



Aled Zachary,
Natural Resources Wales,
Chester Road,
Buckley,
Flintshire.
CH7 3AJ

28th May 2015

Dear Aled,

Environmental Monitoring Report, 1st February to 30th April 2015.

Please find enclosed the quarterly report for routine environmental monitoring undertaken at Llanddulas Landfill Site during the period 1st February to 30th April 2015.

We trust this is satisfactory, please do not hesitate to contact us should you require further clarification.

**Yours sincerely,
for FCC ENVIRONMENT.**

A handwritten signature in black ink, appearing to read 'Geoff Forrest'.

Geoff Forrest

Technical Manager



LLANDDULAS LANDFILL SITE

PPC PERMIT BU0800IZ

QUARTERLY ENVIRONMENTAL MONITORING REPORT

1st February – 30th April 2015

May 2015

**FCC Environment
Llanddulas Landfill Site
Llanddulas
Conwy
LL22 8HP**

1.0 Introduction

This report has been produced in accordance with the requirements of the PPC permit (BU0800IZ) and subsequent variation notice (BP3734XX) issued on the 25th July 2008 and outlines the results of environmental monitoring undertaken between the 1st February and the 30th April 2015 at Llanddulas Landfill Site.

Author	Approved By	Subject	Date	Status	Page
GF		Llanddulas Quarterly Review (1 st Feb 2015 – 30 th April 2015)	28/05/15	Issue	2

2.0 Off Waste Landfill Gas Monitoring

Monitoring for the presence of landfill gas in perimeter boreholes has been undertaken on a weekly basis throughout the review period, in accordance with Table S4.5 of the site Permit.

Revised background concentration levels of landfill gases were agreed as part of the improvement programme requirements (IC13) included in the variation (table S1.3.12). Following the review, Methane compliance and action limits plus Carbon Dioxide (action levels only) were approved by Natural Resources Wales (CAR form RDR/121105BU0800IZ), for all perimeter boreholes.

During this reporting period (of the 762 perimeter gas readings taken) there were no readings in excess of the compliance level for methane.

Borehole 40 has a compliance limit of 2.5% (with an action limit of 1.5%) and is not situated at the site perimeter.

Any methane compliance breaches will continue to be notified via Schedule 6.

A summary of the borehole readings is attached with this report in Appendix 2.

3.0 Water Quality

Water quality is currently measured from 17 groundwater monitoring boreholes, the Dulas spring, W1 (discharge point) and the Afon Dulas upstream/downstream as shown on ESID 13B for Phases 1 and 3 of the application. Monthly suites of samples were taken during February and March with an annual set of samples collected for analysis during April.

3.1 Groundwater Quality

During this reporting period there was one breach of the specific trigger limits for Potassium and Tributyl Tin in borehole GWBH36. A potassium value of 39mg/l (trigger limit 12mg/l) was recorded in the sample collected during April's sampling round, whilst in the same sample Tributyl Tin was recorded at 0.003ug/l (limit 0.001ug/l) – a Schedule 6 notification was submitted to NRW for these breaches

In 2014 we reviewed the Potassium data for GWBH04 which had showed concentrations breaching the trigger level of 12mg/l regularly over the last 5 years. We are continuing to fully purge this borehole during routine groundwater sampling each month which has had the effect of reducing the level of potassium.

Borehole GWBH36 is one of the deeper boreholes on site (120m to base) which it was agreed (through correspondence with NRW) that it is not necessary to purge prior to sampling.

Due to the now persistent breaches of the Potassium trigger level, we are currently looking into methods of purging this deep borehole each month in order to reduce the levels of K within it

There was insufficient liquid for a sample to be retrieved from borehole GWBH26b in February, however it was successfully sampled in March and April.

A slightly elevated level of Ammoniacal Nitrogen (1.4mg/l) was recorded from the sample taken in March, however the NH3N concentration was below 1mg/l in April at 0.4mg/l.

There was a slightly elevated potassium level in GWBH26b in April at 16mg/l, compared to the limit of 12mg/l.

The quarterly sample from borehole GWBH06r returned an elevated result for Potassium of 58mg/l in January (2015), compared to readings in January 2015 of 46mg/l and in 2014 of 46mg/l (October), 51mg/l (July), 50mg/l (April) and 43mg/l in January. There were no elevated levels of any of the other key indicator pollutants in the water from this borehole and

Author	Approved By	Subject	Date	Status	Page
GF		Llanddulas Quarterly Review (1 st Feb 2015 – 30 th April 2015)	28/05/15	Issue	3

Ammonia levels remained between <0.01mg/l and 0.02mg/l during the quarter, with Chloride concentrations below the trigger of 250mg/ throughout the reporting period.

Water level was measured monthly at all of the groundwater monitoring boreholes on site, in accordance with Table S4.10 of the site Permit.

3.2 Surface Water Quality

Surface water sampling is carried out in accordance with Tables S4.3 and S4.9 of the site Permit.

Surface water from the Dulas Spring is sampled weekly and the Upstream and Downstream points of the Afon Dulas along with the Spring and surface water emission point W1 monthly. Generally, analyses of samples from these surface water points, suggests the water is of a good quality with no signs of any deterioration.

All analytical data obtained is attached with this report in Appendix 9.

3.3 Surface Water Discharge Quality

Sampling of surface water discharge point W1, as shown on ESID 13B for phases 1 and 3 of the Permit Application, recommenced during September 2010, at the request of EA Wales (continuing on a Monthly basis) having not been sampled for some time due to there being no discharge of surface water from this point of the site, as is still the case.

4.0 Leachate Monitoring

4.1 Leachate Quality

Leachate sampling was carried out at the 7 leachate collection points on site and at the revised frequency of quarterly, as agreed with NRW. The reduced sampling frequency requires to be written into the next Permit Variation.

Results of the analyses of leachate samples are attached in Appendix 7.

4.2 Leachate Levels

Leachate levels are monitored on a weekly basis in accordance with Table S4.1 of the site Permit.

Levels remained consistently below the 2m limit throughout the period - data is attached with this report in Appendix 6.

Schedule 6 notifications will be submitted to the Natural Resources Wales in relation to any level breaches.

Leachate levels are closely managed at the site with all leachate processed by the treatment plant and discharged to sewer.

5.0 Landfill Gas Management

Landfill gas is currently extracted and utilised at the site from Phases 1, 2, 3 and 3A. The LFG utilisation plant, located on site, comprises of three Jenbacher engines capable of producing 2 x 1000kW, 1 x 1065kW respectively.

The total flaring capacity on site consists of one 2000m³ high temperature flare and one 1000m³ high temperature flare commissioned in September 2008. These are capable of sufficient gas control in the event of the engines being unavailable.

Author	Approved By	Subject	Date	Status	Page
GF		Llanddulas Quarterly Review (1 st Feb 2015 – 30 th April 2015)	28/05/15	Issue	4

5.1 Flare/Gas Engine Emissions

Monitoring of the flare and gas engine emissions were undertaken during December 2014 in accordance with the IPPC permit and the results were submitted to Natural Resources Wales with the Annual Monitoring Report in April 2015.

5.2 In Waste Gas Quality

Monitoring at the gas control collection wells is carried out in accordance with condition 3.6.1 and Table S4.7 of the permit variation.

Table S4.7 states that an assessment of air ingress into the extraction system must be carried out if the following control limits are exceeded;

- Oxygen Concentration >5%
- The addition of carbon dioxide and methane percentages <80%
- Carbon monoxide concentration >100ppm requires additional investigation.

During the review period there was a total of 1349 gas well readings obtained, with weekly gas field balancing taking place across Phase 3A.

Oxygen concentrations in excess of 5% were recorded on 158 occasions and total Carbon Dioxide and Methane concentrations of less than 80% recorded on 486 occasions.

In the majority of the cases above, gas wells have their valves either closed, or closed post-monitoring or partially open to aid odour control or gas migration.

Investigations and remediations are carried out in relation to air ingress and other parameter breaches on a continual basis by our gas contractors.

Of the 1453 gas well readings there were no readings where Carbon Monoxide concentration exceeded 100ppm. The highest reading was recorded on 12th February at 97ppm in gas well D293.

6.0 Ambient air monitoring

Ambient air monitoring is carried out in accordance with the requirements specified in Table S4.11 and Condition 3.6.1 of the Permit Variation.

A monthly regime of FID surveys is carried out as per Permit requirements both on site and at the site perimeter but also more intensive fortnightly FID surveying of all site infrastructure, particularly in temporarily capped or uncapped areas, with follow-up remediations in a maintained effort to avoid the escape of any fugitive emissions/odours.

Both monthly on-site and perimeter FID survey readings are presented below in Appendix 5.

Author	Approved By	Subject	Date	Status	Page
GF		Llanddulas Quarterly Review (1 st Feb 2015 – 30 th April 2015)	28/05/15	Issue	5

APPENDIX 1

Field Logs

Field log report

Llanddulas

03-February-2015

Equipment 01 Last Calibration	20/10/2014
Equipment 01 Serial No.	GA5000 + G500902
Personnel 01	INF00544 Tim.Prosser
Time OFF	15:54
Time ON	09:34
Weather	Clear

Issued By:

Signed By :

Name :

Field log report

Llanddulas

05-February-2015

Equipment 01 Calibration Due	N/A
Equipment 01 Last Calibration	N/A
Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM12355
Equipment 01 Serial No.	79284/10
Equipment 01 Type	Geotech Atex dipmeter
Equipment 02 Last Calibration	05/02/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L.Terrace
Personnel 01	INF00860 brendan.cartwright
Time OFF	14:45
Time OFF	13:10
Time ON	11:30
Time ON	10:33
Weather	Cold
Weather	Sunny

Issued By:

Signed By :

Name :

Field log report

Llanddulas

10-February-2015

Equipment 01 Last Calibration	05/02/2015
Equipment 01 Last Calibration	20/10/2014
Equipment 01 Serial No.	GA5000 + G500902
Equipment 01 Serial No.	LT1
Equipment 01 Type	Hannah Instruments HI98130
Equipment 02 Last Calibration	N/A
Equipment 02 Serial No.	31270
Equipment 02 Type	In Situ Rugged Level Tape 100
Personnel 01	L.Terrace
Personnel 01	INF00544 Tim.Prosser
Time OFF	13:23
Time OFF	18:00
Time ON	09:40
Time ON	12:48
Weather	Clear
Weather	Overcast

Issued By:

Signed By :

Name :

Field log report

Llanddulas

11-February-2015

Equipment 01 Calibration Due	21/02/2015
Equipment 01 Last Calibration	20/08/2014
Equipment 01 Serial No.	G501869
Equipment 01 Type	GA5000
Personnel 01	L Terrace
Time OFF	16:35
Time ON	10:50
Weather	Overcast

Issued By:

Signed By :

Name :

Field log report

Llanddulas

12-February-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00860 brendan.cartwright
Time OFF	15:20
Time ON	11:03
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

13-February-2015

Equipment 01 Last Calibration	20/10/2014
Equipment 01 Serial No.	GA5000 + G500902
Personnel 01	INF00544 Tim.Prosser
Time OFF	15:24
Time ON	14:17
Weather	Clear

Issued By:

Signed By :

Name :

Field log report

Llanddulas

17-February-2015

Equipment 01 Calibration Due	N/A
Equipment 01 Last Calibration	N/A
Equipment 01 Last Calibration	20/10/2014
Equipment 01 Serial No.	79284/10
Equipment 01 Serial No.	GA5000 + G500902
Equipment 01 Type	Geotech Atex dipmeter
Equipment 02 Last Calibration	05/02/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L.Terrace
Personnel 01	INF00544 Tim.Prosser
Time OFF	10:05
Time OFF	15:10
Time ON	08:50
Time ON	09:23
Weather	Dry
Weather	Sunny

Issued By:

Signed By :

Name :

Field log report

Llanddulas

20-February-2015

Equipment 01 Last Calibration	20/10/2014
Equipment 01 Serial No.	GA5000 + G500902
Personnel 01	INF00544 Tim.Prosser
Time OFF	15:27
Time ON	14:45
Weather	Clear

Issued By:

Signed By :

Name :

Field log report

Llanddulas

23-February-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00860 Brendan.Cartwright
Time OFF	15:17
Time ON	10:18
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

24-February-2015

Equipment 01 Last Calibration	05/02/2015
Equipment 01 Serial No.	GEM2000Plus + GM12354
Personnel 01	INF00860 Brendan.Cartwright
Time OFF	15:31
Time ON	10:13
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

25-February-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00860 Brendan.Cartwright
Time OFF	15:39
Time ON	09:05
Weather	Showers

Issued By:

Signed By :

Name :

Field log report

Llanddulas

26-February-2015

Equipment 01 Calibration Due	30/03/2015
Equipment 01 Last Calibration	30/09/2014
Equipment 01 Last Calibration	05/02/2015
Equipment 01 Serial No.	GA11581
Equipment 01 Serial No.	GEM2000Plus + GM12354
Equipment 01 Type	GA2000+
Equipment 02 Last Calibration	05/02/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L Terrace
Personnel 01	INF00860 brendan.cartwright
Time OFF	15:24
Time OFF	16:00
Time ON	09:30
Time ON	13:13
Weather	Cold
Weather	Raining

Issued By:

Signed By :

Name :

Field log report

Llanddulas

27-February-2015

Equipment 01 Last Calibration	05/02/2015
Equipment 01 Serial No.	GEM2000Plus + GM12354
Personnel 01	INF00860 brendan.cartwright
Time OFF	11:47
Time ON	10:27
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

03-March-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	15:49
Time ON	10:18
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

05-March-2015

Equipment 01 Calibration Due	N/A
Equipment 01 Last Calibration	N/A
Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Equipment 01 Serial No.	79284/10
Equipment 01 Type	Geotech Atex dipmeter
Equipment 02 Last Calibration	05/03/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L.Terrace
Personnel 01	INF00919 ellen.owen
Time OFF	12:06
Time OFF	11:10
Time ON	09:20
Time ON	10:25
Weather	Cold
Weather	Overcast

Issued By:

Signed By :

Name :

Field log report

Llanddulas

06-March-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	15:00
Time ON	10:23
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

09-March-2015

Equipment 01 Last Calibration	05/02/2015
Equipment 01 Serial No.	GEM2000Plus + GM12354
Personnel 01	INF00860 brendan.cartwright
Time OFF	14:42
Time ON	10:29
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

10-March-2015

Equipment 01 Last Calibration	05/03/2015
Equipment 01 Last Calibration	05/02/2015
Equipment 01 Serial No.	GEM2000Plus + GM12354
Equipment 01 Serial No.	LT1
Equipment 01 Type	Hannah Instruments HI98130
Equipment 02 Last Calibration	N/A
Equipment 02 Serial No.	31270
Equipment 02 Type	In Situ Rugged Level Tape 100
Personnel 01	L.Terrace
Personnel 01	INF00860 brendan.cartwright
Time OFF	15:01
Time OFF	17:05
Time ON	09:30
Time ON	10:08
Weather	Clear
Weather	Sunny

Issued By:

Signed By :

Name :

Field log report

Llanddulas

11-March-2015

Equipment 01 Calibration Due	30/03/2015
Equipment 01 Last Calibration	30/09/2014
Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GA11581
Equipment 01 Serial No.	GEM2000Plus + GM11655
Equipment 01 Type	GA2000+
Personnel 01	L Terrace
Personnel 01	INF00919 ellen.owen
Time OFF	11:00
Time OFF	15:50
Time ON	09:12
Time ON	10:10
Weather	Raining
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

13-March-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	11:17
Time ON	10:30
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

17-March-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	15:04
Time ON	09:14
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

18-March-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	13:33
Time ON	10:04
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

19-March-2015

Equipment 01 Calibration Due	30/03/2015
Equipment 01 Last Calibration	30/09/2014
Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Equipment 01 Serial No.	GA11581
Equipment 01 Type	GA2000+
Equipment 02 Last Calibration	05/03/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L Terrace
Personnel 01	INF00919 ellen.owen
Time OFF	15:57
Time OFF	15:30
Time ON	09:05
Time ON	09:10
Weather	Dry
Weather	Sunny

Issued By:

Signed By :

Name :

Field log report

Llanddulas

23-March-2015

Equipment 01 Calibration Due	26/08/2015
Equipment 01 Last Calibration	26/02/2015
Equipment 01 Serial No.	G500670
Equipment 01 Type	GA5000
Personnel 02	J Crawford
Weather	Sunny

Issued By:

Signed By :

Name :

Field log report

Llanddulas

24-March-2015

Equipment 01 Last Calibration	28/02/2015
Equipment 01 Serial No.	GA5000 + G502215
Personnel 01	INF00544 Tim.Prosser
Time OFF	15:56
Time ON	09:58
Weather	Clear

Issued By:

Signed By :

Name :

Field log report

Llanddulas

25-March-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Equipment 01 Serial No.	78222-08
Equipment 01 Type	Geotech Atex dipmeter
Personnel 01	DB
Personnel 01	INF00919 ellen.owen
Time OFF	14:50
Time OFF	12:30
Time ON	10:03
Time ON	10:00
Weather	Cold
Weather	sunny

Issued By:

Signed By :

Name :

Field log report

Llanddulas

26-March-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Last Calibration	05/03/2015
Equipment 01 Serial No.	LT1
Equipment 01 Serial No.	GEM2000Plus + GM11655
Equipment 01 Type	Hannah Instruments HI98130
Personnel 01	G Forrest
Personnel 01	INF00919 ellen.owen
Time OFF	13:24
Time OFF	09:00
Time ON	08:45
Time ON	10:36
Weather	Cold
Weather	o/c, cool

Issued By:

Signed By :

Name :

Field log report

Llanddulas

27-March-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	12:18
Time ON	08:56
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

31-March-2015

Equipment 01 Calibration Due	13/09/2015
Equipment 01 Last Calibration	12/03/2015
Equipment 01 Serial No.	G501869
Equipment 01 Type	GA5000
Equipment 02 Last Calibration	05/03/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L Terrace
Time OFF	16:00
Time ON	09:00
Weather	Overcast

Issued By:

Signed By :

Name :

Field log report

Llanddulas

01-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	15:06
Time ON	08:18
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

02-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	11:14
Time ON	08:47
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

08-April-2015

Equipment 01 Calibration Due	13/09/2015
Equipment 01 Last Calibration	12/03/2015
Equipment 01 Serial No.	G501869
Equipment 01 Type	GA5000
Equipment 02 Last Calibration	08/04/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L Terrace
Time OFF	13:50
Time ON	08:50
Weather	Sunny

Issued By:

Signed By :

Name :

Field log report

Llanddulas

09-April-2015

Equipment 01 Last Calibration	28/02/2015
Equipment 01 Serial No.	GA5000 + G502215
Personnel 01	INF00544 Tim.Prosser
Time OFF	14:50
Time ON	14:24
Weather	Overcast

Issued By:

Signed By :

Name :

Field log report

Llanddulas

13-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	11:20
Time ON	10:20
Weather	Cold

Issued By:

Signed By :

Name :

Field log report

Llanddulas

14-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	16:28
Time ON	09:10
Weather	Dry

Issued By:

Signed By :

Name :

Field log report

Llanddulas

15-April-2015

Equipment 01 Calibration Due	13/09/2015
Equipment 01 Last Calibration	12/03/2015
Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Equipment 01 Serial No.	G501869
Equipment 01 Type	GA5000
Personnel 01	L Terrace
Personnel 01	INF00919 ellen.owen
Time OFF	13:56
Time OFF	16:45
Time ON	09:05
Time ON	11:25
Weather	Drizzle
Weather	Overcast

Issued By:

Signed By :

Name :

Field log report

Llanddulas

17-April-2015

Equipment 01 Last Calibration	05/02/2015
Equipment 01 Serial No.	GA5000 + G502223
Personnel 01	INF00544 Tim.Prosser
Time OFF	08:38
Time ON	08:38
Weather	Overcast

Issued By:

Signed By :

Name :

Field log report

Llanddulas

20-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	14:22
Time ON	14:22
Weather	Dry

Issued By:

Signed By :

Name :

Field log report

Llanddulas

21-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	09:22
Time ON	09:18
Weather	Dry

Issued By:

Signed By :

Name :

Field log report

Llanddulas

22-April-2015

Equipment 01 Calibration Due	13/09/2015
Equipment 01 Last Calibration	12/03/2015
Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Equipment 01 Serial No.	G501869
Equipment 01 Type	GA5000
Equipment 02 Last Calibration	08/04/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L Terrace
Personnel 01	INF00919 ellen.owen
Time OFF	16:28
Time OFF	15:50
Time ON	09:05
Time ON	09:08
Weather	Hot & Sunny
Weather	Sunny

Issued By:

Signed By :

Name :

Field log report

Llanddulas

23-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00544 Tim.Prosser
Time OFF	07:59
Time ON	07:49
Weather	Clear

Issued By:

Signed By :

Name :

Field log report

Llanddulas

24-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	11:27
Time ON	09:40
Weather	Dry

Issued By:

Signed By :

Name :

Field log report

Llanddulas

27-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	15:40
Time ON	08:55
Weather	Clear

Issued By:

Signed By :

Name :

Field log report

Llanddulas

28-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	14:11
Time ON	08:48
Weather	Dry

Issued By:

Signed By :

Name :

Field log report

Llanddulas

29-April-2015

Equipment 01 Last Calibration	28/11/2014
Equipment 01 Serial No.	GEM2000Plus + GM11655
Personnel 01	INF00919 ellen.owen
Time OFF	15:13
Time ON	08:38
Weather	Dry

Issued By:

Signed By :

Name :

Field log report

Llanddulas

30-April-2015

Equipment 01 Calibration Due	N/A
Equipment 01 Last Calibration	N/A
Equipment 01 Last Calibration	13/04/2015
Equipment 01 Serial No.	GA5000 + G500902
Equipment 01 Serial No.	79284/10
Equipment 01 Type	Geotech Atex dipmeter
Equipment 02 Last Calibration	08/04/2015
Equipment 02 Serial No.	LT1
Equipment 02 Type	Hannah Instruments HI98130
Personnel 01	L.Terrace
Personnel 01	INF00544 Tim.Prosser
Time OFF	09:46
Time OFF	11:15
Time ON	10:10
Time ON	09:37
Weather	Overcast
Weather	Sunny

Issued By:

Signed By :

Name :

APPENDIX 2

Perimeter Borehole Gas Data

Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

05/02/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1015	0	1.2	0	18.1	-0.43
BH002	1014	0	1.1	0	17.8	-0.02
BH003	1014	0	0.3	0	19.4	-0.43
BH004	1014	0	0.4	0	19.3	-0.38
BH005	1014	0	1.8	0	16	-0.48
BH006	1014	0	0.7	0	18.5	-0.59
BH007	1014	0	0.8	0	19	-0.6
BH008	1014	0	1.2	0	18.6	0.05
BH009	1014	0	0.4	0	19.4	-0.57
BH010	1014	0	0.4	0	19.4	-0.57
BH011	1014	0	0.3	0	19.5	-0.5
BH012	1014	0	0.9	0	19	-0.41
BH013	1014	0	0.5	0	19.4	-0.57
BH014	1014	0	1.3	0	18.5	-0.4
BH015	1014	0	0.6	0	19.4	-0.38
BH016	1014	0	1.1	0	19.1	-0.48
BH017	1014	0	0.4	0	19.5	-0.64
BH018	1014	0	0.5	0	19.5	-0.48
BH019	1014	0	2.3	0	18.5	-0.4
BH020	1014	0	1	0	19	-0.36
BH021	1014	0	0.7	0	19	-0.48
BH022	1014	0	0.5	0	19.5	-0.47
BH023	1013	0	0.8	0	19.1	-0.4
BH024	1014	0	1.1	0	19.2	-0.47
BH025	1013	0	0.6	0	19.4	-0.4
BH026	1014	0	3.9	0	15.3	-0.52
BH027	1014	0	4.4	0	15.3	-0.33
BH028	1014	0	3.8	0	17.3	-0.55
BH029	1014	0	1.7	0	16.8	-0.47
BH030	1014	0	2.4	0	17.6	-0.47
BH040	1013	0	4.1	0	15.3	-0.41
BH041	1012	0	1.6	0	18.6	-0.48
BH042	1015	0	0.1	0	19.7	-0.43
BH100	1014	0	3	0	18.3	-0.47
BH101	1012	0	0.8	0	19.8	-0.48
BH102	1012	0	0.2	0	20.1	-0.45
BH103	1012	0	0.3	0	20.1	-0.38
BH104	1011	0	0.4	0	20.2	-0.45
BH105	1011	0	1.1	0	19.7	-0.38
BH106	1011	0	1.3	0	19.3	-0.36
BH107	1011	0	1.7	0	19.8	-0.4
BH108	1011	0	0.3	0	20.3	-0.48
BH109	1011	0	0.7	0	20.1	-0.4
BH110	1011	0	0.2	0	20.4	-0.36
BH111	1011	0	0.2	0	20.4	-0.45
BH112	1011	0	0.1	0	20.5	-0.54
BH113	1011	0	0.9	0	20	-0.33
BH114	1011	0	0.2	0	20.5	0.95
BH115	1011	0	0.1	0	20.6	-0.41
BH116	1010	0	0.4	0	19.9	-0.43

Issued By:

Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

05/02/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH117	1010	0	0.2	0	20.6	-0.47
BH118	1010	0	0.9	0	20.1	-0.41
BH119	1010	0	0.9	0	20	-0.38
BH120	1010	0	0.3	0	20.7	-0.47

Issued By:

Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

11/02/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1009	0	1.3	0	18.5	-0.4
BH002	1008	0	1.2	0	18.6	-0.35
BH003	1008	0	0.1	0	20.1	-0.45
BH004	1008	0	0.2	0	20.1	-0.36
BH005	1008	0	1.8	0	17.5	-0.45
BH006	1008	0	1	0	18.8	-0.33
BH007	1008	0	0.9	0	19.5	-0.31
BH008	1008	0	2.5	0	13.4	-0.52
BH009	1008	0	0.2	0	20.3	-0.43
BH010	1008	0	0.3	0	20.3	-0.48
BH011	1008	0	0.2	0	20.3	-0.54
BH012	1008	0	2.5	0	13.1	-0.48
BH013	1008	0	0.6	0	19.8	-0.38
BH014	1008	0	1.2	0	19.6	-0.41
BH015	1007	0	0.5	0	20.3	-0.52
BH016	1008	0	1.5	0	19.4	-0.52
BH017	1007	0	0.9	0	19.9	-0.4
BH018	1007	0	0.7	0	20.3	-0.41
BH019	1007	0	2.5	0	18	-0.48
BH020	1007	0	1.4	0	19.4	-0.38
BH021	1007	0	1.2	0	20.1	-0.47
BH022	1007	0	0.9	0	20.2	-0.36
BH023	1007	0	1.1	0	19.8	-0.52
BH024	1007	0	1	0	19.7	-0.38
BH025	1007	0	1.3	0	19	-0.38
BH026	1007	0	4.2	0	17.6	-0.47
BH027	1007	0	4.2	0	16.8	-0.47
BH028	1007	0	3	0	18.8	-0.48
BH029	1007	0	2.5	0	17.3	-0.41
BH030	1007	0	2.3	0	18.8	-0.47
BH031	1007	0	1.3	0	20.1	-0.5
BH032	1007	0	0.9	0	20	-0.41
BH033	1007	0	2.1	0	20	-0.38
BH034	1007	0	1.1	0	20.1	-0.41
BH035	1007	0	1.7	0	20.1	-0.57
BH036	1006	0	2.1	0	19	-0.55
BH037	1006	0	0.7	0	20.3	-0.41
BH038	1006	0	1	0	19.9	-0.45
BH039	1006	0	1.2	0	19.8	-0.43
BH040	1007	0	3	0	17.6	-0.43
BH041	1004	0	2.6	0	17.9	-0.41
BH042	1007	0	0.1	1	20.3	-0.41
BH047	1006	0	1.9	0	18.8	-0.41
BH048	1005	0	3.1	0	18.5	-0.38
BH049	1005	0	1.2	0	19.8	-0.36
BH050	1005	0	3	0	18	-0.5
BH051	1005	0	4	0	18	-0.45
BH052	1005	0	1.5	0	19.8	-0.45
BH053	1004	0	1.1	0	20.1	-0.38
BH054	1004	0	1.4	0	20.1	-0.41

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

11/02/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH055	1004	0	2.2	0	19.6	-0.52
BH056	999	0	1.2	0	19.8	-0.35
BH057	1004	0	1.2	0	19.9	-0.47
BH100	1005	0	2.5	0	18.8	-0.4
BH101	1004	0	2.5	0	16.6	-0.55
BH102	1004	0	0.2	0	20.1	-0.36
BH103	1003	0	0.7	0	19.5	-0.59
BH104	1003	0	0.4	0	19.8	-0.45
BH105	1003	0	1.7	0	19	-0.4
BH106	1003	0	2.1	0	19.3	-0.36
BH107	1003	0	3.3	0	19.3	-0.47
BH108	1003	0	1.2	0	19.6	-0.6
BH109	1003	0	0.8	0	19.9	-0.45
BH110	1003	0	0.2	0	20.2	-0.41
BH111	1003	0	0.5	0	19.9	-0.47
BH112	1003	0	0.6	0	19.6	-0.4
BH113	1002	0	1	0	19.6	-0.41
BH114	1002	0	0.3	0	20.3	1.16
BH115	1002	0	0.1	0	20.4	-0.4
BH116	1002	0	0.4	0	19.8	-0.43
BH117	1001	0	0.2	0	20.4	-0.47
BH118	1001	0	1	0	20.1	-0.43
BH119	1002	0	0.9	0	19.6	-0.47
BH120	1001	0	0.3	0	20.5	-0.36

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

17/02/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1022	0	0.2	0	19.5	-0.45
BH002	1021	0	0.1	0	19.6	-0.4
BH003	1021	0	0.1	0	19.6	-0.48
BH004	1021	0	0.1	0	19.7	-0.19
BH005	1021	0	0.2	0	19.7	-0.52
BH006	1021	0	0.1	0	19.7	-0.41
BH007	1021	0	0.2	0	19.7	-0.48
BH008	1021	0	0.7	0	19.4	-0.54
BH009	1021	0	0.1	0	19.8	-0.55
BH010	1021	0	0.1	0	19.9	-0.38
BH011	1021	0	0.1	0	19.9	-0.47
BH012	1021	0	0.1	0	19.9	-0.4
BH013	1021	0	0.2	0	19.9	-0.43
BH014	1021	0	0.1	0	20	-0.43
BH015	1021	0	0.1	0	20	-0.48
BH016	1021	0	0.2	0	20	-0.48
BH017	1021	0	0.1	0	20.1	-0.47
BH018	1021	0	0.3	0	20	-0.5
BH019	1021	0	0.8	0	19.8	-0.36
BH020	1021	0	0.2	0	20.1	-0.33
BH021	1021	0	0.1	0	20.1	-0.5
BH022	1021	0	0.2	0	20.1	-0.45
BH023	1021	0	0.3	0	20.1	-0.5
BH024	1021	0	0.2	0	20.1	-0.5
BH025	1021	0	0.7	0	19.7	-0.47
BH026	1021	0	0.4	0	20	-0.48
BH027	1021	0	2.6	0	18.4	-0.48
BH028	1021	0	0.2	0	20.2	-0.5
BH029	1021	0	0.2	0	20.2	-0.45
BH030	1021	0	1.7	0	19.4	-0.41
BH040	1020	0	2.4	0	17.8	-0.5
BH041	1019	0	0.8	0	18.6	-0.48
BH042	1018	0	0.1	0	20	-0.45
BH100	1021	0	3	0	16.5	-0.59
BH101	1020	0	1.8	0	17.6	-0.5
BH102	1020	0	0.1	0	19.3	-0.43
BH103	1019	0	1.1	0	18.5	-0.43
BH104	1019	0	0.3	0	19.4	-0.43
BH105	1019	0	0.7	0	19.3	-0.4
BH106	1019	0	0.4	0	19.4	-0.4
BH107	1019	0	0.9	0	18.8	-0.41
BH108	1019	0	0.2	0	19.8	-0.52
BH109	1019	0	0.7	0	19.6	-0.36
BH110	1019	0	0.1	0	20.1	-0.45
BH111	1019	0	0.2	0	20.1	-0.55
BH112	1019	0	0.1	0	20.2	-0.41
BH113	1019	0	0.4	0	20.1	-0.48
BH114	1018	0	0.2	0	20.2	0.29
BH115	1018	0	0.1	0	20.4	-0.54
BH116	1018	0	0.2	0	20.3	-0.35

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

17/02/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH117	1018	0	0.2	0	20.5	-0.41
BH118	1018	0	0.9	0	19.8	-0.47
BH119	1018	0	0.9	0	19.7	-0.48
BH120	1018	0	0.2	0	20.6	-0.36

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

26/02/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	997	0	0.2	0	20.5	-0.02
BH002	996	0	0.1	0	20.7	-0.09
BH003	996	0	0	0	20.7	-0.02
BH004	996	0	0	0	20.8	-0.18
BH005	996	0	0.1	0	20.8	0
BH006	996	0	0	0	20.9	0.03
BH007	996	0	0.1	0	20.8	0.04
BH008	996	0	1.5	0	16.9	0.04
BH009	996	0	0	0	20.9	0
BH010	996	0	0	0	20.8	0.09
BH011	996	0	0	0	20.8	0.05
BH012	996	0	0.1	0	20.8	0.07
BH013	996	0	0.1	0	20.8	0.06
BH014	996	0	0.1	0	20.8	0.06
BH015	996	0	0	0	20.8	0.08
BH016	996	0	0.1	0	20.8	0.08
BH017	996	0	0	0	20.9	0.08
BH018	996	0	0.2	0	20.8	0.12
BH019	996	0	0.3	0	20.7	0.15
BH020	996	0	0	0	20.8	0.04
BH021	996	0	0	0	20.9	0.06
BH022	996	0	0.1	0	20.8	0.15
BH023	996	0	0.2	0	20.6	0.11
BH024	996	0	0	0	20.9	0.1
BH025	996	0	0.9	0	19.8	0.24
BH026	996	0	0.1	0	20.6	0.16
BH027	996	0	0.5	0	20.5	0.97
BH028	996	0	0.3	0	20.7	0.15
BH029	996	0	0.1	0	20.9	0.11
BH030	996	0	1.4	0	20	0.13
BH040	992	1.2	1.4	0	17.9	-0.24
BH041	996	0	1.3	0	19.9	0.1
BH042	999	0	0.1	0	20.4	-0.18
BH100	995	0	2.8	0	18.9	0.04
BH101	994	0	1.7	0	19.2	0
BH102	994	0	0.1	0	20.7	0.04
BH103	994	0	1.1	0	19.8	0.05
BH104	993	0	0.3	0	20.6	-0.07
BH105	993	0	0.9	0	18.7	-0.08
BH106	993	0	0.4	0	20.6	-0.05
BH107	993	0	1.5	0	17.5	-0.02
BH108	993	0	0.3	0	20.8	-0.01
BH109	994	0	0.6	0	20.5	-0.01
BH110	994	0	0.2	0	20.3	-0.05
BH111	994	0	0.9	0	20	0
BH112	993	0	0.7	0	19.5	-0.03
BH113	993	0	1.5	0	19.1	-0.03
BH114	993	0	0.2	0	20.6	-0.04
BH115	993	0	0.1	0	19.5	-0.11
BH116	992	0	0.1	0	20.7	-0.12

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

26/02/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH117	992	0	0.1	0	20.6	-0.07
BH118	992	0	0.8	0	20.3	-0.15
BH119	992	0	0.8	0	20.2	-0.21
BH120	992	0	0.4	0	20.5	-0.19

Issued By:

Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

05/03/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1021	0	0.1	0	20	-0.04
BH002	1020	0	0	0	20.1	0.72
BH003	1020	0	0	0	20.2	0.07
BH004	1020	0	0	0	20.3	0.03
BH005	1020	0	0	0	20.3	0.1
BH006	1020	0	0	0	20.3	0.11
BH007	1020	0	0	0	20.4	0.42
BH008	1020	0	1	0	19.3	0.14
BH009	1020	0	0	0	20.5	0.16
BH010	1020	0	0	0	20.6	0.19
BH011	1020	0	0	0	20.6	0.16
BH012	1020	0	0	0	20.6	0.14
BH013	1020	0	0.1	0	20.6	0.15
BH014	1020	0	0.1	0	20.6	0.13
BH015	1020	0	0	0	20.7	0.19
BH016	1020	0	0	0	20.7	0.13
BH017	1020	0	0	0	20.7	0.13
BH018	1020	0	0.2	0	20.6	0.14
BH019	1020	0	0.7	0	20.2	0.14
BH020	1019	0	0	0	20.7	1.08
BH021	1019	0	0.1	0	20.6	0.14
BH022	1019	0	0.1	0	20.6	0.19
BH023	1019	0	0.2	0	20.6	0.12
BH024	1019	0	0	0	20.8	0.12
BH025	1019	0	0.6	0	20.1	0.2
BH026	1019	0	0.1	0	20.7	0.14
BH027	1019	0	0.6	0	20	0.8
BH028	1019	0	0.1	0	20.7	0.12
BH029	1019	0	0.1	0	20.7	0.07
BH030	1019	0	0.9	0	20	0.11
BH040	1023	1.1	3.1	0	10.8	0.07
BH041	1019	0	1.1	0	19.4	0
BH042	1023	0	0	0	20	0.07
BH100	1019	0	2.4	0	19.1	0.04
BH101	1017	0	1.4	0	19.2	0.03
BH102	1017	0	0	0	20.4	0.11
BH103	1017	0	1.1	0	19.6	0.09
BH104	1017	0	0.3	0	20.3	0.1
BH105	1016	0	0.6	0	20.2	0.12
BH106	1016	0	1	0	19.3	0.11
BH107	1016	0	1.4	0	19.1	0.1
BH108	1016	0	0.7	0	20.2	0.15
BH109	1016	0	0.6	0	20.1	0.15
BH110	1016	0	0.1	0	20.5	0.11
BH111	1016	0	0.2	0	20.3	0.14
BH112	1016	0	0.1	0	20.4	0.14
BH113	1016	0	1.1	0	19.2	0.18
BH114	1016	0	0.1	0	20.4	0.13
BH115	1015	0	0	0	20.5	0.15
BH116	1015	0	0.2	0	20	0.15

Issued By:

From : 05/02/2015
To : 30/04/2015

05/03/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH117	1015	0	0.1	0	20.3	0.14
BH118	1014	0	0.8	0	20	-0.33
BH119	1013	0	0.7	0	19.7	-0.39
BH120	1013	0	0.3	0	20.4	-0.31

Issued By:

Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

11/03/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1006	0	0.3	0	19.9	-0.04
BH002	1005	0	0	0	20.1	-0.07
BH003	1005	0	0	0	20.2	-0.04
BH004	1005	0	0	0	20.2	-0.11
BH005	1005	0	1.4	0	15.6	0.01
BH006	1005	0	0	0	20.3	-0.04
BH007	1005	0	0.1	0	20.3	-0.19
BH008	1005	0	0	0	20.4	0
BH009	1005	0	0	0	20.4	-0.01
BH010	1005	0	0.1	0	20.4	0
BH011	1004	0	0	0	20.4	0.04
BH012	1005	0	0	0	20.4	0
BH013	1005	0	0.2	0	20.2	0
BH014	1005	0	0	0	20.5	-0.03
BH015	1005	0	0	0	20.5	0.01
BH016	1005	0	0.1	0	20.4	0
BH017	1005	0	0.1	0	20.5	0
BH018	1005	0	0.3	0	20.3	0
BH019	1004	0	1.2	0	19.4	0.04
BH020	1004	0	0.1	0	20.4	0.04
BH021	1004	0	0	0	20.5	-0.12
BH022	1004	0	0.1	0	20.4	0.01
BH023	1004	0	0.3	0	20.3	-0.13
BH024	1004	0	0	0	20.6	-0.04
BH025	1004	0	0.9	0	19.6	0.05
BH026	1004	0	0.1	0	20.5	-0.01
BH027	1004	0	0.3	0	20.3	-0.02
BH028	1004	0	0	0	20.6	0
BH029	1004	0	0	0	20.6	0
BH030	1004	0	1.4	0	19.6	0.08
BH031	1004	0	0.3	0	20.4	0.04
BH032	1004	0	0.4	0	20.1	-0.47
BH033	1005	0	0	0	20.6	0.13
BH034	1004	0	1	0	20	0.65
BH035	1004	0	1.5	0	19.8	0.07
BH036	1004	0	1.6	0	19.6	-0.01
BH037	1004	0	0.5	0	20	-0.03
BH038	1004	0	0.8	0	20	0.09
BH039	1004	0	0.9	0	20	0.14
BH040	1007	0	2.7	0	17.4	-0.12
BH041	1004	0	1	0	19.8	0.42
BH042	1007	0	0	0	19.9	-0.1
BH047	1004	0	2.1	0	17.1	-0.02
BH048	1004	0	3.6	0	17.7	0.14
BH049	1003	0	1	0	19.7	0.31
BH050	1003	0	2.5	0	18.4	0
BH051	1003	0	3.7	0	18.4	0.04
BH052	1003	0	1.2	0	20	0.06
BH053	1003	0	0.9	0	20	0
BH054	1003	0	1.1	0	20	0.02

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

11/03/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH055	1003	0	2.7	0	18.6	0.04
BH056	1002	0	1.4	0	19.3	-0.06
BH057	1003	0	0	0	20.6	-0.02
BH100	1004	0	2.2	0	19.6	0.05
BH101	1004	0	1.9	0	17.8	0.02
BH102	1004	0	0	0	20.5	0.17
BH103	1003	0	0	0	20.5	0.09
BH104	1003	0	0.3	0	20.3	0.03
BH105	1003	0	0.1	0	20.4	-0.02
BH106	1003	0	1.1	0	19.3	0.04
BH107	1003	0	2.8	0	18.9	0.09
BH108	1003	0	0.7	0	20	-0.07
BH109	1003	0	0.6	0	20	0
BH110	1002	0	0.1	0	20.5	0
BH111	1002	0	0.6	0	20	0.16
BH112	1002	0	0.6	0	19.7	0
BH113	1002	0	1.3	0	19.1	0.23
BH114	1001	0	0.2	0	20.3	-0.04
BH115	1001	0	0	0	20.6	-0.04
BH116	1001	0	0.1	0	20.5	-0.12
BH117	1001	0	0.1	0	20.5	0.22
BH118	1001	0	0.8	0	20.1	-0.01
BH119	1001	0	0.6	0	20.2	-0.11
BH120	1001	0	0.4	0	20.4	-0.05

Issued By:

From : 05/02/2015

To : 30/04/2015

19/03/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1021	0	0.6	0	19.3	0.08
BH002	1020	0	0.2	0	19.7	0.11
BH003	1020	0	0.1	0	19.8	0.14
BH004	1020	0	0.2	0	19.5	0.27
BH005	1020	0	0.6	0	18.9	0.21
BH006	1020	0	0.4	0	18.9	0.21
BH007	1020	0	0.6	0	18.7	0.2
BH008	1020	0	1.3	0	17.8	0.25
BH009	1020	0	0.1	0	19.9	0.25
BH010	1020	0	0.1	0	19.8	0.27
BH011	1020	0	0.1	0	19.9	0.26
BH012	1020	0	0.9	0	18.2	0.29
BH013	1020	0	0.2	0	19.8	0.27
BH014	1020	0	0.6	0	19	0.33
BH015	1019	0	0.2	0	19.9	0.33
BH016	1019	0	0.7	0	19.3	0.33
BH017	1019	0	0.1	0	20.1	0.33
BH018	1019	0	0.3	0	19.7	0.38
BH019	1019	0	2.1	0	18.3	0.25
BH020	1019	0	0.2	0	19.8	0.41
BH021	1019	0	0	0	20	0.46
BH022	1019	0	0.3	0	19.8	0.45
BH023	1019	0	0.2	0	19.7	0.47
BH024	1019	0	0.6	0	19.5	0.48
BH025	1019	0	0.4	0	19.7	0.66
BH026	1019	0	0.8	0	18.3	0.52
BH027	1019	0	1.2	0	17.6	0.71
BH028	1019	0	1.6	0	18.2	0.56
BH029	1019	0	1.7	0	18.5	0.58
BH030	1019	0	0.6	0	19.5	0.57
BH040	1021	0	2.9	0	17.5	0.01
BH041	1017	0	1	0	19.6	0.52
BH042	1023	0	0	0	20	0.03
BH100	1017	0	2.4	0	18.6	0.53
BH101	1017	0	1.3	0	19.5	0.55
BH102	1017	0	0.4	0	19.9	0.56
BH103	1016	0	0.6	0	19.8	0.45
BH104	1016	0	0.2	0	20.2	0.55
BH105	1016	0	1	0	19.4	0.52
BH106	1016	0	1.4	0	19.3	0.53
BH107	1017	0	1.7	0	19.3	0.52
BH108	1016	0	1	0	19.8	0.5
BH109	1017	0	0.5	0	19.9	0.51
BH110	1016	0	0.1	0	20.2	0.5
BH111	1016	0	0.1	0	20.2	0.5
BH112	1016	0	0.2	0	20.2	0.75
BH113	1016	0	0.5	0	19.9	0.47
BH114	1015	0	0.1	0	20.2	0.46
BH115	1015	0	0	0	20.5	0.46
BH116	1015	0	0.2	0	20.1	0.44

Issued By:

From : 05/02/2015
To : 30/04/2015

19/03/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH117	1015	0	0.1	0	20.5	0.41
BH118	1015	0	0.8	0	20.1	0.39
BH119	1015	0	0.6	0	20.1	0.32
BH120	1015	0	0.2	0	20.7	0.32

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

23/03/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	O2 (%v/v)	Rel Press (mBar)
BH001	1002	0	0.3	20.3	-0.03
BH002	1002	0	1.3	19.2	-0.17
BH003	1004	0	0.3	20.3	-0.12
BH004	1003	0	0.2	20.4	0.14
BH005	1003	0	0.1	20.5	-0.03
BH006	1003	0	0.1	20.5	-0.36
BH007	1003	0	0.2	20.4	-0.14
BH008	1003	0	0.1	20.5	-0.03
BH009	1003	0	0.4	20.3	-0.15
BH010	1003	0	3	11.8	-0.15
BH011	1002	0	0.1	20.5	-0.34
BH012	1002	0	0.2	20.4	0.09
BH013	1002	0	0.1	20.4	-0.09
BH014	1003	0	0.2	20.4	-0.03
BH015	1002	0	0.3	20.4	-0.22
BH016	1002	0	0.3	20.3	-0.1
BH017	1002	0	0.2	20.5	-0.27
BH018	1002	0	0.4	20.4	-0.09
BH019	1002	0	0.2	20.5	-0.15
BH020	1002	0	0.5	20.2	-0.02
BH021	1002	0	1.7	19	-0.24
BH022	1002	0	0.2	20.3	0.1
BH023	1002	0	0.1	20.4	0
BH024	1002	0	0.4	20.1	0.05
BH025	1002	0	0.4	19.8	0.07
BH026	1002	0	0.4	19.9	0.09
BH027	1002	0	1.4	18	0.21
BH028	1002	0	0.7	19.5	0.03
BH029	1002	0	1.6	18.2	0.02
BH030	1002	0	1.6	18.7	0.03
BH040	1002	0	5.1	14.9	-0.19
BH041	999	0	0.2	19.9	0.1
BH042	1001	0	0.1	21.3	-0.05
BH100	1001	0	1.7	19.9	-0.31
BH101	1001	0	3.1	18.8	0.02
BH102	998	0	2.2	18.3	-0.07
BH103	999	0	0.6	20.5	0.02
BH104	999	0	1.5	19.2	-0.29
BH105	999	0	0.3	20.5	0.09
BH106	999	0	1.4	19.8	0.19
BH107	999	0	1.3	19.7	-0.31
BH108	999	0	2.6	19.3	-0.02
BH109	999	0	1.1	19.4	0
BH110	999	0	0.7	19.9	0.24
BH111	999	0	0.1	20.4	0.07
BH112	999	0	0.5	19.9	-0.1
BH113	999	0	0.7	19.5	0.07
BH114	998	0	1.3	19	0.27
BH115	998	0	0.3	19.7	0.09
BH116	998	0	0.1	19.8	0.29

Issued By:

From : 05/02/2015
To : 30/04/2015

23/03/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	O2 (%v/v)	Rel Press (mBar)
BH117	998	0	0.1	19.7	0.31
BH118	999	0	0.2	19.6	0.27
BH119	999	0	1	18.8	0.22
BH120	999	0	0.8	19.2	0.48

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

31/03/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	999	0	0.2	0	20.8	0
BH002	998	0	0.1	0	20.9	-0.17
BH003	998	0	0.1	0	20.9	0
BH004	998	0	0.1	0	20.9	0.05
BH005	998	0	0.1	0	20.8	0.02
BH006	998	0	0.1	0	20.9	0.05
BH007	998	0	0.1	0	20.9	0.09
BH008	992	0	0.6	0	20.6	-0.02
BH009	998	0	0.1	0	20.9	-0.02
BH010	998	0	0.1	0	20.9	-0.19
BH011	998	0	0.1	0	20.9	0.02
BH012	998	0	0.1	0	20.8	0.15
BH013	998	0	0.1	0	20.7	0.03
BH014	998	0	0.1	0	20.8	0.09
BH015	998	0	0.1	0	20.9	-0.02
BH016	998	0	0.1	0	20.9	-0.03
BH017	998	0	0.1	0	20.9	-0.02
BH018	998	0	0.2	0	20.7	0.02
BH019	998	0	0.1	0	20.9	0.05
BH020	998	0	0.1	0	20.9	-0.1
BH021	998	0	0.1	0	20.9	-0.05
BH022	997	0	0.2	0	20.9	-0.02
BH023	997	0	0.2	0	20.9	-0.02
BH024	997	0	0.1	0	20.9	0
BH025	997	0	0.7	0	19.8	-0.02
BH026	997	0	0.1	0	20.9	0
BH027	998	0	1.3	0	19.7	0.05
BH028	997	0	1.5	0	19.1	0
BH030	998	0	1.6	0	19.8	-0.02
BH040	996	0	0.4	0	20.4	-0.03
BH041	996	0	1.5	0	18.6	0.05
BH042	1001	0	0.1	0	20.7	0.09
BH100	997	0	2.7	0	17.7	0.17
BH101	996	0	1.2	0	18.9	0.89
BH102	996	0	0.2	0	19.7	0.07
BH103	996	0	1.1	0	19.4	0.07
BH104	996	0	0.4	0	19.2	0.09
BH105	996	0	0.1	0	20	0.05
BH106	996	0	1	0	19.5	0.05
BH107	996	0	0.7	0	19.8	-0.19
BH108	996	0	0.1	0	20.2	0.14
BH109	996	0	0.5	0	20	0.09
BH110	996	0	0.2	0	16.3	-0.07
BH111	996	0	0.4	0	20.2	0.07
BH112	995	0	0.5	0	19.3	0.03
BH113	995	0	1.4	0	18.9	0.03
BH114	995	0	0.3	0	20.2	0.09
BH115	995	0	0.1	0	20.4	0.02
BH116	995	0	0.2	0	20.3	-0.03
BH117	993	0	0.2	0	20.5	0.07

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

31/03/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH118	995	0	0.9	0	19.9	0.07
BH119	995	0	0.7	0	20.2	0
BH120	995	0	0.5	0	20.3	-0.14

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

08/04/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1022	0	0.6	0	19.2	-0.09
BH002	1022	0	0.3	0	19.4	-0.14
BH003	1021	0	0.1	0	19.5	-0.21
BH004	1021	0	0.1	0	19.5	-0.17
BH005	1021	0	0.3	0	19.2	-0.05
BH006	1021	0	0.2	0	19.3	-0.05
BH007	1021	0	0.4	0	19	0
BH008	1021	0	1.3	0	16.9	-0.17
BH009	1021	0	0.1	0	19.3	0
BH010	1021	0	0.2	0	19.2	-0.19
BH011	1021	0	0.1	0	19.3	-0.09
BH012	1020	0	0.1	0	19.3	-0.03
BH013	1021	0	0.2	0	19.3	-0.02
BH014	1021	0	0.1	0	19.2	-0.05
BH015	1021	0	0.2	0	19.3	-0.02
BH016	1021	0	0.3	0	19.1	-0.12
BH017	1021	0	0.1	0	19.4	-0.14
BH018	1021	0	0.2	0	19.4	-0.02
BH019	1021	0	2	0	17.9	0.07
BH020	1020	0	0.1	0	19.4	-0.07
BH021	1020	0	0.1	0	19.5	-0.09
BH022	1021	0	0.2	0	19.4	-0.14
BH023	1021	0	0.1	0	19.5	-0.03
BH024	1021	0	0.1	0	19.5	-0.07
BH025	1021	0	0.5	0	19.1	-0.12
BH026	1021	0	0.5	0	19	-0.02
BH027	1020	0	1.5	0	17.2	-0.07
BH028	1021	0	0.6	0	18.9	-0.05
BH029	1021	0	0.1	0	19.6	-1.77
BH030	1021	0	0.9	0	19.1	0.05
BH040	1021	0	2.8	0	13.1	-0.07
BH041	1021	0	0.5	0	19.3	-0.07
BH042	1025	0	0.1	0	19.7	-0.05
BH100	1020	0	2.6	0	17.7	-0.05
BH101	1019	0	1	0	19	0.03
BH102	1019	0	0.2	0	19.8	0.02
BH103	1019	0	0.2	0	19.6	-0.02
BH104	1019	0	0.7	0	19.1	0.03
BH105	1019	0	1.4	0	19	0
BH106	1018	0	0.5	0	19.4	0.09
BH107	1018	0	0.5	0	19.2	-0.03
BH108	1019	0	0.6	0	19.6	-0.07
BH109	1019	0	0.3	0	19.9	-0.02
BH110	1019	0	0.7	0	18	-0.05
BH111	1019	0	0.7	0	19	0.02
BH112	1019	0	0.4	0	19.4	-0.02
BH113	1019	0	0.7	0	19.6	-0.03
BH114	1018	0	0.2	0	20	1.74
BH115	1018	0	0.1	0	20.3	0.05
BH116	1017	0	0.3	0	19.9	-0.12

Issued By:

From : 05/02/2015
To : 30/04/2015

08/04/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH117	1018	0	0.1	0	20.3	-0.02
BH118	1017	0	0.9	0	19.5	-0.07
BH119	1017	0	0.6	0	19.8	-0.05
BH120	1017	0	0.3	0	20.4	-0.02

Issued By:

Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

15/04/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1007	0	0.4	0	19.3	-0.05
BH002	1006	0	0.1	0	19.5	-0.03
BH003	1006	0	0.1	0	19.5	-0.15
BH004	1006	0	0.1	0	19.6	-0.22
BH005	1006	0	0.1	0	19.6	-0.22
BH006	1006	0	0.1	0	19.6	-0.17
BH007	1006	0	0.2	0	19.6	-0.05
BH008	1006	0	1	0	16.6	-0.05
BH009	1006	0	0.1	0	19.7	-0.05
BH010	1006	0	0.1	0	19.8	-0.07
BH011	1006	0	0.1	0	19.8	-0.14
BH012	1006	0	0.1	0	19.9	-0.05
BH013	1006	0	0.2	0	19.9	-0.12
BH014	1006	0	0.1	0	20	-0.21
BH015	1006	0	0.1	0	20	-0.05
BH016	1005	0	0.1	0	20	-0.05
BH017	1005	0	0.1	0	20.1	-0.02
BH018	1005	0	0.2	0	20.1	0.02
BH019	1005	0	0.6	0	19.7	0
BH020	1005	0	0.1	0	20.1	-0.02
BH021	1005	0	0.1	0	20.2	-0.21
BH022	1005	0	0.2	0	20.1	-0.09
BH023	1005	0	0.2	0	20	-0.15
BH024	1005	0	0.1	0	20.2	-0.15
BH025	1005	0	1.1	0	18.4	-0.12
BH026	1005	0	0.2	0	20.1	-0.1
BH027	1005	0	0.6	0	19.7	0
BH028	1005	0	0.1	0	20.1	-0.12
BH029	1005	0	0.1	0	20.2	-0.15
BH030	1005	0	0.9	0	19.6	-0.07
BH031	1004	0	0.3	0	20	-0.05
BH032	1005	0	0.5	0	19.7	0
BH033	1005	0	0.1	0	20.2	-0.12
BH034	1005	0	0.9	0	19.2	-0.09
BH035	1005	0	1.5	0	19.3	-0.12
BH036	1005	0	0.1	0	20.2	-0.21
BH037	1005	0	0.4	0	20	-0.12
BH038	1005	0	0.9	0	19.3	-0.09
BH039	1004	0	1.2	0	19.3	-0.15
BH040	1005	0	0.8	0	19.9	-0.1
BH041	1004	0	1	0	19.6	-0.09
BH042	1006	0	0.1	0	19.3	-0.12
BH047	1004	0	1.9	0	17.5	-0.07
BH048	1004	0	4.5	0	17.5	-0.09
BH049	1003	0	1.1	0	19.5	0
BH050	1004	0	3.1	0	17.3	-0.1
BH051	1004	0	0.5	0	20.2	0.03
BH052	1003	0	0.9	0	20	-0.05
BH053	1003	0	1	0	20	-0.03
BH054	1004	0	2.8	0	18.5	-0.12

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From : 05/02/2015
To : 30/04/2015

15/04/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH055	1003	0	2.7	0	18.1	-0.36
BH056	1003	0	1.7	0	18.9	-0.21
BH057	1003	0	0.5	0	20.2	-0.12
BH100	1004	0	2.9	0	18.1	-0.22
BH101	1004	0	1.6	0	19.2	-0.22
BH102	1003	0	0.3	0	20.4	-0.07
BH103	1003	0	0.1	0	20.5	-0.09
BH104	1003	0	0.4	0	20.2	-0.46
BH105	1003	0	0.1	0	20.5	-0.17
BH106	1003	0	1	0	19.7	-0.09
BH107	1003	0	1.7	0	19.5	-0.07
BH108	1003	0	0.9	0	20	-0.03
BH109	1003	0	0.5	0	20.2	0
BH110	1003	0	0.5	0	19.2	-0.1
BH111	1003	0	0.8	0	19.6	0.02
BH112	1002	0	0.9	0	19.1	-0.07
BH113	1002	0	1.1	0	19.4	-0.09
BH114	1002	0	0.3	0	20.1	-0.15
BH115	1001	0	0.1	0	20.4	-0.07
BH116	1001	0	0.3	0	20.2	-0.03
BH117	1001	0	0.2	0	20.6	-0.05
BH118	1001	0	1	0	19.6	-0.1
BH119	1001	0	0.7	0	20.1	0.03
BH120	1000	0	0.6	0	20.3	-0.09

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015

To : 30/04/2015

22/04/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1020	0	0.7	0	18.7	-0.05
BH002	1020	0	0.5	0	18.7	0.14
BH003	1020	0	0.1	0	19.2	-0.17
BH004	1020	0	0.2	0	19	0.05
BH005	1020	0	0.8	0	17.9	0.02
BH006	1020	0	0.3	0	18.8	-0.05
BH007	1020	0	0.7	0	18.4	0.19
BH008	1019	0	1	0	17.7	-0.02
BH009	1019	0	0.1	0	19.2	0.05
BH010	1019	0	0.2	0	19.1	0
BH011	1020	0	0.1	0	19.2	0.1
BH012	1019	0	0.3	0	18.5	1.19
BH013	1019	0	0.2	0	19	0
BH014	1019	0	0.6	0	18.5	-0.02
BH015	1019	0	0.2	0	19	-0.09
BH016	1019	0	0.6	0	18.7	0.07
BH017	1019	0	0.2	0	19.2	-0.05
BH018	1019	0	0.3	0	19	0.03
BH019	1019	0	1.7	0	18.2	0.03
BH020	1019	0	0.1	0	19.2	0.03
BH021	1018	0	0.1	0	19.3	-0.07
BH022	1018	0	0.2	0	19.3	-0.1
BH023	1018	0	0.2	0	19.2	-0.09
BH024	1019	0	0.4	0	19.1	-0.02
BH025	1019	0	0.4	0	19.1	0.09
BH026	1018	0	0.8	0	18	0
BH027	1018	0	1.7	0	17.2	0
BH028	1019	0	0.3	0	19.1	0
BH029	1019	0	0.1	0	19.3	-0.03
BH030	1019	0	0.7	0	19	-0.09
BH040	1020	0	3.9	0	14.8	0
BH041	1019	0	0.5	0	19.3	-0.09
BH042	1022	0	0.1	0	19.1	0
BH100	1019	0	2.8	0	16.4	-0.03
BH101	1018	0	1.7	0	17.9	0
BH102	1017	0	0.3	0	19.3	-0.14
BH103	1017	0	1.1	0	18.8	-0.09
BH104	1016	0	0.2	0	19.5	-0.07
BH105	1016	0	1.5	0	18.2	-0.02
BH106	1016	0	1.3	0	18.5	-0.03
BH107	1016	0	1.9	0	17.5	-0.09
BH108	1016	0	1	0	19.2	0.12
BH109	1016	0	0.1	0	19.7	0.02
BH110	1017	0	0.4	0	19.3	-0.09
BH111	1017	0	0.9	0	18.5	0.6
BH112	1016	0	0.8	0	18.5	-0.09
BH113	1016	0	0.8	0	19.1	-0.09
BH114	1015	0	0.3	0	19.5	-0.15
BH115	1015	0	0.1	0	19.8	0.03
BH116	1015	0	0.4	0	19.3	-0.21

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From : 05/02/2015
To : 30/04/2015

22/04/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH117	1015	0	0.1	0	19.7	0.15
BH118	1014	0	0.8	0	19.2	-0.03
BH119	1015	0	0.6	0	19.3	-0.07
BH120	1015	0	0.2	0	19.8	0.03

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From : 05/02/2015

To : 30/04/2015

30/04/2015

Sample Point	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH001	1001	0	0.4	0	19.5	-0.09
BH002	1000	0	0.3	0	19.7	-0.1
BH003	1000	0	0.2	0	19.6	-0.1
BH004	1000	0	0.4	0	19.5	0.02
BH005	1000	0	0.3	0	18.9	-0.19
BH006	1000	0	0.2	0	19.7	0.07
BH007	1000	0	0.5	0	19.3	0.02
BH008	1000	0	2.4	0	14.4	0.07
BH009	1001	0	0.1	0	19.8	-0.09
BH010	1000	0	0.2	0	19.7	-0.09
BH011	1001	0	0.1	0	19.7	-0.15
BH012	1001	0	1.4	0	15.9	-0.09
BH013	1000	0	0.1	0	20	-0.14
BH014	1001	0	1.4	0	18.9	-0.05
BH015	1000	0	0.2	0	20	-0.22
BH016	1001	0	0.3	0	20	-0.14
BH017	1000	0	0.1	0	20.1	-0.1
BH018	1000	0	0.4	0	20	-0.12
BH019	1000	0	1.5	0	18.7	-0.59
BH020	1000	0	0.2	0	20.1	-0.14
BH021	1000	0	0.2	0	20	-0.09
BH022	1000	0	0.2	0	20.1	-0.09
BH023	1000	0	0.5	0	19.7	-0.29
BH024	1000	0	0.4	0	19.5	-0.14
BH025	1000	0	0.8	0	18.9	-0.07
BH026	1000	0	0.4	0	19.6	0
BH027	1000	0	2	0	18.4	-0.09
BH028	1000	0	2.6	0	17.5	-0.07
BH029	1000	0	0.1	0	19.9	-0.07
BH030	1000	0	1.2	0	18.7	-0.05
BH040	1002	0	0.9	0	19.6	-0.03
BH041	998	0	1.4	0	18.3	-0.05
BH042	1001	0	0.1	0	20.1	-0.02
BH100	1000	0	2.4	0	17.4	0
BH101	999	0	1.8	0	17.5	-0.03
BH102	999	0	0.1	0	19.9	-0.05
BH103	999	0	0.5	0	19.7	0
BH104	998	0	0.4	0	19.8	-0.02
BH105	998	0	1	0	19.3	0.03
BH106	998	0	1.1	0	19.3	-0.14
BH107	998	0	2.3	0	18.5	0.02
BH108	999	0	0.4	0	20.2	1.48
BH109	998	0	0.4	0	20.2	0
BH110	998	0	0.2	0	20.4	0.05
BH111	998	0	0.6	0	20	-0.02
BH112	998	0	0.8	0	19.6	-0.03
BH113	998	0	0.5	0	20.4	-0.09
BH114	998	0	0.2	0	20.4	-0.1
BH115	997	0	0.1	0	20.6	0.03
BH116	997	0	0.5	0	20.1	-0.03

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Llanddulas Perimeter Borehole Gas Data - 1st Feb to 30th April 2015



From : 05/02/2015
To : 30/04/2015

30/04/2015

	AtPress (mBar)	CH4 (%v/v) (%)	CO2 (%v/v) (%)	H2S (ppm)	O2 (%v/v)	Rel Press (mBar)
BH117	997	0	0.1	0	20.6	0.03
BH118	997	0	0.9	0	20	-0.09
BH119	997	0	0.7	0	20.1	0.02
BH120	997	0	0.4	0	20.3	-0.02

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APPENDIX 3

Landfill Gas Field Extraction and Balancing Data
(see separate document)

LLANDDULAS LANDFILL GAS EXTRACTION AND BALANCING DATA - 1st February to 30th April 2015

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLARD187	03/02/2015 09:41	57.1	34.1	1.8	7	-77.86	999	0	1	5	5
LLARD188	03/02/2015 09:43	56.9	34.4	1.8	6.9	-79.98	998	0	1	5	5
LLAWD227	03/02/2015 10:48	34.4	24.9	0.9	39.8	-46.26	996	3	0	10	10
LLAWD233	03/02/2015 10:51	0	1.4	20.9	77.5	0.24	999	0	0	0	0
LLAWD210	03/02/2015 10:54	54.1	36.7	0.3	8.9	-46.76	999	3	0	10	10
LLAWD211	03/02/2015 10:56	57.2	38.4	0.1	4.3	-51.61	1000	8	0	20	20
LLAWD219	03/02/2015 11:01	59	39.5	0.2	1.3	-72.57	999	15	1	20	20
LLARD207	03/02/2015 11:03	60.1	38.9	0.2	0.8	-78.93	1000	51	1	20	20
LLAWD222	03/02/2015 11:06	55.4	43.3	0.4	0.9	-83.4	999	26	1	20	20
LLAWD231	03/02/2015 11:09	49.3	36.3	0.1	14.3	-27.21	999	32	1	30	30
LLAWD230	03/02/2015 11:12	30.7	22	8.9	38.4	-2.53	999	0	0	20	10
LLAWD230	03/02/2015 11:14	30.5	21.9	9	38.6	-0.71	999	0	0	10	10
LLARD205	03/02/2015 11:20	58.2	39.2	0.7	1.9	-72.55	999	13	0	50	50
LLAWD213	03/02/2015 11:22	58.1	42.1	0	0	-80.58	998	27	0	10	10
LLAWD229	03/02/2015 11:25	31.2	30.7	0.1	38	-51.16	999	30	0	20	20
LLAWD232	03/02/2015 11:29	11.4	10.2	14.8	63.6	-0.91	998	0	0	0	0
LLARD220	03/02/2015 11:32	8.7	7.3	18.3	65.7	-7.51	999	0	0	5	0
LLARD220	03/02/2015 11:34	8.7	7.8	18.2	65.3	-3.07	999	0	0	0	0
LLAWD237	03/02/2015 11:38	4	6.6	16.5	72.9	-0.76	999	0	0	0	0
LLAWD238	03/02/2015 11:41	43.4	36.2	0.6	19.8	-21.8	1000	37	1	30	30
LLAWD234	03/02/2015 11:46	48.7	35.3	0.1	15.9	-42.24	996	1	0	30	30
LLAWD236	03/02/2015 11:49	60.1	39.1	0.2	0.6	-0.83	1000	0	0	10	10
LLAWD235	03/02/2015 11:52	56.9	43.4	0.1	0	-0.19	999	51	1	0	20
LLARD215	03/02/2015 11:57	57.8	42.2	0.1	0	0.38	999	27	0	0	0
LLAWD225	03/02/2015 14:48	60.3	38.2	0.6	0.9	-74.76	1002	7	0	20	20
LLAWD266	03/02/2015 15:01	61.6	37.9	0.4	0.1	-86.23	1002	0	0	10	10
LLAWD265	03/02/2015 15:03	46.4	33.2	0.1	20.3	-83.51	1002	0	0	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD241	03/02/2015 15:07	17	11.9	15.7	55.4	-1.67	1000	1	0	0	0
LLAWD240	03/02/2015 15:10	43.5	28	6.3	22.2	-79.73	1003	4	0	5	0
LLAWD240	03/02/2015 15:12	36.5	25.2	8.6	29.7	-74.9	1003	1	0	0	0
LLAWD262	05/02/2015 10:33	65	36.2	0	0	-40.05	1019	3	0	90	90
LLAWD267	05/02/2015 11:24	62.8	38.2	0	0	-68.38	1019	1	0	10	10
LLAWB119	05/02/2015 11:45	35.5	32.1	0	32.4	-2.42	1018	0	0	5	10
LLAWB119	05/02/2015 11:47	33	32	0	35	-5.48	1018	0	0	10	5
LLAWC249	05/02/2015 14:04	68.3	32.5	0.4	0	-32.98	1019	0	0	20	30
LLAWC249	05/02/2015 14:06	59.9	39.5	0	0.6	-42.41	1019	0	0	30	20
LLAWC250	05/02/2015 14:12	41	31.5	0	27.5	-17.25	1019	0	0	10	10
LLAWC251	05/02/2015 14:18	38.9	30.5	0	30.6	-34.17	1019	0	0	10	10
LLAWC145	05/02/2015 14:45	37.1	33.9	0	29	-34.9	1018	0	0	20	20
LLAWD231	10/02/2015 12:55	51.6	35.8	0.1	12.5	-26	1018	23	1	30	35
LLAWD231	10/02/2015 12:56	51.1	36.7	0	12.2	-32.44	1018	17	1	35	35
LLAWD222	10/02/2015 13:00	56.7	43.5	0.1	0	-88.31	1018	13	4	20	20
LLARD207	10/02/2015 13:03	59.2	38.5	0.1	2.2	-69.06	1018	27	2	20	20
LLAWD219	10/02/2015 13:06	60.4	39.1	0.1	0.4	-57.62	1019	0	1	20	25
LLAWD219	10/02/2015 13:09	60.5	38.3	0	1.2	-65.39	1019	0	1	25	25
LLAWD296	10/02/2015 13:20	63.3	37.2	0.4	0	-14.78	1015	10	0	30	30
LLAWD292	10/02/2015 13:23	60.5	36.5	0.8	2.2	-15.76	1019	2	22	20	20
LLAWD230	12/02/2015 11:01	49.9	31	1.7	17.4	-0.69	1004	1	0	10	10
LLARD205	12/02/2015 11:04	59.3	39.4	0.6	0.7	-56.09	1006	19	0	50	50
LLAWD213	12/02/2015 11:06	57.8	40.8	0.5	0.9	-59.74	1006	29	1	20	20
LLAWD229	12/02/2015 11:09	41.2	31.9	0.3	26.6	-44.84	1006	30	1	20	20
LLAWD232	12/02/2015 11:11	44.2	34.3	2.9	18.6	0.65	1005	12	0	0	0
LLARA025	12/02/2015 11:12	12.6	13.7	3.6	70.1	-0.4	1003	32	0	0	0
LLAWA026	12/02/2015 11:13	3.9	6.9	13.5	75.7	-0.7	1003	0	0	0	0
LLAWA203	12/02/2015 11:13	19.3	17.1	0	63.6	-13.38	1010	0	0	10	10
LLAWD237	12/02/2015 11:14	19.7	19.1	9.5	51.7	-0.88	1006	11	0	0	0

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWA027	12/02/2015 11:15	8.9	11.5	1.8	77.8	-0.55	1003	0	0	0	0
LLAWA204	12/02/2015 11:15	10.7	16.9	0	72.4	-12.37	1010	0	0	10	10
LLAWA033	12/02/2015 11:17	37.4	17.2	0.7	44.7	-0.33	1004	14	0	0	0
LLAWD238	12/02/2015 11:17	49.4	39	0.8	10.8	-7.37	1006	48	1	30	30
LLAWA032	12/02/2015 11:20	0.1	3.9	19.3	76.7	-0.26	1009	0	0	0	0
LLAWA001	12/02/2015 11:20	23.6	12.7	0.1	63.6	-0.11	1004	2	0	0	0
LLAWA01A	12/02/2015 11:23	0.2	9.8	7.3	82.7	-0.21	1004	0	0	0	0
LLAWA002	12/02/2015 11:23	19.1	11.9	0.1	68.9	-0.25	1010	0	0	0	0
LLAWA003	12/02/2015 11:26	8.4	12.7	0	78.9	-0.4	1009	0	0	0	0
LLAWA004	12/02/2015 11:26	17	15.5	1.1	66.4	-0.2	1003	11	0	0	0
LLAWA005	12/02/2015 11:28	1.1	8.3	11.2	79.4	-0.29	1003	5	0	0	0
LLAWA006	12/02/2015 11:30	1.3	7.6	12.2	78.9	-0.4	1009	0	0	0	0
LLAWA130	12/02/2015 11:34	13.9	12.7	4.9	68.5	-1.43	1009	0	0	5	5
LLAWA031	12/02/2015 11:36	4.1	13.9	2.9	79.1	-3.93	1003	2	0	0	0
LLAWA030	12/02/2015 11:37	22.8	20.8	0.1	56.3	-4.18	1008	0	0	5	5
LLAWA032	12/02/2015 11:38	5.2	16.7	0.4	77.7	-3.88	1002	0	0	0	0
LLARA010	12/02/2015 11:42	13.9	20.2	0.1	65.8	-1.74	1002	0	0	5	5
LLAWA011	12/02/2015 11:44	17.1	21	0	61.9	-0.73	1002	0	0	5	5
LLARA012	12/02/2015 11:46	17.9	21.5	0.1	60.5	-1.34	1002	0	0	5	5
LLARA028	12/02/2015 11:48	40.9	27.5	0.1	31.5	-5.16	1002	0	0	5	5
LLARA015	12/02/2015 11:52	31.5	23.6	0.1	44.8	-3.26	1002	0	0	5	5
LLAWA016	12/02/2015 11:54	26.5	21.7	0	51.8	-0.49	1008	0	0	5	5
LLARA014	12/02/2015 11:54	31.9	21.1	0	47	-0.02	1002	0	0	0	0
LLAWA031	12/02/2015 11:57	0.3	5.6	19.7	74.4	-0.18	1001	0	0	0	0
LLAWA029	12/02/2015 11:58	32.6	25	0	42.4	-18.48	1008	0	0	5	5
LLAWC143	12/02/2015 12:00	45.9	29.1	0.2	24.8	-44.85	1001	5	0	10	10
LLAWC140	12/02/2015 12:02	35.7	30.6	0.1	33.6	-4.79	1001	1	0	5	5
LLAWC144	12/02/2015 12:03	35.5	26.6	3.7	34.2	-0.49	1008	0	0	5	5
LLAWC142	12/02/2015 12:04	6.6	11.3	17.1	65	-0.37	1001	0	0	0	0

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWC141	12/02/2015 12:05	33.4	27.5	0.1	39	-3.91	1001	1	0	5	5
LLAWC145	12/02/2015 12:06	41.7	17	0	41.3	-32.73	1008	0	0	30	30
LLAWC148	12/02/2015 12:08	0.2	6.3	20.4	73.1	-0.93	1001	0	0	0	0
LLAWC147	12/02/2015 12:10	30	21.7	4.4	43.9	-4.75	1008	0	0	10	10
LLAWC147	12/02/2015 12:11	40.2	27	0.4	32.4	-22.36	1001	0	0	10	10
LLAWD227	12/02/2015 12:13	32.1	26.6	1.2	40.1	-59.05	1001	2	0	10	10
LLAWD225	12/02/2015 12:15	60.2	39	0.4	0.4	-66.68	1003	4	1	20	20
LLARD215	12/02/2015 12:18	58.6	40.8	0.5	0.1	17.88	1003	38	1	0	1
LLARD215	12/02/2015 12:22	57.8	42.7	0.1	0	-1.72	1003	16	1	1	1
LLAWD235	12/02/2015 12:24	59.3	41.7	0.2	0	-3.82	1004	25	31	20	20
LLAWD236	12/02/2015 12:27	61.1	39.7	0.1	0	0.15	1004	0	0	0	0
LLAWD236	12/02/2015 12:29	60.5	40.3	0	0	-1.81	1004	0	0	5	5
LLARD220	12/02/2015 12:32	56.7	43.7	0.1	0	-0.12	1003	34	1	0	1
LLARD220	12/02/2015 12:34	54.7	43.5	0.2	1.6	-15.09	1003	33	1	1	1
LLAWB083	12/02/2015 13:48	54.2	32.7	0.2	12.9	-80.25	1000	0	0	5	5
LLARB072	12/02/2015 13:49	45.3	32.5	0	22.2	-25.5	1000	0	0	20	20
LLAWB082	12/02/2015 13:52	67.2	33.7	0.2	0	-69.44	999	0	0	5	5
LLAWB081	12/02/2015 13:54	61.2	27.4	2.5	8.9	-74.01	999	0	0	5	5
LLAWB079	12/02/2015 13:56	68.7	31.5	0.2	0	-83.54	999	0	0	5	5
LLAWB115	12/02/2015 13:59	40.1	30.3	1	28.6	-11.13	999	0	0	5	5
LLAWB116	12/02/2015 14:00	51.6	36.9	0.2	11.3	-1.28	999	0	0	10	10
LLAWB113	12/02/2015 14:02	46.3	35.2	0.2	18.3	-0.74	999	0	0	5	5
LLAWB112	12/02/2015 14:06	46.2	33.7	0.4	19.7	-2.05	999	2	0	5	5
LLAWB097	12/02/2015 14:08	59.5	40.2	0.5	0	-0.34	999	2	0	0	0
LLAWB111	12/02/2015 14:09	50.3	38.2	0	11.5	-0.75	999	2	0	100	100
LLAWB120	12/02/2015 14:10	35.9	41.5	0	22.6	-4.5	1004	0	0	10	10
LLAWB096	12/02/2015 14:11	50.7	38.1	2.6	8.6	-0.64	999	2	0	0	0
LLAWB095	12/02/2015 14:13	25.3	27.3	0	47.4	-1.58	999	1	0	0	0
LLAWB117	12/02/2015 14:16	36.7	29.9	0	33.4	-1.02	999	1	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWB119	12/02/2015 14:17	42.6	31	0	26.4	-2.82	1004	0	0	5	5
LLAWB093	12/02/2015 14:18	58.1	38.5	1.3	2.1	-83.35	999	2	0	5	5
LLAWD233	12/02/2015 14:20	0	2.2	20.9	76.7	-0.03	1002	0	0	0	0
LLAWD210	12/02/2015 14:22	56.6	36.3	0.2	6.9	-41.64	1002	3	0	30	30
LLAWB118	12/02/2015 14:23	24.7	23.3	6.2	45.8	-2.41	999	2	0	5	5
LLAWD211	12/02/2015 14:25	55.1	37.2	0.3	7.4	-46.27	1002	6	0	20	20
LLAWD232	12/02/2015 14:27	50.6	35.5	0.1	13.8	-39.57	1002	1	0	30	30
LLAWD268	12/02/2015 14:30	59.8	38	0.9	1.3	-75.15	1002	2	0	30	30
LLAWC136	12/02/2015 14:32	43.2	30	0.4	26.4	-24.24	1001	0	0	5	5
LLAWC137	12/02/2015 14:32	47.6	28.6	0	23.8	-2.07	1007	0	0	5	5
LLAWC154	12/02/2015 14:36	32.6	27.2	0.1	40.1	-6.54	1000	0	0	10	10
LLAWC135	12/02/2015 14:36	41.2	30.1	0	28.7	-49.3	1007	0	0	10	10
LLAWD294	12/02/2015 14:37	59.3	41.2	0.1	0	-17.12	1003	3	0	20	20
LLAWC134	12/02/2015 14:38	56.6	35.3	1.8	6.3	-0.21	1000	0	0	5	5
LLAWC152	12/02/2015 14:40	42.3	31.8	0	25.9	-5.61	1007	0	0	5	5
LLAWD266	12/02/2015 14:42	62.9	37.7	0.1	0	-84.13	1003	0	0	20	20
LLAWC133	12/02/2015 14:43	42.9	32.6	3.3	21.2	-16.61	1000	0	0	10	10
LLAWD265	12/02/2015 14:44	40.9	31.1	0.1	27.9	-76.84	1002	0	0	10	10
LLAWC251	12/02/2015 14:44	43	31.9	0	25.1	-34.01	1007	0	0	10	10
LLAWD262	12/02/2015 14:47	59.8	37.7	0.2	2.3	-32.88	1002	5	0	20	20
LLAWC250	12/02/2015 14:48	44.4	30.7	0	24.9	-16.01	1007	0	0	10	10
LLAWC132	12/02/2015 14:50	54.6	36.1	0.1	9.2	-34.48	1000	0	0	5	5
LLAWD261	12/02/2015 14:50	60.9	38.9	0.1	0.1	-83.9	1002	5	0	20	20
LLAWD259	12/02/2015 14:52	59	40.3	0.2	0.5	-70.04	1002	9	0	20	20
LLAWC249	12/02/2015 14:53	56.1	23.8	0	20.1	-42.55	1007	0	0	20	20
LLAWD270	12/02/2015 14:56	61.4	39.2	0.1	0	-6.84	1000	3	0	20	25
LLAWD270	12/02/2015 14:58	60.9	39.8	0	0	-7.18	1000	3	0	30	30
LLAWD283	12/02/2015 15:03	60.1	40.4	0.2	0	-44.52	1000	11	1	20	20
LLAWD281	12/02/2015 15:05	58.1	42.1	0.1	0	-80.82	1002	8	0	20	20

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD293	12/02/2015 15:08	60	40.1	0.1	0	-48.29	1002	97	3	20	20
LLAWD288	12/02/2015 15:11	25.7	20.6	11.4	42.3	-9.92	1002	0	0	0	0
LLAWD288	12/02/2015 15:13	57.9	41.5	0.2	0.4	-3.41	1002	0	1	5	5
LLAWD295	12/02/2015 15:15	57.8	42.4	0.1	0	-59.29	1002	0	0	20	20
LLAWD289	12/02/2015 15:19	59.2	41.1	0.1	0	-6.96	1000	0	0	10	10
LLAWD260	12/02/2015 15:22	59.6	40	0.3	0.1	-82.89	1000	0	0	20	20
LLAWD256	13/02/2015 11:27	60.2	40.3	0.2	0	0.55	984	3	1	1	5
LLAWD256	13/02/2015 11:30	60.6	40.1	0.1	0	-5.87	984	4	1	5	5
LLAWD239	13/02/2015 11:33	30.2	18.8	11.2	39.8	-80.44	984	0	0	5	0
LLAWD250	13/02/2015 11:35	61.5	38.5	0.3	0	-81.58	984	2	0	10	10
LLAWD251	13/02/2015 11:38	62.1	38.9	0.1	0	-82.27	984	0	1	10	10
LLAWD252	13/02/2015 11:41	60.4	39.6	0.4	0	-3.96	983	2	56	5	5
LLAWD245	13/02/2015 11:44	60.5	40.4	0.1	0	18.86	984	6	1	0	5
LLAWD245	13/02/2015 11:46	59.8	40.9	0.1	0	-0.84	984	5	0	5	5
LLAWD244	13/02/2015 11:49	51.4	33.6	3	12	-87.9	983	13	0	10	10
LLAWD258	13/02/2015 11:52	59.9	39.1	0.3	0.7	-65.39	982	0	0	10	10
LLAWD248	13/02/2015 11:55	60.5	40.1	0.1	0	-87.17	982	3	0	10	10
LLAWD253	13/02/2015 11:57	51.6	34.4	1.4	12.6	-44.59	983	0	0	20	20
LLAWD254	13/02/2015 12:00	36.2	24.8	8.6	30.4	-0.34	983	1	1	0	0
LLAWD280	13/02/2015 12:07	58.1	41.8	0.3	0	-14.04	981	7	4	5	5
LLAWD279	13/02/2015 12:10	39.1	30.1	5.3	25.5	-70.14	982	8	3	5	1
LLAWD279	13/02/2015 12:12	51.3	38.3	1.9	8.5	-34.43	982	10	5	1	1
LLAWD287	13/02/2015 12:15	45	33.7	0.1	21.2	-16.33	983	1	0	10	10
LLAWD278	13/02/2015 12:18	55.4	38.9	0.1	5.6	-24.09	982	10	2	10	10
LLAWD277	13/02/2015 12:21	57.1	40.2	0.5	2.2	-47.98	982	0	1	10	10
LLAWD274	13/02/2015 12:23	61.1	39.4	0.1	0	-60.31	982	0	0	10	10
LLAWD290	13/02/2015 12:26	58	41.3	0.4	0.3	-56.57	982	0	3	10	10
LLAL003A	13/02/2015 12:30	50	36.4	2.5	11.1	-76.7	981	1	0	10	0
LLAWD263	13/02/2015 12:35	61.3	39.2	0.1	0	-40.9	981	0	6	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWA131	13/02/2015 14:17	6.1	15.4	1.5	77	-4.01	982	3	0	5	5
LLAWA132	13/02/2015 14:19	7.8	18.1	0.3	73.8	-4.15	980	1	0	5	5
LLAWC146	13/02/2015 14:23	0.1	1.7	20.9	77.2	-21.58	980	0	0	0	0
LLAWB114	13/02/2015 14:27	54.2	38.4	0.2	7.2	-0.28	980	2	0	5	5
LLAWD296	13/02/2015 14:33	58.3	41.1	0.2	0.4	-68.47	979	12	45	30	30
LLAL00C3	13/02/2015 14:40	55.9	39.2	1	3.9	-21.87	980	3	0	20	20
LLAWD264	13/02/2015 14:44	54.6	36.9	1.7	6.8	-43.02	980	0	1	20	20
LLAWD284	13/02/2015 14:53	57.6	39.6	0.7	2.1	-55.37	981	0	0	10	10
LLAWD285	13/02/2015 14:59	59.9	39.5	0.3	0.3	-25.18	982	0	0	10	10
LLAWD286	13/02/2015 15:06	58.9	40.1	0.2	0.8	-28.81	982	1	0	10	10
LLAWD291	13/02/2015 15:13	62.1	37.2	0.6	0.1	11.74	978	0	0	0	0
LLAWD292	13/02/2015 15:20	54.4	38.6	1.5	5.5	-54.13	978	2	0	10	10
LLAWD264	20/02/2015 14:45	53.8	35.9	2	8.3	-40.04	991	5	1	20	20
LLAWD284	20/02/2015 14:52	58.9	39.4	0.6	1.1	-49.72	990	2	0	10	10
LLAWD285	20/02/2015 14:58	59.4	39.1	0.5	1	-29.55	988	1	2	10	10
LLAWD286	20/02/2015 15:04	60.3	40.2	0.2	0	-4.86	990	1	0	5	10
LLAWD286	20/02/2015 15:05	59.5	41.1	0.1	0	-20.77	990	2	0	10	10
LLAWD292	20/02/2015 15:17	57.6	40.5	0.7	1.2	-49.41	988	1	0	10	10
LLAWD296	20/02/2015 15:23	59	41.3	0.2	0	-51.3	989	9	0	20	20
LLAWA204	23/02/2015 10:28	13	16.9	0.1	70	-12.68	975	0	0	10	10
LLAWA203	23/02/2015 10:30	23.3	15.5	0	61.2	-14.09	975	0	0	10	10
LLAWA001	23/02/2015 10:34	39.6	13.1	0	47.3	-0.12	975	0	0	0	0
LLAWA032	23/02/2015 10:37	0.6	3.2	19	77.2	-0.29	975	0	0	0	0
LLAWA01A	23/02/2015 10:40	13.2	10.2	0	76.6	-0.42	975	0	0	0	0
LLAWA002	23/02/2015 10:43	22	13.9	0.5	63.6	-0.26	975	0	0	0	0
LLAWA003	23/02/2015 10:47	15.2	14.2	0.1	70.5	-0.21	975	0	0	0	0
LLAWA033	23/02/2015 10:49	46.6	7	0.1	46.3	-0.2	975	0	0	0	0
LLAWA004	23/02/2015 10:53	20.9	17	0.3	61.8	-0.48	975	4	0	0	0
LLAWA027	23/02/2015 10:57	13.1	13.3	0.3	73.3	-0.68	975	0	0	0	0

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWA026	23/02/2015 10:59	8.8	13.5	2.9	74.8	-0.68	975	0	0	0	0
LLARA025	23/02/2015 11:02	12.7	12.6	2.4	72.3	-0.31	975	12	0	0	0
LLAWA005	23/02/2015 11:05	2.2	9.4	7.1	81.3	-0.59	975	0	0	0	0
LLAWA006	23/02/2015 11:08	1.9	8.4	9.1	80.6	-0.4	975	0	0	0	0
LLAWA130	23/02/2015 11:11	14.9	14.3	1.2	69.6	-1.47	975	0	0	5	5
LLAWA131	23/02/2015 11:14	5.7	15.2	0.6	78.5	-4.23	975	0	0	5	5
LLAWA030	23/02/2015 11:18	29.7	31.6	0.1	38.6	-4.47	975	0	0	5	5
LLAWA132	23/02/2015 11:20	7.8	16.3	0.2	75.7	-5.88	974	0	0	5	5
LLARA010	23/02/2015 11:23	18.2	20.1	0	61.7	-1.99	975	0	0	5	5
LLAWC146	23/02/2015 11:27	0.1	5.7	20.1	74.1	-27.29	974	0	0	0	0
LLARA010	23/02/2015 11:34	18.2	21.7	0.4	59.7	-1.77	969	0	0	5	5
LLAWA011	23/02/2015 11:36	23	21.7	0	55.3	-0.63	969	1	0	5	5
LLAWC148	23/02/2015 11:37	0	2.5	19.7	77.8	-1.03	975	0	0	0	0
LLARA012	23/02/2015 11:38	21.5	22.8	0.1	55.6	-1.5	969	1	0	5	5
LLARA028	23/02/2015 11:40	42.7	28.4	0.3	28.6	-5.59	969	1	0	5	5
LLAWC144	23/02/2015 11:41	44.9	32.6	0.3	22.2	-33.2	975	0	0	5	5
LLARA015	23/02/2015 11:42	35.4	25	0.1	39.5	-3.51	969	0	0	5	5
LLAWA016	23/02/2015 11:43	28.5	22.1	0.1	49.3	-0.47	969	0	0	5	5
LLAWC143	23/02/2015 11:44	45.1	33.1	0.1	21.7	-36.33	974	3	0	10	10
LLARA014	23/02/2015 11:46	37.9	20.2	0.1	41.8	-0.35	969	2	0	5	5
LLAWC142	23/02/2015 11:47	8.3	10.2	16.3	65.2	-0.52	974	0	0	0	0
LLAWA031	23/02/2015 11:49	32.3	19.1	0.5	48.1	-0.3	969	3	0	0	0
LLAWC141	23/02/2015 11:50	32.5	24.9	1.8	40.8	-4.57	975	0	0	5	5
LLAWA029	23/02/2015 11:50	36.4	27.7	0	35.9	-18.38	968	1	0	5	5
LLAWC140	23/02/2015 11:52	35.5	31.7	0.1	32.7	-5.43	969	3	0	5	5
LLAWC145	23/02/2015 11:54	41.3	34.5	0	24.2	-33.77	974	0	0	30	30
LLAWC144	23/02/2015 11:56	44.3	36.4	0.1	19.2	-33.12	969	1	0	5	5
LLAWD210	23/02/2015 13:26	58.8	36.8	0	4.4	-41.17	973	0	0	30	30
LLAWD233	23/02/2015 13:28	0.2	1.1	20.9	77.7	-0.81	968	0	0	0	0

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD211	23/02/2015 13:30	56.8	36.4	0.1	6.7	-46.29	973	1	0	20	20
LLAWD234	23/02/2015 13:34	54.9	30.2	0.4	14.5	-39.95	968	1	0	30	30
LLAWD219	23/02/2015 13:36	58.1	41.6	0	0.3	-73.27	973	0	0	25	25
LLAWD222	23/02/2015 13:38	59.5	42	0.5	0	-82.55	968	9	0	20	20
LLAWD231	23/02/2015 13:40	48.9	36.9	0	14.2	-34.65	967	11	0	35	35
LLARD207	23/02/2015 13:40	61.4	39	0	0	-73.11	973	9	1	20	20
LLAWB079	23/02/2015 13:44	65.7	34.7	0.6	0	-84.76	967	0	0	5	5
LLAWB116	23/02/2015 13:45	66.3	35.6	0	0	0.16	972	0	0	5	7
LLAWB081	23/02/2015 13:46	59.9	27.7	2.8	9.6	-76.96	967	0	0	5	5
LLAWB082	23/02/2015 13:47	67.2	34.1	0.4	0	-71.98	967	0	0	5	5
LLAWB116	23/02/2015 13:48	64.1	37.5	0	0	-0.14	972	0	0	7	10
LLAWB083	23/02/2015 13:49	62.4	32.5	0.3	4.8	-81.21	968	0	0	5	5
LLAWB116	23/02/2015 13:50	63.6	38.1	0	0	-0.92	972	0	0	10	10
LLARB072	23/02/2015 13:51	49.9	32.9	0.2	17	-25.83	968	0	0	20	20
LLAWB095	23/02/2015 13:53	33.6	30.4	0	36	-1.23	967	1	0	0	0
LLAWB120	23/02/2015 13:53	41.8	24	0	34.2	-0.2	973	0	0	10	10
LLAWB096	23/02/2015 13:55	58	42.8	0.5	0	-0.43	967	2	0	0	0
LLAWB119	23/02/2015 13:56	41.1	34.5	0	24.4	-2.23	973	0	0	5	5
LLAWB111	23/02/2015 13:56	57.8	40.1	0.1	2	-0.43	968	2	0	100	100
LLAWB097	23/02/2015 13:58	60.9	42.6	0.1	0	-0.21	967	3	0	0	0
LLAWB118	23/02/2015 13:59	30.2	25.6	3.9	40.3	-2.37	973	0	0	5	5
LLAWB112	23/02/2015 14:01	54.2	40.3	0.1	5.4	-0.81	967	3	0	5	5
LLAWB093	23/02/2015 14:02	51.2	31.1	4.2	13.5	-84.59	974	0	0	5	5
LLAWB113	23/02/2015 14:02	54.4	39.9	0.1	5.6	-0.15	967	2	0	5	5
LLAWB114	23/02/2015 14:04	56.6	41	0	2.4	-0.75	967	3	0	5	5
LLAWB115	23/02/2015 14:05	43	32.6	0.3	24.1	-11.49	967	1	0	5	5
LLAWB117	23/02/2015 14:06	52.5	38.2	0	9.3	-0.36	973	0	0	5	5
LLAWC137	23/02/2015 14:16	48.8	36	0	15.2	-1.49	969	0	0	5	5
LLAWC136	23/02/2015 14:19	46.5	34	0	19.5	-26.02	976	0	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWC135	23/02/2015 14:19	47.5	34	0.1	18.4	-50.7	969	0	0	10	10
LLAWC154	23/02/2015 14:22	37.3	29	0	33.7	-6.76	975	0	0	10	10
LLAWC134	23/02/2015 14:22	60.7	41.2	0.2	0	-0.89	969	2	2	5	5
LLAWC133	23/02/2015 14:23	47.3	35	2.5	15.2	-17.94	969	1	0	10	10
LLAWC152	23/02/2015 14:25	43.5	29	1.7	25.8	-5.77	975	0	0	5	5
LLAWC251	23/02/2015 14:27	49.5	34.5	0.1	15.9	-34.68	969	0	0	10	10
LLAWC132	23/02/2015 14:29	56.5	37.1	0.2	6.2	-35.99	969	0	0	5	5
LLAWC250	23/02/2015 14:30	48.9	32.2	0	18.9	-15.9	975	0	0	10	10
LLAWC249	23/02/2015 14:31	63	38.8	0.5	0	-43.3	969	1	0	30	30
LLAWD230	24/02/2015 10:30	24.9	19.3	10.6	45.2	-0.54	987	1	0	10	10
LLARD205	24/02/2015 10:35	61.3	39.4	0.8	0	-58.49	988	12	0	50	50
LLAWD213	24/02/2015 10:37	62.3	40.8	0.5	0	-65.93	987	24	7	20	20
LLAWD229	24/02/2015 10:41	40.1	30.2	0.7	29	-49.61	987	14	0	20	20
LLAWD232	24/02/2015 10:42	9	11.4	15.5	64.1	-0.45	987	5	0	0	0
LLARD220	24/02/2015 10:44	8	8.5	17.2	66.3	-7.86	987	4	0	1	1
LLAWD237	24/02/2015 10:46	3.3	7.2	16	73.5	-2.23	987	13	0	0	0
LLAWD238	24/02/2015 10:47	56.2	38.3	0.6	4.9	-5.71	987	30	0	30	30
LLAWD236	24/02/2015 10:49	62.2	40.3	0.5	0	-1.63	987	6	0	5	5
LLARD215	24/02/2015 10:53	45.7	34.9	4.3	15.1	-45.74	987	11	0	1	1
LLAWD235	24/02/2015 10:56	60.5	42.7	0.3	0	-0.95	987	23	0	20	20
LLAWD225	24/02/2015 10:59	64	36	0.9	0	-69.48	987	4	0	20	20
LLAWD227	24/02/2015 11:01	55.9	36.4	0.2	7.5	-69.59	987	5	0	10	10
LLAWD266	24/02/2015 11:04	65	38	0.4	0	-87.4	988	4	0	20	20
LLAWD265	24/02/2015 11:05	50.9	35.2	0.3	13.6	-79.04	988	4	0	10	10
LLAWD264	24/02/2015 11:07	54.1	35	2.4	8.5	-63.58	988	4	0	20	20
LLAWD262	24/02/2015 11:10	62.8	34.3	1.3	1.6	-34.07	988	6	0	20	20
LLAWD256	24/02/2015 11:15	40.3	29.7	5.4	24.6	-14.01	988	5	0	5	5
LLAWD240	24/02/2015 11:17	58.1	35.3	2.3	4.3	-87.57	989	7	0	1	1
LLAWD261	24/02/2015 11:20	65.2	38.8	0.2	0	-85.91	988	6	0	20	20

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD262	24/02/2015 11:23	62.6	38.7	0.5	0	-47.01	988	8	4	10	10
LLAWD267	24/02/2015 11:26	63.3	39.6	0.4	0	-79.39	988	10	2	10	10
LLAWD268	24/02/2015 11:28	61.7	38.9	0.3	0	-78.23	988	10	0	30	30
LLAWD289	24/02/2015 11:42	57.6	38.5	1	2.9	-2.87	988	10	3	10	10
LLAWD260	24/02/2015 11:44	63.3	39	0.9	0	-86.94	988	7	0	20	20
LLAL00C3	24/02/2015 11:50	62.1	40	0.1	0	-6.82	989	11	0	20	20
LLAWD283	24/02/2015 11:52	60	43.1	0	0	-46.12	989	12	0	20	20
LLAWD281	24/02/2015 11:55	60.3	43.2	0.2	0	-80.6	989	15	11	20	20
LLAWD288	24/02/2015 11:58	59.2	43.5	0	0	-2.29	989	17	13	5	5
LLAWD294	24/02/2015 12:01	62	42.3	0.2	0	-18.03	989	10	0	20	20
LLAWD295	24/02/2015 12:02	61.3	39.4	0.7	0	-62.2	989	11	0	20	20
LLAWD259	24/02/2015 13:38	60.5	39.7	0.4	0	-68.75	990	8	0	20	20
LLAWD258	24/02/2015 13:39	59.7	39.9	0.4	0	-67.2	991	7	5	10	10
LLAWD244	24/02/2015 13:41	59.1	36.2	1.4	3.3	-86.61	991	21	0	10	10
LLAWD245	24/02/2015 13:43	41.6	31.3	4.8	22.3	-35.1	991	13	0	5	5
LLAWD255	24/02/2015 13:44	50.6	34.9	0.5	14	-69.24	991	9	0	5	5
LLAWD239	24/02/2015 13:47	64.7	37.7	0.2	0	-4.69	991	8	0	0	0
LLAWD250	24/02/2015 13:49	65.4	38.1	0.3	0	-82.25	991	6	0	10	10
LLAWD251	24/02/2015 13:50	65.9	38.1	0.2	0	-83.38	991	7	1	10	10
LLARD188	24/02/2015 13:52	37.3	24.3	8.3	30.1	-81.46	992	8	0	5	1
LLARD188	24/02/2015 13:53	38.4	26.1	7.3	28.2	-81.39	992	8	0	1	1
LLAWD252	24/02/2015 13:59	43.4	29.4	5.9	21.3	-1.28	992	11	0	5	5
LLAWD254	24/02/2015 14:02	64.8	39.3	0	0	-0.27	991	16	5	0	0
LLAWD259	24/02/2015 14:04	59.5	40.5	0.4	0	-67.37	991	19	11	20	20
LLAWD248	24/02/2015 14:07	63.8	39	0.5	0	-50.69	991	14	1	10	10
LLAWD253	24/02/2015 14:11	49.1	30.9	2.1	17.9	-52.89	991	8	0	20	20
LLARD187	24/02/2015 14:13	64.2	37.4	0.7	0	-83.45	992	7	0	5	5
LLAWD284	24/02/2015 14:15	64.2	39.7	0.3	0	-2.86	992	9	0	10	10
LLAWD285	24/02/2015 14:17	64.5	39.4	0.2	0	-30.51	992	8	0	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD280	24/02/2015 14:19	62	42.4	0	0	0.07	992	11	2	5	10
LLAWD280	24/02/2015 14:20	58.5	44.4	0	0	-17.7	992	13	1	10	10
LLAWD279	24/02/2015 14:22	54.6	39.3	1.9	4.2	-23.21	992	12	0	1	1
LLAWD286	24/02/2015 14:25	65.7	37.6	1.2	0	-68.52	992	10	0	10	10
LLAWD287	24/02/2015 14:27	54.9	33.1	0.4	11.6	-16.21	992	11	0	10	10
LLAWD278	24/02/2015 14:29	58.6	37	0.3	4.1	-22.25	992	15	2	10	10
LLAWD277	24/02/2015 14:32	52.5	37.1	1.7	8.7	-31.21	991	14	0	10	10
LLAWD291	24/02/2015 14:38	24	18.7	11.2	46.1	-25.22	992	9	0	5	1
LLAWD291	24/02/2015 14:43	26.9	21.5	9.8	41.8	-3.57	992	11	0	1	1
LLAWD274	24/02/2015 14:50	67.7	36	0.4	0	-55.44	992	9	1	10	10
LLAWD290	24/02/2015 14:57	65.3	39.3	0.9	0	-54.31	992	9	1	10	10
LLAWD292	24/02/2015 15:00	62.8	41.3	0.3	0	-42.52	992	9	0	10	10
LLAWD293	24/02/2015 15:05	64.1	39.1	0.5	0	-72.63	992	20	3	20	20
LLAWD281	24/02/2015 15:11	61	42	0.4	0	-71.96	992	13	0	20	20
LLAWD241	25/02/2015 10:16	18.3	11.8	15.4	54.5	-3.17	999	3	0	0	0
LLAWD263	25/02/2015 10:18	68.8	35.7	0.3	0	-45.04	998	6	10	10	10
LLARD220	25/02/2015 10:33	8	6.2	17.8	68	-7.51	998	6	0	1	0
LLARD220	25/02/2015 10:34	7.9	6.8	17.7	67.6	-2.61	998	6	0	0	0
LLAWD270	25/02/2015 13:52	63	38.7	0	0	-49.24	1002	1	0	10	10
LLAWC147	26/02/2015 13:19	40.3	28.5	0.3	30.9	-22.11	995	0	0	10	10
LLAWA203	26/02/2015 15:20	23.4	17.5	0	59.1	-13.91	998	0	0	10	15
LLAWA203	26/02/2015 15:21	23.3	17.8	0	58.9	-17.51	998	0	0	15	15
LLAWA204	26/02/2015 15:23	11.2	15.6	0	73.2	-12.37	998	0	0	10	15
LLAWA204	26/02/2015 15:24	10.9	18.1	0	71	-15.59	998	0	0	15	15
LLAWD264	27/02/2015 10:48	66.5	34.3	0.6	0	-68.99	1002	2	0	20	20
LLAWD296	27/02/2015 10:59	62	40.9	0.1	0	-18.63	1002	10	0	20	20
LLAWD292	27/02/2015 11:09	58.6	41.5	0.6	0	-52.47	1003	4	0	10	10
LLAWD291	27/02/2015 11:23	12.6	13.7	13.3	60.4	-29.59	1003	6	0	5	5
LLAWD286	27/02/2015 11:32	65.7	37.7	0.3	0	-58.11	1004	6	0	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD285	27/02/2015 11:39	62.9	39.9	0.1	0	-42.91	1004	6	0	10	10
LLAWD284	27/02/2015 11:44	64.6	39.7	0.1	0	-32.09	1004	5	0	10	10
LLAWD241	03/03/2015 10:32	30	21.5	9.7	38.8	-0.77	996	4	0	0	0
LLAWD265	03/03/2015 10:34	54.1	35.6	0.2	10.1	-53.59	996	0	0	10	10
LLAWD266	03/03/2015 10:35	63.6	37.6	0.1	0	-57.26	999	0	0	20	20
LLAWD264	03/03/2015 10:36	63.4	37.8	0.2	0	-38.17	996	2	0	20	20
LLAWD262	03/03/2015 10:38	60.8	37.6	0.7	0.9	-15.97	996	3	0	10	10
LLAWD256	03/03/2015 10:40	56.1	36.1	1.8	6	-2.4	996	2	0	5	5
LLAWD240	03/03/2015 10:52	45.9	31.9	4.9	17.3	-56.35	996	2	0	1	1
LLAWD261	03/03/2015 10:54	63.7	38.8	0.2	0	-55.8	996	3	0	20	20
LLAWD250	03/03/2015 10:57	62.6	39.2	0.1	0	-52.24	997	2	0	10	10
LLAWD239	03/03/2015 10:57	65.1	36.2	0.1	0	9.6	1001	0	0	0	5
LLAWD239	03/03/2015 10:59	60	37.5	0.7	1.8	-30.68	1001	0	0	5	5
LLAWD258	03/03/2015 11:05	61.4	38.7	0.4	0	-42.5	997	1	0	10	10
LLAWD244	03/03/2015 11:06	47.7	31.8	4.3	16.2	-56.63	996	10	0	10	10
LLAWD251	03/03/2015 11:06	63.8	38	0	0	-54.13	1002	0	0	10	10
LLAWD255	03/03/2015 11:08	55.2	36.7	0.3	7.8	-45.61	997	3	0	5	5
LLAWD245	03/03/2015 11:11	44.9	33.2	3.9	18	-18.21	997	5	0	5	5
LLARD188	03/03/2015 11:12	49.1	30.1	3.9	16.9	-22.72	1002	0	0	1	1
LLAWD259	03/03/2015 11:12	61.6	41.2	0.1	0	-44.62	997	9	6	20	20
LLAWD254	03/03/2015 11:16	61.8	40.7	0	0	-0.01	997	6	1	0	0
LLAWD252	03/03/2015 11:17	46.1	31.1	4.4	18.4	-0.73	1002	0	0	5	5
LLAWD248	03/03/2015 11:19	62.7	39.5	0.4	0	-21.93	997	3	0	10	10
LLAWD253	03/03/2015 11:20	49.6	34.1	1.3	15	-35.7	997	2	0	20	20
LLAWD284	03/03/2015 11:22	62.1	40.4	0.1	0	-10.44	998	2	0	10	10
LLARD187	03/03/2015 11:23	58.3	37.1	1.3	3.3	-56.3	1003	0	0	5	5
LLAWD285	03/03/2015 11:25	62.4	40.4	0	0	-4.1	998	2	0	10	10
LLAWD280	03/03/2015 11:26	62.6	39.6	0.1	0	17.56	1002	0	0	10	15
LLAWD286	03/03/2015 11:27	62	40.5	0.1	0	-7	998	2	0	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD280	03/03/2015 11:28	58.2	42.2	0	0	-15.47	1002	0	0	15	15
LLAWD287	03/03/2015 11:32	55	37.7	0	7.3	-10.74	998	2	0	10	10
LLAWD279	03/03/2015 11:32	58.9	40.6	0.4	0.1	-4.03	1002	3	0	1	1
LLAWD277	03/03/2015 11:34	52.9	36.4	1.3	9.4	-21.35	997	5	0	10	10
LLAWD278	03/03/2015 11:35	58.4	37.3	0	4.3	-15.72	1002	2	0	10	10
LLAWD292	03/03/2015 11:41	60.3	40.6	0	0	-17.16	1002	0	0	10	10
LLAWD290	03/03/2015 11:44	61.2	39.6	0.2	0	-27.58	1002	0	0	10	10
LLAWD274	03/03/2015 11:46	63.7	38	0.1	0	-32.25	1002	0	0	10	10
LLAWD233	03/03/2015 13:41	0.2	6.2	19.8	73.8	-0.5	997	0	0	0	0
LLAWD227	03/03/2015 13:41	59.5	33.6	0	6.9	-51.33	999	0	0	20	20
LLAWD225	03/03/2015 13:42	64	37.3	0.3	0	-59.13	997	3	0	20	20
LLAWD210	03/03/2015 13:45	59.5	36.1	0	4.4	-39.11	1000	0	0	30	30
LLAWD235	03/03/2015 13:45	61.9	41.1	0.1	0	-1.1	997	25	0	20	20
LLAWD211	03/03/2015 13:48	58	35.8	0.2	6	-43.2	1000	1	0	20	20
LLARD215	03/03/2015 13:49	45.7	35.1	4.3	14.9	-37.39	997	8	0	1	1
LLAWD236	03/03/2015 13:50	61.3	39.8	0.1	0	-1.36	997	4	7	5	5
LLAWD238	03/03/2015 13:52	54.9	41.7	0.8	2.6	-3.26	997	29	0	30	30
LLAWD234	03/03/2015 13:55	47.8	35.4	0	16.8	-37.46	997	2	0	30	30
LLARD220	03/03/2015 13:57	57.7	45	0	0	-1.51	997	26	2	0	0
LLAWD237	03/03/2015 13:59	17.3	20.2	8.5	54	-1.08	997	15	0	0	0
LLAWD219	03/03/2015 14:00	59.2	44.4	0	0	-67.52	1001	0	0	25	25
LLAWD229	03/03/2015 14:02	43.2	32.2	0	24.6	-37.46	997	14	0	20	20
LLARD207	03/03/2015 14:04	62.4	36.6	0.1	0.9	-67.31	1001	11	1	20	20
LLAWD222	03/03/2015 14:08	55.9	42.6	0.3	1.2	-76.64	1001	1	0	20	20
LLAWD231	03/03/2015 14:14	45.9	36.3	0	17.8	-33.31	1001	0	2	35	35
LLAWD232	03/03/2015 14:17	55.8	43.7	0	0.5	-0.11	1002	10	0	0	0
LLAWD230	03/03/2015 14:28	38.7	29.8	5	26.5	-0.17	1002	0	0	10	10
LLAWD213	03/03/2015 14:33	62.8	38	0.3	0	4.43	1003	12	2	20	25
LLAWD213	03/03/2015 14:35	58.2	41.6	0	0.2	-0.81	1003	10	7	25	25

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLARD205	03/03/2015 14:41	61.4	39	0.2	0	-47.56	1003	4	0	50	50
LLAWD295	03/03/2015 14:52	61.6	40.3	0.3	0	-45.19	997	5	0	20	20
LLAWD296	03/03/2015 14:54	60.7	41.6	0	0	-16.93	997	9	9	20	20
LLAWD294	03/03/2015 14:54	63	39.2	0	0	-10.3	1002	0	0	20	20
LLAL003A	03/03/2015 14:56	55.9	40.6	1	2.5	-18.33	997	3	0	10	10
LLAWD288	03/03/2015 14:58	59.6	38.3	0	2.1	-0.39	1003	0	9	5	5
LLAWD268	03/03/2015 14:58	61.6	41	0.2	0	-51.52	997	6	0	30	30
LLAWD267	03/03/2015 14:59	61.5	40.4	0.2	0	-55.71	997	4	0	10	10
LLAWD283	03/03/2015 15:01	61.7	39.8	0	0	-18.73	1003	1	4	20	20
LLAWD263	03/03/2015 15:02	62.7	40.1	0.4	0	-23.65	997	3	4	10	10
LLAWD281	03/03/2015 15:04	59.7	42	0	0	-49	1004	1	0	20	20
LLAWD260	03/03/2015 15:04	60.3	40.3	0.8	0	-57.06	997	5	1	20	20
LLAWD293	03/03/2015 15:07	60.7	42.4	0	0	-49.53	997	12	0	20	20
LLAWD289	03/03/2015 15:08	61.2	38.7	0.1	0	-1.02	1003	1	1	10	10
LLAWD270	03/03/2015 15:12	59.5	41	0	0	-44.4	1003	0	18	10	10
LLAL00C3	03/03/2015 15:16	67.9	37.8	0	0	-1.68	997	5	8	20	20
LLAWD264	05/03/2015 10:25	59.9	37.2	0.2	2.7	-61.89	1028	0	0	20	20
LLAWD296	05/03/2015 10:45	61.4	39.4	0	0	-32.07	1026	1	4	20	20
LLAWD292	05/03/2015 11:10	58	41.3	0.1	0.6	-35.96	1027	0	0	10	10
LLAWD291	05/03/2015 11:22	18.4	14.4	13.5	53.7	-0.03	1027	0	0	5	5
LLAWD286	05/03/2015 11:32	61.1	37.5	0.5	0.9	-37.78	1028	0	0	10	10
LLAWD285	05/03/2015 11:55	60.7	39	0.2	0.1	-28.13	1028	0	0	10	10
LLAWD284	05/03/2015 12:06	63.3	37.2	0.2	0	-12.66	1028	0	0	10	10
LLAWA204	06/03/2015 10:23	9	13.6	0	77.4	-19.7	1019	0	0	15	20
LLAWA204	06/03/2015 10:27	8.7	18.1	0	73.2	-24.19	1019	0	0	20	20
LLAWA203	06/03/2015 10:35	14.3	9.3	0	76.4	-23.15	1019	0	0	15	20
LLAWA203	06/03/2015 10:39	18.9	26.2	0	54.9	-25.38	1019	0	0	20	20
LLARA025	09/03/2015 10:29	21.4	12.2	0.7	65.7	-0.18	1001	10	0	0	0
LLAWA026	09/03/2015 10:30	5.1	7.8	10.5	76.6	-0.38	1001	0	0	0	0

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWA027	09/03/2015 10:32	7.5	10.4	2	80.1	-0.04	1001	0	0	0	0
LLAWA033	09/03/2015 10:33	11	13.2	2.3	73.5	-0.04	1001	15	0	0	0
LLAWA001	09/03/2015 10:35	8.1	11.8	0.5	79.6	-0.03	1002	0	0	0	0
LLAWA01A	09/03/2015 10:38	0.3	8	15.6	76.1	-0.38	1001	0	0	0	0
LLAWA032	09/03/2015 10:40	0.8	12.7	1.2	85.3	-0.3	1001	0	0	0	0
LLAWA002	09/03/2015 10:41	21.1	15.9	0.1	62.9	-0.34	1001	0	0	0	0
LLAWA003	09/03/2015 10:42	3	12.5	0.2	84.3	-0.17	1001	0	0	0	0
LLAWA004	09/03/2015 10:44	18.5	14	2.1	65.4	-0.43	1000	17	0	0	0
LLAWA005	09/03/2015 10:46	1.1	8.4	12.6	77.9	-0.16	1000	1	0	0	0
LLAWA006	09/03/2015 10:48	0.5	5.6	15.2	78.7	-0.09	1000	0	0	0	0
LLAWA130	09/03/2015 10:50	16	11.2	4.3	68.5	-0.76	999	0	0	5	5
LLAWA031	09/03/2015 10:52	5.6	13.3	3.2	77.9	-3.09	999	1	0	0	0
LLAWA030	09/03/2015 10:54	25.7	19	0.6	54.7	-2.98	999	0	0	5	5
LLAWA132	09/03/2015 10:55	5	14.4	1	79.6	-3.39	999	0	0	5	5
LLARA010	09/03/2015 10:57	15	18.8	0.3	65.9	-1.15	999	0	0	5	5
LLAWA011	09/03/2015 10:58	19.6	18.4	0.3	61.7	-0.04	998	0	0	5	5
LLARA012	09/03/2015 11:00	19	20.1	0.6	60.3	-0.52	998	0	0	5	5
LLARA028	09/03/2015 11:02	44.8	26.8	0.4	28	-3.44	999	0	0	5	5
LLARA015	09/03/2015 11:04	33.7	23.3	0.1	42.9	-2.43	998	0	0	5	5
LLAWA016	09/03/2015 11:06	27.2	20.4	0.6	51.8	0.01	998	0	0	5	10
LLAWA016	09/03/2015 11:07	25.7	22.8	0	51.5	-0.55	998	0	0	10	10
LLARA014	09/03/2015 11:09	15.9	16.7	0.3	67.1	-0.11	999	0	0	5	5
LLAWA031	09/03/2015 11:14	45	24.6	0.4	30	-0.57	997	2	0	0	0
LLAWA029	09/03/2015 11:16	37.1	25.6	0.2	37.1	-7.04	997	0	0	5	5
LLAWC143	09/03/2015 11:18	44.5	28.4	0.8	26.3	-41.38	999	5	0	10	10
LLAWC140	09/03/2015 11:20	34.5	26.4	0.6	38.5	-4.01	998	2	0	5	5
LLAWC142	09/03/2015 11:22	15.3	15.9	13	55.8	0.09	997	2	0	0	0
LLAWC141	09/03/2015 11:23	29.4	23.7	1.4	45.5	-3.2	997	1	0	5	5
LLAWC145	09/03/2015 11:25	40.4	31.6	0.4	27.6	-30.37	997	1	0	30	30

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWC144	09/03/2015 11:27	46	30.3	1.1	22.6	-27.81	997	0	0	5	5
LLAWC148	09/03/2015 11:28	22.6	15.8	13.1	48.5	-0.41	998	0	0	0	0
LLAWC147	09/03/2015 11:30	39.4	25.6	0.6	34.4	-17.53	998	0	0	10	10
LLAWC146	09/03/2015 11:32	0.3	8.6	19.5	71.6	-28.01	998	0	0	0	0
LLAWB117	09/03/2015 13:44	49.4	37.6	0	13	-0.63	997	1	0	5	5
LLAWB093	09/03/2015 13:46	60	35.5	1.6	2.9	-89.1	996	2	0	5	5
LLARB072	09/03/2015 13:47	47.3	32.1	0	20.6	-26.69	1002	0	0	20	20
LLAWB118	09/03/2015 13:48	30.3	26.3	3.6	39.8	-1.92	996	1	0	5	5
LLAWB119	09/03/2015 13:50	44.7	29.9	0.2	25.2	-1.82	997	1	0	5	5
LLAWB083	09/03/2015 13:50	57.7	32.3	0	10	-86.64	1002	0	0	5	5
LLAWB120	09/03/2015 13:51	43.5	25.1	0.2	31.2	-0.22	996	0	0	10	10
LLAWB116	09/03/2015 13:54	36.7	24.3	0.3	38.7	-1.61	996	0	0	10	10
LLAWB082	09/03/2015 13:54	67.4	32.9	0.2	0	-74.33	1001	0	0	5	5
LLAWB079	09/03/2015 13:56	68.7	31.6	0.7	0	-88.26	997	0	0	5	5
LLAWB081	09/03/2015 13:57	71.2	29.3	0.1	0	-83.32	1001	0	0	5	5
LLAWB115	09/03/2015 13:58	45.9	30.6	0.1	23.4	-12.01	996	0	0	5	5
LLAWB114	09/03/2015 14:00	58	38.8	0	3.2	-0.69	1000	0	0	5	5
LLAWB113	09/03/2015 14:03	55.8	39.5	0	4.7	-0.02	1000	0	0	5	10
LLAWB113	09/03/2015 14:05	54.4	41	0	4.6	-0.2	1000	0	0	10	10
LLAWB112	09/03/2015 14:09	56.4	41.3	0	2.3	0.39	1000	0	0	5	10
LLAWB112	09/03/2015 14:11	53	40.9	0	6.1	-0.19	1000	0	0	10	10
LLAWB097	09/03/2015 14:14	59.1	41.2	0	0	0.36	1000	0	0	0	0
LLAWB111	09/03/2015 14:19	57.9	39.6	0	2.5	-0.23	996	0	0	100	100
LLAWB095	09/03/2015 14:21	31.4	30.7	0.2	37.7	-0.7	996	0	0	0	0
LLAWC137	09/03/2015 14:25	49.8	29.8	0.2	20.2	-1.93	999	0	0	5	5
LLAWC136	09/03/2015 14:28	41.5	31.5	0.3	26.7	-23.1	998	0	0	5	5
LLAWC135	09/03/2015 14:30	38.7	30.5	0.5	30.3	-43.78	998	0	0	10	10
LLAWC154	09/03/2015 14:33	33.8	26.8	0	39.4	-6.14	1003	0	0	10	10
LLAWC134	09/03/2015 14:34	56.5	40.7	0.7	2.1	-1.54	998	0	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWC152	09/03/2015 14:36	45.7	33.6	0	20.7	-4.88	998	0	0	5	5
LLAWC251	09/03/2015 14:38	43.3	32.6	0	24.1	-30.48	1003	0	0	10	10
LLAWC133	09/03/2015 14:38	46.8	32.7	2.7	17.8	-18.4	998	0	0	10	10
LLAWC250	09/03/2015 14:40	46.3	28	0.3	25.4	-14.59	998	0	0	10	10
LLAWC132	09/03/2015 14:42	54.7	35.1	0	10.2	-32.45	1002	0	0	10	10
LLAWC249	09/03/2015 14:42	60.4	37.4	0.2	2	-37.74	999	0	0	30	30
LLAWD266	10/03/2015 10:08	66.2	36	0.2	0	-86.6	1015	1	0	20	10
LLAWD266	10/03/2015 10:09	62.6	38.8	0.1	0	-86.94	1015	1	0	10	10
LLAWD265	10/03/2015 10:12	41.2	33.3	0.1	25.4	-74.16	1015	1	0	10	5
LLAWD265	10/03/2015 10:13	40.4	35.4	0	24.2	-53.51	1015	1	0	5	5
LLAWD240	10/03/2015 10:14	51.7	32.1	3.4	12.8	-22.57	1018	0	7	1	1
LLAWD264	10/03/2015 10:15	61.3	37.7	0.2	0.8	-52.49	1015	2	0	20	20
LLAWD241	10/03/2015 10:17	28.2	23.4	9.4	39	-12.9	1016	4	0	0	0
LLAWD256	10/03/2015 10:17	51.8	34.5	2.4	11.3	-5.36	1018	0	0	5	5
LLAWD262	10/03/2015 10:20	59.3	34.4	1.6	4.7	-21.35	1016	3	0	10	10
LLAWD261	10/03/2015 10:22	63.4	39.1	0.1	0	-76.94	1015	4	0	20	10
LLAWD261	10/03/2015 10:23	60.9	41.2	0	0	-74.99	1015	5	0	10	10
LLAWD260	10/03/2015 10:26	61.7	40.7	0	0	-76.71	1015	5	0	20	10
LLAWD260	10/03/2015 10:27	59.7	42.7	0	0	-43.67	1015	5	0	10	10
LLAWD239	10/03/2015 10:28	59.7	35.3	1.2	3.8	0	1019	0	0	5	10
LLAWD239	10/03/2015 10:31	59.4	36.1	1	3.5	-46.02	1019	0	0	10	10
LLAWD270	10/03/2015 10:31	67.2	35.7	0.2	0	-51.86	1015	5	0	10	10
LLAL00C3	10/03/2015 10:33	63.8	37.1	0.3	0	-3.52	1015	6	0	20	20
LLAWD250	10/03/2015 10:34	60.3	37.4	0.5	1.8	-73.63	1019	0	0	10	10
LLAWD259	10/03/2015 10:35	58.8	39.4	0.6	1.2	-61.93	1015	8	0	20	20
LLAWD258	10/03/2015 10:37	61.8	38.1	0.4	0	-56.62	1016	5	0	10	10
LLAWD244	10/03/2015 10:38	47.7	30.1	4.7	17.5	-77.12	1016	14	0	10	10
LLAWD251	10/03/2015 10:38	62.6	38.3	0	0	-75.57	1019	0	0	10	10
LLAWD255	10/03/2015 10:40	52.9	36.3	0.4	10.4	-64.05	1019	0	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD245	10/03/2015 10:41	42.1	31.5	4.7	21.7	-28.81	1016	7	0	5	5
LLARD188	10/03/2015 10:43	61.8	34.4	0.7	3.1	1.42	1020	0	0	1	5
LLAWD252	10/03/2015 10:44	33.2	23.8	9.2	33.8	-0.71	1016	3	0	5	5
LLAWD254	10/03/2015 10:46	66.2	36.1	0.2	0	-0.03	1016	8	0	0	5
LLARD188	10/03/2015 10:48	57.5	33.7	1.6	7.2	-29.41	1020	0	0	5	5
LLAWD254	10/03/2015 10:48	61.5	40.2	0	0	-1.89	1016	10	1	5	5
LLAWD248	10/03/2015 10:49	62.8	39.5	0	0	-32.79	1016	7	0	10	10
LLAWD284	10/03/2015 10:56	61.3	40.9	0	0	-9.06	1017	3	0	10	15
LLAWD284	10/03/2015 10:57	60.5	41.7	0	0	-31.27	1017	4	0	15	15
LLAWD253	10/03/2015 10:58	43.5	29.3	2.9	24.3	-47.57	1020	0	0	20	20
LLARD187	10/03/2015 11:01	54.9	34.5	2.3	8.3	-77.46	1020	0	0	5	5
LLAWD285	10/03/2015 11:01	65.2	37.4	0.3	0	-37.95	1017	3	0	20	20
LLAWD286	10/03/2015 11:03	63	38.9	0.2	0	-43.93	1017	3	0	10	10
LLAWD280	10/03/2015 11:05	58.8	39.4	0.5	1.3	-57.35	1020	0	0	10	10
LLAWD287	10/03/2015 11:06	25.4	27.6	0	47	-16.92	1017	5	0	10	10
LLAWD279	10/03/2015 11:07	53.8	39.3	1.4	5.5	-47.83	1020	1	0	1	1
LLAWD287	10/03/2015 11:08	25	28	0	47	-7.82	1017	5	0	10	5
LLAWD287	10/03/2015 11:09	25.2	28.3	0	46.5	-4.68	1017	5	0	5	5
LLAWD278	10/03/2015 11:10	48.7	36.8	0	14.5	-26.58	1020	3	0	10	10
LLAWD291	10/03/2015 11:16	27.9	19.8	10.6	41.7	-1.17	1016	2	0	5	5
LLAWD277	10/03/2015 11:26	58.6	41.3	0.1	0	-26.84	1020	0	0	10	15
LLAWD291	10/03/2015 11:28	38.1	30.2	5.2	26.5	-5.86	1016	6	0	10	10
LLAWD277	10/03/2015 11:28	57.7	42.1	0	0.2	-38.71	1020	0	0	15	15
LLAWD290	10/03/2015 11:32	58	42	0.1	0	-41.7	1020	0	9	10	10
LLAWD274	10/03/2015 11:32	62.1	39.8	0.2	0	-41.28	1016	8	0	10	10
LLAWD281	10/03/2015 11:36	59.6	42.6	0	0	-60.54	1016	9	0	20	20
LLAWD293	10/03/2015 11:37	58.2	42.1	0	0	-59.21	1019	7	0	20	20
LLAWD283	10/03/2015 11:39	61.4	41.2	0	0	-34.06	1015	9	0	20	20
LLAWD263	10/03/2015 13:43	62.9	38.7	0.6	0	-60.48	1015	2	0	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLARD205	10/03/2015 14:08	58	41.6	0	0.4	-72.35	1021	7	9	50	50
LLAWD213	10/03/2015 14:15	58.6	42.6	0.1	0	-65.92	1016	19	0	25	25
LLAWD230	10/03/2015 14:20	50.9	37.1	0.7	11.3	-0.17	1015	3	0	10	10
LLAWD231	10/03/2015 14:21	57	37.8	0	5.2	-20.6	1020	3	0	35	35
LLAWD232	10/03/2015 14:23	60.4	40.3	0.2	0	-0.05	1015	25	0	0	0
LLAWD222	10/03/2015 14:24	56.4	42.8	0.2	0.6	-89.22	1020	4	0	20	20
LLAWD229	10/03/2015 14:25	44.8	34.9	0	20.3	-29.5	1015	15	0	20	20
LLAWD238	10/03/2015 14:26	56.3	39.6	0.6	3.5	-3.69	1015	30	0	30	30
LLARD207	10/03/2015 14:27	60.8	38.7	0.1	0.4	-77.49	1021	9	0	20	20
LLAWD237	10/03/2015 14:28	14.8	21.3	6.8	57.1	-1.41	1015	12	0	0	0
LLARD220	10/03/2015 14:30	58.7	43.4	0	0	-2.45	1015	32	4	0	0
LLAWD219	10/03/2015 14:30	59.6	39.3	0	1.1	-77.78	1021	0	0	25	25
LLAWD234	10/03/2015 14:32	45.4	32.1	0	22.5	-41.71	1015	7	0	30	30
LLAWD211	10/03/2015 14:34	53.1	36.6	0.3	10	-50.49	1021	0	0	20	20
LLARD215	10/03/2015 14:35	66	34.8	0.5	0	-44.54	1015	13	0	5	5
LLAWD210	10/03/2015 14:37	51.6	35.6	0	12.8	-45.64	1020	0	0	30	30
LLAWD235	10/03/2015 14:37	61.8	40.9	0	0	-1.09	1015	22	0	20	20
LLAWD225	10/03/2015 14:40	59.9	41.2	0.1	0	-68.39	1015	5	0	20	20
LLAWD233	10/03/2015 14:42	0	1.1	20.8	78.1	-0.01	1020	0	0	0	0
LLAWD227	10/03/2015 14:46	51.1	32.9	0.1	15.9	-55.13	1019	0	0	10	10
LLAWD267	10/03/2015 14:49	57.8	37	1.5	3.7	-84.39	1015	3	0	10	10
LLAWD268	10/03/2015 14:51	62.3	39.4	0.3	0	-82.8	1015	5	0	30	30
LLAL003A	10/03/2015 14:54	55.2	33.4	1.8	9.6	-32.86	1015	3	0	10	10
LLAWD296	10/03/2015 14:54	56.1	40.5	0	3.4	-67.43	1019	2	0	20	20
LLAWD295	10/03/2015 14:57	56.4	38.7	0.6	4.3	-67.87	1016	6	0	20	20
LLAWD294	10/03/2015 14:58	58.6	42.1	0	0	-18.14	1020	1	0	20	25
LLAWD294	10/03/2015 14:59	58.3	42.7	0	0	-25.44	1020	1	0	25	25
LLAWD288	10/03/2015 15:00	59.1	42.5	0	0	-3.4	1015	11	0	5	10
LLAWD288	10/03/2015 15:01	57.9	43.3	0	0	-12.21	1015	11	0	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD289	10/03/2015 15:04	54	39.3	0.8	5.9	-3.22	1020	1	0	10	15
LLAWD289	10/03/2015 15:07	52.9	40	0.7	6.4	-4.46	1020	1	0	15	15
LLAWD264	11/03/2015 09:12	60	38	0.2	1.8	-61.58	1013	0	0	20	20
LLAWD296	11/03/2015 09:31	55.4	40.7	0	3.9	-60.18	1012	2	0	20	20
LLAWD292	11/03/2015 09:50	57.8	42.4	0	0	-41.55	1012	0	0	10	10
LLAWD291	11/03/2015 10:05	60.1	41.1	0	0	-0.18	1012	0	0	10	10
LLAWD286	11/03/2015 10:18	52	36.6	2.2	9.2	-45.44	1013	0	0	10	10
LLAWD285	11/03/2015 10:35	61	38.9	0.2	0	-40.13	1013	0	0	20	20
LLAWD284	11/03/2015 10:49	61.1	40	0.1	0	-56.24	1012	0	0	15	15
LLAWB096	13/03/2015 11:09	59.9	42.7	0.2	0	-1.4	1014	2	0	0	0
LLAWA131	13/03/2015 11:14	2.5	16.8	4.1	76.6	-3.39	1012	1	0	5	5
LLAWD266	17/03/2015 09:17	63.1	38.2	0	0	-86.1	1015	0	0	10	10
LLAWD265	17/03/2015 09:20	52.3	37	0	10.7	-61.17	1015	0	0	5	5
LLAWD264	17/03/2015 09:23	58.7	38	0	3.3	-72.37	1015	0	0	20	20
LLAWD262	17/03/2015 09:26	55.3	37	1.3	6.4	-20.67	1016	0	0	10	10
LLAWD241	17/03/2015 09:30	32.1	28	7.3	32.6	-25.58	1016	0	0	0	0
LLAWD256	17/03/2015 09:34	55.1	37.3	1.2	6.4	-4.03	1016	0	0	5	5
LLAWD264	17/03/2015 09:38	60.6	38.1	0.6	0.7	-85.83	1016	0	0	5	5
LLAWD239	17/03/2015 09:44	25.9	18	11.8	44.3	-58.47	1016	0	0	5	1
LLAWD239	17/03/2015 09:53	22.6	16.4	12.8	48.2	-52.93	1016	0	0	1	0
LLAWD239	17/03/2015 09:55	23.4	16.7	12.6	47.3	-8.47	1016	0	0	0	0
LLAWD250	17/03/2015 09:58	61.4	38	0.3	0.3	-81.63	1016	0	0	10	10
LLAWD261	17/03/2015 10:03	61.7	38.7	0.1	0	-84.79	1016	1	0	10	10
LLAWD258	17/03/2015 10:05	61.3	38.2	0.2	0.3	-66.3	1016	0	0	10	10
LLAWD244	17/03/2015 10:08	46.4	30.2	4.4	19	-86.02	1016	4	0	10	10
LLAWD255	17/03/2015 10:11	54.1	37.3	0.4	8.2	-71.98	1016	0	0	10	10
LLAWD245	17/03/2015 10:14	43	32.5	4	20.5	-30.22	1016	1	0	5	5
LLAWD251	17/03/2015 10:17	62.7	38.3	0.1	0	-87.72	1016	0	0	10	10
LLARD188	17/03/2015 10:19	58.9	33.5	1.3	6.3	-2.29	1017	0	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD252	17/03/2015 10:28	39.2	28.8	6.3	25.7	-0.59	1016	0	0	5	1
LLAWD252	17/03/2015 10:30	46.3	31.7	4.5	17.5	-0.52	1016	0	0	1	1
LLAWD253	17/03/2015 10:33	49.7	31.8	2.4	16.1	-21.69	1016	0	0	20	20
LLARD187	17/03/2015 10:36	54.1	37.3	1.8	6.8	-92.07	1017	0	0	5	5
LLAWD259	17/03/2015 10:39	59.5	40.1	0.2	0.2	-73.42	1015	0	0	20	20
LLAWD254	17/03/2015 10:44	30.3	22.2	9.7	37.8	-2.56	1016	0	0	5	1
LLAWD254	17/03/2015 10:50	21.6	16.1	13.1	49.2	-0.86	1016	0	0	1	1
LLAWD248	17/03/2015 10:53	61	39.3	0	0	-41.58	1016	2	0	10	10
LLAWD280	17/03/2015 10:56	47	38.3	1.6	13.1	-72.01	1016	0	0	10	10
LLAWD284	17/03/2015 10:59	60.3	40	0.1	0	-76.12	1016	0	0	15	15
LLAWD285	17/03/2015 11:02	60.4	39.3	0.2	0.1	-68.6	1017	0	0	20	20
LLAWD279	17/03/2015 11:06	57.8	40.4	0.5	1.3	-33.74	1016	1	0	1	1
LLAWD278	17/03/2015 11:14	59.5	35.6	0.2	4.7	-15.82	1016	3	4	10	15
LLAWD278	17/03/2015 11:16	57	38.4	0	4.6	-24.71	1016	3	6	15	15
LLAWD286	17/03/2015 11:21	42.9	31.7	4.9	20.5	-44.73	1017	0	0	10	5
LLAWD286	17/03/2015 11:24	50.7	36.5	2.5	10.3	-38.41	1017	0	0	5	5
LLAWD287	17/03/2015 11:29	61.8	38.5	0	0	-2.26	1016	0	0	10	15
LLAWD287	17/03/2015 11:31	61	39.5	0	0	-6.37	1016	0	0	15	15
LLAWD277	17/03/2015 11:35	48.8	35.5	1.5	14.2	-39.6	1015	0	0	15	15
LLAWD274	17/03/2015 11:46	61.8	38.8	0.1	0	-52.57	1015	0	12	10	10
LLAWD290	17/03/2015 11:50	59.4	39.7	0.5	0.4	-52.81	1015	0	12	10	10
LLAWD292	17/03/2015 11:53	54.7	38.4	1.3	5.6	-68.05	1016	0	0	10	10
LLAWD291	17/03/2015 11:56	57.1	39	0	3.9	-0.5	1016	0	0	10	10
LLAWD293	17/03/2015 12:06	65.5	36.9	0.1	0	-67.88	1015	8	1	20	20
LLAWD281	17/03/2015 13:42	56.9	42.7	0	0.4	-69.7	1014	0	0	20	20
LLAWD288	17/03/2015 13:45	53.4	39.8	0.8	6	-10.87	1014	4	0	10	10
LLAWD294	17/03/2015 13:48	56	41.3	0	2.7	-25.88	1014	1	0	25	25
LLAWD295	17/03/2015 13:51	53.7	41.6	0	4.7	-66.9	1014	1	0	20	20
LLAWD283	17/03/2015 14:07	57.4	42.6	0	0	-44.1	1014	0	0	20	20

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD289	17/03/2015 14:10	51	37.7	1.6	9.7	-4.09	1014	3	36	15	15
LLAWD260	17/03/2015 14:13	61	40.4	0.2	0	-54.94	1014	2	15	10	15
LLAWD260	17/03/2015 14:15	58	44.6	0	0	-62.7	1014	2	23	15	15
LLAWD263	17/03/2015 14:18	61.6	39.1	0	0	-55	1014	0	0	10	10
LLAWD227	18/03/2015 10:06	51.8	34.6	0.1	13.5	-55.55	1023	0	2	10	10
LLAWD233	18/03/2015 10:10	0	1.3	20.9	77.7	0.29	1023	0	0	0	0
LLAWD210	18/03/2015 10:15	54.7	37.5	0	7.8	-46.1	1023	0	0	30	30
LLAWD211	18/03/2015 10:21	54.7	39.1	0.2	6	-51.05	1023	2	0	20	20
LLAWD219	18/03/2015 10:32	59.3	40.4	0	0.3	-77.54	1023	2	0	25	25
LLARD207	18/03/2015 10:45	56.2	51	0	0	-77.33	1022	9	1	20	20
LLAWD222	18/03/2015 10:52	54.3	44	0.2	1.5	-108.29	1021	4	0	20	20
LLAWD231	18/03/2015 10:55	53.7	37.2	0	9.1	-20.1	1021	5	0	35	35
LLAWD230	18/03/2015 10:58	40.1	40	3.6	16.3	0.18	1022	1	0	10	15
LLAWD230	18/03/2015 11:00	40.2	30.6	3.6	25.6	-0.18	1022	0	0	15	15
LLAWD213	18/03/2015 11:07	56.6	40.3	0	3.1	-73.1	1023	14	0	25	25
LLAWD229	18/03/2015 11:11	43.9	34.4	0.2	21.5	-31.98	1022	9	0	20	20
LLAWD232	18/03/2015 11:14	52	41.1	1.1	5.8	0.35	1022	20	0	0	5
LLAWD232	18/03/2015 11:18	6.7	7.5	17.3	68.5	-2.81	1022	0	0	5	1
LLAWD232	18/03/2015 11:19	6.9	7.5	17.2	68.4	-0.18	1022	0	0	1	0
LLAWD232	18/03/2015 11:21	10.4	9.7	15.9	64	-0.03	1022	0	0	0	0
LLAWD237	18/03/2015 11:26	16	18.7	7.4	57.9	-1.14	1023	9	0	0	0
LLARD220	18/03/2015 11:28	61.4	42.5	0.2	0	-1.73	1023	16	18	0	5
LLARD220	18/03/2015 11:30	56.1	45.2	0	0	-5.34	1023	18	79	5	5
LLAWD238	18/03/2015 11:33	53.9	41.2	0.6	4.3	-2.49	1023	27	1	30	30
LLAWD296	18/03/2015 11:36	54.2	39.5	0	6.3	-71.78	1023	1	46	20	20
LLAWD268	18/03/2015 11:39	59.9	40.3	0	0	-34.79	1023	2	1	30	30
LLAWD236	18/03/2015 11:42	60.7	39.4	0.1	0	-1.02	1023	1	25	5	5
LLAWD234	18/03/2015 11:44	48.5	33.4	0.2	17.9	-40.84	1022	2	0	30	30
LLARD205	18/03/2015 11:48	63.5	36.6	2.7	0	14.08	1022	14	0	5	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLARD205	18/03/2015 11:51	59.5	41.2	0.2	0	-6.66	1022	9	0	10	10
LLAWD235	18/03/2015 11:56	58.1	42.6	0	0	-0.42	1023	20	0	20	20
LLAWD267	18/03/2015 11:59	59	36.5	0.8	3.7	-83.08	1023	0	0	10	10
LLAWD225	18/03/2015 12:02	59.3	39.4	0.3	1	-65.6	1023	0	0	20	20
LLAWD264	19/03/2015 09:21	59.4	37.3	0.2	3.1	-68.61	1026	0	0	20	20
LLAWD296	19/03/2015 10:13	56.4	36.3	0.2	7.1	-70.55	1025	3	0	20	20
LLAWD292	19/03/2015 10:26	56.8	39.5	0.6	3.1	-67.55	1025	0	0	10	10
LLAWD291	19/03/2015 10:41	45.2	34.5	1.9	18.4	-0.85	1025	0	0	5	5
LLAWD286	19/03/2015 10:56	59.2	39.5	0	1.3	-19.61	1025	0	0	5	5
LLAWD284	19/03/2015 11:20	58.9	38.6	0.3	2.2	-74.85	1025	0	0	15	15
LLAWD285	19/03/2015 15:32	60.3	39.4	0	0.3	-65.74	1023	0	0	20	20
LLAWD227	24/03/2015 10:04	59.9	36.5	0.5	3.1	-70.7	996	3	1	10	10
LLAWD225	24/03/2015 10:06	61.1	39.7	0.4	0	-65.23	995	6	1	10	10
LLARD215	24/03/2015 10:09	30.6	22.5	9.7	37.2	-40.3	995	7	1	10	10
LLAWD235	24/03/2015 10:11	59.2	41.9	0.2	0	-0.52	995	27	2	10	20
LLAWD235	24/03/2015 10:13	59.2	42.3	0	0	-1.11	995	25	3	20	20
LLAWD233	24/03/2015 10:51	0.2	1.4	20.9	77.5	-0.33	994	0	0	0	0
LLAWD210	24/03/2015 10:55	54.4	36.3	0.3	9	-44.36	995	3	0	30	30
LLAWD211	24/03/2015 10:57	55.7	37.2	0.6	6.5	-47.84	995	5	0	20	20
LLAWD219	24/03/2015 11:00	60.4	39.9	0.2	0	-76.46	995	6	0	20	20
LLARD207	24/03/2015 11:03	61.7	39.4	0.2	0	-77.01	995	17	0	10	10
LLAWD222	24/03/2015 11:06	57.3	43.4	0.4	0	-87.32	994	10	6	10	10
LLAWD231	24/03/2015 11:08	54.8	37.3	0.2	7.7	-20.46	991	9	0	20	20
LLAWD230	24/03/2015 11:12	39.2	28.8	4.3	27.7	-0.28	994	3	0	10	0
LLAWD230	24/03/2015 11:15	37.8	28.5	4.3	29.4	-0.26	994	3	0	0	0
LLARD205	24/03/2015 11:18	59.7	40.9	0.3	0	-77.68	995	13	64	50	50
LLAWD213	24/03/2015 11:21	58.5	42.8	0.2	0	-81.66	995	21	0	20	20
LLAWD232	24/03/2015 11:24	56.6	44.1	0.3	0	-0.4	995	28	2	0	5
LLAWD232	24/03/2015 11:26	56.6	44.8	0	0	-0.59	995	29	5	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD229	24/03/2015 11:30	46.2	35.3	0.3	18.2	-34.5	995	15	0	10	10
LLAWD238	24/03/2015 11:32	56.9	42.5	0.5	0.1	-0.59	995	35	15	20	20
LLAWD236	24/03/2015 11:35	60.7	40	0.4	0	-0.99	995	5	1	5	10
LLAWD236	24/03/2015 11:37	60.1	40.4	0.1	0	-13.32	995	6	2	10	10
LLAWD268	24/03/2015 11:41	60.7	40.6	0.1	0	-78.22	994	8	1	20	20
LLAWD289	24/03/2015 11:43	54.5	38.3	1.2	6	-4.55	994	9	4	20	20
LLAWD288	24/03/2015 11:46	54.6	39.7	0.9	4.8	-9.25	995	13	3	20	25
LLAWD288	24/03/2015 11:48	54	39.9	0.9	5.2	-11.57	995	11	4	25	25
LLAWD294	24/03/2015 11:51	58.3	41.9	0.1	0	-26.04	994	8	5	10	15
LLAWD294	24/03/2015 11:53	58	42.3	0	0	-33.86	994	9	6	15	15
LLAWD296	24/03/2015 11:56	54.9	40.4	0	4.7	-75.8	994	5	3	50	25
LLAWD296	24/03/2015 12:01	56.3	40.8	0	2.9	-21.12	994	8	3	25	25
LLAWD296	24/03/2015 14:14	61.3	40.6	0.5	0	-7.87	992	7	1	25	50
LLAWD296	24/03/2015 14:16	60.1	41.2	0	0	-28	992	6	3	50	50
LLAWD295	24/03/2015 14:20	56.9	41.9	0.2	1	-50.86	993	5	0	25	25
LLAWD290	24/03/2015 14:25	59.1	40.7	0.8	0	-63.83	994	5	2	25	25
LLAWD291	24/03/2015 14:28	60.3	41.9	0.1	0	-54.77	995	7	3	25	25
LLAWD292	24/03/2015 14:31	50.6	35.1	1.8	12.5	-0.76	994	6	11	5	10
LLAWD292	24/03/2015 14:33	46.2	33.3	2.4	18.1	-3.32	994	6	2	10	10
LLAWD278	24/03/2015 14:41	54	38	0.1	7.9	-19.94	995	8	7	15	15
LLAWD287	24/03/2015 14:43	52.6	36.4	0.3	10.7	-6.92	995	5	9	10	15
LLAWD287	24/03/2015 14:45	52.2	36.8	0.1	10.9	-8.34	995	4	1	15	15
LLAWD286	24/03/2015 14:48	61.3	40.7	0.1	0	-22.45	994	5	17	5	10
LLAWD286	24/03/2015 14:51	60.7	41.2	0	0	-37.61	994	5	3	10	10
LLAWA203	25/03/2015 10:17	13.2	14.7	0.9	71.2	-25.95	1001	0	0	20	20
LLAWA204	25/03/2015 10:18	7.9	15.6	0.3	76.2	-22.99	1000	0	0	20	20
LLARA025	25/03/2015 10:21	5.5	7.7	12.9	73.9	-0.03	1000	24	0	0	0
LLAWA026	25/03/2015 10:22	5.1	10.1	5.5	79.3	-0.73	999	0	0	0	0
LLAWA027	25/03/2015 10:24	8	10	1.7	80.3	-0.53	999	0	0	0	0

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWA033	25/03/2015 10:25	10.7	11.1	5.1	73.1	-0.22	1000	11	0	0	0
LLAWA001	25/03/2015 10:27	5.1	11	1.6	82.3	-0.25	1000	0	0	0	0
LLAWA032	25/03/2015 10:28	0.2	4.7	20.2	74.9	0	1000	0	0	0	0
LLAWA01A	25/03/2015 10:30	0.1	4.3	14.3	81.3	0	1000	0	0	0	0
LLAWA002	25/03/2015 10:32	10.5	7	10.4	72.1	-0.02	1000	0	0	0	0
LLAWA003	25/03/2015 10:33	2	10.5	0.2	87.3	-0.11	1000	0	0	0	0
LLAWA004	25/03/2015 10:35	15.1	12.7	4.2	68	0	999	17	0	0	0
LLAWA005	25/03/2015 10:38	0.9	7.1	13.7	78.3	-0.08	999	1	0	0	0
LLAWA006	25/03/2015 10:41	0.6	3.9	15.6	79.9	-0.08	999	0	0	0	0
LLAWA130	25/03/2015 10:45	12.3	11.2	6.4	70.1	-1.41	999	0	0	5	5
LLAWA131	25/03/2015 10:48	2.8	12.1	3.8	81.3	-4.2	999	1	0	5	5
LLAWA030	25/03/2015 10:50	22.4	18.4	0.3	58.9	-4.06	998	0	0	5	5
LLAWA132	25/03/2015 10:51	5.3	17	0.7	77	-5.8	998	0	0	5	5
LLARA010	25/03/2015 10:53	12.7	19.8	0.1	67.4	-1.7	998	0	0	5	5
LLAWA011	25/03/2015 10:55	17	17.9	0.1	65	-0.66	998	0	0	5	5
LLARA012	25/03/2015 10:57	14.9	19.7	0.2	65.2	-1.32	998	0	0	5	5
LLARA028	25/03/2015 10:59	37.6	27.4	0.4	34.6	-5.94	998	0	0	5	5
LLARA015	25/03/2015 11:02	30.6	24.3	0	45.1	-3.82	998	0	0	5	5
LLAWA016	25/03/2015 11:03	18.3	20.1	0.2	61.4	-1.1	998	0	0	10	10
LLARA014	25/03/2015 11:06	12.1	15.7	2.1	70.1	-0.07	998	6	0	5	5
LLAWA031	25/03/2015 11:08	7.2	13.3	6.5	73	0	997	7	0	0	0
LLAWA029	25/03/2015 11:10	32.7	23.2	0.1	44	-14.93	997	0	0	5	5
LLAWC143	25/03/2015 11:12	45.1	27.6	0.3	27	-45.73	997	6	0	10	10
LLAWC140	25/03/2015 11:14	34.4	30.6	0.1	34.9	-5.27	997	1	0	5	5
LLAWC142	25/03/2015 11:15	11.1	18	13.4	57.5	-0.46	997	0	0	0	0
LLAWC141	25/03/2015 11:17	29.6	24.2	1.2	45	-4.04	997	1	0	5	5
LLAWC145	25/03/2015 11:18	39.3	31.4	0	29.3	-37.42	997	1	0	30	30
LLAWC144	25/03/2015 11:20	34.4	27.6	4.2	33.8	-26.97	997	0	0	5	5
LLAWC148	25/03/2015 11:22	0.2	6	20.4	73.4	-1.45	998	0	0	0	0

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWC147	25/03/2015 11:23	41.1	18	1.2	39.7	-20.23	997	0	0	10	10
LLAWC146	25/03/2015 11:25	3.4	8.4	18.5	69.7	-7.24	997	0	0	0	0
LLAWB116	25/03/2015 13:36	36.8	27.3	0.3	35.6	-1.67	1001	0	1	10	10
LLAWB079	25/03/2015 13:36	76	22.7	0.6	0.7	-86.76	995	0	0	5	5
LLAWB120	25/03/2015 13:38	33.7	24.2	0	42.1	-0.63	1001	0	0	10	10
LLAWB081	25/03/2015 13:38	63.6	24.8	2.7	8.9	-79.47	996	0	0	5	5
LLAWB082	25/03/2015 13:40	67.9	33.5	0.2	0	-72.8	996	0	0	5	5
LLAWB119	25/03/2015 13:41	36	29.8	0	34.2	-2.04	1000	0	0	5	5
LLAWB083	25/03/2015 13:43	58.6	30.3	0.6	10.5	-83.92	996	0	0	5	5
LLARB072	25/03/2015 13:44	48.6	31	0.1	20.3	-26.96	996	0	0	20	20
LLAWB118	25/03/2015 13:53	23.4	22.5	6.1	48	-1.76	1000	0	0	5	5
LLAWB115	25/03/2015 13:55	40.5	21.9	3.9	33.7	-10.69	995	0	0	5	5
LLAWB093	25/03/2015 13:56	55.7	38.4	1.6	4.3	-85.31	999	3	108	5	5
LLAWB114	25/03/2015 13:57	56.4	34.1	0.7	8.8	-1.26	995	1	0	5	5
LLAWB117	25/03/2015 13:58	32.1	31.6	0.1	36.2	-0.46	999	2	29	5	5
LLAWB113	25/03/2015 13:58	38.5	33.3	0.3	27.9	-1.01	996	1	0	10	10
LLAWB112	25/03/2015 14:00	61.1	41.4	0	0	-0.38	995	2	0	10	10
LLAWB095	25/03/2015 14:02	25	28	0	47	-1.39	999	1	37	0	0
LLAWB097	25/03/2015 14:02	37.5	30.7	3.5	28.3	-2.65	995	2	0	0	0
LLAWB111	25/03/2015 14:04	49.2	37	0	13.8	-0.98	995	1	0	100	100
LLAWB096	25/03/2015 14:05	55	41.2	0.9	2.9	-0.57	999	0	15	0	0
LLAWC137	25/03/2015 14:11	46.4	35.4	0.4	17.8	-1.14	1001	0	14	5	5
LLAWC136	25/03/2015 14:11	49.9	26.8	0.4	22.9	-24.32	997	0	0	5	5
LLAWC154	25/03/2015 14:14	35.1	29.3	0	35.6	-5.14	1001	0	47	10	10
LLAWC135	25/03/2015 14:14	43	28.8	0.3	27.9	-49.65	997	0	0	10	10
LLAWC134	25/03/2015 14:16	55.9	37.7	1.3	5.1	-0.14	997	1	0	5	5
LLAWC152	25/03/2015 14:17	39.5	29.8	2.9	27.8	-4.25	1001	0	270	5	5
LLAWC133	25/03/2015 14:18	42.7	30.8	3.8	22.7	-19.52	998	0	0	10	10
LLAWC251	25/03/2015 14:20	50.3	37.1	0	12.6	-15.34	1000	0	504	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWC250	25/03/2015 14:21	48.3	31.7	0.1	19.9	-14.81	997	0	0	10	10
LLAWC132	25/03/2015 14:23	52.5	37.5	0	10	-35.92	1000	0	171	10	10
LLAWC249	25/03/2015 14:25	60.6	38.8	0	0.6	-42.74	997	0	0	30	30
LLAL003A	26/03/2015 10:50	51.5	35.8	1.5	11.2	-25.42	993	0	0	10	10
LLAL00C3	26/03/2015 10:55	61.7	37.9	0.2	0.2	-2.76	993	0	0	20	20
LLAWD240	26/03/2015 11:03	61.5	45.5	0.5	0	-88.95	993	0	0	1	1
LLAWD270	26/03/2015 11:10	63.9	44.9	0.2	0	-68.47	992	0	0	10	10
LLAWD264	27/03/2015 08:59	59.1	37.3	0.2	3.4	-62.23	1007	0	0	20	20
LLAWD296	27/03/2015 09:22	54.2	39	0.2	6.6	-57.22	1007	2	0	50	50
LLAWD292	27/03/2015 09:47	57.8	41.1	0	1.1	-5.15	1007	0	0	15	15
LLAWD291	27/03/2015 10:09	32.3	26	6.8	34.9	-21.44	1008	0	0	25	20
LLAWD291	27/03/2015 10:19	56.7	37.9	0.5	4.9	-0.28	1007	0	0	20	15
LLAWD291	27/03/2015 10:22	46.7	33.5	2.8	17	-0.7	1007	0	0	15	15
LLAWD284	27/03/2015 10:54	58.4	37.4	0.7	3.5	-74.38	1009	0	0	15	15
LLAWD285	27/03/2015 11:54	56.1	37.8	0.9	5.2	-31.72	1008	0	0	20	20
LLAWD286	27/03/2015 12:03	50.3	35.7	2.4	11.6	-66.66	1009	0	1	10	10
LLAWD266	01/04/2015 08:21	65.1	36.1	0.3	0	-87.92	1012	0	0	10	10
LLAWD265	01/04/2015 08:23	46.3	34.6	0.3	18.8	-59.57	1013	0	0	5	5
LLAWD264	01/04/2015 08:27	60.4	37.9	0.3	1.4	-73.12	1012	0	0	20	20
LLAWD241	01/04/2015 08:30	41.9	31.2	4.1	22.8	-1.58	1012	0	0	0	0
LLAWD262	01/04/2015 08:33	56.4	37.4	1.2	5	-19.23	1013	0	0	10	10
LLAWD240	01/04/2015 08:40	57	36.3	1.5	5.2	-87.95	1013	0	0	1	1
LLAWD239	01/04/2015 08:46	64.1	37	0.1	0	7.23	1013	0	0	0	5
LLAWD239	01/04/2015 08:47	61.5	38.3	0.2	0	-1.85	1013	0	0	5	5
LLAWD250	01/04/2015 08:50	60.1	38.1	0.4	1.4	-83.74	1013	0	0	10	10
LLAWD261	01/04/2015 08:54	60.4	39.7	0.1	0	-86.79	1012	1	0	10	10
LLAWD258	01/04/2015 08:57	60.9	37.4	0.3	1.4	-66.98	1012	0	0	10	10
LLAWD255	01/04/2015 08:59	55.6	36.9	0.5	7	-72.85	1013	0	0	10	10
LLAWD245	01/04/2015 09:02	42.3	31.7	4.4	21.6	-39.72	1013	0	2	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD251	01/04/2015 09:04	61.5	39.1	0.1	0	-84.91	1013	0	0	10	10
LLAWD252	01/04/2015 09:18	62.6	38	0.8	0	1.33	1014	0	0	1	1
LLAWD252	01/04/2015 09:19	37.7	34.4	4.3	23.6	-12.33	1014	0	0	5	5
LLARD188	01/04/2015 09:26	67.4	34.1	0.2	0	4.89	1015	0	10	5	10
LLARD188	01/04/2015 09:27	64.7	36.1	0	0	-9.75	1015	0	10	10	15
LLARD188	01/04/2015 09:31	57.7	34.1	1.7	6.5	-28.45	1015	0	21	15	15
LLAWD253	01/04/2015 09:34	47.4	32.8	2	17.8	-34.78	1014	0	0	20	20
LLARD187	01/04/2015 09:37	53.5	36.8	2	7.7	-86.87	1014	0	0	5	5
LLAWD254	01/04/2015 09:42	22.2	15.8	13.1	48.9	-3.81	1014	0	0	1	1
LLAWD259	01/04/2015 09:44	61.7	38.4	0.4	0	-66.56	1013	3	0	20	20
LLAWD280	01/04/2015 09:50	60.7	39.7	0.1	0	-53.43	1014	0	0	10	10
LLAWD284	01/04/2015 09:53	57.4	37.5	1.2	3.9	-79.31	1014	0	0	15	15
LLAWD285	01/04/2015 09:55	63.6	37.9	0.3	0	-22.42	1015	0	0	20	25
LLAWD285	01/04/2015 09:57	60.9	39.8	0	0	-26.22	1015	0	0	25	25
LLAWD286	01/04/2015 10:01	47.5	34.5	3.6	14.4	-68.62	1015	0	0	10	10
LLAWD287	01/04/2015 10:03	42.6	32.5	0.1	24.8	-10	1015	0	0	15	15
LLAWD278	01/04/2015 10:06	49.7	35.1	0.1	15.1	-23.48	1014	3	8	20	20
LLAWD279	01/04/2015 10:08	62.3	39.8	0.3	0	15.76	1015	0	0	5	10
LLAWD279	01/04/2015 10:10	58.4	41.5	0.1	0	-9.19	1015	1	0	15	15
LLAWD277	01/04/2015 10:14	48.8	35.9	1.6	13.7	-38.9	1014	0	0	5	5
LLAWD291	01/04/2015 10:24	63.3	38.3	0.2	0	-0.22	1015	0	0	5	5
LLAWD274	01/04/2015 10:27	63.9	37.3	0.6	0	-75.91	1014	0	7	10	10
LLARD205	01/04/2015 10:29	60.5	39.9	0.2	0	-53.74	1014	7	5	10	10
LLAWD213	01/04/2015 10:31	59.3	41	0.2	0	-62.65	1014	13	0	10	10
LLAWD290	01/04/2015 10:35	57.4	37.9	0.4	4.3	-70.35	1014	0	0	10	10
LLAWD292	01/04/2015 10:39	58.9	41.8	0	0	-7.56	1015	0	0	10	10
LLAWD293	01/04/2015 10:52	62.2	38.1	0.6	0	-76.26	1013	7	0	20	20
LLAWD288	01/04/2015 10:55	51.7	36.6	1.7	10	-9.59	1013	1	37	10	10
LLAWD294	01/04/2015 10:57	54.4	40.1	0.1	5.4	-37.15	1013	1	0	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD295	01/04/2015 11:00	57.7	41	0.1	1.2	-55.02	1013	1	7	10	10
LLAWD296	01/04/2015 11:02	57.8	38.8	0.2	3.2	-54.68	1013	2	22	15	15
LLAWD283	01/04/2015 11:06	59.4	40.4	0.1	0.1	-40.23	1013	2	0	10	15
LLAL00C3	01/04/2015 11:09	64	37	0.5	0	-2.85	1012	0	0	10	0
LLAWD289	01/04/2015 11:13	57.2	41.4	0	1.4	-130.1	1012	1	0	10	10
LLAWD270	01/04/2015 11:15	62.2	38	0.2	0	-63.06	1012	1	21	1	10
LLAWD260	01/04/2015 11:18	60.9	39.5	0.1	0	-84.6	1012	2	0	5	5
LLAWD262	01/04/2015 11:20	61.9	38.5	0.1	0	-52.87	1012	0	0	5	5
LLAWD229	01/04/2015 13:26	41.5	32.8	0	25.7	-33.35	1010	9	0	20	20
LLAWD238	01/04/2015 13:28	56.6	41.8	0.3	1.3	-0.44	1010	28	0	15	15
LLAL003A	01/04/2015 13:32	52.5	35.8	1.7	10	-40.18	1009	0	0	10	10
LLAWD268	01/04/2015 13:34	61.8	38.7	0.2	0	-77.53	1010	3	0	20	20
LLAWD236	01/04/2015 13:37	62.7	37.8	0.3	0	-1.66	1010	0	0	10	15
LLAWD236	01/04/2015 13:39	59.8	39.5	0.2	0.5	-5.75	1010	0	0	15	15
LLAWD235	01/04/2015 13:44	59.1	41.4	0	0	-0.06	1010	18	4	20	20
LLARD215	01/04/2015 13:48	0	1.7	20.9	76.9	-38.12	1010	0	0	10	5
LLARD215	01/04/2015 13:49	61.3	39.3	0.2	0	-4.28	1010	7	0	5	1
LLARD215	01/04/2015 13:51	60.3	40.7	0.3	0	-1.66	1010	6	0	1	1
LLAWD267	01/04/2015 13:55	61.9	37.4	0.3	0.4	-81	1010	0	3	10	10
LLAWD225	01/04/2015 13:57	61.9	37.5	0.5	0.1	-79.01	1010	0	0	10	10
LLAWD227	01/04/2015 13:59	47.5	30.5	0.4	21.6	-78.51	1010	0	0	10	10
LLAWD233	01/04/2015 14:02	0	2.3	20.9	76.6	-0.3	1010	0	0	0	0
LLAWD210	01/04/2015 14:04	0	1.4	20.9	77.3	-43.09	1010	0	0	30	25
LLAWD210	01/04/2015 14:07	54.6	31	0.3	14.1	-37.5	1010	0	0	25	25
LLAWD211	01/04/2015 14:10	54.1	35.6	0.7	9.6	-47.87	1011	1	0	20	20
LLAWD234	01/04/2015 14:13	43.3	32.6	0.1	24	-39.27	1010	0	1	30	30
LLAWD232	01/04/2015 14:17	12.4	9.5	13.4	64.7	-0.01	1010	0	0	5	5
LLARD220	01/04/2015 14:21	56.4	43.6	0	0	-27.77	1010	26	1	5	5
LLAWD219	01/04/2015 14:24	55.6	38	0.1	6.3	-73.93	1011	1	0	20	20

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLARD207	01/04/2015 14:27	59.2	38.8	0.1	1.9	-73.79	1011	10	0	10	10
LLAWD222	01/04/2015 14:29	59.2	39.6	0.4	0.8	-83.81	1011	4	0	10	10
LLAWD231	01/04/2015 14:32	51.3	37	0	11.7	-9.56	1010	5	0	20	20
LLAWD230	01/04/2015 14:37	37.7	28.4	4.9	29	-0.12	1010	0	0	20	20
LLAWD284	02/04/2015 09:16	57.6	37.9	0.9	3.6	-79.47	1013	0	0	15	15
LLAWD285	02/04/2015 09:27	60.5	38.7	0.3	0.5	-36.08	1013	0	0	25	25
LLAWD286	02/04/2015 09:39	51.5	35.5	2.6	10.4	-63.22	1013	0	0	10	10
LLAWD291	02/04/2015 09:51	55	51.4	0.1	0	-0.36	1012	0	0	5	5
LLAWD292	02/04/2015 10:03	56.3	60.1	0.1	0	-32.06	1012	0	0	10	10
LLAWD296	02/04/2015 10:13	57.7	39.4	0.1	2.8	-57.76	1011	2	14	15	15
LLAWD264	02/04/2015 10:25	61.2	38.8	0.1	0	-73.12	1012	0	0	20	20
LLAWD235	09/04/2015 09:29	59.3	39.8	0.3	0.6	0.53	1013	27	1	20	25
LLAWD235	09/04/2015 09:32	57.3	43.8	0	0	-0.14	1013	26	1	25	25
LLARD215	09/04/2015 09:36	61.6	39.5	0.4	0	6.07	1013	7	1	1	5
LLARD215	09/04/2015 09:37	58.3	41.5	0.3	0	-1.54	1013	8	1	5	10
LLARD215	09/04/2015 09:39	0.1	5.2	19.5	75.2	-12.4	1013	0	0	10	5
LLARD215	09/04/2015 09:41	59.8	40.7	0.2	0	-5.42	1013	7	1	5	5
LLAWD234	09/04/2015 09:49	50.4	34.4	0.1	15.1	-39.04	1013	0	1	30	35
LLAWD234	09/04/2015 09:51	48.8	35.4	0.1	15.7	-45.78	1013	0	1	35	35
LLAWD211	09/04/2015 09:56	52.4	35.8	0.8	11	-45.58	1013	6	0	20	25
LLAWD211	09/04/2015 10:00	52.5	36.3	0.8	10.4	-49.35	1013	0	0	25	25
LLAWD219	09/04/2015 10:08	56.2	38.6	0.1	5.1	-72.7	1013	0	0	20	20
LLARD207	09/04/2015 10:11	59	38.1	0.2	2.7	-74.11	1012	10	1	10	10
LLAWD222	09/04/2015 10:13	58.4	40.1	0.4	1.1	-85.08	1012	3	0	10	10
LLAWD231	09/04/2015 10:15	49.4	35.7	0.1	14.8	-23.41	1012	3	0	20	25
LLAWD231	09/04/2015 10:17	49.4	36.4	0	14.2	-29.04	1012	2	9	25	25
LLAWD230	09/04/2015 10:21	36.4	27.6	4.5	31.5	-0.27	1012	0	0	20	20
LLAWD232	09/04/2015 10:25	11.3	11.6	12.2	64.9	0.57	1012	0	0	5	5
LLAWD229	09/04/2015 10:27	44.1	33	0.2	22.7	-32.99	1012	8	0	20	20

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLARD220	09/04/2015 10:30	51.9	40.3	0.8	7	-1.65	1012	23	1	5	5
LLAWD237	09/04/2015 10:32	37.8	29.7	1.5	31	-0.49	1012	8	0	5	5
LLAWD236	09/04/2015 10:34	59.1	39	0.2	1.7	-2.47	1012	0	0	15	20
LLAWD236	09/04/2015 10:37	58.8	39.8	0.1	1.3	-8.77	1012	0	0	20	25
LLAWD236	09/04/2015 10:38	58.3	39.8	0.1	1.8	-15.56	1012	0	0	25	25
LLAWD268	09/04/2015 10:41	60.5	38.8	0.1	0.6	-75.41	1012	2	0	20	20
LLAWD267	09/04/2015 10:44	62.1	36.6	0.3	1	-82.44	1011	1	0	10	10
LLAWD296	09/04/2015 10:47	59.3	38.5	0.5	1.7	-27.07	1012	3	0	15	15
LLAL003A	09/04/2015 10:51	57.6	25.4	2.7	14.3	-50.85	1011	0	0	10	10
LLAWD294	09/04/2015 10:54	58	40.6	0.1	1.3	-35.01	1012	2	0	10	15
LLAWD294	09/04/2015 10:56	57.5	41.3	0	1.2	-40.5	1012	1	0	15	20
LLAWD294	09/04/2015 10:58	57.3	41.5	0	1.2	-45.25	1012	1	0	20	20
LLAWD288	09/04/2015 11:02	48.6	35.4	2.4	13.6	-6.8	1012	3	0	10	10
LLAWD295	09/04/2015 11:05	59	39.8	0.1	1.1	-67.56	1012	2	0	10	15
LLAWD295	09/04/2015 11:08	57.6	41.6	0	0.8	-72.67	1012	0	0	15	15
LLAWD290	09/04/2015 11:12	56.5	40.4	0.7	2.4	-73.36	1012	0	0	5	5
LLAWD274	09/04/2015 11:14	61.4	37.2	0.2	1.2	-76.32	1012	0	0	10	10
LLARD205	09/04/2015 11:16	62.4	35.9	0.6	1.1	-71.52	1012	8	5	10	10
LLAWD213	09/04/2015 11:19	57	31.6	0.2	11.2	-2.98	1012	18	7	5	5
LLAWD292	09/04/2015 11:22	60.7	39.1	0.1	0.1	-12.42	1012	0	0	5	10
LLAWD292	09/04/2015 11:24	59.6	49.1	0	0	-18.18	1012	0	0	10	15
LLAWD292	09/04/2015 11:27	58.1	41.4	0	0.5	-23.13	1012	0	0	15	15
LLAWD291	09/04/2015 11:31	61.9	37.9	0.1	0.1	0	1012	0	0	5	10
LLAWD291	09/04/2015 11:33	60.4	39.4	0	0.2	-5.43	1012	0	0	10	20
LLAWD291	09/04/2015 11:36	60.1	39.5	0	0.4	-10.17	1012	0	0	20	20
LLAWD293	09/04/2015 11:45	57.7	43.2	0.1	0	-78.17	1012	11	0	20	20
LLAWD277	09/04/2015 11:48	49.5	36.1	1.4	13	-39.57	1012	0	0	5	5
LLAWD287	09/04/2015 11:55	38	19.6	0.2	42.2	-10.3	1013	0	0	15	15
LLARD187	09/04/2015 13:46	51.3	32.5	2.6	13.6	-86.47	1011	0	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD284	09/04/2015 13:48	59.4	52.9	0.6	0	-81.14	1012	0	0	15	15
LLAWD285	09/04/2015 13:50	60.5	38.4	0.3	0.8	-38.74	1012	0	0	25	30
LLAWD285	09/04/2015 13:52	59.3	39.9	0.2	0.6	-43.2	1012	0	0	30	30
LLAWD286	09/04/2015 13:56	59.3	40.2	0.1	0.4	-69.22	1012	0	0	10	10
LLAWD278	09/04/2015 13:59	49.2	35.4	0	15.4	-22.51	1010	4	0	20	25
LLAWD278	09/04/2015 14:00	48.8	36.4	0	14.8	-27.07	1010	3	0	25	25
LLAWD279	09/04/2015 14:02	55.5	37.6	1.3	5.6	-45.69	1010	1	0	15	20
LLAWD279	09/04/2015 14:08	51.5	35.6	2.4	10.5	-44.41	1010	1	0	20	20
LLAWD280	09/04/2015 14:10	43.7	37.1	2.6	16.6	-34.29	1010	0	0	10	10
LLAWD248	09/04/2015 14:13	61.9	36.9	0.1	1.1	-35.5	1010	1	1	10	15
LLAWD248	09/04/2015 14:17	57.4	40	0.4	2.2	-44.46	1010	1	0	15	15
LLAWD253	09/04/2015 14:19	45.1	27.6	3.7	23.6	-12.68	1010	0	0	20	20
LLAWD252	09/04/2015 14:33	50.6	31.6	3.4	14.4	-0.55	1010	0	0	1	1
LLARD188	09/04/2015 14:36	65.6	50.3	0	0	1.44	1010	0	1	1	5
LLARD188	09/04/2015 14:38	65	35.3	0	0	-10.41	1010	0	2	5	5
LLAWD251	09/04/2015 14:53	63.1	37.7	0.1	0	-84.65	1010	0	0	10	10
LLAWD250	09/04/2015 14:56	60.4	36.3	0.4	2.9	-81.32	1010	0	0	10	10
LLAWD239	09/04/2015 14:58	64	37	0.1	0	-3.51	1010	0	0	5	10
LLAWD239	09/04/2015 15:00	46.3	29.7	4.6	19.4	-6.01	1010	0	0	10	5
LLAWD239	09/04/2015 15:03	46.9	29.3	4.5	19.3	-1.17	1010	0	8	5	5
LLAWD255	09/04/2015 15:05	58.2	36	0.3	5.5	-70.65	1009	0	0	10	10
LLAWD245	09/04/2015 15:08	40.6	27.4	6	26	-87.94	1009	6	0	5	5
LLAWD258	09/04/2015 15:11	62.3	36.4	0.1	1.2	-65.35	1009	0	19	10	10
LLAWD256	09/04/2015 15:14	60.6	36.8	1	1.6	-3.56	1008	0	0	5	10
LLAWD256	09/04/2015 15:15	55.8	36.8	0.9	6.5	-7.28	1008	0	0	10	10
LLAWD240	09/04/2015 15:18	57	34.4	1.7	6.9	-87.12	1008	0	0	1	1
LLAWD241	09/04/2015 15:21	53.3	35.4	0.2	11.1	0.49	1009	0	0	0	5
LLAWD241	09/04/2015 15:22	50.8	35.8	0.7	12.7	-6.49	1009	0	0	5	5
LLAWD262	09/04/2015 15:24	55.9	34.9	1.6	7.6	-15.58	1009	0	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD264	09/04/2015 15:27	60.2	36.5	0.3	3	-75.36	1008	0	0	20	20
LLAWD265	09/04/2015 15:29	55.3	32.9	0.1	11.7	-60.34	1008	0	0	5	5
LLAWD266	09/04/2015 15:31	66.7	32.8	0.5	0	-88.55	1008	0	0	10	10
LLAWD263	09/04/2015 15:36	62.9	37.1	0	0	-54.07	1008	0	0	10	10
LLAWD289	09/04/2015 15:39	60.6	39.7	0	0	-5.79	1008	2	0	10	15
LLAWD289	09/04/2015 15:41	59.2	40.5	0	0.3	-8.73	1008	2	0	15	15
LLAWD283	09/04/2015 15:43	61.2	39.3	0	0	-42.95	1008	4	29	10	10
LLAWD288	09/04/2015 15:46	56.8	37.2	0.9	5.1	-7.03	1009	4	3	10	10
LLAWD281	09/04/2015 15:54	60.9	37.9	0.3	0.9	-83.85	1009	4	0	20	20
LLAL00C3	09/04/2015 15:57	62.8	36.5	0.1	0.6	-2.84	1009	0	0	10	10
LLARD215	13/04/2015 10:54	0	2.9	19.6	77.5	-12.61	1018	0	0	5	1
LLARD215	13/04/2015 10:55	60.1	40.2	0.2	0	-4.02	1018	8	2	1	1
LLARD215	13/04/2015 11:01	53.6	44.7	0.9	0.8	-3.38	1018	13	7	1	1
LLAWD236	13/04/2015 11:16	35.8	32.5	0.3	31.4	-14.7	1018	0	1	25	20
LLAWD236	13/04/2015 11:20	36.7	32.8	0.3	30.2	-9.42	1018	0	1	20	20
LLAWD227	14/04/2015 09:40	52.2	33.7	0.2	13.9	-79.74	1012	0	1	10	10
LLAWD225	14/04/2015 09:43	58.9	40	0.2	0.9	-78.89	1012	1	0	10	10
LLAWD210	14/04/2015 09:50	49.3	36.2	0.4	14.1	-36.34	1012	0	0	25	25
LLAWD211	14/04/2015 09:55	54.7	44.4	0.4	0.5	0.05	1012	3	0	25	25
LLAWD219	14/04/2015 10:12	58	39	0.1	2.9	-74.04	1012	9	0	20	20
LLAWD222	14/04/2015 10:17	55	43.5	0.2	1.3	-83.1	1012	4	0	20	20
LLAWD231	14/04/2015 10:20	44.9	35.7	0	19.4	-31.96	1012	4	0	25	25
LLAWD230	14/04/2015 10:22	31.5	24.2	6.5	37.8	-0.66	1012	0	0	20	20
LLAWD232	14/04/2015 10:28	5.3	6.7	15.9	72.1	-1.05	1012	0	0	5	5
LLAWD237	14/04/2015 10:31	17.8	19	6	57.2	-1.95	1012	5	0	5	5
LLARD220	14/04/2015 10:33	23.6	21.4	11	44	-3.13	1012	9	0	5	5
LLAWD234	14/04/2015 10:36	38.6	32	0.2	29.2	-50.26	1012	0	0	35	30
LLAWD234	14/04/2015 10:39	38.2	32.9	0	28.9	-43.33	1012	0	0	30	25
LLAWD234	14/04/2015 10:44	38.2	32.9	0	28.9	-32.48	1012	0	0	25	25

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLARD215	14/04/2015 10:48	60.5	40.1	0.6	0	-0.39	1012	7	0	1	1
LLAWD235	14/04/2015 10:50	60.5	39.9	0.4	0	-0.16	1012	19	1	25	25
LLAWD268	14/04/2015 10:53	59.6	39.9	0.2	0.3	-82.31	1012	2	0	20	20
LLAWD236	14/04/2015 10:57	41.6	34.3	0.2	23.9	-7.69	1012	0	0	20	20
LLAWD238	14/04/2015 11:00	47.1	38.3	0.4	14.2	-9.33	1012	17	0	15	15
LLAL003A	14/04/2015 11:03	49	32.6	3	15.4	-52.31	1011	0	0	10	10
LLAWD296	14/04/2015 11:06	58.5	40.1	0.1	1.3	-44.46	1012	2	0	15	20
LLAWD296	14/04/2015 11:07	57.7	40.8	0	1.5	-51.41	1012	1	0	20	20
LLAWD294	14/04/2015 11:10	54.3	38.9	0.2	6.6	-50.11	1011	1	0	20	20
LLAWD288	14/04/2015 11:16	55.8	41.2	0.3	2.7	-5.93	1011	0	0	10	10
LLAWD283	14/04/2015 11:19	60.7	39.1	0.3	0	-40.78	1011	4	0	10	10
LLAL00C3	14/04/2015 11:26	60.4	39.3	0	0.3	-3.67	1011	0	5	10	15
LLAL00C3	14/04/2015 11:28	60.4	39.4	0	0.2	-6.98	1011	0	10	15	15
LLAWD270	14/04/2015 11:31	59.3	28.5	0.1	12.1	-36.11	1011	1	1	10	10
LLAWD289	14/04/2015 11:34	59.1	40.7	0.1	0.1	-11.07	1010	3	1	15	20
LLAWD289	14/04/2015 11:38	57.6	41.8	0	0.6	-15.01	1010	0	5	20	20
LLAWD260	14/04/2015 11:43	58.1	41.1	0.1	0.7	-84.54	1010	2	6	5	5
LLAWD259	14/04/2015 11:45	59.3	39.6	0.1	1	-67.22	1010	3	0	20	20
LLAWD254	14/04/2015 11:51	14	13.2	12.9	59.9	-6.22	1011	0	0	1	1
LLAWD248	14/04/2015 11:54	57.2	21.7	0.3	20.8	-54.03	1011	0	0	15	15
LLAWD280	14/04/2015 11:57	59.1	43.6	0	0	-1.84	1011	0	0	10	15
LLAWD280	14/04/2015 11:58	59.5	40.4	0	0.1	-13.1	1011	2	0	15	15
LLAWD279	14/04/2015 12:02	57.5	40.5	0.2	1.8	-4.23	1010	4	0	20	20
LLAWD278	14/04/2015 12:08	49.6	37.2	0	13.2	-28.36	1010	7	0	10	10
LLAWD277	14/04/2015 12:11	51.9	32.5	1.9	13.7	-39.16	1010	2	0	5	5
LLAWD291	14/04/2015 12:24	39.5	32.2	4.9	23.4	-6.99	1010	0	0	20	20
LLARD188	14/04/2015 14:23	64	27.6	0.5	7.9	2.65	1012	0	0	5	10
LLARD188	14/04/2015 14:25	61.9	33.9	0.4	3.8	-5.63	1012	0	0	10	10
LLAWD252	14/04/2015 14:27	48.7	31.5	3.6	16.2	-0.96	1011	0	0	1	1

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD253	14/04/2015 14:30	45.2	28.5	3.7	22.6	-13.58	1010	0	0	20	20
LLARD187	14/04/2015 14:33	52.1	34.9	2.2	10.8	-83.37	1010	0	0	5	5
LLAWD284	14/04/2015 14:35	56.5	36	1.3	6.2	-78.71	1010	0	0	15	15
LLAWD285	14/04/2015 14:38	57.9	36.3	0.9	4.9	-62.72	1010	0	0	30	30
LLAWD286	14/04/2015 14:40	33	21.6	9	36.4	-56.92	1010	0	0	5	5
LLAWD286	14/04/2015 14:42	43.3	31.5	4.8	20.4	-61.45	1010	0	0	10	5
LLAWD286	14/04/2015 14:43	46.6	33.2	3.8	16.4	-28.63	1010	0	0	5	1
LLAWD286	14/04/2015 14:46	54.5	37.3	1.3	6.9	-9.01	1010	0	0	1	1
LLAWD287	14/04/2015 14:50	33.7	26.9	0.5	38.9	-11.02	1009	1	0	15	10
LLAWD287	14/04/2015 14:52	32.5	28.6	0.4	38.5	-7.65	1009	2	0	10	10
LLAWD245	14/04/2015 15:00	46.7	27.7	4.3	21.3	-35.75	1009	0	0	5	5
LLAWD244	14/04/2015 15:04	45.9	28.7	4.9	20.5	-86.33	1008	5	4	10	10
LLAWD258	14/04/2015 15:07	60.8	33.9	0.8	4.5	-65.25	1008	1	0	10	10
LLAWD255	14/04/2015 15:10	54	36.7	0.9	8.4	-69.93	1009	0	0	10	10
LLAWD250	14/04/2015 15:15	56	23	0.9	20.1	-71.84	1009	3	8	10	10
LLAWD239	14/04/2015 15:20	62.1	36.4	0.3	1.2	40.66	1008	0	1	5	10
LLAWD240	14/04/2015 15:28	54.3	27.5	1.4	16.8	-85.76	1008	0	0	1	1
LLAWD256	14/04/2015 15:30	44.3	29.7	4.1	21.9	-11.09	1008	0	0	10	10
LLAWD241	14/04/2015 15:33	19.1	11.6	14	55.3	-6.48	1008	0	0	5	5
LLAWD262	14/04/2015 15:37	56	34.8	1.6	7.6	-16.27	1008	0	0	5	5
LLAWD265	14/04/2015 15:42	60.3	12.5	0.5	26.7	-57.31	1008	0	3	5	5
LLAWD266	14/04/2015 15:45	60.9	34.9	0.8	3.4	-85.57	1008	0	1	10	10
LLAWD229	14/04/2015 16:03	42.9	29.6	0.3	27.2	-19.23	1007	0	0	20	20
LLAWD213	14/04/2015 16:05	57.4	38.9	0.6	3.1	-10.2	1007	14	0	5	5
LLARD205	14/04/2015 16:11	56.1	41	0.5	2.4	-69.29	1007	0	6	5	5
LLAWD274	14/04/2015 16:13	60.8	33.5	0.8	4.9	-96.2	1007	0	1	10	10
LLAWD290	14/04/2015 16:16	58.1	37.2	1	3.7	-55.22	1007	1	1	5	5
LLAWD295	14/04/2015 16:28	57.5	37.1	0.8	4.6	-73.51	1006	4	9	15	15
LLAWD251	15/04/2015 12:10	47.5	29.8	4.3	18.4	-67.73	1006	0	0	15	15

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD251	15/04/2015 12:13	47.5	31.9	3.9	16.7	-61.67	1006	0	0	10	10
LLAWD261	15/04/2015 12:18	42.4	29.8	5.5	22.3	-61.14	1005	1	0	10	10
LLAWD264	15/04/2015 12:25	58.2	37.6	0.5	3.7	-79.56	1005	0	0	20	20
LLAWD263	15/04/2015 12:29	60.8	37.4	0.4	1.4	-52.57	1005	0	0	10	10
LLAWD281	15/04/2015 12:33	55.5	42	0.5	2	-76.33	1006	3	0	20	20
LLAWD293	15/04/2015 12:37	58.2	39.3	0.8	1.7	-72.37	1006	6	0	20	20
LLAWD292	15/04/2015 12:43	64.6	36.3	0.2	0	-25.14	1006	2	0	15	20
LLAWD292	15/04/2015 12:45	56.5	39.4	0.2	3.9	-33.9	1006	0	0	20	20
LLARD207	15/04/2015 12:52	58	37.5	0.4	4.1	-68.61	1006	10	0	10	10
LLAWD284	17/04/2015 09:42	60.8	38.5	0.3	0.4	-77.28	1010	0	0	15	15
LLAWD285	17/04/2015 09:50	59.1	39.5	0.2	1.2	-61.48	1009	0	0	30	30
LLAWD286	17/04/2015 10:04	56	36.5	0.8	6.7	-25.8	1009	0	0	1	1
LLAWD291	17/04/2015 10:13	48	36	1.6	14.4	-2.92	1007	0	0	10	10
LLAWD292	17/04/2015 10:24	56.7	39.7	0	3.6	-36.92	1007	0	0	15	15
LLAWD296	17/04/2015 10:34	58.4	39.2	0	2.4	-58.35	1008	2	0	20	20
LLAWD264	17/04/2015 10:49	58.8	40.9	0	0.3	-70.18	1007	3	0	20	20
LLAWA131	17/04/2015 11:44	2	13.6	3.7	80.7	-4.08	1010	0	0	5	5
LLAWA030	17/04/2015 11:48	19.2	21.9	0.1	58.8	-4.2	1009	0	0	5	5
LLAWA132	17/04/2015 11:50	4.2	16.1	0.5	79.2	-4.36	1009	0	0	5	5
LLARA010	17/04/2015 11:53	10.4	18.3	0.1	71.2	-1.76	1008	0	0	5	5
LLAWA011	17/04/2015 11:55	13.1	18.9	0	68	-0.82	1008	0	0	5	5
LLARA012	17/04/2015 11:58	12	19.4	0.8	67.8	-1.01	1008	0	0	5	5
LLARA028	17/04/2015 12:00	33.1	24.7	0.2	42	-6.55	1008	0	0	5	5
LLAWC143	17/04/2015 12:04	41.3	32.5	0	26.2	-44.89	1007	4	0	10	10
LLAWC140	17/04/2015 12:07	30	29.3	0	40.7	-5.83	1007	0	0	5	5
LLAWC142	17/04/2015 12:10	23	14.9	10.1	52	-0.43	1007	1	0	0	0
LLAWC141	17/04/2015 12:13	21.4	24.2	3.8	50.6	-4.71	1007	0	0	5	5
LLAWC144	17/04/2015 12:16	31.9	24.4	5	38.7	-25.73	1008	0	0	5	5
LLAWC145	17/04/2015 12:18	37.6	29	0.3	33.1	-30.52	1008	0	0	30	30

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWC146	17/04/2015 12:20	0.1	2.4	20.5	77	-8.67	1008	0	0	0	0
LLAWC147	17/04/2015 12:23	35.9	32.9	0.2	31	-20.75	1008	0	0	10	10
LLAWC148	17/04/2015 12:25	0	4.8	19.9	75.3	-2.73	1008	0	0	0	0
LLAWB116	17/04/2015 12:34	33.9	20.7	0.3	45.1	-3.16	1007	0	0	10	10
LLAWB120	17/04/2015 12:36	35.5	24.7	0	39.8	-1.94	1006	0	0	10	10
LLAWB119	17/04/2015 12:38	35.9	27.7	0.1	36.3	-3.1	1007	0	0	5	5
LLAWB118	17/04/2015 12:40	22.5	20.5	7.1	49.9	-2.67	1007	0	0	5	5
LLAWB093	17/04/2015 12:42	53.9	38	1.5	6.6	-82.35	1007	1	0	5	5
LLAWB117	17/04/2015 12:45	28.4	27.2	0	44.4	-0.98	1007	0	0	5	5
LLAWB095	17/04/2015 12:49	21.2	28	0	50.8	-5.04	1007	0	0	0	0
LLAWB096	17/04/2015 12:51	49.9	35.8	2.7	11.6	-1.61	1007	0	0	0	0
LLAWB111	17/04/2015 12:52	48	34.8	0	17.2	-1.44	1008	0	0	100	100
LLAWB097	17/04/2015 12:54	43	32.5	0.7	23.8	-2.93	1007	0	0	0	0
LLAWB112	17/04/2015 12:56	62.6	38.8	0	0	-1.21	1007	0	0	10	10
LLAWB113	17/04/2015 13:01	36.6	31.3	0.2	31.9	-1.13	1007	0	0	10	10
LLAWB114	17/04/2015 13:03	44	34.2	1.1	20.7	-2.32	1007	5	0	5	5
LLAWB115	17/04/2015 13:04	39.9	27.5	2	30.6	-8.86	1006	0	0	5	5
LLAWB079	17/04/2015 13:09	62.9	33.1	0.2	3.8	-83.96	1007	0	0	5	5
LLAWB081	17/04/2015 13:12	53.7	22.2	4.6	19.5	-80.7	1007	0	0	5	5
LLAWB082	17/04/2015 13:14	67.7	31.6	0.2	0.5	-69.58	1007	0	0	5	10
LLAWB082	17/04/2015 13:15	64.4	34.4	0.1	1.1	-75.4	1007	0	0	10	10
LLAWB083	17/04/2015 13:18	59.1	30.3	0	10.6	-80.84	1007	0	0	5	5
LLARB072	17/04/2015 13:20	44.9	31.5	0	23.6	-26.98	1007	0	0	20	20
LLAWC249	17/04/2015 14:24	54	38.6	0	7.4	-61.25	1011	0	0	30	30
LLAWC132	17/04/2015 14:26	57	37.2	0	5.8	-34.86	1011	0	0	10	10
LLAWC250	17/04/2015 14:30	44.9	31.4	0	23.7	-16.49	1011	0	0	10	10
LLAWC251	17/04/2015 14:31	56.8	49.2	0	0	-16.45	1010	0	0	10	10
LLAWC133	17/04/2015 14:33	42.7	29.8	3.5	24	-19.39	1011	0	0	10	10
LLAWC152	17/04/2015 14:35	0.5	4.9	19.4	75.2	-3.5	1011	0	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWC134	17/04/2015 14:37	58.5	35.3	1.2	5	-0.1	1011	0	0	5	5
LLAWC154	17/04/2015 14:39	36	27.1	0.1	36.8	-5.29	1011	0	0	10	10
LLAWC137	17/04/2015 14:42	40.6	32.1	2.1	25.2	-1.77	1010	0	0	5	5
LLAWC135	17/04/2015 14:53	38.3	31	0	30.7	-34.41	1010	0	0	10	10
LLAWA204	20/04/2015 09:07	6.5	17.3	0.3	75.9	-24.05	1021	0	0	20	20
LLAWA203	20/04/2015 09:09	12.3	16.4	0.3	71	-27.83	1021	0	0	20	20
LLAWA026	20/04/2015 09:13	2.7	9.6	8.8	78.9	-0.98	1020	0	0	0	0
LLARA025	20/04/2015 09:17	0.7	3.2	17.3	78.8	-0.1	1020	4	0	0	0
LLAWA027	20/04/2015 09:20	1.8	10.5	4.2	83.5	-0.79	1020	0	0	0	0
LLAWA033	20/04/2015 09:22	0.8	9.8	6.4	83	-0.68	1020	2	0	0	0
LLAWA001	20/04/2015 09:25	4.1	11.3	3.6	81	-0.8	1020	0	0	0	0
LLAWA032	20/04/2015 09:27	0	2.6	19.7	77.7	-0.22	1020	0	0	0	0
LLAWA01A	20/04/2015 09:29	0	3	16.5	80.5	-0.15	1019	0	0	0	0
LLAWA002	20/04/2015 09:32	11.8	13.3	0.1	74.8	-0.03	1019	1	0	0	0
LLAWA003	20/04/2015 09:34	0.6	10.2	0.9	88.3	-0.19	1019	0	0	0	0
LLAWA004	20/04/2015 09:44	1.1	5	14.7	79.2	-0.42	1019	0	0	0	0
LLAWA005	20/04/2015 09:48	0.5	4.8	14.5	80.2	-0.07	1019	0	0	0	0
LLAWA006	20/04/2015 09:51	0.4	3.9	15.9	79.8	-0.04	1018	0	0	0	0
LLAWA130	20/04/2015 09:55	9.1	11	7.3	72.6	-1.61	1017	0	0	5	5
LLARA014	20/04/2015 10:20	9.3	15.2	2.3	73.2	0.03	1017	0	0	5	5
LLAWA016	20/04/2015 10:24	11.7	14.5	5.1	68.7	-0.77	1017	0	0	10	10
LLAWA031	20/04/2015 10:29	1	5.9	13.2	79.9	-0.21	1016	0	0	0	0
LLAWA029	20/04/2015 10:31	27.2	19.9	0.2	52.7	-6.39	1016	0	0	5	5
LLAWC136	20/04/2015 10:37	39.9	33.2	0.2	26.7	-23.01	1018	0	0	5	5
LLARA015	20/04/2015 14:22	27.2	21	0.1	51.7	-3.81	1018	0	0	5	5
LLAWC144	21/04/2015 09:18	9.6	11.1	14.2	65.1	-12.76	1030	0	0	5	5
LLARD188	22/04/2015 09:44	66.1	34.9	0	0	-1.7	1022	0	4	10	10
LLAWD252	22/04/2015 09:46	52.8	38.4	2.8	6	-0.07	1021	0	0	1	1
LLAWD245	22/04/2015 09:48	45.1	31.7	3.5	19.7	-12.9	1021	1	0	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD255	22/04/2015 09:53	57.7	22.4	0.1	19.8	-64.7	1020	0	0	10	10
LLAWD251	22/04/2015 09:56	63.3	37.8	0	0	-66.74	1020	0	0	10	15
LLAWD251	22/04/2015 09:58	61.9	39.2	0	0	-71.72	1020	0	0	15	20
LLAWD251	22/04/2015 09:59	62.2	39	0	0	-74.63	1020	0	0	20	20
LLAWD250	22/04/2015 10:01	64.2	36.1	0.4	0	-75.63	1020	0	0	10	10
LLAWD239	22/04/2015 10:06	17.3	10.2	15.1	57.4	-68.42	1020	0	0	10	5
LLAWD239	22/04/2015 10:07	15	9.6	15.9	59.5	-33.71	1020	0	0	5	1
LLAWD239	22/04/2015 10:10	10.9	6.9	17.3	64.9	-0.83	1020	0	0	1	1
LLAWD240	22/04/2015 10:14	49.6	31.8	3.8	14.8	-81.86	1020	0	0	1	1
LLAWD256	22/04/2015 10:16	48.3	29.4	3.7	18.6	-7.93	1020	0	0	10	10
LLAWD262	22/04/2015 10:20	48.9	32.2	3.4	15.5	-11.57	1019	0	0	5	5
LLAWD241	22/04/2015 10:23	35.3	31	6.2	27.5	2.2	1019	0	0	5	5
LLAWD264	22/04/2015 10:27	63.7	35.3	0.3	0.7	-72.34	1019	0	0	20	20
LLAWD265	22/04/2015 10:28	42.6	29.9	0.1	27.4	-53.24	1019	0	0	5	5
LLAWD266	22/04/2015 10:32	58.6	38.3	0.1	3	-80.74	1018	0	0	10	10
LLAWD263	22/04/2015 10:35	62.6	38.4	0	0	-46.77	1018	0	0	10	10
LLAWD261	22/04/2015 10:36	66.2	34.7	0.4	0	-80.14	1018	0	0	10	10
LLAWD260	22/04/2015 10:40	59.2	45.8	0.3	0	-79.06	1018	9	0	5	5
LLAWD270	22/04/2015 10:43	61.1	39.8	0	0	-37.84	1018	1	0	10	10
LLAWD259	22/04/2015 10:46	59.2	41.3	0.1	0	-63.86	1018	0	0	20	25
LLAWD259	22/04/2015 10:48	59.3	41	0	0	-67.22	1018	1	0	25	25
LLAWD244	22/04/2015 10:51	48.5	31.6	3.8	16.1	-80.84	1019	17	0	10	10
LLAWD254	22/04/2015 10:57	23.8	14.1	12.9	49.2	-7	1019	0	0	1	1
LLAWD258	22/04/2015 11:00	60	40.1	0	0	-46.9	1019	0	0	10	15
LLAWD258	22/04/2015 11:02	61.2	37.3	0.1	1.4	-70.51	1019	0	0	15	15
LLAWD253	22/04/2015 11:05	45.9	31	4	19.1	-13.38	1019	0	0	20	20
LLARD187	22/04/2015 11:08	53.3	36.5	1.9	8.3	-79.33	1019	0	0	5	5
LLAWD284	22/04/2015 11:10	60.1	35.7	0.5	3.7	-76.16	1019	0	0	15	15
LLAWD285	22/04/2015 11:13	62	40.4	0.4	0	-67.71	1019	0	0	30	30

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD286	22/04/2015 11:18	6.1	4.4	18.5	71	-7.64	1019	0	0	1	5
LLAWD286	22/04/2015 11:24	40.1	28	6.3	25.6	-15.42	1019	0	0	5	1
LLAWD286	22/04/2015 11:29	57.1	39.1	0.7	3.1	-5.82	1019	0	0	1	1
LLAWD287	22/04/2015 11:32	28.3	28.3	0	43.4	-6.67	1018	0	0	10	10
LLAWD278	22/04/2015 11:38	47	36.1	0	16.9	-25.35	1018	3	0	10	10
LLAWD279	22/04/2015 11:40	59.7	39.9	0.1	0.3	-0.94	1018	2	0	20	25
LLAWD279	22/04/2015 11:41	57.4	40.4	0.4	1.8	-12.83	1018	4	0	25	25
LLAWD280	22/04/2015 11:44	60.7	39.7	0	0	-4.77	1018	0	0	5	5
LLAL00C3	22/04/2015 11:47	59.7	38.3	0.3	1.7	-10.71	1016	1	0	15	15
LLAWD289	22/04/2015 11:50	59.9	40.1	0	0	-11.11	1016	2	0	30	30
LLAWD283	22/04/2015 11:52	60.8	39.8	0	0	-29.79	1016	4	0	10	10
LLAWD281	22/04/2015 11:54	59.4	40.8	0	0	-74.82	1017	14	0	20	20
LLAWD293	22/04/2015 11:58	57.7	45.6	0	0	-71.08	1016	14	0	20	20
LLAWD277	22/04/2015 12:07	51.3	34.6	1.1	13	-38.51	1017	2	0	5	5
LLAWD291	22/04/2015 12:10	54.1	25.1	0.3	20.5	-1.48	1016	0	0	10	10
LLAWD292	22/04/2015 12:14	58.8	41.5	0	0	-41.68	1016	0	0	15	20
LLAWD292	22/04/2015 12:15	58.7	41.7	0	0	-47.12	1016	0	0	20	20
LLAWD230	22/04/2015 12:29	32.5	25.2	4.1	38.2	-0.43	1015	3	0	20	20
LLAWD213	22/04/2015 12:32	61.2	40.4	0	0	-70.22	1015	16	3	5	5
LLARD205	22/04/2015 12:34	61.1	38.4	0.3	0.2	-65.81	1015	19	1	5	5
LLAWD290	22/04/2015 12:41	58	39.3	0.5	2.2	-64.29	1016	1	0	5	5
LLAWD295	22/04/2015 12:44	58.3	39.5	0.2	2	-71.11	1015	2	0	15	15
LLAWD294	22/04/2015 12:47	58.7	38.3	0	3	-46.63	1014	2	0	20	25
LLAWD294	22/04/2015 12:49	55.1	40.3	0	4.6	-52.07	1014	0	0	25	25
LLAWD288	22/04/2015 12:50	62	38.9	0	0	-2.86	1014	6	6	10	15
LLAWD288	22/04/2015 12:53	59.4	48.9	0	0	-6.25	1014	0	8	15	15
LLAWD267	22/04/2015 12:55	64.5	36	0.1	0	-78.39	1014	0	1	10	10
LLAWD231	22/04/2015 14:37	50.7	45.6	0	3.7	-16.65	1014	8	2	25	25
LLAWD222	22/04/2015 14:39	62.7	28.9	0.9	7.5	-81.49	1014	1	0	20	20

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD232	22/04/2015 14:42	16.2	18.2	7.5	58.1	0.12	1014	6	0	1	1
LLAWD229	22/04/2015 14:45	46.5	34.4	0	19.1	-17.9	1014	11	2	20	20
LLAWD238	22/04/2015 14:47	50.8	37.9	0.6	10.7	-5.41	1014	18	0	15	15
LLAWD296	22/04/2015 14:52	57.6	40.4	0	2	-65.26	1014	29	0	20	20
LLAL003A	22/04/2015 14:54	47.3	34	2.7	16	-47.48	1013	0	0	10	10
LLAWD236	22/04/2015 14:56	50.6	35.5	0	13.9	-5.07	1013	0	0	20	20
LLAWD268	22/04/2015 14:58	65.3	36.9	0	0	-76.67	1013	4	0	20	20
LLAWD235	22/04/2015 15:01	57.6	43.2	0	0	0.85	1013	30	0	25	30
LLAWD235	22/04/2015 15:03	57.8	43.2	0	0	-0.8	1013	15	0	30	30
LLARD215	22/04/2015 15:06	58.6	40.5	0	0.9	7.62	1013	8	0	1	5
LLARD215	22/04/2015 15:10	59.5	44.3	0	0	-7.32	1013	9	0	5	5
LLAWD225	22/04/2015 15:16	62	38.3	0	0	-75.94	1013	0	0	10	10
LLAWD227	22/04/2015 15:18	53.5	33.7	0	12.8	-76.92	1013	0	0	10	10
LLAWD210	22/04/2015 15:21	51	36.2	0.2	12.6	-32.62	1013	1	0	25	25
LLAWD211	22/04/2015 15:24	54	35.8	0.3	9.9	-48.43	1013	2	0	25	25
LLAWD234	22/04/2015 15:27	54.7	35.2	0	10.1	-30.1	1013	1	0	25	30
LLAWD234	22/04/2015 15:29	52.7	37.6	0	9.7	-35.56	1013	0	0	30	30
LLARD220	22/04/2015 15:31	59.2	41.7	0	0	-0.76	1013	23	0	5	5
LLAWD237	22/04/2015 15:34	54.7	43.5	0	1.8	-0.61	1013	1	0	5	5
LLAWD219	22/04/2015 15:44	55.1	26.1	0	18.8	-70.31	1013	0	0	20	20
LLARD207	22/04/2015 15:52	60	38.5	0	1.5	-115.49	1012	9	0	10	10
LLAL0003	22/04/2015 16:09	24.8	15.3	11.9	48	0.82	1013	0	0	0	5
LLAL0003	22/04/2015 16:12	24.5	16.9	11.6	47	-0.08	1013	0	0	5	5
LLAWD284	24/04/2015 09:43	59.1	38	0.2	2.7	-84.03	999	0	0	15	15
LLAWD285	24/04/2015 09:57	58.7	38.2	0.6	2.5	-73.53	1000	0	0	30	30
LLAWD286	24/04/2015 10:08	51.1	22.6	1.1	25.2	-4.54	999	0	0	1	1
LLAWD291	24/04/2015 10:20	60.1	39.1	0	0.8	-0.66	998	0	0	10	10
LLAWD292	24/04/2015 10:32	59.1	40.1	0.3	0.5	-52.23	999	0	0	20	20
LLAWD296	24/04/2015 10:44	57.9	39	0.1	3	-69.41	997	5	0	20	20

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD264	24/04/2015 10:57	61.1	38	0.2	0.7	-77.29	998	0	0	20	20
LLARA025	27/04/2015 08:58	5.8	6.9	12.5	74.8	-0.07	1001	18	0	0	0
LLAWA002	27/04/2015 10:04	17.7	15.9	0.1	66.3	0	1000	0	0	0	0
LLAWA01A	27/04/2015 10:09	0.1	4.7	14.6	80.6	-0.03	1000	0	0	0	0
LLAWA032	27/04/2015 10:12	0	0.7	19.8	79.5	-0.06	1000	0	0	0	0
LLAWA001	27/04/2015 10:16	7	12.9	2.8	77.3	-0.51	1000	0	0	0	0
LLAWA203	27/04/2015 10:20	14.2	17.2	0.3	68.3	-27.71	1000	0	0	10	10
LLAWA204	27/04/2015 10:24	7.4	17.6	0.2	74.8	-24.13	1001	0	0	20	20
LLAWA005	27/04/2015 10:28	0.3	5.6	14	80.1	-0.06	1000	0	0	0	0
LLAWA006	27/04/2015 10:33	0.5	4.1	15.9	79.5	0	1000	0	0	0	0
LLAWA130	27/04/2015 10:37	11.7	12.9	6.5	68.9	-1.58	1000	0	0	5	5
LLAWA131	27/04/2015 10:42	2.5	14.5	3.6	79.4	-3.06	1000	0	0	5	5
LLAWA030	27/04/2015 10:47	21.3	22.9	0.2	55.6	-3.93	999	0	8	5	5
LLAWA132	27/04/2015 10:51	4.7	17.7	0.8	76.8	-2.35	999	0	1	5	5
LLARA010	27/04/2015 10:55	12.3	20.7	0.1	66.9	-1.22	999	0	2	5	5
LLAWA011	27/04/2015 11:00	15.2	21.4	0	63.4	-0.7	999	0	19	5	5
LLARA012	27/04/2015 11:10	14.4	21.3	0.5	63.8	-1.3	1000	0	0	5	5
LLARA028	27/04/2015 11:14	37.8	27.8	0.5	33.9	-3.9	1000	0	3	5	5
LLARA015	27/04/2015 11:20	30.1	25.2	0.1	44.6	-2.81	1000	0	79	5	5
LLAWA016	27/04/2015 11:24	14.9	19	1.7	64.4	-1.19	1000	0	17	10	10
LLARA014	27/04/2015 11:28	11.6	17.1	1.1	70.2	-0.24	1000	1	0	5	5
LLAWA031	27/04/2015 11:34	3.1	11.7	7.7	77.5	-0.13	999	0	0	0	0
LLAWA029	27/04/2015 11:37	31.2	26.8	0	42	-6.77	999	0	15	5	5
LLAWB117	27/04/2015 14:03	37.1	33	0	29.9	-0.08	996	0	0	5	5
LLAWB093	27/04/2015 14:20	54.7	37.9	1.6	5.8	-76.51	996	2	0	5	5
LLAWB118	27/04/2015 14:22	24.2	22.5	6.6	46.7	-2.48	995	0	0	5	5
LLAWB119	27/04/2015 14:28	35.1	33.1	0	31.8	-2.48	996	0	46	5	5
LLAWB120	27/04/2015 14:38	29.8	23.2	0	47	-0.91	996	0	112	10	10
LLAWB116	27/04/2015 14:42	35.9	29.2	0.2	34.7	-1.82	997	0	21	10	10

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWB115	27/04/2015 14:47	39.4	30.4	2.4	27.8	-8.47	996	0	44	5	5
LLAWB114	27/04/2015 14:51	47.6	36.9	0.8	14.7	-0.93	996	0	110	5	5
LLAWB113	27/04/2015 14:55	45.4	37.6	0	17	-0.21	996	0	184	10	10
LLAWB112	27/04/2015 14:58	55	41.2	0	3.8	-0.64	996	3	146	10	10
LLAWB097	27/04/2015 15:02	41.7	35	0.9	22.4	-3	997	1	22	0	0
LLAWB111	27/04/2015 15:05	48.4	37.5	0	14.1	-1.15	996	3	96	100	100
LLAWB096	27/04/2015 15:08	51.4	38.9	2.1	7.6	-0.98	997	2	1	0	0
LLAWB095	27/04/2015 15:11	24.6	27.8	0	47.6	-1.14	997	3	34	0	0
LLAWB079	27/04/2015 15:25	14.9	7.8	16	61.3	-83.74	996	0	3	5	5
LLAWB081	27/04/2015 15:29	56.8	25.9	3.4	13.9	-79.22	996	0	12	5	5
LLAWB082	27/04/2015 15:32	64.7	34.9	0.2	0.2	-70.9	997	0	14	10	10
LLAWB083	27/04/2015 15:36	57.5	34.7	0	7.8	-80.12	997	0	26	5	5
LLARB072	27/04/2015 15:39	45.3	34.2	0	20.5	-26.26	997	0	21	20	20
LLAWD240	29/04/2015 08:56	36.9	22.1	15.8	25.2	-82.29	999	0	133	5	5
LLAWD256	29/04/2015 09:02	51.1	33.4	2.1	13.4	-4.64	998	1	162	5	10
LLAWD256	29/04/2015 09:03	44	29.5	3.4	23.1	-11.49	998	1	130	10	10
LLAWD262	29/04/2015 09:08	51.6	34.9	2.9	10.6	-13.7	998	0	226	5	5
LLAWD264	29/04/2015 09:11	60.5	39.8	0.1	0	-75.33	998	0	210	20	20
LLAWD265	29/04/2015 09:14	52	35.8	0.3	11.9	-72.69	998	0	111	5	5
LLAWD266	29/04/2015 09:16	54.2	36.2	1.8	7.8	-82.64	997	0	329	10	10
LLAWD263	29/04/2015 09:19	60.1	39.6	0.4	0	-63.2	997	1	334	10	10
LLAWD261	29/04/2015 09:21	62.8	41.1	0	0	-81.11	997	6	433	10	10
LLAWD258	29/04/2015 09:23	61.1	39.7	0.1	0	-69.91	998	3	395	15	15
LLAWD244	29/04/2015 09:26	52.2	33.4	3.2	11.2	-83.14	998	10	21	10	10
LLAWD245	29/04/2015 09:28	59.5	38.7	0.6	1.2	-19.41	999	6	93	5	5
LLAWD255	29/04/2015 09:30	63	40.1	0.1	0	2.34	999	4	279	0	5
LLAWD255	29/04/2015 09:31	62.4	39.4	0.2	0	-11.59	999	0	254	5	10
LLAWD255	29/04/2015 09:33	63	39.4	0.2	0	-19.41	999	4	168	10	15
LLAWD255	29/04/2015 09:34	62.4	40	0.2	0	-26.21	999	10	147	15	15

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD239	29/04/2015 09:47	15.3	99.9	1.3	0	30.66	999	1	46	0	5
LLAWD239	29/04/2015 09:50	64.8	37.1	0.1	0	-26.73	999	1	200	5	5
LLAWD250	29/04/2015 09:52	64.4	38.8	0.3	0	-59.94	999	0	125	10	10
LLAWD251	29/04/2015 09:55	63.3	39.9	0	0	19.02	1000	0	318	5	10
LLAWD251	29/04/2015 09:58	64.2	41	0	0	-6.68	1000	0	220	10	15
LLAWD251	29/04/2015 10:00	63.5	39.7	0	0	-19.64	1000	0	198	15	20
LLAWD251	29/04/2015 10:02	63.4	47.1	0	0	-28.64	1000	8	187	20	20
LLARD188	29/04/2015 10:05	2.4	2	12.7	82.9	-74.19	1000	0	20	10	5
LLARD188	29/04/2015 10:09	1.7	1.5	10	86.8	-14.64	1000	0	10	5	5
LLAWD252	29/04/2015 10:20	61.7	39.5	0.2	0	-0.58	999	0	96	1	5
LLAWD252	29/04/2015 10:23	41.5	31.2	3.1	24.2	-3.14	999	3	67	5	1
LLAWD252	29/04/2015 10:26	52.2	33.7	2.3	11.8	-0.62	999	0	65	1	1
LLAWD253	29/04/2015 10:28	63.8	38.6	0	0	6.8	999	5	60	0	5
LLAWD253	29/04/2015 10:29	60.2	36.8	0.5	2.5	-10.19	999	0	52	5	10
LLAWD253	29/04/2015 10:31	52.3	32.9	3.1	11.7	-16.2	999	2	41	10	10
LLARD187	29/04/2015 10:34	58.3	44.1	0.3	0	-82.98	1000	0	39	5	5
LLAWD285	29/04/2015 10:41	60.6	40.3	0.4	0	-72.04	1000	0	39	30	30
LLAWD286	29/04/2015 10:43	60.8	41.3	0.1	0	-7.18	1000	2	72	1	5
LLAWD286	29/04/2015 10:44	60.4	41.1	0.1	0	-13.8	1000	3	73	5	5
LLAWD287	29/04/2015 10:48	61.5	40	0	0	0.31	999	2	40	5	10
LLAWD287	29/04/2015 10:50	61.4	40.3	0	0	-4.68	999	5	36	10	15
LLAWD287	29/04/2015 10:53	60.4	39.2	0	0.4	-10.68	999	5	33	15	15
LLAWD278	29/04/2015 10:56	62.8	42.3	0	0	1.9	999	3	81	0	5
LLAWD278	29/04/2015 11:00	59.9	39.1	0	1	-5.16	999	14	65	5	10
LLAWD278	29/04/2015 11:02	61.9	43.2	0	0	-11.77	999	17	65	10	10
LLAWD279	29/04/2015 11:06	55.4	38.6	1.6	4.4	-15.06	999	8	122	25	25
LLAWD281	29/04/2015 11:08	61.5	41.1	0	0	-0.53	998	6	45	5	10
LLAWD281	29/04/2015 11:10	61.7	39.1	0	0	-8.85	998	2	42	10	15
LLAWD281	29/04/2015 11:11	60.8	40.9	0	0	-19.6	998	7	39	15	15

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD248	29/04/2015 11:16	34	25.1	8	32.9	10.95	998	5	31	0	5
LLAWD248	29/04/2015 11:17	47.8	34.7	3.4	14.1	-6.23	998	5	36	5	10
LLAWD248	29/04/2015 11:19	51.9	35.5	2.7	9.9	-8.3	998	6	36	10	10
LLAWD254	29/04/2015 11:21	27.1	17.9	11.5	43.5	-11.56	998	0	37	1	0
LLAWD254	29/04/2015 11:22	27.6	18.2	11.3	42.9	-3.95	998	5	39	0	0
LLAWD259	29/04/2015 11:25	59.3	40.2	0.6	0	-57.73	997	10	139	25	25
LLAWD260	29/04/2015 11:29	29.5	21.6	9.8	39.1	-89.22	997	6	75	5	5
LLAWD270	29/04/2015 11:33	62.4	40.1	0	0	-40.91	996	9	138	10	10
LLAL00C3	29/04/2015 11:36	58.6	38.5	0.7	2.2	-10.52	997	8	33	15	15
LLAWD283	29/04/2015 11:39	62.3	42.8	0	0	-41.81	996	12	137	10	10
LLAWD293	29/04/2015 11:44	60.7	42.9	0.1	0	-71.19	997	14	79	20	20
LLAWD288	29/04/2015 11:48	61.5	41.8	0	0	-6.64	996	13	100	15	15
LLAWD294	29/04/2015 11:51	61.4	56	0	0	-60.66	996	5	64	25	25
LLAWD289	29/04/2015 11:53	64.1	41.3	0	0	-10.5	995	10	106	30	30
LLAWD267	29/04/2015 11:56	58.1	36.7	1.3	3.9	-88.93	995	6	73	10	10
LLAWD225	29/04/2015 11:58	60.9	40.3	0.4	0	-84.75	995	0	55	10	10
LLAWD227	29/04/2015 12:00	58	36.2	0	5.8	-56.1	996	7	27	10	10
LLARD215	29/04/2015 13:31	0.1	0	20.9	78.7	-56.07	995	0	8	5	1
LLARD215	29/04/2015 13:34	50.8	35.8	3.3	10.1	-7.01	995	15	91	1	1
LLAWD235	29/04/2015 13:37	61	40.9	0.3	0	-2.22	996	22	68	5	5
LLAWD268	29/04/2015 13:42	62.7	40.7	0	0	-89.57	995	14	114	20	20
LLAWD236	29/04/2015 13:46	46.5	35.2	0.1	18.2	-4.99	995	0	60	20	20
LLAL003A	29/04/2015 13:48	50.1	35.4	2.6	11.9	-53.29	995	8	10	10	10
LLAWD296	29/04/2015 13:51	38	28.1	6.5	27.4	-79.08	995	9	82	20	15
LLAWD296	29/04/2015 13:53	40.4	29.7	5.7	24.2	-71.51	995	9	83	15	10
LLAWD296	29/04/2015 13:59	44.3	22.7	3.7	29.3	-52.43	995	0	81	10	10
LLAWD238	29/04/2015 14:02	42.2	30.5	0.3	27	-28.6	995	12	50	15	15
LLARD220	29/04/2015 14:05	62.3	45.1	0	0	-2.86	995	38	144	5	5
LLAWD237	29/04/2015 14:07	23.8	23.3	4.9	48	-2	995	12	16	5	5

Well ID	Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Atm Press (mbar)	CO (ppm)	H2S (ppm)	Original Valve (%)	Depart Valve (%)
LLAWD232	29/04/2015 14:10	6.4	7.4	15.8	70.4	-2.78	995	7	7	5	5
LLAWD229	29/04/2015 14:13	40.2	34.4	0	25.4	-30.43	994	16	55	20	20
LLAWD213	29/04/2015 14:15	58.3	42	0.4	0	-69.2	995	29	97	5	5
LLARD205	29/04/2015 14:19	57.8	41.7	0.3	0.2	-69.38	995	49	80	5	5
LLAWD274	29/04/2015 14:21	62.1	40.1	0	0	-69.33	995	9	104	10	10
LLAWD290	29/04/2015 14:27	59.9	40.8	0.3	0	-79.95	995	13	142	5	5
LLAWD295	29/04/2015 14:29	55.9	38.9	0.3	4.9	-75.44	994	15	82	15	15
LLAWD292	29/04/2015 14:32	59.9	40.9	0.2	0	-62.96	995	11	63	20	20
LLAWD277	29/04/2015 14:35	55.2	37.4	1.2	6.2	-23.53	995	6	53	5	5
LLAWD291	29/04/2015 14:43	55.2	38	0.7	6.1	-1.96	994	10	40	10	10
LLAWD230	29/04/2015 14:49	16.9	17.4	10.8	54.9	-1.34	994	2	9	20	20
LLAWD231	29/04/2015 14:54	55	37.4	0.6	7	-29.3	994	17	38	20	20
LLAWD222	29/04/2015 14:57	55.2	47.2	3.2	0	-96.17	994	9	51	20	20
LLARD207	29/04/2015 15:02	59.4	42.7	0	0	-72.47	995	17	23	10	10
LLAWD219	29/04/2015 15:07	58.6	39.4	0	2	-64.06	995	12	20	20	20
LLAWD211	29/04/2015 15:10	56.1	46.6	0.2	0	-36.58	995	2	12	25	25
LLAWD210	29/04/2015 15:13	54.9	39.9	1.7	3.5	-5.84	995	8	6	25	25

APPENDIX 4

Gas Compound Inputs

LLANDDULAS GAS UTILISATION COMPOUND DATA - February to April 2015

Date & Time	CH4 (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Vacuum (mbar)	Flow (m3/h)	Engine output (kW)
03/02/2015 09:34	43.3	32.6	1.7	22.4	-91.32	1545	2575
10/02/2015 12:48	42.9	31.6	1.5	24	-98.2	1452	2400
12/02/2015 15:20	46.5	31.7	1.5	20.3	-86.9	1530	2669
13/02/2015 11:18	46.4	33.5	1.5	18.6	-90.69	1557	2780
17/02/2015 09:23	39.9	30.2	2.3	27.6	-91.39	1545	2450
23/02/2015 10:18	47.3	31.3	1.5	19.9	-88.8	1457	2542
24/02/2015 10:13	42.9	33.6	2.1	21.4	-91.09	1520	2478
25/02/2015 15:39	43.2	32.2	1.4	23.2	-88.81	1510	2465
03/03/2015 10:18	44.2	30.4	2	23.4	-60.73	1450	1848
06/03/2015 15:00	42.7	35.1	1	21.2	-85.38	1450	2449
09/03/2015 15:44	44.2	33	0.9	21.9	-81.4	1410	1700
10/03/2015 15:33	43	32.9	1.2	22.9	-93.1	1527	2494
11/03/2015 15:26	42.8	32.5	1.1	23.6	-95.56	1537	2525
13/03/2015 11:18	45.4	31.1	1.4	22.1	-85.59	1510	1991
17/03/2015 15:04	44.4	34	1	20.6	-84.2	1450	2542
18/03/2015 10:04	42.2	34	1.4	22.4	-92.84	1477	2447
19/03/2015 09:10	45.5	28.7	1.4	24.4	90.21	1427	2389
24/03/2015 09:58	45.2	33.2	1.4	20.2	-92.82	1479	2515
25/03/2015 14:50	43	33.6	1.2	22.2	-89.35	1468	2442
26/03/2015 13:24	41	31.6	3.7	23.7	-90.22	1498	2473
27/03/2015 08:56	40.9	31.8	1.6	25.7	-85.96	1482	2425
01/04/2015 15:06	41.2	32.7	1.5	24.6	-48.9	1444	2257
02/04/2015 11:14	41.6	31.8	1.6	25	-91.25	1458	2305
09/04/2015 16:19	42.3	32.6	1.5	23.6	-91.18	1598	2529
13/04/2015 10:20	38.6	31.7	2	27.7	-89.94	1522	2293
14/04/2015 09:10	39.7	31.1	2.1	27.1	-87.67	1501	2307
15/04/2015 13:56	41.9	33	1.4	23.7	-86.3	1462	2314
17/04/2015 15:03	41.1	31.4	1.7	25.8	-85.56	1442	1847
20/04/2015 09:04	40.7	30.5	1.9	26.9	-84.41	1441	1899
22/04/2015 16:28	43.3	29.9	1.5	25.3	-68.77	1491	2326
24/04/2015 11:27	42.8	32.6	1.7	22.9	-90.22	1523	2423
27/04/2015 08:55	41.9	29.8	2.1	26.2	-90.94	1514	2321
28/04/2015 08:48	40.4	32.2	2.1	25.3	-95.86	1538	2351
29/04/2015 08:38	41.8	32.5	1.9	23.8	-85.76	1406	2199

APPENDIX 5

Emissions/Ambient Air Monitoring

FID SURVEY

LLANDDULAS, ABERGELE, LL22 8HP

Date	Time On	Time Off
05/02/2015	14:50	15:55

Personnel	Equipment Type	Equipment Serial No.	Equipment Last Calibration
L Terrace	GasTec FID	8301	28/11/2014

Equipment Calibration Due	Weather	Temperature °C	Wind Direction & Speed
28/05/2015	Sunny	5	NW - SE 5mph

Location reading taken	Reading (ppm)	Comment
Landfill Perimeter (North, East & South)		
Borehole 41	0	
Borehole 40	0	
Borehole 42	0	
Between B42 and N Gates	0	
Northern Perimeter Gate	0	
Borehole 1	0	
Borehole 3	0	
Borehole 5	0	
Borehole 7	0	
Borehole 09	0	
Borehole 11	0	
Borehole 13	0	
Borehole 15	0	
Borehole 17	0	
Borehole 19	0	
Borehole 21	0	
Borehole 23	0	
Borehole 25	0	
Borehole 27	0	
Borehole 29	0	
Borehole 31	0	
East Perimeter Gates	0	
Borehole 33	0	
Borehole 34	0	
Borehole 36	0	
Groundwater Borehole 6R	0	
Borehole 39	0	
Borehole 48	0	
Groundwater Borehole 36	0	
Borehole 50	0	
Borehole 52	0	

Location reading taken	Reading (ppm)	Comment
Borehole 54	0	
Borehole 56	0	
Borehole 57	0	
Groundwater Borehole 35	0	
Groundwater Borehole 34	0	
Compost Pad		
N end of compost pad	0	
Compost pad entrance	0	
Eastern flank of compost pad	0	
SE flank of compost pad	0	
SE corner of compost pad	4	
Southern perimeter of pad	3	
SW corner of compost pad	0	
W flank of compost pad	0	
NW corner of compost pad	0	
Landfill Perimeter (West)		
Above redundant leachate tank	0	Old tank number 1
Borehole 124	0	
Borehole 122	0	
Groundwater Borehole 33	0	
Borehole 121	0	
Borehole 120	0	
Borehole 118	0	
Borehole 116	0	
Borehole 114	0	
Borehole 112	0	
Groundwater Borehole 1	0	
Borehole 110	0	
Borehole 108	0	
Borehole 106	0	
Borehole 104	0	
Borehole 102	0	
Borehole 100	0	
Groundwater Borehole 32	0	Above gas utilisation compound
Track leading to perimeter fence	0	

FID SURVEY		
LLANDDULAS, ABERGELE, LL22 8HP		

Date	Time On	Time Off
05/03/2015	15:00	16:20

Personnel	Equipment Type	Equipment Serial No.	Equipment Last Calibration
L Terrace	GasTec FID	8301	28/11/2014

Equipment Calibration Due	Weather	Temperature °C	Wind Direction & Speed
28/05/2015	Overcast	8.4	W - E 12mph

Location reading taken	Reading (ppm)	Comment
Landfill Perimeter (North, East & South)		
Borehole 41	0	
Borehole 40	0	
Borehole 42	0	
Between B42 and N Gates	0	
Northern Perimeter Gate	0	
Borehole 1	0	
Borehole 3	0	
Borehole 5	0	
Borehole 7	0	
Borehole 09	0	
Borehole 11	0	
Borehole 13	0	
Borehole 15	0	
Borehole 17	0	
Borehole 19	0	
Borehole 21	0	
Borehole 23	0	
Borehole 25	0	
Borehole 27	0	
Borehole 29	0	
Borehole 31	0	
East Perimeter Gates	0	
Borehole 33	0	
Borehole 34	0	
Borehole 36	3	
Groundwater Borehole 6R	0	
Borehole 39	0	
Borehole 48	0	
Groundwater Borehole 36	0	
Borehole 50	0	
Borehole 52	0	

Location reading taken	Reading (ppm)	Comment
Borehole 54	4	
Borehole 56	0	
Borehole 57	0	
Groundwater Borehole 35	0	
Groundwater Borehole 34	0	
Compost Pad		
N end of compost pad	0	
Compost pad entrance	0	
Eastern flank of compost pad	0	
SE flank of compost pad	0	
SE corner of compost pad	0	
Southern perimeter of pad	3	
SW corner of compost pad	2	
W flank of compost pad	0	
NW corner of compost pad	0	
Landfill Perimeter (West)		
Above redundant leachate tank	0	Old tank number 1
Borehole 124	0	
Borehole 122	0	
Groundwater Borehole 33	0	
Borehole 121	0	
Borehole 120	0	
Borehole 118	0	
Borehole 116	0	
Borehole 114	0	
Borehole 112	0	
Groundwater Borehole 1	0	
Borehole 110	0	
Borehole 108	0	
Borehole 106	0	
Borehole 104	0	
Borehole 102	0	
Borehole 100	0	
Groundwater Borehole 32	0	Above gas utilisation compound
Track leading to perimeter fence	0	

FID SURVEY		
LLANDDULAS, ABERGELE, LL22 8HP		

Date	Time On	Time Off
15/04/2015	15:30	16:45

Personnel	Equipment Type	Equipment Serial No.	Equipment Last Calibration
L Terrace	GasTec FID	8301	28/11/2014

Equipment Calibration Due	Weather	Temperature °C	Wind Direction & Speed
28/05/2015	Overcast	6	SW - NE 6mph

Location reading taken	Reading (ppm)	Comment
Landfill Perimeter (North, East & South)		
Borehole 41	0	
Borehole 40	0	
Borehole 42	0	
Between B42 and N Gates	0	
Northern Perimeter Gate	0	
Borehole 1	0	
Borehole 3	0	
Borehole 5	0	
Borehole 7	0	
Borehole 09	0	
Borehole 11	0	
Borehole 13	0	
Borehole 15	0	
Borehole 17	0	
Borehole 19	0	
Borehole 21	0	
Borehole 23	0	
Borehole 25	0	
Borehole 27	0	
Borehole 29	0	
Borehole 31	0	
East Perimeter Gates	0	
Borehole 33	0	
Borehole 34	0	
Borehole 36	0	
Groundwater Borehole 6R	0	
Borehole 39	0	
Borehole 48	0	
Groundwater Borehole 36	0	
Borehole 50	0	
Borehole 52	0	

Location reading taken	Reading (ppm)	Comment
Borehole 54	0	
Borehole 56	0	
Borehole 57	2	
Groundwater Borehole 35	0	
Groundwater Borehole 34	0	
Compost Pad		
N end of compost pad	0	
Compost pad entrance	0	
Eastern flank of compost pad	3	
SE flank of compost pad	0	
SE corner of compost pad	0	
Southern perimeter of pad	4	
SW corner of compost pad	0	
W flank of compost pad	0	
NW corner of compost pad	0	
Landfill Perimeter (West)		
Above redundant leachate tank	0	Old tank number 1
Borehole 124	0	
Borehole 122	0	
Groundwater Borehole 33	0	
Borehole 121	0	
Borehole 120	0	
Borehole 118	0	
Borehole 116	0	
Borehole 114	0	
Borehole 112	0	
Groundwater Borehole 1	0	
Borehole 110	0	
Borehole 108	0	
Borehole 106	0	
Borehole 104	0	
Borehole 102	0	
Borehole 100	0	
Groundwater Borehole 32	0	Above gas utilisation compound
Track leading to perimeter fence	0	

Llanddulas FID Survey

LLANDULAS, ABERGELE, LL22 8HP

Time On	Time Off
07:00	17:00

Personnel	Equipment Type	Equipment Serial No.	Equipment Last Calibration
C Gratton	Gas Tec 4	56794	02/01/2015

Equipment Calibration Due	Weather	Temp °C	Wind Direction & Speed
02/07/2015	Cold & Sunny	3	11mph North West

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 3A			
04.02.15	D230	0	N/A
04.02.15	D231	0	N/A
04.02.15	D222	0	N/A
04.02.15	RD207	0	N/A
04.02.15	D219	0	N/A
04.02.15	D232	0	N/A
04.02.15	D229	0	N/A
04.02.15	D238	0	N/A
04.02.15	D237	0	N/A
04.02.15	RD220	0	N/A
04.02.15	D236	0	N/A
04.02.15	D235	0	N/A
04.02.15	RD215	0	N/A
04.02.15	D226	0	N/A
04.02.15	D225	0	N/A
04.02.15	D233	0	N/A
04.02.15	POT 12	0	N/A
04.02.15	KOP 7	0	N/A
04.02.15	POT 11	0	N/A
04.02.15	POT 9	0	N/A
04.02.15	D211	0	N/A
04.02.15	D234	0	N/A
04.02.15	D227	0	N/A
04.02.15	D228	0	N/A
04.02.15	D266	0	N/A
04.02.15	D265	0	N/A
04.02.15	D264	0	N/A
04.02.15	D241	0	N/A
04.02.15	D262	0	N/A
04.02.15	New Sump No ID	0	N/A
04.02.15	D261	300	Reading from outside sleeve.
04.02.15	POT 7	0	N/A
04.02.15	D256	0	N/A
04.02.15	W240	0	N/A
04.02.15	POT 8	0	N/A

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 3A			
04.02.15	W258	0	N/A
04.02.15	W244	0	N/A
04.02.15	GW245	0	N/A
04.02.15	D255	0	N/A
04.02.15	W250	0	N/A
04.02.15	W239	0	N/A
04.02.15	W251	0	N/A
04.02.15	RD188	0	N/A
04.02.15	W252	10,000	Reading from outside sleeve.
04.02.15	W253	0	N/A
04.02.15	RD187	10,000	Reading from outside sleeve.
04.02.15	D284	0	N/A
04.02.15	D285	0	N/A
04.02.15	D286	0	N/A
04.02.15	D287	0	N/A
04.02.15	D279	1,000	Reading from outside sleeve.
04.02.15	W248	1,000	Reading from outside sleeve.
04.02.15	W259	0	N/A
04.02.15	D270	0	N/A
04.02.15	D270	0	N/A
04.02.15	LMP3/2	0	N/A
04.02.15	D283	8,000	Reading from inside sleeve.
04.02.15	D281	1,000	Reading from around base.
04.02.15	D288	0	N/A
04.02.15	D294	1,000	Reading from around base.
04.02.15	D260	2,000	Reading from in and around sleeve.
04.02.15	D262	1,000	Reading from outside sleeve.
04.02.15	D267	3,000	Reading from outside sleeve.
04.02.15	D268	1,000	Reading from inside sleeve.
04.02.15	D294	1,000	Reading from around base of well.
04.02.15	D296	10,000	Reading from around base of well.
04.02.15	LCP3A	1,000	Reading from around concrete ring.
04.02.15	D295	10,000	Reading from outside sleeve.
04.02.15	RD205	0	N/A
04.02.15	D274	200	Reading from outside sleeve.
04.02.15	D291	1,000	Reading from around pin well.
04.02.15	D292	500	Reading from outside sleeve.
04.02.15	D277	0	N/A
04.02.15	Pot 3	0	N/A
04.02.15	Pot 1	0	N/A
04.02.15	KOP 5	0	N/A
Phase 2			
04.02.15	LC2BR2	200	Leaking from around chamber.
04.02.15	LC2AR2	2,000	Leaking from 32mm fitting in lid.
04.02.15	WB095	0	N/A
04.02.15	WB096	0	N/A
04.02.15	WB082	0	N/A
04.02.15	WB083	0	N/A
04.02.15	B072	0	N/A
04.02.15	B116	0	N/A
04.02.15	B077	0	N/A
04.02.15	WB120	0	N/A

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 2			
04.02.15	LC2CR	200	Reading from around base of chamber.
04.02.15	LF1	0	N/A
04.02.15	LF2	0	N/A
04.02.15	KOP 3	0	N/A
04.02.15	LMP4	0	N/A
04.02.15	WB117	0	N/A
04.02.15	WB093	0	N/A
04.02.15	WB118	0	N/A
04.02.15	WB119	0	N/A
04.02.15	LMP 5	0	N/A
Phase 1			
04.02.15	RA014	0	N/A
04.02.15	WA016	0	N/A
04.02.15	RA15	0	N/A
04.02.15	RA012	0	N/A
04.02.15	RA028	0	N/A
04.02.15	WA011	0	N/A
04.02.15	RA010	0	N/A
04.02.15	LMP2	0	N/A
04.02.15	LMP 3	0	N/A
04.02.15	WA132	0	N/A
04.02.15	LCP1Ar	0	N/A
04.02.15	WA030	0	N/A
04.02.15	WA131	0	N/A
04.02.15	WA029	0	N/A
04.02.15	WA031	0	N/A
04.02.15	LCP1C	0	N/A
Phase 3			
04.02.15	WC146	0	N/A
04.02.15	WC147	0	N/A
04.02.15	WC148	0	N/A
04.02.15	WC144	0	N/A
04.02.15	WC145	0	N/A
04.02.15	WC141	0	N/A
04.02.15	WC142	0	N/A
04.02.15	WC140	0	N/A
04.02.15	WC143	0	N/A
04.02.15	KOP 2	0	N/A
04.02.15	WC137	0	N/A
04.02.15	WC136	0	N/A
04.02.15	WC135	0	N/A
04.02.15	WC154	0	N/A
04.02.15	LCP03	0	N/A
04.02.15	WC134	0	N/A
04.02.15	C152	0	N/A
04.02.15	C251	0	N/A
04.02.15	C250	10	N/A
04.02.15	WC132	0	N/A
04.02.15	C249	0	N/A
04.02.15	LMP3/1	0	N/A

Llanddulas FID Survey

LLANDULAS, ABERGELE, LL22 8HP

Time On	Time Off
07:00	17:00

Personnel	Equipment Type	Equipment Serial No.	Equipment Last Calibration
C Gratton	Gas Tec 4	56794	02/01/2015

Equipment Calibration Due	Weather	Temp°C	Wind Direction & Speed
02/07/2015	Bright & Windy	9	21mph South/South West

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 3A			
04.03.15	LC2CR	0	N/A
04.03.15	D230	0	N/A
04.03.15	D231	0	N/A
04.03.15	D222	0	N/A
04.03.15	RD207	0	N/A
04.03.15	D219	0	N/A
04.03.15	POT 11	0	N/A
04.03.15	KOP 7	0	N/A
04.03.15	POT 12	0	N/A
04.03.15	POT 09	0	N/A
04.03.15	D211	0	N/A
04.03.15	D234	0	N/A
04.03.15	D220	0	N/A
04.03.15	D237	0	N/A
04.03.15	D232	0	N/A
04.03.15	D213	0	N/A
04.03.15	D229	0	N/A
04.03.15	D238	0	N/A
04.03.15	D236	0	N/A
04.03.15	D235	0	N/A
04.03.15	D215	0	N/A
04.03.15	D225	0	N/A
04.03.15	D233	0	N/A
04.03.15	D210	0	N/A
04.03.15	D227	0	N/A
04.03.15	D267	1,000	Reading from around well.
04.03.15	D268	1,000	Reading from outside sleeve.
04.03.15	LC3A	100	Reading from around ring.
04.03.15	D296	0	N/A
04.03.15	D295	100	Reading from around outside sleeve.
04.03.15	D290	1,000	Reading from outside sleeve.
04.03.15	D292	2,000	Reading from outside sleeve.
04.03.15	D291	0	N/A
04.03.15	LC2AR2	0	N/A
04.03.15	D277	0	N/A
04.03.15	LC2BR2	0	N/A

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 3A			
04.03.15	D205	0	N/A
04.03.15	D294	1,000	Reading from base of well.
04.03.15	D288	0	N/A
04.03.15	D283	2,000	Reading from inside sleeve.
04.03.15	LMP3/2	1,000	Reading from outside ring.
04.03.15	D270	0	N/A
04.03.15	D260	3,000	Reading from around base.
04.03.15	D263	1,000	Inside & outside sleeve.
04.03.15	D261	0	N/A
04.03.15	W266	0	N/A
04.03.15	D265	1,000	Reading from inside & outside sleeve.
04.03.15	W264	0	N/A
04.03.15	D241	0	N/A
04.03.15	POT 7	0	N/A
04.03.15	D240	0	N/A
04.03.15	D256	0	N/A
04.03.15	New Sump	0	N/A
04.03.15	W258	0	N/A
04.03.15	D244	1,000	Reading from around base of well.
04.03.15	GW245	0	N/A
04.03.15	D255	0	N/A
04.03.15	D250	0	N/A
04.03.15	W239	0	N/A
04.03.15	W251	0	N/A
04.03.15	RD188	0	N/A
04.03.15	W252	0	N/A
04.03.15	W254	0	N/A
04.03.15	D280	0	N/A
04.03.15	D279	1,000	Reading from indside sleeve.
04.03.15	D278	0	N/A
04.03.15	D287	0	N/A
04.03.15	D256	0	N/A
04.03.15	D285	0	N/A
04.03.15	D284	0	N/A
04.03.15	RD187	10,000	Reading from around base.
04.03.15	Pot 1	0	N/A
04.03.15	KOP 5	0	N/A
04.03.15	Pot 3	0	N/A
Phase 3			
04.03.15	WC137	0	N/A
04.03.15	WC136	0	N/A
04.03.15	WC135	0	N/A
04.03.15	WC154	0	N/A
04.03.15	LCP03	0	N/A
04.03.15	WC134	0	N/A
04.03.15	C152	0	N/A
04.03.15	WC133	0	N/A
04.03.15	C251	0	N/A
04.03.15	LMP3/1	0	N/A
04.03.15	KOP 2	0	N/A
04.03.15	C250	0	N/A
04.03.15	C132	0	N/A

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 3			
04.03.15	C248	0	N/A
04.03.15	WC148	0	N/A
04.03.15	WC147	0	N/A
04.03.15	WC145	0	N/A
04.03.15	WC144	0	N/A
04.03.15	WC142	0	N/A
04.03.15	WC141	0	N/A
04.03.15	WC140	0	N/A
04.03.15	WC143	0	N/A
04.03.15	WC146	0	N/A
Phase 1			
04.03.15	WA131	0	N/A
04.03.15	WA030	0	N/A
04.03.15	LCP1Ar	0	N/A
04.03.15	WA132	0	N/A
04.03.15	LMP2	0	N/A
04.03.15	RA010	0	N/A
04.03.15	WA029	0	N/A
04.03.15	WA031	0	N/A
04.03.15	LCP1C	10	N/A
04.03.15	LMP3	0	N/A
04.03.15	A015	0	N/A
04.03.15	RA028	0	N/A
04.03.15	RA012	0	N/A
04.03.15	RA014	0	N/A
04.03.15	KOP 3	0	N/A
Phase 2			
04.03.15	LMP5	0	N/A
04.03.15	LF1	0	N/A
04.03.15	LF2	0	N/A
04.03.15	B072	0	N/A
04.03.15	B116	0	N/A
04.03.15	B077	0	N/A
04.03.15	WB120	0	N/A
04.03.15	WB083	0	N/A
04.03.15	WB082	0	N/A
04.03.15	WB081	0	N/A
04.03.15	B079	0	N/A
04.03.15	WB119	0	N/A
04.03.15	WB118	0	N/A
04.03.15	WB093	0	N/A
04.03.15	LMP 4	0	N/A
04.03.15	WB117	800	Reading from inside sleeve.
04.03.15	WB095	0	N/A
04.03.15	WB096	0	N/A
04.03.15	WB111	0	N/A
04.03.15	WB097	0	N/A
04.03.15	WB112	0	N/A
04.03.15	WB113	0	N/A
04.03.15	WB114	0	N/A
04.03.15	WB115	0	N/A

Llanddulas FID Survey

LLANDULAS, ABERGELE, LL22 8HP

Time On	Time Off
07:00	17:00

Personnel	Equipment Type	Equipment Serial No.	Equipment Last Calibration
C Gratton	Gas Tec 4	6992	26.02.15

Equipment Calibration Due	Weather	Temp °C	Wind Direction & Speed
26.08.15	Overcast & Strong Winds	4.8	24mph North West

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 3A			
01.04.15	D230	0	N/A
01.04.15	D231	0	N/A
01.04.15	D222	0	N/A
01.04.15	RD207	0	N/A
01.04.15	D219	0	N/A
01.04.15	POT 11	0	N/A
01.04.15	KOP 7	0	N/A
01.04.15	POT 12	0	N/A
01.04.15	POT 9	0	N/A
01.04.15	D210	0	N/A
01.04.15	D233	0	N/A
01.04.15	D211	0	N/A
01.04.15	D234	0	N/A
01.04.15	RD220	0	N/A
01.04.15	D237	0	N/A
01.04.15	D232	0	N/A
01.04.15	D213	0	N/A
01.04.15	D229	0	N/A
01.04.15	D238	0	N/A
01.04.15	D236	0	N/A
01.04.15	D235	0	N/A
01.04.15	RD215	0	N/A
01.04.15	D225	0	N/A
01.04.15	D227	0	N/A
01.04.15	D268	1,000	Reading from outside of sleeve
01.04.15	D296	0	N/A
01.04.15	D294	1,000	Reading from around base of well.
01.04.15	LC3A	400	Reading from around ring.
01.04.15	D288	100	Reading from around base of well
01.04.15	D281	1,000	Reading from base of well.
01.04.15	D288	1,000	Reading from inside & outside of sleeve.
01.04.15	LMP3/2	0	N/A
01.04.15	D270	1,000	Reading from around base of well.
01.04.15	D260	1,000	Reading from around base of well.
01.04.15	D293	1,000	Reading from around base of well.
01.04.15	D292	3,000	Reading from outside sleeve.

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 3A			
01.04.15	D290	1,500	Reading from inside & outside of sleeve.
01.04.15	D274	0	N/A
01.04.15	D291	0	N/A
01.04.15	D277	0	N/A
01.04.15	D278	0	N/A
01.04.15	D279	500	Reading from outside of sleeve.
01.04.15	D280	0	N/A
01.04.15	D284	0	N/A
01.04.15	D285	0	N/A
01.04.15	D286	0	N/A
01.04.15	D287	0	N/A
01.04.15	Pot 3	0	N/A
01.04.15	Pot 1	0	N/A
01.04.15	Kop 3	0	N/A
01.04.15	RD187	500	Reading from around base.
01.04.15	W253	0	N/A
01.04.15	D252	0	N/A
01.04.15	D248	1,000	Reading from around base.
01.04.15	W254	0	N/A
01.04.15	W245	0	N/A
01.04.15	D255	0	N/A
01.04.15	W244	0	N/A
01.04.15	W258	0	N/A
01.04.15	New Sump	1,000	Reading from around base.
01.04.15	D262	0	N/A
01.04.15	D264	0	N/A
01.04.15	D265	0	N/A
01.04.15	D266	0	N/A
01.04.15	D241	0	N/A
01.04.15	POT 7	0	N/A
01.04.15	D256	0	N/A
01.04.15	W240	0	N/A
01.04.15	POT 8	0	N/A
01.04.15	D239	0	N/A
01.04.15	D250	0	N/A
01.04.15	D251	0	N/A
01.04.15	RD188	0	N/A
Phase 2			
01.04.15	LMP5	0	N/A
01.04.15	WB119	0	N/A
01.04.15	WB118	0	N/A
01.04.15	LMP 4	0	N/A
01.04.15	LF2	0	N/A
01.04.15	WB117	0	N/A
01.04.15	B116	0	N/A
01.04.15	B077	0	N/A
01.04.15	LC2AR2	0	N/A
01.04.15	LC2BR2	0	N/A
01.04.15	LC2CR	0	N/A
01.04.15	WB120	0	N/A
01.04.15	WB095	0	N/A
01.04.15	WB096	0	N/A

Date	Monitoring Point	FID Reading (ppm)	Comment
Phase 2			
01.04.15	WB111	0	N/A
01.04.15	WB097	0	N/A
01.04.15	WB112	0	N/A
01.04.15	WB113	0	N/A
01.04.15	WB114	0	N/A
01.04.15	WB115	0	N/A
01.04.15	B079	0	N/A
01.04.15	WB081	0	N/A
01.04.15	WB082	0	N/A
01.04.15	WB083	0	N/A
01.04.15	WB072	0	N/A
01.04.15	LF1	0	N/A
01.04.15	KOP 3	0	N/A
Phase 1			
01.04.15	WA131	0	N/A
01.04.15	WA030	0	N/A
01.04.15	EXLMP	0	N/A
01.04.15	RA010	0	N/A
01.04.15	RA028	0	N/A
01.04.15	RA012	0	N/A
01.04.15	RA15	0	N/A
01.04.15	WA016	0	N/A
01.04.15	RA014	0	N/A
01.04.15	WA029	0	N/A
01.04.15	WA031	0	N/A
01.04.15	LCP1Ar	0	N/A
01.04.15	LCP1C	0	N/A
01.04.15	LMP1	0	N/A
01.04.15	LMP2	0	N/A
01.04.15	LMP3	0	N/A
Phase 3			
01.04.15	WC137	0	N/A
01.04.15	WC136	0	N/A
01.04.15	WC135	0	N/A
01.04.15	WC154	0	N/A
01.04.15	WC146	0	N/A
01.04.15	WC147	0	N/A
01.04.15	WC148	0	N/A
01.04.15	WC144	0	N/A
01.04.15	WC145	0	N/A
01.04.15	WC141	0	N/A
01.04.15	WC142	0	N/A
01.04.15	WC140	0	N/A
01.04.15	WC143	0	N/A
01.04.15	LCP03	0	N/A
01.04.15	WC134	0	N/A
01.04.15	C152	0	N/A
01.04.15	WC133	0	N/A
01.04.15	C251	0	N/A
01.04.15	KOP 2	0	N/A
01.04.15	C250	0	N/A
01.04.15	WC132	0	N/A
01.04.15	C249	0	N/A
01.04.15	LMP3/1	0	N/A

APPENDIX 6

Leachate Level Data

From : 05/02/2015

To : 30/04/2015

05/02/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.58	38.59	39.12	89.08
LCP2Br2	1.64	40.2	41.3	88.94
LCP2Cr	1.98	47.71	48.52	87.93
LCP3	1.59	21.86	22.8	98.40
LCP3A	0.11	43.17	43.58	90.03
LLALCP1AR	0.94	23.75	24.44	99.39
LLALCP1C	1.62	40.83	42.69	90.86
LLALMP01	1.30	18.92	19.6	99.90
LLALMP02	0.99	28.16	29.65	102.05
LLALMP03	0.72	36.63	37.36	96.32
LLALMP04	1.28	41.1	42.62	96.55
LLALMP05	0.10	45.74	46.41	95.70
LLALMP3/1	0.82	13.24	13.48	99.05
LLALMP3/2	0.49	40.22	41.85	90.49

Issued By:

From : 05/02/2015

To : 30/04/2015

11/02/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.68	38.49	39.12	89.18
LCP2Br2	1.65	40.19	41.3	88.95
LCP2Cr	1.72	47.97	48.52	87.67
LCP3	1.59	21.86	22.8	98.40
LCP3A	-0.02	43.3	43.58	89.90
LLALCP1AR	1.00	23.69	24.44	99.45
LLALCP1C	1.34	41.11	42.69	90.58
LLALMP01	1.32	18.9	19.6	99.92
LLALMP02	1.15	28	29.65	102.21
LLALMP03	0.67	36.68	37.36	96.27
LLALMP04	0.98	41.4	42.62	96.25
LLALMP05	-0.03	45.87	46.41	95.57
LLALMP3/1	0.82	13.24	13.48	99.05
LLALMP3/2	0.44	40.27	40.85	90.44

Issued By:

From : 05/02/2015

To : 30/04/2015

17/02/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.57	38.6	39.12	89.07
LCP2Br2	1.61	40.23	41.3	88.91
LCP2Cr	1.69	48	48.52	87.64
LCP3	1.56	21.89	22.8	98.37
LCP3A	0.38	42.9	43.58	90.30
LLALCP1AR	1.56	23.13	24.44	100.01
LLALCP1C	1.11	41.34	42.69	90.35
LLALMP01	1.32	18.9	19.6	99.92
LLALMP02	1.06	28.09	29.65	102.12
LLALMP03	0.66	36.69	37.36	96.26
LLALMP04	1.00	41.38	42.62	96.27
LLALMP05	0.09	45.75	46.41	95.69
LLALMP3/1	0.83	13.23	13.48	99.06
LLALMP3/2	0.43	40.28	40.85	90.43

Issued By:

From : 05/02/2015

To : 30/04/2015

26/02/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.65	38.52	39.12	89.15
LCP2Br2	1.64	40.2	41.3	88.94
LCP2Cr	1.72	47.97	48.52	87.67
LCP3	1.59	21.86	22.8	98.40
LCP3A	-0.09	43.37	43.58	89.83
LLALCP1AR	1.99	22.7	24.44	100.44
LLALCP1C	1.45	41	42.69	90.69
LLALMP01	1.29	18.93	19.6	99.89
LLALMP02	1.22	27.93	29.65	102.28
LLALMP03	0.65	36.7	37.36	96.25
LLALMP04	0.98	41.4	42.62	96.25
LLALMP05	0.04	45.8	46.41	95.64
LLALMP3/1	0.82	13.24	13.48	99.05
LLALMP3/2	0.30	40.41	40.85	90.30

Issued By:

From : 05/02/2015

To : 30/04/2015

05/03/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.59	38.58	39.12	89.09
LCP2Br2	1.69	40.15	41.3	88.99
LCP2Cr	1.72	47.97	48.52	87.67
LCP3	1.59	21.86	22.8	98.40
LCP3A	0.21	43.07	43.58	90.13
LLALCP1AR	1.89	22.8	24.44	100.34
LLALCP1C	1.34	41.11	42.69	90.58
LLALMP01	1.30	18.92	19.6	99.90
LLALMP02	1.05	28.1	29.65	102.11
LLALMP03	0.69	36.66	37.36	96.29
LLALMP04	0.97	41.41	42.62	96.24
LLALMP05	0.35	45.49	46.41	95.95
LLALMP3/1	0.83	13.23	13.48	99.06
LLALMP3/2	0.30	40.41	40.85	90.30

Issued By:



From : 05/02/2015
To : 30/04/2015

11/03/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.65	38.52	39.12	89.15
LCP2Br2	1.83	40.01	41.3	89.13
LCP2Cr	1.78	47.91	48.52	87.73
LCP3	1.58	21.87	22.8	98.39
LCP3A	0.16	43.12	43.58	90.08
LLALCP1AR	1.98	22.71	24.44	100.43
LLALCP1C	1.23	41.22	42.69	90.47
LLALMP01	1.30	18.92	19.6	99.90
LLALMP02	1.16	27.99	29.65	102.22
LLALMP03	0.67	36.68	37.36	96.27
LLALMP04	0.95	41.43	42.62	96.22
LLALMP05	0.04	45.8	46.41	95.64
LLALMP3/1	0.83	13.23	13.48	99.06
LLALMP3/2	0.26	40.44	40.85	90.27

Issued By:

From : 05/02/2015

To : 30/04/2015

19/03/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.61	38.56	39.12	89.11
LCP2Br2	1.72	40.12	41.3	89.02
LCP2Cr	1.69	48	48.52	87.64
LCP3	1.59	21.86	22.8	98.40
LCP3A	0.08	43.2	43.58	90.00
LLALCP1AR	0.98	23.71	24.44	99.43
LLALCP1C	1.38	41.07	42.69	90.62
LLALMP01	1.28	18.94	19.6	99.88
LLALMP02	1.12	28.03	29.65	102.18
LLALMP03	0.65	36.7	37.36	96.25
LLALMP04	0.96	41.42	42.62	96.23
LLALMP05	0.03	45.81	46.41	95.63
LLALMP3/1	0.83	13.23	13.48	99.06
LLALMP3/2	0.14	40.57	40.85	90.14

Issued By:

From : 05/02/2015
To : 30/04/2015

25/03/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.64	38.53	39.17	89.14
LCP2Br2	1.94	39.9	41.25	89.24
LCP2Cr	1.75	47.94	49.58	87.70
LCP3	1.61	21.84	22.9	98.42
LCP3A	0.16	43.12	43.76	90.08
LLALCP1AR	1.98	22.71	24.49	100.43
LLALCP1C	1.12	41.33	42.8	90.36
LLALMP01	1.30	18.92	19.62	99.90
LLALMP02	1.16	27.99	29.69	102.22
LLALMP03	0.68	36.67	37.8	96.28
LLALMP04	0.95	41.43	42.5	96.22
LLALMP05	0.04	45.8	46.89	95.64
LLALMP3/1	0.83	13.23	13.44	99.06
LLALMP3/2	0.26	40.44	41.87	90.27

Issued By:

From : 05/02/2015

To : 30/04/2015

31/03/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.61	38.56	39.12	89.11
LCP2Br2	1.57	40.27	41.3	88.87
LCP2Cr	1.71	47.98	48.52	87.66
LCP3	1.58	21.87	22.8	98.39
LCP3A	0.06	43.22	43.58	89.98
LLALCP1AR	0.97	23.72	24.44	99.42
LLALCP1C	1.13	41.32	42.69	90.37
LLALMP01	1.32	18.9	19.6	99.92
LLALMP02	1.15	28	29.65	102.21
LLALMP03	0.70	36.65	37.36	96.30
LLALMP04	0.98	41.4	42.62	96.25
LLALMP05	0.03	45.81	46.41	95.63
LLALMP3/1	0.83	13.23	13.48	99.06
LLALMP3/2	0.26	40.45	40.85	90.26

Issued By:

From : 05/02/2015

To : 30/04/2015

08/04/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.57	38.6	39.12	89.07
LCP2Br2	1.80	40.04	41.3	89.10
LCP2Cr	1.98	47.71	48.52	87.93
LCP3	1.53	21.92	22.8	98.34
LCP3A	0.03	43.25	43.58	89.95
LLALCP1AR	0.91	23.78	24.44	99.36
LLALCP1C	1.12	41.33	42.69	90.36
LLALMP01	1.29	18.93	19.6	99.89
LLALMP02	1.14	28.01	29.65	102.20
LLALMP03	0.65	36.7	37.36	96.25
LLALMP04	0.97	41.41	42.62	96.24
LLALMP05	0.03	45.81	46.41	95.63
LLALMP3/1	0.83	13.23	13.48	99.06
LLALMP3/2	0.14	40.57	40.85	90.14

Issued By:

From : 05/02/2015

To : 30/04/2015

15/04/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.57	38.6	39.12	89.07
LCP2Br2	1.73	40.11	41.3	89.03
LCP2Cr	1.68	48.01	48.52	87.63
LCP3	1.57	21.88	22.8	98.38
LCP3A	0.14	43.14	43.58	90.06
LLALCP1AR	0.94	23.75	24.44	99.39
LLALCP1C	1.47	40.98	42.69	90.71
LLALMP01	1.27	18.95	19.6	99.87
LLALMP02	1.13	28.02	29.65	102.19
LLALMP03	0.65	36.7	37.36	96.25
LLALMP04	0.96	41.42	42.62	96.23
LLALMP05	0.40	45.44	46.41	96.00
LLALMP3/1	0.83	13.23	13.48	99.06
LLALMP3/2	0.05	40.66	40.85	90.05

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From : 05/02/2015
To : 30/04/2015

22/04/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.63	38.54	39.12	89.13
LCP2Br2	1.82	40.02	41.3	89.12
LCP2Cr	1.76	47.93	48.52	87.71
LCP3	1.38	22.07	22.8	98.19
LCP3A	0.16	43.12	43.58	90.08
LLALCP1AR	0.92	23.77	24.44	99.37
LLALCP1C	1.15	41.3	42.69	90.39
LLALMP01	1.30	18.92	19.6	99.90
LLALMP02	1.13	28.02	29.65	102.19
LLALMP03	0.54	36.81	37.36	96.14
LLALMP04	0.95	41.43	42.62	96.22
LLALMP05	-0.08	45.92	46.41	95.52
LLALMP3/1	0.82	13.24	13.48	99.05
LLALMP3/2	0.29	40.42	40.85	90.29

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From : 05/02/2015

To : 30/04/2015

30/04/2015

Sample Point	Depth of Liq (m)	Dip to Water (m)	TD (m)	Water Level (mAOD)
LCP2Ar2	0.59	38.58	39.12	89.09
LCP2Br2	1.88	39.96	41.3	89.18
LCP2Cr	1.86	47.83	48.52	87.81
LCP3	1.37	22.08	22.8	98.18
LCP3A	0.31	42.97	43.58	90.23
LLALCP1AR	0.84	23.85	24.44	99.29
LLALCP1C	1.31	41.14	42.69	90.55
LLALMP01	1.27	18.95	19.6	99.87
LLALMP02	1.19	27.96	29.65	102.25
LLALMP03	0.65	36.7	37.36	96.25
LLALMP04	0.93	41.45	42.62	96.20
LLALMP05	0.17	45.67	46.41	95.77
LLALMP3/1	0.82	13.24	13.48	99.05
LLALMP3/2	0.28	40.43	40.85	90.28

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APPENDIX 7

Leachate Quality Data

From : 15/04/2015

To : 15/04/2015

15/04/2015

Sample Point	Alk (CaCO ₃ :mg/l)	Amm-N (N:mg/l)	BOD (mg/l)	Ca(D) (mg/l)	Chloride (mg/l)	COD (mg/l)	Pb(D) (mg/l)
LCP2Ar2	9170	1370	119	72	2360	3025	<0.01
LCP2Br2	9990	1750	126	48	3320	3475	<0.01
LCP2Cr	13900	1910	216	38	3450	4425	0.013
LCP3	10900	1510	170	69	1610	3600	0.037
LCP3A	16600	2650	3680	60	2440	11200	0.012
LLALCP1AR	1990	247	14.8	92	576	410	<0.01
LLALCP1C	9540	1480	284	33	2810	3325	<0.01

Sample Point	Hg (mg/l)	K(D) (mg/l)	MCP (UG/L)	Mg(D) (mg/l)	Na(D) (mg/l)	TOC (mg/l)	TON (mg/l)
LCP2Ar2	<0.00001	852	83.3	67	2230	860	0.2
LCP2Br2	<0.00001	1090	56.3	66	3110	430	<0.2
LCP2Cr	<0.00001	1210	74.4	66	3370	1300	0.3
LCP3	<0.00001	848	60.3	53	1770	1500	0.3
LCP3A	<0.00001	1210	39.9	71	2640	3400	<0.2
LLALCP1AR	<0.00001	187	11.1	46	536	89	0.3
LLALCP1C	<0.00001	911	79.7	52	2500	980	0.4

Sample Point	Total S(D) SO ₄ :mg/l
LCP2Ar2	102
LCP2Br2	331
LCP2Cr	218
LCP3	136
LCP3A	295
LLALCP1AR	96
LLALCP1C	111

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APPENDIX 8

Groundwater Quality Data

Llanddulas Groundwater Levels & Quality Data - Feb to April 2015



From : 10/02/2015
To : 14/04/2015

10/02/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond(Fld) (uS / cm)	Dip to Water (m)	Hg (mg/l)	MCPP (UG/L)	Pb(D) (mg/l)
GWBH01	0.02	24	630	91.67	<0.00001	<0.02	<0.001
GWBH02	<0.01	16	350	66.38	<0.00001	<0.02	0.001
GWBH04	0.01	24	480	14.85	0.00001	<0.02	<0.001
GWBH06R	0.01	152	1430	95.04	<0.00001	<0.02	<0.001
GWBH07	0.3	75	690	3.67	<0.00001	<0.02	<0.001
GWBH22	0.06	67	790	13.48	<0.00001	<0.02	<0.001
GWBH23	0.03	74	960	0	<0.00001	<0.02	<0.001
GWBH24	<0.01	137	1070	3.6	<0.00001	<0.02	<0.001
GWBH25	<0.01	19	560	43.84	<0.00001	<0.02	<0.001
GWBH26B				48.82			
GWBH27B	<0.01	37	800	16.17	<0.00001	<0.02	<0.001
GWBH28	0.1	40	620	32.75	0.00001	<0.02	<0.001
GWBH32	0.01	37	890	95.86	<0.00001	<0.02	<0.001
GWBH33	<0.01	37	590	103.3	<0.00001	<0.02	<0.001
GWBH34	0.02	23	840	128.84	<0.00001	<0.02	<0.001
GWBH35	0.01	24	630	125.99	<0.00001	<0.02	<0.001
GWBH36	0.01	97	1270	86.94	<0.00001	<0.02	0.002

Sample Point	pH(Fld)	TD (m)	WtrTemp (Deg C)
GWBH01	7.56	97.14	8.7
GWBH02	7.90	100.63	8.4
GWBH04	7.67	30.84	9.3
GWBH06R	6.93	100.04	8.5
GWBH07	7.65	25.87	8.9
GWBH22	7.41	36.23	9.7
GWBH23	7.12	26.13	9.3
GWBH24	7.41	18.43	9.9
GWBH25	7.55	54.43	8.5
GWBH26B		49.96	
GWBH27B	7.2	31.23	8.9
GWBH28	7.55	45.12	8.7
GWBH32	7.24	108.37	8.6
GWBH33	7.56	132.37	8.4
GWBH34	7.32	139.9	8.4
GWBH35	7.74	138.45	8.2
GWBH36	7.26	120.01	8.4

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Llanddulas Groundwater Levels & Quality Data - Feb to April 2015



From : 10/02/2015

To : 14/04/2015

10/03/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond(Fld) (uS / cm)	Dip to Water (m)	Hg (mg/l)	MCP (UG/L)	Pb(D) (mg/l)
GWBH01	0.01	25	610	94.59	<0.00001	0.02	<0.001
GWBH02	0.01	18	370	66.38	<0.00001	0.02	<0.001
GWBH04	0.01	23	490	16.24	0.00001	<0.02	<0.001
GWBH06R	0.02	159	1460	96.26	<0.00001	<0.02	<0.001
GWBH07	0.08	70	680	3.66	<0.00001	0.02	0.003
GWBH22	0.17	67	810	13.56	<0.00001	<0.02	<0.001
GWBH23	0.04	75	950	0	<0.00001	<0.02	<0.001
GWBH24	0.01	138	1070	3.74	<0.00001	<0.02	<0.001
GWBH25	0.04	35	650	45.65	<0.00001	0.1	<0.001
GWBH26B	1.4	53	830	48.75	<0.00001	<0.02	<0.001
GWBH27B	0.03	20	810	16.3	<0.00001	0.02	<0.001
GWBH28	0.02	40	640	32.88	0.00002	0.02	<0.001
GWBH32	0.04	37	900	96.68	0.00001	<0.02	<0.001
GWBH33	0.01	27	550	106.6	<0.00001	<0.02	<0.001
GWBH34	0.02	23	920	128.91	<0.00001	<0.02	<0.001
GWBH35	0.01	24	650	126.25	0.00001	<0.02	<0.001
GWBH36	0.02	77	1110	95.63	0.00001	<0.02	<0.001

Sample Point	K(D) (mg/l)	pH(Fld)	TD (m)	WtrTemp (Deg C)
GWBH01		7.5	97.14	11.8
GWBH02		7.78	100.63	11.8
GWBH04		8.03	30.84	8.7
GWBH06R		6.85	100.04	10
GWBH07		7.62	25.87	10.3
GWBH22		7.43	36.23	9.4
GWBH23		7.22	26.13	9.7
GWBH24		7.49	18.43	11
GWBH25		7.55	54.43	9.1
GWBH26B		7.29	49.96	8.6
GWBH27B		7.29	31.23	9.4
GWBH28		7.58	45.12	9.1
GWBH32		7.25	108.37	10.4
GWBH33		7.58	132.37	11.5
GWBH34		7.15	139.9	12.6
GWBH35		7.61	138.45	11
GWBH36	29	7.23	120.01	9.6

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From : 10/02/2015

To : 14/04/2015

14/04/2015

Sample Point	Alk (CaCO ₃ :mg/l)	Amm-N (N:mg/l)	Ca(D) (mg/l)	Cd(D) (mg/l)	CH ₄ (Diss) (mg/l)	Chloride (mg/l)	Cr(D) (mg/l)
GWBH01	264	<0.01	114	<0.0001	<0.02	24	<0.001
GWBH02	149	<0.01	77	<0.0001	<0.02	17	<0.001
GWBH04	188	<0.01	99	<0.0001	<0.02	32	<0.001
GWBH06R	434	<0.01	199	<0.0001	<0.02	144	<0.001
GWBH07	196	<0.01	86	<0.0001	<0.02	70	<0.001
GWBH22	282	<0.01	137	<0.0001	<0.02	64	<0.001
GWBH23	320	0.02	163	<0.0001	<0.02	74	<0.001
GWBH24	285	<0.01	127	<0.0001	<0.02	128	<0.001
GWBH25	249	<0.01	115	<0.0001	<0.02	16	<0.001
GWBH26B	360	0.4	135	<0.0001	<0.02	53	<0.001
GWBH27B	318	<0.01	172	<0.0001	<0.02	38	<0.001
GWBH28	226	<0.01	123	<0.0001	<0.02	38	<0.001
GWBH32	431	<0.01	177	<0.0001	<0.02	37	<0.001
GWBH33	233	<0.01	127	<0.0001	<0.02	42	<0.001
GWBH34	354	<0.01	191	<0.0001	<0.02	23	<0.001
GWBH35	246	<0.01	85	<0.0001	<0.02	23	<0.001
GWBH36	362	<0.01	196	<0.0001	<0.02	78	<0.001

Sample Point	Cu(D) (mg/l)	Fe(D) (mg/l)	Hg (mg/l)	MCPD (UG/L)	Mg(D) (mg/l)	Mn(D) (mg/l)	Pb(D) (mg/l)
GWBH01	<0.001	<0.01	<0.00001	<0.02	11	<0.002	<0.001
GWBH02	<0.001	<0.01	<0.00001	<0.02	4	<0.002	<0.001
GWBH04	0.005	<0.01	0.00001	<0.02	6	<0.002	<0.001
GWBH06R	0.005	<0.01	<0.00001	<0.02	21	0.003	<0.001
GWBH07	0.001	<0.01	<0.00001	<0.02	15	<0.002	<0.001
GWBH22	<0.001	<0.01	<0.00001	<0.02	22	0.019	<0.001
GWBH23	<0.001	<0.01	<0.00001	<0.02	17	0.504	<0.001
GWBH24	<0.001	<0.01	<0.00001	<0.02	18	<0.002	<0.001
GWBH25	<0.001	<0.01	<0.00001	<0.02	6	<0.002	<0.001
GWBH26B	0.001	<0.01	<0.00001	<0.02	17	0.161	<0.001
GWBH27B	<0.001	<0.01	0.00001	<0.02	10	0.002	<0.001
GWBH28	<0.001	<0.01	<0.00001	<0.02	6	<0.002	<0.001
GWBH32	<0.001	<0.01	<0.00001	<0.02	23	0.09	<0.001
GWBH33	<0.001	<0.01	<0.00001	<0.02	4	<0.002	<0.001
GWBH34	0.003	<0.01	<0.00001	<0.02	7	<0.002	<0.001
GWBH35	0.001	<0.01	<0.00001	<0.02	12	<0.002	<0.001
GWBH36	0.005	<0.01	<0.00001	<0.02	13	<0.002	0.002

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Llanddulas Groundwater Levels & Quality Data - Feb to April 2015



From : 10/02/2015

To : 14/04/2015

14/04/2015

Sample Point	K(D) (mg/l)	Na(D) (mg/l)	Ni(D) (mg/l)	Phenol (mg/l)	TOC (mg/l)	TON (mg/l)	Total S(D) SO4:mg/l
GWBH01	1	17	<0.001	<0.0005	<0.2	6.4	12
GWBH02	2	10	<0.001	<0.0005	0.62	1.7	14
GWBH04	10	17	<0.001	<0.0005	7.6	0.3	28
GWBH06R	58	75	0.003	<0.0005	11	15.3	82
GWBH07	5	58	<0.001	<0.0005	3.5	0.3	33
GWBH22	3	35	<0.001	<0.0005	0.26	0.3	42
GWBH23	2	52	<0.001	<0.0005	0.3	<0.2	75
GWBH24	4	103	<0.001	<0.0005	0.61	4.4	33
GWBH25	1	19	<0.001	<0.0005	0.27	4.2	14
GWBH26B	16	28	0.002	<0.0005	3	3.4	32
GWBH27B	2	24	<0.001	<0.0005	0.2	4	19
GWBH28	<1	24	<0.001	<0.0005	<0.2	3.4	20
GWBH32	3	24	<0.001	<0.0005	1.7	0.2	7
GWBH33	4	25	<0.001	<0.0005	0.75	4.8	18
GWBH34	4	14	0.001	<0.0005	2.3	15.5	20
GWBH35	2	54	<0.001	<0.0005	0.85	1.3	30
GWBH36	36	33	0.002	<0.0005	6.6	16.7	45

Sample Point	Tributyl Tin (mg/l)	Trifluralin (ng/l)	Zn(D) (mg/l)
GWBH01	<0.0005	<20	0.003
GWBH02	<0.0005	<20	0.005
GWBH04	<0.0005	<20	0.003
GWBH06R	<0.0005	<20	<0.002
GWBH07	<0.0005	<20	<0.002
GWBH22	<0.0005	<20	0.005
GWBH23	<0.0005	<20	0.003
GWBH24	<0.0005	<20	<0.002
GWBH25	<0.0005	<20	0.002
GWBH26B	<0.0005	<20	0.004
GWBH27B	<0.0005	<20	<0.002
GWBH28	<0.0005	<20	0.004
GWBH32	<0.0005	<20	0.01
GWBH33	<0.0005	<20	0.003
GWBH34	<0.0005	<20	0.015
GWBH35	<0.0005	<20	0.014
GWBH36	0.00322	<20	0.02

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APPENDIX 9

Surface Water Quality Data

Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

05/02/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	<0.015	36	730	7.53	900	10.3

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

10/02/2015

Sample Point	Amm-N (N:mg/l)	BOD (mg/l)	Chloride (mg/l)	Cond(Fld) (uS / cm)	Hg (mg/l)	MCPP (UG/L)	Pb(D) (mg/l)
LLA000W1	0.3	<2.0					
LLADOWNSTREAM	0.04		31	310			
LLASPRING	0.02		55	730	<0.00001	<0.02	<0.001
LLAUPSTREAM	0.05		30	280			

Sample Point	pH (Lab)	pH(Fld)	S.Solids (mg/l)	Spring Flow (l/min)	WtrTemp (Deg C)
LLA000W1	7.5		7		
LLADOWNSTREAM		7.72			6.2
LLASPRING		7.25		600	9.6
LLAUPSTREAM		7.93			5.8

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

17/02/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	0.023	35	750	6.95	360	9.8

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

26/02/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	<0.015	31	750	6.94	1200	9.8

Issued By:

Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

05/03/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	0.018	33	710	7.06	600	10.3

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015
To : 30/04/2015

10/03/2015

Sample Point	Amm-N (N:mg/l)	BOD (mg/l)	Chloride (mg/l)	Cond(Fld) (uS / cm)	Hg (mg/l)	MCPP (UG/L)	Pb(D) (mg/l)
LLA000W1	0.09	4.4					
LLADOWNSTREAM	0.02		33	290			
LLASPRING	<0.01		53	710	0.00001	0.03	<0.001
LLAUPSTREAM	0.02		33	270			

Sample Point	pH (Lab)	pH(Fld)	S.Solids (mg/l)	Spring Flow (l/min)	WtrTemp (Deg C)
LLA000W1	7.8		27		
LLADOWNSTREAM		7.78			8
LLASPRING		7.35		600	10
LLAUPSTREAM		7.99			8.2

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

19/03/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	<0.015	41	680	6.98	660	9.8

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

26/03/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond(Fld) (uS / cm)	pH(Fld)	Spring Flow (l/min)	WtrTemp (Deg C)
LLASPRING	<0.015	38	740	7.28	660	10.2

Issued By:

Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

31/03/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	0.019	39	670	6.81	1200	10.1

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

08/04/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	<0.015	38	700	6.75	900	11.3

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

14/04/2015

Sample Point	Amm-N (N:mg/l)	BOD (mg/l)	Chloride (mg/l)	COD (mg/l)	Hg (mg/l)	MCPP (UG/L)	Pb(D) (mg/l)
LLA000W1	0.22	2					
LLADOWNSTREAM	0.03		31	7	<0.00001	<0.02	<0.001
LLASPRING	<0.01		51		0.00001	0.06	<0.001
LLAUPSTREAM	<0.01		30	5	<0.00001	<0.02	<0.001

Sample Point	pH (Lab)	S.Solids (mg/l)
LLA000W1	7.7	48

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

22/04/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	<0.015	42	820	7.75	600	12.7

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Llanddulas Surface Water Quality Data - February to April 2015



From : 05/02/2015

To : 30/04/2015

30/04/2015

Sample Point	Amm-N (N:mg/l)	Chloride (mg/l)	Cond (uS / cm)	pH(Fld)	Spring Flow (l/min)	Temp (Deg C)
LLASPRING	<0.015	37	740	6.9	360	10.8

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