			15:00	End		
Barometric pressure (mbar):			1011	Start			1011	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			10	Before			17	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:

Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 07/06/2016

Job No: C6485A
Visit No: 12 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
South West Area - Former Buildings/Machinery/Engine House																										
SWS30A	ND	ND	0.7	ND	0.9	0.9	ND	ND	ND	ND	19.7	19.7	ND	ND	3.2	3.2	12	7	NA	0.0288	ND	2.04	95.10	NA	MG - C	
SBH11	ND	ND	ND	ND	0.3	0.1	ND	ND	ND	ND	20.2	21.0	ND	ND	0.6	0.6	1	1	NA	0.0006	NR	NR	95.08	ND	MG - G	
Max	**ND**	**ND**	**0.7**	**ND**	**0.9**	**0.9**	**ND**	**ND**	**ND**	**ND**	**20.2**	**21.0**	**ND**	**ND**	**3.2**	**3.2**	**12.0**	**7**	**NA**	**0.0288**	**DRY**	**2.04**	**95.10**	**NA**		
Min	**ND**	**ND**	**ND**	**ND**	**0.3**	**0.1**	**ND**	**ND**	**ND**	**ND**	**19.7**	**19.7**	**ND**	**ND**	**0.6**	**0.6**	**1.0**	**1**	**NA**	**0.0006**	**NR**	**2.04**	**95.08**	**NR**		

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Two phased Dip meter and PID used.

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Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:	X	Calm		Light		Moderate		Strong		
Cloud cover:	X	None		Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:30	Start			15:00	End		
Barometric pressure (mbar):			1011	Start			1011	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			10	Before			17	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter: GFM400
Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 07/06/2016

Job No: C6485A
Visit No: 12 **of** 12
Operator: DL **Project Manager:** JF

Monitoring Point	GAS CONCENTRATIONS: Methane (%v/v) Peak	Methane (%v/v) Steady	%LEL Peak	%LEL Steady	Carbon dioxide (%v/v) Peak	Carbon dioxide (%v/v) Steady	Carbon monoxide (ppmv) Peak	Carbon monoxide (ppmv) Steady	Hydrogen sulphide (ppmv) Peak	Hydrogen sulphide (ppmv) Steady	Oxygen (%v/v) Min.	Oxygen (%v/v) Steady	VOLATILES: PID Peak (ppm)	Product thickness (mm)	FLOW DATA: Flow rate (l/hr) Peak	Flow rate (l/hr) Steady	Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Worst-credible GSVs: Methane (l/hr)	CO2 (l/hr)	WELL AND WATER DATA: Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	Comments
North West Area - Former Effluent Tanks/Reservoirs																										
SWS33	ND	ND	2.4	ND	0.2	0.2	ND	ND	ND	ND	19.7	19.7	ND	ND	0.6	0.6	2	1	NA	0.0012	3.66	4.44	98.20	94.54	MG - C	
SWS34	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	20.6	20.6	ND	ND	1.1	1.1	4	4	NA	0.0066	2.58	4.75	99.37	96.79	NAT - C - G - ALL	
SWS35	ND	ND	ND	ND	0.5	0.5	ND	ND	ND	ND	20.4	20.7	ND	ND	0.9	0.9	3	2	NA	0.0045	ND	5.35	105.56	ND	MG - G - C	
SWS38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7	21.7	ND	ND	1.0	1.0	3	2	NA	NA	2.24	3.60	98.86	96.62	MG - C	
SWS41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	21.8	ND	ND	0.8	0.8	2	1	NA	NA	ND	4.10	106.06	ND	MG - G	
SBH13 (Pre - Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	21.3	ND	ND	1.0	1.0	3	2	NA	NA	3.12	7.50	98.33	95.21	NAT - G - ALL & BRMSG	
SBH13 (Post - Purge)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.5	20.7	ND	ND	0.2	0.2	ND	1	NA	0.0002	6.62	7.50	98.33	91.71	NAT - G - ALL & BRMSG	
SBH14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	21.8	ND	ND	0.9	0.9	3	1	NA	NA	7.03	10.46	105.53	98.50	NAT - C - ALL & MSG	
SBH15 (Pre - Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4	21.2	ND	ND	0.3	0.3	1	1	NA	NA	2.46	5.35	96.57	94.11	NAT - G - ALL & BRMSG	
SBH15 (Post - Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.3	20.4	ND	ND	ND	ND	ND	NA	NA	0.0003	5.03	5.35	96.57	91.54	NAT - G - ALL & BRMSG	
SBH16 (Pre - Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	21.4	ND	ND	0.9	0.9	3	1	NA	NA	3.37	4.60	97.00	93.63	NAT - G - ALL & BRMSG	
SBH16 (Post - Purge)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.6	20.8	ND	ND	ND	ND	ND	NA	NA	NA	4.00	4.60	97.00	93.00	NAT - G - ALL & BRMSG	
BH202A (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.9	20.9	ND	ND	1.1	1.1	4	2	NA	0.0011	2.50	6.20	97.76	95.26	MG - G	
Max	**ND**	**ND**	**2.4**	**ND**	**0.6**	**0.6**	**ND**	**ND**	**ND**	**ND**	**20.9**	**21.8**	**ND**	**ND**	**1.1**	**1.1**	**4.0**	**4**	**NA**	**0.0066**	**7.03**	**10.46**	**106.06**	**98.50**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**19.7**	**19.7**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**2.24**	**3.60**	**96.57**	**ND**		

ND - Not detected
NR - Not recorded
NA - Non applicable
S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular
ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:	X	Calm		Light		Moderate		Strong		
Cloud cover:	X	None		Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:30	Start			15:00	End		
Barometric pressure (mbar):			1011	Start			1011	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			10	Before			17	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:

Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Ground Gas and Groundwater Monitoring Record Sheet

JOB DETAILS:

Client: CEG
Site: Oughtibridge Mill
Date: 07/06/2016

Job No: C6485A
Visit No: 12 **of** 12
Operator: DL **Project Manager:** JF

	GAS CONCENTRATIONS												VOLATILES		FLOW DATA				Worst-credible GSVs		WELL AND WATER DATA					Comments
Monitoring Point	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppmv)		Hydrogen sulphide (ppmv)		Oxygen (%v/v)		PID Peak (ppm)	Product thickness (mm)	Flow rate (l/hr)		Differential borehole Pressure (Pa)	Time for flow to equalise (secs)	Methane (l/hr)	CO2 (l/hr)	Water level (mbgl)	Depth of well (m)	Reduced level (mAOD)	Water level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Min.	Steady			Peak	Steady										
Former Mill Area																										
SWS01	0.1	ND	3.1	ND	0.3	0.3	ND	ND	ND	ND	20.6	20.6	ND	ND	1.6	1.6	6	4	0.0016	0.0048	1.10	3.53	95.72	94.62	NAT - C - MSG	
SWS02A	**B/H LOST UNDER TOPSOIL MOUND**																								NAT - C - ALL	
SWS07	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.6	ND	ND	0.4	0.4	1.0	1	NA	0.0004	1.90	2.00	94.72	92.82	NAT - C	
SWS08A	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.0	20.0	ND	ND	0.2	0.2	ND	1	NA	0.0006	3.25	3.92	95.37	92.12	NAT - C - ALL	
SWS11	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.2	20.6	ND	ND	0.4	0.4	1	1	NA	0.0012	3.40	5.47	95.33	91.93	NAT - C - ALL & MSG	
SWS13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.3	20.5	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.85	100.36	NA	MG - G	
SWS14	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.7	21.1	ND	ND	0.3	0.3	ND	1	NA	0.0003	ND	1.94	99.06	NA	MG - G	
SWS09	ND	ND	ND	ND	2.1	2.1	ND	ND	ND	ND	17.2	17.2	ND	ND	0.1	0.1	ND	1	NA	0.0021	ND	2.42	100.03	NA	C - MG - ALL	
SWS44	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	0.0001	ND	2.50	95.49	NA	MG - G	
SBH01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.2	20.5	ND	ND	ND	ND	ND	NA	NA	NA	2.20	6.00	100.48	98.28	MG - G/C/G - ALL & C- MSG	
SBH03 (Pre-Purge)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.3	20.5	ND	ND	ND	ND	ND	NA	NA	0.0003	2.08	7.8	95.35	93.27	NAT - C/G - ALL & C - MSG	
SBH03 (Post-Purge)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.7	ND	ND	ND	ND	ND	NA	NA	0.0002	6.35	7.8	95.35	89.00	NAT - C/G - ALL & C - MSG	
SBH04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	20.6	ND	ND	ND	ND	ND	NA	NA	NA	2.16	5.53	95.43	93.27	NAT - C/G - ALL & C - MSG -BRMSG	
SBH05	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.6	20.8	ND	ND	0.2	0.2	ND	1	NA	0.0006	2.72	6.85	99.79	97.07	MG - G/C - C - ALL & MSG	
BH208 - S - (WSP)	3.5	3.5	79.9	64.1	1.7	1.7	ND	ND	ND	ND	17.6	17.6	ND	ND	0.2	0.2	ND	1	0.007	0.0034	ND	0.90	99.79	NA	NAT - C - G - MSG	
BH208 - D- (WSP)	2.5	2.5	57.2	57.2	1.5	1.3	ND	ND	ND	ND	19.8	19.8	ND	ND	0.6	0.6	2	1	0.015	0.0078	1.87	4.55	99.79	97.92	NAT - C - G - MSG	
BH207 - (WSP)	ND	ND	ND	ND	0.2	0.2	ND	ND	ND	ND	20.5	20.5	ND	ND	ND	ND	ND	NA	NA	NA	5.11	7.39	95.35	90.24	NAT - C - G - MSG	
BH205 - S - (WSP)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.4	20.4	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.86	95.35	NA	NAT - C - ALL & G - MSG	
BH205 - D - (WSP)	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	20.0	20.3	ND	ND	ND	ND	ND	NA	NA	NA	2.16	3.50	95.35	93.19	MG - G	
MW101 (URS)	ND	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	20.3	20.5	ND	ND	ND	ND	ND	NA	NA	NA	ND	5.20	NR	NA	MG - G	
Max	**3.5**	**3.5**	**79.9**	**64.1**	**2.1**	**2.1**	**ND**	**ND**	**ND**	**ND**	**20.7**	**21.1**	**ND**	**ND**	**1.6**	**1.6**	**6.0**	**4**	**0.0150**	**0.0078**	**6.35**	**7.80**	**100.48**	**98.28**		
Min	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**17.2**	**17.2**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**NA**	**1.10**	**0.85**	**94.72**	**89.00**		

ND - Not detected
NR - Not recorded
NA - Non applicable

S - Shallow
D - Deep

MG - Made ground
NAT - Natural
C - Cohesive
G - Granular

ALL- Alluvium
MSG - Millstone Grit Formation
BR - Bedrock

Two phased Dip meter and PID used.

NB: Where no flow (ND) recorded, GSVs are calculated using equiment limit of detection (0.1l/hr). Where negative flows recorded, these are converted to positive values for calculation of GSVs.
Installations with high groundwater levels i.e. above the reponse zone, have been where possible monitored pre and post purge

METEOROLOGICAL AND SITE INFORMATION:

State of ground:	X	Dry		Moist		Wet		Snow		Frozen
Wind:	X	Calm		Light		Moderate		Strong		
Cloud cover:	X	None		Slight		Cloudy		Overcast		
Precipitation:	X	None		Slight		Moderate		Heavy		
Time monitoring performed:			09:30	Start			15:00	End		
Barometric pressure (mbar):			1011	Start			1011	End		
Pressure trend (Daily):				Falling	X	Steady		Rising		
Source:	www.wunderground.com									
Air Temperature (Deg. C):			10	Before			17	After		

INSTRUMENTATION TECHNICAL SPECIFICATIONS:

Ground gas meter:

Gas Range: **CH_4** 0 - 100% **CO_2** 0 - 100% **O_2** 0 - 25%
Gas Flow range: +100/-50 l/hour
Differential Pressure: (+/-) 1000 Pa
Date of last calibration: 17/09/2015
Date of next calibration: 17/09/2016

Ambient air check: **CH_4** 0.0 **CO_2** 0.0 **O_2** 20.8

PID: MiniRae 3000
Calibrated range: 0-100ppm
Calibration gas: isobutylene
Response time: 0.1
Accuracy: plus/ minus 5% displayer reading
Date of last calibration: 02/02/2016
Date of next calibration: 02/08/2016

Table 16
Bulk Ground Gas Monitoring

	Location	Date	Gas Flow Rate		Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO	H2S	Depth to Water (mbgl)	Depth to Base (mbgl)
			Peak (l/hr)	Steady (l/hr)			Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)	Peak (ppm)	Peak (ppm)		
First Visit	BH101S	10.12.14	+0.1	+0.1	1002	-10.25	>>>	>>>	42.4	41.0	10.1	10.1	1.3	1.5	2	<1	Dry	2.060
	BH101D	10.12.14	+0.1	0.0	1002	+5.4	>>>	>>>	13.7	3.0	2.3	1.0	17.3	19.7	1	<1	4.463	7.972
	BH102S	10.12.14	-0.0	0.0	1002	-0.32	<0.01	<0.01	<0.01	<0.01	0.1	0.1	19.7	21.3	<1	<1	Dry	1.820
	BH102D	10.12.14	-0.0	0.0	1002	-0.35	<0.01	<0.01	<0.01	<0.01	0.2	0.2	20.6	20.6	1	<1	4.279	7.815
	BH103S	10.12.14	-1.0	0.0	1001	-9.01	<0.01	<0.01	<0.01	<0.01	0.8	0.1	20.8	21.5	23	<1	Dry	2.003
	BH103D	10.12.14	-0.0	0.0	1002	+8.99	<0.01	<0.01	<0.01	<0.01	0.8	0.4	20.0	20.7	23	<1	4.163	6.225
	BH104S	10.12.14	+0.2	0.0	1002	-4.56	<0.01	<0.01	<0.01	<0.01	3.9	3.9	16.7	16.9	1	<1	Dry	1.959
	BH104D	10.12.14	+0.0	0.0	1001	+5.49	<0.01	<0.01	<0.01	<0.01	1.9	1.9	19.8	19.8	13	<1	4.971	8.078
	Weather	Cold, windy, sunshine and showers																

	Location	Date	Gas Flow Rate		Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO	H2S	Depth to Water (mbgl)	Depth to Base (mbgl)
			Peak (l/hr)	Steady (l/hr)			Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)	Peak (ppm)	Peak (ppm)		
Second Visit	BH101S	16.12.14	+0.0	-0.0	1001	+7.33	>>>	>>>	40.3	40.0	10.6	10.6	<0.01	<0.01	<1	<1	Dry	2.075
	BH101D	16.12.14	-0.2	-0.1	1002	+3.11	>>>	>>>	30.2	30.2	9.6	9.6	3.4	3.4	1	<1	4.258	7.965
	BH102S*	16.12.14	+1.5	+0.0	1001	+0.19	4	4	0.2	0.2	0.9	0.7	0.3	0.3	1	<1	1.529	1.850
	BH102D	16.12.14	-0.2	-0.0	1001	-0.46	1	1	0.1	0.1	3.9	3.9	9.5	9.5	<1	<1	4.236	7.845
	BH103S	16.12.14	-0.0	-0.0	1001	-2.59	<0.01	<0.01	<0.01	<0.01	0.5	0.1	20.0	21.8	19	<1	Dry	2.010
	BH103D	16.12.14	-0.0	-0.0	1001	+3.03	<0.01	<0.01	<0.01	<0.01	0.7	0.2	21.1	21.8	8	<1	4.169	6.235
	BH104S	16.12.14	+0.0	-0.0	1001	-2.84	<0.01	<0.01	<0.01	<0.01	4.3	4.3	14.9	15.3	1	<1	Dry	1.925
	BH104D	16.12.14	-0.0	-0.0	1001	+5.56	<0.01	<0.01	<0.01	<0.01	3.8	3.8	16.9	16.9	2	<1	4.737	8.070
	Weather	Cold, still, cloudy with sunny spells																
	Notes	*Water entered tubing during monitoring of BH102S resulting in the test being abandoned after 45 seconds, flow rate may be unreliable.																

	Location	Date	Gas Flow Rate		Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO	H2S	Depth to Water (mbgl)	Depth to Base (mbgl)
			Peak (l/hr)	Steady (l/hr)			Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)	Peak (ppm)	Peak (ppm)		
Third Visit	BH101S	06.01.15	-0.1	-0.1	1004	-1.90	>>>	>>>	49.8	49.8	10.4	9.9	<0.01	<0.01	1	<1	Dry	2.085
	BH101D	06.01.15	-0.3	-0.2	1004	+2.68	>>>	>>>	33.5	33.5	7.9	7.9	6.1	6.1	<1	<1	4.232	7.928
	BH102S	06.01.15	+0.0	-0.0	1003	+3.79	8	<0.01	<0.01	<0.01	0.3	0.1	18.8	21.4	<1	<1	1.353	1.810
	BH102D	06.01.15	+0.0	-0.0	1003	+3.11	<0.01	<0.01	<0.01	<0.01	5.3	5.3	2.5	2.5	<1	<1	-	-
	BH103S	06.01.15	-0.0	-0.0	1001	-2.54	<0.01	<0.01	<0.01	<0.01	1.0	0.1	20.2	21.5	<1	<1	Dry	2.015
	BH103D	06.01.15	-0.0	-0.0	1001	+6.04	<0.01	<0.01	<0.01	<0.01	0.9	0.3	20.8	21.4	<1	<1	3.928	6.231
	BH104S	06.01.15	+0.1	+0.0	1002	-1.47	<0.01	<0.01	<0.01	<0.01	3.9	3.9	17.1	17.3	<1	<1	Dry	1.945
	BH104D	06.01.15	+0.0	-0.0	1002	+3.47	<0.01	<0.01	<0.01	<0.01	3.1	3.1	18.2	18.2	<1	<1	4.723	8.070
	Weather	Cool, cloudy with showers and breezey																

	Location	Date	Gas Flow Rate		Atmos. Pressure (mb)	Diff. Pressure (mb)	Methane LEL		Methane		Carbon-dioxide		Oxygen		CO	H2S	Depth to Water (mbgl)	Depth to Base (mbgl)
			Peak (l/hr)	Steady (l/hr)			Peak (%)	Steady (%)	Peak (%v/v)	Steady (%v/v)	Peak (%v/v)	Steady (%v/v)	Minimum (%v/v)	Steady (%v/v)	Peak (ppm)	Peak (ppm)		
Fourth Visit	BH101S	12.1.15	+0.1	+0.0	992	+0.17	>>>	>>>	46.6	46.6	10.6	10.6	<0.01	<0.01	<1	<1	Dry	2.080
	BH101D	12.1.15	+0.0	+0.0	992	-0.19	>>>	>>>	37.1	37.1	10.3	10.3	1.5	1.5	<1	<1	4.196	7.933
	BH102S	12.1.15	-0.0	+0.0	992	+0.1	1	<0.01	<0.01	<0.01	0.5	0.1	13.8	21.1	<1	<1	1.484	1.850
	BH102D	12.1.15	+0.0	+0.0	992	-7.27	<0.01	<0.01	<0.01	<0.01	5.5	5.5	2.8	2.8	<1	<1	4.018	7.805
	BH103S	12.1.15	+4.1	+0.01	992	+7.94	<0.01	<0.01	<0.01	<0.01	0.1	0.1	19.3	21.5	<1	<1	Dry	2.045
	BH103D	12.1.15	+0.0	-0.0	992	+0.01	<0.01	<0.01	<0.01	<0.01	4.6	4.6	16.7	16.7	<1	<1	3.858	6.215
	BH104S	12.1.15	-0.0	-0.0	992	+0.01	<0.01	<0.01	<0.01	<0.01	3.6	3.6	1.6	17.2	<1	<1	Dry	1.947
	BH104D	12.1.15	+0.0	+0.0	992	+0.02	<0.01	<0.01	<0.01	<0.01	4.5	4.4	16.5	16.5	<1	<1	4.685	8.046
	Weather																	

Notes:

<0.01 / <1 No detection / concentration less than instrument detection limits
>>> LEL value (which represents methane concentrations x 5) greater than 100%
- Data not collected

Groundwater and Ground Gas Monitoring Summary

Site Name	Oughtibridge
Client	SCA
Job No.	70006973

Start Date	19/12/2014
End Date	25/02/2015
No. Visits	5

	Borehole	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Flow (l/hr)		Standing Water Level (m)		Gas Screening Value Methane (l/hr)	Gas Screening Value Carbon Dioxide (l/hr)
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX		
1	BH204S	0.0	0.0	0.2	1.5	0.0	7.9	0.1	1.0	0.00	0.00		0.015
2	BH204D	0.0	0.0	0.1	1.2	11.8	13.7	0.0	2.0	2.50	2.57		0.024
3	BH205S	0.0	0.0	0.0	0.5	14.9	19.9	0.0	1.0	0.00	0.00		0.005
4	BH205D	0.0	0.0	0.0	0.4	15.2	19.8	0.0	0.0	1.43	1.53		
5	BH206S	0.0	0.0	2.0	2.4	8.8	12.1	0.0	0.0	0.45	0.72		
6	BH206D	6.3	14.0	0.0	0.9	0.2	5.5	0.0	0.0	2.15	2.21		
7	BH207	0.0	0.0	0.1	0.7	18.7	19.8	0.0	0.0	3.99	4.21		
8	BH208S	3.0	14.3	0.2	7.6	0.0	8.5	0.0	0.1	0.00	0.00	0.0143	0.0076
9	BH208D	2.4	5.1	2.8	7.6	12.0	18.0	0.0	0.3	1.54	1.75	0.0153	0.0228
10	BH301	0.0	0.0	0.0	0.5	17.8	19.9	0.2	4.0	8.58	9.30		0.02
11	BH401S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00		
12	BH401D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00		
13	BH402	0.0	0.0	0.2	2.5	18.1	19.8	0.0	2.0	0.39	0.54		0.05
14	BH403	0.0	0.0	4.4	6.1	8.5	11.7	-0.1	2.0	4.43	4.75		0.122
15	BH202A	0.1	0.3	1.3	1.3	20.2	21.1	0.1	0.1	2.12	2.12	0.0003	0.0013
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	Borehole	Standing Water Level (m)		Response Zone		Thickness of Product (mm)		PID Readings ppmV		H2S ppm	CO ppm	Was the well ever flooded?	Was Product >1mm detected?
		MIN	MAX	TOP	BASE	MIN	MAX	MIN	MAX	MAX	MAX		
1	BH204S	0.0	0.0	1.2	2.2	0	0	0	0	0	0	Yes	No
2	BH204D	2.5	2.6	3.7	6.7	0	0	0	0	0	0	Yes	No
3	BH205S	0.0	0.0	0.5	1.0	0	0	0	0	0	0	Yes	No
4	BH205D	1.4	1.5	2.0	4.0	0	0	0	0	0	0	Yes	No
5	BH206S	0.5	0.7	0.3	0.7	0	0	0	0	0	0	No	No
6	BH206D	2.2	2.2	2.0	5.0	0	0	0	0	0	0	No	No
7	BH207	4.0	4.2	5.0	8.0	0	0	0	0	0	0	Yes	No
8	BH208S	0.0	0.0	0.5	1.0	0	0	0	0	0	0	Yes	No
9	BH208D	1.5	1.7	2.0	5.0	0	0	0	0	0	0	Yes	No
10	BH301	8.6	9.3	7.0	10.0	0	0	0	0	0	0	No	No
11	BH401S	0.0	0.0	0.3	0.8	0	0	0	0	0	0	Yes	No
12	BH401D	0.0	0.0	2.0	5.0	0	0	0	0	0	0	Yes	No
13	BH402	0.4	0.5	1.0	4.0	0	0	0	0	0	0	Yes	No
14	BH403	4.4	4.7	3.0	6.0	0	0	0	0	0	0	No	No
15	BH202A	2.1	2.1	1.0	5.0	0	0	0	0	0	0	No	No
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Start Date	19/12/2014
End Date	25/02/2015
No. Visits	5

Visit No.	Visit Date	Pressure Trend	Start mB	End mB
1	19/12/2014	Rising	995	999
2	24/12/2014	No Change	1002	1002
3	05/01/2015	Falling	1016	1012
4	12/01/2015	Rising	989	991
5	25/02/2015	No Change	1004	1004
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	Minimum mB	Maximum mB
Barometric Pressure	989	1016

Gas Screening Value (GSV) Calculation

	GSV Max per hole* (l/hr)	GSV using Max Values** (l/hr)	Maximum Values (% v/v)
Carbon Dioxide	0.122	**0.304**	7.6
Methane	0.0153	**0.572**	14.3
Max Flow (l/hr)	4.0		

Key	Methane Column	Carbon Dioxide Column	Depth to Water Column	Gas Flow
	n/a	n/a	Response Zone Part Flooded	n/a
	> 1% v/v	> 5% v/v	Response Zone Totally Flooded	>70 l/hr

***GSV Max Per Hole** is the maximum calculated GSV using data *specific to each borehole* over the monitoring period.

****GSV Using Max Values** is a worst case estimated of the GSV using Maxmimum Concentration and Maximum Flow for the whole data set.

CIRIA C665 - Table 8.5 (Refer to CIRIA document for full table and notes) (2007)

	Characteristic Situation (CIRIA R149)	Comparable PIT gas regime	Risk Classification	Gas Screening Value (l/hr)	Additional Factors
	1	A	Very Low Risk	<0.07	Typically methane ≤ 1% and/or carbon dioxide ≤ 5% otherwise consider increase to Characteristic Situation 2
	2	B	Low Risk	<0.7	Borehole air flow rate not to exceed 70l/hr. Otherwise consider increase to Characteristic Situation 3
	3	C	Moderate Risk	<3.5	
	4	D	Moderate to High Risk	<15	Quantitative Risk Assessment required to evaluate scope of protection measures
	5	E	High Risk	<70	
	6	F	Very High Risk	>70	

NHBC Report No. 4 - Table 14.1 (Refer to NHBC document for full table) (March 2007)

Traffic Light Classification	Methane		Carbon Dioxide	
	Typical Max Concentration (%v/v)	Gas Screening Value (l/hr)	Typical Max Concentration (%v/v)	Gas Screening Value (l/hr)
Green	1	0.13	5	0.78
Amber	5	0.63	10	1.6
Amber 2	20	1.6	30	3.1
Red				

Notes:
1. The worst-case ground gas regime identified on the site, either methane or carbon dioxide, at the worst case temporal conditions that the site may be expected to encounter will be the decider as to what Traffic Light is allocated.
2. Borehole Gas Volume Flow Rate, in litres per hour is defined as Wilson and Card (1999), is the borehole flow rate multiplied by the concentrations in the air stream of the particular gas being considered;
3. The typical Maximum Concentration can be exceeded in certain circumstances should the conceptual model indicate that it is safe to do so;
4. The Gas Screening Value Threshold should not generally be exceeded without the completion fo a detailed ground gas risk assessment taking into account site-specific conditions.

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