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ref: A11220/220411/L1

Rafal Chodkowski
Berkeley Homes (Oxford and Chiltern) Ltd
Berkeley House
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Maidenhead
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By Email: Rafal.Chodkowski@berkeleygroup.co.uk

Dear Rafal,

RE: Ground Gas Monitoring Assessment – 55 Vastern Road, Reading, RG1 8BU

Please find attached Omnia Report A11220/220411/L1 detailing results of all ground gas monitoring undertaken to date providing an interim ground gas assessment. Upon completion of demolition works and subsequent additional monitoring this assessment should be reviewed.

If you have any questions, please do not hesitate to contact us.

Yours sincerely,

A handwritten signature in black ink, appearing to be "Tim Mitchell".

Tim Mitchell
Director

Attachments

- Attachment 1: Site Figures
- Attachment 2: Exploratory Borehole Logs
- Attachment 3: Ground Gas Results (Terramech Investigations Ltd)
- Attachment 4: Gas Analyser GA5000 Calibration Certificate

GROUND GAS ASSESSMENT

Site Address	55 Vastern Road, Reading, RG1 8BU
Grid Reference	471089, 174089

1.0 Background & Objectives

Omnia were commissioned by Berkeley Homes Oxford and Chiltern to undertake gas and groundwater monitoring at the site of 55 Vastern Road, Reading, RG1 8BU, to assist with the gas classification of the site and explore whether the current classification, CS-3, for the site detailed in report reference A10967/1.1 dated April 2018 is robust. This letter should be read in conjunction with the Omnia Phase II report A11220/1.1 dated November 2019, which supersedes report A10967/1.0. The investigation requires additional gas monitoring in the area of the former SSE site, as well as assessment of previous gas monitoring undertaken by CC Ground Investigations Ltd (report reference: No.C5925/01).

A data review of gas monitoring data undertaken by CC Ground Investigations between 22/02/2018 to 19/04/2018 was also utilised to assist in classifying the site. A total of five (5no.) ground gas monitoring results were undertaken by CC Ground Investigations Ltd (report reference: No.C5925/01) on eleven (11no.) borehole locations. Terramech Investigations Ltd, in accordance with guidance set out in BS8485:2015, commenced seven (7no.) additional ground gas monitoring visits within eleven (11no.) boreholes within the site boundary at Vastern Road, Reading, in order to further classify the gas regime of the site and assess potential risks to future site users.

Therefore, the ground gas assessment is based on a total of twelve (12no.) gas monitoring visits over a period spanning February 2018 to December 2019. Further ground gas monitoring is proposed post demolition once additional areas are accessible, however the assessment set out in this letter is suitable to use as an interim classification for budgeting purposes.

A site location plan and intrusive location plan are presented in Attachment 1.

2.0 Site Works

Supplementary gas monitoring was undertaken by Terramech Investigations Ltd between the 1st November 2019 to the 19th December 2019 comprising eight (8no.) ground gas and groundwater monitoring visits as well as Photoionisation Detector (PID) screening and deploying an interface probe in each of the eleven (11no.) previously installed borehole locations.

2.1 Site Description

The area of investigation is located within Reading town centre, approximately 1km north of Reading train station on an irregularly shaped parcel of land approximately 0.75 hectares in size. A comprehensive site description is detailed within report A11220/1.0 dated November 2019, however a summary of site observations is summarised below:

The site is located north of Vastern Road with the long axis aligned north east to south west. The site was accessed via a security gate located just north of Vastern Road.

The site was vacant and comprised of a single two-storey building occupying the southern area. Electricity power distribution infrastructure was located directly to the east of the site boundary. The two-storey building within the southern section of the site was aligned alongside Vastern Road in an approximate east west orientation, with the building fronting onto Vastern Road. The majority of area of investigation was a former car parking area, in a generally good state of repair.

2.2 Ground Conditions

To assist in the characterisation of the site for the gas risk assessment a summary of geological observations from the previous report are set out below:

Made Ground (MG)

Made Ground (MG) was found to be predominantly granular in nature, to contain variable amounts of anthropogenic material and generally ranged from 1.10m to 2.00m in thickness with thicker MG up to 3.50m encountered in the central portion of the site, to the west of the neighbouring transformer compound.

Made Ground comprised an asphalt cover over a sequence of cohesive and granular strata. Generally Granular deposits comprised a brownish, very sandy, slightly silty, sandy angular to sub-angular, fine to coarse flint GRAVEL with occasional brick, concrete, siliceous material and rare metal fragments. Sand is fine to medium. Made Ground also comprised a dark grey mottled black, gravelly, silty, fine to coarse SAND. Gravel is sub-angular, fine to coarse siliceous material and clinker. Granular deposits were often interbedded with cohesive strata, which generally comprised a very soft, dark brown, slightly gravelly, sandy CLAY. Sand is fine to medium. Gravel is angular to sub-rounded, fine to coarse of flint with occasional brick and concrete.

Superficial Deposits – Alluvium (ALL)

Immediately underlying MG was a sequence of cohesive deposits comprising soft, green slightly sandy, slight silty CLAY with variable gravel content attributed to Alluvium (ALL). The top of the ALL was encountered at depths ranging from 0.60 – 3.50m bgl (37.57 – 35.26mAOD). The unit ranged from 0.60 – 3.40m in thickness with an average thickness of approximately 1.70m. The base of the ALL was encountered at depths ranging from 2.30 – 4.10m bgl (36.08 – 34.11m AOD).

Superficial Deposits – Kempton Park Gravel (KPG)

Immediately underlying the ALL were sands and gravels attributed to the Kempton Park Gravel Formation (KPG), which ranged from loose to dense grey variably silty and sandy GRAVEL. The KPG ranged from 5.00 – 9.20m in thickness with an average thickness of approximately 6.60m. The base of the KPG was encountered at depths ranging from 8.10 to 12.50m bgl (30.21 – 26.21mAOD).

Bedrock – Seaford Chalk Formation and Newhaven Chalk Formation (SCF/NCF)

Chalk bedrock was encountered immediately beneath the KPG at depths ranging from 8.10 – 12.50m bgl (30.21 – 26.21mAOD) and was proven to a maximum depth of 35.00m bgl at locations BH1002C (3.40m AOD), BH1003E (3.71m AOD) and BH1004 (3.31mAOD) although the base of the Upper Chalk was not proven within any of the intrusive locations. A review of the geological logs indicated that the Chalk was recovered as a variably sandy and silty angular to subangular GRAVEL (Grade Dc) suggesting an absence of “Putty Chalk” (Grade Dm) from beneath the site.

Logs are presented in Attachment 2.

2.3 Gas Monitoring

Five (5no.) rounds of ground gas monitoring were conducted on the following dates, by CC Ground Investigations Ltd, summarised in Table 1:

1. 22/02/2018
2. 07/03/2018
3. 22/03/2018
4. 04/04/2018
5. 19/04/2018

In order to fully assess the ground regime of the site, Omnia proposed that eight (8no.) additional ground gas monitoring visits should be undertaken by Terramech Investigations Ltd. Eight (8no.) monitoring visits were undertaken on borehole locations BH1001, BH1002C, BH1003E, BH1004, BH2001, BH2002, BH2003, BH2004, WS1003, WS1004 and WS1007 on the following dates, summarised in Table 2:

1. 01/11/2019
2. 12/11/2019
3. 20/11/2019
4. 06/11/2019

5. 03/12/2019
6. 09/12/2019
7. 13/12/2019
8. 19/12/2019

From review of the CC Ground Investigations Ltd report (No.C5925/01) ground gas installations generally target the natural ground of the Superficial Deposits of the Alluvium and the Kempton Park Gravel thickness across the site (depth in excess of approximately 3.00m bgl). Within locations BH1001, BH1003E, BH1004, BH2004 slotted pipework transects the Made Ground and the Alluvium deposits. Location WS1007 response zone targets the Made Ground.

Concentrations of methane (CH₄), carbon dioxide (CO₂) and Oxygen (O₂) were measured using an infrared gas analyser (GA5000), calibrated to a reference standard (before and after each survey) with ground gas flow rates measured using an internal flow pod. Gas concentrations were recorded at thirty second (30 secs) intervals until concentrations stabilised for three consecutive readings and for a minimum of ninety seconds (90 secs) at each location, at which point the maximum concentration of CH₄ and CO₂ together with the lowest concentration of O₂ were recorded.

Groundwater monitoring was undertaken using an electronic dip tape to record the depth to groundwater. Headspace vapour was measured utilising a PID, prior to gas monitoring. Potential free product within the groundwater was measured utilising an interface probe. Ground gas and groundwater monitoring results as well as PID screening results are presented and discussed in Section 4.0, and in Appendix 3.

3.0 Ground Gas Assessment

The potential impact on the development from ground gases has been assessed with reference to standards and guidelines published in BS 8485:2015 (*Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings*). However, it is recommended that the full ground gas assessment and any recommended protection measures are agreed with the local authority prior to their adoption on site. Furthermore, any potential ground gas protection measures should be validated by a suitably qualified engineer.

Ground gas and groundwater monitoring data collected during the current phase of investigation are presented in Table 2.0, with previous phases of investigation, conducted by CC Ground Investigations Ltd presented in Table 1.0.

Five (5no.) ground gas monitoring visits were undertaken by CC Ground Investigations Ltd in 2018. Eight (8no.) additional ground gas and groundwater monitoring visits were undertaken on a weekly interval at eleven (11no.) installed locations (BH1001, BH1002C, BH1003E, BH1004, BH2001, BH2002, BH2003, BH2004, WS1003, WS1004 and WS1007). Upon completion of the visits, and review of previous monitoring data, concentrations of methane (CH₄) exceeding the equipment Limit of Detection (LOD) of 0.1% v/v were recorded at all locations, with a maximum methane (CH₄) concentration of 0.1% v/v, recorded at location BH2001 on the 12th November 2019 and WS1004 and WS1007 on the 13th December 2019. A maximum carbon dioxide (CO₂) concentration of 6.5% v/v was recorded at location BH1004 and BH2001 on the 1st November 2019.

Ground gas flow rates were recorded, with a maximum ground gas flow rate of 27.4 l/hr recorded within WS1007 on the 3rd December 2019.

In accordance with the methodology outlined within CIRIA publication C665 and BS 8485:2015, Omnia have utilised the results of the ground gas monitoring to calculate tentative Gas Screening Values (GSVs). Where ground gas concentrations have been recorded at less than the equipment LOD of 0.1% v/v, these concentrations have been assumed to be 0.1% v/v in order to adopt a conservative approach and facilitate the calculation of a GSV. The maximum GSV calculated for methane was 0.0248l/hr (WS1007) whilst the maximum GSV for carbon dioxide was 1.404l/hr (BH1004).

It is understood that the proposed development consists of the construction of eight (8no.) residential apartment blocks, as set out in Berkeley Homes Landscape General Arrangement Plan, dated February 2021 and within Figure 2.0 within Appendix 1. It is understood that the apartment block will range from 2 to 11 storeys. Therefore, a ground gas assessment has been undertaken for the assessment of apartment blocks, accordingly.

Omnia have therefore followed BS 8485:2015 guidance for high rise developments. A residential apartment block is defined under BS 8485:2015 as private ownership with central building management controls assessed under BS8485:2015 classed as a Type B building (Table 3 of BS 8485:2015).

3.1 BS 8485:2015 - Type B Building – Private ownership

Guidance set out in BS 8485:2015, which is equivalent to the characteristic situations of the modified Wilson & Card classification set out in CIRIA C665, stipulates a site characteristic maximum GSV of <0.07 l/hr, with typical maximum permissible concentrations of 1% v/v (CH₄) and/or 5% v/v (CO₂) is defined for a classification as Characteristic Situation 1 (CS1).

Maximum recorded concentrations and GSVs within the thirteen (13no.) monitoring visits have been recorded as follows; for CH₄ (0.1%v/v and 0.0248l/hr) within WS1007 and CO₂ (6.5%v/v and 1.404l/hr) in BH1004, which were recorded under low pressure conditions.

Whilst the maximum GSV of CH₄ are at levels that do not exceed the maximum permissible concentrations, CO₂ concentrations along with the high ground gas flows are at levels above the maximum permissible GSV. It is noted that guidance states that an increased classification could be considered, leaving space for the use of professional judgement. With this in mind, consideration is given to the maximum GSV value for CO₂ as set out below:

Carbon Dioxide – Maximum of 6.5%v/v (GSV of 1.404l/hr)

Elevated carbon dioxide recordings above 5.0%v/v have been identified in the range of 5.0%v/v to 6.5%v/v within BH1001, BH1004 and BH2001, with maximum concentrations of 6.5%v/v with the highest flow recorded in BH1004. High ground gas flow rates were recorded consistently ranging from 4.5l/hr to 21.6l/hr within BH1001, BH1004 and BH2001. A single elevated CO₂ concentration (6.5% v/v) was recorded in WS2001 on 1st November 2019. However, on the remainder of monitoring visits CO₂ concentrations have been recorded at <1.0% v/v consistently. It is therefore considered that the CO₂ concentration recorded on the 1st November 2019 is an anomalous isolated result and is unrepresentative of the 8no. Omnia monitoring visits.

The highest CO₂ results and the associated flow rate gave a GSV of 1.404l/hr within BH1004 which in accordance with BS8485:2015 would meet the criteria for classification as Characteristic Situation 3. This position is located immediately to the south east of the site boundary, underlying the proposed block named 'The Railway House'. Over the thirteen (13no.) ground gas monitoring rounds it is apparent that BH1004 gives the highest GSVs, due to the high ground gas flow rates recorded (21.6l/hr in BH1004). However, review of the available data suggests that this classification is not representative of the entirety of the site, as the remaining boreholes do not show consistently high CO₂ results, and therefore should be assessed separately to the remainder of the site.

From the data presented in the previous section, with the exception of BH1004, it can be seen that the maximum calculated concentrations for CO₂ exceeds the criteria for Characteristic Situation 1 classification. The maximum recorded concentrations and GSVs, recorded within the thirteen (13no.) monitoring visits, for CO₂ (5.1%v/v and 0.595l/hr) is considered to meet the criteria for classification as CS-2 due to the consistently high ground gas flow readings across the site.

It is therefore considered that the area underlying block A meets the criteria for CS-3 whilst across the remainder of the site it is considered that a CS-2 classification is suitable for the site. Referring to Table 4 of BS 8485:2015 a Type B building with a gas classification of CS-3 give a gas protection score of 4.0 and a gas classification of CS-2 gives a gas protection score of 3.5.

Further monitoring is proposed post demolition once additional areas are accessible. As a result this gas assessment should be reviewed against all available data, with the above classification treated as indicative for budgeting purposes.

4.0 Conclusions and Recommendations

The findings of a total of thirteen (13no.) rounds of ground gas monitoring, detected a maximum CH₄ concentration of 0.1% v/v, a maximum CO₂ concentration of 6.5% v/v, and a maximum ground gas flow rate of 27.4 l/hr. The elevated classification is restricted to just one borehole location, close to the south western boundary. Given the size of the data set, with a total of 13 visits from 11no. monitoring locations it is considered that division of the gas classification is robust, however should be reviewed post return of additional monitoring post demolition. As a result, it is recommended that the following classification can be adopted as an interim assessment:

The proposed Block A is classified as **CS-3**

The remainder of the site is classified as **CS-2**

A CS-3 development must achieve a gas protection score of 4.0 and CS-2 a score of 3.5 in accordance with BS 8485:2015. Reference should be made to Tables 5, 6 and 7 of BS 8485:2015 to achieve the recommended gas protection score and must include a structural barrier (Table 5), ventilation measures (Table 6) and/or gas resistant membrane (Table 7).

Consideration should be given to the proposed construction of the building by the structural engineer as it is likely that a standard ventilated sub void and gas membrane may provide mitigation for the CS-2 criteria and the majority of the points score on CS-3 without the requirement for a granular venting scheme. Demonstration of air exchange calculations will be required for the sub void to assist in achieving the required points score for CS-3. A gas membrane specification report should be prepared for the scheme once the gas protection scoring has been complete and schematic diagrams available.

The above classification should be reviewed post completion of additional monitoring once demolition works are complete and further monitoring points installed.

Table 1 - Summary of Ground Gas and Groundwater Monitoring Results CC Ground Investigations Ltd, 22/02/2018 to 19/04/2018 (Report Ref: C5925/01)

Well	CH ₄ Peak %v/v	CH ₄ Steady %v/v	CH ₄ GSV l/hr	CO ₂ Peak %v/v	CO ₂ Steady %v/v	CO ₂ GSV l/hr	O ₂ %v/v	PID (ppm)	Flow (l/hr)
BH1001	0.2	0.2	0.0002	1.0	1.0	0.0010	17.6	2.9	<0.1
BH1002C	1.6	1.6	0.0032	0.4	0.4	0.0008	9.0	4.1	0.2
BH1003E	0.2	0.2	0.0002	0.6	0.6	0.0006	18.9	2.6	0.1
BH1004	3.0	3.0	0.009	4.0	4.0	0.012	6.5	4.5	0.3
BH2001	0.1	0.1	0.0011	1.0	1.0	0.112	19.7	3.2	11.2
BH2002	0.3	0.3	0.0003	0.6	0.6	0.0006	19.6	4.2	0.1
BH2003	0.3	0.3	0.0339	0.6	0.6	0.0678	19.7	3.9	11.3
BH2004	0.3	0.3	0.0003	0.6	0.6	0.0006	20.6	2.4	0.1
WS1003	0.2	0.2	0.0002	1.0	1.0	0.0010	19.2	4.6	0.1
WS1004	0.2	0.2	0.0002	1.8	1.8	0.0018	19.2	5.3	0.1
WS1007	0.3	0.3	0.0105	0.6	0.6	0.0210	19.5	10.3	3.5

Table 2 Summary of Ground Gas and Groundwater Monitoring Results: Terramech Investigations Ltd, 01/11/2019 to 09/12/2019

Well	Date	CH ₄ Peak %v/v	CH ₄ Steady %v/v	CH ₄ GSV l/hr	CO ₂ Peak %v/v	CO ₂ Steady %v/v	CO ₂ GSV l/hr	O ₂ %v/v	Atmospheric Pressure (mbar)	PID (ppm)	Flow (l/hr)
BH1001	01/11/2019	<0.1	<0.1	0.0045	5.1	5.0	0.2295	8.0	995	0.3	4.5
	12/11/2019	<0.1	<0.1	0.0119	5.0	5.0	0.595	8.6	994	0.3	11.9
	20/11/2019	<0.1	<0.1	0.0041	4.8	4.8	0.1968	9.0	1010	0.2	4.1
	26/11/2019	<0.1	<0.1	0.0052	4.5	4.5	0.234	9.2	990	0.2	5.2
	03/12/2019	<0.1	<0.1	0.0068	4.5	4.0	0.306	10.3	1026	0.2	6.8
	09/12/2019	<0.1	<0.1	0.007	4.5	4.6	0.315	10.2	1013	0.2	7.0
	13/12/2019	<0.1	<0.1	0.0013	4.1	4.1	0.0533	11.4	980	0.2	1.3
	18/12/2019	<0.1	<0.1	0.005	4.1	4.1	0.205	10.9	1007	0.1	5.0
BH1002C	01/11/2019	<0.1	<0.1	0.0019	2.7	0.4	0.0513	19.4	994	0.1	1.9
	12/11/2019	<0.1	<0.1	0.0002	1.3	0.3	0.0026	16.7	994	0.1	0.2
	20/11/2019	<0.1	<0.1	0.0002	0.6	0.2	0.0012	19.6	1009	0.1	0.2
	26/11/2019	<0.1	<0.1	0.0001	0.1	0.1	0.0001	20.1	990	<0.1	0.1
	03/12/2019	<0.1	<0.1	0.0003	0.1	0.1	0.0003	21.5	1026	<0.1	0.3
	09/12/2019	<0.1	<0.1	0.0029	1.1	1.1	0.0319	21.1	1009	<0.1	2.9
	13/12/2019	<0.1	<0.1	0.0006	0.3	0.1	0.0018	15.9	980	0.6	0.1
	18/12/2019	<0.1	<0.1	0.0001	0.1	0.1	0.0001	21.0	1006	<0.1	0.1
BH1003E	01/11/2019	<0.1	<0.1	0.0001	1.0	1.0	0.001	19.4	994	0.3	0.1
	12/11/2019	<0.1	<0.1	0.0003	0.3	0.3	0.0009	21.8	994	<0.1	0.3
	20/11/2019	<0.1	<0.1	0.0001	0.8	0.8	0.0008	19.8	1009	0.1	0.1
	26/11/2019	<0.1	<0.1	0.0003	0.8	0.8	0.0024	19.1	990	0.1	0.3
	03/12/2019	<0.1	<0.1	0.0001	0.8	0.8	0.0008	20.1	1026	0.1	0.1
	09/12/2019	<0.1	<0.1	0.0002	0.7	0.7	0.0014	20.5	1012	0.2	0.2
	13/12/2019	<0.1	<0.1	0.0002	0.7	0.7	0.0014	21.4	980	0.2	0.1
	18/12/2019	<0.1	<0.1	0.0001	0.6	0.6	0.0006	20.7	1008	0.1	0.1
BH1004	01/11/2019	<0.1	<0.1	0.0216	6.5	6.5	1.404	0.1	994	0.8	21.6
	12/11/2019	<0.1	<0.1	0.0188	5.3	3.6	0.9964	11.5	995	0.2	18.8
	20/11/2019	<0.1	<0.1	0.0055	3.9	0.8	0.2145	17.1	1010	0.1	5.5
	26/11/2019	<0.1	<0.1	0.0216	3.4	3.4	0.7344	18.2	992	0.1	21.6

Well	Date	CH ₄ Peak %v/v	CH ₄ Steady %v/v	CH ₄ GSV l/hr	CO ₂ Peak %v/v	CO ₂ Steady %v/v	CO ₂ GSV l/hr	O ₂ %v/v	Atmospheric Pressure (mbar)	PID (ppm)	Flow (l/hr)
	03/12/2019	<0.1	<0.1	0.0036	3.5	0.6	0.126	19.3	1026	<0.1	3.6
	09/12/2019	<0.1	<0.1	0.0068	3.1	1.0	0.2108	20.0	1007	<0.1	6.8
	13/12/2019	<0.1	<0.1	0.0184	3.6	3.6	0.6624	19.2	977	0.2	18.4
	18/12/2019	<0.1	<0.1	0.022	3.5	3.5	0.77	20.0	1006	0.1	22.0
BH2001	01/11/2019	<0.1	<0.1	0.0052	6.5	6.5	0.338	0.1	996	1.3	5.2
	12/11/2019	0.1	0.1	0.0119	1.0	0.4	0.119	20.4	994	1.8	11.9
	20/11/2019	<0.1	<0.1	0.0006	0.7	0.5	0.0042	21.2	1009	1.3	0.6
	26/11/2019	<0.1	<0.1	0.0209	0.8	0.8	0.1672	20.8	990	1.5	20.9
	03/12/2019	<0.1	<0.1	0.0213	0.8	0.7	0.1704	21.6	1024	1.3	21.3
	09/12/2019	<0.1	<0.1	0.0209	0.7	0.7	0.1463	21.3	1011	1.5	20.9
	13/12/2019	<0.1	<0.1	0.0002	0.4	0.2	0.0008	21.8	979	0.7	0.2
	18/12/2019	<0.1	<0.1	0.005	0.4	0.2	0.02	218.0	1007	0.6	5.0
BH2002	01/11/2019	<0.1	<0.1	0.0001	0.1	0.1	0.0001	21.0	996	0.1	0.1
	12/11/2019	<0.1	<0.1	0.0002	0.1	0.1	0.0002	21.2	994	0.1	0.2
	20/11/2019	<0.1	<0.1	0.0002	0.1	0.1	0.0002	22.2	1009	0.1	0.2
	26/11/2019	<0.1	<0.1	0.0002	0.1	0.1	0.0002	21.6	990	1.3	0.2
	03/12/2019	<0.1	<0.1	0.0001	0.1	0.1	0.0001	22.1	1024	0.1	0.1
	09/12/2019	<0.1	<0.1	0.0001	0.1	0.1	0.0001	21.7	1011	0.1	0.1
	13/12/2019	<0.1	<0.1	0.0001	0.2	0.1	0.0002	22.1	979	0.1	0.1
	18/12/2019	<0.1	<0.1	0.0001	0.2	0.1	0.0002	22.3	1006	0.1	0.1
BH2003	01/11/2019	<0.1	<0.1	0.0221	1.4	1.4	0.3094	17.8	996	2.7	22.1
	12/11/2019	<0.1	<0.1	0.0175	0.5	0.5	0.0875	19.6	994	1.4	17.5
	20/11/2019	<0.1	<0.1	0.0218	0.6	0.6	0.01308	21.5	1009	1.4	21.8
	26/11/2019	<0.1	<0.1	0.0207	0.4	0.4	0.0828	20.5	990	1.2	20.7
	03/12/2019	<0.1	<0.1	0.0235	0.4	0.4	0.094	21.7	1025	1.0	23.5
	09/12/2019	<0.1	<0.1	0.0207	0.3	0.3	0.0621	21.4	1011	0.8	20.7
	13/12/2019	<0.1	<0.1	0.0209	0.3	0.3	0.0627	22.1	980	0.6	20.9
	18/12/2019	<0.1	<0.1	0.0199	0.3	0.3	0.0597	22.4	1006	0.5	19.9
BH2004	01/11/2019	<0.1	<0.1	0.0003	0.1	0.1	0.0003	20.1	996	0.4	0.3
	12/11/2019	<0.1	<0.1	0.0014	0.2	0.2	0.0028	21.7	994	0.7	1.4

Well	Date	CH ₄ Peak %v/v	CH ₄ Steady %v/v	CH ₄ GSV l/hr	CO ₂ Peak %v/v	CO ₂ Steady %v/v	CO ₂ GSV l/hr	O ₂ %v/v	Atmospheric Pressure (mbar)	PID (ppm)	Flow (l/hr)
	20/11/2019	<0.1	<0.1	0.0023	0.2	0.2	0.0046	21.7	1008	0.8	2.3
	26/11/2019	<0.1	<0.1	0.0006	0.2	0.1	0.0012	21.6	991	0.6	0.6
	03/12/2019	<0.1	<0.1	0.0019	0.2	0.2	0.0038	21.3	1025	0.6	1.9
	09/12/2019	<0.1	<0.1	0.0012	0.2	0.1	0.0024	21.0	1010	0.6	1.2
	13/12/2019	<0.1	<0.1	0.0002	0.3	0.1	0.0006	22.1	979	0.6	0.2
	18/12/2019	<0.1	<0.1	0.0033	0.2	0.1	0.0066	22.3	1006	0.5	3.3
WS1003	01/11/2019	<0.1	<0.1	0.0001	0.9	0.2	0.0009	21.0	995	0.1	<0.1
	12/11/2019	<0.1	<0.1	0.0004	0.8	0.4	0.0032	21.3	995	0.3	0.4
	20/11/2019	<0.1	<0.1	0.0002	1.1	0.4	0.0022	20.0	1010	0.2	0.2
	26/11/2019	<0.1	<0.1	0.0059	1.0	0.4	0.059	20.0	991	0.4	5.9
	03/12/2019	<0.1	<0.1	0.0252	1.0	1.0	0.252	20.7	1026	0.7	25.2
	09/12/2019	<0.1	<0.1	0.02014	0.8	0.7	0.16112	20.7	1012	0.4	20.1
	13/12/2019	<0.1	<0.1	0.0002	0.3	0.1	0.0006	22.1	980	0.1	0.2
	18/12/2019	<0.1	<0.1	0.0188	0.5	0.5	0.094	21.3	1007	0.2	18.8
WS1004	01/11/2019	<0.1	<0.1	0.0043	4.2	3.7	0.1806	17.1	995	0.5	4.3
	12/11/2019	<0.1	<0.1	0.0003	2.5	1.0	0.0075	20.1	994	0.2	0.3
	20/11/2019	<0.1	<0.1	0.0001	2.6	1.8	0.0026	19.2	1010	0.3	0.1
	26/11/2019	<0.1	<0.1	0.0004	0.3	0.1	0.0012	21.6	991	0.2	0.4
	03/12/2019	<0.1	<0.1	0.0001	1.6	0.6	0.0016	19.1	1026	0.2	0.1
	09/12/2019	<0.1	<0.1	0.0002	1.3	0.4	0.0026	20.9	1012	0.2	0.2
	13/12/2019	0.10	0.10	0.0002	1.9	0.4	0.0038	21.1	980	0.2	0.2
	18/12/2019	<0.1	<0.1	0.007	2.1	0.8	0.147	21.0	1007	0.2	7.0
WS1007	01/11/2019	<0.1	<0.1	0.0248	1.7	1.7	0.4216	17.3	996	0.1	24.8
	12/11/2019	<0.1	<0.1	0.0164	0.8	0.5	0.1312	20.4	995	0.1	16.4
	20/11/2019	<0.1	<0.1	0.0199	0.8	0.8	0.1592	21.7	1010	0.2	19.9
	26/11/2019	<0.1	<0.1	0.018	0.6	0.5	0.108	21.8	991	0.2	18.0
	03/12/2019	<0.1	<0.1	0.0274	0.8	0.8	0.2192	21.8	1026	0.1	27.4
	09/12/2019	<0.1	<0.1	0.0237	0.8	0.8	0.1896	21.7	1009	0.2	23.7

Well	Date	CH ₄ Peak %v/v	CH ₄ Steady %v/v	CH ₄ GSV l/hr	CO ₂ Peak %v/v	CO ₂ Steady %v/v	CO ₂ GSV l/hr	O ₂ %v/v	Atmospheric Pressure (mbar)	PID (ppm)	Flow (l/hr)
	13/12/2019	0.10	0.10	0.0148	0.5	0.3	0.074	21.5	979	0.1	14.8
	18/12/2019	<0.1	<0.1	0.0202	0.7	0.5	0.1414	21.8	1007	0.2	20.2

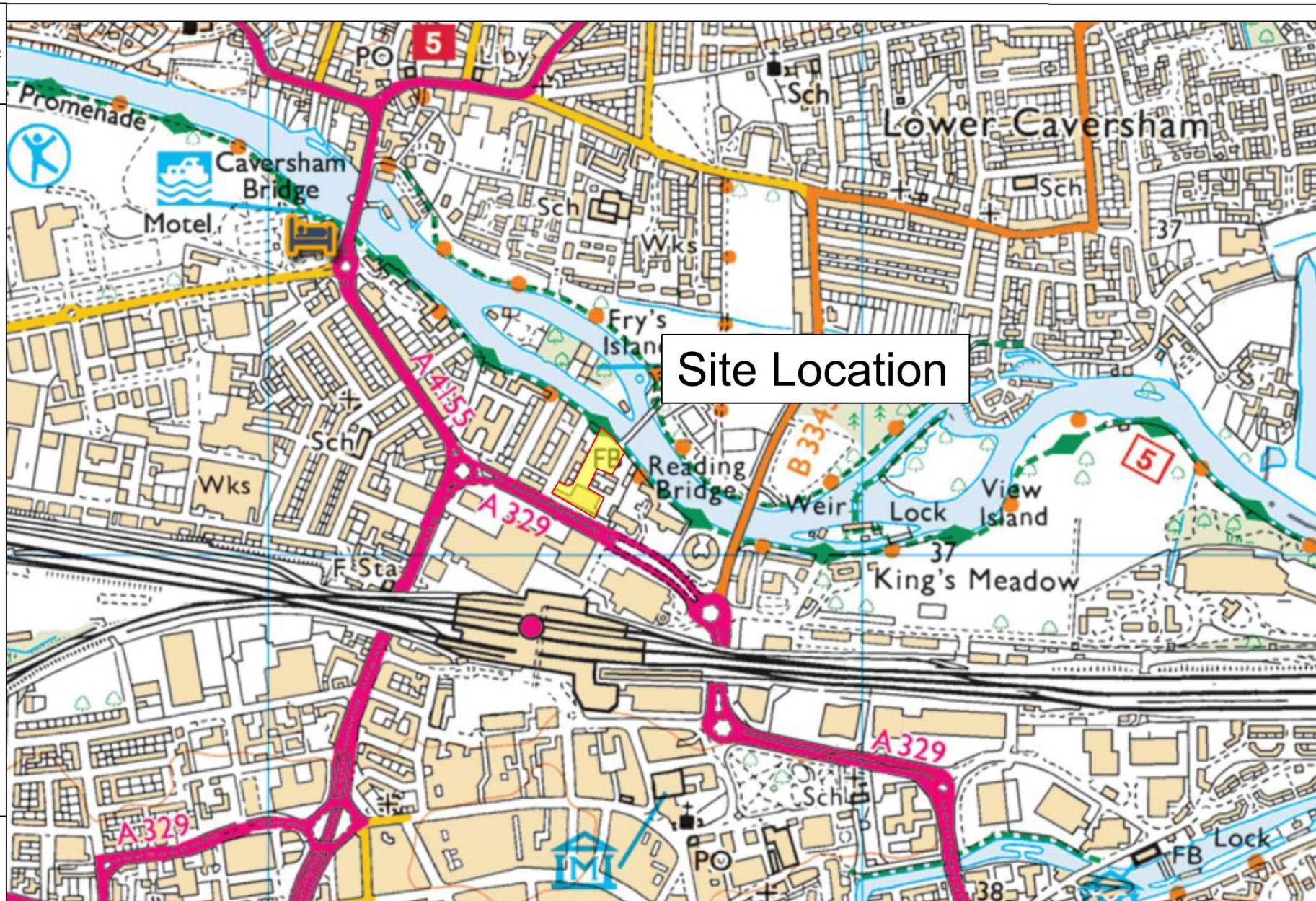
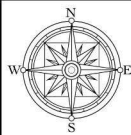
Limitations

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between OE Ltd and the Client as indicated in Section 1.2.
 2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information, it has been assumed it is correct. No attempt has been made to verify the information.
 3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination, which are enforced, by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.
 4. During the site walkover reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not been made known or accessible.
 5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.
 6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
 7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials this is for indicative purposes only and do not constitute or replace full and proper surveys.
 8. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.
 9. OE cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by OE is owned by them and no such plans or documents may be reproduced, published or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by OE in this connection without their explicit written agreement there to by OE.
 10. Current information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.
-
-

Attachment 1

Drawings

Key



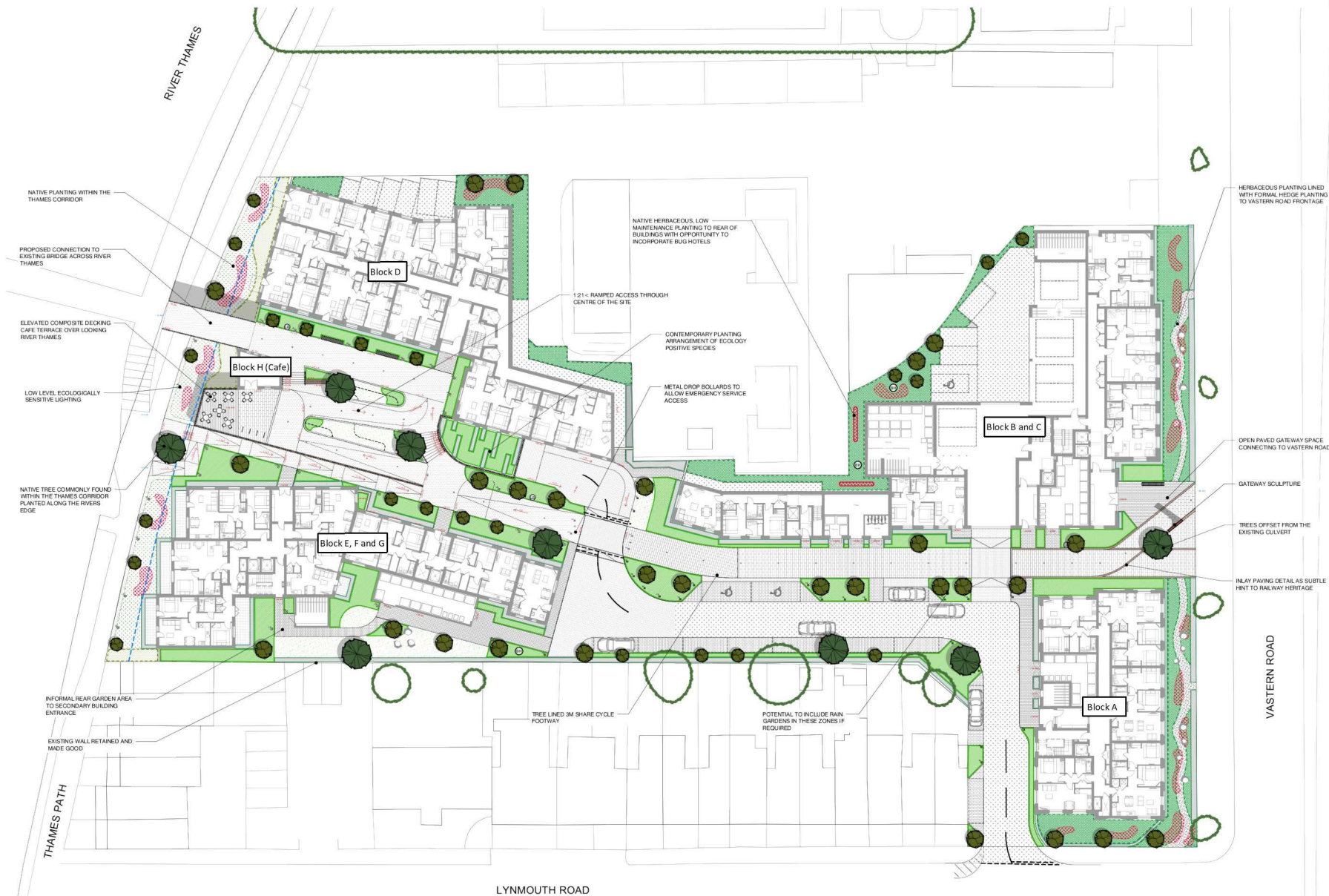
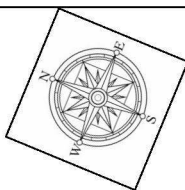
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Segensworth,
Fareham,
PO15 5TH
T: 01489 808088
E: info@omnia-consulting.co.uk
W: www.omnia-consulting.co.uk



Job Title:	Client:	Project No:	Date:	Drawing Title:
55 Vastern Road, Reading	Berkley Homes (Oxford and Chiltern)	A11220	18/11/2019	Figure 1.0 - Site Location
		Drawn By:	Authorised By:	
		G.Larcombe	T.Mitchell	
		Scale:	Notes:	
		1 square = 1km ²		

Key



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W: www.omnia-consulting.co.uk



Job Title:

55 Vastern Road, Reading

Client:

Berkley Homes (Oxford and Chiltern)

Project No:

A11220

Drawn By:

O. Maxwell

Scale:

NTS

Date:

08/03/2021

Authorised By:

T. Mitchell

Notes:

Drawing Title:

Figure 2.0 - Proposed Development Plan

Key

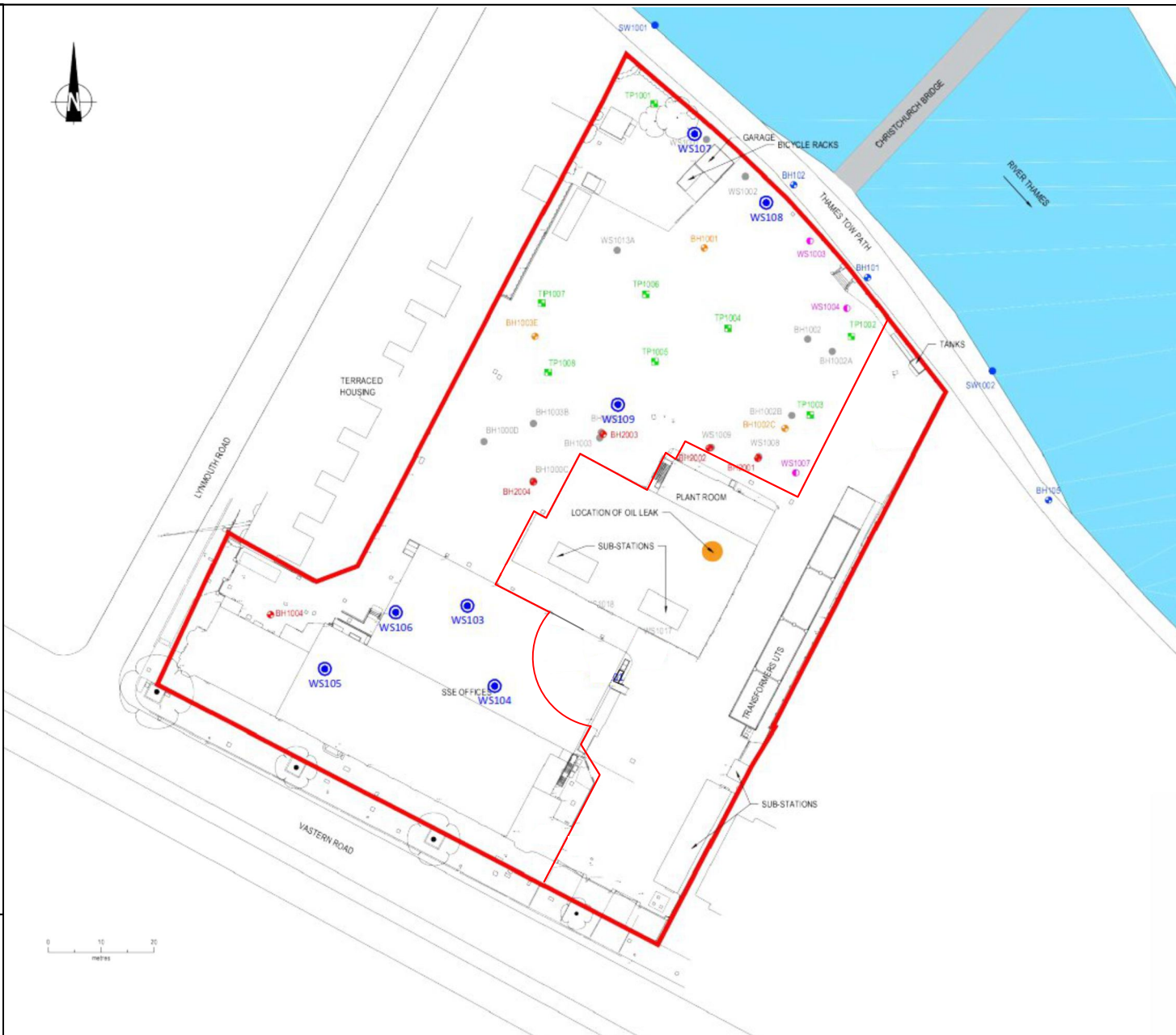
Approximate Window Sample
Probehole Location (OEC)

Current Site Boundary

Former Site Boundary

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Intrusive Locations undertaken by others:

- KEY
- CABLE PERCUSSION BOREHOLE LOCATION
 - ROTARY CORED BOREHOLE LOCATION
 - WINDOW SAMPLE LOCATION
 - TRIAL PIT LOCATION
 - INSPECTION PIT LOCATION
 - SURFACE WATER SAMPLING LOCATION
 - HISTORICAL BOREHOLE LOCATION (GEL 2014)

Job Title:	Client:	Project No:	Date:	Drawing Title:
55 Vastern Road, Reading	Berkley Homes (Oxford and Chiltern)	A11220	18/11/2019	
		Drawn By:	Authorised By:	
		G.Larcombe	T.Mitchell	Figure 3.0 - Intrusive Location Plan
		Scale:	Notes:	
		NTS		

Attachment 2

Logs

BOREHOLE LOG



Borehole No.

BH1001

Sheet 1 of 2

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471576 N 174181	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.39mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 29/01/2018 End: 31/01/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
1		B ES	0.20 - 0.40 0.20				MADE GROUND: Grey ASPHALT.	0.10	38.29	
		B ES	0.40 - 0.60 0.50				MADE GROUND: Dark grey sandy slightly silty angular fine to coarse GRAVEL of siliceous material and brick with low cobble content.	0.40	37.99	
		B	0.70 - 1.20				MADE GROUND: Brown sandy silty angular fine to coarse GRAVEL of siliceous material and brick with medium cobble content of brick.	0.60	37.79	
		B					MADE GROUND: Grey CONCRETE.	0.70	37.69	
		ES	1.20	S 4			MADE GROUND: Soft dark greyish brown slightly gravelly sandy CLAY. Gravel is angular fine to coarse of siliceous material, concrete and brick.	(0.80)		
		SPT	1.20 - 1.65				Soft becoming very soft green slightly sandy CLAY with a moderate organic odour. (ALLUVIUM)	1.50	36.89	
2		D ES UT100	2.00 2.00 - 2.45					(2.50)		
		D	2.50							
3		D SPT	3.00 3.00 - 3.45	S<1						
4		B D SPT C	4.00 - 4.45 4.00 4.00 - 4.45	S 5			Loose grey silty very sandy angular to subangular fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	4.00	34.39	
								(1.00)		
5		B D SPT C	5.00 - 5.45 5.00 5.00 - 5.45	C 25			Medium dense grey sandy silty angular to sub-angular fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	5.00	33.39	
								(1.50)		
6		D	6.00							
		SPT C	6.50 - 6.95	C 27			Medium dense light brown sandy becoming very sandy silty angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	6.50	31.89	
7		D	7.00					(2.50)		
8										

EQUIPMENT: Hand tools. Hydraulic breaker. Light cable percussion rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Cable percussion drilled using 250mm diameter clay cutter and bailer 1.20-1.70m and 200mm diameter clay cutter and bailer 1.70-12.00m.

CASING: 250mm diameter to 1.70m. 200mm diameter to 10.50m.

GROUNDWATER: Encountered at 4.00m, and rose to 3.40m after 20 minutes; and at 8.00m and rose to 1.70m after 20 minutes.

INSTALLATION: Borehole was sealed with bentonite pellets: 7.00-12.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 7.00-1.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 1.00-0.20m. Flush 150mm steel cover set in concrete: Flush cover set in concrete: 0.20-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Borehole was installed on 31/1/18. Clean drilling techniques; bentonite seal from 1.50-2.00m. PID readings taken on all environmental samples. Results: 0.20m - 0.10ppm; 0.50m - 0.20ppm; 1.20m - 0.20ppm; 2.00m - 0.40ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
30/01/18	4.00	4.00	3.40
30/01/18	8.00	7.60	1.70

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
29/01/2018 17:00	0.05		
30/01/2018 08:00	0.05		

BOREHOLE LOG



Borehole No.

BH1001

Sheet 2 of 2

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471576 N 174181	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.39mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 29/01/2018 End: 31/01/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
		D SPT	8.00 8.00 - 8.45	S 10			Medium dense light brown sandy becoming very sandy silty angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL) <i>(continued from previous sheet)</i> 8.00m: Firm grey gravelly sandy clay. Gravel angular to sub-rounded fine to medium.			
9		D	9.00				CHALK recovered as: light brown and off white slightly sandy slightly silty angular to sub-angular fine to coarse GRAVEL and COBBLES of weak low to medium density chalk (WHITE CHALK SUBGROUP)	9.00	29.39	
		SPT	9.50 - 9.95	S 6						
10		D	10.00					(3.00)		
11		D SPT	11.00 11.00 - 11.45	S 12						
12		D	12.00				Borehole completed at 12.00m	12.00	26.39	
13										
14										
15										
16										
17										

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
------	------------------	------------------	-----------------------------

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
30/01/2018 17:00	12.00	10.50	3.60
31/01/2018 08:00	12.00	10.50	

INSPECTION PIT LOG


 Pit No
BH1002

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471596 N 174164
 Level: 38.30mAOD
Date
 29/01/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: 0.50m

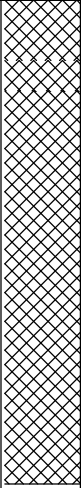
Depth
 0.80m

0.50m

Scale
 1 : 12.5

Client: SSE Plc

Logged By
 MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result				
1		B ES	0.10 - 0.15 0.15		MADE GROUND: Grey ASPHALT.	(0.10)	38.20 38.15	
					MADE GROUND: Dark grey sandy slightly silty angular fine to coarse GRAVEL of siliceous material and brick.	0.10		
					MADE GROUND: Grey CONCRETE.	0.15		
						(0.65)		
					Inspection pit completed at 0.80m	0.80	37.50	
2								

EQUIPMENT: Hand tools. Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-0.80m.

CASING: None used.

GROUNDWATER: None encountered.

BACKFILL: Borehole was backfilled with bentonite pellets and ground surface reinstated.

REMARKS: Unable to advance hole through concrete. Relocated as BH1002A. PID readings taken on all environmental samples. Results: 0.15m - 0.20ppm.

INSPECTION PIT LOG


 Pit No
BH1002A

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471600 N 174161
Level: 38.28mAODDate
30/01/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: 0.50m

Scale
1 : 12.5

Client: SSE Plc

Depth
0.80m

0.50m

Logged By
MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		ES	0.50		MADE GROUND: Grey ASPHALT.	(0.10)	38.18	
					MADE GROUND: Grey to brown sandy slightly silty angular fine to coarse GRAVEL of siliceous material and brick with low cobble content and rare possible asbestos containing material.	0.10		
						(0.70)		
2					0.80m: Concrete across base of pit. Inspection pit completed at 0.80m	0.80	37.48	

EQUIPMENT: Hand tools. Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-0.80m.

CASING: None used.

GROUNDWATER: None encountered.

BACKFILL: Borehole was backfilled with bentonite pellets and ground surface reinstated.

REMARKS: Unable to advance hole through concrete. Relocated as BH1002B. PID readings taken on all environmental samples. Results: 0.50m - 0.00ppm.

INSPECTION PIT LOG


 Pit No
BH1002B

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471592 N 174149
 Level: 38.37mAOD
Date
 30/01/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: 0.50m

Scale
 1 : 12.5

Client: SSE Plc

Depth
 0.45m

0.50m

Logged By
 MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1					MADE GROUND: Grey ASPHALT.	(0.10)	38.27	
					MADE GROUND: Red brick MASONRY.	0.10		
						(0.25)		
					MADE GROUND: Grey CONCRETE.	0.35		
2					0.450m: 1no. metal pipe approximately 50mm diameter, broken with surround of light grey to brown sandy slightly silty angular fine gravel of siliceous material. Inspection pit completed at 0.45m	(0.10)	37.92	
						0.45		

EQUIPMENT: Hand tools. Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-0.45m.

CASING: None used.

GROUNDWATER: None encountered.

BACKFILL: Borehole was backfilled with bentonite pellets and ground surface reinstated.

REMARKS: Metal pipe in base of pit. Relocated as BH1002C.

BOREHOLE LOG



Borehole No.

BH1002C

Sheet 1 of 4

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471591 N 174147	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.40m AOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 31/01/2018 End: 02/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
		B ES	0.10 - 0.50 0.20				MADE GROUND: Grey ASPHALT.	0.10	38.30	
							MADE GROUND: Brown tending to grey sandy slightly silty angular fine to coarse GRAVEL of siliceous material and red brick with medium cobble content. Cobbles are angular of brick.	0.30	38.10	
							MADE GROUND: Red brick MASONRY.	0.50	37.90	
		ES B	0.60 0.65 - 1.10				MADE GROUND: Light brown locally grey sandy slightly silty angular fine to coarse GRAVEL of siliceous material and red brick.	0.65	37.75	
							MADE GROUND: Dark greyish brown slightly gravelly sandy CLAY. Gravel is angular fine to coarse of siliceous material, concrete and red brick.	(0.45)		
1		ES	1.00					1.10	37.30	
		D	1.20							
		ES SPT	1.50 1.50 - 1.65	S 6			Very soft dark grey slightly sandy CLAY with occasional partially decomposed organic material (<5mm). (ALLUVIUM)	(1.20)		
2										
		ES UT100	2.50 2.50 - 2.95				Soft to firm greenish grey slightly sandy CLAY. (ALLUVIUM)	2.30	36.10	
3		D	3.00					(1.50)		
		SPT	3.50 - 3.95	S 31						
4		B	3.80 - 4.30				Dense grey sandy silty angular to sub-angular fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.80	34.60	
		B SPT C	4.50 - 5.00 4.50 - 4.95	C 34				(1.30)		
5										
		B SPT C	5.50 - 6.00 5.50 - 5.95	C 27			Medium dense locally dense light brown sandy tending to very sandy slightly silty angular to sub-angular fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	5.10	33.30	
6										
		B SPT C	7.00 - 7.50 7.00 - 7.45	C 30				(5.00)		
7										
8										

EQUIPMENT: Hand tools. Hydraulic breaker. Light cable percussion rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Cable percussion drilled using 200mm diameter clay cutter and bailer 1.20-10.50m and 150mm diameter clay cutter and bailer 10.50-35.00m.

CASING: 250mm diameter to 1.70m, 200mm diameter to 10.50m, 150mm diameter to 24.90m.

GROUNDWATER: Encountered at 4.00m, and rose to 3.40m after 20 minutes; and at 8.00m and rose to 1.70m after 20 minutes.

INSTALLATION: Borehole was backfilled with bentonite pellets: 35.00-7.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 7.00-2.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 2.00-0.20m. Flush 150mm steel cover set in concrete: Flush cover set in concrete: 0.20-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Clean drilling techniques; bentonite seal from 1.50-2.00m. PID readings taken on all environmental samples. Results: 0.20m - 0.00ppm; 0.60m - 1.50ppm; 1.00m - 0.00ppm; 1.50m - 4.50ppm; 2.50m - 0.30ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
31/01/18	4.00	4.00	3.40
01/02/18	8.00	8.00	1.70

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
31/01/2018 17:00	7.00	6.90	3.20
01/02/2018 08:00	7.00	6.90	

BOREHOLE LOG



Borehole No.

BH1002C

Sheet 2 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471591 N 174147	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.40mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 31/01/2018 End: 02/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
9		B SPT C	8.50 - 9.00 8.50 - 8.95	C 21			Medium dense locally dense light brown sandy tending to very sandy slightly silty angular to sub-angular fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL) (continued from previous sheet)			
10		B SPT C	10.00 - 10.50 10.00 - 10.45	C 8			CHALK recovered as light brown and off white slightly sandy silty angular to sub-angular fine to coarse GRAVEL with rare flints. Clasts are very weak low to medium dense. (Dc) (WHITE CHALK SUBGROUP)	10.10	28.30	
11		U100	11.50 - 11.95					(1.90)		
12		D	12.00				CHALK recovered as off white sandy silty angular to sub-angular fine to coarse GRAVEL with rare rinded flints. Clasts are weak high density. (WHITE CHALK SUBGROUP)	12.00	26.40	
13		SPT	13.00 - 13.45	S 8						
14		D	14.00							
15		U100	14.50 - 14.95							
15		D	15.00							
16		SPT	16.00 - 16.45	S 33						
17		D	17.00							
		U100	17.50 - 17.95							

Groundwater:

Date Strike Depth (m) Casing Depth (m) Depth After Observation (m)

Hole Progress:

Date Hole Depth (m) Casing Depth (m) Water Depth (m)

BOREHOLE LOG



Borehole No.

BH1002C

Sheet 3 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471591 N 174147	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.40mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 31/01/2018 End: 02/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
18		D	18.00				CHALK recovered as off white sandy silty angular to sub-angular fine to coarse GRAVEL with rare rinded flints. Clasts are weak high density. (WHITE CHALK SUBGROUP) (continued from previous sheet)			
19		SPT	19.00 - 19.45	S 46						
20		U100	20.50 - 20.95							
21		D	21.00							
22		SPT	22.00 - 22.45	S*55						
23		B	23.50 - 24.00					(23.00)		
24										
25		SPT	25.00 - 25.45	S*188						
26		SPT	26.50 - 26.95	S*81						
27										

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
01/02/2018 17:00	25.00	24.90	3.80
02/02/2018 08:00	25.00	24.90	3.60

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
01/02/2018 17:00	25.00	24.90	3.80
02/02/2018 08:00	25.00	24.90	3.60

BOREHOLE LOG



Borehole No.

BH1002C

Sheet 4 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471591 N 174147	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.40mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 31/01/2018 End: 02/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
28		SPT	28.00 - 28.45	S*176			CHALK recovered as off white sandy silty angular to sub-angular fine to coarse GRAVEL with rare rinded flints. Clasts are weak high density. (WHITE CHALK SUBGROUP) (continued from previous sheet)			
29										
30		SPT	29.50 - 29.95	S*107						
31										
32		SPT	31.00 - 31.45	S*103						
33										
34		SPT	32.50 - 32.95	S*120						
35										
36		SPT	34.00 - 34.45	S*83						
37										
		D	35.00				Borehole completed at 35.00m	35.00	3.40	

Groundwater:

Date Strike Depth (m) Casing Depth (m) Depth After Observation (m)

Hole Progress:

Date Hole Depth (m) Casing Depth (m) Water Depth (m)

02/02/2018 17:00 35.00 34.90 3.60

INSPECTION PIT LOG


Pit No
BH1003

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471556 N 174145 Level: 38.57mAOD	Date 01/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: 0.50m Depth 0.80m		Scale 1 : 12.5
Client: SSE Plc			Logged By MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1					MADE GROUND: Grey ASPHALT.	(0.10)		
		B	0.10 - 0.25		MADE GROUND: Brown to grey slightly gravelly slightly silty SAND. Gravel is angular fine to coarse of siliceous material and brick.	0.10	38.47	
		D ES	0.20		MADE GROUND: Red brick MASONRY.	(0.15)		
						0.25	38.32	
						(0.20)		
					MADE GROUND: Brown to grey gravelly slightly silty SAND. Gravel is angular fine to coarse of siliceous material and brick.	0.45	38.12	
					MADE GROUND: Grey CONCRETE.	(0.10)	38.02	
		B	0.65 - 0.80		MADE GROUND: Brown to grey gravelly slightly silty SAND. Gravel is angular fine to coarse of siliceous material and brick.	0.55		
2						(0.10)	37.92	
		D ES	0.80		0.80m: Clay pipe in north face of inspection pit. Intact (approximately 100mm). Inspection pit completed at 0.80m	0.65		
						(0.15)	37.77	

EQUIPMENT: Hand tools. Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-0.80m.

CASING: None used.

GROUNDWATER: None encountered.

BACKFILL: Borehole was backfilled with bentonite pellets and ground surface reinstated.

REMARKS: Borehole terminated due to clay pipe at 0.80m. Relocated as BH1003A. PID readings taken on all environmental samples. Results: 0.20m - 0.30ppm; 0.80m - 0.20ppm.

INSPECTION PIT LOG


 Pit No
BH1003A

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471557 N 174145
 Level: 38.56mAOD
Date
 02/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: m

Depth
 1.50m

E

Scale
 1 : 12.5

Client: SSE Plc

Logged By
 MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1					MADE GROUND: Grey ASPHALT.	(0.10)		
					MADE GROUND: Brownish grey slightly gravelly slightly silty SAND. Gravel is angular fine to coarse of siliceous material and brick.	0.10	38.46	
					MADE GROUND: Red brick MASONRY.	(0.10)	38.36	
						0.20		
						(0.20)		
					MADE GROUND: Brownish grey gravelly slightly silty SAND. Gravel is angular fine to coarse of siliceous material and brick.	0.40	38.16	
						(0.30)		
2					MADE GROUND: Grey CONCRETE.	0.70	37.86	
						(0.20)		
		B	0.90 - 1.20		MADE GROUND: Loose brownish grey gravelly slightly silty (ashy) SAND with low cobble content. Gravel is angular fine to coarse of siliceous material and brick. Cobbles are angular of brick.	0.90	37.66	
		D ES	1.00					
		SPT	1.20 - 1.65		1.20-1.50m: Concrete footing in north face of the pit.	(0.60)		
					Inspection pit completed at 1.50m	1.50	37.06	

EQUIPMENT: Hand tools. Hydraulic breaker. Light cable percussion rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.15m. Cable percussion drilled using 200mm diameter clay cutter and bailer 1.20-1.50m

CASING: None used.

GROUNDWATER: Groundwater seepage encountered at 0.50m. No rise is record.

BACKFILL: Borehole was backfilled with bentonite pellets and ground surface reinstated.

REMARKS: Unable to advance hole through concrete. Relocated as BH1003B. PID readings taken on all environmental samples. Results: 1.00m - 0.30ppm.

INSPECTION PIT LOG


 Pit No
BH1003B

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471544 N 174148
 Level: 38.71mAOD
Date
 02/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: 0.50m

Depth
 0.70m

0.60m

Scale
 1 : 12.5

Client: SSE Plc

Logged By
 TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		C	0.05 - 0.70		MADE GROUND: Black ASPHALT.	0.08	38.63	
					MADE GROUND: Dark grey CONCRETE.			
						(0.32)		
					MADE GROUND: Light grey CONCRETE.	0.40	38.31	
						(0.30)		
					Inspection pit completed at 0.70m	0.70	38.01	
2								

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels: 0.00-0.05m. Borehole advanced using 300mm diameter coring barrel: 0.05-0.70m.

CASING: None used.

GROUNDWATER: None encountered.

BACKFILL: Borehole was backfilled with arisings and ground surface reinstated.

REMARKS: Unable to advance hole through concrete. Relocated as BH1003C.

INSPECTION PIT LOG


 Pit No
BH1003C

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471544 N 174137
 Level: 38.76mAOD
Date
 05/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: 0.50m

Scale
 1 : 12.5

Client: SSE Plc

Depth
 0.50m

0.50m

Logged By
 TH/MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		C	0.00 - 0.20		MADE GROUND: Dark grey ASPHALT.	(0.10)	38.66	
		B	0.10		MADE GROUND: Brown very sandy slightly clayey angular to sub-rounded fine to coarse GRAVEL mixed lithologies including concrete, red brick, chalk and siliceous material.	0.10		
		D ES	0.20			(0.40)		
		B	0.30 - 0.45					
		D ES	0.45		0.40-0.47m: Clayey.		38.26	
2					0.50m: Concrete across base of pit. Inspection pit completed at 0.50m	0.50		

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels: 0.00-0.05m. Borehole advanced using 300mm diameter coring barrel utilizing water flush: 0.05-0.20m.

Hand dug inspection pit: 0.20-0.50m.

CASING: None used.

GROUNDWATER: None encountered.

BACKFILL: None used.

REMARKS: Unable to advance hole through concrete at 0.50. Relocated as BH1003D. Inspection pit covered and fenced off to be continued using rotary drilling techniques: See BH2004. PID readings taken on all environmental samples. Results: 0.20m -0.20ppm; 0.45m -0.40ppm.

INSPECTION PIT LOG


 Pit No
BH1003D

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471535 N 174144
 Level: 38.72mAOD
Date
 05/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: 0.60m

Depth
 0.05m

0.50m

Scale
 1 : 12.5

Client: SSE Plc

Logged By
 TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
					MADE GROUND: Dark grey ASPHALT. 0.05m: Concrete across base of inspection pit. Inspection pit completed at 0.05m	0.05	38.67	
1								
2								

EQUIPMENT: Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels: 0.00-0.05m.

CASING: None used.

GROUNDWATER: None encountered.

BACKFILL: Ground surface reinstated.

REMARKS: Unable to advance hole through concrete. Relocated as BH1003E.

BOREHOLE LOG



Borehole No.

BH1003E

Sheet 1 of 4

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471544 N 174164	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.71mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 08/02/2018	Logged By TH	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
1		B	0.30 - 0.40				MADE GROUND: Black ASPHALT.	0.08	38.63	1
		ES	0.30				MADE GROUND: Grey sandy angular fine to coarse GRAVEL of igneous material.	0.15 (0.40)	38.56	
		B	0.60 - 0.70				MADE GROUND: Reddish brown very sandy silty angular to sub-angular fine to coarse GRAVEL of red brick, concrete and siliceous material.	0.55	38.16	
		ES	0.60				0.40-0.50m: 2no. clay pipes. Broken and infilled with sediment. Orientation approximately East to West.	0.90	37.81	
		B	1.00 - 1.10				MADE GROUND: Light brown very sandy clayey angular to sub-rounded fine to coarse GRAVEL of mixed lithologies including chalk, red brick, and siliceous material.	1.20 (0.70)	37.51	
2		ES	1.00				MADE GROUND: Off white and light brown sandy very clayey angular to sub-rounded COBBLES of chalk with some very silty angular to sub-angular fine to coarse gravel of chalk and siliceous material.	1.90 (0.80)	36.81	2
		B	1.30 - 1.40				MADE GROUND: Light brown sandy very clayey angular to sub-rounded fine to coarse GRAVEL of red brick, chalk and siliceous material locally tending to slightly sandy gravelly clay with rare bone and clay pot fragments (<100mm).	2.70	36.01	
		ES	1.30				1.50-1.90m: Very loose.			
		SPT	1.50 - 1.95	S 2			Very soft bluish grey mottled greenish grey silty CLAY with rare shell fragments (<5mm), rare pockets (<30mm) of dark grey peat and a moderate organic odour. (ALLUVIUM)	3.30 (0.60)	35.41	
		UT100	2.50 - 2.95				Very soft greyish brown slightly sandy gravelly CLAY. Gravel is angular to sub-rounded fine to coarse siliceous material. (ALLUVIUM)			
3		D	2.00				3.00-3.30m: Tending to sandy, very clayey gravel.	(1.20)		3
							Loose greyish brown very sandy slightly silty angular to sub-rounded, fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)			
		B	3.50 - 4.00				Dense grey very sandy silty angular to sub-angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	4.50	34.21	
		SPT C	3.50 - 3.95	C 7						
		D	4.00							
4		B	4.50 - 5.00							4
		SPT C	4.50 - 4.95	C 30						
		D	5.00							
		B	5.50 - 6.00							
		SPT C	5.50 - 5.95	C 30						
5		D	6.00							5
		B	7.00 - 7.45							
		D	7.00							
		SPT C	7.00 - 7.45	C 32						
6										6
7										7
8										8

EQUIPMENT: Hand tools. Hydraulic breaker. Light cable percussion rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.50m. Cable percussion drilled using 200mm diameter clay cutter and bailer 1.50-10.50m and 150mm diameter clay cutter and bailer 10.50-35.00m..

CASING: 250mm diameter to 1.70m, 200mm diameter to 12.80m, 150mm diameter to 26.50m.

GROUNDWATER: Encountered at 4.00m, and rose to 3.40m after 20 minutes; and at 8.00m and rose to 1.70m after 20 minutes.

INSTALLATION: Borehole was backfilled with bentonite pellets: 35.00-6.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 6.00-1.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 1.00-0.40m. Flush 150mm steel cover set in concrete: 0.40-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Clean drilling techniques; bentonite seal from 1.50-2.40m. PID readings taken on all environmental samples. Results: 0.30m - 1.10ppm; 0.60m - 1.60ppm; 1.00m - 1.10.ppm; 1.30m - 0.30ppm; 2.00m - 0.00ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
------	------------------	------------------	-----------------------------

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
05/02/2018 17:00	1.50		
06/02/2018 08:00	1.50		
08/02/2018 08:00			

BOREHOLE LOG



Borehole No.

BH1003E

Sheet 2 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471544 N 174164	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.71mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 08/02/2018	Logged By TH	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
		D	8.00				Dense grey very sandy silty angular to sub-angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL) <i>(continued from previous sheet)</i>			
		B SPT C	8.50 - 8.95	C 22			8.00-8.10m: Light brown slight sandy gravelly silty CLAY. Gravel is angular to sub-rounded fine to coarse chalk.	8.50	30.21	
9		D	9.00				Medium dense light brown very sandy silty angular to rounded fine to coarse GRAVEL of siliceous material and chalk. (KEMPTON PARK GRAVEL)			
		D	10.00					(2.60)		
10		D SPT C	10.00 - 10.45	C 30						
		D	11.00							
11		SPT	11.50 - 11.95	S 9			Soft light brown locally light greyish brown slightly sandy gravelly silty CLAY. Gravel is angular to rounded fine to coarse siliceous material and chalk. (KEMPTON PARK GRAVEL)	11.10	27.61	
		D	12.00							
12		D	12.50 - 12.80				Medium dense slightly sandy very silty angular to sub-rounded fine to coarse GRAVEL of siliceous material and chalk. (KEMPTON PARK GRAVEL)	11.85	26.86	
		B	13.00 - 13.41							
13		B D	13.00				CHALK recovered as off white slightly sandy very silty sub-angular to sub-rounded fine to coarse Gravel with rare rinded flints. Clasts are very weak medium and high density. (WHITE CHALK SUBGROUP)	12.50	26.21	
		D	14.00							
14		SPT	14.50 - 14.95	S 17						
		D	15.00							
15		D	16.00							
16		D U100	16.00 - 16.45							
		D	17.00							
17		SPT	17.50 - 17.95	S 19			17.50-17.95m: Occasional flints.			

Groundwater:

Date Strike Depth (m) Casing Depth (m) Depth After Observation (m)

Hole Progress:

Date Hole Depth (m) Casing Depth (m) Water Depth (m)

06/02/2018 17:00 11.50 11.50 3.50

07/02/2018 08:00 11.50 11.50 3.00

BOREHOLE LOG



Borehole No.

BH1003E

Sheet 3 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471544 N 174164	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.71mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 08/02/2018	Logged By TH	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
18		D	18.00				CHALK recovered as off white slightly sandy very silty sub-angular to sub-rounded fine to coarse Gravel with rare rinded flints. Clasts are very weak medium and high density. (WHITE CHALK SUBGROUP) (continued from previous sheet)	(11.50)		
19		D U100	19.00 19.00 - 19.45							
20		D	20.00				20.00-20.45m: Locally speckled black.			
		SPT	20.50 - 20.95	S 28						
21		D	21.00							
22		B D U100	22.00 - 22.45 22.00 22.00 - 22.45							
23		D	23.00							
		SPT	23.50 - 23.95	S*167						
24		D	24.00				CHALK recovered as off white slightly sandy very silty sub-angular to sub-rounded fine to coarse GRAVEL with rare rinded flints. Clasts are weak high density. (WHITE CHALK SUBGROUP)	24.00	14.71	
25		D SPT	25.00 25.00 - 25.45	S*88						
26		D	26.00							
		SPT	26.50 - 26.95	S*185						
27		D	27.00							

Groundwater:

Date Strike Depth (m) Casing Depth (m) Depth After Observation (m)

Hole Progress:

Date Hole Depth (m) Casing Depth (m) Water Depth (m)
07/02/2018 17:00 26.50 26.50 5.90

BOREHOLE LOG



Borehole No.

BH1003E

Sheet 4 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471544 N 174164	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.71mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 08/02/2018	Logged By TH	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
28		D SPT	28.00 28.00 - 28.45	S*130			CHALK recovered as off white slightly sandy very silty sub-angular to sub-rounded fine to coarse GRAVEL with rare rinded flints. Clasts are weak high density. (WHITE CHALK SUBGROUP) (continued from previous sheet)			
29		D SPT	29.00 29.50 - 29.95	S*200				(11.00)		
30		D SPT	30.00 31.00 - 31.45	S*115			31.00-34.00m: Occasional rinded flints			
31		D SPT	31.00 32.50 - 32.95	S*88						
32		D SPT	32.00 34.00 - 34.45	S*97						
33		D SPT	33.00 35.00				Borehole completed at 35.00m	35.00	3.71	
34		D SPT	34.00 35.00							
35		D SPT	35.00							
36										
37										

Groundwater:

Date Strike Depth (m) Casing Depth (m) Depth After Observation (m)

Hole Progress:

Date Hole Depth (m) Casing Depth (m) Water Depth (m)

BOREHOLE LOG



Borehole No.

BH1004

Sheet 1 of 4

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471494 N 174112	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.31mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 08/02/2018	Logged By MM/TH	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
1		ES	0.30				Black ASPHALT.	0.10	38.21	1
							MADE GROUND: Dark grey mottled black gravelly silty SAND. Gravel is sub-angular, fine to coarse siliceous material and clinker.	0.40	37.91	
		ES	0.60							
		ES	1.00				MADE GROUND: Brown and greyish brown gravelly silty SAND with low cobble content and occasional fragments of wood and ceramics. Gravel is angular fine to coarse of red brick and concrete. Cobbles are angular of red brick.	(0.80)		
		ES	1.20							
2		B	1.30 - 1.70				MADE GROUND: Soft black gravelly CLAY. Gravel is angular, fine to medium red brick.	1.20	37.11	2
		SPT	1.50 - 1.95	S 1						
		ES	1.70							
		B	2.00 - 2.40				Very soft bluish grey and brownish grey silty CLAY with frequent pockets (<30mm) of partially decomposed organic material and a moderate organic odour. (ALLUVIUM)	1.70	36.61	
		ES	2.00							
3		B	2.50 - 3.00				Medium dense light brown very sandy silty angular to rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	2.40	35.91	3
		SPT C	2.50 - 2.95	C 24			2.40-8.10m: Partial loss of fines.			
		B	3.50 - 4.00							
		SPT C	3.50 - 3.95	C 21						
4										4
		B	4.50 - 5.00							
		SPT C	4.50 - 4.95	C 22						
		B	5.50 - 6.00							
5		SPT C	5.50 - 5.95	C 29						5
6										6
7										7
8										8

EQUIPMENT: Hand tools. Hydraulic breaker. Light cable percussion rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Cable percussion drilled using 250mm diameter clay cutter and bailer 1.20-2.00m and 200mm diameter clay cutter and bailer 1.20-9.00m, and 150mm diameter clay cutter and bailer 9.00-35.00m.

CASING: 250mm diameter to 2.00m, 200mm diameter to 9.00m, 150mm diameter to 35.00m.

GROUNDWATER: None recorded, however was added to assist drilling.

INSTALLATION: Borehole was backfilled with bentonite pellets: 35.00-7.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 7.00-1.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 1.00-0.40m. Flush 150mm steel cover set in concrete: 0.40-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Clean drilling techniques; bentonite seal from 1.50-2.40m. PID readings taken on all environmental samples. Results: 0.30m - 0.30ppm; 0.60m - 0.20ppm; 1.00m - 0.40ppm; 1.20m - 2.30ppm; 1.70m - 0.20ppm; 2.00m - 1.00ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
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Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
05/02/2018 17:00	2.50	2.00	
06/02/2018 08:00	2.50	2.00	

BOREHOLE LOG



Borehole No.

BH1004

Sheet 2 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471494 N 174112	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.31mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 08/02/2018	Logged By MM/TH	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
		B	8.20 - 8.50				CHALK off white locally speckled black recovered as very silty sub-angular to sub-rounded fine to coarse GRAVEL with rare rinded flints. Clasts are very weak and weak medium density. (Dc) (WHITE CHALK SUBGROUP)	8.10	30.21	
		B SPT	8.50 - 9.00 8.50 - 8.95	S 7						
9										
		U100	10.00 - 10.45							
10		D	10.50							
11		SPT	11.50 - 11.95	S 8						
		D	12.50							
12										
		U100	13.00 - 13.45							
13		D	13.50							
14		SPT	14.50 - 14.95	S 19				(12.40)		
		D	15.50							
15										
		U100	16.00 - 16.45							
16		D	16.50							
17		SPT	17.50 - 17.95	S 34						

Groundwater:

Date Strike Depth (m) Casing Depth (m) Depth After Observation (m)

Hole Progress:

Date Hole Depth (m) Casing Depth (m) Water Depth (m)

BOREHOLE LOG



Borehole No.

BH1004

Sheet 3 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471494 N 174112	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.31mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 08/02/2018	Logged By MM/TH	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
18							CHALK off white locally speckled black recovered as very silty sub-angular to sub-rounded fine to coarse GRAVEL with rare rinded flints. Clasts are very weak and weak medium density. (Dc) (WHITE CHALK SUBGROUP) (continued from previous sheet)			
		D	18.50							
19		B	19.00 - 19.50							
20										
		SPT	20.50 - 20.95	S*158				20.50	17.81	
21		D	21.00				CHALK recovered as off white very silty sub-angular to sub-rounded fine to coarse GRAVEL with rare rinded flints. Clasts are weak medium and high density. (Dc) (WHITE CHALK SUBGROUP)			
22		SPT	22.00 - 22.45	S*75						
23		D	23.00							
		SPT	23.50 - 23.95	S*97						
24										
		D	24.50							
25		SPT	25.00 - 25.45	S*94						
26		D	26.00							
		SPT	26.50 - 26.95	S*107						
27										

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
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Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
06/02/2018 17:00	20.50	20.40	4.80
07/02/2018 08:00	20.50	20.40	

BOREHOLE LOG



Borehole No.

BH1004

Sheet 4 of 4

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471494 N 174112	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.31mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 08/02/2018	Logged By MM/TH	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
28		D SPT	28.00 28.00 - 28.45	S*136			CHALK recovered as off white very silty sub-angular to sub-rounded fine to coarse GRAVEL with rare rinded flints. Clasts are weak medium and high density. (Dc) (WHITE CHALK SUBGROUP) (continued from previous sheet)	(14.50)		
29		D SPT	29.00 29.50 - 29.95	S*150						
30		D SPT	30.50 31.00 - 31.45	S*120			31.00-35.00m: Occasional rinded flints. 32.5m: Rinded flint cobbles.			
31		D SPT	32.00 32.50 - 32.95	S**						
32		B SPT	33.50 - 34.00 34.00 - 34.45	S*103						
33		D	35.00				Borehole completed at 35.00m	35.00	3.31	
34										
35										
36										
37										

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
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Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
07/02/2018 17:00	28.00	28.00	3.10
08/02/2018 08:00	28.00	28.00	
08/02/2018 17:00	35.00	35.00	3.10

BOREHOLE LOG



Borehole No.

BH1005

Sheet 1 of 2

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471538 N 174120	Hole Type CP
Location: Vastern Road, Reading, RG1 8BU	Level: 38.69mAOD	Scale 1 : 50.00	
Client: SSE Plc	Dates: Start: 31/01/2018 End: 01/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
1		B	0.20 - 0.40				MADE GROUND: Grey ASPHALT.	0.10	38.59	1
		ES	0.30				MADE GROUND: Dark grey slightly silty angular fine to coarse GRAVEL of siliceous material and brick.	0.20	38.49	
		B	0.60 - 0.90				MADE GROUND: Reddish brown and grey sandy slightly silty (ashy) angular fine to coarse GRAVEL of siliceous material and brick with medium cobble content. Cobbles are angular of brick.	0.60	38.09	
		ES	0.90 - 1.20				MADE GROUND: Grey sandy slightly silty angular fine to coarse GRAVEL of siliceous material, sandstone and brick with low cobble content. Cobbles are angular of brick.	0.90	37.79	
		SPT	1.20 - 1.65	S 1			MADE GROUND: Very soft dark greyish brown slightly gravelly sandy CLAY. Gravel is angular fine to coarse of siliceous material, concrete and brick.	(1.00)		
2		D	2.00				Very soft greenish grey slightly sandy silty CLAY. (ALLUVIUM)	1.90	36.79	2
		ES	2.00 - 2.45					(0.90)		
		D	2.50							
3		D	2.80				Very soft grey mottled brown slightly gravelly sandy CLAY. Gravel is sub-angular fine to medium of siliceous material. (ALLUVIUM)	2.80	35.89	3
		B	3.00 - 3.50	S 11			Medium dense light brown to grey very sandy slightly silty angular to sub-rounded GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.00	35.69	
		SPT C	3.00 - 3.45							
4		B	4.00 - 4.50	S 25						4
		SPT C	4.00 - 4.45							
5		B	5.00 - 5.50	S 30						5
		SPT C	5.00 - 5.45							
6										6
7		B	6.50 - 7.00	S 33			6.50-6.95m: Very dense.	(6.70)		7
		SPT C	6.50 - 6.95							
8										8

EQUIPMENT: Hand tools. Hydraulic breaker. Light cable percussion rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Cable percussion drilled using 250mm diameter clay cutter and bailer 1.20-2.00m and 200mm diameter clay cutter and bailer 1.20-9.00m, and 150mm diameter clay cutter and bailer 9.00-35.00m.

CASING: 250mm diameter to 2.00m, 200mm diameter to 9.00m, 150mm diameter to 35.00m.

GROUNDWATER: None recorded, however was added to assist drilling.

INSTALLATION: Borehole was backfilled with bentonite pellets: 12.00-7.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 7.00-2.80m. 50mm ID HDPE plain pipe with bentonite pellet seal: 2.80-0.20m. Flush 150mm steel cover set in concrete: 0.20-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Clean drilling techniques; bentonite seal from 1.50-2.00m. PID readings taken on all environmental samples. Results: 0.30m - 0.00ppm; 0.70m - 0.20ppm; 1.00m - 0.50ppm; 2.00m - 0.20ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
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Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
31/01/2018 17:00	5.50	4.00	
01/02/2018 08:00	5.50	6.10	

BOREHOLE LOG



Borehole No.

BH1005

Sheet 2 of 2

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925

Co-ords: E 471538 N 174120

Hole Type
CP

Location: Vastern Road, Reading, RG1 8BU

Level: 38.69mAOD

Scale
1 : 50.00

Client: SSE Plc

Dates: Start: 31/01/2018
End: 01/02/2018Logged By
MM

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
9		B SPT C	8.00 - 8.45	S 20			Medium dense light brown to grey very sandy slightly silty angular to sub-rounded GRAVEL of siliceous material. (KEMPTON PARK GRAVEL) (continued from previous sheet) 8.50-9.70m: Very sandy.			
10		SPT D	9.50 - 9.95 9.70	S 7			CHALK recovered as off white locally speckled black very silty sub-angular to sub-rounded fine to coarse GRAVEL with rare rinded flints. Clasts are very weak and weak medium density. (Dc) (WHITE CHALK SUBGROUP)	9.70	28.99	
11		B U100	11.00 - 11.45					(2.30)		
12		SPT	11.50 - 11.95	S 36			Borehole completed at 12.00m	12.00	26.69	
13										
14										
15										
16										
17										

Groundwater:

Date Strike Depth (m) Casing Depth (m) Depth After Observation (m)

Hole Progress:

Date Hole Depth (m) Casing Depth (m) Water Depth (m)

ROTARY BOREHOLE LOG



Borehole No.

BH2001

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471586 N 174141	Hole Type DS+RC
Location: Vastern Road, Reading, RG1 8BU	Level: 38.42mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 13/02/2018 End: 13/02/2018	Logged By TH	

(m)	Water Levels	Core Run, Samples & Testing			Core Run & Sample	TCR SCR RQD	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result							
1								MADE GROUND: Dark grey ASPHALT.	0.08	38.34	
								MADE GROUND: Light brown very sandy angular fine to coarse GRAVEL of siliceous material and brick.	0.30	38.12	
								MADE GROUND: Dark grey sandy silty (ashy) GRAVEL with low cobble content. Cobbles are angular of red brick.	0.55	37.87	
								MADE GROUND: CONCRETE.	0.80	37.62	
								MADE GROUND: Dark grey very sandy very clayey angular to sub-angular fine to coarse GRAVEL of red brick, concrete and siliceous material.	0.90	37.52	
2		C	0.60 - 1.20			100% 33% 33%		MADE GROUND: Very soft light greyish brown locally mottled orangish brown slightly gravelly slightly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse of red brick and siliceous material.	(0.40)	37.12	
		ES	0.80					Very soft dark bluish green locally mottled light grey CLAY with rare partially decomposed organic material (<5mm) and occasional comminuted shell fragments (<3mm). (ALLUVIUM)	(1.10)		
		D	0.90								
		ES	1.00								
3		D	1.40					Very soft bluish green mottled brown slightly gravelly slightly sandy CLAY with rare partially decomposed organic material (5mm) and a moderate organic odour. Gravel is sub-rounded to rounded fine to coarse siliceous material. (ALLUVIUM)	2.40	36.02	
		ES	1.50								
4		D	2.00								
5								Light brown very sandy slightly silty angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.60	34.82	
								3.60-3.80m: Very clayey.	(1.40)		
6		B	4.00 - 5.00					Borehole completed at 5.00m	5.00	33.42	

EQUIPMENT: Hand digging tools. Comacchio Fraste Multi-drill ML track mounted rig.

METHOD: Hand dug inspection pit: See WS1008. Waterflush rotary coring (150mm): 0.60-1.20m. Dynamic sampling using 128mm and 113mm sample barrels: 1.20-5.00m.

CASING: 140mm diameter to 4.00m.

GROUNDWATER: None encountered prior to using water flush.

INSTALLATION: Bentonite seal 5.00-4.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 4.00-3.00m. Plain 50mm ID HDPE pipe with washed gravel response zone: 3.00-2.80m, bentonite pellet seal: 2.80-0.60m and gravel 0.60-0.40m. Flush cover set in concrete: 0.40-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Drilled at location of WS1008. PID readings taken on all environmental samples. Results: 0.80m - 3.60ppm; 1.00m - 4.70ppm; 1.50m - 4.80ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
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Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
13/02/2018 10:30	5.00	4.00	

ROTARY BOREHOLE LOG



Borehole No.

BH2002

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471577 N 174143	Hole Type DS+RC
Location: Vastern Road, Reading, RG1 8BU	Level: 38.37mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 12/02/2018 End: 12/02/2018	Logged By TH	

(m)	Water Levels	Core Run, Samples & Testing			Core Run & Sample	TCR SCR RQD	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result							
1		C	0.25 - 1.20			89% 13% 13%		MADE GROUND: Dark grey ASPHALT. MADE GROUND: Grey and brown very sandy silty angular fine to coarse GRAVEL of siliceous material and red brick. MADE GROUND: CONCRETE. 0.37-1.00m: recovered as very sandy silty angular fine to coarse gravel of concrete.	0.10 0.25 (0.75)	38.27 38.12	
		ES	1.00					MADE GROUND: Off white and dark grey slightly sandy very silty angular GRAVEL of chalk. 1.10m: 1no. bone fragment (<30mm).	1.00 (0.45)	37.37	1
		ES D	1.50 1.60					Very soft dark bluish green CLAY with rare partially decomposed organic material (<5mm) and occasional comminuted shell fragments (<3mm). (ALLUVIUM) 1.45-1.60m: Light brown. Occasional partially decomposed organic material (<5mm).	1.45 (0.65)	36.92	
2		ES D	2.20 2.30					Very soft bluish green mottled light grey slightly sandy silty calcareous CLAY with frequent lenses (<1mm) of light grey silt. (ALLUVIUM)	2.10 (0.80)	36.27	2
		D	3.00					Very soft dark bluish green slightly gravelly slightly sandy CLAY with rare partially decomposed organic material (<5mm) and a slight organic odour. Gravel is sub-rounded fine to coarse siliceous material. (ALLUVIUM)	2.90 (0.70)	35.47	3
4		B	4.00 - 5.00					Light brown very sandy slightly slightly silty angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL) 3.60-3.80m: Very clayey.	3.60 (1.40)	34.77	4
								Borehole completed at 5.00m	5.00	33.37	5
6											6

EQUIPMENT: Hand digging tools. Comacchio Fraste Multi-drill ML track mounted rig.

METHOD: Hand dug inspection pit: See WS1009. Waterflush rotary coring (150mm): 0.25-1.20m. Dynamic sampling using 128mm and 113mm sample barrels: 1.20-5.00.

CASING: 140mm diameter to 4.00m.

GROUNDWATER: None encountered prior to using water flush.

INSTALLATION: Bentonite seal 5.00-4.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 4.00-3.00m. Plain 50mm ID HDPE pipe with washed gravel response zone: 3.00-2.80m, bentonite pellet seal: 2.80-0.60m and gravel 0.60-0.40m. Flush cover set in concrete: 0.40-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Drilled at location of WS1009. PID readings taken on all environmental samples. Results: 1.00m - 4.00ppm; 1.50m - 3.50ppm; 2.20m - 4.80ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
12/02/2018 17:00	5.00	4.00	

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
12/02/2018 17:00	5.00	4.00	

ROTARY BOREHOLE LOG



Borehole No.

BH2003

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471557 N 174145	Hole Type DS+RC
Location: Vastern Road, Reading, RG1 8BU	Level: 38.56mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 12/02/2018 End: 12/02/2018	Logged By TH	

(m)	Water Levels	Core Run, Samples & Testing			Core Run & Sample	TCR SCR RQD	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result							
1								MADE GROUND: Grey ASPHALT.	0.10	38.46	
								MADE GROUND: Brownish grey slightly gravelly slightly silty SAND. Gravel is angular fine to coarse of siliceous material and brick.	0.20	38.36	
								MADE GROUND: Red brick MASONRY.	0.40	38.16	
								MADE GROUND: Brownish grey gravelly slightly silty SAND. Gravel is angular fine to coarse of siliceous material and brick.	(0.30) 0.70	37.86	
								MADE GROUND: Grey CONCRETE.	0.90	37.66	
2		C	1.50 - 2.00			60% 0% 0%		MADE GROUND: Loose brownish grey gravelly slightly silty (ashy) SAND with low cobble content. Gravel is angular fine to coarse of siliceous material and brick. Cobbles are angular of brick.	(0.60) 1.50	37.06	
								MADE GROUND: CONCRETE recovered as dark grey, grey and reddish brown angular coarse gravel of red brick, siliceous material and concrete with 1no. cobble of angular concrete.	(0.50) 2.00	36.56	
		D	2.30					MADE GROUND: Brownish grey very sandy silty angular to sub-rounded fine to coarse GRAVEL of mixed lithologies including red brick, concrete and siliceous material.	2.20	36.36	
		ES	2.40					Very soft greenish grey CLAY with a moderate hydrocarbon odour, occasional partially decomposed organic material (<5mm) and rare comminuted shell fragments (<5mm). (ALLUVIUM)	(0.80)		
								2.90-3.00m: Slightly gravelly slightly sandy clay. Gravel is angular to sub-angular fine to coarse siliceous material.	3.00	35.56	
3		ES	3.50					Light brown very sandy very clayey angular to sub-rounded fine to coarse GRAVEL of siliceous material with a moderate hydrocarbon odour and free product (black). (KEMPTON PARK GRAVEL)	(0.80)		
		B	3.80 - 4.50					3.50-3.80m: Dark grey with a strong hydrocarbon odour.	3.80	34.76	
		ES	4.20					Light brown very sandy silty angular to sub-angular fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	(0.70)		
								Borehole completed at 4.50m	4.50	34.06	
4											
5											
6											

EQUIPMENT: Hand digging tools. Comacchio Fraste Multi-drill ML track mounted rig.

METHOD: Hand dug inspection pit and geology to 1.50m: See BH1003A. Waterflush rotary coring (146mm) : 1.50-2.00m. Dynamic sampling using 128mm and 113mm sample barrels: 2.00-4.50m.

CASING: 140mm diameter to 4.50m.

GROUNDWATER: None encountered prior to using water flush.

INSTALLATION: Bentonite seal 4.50-4.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 4.00-3.00m. Plain 50mm ID HDPE pipe with washed gravel response zone: 3.00-2.80m, bentonite pellet seal: 2.80-0.60m and gravel 0.60-0.40m. Flush cover set in concrete: 0.40-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Drilled at location of BH1003A. PID readings taken on all environmental samples. Results: 2.40m - 5.70ppm; 3.50m - 5.80ppm; 4.20m - 6.90ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
12/02/2018 17:00	4.50	4.50	

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
12/02/2018 17:00	4.50	4.50	

ROTARY BOREHOLE LOG



Borehole No.

BH2004

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading

Project No:

C5925

Co-ords: E 471544 N 174137

Hole Type
DS+RC

Location: Vastern Road, Reading, RG1 8BU

Level: 38.76mAOD

Scale
1 : 37.50

Client: SSE Plc

Dates: Start: 13/02/2018
End: 13/02/2018Logged By
TH

(m)	Water Levels	Core Run, Samples & Testing			Core Run & Sample	TCR SCR RQD	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result							
1		C	0.50 - 1.80			100% 21% 0%		MADE GROUND: Dark grey ASPHALT. MADE GROUND: Brown very sandy slightly clayey angular to sub-rounded fine to coarse GRAVEL mixed lithologies including concrete, red brick, chalk and siliceous material. MADE GROUND: CONCRETE recovered as light brown very sandy silty angular to sub-angular cobbles of concrete, red brick and siliceous material. MADE GROUND: CONCRETE recovered as angular to sub-angular cobbles of concrete with little very sandy angular fine to coarse gravel of red brick, siliceous material and concrete. 1.40-1.60m: Red brick masonry recovered as reddish brown very sandy silty angular to sub-angular fine to coarse gravel of red brick.	0.10 (0.40) 0.50 (0.40) 0.90 (0.90)	38.66 38.26 37.86	
2		C	1.80 - 2.90			100% 100% 100%		MADE GROUND: Light grey matrix supported CONCRETE, Aggregate is angular to rounded fine to coarse of red brick and siliceous material. 1.80-3.40m: Drill induced discontinuities are horizontal closely to medium spaced undulating and stepped rough.	1.80 (1.70)	36.96	
3		C	2.90 - 3.50			100% 83% 83%					
4		B	3.50 - 5.00					3.40-3.50m: Recovered non intact as angular fine to coarse gravel of red brick and concrete. Light brown very sandy slightly silty angular to rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.50 (1.50)	35.26	
5		ES	4.00					Borehole completed at 5.00m	5.00	33.76	
6											

EQUIPMENT: Hand digging tools. Comacchio Fraste Multi-drill ML track mounted rig.

METHOD: Hand dug inspection pit: See BH1003C. Dry drill rotary coring using 150mm coring barrel: 0.50-1.80m. Waterflush rotary coring using T6-116 coring barrel: 1.80-3.50m. Dynamic sampling using 98mm sample barrels: 3.50-5.00m.

CASING: 140mm diameter to 1.80m.

GROUNDWATER: None encountered prior to using water flush.

INSTALLATION: 50mm ID HDPE slotted pipe with washed gravel response zone: 3.80-3.30m. Plain 50mm ID HDPE pipe with washed gravel response zone:

3.30-3.10m, bentonite pellet seal: 3.10-0.60m and gravel 0.60-0.40m. Flush cover set in concrete: 0.40-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Drilled at location of BH1003C. On completion, hole collapsed to 3.80m as unable to advance casing. PID readings taken on all environmental samples. Results: 4.00m - 0.00ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
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Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
13/02/2018 17:00	5.00	1.80	

ROTARY BOREHOLE LOG



Borehole No.

BH2005

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
Reading

Project No:

C5925

Co-ords: E 471552 N 174113

Hole Type
DS+RC

Location: Vastern Road, Reading, RG1 8BU

Level: 38.65mAOD

Scale
1 : 37.50

Client: SSE Plc

Dates: Start: 13/02/2018
End: 13/02/2018Logged By
TH

(m)	Water Levels	Core Run, Samples & Testing			Core Run & Sample	TCR SCR RQD	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result							
1								MADE GROUND: Dark grey ASPHALT.	0.15	38.50	
								MADE GROUND: Grey sandy slightly silty angular fine to coarse GRAVEL of concrete and siliceous material with high cobble content. Cobbles are angular of concrete.	(0.35)		
		C ES B	0.50 - 1.20 0.60 0.70 - 0.95			100% 0% 0%		MADE GROUND: Concrete and red brick cobbles recovered as greyish brown and reddish brown very sandy silty angular to sub-angular fine to coarse GRAVEL of concrete, red brick, siliceous material and asphalt with 2no. angular cobbles of red brick and concrete.	0.50 (0.45)	38.15	
		ES D	0.95 1.05					MADE GROUND: Very soft slightly gravelly slightly sandy CLAY. Gravel is angular to rounded fine to coarse chalk, siliceous material and red brick.	0.95 (0.90)	37.70	
2											
								MADE GROUND: Dark grey very sandy clayey angular to sub-angular fine to coarse GRAVEL of red brick and siliceous material with visible hydrocarbons.	1.85 (0.30)	36.80	
		ES ES	1.75 1.90					Very soft dark green locally dark grey slightly gravelly slightly sandy CLAY with rare partially decomposed organic material (<5mm). Gravel is sub-rounded fine to medium of siliceous material. (ALLUVIUM)	2.15 (1.15)	36.50	
		D ES	2.30 2.40					2.50-3.30m: Limited recovery: slightly sandy gravelly clay. Gravel is angular to sub-rounded fine to coarse siliceous material.			
3											
								Light brown very sandy slightly silty angular to rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.30 (1.70)	35.35	
		D B	3.20 3.30 - 5.00								
4											
5								Borehole completed at 5.00m	5.00	33.65	
6											

EQUIPMENT: Hand digging tools. Comacchio Fraste Multi-drill ML track mounted rig.

METHOD: Hand dug inspection pit: See WS1018. Dry drill rotary coring using 150mm coring barrel: 0.50-1.20m. Dynamic sampling using 128mm and 113mm sample barrels: 1.20-5.00m.

CASING: 150mm diameter casing to 1.20m and 140mm diameter casing to 4.00m.

GROUNDWATER: None encountered prior to using water flush.

INSTALLATION: Bentonite seal 3.00-5.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 4.00-1.00m. Plain 50mm ID HDPE pipe with washed gravel response zone: 1.00-0.95m and bentonite pellet seal: 0.95-0.40m. Flush cover set in concrete: 0.40-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Drilled at location of WS1018. PID readings taken on all environmental samples. Results: 0.60m - 2.80ppm; 0.95m - 4.00ppm; 1.75m - 4.00ppm; 1.90m - 3.40ppm; 2.40m - 2.40ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
14/02/2018 17:00	5.00		

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
14/02/2018 17:00	5.00		

ROTARY BOREHOLE LOG



Borehole No.

BH2006

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471564 N 174107	Hole Type DS+RC
Location: Vastern Road, Reading, RG1 8BU	Level: 38.49mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 14/02/2018 End: 14/02/2018	Logged By TH	

(m)	Water Levels	Core Run, Samples & Testing			Core Run & Sample	TCR SCR RQD	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result							
1		C	0.00 - 1.20			100% 0% 0%		MADE GROUND: Light grey CONCRETE.	0.12	38.37	
								MADE GROUND: Grey sandy slightly silty angular fine to coarse GRAVEL of concrete and siliceous material with high cobble content. Cobbles are angular of concrete.	(0.38)		
		ES	0.60					MADE GROUND: Concrete and red brick cobbles recovered as greyish brown and reddish brown very sandy silty angular to sub-angular fine to coarse GRAVEL of concrete, red brick, siliceous material and asphalt with 3no. angular cobbles of concrete.	0.50	37.99	
		B	0.70 - 0.90						(0.40)		
		B	0.90 - 1.20					MADE GROUND: Dark grey and off white very sandy very silty angular to sub-angular fine to coarse GRAVEL of chalk, siliceous material, concrete and red brick.	0.90	37.59	
2		ES	1.00					MADE GROUND: Very soft slightly gravelly slightly sandy CLAY. Gravel is angular to rounded fine to coarse chalk, siliceous material and red brick.	(0.30)		
									1.20	37.29	
		ES	1.40					MADE GROUND: Dark grey very sandy clayey angular to sub-angular fine to coarse GRAVEL of red brick and siliceous material with visible hydrocarbons.	(0.50)		
		D	1.50						1.70	36.79	
		ES	1.80					Very soft dark green locally dark grey slightly gravelly slightly sandy CLAY with rare partially decomposed organic material (<5mm). Gravel is sub-rounded fine to medium of siliceous material. (ALLUVIUM)	1.95	36.54	
3		ES	2.00					2.50-3.00m: Limited recovery; slightly sandy gravelly clay. Gravel is angular to sub-rounded fine to coarse of siliceous material.	(1.05)		
		D	2.20								
		ES	2.40					Light brown very sandy silty angular to rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.00	35.49	
								3.00-3.20m: Very clayey.			
								3.20-3.30m: Clayey.			
4								3.30-3.40m: Slightly clayey.			
5											
6											
								Borehole completed at 5.00m	5.00	33.49	

EQUIPMENT: Hand digging tools. Comacchio Fraste Multi-drill ML track mounted rig.

METHOD: Hand dug inspection pit: See WS1019. Dry drill rotary coring using 150mm coring barrel: 0.50-1.20m. Dynamic sampling using 128mm and 113mm sample barrels: 1.20-5.00m.

CASING: 140mm diameter casing to 4.00m.

GROUNDWATER: None encountered prior to using water flush.

INSTALLATION: Bentonite seal 2.00-5.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 2.00-1.00m. Plain 50mm ID HDPE pipe with washed gravel response zone: 1.00-0.95m and bentonite pellet seal: 0.95-0.40m. Flush cover set in concrete: 0.40-0.10m. Gas valve fitted. Surface reinstated with tarmacadam 0.10-0.00m.

REMARKS: Drilled at location of WS1017. PID readings taken on all environmental samples. Results: 0.60m - 1.80ppm; 1.00m - 1.60ppm; 1.40m - 2.30ppm; 1.80m - 3.10ppm; 2.00m - 3.20ppm; 2.40m - 2.30ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
14/02/2018 17:00	5.00	4.00	

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
14/02/2018 17:00	5.00	4.00	

WINDOWLESS SAMPLE LOG



Borehole No.

WS1002

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471584 N 174194	Hole Type WS
Location: Vastern Road, Reading, RG1 8BU	Level: 38.26mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 06/02/2018 End: 06/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
1		B	0.10 - 0.20				MADE GROUND: Black ASPHALT.	0.10	38.16	
		ES	0.20				MADE GROUND: Reddish brown and grey sandy slightly silty angular fine to coarse GRAVEL of siliceous material and concrete.	0.20	38.06	
		B	0.30 - 0.50					(0.30)		
		D	0.50				MADE GROUND: Greyish brown very sandy clayey angular fine to coarse GRAVEL of brick and concrete. Cobbles are angular of concrete.	0.50	37.76	
		ES								
1		B	0.80 - 1.00				MADE GROUND: Brown to grey slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to medium of brick, siliceous material and concrete.			
		D	1.00					(1.20)		
		ES SPT	1.20 - 1.65	S 5						
		ES	1.70				1.70m: Slow groundwater seepage. Borehole completed at 1.70m	1.70	36.56	
2										
3										
4										
5										
6										

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Continuous disturbed sampling using 101mm sample barrel: 1.20-1.70m.

CASING: None used.

GROUNDWATER: Seepage encountered at 1.70m. No rise after 20 minutes.

BACKFILL: On completion, hole backfilled with arisings and the surface reinstated.

REMARKS: Obstruction encountered at 1.70m. PID readings taken on all environmental samples. Results: 0.20m -0.10ppm; 0.50m -0.60ppm; 1.00m -0.70ppm; 1.70m -1.50ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
06/02/18	1.70		1.70

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
06/02/2018 00:00	1.70	1.70	

WINDOWLESS SAMPLE LOG



Borehole No.

WS1003

Sheet 1 of 1

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471596 N 174182	Hole Type WS
Location: Vastern Road, Reading, RG1 8BU	Level: 38.21mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 06/02/2018 End: 06/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
1		B	0.10 - 0.30				MADE GROUND: Dark grey ASPHALT.	0.10	38.11	
		D	0.20				MADE GROUND: Reddish brown slightly sandy angular fine to coarse GRAVEL of brick.	0.12	38.09	
		B	0.40 - 0.60				MADE GROUND: Dark grey very sandy slightly silty (ashy) angular fine to coarse GRAVEL of siliceous material and brick.	(0.98)		
		D	0.50							
		ES								
2		B	0.80 - 1.00							
		D	1.00				MADE GROUND: Light brown to grey sandy angular slightly silty fine to coarse GRAVEL of siliceous material and brick.	1.10	37.11	
		ES	1.10					(0.30)		
		D	1.20	S<1			Very soft brown slightly sandy CLAY. (ALLUVIUM)	1.40	36.81	
		ES	1.20 - 1.65					(0.35)		
3		SPT					Very soft greenish grey silty CLAY with moderate organic odour. (ALLUVIUM)	1.75	36.46	
		D	1.70							
		ES								
		SPT	2.00 - 2.45	S<1				(2.05)		
4		SPT	3.00 - 3.45	S<1						
		D	3.80				Very soft dark grey organic sandy CLAY. (ALLUVIUM)	3.80	34.41	
		B	4.00 - 5.00	S 10				(0.30)		
		SPT	4.00 - 4.45				Medium dense becoming dense grey to brown sandy sub-angular to rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	4.10	34.11	
								(1.35)		
5		SPT	5.00 - 5.45	S 44						
							Borehole completed at 5.45m	5.45	32.76	
6										

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Continuous disturbed sampling using 101mm sample barrel: 1.20-5.00m.

CASING: 113mm diameter to 5.00m.

GROUNDWATER: Encountered at 3.89m and rose to 2.99m after a 20 minute monitoring period.

INSTALLATION: Borehole backfilled with washed gravel: 5.45-5.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 5.00-3.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 3.00-0.40m. Flush cover set in concrete: 0.40-0.10m and tarmacadam: 0.10-0.00m. Gas valve fitted.

REMARKS: PID readings taken on all environmental samples. Results: 0.20m -0.10ppm; 0.50m -0.60ppm; 1.00m -0.70ppm; 1.70m -0.10ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
06/02/18	3.89	4.00	2.99

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
06/02/2018 17:00	5.45	5.00	2.42

WINDOWLESS SAMPLE LOG



Borehole No.

WS1004

Sheet 1 of 1

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471603 N 174169	Hole Type WS
Location: Vastern Road, Reading, RG1 8BU	Level: 38.37mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 06/02/2018 End: 06/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
1		B	0.20 - 0.40				MADE GROUND: Grey ASPHALT.	0.10	38.27	
		D	0.20				MADE GROUND: Grey very sandy angular fine to coarse GRAVEL of siliceous material and brick.	(0.40)		
		B	0.50 - 0.70				MADE GROUND: Grey very sandy slightly silty (ashy) angular fine to coarse GRAVEL of siliceous material and brick.	0.50	37.87	
		D	0.60				MADE GROUND: Very soft brown slightly sandy gravelly CLAY. Gravel is angular to sub-angular of siliceous material and brick.	0.70	37.67	
		B	0.80 - 1.00							
2		D	1.00					(0.80)		
		ES	1.20 - 1.65	S 2						
		SPT					Very soft brown mottled grey slightly sandy CLAY. (ALLUVIUM)	1.50	36.87	
								(0.50)		
		D	1.80				Very soft greenish grey mottled brown slightly sandy CLAY with moderate organic odour. (ALLUVIUM)	2.00	36.37	
3		ES	2.00	S 3						
		SPT	2.00 - 2.45							
								(1.70)		
		D	3.00	S<1						
		SPT	3.00 - 3.45							
4										
		D	3.70				Grey very sandy slightly silty angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.70	34.67	
		B	4.00 - 5.00	S 25			Medium dense grey to brown sandy sub-angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.90	34.47	
		D	4.00							
		SPT	4.00 - 4.45					(1.55)		
5										
		SPT	5.00 - 5.45	S 38						
							Borehole completed at 5.45m	5.45	32.92	
6										

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Continuous disturbed sampling using 101mm sample barrel: 1.20-5.00m.

CASING: 113mm diameter to 5.00m.

GROUNDWATER: Encountered at 3.71m and rose to 2.67m after a 20 minute monitoring period.

INSTALLATION: Borehole backfilled with washed gravel: 5.45-5.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 5.45-3.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 3.00-0.40m. Flush cover set in concrete: 0.40-0.10m and tarmacadam: 0.10-0.00m. Gas valve fitted.

REMARKS: PID readings taken on all environmental samples. Results: 0.20m -0.10ppm; 0.60m -0.70ppm; 1.00m -0.90ppm; 2.00m -0.20ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
06/02/18	3.71	4.00	2.67

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
06/02/2018 17:00	5.45	5.00	2.43

WINDOWLESS SAMPLE LOG



Borehole No.

WS1005A

Sheet 1 of 1

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471614 N 174146	Hole Type WS
Location: Vastern Road, Reading, RG1 8BU	Level: 38.17mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 09/02/2018 End: 09/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
							MADE GROUND: Dark grey ASPHALT.			
		B	0.25 - 0.45				MADE GROUND: Reddish brown sandy slightly silty angular fine to coarse GRAVEL of siliceous material.	0.25	37.92	
		ES	0.30					0.45	37.72	
		B	0.45 - 0.60				MADE GROUND: Reddish brown and grey sandy clayey fine to coarse GRAVEL of siliceous material and brick.	0.60	37.57	
		ES	0.50							
		B	0.80 - 1.20				Very loose greyish brown slightly sandy clayey angular to sub-rounded fine to coarse GRAVEL of siliceous material. (ALLUVIUM)			
1		ES	1.00					(1.00)		
		SPT	1.20 - 1.65	S 4						
		ES	1.50							
							Very soft bluish grey mottled brown slightly sandy CLAY with occasional shell fragments (<5mm). (ALLUVIUM)	1.60	36.57	
2		D	1.90							
		SPT	2.00 - 2.45	S 3						
								(2.40)		
3		D	2.90							
		SPT	3.00 - 3.45	S<1						
4		D	3.90							
		SPT	4.00 - 4.45	S 37			Dense brown sandy clayey angular fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	4.00	34.17	
		B	4.30 - 4.65					(0.65)		
		B	4.65 - 5.00				Dense light brown sandy angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	4.65	33.52	
5		SPT	5.00 - 5.45	S 41				(0.80)		
							Borehole completed at 5.45m	5.45	32.72	
6										

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Continuous disturbed sampling using 101mm sample barrel: 1.20-5.00m.

CASING: 113mm diameter to 5.00m.

GROUNDWATER: Encountered at 2.76m and rose to and levelled out at 2.22m after a 15 minute monitoring period.

INSTALLATION: Bentonite seal 5.45-2.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 2.00-1.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 1.00-0.40m. Flush cover set in concrete: 0.40-0.10m and tarmacadam: 0.10-0.00m. Gas valve fitted.

REMARKS: PID readings taken on all environmental samples. Results: 0.20m -0.40ppm; 0.50m -0.80ppm; 1.00m -1.40ppm; 1.50m -0.40ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
09/02/18	2.76	3.00	2.22

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
08/02/2018 17:00	5.45	5.00	2.29

WINDOWLESS SAMPLE LOG



Borehole No.

WS1006

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471608 N 174137	Hole Type WS
Location: Vastern Road, Reading, RG1 8BU	Level: 38.19mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 08/02/2018 End: 08/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAD)	Legend
		No/Type	Depth (m)	Result						
1		B	0.20 - 0.40				MADE GROUND: Dark grey ASPHALT.	0.20	37.99	
		D	0.30				MADE GROUND: Grey and reddish brown sandy angular fine to coarse GRAVEL of siliceous material.	(0.40)		
		ES	0.40 - 0.60							
		B	0.50							
		D	0.60 - 0.90				MADE GROUND: Brown and greyish brown sandy angular to sub-angular fine to coarse GRAVEL of siliceous material, brick and concrete with rare geotextile membrane fragments (<80mm).	0.60	37.59	
2		ES	1.00					(1.00)		
		SPT	1.20 - 1.65	S 3						
		D	1.90				Very soft bluish grey mottled brown slightly sandy CLAY. (ALLUVIUM)	1.60	36.59	
3		ES	2.00 - 2.45	S<1				(1.40)		
		SPT	2.40							
4		D	3.00 - 3.75				Medium dense brown and greyish brown sandy sub-angular to sub-rounded fine to medium GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.00	35.19	
		SPT	3.00 - 3.45	S 18				(0.75)		
5		SPT	4.00 - 4.45	S 41			Dense light brown sandy slightly silty sub-angular to sub-rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.75	34.44	
		B	4.40 - 5.00					(1.70)		
6		SPT	5.00 - 5.45	S 30						
							Borehole completed at 5.45m	5.45	32.74	

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Continuous disturbed sampling using 101mm sample barrel: 1.20-5.00m.

CASING: 113mm diameter to 5.00m.

GROUNDWATER: Encountered at 3.36m and rose to 2.94 after 20 minutes.

INSTALLATION: Borehole backfilled with washed gravel: 5.45-5.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 5.00-3.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 3.00-0.40m. Flush cover set in concrete: 0.40-0.10m and tarmacadam: 0.10-0.00m. Gas valve fitted.

REMARKS: PID readings taken on all environmental samples. Results: 0.30m -0.10ppm; 0.50m -0.30ppm; 1.00m -0.20ppm; 1.90m -0.10ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
07/02/18	3.36		2.94

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
07/02/2018 17:00	3.45	3.00	3.36
08/02/2018 08:00	3.45	3.00	2.28
08/02/2018 17:00	5.45	5.00	2.32

WINDOWLESS SAMPLE LOG



Borehole No.

WS1007

Sheet 1 of 1

Telephone: 01452 739165, Fax: 01452 739220, Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471593 N 174138	Hole Type WS
Location: Vastern Road, Reading, RG1 8BU	Level: 38.38mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 05/02/2018 End: 05/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
1		B	0.10 - 0.20				MADE GROUND: ASPHALT.	0.10	38.28	
		D	0.15				MADE GROUND: Brown sandy silty angular to sub-rounded fine to medium GRAVEL of siliceous material.	0.20	38.18	
		ES	0.20 - 0.50				MADE GROUND: Grey sandy slightly silty angular fine to coarse of GRAVEL of brick, concrete and siliceous material.	(0.30)		
		B	0.45				MADE GROUND: Brown sandy clayey GRAVEL of siliceous material and chalk.	0.50	37.88	
2		D	1.00 - 1.20					(1.20)		
		B	1.00							
		ES	1.20 - 1.65	S 1			Grey mottled orangish brown gravelly CLAY. (ALLUVIUM)	1.70	36.68	
		SPT						(0.60)		
3		D	2.00							
		ES	2.00 - 2.45	S 4			Orangish brown and grey sandy clayey GRAVEL. (KEMPTON PARK GRAVEL)	2.30	36.08	
		SPT						(1.00)		
							3.00m: Medium dense.			
4		D	3.00							
		SPT	3.00 - 3.45	S 11			Dense brown sandy GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	3.30	35.08	
		B	3.30 - 3.70							
5		B	4.00 - 5.00	S 30						
		SPT	4.00 - 4.45					(2.15)		
6		SPT	5.00 - 5.45	S 34						
							Borehole completed at 5.45m	5.45	32.93	

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Continuous disturbed sampling using 101mm sample barrel: 1.20-5.00m.

CASING: 113mm diameter to 5.00m.

GROUNDWATER: Encountered at 1.10m. No rise is recorded.

INSTALLATION: Borehole backfilled with washed gravel: 5.45-5.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 5.00-3.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 3.00-0.40m. Flush cover set in concrete: 0.40-0.10m and tarmacadam: 0.10-0.00m. Gas valve fitted.

REMARKS: PID readings taken on all environmental samples. Results: 0.15m -0.20ppm; 0.45m -0.40ppm; 1.00m -0.30ppm; 2.00m -0.10ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
05/02/18	1.10		

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
05/02/2018 17:00	5.45	5.00	2.48

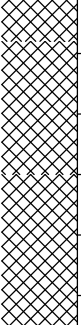
INSPECTION PIT LOG



Pit No
WS1008
Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471586 N 174141 Level: 38.42mAOD	Date 05/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: m Depth 0.55m E 		Scale 1 : 12.5
Client: SSE Plc			Logged By MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		C	0.00 - 0.10		MADE GROUND: Dark grey ASPHALT.			
		B	0.10 - 0.25		MADE GROUND: Light brown very sandy angular fine to coarse GRAVEL of siliceous material and brick.	0.08	38.34	
		D ES	0.20			(0.22)		
		B	0.30 - 0.50		MADE GROUND: Dark grey sandy silty (ashy) GRAVEL with low cobble content. Cobbles are angular of red brick.	0.30	38.12	
		D ES	0.45		0.50m: Concrete across base of pit.	(0.25)		
					Inspection pit completed at 0.55m	0.55	37.87	
2								

EQUIPMENT: Hand digging tools. Terrier 2002 track mounted rig.

METHOD: Borehole advanced using 300mm diameter coring barrel utilizing water flush: 0.00-0.10m. Hand dug inspection pit: 0.10-0.55m.

GROUNDWATER: None encountered.

BACKFILL: On completion, hole backfilled with bentonite pellets: 0.55-0.10 and the surface reinstated with Tarmacadam: 0.10-0.00.

REMARKS: Unable to advance hole through concrete. Position continued with rotary coring and renamed BH2001. See separate sheet. PID readings taken on all environmental samples. Results: 0.20m -0.10ppm; 0.45m -0.10ppm.

INSPECTION PIT LOG


 Pit No
WS1009

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471577 N 174143
 Level: 38.37mAOD
Date
 05/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: m

Scale
 1 : 12.5

Client: SSE Plc

Depth
 0.25m

E

Logged By
 MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		C	0.00 - 0.10		MADE GROUND: Dark grey ASPHALT.	(0.10)	38.27	
		B	0.10 - 0.25		MADE GROUND: Grey and brown very sandy silty angular fine to coarse GRAVEL of siliceous material and red brick.	0.10		
		D	0.20			(0.15)		
		ES			0.25m: Concrete across base of pit. Inspection pit completed at 0.25m	0.25	38.12	
2								

EQUIPMENT: Hand digging tools. Terrier 2002 track mounted rig.

METHOD: Borehole advanced using 300mm diameter coring barrel utilizing water flush: 0.00-0.10m. Hand dug inspection pit: 0.10-0.25m.

GROUNDWATER: None encountered.

BACKFILL: On completion, hole backfilled with bentonite pellets: 0.25-0.10 and the surface reinstated with Tarmacadam: 0.10-0.00.

REMARKS: Unable to advance hole through concrete. Position continued with rotary coring and renamed BH2002. See separate sheet. PID readings taken on all environmental samples. Results: 0.20m -0.20ppm.

INSPECTION PIT LOG


Pit No
WS1013

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471560 N 174180
Level: 38.54mAOD
Date
08/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: m

Scale
1 : 12.5

Client: SSE Plc

Depth
0.80m

E

Logged By
MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1					MADE GROUND: ASPHALT.	(0.10)		
		B	0.15 - 0.40		MADE GROUND: Grey angular COBBLES of concrete with some slightly sandy angular fine to coarse gravel of concrete and brick.	0.10	38.44	
		ES	0.20					
		B	0.40 - 0.70			(0.70)		
2		ES	0.60					
					Inspection pit completed at 0.80m	0.80	37.74	

EQUIPMENT: Hand tools. Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-0.80m.

GROUNDWATER: None encountered.

BACKFILL: On completion, hole backfilled with bentonite pellets: 0.80-0.10 and the surface reinstated with Tarmacadam: 0.10-0.00.

REMARKS: Unable to advance hole through concrete cobbles and boulders. PID readings taken on all environmental samples. Results: 0.20m -0.20ppm; 0.60m -0.30ppm.



INSPECTION PIT LOG

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading		Project No: C5925	Co-ords: E 471560 N 174180 Level: 38.54mAOD	Date 09/02/2018
Location: Vastern Road, Reading, RG1 8BU			Dimensions: m	Scale 1 : 12.5
Client: SSE Plc			Depth 0.55m	Logged By MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
					MADE GROUND: ASPHALT.	(0.10)		
					MADE GROUND: Grey angular COBBLES of concrete with some slightly sandy angular fine to coarse gravel of concrete and brick.	0.10	38.44	
						(0.45)		
					Inspection pit completed at 0.55m	0.55	37.99	

1

1

2

2

EQUIPMENT: Hand tools. Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-0.55m.

GROUNDWATER: None encountered.

BACKFILL: On completion, hole backfilled with bentonite pellets: 0.55-0.10 and the surface reinstated with Tarmacadam: 0.10-0.00.

REMARKS: Unable to advance hole through concrete cobbles and boulders.

INSPECTION PIT LOG


 Pit No
WS1017

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

 Project Name: SSE Site, Vastern Road,
 Reading

 Project No:
C5925

 Co-ords: E 471564 N 174107
 Level: 38.49mAOD

 Date
 07/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: m

 Scale
 1 : 12.5

Client: SSE Plc

 Depth
 0.50m

E

 Logged By
 MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		B	0.00 - 0.12		MADE GROUND: Light grey CONCRETE.	(0.12)	38.37	
		B	0.12 - 0.40		MADE GROUND: Grey sandy slightly silty angular fine to coarse GRAVEL of concrete and siliceous material with high cobble content. Cobbles are angular of concrete.	0.12		
		D ES	0.40			(0.38)		
					Inspection pit completed at 0.50m	0.50	37.99	
2								

EQUIPMENT: Hand tools. Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-0.50m.

GROUNDWATER: None encountered.

BACKFILL: On completion, hole backfilled with bentonite pellets: 0.50-0.10 and the surface reinstated with Tarmacadam: 0.10-0.00.

REMARKS: Unable to advance hole through concrete. Position continued with rotary coring and renamed BH2006. See separate sheet. PID readings taken on all environmental samples. Results: 0.20m -0.10ppm.

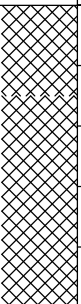
INSPECTION PIT LOG



Pit No
WS1018
Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471552 N 174113 Level: 38.65mAOD	Date 07/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: m Depth 0.50m E 		Scale 1 : 12.5
Client: SSE Plc			Logged By MM

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		B	0.07 - 0.20		MADE GROUND: Dark grey ASPHALT.	(0.15)		
		D ES B	0.15 0.20 - 0.45		MADE GROUND: Grey sandy slightly silty angular fine to coarse GRAVEL of concrete and siliceous material with high cobble content. Cobbles are angular of concrete.	0.15	38.50	
						(0.35)		
		D ES	0.40			0.50	38.15	
					Inspection pit completed at 0.50m			
2								

EQUIPMENT: Hand tools. Hydraulic breaker.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-0.50m.

GROUNDWATER: None encountered.

BACKFILL: On completion, hole backfilled with bentonite pellets: 0.50-0.10 and the surface reinstated with Tarmacadam: 0.10-0.00.

REMARKS: Unable to advance hole through concrete. Position continued with rotary coring and renamed BH2005. See separate sheet. PID readings taken on all environmental samples. Results: 0.15m -0.20ppm; 0.40m -0.10ppm.

WINDOWLESS SAMPLE LOG



Borehole No.

WS1019

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471552 N 174069	Hole Type WS
Location: Vastern Road, Reading, RG1 8BU	Level: 38.32mAOD	Scale 1 : 37.50	
Client: SSE Plc	Dates: Start: 07/02/2018 End: 07/02/2018	Logged By MM	

(m)	Water Levels	Samples & In Situ Testing			Sample	Install	Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result						
1		B	0.10 - 0.25				MADE GROUND: Dark grey ASPHALT.	0.10	38.22	
		ES	0.20				MADE GROUND: Grey and reddish brown sandy slightly silty angular fine to coarse GRAVEL of siliceous material.	0.25	38.07	
		B	0.25 - 0.50				MADE GROUND: Brown and greyish brown very sandy slightly clayey angular to sub-angular fine to coarse GRAVEL of siliceous material, brick and concrete with low cobble content. Cobbles are angular brick.	(0.75)		
		ES	0.50							
2		B	1.00 - 1.20				MADE GROUND: Very soft brown gravelly sandy CLAY. Gravel is angular to sub-angular fine to coarse of siliceous material, brick and concrete.	1.00	37.32	1
		D	1.10					(0.70)		
		ES	1.20 - 1.65	S<1						
		SPT								
3		D	1.80				Very soft firm greenish grey slightly gravelly slightly sandy CLAY. Gravel is sub-angular fine to medium of siliceous material. (ALLUVIUM)	1.70	36.62	2
		ES						(0.78)		
		SPT	2.00 - 2.45	S<1						
4		D	2.40				Medium dense light brown very sandy slightly silty sub-angular to rounded fine to coarse GRAVEL of siliceous material. (KEMPTON PARK GRAVEL)	2.48	35.84	3
		SPT	3.00 - 3.45	S 11						
5		D	4.00					(2.97)		4
		SPT	4.00 - 4.45	S 15						
6		SPT	5.00 - 5.45	S 25						5
							Borehole completed at 5.45m	5.45	32.87	6

EQUIPMENT: Hand tools. Hydraulic breaker. Terrier 2002 track mounted rig.

METHOD: Hard standing broken out using hydraulic breaker with a range of chisels and continued with hand dug inspection pit: 0.00-1.20m. Continuous disturbed sampling using 101mm sample barrel: 1.20-5.00m.

CASING: 113mm diameter to 5.00m.

GROUNDWATER: Encountered at 2.48m and rose to and leveling out at 2.36m after 15 minutes.

INSTALLATION: Borehole backfilled with washed gravel: 5.45-5.00m. 50mm ID HDPE slotted pipe with washed gravel response zone: 5.00-3.00m. 50mm ID HDPE plain pipe with bentonite pellet seal: 2.00-0.40m. Flush cover set in concrete: 0.40-0.10m and tarmacadam: 0.10-0.00m. Gas valve fitted.

REMARKS: PID readings taken on all environmental samples. Results: 0.20m -0.20ppm; 0.50m -0.30ppm; 1.10m -0.10ppm; 1.80m - 0.10ppm.

Groundwater:

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
07/02/18	2.48	3.00	2.36

Hole Progress:

Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
07/02/2018 17:00	5.45	5.00	2.44

TRIAL PIT LOG



Pit No
TP1001
Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471567 N 174208 Level: 38.13mAOD	Date 07/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: 3.10m Depth 1.20m 0.60m		Scale 1 : 37.5
Client: SSE Plc			Logged By TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		B D ES B ES	0.20		MADE GROUND: Dark brown slightly gravelly sandy silty CLAY with frequent roots and rootlets (<20mm) and rare fragments (<60mm) of pottery. Gravel is angular to sub-angular fine to coarse of siliceous material, concrete and red brick.	(0.40)	37.73	
			0.50		MADE GROUND: Dark greyish brown, grey and reddish brown COBBLES of concrete, red brick and slag with low boulder content and much very gravelly slightly clayey sand. Gravel is angular to sub-angular fine to coarse of mixed lithologies including red brick, concrete and siliceous material. Boulders are angular of concrete and intact red brick masonry (<400mm).	0.40 (0.40)		
		B D ES	1.00		MADE GROUND: Firm light brown mottled greyish brown slightly gravelly slightly sandy CLAY with rare roots and rootlets (<5mm). Gravel is angular to sub-rounded fine to coarse of red brick, concrete and siliceous material.	0.80 (0.40)		
					0.80m: Light grey concrete slab with red brick masonry across large are of pit. 1.20m: 1no. black cable (Intact) approximately 50mm diameter orientated approximately Southwest - Northeast. 1.20m: Dry. Trial pit completed at 1.20m	1.20		
2								
3								
4								
5								
6								

EQUIPMENT: JCB 3CX Mechanical Excavator.

METHOD: Trial pit excavated using 0.60m wide backactor bucket.

GROUNDWATER: None encountered.

STABILITY: Trial pit generally stable and vertical throughout.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: PID readings taken on all environmental samples. Results: 0.20m -1.90ppm; 1.50m -2.00ppm; 1.00m - 2.60ppm. Trial pit terminated at 1.20m due to buried service at 1.20m.

TRIAL PIT LOG



Pit No
TP1002
Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471604 N 174164 Level: 38.36mAOD	Date 07/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: 3.70m Depth 4.00m		Scale 1 : 37.5
Client: SSE Plc			Logged By TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		B ES	0.30		MADE GROUND: Dark grey ASPHALT.	0.05	38.31	
					MADE GROUND: CONCRETE.	0.15	38.21	
					MADE GROUND: Brown very sandy very silty angular to sub-angular fine to coarse GRAVEL of red brick, concrete and siliceous material with medium cobble content and rare fragments (<50mm) of metal. Cobbles are angular to sub-angular of red brick and concrete.	0.35	38.01	
		B ES	0.80		MADE GROUND: CONCRETE.	0.50	37.86	
					MADE GROUND: Brown, grey and reddish brown COBBLES of red brick and concrete with much very sandy very silty angular to rounded fine to coarse gravel of red brick, siliceous material and concrete.	(0.60)		
					0.50-1.10m: Intact red brick masonry in Northern pit wall.	1.10	37.26	
2		B ES	1.40		MADE GROUND: Brown very sandy very clayey angular to sub-rounded fine to coarse GRAVEL of siliceous material, red brick and chalk.	(0.50)		
					1.40-1.60m: Tending to slightly sandy gravelly clay.	1.60	36.76	
		B D ES	1.70		Very soft dark green slightly sandy silty CLAY with moderate organic odour and rare comminuted shell fragments (<5mm). (ALLUVIUM)	(0.80)		
						2.40	35.96	
3		B D	2.50		Very soft bluish green mottled light grey silty calcareous CLAY with rare partially decomposed organic material (<5mm), occasional comminuted shell fragments (<5mm) and a moderate organic odour. (ALLUVIUM)	(1.60)		
4		D	3.90		3.90-4.00m: 1no. lens of light grey and off white very clayey sand with frequent comminuted shell fragments (<5mm).	4.00	34.36	
					4.00m: Slow groundwater seepage. Trial pit completed at 4.00m			
5								
6								

EQUIPMENT: JCB 3CX Mechanical Excavator.

METHOD: Trial pit excavated using 0.60m wide backactor bucket.

GROUNDWATER: Slow groundwater seepage encountered at 4.00m.

STABILITY: Trial pit generally stable and vertical throughout.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: PID readings taken on all environmental samples. Results: 0.30m -2.50ppm; 0.80m -3.40ppm; 1.40m - 4.10ppm; 1.70m -3.50ppm. Surface reinstated on 13/02/2018.

TRIAL PIT LOG


Pit No
TP1003

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471596 N 174149
Level: 38.35mAOD
Date
07/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: 3.60m

Depth
0.35m

1.80m

Scale
1 : 37.5

Client: SSE Plc

Logged By
TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		B ES	0.30		MADE GROUND: Dark grey ASPHALT.	0.05	38.30	
					MADE GROUND: CONCRETE.	0.10	38.25	
					MADE GROUND: Reddish brown very sandy silty angular to sub-rounded fine to coarse GRAVEL of mixed lithologies including concrete, red brick and siliceous material with high cobble content. Cobbles are angular to sub-angular of red brick and concrete.	0.35	38.00	
					0.30m: Historic concrete foundations with rolled steel joists (~200mm). 0.30-0.35m: Attempt to break through concrete obstruction. Concrete extending below extent of JCB pecker. 0.35m: 1no steel plate (exposed 1.40mx0.80m) - Possible earthing plate. 0.35m: Dry. Trial pit completed at 0.35m			
2								
3								
4								
5								
6								

EQUIPMENT: JCB 3CX Mechanical Excavator.

METHOD: Trial pit excavated using 0.60m wide backactor bucket.

GROUNDWATER: None encountered.

STABILITY: Trial pit generally stable and vertical throughout.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: PID readings taken on all environmental samples. Results: 0.20m -1.80ppm. Trial pit terminated at 0.35m due to historic reinforced concrete foundations.

Surface reinstated on 13/02/2018.

TRIAL PIT LOG



Pit No
TP1004
Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471580 N 174166 Level: 38.29mAOD	Date 07/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: 3.60m Depth 4.20m		Scale 1 : 37.5
Client: SSE Plc			Logged By TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1		B ES	0.40		MADE GROUND: Dark grey ASPHALT.	0.05	38.24	
			0.60		MADE GROUND: CONCRETE.	(0.30)		
		B ES	0.40		MADE GROUND: Brown very sandy slightly clayey angular to sub-angular fine to coarse GRAVEL of red brick, concrete and siliceous material with a medium cobble content. Cobbles are angular of red brick.	0.35	37.94	
			0.60		MADE GROUND: Off white and brown sandy very clayey angular to sub-rounded fine to coarse GRAVEL of chalk, red brick and siliceous material.	0.50	37.79	
		B D ES	1.00		MADE GROUND: Very soft dark green and bluish grey slightly gravelly slightly sandy silty calcareous CLAY with a slight organic odour. Gravel is angular to sub-angular fine to coarse of red brick.	0.75	37.54	
			1.00			(0.55)		
		B D ES	1.50		Very soft dark green and dark brownish grey silty calcareous CLAY with rare shell fragments (<5mm) and a strong organic odour. (ALLUVIUM)	1.30	36.99	
			1.50			(0.70)		
		B D	2.50		Very soft bluish green mottled light grey silty calcareous CLAY with a strong organic odour and rare partially decomposed organic material (<5mm). (ALLUVIUM)	2.00	36.29	
			2.50			(1.10)		
3		B D	3.50		Very soft greenish grey mottled greenish brown and light grey slightly sandy silty calcareous CLAY with occasional comminuted shell fragments (<5mm). (ALLUVIUM)	3.10	35.19	
			3.50			(1.10)		
4					Trial pit completed at 4.20m	4.20	34.09	
5								
6								

EQUIPMENT: JCB 3CX Mechanical Excavator.

METHOD: Trial pit excavated using 0.60m wide backactor bucket.

GROUNDWATER: Groundwater encountered at 3.90m rising to 3.40m after a 10 minute monitoring period.

STABILITY: Trial pit generally stable and vertical throughout.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: PID readings taken on all environmental samples. Results: 0.40m -0.70ppm; 0.60m -1.30ppm; 1.00m - 1.50ppm; 1.50m - 4.20ppm. Surface reinstated on 13/02/2018.

TRIAL PIT LOG



Pit No
TP1005
Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471567 N 174159 Level: 38.41mAOD	Date 07/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: 2.60m Depth 1.10m		Scale 1 : 37.5
Client: SSE Plc			Logged By TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1					MADE GROUND: Dark grey ASPHALT.	0.05	38.36	
					MADE GROUND: CONCRETE.	0.15	38.26	
		B ES	0.30		MADE GROUND: Brown and reddish brown COBBLES of angular red brick and concrete with much very sandy very silty angular to sub-angular fine to coarse gravel of red brick, concrete, slag and siliceous material.	(0.95)		
		B ES	0.70		0.80m: 1no. broken black metal pipe (~80mm diameter) orientated approximately East to West.	1.10	37.31	
					Trial pit completed at 1.10m			
2								
3								
4								
5								
6								

EQUIPMENT: JCB 3CX Mechanical Excavator.

METHOD: Trial pit excavated using 0.60m wide backactor bucket.

GROUNDWATER: None encountered.

STABILITY: Trial pit generally stable and vertical throughout.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: PID readings taken on all environmental samples. Results: 0.30m -0.40ppm; 0.70m -2.00ppm. Trial pit terminated at 1.10m due to buried service at 1.20m. Trial pit terminated at 0.35m due to historic reinforced concrete foundations. Surface reinstated on 13/02/2018.

TRIAL PIT LOG



Pit No
TP1006
Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471565 N 174172 Level: 38.44mAOD	Date 07/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: 3.60m Depth 2.40m		Scale 1 : 37.5
Client: SSE Plc			Logged By TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
					MADE GROUND: Dark grey ASPHALT.	0.05	38.39	
					MADE GROUND: CONCRETE.	0.15	38.29	
		B ES	0.30		MADE GROUND: Brown very sandy slightly clayey angular to sub-angular fine to coarse GRAVEL of red brick, concrete and siliceous material with a medium cobble content. Cobbles are angular of red brick.	(0.30)		
		B ES	0.50			0.45	37.99	
		B ES	0.70		MADE GROUND: Light brown very sandy silty angular to sub-rounded fine to coarse GRAVEL of siliceous material, red and yellow brick.	0.60	37.84	
1					MADE GROUND: Off white and light brown slightly sandy very silty angular to sub-rounded fine to coarse GRAVEL of chalk and siliceous material with high cobble content. Cobbles are sub-angular to sub-rounded of chalk and siliceous material.	(1.30)		
		B ES	1.50		0.90-1.10m: Light brown and reddish brown very sandy clayey angular to sub-angular gravel of siliceous material, red brick and concrete with a high cobble content. Cobbles are angular to sub-angular of red brick.			
					1.10-1.90m: Low cobble content.			
2	1				Very soft dark green and dark grey CLAY with strong organic odour. (ALLUVIUM)	1.90	36.54	
		B D ES	2.20			(0.50)		
					Trial pit completed at 2.40m	2.40	36.04	
3								
4								
5								
6								

EQUIPMENT: JCB 3CX Mechanical Excavator.

METHOD: Trial pit excavated using 0.60m wide backactor bucket.

GROUNDWATER: Groundwater encountered at 2.40m rising to 2.30m after a ten minute monitoring period. Slow groundwater seepage encountered at 1.90m.

STABILITY: Trial pit collapsing from 1.10-1.90m.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: PID readings taken on all environmental samples. Results: 0.30m - 1.20ppm; 0.50m - 1.20ppm; 0.70m - 1.40ppm; 1.50m - 0.70ppm; 2.20m - 1.70ppm. Trial pit terminated at 2.40m due to undermining of surface hardstanding. Surface reinstated on 13/02/2018.

TRIAL PIT LOG



Pit No
TP1007
Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road, Reading	Project No: C5925	Co-ords: E 471545 N 174170 Level: 38.70mAOD	Date 07/02/2018
Location: Vastern Road, Reading, RG1 8BU	Dimensions: 2.80m Depth 0.70m		Scale 1 : 37.5
Client: SSE Plc			Logged By TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1					MADE GROUND: Dark grey ASPHALT.	0.05	38.65	
					MADE GROUND: CONCRETE.	0.10	38.60	
		B ES	0.20		MADE GROUND: Brown very sandy very silty angular to sub-angular fine to coarse GRAVEL of red brick, concrete and siliceous material with medium cobble content and rare fragments (<50mm) of metal. Cobbles are angular to sub-angular of red brick and concrete.	(0.40)		
		B ES	0.50		0.30m: Historic concrete foundations.	0.50	38.20	
2					MADE GROUND: Firm light brown slightly gravelly sandy silty CLAY with a moderate hydrocarbon odour. Gravel is angular to sub-angular fine to coarse of red brick, siliceous material, chalk and concrete.	0.70	38.00	
					Trial pit completed at 0.70m			
3								
4								
5								
6								

EQUIPMENT: JCB 3CX Mechanical Excavator.

METHOD: Trial pits excavated using 0.60m backactor bucket.

GROUNDWATER: None encountered.

STABILITY: Trial pit generally stable and vertical throughout.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: PID readings taken on all environmental samples. Results: 0.20m -3.20ppm; 0.70m -5.20ppm. Trial pit terminated at 0.70m due to historic reinforced concrete foundations. Surface reinstated on 13/02/2018.

TRIAL PIT LOG


 Pit No
TP1008

Sheet 1 of 1

Telephone: 01452 739165 , Fax: 01452 739220 , Email: info@ccground.co.uk

Project Name: SSE Site, Vastern Road,
ReadingProject No:
C5925
Co-ords: E 471546 N 174157
 Level: 38.69mAOD
Date
 07/02/2018

Location: Vastern Road, Reading, RG1 8BU

Dimensions: 3.10m

Depth
 1.70m

1.50m

Scale
 1 : 37.5

Client: SSE Plc

Logged By
 TH

(m)	Water Levels	Samples & In Situ Testing			Description	Depth (m)	Level (mAOD)	Legend
		No/Type	Depth (m)	Result				
1					MADE GROUND: Dark grey ASPHALT.	0.05	38.64	
					MADE GROUND: CONCRETE.	(0.30)		
		B ES	0.40		MADE GROUND: Gray and light brown and reddish brown very sandy silty angular to sub-angular fine to coarse GRAVEL of mixed lithologies including concrete, red brick and siliceous material with high cobble content. Cobbles are angular to sub-angular of concrete and red brick.	0.35 (0.35)	38.34	
		B ES	0.80		MADE GROUND: Firm light brown slightly gravelly sandy silty CLAY. Gravel is angular to sub-angular fine to coarse of chalk, siliceous material, red brick and clinker.	0.70	37.99	
2		B D ES	1.50		0.75-1.10m: 1no. pocket of dark grey and grey ash. 1.00-1.70m: With pockets (<0.5m) of off white slightly sandy very silty angular to sub-angular fine to coarse gravel of chalk and siliceous material.	(1.00)		
					1.70m: Dry. Trial pit completed at 1.70m	1.70	36.99	
3								
4								
5								
6								

EQUIPMENT: JCB 3CX Mechanical Excavator.

METHOD: Trial pit excavated using 0.60m wide backactor bucket.

GROUNDWATER: None encountered.

STABILITY: Trial pit generally unstable and collapse from 1.20-1.70m.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: PID readings taken on all environmental samples. Results: 0.40m -1.70ppm; 0.80m -0.60ppm; 1.50m - 1.40ppm. Trial pit terminated at 1.20m due to buried service at 1.20m. Trial pit terminated at 1.70m due to undermining surface hardstanding. Surface reinstated on 13/02/2018.



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Fareham
PO15 5TH

Borehole Log

Borehole No.

WS101

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 16/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
				PID=4	0.40			MADE GROUND Concrete.	
		0.40 - 0.45	ES		0.45			MADE GROUND Soft dark grey slightly silty CLAY. Black staining present.	
		0.45 - 0.80	ES	PID=4				MADE GROUND Dark grey SAND AND GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse concrete, brick and asphalt.	
		0.80 - 1.00	ES	PID=4	0.80			MADE GROUND Dark grey/black slightly silty slightly gravelly fine to coarse SAND. Gravel of subangular to subrounded fine to coarse brick and concrete.	
		1.00 - 1.30	ES	PID=10					
		1.30 - 1.50	ES	PID=9	1.30			MADE GROUND Soft brown slightly sandy slightly gravelly CLAY. Sand is medium to coarse. Gravel is subangular to subrounded fine to coarse chalk, asphalt and clinker.	
		1.50 - 1.70	ES	PID=8	1.50			CLAY Soft brown slightly gravelly CLAY. Gravel is subangular to subrounded fine shell fragments.	
		1.70 - 1.80	ES	PID=6	1.70			CLAY Firm green with black speckling slightly gravelly slightly silty CLAY. Gravel is subangular to subrounded fine to medium chalk, flint and organic matter.	
					1.80			End of borehole at 1.80 m	

Remarks

Cleared by Cable Avoidance Tool (CAT).
No groundwater encountered.





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Borehole Log

Borehole No.

WS102

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 16/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								MADE GROUND Concrete.	
		0.40 - 0.60	ES	PID=4	0.38				
		0.60 - 0.90	ES	PID=4	0.60			MADE GROUND Black gravely medium to coarse SAND. Gravel of subangular to subrounded fine to coarse concrete, clinker, asphalt and PACM.	
		0.95 - 1.50	ES	PID=7	0.95			MADE GROUND Multicoloured gravely medium to coarse SAND. Gravel of subangular to subrounded fine to medium clinker, concrete and brick.	1
		1.50 - 2.00	ES	PID=9				MADE GROUND Light grey SAND AND GRAVEL. Sand is medium to coarse. Gravel is angular to subrounded fine to coarse brick concrete and clinker.	
		2.00 - 2.40	ES	PID=10	2.00			CLAY Soft green slightly gravely slightly silty CLAY. Gravel of subangular to subrounded fine chalk and shell fragments.	2
					2.40			End of borehole at 2.40 m	
									3
									4
									5

Remarks

Cleared by Cable Avoidance Tool (CAT).
No groundwater encountered.





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Borehole Log

Borehole No.

WS103

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 16/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								MADE GROUND Concrete.	
		0.40 - 0.70	ES	PID=5	0.40			MADE GROUND Grey and SAND AND GRAVEL. Sand is fine to coarse with frequent cobble content of brick, ceramic, clinker asphalt, chalk and concrete.	1
		1.20 - 1.40	ES	PID=4					
		1.60 - 1.70	ES	PID=6	1.60			MADE GROUND Soft brown slightly gravelly CLAY. Gravel of subangular to subrounded fine to coarse brick, chalk, clinker and flint.	
		1.70 - 2.00	ES	PID=3	1.80			CLAY Soft brown slightly gravelly CLAY . Gravel of subangular to subrounded fine chalk.	2
					2.00			CLAY Soft green slightly gravelly CLAY. Gravel of subangular to subrounded flint, chalk and shell fragments.	
								End of borehole at 2.00 m	
									3
									4
									5

Remarks

Cleared by Cable Avoidance Tool (CAT).
No groundwater encountered.





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Borehole Log

Borehole No.

WS104

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 17/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30 - 0.70	ES	PID=3	0.30			MADE GROUND Concrete.	1
		0.70 - 1.55	ES		0.70			MADE GROUND Grey sandy GRAVEL. Sand is medium to coarse. Gravel of subangular to subrounded fine to medium concrete and brick.	
		1.55 - 1.75	ES	PID=13	1.55			MADE GROUND Soft brown gravelly CLAY. Gravel subangular to subrounded fine to coarse with frequent cobble of brick, concrete, slate, clinker and flint.	
		1.75 - 2.00	ES	PID=2307	1.75			MADE GROUND Firm black slightly gravelly CLAY. Gravel of subangular to subrounded fine to coarse flint, brick and concrete.	2
		2.00 - 2.40	ES	PID=368				CLAY Firm greyish green with black staining present slightly gravelly CLAY. Gravel subangular to subrounded fine, chalk and shell fragments.	
					2.40			End of borehole at 2.40 m	3
									4
									5

Remarks

Cleared by Cable Avoidance Tool (CAT).
No groundwater encountered.





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Borehole Log

Borehole No.

WS105

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 17/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								MADE GROUND Concrete.	
		0.60 - 0.90	ES	PID=4	0.60			MADE GROUND Soft brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel of subangular to subrounded fine to coarse with frequent cobble content brick, clinker and flint.	1
		0.90 - 1.30	ES	PID=4					
		1.60 - 1.70	ES	PID=8	1.70			MADE GROUND Soft dark brown/black slightly gravelly CLAY. Gravel of subangular to subrounded fine to medium brick, clinker and flint.	2
		1.70 - 1.80	ES		1.85			CLAY Soft greyish green slightly gravelly CLAY. Gravel of subangular to subrounded fine shell fragments chalk and organic matter.	
		2.00 - 2.30	ES	PID=3	2.30			End of borehole at 2.20 m	5

Remarks

Cleared by Cable Avoidance Tool (CAT).
Groundwater encountered as strike at 2.2m bgl.





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Borehole Log

Borehole No.

WS106

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 18/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								MADE GROUND Concrete.	
		0.40 - 0.70	ES		0.40			MADE GROUND Red slightly sandy GRAVEL. Sand is medium to coarse. Gravel of subangular to subrounded fine to coarse with frequent cobble content of brick.	
					0.70			End of borehole at 0.70 m	
									1
									2
									3
									4
									5

Remarks

Cleared by Cable Avoidance Tool (CAT).
No groundwater encountered.
Hole terminated due to obstruction at 0.70m bgl.





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Borehole Log

Borehole No.

WS107

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 18/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.40	ES	PID=0				MADE GROUND Brown slightly silty gravelly fine to coarse SAND. Gravel of subangular to subrounded fine to coarse with frequent cobble content of brick and concrete.	1
		0.50 - 1.00	ES	PID=0					
		1.00 - 1.50	ES	PID=1					
					1.50			POOR RECOVERY BETWEEN 1.50- 2.20M BGL.	2
					2.20				
								End of borehole at 2.20 m	3
									4
									5

Remarks

Cleared by Cable Avoidance Tool (CAT)
No groundwater encountered.
Hole terminated due to obstruction at 2.20m bgl.





Omnia Environmental Consulting
10 Manor Court
2 Barnes Wallis Road
Fareham
PO15 5TH

Borehole Log

Borehole No.

WS108

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 18/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.30	ES	PID=0	0.05			MADE GROUND Asphalt cover.	1
		0.50 - 0.70	ES	PID=0				MADE GROUND Brown slightly clayey gravelly fine to coarse SAND. Gravel of subangular to subrounded fine to coarse brick, concrete and flint.	
		0.90 - 1.20	ES	PID=0					
		1.20 - 1.50	ES	PID=3					
		1.50 - 1.70	ES	PID=6	1.50			CLAY Firm greyish green slightly silty slightly gravelly CLAY. Gravel of subangular to subrounded fine flint and orangic material.	2
		1.80 - 2.00	ES	PID=0					
		2.00 - 2.50	ES						
					2.50			End of borehole at 2.50 m	3
									4
									5

Remarks

Cleared by Cable Avoidance Tool (CAT).
No groundwater encountered





Omnia Environmental Consulting
10 Manor Court
2 Barnes Wallis Road
Fareham
PO15 5TH

Borehole Log

Borehole No.

WS109

Sheet 1 of 1

Project Name: 55 Vastern Road, Reading

Project No.
A10967

Co-ords: -

Hole Type
WS

Location: SSE Contracting Ltd, 55 Vastern Road, Reading,
Berkshire, RG1 8BU

Level:

Scale
1:25

Client: Berkely (Western) Homes

Dates: 18/04/2018 -

Logged By
K.D

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.30	ES	PID=6	0.05			MADE GROUND Asphalt cover.	
		0.30 - 0.60	ES	PID=2				MADE GROUND	
								Brown slightly silty gravelly fine to coarse SAND.	
		0.60 - 0.90	ES	PID=0				Gravel of subangular to subrounded fine to coarse with frequent cobble content of brick, asphalt and concrete.	
					1.00			End of borehole at 1.00 m	1
									2
									3
									4
									5

Remarks

Cleared by Cable Avoidance Tool (CAT).
No groundwater encountered.
Hole terminated due to obstruction at 1.00m bgl.



Attachment 3

Ground Gas Results (Terramech Investigations Ltd)

PAGE:	4200	GAS MONITORING
DATE: 01/11/2019	VASTERN ROAD, READING	

Monitoring Date: 01/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.2
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): 0.0
Weather/Wind: Light Rain **Weather Trend:** Unsettled **Atm. Press. Trend** Falling
Remarks: BH1002C: Bung moved at the end of test allowing air to move in **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH1001	995	0.05	Initial:	15	0	4.9	12.9	1	1	0.2	2.23
				30	0	5	8.5	1	1	0.3	
			0.1	45	0	5	8.3	1	1	0.3	
				60	0	5	8.2	1	1	0.3	
			Peak:	75	0	5	8.2	1	1	0.3	
				90	0	5	8.2	1	1	0.3	
			-4.5	105	0	5	8.1	1	1	0.3	
				120	0	5.1	8.1	1	1	0.3	
			Average:	135	0	5.1	8	1	1	0.3	
				150	0	5.1	8	1	1	0.3	
			-1.3	165	0	5.1	8.2	1	1	0.3	
				180	0	5	8.5	1	1	0.2	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH1002C	996	-0.17	Initial:	15	0	0.1	21.5	1	1	0.1	2.32 - Light Hydro-carbon Odour
				30	0	1.6	18.8	1	1	0.1	
			-1.9	45	0	1.8	17	1	1	0.1	
				60	0	2	16.4	1	1	0.1	
			Peak:	75	0	2.3	15.9	1	1	0.1	
				90	0	2.4	15.5	1	1	0.1	
			-1.9	105	0	2.6	15.1	1	1	0.0	
				120	0	2.7	14.9	1	1	0.1	
			Average:	135	0	2.7	14.8	1	1	0.1	
				150	0	2.4	15.4	1	1	0.0	
			-1.7	165	0	1.6	17.7	1	1	0.0	
				180	0	0.4	20.3	1	1	0.0	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH1003E	994	0.03	Initial:	15	0	0.9	20.2	1	1	0.3	2.44
				30	0	1	19.5	0	1	0.3	
			0.1	45	0	1	19.4	0	1	0.3	
				60	0	1	19.4	0	1	0.3	
			Peak:	75	0	1	19.4	0	1	0.3	
				90	0	1	19.4	0	1	0.3	
			0.1	105	0	1	19.4	0	1	0.3	
				120	0	1	19.4	0	1	0.3	
			Average:	135	0	1	19.4	0	1	0.3	
				150	0	1	19.4	0	1	0.3	
			0.1	165	0	1	19.4	0	1	0.2	
				180	0	1	19.4	0	1	0.2	

PAGE:	4200	GAS MONITORING
DATE: 01/11/2019	VASTERN ROAD, READING	

Monitoring Date: 01/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.2
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): 0.0
Weather/Wind: Light Rain **Weather Trend:** Unsettled **Atm. Press. Trend** Falling
Remarks: BH1002C: Bung moved at the end of test allowing air to move in **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH1004	994	-1.15	Initial:	15	0.1	6.3	9.8	8	1	0.7	2.08
				30	0.1	6.4	0.6	2	1	0.7	
			0.1	45	0.1	6.5	0.3	2	1	0.7	
				60	0.1	6.5	0.3	1	1	0.8	
			Peak:	75	0.1	6.5	0.2	1	1	0.8	
				90	0.1	6.5	0.2	1	1	0.8	
			-21.6	105	0.1	6.5	0.2	1	1	0.8	
				120	0.1	6.5	0.2	1	1	0.8	
			Average:	135	0.1	6.5	0.2	1	1	0.8	
				150	0.1	6.5	0.2	1	1	0.8	
			-9.9	165	0.1	6.5	0.1	1	1	0.8	
				180	0.1	6.5	0.1	1	1	0.8	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH1005	997	0.05	Initial:	15	0	0.6	20.3	1	1	2.5	2.49
				30	0	0.6	20	0	1	2.5	
			-16.0	45	0	0.6	20.1	0	1	2.4	
				60	0	0.6	20.1	0	1	2.3	
			Peak:	75	0	0.6	20.2	0	1	2.2	
				90	0	0.5	20.2	0	1	2.2	
			-16.0	105	0	0.5	20.2	0	1	2.1	
				120	0	0.5	20.3	0	1	2.0	
			Average:	135	0	0.5	20.3	0	1	2.0	
				150	0	0.5	20.3	0	1	1.9	
			-5.9	165	0	0.5	20.4	0	1	1.8	
				180	0	0.4	20.4	0	1	1.8	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH2001	996	-0.53	Initial:	15	0.1	6.3	9.8	8	1	1.3	2.32
				30	0.1	6.4	0.6	2	1	1.2	
			-5.2	45	0.1	6.5	0.3	2	1	1.1	
				60	0.1	6.5	0.3	1	1	1.0	
			Peak:	75	0.1	6.5	0.2	1	1	0.9	
				90	0.1	6.5	0.2	1	1	0.9	
			-2.7	105	0.1	6.5	0.2	1	1	0.8	
				120	0.1	6.5	0.2	1	1	0.7	
			Average:	135	0.1	6.5	0.2	1	1	0.7	
				150	0.1	6.5	0.2	1	1	0.7	
			-2.8	165	0.1	6.5	0.1	1	1	0.6	
				180	0.1	6.5	0.1	1	1	0.5	

PAGE:	4200	GAS MONITORING
DATE: 01/11/2019	VASTERN ROAD, READING	

Monitoring Date: 01/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.2
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): 0.0
Weather/Wind: Light Rain **Weather Trend:** Unsettled **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH2002	996	-0.17	Initial:	15	0	0.1	21	1	1	0.1	2.28
				30	0	0.1	21.1	1	1	0.1	
			0.1	45	0	0.1	21.1	1	1	0.1	
				60	0	0.1	21.1	1	1	0.1	
			Peak:	75	0	0.1	21.1	1	1	0.1	
				90	0	0.1	21.1	1	1	0.1	
			0.1	105	0	0.1	21.1	1	1	0.1	
				120	0	0.1	21.2	1	1	0.1	
			Average:	135	0	0.1	21.2	1	1	0.1	
				150	0	0.1	21.2	1	1	0.0	
			0.1	165	0	0.1	21.2	1	1	0.0	
				180	0	0.1	21.2	1	1	0.0	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH2003	996	-2.62	Initial:	15	0	1.4	19.3	4	1	2.5	2.44
				30	0	1.4	17.9	6	1	2.6	
			-22.1	45	0	1.4	17.8	6	1	2.7	
				60	0	1.4	17.8	6	1	2.7	
			Peak:	75	0	1.4	17.8	6	1	2.7	
				90	0	1.4	17.8	6	1	2.6	
			-22.1	105	0	1.4	17.8	6	1	2.6	
				120	0	1.4	17.8	6	1	2.6	
			Average:	135	0	1.4	17.8	6	1	2.6	
				150	0	1.4	17.8	6	1	2.6	
			-20.2	165	0	1.4	17.8	6	1	2.6	
				180	0	1.4	17.8	6	1	2.6	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH2004	996	-0.29	Initial:	15	0	0.1	20.2	1	1	0.4	2.40
				30	0	0.1	20.1	1	1	0.5	
			0.1	45	0	0.1	20.3	1	1	0.4	
				60	0	0.1	20.5	1	1	0.3	
			Peak:	75	0	0.1	20.6	0	1	0.2	
				90	0	0.1	20.7	0	1	0.2	
			0.3	105	0	0.1	20.7	0	1	0.2	
				120	0	0.1	20.7	0	1	0.2	
			Average:	135	0	0.1	20.8	1	1	0.2	
				150	0	0.1	20.8	1	1	0.2	
			0.2	165	0	0.1	20.8	1	1	0.2	
				180	0	0.1	20.8	1	1	0.2	

PAGE:	4200	GAS MONITORING
DATE: 01/11/2019	VASTERN ROAD, READING	

Monitoring Date: 01/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.2
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): 0.0
Weather/Wind: Light Rain **Weather Trend:** Unsettled **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
BH2005	997	-1.34	Initial:	15	0	10.3	12.7	2	1	0.2	2.44 - Strong hydro-carbon odour & sheen on dipmeter
				30	0	10.4	9.4	2	1	0.2	
			0.1	45	0	10.4	9.3	1	1	0.1	
				60	0	10.5	9.2	1	1	0.1	
			Peak:	75	0	10.5	9.2	1	1	0.1	
				90	0	10.6	9.2	1	1	0.1	
			0.1	105	0	10.7	9.2	1	1	0.0	
				120	0	10.9	8.9	1	1	0.0	
			Average:	135	0	11.1	8.7	1	1	0.0	
				150	0	11.2	8.5	0	1	0.0	
			0.1	165	0	11.2	8.4	0	1	0.0	
				180	0	11.2	8.3	1	1	0.0	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
WS1003	995	-0.43	Initial:	15	0	0.9	20.3	1	1	0.3	2.06
				30	0	0.5	21	1	1	0.1	
			0.0	45	0	0.4	21.1	1	1	0.1	
				60	0	0.3	21.1	1	1	0.1	
			Peak:	75	0	0.2	21.2	1	1	0.1	
				90	0	0.2	21.2	1	1	0.1	
			0.0	105	0	0.2	21.2	1	1	0.1	
				120	0	0.2	21.2	1	1	0.1	
			Average:	135	0	0.2	21.2	1	1	0.1	
				150	0	0.2	21.2	1	1	0.1	
			0.0	165	0	0.2	21.2	1	1	0.1	
				180	0	0.2	21.3	1	1	0.1	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
WS1004	995	-0.63	Initial:	15	0	4.2	17.7	1	1	0.5	2.24
				30	0	4.2	17.3	1	1	0.5	
			-4.3	45	0	4.2	17.3	1	1	0.5	
				60	0	4.1	17.3	1	1	0.5	
			Peak:	75	0	4.1	17.3	1	1	0.5	
				90	0	4.1	17.3	1	1	0.5	
			-4.3	105	0	4.1	17.3	1	1	0.5	
				120	0	4.1	17.3	1	1	0.5	
			Average:	135	0	4	17.3	1	1	0.4	
				150	0	3.9	17.2	1	1	0.4	
			-2.5	165	0	3.9	17.2	1	1	0.4	
				180	0	3.7	17.1	1	1	0.3	

PAGE:	4200	GAS MONITORING
DATE: 01/11/2019	VASTERN ROAD, READING	

Monitoring Date: 01/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.2
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): 0.0
Weather/Wind: Light Rain **Weather Trend:** Unsettled **Atm. Press. Trend:** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
WS1007	996	-4.61	Initial:	15	0	1.7	19	1	1	0.1	0.96
				30	0	1.7	17.4	1	1	0.1	
			-24.8	45	0	1.7	17.3	1	1	0.1	
				60	0	1.7	17.3	1	1	0.1	
			Peak:	75	0	1.7	17.3	1	1	0.1	
				90	0	1.7	17.3	1	1	0.1	
			-24.8	105	0	1.7	17.3	1	1	0.1	
				120	0	1.7	17.3	1	1	0.1	
			Average:	135	0	1.7	17.3	1	1	0.0	
				150	0	1.7	17.3	1	1	0.0	
			-20.7	165	0	1.7	17.3	1	1	0.0	
				180	0	1.7	17.3	1	1	0.0	
Borehole ID	Atmospheric Barometric Pressure (mb)	Borehole Barometric Pressure (mb)	Flow (l/hr)	Time (sec)	Methane CH4 (%)	Carbon Dioxide CO2 (%)	Oxygen O2 (%)	Carbon Monoxide CO (ppm)	Hydrogen Sulphide H2S (ppm)	Volatile Organic Compounds VOCs (ppm)	Water Level (m)
WS10019	994	0.03	Initial:	15	0	0.6	20.7	0	0	0.5	2.21
				30	0	0.6	20.6	0	0	0.5	
			0.1	45	0	0.7	20.5	0	1	0.5	
				60	0	0.8	20.4	0	0	0.5	
			Peak:	75	0	0.8	20.4	0	1	0.5	
				90	0	0.9	20.3	0	1	0.5	
			0.3	105	0	1	20.2	0	1	0.5	
				120	0	1	20.1	0	1	0.5	
			Average:	135	0	1.1	20.1	0	1	0.5	
				150	0	1.1	20.1	0	1	0.5	
			0.3	165	0	1.2	20	0	1	0.5	
				180	0	1.2	20	0	1	0.5	

PAGE:	4200	GAS MONITORING
DATE: 01/11/2019	VASTERN ROAD, READING	

Monitoring Date:	01/11/2019	Ambient Gas Conc.:	CH4 (%): 0.0	CO2 (%): 0.1	O2 (%): 21.2
Monitoring Engineer:	RK		CO (ppm): 0.0	H2S (ppm): 1.0	VOCs (ppm): 0.0
Weather/Wind:	Light Rain	Weather Trend:	Unsettled	Atm. Press. Trend	Falling
Remarks: -				Equipment:	Geotech GA5000



NB Note: The weather station atmospheric pressure is normally corrected for attitude (providing an equivalent sea level atmospheric pressure), whereas the GA5000 gas analyser measures absolute atmospheric pressure at the sites altitude, therefore a difference in pressures is to be expected between the local station data and the gas analyser data. The graph above has been appended purely to give an indication of pressure trends prior to the monitoring visit.

PAGE:	4200	GAS MONITORING
DATE: 12/11/2019	VASTERN ROAD, READING	

Monitoring Date: 12/11/2019 **Ambient Gas Conc.:** **CH4 (%):** 0.0 **CO2 (%):** 0.1 **O2 (%):** 21.4
Monitoring Engineer: RK **CO (ppm):** 0.0 **H2S (ppm):** 0.0 **VOCs (ppm):** N/A
Weather/Wind: Rainy/strong **Weather Trend:** Unsettled **Atm. Press. Trend** Stable
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1001	994	-0.09	Initial:	Initial:	15	0	4.7	17.1	0	1	0.2	2.15
					30	0	4.8	9.7	0	1	0.3	
			-4.5	0.0	45	0	4.8	8.9	0	1	0.3	
					60	0	4.9	8.7	0	1	0.3	
			Peak:	Peak:	75	0	4.9	8.7	0	1	0.3	
					90	0	4.9	8.6	0	1	0.3	
			-11.9	0.0	105	0	4.9	8.6	0	1	0.3	
					120	0	4.9	8.6	0	1	0.2	
			Average:	Average:	135	0	5	8.6	0	1	0.2	
					150	0	5	8.5	0	1	0.2	
					165	0	5	8.6	0	1	0.2	
					180	0	5	8.6	0	1	0.2	
			Initial:		15	0	1.3	20.4	0	1	0.1	
					30	0	1.3	16.7	0	0	0.1	
			0.1		45	0	1	17	0	0	0.1	
					60	0	0.8	17.9	0	0	0.1	
			Peak:		75	0	0.6	19.3	0	1	0.1	
					90	0	0.6	20	0	1	0.1	
			0.2		105	0	0.5	20.2	0	1	0.1	
					120	0	0.4	20.5	0	1	0.0	
			Average:		135	0	0.4	20.7	0	1	0.0	2.21
					150	0	0.4	20.8	0	1	0.0	
			0.2		165	0	0.3	21	0	1	0.0	
					180	0	0.3	21.1	0	1	0.0	
			Initial:		15	0	0.2	22	0	0	0.0	
					30	0	0.2	22	0	0	0.0	
			0.2		45	0	0.2	22	0	0	0.0	
					60	0	0.2	22	0	0	0.0	
			Peak:		75	0	0.2	22	0	0	0.0	
					90	0	0.2	22	0	1	0.0	
			0.3		105	0	0.3	21.9	0	1	0.0	2.47
					120	0	0.3	21.9	0	1	0.0	
			Average:		135	0	0.3	21.9	0	1	0.0	
					150	0	0.3	21.8	0	1	0.0	
			0.2		165	0	0.3	21.8	0	1	0.0	
					180	0	0.3	21.8	0	1	0.0	
			Initial:		15	0	0.2	22	0	0	0.0	
					30	0	0.2	22	0	0	0.0	
			0.2		45	0	0.2	22	0	0	0.0	
					60	0	0.2	22	0	0	0.0	

PAGE:	4200	GAS MONITORING
DATE: 12/11/2019	VASTERN ROAD, READING	

Monitoring Date: 12/11/2019 **Ambient Gas Conc.:** **CH4 (%):** 0.0 **CO2 (%):** 0.1 **O2 (%):** 21.4
Monitoring Engineer: RK **CO (ppm):** 0.0 **H₂S (ppm):** 0.0 **VOCs (ppm):** N/A
Weather/Wind: Rainy/strong **Weather Trend:** Unsettled **Atm. Press. Trend** Stable
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1004	995	2.48	Initial:	Initial:	15	0	5.1	19.4	0	1	0.2	2.01
					30	0	5.2	12.2	0	1	0.2	
					45	0	5.3	11.7	0	1	0.2	
			-18.8	2.0	60	0	5.3	11.5	0	1	0.2	
					75	0	5.3	11.5	0	1	0.2	
					90	0	4.9	11.7	0	1	0.2	
			Peak:	Peak:	105	0	4.4	12.1	0	1	0.2	
					120	0	4.3	13.2	0	1	0.2	
					135	0	4.2	13.6	0	1	0.2	
			Average:	Average:	150	0	3.8	13.9	0	1	0.2	
					165	0	3.8	14.3	0	1	0.2	
					180	0	3.6	14.2	0	1	0.2	
BH1005	995	4.37	Initial:	Initial:	15	0	1	21	1	1	1.8	2.41 - Light Hydro-carbon Odour & Sheen
					30	0	1	20.8	1	1	1.8	
					45	0	0.8	20.9	1	1	1.6	
			-0.2	0.4	60	0	0.6	21	1	1	1.2	
					75	0	0.9	21.1	1	1	0.9	
					90	0	0.4	21.2	1	1	0.7	
			Peak:	Peak:	105	0	0.4	21.3	1	1	0.6	
					120	0	0.4	21.4	1	1	0.5	
					135	0	0.3	21.4	1	1	0.4	
			Average:	Average:	150	0	0.3	21.4	0	1	0.4	
					165	0	0.2	21.4	0	1	0.3	
					180	0	0.2	21.5	0	1	0.3	
BH2001	994	-1.68	Initial:	Initial:	15	0.1	1	20.9	1	1	1.6	2.21
					30	0.1	1	20.4	1	1	1.8	
					45	0.1	0.9	20.4	1	1	1.7	
			-11.9	0.4	60	0.1	0.9	20.6	1	1	1.6	
					75	0.1	0.8	20.6	1	1	1.5	
					90	0.1	0.8	20.7	1	1	1.4	
			Peak:	Peak:	105	0.1	0.7	20.8	0	1	1.4	
					120	0	0.7	20.9	0	1	1.3	
					135	0	0.6	21	0	1	1.2	
			Average:	Average:	150	0	0.5	21.2	0	1	0.9	
					165	0	0.4	21.4	0	1	0.7	
					180	0	0.4	21.4	0	1	0.7	

PAGE:	4200	GAS MONITORING
DATE: 12/11/2019	VASTERN ROAD, READING	

Monitoring Date: 12/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.4
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 0.0 VOCs (ppm): N/A
Weather/Wind: Rainy/strong **Weather Trend:** Settled **Atm. Press. Trend** Stable
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2002	994	0.02	Initial:		15	0	0.2	21.3	0	1	0.0	2.19
					30	0	0.2	21.2	0	1	0.0	
			0.1		45	0	0.1	21.3	0	1	0.0	
					60	0	0.1	21.4	0	1	0.0	
			Peak:		75	0	0.1	21.4	0	1	0.0	
					90	0	0.1	21.4	0	1	0.0	
			0.2		105	0	0.1	21.5	0	1	0.0	
					120	0	0.1	21.4	0	1	0.0	
			Average:		135	0	0.1	21.5	0	1	0.0	
					150	0	0.1	21.5	0	1	0.0	
			0.2		165	0	0.1	21.5	0	1	0.0	
					180	0	0.1	21.5	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2003	994	0.09	Initial:	Initial:	15	0	0.6	20.1	1	1	1.2	2.35
					30	0	0.6	19.6	2	1	1.4	
			-17.0	0.4	45	0	0.6	19.6	2	1	1.3	
					60	0	0.6	19.7	2	1	1.2	
			Peak:	Peak:	75	0	0.5	19.8	1	1	1.1	
					90	0	0.5	19.9	1	1	1.1	
			-17.5	0.7	105	0	0.5	19.9	1	1	1.1	
					120	0	0.5	20	1	1	1.1	
			Average:	Average:	135	0	0.5	20	1	1	1.0	
					150	0	0.5	20.1	1	1	0.9	
			-5.6	0.7	165	0	0.5	20.1	1	1	1.0	
					180	0	0.5	20.1	1	1	0.9	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2004	994	0.1	Initial:	Initial:	15	0	0.3	22.1	1	0	0.7	2.29
					30	0	0.3	21.7	1	0	0.7	
			-0.5	0.1	45	0	0.2	21.7	0	0	0.5	
					60	0	0.2	21.9	0	0	0.4	
			Peak:	Peak:	75	0	0.2	22	0	1	0.4	
					90	0	0.2	22	0	1	0.4	
			-1.0	1.4	105	0	0.2	22	0	0	0.3	
					120	0	0.2	22.1	0	1	0.3	
			Average:	Average:	135	0	0.2	22.1	0	0	0.3	
					150	0	0.2	22.1	0	1	0.3	
			-0.9	0.3	165	0	0.2	22.1	0	0	0.2	
					180	0	0.2	22.1	0	1	0.2	

PAGE:	4200	GAS MONITORING
DATE: 12/11/2019	VASTERN ROAD, READING	

Monitoring Date: 12/11/2019
Monitoring Engineer: RK
Weather/Wind: Rainy/strong
Remarks: -

Ambient Gas Conc.:
CH4 (%): 0.0
CO (ppm): 0.0
Weather Trend: Settled

CO2 (%): 0.1
H2S (ppm): 0.0
Atm. Press. Trend: Stable
Equipment: Geotech GA5000

O2 (%): 21.4
VOCs (ppm): N/A

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2005	995	-0.05	Initial:		15	0	10.7	16.6	1	1	0.2	2.31 - Hydro-carbon odour & sheen on dipmeter
					30	0	10.9	8.8	1	1	0.2	
			0.1		45	0	11	7.9	1	1	0.2	
					60	0	11	7.7	0	1	0.2	
			Peak:		75	0	11	7.6	0	1	0.2	
					90	0	11.1	7.5	0	1	0.2	
			0.2		105	0	11.1	7.4	0	1	0.2	
					120	0	11.2	7.2	0	1	0.2	
			Average:		135	0	11.5	7	0	1	0.2	
					150	0	11.6	6.6	0	1	0.1	
			0.1		165	0	11.8	6.3	0	1	0.1	
					180	0	12	6.1	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1003	995	0.6	Initial:		15	0	0.8	21.3	0	0	0.3	1.98
					30	0	0.6	21.4	0	0	0.2	
			0.2		45	0	0.6	21.5	0	0	0.2	
					60	0	0.6	21.5	0	0	0.2	
			Peak:		75	0	0.5	21.6	0	0	0.2	
					90	0	0.5	21.7	0	0	0.2	
			0.4		105	0	0.4	21.7	0	0	0.2	
					120	0	0.4	21.8	0	0	0.2	
			Average:		135	0	0.4	21.9	0	0	0.2	
					150	0	0.4	21.9	0	0	0.2	
			0.4		165	0	0.4	22	0	0	0.2	
					180	0	0.4	22	0	0	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1004	994	0	Initial:		15	0	2.5	21.4	0	0	0.2	2.15
					30	0	2.3	20.1	0	0	0.2	
			0.1		45	0	2.1	20.2	0	0	0.2	
					60	0	1.9	20.4	0	0	0.2	
			Peak:		75	0	1.8	20.6	0	0	0.2	
					90	0	1.6	20.8	0	0	0.2	
			0.3		105	0	1.4	21	0	0	0.2	
					120	0	1.2	21.2	0	0	0.2	
			Average:		135	0	1.1	21.3	0	0	0.1	
					150	0	1	21.4	0	0	0.1	
			0.2		165	0	1	21.5	0	0	0.1	
					180	0	1	21.5	0	0	0.1	

PAGE:	4200	GAS MONITORING
DATE: 12/11/2019	VASTERN ROAD, READING	

Monitoring Date: 12/11/2019
Monitoring Engineer: RK
Weather/Wind: Rainy/strong
Remarks: -

Ambient Gas Conc.:
Weather Trend:

CH4 (%): 0.0
CO (ppm): 0.0
Unsettled

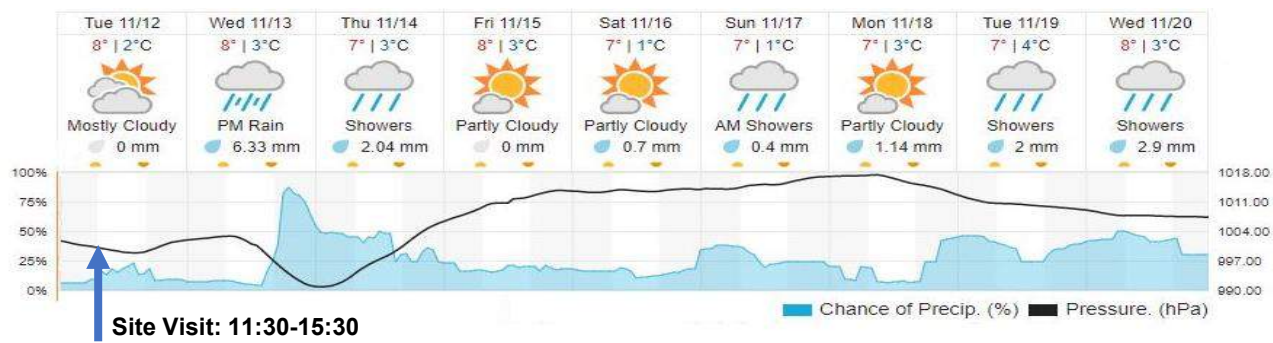
CO2 (%): 0.1
H2S (ppm): 0.0
Atm. Press. Trend
Equipment:

O2 (%): 21.4
VOCs (ppm): N/A
Stable
Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1007	995	0.02	Initial:	Initial:	15	0	0.8	21.5	0	0	0.1	0.95
					30	0	0.8	20.5	0	0	0.1	
			-16.4	0.5	45	0	0.8	20.4	0	0	0.1	
					60	0	0.8	20.4	0	0	0.1	
			Peak:	Peak:	75	0	0.8	20.4	0	0	0.1	
					90	0	0.7	20.6	0	0	0.1	
			-16.4	0.9	105	0	0.6	20.8	0	0	0.1	
					120	0	0.6	21	0	0	0.1	
			Average:	Average:	135	0	0.6	21	0	0	0.1	
					150	0	0.6	21	0	0	0.1	
			-4.2	0.6	165	0	0.5	21.2	0	1	0.1	
					180	0	0.5	21.3	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1019	995	-0.07	Initial:		15	0	0.4	21.5	0	0	0.1	2.12 - Hydro-carbon odour
					30	0	0.2	21.7	0	0	0.1	
			0.1		45	0	0.2	21.8	0	0	0.1	
					60	0	0.1	21.9	0	0	0.1	
			Peak:		75	0	0.1	21.9	0	0	0.1	
					90	0	0.1	22	0	0	0.1	
			0.2		105	0	0.1	22	0	0	0.1	
					120	0	0.1	22	0	0	0.1	
			Average:		135	0	0.1	22	0	0	0.1	
					150	0	0.1	22	0	0	0.1	
			0.1		165	0	0.1	22	0	0	0.1	
					180	0	0.1	22	0	0	0.1	

PAGE:	4200	GAS MONITORING
DATE: 12/11/2019	VASTERN ROAD, READING	

Monitoring Date:	12/11/2019	Ambient Gas Conc.:	CH4 (%): 0.0	CO2 (%): 0.1	O2 (%): 21.4
Monitoring Engineer:	RK		CO (ppm): 0.0	H2S (ppm): 0.0	VOCs (ppm): N/A
Weather/Wind:	Rainy/strong	Weather Trend:	Unsettled	Atm. Press. Trend	Stable
Remarks:	-			Equipment:	Geotech GA5000



Local Weather Station Atmospheric Pressure Records for 12th to 20th November 2019.

NB Note: The weather station atmospheric pressure is normally corrected for attitude (providing an equivalent sea level atmospheric pressure), whereas the GA5000 gas analyser measures absolute atmospheric pressure at the sites altitude, therefore a difference in pressures is to be expected between the local station data and the gas analyser data. The graph above has been appended purely to give an indication of pressure trends prior to the monitoring visit.

PAGE:	4200	GAS MONITORING
DATE: 20/11/2019	VASTERN ROAD, READING	

Monitoring Date: 20/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.5
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/ Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1001	1010	-0.07	Initial:	Initial:	15	0	4.7	15.2	0	1	0.2	2.13
					30	0	4.8	9.7	0	1	0.2	
			-4.1	0.1	45	0	4.8	9.2	0	1	0.2	
					60	0	4.8	9.1	0	1	0.2	
			Peak:	Peak:	75	0	4.8	9.1	0	1	0.2	
					90	0	4.8	9.1	0	1	0.2	
			-4.1	0.1	105	0	4.8	9	0	1	0.2	
					120	0	4.8	9.1	0	1	0.2	
			Average:	Average:	135	0	4.8	9.1	0	1	0.2	
					150	0	4.8	9.1	0	1	0.2	
			-3.8	0.1	165	0	4.8	9.2	0	1	0.2	
					180	0	4.8	9.3	0	1	0.2	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1002C	1009	-1.06	Initial:	Initial:	15	0	0.6	20.4	0	1	0.1	2.19
					30	0	0.5	19.6	0	1	0.1	
			0.1	0.1	45	0	0.4	20	0	1	0.1	
					60	0	0.3	20.4	0	1	0.1	
			Peak:	Peak:	75	0	0.3	20.7	0	1	0.1	
					90	0	0.3	20.9	0	1	0.1	
			0.2	0.1	105	0	0.2	21.1	0	1	0.0	
					120	0	0.2	21.2	0	1	0.0	
			Average:	Average:	135	0	0.2	21.3	0	1	0.0	
					150	0	0.2	21.4	0	1	0.0	
			0.1	0.0	165	0	0.2	21.5	0	1	0.0	
					180	0	0.2	21.6	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1003E	1009	0.03	Initial:	Initial:	15	0	0.8	21.1	0	0	0.1	1.45
					30	0	0.8	19.9	0	0	0.1	
			0.1	0.0	45	0	0.8	19.8	0	0	0.1	
					60	0	0.8	19.8	0	0	0.1	
			Peak:	Peak:	75	0	0.8	19.8	0	0	0.1	
					90	0	0.8	19.8	0	0	0.1	
			0.1	0.0	105	0	0.8	19.8	0	1	0.1	
					120	0	0.8	19.8	0	1	0.1	
			Average:	Average:	135	0	0.8	19.8	0	1	0.1	
					150	0	0.8	19.8	0	1	0.1	
			0.0	0.0	165	0	0.8	19.8	0	1	0.1	
					180	0	0.8	19.8	0	1	0.1	

PAGE:	4200	GAS MONITORING
DATE: 20/11/2019	VASTERN ROAD, READING	

Monitoring Date: 20/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.5
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/ Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1004	1010	1.23	Initial:	Initial:	15	0	3.9	18.9	0	1	0.1	1.99
					30	0	4	16.7	0	1	0.1	
			-5.5	0.0	45	0	3.4	17.1	0	1	0.1	
					60	0	3	17.9	0	1	0.1	
			Peak:	Peak:	75	0	2.7	18.3	0	1	0.1	
					90	0	2.2	18.8	0	1	0.1	
			-5.5	0.0	105	0	1.8	19.3	0	1	0.1	
					120	0	1.5	19.8	0	1	0.0	
			Average:	Average:	135	0	1.2	20.2	0	1	0.0	
					150	0	1	20.4	0	1	0.0	
			-4.3	0.0	165	0	0.9	20.7	0	1	0.0	
					180	0	0.8	20.8	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1005	1010	0.89	Initial:	Initial:	15	0	1.2	21.8	1	1	1.6	2.37
					30	0	1.2	21.4	1	1	1.7	
			-22.6	0.6	45	0	1.2	21.4	1	1	1.8	
					60	0	1.2	21.4	1	1	1.8	
			Peak:	Peak:	75	0	1.2	21.4	1	1	1.8	
					90	0	1.3	21.4	1	1	1.9	
			-22.6	1.0	105	0	1.3	21.4	1	1	1.9	
					120	0	1.3	21.4	1	1	1.9	
			Average:	Average:	135	0	1.3	21.4	1	1	1.9	
					150	0	1.3	21.4	1	1	1.9	
			-20.8	0.9	165	0	1.3	21.4	1	1	1.9	
					180	0	1.3	21.4	1	1	2.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2001	1009	0.03	Initial:	Initial:	15	0	0.8	21.6	1	1	1.2	2.18
					30	0	0.8	21.2	1	1	1.3	
			-0.6	0.0	45	0	0.8	21.2	1	1	1.3	
					60	0	0.8	21.2	1	1	1.2	
			Peak:	Peak:	75	0	0.7	21.3	1	1	1.2	
					90	0	0.7	21.3	1	1	1.2	
			-0.6	-0.1	105	0	0.7	21.4	1	1	1.2	
					120	0	0.7	21.4	1	1	1.1	
			Average:	Average:	135	0	0.6	21.4	1	1	1.0	
					150	0	0.6	21.5	1	1	1.0	
			-4.7	-0.1	165	0	0.6	21.5	1	1	0.9	
					180	0	0.5	21.6	1	1	0.8	

PAGE:	4200	GAS MONITORING
DATE: 20/11/2019	VASTERN ROAD, READING	

Monitoring Date: 20/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.5
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/ Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2002	1009	0.02	Initial:	Initial:	15	0	0.1	22.2	0	1	0.1	2.16
					30	0	0.1	22.2	0	1	0.1	
			0.2	0.0	45	0	0.1	22.2	0	1	0.1	
					60	0	0.1	22.2	0	1	0.1	
			Peak:	Peak:	75	0	0.1	22.2	0	1	0.0	
					90	0	0.1	22.2	0	1	0.0	
			0.2	0.0	105	0	0.1	22.2	0	1	0.0	
					120	0	0.1	22.2	0	1	0.0	
			Average:	Average:	135	0	0.1	22.2	0	1	0.0	
					150	0	0.1	22.2	0	1	0.0	
			0.2	0.0	165	0	0.1	22.2	0	1	0.0	
					180	0	0.1	22.2	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2003	1008	-0.09	Initial:	Initial:	15	0	0.5	21.9	1	1	1.2	2.32
					30	0	0.5	21.6	2	1	1.3	
			-21.8	0.1	45	0	0.5	21.5	2	1	1.3	
					60	0	0.5	21.5	2	0	1.4	
			Peak:	Peak:	75	0	0.5	21.5	2	1	1.4	
					90	0	0.5	21.5	2	1	1.4	
			-21.8	0.4	105	0	0.5	21.5	2	1	1.4	
					120	0	0.5	21.5	2	1	1.4	
			Average:	Average:	135	0	0.6	21.5	2	1	1.3	
					150	0	0.6	21.5	2	1	1.3	
			-19.9	0.3	165	0	0.6	21.5	2	1	1.3	
					180	0	0.6	21.5	2	1	1.3	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2004	1008	-2.6	Initial:	Initial:	15	0	0.3	21.9	1	1	0.8	2.28
					30	0	0.3	21.7	1	1	0.8	
			-2.3	0.1	45	0	0.3	21.7	1	1	0.7	
					60	0	0.2	21.8	1	1	0.5	
			Peak:	Peak:	75	0	0.2	21.9	0	1	0.4	
					90	0	0.2	21.9	0	1	0.4	
			-2.3	0.2	105	0	0.2	22	0	1	0.4	
					120	0	0.2	22	0	1	0.4	
			Average:	Average:	135	0	0.2	22	0	1	0.4	
					150	0	0.2	22	0	1	0.3	
			-2.1	0.2	165	0	0.2	22	0	1	0.3	
					180	0	0.2	22	0	1	0.3	

PAGE:	4200	GAS MONITORING
DATE: 20/11/2019	VASTERN ROAD, READING	

Monitoring Date: 20/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.5
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/ Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2005	1011	-0.15	Initial:	Initial:	15	0	10.1	15	4	1	0.1	2.35 Hydro-carbon Odour & Sheen/ residue on dipmeter
					30	0	10.2	9.5	1	1	0.1	
			0.1	0.0	45	0	10.2	9.1	0	0	0.1	
					60	0	10.3	9.1	0	1	0.1	
			Peak:	Peak:	75	0	10.3	9	0	1	0.1	
					90	0	10.3	9	0	1	0.1	
			0.1	0.0	105	0	10.3	9	0	1	0.1	
					120	0	10.4	8.9	0	1	0.1	
			Average:	Average:	135	0	10.5	8.8	0	1	0.1	
					150	0	10.7	8.5	0	1	0.1	
			0.1	0.0	165	0	10.8	8.2	0	1	0.0	
					180	0	10.9	8.1	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1003	1010	0.15	Initial:	Initial:	15	0	1.1	21	0	1	0.3	1.97
					30	0	1	20	0	1	0.2	
			0.1	0.1	45	0	0.8	20.4	0	1	0.2	
					60	0	0.7	20.8	0	1	0.2	
			Peak:	Peak:	75	0	0.6	20.9	0	1	0.2	
					90	0	0.6	21.1	0	1	0.2	
			0.2	0.1	105	0	0.5	21.2	0	1	0.1	
					120	0	0.5	21.3	0	1	0.1	
			Average:	Average:	135	0	0.5	21.3	0	1	0.1	
					150	0	0.4	21.5	0	1	0.1	
			0.2	0.1	165	0	0.4	21.5	0	1	0.1	
					180	0	0.4	21.6	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1004	1010	-0.07	Initial:	Initial:	15	0	2.6	20.8	0	0	0.2	2.13
					30	0	2.6	19.3	0	0	0.3	
			0.1	0.0	45	0	2.5	19.2	0	0	0.3	
					60	0	2.4	19.3	0	0	0.3	
			Peak:	Peak:	75	0	2.4	19.4	0	0	0.3	
					90	0	2.2	19.5	0	1	0.2	
			0.1	0.0	105	0	2.1	19.7	0	1	0.2	
					120	0	2	19.8	0	1	0.2	
			Average:	Average:	135	0	2	19.7	0	1	0.2	
					150	0	1.9	19.7	0	1	0.2	
			0.1	0.0	165	0	1.8	19.8	0	1	0.2	
					180	0	1.8	19.8	0	1	0.2	

PAGE:	4200	GAS MONITORING
DATE: 20/11/2019	VASTERN ROAD, READING	

Monitoring Date: 20/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.5
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/ Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1007	1010	0.77	Initial:	Initial:	15	0	0.9	22.1	0	0	0.2	0.95
					30	0	0.9	21.7	0	0	0.2	
			-19.9	0.0	45	0	0.9	21.7	0	0	0.2	
					60	0	0.8	21.7	0	0	0.2	
			Peak:	Peak:	75	0	0.8	21.7	0	1	0.1	
					90	0	0.8	21.8	0	1	0.1	
			-19.9	0.0	105	0	0.8	21.8	0	1	0.1	
					120	0	0.8	21.8	0	1	0.1	
			Average:	Average:	135	0	0.8	21.8	0	1	0.1	
					150	0	0.8	21.8	0	1	0.1	
			-15.7	0.0	165	0	0.8	21.8	0	1	0.1	
					180	0	0.7	21.8	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1019	1010	-0.02	Initial:	Initial:	15	0	0.3	22	0	0	0.1	2.09 - Hydro-carbon odour
					30	0	0.2	22.1	0	0	0.1	
			0.1	0.0	45	0	0.2	22.1	0	0	0.1	
					60	0	0.2	22.2	0	0	0.1	
			Peak:	Peak:	75	0	0.2	22.2	0	0	0.1	
					90	0	0.1	22.3	0	0	0.0	
			0.2	0.0	105	0	0.1	22.3	0	0	0.0	
					120	0	0.1	22.3	0	0	0.0	
			Average:	Average:	135	0	0.1	22.3	0	0	0.0	
					150	0	0.1	22.4	0	0	0.0	
			0.2	0.0	165	0	0.1	22.4	0	0	0.0	
					180	0	0.1	22.4	0	0	0.0	

PAGE:	4200	GAS MONITORING
DATE: 20/11/2019	VASTERN ROAD, READING	

Monitoring Date: 20/11/2019

Monitoring Engineer: RK

Weather/Wind: Overcast/ Mod.

Remarks: -

Ambient Gas Conc.:

CH4 (%): 0.0

CO (ppm): 0.0

Weather Trend: Stable

CO2 (%): 0.1

H2S (ppm): 1.0

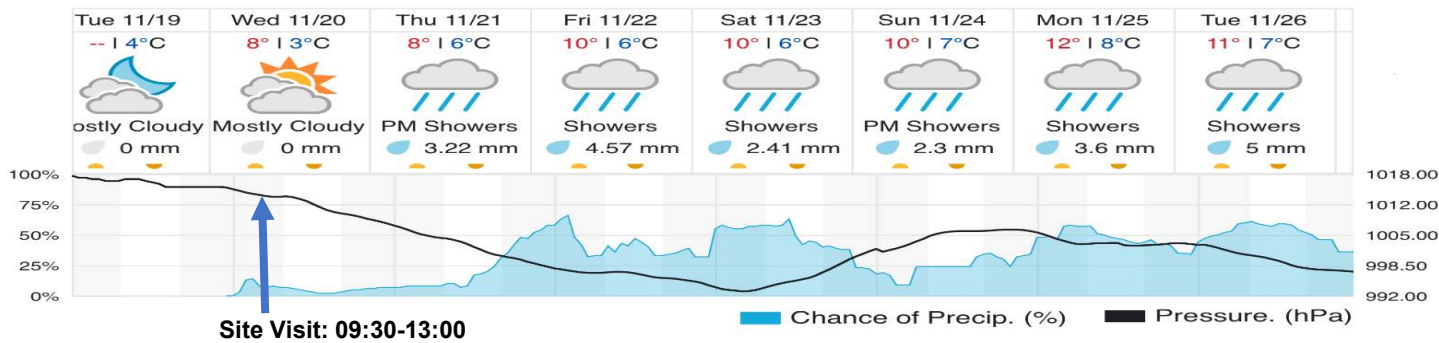
Atm. Press. Trend

Equipment: Geotech GA5000

O2 (%): 21.5

VOCs (ppm): N/A

Falling



Local Weather Station Atmospheric Pressure Records for 19th to 26th November 2019.

NB Note: The weather station atmospheric pressure is normally corrected for attitude (providing an equivalent sea level atmospheric pressure), whereas the GA5000 gas analyser measures absolute atmospheric pressure at the sites altitude, therefore a difference in pressures is to be expected between the local station data and the gas analyser data. The graph above has been appended purely to give an indication of pressure trends prior to the monitoring visit.

PAGE:	4200	GAS MONITORING
DATE: 26/11/2019	VASTERN ROAD, READING	

Monitoring Date: 26/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.1
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Showers/Light **Weather Trend:** Unsettled **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1001	990	0.43	Initial:	Initial:	15	0	4.4	15.2	0	1	0.2	2.17
					30	0	4.4	9.8	0	1	0.2	
			-5.2	0.0	45	0	4.4	9.5	0	1	0.2	
					60	0	4.4	9.4	0	1	0.2	
			Peak:	Peak:	75	0	4.4	9.4	0	1	0.2	
					90	0	4.4	9.4	0	1	0.2	
			-5.2	0.0	105	0	4.4	9.3	0	1	0.2	
					120	0	4.4	9.3	0	1	0.2	
			Average:	Average:	135	0	4.5	9.3	0	1	0.2	
					150	0	4.5	9.3	0	1	0.2	
			-2.2	0.0	165	0	4.5	9.2	0	1	0.2	
					180	0	4.5	9.2	0	1	0.2	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1002C	990	4.07	Initial:	Initial:	15	0	0.1	20.8	0	1	0.1	2.24
					30	0	0.1	20.1	0	1	0.1	
			0.0	-0.1	45	0	0.1	20.2	0	1	0.1	
					60	0	0.1	20.5	0	1	0.1	
			Peak:	Peak:	75	0	0.1	20.8	0	1	0.1	
					90	0	0.1	21	0	1	0.1	
			0.0	-0.3	105	0	0.1	21.2	0	1	0.1	
					120	0	0.1	21.3	0	1	0.0	
			Average:	Average:	135	0	0.1	21.4	0	1	0.0	
					150	0	0.1	21.5	0	1	0.0	
			0.0	-0.3	165	0	0.1	21.5	0	1	0.0	
					180	0	0.1	21.5	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1003E	990	0	Initial:	Initial:	15	0	0.8	20.4	0	1	0.1	2.49
					30	0	0.8	19.2	0	1	0.1	
			0.2	0.0	45	0	0.8	19.1	0	1	0.1	
					60	0	0.8	19.1	0	1	0.1	
			Peak:	Peak:	75	0	0.8	19.1	0	1	0.1	
					90	0	0.8	19.1	0	1	0.1	
			0.3	0.0	105	0	0.8	19.1	0	1	0.1	
					120	0	0.8	19.1	0	1	0.0	
			Average:	Average:	135	0	0.8	19.1	0	1	0.0	
					150	0	0.8	19.1	0	1	0.0	
			0.3	0.0	165	0	0.8	19.1	0	1	0.0	
					180	0	0.8	19.1	0	1	0.0	

PAGE:	4200	GAS MONITORING
DATE: 26/11/2019	VASTERN ROAD, READING	

Monitoring Date: 26/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.1
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Showers/Light **Weather Trend:** Unsettled **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1004	992	3.24	Initial:	Initial:	15	0	3.2	19.3	1	1	0.2	2.03
					30	0	3.3	18.3	1	1	0.2	
			-21.6	0.0	45	0	3.3	18.3	1	1	0.1	
					60	0	3.3	18.3	1	1	0.1	
			Peak:	Peak:	75	0	3.3	18.3	1	1	0.1	
					90	0	3.3	18.3	1	1	0.1	
			-21.6	0.0	105	0	3.3	18.3	1	1	0.1	
					120	0	3.3	18.3	1	1	0.1	
			Average:	Average:	135	0	3.3	18.3	1	1	0.1	
					150	0	3.4	18.3	1	1	0.1	
			-18.2	0.0	165	0	3.4	18.2	1	1	0.1	
					180	0	3.4	18.2	1	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1005	991	1.11	Initial:	Initial:	15	0	1.1	21.2	1	1	1.2	2.43
					30	0	1.1	20.9	1	1	1.3	
			-6.3	0.1	45	0	1.1	20.9	1	1	1.3	
					60	0	1	21	1	1	1.1	
			Peak:	Peak:	75	0	0.8	21.2	1	1	0.9	
					90	0	0.7	21.2	1	1	0.7	
			-6.3	0.1	105	0	0.6	21.4	1	1	0.6	
					120	0	0.5	21.5	1	1	0.4	
			Average:	Average:	135	0	0.4	21.5	1	1	0.3	
					150	0	0.3	21.6	1	1	0.3	
			-4.9	0.0	165	0	0.3	21.7	1	1	0.2	
					180	0	0.2	21.7	1	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2001	990	0.43	Initial:	Initial:	15	0	0.8	21.2	2	1	1.2	2.12
					30	0	0.8	20.8	2	1	1.3	
			-20.9	-3.9	45	0	0.8	20.8	2	1	1.4	
					60	0	0.8	20.8	2	1	1.4	
			Peak:	Peak:	75	0	0.8	20.8	2	1	1.5	
					90	0	0.8	20.8	2	1	1.5	
			-20.9	-3.9	105	0	0.8	20.8	2	1	1.5	
					120	0	0.8	20.8	2	1	1.5	
			Average:	Average:	135	0	0.8	20.8	2	1	1.5	
					150	0	0.8	20.8	2	1	1.5	
			-17.6	-2.8	165	0	0.8	20.8	2	1	1.5	
					180	0	0.8	20.8	2	1	1.5	

PAGE:	4200	GAS MONITORING
DATE: 26/11/2019	VASTERN ROAD, READING	

Monitoring Date: 26/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.1
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Showers/Light **Weather Trend:** Unsettled **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2002	990	-0.09	Initial:	Initial:	15	0	0.1	21.4	0	1	1.2	2.20
					30	0	0.1	21.4	0	1	1.3	
			0.1	0.0	45	0	0.1	21.5	0	1	1.3	
					60	0	0.1	21.5	0	1	1.1	
			Peak:	Peak:	75	0	0.1	21.5	0	1	0.9	
					90	0	0.1	21.5	0	1	0.7	
			0.2	0.0	105	0	0.1	21.5	0	1	0.6	
					120	0	0.1	21.6	0	1	0.4	
			Average:	Average:	135	0	0.1	21.6	0	1	0.3	
					150	0	0.1	21.6	0	1	0.3	
0.2	0.0	165	0	0.1	21.6	0	1	0.2				
		180	0	0.1	21.6	0	1	0.1				
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2003	990	0.53	Initial:	Initial:	15	0	0.4	20.7	1	1	1.2	2.37
					30	0	0.4	20.5	1	1	1.2	
			-20.7	0.2	45	0	0.4	20.5	1	1	1.2	
					60	0	0.4	20.5	1	1	1.2	
			Peak:	Peak:	75	0	0.4	20.5	1	1	1.2	
					90	0	0.4	20.6	1	1	1.2	
			-20.7	0.3	105	0	0.4	20.6	1	1	1.1	
					120	0	0.4	20.6	1	1	1.1	
			Average:	Average:	135	0	0.4	20.6	1	1	1.1	
					150	0	0.4	20.7	1	1	1.1	
-17.3	0.3	165	0	0.4	20.7	1	1	1.0				
		180	0	0.4	20.7	1	1	1.0				
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2004	991	0.03	Initial:	Initial:	15	0	0.2	21.8	1	1	0.6	2.31
					30	0	0.3	21.6	1	1	0.6	
			-0.4	0.2	45	0	0.2	21.7	1	1	0.5	
					60	0	0.2	21.8	1	1	0.4	
			Peak:	Peak:	75	0	0.2	21.8	1	1	0.4	
					90	0	0.2	21.9	1	1	0.3	
			-0.6	0.4	105	0	0.1	21.9	0	1	0.2	
					120	0	0.1	21.9	0	1	0.2	
			Average:	Average:	135	0	0.1	22	0	1	0.2	
					150	0	0.1	22	0	1	0.1	
-0.1	0.4	165	0	0.1	22	0	1	0.1				
		180	0	0.1	22	0	1	0.1				

PAGE:	4200	GAS MONITORING
DATE: 26/11/2019	VASTERN ROAD, READING	

Monitoring Date: 26/11/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.1
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Showers/Light **Weather Trend:** Unsettled **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2005	991	0.02	Initial:	Initial:	15	0	9.4	14.6	6	1	0.1	2.32 Hydro-carbon Odour & Sheen/ residue on dipmeter
					30	0	9.5	10.8	2	1	0.1	
			0.1	0.0	45	0	9.5	10.6	1	1	0.1	
					60	0	9.5	10.6	1	1	0.1	
			Peak:	Peak:	75	0	9.5	10.6	1	1	0.1	
					90	0	9.5	10.5	1	1	0.1	
			0.2	0.0	105	0	9.6	10.5	1	1	0.1	
					120	0	9.7	10.5	1	1	0.1	
			Average:	Average:	135	0	9.8	10.3	1	1	0.1	
					150	0	10.1	9.9	0	1	0.1	
			0.2	0.0	165	0	10.4	9.5	1	1	0.1	
					180	0	10.5	9.1	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1003	991	0.02	Initial:	Initial:	15	0	1	20.9	0	1	0.3	2.00
					30	0	1	20	0	1	0.4	
			-5.9	0.2	45	0	1	20.1	0	1	0.4	
					60	0	0.9	20.2	0	1	0.3	
			Peak:	Peak:	75	0	0.8	20.5	0	1	0.3	
					90	0	0.8	20.5	0	1	0.3	
			-5.9	0.4	105	0	0.7	20.6	0	1	0.3	
					120	0	0.6	20.8	0	1	0.2	
			Average:	Average:	135	0	0.6	21	0	1	0.2	
					150	0	0.5	21.1	0	1	0.2	
			-2.8	0.4	165	0	0.4	21.2	0	1	0.1	
					180	0	0.4	21.4	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1004	991	0.03	Initial:	Initial:	15	0	0.2	21.8	1	1	0.2	2.17
					30	0	0.3	21.6	1	1	0.2	
			-0.3	0.0	45	0	0.2	21.7	1	1	0.2	
					60	0	0.2	21.8	1	1	0.1	
			Peak:	Peak:	75	0	0.2	21.8	1	1	0.1	
					90	0	0.2	21.9	1	1	0.1	
			-0.4	0.0	105	0	0.1	21.9	0	1	0.1	
					120	0	0.1	21.9	0	1	0.1	
			Average:	Average:	135	0	0.1	22	0	1	0.1	
					150	0	0.1	22	0	1	0.1	
			-0.3	0.0	165	0	0.1	22	0	1	0.1	
					180	0	0.1	22	0	1	0.1	

PAGE:	4200	GAS MONITORING
DATE: 26/11/2019	VASTERN ROAD, READING	

Monitoring Date: 26/11/2019
Monitoring Engineer: RK
Weather/Wind: Showers/Light
Remarks: -

Ambient Gas Conc.:
Weather Trend: Unsettled

CH4 (%): 0.0
CO (ppm): 1.0
Unsettled

CO2 (%): 0.1
H₂S (ppm): 1.0
Atm. Press. Trend
Equipment:

O2 (%): 21.1
VOCs (ppm): N/A
Falling
Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1007	991	5.43	Initial:	Initial:	15	0	0.6	21.9	0	1	0.2	0.95
					30	0	0.6	21.8	0	1	0.2	
			-18.0	-0.1	45	0	0.6	21.8	0	1	0.2	
					60	0	0.6	21.8	0	1	0.2	
			Peak:	Peak:	75	0	0.6	21.8	0	1	0.1	
					90	0	0.6	21.8	0	1	0.1	
			-18.0	-0.5	105	0	0.6	21.8	0	1	0.1	
					120	0	0.5	21.8	0	1	0.1	
			Average:	Average:	135	0	0.5	21.8	0	1	0.1	
					150	0	0.5	21.9	0	1	0.1	
					165	0	0.5	21.9	0	1	0.1	
					180	0	0.5	21.9	0	1	0.1	
			-12.5	-0.3								
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1019	991	0.05	Initial:	Initial:	15	0	0.2	21.9	0	0	0.0	2.15 Faint sheen on dip meter
					30	0	0.2	22	0	0	0.0	
			0.1	0.0	45	0	0.2	22	0	0	0.0	
					60	0	0.2	22	0	0	0.0	
			Peak:	Peak:	75	0	0.2	22	0	0	0.0	
					90	0	0.2	22	0	1	0.0	
			0.1	0.0	105	0	0.3	22	0	1	0.0	
					120	0	0.3	21.9	0	1	0.0	
			Average:	Average:	135	0	0.4	21.9	0	1	0.0	
					150	0	0.4	21.8	0	1	0.0	
					165	0	0.5	21.8	0	1	0.0	
					180	0	0.5	21.8	0	1	0.0	

PAGE:	4200	GAS MONITORING
DATE: 26/11/2019	VASTERN ROAD, READING	

Monitoring Date:26/11/2019

Monitoring Engineer:RK

Weather/Wind:Showers/Light

Remarks:-

Ambient Gas Conc.:

CH4 (%):0.0

CO (ppm):1.0

Weather Trend:Unsettled

CO2 (%):0.1

H2S (ppm):1.0

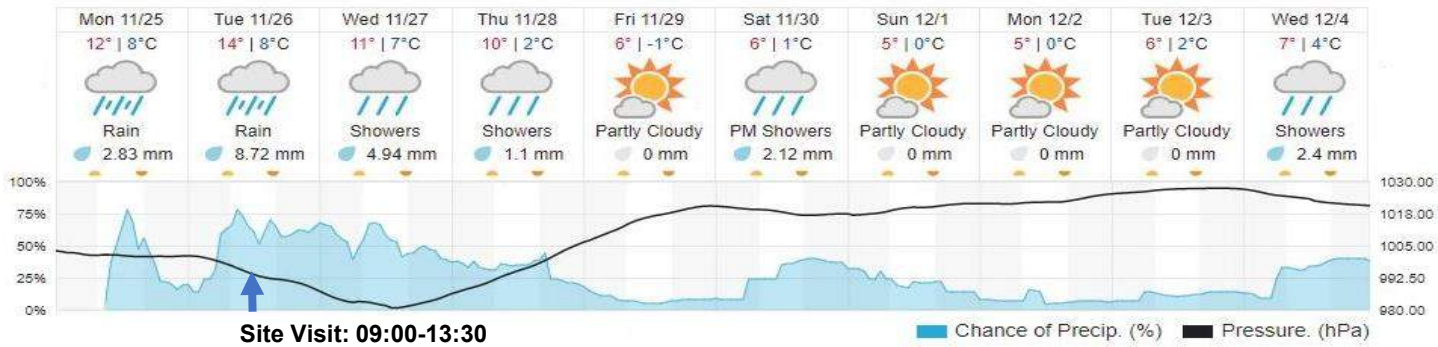
Atm. Press. Trend

Equipment:Geotech GA5000

O2 (%):21.1

VOCs (ppm):N/A

Falling



Local Weather Station Atmospheric Pressure Records for 25th November to 4th December 2019.

NB Note: The weather station atmospheric pressure is normally corrected for attitude (providing an equivalent sea level atmospheric pressure), whereas the GA5000 gas analyser measures absolute atmospheric pressure at the sites altitude, therefore a difference in pressures is to be expected between the local station data and the gas analyser data. The graph above has been appended purely to give an indication of pressure trends prior to the monitoring visit.

PAGE:	4200	GAS MONITORING
DATE: 03/12/2019	VASTERN ROAD, READING	

Monitoring Date: 03/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.6
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1001	1026	-5	Initial:	Initial:	15	0	4.5	16.7	0	0	0.2	2.20
					30	0	4.5	10.6	0	0	0.2	
			-6.8	0.1	45	0	4.4	10.3	0	1	0.2	
					60	0	4.3	10.5	0	0	0.2	
			Peak:	Peak:	75	0	4.2	10.8	0	1	0.2	
					90	0	4	11.3	0	1	0.2	
			-6.8	0.2	105	0	3.9	11.6	0	1	0.2	
					120	0	3.8	11.8	0	1	0.2	
			Average:	Average:	135	0	3.8	12	0	1	0.2	
					150	0	3.8	11.9	0	1	0.2	
			-6.6	0.2	165	0	3.8	12.2	0	1	0.1	
					180	0	4	11.5	0	1	0.2	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1002C	1026	0.65	Initial:	Initial:	15	0	0.1	22	0	1	0.1	2.30
					30	0	0.1	21.5	0	0	0.1	
			-0.1	0.1	45	0	0.1	21.7	0	0	0.1	
					60	0	0.1	21.8	0	0	0.0	
			Peak:	Peak:	75	0	0.1	21.9	0	0	0.0	
					90	0	0.1	22	0	0	0.0	
			-0.3	0.2	105	0	0.1	22.1	0	0	0.0	
					120	0	0.1	22.2	0	1	0.0	
			Average:	Average:	135	0	0.1	22.2	0	1	0.0	
					150	0	0.1	22.2	0	1	0.0	
			-0.3	0.1	165	0	0.1	22.3	0	1	0.0	
					180	0	0.1	22.3	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1003E	1026	-0.02	Initial:	Initial:	15	0	0.8	21.4	0	0	0.0	2.54
					30	0	0.8	20.3	0	0	0.0	
			0.1	0.0	45	0	0.8	20.2	0	0	0.0	
					60	0	0.8	20.2	0	0	0.0	
			Peak:	Peak:	75	0	0.8	20.2	0	0	0.0	
					90	0	0.8	20.2	0	0	0.0	
			0.1	0.0	105	0	0.8	20.2	0	0	0.0	
					120	0	0.8	20.2	0	0	0.0	
			Average:	Average:	135	0	0.8	20.2	0	0	0.0	
					150	0	0.8	20.2	0	0	0.1	
			0.0	0.0	165	0	0.8	20.1	0	0	0.1	
					180	0	0.8	20.2	0	0	0.1	

PAGE:	4200	GAS MONITORING
DATE: 03/12/2019	VASTERN ROAD, READING	

Monitoring Date: 03/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.6
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1004	1026	-2.64	Initial:	Initial:	15	0	3.5	20.5	1	1	0.1	1.91
					30	0	3.1	19.3	0	1	0.1	
			-3.6	0.3	45	0	2.7	19.6	0	1	0.1	
					60	0	2.3	19.9	0	1	0.1	
			Peak:	Peak:	75	0	2.1	20.1	0	1	0.1	
					90	0	1.8	20.3	0	1	0.1	
			-3.6	0.5	105	0	1.5	20.6	0	1	0.0	
					120	0	1.3	20.7	0	1	0.0	
			Average:	Average:	135	0	1.1	20.9	0	1	0.0	
					150	0	0.9	21	1	1	0.0	
			-2.5	0.5	165	0	0.8	21.2	0	1	0.0	
					180	0	0.6	21.3	1	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1005	1025	-10.17	Initial:	Initial:	15	0	1.3	21.6	0	0	1.4	2.47
					30	0	1.3	21.2	0	0	1.5	
			-23.9	0.5	45	0	1.3	21.2	0	1	1.6	
					60	0	1.3	21.2	0	0	1.6	
			Peak:	Peak:	75	0	1.3	21.2	0	1	1.6	
					90	0	1.3	21.2	0	1	1.7	
			-23.9	1.1	105	0	1.3	21.2	0	1	1.7	
					120	0	1.3	21.2	0	1	1.7	
			Average:	Average:	135	0	1.4	21.2	0	0	1.7	
					150	0	1.4	21.2	0	1	1.7	
			-21.9	1.0	165	0	1.4	21.2	0	1	1.8	
					180	0	1.4	21.2	0	1	1.8	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2001	1024	-15.26	Initial:	Initial:	15	0	0.8	22	0	0	0.9	2.30
					30	0	0.8	21.6	1	0	1.2	
			-21.3	0.1	45	0	0.8	21.6	1	0	1.3	
					60	0	0.8	21.6	1	0	1.2	
			Peak:	Peak:	75	0	0.8	21.6	1	1	1.3	
					90	0	0.8	21.6	1	0	1.3	
			-21.3	0.1	105	0	0.8	21.6	1	0	1.3	
					120	0	0.8	21.6	1	1	1.3	
			Average:	Average:	135	0	0.7	21.6	0	0	1.3	
					150	0	0.7	21.6	1	0	1.3	
			-18.1	0.1	165	0	0.7	21.6	1	1	1.3	
					180	0	0.7	21.6	0	1	1.3	

PAGE:	4200	GAS MONITORING
DATE: 03/12/2019	VASTERN ROAD, READING	

Monitoring Date: 03/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.6
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2002	1024	-0.05	Initial:	Initial:	15	0	0.1	22	0	0	0.1	2.27
					30	0	0.1	22	0	0	0.1	
			0.0	0.0	45	0	0.1	22.1	0	0	0.1	
					60	0	0.1	22.1	0	1	0.1	
			Peak:	Peak:	75	0	0.1	22.1	0	0	0.1	
					90	0	0.1	22.1	0	0	0.1	
			0.0	0.0	105	0	0.1	22.1	0	1	0.1	
					120	0	0.1	22.1	0	1	0.1	
			Average:	Average:	135	0	0.1	22.1	0	1	0.1	
					150	0	0.1	22.1	0	1	0.1	
BH2003	1025	-11.25	Initial:	Initial:	15	0	0.3	22	0	0	0.9	2.42
					30	0	0.4	21.8	1	0	1.0	
			-23.5	0.2	45	0	0.4	21.8	1	0	1.0	
					60	0	0.4	21.8	1	0	1.0	
			Peak:	Peak:	75	0	0.4	21.8	1	0	1.0	
					90	0	0.4	21.8	1	0	1.0	
			-23.5	0.6	105	0	0.4	21.7	1	0	1.0	
					120	0	0.4	21.7	1	0	1.0	
			Average:	Average:	135	0	0.4	21.7	1	0	1.0	
					150	0	0.4	21.7	1	1	1.0	
BH2004	1025	-2.98	Initial:	Initial:	15	0	0.3	21.9	0	1	0.6	2.37
					30	0	0.3	21.6	1	1	0.6	
			-1.9	0.3	45	0	0.3	21.6	0	1	0.6	
					60	0	0.2	21.7	0	1	0.5	
			Peak:	Peak:	75	0	0.2	21.8	0	1	0.3	
					90	0	0.2	21.9	0	1	0.3	
			-1.9	0.5	105	0	0.2	22	0	1	0.2	
					120	0	0.2	22	0	1	0.3	
			Average:	Average:	135	0	0.2	22	0	1	0.2	
					150	0	0.2	22	0	1	0.2	
BH2004	1025	-2.98	-1.7	0.5	165	0	0.2	22	0	1	0.2	2.37
					180	0	0.2	22	0	1	0.2	

PAGE:	4200	GAS MONITORING
DATE: 03/12/2019	VASTERN ROAD, READING	

Monitoring Date: 03/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.6
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2005	1025	0.02	Initial:	Initial:	15	0	9.5	16.8	1	1	0.1	2.41 Strong Hydro-carbon Odour & Sheen on Dipmeter
					30	0	9.6	10.8	0	1	0.1	
			0.1	0.0	45	0	9.7	10.2	0	1	0.1	
					60	0	9.7	10.1	0	1	0.1	
			Peak:	Peak:	75	0	9.7	10	0	1	0.1	
					90	0	9.7	10	0	1	0.1	
			0.1	0.0	105	0	9.7	9.9	0	1	0.1	
					120	0	9.8	9.8	0	1	0.1	
			Average:	Average:	135	0	9.9	9.7	0	1	0.1	
					150	0	10.1	9.4	0	1	0.1	
			0.0	0.0	165	0	10.4	8.9	0	1	0.1	
					180	0	10.6	8.5	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1003	1026	-10.17	Initial:	Initial:	15	0	1	21.7	0	0	0.6	2.05
					30	0	1	20.8	0	0	0.7	
			-25.2	0.0	45	0	1	20.7	0	0	0.7	
					60	0	1	20.7	0	0	0.7	
			Peak:	Peak:	75	0	1	20.7	0	0	0.7	
					90	0	1	20.7	0	1	0.7	
			-25.2	0.0	105	0	1	20.7	0	1	0.7	
					120	0	1	20.7	0	0	0.7	
			Average:	Average:	135	0	1	20.7	0	1	0.7	
					150	0	1	20.7	0	1	0.7	
			-21.1	0.0	165	0	1	20.7	0	1	0.7	
					180	0	1	20.7	0	1	0.7	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1004	1026	-0.03	Initial:	Initial:	15	0	1.6	20.7	0	0	0.2	2.22
					30	0	1.5	19.1	0	0	0.2	
			0.1	0.0	45	0	1.3	19.5	0	0	0.2	
					60	0	1.1	19.9	0	0	0.2	
			Peak:	Peak:	75	0	1	20.3	0	0	0.2	
					90	0	0.9	20.6	0	0	0.1	
			0.1	0.0	105	0	0.8	20.8	0	1	0.1	
					120	0	0.7	21	0	1	0.1	
			Average:	Average:	135	0	0.7	21	0	0	0.1	
					150	0	0.7	21.2	0	0	0.1	
			0.1	0.0	165	0	0.6	21.2	0	0	0.1	
					180	0	0.6	21.3	0	0	0.1	

PAGE:	4200	GAS MONITORING
DATE: 03/12/2019	VASTERN ROAD, READING	

Monitoring Date: 03/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.6
Monitoring Engineer: RK CO (ppm): 1.0 H₂S (ppm): 1.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Mod. **Weather Trend:** Stable **Atm. Press. Trend** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1007	1026	-6.75	Initial:	Initial:	15	0	0.8	22.2	0	0	0.1	0.95
					30	0	0.8	21.9	0	0	0.1	
			-27.4	-0.2	45	0	0.8	21.8	0	0	0.1	
					60	0	0.8	21.8	0	1	0.1	
			Peak:	Peak:	75	0	0.8	21.8	0	0	0.1	
					90	0	0.8	21.8	0	1	0.1	
			-27.4	-0.5	105	0	0.8	21.8	0	1	0.1	
					120	0	0.8	21.8	0	1	0.1	
			Average:	Average:	135	0	0.8	21.8	0	1	0.1	
					150	0	0.8	21.8	0	1	0.1	
			-22.2	-0.4	165	0	0.8	21.8	0	1	0.1	
					180	0	0.8	21.8	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1019	1025	0	Initial:	Initial:	15	0	1	21.7	0	1	0.1	2.19 Faint Hydro- carbon Odour & Sheen on Dipmeter
					30	0	0.9	20.8	0	1	0.1	
			0.1	0.0	45	0	0.9	20.7	0	1	0.1	
					60	0	0.9	20.7	0	1	0.1	
			Peak:	Peak:	75	0	0.9	20.7	0	1	0.1	
					90	0	1	20.7	0	1	0.1	
			0.1	0.0	105	0	1	20.7	0	1	0.1	
					120	0	1	20.7	0	1	0.1	
			Average:	Average:	135	0	1	20.7	0	1	0.1	
					150	0	1.1	20.6	0	1	0.1	
			0.1	0.0	165	0	1.1	20.6	0	1	0.1	
					180	0	1.2	20.5	0	1	0.1	

PAGE:	4200 VASTERN ROAD, READING	GAS MONITORING
DATE: 03/12/2019		

Monitoring Date:

03/12/2019

Ambient Gas Conc.:

CH4 (%): 0.0

CO2 (%): 0.1

O2 (%): 21.6

Monitoring Engineer:

RK

CO (ppm): 1.0

H2S (ppm): 1.0

VOCs (ppm): N/A

Weather/Wind:

Overcast/Mod.

Weather Trend:

Stable

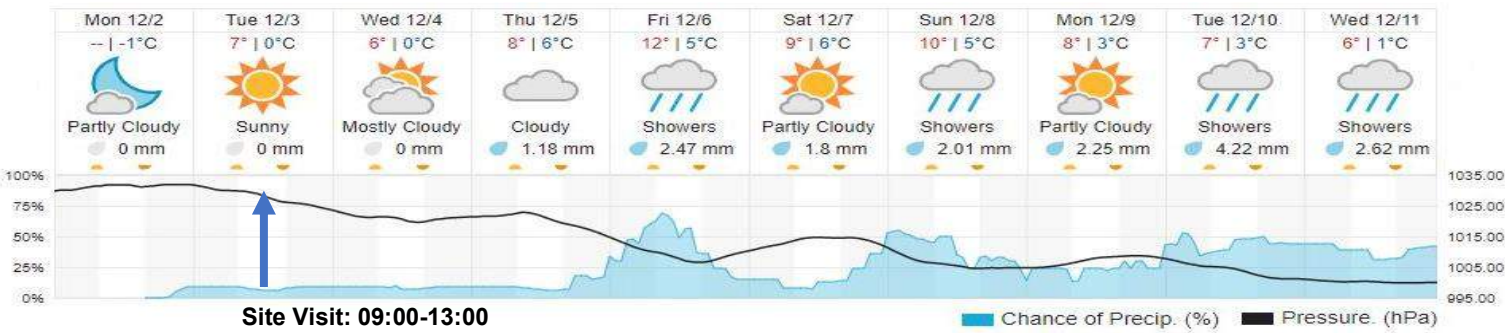
Atm. Press. Trend

Falling

Remarks: -

Equipment:

Geotech GA5000



Local Weather Station Atmospheric Pressure Records for 2nd to 11th December 2019.

NB Note: The weather station atmospheric pressure is normally corrected for attitude (providing an equivalent sea level atmospheric pressure), whereas the GA5000 gas analyser measures absolute atmospheric pressure at the sites altitude, therefore a difference in pressures is to be expected between the local station data and the gas analyser data. The graph above has been appended purely to give an indication of pressure trends prior to the monitoring visit.

PAGE:	4200	GAS MONITORING
DATE: 09/12/2019	VASTERN ROAD, READING	

Monitoring Date: 09/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.9
Monitoring Engineer: RK CO (ppm): 0.0 H2S (ppm): 0.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Strong **Weather Trend:** Unsettled **Atm. Press. Trend** Rising
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1001	1013	-4.01	Initial:	Initial:	15	0	4.4	18.5	0	1	0.2	2.26
					30	0	4.5	11	0	1	0.2	
			-7.0	0.0	45	0	4.5	10.4	0	1	0.2	
					60	0	4.5	10.3	0	1	0.2	
			Peak:	Peak:	75	0	4.5	10.3	0	1	0.2	
					90	0	4.5	10.3	0	1	0.2	
			-7.0	0.0	105	0	4.5	10.3	0	1	0.2	
					120	0	4.5	10.3	0	1	0.2	
			Average:	Average:	135	0	4.5	10.2	0	1	0.2	
					150	0	4.5	10.2	0	1	0.2	
			-6.7	0.0	165	0	4.6	10.2	0	1	0.2	
					180	0	4.6	10.2	0	1	0.2	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1002C	1009	-0.87	Initial:	Initial:	15	0	1.2	19.8	0	1	0.1	2.36
					30	0	1.2	16.9	0	1	0.1	
			-2.9	0.1	45	0	1.1	16.7	0	1	0.1	
					60	0	1.1	17	0	1	0.1	
			Peak:	Peak:	75	0	1.1	17.1	0	1	0.1	
					90	0	1	17.4	0	1	0.0	
			-2.9	0.1	105	0	1	17.8	0	0	0.0	
					120	0	1	17.9	0	0	0.0	
			Average:	Average:	135	0	1	18.1	0	1	0.0	
					150	0	0.9	18.3	0	1	0.0	
			-2.6	0.1	165	0	0.9	18.6	0	1	0.0	
					180	0	0.8	18.8	0	0	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1003E	1012	0.07	Initial:	Initial:	15	0	0.7	21.4	0	1	0.2	2.59
					30	0	0.7	20.6	0	1	0.2	
			0.1	0.0	45	0	0.7	20.6	0	1	0.2	
					60	0	0.7	20.6	0	1	0.2	
			Peak:	Peak:	75	0	0.7	20.5	0	1	0.2	
					90	0	0.7	20.6	0	1	0.2	
			0.2	0.0	105	0	0.7	20.6	0	1	0.2	
					120	0	0.7	20.6	0	1	0.2	
			Average:	Average:	135	0	0.7	20.6	0	1	0.2	
					150	0	0.7	20.6	0	1	0.2	
			0.1	0.0	165	0	0.7	20.6	0	1	0.2	
					180	0	0.7	20.6	0	1	0.2	

PAGE:	4200	GAS MONITORING
DATE: 09/12/2019	VASTERN ROAD, READING	

Monitoring Date: 09/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 21.9
Monitoring Engineer: RK CO (ppm): 0.0 H2S (ppm): 0.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Strong **Weather Trend:** Unsettled **Atm. Press. Trend** Rising
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1004	1007	-0.57	Initial:	Initial:	15	0	3.1	21.1	0	0	0.1	2.13
					30	0	2.9	20	0	0	0.1	
					45	0	2.7	20.1	0	0	0.1	
			-6.8	0.1	60	0	2.7	20	0	1	0.1	
					75	0	2.8	20	0	1	0.1	
					90	0	2.5	20.1	0	1	0.0	
			Peak:	Peak:	105	0	2	20.4	0	1	0.0	
					120	0	1.7	20.7	0	1	0.0	
					135	0	1.5	20.8	0	1	0.0	
			Average:	Average:	150	0	1.3	20.9	0	1	0.0	
					165	0	1.1	21.2	0	1	0.0	
					180	0	1	21.2	0	1	0.0	
BH1005	1007	0.6	Initial:	Initial:	15	0	1.1	21.6	0	1	1.1	2.53
					30	0	1.2	21.2	0	1	1.1	
					45	0	1.2	21.2	1	1	1.2	
			-22.0	0.4	60	0	1.2	21.2	1	1	1.2	
					75	0	1.2	21.2	1	1	1.2	
					90	0	1.2	21.2	1	1	1.2	
			Peak:	Peak:	105	0	1.2	21.2	1	1	1.3	
					120	0	1.2	21.2	1	1	1.3	
					135	0	1.2	21.1	1	1	1.3	
			Average:	Average:	150	0	1.2	21.1	0	1	1.3	
					165	0	1.3	21.1	1	1	1.3	
					180	0	1.3	21.1	1	1	1.3	
BH2001	1011	-1.42	Initial:	Initial:	15	0	0.7	21.7	0	1	1.0	2.30
					30	0	0.7	21.4	1	1	1.2	
					45	0	0.7	21.3	0	1	1.3	
			-20.9	0.0	60	0	0.7	21.3	0	1	1.3	
					75	0	0.7	21.3	0	1	1.4	
					90	0	0.7	21.3	0	1	1.4	
			Peak:	Peak:	105	0	0.7	21.3	0	1	1.4	
					120	0	0.7	21.3	0	1	1.5	
					135	0	0.7	21.3	0	1	1.5	
			Average:	Average:	150	0	0.7	21.3	0	1	1.5	
					165	0	0.7	21.3	0	1	1.5	
					180	0	0.8	21.3	0	1	1.5	

PAGE:	4200	GAS MONITORING
DATE: 09/12/2019	VASTERN ROAD, READING	

Monitoring Date: 09/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 21.9 O2 (%): 21.9
Monitoring Engineer: RK CO (ppm): 0.0 H2S (ppm): 0.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Strong **Weather Trend:** Unsettled **Atm. Press. Trend** Rising
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2002	1011	0.17	Initial:	Initial:	15	0	0.1	21.7	0	1	0.1	2.32
					30	0	0.1	21.7	0	1	0.1	
			0.1	0.0	45	0	0.1	21.7	0	1	0.1	
					60	0	0.1	21.7	0	1	0.1	
			Peak:	Peak:	75	0	0.1	21.8	0	1	0.1	
					90	0	0.1	21.8	0	1	0.1	
			0.1	0.0	105	0	0.1	21.8	0	1	0.1	
					120	0	0.1	21.8	0	1	0.1	
			Average:	Average:	135	0	0.1	21.8	0	1	0.1	
					150	0	0.1	21.8	0	1	0.1	
BH2003	1011	-0.48	Initial:	Initial:	15	0	0.2	21.5	0	1	0.7	2.48
					30	0	0.3	21.4	0	1	0.8	
			-20.7	0.3	45	0	0.3	21.4	0	1	0.8	
					60	0	0.3	21.4	0	1	0.8	
			Peak:	Peak:	75	0	0.3	21.4	0	1	0.8	
					90	0	0.3	21.4	0	1	0.8	
			-20.7	0.5	105	0	0.3	21.4	0	1	0.8	
					120	0	0.3	21.4	0	1	0.8	
			Average:	Average:	135	0	0.3	21.4	0	1	0.8	
					150	0	0.3	21.4	0	1	0.8	
BH2004	1010	0.05	Initial:	Initial:	15	0	0.2	21.2	0	0	0.5	2.43
					30	0	0.2	21	0	0	0.6	
			-0.6	0.3	45	0	0.2	21	0	0	0.6	
					60	0	0.2	21.1	0	0	0.5	
			Peak:	Peak:	75	0	0.2	21.1	0	1	0.4	
					90	0	0.2	21.2	0	1	0.3	
			-1.2	0.5	105	0	0.1	21.2	0	1	0.2	
					120	0	0.1	21.3	0	1	0.2	
			Average:	Average:	135	0	0.1	21.3	0	1	0.2	
					150	0	0.1	21.3	0	1	0.1	
BH2004	1010	0.05	-1.0	0.5	165	0	0.1	21.3	0	1	0.1	2.43
					180	0	0.1	21.3	0	1	0.1	
			-1.0	0.5	165	0	0.1	21.3	0	1	0.1	
					180	0	0.1	21.3	0	1	0.1	

PAGE:	4200	GAS MONITORING
DATE: 09/12/2019	VASTERN ROAD, READING	

Monitoring Date: 09/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 21.9 O2 (%): 21.9
Monitoring Engineer: RK CO (ppm): 0.0 H2S (ppm): 0.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Strong **Weather Trend:** Unsettled **Atm. Press. Trend** Rising
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2005	1008	-0.02	Initial:	Initial:	15	0	10.6	15.7	1	1	0.2	2.49 Strong Hydro-carbon Odour & Sheen on Dipmeter
					30	0	10.8	7.8	1	1	0.2	
					45	0	10.8	7.1	1	1	0.2	
			0.1	0.0	60	0	10.8	7.1	1	1	0.1	
					75	0	10.8	7	1	1	0.1	
					90	0	10.8	7.1	0	1	0.1	
			Peak:	Peak:	105	0	10.9	7.1	0	1	0.1	
					120	0	10.9	7.1	0	1	0.1	
					135	0	10.9	7	0	1	0.1	
			Average:	Average:	150	0	11.1	6.9	0	1	0.1	
					165	0	11.4	6.5	0	1	0.0	
					180	0	11.6	6.1	0	1	0.0	
WS1003	1012	0.27	Initial:	Initial:	15	0	0.8	21.3	0	1	0.4	2.11
					30	0	0.8	20.7	0	1	0.4	
					45	0	0.8	20.7	0	1	0.4	
			-20.1	0.0	60	0	0.8	20.7	0	1	0.4	
					75	0	0.7	20.7	0	1	0.4	
					90	0	0.7	20.7	0	1	0.4	
			Peak:	Peak:	105	0	0.8	20.7	0	1	0.4	
					120	0	0.8	20.7	0	1	0.3	
					135	0	0.8	20.7	0	1	0.3	
			Average:	Average:	150	0	0.8	20.7	0	1	0.3	
					165	0	0.7	20.7	0	1	0.3	
					180	0	0.7	20.7	0	1	0.3	
WS1004	1012	-0.05	Initial:	Initial:	15	0	1.3	21.3	0	1	0.2	2.28
					30	0	1.1	20.9	0	1	0.2	
					45	0	0.9	21	0	1	0.1	
			0.1	0.0	60	0	0.8	21.1	0	1	0.1	
					75	0	0.8	21.2	0	1	0.1	
					90	0	0.7	21.2	0	1	0.1	
			Peak:	Peak:	105	0	0.6	21.3	0	1	0.1	
					120	0	0.6	21.3	0	1	0.1	
					135	0	0.5	21.4	0	1	0.1	
			Average:	Average:	150	0	0.5	21.4	0	1	0.1	
					165	0	0.4	21.4	0	1	0.1	
					180	0	0.4	21.5	0	1	0.1	

PAGE:	4200	GAS MONITORING
DATE: 09/12/2019	VASTERN ROAD, READING	

Monitoring Date: 09/12/2019 **Ambient Gas Conc.:** **CH4 (%):** 0.0 **CO2 (%):** 0.1 **O2 (%):** 21.9
Monitoring Engineer: RK **CO (ppm):** 0.0 **H2S (ppm):** 0.0 **VOCs (ppm):** N/A
Weather/Wind: Overcast/Strong **Weather Trend:** Unsettled **Atm. Press. Trend** Rising
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1007	1009	1.39	Initial:	Initial:	15	0	0.8	21.9	0	0	0.2	0.95
					30	0	0.8	21.7	0	1	0.2	
			-23.7	0.1	45	0	0.8	21.7	0	0	0.2	
					60	0	0.8	21.7	0	1	0.2	
			Peak:	Peak:	75	0	0.8	21.7	0	1	0.2	
					90	0	0.8	21.7	0	1	0.1	
			-23.7	0.1	105	0	0.8	21.7	0	1	0.1	
					120	0	0.8	21.7	0	1	0.1	
			Average:	Average:	135	0	0.8	21.7	0	1	0.1	
					150	0	0.8	21.7	0	1	0.1	
					165	0	0.8	21.7	0	1	0.1	
					180	0	0.8	21.7	0	1	0.1	
			Initial:	Initial:	15	0	0.5	21.6	0	1	0.1	
					30	0	0.5	21.7	0	0	0.1	
			0.1	0.0	45	0	0.6	21.7	0	0	0.1	
					60	0	0.6	21.7	0	0	0.1	
			Peak:	Peak:	75	0	0.6	21.6	0	0	0.1	
					90	0	0.7	21.6	0	0	0.1	
			0.2	0.1	105	0	0.7	21.5	0	1	0.1	
					120	0	0.8	21.5	0	1	0.1	
			Average:	Average:	135	0	0.8	21.4	0	1	0.1	2.24 Faint Hydro-carbon Odour & Sheen on Dipmeter
					150	0	0.9	21.3	0	1	0.1	
			0.1	0.0	165	0	1	21.2	0	1	0.0	
					180	0	1.1	21.1	0	0	0.0	

PAGE:	4200	GAS MONITORING
DATE: 09/12/2019	VASTERN ROAD, READING	

Monitoring Date:09/12/2019

Monitoring Engineer:RK

Weather/Wind:Overcast/Strong

Remarks:-

Ambient Gas Conc.:

CH4 (%):0.0

CO (ppm):0.0

Weather Trend:Unsettled

CO2 (%):0.1

H2S (ppm):0.0

Atm. Press. TrendRising

Equipment:Geotech GA5000

O2 (%):21.9

VOCs (ppm):N/A



Local Weather Station Atmospheric Pressure Records for 8th to 15th December 2019.

NB Note: The weather station atmospheric pressure is normally corrected for attitude (providing an equivalent sea level atmospheric pressure), whereas the GA5000 gas analyser measures absolute atmospheric pressure at the sites altitude, therefore a difference in pressures is to be expected between the local station data and the gas analyser data. The graph above has been appended purely to give an indication of pressure trends prior to the monitoring visit.

PAGE:	4200	GAS MONITORING
DATE: 13/12/2019	VASTERN ROAD, READING	

Monitoring Date: 13/12/2019
Monitoring Engineer: RK
Weather/Wind: Overcast/Strong
Remarks: BH1002C: Bung moved in the end of test allowing air and standing water to move in

Ambient Gas Conc.:
CH4 (%): 0.0
CO (ppm): 0.0
Weather Trend: Unsettled

CO2 (%): 0.1
H2S (ppm): 0.0
Atm. Press. Trend: Rising
Equipment: Geotech GA5000

O2 (%): 22.3
VOCs (ppm): N/A

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1001	980	11.32	Initial:	Initial:	15	0	4.1	17.5	0	0	0.1	2.13
					30	0	4.1	12.3	0	1	0.2	
			0.6	0.1	45	0	4.1	11.7	0	1	0.2	
					60	0	4.1	11.7	0	1	0.2	
			Peak:	Peak:	75	0	4.1	11.6	0	1	0.2	
					90	0	4.1	11.6	0	1	0.2	
			1.3	0.3	105	0	4.2	11.6	0	1	0.2	
					120	0	4.2	11.6	0	1	0.2	
			Average:	Average:	135	0	4.2	11.5	0	1	0.2	
					150	0	4.2	11.5	0	1	0.2	
			1.2	0.3	165	0	4.2	11.5	0	1	0.2	
					180	0	4.3	11.4	0	1	0.2	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1002C	980	7.02	Initial:	Initial:	15	0	0.2	19.5	2	0	0.1	2.2 (See Remark)
					30	0	0.2	16.4	2	1	0.1	
			-0.2	0.2	45	0	0.2	16	3	1	0.1	
					60	0	0.3	16	3	1	0.1	
			Peak:	Peak:	75	0	0.3	15.9	4	1	0.1	
					90	0	0.3	16	4	1	0.1	
			-0.6	0.3	105	0	0.2	18.5	2	1	0.1	
					120	0	0.2	20	1	1	0.1	
			Average:	Average:	135	0	0.1	20.5	1	1	0.1	
					150	0	0.1	20.8	0	1	0.1	
			-0.5	0.3	165	0	0.1	20.9	0	1	0.1	
					180	0	0.1	21	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1003E	980	-0.03	Initial:	Initial:	15	0	0.7	22	0	0	0.1	2.45
					30	0	0.7	21.5	0	0	0.1	
			0.1	0.0	45	0	0.7	21.4	0	0	0.1	
					60	0	0.7	21.4	0	1	0.1	
			Peak:	Peak:	75	0	0.7	21.4	0	1	0.1	
					90	0	0.7	21.4	0	1	0.1	
			0.2	0.1	105	0	0.7	21.4	0	1	0.1	
					120	0	0.7	21.4	0	1	0.1	
			Average:	Average:	135	0	0.7	21.4	0	1	0.1	
					150	0	0.7	21.4	0	1	0.1	
			0.2	0.0	165	0	0.7	21.4	0	1	0.1	
					180	0	0.7	21.4	0	1	0.1	

PAGE:	4200	GAS MONITORING
DATE: 13/12/2019	VASTERN ROAD, READING	

Monitoring Date: 13/12/2019
Monitoring Engineer: RK
Weather/Wind: Overcast/Strong
Remarks: BH1002C: Bung moved in the end of test allowing air and standing water to move in

Ambient Gas Conc.:
CH4 (%): 0.0
CO (ppm): 0.0
Weather Trend: Unsettled

CO2 (%): 0.1
H2S (ppm): 0.0
Atm. Press. Trend: Rising
Equipment: Geotech GA5000

O2 (%): 22.3
VOCs (ppm): N/A

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1004	977	19.06	Initial:	Initial:	15	0	3.3	20.4	1	1	0.2	1.99
					30	0	3.3	19.5	0	1	0.2	
			-18.4	0.3	45	0	3.3	19.3	0	1	0.2	
					60	0	3.3	19.3	0	1	0.2	
			Peak:	Peak:	75	0	3.3	19.3	0	1	0.2	
					90	0	3.3	19.3	0	1	0.1	
			-18.4	0.7	105	0	3.4	19.3	0	1	0.1	
					120	0	3.4	19.3	0	1	0.1	
			Average:	Average:	135	0	3.5	19.2	0	1	0.1	
					150	0	3.6	19.2	0	1	0.1	
			-16.3	0.7	165	0	3.6	19.2	0	1	0.1	
					180	0	3.6	19.2	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1005	978	19.45	Initial:	Initial:	15	0	1	21.6	0	1	0.8	2.39
					30	0	1	21.3	0	1	0.9	
			-18.4	0.2	45	0	1	21.3	0	1	0.9	
					60	0	1	21.3	0	1	0.9	
			Peak:	Peak:	75	0	1	21.3	0	1	1.0	
					90	0	1	21.3	0	1	1.0	
			-18.4	0.6	105	0	1	21.3	0	1	1.0	
					120	0	1	21.3	0	1	1.0	
			Average:	Average:	135	0	1.1	21.3	0	1	1.0	
					150	0	1.1	21.3	0	1	1.0	
			-17.0	0.5	165	0	1.1	21.3	0	1	1.0	
					180	0	1.1	21.3	0	1	1.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2001	979	0.03	Initial:	Initial:	15	0	0.5	22	1	1	0.7	2.23
					30	0	0.4	21.8	1	1	0.7	
			-0.1	0.0	45	0	0.4	21.9	1	1	0.6	
					60	0	0.3	21.9	1	1	0.6	
			Peak:	Peak:	75	0	0.3	22	1	1	0.5	
					90	0	0.3	22	0	1	0.5	
			-0.2	0.0	105	0	0.3	22	0	1	0.4	
					120	0	0.2	22	0	1	0.4	
			Average:	Average:	135	0	0.2	22.1	0	1	0.4	
					150	0	0.2	22.1	0	1	0.3	
			-0.2	0.0	165	0	0.2	22.1	0	1	0.3	
					180	0	0.2	22.1	0	1	0.3	

PAGE:	4200	GAS MONITORING
DATE: 13/12/2019	VASTERN ROAD	

Monitoring Date: 13/12/2019
Monitoring Engineer: RK
Weather/Wind: Overcast/Strong
Remarks: BH1002C: Bung moved in the end of test allowing air and standing water to move in

Ambient Gas Conc.:
CH4 (%): 0.0
CO (ppm): 0.0
Weather Trend: Unsettled

CO2 (%): 0.1
H2S (ppm): 0.0
Atm. Press. Trend: Rising
Equipment: Geotech GA5000

O2 (%): 22.3
VOCs (ppm): N/A

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2002	979	-0.02	Initial:	Initial:	15	0	0.2	22.1	0	0	0.1	2.18
					30	0	0.1	22.1	0	0	0.1	
			0.1	0.0	45	0	0.1	22.2	0	0	0.1	
					60	0	0.1	22.2	0	0	0.1	
			Peak:	Peak:	75	0	0.1	22.2	0	0	0.0	
					90	0	0.1	22.2	0	0	0.0	
			0.1	0.1	105	0	0.1	22.2	0	0	0.0	
					120	0	0.1	22.2	0	0	0.0	
			Average:	Average:	135	0	0.1	22.2	0	1	0.0	
					150	0	0.1	22.2	0	1	0.0	
			0.1	0.0	165	0	0.1	22.2	0	1	0.0	
					180	0	0.1	22.2	0	0	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2003	979	-0.14	Initial:	Initial:	15	0	0.2	22.2	0	0	0.5	2.31
					30	0	0.2	22.1	0	0	0.6	
			-20.9	0.2	45	0	0.2	22.1	0	0	0.6	
					60	0	0.3	22.1	0	0	0.6	
			Peak:	Peak:	75	0	0.3	22.1	0	1	0.6	
					90	0	0.3	22.1	0	1	0.6	
			-20.9	0.5	105	0	0.3	22.1	0	1	0.6	
					120	0	0.3	22.1	0	1	0.6	
			Average:	Average:	135	0	0.3	22.1	0	1	0.6	
					150	0	0.3	22.1	0	1	0.6	
			-18.6	0.5	165	0	0.3	22.1	0	1	0.6	
					180	0	0.3	22.1	0	1	0.6	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2004	979	3.12	Initial:	Initial:	15	0	0.2	22.2	0	0	0.5	2.23
					30	0	0.3	22	0	1	0.6	
			-0.1	0.2	45	0	0.3	22	0	0	0.6	
					60	0	0.3	22	0	0	0.6	
			Peak:	Peak:	75	0	0.2	22.1	0	1	0.4	
					90	0	0.2	22.2	0	1	0.3	
			-0.2	0.4	105	0	0.1	22.2	0	1	0.2	
					120	0	0.1	22.2	0	1	0.2	
			Average:	Average:	135	0	0.1	22.3	0	1	0.2	
					150	0	0.1	22.3	0	1	0.1	
			-0.1	0.3	165	0	0.1	22.3	0	1	0.1	
					180	0	0.1	22.3	0	1	0.1	

PAGE:	4200	GAS MONITORING
DATE: 13/12/2019	VASTERN ROAD	

Monitoring Date: 13/12/2019
Monitoring Engineer: RK
Weather/Wind: Overcast/Strong
Remarks: BH1002C: Bung moved in the end of test allowing air and standing water to move in

Ambient Gas Conc.:
Weather Trend: Unsettled

CH4 (%): 0.0
CO (ppm): 0.0
Unsettled
Atm. Press. Trend
Equipment: Geotech GA5000

CO2 (%): 0.1
H₂S (ppm): 0.0
Rising

O2 (%): 22.3
VOCs (ppm): N/A

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2005	980	-0.1	Initial:	Initial:	15	0	10.2	15.6	0	1	0.1	2.3 Strong Hydro-carbon Odour & Sheen on Dipmeter
					30	0	10.4	8.5	0	1	0.1	
			0.2	0.0	45	0	10.4	7.8	0	1	0.1	
					60	0	10.4	7.7	0	1	0.1	
			Peak:	Peak:	75	0	10.5	7.6	0	1	0.1	
					90	0	10.5	7.6	0	1	0.1	
			0.2	0.1	105	0	10.6	7.5	0	1	0.1	
					120	0	10.7	7.4	0	1	0.1	
			Average:	Average:	135	0	10.9	7.2	0	1	0.1	
					150	0	11.1	6.9	0	1	0.1	
			0.2	0.0	165	0	11.4	6.5	0	1	0.1	
					180	0	11.6	6.1	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1003	980	-0.02	Initial:	Initial:	15	0	0.3	22	0	0	0.1	1.96
					30	0	0.2	22	0	0	0.1	
			0.1	0.1	45	0	0.2	22.1	0	0	0.1	
					60	0	0.2	22.2	0	0	0.1	
			Peak:	Peak:	75	0	0.1	22.2	0	0	0.1	
					90	0	0.1	22.2	0	0	0.1	
			0.2	0.1	105	0	0.1	22.2	0	0	0.1	
					120	0	0.1	22.2	0	0	0.1	
			Average:	Average:	135	0	0.1	22.2	0	1	0.1	
					150	0	0.1	22.2	0	0	0.1	
			0.2	0.0	165	0	0.1	22.2	0	0	0.1	
					180	0	0.1	22.2	0	0	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1004	980	0.15	Initial:	Initial:	15	0	1.8	21.7	0	0	0.2	2.13
					30	0	1.9	21.1	0	0	0.2	
			0.1	0.0	45	0	1.8	21.1	0	0	0.2	
					60	0	1.6	21.2	0	0	0.2	
			Peak:	Peak:	75	0	1.3	21.4	0	1	0.2	
					90	0	1.1	21.6	0	0	0.1	
			0.2	0.0	105	0	0.9	21.7	0	1	0.1	
					120	0	0.8	21.8	0	0	0.1	
			Average:	Average:	135	0	0.6	21.9	0	0	0.1	
					150	0	0.5	22	0	1	0.1	
			0.2	0.0	165	0	0.5	22	0	1	0.1	
					180	0	0.4	22.1	0	1	0.1	

PAGE:	4200	GAS MONITORING
DATE: 13/12/2019	VASTERN ROAD, READING	

Monitoring Date: 13/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 22.3
Monitoring Engineer: RK CO (ppm): 0.0 H₂S (ppm): 0.0 VOCs (ppm): N/A
Weather/Wind: Overcast/Strong **Weather Trend:** Unsettled **Atm. Press. Trend** Rising
Remarks: BH1002C: Bung moved in the end of test allowing air and standing water to move in **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1007	979	0.02	Initial:	Initial:	15	0	0.5	21.8	0	1	0.1	0.89
					30	0	0.5	21.5	0	1	0.1	
					45	0	0.5	21.5	0	1	0.1	
			-14.8	0.8	60	0	0.5	21.5	0	1	0.1	
					75	0	0.5	21.5	0	1	0.1	
					90	0	0.5	21.5	0	1	0.1	
			Peak:	Peak:	105	0	0.4	21.6	0	1	0.1	
					120	0	0.4	21.6	0	1	0.1	
					135	0	0.4	21.7	0	1	0.1	
			Average:	Average:	150	0	0.4	21.7	0	1	0.1	
					165	0	0.3	21.8	0	1	0.1	
					180	0	0.3	21.8	0	1	0.1	
WS1019	978	0.1	Initial:	Initial:	15	0	0.2	22.1	0	0	0.1	2.11 Faint Hydro-carbon Odour & Sheen on Dipmeter
					30	0	0.3	22	0	0	0.1	
					45	0	0.3	22.1	0	0	0.1	
			0.2	0.1	60	0	0.2	22.1	0	0	0.1	
					75	0	0.2	22.1	0	1	0.1	
					90	0	0.2	22.2	0	1	0.1	
			Peak:	Peak:	105	0	0.2	22.2	0	0	0.1	
					120	0	0.2	22.2	0	0	0.1	
					135	0	0.2	22.2	0	0	0.0	
			Average:	Average:	150	0	0.2	22.2	0	1	0.0	
					165	0	0.1	22.2	0	1	0.0	
					180	0	0.1	22.2	0	1	0.0	

PAGE:	4200	GAS MONITORING
DATE: 13/12/2019	VASTERN ROAD, READING	

Monitoring Date:13/12/2019

Monitoring Engineer:RK

Weather/Wind:Overcast/Strong

Remarks: BH1002C: Bung moved in the er

Ambient Gas Conc.:

CH4 (%): 0.0

CO (ppm): 0.0

Weather Trend:Unsettled

CO2 (%): 0.1

H2S (ppm): 0.0

Atm. Press. TrendRising

Equipment:Geotech GA5000

O2 (%): 22.3

VOCs (ppm): N/A



Local Weather Station Atmospheric Pressure Records for 12th to 21st December 2019.

NB Note: The weather station atmospheric pressure is normally corrected for attitude (providing an equivalent sea level atmospheric pressure), whereas the GA5000 gas analyser measures absolute atmospheric pressure at the sites altitude, therefore a difference in pressures is to be expected between the local station data and the gas analyser data. The graph above has been appended purely to give an indication of pressure trends prior to the monitoring visit.

PAGE:	4200	GAS MONITORING
DATE: 18/12/2019	VASTERN ROAD, READING	

Monitoring Date: 18/12/2019
Monitoring Engineer: JM
Weather/Wind: Cool/Calm
Remarks: -

Ambient Gas Conc.:
Weather Trend: Unsettled

CH4 (%): 0.0
CO (ppm): 0.0
Unsettled

CO2 (%): 0.1
H2S (ppm): 0.0
Atm. Press. Trend

O2 (%): 22.2
VOCs (ppm): N/A
Falling

Equipment: Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1001	1007	1.37	Initial:	Initial:	15	0	4	15.3	0	1	0.1	2.09
					30	0	4	11.3	0	1	0.1	
			-5.0	-0.1	45	0	4	11.1	0	1	0.1	
					60	0	4	11	0	1	0.1	
			Peak:	Peak:	75	0	4.1	11	0	1	0.1	
					90	0	4.1	11	0	1	0.1	
			-5.0	-0.1	105	0	4.1	11	0	1	0.1	
					120	0	4.1	11	0	1	0.1	
			Average:	Average:	135	0	4.1	11	0	1	0.1	
					150	0	4.1	10.9	0	1	0.1	
			-4.5	-0.1	165	0	4.1	10.9	0	1	0.1	
					180	0	4.1	10.9	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1002C	1006	0.02	Initial:	Initial:	15	0	0.1	21.5	1	1	0.0	2.05
					30	0	0.1	21	1	1	0.0	
			0.1	0.0	45	0	0.1	21.3	1	1	0.0	
					60	0	0.1	21.3	1	1	0.0	
			Peak:	Peak:	75	0	0.1	21.4	1	1	0.0	
					90	0	0.1	21.5	1	1	0.0	
			0.1	0.4	105	0	0.1	21.5	1	1	0.0	
					120	0	0.1	21.5	1	1	0.0	
			Average:	Average:	135	0	0.1	21.6	1	1	0.0	
					150	0	0.1	21.7	0	1	0.0	
			0.1	0.3	165	0	0.1	21.7	1	1	0.0	
					180	0	0.1	21.7	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1003E	1008	0	Initial:	Initial:	15	0	0.6	21.1	0	1	0.1	2.41
					30	0	0.6	20.7	0	1	0.0	
			0.0	0.0	45	0	0.6	20.7	0	1	0.0	
					60	0	0.6	20.7	0	1	0.0	
			Peak:	Peak:	75	0	0.6	20.7	0	1	0.0	
					90	0	0.6	20.8	0	1	0.0	
			0.1	0.0	105	0	0.6	20.8	0	1	0.0	
					120	0	0.6	20.8	0	1	0.0	
			Average:	Average:	135	0	0.6	20.8	0	1	0.0	
					150	0	0.6	20.8	0	1	0.0	
			0.0	0.0	165	0	0.6	20.8	0	1	0.0	
					180	0	0.6	20.8	0	1	0.0	

PAGE:	4200	GAS MONITORING
DATE: 18/12/2019	VASTERN ROAD, READING	

Monitoring Date: 18/12/2019
Monitoring Engineer: JM
Weather/Wind: Cool/Calm
Remarks: -

Ambient Gas Conc.:
Weather Trend: Unsettled

CH4 (%): 0.0
CO (ppm): 0.0
Unsettled

CO2 (%): 0.1
H₂S (ppm): 0.0
Atm. Press. Trend

O2 (%): 22.2
VOCs (ppm): N/A
Falling

Equipment: Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1004	1006	2.69	Initial:	Initial:	15	0	3.2	21.2	2	0	0.2	1.94
					30	0	3.3	20.3	0	0	0.2	
			-22.0	0.0	45	0	3.3	20.2	0	0	0.2	
					60	0	3.3	20.2	0	1	0.1	
			Peak:	Peak:	75	0	3.3	20.2	0	1	0.1	
					90	0	3.3	20.1	0	1	0.1	
			-22.0	0.0	105	0	3.3	20.1	0	1	0.1	
					120	0	3.3	20.1	0	1	0.1	
			Average:	Average:	135	0	3.4	20.1	0	1	0.1	
					150	0	3.4	20.1	0	1	0.1	
			-18.0	0.0	165	0	3.5	20	0	1	0.1	
					180	0	3.5	20	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH1005	1006	1.52	Initial:	Initial:	15	0	1.1	22.1	0	1	0.9	2.34
					30	0	1.1	21.7	0	1	0.9	
			-17.0	0.1	45	0	1.1	21.7	0	1	0.9	
					60	0	1	21.7	0	1	0.9	
			Peak:	Peak:	75	0	1	21.8	0	1	0.8	
					90	0	1	21.8	0	1	0.8	
			-17.0	0.4	105	0	0.9	21.9	0	1	0.8	
					120	0	0.9	21.9	0	1	0.7	
			Average:	Average:	135	0	0.8	21.9	0	1	0.7	
					150	0	0.8	21.9	0	1	0.7	
			-14.3	0.3	165	0	0.7	22	0	1	0.7	
					180	0	0.7	22	0	1	0.6	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2001	1006	0.07	Initial:	Initial:	15	0	0.4	22.2	1	1	0.5	2.14
					30	0	0.4	21.8	1	1	0.6	
			-5.0	0.1	45	0	0.4	21.9	1	1	0.6	
					60	0	0.3	21.9	1	1	0.5	
			Peak:	Peak:	75	0	0.3	22	1	1	0.5	
					90	0	0.3	22	1	1	0.5	
			-5.0	0.1	105	0	0.3	22.1	1	1	0.5	
					120	0	0.3	22.1	1	1	0.5	
			Average:	Average:	135	0	0.2	22.1	1	1	0.5	
					150	0	0.2	22.2	1	1	0.4	
			-3.0	0.1	165	0	0.2	22.2	1	1	0.4	
					180	0	0.2	22.2	0	1	0.4	

PAGE:	4200	GAS MONITORING
DATE: 18/12/2019	VASTERN ROAD, READING	

Monitoring Date: 18/12/2019
Monitoring Engineer: JM
Weather/Wind: Cool/Calm
Remarks: -

Ambient Gas Conc.:
Weather Trend: Unsettled

CH4 (%): 0.0
CO (ppm): 0.0
Unsettled

CO2 (%): 0.1
H₂S (ppm): 0.0
Atm. Press. Trend

O2 (%): 22.2
VOCs (ppm): N/A
Falling

Equipment: Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2002	1006	0.03	Initial:	Initial:	15	0	0.2	22.3	0	1	0.1	2.11
					30	0	0.2	22.3	0	1	0.0	
			0.0	0.0	45	0	0.1	22.4	0	1	0.0	
					60	0	0.1	22.5	0	1	0.0	
			Peak:	Peak:	75	0	0.1	22.5	0	1	0.0	
					90	0	0.1	22.5	0	1	0.0	
			0.0	0.0	105	0	0.1	22.5	0	1	0.0	
					120	0	0.1	22.5	0	1	0.0	
			Average:	Average:	135	0	0.1	22.5	0	1	0.0	
					150	0	0.1	22.5	0	1	0.0	
			0.0	0.0	165	0	0.1	22.5	0	1	0.0	
					180	0	0.1	22.5	0	1	0.0	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2003	1006	0.33	Initial:	Initial:	15	0	0.2	22.5	0	1	0.4	2.00
					30	0	0.2	22.4	0	0	0.5	
			-19.9	0.1	45	0	0.3	22.4	0	1	0.5	
					60	0	0.3	22.4	0	1	0.5	
			Peak:	Peak:	75	0	0.3	22.4	0	1	0.5	
					90	0	0.2	22.4	0	1	0.5	
			-19.9	0.3	105	0	0.2	22.4	0	1	0.5	
					120	0	0.3	22.4	0	1	0.5	
			Average:	Average:	135	0	0.3	22.4	0	1	0.5	
					150	0	0.3	22.4	0	1	0.5	
			-18.1	0.2	165	0	0.3	22.4	0	1	0.5	
					180	0	0.3	22.4	0	1	0.5	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2004	1006	0.21	Initial:	Initial:	15	0	0.2	22.4	0	1	0.5	2.21
					30	0	0.2	22.2	0	1	0.5	
			-3.3	0.1	45	0	0.2	22.3	0	1	0.4	
					60	0	0.2	22.3	0	1	0.3	
			Peak:	Peak:	75	0	0.2	22.4	0	1	0.3	
					90	0	0.1	22.4	0	1	0.2	
			-3.3	0.1	105	0	0.1	22.4	0	1	0.2	
					120	0	0.1	22.4	0	1	0.1	
			Average:	Average:	135	0	0.1	22.4	0	1	0.0	
					150	0	0.1	22.5	0	1	0.0	
			-2.2	0.1	165	0	0.1	22.5	0	1	0.0	
					180	0	0.1	22.5	0	1	0.0	

PAGE:	4200	GAS MONITORING
DATE: 18/12/2019	VASTERN ROAD, READING	

Monitoring Date: 18/12/2019 **Ambient Gas Conc.:** CH4 (%): 0.0 CO2 (%): 0.1 O2 (%): 22.2
Monitoring Engineer: JM CO (ppm): 0.0 H₂S (ppm): 0.0 VOCs (ppm): N/A
Weather/Wind: Cool/Calm **Weather Trend:** Unsettled **Atm. Press. Trend:** Falling
Remarks: - **Equipment:** Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
BH2005	1006	-0.03	Initial:	Initial:	15	0	9.3	15.1	0	1	0.1	1.97 (Strong odour and sheen)
					30	0	9.4	9.7	0	1	0.1	
			0.1	0.0	45	0	9.5	9.2	0	1	0.1	
					60	0	9.5	9.2	0	1	0.1	
			Peak:	Peak:	75	0	9.4	9.2	0	1	0.1	
					90	0	9.4	9.2	0	1	0.1	
			0.2	0.0	105	0	9.4	9.2	0	1	0.1	
					120	0	9.5	9.2	0	1	0.1	
			Average:	Average:	135	0	9.5	9.2	0	1	0.1	
					150	0	9.6	9.1	0	1	0.1	
			0.1	0.0	165	0	9.9	8.7	0	1	0.1	
					180	0	10.2	8.2	0	1	0.1	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1003	1007	0.12	Initial:	Initial:	15	0	0.6	21.6	0	1	0.2	1.94
					30	0	0.6	21.3	0	1	0.2	
			-18.8	0.0	45	0	0.5	21.3	0	1	0.3	
					60	0	0.5	21.4	0	1	0.2	
			Peak:	Peak:	75	0	0.5	21.4	0	1	0.2	
					90	0	0.5	21.4	0	1	0.2	
			-18.8	0.0	105	0	0.5	21.5	0	1	0.2	
					120	0	0.5	21.5	0	1	0.2	
			Average:	Average:	135	0	0.5	21.5	0	1	0.2	
					150	0	0.5	21.5	0	1	0.2	
			-15.0	0.0	165	0	0.5	21.6	0	1	0.2	
					180	0	0.5	21.6	0	1	0.2	
Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1004	1007	-0.05	Initial:	Initial:	15	0	2.1	21.4	0	1	0.2	2.10
					30	0	2.1	21	0	1	0.2	
			-7.0	0.0	45	0	2.1	21	0	1	0.2	
					60	0	2	21	0	1	0.2	
			Peak:	Peak:	75	0	1.9	21.1	0	1	0.2	
					90	0	1.7	21.2	0	1	0.2	
			-7.0	0.0	105	0	1.6	21.3	0	1	0.2	
					120	0	1.4	21.4	0	1	0.1	
			Average:	Average:	135	0	1.2	21.6	0	1	0.1	
					150	0	1	21.7	0	1	0.1	
			-3.5	0.0	165	0	0.9	21.8	0	1	0.1	
					180	0	0.8	21.8	0	1	0.1	

PAGE:	4200	GAS MONITORING
DATE: 18/12/2019	VASTERN ROAD, READING	

Monitoring Date: 18/12/2019
Monitoring Engineer: JM
Weather/Wind: Cool/Calm
Remarks: -

Ambient Gas Conc.:
Weather Trend: Unsettled

CH4 (%): 0.0
CO (ppm): 0.0
Unsettled

CO2 (%): 0.1
H₂S (ppm): 0.0
Atm. Press. Trend

O2 (%): 22.2
VOCs (ppm): N/A
Falling

Equipment: Geotech GA5000

Borehole ID	Atmospheric Barometric Pressure	Borehole Barometric Pressure	Flow	Second flow (after bung was placed back)	Time	Methane	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Volatile Organic Compounds	Water Level
	(mb)	(mb)	(l/hr)	(l/hr)	(sec)	CH4 (%)	CO2 (%)	O2 (%)	CO (ppm)	H2S (ppm)	VOCs (ppm)	(m)
WS1007	1007	0.02	Initial:	Initial:	15	0	0.7	22	0	1	0.2	2.00
					30	0	0.7	21.8	0	1	0.2	
					45	0	0.7	21.8	0	1	0.2	
			-20.2	2.6	60	0	0.6	21.8	0	1	0.1	
					75	0	0.6	21.8	0	1	0.1	
					90	0	0.6	21.9	0	1	0.1	
			Peak:	Peak:	105	0	0.5	21.9	0	1	0.1	
					120	0	0.5	21.9	0	1	0.1	
					135	0	0.5	21.9	0	1	0.1	
			Average:	Average:	150	0	0.5	21.9	0	1	0.1	
					165	0	0.5	21.9	0	1	0.1	
					180	0	0.5	22	0	1	0.1	
WS1019	1006	0.03	Initial:	Initial:	15	0	0.2	22.2	0	1	0.1	2.05 (Faint odour and sheen)
					30	0	0.2	22.2	0	1	0.0	
					45	0	0.2	22.3	0	0	0.0	
			0.1	0.0	60	0	0.1	22.3	0	1	0.0	
					75	0	0.1	22.3	0	1	0.0	
					90	0	0.1	22.3	0	1	0.0	
			Peak:	Peak:	105	0	0.1	22.3	0	1	0.0	
					120	0	0.1	22.4	0	1	0.0	
					135	0	0.1	22.4	0	1	0.0	
			Average:	Average:	150	0	0.1	22.4	0	1	0.0	
					165	0	0.1	22.4	0	1	0.0	
					180	0	0.1	22.4	0	1	0.0	

PAGE:	4200	GAS MONITORING
DATE: 18/12/2019	VASTERN ROAD, READING	

Monitoring Date:	18/12/2019	Ambient Gas Conc.:	CH4 (%): 0.0	CO2 (%): 0.1	O2 (%): 22.2
Monitoring Engineer:	JM		CO (ppm): 0.0	H2S (ppm): 0.0	VOCs (ppm): N/A
Weather/Wind:	Cool/Calm	Weather Trend:	Unsettled	Atm. Press. Trend	Falling
Remarks:	-			Equipment:	Geotech GA5000



Local Weather Station Atmospheric Pressure Records for 16th to 23rd December 2019.

NB Note: The weather station atmospheric pressure is normally corrected for attitude (providing an equivalent sea level atmospheric pressure), whereas the GA5000 gas analyser measures absolute atmospheric pressure at the sites altitude, therefore a difference in pressures is to be expected between the local station data and the gas analyser data. The graph above has been appended purely to give an indication of pressure trends prior to the monitoring visit.

Attachment 4

Gas Analyser GA5000 Calibration Certificate

CERTIFICATION OF CALIBRATION



Date Of Calibration: 29-Jan-2019

Certificate Number: G504358_1/22429

Issued by: QED Environmental Systems Ltd.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Calibrations marked 'Non-UKAS Accredited results' on this certificate have been included for completeness.

Non-UKAS accredited results after adjustment:

Barometer (mbar)	
Reference	Instrument Reading
989	989

Additional Gas Cells		
Gas	Certified Gas (ppm)	Instrument Reading (ppm)
CO	497	507
H ₂ S	257	251

Internal Flow	
Applied (l/hr)	Instrument Reading (l/hr)
5.00	5.00
10.00	9.90

Date of Issue : 30-Jan-2019

Approved by Signatory

A. Tantoush

Abdul Tantoush

Laboratory Inspection

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Calibration Instance:101 IGC Instance:101

Page 2 of 2 | LP015GIUKAS-2.4

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QED Environmental Systems Ltd. Cyan Park - Unit 3, Jimmy Hill Way, Coventry, CV2 4QP, UNITED KINGDOM

Registered in England and Wales 1898734

CERTIFICATION OF CALIBRATION



Date Of Calibration: 29-Jan-2019

Certificate Number: G504358_1/22429

Issued by: QED Environmental Systems Ltd.

Customer: Terramech Investigations Ltd
183 Long Lane Tilehurst READING
RG31 6YW UNITED KINGDOM

Description: Gas Analyser

Model: GA5000

Serial Number: G504358

UKAS Accredited results:

Results after adjustment :

Methane (CH ₄)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.9	0.41
15.0	15.0	0.64
49.9	49.4	0.94

Carbon Dioxide (CO ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.8	0.43
15.0	14.8	0.70
50.1	50.3	1.1

Oxygen (O ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
21.0	21.1	0.31

The inwards assessment was carried out 22-Jan-2019.

The maximum adjustment is larger than the inwards assessment uncertainty.

Inwards assessment data is available if requested.

All concentrations are molar.

CH₄, CO₂ readings recorded at : 31.4 °C ± 2.5 °C

O₂ readings recorded at : 22.3 °C ± 2.5 °C

Barometric Pressure : 0989 mbar ± 4 mbar

Method of Test : The analyser is calibrated in a temperature controlled chamber using a series of reference gases, in compliance with procedure LP004.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Calibration Instance: 101 IGC Instance: 101

Page 1 of 2 | LP015GIUKAS-2.4

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QED Environmental Systems Ltd. Cyan Park - Unit 3, Jimmy Hill Way, Coventry, CV2 4QP, UNITED KINGDOM

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SERVICE REPORT



Issued by: QED Environmental Systems Ltd.

Customer Name: Terramech Investigations Ltd

Model: GA5000

Part Number: GA5KB0C0-101

Serial Number: G504358

Date of Service: 30-Jan-2019

Service Engineer: David Edwards

Calibration Engineer: Suk Balrey

Verification / Approved By: Abdul Tantoush

Signature: 

Reason for Return (inc. Customer Comments):

Returned for full service and calibration

Service Comments/Feedback:

Thank you for returning your gas analyser to the Geotech Service Centre for full service and calibration. We are pleased to inform you that the analyser was received and fully assessed by one of our experienced Service Engineers and no significant faults or issues were observed during the assessment. Our extensive service was carried out, and any necessary components replaced. The analyser has successfully passed all of our rigorous testing and quality checks and has been calibrated using our bespoke, state of the art calibration facility.

We are pleased to inform you that we have installed the latest version of firmware on your gas analyser, so you will be able to benefit from the latest features and improvements.

We have replaced the battery because it is over 2 years old. This is in accordance to the battery cell manufacturer's recommendation.

The CO and H2S electrochemical sensors have been replaced due to them being over 2 years old in accordance with the manufacturer's recommendations, and also as a proactive measure based on our experience of the typical lifetime of these types of sensor.

For further information about how to get the best use from your instrument please visit our YouTube channel <http://www.youtube.com/GeotechTV> and on our Website <http://www.geotechuk.com>

If you require any further assistance with your instrument please email our Technical Support Team at technical@geotech.co.uk or call us on +44 1926 338111 (Monday to Thursday 08.30 - 17.00 & Friday 08.30 - 15.30) UK time zone.

Next Service Due: 29-Jul-2019

17025

Our ISO accreditation for our customised auto-calibration facilities

5

Number of days we aim to complete your service within

50

Number of checks instruments are subject to when serviced

65

Number of countries from which we service instruments /accessories each year

7,384

Number of calibrations completed in last 12 months

340

Minimum number of service instruments we process each month

25

Cost (in £) of fully insured analyser collection for our UK customers

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Registered in England and Wales 1898734

SERVICE REPORT



Issued by: QED Environmental Systems Ltd.

17025

Our ISO accreditation
for our customised
auto-calibration facilities

5

Number of days we
aim to complete
your service within

50

Number of checks
instruments are subject
to when serviced

65

Number of countries from
which we service instruments
/accessories each year

7,384

Number of calibrations
completed in last
12 months

340

Minimum number
of service instruments
we process each month

25

Cost (in £) of fully insured
analyser collection for
our UK customers

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