

Document ref: R/14656/007

16th October 2014

Lend Lease
Clarendon House
76-90 High Street
Solihull
West Midlands
B91 3TA

For the attention of Tom Maguire

Dear Tom,

Re: Final Gas Risk Assessment, North Wales Prison, Wrexham

1.0 INTRODUCTION

In August and September 2014 Hydrock undertook an intrusive ground investigation at the site of the proposed North Wales Prison, off Bridge Road South, Wrexham. The investigation included the installation of 10 gas monitoring wells (referenced BH01-BH05, BH07-BH08, BH10-12 and BH15) located across the footprint of the proposed prison building (known as Area 2).

All 6 of the proposed 6 post-investigation gas monitoring visits have been undertaken. This final Gas Risk assessment discusses the gas monitoring data acquired by Hydrock, and also considers previous gas monitoring data recorded by White Young Green (WYG) in 2013.

A drawing showing the locations of the monitoring boreholes is presented as Drawing 14656/D009 in Annex A, along with the site location plan (Drawing 14656/D001) and the proposed site layout plan (Drawing 14656/D003).

2.0 SUMMARY OF AVAILABLE DATA

Six gas monitoring visits have been undertaken by Hydrock during the period 4th September to 13th October 2014. The data acquired, which is included at Annex B of this report, can be summarised as follows:

- Concentrations of methane have been below the detection limit of the equipment used (<0.1% v/v) at all monitoring locations on all visits;
- Concentrations of carbon dioxide ranged from below the detection limit (<0.1% v/v) to 5.7% v/v;
- Concentrations of carbon monoxide and hydrogen sulphide were below the limit of detection (<1 ppm); and

- Gas flow rates were below the limit of detection of the equipment used (<0.1 l/hr) at all locations throughout the monitoring period so far.

The results of the Hydrock monitoring are consistent with those recorded by WYG in their 2013 investigation. The results of the WYG monitoring are reproduced in Annex C, together with the WYG monitoring well location plan, and show:

- Concentrations of methane have been below the detection limit of the equipment used ($<0.1\%$ v/v) at all monitoring locations on all visits;
- Concentrations of carbon dioxide ranged from below the detection limit ($<0.1\%$ v/v) to 3.5% v/v;
- A maximum concentration of carbon monoxide of 13ppm was recorded;
- Hydrogen sulphide was below the limit of detection (<1 ppm) at all locations;
- A maximum value of 1.3ppm was recorded for VOCs; and
- Steady gas flow rates were below the limit of detection of the equipment used (<0.1 l/hr) at all locations and on all monitoring visits.

3.0 GAS RISK ASSESSMENT

The risks associated with the ground gases methane (CH_4) and carbon dioxide (CO_2) are assessed using BS 8485:2007 (Code of practice for the characterisation and remediation from ground gas in affected developments) and guidelines from CIRIA 665 (Wilson et al 2007) and the NHBC (Boyle and Witherington 2007). In the above CIRIA guidance (C665):

- 'Situation A' covers all forms of development (residential and industrial/commercial developments), other than those in Situation B; and
- 'Situation B' is defined as the specific development of low-rise (one to three storeys in height) housing with a vented sub-floor void (min. 150 mm).

The development proposals require consideration of Situation A.

The guidance requires identification and use of the gas flow rate and the concentration of both carbon dioxide and methane across the whole site to calculate a Gas Screening Value (GSV). The typical worst case GSV (subject to on-going monitoring) using the data acquired to date from Hydrock's monitoring and from the monitoring acquired by WYG in 2013 have been calculated as 0.0001 l/hr for methane and 0.0057 l/hr for carbon dioxide, and the site is classified as Characteristic Situation 1.

Although a maximum concentration of 13ppm was recorded for carbon monoxide at BH10 during the WYG investigation, this level of carbon monoxide is not considered significantly elevated. Furthermore, during the remaining 5 monitoring visits undertaken by WYG the carbon monoxide levels at this location ranged from zero (on 4 occasions) to 1ppm. Consequently, carbon monoxide at the site is considered to pose a very low risk to future site users.

Based on the above, mitigation measures are not considered to be required, subject to regulatory approval.



We trust that the above meets with your requirements, however, should you have any queries please do not hesitate to contact the undersigned.

Yours sincerely
for **Hydrock**

A handwritten signature in blue ink that reads "T.P. Wraxton".

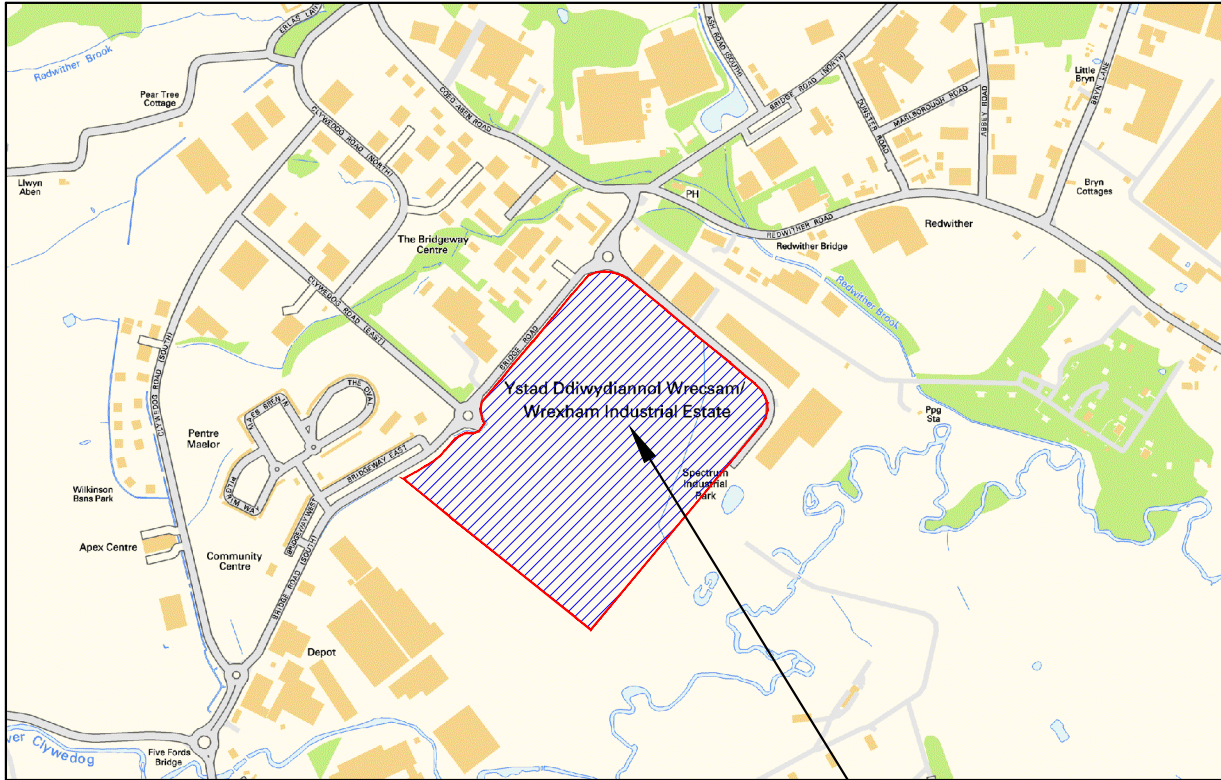
Terry Wraxton
Senior Geo-Environmental Consultant

terrywraxton@hydrock.com



Annex A

Drawings



SITE LOCATION



A	07/10/14	FINAL	LW	TW
Rev	Date	Description	By	Ckd

This drawing is the copyright of Hydrock Consultants Ltd

Client :	LEND LEASE
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Project Title:	NORTH WALES PRISON
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Architect :	Site Location Plan
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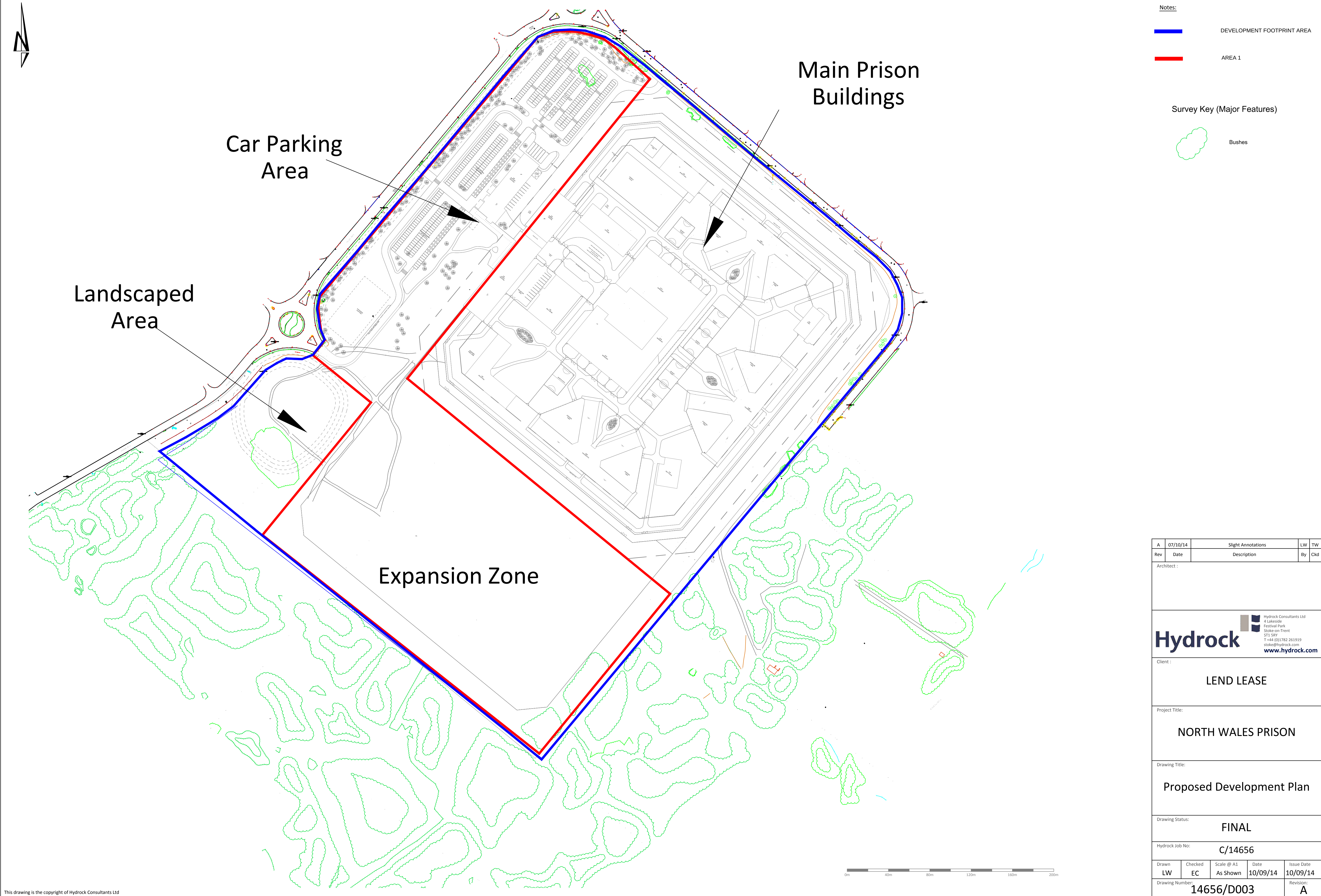
Drawing Title:	Site Location Plan
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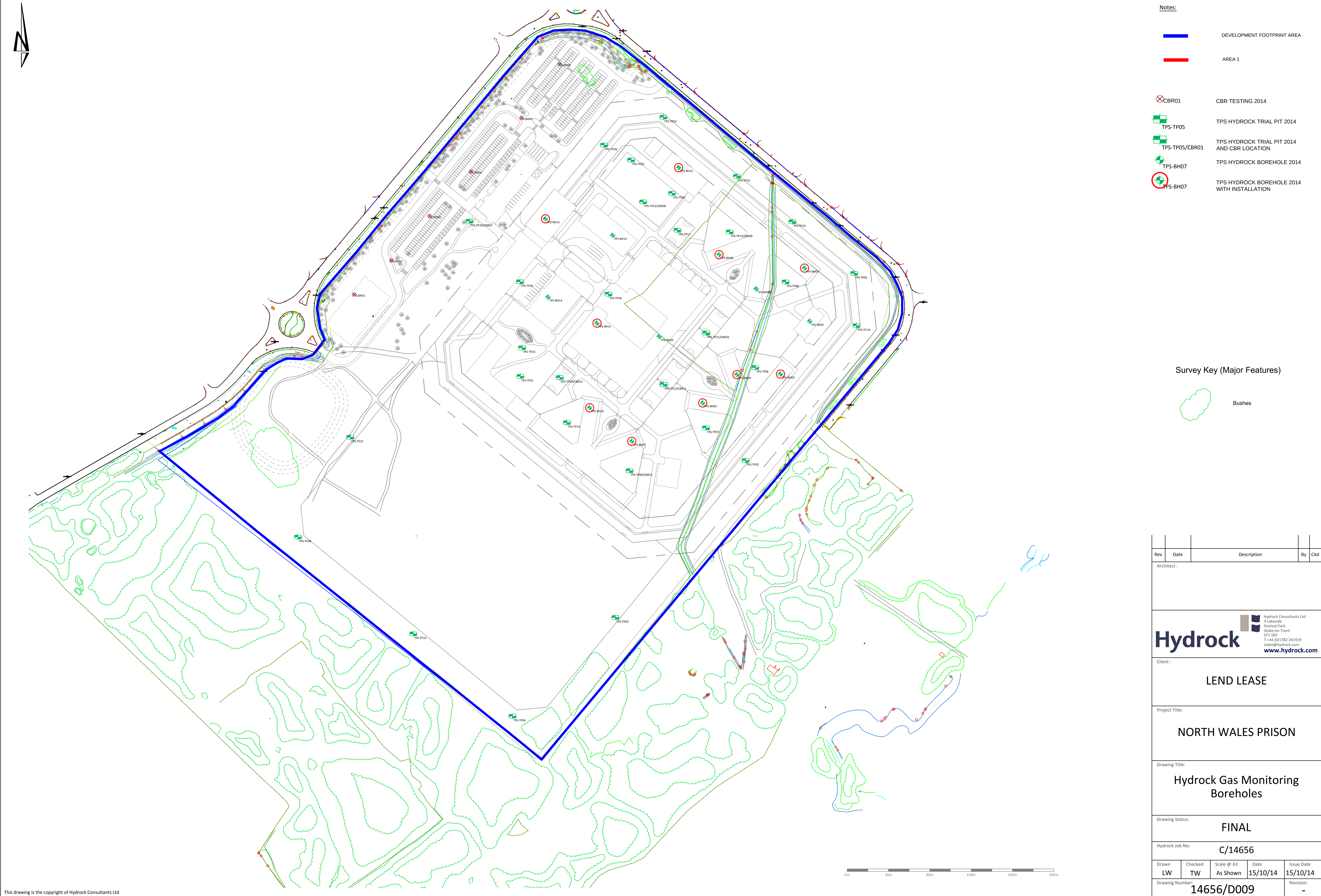
Drawing Status:	FINAL
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Hydrock Job No:		C/14656		
Drawn LW	Checked TW	Scale @ A4 AS SHOWN	Date 12/09/14	Issue Date 12/09/14
Drawing Number: 14656/D001				Revision: A





- Notes:
- DEVELOPMENT FOOTPRINT AREA
 - AREA 1
 - CBR01 CBR TESTING 2014
 - TPS-TP05 TPS HYDROCK TRIAL PIT 2014
 - TPS-TP05/CBR01 TPS HYDROCK TRIAL PIT 2014 AND CBR LOCATION
 - TPS-BH07 TPS HYDROCK BOREHOLE 2014
 - TPS-BH07 TPS HYDROCK BOREHOLE 2014 WITH INSTALLATION

Survey Key (Major Features)

- Bushes

Rev	Date	Description	By	Ckd
Architect :				
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Client :				
LEND LEASE				
Project Title:				
NORTH WALES PRISON				
Drawing Title:				
Hydrock Gas Monitoring Boreholes				
Drawing Status:				
FINAL				
Hydrock Job No:				
C/14656				
Drawn	Checked	Scale @ A1	Date	Issue Date
LW	TW	As Shown	15/10/14	15/10/14
Drawing Number:				Revision:
14656/D009				-



Annex B

Hydrock Gas Monitoring Data 2014

Gas Monitoring Record Sheet



Contract Number: C 14656

Site: Proposed North Wales Prison, Wrexham

GAS ANALYSER GA2000

Location	Date	Response Zone (m bgl)	Relative Pressure (mb)	Flow Rate (l/hr)	Atmos. Pressure (m.bar)	CH ₄ (% vol)		(%LEL)		CO ₂ (% vol)		O ₂ (% vol)		Other Gases (ppm) PID	Water Level (m bgl)	Depth of Standpipe (m bgl)
						Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady			
TPS-BH02	04.09.2014	3	0.00	0.0	1015	0.0	0.0	0.0	0.0	0.6	0.6	19.1	19.1	0.00	2.07	9.87
TPS-BH03	04.09.2014	1	0.00	0.0	1016	0.0	0.0	0.0	0.0	0.9	0.9	19.7	19.7	0.00	6.85	9.98
TPS-BH04	04.09.2014	1	0.00	0.0	1017	0.0	0.0	0.0	0.0	2.5	1.4	15.9	18.7	0.00	8.85	9.59
TPS-BH05	04.09.2014	1	0.00	0.0	1014	0.0	0.0	0.0	0.0	2.4	2.4	14.1	14.1	0.00	7.51	9.67
TPS-BH07	04.09.2014	1	0.00	0.0	1013	0.0	0.0	0.0	0.0	0.5	0.5	20.5	20.5	0.00	1.27	8.86
TPS-BH08	04.09.2014	2	0.00	0.0	1019	0.0	0.0	0.0	0.0	1.5	1.5	18.4	18.4	0.00	7.82	9.52
TPS-BH10	04.09.2014	1	0.00	0.0	1013	0.0	0.0	0.0	0.0	2.2	2.2	18.8	18.8	0.00	3.94	9.94
TPS-BH11	04.09.2014	1	0.00	0.0	1013	0.0	0.0	0.0	0.0	0.9	0.9	20.4	20.4	0.00	0.50	9.62
TPS-BH12	04.09.2014	3	0.00	0.0	1016	0.0	0.0	0.0	0.0	0.2	0.2	19.8	19.8	0.00	1.18	9.74
TPS-BH15	04.09.2014	3	0.00	0.0	1016	0.0	0.0	0.0	0.0	0.4	0.3	20.7	20.7	0.00	0.92	9.69
TPS-BH02	19.09.2014	3	0.00	0.0	1009	0.0	0.0	0.0	0.0	0.8	0.8	20.3	19.4	0.00	2.17	9.76
TPS-BH03	19.09.2014	1	0.00	0.0	1010	0.0	0.0	0.0	0.0	3.6	3.6	20.1	17.4	0.00	2.72	9.93
TPS-BH04	19.09.2014	1	0.00	0.0	1009	0.0	0.0	0.0	0.0	5.0	5.0	20.5	12.3	0.00	2.50	9.69
TPS-BH05	19.09.2014	1	0.00	0.0	1009	0.0	0.0	0.0	0.0	3.8	3.8	19.7	15.1	0.00	6.40	9.87
TPS-BH07	19.09.2014	1	0.00	0.0	1010	0.0	0.0	0.0	0.0	1.7	1.7	20.5	19.1	0.00	6.69	9.59
TPS-BH08	19.09.2014	2	0.00	0.0	1008	0.0	0.0	0.0	0.0	1.7	0.8	19.8	19.4	0.00	1.55	8.80
TPS-BH10	19.09.2014	1	0.00	0.0	1009	0.0	0.0	0.0	0.0	1.9	1.9	20.3	18.7	0.00	3.02	9.90
TPS-BH11	19.09.2014	1	0.00	0.0	1009	0.0	0.0	0.0	0.0	0.5	0.2	20.5	20.5	0.00	0.65	9.65
TPS-BH12	19.09.2014	3	0.00	0.0	1009	0.0	0.0	0.0	0.0	0.5	0.5	20.5	20.4	0.00	1.10	9.77
TPS-BH15	19.09.2014	3	0.00	0.0	1010	0.0	0.0	0.0	0.0	0.2	0.0	20.7	20.6	0.00	0.94	9.73
TPS-BH02	25.09.2014	3	0.00	0.0	1010	0.0	0.0	0.0	0.0	0.8	0.8	19.5	19.5	0.00	2.23	9.76
TPS-BH03	25.09.2014	1	0.00	0.0	1011	0.0	0.0	0.0	0.0	3.8	3.8	17.4	17.4	0.00	1.51	9.93
TPS-BH04	25.09.2014	1	0.00	0.0	1010	0.0	0.0	0.0	0.0	5.7	5.7	9.6	9.6	0.00	2.71	9.69
TPS-BH05	25.09.2014	1	0.00	0.0	1011	0.0	0.0	0.0	0.0	3.5	3.5	16.1	16.1	0.00	5.82	9.87
TPS-BH07	25.09.2014	1	0.00	0.0	1011	0.0	0.0	0.0	0.0	1.8	0.8	18.1	19.2	0.00	1.51	9.59
TPS-BH08	25.09.2014	2	0.00	0.0	1011	0.0	0.0	0.0	0.0	2.6	2.6	18.1	18.1	0.00	3.11	8.80
TPS-BH10	25.09.2014	1	0.00	0.0	1010	0.0	0.0	0.0	0.0	1.7	1.7	18.9	18.9	0.00	2.25	9.90
TPS-BH11	25.09.2014	1	0.00	0.0	1010	0.0	0.0	0.0	0.0	0.5	0.5	20.5	20.5	0.00	0.76	9.65
TPS-BH12	25.09.2014	3	0.00	0.0	1012	0.0	0.0	0.0	0.0	0.1	0.1	20.4	20.4	0.00	1.06	9.77
TPS-BH15	25.09.2014	3	0.00	0.0	1012	0.0	0.0	0.0	0.0	0.6	0.0	20.1	20.5	0.00	0.76	9.73
TPS-BH02	01.10.2014	3	0.00	0.0	1018	0.0	0.0	0.0	0.0	0.1	0.1	20.9	20.9	0.00	1.46	9.76
TPS-BH03	01.10.2014	1	0.00	0.0	1018	0.0	0.0	0.0	0.0	0.1	0.1	20.9	20.9	0.00	0.80	9.93
TPS-BH04	01.10.2014	1	0.00	0.0	1019	0.0	0.0	0.0	0.0	2.3	2.3	16.1	16.1	0.00	1.78	9.69
TPS-BH05	01.10.2014	1	0.00	0.0	1020	0.0	0.0	0.0	0.0	0.1	0.1	20.9	20.9	0.00	0.66	9.87
TPS-BH07	01.10.2014	1	0.00	0.0	1019	0.0	0.0	0.0	0.0	0.1	0.1	20.9	20.9	0.00	0.37	9.59
TPS-BH08	01.10.2014	2	0.00	0.0	1018	0.0	0.0	0.0	0.0	0.2	0.2	20.7	20.7	0.00	1.33	8.80
TPS-BH10	01.10.2014	1	0.00	0.0	1020	0.0	0.0	0.0	0.0	1.6	1.6	19.1	19.1	0.00	2.37	9.90
TPS-BH11	01.10.2014	1	0.00	0.0	1019	0.0	0.0	0.0	0.0	0.3	0.2	20.7	20.7	0.00	0.71	9.65
TPS-BH12	01.10.2014	3	0.00	0.0	1017	0.0	0.0	0.0	0.0	0.1	0.1	20.9	20.9	0.00	1.18	9.77
TPS-BH15	01.10.2014	3	0.00	0.0	1017	0.0	0.0	0.0	0.0	0.1	0.1	20.9	20.9	0.00	0.63	9.73
TPS-BH02	07.10.2014	3	0.00	0.0	983	0.0	0.0	0.0	0.0	0.3	0.2	20.6	20.7	0.00	2.01	9.76
TPS-BH03	07.10.2014	1	0.00	0.0	983	0.0	0.0	0.0	0.0	0.2	0.1	20.7	20.7	0.00	1.04	9.93
TPS-BH04	07.10.2014	1	0.00	0.0	984	0.0	0.0	0.0	0.0	5.6	5.6	8.0	8.0	0.00	1.82	9.69
TPS-BH05	07.10.2014	1	0.00	0.0	984	0.0	0.0	0.0	0.0	0.2	0.2	20.8	20.8	0.00	0.58	9.87
TPS-BH07	07.10.2014	1	0.00	0.0	985	0.0	0.0	0.0	0.0	0.2	0.1	20.8	20.8	0.00	0.99	9.59
TPS-BH08	07.10.2014	2	0.00	0.0	983	0.0	0.0	0.0	0.0	0.2	0.2	20.7	20.7	0.00	1.31	8.80
TPS-BH10	07.10.2014	1	0.00	0.0	987	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.8	0.00	0.38	9.90
TPS-BH11	07.10.2014	1	0.00	0.0	986	0.0	0.0	0.0	0.0	0.2	0.1	20.8	20.8	0.00	0.41	9.65
TPS-BH12	07.10.2014	3	0.00	0.0	986	0.0	0.0	0.0	0.0	0.1	0.1	20.9	20.9	0.00	1.12	9.77
TPS-BH15	07.10.2014	3	0.00	0.0	986	0.0	0.0	0.0	0.0	0.4	0.1	20.3	20.6	0.00	0.83	9.73
TPS-BH02	13.10.2014	3	0.00	0.0	998	0.0	0.0	0.0	0.0	0.3	0.2	20.6	20.6	0.00	2.08	9.76
TPS-BH03	13.10.2014	1	0.00	0.0	999	0.0	0.0	0.0	0.0	0.8	0.2	19.9	20.8	0.00	1.08	9.93
TPS-BH04	13.10.2014	1	0.00	0.0	998	0.0	0.0	0.0	0.0	4.5	4.5	10.6	10.6	0.00	1.85	9.69
TPS-BH05	13.10.2014	1	0.00	0.0	998	0.0	0.0	0.0	0.0	0.2	0.2	20.8	20.8	0.00	0.56	9.87
TPS-BH07	13.10.2014	1	0.00	0.0	999	0.0	0.0	0.0	0.0	0.2	0.1	20.7	20.8	0.00	1.13	9.59
TPS-BH08	13.10.2014	2	0.00	0.0	999	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.8	0.00	1.27	8.80
TPS-BH10	13.10.2014	1	0.00	0.0	999	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.8	0.00	0.37	9.90
TPS-BH11	13.10.2014	1	0.00	0.0	1001	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.8	0.00	0.35	9.65
TPS-BH12	13.10.2014	3	0.00	0.0	999	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.8	0.00	1.11	9.77
TPS-BH15	13.10.2014	3	0.00	0.0	999	0.0	0.0	0.0	0.0	0.2	0.1	20.7	20.7	0.00	0.85	9.73



Annex C

WYG Gas Monitoring Data

**GAS & GROUNDWATER MONITORING RECORD SHEET 1 of 6**

Client Ministry of Justice
Project New Prison North Wales
Job Number A083839

Visit No. 1 **Date** 28/11/2013 **Start** 08:30 **End** 16:00 **By** AC **AP Trend** Rising until midday, then falling to Steady **Weather** Cloudy, Cold

Instruments used - GFM435 with internal flow pod, Minirae 2000, Oil/Water Interface Meter.

Background (start) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.5% **VOCs** 0ppm **AP** 1034
Background (end) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.3% **VOCs** 0ppm **AP** 1034

Installation	Elevation of cover (mAOD)	CH ₄		CH ₄ % LEL		CO ₂		O ₂	CO	H ₂ S	VOC	Flow Rate		Atmospheric Pressure (mbar)	Depth to Water (mbgl)	Depth to Base (mbgl)	Water Level (mAOD)	Remarks	GSV		
		Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady (% vol)	Av. (ppm)	Av. (ppm)	Av. (ppm)	Peak (l/h)	Steady (l/h)						CH ₄	CO ₂	Maximum GSV
WYG BH1	31.687	0.0	0.0	0	0	0.0	0.0	20.1	5	0	0.0	0.0	0.0	1034	1.06	4.00	30.63		0.000	0.000	0.000
WYG BH2	34.775	0.0	0.0	0	0	0.5	0.5	19.3	3	0	0.0	0.0	0.0	1032	2.67	2.95	32.11		0.000	0.000	0.000
WYG BH3	33.662	0.0	0.0	0	0	0.8	0.7	19.1	1	0	0.0	11.8*	0.0	1031	1.02	3.08	32.64		0.000	0.000	0.000
WYG BH4	31.214	0.0	0.0	0	0	0.9	0.5	19.3	7	0	0.0	0.0	0.0	1032	7.89	15.52	23.32		0.000	0.000	0.000
WYG BH5	31.06	0.2	0.2	0	0	0.0	0.0	18.3	3	0	0.0	-14.0	0.0	1032	1.20	3.05	29.86		0.000	0.000	0.000
WYG BH6	31.42	0.0	0.0	0	0	0.6	0.4	18.5	9	0	0.1	120*	0.0	1032	0.99	3.05	30.43		0.000	0.000	0.000
WYG BH7	32.552	0.0	0.0	0	0	0.4	0.4	19.5	1	0	0.0	0.0	0.0	1030	1.75	3.00	30.80		0.000	0.000	0.000
WYG BH8	31.897	0.0	0.0	0	0	0.7	0.4	19.6	12	0	0.2	119*	0.0	1031	0.93	3.00	30.97		0.000	0.000	0.000
WYG BH9	31.685	0.0	0.0	0	0	0.1	0.0	20.1	1	0	0.0	0.0	0.0	1032	0.64	3.00	31.05		0.000	0.000	0.000
WYG BH10	31.339	0.0	0.0	0	0	0.0	0.0	17.9	13	0	0.0	-64.0	0.0	1031	0.46	3.95	30.88		0.000	0.000	0.000
WYG BH10A	31.457	0.0	0.0	0	0	0.8	0.8	18.2	3	0	0.0	0.0	0.0	1032	0.48	3.00	30.98		0.000		
WYG BH11	33.063	0.0	0.0	0	0	0.1	0.1	18.4	1	0	0.4	0.0	0.0	1031	2.35	2.87	30.71		0.000	0.000	0.000
WYG BH12	32.496	0.0	0.0	0	0	0.5	0.5	19.4	3	0	0.0	0.0	0.0	1031	1.96	5.85	30.54		0.000	0.000	0.000
WYG BH13	31.534	0.0	0.0	0	0	3.5	3.5	15.5	1	0	0.7	110*	0.0	1031	2.93	3.00	28.60		0.000	0.000	0.000
WYG BH14	30.921	0.0	0.0	0	0	0.5	0.5	20.0	3	0	1.0	0.0	0.0	1032	0.62	4.61	30.30		0.000	0.000	0.000
WYG BH15	32.497	0.0	0.0	0	0	0.1	0.1	20.0	3	0	1.2	0.0	0.0	1031	1.03	3.09	31.47		0.000	0.000	0.000
WYG BH16	30.334	0.0	0.0	0	0	0.3	0.3	19.9	3	0	1.3	12*	0.0	1031	1.15	3.02	29.18		0.000	0.000	0.000
WYG BH17	31.261	0.0	0.0	0	0	0.0	0.0	20.0	1	0	0.0	0.0	0.0	1032	0.36	2.58	30.90		0.000	0.000	0.000
WYG BH18	31.244	0.0	0.0	0	0	0.1	0.1	19.4	3	0	0.0	-69.0	0.0	1031	0.23	8.32	31.01		0.000	0.000	0.000
WYG BH19	31.403	0.0	0.0	0	0	0.2	0.2	19.1	3	0	1.2	0.0	0.0	1031	DRY	4.95	DRY		0.000	0.000	0.000
Maximum	-	0.2	0.2	0	0	3.5	3.5	-	13	0	1.3	0.0	0.0	-	-	-	-	-	0.000	0.000	0.000

Notes:

AP - Atmospheric Pressure Trend

Peak reading = maximum recorded level during a monitoring event.

Steady reading = level which remained constant after approximately 5 minutes.

LEL = Lower Explosive Limit

GSV = Gas Screening Value - the maximum percentage steady CH₄ or CO₂ multiplied by the gas flow rate.

WAB = Wet At Base

Atmospheric Pressure trend obtained from Met Office Website (<http://www.metoffice.gov.uk/education/archive/uk/>) and www.wunderground.com (History Data)

*Elevated flow recorded on opening gap tap, which fell to steady straight away.

**GAS & GROUNDWATER MONITORING RECORD SHEET 2 of 6**

Client Ministry of Justice
Project New Prison North Wales
Job Number A083839

Visit No. 2 **Date** 03/12/2013 **Start** 09:30 **End** 15:00 **By** AC **AP Trend** Falling **Weather** Cloudy, Cold

Instruments used - GFM435 with internal flow pod, Groundwater Dip Meter.

Background (start) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.3% **VOCs** N/A **AP** 1026mbar

Background (end) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.3% **VOCs** N/A **AP** 1026m bar

Installation	Elevation of cover (mAOD)	CH ₄		CH ₄ % LEL		CO ₂		O ₂	CO	H ₂ S	VOC	Flow Rate		Atmospheric Pressure (mbar)	Depth to Water (mbgl)	Depth to Base (mbgl)	Water Level (mAOD)	Remarks	GSV		
		Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady (% vol)	Av. (ppm)	Av. (ppm)	Av. (ppm)	Peak (l/h)	Steady (l/h)						CH ₄	CO ₂	Maximum GSV
WYG BH1	31.687	0.0	0.0	0	0	0.0	0.0	20.1	3	0	-	0.0	0.0	1026	1.08	4.00	30.61		0.000	0.000	0.000
WYG BH2	34.775	0.0	0.0	0	0	0.0	0.0	19.3	3	0	-	0.0	0.0	1024	2.60	2.95	32.18		0.000	0.000	0.000
WYG BH3	33.662	0.0	0.0	0	0	0.0	0.0	20.2	3	0	-	11.8	0.0	1024	0.40	3.00	33.26		0.000	0.000	0.000
WYG BH4	31.214	0.0	0.0	0	0	0.0	0.0	20.3	3	0	-	-0.1	0.0	1024	7.85	15.50	23.36		0.000	0.000	0.000
WYG BH5	31.06	0.2	0.2	0	0	0.0	0.0	20.3	3	0	-	0.0	0.0	1025	1.25	3.05	29.81		0.000	0.000	0.000
WYG BH6	31.42	0.0	0.0	0	0	0.0	0.0	20.4	3	0	-	0.0	0.0	1024	0.75	3.05	30.67		0.000	0.000	0.000
WYG BH7	32.552	0.0	0.0	0	0	0.0	0.0	19.5	1	0	-	0.0	0.0	1024	2.83	3.05	29.72		0.000	0.000	0.000
WYG BH8	31.897	0.0	0.0	0	0	0.0	0.0	19.6	1	0	-	0.0	0.0	1025	1.10	3.00	30.80		0.000	0.000	0.000
WYG BH9	31.685	0.0	0.0	0	0	0.0	0.0	20.1	3	0	-	0.0	0.0	1024	1.04	3.05	30.65		0.000	0.000	0.000
WYG BH10	31.339	0.0	0.0	0	0	0.0	0.0	19.9	1	0	-	0.0	0.0	1026	0.60	3.95	30.74		0.000	0.000	0.000
WYG BH10A	31.457	0.0	0.0	0	0	0.0	0.0	19.1	3	0	-	0.0	0.0	1024	DRY	3.00	DRY		0.000	0.000	0.000
WYG BH11	33.063	0.0	0.0	0	0	0.0	0.0	18.2	3	0	-	0.0	0.0	1024	0.75	3.05	32.31		0.000	0.000	0.000
WYG BH12	32.496	0.0	0.0	0	0	-0.1	0.0	20.2	3	0	-	0.0	0.0	1024	1.95	3.00	30.55		0.000	0.000	0.000
WYG BH13	31.534	0.0	0.0	0	0	0.0	0.0	20.1	3	0	-	0.0	0.0	1024	1.90	5.90	29.63		0.000	0.000	0.000
WYG BH14	30.921	0.0	0.0	0	0	0.0	0.0	20.1	1	0	-	0.0	0.0	1024	0.73	4.61	30.19		0.000	0.000	0.000
WYG BH15	32.497	0.0	0.0	0	0	-0.1	0.0	20.0	3	0	-	0.0	0.0	1025	0.60	3.09	31.90		0.000	0.000	0.000
WYG BH16	30.334	0.0	0.0	0	0	-0.1	0.1	20.0	3	0	-	0.0	0.0	1024	1.00	3.00	29.33		0.000	0.000	0.000
WYG BH17	31.261	0.0	0.0	0	0	-0.1	0.0	19.9	3	0	-	0.0	0.0	1024	0.30	2.60	30.96		0.000	0.000	0.000
WYG BH18	31.244	0.0	0.0	0	0	0.0	0.0	20.0	1	0	-	0.0	0.0	1024	1.30	8.30	29.94		0.000	0.000	0.000
WYG BH19	31.403	0.0	0.0	0	0	0.0	0.0	19.4	3	0	-	0.0	0.0	1.24	1.30	8.30	30.10		0.000	0.000	0.000
Maximum	-	0.2	0.2	0.0	0.0	0.0	0.1	20.4	3.0	0.0	-	11.8	0.0	-	-	-	-	-	0.000	0.000	0.000

Notes:

AP - Atmospheric Pressure Trend

Peak reading = maximum recorded level during a monitoring event.

Steady reading = level which remained constant after approximately 5 minutes.

LEL = Lower Explosive Limit

GSV = Gas Screening Value - the maximum percentage steady CH₄ or CO₂ multiplied by the gas flow rate.

WAB = Wet At Base

Atmospheric Pressure trend obtained from Met Office Website (<http://www.metoffice.gov.uk/education/archive/uk/>) and www.wunderground.com (History Data)

**GAS & GROUNDWATER MONITORING RECORD SHEET 3 of 6**

Client Ministry of Justice
Project New Prison North Wales
Job Number A083839

Visit No. 3 **Date** 12/12/2013 **Start** 9am **End** 3pm **By** JRT **AP Trend** Steady **Weather** Cloud, rain

Instruments used - GFM435 with internal flow pod, Minirae 2000, Oil/Water Interface Meter.

Background (start) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.1% **VOCs** 0ppm **AP** 1011mbar
Background (end) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.1% **VOCs** 0ppm **AP** 1009mbar

Installation	Elevation of cover (mAOD)	CH ₄		CH ₄ % LEL		CO ₂		O ₂	CO	H ₂ S	VOC	Flow Rate		Atmospheric Pressure (mbar)	Depth to Water (mbgl)	Depth to Base (mbgl)	Water Level (mAOD)	Remarks	GSV		
		Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady (% vol)	Av. (ppm)	Av. (ppm)	Av. (ppm)	Peak (l/h)	Steady (l/h)						CH ₄	CO ₂	Maximum GSV
WYG BH1	31.687	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	1011	0.85	4.00	30.84		0.000	0.000	0.000
WYG BH2	34.775	0.0	0.0	0	0	0.0	0.0	20.0	1	0	0	0.0	0.0	1011	2.25	2.95	32.53		0.000	0.000	0.000
WYG BH3	33.662	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	5.2	0.0	1011	0.35	3.00	33.31		0.000	0.000	0.000
WYG BH4	31.214	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1011	7.46	15.50	23.75		0.000	0.000	0.000
WYG BH5	31.06	0.2	0.2	0	0	0.0	0.0	20.2	0	0	0	%	0.0	1011	1.22	3.05	29.84		0.000	0.000	0.000
WYG BH6	31.42	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1010	0.32	3.05	31.10		0.000	0.000	0.000
WYG BH7	32.552	0.0	0.0	0	0	0.0	0.0	19.9	0	0	0	0.0	0.0	1010	1.57	3.05	30.98		0.000	0.000	0.000
WYG BH8	31.897	0.0	0.0	0	0	0.0	0.0	19.8	0	0	0	0.0	0.0	1010	0.66	3.00	31.24		0.000	0.000	0.000
WYG BH9	31.685	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0.1	0.0	0.0	1010	0.85	3.05	30.84		0.000	0.000	0.000
WYG BH10	31.339	0.0	0.0	0	0	0.0	0.0	20.2	0	0	0	0.0	0.0	1010	0.48	3.95	30.86		0.000	0.000	0.000
WYG BH10A	31.457	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	1009	0.49	3.00	30.97		0.000	0.000	0.000
WYG BH11	33.063	0.0	0.0	0	0	0.0	0.0	18.9	3	0	0	0.0	0.0	1009	1.58	3.05	31.48		0.000	0.000	0.000
WYG BH12	32.496	0.0	0.0	0	0	-0.1	0.0	20.1	2	0	0	0.0	0.0	1009	1.24	3.00	31.26		0.000	0.000	0.000
WYG BH13	31.534	0.0	0.0	0	0	0.0	0.0	20.1	3	0	0.1	0.0	0.0	1010	1.82	5.90	29.71		0.000	0.000	0.000
WYG BH14	30.921	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	1010	0.64	4.61	30.28		0.000	0.000	0.000
WYG BH15	32.497	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	1011	2.93	3.09	29.57		0.000	0.000	0.000
WYG BH16	30.334	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	1010	0.44	3.00	29.89		0.000	0.000	0.000
WYG BH17	31.261	0.0	0.0	0	0	0.0	0.0	20.0	1	0	0	0.0	0.0	1009	0.36	2.60	30.90		0.000	0.000	0.000
WYG BH18	31.244	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	1009	1.39	8.30	29.85		0.000	0.000	0.000
WYG BH19	31.403	0.0	0.0	0	0	0.0	0.0	20.0	1	0	0	0.0	0.0	1009	4.79	8.30	26.61		0.000	0.000	0.000
Maximum	-	0.2	0.2	0	0	0.0	0.0	-	3	0	0.1	5.2	0.0	-	-	-	-	-	0.000	0.000	0.000

Notes:

AP - Atmospheric Pressure Trend

Peak reading = maximum recorded level during a monitoring event.

Steady reading = level which remained constant after approximately 5 minutes.

LEL = Lower Explosive Limit

GSV = Gas Screening Value - the maximum percentage steady CH₄ or CO₂ multiplied by the gas flow rate.

WAB = Wet At Base

Atmospheric Pressure trend obtained from Met Office Website (<http://www.metoffice.gov.uk/education/archive/uk/>) and www.wunderground.com (History Data)

**GAS & GROUNDWATER MONITORING RECORD SHEET 4 of 6**

Client Ministry of Justice
 Project New Prison North Wales
 Job Number A083839

Visit No. 4 Date 19/12/2013 Start 9am End 3pm By AC AP Trend Rising Weather Cloudy, dry

Instruments used - GFM435 with internal flow pod, Minirae 2000, Oil/Water Interface Meter.

Background (start) CH₄ 0.0% CO₂ 0.0% O₂ 19.7% VOCs 0ppm AP 1010mbar

Background (end) CH₄ 0.0% CO₂ 0.0% O₂ 19.7% VOCs 0ppm AP 1012mbar

Installation	Elevation of cover (mAOD)	CH ₄		CH ₄ % LEL		CO ₂		O ₂	CO	H ₂ S	VOC	Flow Rate		Atmospheric Pressure (mbar)	Depth to Water (mbgl)	Depth to Base (mbgl)	Water Level (mAOD)	Remarks	GSV		
		Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady (% vol)	Av. (ppm)	Av. (ppm)	Av. (ppm)	Peak (l/h)	Steady (l/h)						CH ₄	CO ₂	Maximum GSV
WYG BH1	31.687	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	1011	0.85	4.00	30.84		0.000	0.000	0.000
WYG BH2	34.775	0.0	0.0	0	0	0.0	0.0	20.0	1	0	0	0.0	0.0	1011	2.00	2.95	32.78		0.000	0.000	0.000
WYG BH3	33.662	0.0	0.0	0	0	0.1	0.1	19.9	1	0	0	0.0	0.0	1010	0.50	3.00	33.16		0.000	0.000	0.000
WYG BH4	31.214	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1011	7.50	15.50	23.71		0.000	0.000	0.000
WYG BH5	31.06	0.2	0.2	0	0	0.0	0.0	20.2	0	0	0	0.0	0.0	1011	1.22	3.05	29.84		0.000	0.000	0.000
WYG BH6	31.42	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1010	0.50	3.05	30.92		0.000	0.000	0.000
WYG BH7	32.552	0.0	0.0	0	0	0.2	0.2	18.7	1	0	0	0.0	0.0	1012	1.40	3.05	31.15		0.000	0.000	0.000
WYG BH8	31.897	0.0	0.0	0	0	0.0	0.0	19.8	0	0	0	0.0	0.0	1010	0.66	3.00	31.24		0.000	0.000	0.000
WYG BH9	31.685	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0.1	0.0	0.0	1010	0.40	3.05	31.29		0.000	0.000	0.000
WYG BH10	31.339	0.0	0.0	0	0	0.0	0.0	20.2	0	0	0	0.0	0.0	1010	0.48	3.95	30.86		0.000	0.000	0.000
WYG BH10A	31.457	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	1010	0.49	3.00	30.97		0.000	0.000	0.000
WYG BH11	33.063	0.0	0.0	0	0	0.0	0.0	18.9	3	0	0	0.0	0.0	1011	1.30	3.05	31.76		0.000	0.000	0.000
WYG BH12	32.496	0.0	0.0	0	0	0.0	0.0	19.8	1	0	0	0.0	0.0	1012	1.10	2.95	31.40		0.000	0.000	0.000
WYG BH13	31.534	0.0	0.0	0	0	0.0	0.0	19.2	3	0	0	0.0	0.0	1012	1.82	5.90	29.71		0.000	0.000	0.000
WYG BH14	30.921	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	1010	0.60	4.60	30.32		0.000	0.000	0.000
WYG BH15	32.497	0.0	0.0	0	0	0.0	0.0	20.3	0	0	0	0.0	0.0	1011	1.10	3.09	31.40		0.000	0.000	0.000
WYG BH16	30.334	0.0	0.0	0	0	0.0	0.0	20.0	4	0	0	0.0	0.0	1012	0.50	3.00	29.83		0.000	0.000	0.000
WYG BH17	31.261	0.0	0.0	0	0	0.0	0.0	20.4	1	0	0	0.0	0.0	1011	0.40	2.60	30.86		0.000	0.000	0.000
WYG BH18	31.244	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	1012	1.39	8.30	29.85		0.000	0.000	0.000
WYG BH19	31.403	0.0	0.0	0	0	0.0	0.0	19.9	4	0	0	0.0	0.0	1011	2.40	8.30	29.00		0.000	0.000	0.000
Maximum	-	0.2	0.2	0	0	0.2	0.2	-	4	0	0.1	0.0	0.0	-	-	-	-	-	0.000	0.000	0.000

Notes:

AP - Atmospheric Pressure Trend

Peak reading = maximum recorded level during a monitoring event.

Steady reading = level which remained constant after approximately 5 minutes.

LEL = Lower Explosive Limit

GSV = Gas Screening Value - the maximum percentage steady CH₄ or CO₂ multiplied by the gas flow rate.

WAB = Wet At Base

Atmospheric Pressure trend obtained from Met Office Website (<http://www.metoffice.gov.uk/education/archive/uk/>) and www.wunderground.com (History Data)

**GAS & GROUNDWATER MONITORING RECORD SHEET 5 of 6**

Client Ministry of Justice
Project New Prison North Wales
Job Number A083839

Visit No. 5 **Date** 03/01/2004 **Start** 08:45 **End** 14:00 **By** AC **AP Trend** Rising **Weather** Rainy

Instruments used - GFM435 with internal flow pod, Minirae 2000, Oil/Water Interface Meter.

Background (start) **CH₄** 0.0% **CO₂** 0.0% **O₂** 19.9% **VOCs** 0ppm **AP** 980mbar
Background (end) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.1% **VOCs** 0ppm **AP** 981mbar

Installation	Elevation of cover (mAOD)	CH ₄		CH ₄ % LEL		CO ₂		O ₂	CO	H ₂ S	VOC	Flow Rate		Atmospheric Pressure (mbar)	Depth to Water (mbgl)	Depth to Base (mbgl)	Water Level (mAOD)	Remarks	GSV		
		Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady (% vol)	Av. (ppm)	Av. (ppm)	Av. (ppm)	Peak (l/h)	Steady (l/h)						CH ₄	CO ₂	Maximum GSV
WYG BH1	31.687	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	981	1.00	4.10	30.69		0.000	0.000	0.000
WYG BH2	34.775	0.0	0.0	0	0	0.0	0.0	20.0	1	0	0	0.0	0.0	981	2.00	3.00	32.78		0.000	0.000	0.000
WYG BH3	33.662	0.0	0.0	0	0	0.0	0.0	19.9	1	0	0	0.0	0.0	981	1.50	3.00	32.16		0.000	0.000	0.000
WYG BH4	31.214	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	981	7.00	15.50	24.21		0.000	0.000	0.000
WYG BH5	31.06	0.2	0.2	0	0	0.0	0.0	20.2	0	0	0	0.0	0.0	980	1.20	3.00	29.86		0.000	0.000	0.000
WYG BH6	31.42	0.0	0.0	0	0	0.0	0.0	19.9	0	0	0	0.0	0.0	981	0.70	2.50	30.72		0.000	0.000	0.000
WYG BH7	32.552	0.0	0.0	0	0	0.2	0.2	18.7	1	0	0	0.0	0.0	980	1.40	3.05	31.15		0.000	0.000	0.000
WYG BH8	31.897	0.0	0.0	0	0	0.0	0.0	19.8	0	0	0	0.0	0.0	981	0.80	3.00	31.10		0.000	0.000	0.000
WYG BH9	31.685	0.0	0.0	0	0	0.0	0.0	19.9	0	0	0	0.0	0.0	981	0.85	2.80	30.84		0.000	0.000	0.000
WYG BH10	31.339	0.0	0.0	0	0	0.0	0.0	20.2	0	0	0	0.0	0.0	980	0.40	3.95	30.94		0.000	0.000	0.000
WYG BH10A	31.457	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	981	0.40	3.00	31.06		0.000	0.000	0.000
WYG BH11	33.063	0.0	0.0	0	0	0.0	0.0	18.9	3	0	0	0.0	0.0	981	1.00	3.05	32.06		0.000	0.000	0.000
WYG BH12	32.496	0.0	0.0	0	0	0.0	0.0	20.1	4	0	0	0.0	0.0	981	0.90	2.95	31.60		0.000	0.000	0.000
WYG BH13	31.534	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	981	0.50	5.70	31.03		0.000	0.000	0.000
WYG BH14	30.921	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	981	0.30	4.60	30.62		0.000	0.000	0.000
WYG BH15	32.497	0.0	0.0	0	0	0.0	0.0	20.3	0	0	0	0.0	0.0	981	0.50	3.10	32.00		0.000	0.000	0.000
WYG BH16	30.334	0.0	0.0	0	0	0.0	0.0	20.0	4	0	0	0.0	0.0	981	0.50	3.00	29.83		0.000	0.000	0.000
WYG BH17	31.261	0.0	0.0	0	0	0.0	0.0	20.4	1	0	0	0.0	0.0	981	0.40	2.60	30.86		0.000	0.000	0.000
WYG BH18	31.244	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	981	1.20	8.35	30.04		0.000	0.000	0.000
WYG BH19	31.403	0.0	0.0	0	0	0.0	0.0	19.9	4	0	0	0.0	0.0	981	1.50	8.30	29.90		0.000	0.000	0.000
Maximum	-	0.2	0.2	0	0	0.2	0.2	-	4	0	0.0	0.0	0.0	-	-	-	-	-	0.000	0.000	0.000

Notes:

AP - Atmospheric Pressure Trend

Peak reading = maximum recorded level during a monitoring event.

Steady reading = level which remained constant after approximately 5 minutes.

LEL = Lower Explosive Limit

GSV = Gas Screening Value - the maximum percentage steady CH₄ or CO₂ multiplied by the gas flow rate.

WAB = Wet At Base

Atmospheric Pressure trend obtained from Met Office Website (<http://www.metoffice.gov.uk/education/archive/uk/>) and www.wunderground.com (History Data)

**GAS & GROUNDWATER MONITORING RECORD SHEET 6 of 6**

Client Ministry of Justice
Project New Prison North Wales
Job Number A083839

Visit No. 6 **Date** 10/01/2014 **Start** 9am **End** 2pm **By** JRT **AP Trend** Steady **Weather** Cloud, showers

Instruments used - GFM435 with internal flow pod, Minirae 2000, Oil/Water Interface Meter.

Background (start) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.1% **VOCs** 0ppm **AP** 1007mbar

Background (end) **CH₄** 0.0% **CO₂** 0.0% **O₂** 20.1% **VOCs** 0ppm **AP** 1008mbar

Installation	Elevation of cover (mAOD)	CH ₄		CH ₄ % LEL		CO ₂		O ₂	CO	H ₂ S	VOC	Flow Rate		Atmospheric Pressure (mbar)	Depth to Water (mbgl)	Depth to Base (mbgl)	Water Level (mAOD)	Remarks	GSV		
		Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady (% vol)	Av. (ppm)	Av. (ppm)	Av. (ppm)	Peak (l/h)	Steady (l/h)						CH ₄	CO ₂	Maximum GSV
WYG BH1	31.687	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1007	0.84	4.00	30.85		0.000	0.000	0.000
WYG BH2	34.775	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1007	2.16	2.95	32.62		0.000	0.000	0.000
WYG BH3	33.662	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	3.1	0.0	1007	0.34	3.00	33.32		0.000	0.000	0.000
WYG BH4	31.214	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1007	7.44	15.50	23.77		0.000	0.000	0.000
WYG BH5	31.06	0.1	0.1	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1007	1.09	3.05	29.97		0.000	0.000	0.000
WYG BH6	31.42	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1007	0.28	3.05	31.14		0.000	0.000	0.000
WYG BH7	32.552	0.0	0.0	0	0	0.0	0.0	19.9	0	0	0	0.0	0.0	1007	1.52	3.05	31.03		0.000	0.000	0.000
WYG BH8	31.897	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	1007	0.57	3.00	31.33		0.000	0.000	0.000
WYG BH9	31.685	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1008	0.83	3.05	30.86		0.000	0.000	0.000
WYG BH10	31.339	0.0	0.0	0	0	0.0	0.0	20.1	0	0	0	0.0	0.0	1008	0.44	3.95	30.90		0.000	0.000	0.000
WYG BH10A	31.457	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	1008	0.49	3.00	30.97		0.000	0.000	0.000
WYG BH11	33.063	0.0	0.0	0	0	0.0	0.0	19.0	1	0	0	0.0	0.0	1008	1.51	3.05	31.55		0.000	0.000	0.000
WYG BH12	32.496	0.0	0.0	0	0	-0.1	0.0	20.1	1	0	0	0.0	0.0	1008	1.18	3.00	31.32		0.000	0.000	0.000
WYG BH13	31.534	0.0	0.0	0	0	0.0	0.0	20.1	2	0	0	0.0	0.0	1008	1.76	5.90	29.77		0.000	0.000	0.000
WYG BH14	30.921	0.0	0.0	0	0	0.0	0.0	20.0	1	0	0	0.0	0.0	1008	0.61	4.61	30.31		0.000	0.000	0.000
WYG BH15	32.497	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	1007	2.88	3.09	29.62		0.000	0.000	0.000
WYG BH16	30.334	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	1007	0.41	3.00	29.92		0.000	0.000	0.000
WYG BH17	31.261	0.0	0.0	0	0	0.0	0.0	20.1	1	0	0	0.0	0.0	1008	0.27	2.60	30.99		0.000	0.000	0.000
WYG BH18	31.244	0.0	0.0	0	0	0.0	0.0	20.0	0	0	0	0.0	0.0	1008	1.22	8.30	30.02		0.000	0.000	0.000
WYG BH19	31.403	0.0	0.0	0	0	0.0	0.0	20.0	1	0	0	0.0	0.0	1008	4.71	8.30	26.69		0.000	0.000	0.000
Maximum	-	0.1	0.1	0	0	0.0	0.0	-	2	0	0.0	3.1	0.0	-	-	-	-	-	0.000	0.000	0.000

Notes:

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Atmospheric Pressure trend obtained from Met Office Website (<http://www.metoffice.gov.uk/education/archive/uk/>) and www.wunderground.com (History Data)



- KEY
- LOCATION OF TRIAL PIT
 - LOCATION OF TRIAL HAND DUG PIT
 - LOCATION OF BOREHOLE

REV	DESCRIPTION	BY	CHK	APP	DATE
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Project:
NEW PRISON NORTH WALES

Drawing Title:
EXPLORATORY HOLE LOCATION PLAN
PROPOSED DEVELOPMENT

Scale @	A3	Drawn	Date	Checked	Date	Approved	Date
1:2500		PMC	17.12.13	KE	17.12.13	CM	17.12.13
Project No.	Office	Type	Drawing No.	Revision			
A083839	MAN	N	Fig.3				