

**Flintshire County Council
Waste Management Services**

Brookhill Landfill Site

Retro Drilling of Gas Wells and Installation of Gas
Collection Pipework

Construction Quality Assurance Report

November 2015

Flintshire County Council Waste Management Services

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Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

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Flintshire County Council Waste Management Services

Brookhill Landfill Site

**Retro Drilling of Gas Wells and Installation of
Gas Collection Pipework**

Construction Quality Assurance Report

November 2015

Prepared for
Flintshire County Council Waste
Management Services

Prepared by
Egniol Environmental Ltd.
Tre Felin
Bangor
Gwynedd
LL57 4LH

Document Review

Version No.	Date of Review	Prepared By	Reviewed By	Approved By
1.0	26/11/2015	Jason Buckley	Richard Furniss	Richard Furniss

1.0 INTRODUCTION

- 1.1** Egniol Environmental Ltd. (Egniol) of Tre Felin, Bangor, Gwynedd have been appointed by Flintshire County Council Waste Management Services (Flintshire CC) as Construction Quality Assurance (CQA) Consultants for the retro drilling and installation of gas wells and gas collection pipework at Brookhill Landfill Site.
- 1.2** The appointment required the professional services of Egniol for the provision of a CQA Inspector. The CQA Inspector was required to monitor the progress and report upon completion of the works, with regard to quality assurance and compliance with the approved CQA Plans for the works (Egniol documents: *Brookhill Landfill Site, Retro-Drilling of Gas Wells, Construction Quality Assurance Plan, Version 2.0, September 2015* and *Brookhill Landfill Site, Installation of Gas Collection Pipework, Construction Quality Assurance Plan, Version 1.0, October 2015*).
- 1.3** In accordance with this appointment, Egniol have produced this report which covers the retro drilling and installation of gas wells and gas collection pipework at Brookhill Landfill Site.

2.0 LOCATION AND ADDRESS OF SITE

2.1 Site Location

Brookhill Landfill Site is located approximately 1.0 mile North of the town of Buckley in Flintshire. The site can be accessed via Brookhill Way, off Pinfold Lane.

2.2 Site Address

Brookhill Landfill Site
Pinfold Industrial Estate
Buckley Way
Buckley
Flintshire
CH7 3PL

3.0 BRIEF DESCRIPTION AND TIMING OF WORKS

3.1 Description of Works

In accordance with the approved CQA Plans (Egniol documents: *Brookhill Landfill Site, Retro-Drilling of Gas Wells, Construction Quality Assurance Plan, Version 2.0, September 2015* and *Brookhill Landfill Site, Installation of Gas Collection Pipework, Construction Quality Assurance Plan, Version 1.0, October 2015*), 15 no. landfill gas extraction wells were to be installed into areas of the capped and restored waste surface at Brookhill Landfill Site by means of retro drilling. Gas collection pipework was subsequently installed following gas well installation to connect the newly installed wells to the gas collection system.

All 15 no. proposed wells were installed during these Works.

The drilling Works commenced on the 24th September 2015 and were completed on the 6th October 2015. The gas collection pipework installation works commenced on Wednesday 21st October 2015 and were completed on Thursday 29th October 2015.

The proposed gas well locations were supplied by Flintshire CC prior to the Works commencing. These locations were surveyed and marked with the erection of a wooden peg. Each peg was labeled with its own identification number.

Table 1 – Location and Drill Depth Information

CQA Plan Gas Well ID	Installed Gas Well ID	Eastings	Northings	Proposed Drill Depth (mBGL)	Actual Drill Depth (mBGL)	Theoretical Stone Volume (m ³) (Aprox.)	Actual Stone Volume (m ³) (Approx.)
35	35	633.750	1095.900	15.98	15.98	0.988	0.99
36	36	649.929	1108.350	25.36	25.36	1.702	1.70
37	37	687.455	1116.200	18.51	18.51	1.180	1.18
38	38	667.056	1139.072	27.49	27.49	1.864	1.86
39	39	676.016	1165.365	20.85	20.85	1.358	1.36
40	40	646.158	1215.988	28.21	28.21	1.919	1.92
41	41	618.674	1220.377	35.83	35.83	2.499	2.50
42	42	637.953	1270.439	17.42	17.42	1.098	1.10
43	43	610.920	1271.132	23.45	23.45	1.556	1.56
44	44	585.836	1297.648	23.82	23.82	1.584	1.58
45	45	569.184	1253.447	31.10	30.40	2.138	2.09
46	46	600.892	1201.833	36.09	35.00	2.518	2.44
47	47	551.137	1213.782	26.09	26.09	1.757	1.76
48	48	538.322	1130.020	22.68	22.68	1.498	1.50
49	49	539.104	1054.957	25.11	25.11	1.683	1.68

Location information supplied by Flintshire County Council Waste Management Services via email 08.10.2015.

3.2 Works Parties

The following parties were involved in the works:

Site Permit Holder	Flintshire County Council
CQA Inspector	Egniol Environmental
Retro Drilling Contractor	Magpie Environmental Drilling Services
Pipework Welding Contractor	RPG Services

4.0 CONSTRUCTION QUALITY ASSURANCE

4.1 Specification

All pipework lengths were welded on top of site in a fully capped and restored area as approved by Flintshire CC prior to works starting, away from all other wells.

The pipework lengths were connected using butt-fusion welding techniques to the required length for each well as stated in the CQA Plan.

The pipework installed consisted of 160mm diameter HDPE pipe with a solid upper section and a lower perforated section. The upper section of solid pipework had a minimum of 4.0m installed below ground level and 1.0m above ground level. The base of the perforated pipework was fitted with a welded end cap.

The solid pipework was fitted with gas well headwork's prior to the installation of gas collection pipework.

The annulus between the HDPE pipe and waste was backfilled with 20-40mm non-calcareous stone to a minimum depth of 3.0m below ground level. The remaining length of the annulus was sealed using a hydrated bentonite seal to ground level. A bag of dry bentonite was inserted into the borehole to form a blinding layer on top of the gravel pack to prevent downward movement of the hydrated bentonite. The bentonite seal was formed by hydrating of bentonite powder and mixing into a slurry prior to installation within the borehole.

All pipework was measured by the CQA Inspector to verify the length of solid and perforated pipe prior to being installed within the borehole.

4.2 Gas Well Details

The following well details are listed in order of well installation.

Gas Well 47

Gas Well 47 was drilled to the target depth of 26.09m. Pipework was installed to a depth of 26.09m Below Ground Level (BGL) and consisted of 21.09m perforated casing and 6.0m solid casing (including 1.0m Above Ground Level (AGL). Approximately 1.76m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 46

Gas Well 46 was drilled to the target depth of 36.09m. After reaching the achieved depth and prior to installing the pipework, the waste at the base of the well collapsed by approximately 1.09m. Pipework was installed to a depth of

35.0m BGL due to the collapse at the base of the well. The pipework consisted of 31.0m perforated casing and 6.0m solid casing (including 2.0m AGL). Approximately 2.44m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 41

Gas Well 41 was drilled to the target depth of 35.83m. Pipework was installed to a depth of 35.83m BGL and consisted of 30.83m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 2.50m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 40

Gas Well 40 was drilled to the target depth of 28.21m. Pipework was installed to a depth of 28.21m BGL and consisted of 23.21m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.92m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 43

Gas Well 43 was drilled to the target depth of 23.45m. Pipework was installed to a depth of 23.45m BGL and consisted of 18.45m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.56m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 44

Gas Well 44 was drilled to the target depth of 23.82m. Pipework was installed to a depth of 23.82m BGL and consisted of 18.82m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.58m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 42

Gas Well 42 was drilled to the target depth of 17.42m. Pipework was installed to a depth of 17.42m BGL and consisted of 12.40m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.10m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 48

Gas Well 48 was drilled to the target depth of 22.68m. Pipework was installed to a depth of 22.68m BGL and consisted of 17.68m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.50m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 37

Gas Well 37 was drilled to the target depth of 18.51m. Pipework was installed to a depth of 18.51m BGL and consisted of 13.51m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.18m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 38

Gas Well 38 was drilled to the target depth of 27.49m. Pipework was installed to a depth of 27.49m BGL and consisted of 22.49m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.86m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 39

Gas Well 39 was drilled to the target depth of 20.85m. Pipework was installed to a depth of 20.85m BGL and consisted of 15.85m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.36m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 35

Gas Well 35 was drilled to the target depth of 15.98m. Pipework was installed to a depth of 15.98m BGL and consisted of 10.98m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 0.99m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 36

Gas Well 36 was drilled to the target depth of 25.36m. Pipework was installed to a depth of 25.36m BGL and consisted of 20.36m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.70m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 45

Gas Well 45 was drilled to the target depth of 31.10m BGL. After reaching the achieved depth and prior to installing the pipework, the waste at the base of the well collapsed by approximately 0.7m. Pipework was installed to a depth of 30.40m BGL following the collapse at the base of the well. The pipework consisted of 26.10m perforated casing and 6.0m solid casing (including 1.7m AGL). Approximately 2.09m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

Gas Well 49

Gas Well 49 was drilled to the target depth of 25.11m. Pipework was installed to a depth of 25.11m BGL and consisted of 20.11m perforated casing and 6.0m solid casing (including 1.0m AGL). Approximately 1.68m³ of gravel was installed to a depth of 3.0m BGL. The remaining portion of the annulus was backfilled with a hydrated bentonite seal to ground level.

4.3 Contract Particulars

During the drilling of the gas extraction wells the verticality of the borehole was regularly checked at approximately 5.0m intervals.

When moving the drilling rig between locations, it was ensured that the route had been walked to establish the most suitable access route and to check for services or penetrations along the way. The area of drilling was also cleared of any obstruction that could prevent the drilling rig from carrying out the Works.

Dry waste arisings from the drilling operations were taken to the waste transfer station on site. All other waste arisings excavated as a result of the drilling works were placed in covered skips for offsite disposal. Details of the waste arisings can be found in the CQA Inspectors drilling logs enclosed in Appendix 2 of this CQA Report.

The Well 46 operations took place over two days. The barrel auger of the drill rig was left in place over night with a hydrated bentonite seal installed to prevent gas emissions.

A deodorizing unit was utilized during the drilling works, in accordance with the Permit requirements and in close liaison with the Site Operators.

4.4 Installation of Gas Collection Pipework

In accordance with the approved CQA Plan the following works to install gas collection pipework took place:

- 7 no. installed gas wells were connected to existing manifolds via 90mm pipe (gas wells 38, 40, 41, 45, 46, 47 and 48);
- 8 no. installed gas wells were connected to existing manifolds by way of 90mm pipe connected onto 180mm/250mm pipework via reducer joints (gas wells 35, 36, 37, 39, 42, 43, 44 and 49).

4.4.1 Well Connections

Connections were made between the installed gas wells and the existing manifolds. The connections used 90mm SDR17.6 butt fusion welded HDPE pipework lengths, with electro fusion welded couplers or reducers at the gas well. The pipework was then connected to the gas well headworks using a 63mm/160mm collar.

The connecting pipework was joined to the manifolds using 90mm to 63mm electro fusion welded reducers.

Gas Well 49 was connected directly to the 250mm gas main using 250mm to 63mm reducing saddle joints; these were also electro fusion welded.

The CQA Inspectors pipework joint record sketch can be found in Appendix 7 of this report.

4.4.2 Pipework Trenching

All connecting pipework lengths were laid within trenches and laid to ensure a fall within the pipework towards the manifolds to facilitate dewatering by achieving the required falls.

Prior to the trenches being backfilled, the CQA Inspector and Pipework Welding Contractor visually inspected the pipework for any damage which may have occurred during the transportation and installation of the pipework.

4.4.3 Welding Records

Joint records for all butt fusion and electro fusion welding carried out during the Works were maintained by the CQA Inspector and are included within Appendices 3 and 5 (respectively) of this Report along with copies of the butt fusion and electro fusion welding tickets in Appendices 4 and 6 (respectively).

All welding was inspected by the CQA Inspector for suitability prior to its inclusion within the works in accordance with the CQA Plan.

5.0 ISSUES ENCOUNTERED

- 5.1** The borehole drilling process for Well 35 commenced but was abandoned when an airline was encountered during the drilling process. Flintshire CC were contacted and informed of the damaged airline. The airline was encountered in the upper restoration soils (approx 0.5m BGL) and the geosynthetic capping system was not encountered.

The airline pipework was subsequently repaired with an electro fusion welded coupler. Flintshire CC instructed that the location for Well 35 was to be moved 5.0m up the batter from the original location. Drilling continued with no further services encountered. The abandoned borehole for Well 35 was backfilled with the excavated restoration soils.

- 5.2** Well 45 was drilled to the target depth of 36.09m BGL. The well was installed at 35.0m BGL (1.09m short of target depth) due to a small collapse of the waste at the base of the well.
- 5.3** Well 46 was drilled to the target depth of 36.09m. The well was installed at 35.0m BGL (0.7m short of the target depth) due to a small collapse of the waste at the base of the well.
- 5.4** On excavation of the trench that runs from Gas Well 46 to the manifold, a breached leachate line was discovered. It was subsequently repaired by RPG (the pipework welding contractor) by cutting out the damaged piece of pipe and replacing with a new section using electro fused collars. The Flintshire CC Site Manager was contacted and informed of the repair.
- 5.5** No other issues were encountered during the Works.

6.0 CONCLUSIONS

- 6.1** From the observations and measurements made by the CQA Inspector, to the best of our knowledge, 15 no. gas extraction wells were installed at Brookhill Landfill Site to a satisfactory standard and in accordance with the previously approved CQA Plan.
- 6.2** From the observations and measurements made by the CQA Inspector, to the best of our knowledge all gas collection pipework was connected and installed in the accordance with the previously approved CQA Plan.

Flintshire County Council Waste Management Services

Brookhill Landfill Site

Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

1. CQA Inspectors Daily Logs

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site
Project: Retro Drilling of Gas Wells

Date	Thursday 24th September 2015	
Weather	Previous Night	N/A
	a.m	Sunny
	p.m	Sunny
Site Hours:	07:00 - 17:00	
Contractors Arrival Time:	08:00	
CQA Arrival Time:	08:30	
Contractors Departure Time:	17:00	
CQA Departure Time:	17:00	
Contractors Plant / Resources Utilised	<u>Magpie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odouriser. 2 x Drilling Crew <u>RPG Services UK</u> Fusion 180ABF Butt fusion Machine. 2 x Pipe Crew	
Contract Works Undertaken	<u>Magpie Environmental Drilling Ltd. (MDL)</u> <u>Gas Well 46</u> 10.00hrs MDL - Positioned the drilling at gas well 46 10.15hrs MDL Started the drilling of gas well 46 to a target depth of 36.1mBGL 17:00hrs - Borehole sealed up at the end of shift barrel left in borehole and sealed with bentonite. Drilled to 30.0mBGL All waste arisings were placed in the dumper and transported to skips to be disposed offsite.	
Testing Undertaken	Vertical checks to drilling rig. Photos taken of works.	
Meetings/ Correspondence	Pre start Meeting and walkover the positions with Paul Murphy (Flintshire CC) about the upcoming works	
Health and Safety	No Issues	
Visitors to Site	Richard Furniss (EGNIOL) Alison Soper (Natural Resource Wales)	
Comments	None.	

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site
Project: Retro Drilling of Gas Wells

Date	Friday 25th September 2015
Weather	Previous Night a.m p.m
	N/A Sunny Sunny
Site Hours:	07:00 - 17:00
Contractors Arrival Time:	08:00
CQA Arrival Time:	08:00
Contractors Departure Time:	17:00
CQA Departure Time:	17:00
Contractors Plant / Resources Utilised	<u>Maggie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odourizer. 2 x Drilling Crew <u>RPG Services UK</u> Fusion 180ABF Butt fusion Machine. 2 x Pipe Crew
Contract Works Undertaken	<u>Maggie Environmental Drilling Ltd. (MDL)</u> <u>Gas Well 46</u> 08.00hrs MDL - Continued the drilling of gas well 46 to a target depth of 36.1mBGL 12:30hrs - Borehole completed to 36.09mBGL 160mm pipe installed to a depth of 35.0mBGL. 2m Stick up due to hole collapsing on installation of pipework. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. All Waste arising's placed in the dumper and transported to skips to be disposed offsite.
Testing Undertaken	Vertical checks to drilling rig. Photos taken of works. Borehole checked 5m from target depth Pipework Installation 20/40 Gravel Pack installed Hydrated Bentonite Seal Installed Plastic end cap fitted and taped
Meetings/ Correspondence	None.
Health and Safety	No Issues
Visitors to Site	None.
Comments	None.

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site

Project: Retro Drilling of Gas Wells

Date	Monday 28th September 2015
Weather	Previous Night N/A a.m Sunny p.m Sunny
Site Hours:	07:00 - 17:00
Contractors Arrival Time:	10:00
CQA Arrival Time:	08:00
Contractors Departure Time:	17:00
CQA Departure Time:	17:00
Contractors Plant / Resources Utilised	<u>Maggie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odourizer. 2 x Drilling Crew.
Contract Works Undertaken	<u>Maggie Environmental Drilling Ltd. (MDL)</u> <u>Gas Well 41</u> 10.00hrs MDL – Positioned the drilling rig at gas well 41 10.00hrs MDL - Started the drilling of gas well 35.83 to a target depth of 36.1mBGL 12:30hrs - Borehole completed to 35.83mBGL 160mm pipe installed to a depth of 35.83mBGL. 1m stick up above ground level. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. All Waste arising's placed in the dumper and transported to skips to be disposed offsite.
Testing Undertaken	Vertical checks to drilling rig. Photos taken of works. Borehole checked 5m from target depth Pipework Installation 20/40 Gravel Pack installed Hydrated Bentonite Seal Installed Plastic end cap fitted and taped
Meetings/ Correspondence	None.
Health and Safety	No Issues
Visitors to Site	None.
Comments	None.

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site

Project: Retro Drilling of Gas Wells

Date	Tuesday 29th September 2015	
Weather	Previous Night	N/A
	a.m	Sunny
	p.m	Sunny
Site Hours:	07:00 - 17:00	
Contractors Arrival Time:	07:00	
CQA Arrival Time:	07:00	
Contractors Departure Time:	17:00	
CQA Departure Time:	17:00	
Contractors Plant / Resources Utilised	<u>Magpie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odourizer. 2 x Drilling Crew.	
Contract Works Undertaken	<u>Magpie Environmental Drilling Ltd. (MDL)</u> <u>Gas Well 40</u> 07.40hrs MDL – Positioned the drilling rig at gas well 40 07.40hrs MDL - Started the drilling of gas well to target depth of 28.21mBGL 11:00hrs - Borehole completed to 28.21mBGL 160mm pipe installed to a depth of 28.21mBGL. 20/40 Gravel installed into the annulus. 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. <u>Gas Well 43</u> 11.00hrs MDL – Positioned the drilling rig at gas well 43 11.00hrs MDL - Started the drilling of gas well 23.45 to a target depth of 23.45mBGL 14:00hrs - Borehole completed to 23.5mBGL 160mm pipe installed to a depth of 23.5mBGL. 20/40 Gravel installed into the anulas 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. <u>Gas Well 44</u> 14.00hrs MDL – Positioned the drilling rig at gas well 44 14.00hrs MDL - Started the drilling of gas well 23.8 to a target depth of 23.5mBGL 17:30hrs - Borehole completed to 23.8mBGL 160mm pipe installed to a depth of 23.8mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. All Waste arising's placed in the dumper and transported to skips to be disposed offsite.	

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site

Project: Retro Drilling of Gas Wells

Testing Undertaken	Vertical checks to drilling rig. Photos taken of works. Borehole checked 5m from target depth Pipework Installation 20/40 Gravel Pack installed Hydrated Bentonite Seal Installed Plastic end cap fitted and taped
Meetings/ Correspondence	None
Health and Safety	No Issues
Visitors to Site	Paul Murphy (Flintshire CC)
Comments	None.

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site

Project: Retro Drilling of Gas Wells

Date		Wednesday 30th September 2015
Weather	Previous Night	N/A
	a.m	Sunny
	p.m	Sunny
Site Hours:		07:00 - 17:00
Contractors Arrival Time:		07:00
CQA Arrival Time:		07:00
Contractors Departure Time:		17:00
CQA Departure Time:		17:00
Contractors Plant / Resources Utilised		<u>Magpie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odourizer. 2 x Drilling Crew.
Contract Works Undertaken		<u>Magpie Environmental Drilling Ltd. (MDL)</u> <u>Gas Well 47</u> 07.45hrs MDL – Positioned the drilling rig at gas well 47 07.45hrs MDL - Started the drilling of gas well 47 to a target depth of 26.09mBGL 11:00hrs - Borehole completed to 26.09mBGL 160mm pipe installed to a depth of 26.09mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. <u>Gas Well 48</u> 11.00hrs MDL – Positioned the drilling rig at gas well 48 11.00hrs MDL - Started the drilling of gas well 48 to a target depth of 22.68mBGL 14:00hrs - Borehole completed to 22.68mBGL 160mm pipe installed to a depth of 22.68mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. <u>Gas Well 42</u> 14.00hrs MDL – Positioned the drilling rig at gas well 42 14.00hrs MDL - Started the drilling of gas well 42 to a target depth of 17.42mBGL 17:00hrs - Borehole completed to 17.42mBGL 160mm pipe installed to a depth of 17.42mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted.

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site
Project: Retro Drilling of Gas Wells

	All Information wrote onto the newly installed gas well. All Waste arising's placed in the dumper and transported to skips to be disposed offsite.
Testing Undertaken	Vertical checks to drilling rig. Photos taken of works. Borehole checked 5m from target depth Pipework Installation 20/40 Gravel Pack installed Hydrated Bentonite Seal Installed Plastic end cap fitted and taped
Meetings/ Correspondence	None.
Health and Safety	No Issues
Visitors to Site	Paul Murphy (Flintshire CC) Alison Soper (Natural Resource Wales)
Comments	All Boreholes used 4 bags of bentonite mixed hydrated above borehole. 2 bags of dry installed over gravel pack.

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Retro Drilling of Gas Wells

Date	Thursday 1st October 2015	
Weather	Previous Night	N/A
	a.m	Foggy
	p.m	Overcast
Site Hours:	07:00 - 17:00	
Contractors Arrival Time:	07:00	
CQA Arrival Time:	07:00	
Contractors Departure Time:	17:00	
CQA Departure Time:	17:00	
Contractors Plant / Resources Utilised	<u>Magpie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odourizer. 2 x Drilling Crew.	
Contract Works Undertaken	<u>Magpie Environmental Drilling</u> <u>Gas Well 39</u> 07.45hrs MDL – Positioned the drilling rig at gas well 39 07.45hrs MDL - Started the drilling of gas well 39 to a target depth of 20.85mBGL 11:00hrs - Borehole completed to 20.85mBGL 160mm pipe installed to a depth of 20.85mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. <u>Gas Well 38</u> 11.00hrs MDL – Positioned the drilling rig at gas well 38 11.00hrs MDL - Started the drilling of gas well 38 to a target depth of 27.49mBGL 14:00hrs - Borehole completed to 27.49mBGL 160mm pipe installed to a depth of 27.49mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. <u>Gas Well 37</u> 14.00hrs MDL – Positioned the drilling rig at gas well 37 14.00hrs MDL - Started the drilling of gas well 37 to a target depth of 18.51mBGL 17:00hrs - Borehole completed to 18.51mBGL 160mm pipe installed to a depth of 18.51mBGL. 20/40 Gravel installed into the anulas 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted.	

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Retro Drilling of Gas Wells

	All Information wrote onto the newly installed gas well. All Waste arising's placed in the dumper and transported to skips to be disposed offsite.
Testing Undertaken	Vertical checks to drilling rig. Photos taken of works. Borehole checked 5m from target depth Pipework Installation 20/40 Gravel Pack installed Hydrated Bentonite Seal Installed Plastic end cap fitted and taped
Meetings/ Correspondence	None.
Health and Safety	No Issues
Visitors to Site	None.
Comments	All Boreholes used 4 bags of bentonite mixed hydrated above borehole. 2 bags of dry installed over gravel pack.

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site
Project: Retro Drilling of Gas Wells

Date	Friday 2nd October 2015
Weather	Previous Night N/A a.m Foggy/ Sunny p.m Sunny
Site Hours:	07:00 - 17:00
Contractors Arrival Time:	07:00
CQA Arrival Time:	07:00
Contractors Departure Time:	17:00
CQA Departure Time:	17:00
Contractors Plant / Resources Utilised	<u>Maggie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odourizer. 2 x Drilling Crew.
Contract Works Undertaken	<u>Maggie Environmental Drilling Ltd. (MDL)</u> <u>Gas Well 36</u> 07.45hrs MDL – Positioned the drilling rig at gas well 36 07.45hrs MDL - Started the drilling of gas well 36 to a target depth of 25.36mBGL 11:00hrs - Borehole completed to 25.36mBGL 160mm pipe installed to a depth of 25.36mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. <u>Gas Well 35</u> 11.00hrs MDL – Positioned the drilling rig at gas well 35 11.00hrs MDL - Started the drilling of gas well 35 to a target depth of 15.98mBGL 14:00hrs - Borehole completed to 15.98mBGL 160mm pipe installed to a depth of 15.98mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. All Waste arising's placed in the dumper and transported to skips to be disposed offsite.
Testing Undertaken	Vertical checks to drilling rig. Photos taken of works. Borehole checked 5m from target depth Pipework Installation 20/40 Gravel Pack installed Hydrated Bentonite Seal Installed Plastic end cap fitted and taped

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site

Project: Retro Drilling of Gas Wells

Meetings/ Correspondence	None.
Health and Safety	No Issues
Visitors to Site	None.
Comments	All Boreholes used 4 bags of bentonite mixed hydrated above borehole. 2 bags of dry installed over gravel pack. Gas Well 35 was abandoned after encountering an air line at approx 0.5. Borehole started again 5 meter's up the batter from the original position. Paul Murphy of Flitshire CC aware of the breach to pipework. New pipe fitted with E.F Weld. Geosynthetic capping system not encountered in abandoned borehole.

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site
Project: Retro Drilling of Gas Wells

Date	Monday 5th October 2015
Weather	Previous Night N/A a.m Rain / Overcast p.m Overcast
Site Hours:	07:00 - 17:00
Contractors Arrival Time:	11:00
CQA Arrival Time:	07:00
Contractors Departure Time:	17:00
CQA Departure Time:	17:00
Contractors Plant / Resources Utilised	<u>Maggie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odourizer. 2 x Drilling Crew.
Contract Works Undertaken	<u>Maggie Environmental Drilling</u> <u>Gas Well 45</u> 10.00hrs MDL – Positioned the drilling rig at gas well 45 10.00hrs MDL - Started the drilling of gas well 45 to a target depth of 31.1mBGL 15:00hrs - Borehole completed to 31.1mBGL 160mm pipe installed to a depth of 30.4mBGL. 0.7 collapsed back into borehole on installation of pipework. 1.7m Stick up 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. All Waste arising's placed in the dumper and transported to skips to be disposed offsite.
Testing Undertaken	Vertical checks to drilling rig. Photos taken of works. Borehole checked 5m from target depth Pipework Installation 20/40 Gravel Pack installed Hydrated Bentonite Seal Installed Plastic end cap fitted and taped.
Meetings/ Correspondence	None.
Health and Safety	No Issues
Visitors to Site	Paul Murphy (Flintshire CC)

For Egniol Environmental Ltd: Stuart Darbyshire



CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site

Project: Retro Drilling of Gas Wells

Comments	All Boreholes used 4 bags of bentonite mixed hydrated above borehole. 2 bags of dry installed over gravel pack.
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For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site
Project: Retro Drilling of Gas Wells

Date	Tuesday 6th October 2015
Weather	Previous Night N/A a.m Sunny Intervals p.m Overcast
Site Hours:	07:00 - 17:00
Contractors Arrival Time:	07:00
CQA Arrival Time:	07:00
Contractors Departure Time:	17:00
CQA Departure Time:	17:00
Contractors Plant / Resources Utilised	<u>Magpie Environmental Drilling</u> Comacchio MC 3000s Drilling Rig Manitou 732 Telehandler Terex TA6 Dumper Endura Maxx De Odourizer. 2 x Drilling Crew.
Contract Works Undertaken	<u>Magpie Environmental Drilling</u> <u>Gas Well 49</u> 08.00hrs MDL – Positioned the drilling rig at gas well 49 08.00hrs MDL - Started the drilling of gas well 49 to a target depth of 25.11mBGL 11:00hrs - Borehole completed to 25.11mBGL 160mm pipe installed to a depth of 25.11mBGL. 20/40 Gravel installed into the annulus 3.0m Hydrated bentonite seal backfilled to ground level. Plastic cap fitted. All Information wrote onto the newly installed gas well. All Waste arising's placed in the dumper and transported to skips to be disposed offsite.
Testing Undertaken	Vertical checks to drilling rig. Photos taken of works. Borehole checked 5m from target depth Pipework Installation 20/40 Gravel Pack installed Hydrated Bentonite Seal Installed Plastic end cap fitted and taped
Meetings/ Correspondence	None.
Health and Safety	No Issues
Visitors to Site	Paul Murphy (Flintshire CC)

For Egniol Environmental Ltd: Stuart Darbyshire



CQA Inspector's Daily Report

Site Name: Brookhill Landfill Site

Project: Retro Drilling of Gas Wells

Comments	All Boreholes used 4 bags of bentonite mixed hydrated above borehole. 2 bags of dry installed over gravel pack
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For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Date	Wednesday 21st October 2015	
Weather	Previous Night	Rain
	a.m	Overcast
	p.m	Overcast
Site Hours:	07:00 - 17:00	
Contractors Arrival Time:	07:30	
CQA Arrival Time:	07:30	
Contractors Departure Time:	17:00	
CQA Departure Time:	17:00	
Contractors Plant / Resources Utilised	<u>RPG Services UK</u> Fusion 180ABF Butt fusion Machine. Fusion QBOX Electro Fusion Machine 2 x Pipe Crew	
Contract Works Undertaken	<u>RPG Services UK</u> Started the Butt fusion of the 90mm SDR 17.6 pipe work gas well 49 Joint numbers 173 – 177 gas well 35 Joint numbers 178 – 181 gas well 42 Joint numbers 182 – 185 gas well 47 Joint numbers 186 – 189 gas well 41 joint numbers 190 - 193 gas well 43 joint numbers 194 – 195 gas well 38 joint numbers 196 gas well 40 joint numbers 197 gas well 44 joint number 198 gas well 46 joint number 199 – 200 gas well 45 joint numbers 201 - 204	
Testing Undertaken	Photos taken of works. All Joint Numbers Recorded.	
Meetings/ Correspondence	Inductions and Pre start Meeting and walkover with Paul Murphy (Flintshire CC) about the upcoming works	
Health and Safety	No Issues	
Visitors to Site	Paul Murphy (Flintshire CC)	
Comments		

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Date	Thursday 22nd October 2015	
Weather	Previous Night	Clear
	a.m	Overcast
	p.m	Overcast
Site Hours:	07:00 - 17:00	
Contractors Arrival Time:	07:30	
CQA Arrival Time:	07:30	
Contractors Departure Time:	17:00	
CQA Departure Time:	17:00	
Contractors Plant / Resources Utilised	<u>RPG Services UK</u> Fusion 180ABF Butt fusion Machine. Fusion QBOX Electro Fusion Machine Komatsu PC27MR Mini Digger 2 x Pipe Crew	
Contract Works Undertaken	<u>RPG Services UK</u> Started the excavation of trenches to take the 90mm gas line from the gas well to the manifolds. All trenches are 300mm Minimum with the fall away from the gas well towards the manifolds.	
Testing Undertaken	Photos taken of works Joint Numbers Recorded.	
Meetings/ Correspondence		
Health and Safety	No Issues	
Visitors to Site	Paul Murphy (Flintshire CC)	
Comments		

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Date	Friday 23rd October 2015
Weather	Previous Night Clear a.m Overcast p.m Cloudy
Site Hours:	07:00 - 17:00
Contractors Arrival Time:	07:30
CQA Arrival Time:	07:30
Contractors Departure Time:	17:00
CQA Departure Time:	17:00
Contractors Plant / Resources Utilised	<u>RPG Services UK</u> Fusion 180ABF Butt fusion Machine. Fusion QBOX Electro Fusion Machine Komatsu PC27MR Mini Digger 2 x Pipe Crew
Contract Works Undertaken	<u>RPG Services UK</u> Continued the excavation of trenches to take the 90mm gas line from the gas wells to the manifolds the pipework is reduced to 63mm through an EF reducer and connected to the valves in the Manifold. Installed the pipe work from gas well 46 41 40 to the manifold connected up at the manifold and back filled the trench. The Connections to the gas well 46. Are a 160mm Collar fused at the well head. The pipework connecting to the gas collection is a 63mm collar through a 63mm elbow and then finally a 63/90mm reducer to connect to the 90mm gas line from manifold. The connection to gas well 41 is on the same 90mm pipe as gas well 46 through a 90mm tee piece and a 90/63mm reducer a 63mm collar and a 160mm collar fused at the headworks. The Connections to the gas well 40. Are a 160mm Collar fused at the well head. The pipework connecting to the gas collection is a 63mm collar through a 63mm elbow and then finally a 63/90mm reducer to connect to the 90mm gas line from manifold.
Testing Undertaken	Photos taken of works. Joint Numbers Recorded
Meetings/ Correspondence	
Health and Safety	No Issues

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Visitors to Site	Paul Murphy (Flintshire CC)
Comments	On Excavating the trench that runs from gas well 46 to the manifold RPG encountered a leachate line and that was breached. RPG fixed the leachate line by the means of cutting out the damaged piece of pipe connecting a new piece of pipe and welded an EF collar to fuse the pipe.

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Date	Monday 26th October 2015	
Weather	Previous Night	Clear
	a.m	Overcast
	p.m	Cloudy
Site Hours:	07:00 - 17:00	
Contractors Arrival Time:	07:30	
CQA Arrival Time:	07:30	
Contractors Departure Time:	17:00	
CQA Departure Time:	17:00	
Contractors Plant / Resources Utilised	<u>RPG Services UK.</u> Fusion QBOX Electro Fusion Machine Komatsu PC27MR Mini Digger 2 x Pipe Crew	
Contract Works Undertaken	<u>RPG Services UK</u> Continued the excavation of trenches to take the 90mm gas line from the gas wells to the manifolds the pipework is reduced to 63mm through an EF reducer and connected to the valves in the Manifold. Installed the pipe work from gas well 43 44 45 to the manifold and connected up. The Connections to the gas well 43 44. Are a 160mm Collar fused at the well head the pipework connecting to the gas collection is a 63mm collar through a 63mm elbow and then finally a 63/90mm reducer to connect to the 90mm gas line from manifold. The connection to gas well 45 runs from the manifold below the gas well RPG connected into a 90mm pipe running from the manifold. Connected up with a 90mm collar to the new piece of pipe running to the Gas well. The Connections at the gas well 45. Are a 160mm Collar fused at the well head. The pipework connecting to the gas collection is a 63mm collar through a 63mm elbow and then finally a 63/90mm reducer to connect to the 90mm gas line from manifold.	
Testing Undertaken	Photos taken of works. Joint Numbers Recorded	
Meetings/ Correspondence		
Health and Safety	No Issues	

For Egniol Environmental Ltd: Stuart Darbyshire



CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Visitors to Site	Paul Murphy (Flintshire CC)
Comments	

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Date	Tuesday 27th October 2015	
Weather	Previous Night	N/A
	a.m	Overcast / Misty
	p.m	Overcast / Cloudy
Site Hours:	07:00 - 17:00	
Contractors Arrival Time:	07:30	
CQA Arrival Time:	07:30	
Contractors Departure Time:	17:00	
CQA Departure Time:	17:00	
Contractors Plant / Resources Utilised	<u>RPG Services UK.</u> Fusion QBOX Electro Fusion Machine Komatsu PC27MR Mini Digger 2 x Pipe Crew	
Contract Works Undertaken	<u>RPG Services UK</u> Continued the excavation of trenches to take the 90mm gas line from the gas wells to the manifolds. Installed the pipe work from gas well to the manifold connected up at the manifold and Installation of the well head to gas wells 48, 47 49, The Installation of the well head consists of a 160mm collar EF fused to the gas well. Also the 90mm pipework is connected by a 63mm 90mm Reducer and the 63mm pipe is fused by a 63mm Collar at the head works. (See Pics)	
Testing Undertaken	Photos taken of works Joint Numbers recorded.	
Meetings/ Correspondence		
Health and Safety	No Issues	
Visitors to Site	Paul Murphy (Flintshire CC)	
Comments		

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Date	Wednesday 28th October 2015
Weather	Previous Night a.m p.m
	N/A Overcast Overcast
Site Hours:	07:00 - 17:00
Contractors Arrival Time:	07:30
CQA Arrival Time:	07:30
Contractors Departure Time:	17:00
CQA Departure Time:	17:00
Contractors Plant / Resources Utilised	<u>RPG Services UK.</u> Fusion QBOX Electro Fusion Machine Komatsu PC27MR Mini Digger 2 x Pipe Crew
Contract Works Undertaken	<u>RPG Services UK</u> Continued the excavation of trenches to take the 90mm gas line from the gas wells to the manifolds. Installed the pipe work for gas wells and connected the well head to gas wells 49 35 36 37, The Installation of the well head consists of a 160mm collar EF fused to the gas well. Also the 90mm pipework is connected by a 63mm 90mm Reducer and the 63mm pipe is fused by a 63mm Collar at the head works. (See Pics) The connection to Gas Well 49 consists of a 90mm pipe reduced to 63mm through a 63mm valve connected to a stand point by a 63mm collar inside of a stone ring. (See Pics) The connection to Gas Wells 35 36 37. Is connected at the 180mm Spine gas main by a 180mm 63mm Saddle through a in line valve. At the connection with gas well 36 there is a 90mm Tee in the pipework. The pipework running from Gas Well 38 is connected into the 180mm Gas Main through the means of a Saddle EF Fused.
Testing Undertaken	Photos taken of works Joint Numbers recorded.
Meetings/ Correspondence	
Health and Safety	No Issues

For Egniol Environmental Ltd: Stuart Darbyshire



CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Visitors to Site	Paul Murphy (Flintshire CC)
Comments	

For Egniol Environmental Ltd: Stuart Darbyshire

CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Date	Thursday 29th October 2015	
Weather	Previous Night	N/A
	a.m	Rain
	p.m	Sunny /Cloudy
Site Hours:	07:00 - 17:00	
Contractors Arrival Time:	07:30	
CQA Arrival Time:	07:30	
Contractors Departure Time:	17:00	
CQA Departure Time:	17:00	
Contractors Plant / Resources Utilised	<u>RPG Services UK.</u> Fusion QBOX Electro Fusion Machine Komatsu PC27MR Mini Digger 2 x Pipe Crew	
Contract Works Undertaken	<u>RPG Services UK</u> Finished the excavation of trenches to take the 90mm gas line from the gas wells to the manifolds. All trenches backfilled Installed the pipe work from gas well to the manifold connected up at the manifold and Installation of the well head to gas wells 42,39 35,37 The Installation of the well head consists of a 160mm collar EF fused to the gas well. Also the 90mm pipework is connected by a 63mm 90mm Reducer and the 63mm pipe is fused by a 63mm Collar at the head works. (See Pics) The pipework running from Gas Well 37 is connected into the 180mm spine Gas Main through the means of a Saddle EF Fused also through a in line valve. Running to the manifold above gas well 37 adjacent to gas well 38 The Pipework running from gas well 39 is connected up into a 180mm Spine gas line below the manifold through a 180/63mm Saddle,63mm Elbow 63mm coupler and a in line valve 63/90mm reducer to take the 90mm pipe. The Pipework running from Gas well 42 is connected below the manifold that takes gas wells 43, 44. The 90mm pipework from the gas well to the 180mm gas line runs through an inline valve reduces to 63mm and connects to the 180 through a 180mm 63mm Saddle. Via an 63mm elbow.	
Testing Undertaken	Photos taken of works Joint Numbers recorded.	
Meetings/ Correspondence		

For Egniol Environmental Ltd: Stuart Darbyshire



CQA Inspector's Daily Report

Site Name: Brookhill LFS

Project: Pipework Installation

Health and Safety	No Issues
Visitors to Site	Paul Murphy (Flintshire CC)
Comments	

For Egniol Environmental Ltd: Stuart Darbyshire

Flintshire County Council Waste Management Services

Brookhill Landfill Site

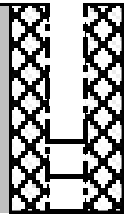
Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

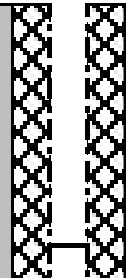
2. CQA Inspectors Drilling Logs

DRILLING REPORT						Well Number: 47	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 30.09.2015			Installation Details			Target Depth (m): 26.09	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00			Actual Depth (m): 26.09	
Extruder Dimensions:			Solid BGL (m): 5.00			Dip Level (mBGL):	
Auger Dimensions: 350mm			Perforated BGL (m): 21.09			Dip Level (mBGL) after 24hrs:	
Casing Dimensions:			Bentonite (m): 3.00			HDPE Casing Dimensions: 160mm	
			Gravel (m): 23.09				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Clay Soils			
	2.0			Dry Consolidated Waste	1.5	Dry Waste	
2.0		1	2	Dry Consolidated Waste			Hydrated Bentonite
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			J.N 59
	5.0			Dry Consolidated Waste	4.5		
5.0		1	5	Dry Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			20/40 Gravel
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			J.N 60
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Damp Consolidated Waste		Damp waste	
	14.0			Damp Consolidated Waste	13.5		
14.0		1	14	Damp Consolidated Waste			
	15.0			Damp Consolidated Waste	14.5		
15.0		1	15	Damp Consolidated Waste			
	16.0			Wet Consolidated Waste	15.5	Wet Waste	
16.0		1	16	Wet Consolidated Waste			
	17.0			Dry Consolidated Waste	16.5	Dry Waste	J.N 61
17.0		1	17	Dry Consolidated Waste			
	18.0			Dry Consolidated Waste	17.5		
18.0		1	18	Dry Consolidated Waste			
	19.0			Dry Consolidated Waste	18.5		
19.0		1	19	Dry Consolidated Waste			
	20.0			Dry Consolidated Waste	19.5		
20.0		1	20	Dry Consolidated Waste			
	21.0			Dry Consolidated Waste	20.5		
21.0		1	21	Dry Consolidated Waste			
	22.0			Dry Consolidated Waste	21.5		
22.0		1	22	Dry Consolidated Waste			J.N 62
	23.0			Dry Consolidated Waste	22.5		
23.0		1	23	Dry Consolidated Waste			
	24.0			Dry Consolidated Waste	23.5		
24.0		1	24	Dry Consolidated Waste			
	25.0			Dry Consolidated Waste	24.5		
25.0		1	25	Dry Consolidated Waste			
	26.0			Dry Consolidated Waste	25.5		J.N 63
26.0		1	26	Dry Consolidated Waste			
	27.0			Completed at 26.09mBGL	26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 46	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire CC Waste Management.						Site: Brookhill Landfill Site	
Date: 25.09.2015			Installation Details			Target Depth (m): 36.10	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 2.00		Actual Depth (m): 35.00		
Extruder Dimensions:			Solid BGL (m): 4.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 31.00		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 32.00				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay		Clay	
	1.0			Clay	0.5		
1.0		1	1	Dry Consolidated Waste		Dry Waste	
	2.0			Dry Consolidated Waste	1.5		Hydrated Bentonite
2.0		1	2	Dry Consolidated Waste			
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			J.N 9
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			
	5.0			Dry Consolidated Waste	4.5		
5.0		1	5	Dry Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			20/40 Gravel
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			J.N 10
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			J.N 11
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Dry Consolidated Waste	17.5		
18.0		1	18	Dry Consolidated Waste			
	19.0			Dry Consolidated Waste	18.5		
19.0		1	19	Dry Consolidated Waste			
	20.0			Dry Consolidated Waste	19.5		
20.0		1	20	Dry Consolidated Waste			
	21.0			Damp Consolidated Waste	20.5	Damp Waste	
21.0		1	21	Damp Consolidated Waste			J.N 12
	22.0			Damp Consolidated Waste	21.5		
22.0		1	22	Damp Consolidated Waste			
	23.0			Damp Consolidated Waste	22.5		
23.0		1	23	Damp Consolidated Waste			
	24.0			Damp Consolidated Waste	23.5		
24.0		1	24	Damp Consolidated Waste			
	25.0			Damp Consolidated Waste	24.5		
25.0		1	25	Dry Consolidated Waste		Dry Waste	
	26.0			Dry Consolidated Waste	25.5		
26.0		1	26	Dry Consolidated Waste			
	27.0			Dry Consolidated Waste	26.5		
27.0		1	27	Dry Consolidated Waste			J.N 13
	28.0			Dry Consolidated Waste	27.5		
28.0		1	28	Dry Consolidated Waste			
	29.0			Dry Consolidated Waste	28.5		
29.0		1	29	Dry Consolidated Waste			
	30.0			Dry Consolidated Waste	29.5		
30.0		1	30	Dry Consolidated Waste			
	31.0			Dry Consolidated Waste	30.5		
31.0		1	31	Dry Consolidated Waste			
	32↓			Dry Consolidated Waste	31.5		

DRILLING REPORT						Well Number: 46	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire CC Waste Managment.						Site: Brookhill landfill site	
Date: 25.09.2015			Installation Details			Target Depth (m): 36.10	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 2.00		Actual Depth (m): 35.00		
Extruder Dimensions:			Solid BGL (m): 4.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 31.00		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 32.00				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
32.0		1	32	Dry Consolidated Waste		Dry Waste	 J.N 14 J.N 15
	33.0			Dry Consolidated Waste	32.5		
33.0		1	33	Dry Consolidated Waste			
	34.0			Dry Consolidated Waste	33.5		
34.0		1	34	Dry Consolidated Waste			
	35.0			Dry Consolidated Waste	34.5		
35.0		1	35	Completed at 35.0mBGL			
	36.0				35.5		
36.0		1	36				
	37.0				36.5		
37.0		1	37				
	38.0				37.5		
38.0		1	38				
	39.0				38.5		
39.0		1	39				
	40.0				39.5		
40.0		1	40				
	41.0				40.5		
41.0		1	41				
	42.0				41.5		
42.0		1	42				
	43.0				42.5		
43.0		1	43				
	44.0				43.5		
44.0		1	44				
	45.0				44.5		
45.0		1	45				
	46.0				45.5		
46.0		1	46				
	47.0				46.5		
47.0		1	47				
	48.0				47.5		
48.0		1	48				
	49.0				48.5		
49.0		1	49				
	50.0				49.5		
50.0		1	50				
	51.0				50.5		
51.0		1	51				
	52.0				51.5		
52.0		1	52				
	53.0				52.5		
53.0		1	53				
	54.0				53.5		
54.0		1	54				
	55.0				54.5		
55.0		1	55				
	56.0				55.5		
56.0		1	56				
	57.0				56.5		
57.0		1	57				
	58.0				57.5		
58.0		1	58				
	59.0				58.5		
59.0		1	59				
	60.0				59.5		
60.0		1	60				
	61.0				60.5		
61.0		1	61				
	62.0				61.5		
62.0		1	62				
	63.0				62.5		
63.0		1	63				
	64.0				63.5		
64.0		1	64				
	65.0				64.5		

DRILLING REPORT						Well Number: 41	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire CC Waste Management.						Site: Brookhill Landfill Site	
Date: 28.09.2015			Installation Details			Target Depth (m): 35.83	
Drilling Rig type: Commachio MC3000s			Solid AGL (m):		1.00	Actual Depth (m): 35.83	
Extruder Dimensions:			Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions: 350mm			Perforated BGL (m):		30.83	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:			Bentonite (m):		3.00	HDPE Casing Dimensions: 160mm	
			Gravel (m):		32.83		
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1				
					+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay		Clay	
	1.0			Clay	0.5		
1.0		1	1	Clay			
	2.0			Dry Consolidated Waste	1.5	Dry Waste	Hydrated Bentonite
2.0		1	2	Dry Consolidated Waste			
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			
	5.0			Wet Consolidated Waste	4.5	Wet Waste	J.N 2
5.0		1	5	Wet Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5	Dry Waste	
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			20/40 Gravel
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			J.N 3
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			J.N 4
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Damp Consolidated Waste	17.5	Damp Waste	
18.0		1	18	Damp Consolidated Waste			
	19.0			Damp Consolidated Waste	18.5		
19.0		1	19	Damp Consolidated Waste			
	20.0			Damp Consolidated Waste	19.5		
20.0		1	20	Damp Consolidated Waste			
	21.0			Damp Consolidated Waste	20.5		
21.0		1	21	Damp Consolidated Waste			
	22.0			Damp Consolidated Waste	21.5		
22.0		1	22	Damp Consolidated Waste			J.N 5
	23.0			Damp Consolidated Waste	22.5		
23.0		1	23	Damp Consolidated Waste			
	24.0			Damp Consolidated Waste	23.5		
24.0		1	24	Damp Consolidated Waste			
	25.0			Damp Consolidated Waste	24.5		
25.0		1	25	Damp Consolidated Waste			
	26.0			Damp Consolidated Waste	25.5		
26.0		1	26	Damp Consolidated Waste			
	27.0			Dry Consolidated Waste	26.5	Dry Waste	
27.0		1	27	Dry Consolidated Waste			
	28.0			Dry Consolidated Waste	27.5		
28.0		1	28	Dry Consolidated Waste			J.N 6
	29.0			Dry Consolidated Waste	28.5		
29.0		1	29	Dry Consolidated Waste			
	30.0			Dry Consolidated Waste	29.5		
30.0		1	30	Dry Consolidated Waste			
	31.0			Dry Consolidated Waste	30.5		
31.0		1	31	Dry Consolidated Waste			
	32↓			Dry Consolidated Waste	31.5		

DRILLING REPORT						Well Number: 41		
CQA INSPECTOR:- Stuart Darbyshire								
CLIENT: Flintshire CC Waste Managment.						Site: Brookhill landfill site		
Date: 28.09.2015			Installation Details			Target Depth (m): 35.83		
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 35.83			
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):			
Auger Dimensions: 350mm			Perforated BGL (m): 30.83		Dip Level (mBGL) after 24hrs:			
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm			
			Gravel (m): 32.83					
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA		
			m		m			
32.0		1	32	Dry Consolidated Waste		Dry Waste	 J.N 8	
	33.0			Dry Consolidated Waste	32.5			
33.0		1	33	Dry Consolidated Waste				
	34.0			Dry Consolidated Waste	33.5			
34.0		1	34	Dry Consolidated Waste				
	35.0			Dry Consolidated Waste	34.5			
35.0		1	35	Dry Consolidated Waste				
	36.0			Dry Consolidated Waste	35.5			
36.0		1	36	Completed at 35.83mBGL				
	37.0				36.5			
37.0		1	37					
	38.0				37.5			
38.0		1	38					
	39.0				38.5			
39.0		1	39					
	40.0				39.5			
40.0		1	40					
	41.0				40.5			
41.0		1	41					
	42.0				41.5			
42.0		1	42					
	43.0				42.5			
43.0		1	43					
	44.0				43.5			
44.0		1	44					
	45.0				44.5			
45.0		1	45					
	46.0				45.5			
46.0		1	46					
	47.0				46.5			
47.0		1	47					
	48.0				47.5			
48.0		1	48					
	49.0				48.5			
49.0		1	49					
	50.0				49.5			
50.0		1	50					
	51.0				50.5			
51.0		1	51					
	52.0				51.5			
52.0		1	52					
	53.0				52.5			
53.0		1	53					
	54.0				53.5			
54.0		1	54					
	55.0				54.5			
55.0		1	55					
	56.0				55.5			
56.0		1	56					
	57.0				56.5			
57.0		1	57					
	58.0				57.5			
58.0		1	58					
	59.0				58.5			
59.0		1	59					
	60.0				59.5			
60.0		1	60					
	61.0				60.5			
61.0		1	61					
	62.0				61.5			
62.0		1	62					
	63.0				62.5			
63.0		1	63					
	64.0				63.5			
64.0		1	64					
	65.0				64.5			

DRILLING REPORT						Well Number: 40	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire CC Waste Managment.						Site: Brookhill Landfill Site	
Date: 29.09.2015			Installation Details			Target Depth (m): 28.21	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 28.21		
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 23.21		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 25.21				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay		Clay	
	1.0			Clay	0.5		
1.0		1	1	Wet Consolidated Waste		Wet Waste	Hydrated Bentonite
	2.0			Wet Consolidated Waste	1.5		
2.0		1	2	Damp Consolidated Waste		Damp Waste	
	3.0			Damp Consolidated Waste	2.5		
3.0		1	3	Damp Consolidated Waste			
	4.0			Damp Consolidated Waste	3.5		
4.0		1	4	Damp Consolidated Waste			
	5.0			Damp Consolidated Waste	4.5		J.N 22
5.0		1	5	Dry Consolidated Waste		Dry Waste	
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			20/40 Gravel
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			J.N 23
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			J.N 24
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Damp Consolidated Waste	17.5	Damp Waste	
18.0		1	18	Damp Consolidated Waste			
	19.0			Damp Consolidated Waste	18.5		
19.0		1	19	Damp Consolidated Waste			
	20.0			Damp Consolidated Waste	19.5		
20.0		1	20	Damp Consolidated Waste			
	21.0			Damp Consolidated Waste	20.5		
21.0		1	21	Damp Consolidated Waste			
	22.0			Damp Consolidated Waste	21.5		
22.0		1	22	Damp Consolidated Waste			J.N 25
	23.0			Damp Consolidated Waste	22.5		
23.0		1	23	Damp Consolidated Waste			
	24.0			Damp Consolidated Waste	23.5		
24.0		1	24	Damp Consolidated Waste			
	25.0			Damp Consolidated Waste	24.5		
25.0		1	25	Damp Consolidated Waste			
	26.0			Damp Consolidated Waste	25.5		
26.0		1	26	Damp Consolidated Waste			
	27.0			Dry Consolidated Waste	26.5	Dry Waste	
27.0		1	27	Dry Consolidated Waste			J.N 26
	28.0			Dry Consolidated Waste	27.5		
28.0		1	28	Dry Consolidated Waste			
	29.0			Completed at 28.21mBGL	28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 43	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire CC Waste Managment.						Site: Brookhill Landfill Site	
Date: 29.09.2015			Installation Details			Target Depth (m): 23.45	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 23.45		
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 18.45		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 20.45				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay		Clay	
	1.0			Clay	0.5		
1.0						Dry Waste	
	2.0			Dry Consolidated Waste	1.5		
2.0		1	2	Dry Consolidated Waste			Hydrated Bentonite
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			
	5.0			Wet Consolidated Waste	4.5	Wet Waste	J.N 53
5.0		1	5	Wet Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5	Dry Waste	
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			20/40 Gravel
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			
	11.0			Dry Consolidated Waste	10.5		J.N 54
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			J.N 55
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Damp Consolidated Waste	17.5	Damp Waste	
18.0		1	18	Damp Consolidated Waste			
	19.0			Damp Consolidated Waste	18.5		
19.0		1	19	Damp Consolidated Waste			
	20.0			Damp Consolidated Waste	19.5		
20.0		1	20	Damp Consolidated Waste			
	21.0			Damp Consolidated Waste	20.5		
21.0		1	21	Damp Consolidated Waste			
	22.0			Damp Consolidated Waste	21.5		
22.0		1	22	Damp Consolidated Waste			J.N 56
	23.0			Damp Consolidated Waste	22.5		J.N 57
23.0		1	23	Damp Consolidated Waste			
	24.0			Completed at 23.5mBGL	23.5		
24.0		1	24				
	25.0				24.5		
25.0		1	25				
	26.0				25.5		
26.0		1	26				
	27.0				26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 44	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 29.09.2015			Installation Details			Target Depth (m): 23.82	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00			Actual Depth (m): 23.82	
Extruder Dimensions:			Solid BGL (m): 5.00			Dip Level (mBGL):	
Auger Dimensions: 350mm			Perforated BGL (m): 18.82			Dip Level (mBGL) after 24hrs:	
Casing Dimensions:			Bentonite (m): 3.00			HDPE Casing Dimensions: 160mm	
			Gravel (m): 20.82				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Dry Consolidated Waste		Dry Waste	
	2.0			Dry Consolidated Waste	1.5		
2.0		1	2	Dry Consolidated Waste			Hydrated Bentonite
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			J.N 48
	5.0			Dry Consolidated Waste	4.5		
5.0		1	5	Dry Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			20/40 Gravel
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			J.N 49
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Damp Consolidated Waste	11.5	Damp waste	
12.0		1	12	Damp Consolidated Waste			
	13.0			Damp Consolidated Waste	12.5		
13.0		1	13	Damp Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5	Dry Waste	
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			J.N 50
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Dry Consolidated Waste	17.5		
18.0		1	18	Dry Consolidated Waste			
	19.0			Dry Consolidated Waste	18.5		
19.0		1	19	Dry Consolidated Waste			J.N 51
	20.0			Dry Consolidated Waste	19.5		J.N 52
20.0		1	20	Dry Consolidated Waste			
	21.0			Dry Consolidated Waste	20.5		
21.0		1	21	Dry Consolidated Waste			
	22.0			Dry Consolidated Waste	21.5		
22.0		1	22	Dry Consolidated Waste			
	23.0			Dry Consolidated Waste	22.5		
23.0		1	23	Dry Consolidated Waste			
	24.0			Dry Consolidated Waste	23.5		
24.0		1	24	Completed at 23.82mBGL			
	25.0				24.5		
25.0		1	25				
	26.0				25.5		
26.0		1	26				
	27.0				26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 42	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 30.09.2015			Installation Details			Target Depth (m): 17.40	
Drilling Rig type: Commachio MC3000s			Solid AGL (m):		1.00	Actual Depth (m): 17.40	
Extruder Dimensions:			Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions: 350mm			Perforated BGL (m):		12.40	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:			Bentonite (m):		3.00	HDPE Casing Dimensions: 160mm	
			Gravel (m):		14.40		
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1				
					+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Dry Consolidated Waste		Dry Waste	Hydrated Bentonite
	2.0			Dry Consolidated Waste	1.5		
2.0		1	2	Dry Consolidated Waste			
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			
	5.0			Dry Consolidated Waste	4.5		J.N 71
5.0		1	5	Dry Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Wet Consolidated Waste	6.5	Wet Waste	
7.0		1	7	Wet Consolidated Waste			
	8.0			Dry Consolidated Waste	7.5	Dry Waste	
8.0		1	8	Dry Consolidated Waste			20/40 Gravel
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			J.N 72
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			
	17.0			Dry Consolidated Waste	16.5		J.N 73
17.0		1	17	Dry Consolidated Waste			
	18.0			Completed at 17.40mBGL	17.5		
18.0		1	18				
	19.0				18.5		
19.0		1	19				
	20.0				19.5		
20.0		1	20				
	21.0				20.5		
21.0		1	21				
	22.0				21.5		
22.0		1	22				
	23.0				22.5		
23.0		1	23				
	24.0				23.5		
24.0		1	24				
	25.0				24.5		
25.0		1	25				
	26.0				25.5		
26.0		1	26				
	27.0				26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 48	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 30.09.2015			Installation Details			Target Depth (m): 22.68	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 22.68		
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 17.68		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 19.68				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Wet Consolidated Waste		Wet Waste	
	2.0			Wet Consolidated Waste	1.5		Hydrated Bentonite
2.0		1	2	Damp Consolidated Waste		Damp waste	
	3.0			Damp Consolidated Waste	2.5		
3.0		1	3	Damp Consolidated Waste			
	4.0			Damp Consolidated Waste	3.5		
4.0		1	4	Damp Consolidated Waste			
	5.0			Damp Consolidated Waste	4.5		J.N 59
5.0		1	5	Damp Consolidated Waste			
	6.0			Damp Consolidated Waste	5.5		
6.0		1	6	Damp Consolidated Waste			
	7.0			Damp Consolidated Waste	6.5		
7.0		1	7	Damp Consolidated Waste			
	8.0			Damp Consolidated Waste	7.5		
8.0		1	8	Damp Consolidated Waste			20/40 Gravel
	9.0			Damp Consolidated Waste	8.5		
9.0		1	9	Damp Consolidated Waste			
	10.0			Damp Consolidated Waste	9.5		
10.0		1	10	Damp Consolidated Waste			J.N 60
	11.0			Damp Consolidated Waste	10.5		
11.0		1	11	Damp Consolidated Waste			
	12.0			Damp Consolidated Waste	11.5		
12.0		1	12	Damp Consolidated Waste			
	13.0			Damp Consolidated Waste	12.5		
13.0		1	13	Damp Consolidated Waste			
	14.0			Damp Consolidated Waste	13.5		
14.0		1	14	Damp Consolidated Waste			
	15.0			Damp Consolidated Waste	14.5		
15.0		1	15	Damp Consolidated Waste			
	16.0			Damp Consolidated Waste	15.5		
16.0		1	16	Damp Consolidated Waste			J.N 61
	17.0			Damp Consolidated Waste	16.5		
17.0		1	17	Damp Consolidated Waste			
	18.0			Damp Consolidated Waste	17.5		
18.0		1	18	Damp Consolidated Waste			
	19.0			Damp Consolidated Waste	18.5		
19.0		1	19	Damp Consolidated Waste			
	20.0			Damp Consolidated Waste	19.5		
20.0		1	20	Damp Consolidated Waste			
	21.0			Damp Consolidated Waste	20.5		
21.0		1	21	Damp Consolidated Waste			
	22.0			Damp Consolidated Waste	21.5		
22.0		1	22	Damp Consolidated Waste			J.N 62
	23.0			Damp Consolidated Waste	22.5		
23.0		1	23	Completed at 22.68mBGL			
	24.0				23.5		
24.0		1	24				
	25.0				24.5		
25.0		1	25				
	26.0				25.5		
26.0		1	26				
	27.0				26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 37	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 01.10.2015			Installation Details			Target Depth (m): 18.51	
Drilling Rig type: Commachio MC3000s			Solid AGL (m):		1.00	Actual Depth (m): 18.51	
Extruder Dimensions:			Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions: 350mm			Perforated BGL (m):		13.51	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:			Bentonite (m):		3.00	HDPE Casing Dimensions: 160mm	
			Gravel (m):		15.51		
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1				
					+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Wet Consolidated Waste		Wet Waste	
	2.0			Wet Consolidated Waste	1.5		Hydrated Bentointe
2.0		1	2	Damp Consolidated Waste		Damp Waste	
	3.0			Damp Consolidated Waste	2.5		
3.0		1	3	Damp Consolidated Waste			
	4.0			Damp Consolidated Waste	3.5		
4.0		1	4	Damp Consolidated Waste			
	5.0			Dry Consolidated Waste	4.5	Dry Waste	J.N 67
5.0		1	5	Dry Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			20/40 Gravel
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			
	11.0			Dry Consolidated Waste	10.5		J.N 68
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			
	17.0			Dry Consolidated Waste	16.5		J.N 69
17.0		1	17	Dry Consolidated Waste			J.N 70
	18.0			Dry Consolidated Waste	17.5		
18.0		1	18	Dry Consolidated Waste			
	19.0			Completed at 18.51mBGL	18.5		
19.0		1	19				
	20.0				19.5		
20.0		1	20				
	21.0				20.5		
21.0		1	21				
	22.0				21.5		
22.0		1	22				
	23.0				22.5		
23.0		1	23				
	24.0				23.5		
24.0		1	24				
	25.0				24.5		
25.0		1	25				
	26.0				25.5		
26.0		1	26				
	27.0				26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 38	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 01.10.2015			Installation Details			Target Depth (m): 27.49	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 27.49		
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 22.49		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 24.49				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Dry Consolidated Waste		Dry Waste	Hydrated Bentonite
	2.0			Dry Consolidated Waste	1.5		
2.0		1	2	Dry Consolidated Waste			
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			
	5.0			Dry Consolidated Waste	4.5		J.N 27
5.0		1	5	Dry Consolidated Waste			
	6.0			Wet Consolidated Waste	5.5	Wet Waste	
6.0		1	6	Wet Consolidated Waste			
	7.0			Wet Consolidated Waste	6.5		
7.0		1	7	Damp Consolidated Waste		Damp Waste	
	8.0			Damp Consolidated Waste	7.5		
8.0		1	8	Damp Consolidated Waste			
	9.0			Damp Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste		Dry Waste	20/40 Gravel
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			J.N 28
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			J.N 29
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Dry Consolidated Waste	17.5		
18.0		1	18	Dry Consolidated Waste			
	19.0			Dry Consolidated Waste	18.5		
19.0		1	19	Dry Consolidated Waste			
	20.0			Dry Consolidated Waste	19.5		
20.0		1	20	Dry Consolidated Waste			
	21.0			Dry Consolidated Waste	20.5		
21.0		1	21	Dry Consolidated Waste			
	22.0			Dry Consolidated Waste	21.5		
22.0		1	22	Dry Consolidated Waste			J.N 30
	23.0			Dry Consolidated Waste	22.5		
23.0		1	23	Dry Consolidated Waste			
	24.0			Dry Consolidated Waste	23.5		
24.0		1	24	Dry Consolidated Waste			
	25.0			Dry Consolidated Waste	24.5		
25.0		1	25	Dry Consolidated Waste			
	26.0			Dry Consolidated Waste	25.5		
26.0		1	26	Dry Consolidated Waste			J.N 31
	27.0			Dry Consolidated Waste	26.5		
27.0		1	27	Dry Consolidated Waste			
	28.0			Completed at 27.49mBGL	27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 39	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 01.10.2015			Installation Details			Target Depth (m): 20.85	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 20.85		
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 15.85		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 17.85				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Clay Soils			
	2.0			Dry Consolidated Waste	1.5	Dry Waste	Hydrated Bentonite
2.0		1	2	Dry Consolidated Waste			
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			
	5.0			Dry Consolidated Waste	4.5		J.N 63
5.0		1	5	Dry Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			J.N 64
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		20/40 Gravel
13.0		1	13	Dry Consolidated Waste			
	14.0			Wet Consolidated Waste	13.5	Wet Waste	
14.0		1	14	Wet Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5	Dry Waste	
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			J.N 65
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Dry Consolidated Waste	17.5		
18.0		1	18	Dry Consolidated Waste			
	19.0			Dry Consolidated Waste	18.5		
19.0		1	19	Dry Consolidated Waste			
	20.0			Dry Consolidated Waste	19.5		J.N 66
20.0		1	20	Dry Consolidated Waste			
	21.0			Dry Consolidated Waste	20.5		
21.0		1	21	Completed at 20.85mBGL			
	22.0				21.5		
22.0		1	22				
	23.0				22.5		
23.0		1	23				
	24.0				23.5		
24.0		1	24				
	25.0				24.5		
25.0		1	25				
	26.0				25.5		
26.0		1	26				
	27.0				26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 35	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 02.10.2015			Installation Details			Target Depth (m): 15.98	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 15.98		
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 10.98		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 12.98				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1				
					+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Wet Consolidated Waste		Wet Waste	
	2.0			Wet Consolidated Waste	1.5		Hydrated Bentointe
2.0		1	2	Damp Consolidated Waste		Damp Waste	
	3.0			Damp Consolidated Waste	2.5		
3.0		1	3	Damp Consolidated Waste			
	4.0			Damp Consolidated Waste	3.5		
4.0		1	4	Damp Consolidated Waste			
	5.0			Dry Consolidated Waste	4.5	Dry Waste	J.N 76
5.0		1	5	Dry Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			20/40 Gravel
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			
	11.0			Dry Consolidated Waste	10.5		J.N 77
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			J.N 78
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Completed at 15.98mBGL			
	17.0				16.5		
17.0		1	17				
	18.0				17.5		
18.0		1	18				
	19.0				18.5		
19.0		1	19				
	20.0				19.5		
20.0		1	20				
	21.0				20.5		
21.0		1	21				
	22.0				21.5		
22.0		1	22				
	23.0				22.5		
23.0		1	23				
	24.0				23.5		
24.0		1	24				
	25.0				24.5		
25.0		1	25				
	26.0				25.5		
26.0		1	26				
	27.0				26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 36	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire C.C Waste Management						Site: Brookhill Landfill Site	
Date: 02.10.2015			Installation Details			Target Depth (m): 25.36	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 25.36		
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 20.36		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 22.36				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay Soils		Clay Soils	
	1.0			Clay Soils	0.5		
1.0		1	1	Wet Consolidated Waste		Wet Waste	
	2.0			Wet Consolidated Waste	1.5		Hydrated Bentointe
2.0		1	2	Damp Consolidated Waste		Damp Waste	
	3.0			Damp Consolidated Waste	2.5		
3.0		1	3	Damp Consolidated Waste			
	4.0			Damp Consolidated Waste	3.5		
4.0		1	4	Damp Consolidated Waste			
	5.0			Damp Consolidated Waste	4.5		J.N 37
5.0		1	5	Damp Consolidated Waste		Dry Waste	
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			20/40 Gravel
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			J.N 38
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			J.N 39
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Dry Consolidated Waste	17.5		
18.0		1	18	Dry Consolidated Waste			
	19.0			Dry Consolidated Waste	18.5		
19.0		1	19	Dry Consolidated Waste			
	20.0			Dry Consolidated Waste	19.5		
20.0		1	20	Dry Consolidated Waste			
	21.0			Dry Consolidated Waste	20.5		
21.0		1	21	Dry Consolidated Waste			
	22.0			Dry Consolidated Waste	21.5		
22.0		1	22	Dry Consolidated Waste			J.N 40
	23.0			Dry Consolidated Waste	22.5		
23.0		1	23	Dry Consolidated Waste			
	24.0			Dry Consolidated Waste	23.5		
24.0		1	24	Dry Consolidated Waste			J.N 41
	25.0			Dry Consolidated Waste	24.5		
25.0		1	25	Dry Consolidated Waste			
	26.0			Completed at 25.36mBGL	25.5		
26.0		1	26				
	27.0				26.5		
27.0		1	27				
	28.0				27.5		
28.0		1	28				
	29.0				28.5		
29.0		1	29				
	30.0				29.5		
30.0		1	30				
	31.0				30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 45	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire CC Waste Management.						Site: Brookhill Landfill Site	
Date: 05.10.2015			Installation Details			Target Depth (m): 31.10	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.70		Actual Depth (m): 30.40		
Extruder Dimensions:			Solid BGL (m): 4.30		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 26.10		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 27.40				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay		Clay	
	1.0			Clay	0.5		
1.0		1	1	Dry Consolidated Waste		Dry Waste	
	2.0			Dry Consolidated Waste	1.5		Hydrated Bentonite
2.0		1	2	Dry Consolidated Waste			
	3.0			Dry Consolidated Waste	2.5		
3.0		1	3	Dry Consolidated Waste			J.N 6
	4.0			Dry Consolidated Waste	3.5		
4.0		1	4	Dry Consolidated Waste			
	5.0			Dry Consolidated Waste	4.5		
5.0		1	5	Dry Consolidated Waste			
	6.0			Dry Consolidated Waste	5.5		
6.0		1	6	Dry Consolidated Waste			
	7.0			Dry Consolidated Waste	6.5		
7.0		1	7	Dry Consolidated Waste			20/40 Gravel
	8.0			Dry Consolidated Waste	7.5		
8.0		1	8	Dry Consolidated Waste			
	9.0			Dry Consolidated Waste	8.5		
9.0		1	9	Dry Consolidated Waste			J.N 7
	10.0			Dry Consolidated Waste	9.5		
10.0		1	10	Dry Consolidated Waste			
	11.0			Dry Consolidated Waste	10.5		
11.0		1	11	Dry Consolidated Waste			
	12.0			Dry Consolidated Waste	11.5		
12.0		1	12	Dry Consolidated Waste			
	13.0			Dry Consolidated Waste	12.5		
13.0		1	13	Dry Consolidated Waste			
	14.0			Dry Consolidated Waste	13.5		
14.0		1	14	Dry Consolidated Waste			
	15.0			Dry Consolidated Waste	14.5		
15.0		1	15	Dry Consolidated Waste			J.N 8
	16.0			Dry Consolidated Waste	15.5		
16.0		1	16	Dry Consolidated Waste			
	17.0			Dry Consolidated Waste	16.5		
17.0		1	17	Dry Consolidated Waste			
	18.0			Dry Consolidated Waste	17.5		
18.0		1	18	Dry Consolidated Waste			
	19.0			Dry Consolidated Waste	18.5		
19.0		1	19	Dry Consolidated Waste			
	20.0			Dry Consolidated Waste	19.5		
20.0		1	20	Dry Consolidated Waste			
	21.0			Dry Consolidated Waste	20.5		
21.0		1	21	Dry Consolidated Waste			J.N 9
	22.0			Dry Consolidated Waste	21.5		
22.0		1	22	Dry Consolidated Waste			
	23.0			Dry Consolidated Waste	22.5		
23.0		1	23	Dry Consolidated Waste			
	24.0			Dry Consolidated Waste	23.5		
24.0		1	24	Dry Consolidated Waste			
	25.0			Dry Consolidated Waste	24.5		
25.0		1	25	Dry Consolidated Waste			
	26.0			Dry Consolidated Waste	25.5		
26.0		1	26	Dry Consolidated Waste			
	27.0			Dry Consolidated Waste	26.5		
27.0		1	27	Dry Consolidated Waste			J.N 10
	28.0			Dry Consolidated Waste	27.5		
28.0		1	28	Dry Consolidated Waste			
	29.0			Dry Consolidated Waste	28.5		
29.0		1	29	Dry Consolidated Waste			J.N 11
	30.0			Dry Consolidated Waste	29.5		
30.0		1	30	Dry Consolidated Waste			
	31.0			Completed at 30.4m BGL	30.5		
31.0		1	31				
	32↓				31.5		

DRILLING REPORT						Well Number: 49	
CQA INSPECTOR:- Stuart Darbyshire							
CLIENT: Flintshire CC Waste Management.						Site: Brookhill Landfill Site	
Date: 06.10.2015			Installation Details			Target Depth (m): 25.11	
Drilling Rig type: Commachio MC3000s			Solid AGL (m): 1.00		Actual Depth (m): 25.11		
Extruder Dimensions:			Solid BGL (m): 5.00		Dip Level (mBGL):		
Auger Dimensions: 350mm			Perforated BGL (m): 20.11		Dip Level (mBGL) after 24hrs:		
Casing Dimensions:			Bentonite (m): 3.00		HDPE Casing Dimensions: 160mm		
			Gravel (m): 22.11				
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION			STRATA	
			m		m		
	+1.0	1	+1		+0.5		
0.0	0.0	0	0			GL	GL
0.0			0	Clay		Clay	
	1.0			Clay	0.5		Hydrated Bentonite
1.0	2.0	1	1	Wet Consolidated Waste		Wet Waste	
2.0	3.0	1	2	Wet Consolidated Waste	1.5		
3.0	4.0	1	3	Wet Consolidated Waste		Damp Waste	
4.0	5.0	1	4	Damp Consolidated Waste	2.5		
5.0	6.0	1	5	Damp Consolidated Waste			J.N 43
6.0	7.0	1	6	Damp Consolidated Waste	3.5		
7.0	8.0	1	7	Damp Consolidated Waste			
8.0	9.0	1	8	Damp Consolidated Waste	4.5		
9.0	10.0	1	9	Damp Consolidated Waste			
10.0	11.0	1	10	Damp Consolidated Waste	5.5		
11.0	12.0	1	11	Dry Consolidated Waste		Dry Waste	
12.0	13.0	1	12	Dry Consolidated Waste	6.5		
13.0	14.0	1	13	Dry Consolidated Waste			20/40 Gravel
14.0	15.0	1	14	Dry Consolidated Waste	7.5		
15.0	16.0	1	15	Dry Consolidated Waste			
16.0	17.0	1	16	Dry Consolidated Waste	8.5		
17.0	18.0	1	17	Dry Consolidated Waste			J.N 44
18.0	19.0	1	18	Dry Consolidated Waste	9.5		
19.0	20.0	1	19	Dry Consolidated Waste			
20.0	21.0	1	20	Dry Consolidated Waste	10.5		
21.0	22.0	1	21	Dry Consolidated Waste			
22.0	23.0	1	22	Dry Consolidated Waste	11.5		J.N 45
23.0	24.0	1	23	Dry Consolidated Waste			
24.0	25.0	1	24	Dry Consolidated Waste	12.5		
25.0	26.0	1	25	Dry Consolidated Waste			J.N 46
26.0	27.0	1	26	Dry Consolidated Waste	13.5		
27.0	28.0	1	27	Dry Consolidated Waste			
28.0	29.0	1	28	Dry Consolidated Waste	14.5		
29.0	30.0	1	29	Dry Consolidated Waste			J.N 47
30.0	31.0	1	30	Dry Consolidated Waste	15.5		
31.0	32↓	1	31	Dry Consolidated Waste			
				Completed at 25.11m BGL	16.5		
					17.5		
					18.5		
					19.5		
					20.5		
					21.5		
					22.5		
					23.5		
					24.5		
					25.5		
					26.5		
					27.5		
					28.5		
					29.5		
					30.5		
					31.5		

Flintshire County Council Waste Management Services

Brookhill Landfill Site

Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

3. CQA Inspectors Butt Fusion Welding Logs

Butt Fusion Record Sheet



Landfill Site: Brookhill Landfill Site
Project: Pipework Collection

Date	Joint Number (from Welding Machine)	Pipework Type		Weld	Test Joints		Failed Joints		CQA Inspector	Remarks
		Diameter	SDR	Good Joint Produced (Y/N)	Good Joint Produced (Y/N)	Incorporated in Works (Y/N)	Retrim/ Reweld (Y/N)	Removed & stored (location)		
23.10.15	173	90mm	17.6	y					Stuart Darbyshire	
23.10.15	174	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	175	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	176	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	177	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	178	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	179	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	180	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	181	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	182	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	183	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	184	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	185	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	186	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	187	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	188	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	189	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	190	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	191	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	192	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	193	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	194	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	195	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	196	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	197	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	198	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	199	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	200	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	201	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	202	90mm	17.6	N			Y		Stuart Darbyshire	
23.10.15	203	90mm	17.6	Y					Stuart Darbyshire	
23.10.15	204	90mm	17.6	Y					Stuart Darbyshire	

Flintshire County Council Waste Management Services

Brookhill Landfill Site

Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

4. Butt Fusion Welding Tickets

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 11:16.49

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 76

Operator code: P.RIGBY

Location: BROOKHILL

Welding Standard

Fusion FN Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 8.0 Bar

Dynamic Dras: 8.0 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.5 °C
Bead Pressure [8.0+] 17.0	25.1 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	8.0	8.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.0+] 17.0	24.7 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 11:26.04

Machine Type: GATOR180/110v

Ambient Temp.: 19 °C

Joint No: 77

Operator code: P.RIGBY

Location: BROOKHILL

Welding Standard

Fusion FN Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 7.5 Bar

Dynamic Dras: 7.5 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [7.5+] 17.0	24.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	8.0	8.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.5+] 17.0	24.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 11:34.58

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 78

Operator code: P.RIGBY

Location: BROOKHILL

Welding Standard

Fusion FN Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 5.4 Bar

Dynamic Dras: 5.3 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.7 °C
Bead Pressure [5.4+] 17.0	21.7 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	8.0	8.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.3+] 17.0	22.1 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 09:56.24

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 68
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 9.5 Bar

Dynamic Dras: 9.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.5 °C
Bead Pressure [9.5v] 17.0	26.5	26.5 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Sec
Fusion Pressure [9.5v] 17.0	26.5	26.5 Bar

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 10:06.02

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 69
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 6.3 Bar

Dynamic Dras: 6.3 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.7 °C
Bead Pressure [6.3v] 17.0	22.8	22.8 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Sec
Fusion Pressure [6.3v] 17.0	23.1	23.1 Bar

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 10:15.52

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 70
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 5.5 Bar

Dynamic Dras: 5.3 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [5.5v] 17.0	22.9	22.9 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.5v] 17.0	22.2	22.2 Bar

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 10:26.38

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 71
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 8.3 Bar

Dynamic Dras: 8.3 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [8.3v] 17.0	24.7	24.7 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.3v] 17.0	25.3	25.3 Bar
Cool Time	230.0	230.0 Sec

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 10:37.19

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 72
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 7.5 Bar

Dynamic Dras: 7.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.7 °C
Bead Pressure [7.5v] 17.0	24.1	24.1 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.5v] 17.0	24.4	24.4 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 10:47.32

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 73
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 8.6 Bar

Dynamic Dras: 8.6 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [8.6v] 17.0	25.1	25.1 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Sec
Fusion Pressure [8.6v] 17.0	25.5	25.5 Bar
Cool Time	230.0	230.0 Sec

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 11:01.33

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 74
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 5.4 Bar

Dynamic Dras: 5.1 Bar

Dwell Time: N Secs

Joint Status: INCOMPLETE

Fault Condition

Err19: Abort during soak

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [5.4v] 17.0	21.9	21.9 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	6.4 Sec
Fusion Pressure [5.4v] 17.0	N	Bar
Cool Time	230.0	N Sec

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 11:05.40

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 75
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 5.5 Bar

Dynamic Dras: 5.3 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.3 °C
Bead Pressure [5.5v] 17.0	22.2	22.2 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.5v] 17.0	22.1	22.1 Bar

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 08:23.26

Machine Type: GATOR180/110v

Ambient Temp.: 16 °C

Joint No: 60
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 6.4 Bar

Dynamic Draw: 6.4 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.5 °C
Bead Pressure [6.4] 17.0	24.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.4] 17.0	23.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 08:34.11

Machine Type: GATOR180/110v

Ambient Temp.: 18 °C

Joint No: 61
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.3 Bar

Dynamic Draw: 8.3 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.8 °C
Bead Pressure [8.3] 17.0	26.1 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.3] 17.0	25.3 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 08:45.47

Machine Type: GATOR180/110v

Ambient Temp.: 19 °C

Joint No: 62
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.6 Bar

Dynamic Draw: 5.6 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.2 °C
Bead Pressure [5.6] 17.0	23.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.6] 17.0	22.9 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 08:56.48

Machine Type: GATOR180/110v

Ambient Temp.: 17 °C

Joint No: 63
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 6.4 Bar

Dynamic Draw: 6.4 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [6.4] 17.0	23.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.4] 17.0	23.1 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 09:00.47

Machine Type: GATOR180/110v

Ambient Temp.: 19 °C

Joint No: 64
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.0 Bar

Dynamic Draw: 8.0 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [8.0] 17.0	25.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.0] 17.0	25.0 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 09:19.18

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 65
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.4 Bar

Dynamic Draw: 8.4 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.7 °C
Bead Pressure [8.4] 17.0	25.3 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.4] 17.0	25.0 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 09:34.21

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 66
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.5 Bar

Dynamic Draw: 5.4 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.5 °C
Bead Pressure [5.5] 17.0	22.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.4] 17.0	22.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 (UH.68TS/GB)

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 09:45.23

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 67
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.5 Bar

Dynamic Draw: 8.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [8.5] 17.0	25.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.5] 17.0	25.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 09:43.33
Machine Type: GATOR180/110v
Ambient Temp.: 23 °C
Joint No: 53
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.8 Bar
Dynamic Draw: 8.8 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.2 °C
Bead Pressure [8.8+] 17.0	25.4 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.8+] 17.0	25.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 10:22.35
Machine Type: GATOR180/110v
Ambient Temp.: 23 °C
Joint No: 56
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.7 Bar
Dynamic Draw: 5.4 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	233.2 °C
Bead Pressure [5.7+] 17.0	22.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.4+] 17.0	22.4 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 09:56.04
Machine Type: GATOR180/110v
Ambient Temp.: 25 °C
Joint No: 54
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.3 Bar
Dynamic Draw: 8.3 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.5 °C
Bead Pressure [8.3+] 17.0	25.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.3+] 17.0	25.3 Bar	

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 10:34.00
Machine Type: GATOR180/110v
Ambient Temp.: 23 °C
Joint No: 57
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.6 Bar
Dynamic Draw: 5.4 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	233.0 °C
Bead Pressure [5.6+] 17.0	22.5 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.4+] 17.0	22.2 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 10:08.54
Machine Type: GATOR180/110v
Ambient Temp.: 25 °C
Joint No: 55
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 6.9 Bar
Dynamic Draw: 6.9 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [6.9+] 17.0	23.4 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.9+] 17.0	23.8 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 30/09/2015 Time: 00:10.50
Machine Type: GATOR180/110v
Ambient Temp.: 14 °C
Joint No: 59
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.6 Bar
Dynamic Draw: 8.6 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [8.6+] 17.0	26.7 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.6+] 17.0	25.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 08:19.30

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 45
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.6 Bar
Dynamic Draw: 8.6 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [8.6+] 17.0	25.5 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.6+] 17.0	25.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 09:03.19

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 49
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.3 Bar
Dynamic Draw: 8.3 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.3 °C
Bead Pressure [8.3+] 17.0	25.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.3+] 17.0	25.1 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 08:29.15

Machine Type: GATOR180/110v

Ambient Temp.: 19 °C

Joint No: 46
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.9 Bar
Dynamic Draw: 5.7 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.0 °C
Bead Pressure [5.9+] 17.0	22.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.7+] 17.0	22.9 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 09:12.58

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 50
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 6.7 Bar
Dynamic Draw: 6.7 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [6.7+] 17.0	24.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.7+] 17.0	23.8 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 08:38.51

Machine Type: GATOR180/110v

Ambient Temp.: 17 °C

Joint No: 47
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.9 Bar
Dynamic Draw: 5.6 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [5.9+] 17.0	23.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.6+] 17.0	22.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 09:22.53

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 51
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.7 Bar
Dynamic Draw: 5.4 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.2 °C
Bead Pressure [5.7+] 17.0	22.4 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.4+] 17.0	22.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 08:52.53

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 48
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.5 Bar
Dynamic Draw: 8.5 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.3 °C
Bead Pressure [8.5+] 17.0	25.3 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.5+] 17.0	25.4 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 09:33.09

Machine Type: GATOR180/110v

Ambient Temp.: 22 °C

Joint No: 52
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.7 Bar
Dynamic Draw: 5.5 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [5.7+] 17.0	22.8 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.5+] 17.0	22.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 15:51.35
Machine Type: GATOR180/110v
Ambient Temp.: 21 °C
Joint No: 37
Operator code: P.RIGBY
Location: BROOKHILL
Welding Standard
Fusion FW Landfill
Pipe Selected
PE100 160mm SDR 11 Black
Dras Parameters
Peak Dras: 7.3 Bar
Dynamic Dras: 7.3 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	233.0 °C
Bead Pressure [7.3+] 17.0	23.3 Bar	23.3 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.3+] 17.0	24.2 Bar	24.2 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 16:02.33
Machine Type: GATOR180/110v
Ambient Temp.: 20 °C
Joint No: 38
Operator code: P.RIGBY
Location: BROOKHILL
Welding Standard
Fusion FW Landfill
Pipe Selected
PE100 160mm SDR 11 Black
Dras Parameters
Peak Dras: 8.3 Bar
Dynamic Dras: 8.3 Bar
Dwell Time: 1.8 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.3 °C
Bead Pressure [8.3+] 17.0	24.2 Bar	24.2 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.3+] 17.0	25.3 Bar	25.3 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 16:11.55
Machine Type: GATOR180/110v
Ambient Temp.: 20 °C
Joint No: 39
Operator code: P.RIGBY
Location: BROOKHILL
Welding Standard
Fusion FW Landfill
Pipe Selected
PE100 160mm SDR 11 Black
Dras Parameters
Peak Dras: 7.3 Bar
Dynamic Dras: 7.3 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.3 °C
Bead Pressure [7.3+] 17.0	23.4 Bar	23.4 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.3+] 17.0	24.4 Bar	24.4 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 16:22.13
Machine Type: GATOR180/110v
Ambient Temp.: 19 °C
Joint No: 40
Operator code: P.RIGBY
Location: BROOKHILL
Welding Standard
Fusion FW Landfill
Pipe Selected
PE100 160mm SDR 11 Black
Dras Parameters
Peak Dras: 5.6 Bar
Dynamic Dras: 5.6 Bar
Dwell Time: 1.8 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [5.6+] 17.0	22.4 Bar	22.4 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.6+] 17.0	22.5 Bar	22.5 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 16:32.35
Machine Type: GATOR180/110v
Ambient Temp.: 19 °C
Joint No: 41
Operator code: P.RIGBY
Location: BROOKHILL
Welding Standard
Fusion FW Landfill
Pipe Selected
PE100 160mm SDR 11 Black
Dras Parameters
Peak Dras: 5.5 Bar
Dynamic Dras: 5.5 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.2 °C
Bead Pressure [5.5+] 17.0	22.2 Bar	22.2 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.5+] 17.0	22.4 Bar	22.4 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Serial Number: G180-2417 [UH.68TS/GB]
Property of:
FUSION HIRE
Date: 25/09/2015 Time: 07:53.01
Machine Type: GATOR180/110v
Ambient Temp.: 14 °C
Joint No: 42
Operator code: P.RIGBY
Location: BROOKHILL
Welding Standard
Fusion FW Landfill
Pipe Selected
PE100 160mm SDR 11 Black
Dras Parameters
Peak Dras: 7.0 Bar
Dynamic Dras: 7.0 Bar
Dwell Time: 0.0 Secs
Dummy Joint Status: COMPLETE
Final bead OK? NO

Parameter	Target	Achieved
Heater Temperature	233.0	233.2 °C
Bead Pressure [7.0+] 17.0	24.1 Bar	24.1 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.0+] 17.0	0.0 Bar	0.0 Bar
Cool Time	230.0	0.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 07:59.01
Machine Type: GATOR180/110v
Ambient Temp.: 14 °C
Joint No: 43
Operator code: P.RIGBY
Location: BROOKHILL
Welding Standard
Fusion FW Landfill
Pipe Selected
PE100 160mm SDR 11 Black
Dras Parameters
Peak Dras: 6.4 Bar
Dynamic Dras: 6.4 Bar
Dwell Time: 1.8 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [6.4+] 17.0	23.5 Bar	23.5 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.4+] 17.0	23.4 Bar	23.4 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 25/09/2015 Time: 08:09.35
Machine Type: GATOR180/110v
Ambient Temp.: 17 °C
Joint No: 44
Operator code: P.RIGBY
Location: BROOKHILL
Welding Standard
Fusion FW Landfill
Pipe Selected
PE100 160mm SDR 11 Black
Dras Parameters
Peak Dras: 7.0 Bar
Dynamic Dras: 7.0 Bar
Dwell Time: 1.8 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [7.0+] 17.0	23.3 Bar	23.3 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.0+] 17.0	24.0 Bar	24.0 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE
Date: 24/09/2015 Time: 14:32.15
Machine Type: GATOR180/110v
Ambient Temp.: 23 °C
Joint No: 29
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard
Fusion FW Landfill
Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 6.6 Bar
Dynamic Dras: 6.6 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.5 °C
Bead Pressure [6.6+] 17.0	23.1 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.6+] 17.0	23.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE
Date: 24/09/2015 Time: 14:42.11
Machine Type: GATOR180/110v
Ambient Temp.: 21 °C
Joint No: 30
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard
Fusion FW Landfill
Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 6.7 Bar
Dynamic Dras: 6.7 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.8 °C
Bead Pressure [6.7+] 17.0	23.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.7+] 17.0	23.9 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE
Date: 24/09/2015 Time: 14:51.34
Machine Type: GATOR180/110v
Ambient Temp.: 21 °C
Joint No: 31
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard
Fusion FW Landfill
Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 5.5 Bar
Dynamic Dras: 5.4 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.5 °C
Bead Pressure [5.5+] 17.0	22.1 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.4+] 17.0	22.4 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE
Date: 24/09/2015 Time: 15:00.49
Machine Type: GATOR180/110v
Ambient Temp.: 21 °C
Joint No: 32
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard
Fusion FW Landfill
Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 6.6 Bar
Dynamic Dras: 6.6 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.7 °C
Bead Pressure [6.6+] 17.0	23.4 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.6+] 17.0	23.4 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE
Date: 24/09/2015 Time: 15:09.54
Machine Type: GATOR180/110v
Ambient Temp.: 22 °C
Joint No: 33
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard
Fusion FW Landfill
Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 7.5 Bar
Dynamic Dras: 7.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.5 °C
Bead Pressure [7.5+] 17.0	23.9 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.5+] 17.0	24.4 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE
Date: 24/09/2015 Time: 15:19.12
Machine Type: GATOR180/110v
Ambient Temp.: 22 °C
Joint No: 34
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard
Fusion FW Landfill
Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 6.5 Bar
Dynamic Dras: 6.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [6.5+] 17.0	23.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.5+] 17.0	23.4 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE
Date: 24/09/2015 Time: 15:28.59
Machine Type: GATOR180/110v
Ambient Temp.: 22 °C
Joint No: 35
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard
Fusion FW Landfill
Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 7.0 Bar
Dynamic Dras: 7.0 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.3 °C
Bead Pressure [7.0+] 17.0	23.5 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.0+] 17.0	23.9 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE
Date: 24/09/2015 Time: 15:40.50
Machine Type: GATOR180/110v
Ambient Temp.: 21 °C
Joint No: 36
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard
Fusion FW Landfill
Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Dras: 5.6 Bar
Dynamic Dras: 5.6 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.2 °C
Bead Pressure [5.6+] 17.0	21.9 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.6+] 17.0	22.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 13:14.07

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 21
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion Fw Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Drag: 5.5 Bar
Dynamic Drag: 5.4 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.8 °C
Bead Pressure [5.5+] 17.0	22.1 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.4+] 17.0	22.1 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 13:24.17

Machine Type: GATOR180/110v

Ambient Temp.: 22 °C

Joint No: 22
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion Fw Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Drag: 8.5 Bar
Dynamic Drag: 8.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.8 °C
Bead Pressure [8.5+] 17.0	25.1 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.5+] 17.0	25.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 13:33.44

Machine Type: GATOR180/110v

Ambient Temp.: 22 °C

Joint No: 23
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion Fw Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Drag: 6.9 Bar
Dynamic Drag: 6.9 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.7 °C
Bead Pressure [6.9+] 17.0	23.3 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.9+] 17.0	23.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 13:42.59

Machine Type: GATOR180/110v

Ambient Temp.: 24 °C

Joint No: 24
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion Fw Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Drag: 7.5 Bar
Dynamic Drag: 7.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.3 °C
Bead Pressure [7.5+] 17.0	24.2 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.5+] 17.0	24.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 13:52.12

Machine Type: GATOR180/110v

Ambient Temp.: 25 °C

Joint No: 25
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion Fw Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Drag: 6.7 Bar
Dynamic Drag: 6.7 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.0 °C
Bead Pressure [6.7+] 17.0	23.1 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.7+] 17.0	23.8 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 14:02.00

Machine Type: GATOR180/110v

Ambient Temp.: 22 °C

Joint No: 26
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion Fw Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Drag: 6.1 Bar
Dynamic Drag: 6.1 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.3 °C
Bead Pressure [6.1+] 17.0	22.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.1+] 17.0	23.3 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 14:13.48

Machine Type: GATOR180/110v

Ambient Temp.: 22 °C

Joint No: 27
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion Fw Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Drag: 7.5 Bar
Dynamic Drag: 7.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [7.5+] 17.0	23.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.5+] 17.0	24.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 14:23.29

Machine Type: GATOR180/110v

Ambient Temp.: 22 °C

Joint No: 28
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion Fw Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Dras Parameters

Peak Drag: 7.9 Bar
Dynamic Drag: 7.9 Bar

Dwell Time: 1.8 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [7.9+] 17.0	24.1 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.9+] 17.0	24.9 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 11:27.30

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 13
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Drag: 8.1 Bar
Dynamic Drag: 8.1 Bar
Dwell Time: 1.8 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.8 °C
Bead Pressure [8.1+]	17.0	25.1 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.1+]	17.0	25.1 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 11:40.34

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 14
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Drag: 6.0 Bar
Dynamic Drag: 6.0 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [6.0+]	17.0	22.8 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.0+]	17.0	22.9 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 11:50.13

Machine Type: GATOR180/110v

Ambient Temp.: 24 °C

Joint No: 15
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Drag: 5.7 Bar
Dynamic Drag: 5.7 Bar
Dwell Time: 1.8 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.8 °C
Bead Pressure [5.7+]	17.0	22.4 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.7+]	17.0	22.6 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 12:22.41

Machine Type: GATOR180/110v

Ambient Temp.: 22 °C

Joint No: 16
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Drag: 8.1 Bar
Dynamic Drag: 8.1 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	234.5 °C
Bead Pressure [8.1+]	17.0	25.3 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.1+]	17.0	25.0 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 12:31.57

Machine Type: GATOR180/110v

Ambient Temp.: 21 °C

Joint No: 17
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Drag: 7.0 Bar
Dynamic Drag: 7.0 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.0 °C
Bead Pressure [7.0+]	17.0	24.2 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.0+]	17.0	23.9 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 12:41.23

Machine Type: GATOR180/110v

Ambient Temp.: 22 °C

Joint No: 18
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Drag: 7.6 Bar
Dynamic Drag: 7.6 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [7.6+]	17.0	24.2 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.6+]	17.0	24.6 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 12:51.06

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 19
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Drag: 6.6 Bar
Dynamic Drag: 6.6 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [6.6+]	17.0	23.3 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.6+]	17.0	23.6 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD
Serial Number: 6180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 13:02.31

Machine Type: GATOR180/110v

Ambient Temp.: 24 °C

Joint No: 20
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Drag: 6.5 Bar
Dynamic Drag: 6.5 Bar
Dwell Time: 1.7 Secs
Joint Status: COMPLETE
Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	230.0 °C
Bead Pressure [6.5+]	17.0	23.6 Bar
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.5+]	17.0	23.4 Bar
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 10:20.25

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 7
Operator code: P.RIGBY
Location: BRGOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.6 Bar
Dynamic Draw: 5.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.2 °C
Bead Pressure [5.6+] 17.0	23.3 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.5+] 17.0	22.2 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 10:36.44

Machine Type: GATOR180/110v

Ambient Temp.: 25 °C

Joint No: 8
Operator code: P.RIGBY
Location: BRGOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 5.6 Bar
Dynamic Draw: 5.4 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [5.6+] 17.0	22.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [5.4+] 17.0	22.2 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 10:47.10

Machine Type: GATOR180/110v

Ambient Temp.: 24 °C

Joint No: 9
Operator code: P.RIGBY
Location: BRGOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 9.0 Bar
Dynamic Draw: 9.0 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.8 °C
Bead Pressure [9.0+] 17.0	25.8 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [9.0+] 17.0	26.0 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 10:50.20

Machine Type: GATOR180/110v

Ambient Temp.: 24 °C

Joint No: 10
Operator code: P.RIGBY
Location: BRGOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 6.5 Bar
Dynamic Draw: 6.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [6.5+] 17.0	23.4 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.5+] 17.0	23.4 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 11:07.36

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 11
Operator code: P.RIGBY
Location: BRGOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 7.8 Bar
Dynamic Draw: 7.8 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [7.8+] 17.0	25.0 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [7.8+] 17.0	24.6 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: G180-2417 [UH.68TS/GB]

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 11:17.25

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 12
Operator code: P.RIGBY
Location: BRGOKHILL

Welding Standard

Fusion FW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 6.9 Bar
Dynamic Draw: 6.9 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [6.9+] 17.0	23.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.9+] 17.0	23.8 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

<<<<<< DUMMY JOINT >>>>>>

Date: 24/09/2015 Time: 09:10.35

Machine Type: GATOR180/110v

Ambient Temp.: 18 °C

Joint No: 1
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 6.9 Bar
Dynamic Draw: 6.9 Bar

Dwell Time: 0.0 Secs

Dummy Joint Status: COMPLETE

Final bead OK? NO

Parameter	Target	Achieved
Heater Temperature	233.0	232.5 °C
Bead Pressure [6.9+] 17.0	24.2 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [6.9+] 17.0	0.0 Bar	
Cool Time	230.0	0.0 Secs

Designed and manufactured by

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 09:39.46

Machine Type: GATOR180/110v

Ambient Temp.: 19 °C

Joint No: 4
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 10.7 Bar
Dynamic Draw: 10.7 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.5 °C
Bead Pressure [10.7+] 17.0	27.9 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [10.7+] 17.0	27.5 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 09:17.16

Machine Type: GATOR180/110v

Ambient Temp.: 19 °C

Joint No: 2
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 8.0 Bar
Dynamic Draw: 8.0 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.0 °C
Bead Pressure [8.0+] 17.0	23.6 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [8.0+] 17.0	24.2 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 09:28.17

Machine Type: GATOR180/110v

Ambient Temp.: 20 °C

Joint No: 3
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 9.9 Bar
Dynamic Draw: 9.9 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.2 °C
Bead Pressure [9.9+] 17.0	27.5 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [9.9+] 17.0	26.9 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 09:49.31

Machine Type: GATOR180/110v

Ambient Temp.: 19 °C

Joint No: 5
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 10.9 Bar
Dynamic Draw: 10.9 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	231.3 °C
Bead Pressure [10.9+] 17.0	27.9 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [10.9+] 17.0	28.0 Bar	
Cool Time	230.0	230.0 Secs

AUTOMATIC BUTT FUSION JOINT RECORD

Serial Number: 6180-2417 UH.68TS/GB1

Property of:
FUSION HIRE

Date: 24/09/2015 Time: 10:10.28

Machine Type: GATOR180/110v

Ambient Temp.: 23 °C

Joint No: 6
Operator code: P.RIGBY
Location: BROOKHILL

Welding Standard

Fusion PW Landfill

Pipe Selected

PE100 160mm SDR 11 Black

Draw Parameters

Peak Draw: 9.5 Bar
Dynamic Draw: 9.5 Bar

Dwell Time: 1.7 Secs

Joint Status: COMPLETE

Final bead OK? YES

Parameter	Target	Achieved
Heater Temperature	233.0	232.8 °C
Bead Pressure [9.5+] 17.0	26.4 Bar	
Bead Distance	200.0	200.0 mm
Soak Pressure	0.0	0.0 Bar
Soak Time	30.0	30.0 Secs
Fusion Pressure [9.5+] 17.0	26.5 Bar	
Cool Time	230.0	230.0 Secs

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 174
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 11:46.45
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.9 12.9 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 230.3 ° C
Bead Pressure: 3.0 15.9 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 10.0 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 175
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 11:53.37
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.8

Peak

12.6 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

2.0 S
230.6 ° C
15.6 B
800.0 μ m
0.0 B
15.0 S
10.0 B
120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 176
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 11:59.55
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.6

Peak

8.8 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

2.1 S
229.5 ° C
12.3 B
800.0 μ m
0.0 B
15.0 S
9.7 B
120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 177
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:06.42
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.8 13.6 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 229.4 ° C
Bead Pressure: 3.0 17.4 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.9 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 178
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:14.45
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.6 11.5 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 230.8 ° C
Bead Pressure: 3.0 15.1 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.8 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 179
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:20.28
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.6 9.5 B

Target Achieved

Dwell Time: 4.0 2.1 S
Heater Temperature: 233.0 230.4 ° C
Bead Pressure: 3.0 12.4 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.7 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 180
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:26.27
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.5 11.6 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 230.6 ° C
Bead Pressure: 3.0 15.0 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.7 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 181
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:32.58
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.5 12.4 B

Target Achieved

Dwell Time: 4.0 1.9 S
Heater Temperature: 233.0 230.5 ° C
Bead Pressure: 3.0 15.8 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.8 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 182
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:40.01
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.5 9.5 B

Target Achieved

Dwell Time: 4.0 2.1 S
Heater Temperature: 233.0 231.4 ° C
Bead Pressure: 3.0 12.1 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.5 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 183
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:45.57
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.7 10.2 B

Target Achieved

Dwell Time: 4.0 2.1 S
Heater Temperature: 233.0 230.7 ° C
Bead Pressure: 3.0 13.3 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.8 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 184
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:52.07
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.5 11.1 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 230.9 ° C
Bead Pressure: 3.0 14.4 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.6 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 185
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 12:59.41
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.5

Peak

7.9 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

2.3 S
230.0 ° C
11.3 B
800.0 μ m
0.0 B
15.0 S
9.7 B
120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 186
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 13:06.32
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.7 7.9 B

Target Achieved

Dwell Time: 4.0 2.4 S
Heater Temperature: 233.0 231.2 ° C
Bead Pressure: 3.0 10.7 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.9 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 187
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 13:12.59
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.4 8.2 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 231.5 ° C
Bead Pressure: 3.0 11.2 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.6 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 188
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 13:20.42
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.3

Peak

7.9 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

2.0 S
231.7 ° C
11.4 B
800.0 μ m
0.0 B
15.0 S
9.5 B
120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 189
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 13:27.06
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.4 7.5 B

Target Achieved

Dwell Time: 4.0 2.2 S
Heater Temperature: 233.0 231.7 ° C
Bead Pressure: 3.0 10.9 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.6 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 190
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 13:34.03
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.3 8.9 B

Target Achieved

Dwell Time: 4.0 2.2 S
Heater Temperature: 233.0 231.7 ° C
Bead Pressure: 3.0 11.7 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.5 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 191
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 13:40.06
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.3 8.6 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 231.6 ° C
Bead Pressure: 3.0 11.3 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.5 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 192
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 13:47.00
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.4

Peak

8.5 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

2.0 S
232.6 ° C
11.6 B
800.0 μ m
0.0 B
15.0 S
9.4 B
120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 193
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 13:52.51
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.4 8.3 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 231.1 ° C
Bead Pressure: 3.0 11.4 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.6 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 194
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 14:01.46
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.3

Peak

9.2 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

2.1 S
232.4 ° C
12.1 B
800.0 μ m
0.0 B
15.0 S
9.5 B
120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 195
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 14:08.04
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.3 8.6 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 232.4 ° C
Bead Pressure: 3.0 12.0 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.5 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 196
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 14:15.18
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.4 8.9 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 231.9 ° C
Bead Pressure: 3.0 12.2 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.5 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 197
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 14:22.06
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.4 8.7 B

Target Achieved

Dwell Time: 4.0 2.1 S
Heater Temperature: 233.0 231.3 ° C
Bead Pressure: 3.0 12.1 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.6 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 198
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 14:31.13
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.4

Peak

7.2 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

2.1 S
232.2 ° C
10.4 B
800.0 μ m
0.0 B
15.0 S
9.6 B
120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 199
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 14:38.49
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.3

Peak

8.7 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

2.0 S
232.5 ° C
11.9 B
800.0 μ m
0.0 B
15.0 S
9.6 B
120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 200
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 14:45.51
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.6 8.7 B

Target Achieved

Dwell Time: 4.0 1.9 S
Heater Temperature: 233.0 232.3 ° C
Bead Pressure: 3.0 12.1 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.7 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 201
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 14:52.55
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.3 9.1 B

Target Achieved

Dwell Time: 4.0 2.0 S
Heater Temperature: 233.0 232.8 ° C
Bead Pressure: 3.0 12.2 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.6 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 202
Status: E32: Abort Duri ng DWELL
Bead OK: X

Date: 21/10/15
Time: 14:59.24
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.3 8.8 B

Target Achieved

Dwell Time: 4.0 0.0 S
Heater Temperature: 233.0 231.7 ° C
Bead Pressure: 3.0 12.3 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 0.0 B
Fusion Time: 120.0 0.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 203
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 15:02.57
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.2 9.0 B

Target Achieved

Dwell Time: 4.0 1.9 S
Heater Temperature: 233.0 230.1 ° C
Bead Pressure: 3.0 11.8 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.4 B
Fusion Time: 120.0 120.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 204
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 15:17.16
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic

Drag: 6.2

Peak

8.6 B

Target

Dwell Time: 4.0
Heater Temperature: 233.0
Bead Pressure: 3.0
Bead Distance: 800.0
Soak Pressure: 0.0
Soak Time: 15.0
Fusion Pressure: 3.0
Fusion Time: 120.0

Achieved

1.8 S
231.1 ° C
12.1 B
800.0 μ m
0.0 B
15.0 S
9.5 B
120.0 S

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BUTT FUSION JOINT RECORD		
GTR203047		
FUSION HIRE		
GATOR180		
-----	-----	-----
Joint Number: 205		
Status: Joint Complete		
Bead OK: ✓		
Date: 21/10/15		
Time: 15:25.29		
Temperature: 24.5 °C		
Operator: P RIGBY		
Location: BROOKHILL		
Welding/Pipe Details:		
-----	-----	-----
Welding Standard: Fusion FW	Landfill	[05/199
Pipe:		
Material: PE80		
Diameter: 90.0		
SDR: 17.60		
Colour: Black		
Welding Parameters:		
-----	-----	-----
Dynamic	Peak	
-----	-----	-----
Drag: 6.3	8.3 B	
Target	Achieved	
-----	-----	-----
Dwell Time: 4.0	1.8 S	
Heater Temperature: 233.0	231.5 °	C
Bead Pressure: 3.0	11.3 B	
Bead Distance: 800.0	800.0 μ	m
Soak Pressure: 0.0	0.0 B	
Soak Time: 15.0	15.0 S	
Fusion Pressure: 3.0	9.6 B	
Fusion Time: 120.0	120.0 S	
-----	-----	-----

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 206
Status: E18: Abort Duri ng BEADUP
Bead OK: ✕

Date: 21/10/15
Time: 15:31.53
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.3 8.7 B

Target Achieved

Dwell Time: 4.0 0.0 S
Heater Temperature: 233.0 231.1 ° C
Bead Pressure: 3.0 0.0 B
Bead Distance: 800.0 0.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 0.0 S
Fusion Pressure: 3.0 0.0 B
Fusion Time: 120.0 0.0 S

BUTT FUSION JOINT RECORD
GTR203047
FUSION HIRE
GATOR180

Joint Number: 207
Status: Joint Complete
Bead OK: ✓

Date: 21/10/15
Time: 15:34.16
Temperature: 24.5 °C

Operator: P RIGBY
Location: BROOKHILL

Welding/Pipe Details:

Welding Standard: Fusion FW Landfill [05/199
Pipe:
Material: PE80
Diameter: 90.0
SDR: 17.60
Colour: Black

Welding Parameters:

Dynamic Peak

Drag: 6.2 7.9 B

Target Achieved

Dwell Time: 4.0 1.9 S
Heater Temperature: 233.0 229.3 ° C
Bead Pressure: 3.0 10.8 B
Bead Distance: 800.0 800.0 μ m
Soak Pressure: 0.0 0.0 B
Soak Time: 15.0 15.0 S
Fusion Pressure: 3.0 9.2 B
Fusion Time: 120.0 120.0 S

Designed and Manufactured by:

Fusion Equipment

Phone : +44 (0)1246 26866

email : sales@fusiongroup

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.com

Flintshire County Council Waste Management Services

Brookhill Landfill Site

Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

5. CQA Inspectors Electro Fusion Welding Logs

Electro Fusion Record Sheet



Landfill Site: Brookhill Landfill Site

Project: Pipework Collection

Date	Joint Number	Pipe Diameter (mm)	Scraped	Clamped	Fitting Type						Heat Time (secs)		Cool Time (secs)		Status		CQA Inspector	Remarks
					cou	tee	red	sad	elb	other	Target	Actual	Target	Actual	Pass	Fail		
23.10.2015	2529	90mm	Y		X						90	90	300	300	Y		Stuart Darbyshire	
23.10.2015	2530	90mm	Y		X						90	90	300	300	Y		Stuart Darbyshire	
23.10.2015	2531	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
23.10.2015	2532	90mm	Y			X					80	80	300	300	Y		Stuart Darbyshire	
23.10.2015	2533	90mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
23.10.2015	2537	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
23.10.2015	2538	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
23.10.2015	2539	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
23.10.2015	2540	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
23.10.2015	2541	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
23.10.2015	2542	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
23.10.2015	2543	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
26.10.2015	2544	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
26.10.2015	2545	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
26.10.2015	2546	90mm	Y							X	35	35	180	180	Y		Stuart Darbyshire	
26.10.2015	2547	90mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
26.10.2015	2548	160mm	Y		X						360	360	1200	1200	Y		Stuart Darbyshire	
26.10.2015	2549	63mm/90mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
26.10.2015	2550	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
27.10.2015	2554	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
27.10.2015	2555	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
27.10.2015	2556	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
27.10.2015	2558	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
27.10.2015	2559	63mm	Y		X						76	30	-	-		Y	Stuart Darbyshire	
27.10.2015	2560	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
27.10.2015	2561	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
27.10.2015	2562	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
27.10.2015	2563	90mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
27.10.2015	2564	90mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
27.10.2015	2565	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
27.10.2015	2566	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
27.10.2015	2567	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
27.10.2015	2568	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	

Electro Fusion Record Sheet



Landfill Site: Brookhill Landfill Site

Project: Gas Collection

Date	Joint Number	Pipe Diameter (mm)	Scraped	Clamped	Fitting Type						Heat Time (secs)		Cool Time (secs)		Status		CQA Inspector	Remarks
					cou	tee	red	sad	elb	other	Target	Actual	Target	Actual	Pass	Fail		
27.10.2015	2569	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
27.10.2015	2570	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
27.10.2015	2571	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2572	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
27.10.2015	2573	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
27.10.2015	2574	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2575	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
28.10.2015	2576	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
28.10.2015	2577	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2578	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
28.10.2015	2579	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2580	63mm	Y			X					80	80	300	300	Y		Stuart Darbyshire	
28.10.2015	2581	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
28.10.2015	2582	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
28.10.2015	2583	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
28.10.2015	2584	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2585	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
28.10.2015	2586	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
28.10.2015	2587	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2588	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
28.10.2015	2589	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
28.10.2015	2590	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2591	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
28.10.2015	2592	90mm	Y			X					100	100	300	300	Y		Stuart Darbyshire	
28.10.2015	2593	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
28.10.2015	2595	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
28.10.2015	2596	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2597	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
28.10.2015	2598	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	
28.10.2015	2599	160mm	Y		X						300	300	1200	1200	Y		Stuart Darbyshire	
28.10.2015	2600	63mm	Y		X						35	35	180	180	Y		Stuart Darbyshire	
28.10.2015	2601	63mm	Y						X		35	35	300	300	Y		Stuart Darbyshire	
28.10.2015	2602	90mm/63mm	Y				X				80	80	300	300	Y		Stuart Darbyshire	

Project: Gas Collection

[illegible]

Flintshire County Council Waste Management Services

Brookhill Landfill Site

Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

6. Electro Fusion Welding Tickets

Joint Record

www.jointmanager.com

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnworkshop

Joint Identification	
Joint Number	2528
Reference	7653131
Created	22/10/2015 13:41:11
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.9 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.94 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	90	90
Energy (kJ)	-	78.424
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.6	33.1	0.5
9	98	39.5	26.4	9.5
18	100	39.6	24.1	18.5
27	100	39.5	22.8	26.8
36	100	39.5	22.2	34.8
45	100	39.4	21.4	42.6
54	101	39.6	20.8	50.1
63	103	39.6	20.2	57.3
72	102	39.5	19.9	64.5
81	103	39.5	19.7	71.5
90	102	39.6	19.2	78.4

Joint Record

www.jointmanager.com

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnworkshop

Joint Identification	
Joint Number	2529
Reference	7653130
Created	23/10/2015 09:04:17
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	10.5 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.928 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	90	90
Energy (kJ)	-	78.657
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.6	33.3	0.5
9	99	39.5	26.8	9.7
18	102	39.6	24.5	18.8
27	102	39.7	23.0	27.2
36	102	39.5	22.2	35.3
45	102	39.5	21.4	43.1
54	103	39.6	20.7	50.5
63	104	39.6	20.3	57.9
72	103	39.6	19.8	65.0
81	102	39.5	19.3	71.9
90	104	39.6	18.9	78.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnworkshop

Joint Identification	
Joint Number	2530
Reference	7653129
Created	23/10/2015 09:06:07
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	10.5 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.928 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	90	90
Energy (kJ)	-	78.162
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.6	33.4	0.5
9	99	39.5	26.7	9.7
18	101	39.6	24.4	18.7
27	101	39.5	23.0	27.1
36	102	39.5	22.1	35.2
45	102	39.5	21.3	42.9
54	102	39.5	20.6	50.3
63	103	39.5	20.0	57.5
72	102	39.6	19.6	64.6
81	102	39.5	19.1	71.4
90	103	39.6	18.7	78.2

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnworkshop
Joint Identification	
Joint Number	2531
Reference	7653128
Created	23/10/2015 11:30:52
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	12.7 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.184 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.59
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	93	35.7	25.6	0.4
8	97	39.5	20.8	6.6
16	96	39.5	19.1	12.9
24	98	39.5	18.0	18.8
32	97	39.5	17.3	24.4
40	97	39.5	16.7	29.7
48	98	39.6	16.3	35.0
56	98	39.6	15.9	40.0
64	98	39.5	15.5	45.0
72	99	39.6	15.2	49.8
80	100	39.6	14.9	54.6

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnworkshop
Joint Identification	
Joint Number	2532
Reference	7653127
Created	23/10/2015 12:51:48
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	13.7 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.172 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.69
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.9	25.9	0.4
8	98	39.6	21.0	6.7
16	99	39.5	19.3	13.0
24	99	39.6	18.3	19.0
32	99	39.6	17.6	24.6
40	100	39.5	17.0	30.1
48	99	39.5	16.6	35.4
56	100	39.7	16.5	40.6
64	100	39.5	16.0	45.8
72	100	39.5	15.7	50.8
80	99	39.5	15.3	55.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnworkshop
Joint Identification	
Joint Number	2533
Reference	7653126
Created	23/10/2015 13:10:02
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.9 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	1.257 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	150	150
Energy (kJ)	-	101.05
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	36.0	24.9	0.4
15	101	39.6	20.5	12.6
30	101	39.4	18.8	24.2
45	102	39.6	17.9	35.1
60	103	39.5	17.1	45.5
75	103	39.5	16.5	55.5
90	104	39.6	16.0	65.1
105	103	39.6	15.5	74.4
120	103	39.6	15.1	83.5
135	103	39.5	14.8	92.4
150	104	39.6	14.5	101.1

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnwworkshop

Joint Identification	
Joint Number	2534
Reference	7653125
Created	23/10/2015 13:26:05
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.2 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.624 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	110	110
Energy (kJ)	-	82.484
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	99	35.9	28.6	0.5
11	102	39.6	22.5	10.2
22	102	39.6	20.4	19.5
33	103	39.6	19.4	28.1
44	103	39.6	19.0	36.5
55	103	39.5	18.6	44.7
66	102	39.5	18.0	52.6
77	103	39.6	17.5	60.3
88	104	39.6	17.1	67.9
99	104	39.6	16.8	75.3
110	104	39.5	16.4	82.5

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnwworkshop

Joint Identification	
Joint Number	2535
Reference	7653124
Created	23/10/2015 13:49:50
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.916 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.895
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.8	30.4	0.5
4	98	39.4	26.3	3.2
7	99	39.5	23.5	6.6
10	100	39.6	21.9	9.8
14	99	39.5	20.7	12.7
18	99	39.5	20.3	15.5
21	100	39.6	19.8	18.3
24	99	39.5	19.4	21.0
28	100	39.5	19.2	23.7
32	101	39.5	18.9	26.3
35	100	39.5	18.5	28.9

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnwworkshop

Joint Identification	
Joint Number	2536
Reference	7653123
Created	23/10/2015 13:53:41
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.6 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.928 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.613
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.7	30.1	0.5
4	98	39.5	26.2	3.2
7	99	39.6	23.4	6.6
10	99	39.6	21.9	9.7
14	100	39.5	20.8	12.7
18	100	39.5	19.9	15.5
21	100	39.6	19.5	18.2
24	101	39.6	19.2	20.9
28	101	39.5	18.8	23.5
32	101	39.5	18.4	26.1
35	100	39.5	18.1	28.6

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnworkshop

Joint Identification	
Joint Number	2537
Reference	7653122
Created	23/10/2015 14:00:10
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.9 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.94 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.478
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.6	29.9	0.5
4	98	39.4	26.2	3.2
7	100	39.5	23.4	6.6
10	99	39.5	21.8	9.7
14	99	39.4	20.5	12.6
18	100	39.6	19.8	15.4
21	102	39.6	19.4	18.1
24	102	39.5	19.1	20.8
28	101	39.6	18.7	23.4
32	101	39.5	18.4	26.0
35	101	39.5	18.1	28.5

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:03
Uploader	fnworkshop

Joint Identification	
Joint Number	2538
Reference	7653121
Created	23/10/2015 14:03:37
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.3 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.903 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	29.085
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.7	31.0	0.5
4	99	39.5	26.6	3.3
7	100	39.4	23.7	6.7
10	100	39.5	22.1	9.9
14	100	39.5	21.0	12.8
18	100	39.4	20.2	15.7
21	101	39.5	19.8	18.5
24	101	39.4	19.5	21.2
28	101	39.5	19.1	23.9
32	100	39.5	19.2	26.5
35	100	39.6	18.7	29.1

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop

Joint Identification	
Joint Number	2539
Reference	7653120
Created	23/10/2015 14:07:03
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.928 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.705
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.6	30.3	0.5
4	98	39.4	26.2	3.2
7	100	39.6	23.5	6.6
10	99	39.5	21.9	9.7
14	99	39.5	20.7	12.7
18	99	39.4	20.0	15.5
21	99	39.5	19.6	18.2
24	101	39.5	19.3	20.9
28	100	39.5	18.9	23.6
32	100	39.4	18.6	26.2
35	100	39.5	18.2	28.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop

Joint Identification	
Joint Number	2540
Reference	7653119
Created	23/10/2015 14:09:54
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.3 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.928 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.91
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.6	30.0	0.5
4	98	39.3	26.2	3.2
7	99	39.5	23.8	6.7
10	98	39.4	22.1	9.8
14	100	39.5	21.0	12.8
18	100	39.5	20.3	15.7
21	100	39.5	19.7	18.4
24	101	39.6	19.4	21.1
28	100	39.4	19.0	23.8
32	100	39.6	18.6	26.4
35	101	39.5	18.3	28.9

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop

Joint Identification	
Joint Number	2541
Reference	7653118
Created	23/10/2015 14:12:37
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.4 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.94 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.337
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.5	29.6	0.5
4	98	39.4	26.0	3.2
7	99	39.4	23.2	6.5
10	100	39.5	21.8	9.7
14	100	39.5	20.6	12.6
18	100	39.5	19.8	15.4
21	101	39.5	19.3	18.1
24	100	39.5	18.9	20.7
28	100	39.4	18.6	23.3
32	101	39.5	18.3	25.8
35	101	39.5	17.9	28.3

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop

Joint Identification	
Joint Number	2542
Reference	7653117
Created	23/10/2015 14:16:30
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.4 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.94 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.479
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.6	29.7	0.5
4	98	39.4	26.0	3.2
7	98	39.5	23.3	6.6
10	100	39.6	21.7	9.7
14	100	39.5	20.5	12.6
18	101	39.5	19.9	15.4
21	100	39.5	19.4	18.1
24	101	39.5	19.0	20.7
28	102	39.6	18.7	23.3
32	101	39.5	18.7	25.9
35	101	39.4	18.3	28.5

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop
Joint Identification	
Joint Number	2543
Reference	7653116
Created	23/10/2015 14:19:10
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.5 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.928 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.985
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.6	30.2	0.5
4	99	39.3	26.2	3.2
7	99	39.5	23.4	6.6
10	100	39.5	21.9	9.7
14	101	39.6	20.8	12.7
18	101	39.5	20.0	15.5
21	100	39.6	19.5	18.2
24	101	39.6	19.3	20.9
28	101	39.6	20.2	23.6
32	100	39.5	19.6	26.3
35	100	39.4	19.0	29.0

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop
Joint Identification	
Joint Number	2544
Reference	7653115
Created	26/10/2015 10:35:24
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	9.8 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.16 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.092
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	36.0	26.0	0.4
8	99	39.6	20.8	6.6
16	99	39.6	19.0	12.9
24	99	39.5	17.9	18.8
32	100	39.6	17.3	24.3
40	99	39.5	16.8	29.7
48	102	39.7	16.5	35.0
56	100	39.6	16.3	40.2
64	100	39.6	15.9	45.2
72	100	39.6	15.5	50.2
80	101	39.6	15.0	55.1

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop
Joint Identification	
Joint Number	2545
Reference	7653114
Created	26/10/2015 11:08:51
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	10.5 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.147 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.683
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.9	26.1	0.4
8	98	39.6	21.1	6.7
16	98	39.5	19.3	13.1
24	98	39.6	18.3	19.0
32	98	39.6	17.6	24.7
40	99	39.5	17.0	30.2
48	97	39.4	16.5	35.5
56	99	39.5	16.1	40.6
64	99	39.6	15.9	45.7
72	101	39.7	15.9	50.7
80	98	39.4	15.4	55.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnwworkshop

Joint Identification	
Joint Number	2546
Reference	7653113
Created	26/10/2015 13:29:28
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.16 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.849
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	92	35.6	25.9	0.4
8	98	39.6	21.4	6.8
16	97	39.5	19.6	13.2
24	97	39.5	18.5	19.3
32	97	39.5	17.7	25.0
40	98	39.5	17.1	30.5
48	98	39.5	16.5	35.8
56	98	39.5	16.1	41.0
64	99	39.7	15.7	46.0
72	99	39.5	15.6	51.0
80	99	39.5	15.2	55.8

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnwworkshop

Joint Identification	
Joint Number	2547
Reference	7653112
Created	26/10/2015 14:04:40
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.5 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.903 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	90	90
Energy (kJ)	-	79.606
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	92	35.3	34.1	0.5
9	97	39.6	27.5	9.9
18	97	39.5	25.2	19.2
27	98	39.5	23.6	27.9
36	98	39.6	22.5	36.1
45	99	39.7	21.6	43.9
54	98	39.6	20.9	51.5
63	99	39.5	20.2	58.8
72	98	39.6	19.7	65.9
81	98	39.5	19.3	72.8
90	99	39.5	18.8	79.6

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnwworkshop

Joint Identification	
Joint Number	2548
Reference	7653111
Created	26/10/2015 14:16:47
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.8 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.671 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	360	360
Energy (kJ)	-	442.083
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	93	34.8	47.8	0.6
36	97	39.3	35.9	55.1
72	98	39.5	33.6	104.5
108	99	39.6	32.2	151.1
144	98	39.5	31.2	196.2
180	99	39.5	30.2	239.8
216	99	39.5	29.4	282.2
252	101	39.6	28.7	323.5
288	100	39.5	28.1	363.8
324	100	39.5	27.5	403.3
360	100	39.5	27.0	442.1

Joint Record

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Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop

Joint Identification	
Joint Number	2549
Reference	7653110
Created	26/10/2015 14:30:35
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.5 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.184 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.959
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	99	35.9	25.6	0.4
8	102	39.5	20.8	6.6
16	103	39.5	19.1	12.9
24	102	39.5	18.0	18.8
32	103	39.6	17.3	24.4
40	103	39.5	16.7	29.7
48	102	39.5	16.3	35.0
56	103	39.5	16.3	40.1
64	103	39.5	15.8	45.2
72	103	39.6	15.5	50.2
80	103	39.5	15.0	55.0

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:02
Uploader	fnworkshop

Joint Identification	
Joint Number	2550
Reference	7653109
Created	26/10/2015 14:32:16
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.6 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.977 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	29.009
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	35.8	29.5	0.5
4	101	39.4	25.9	3.1
7	102	39.5	23.4	6.5
10	102	39.5	22.1	9.7
14	102	39.5	21.1	12.6
18	102	39.6	20.4	15.5
21	101	39.5	19.7	18.3
24	102	39.5	19.6	21.0
28	102	39.5	19.6	23.7
32	104	39.5	19.2	26.4
35	102	39.5	18.8	29.0

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2551
Reference	7653108
Created	26/10/2015 15:39:42
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.3 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.793 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	330.927
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	90	34.7	40.6	0.6
30	97	39.6	31.9	40.4
60	97	39.5	29.7	76.8
90	98	39.5	28.5	111.3
120	97	39.6	27.6	144.6
150	98	39.5	27.8	177.5
180	98	39.6	26.8	209.8
210	99	39.5	26.2	241.0
240	98	39.6	25.6	271.6
270	99	39.4	25.0	301.5
300	98	39.5	24.6	330.9

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnwworkshop
Joint Identification	
Joint Number	2552
Reference	7653107
Created	26/10/2015 15:45:55
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.1 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	2.014 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	76	76
Energy (kJ)	-	50.796
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	100	36.1	17.1	0.3
8	101	39.5	17.8	4.9
15	101	39.5	17.3	10.2
23	102	39.5	17.0	15.3
30	101	39.5	16.7	20.4
38	101	39.5	16.5	25.4
46	101	39.4	16.2	30.3
53	101	39.5	17.3	35.2
61	101	39.5	17.3	40.4
68	101	39.6	17.4	45.6
76	100	39.5	17.2	50.8

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnwworkshop
Joint Identification	
Joint Number	2553
Reference	7653106
Created	26/10/2015 15:47:49
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.4 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.172 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.25
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.7	25.7	0.4
8	100	39.5	20.9	6.7
16	101	39.6	19.2	13.0
24	101	39.6	18.2	18.9
32	101	39.5	17.5	24.5
40	102	39.5	16.9	30.0
48	101	39.5	16.4	35.2
56	101	39.5	16.1	40.4
64	101	39.5	16.0	45.4
72	102	39.5	15.6	50.4
80	101	39.6	15.2	55.3

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnwworkshop
Joint Identification	
Joint Number	2554
Reference	7653105
Created	27/10/2015 09:51:28
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	12.8 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.793 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	329.584
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	93	35.0	40.8	0.6
30	100	39.6	31.9	40.2
60	98	39.4	29.7	76.6
90	100	39.5	28.6	111.1
120	100	39.5	27.6	144.4
150	101	39.6	27.7	177.4
180	100	39.5	26.4	209.3
210	102	39.5	25.8	240.2
240	101	39.5	25.2	270.5
270	102	39.6	24.8	300.1
300	101	39.5	24.7	329.6

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2555
Reference	7653104
Created	27/10/2015 09:58:05
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	12.9 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.891 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	30.653
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.7	32.0	0.5
4	99	39.4	27.1	3.4
7	102	39.6	24.2	6.9
10	101	39.5	22.6	10.1
14	102	39.6	21.3	13.2
18	102	39.5	21.0	16.0
21	102	39.5	21.1	19.0
24	102	39.5	20.9	21.9
28	102	39.5	21.4	24.8
32	101	39.5	20.9	27.7
35	101	39.5	20.8	30.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2556
Reference	7653103
Created	27/10/2015 09:59:12
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	12.9 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.16 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.176
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	35.9	25.9	0.4
8	101	39.5	20.9	6.7
16	103	39.6	19.2	13.0
24	103	39.6	18.1	18.9
32	102	39.5	17.4	24.5
40	103	39.6	16.9	29.9
48	103	39.4	16.4	35.2
56	103	39.5	16.0	40.3
64	104	39.6	15.9	45.4
72	103	39.5	15.5	50.3
80	103	39.5	15.2	55.2

Joint Record

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Joint Status	Low output current
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2557
Reference	7653102
Created	27/10/2015 10:45:59
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.147 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	40.3
Energy (kJ)	-	30.897
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.9	26.8	0.4
8	99	39.5	22.8	7.2
16	99	39.5	20.2	14.0
24	101	39.6	18.8	20.1
32	101	39.6	18.1	25.9
40	101	39.6	1.3	30.9
40.3	Aborted			

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2558
Reference	7653101
Created	27/10/2015 11:20:56
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	17.2 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.806 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	337.44
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.1	40.5	0.6
30	98	39.5	31.7	40.1
60	99	39.5	29.8	76.4
90	100	39.4	28.5	111.0
120	100	39.5	28.6	144.5
150	100	39.5	27.0	177.3
180	100	39.5	27.1	209.8
210	99	39.5	26.9	242.1
240	100	39.5	26.8	273.6
270	101	39.5	26.7	305.2
300	100	39.5	27.4	337.4

Joint Record

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Joint Status	Low output current
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2559
Reference	7653100
Created	27/10/2015 11:27:43
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	26.1 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	4.053 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	76	30.1
Energy (kJ)	-	14.817
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	100	36.2	15.0	0.2
8	104	39.6	14.0	4.0
15	104	39.6	13.1	8.1
23	104	39.5	12.5	11.9
30.1	Aborted			

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2560
Reference	7653099
Created	27/10/2015 12:17:36
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.806 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	329.966
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	92	35.0	40.4	0.6
30	96	39.5	31.6	39.8
60	97	39.5	29.5	75.9
90	97	39.6	28.3	110.1
120	98	39.6	27.4	143.0
150	97	39.5	27.8	175.2
180	97	39.5	26.8	207.5
210	98	39.5	26.1	238.8
240	98	39.5	26.1	269.6
270	98	39.5	25.4	300.1
300	98	39.5	25.0	330.0

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2561
Reference	7653098
Created	27/10/2015 12:23:29
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.8 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	2.209 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	76	76
Energy (kJ)	-	34.877
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	99	36.1	14.6	0.2
8	100	39.4	13.6	3.9
15	101	39.6	12.7	7.9
23	100	39.4	12.2	11.6
30	102	39.6	11.8	15.2
38	102	39.5	11.4	18.7
46	100	39.6	11.1	22.1
53	102	39.5	10.9	25.4
61	102	39.5	10.7	28.6
68	100	39.5	10.4	31.8
76	100	39.6	10.2	34.9

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2562
Reference	7653097
Created	27/10/2015 12:25:19
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.172 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.551
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.7	25.7	0.4
8	99	39.5	21.1	6.7
16	98	39.4	19.4	13.1
24	100	39.5	18.3	19.0
32	99	39.5	17.5	24.7
40	101	39.6	17.0	30.1
48	100	39.6	16.5	35.4
56	100	39.5	16.2	40.6
64	100	39.5	15.8	45.7
72	100	39.5	15.5	50.6
80	102	39.7	15.2	55.6

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnworkshop

Joint Identification	
Joint Number	2563
Reference	7653096
Created	27/10/2015 13:02:10
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	17.4 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	1.294 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	150	150
Energy (kJ)	-	99.707
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	36.0	24.0	0.4
15	99	39.5	20.2	12.4
30	101	39.5	18.6	23.8
45	102	39.6	17.7	34.6
60	102	39.5	16.9	44.8
75	103	39.6	16.3	54.7
90	102	39.5	15.8	64.2
105	102	39.5	15.3	73.4
120	103	39.6	14.9	82.4
135	102	39.5	14.6	91.1
150	104	39.5	14.3	99.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnwworkshop

Joint Identification	
Joint Number	2564
Reference	7653095
Created	27/10/2015 13:13:58
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.3 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.916 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	90	90
Energy (kJ)	-	79.323
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.4	33.6	0.5
9	100	39.5	27.3	9.8
18	100	39.5	25.0	19.0
27	100	39.4	23.4	27.6
36	101	39.4	22.4	35.8
45	102	39.5	21.6	43.6
54	101	39.5	20.9	51.1
63	100	39.5	20.3	58.4
72	101	39.5	19.8	65.6
81	101	39.5	19.3	72.5
90	102	39.5	18.9	79.3

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:01
Uploader	fnwworkshop

Joint Identification	
Joint Number	2565
Reference	7653094
Created	27/10/2015 13:27:56
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.2 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.184 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.891
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.8	25.7	0.4
8	100	39.5	20.9	6.7
16	101	39.6	19.2	13.0
24	102	39.5	18.1	18.9
32	101	39.5	17.3	24.5
40	100	39.5	16.8	29.8
48	102	39.5	16.4	35.1
56	103	39.6	16.0	40.2
64	101	39.4	15.6	45.2
72	102	39.5	15.3	50.1
80	101	39.5	15.0	54.9

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop

Joint Identification	
Joint Number	2566
Reference	7653093
Created	27/10/2015 13:59:35
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	23.3 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.818 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	322.272
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	92	34.9	39.8	0.6
30	99	39.5	31.4	39.5
60	99	39.6	29.3	75.3
90	100	39.5	27.9	109.1
120	99	39.5	27.0	141.6
150	101	39.6	26.4	173.2
180	100	39.4	25.8	204.1
210	99	39.5	25.3	234.4
240	100	39.4	24.8	264.1
270	99	39.4	24.5	293.3
300	99	39.5	24.6	322.3

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnworkshop

Joint Identification	
Joint Number	2567
Reference	7653092
Created	27/10/2015 14:08:54
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	20.6 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.001 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.51
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.5	28.8	0.5
4	100	39.4	25.5	3.1
7	100	39.5	22.9	6.4
10	100	39.5	21.7	9.5
14	101	39.5	20.8	12.4
18	101	39.5	20.1	15.2
21	100	39.4	19.6	18.0
24	101	39.4	19.1	20.7
28	101	39.5	18.7	23.3
32	101	39.6	19.1	25.9
35	101	39.5	18.7	28.5

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnworkshop

Joint Identification	
Joint Number	2568
Reference	7653091
Created	27/10/2015 14:16:21
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.2 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.208 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.492
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.6	25.0	0.4
8	100	39.4	20.5	6.5
16	102	39.5	18.9	12.7
24	101	39.5	17.9	18.5
32	102	39.4	17.2	24.1
40	101	39.4	16.7	29.4
48	101	39.5	16.2	34.6
56	101	39.4	16.0	39.7
64	101	39.5	15.9	44.8
72	101	39.5	15.4	49.7
80	102	39.5	15.1	54.5

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnworkshop

Joint Identification	
Joint Number	2569
Reference	7653090
Created	27/10/2015 15:13:23
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	20.6 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.83 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	331.877
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	92	34.8	39.9	0.5
30	96	39.5	31.8	40.1
60	98	39.6	29.8	76.4
90	98	39.5	28.4	110.8
120	98	39.6	28.5	144.5
150	98	39.5	27.3	177.5
180	97	39.5	26.9	209.9
210	96	39.4	26.1	241.4
240	97	39.4	25.5	272.0
270	98	39.5	25.4	302.1
300	99	39.6	24.9	331.9

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop
Joint Identification	
Joint Number	2570
Reference	7653089
Created	27/10/2015 15:19:43
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	26.8 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	2.71 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	76	76
Energy (kJ)	-	35.161
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	100	36.1	14.6	0.2
8	101	39.5	13.7	3.9
15	101	39.4	12.8	7.9
23	101	39.5	12.3	11.7
30	100	39.5	11.9	15.3
38	101	39.5	11.6	18.8
46	101	39.5	11.3	22.2
53	101	39.5	11.0	25.6
61	101	39.5	10.7	28.8
68	102	39.6	10.6	32.0
76	101	39.5	10.4	35.2

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop
Joint Identification	
Joint Number	2571
Reference	7653088
Created	27/10/2015 15:21:48
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	27.2 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.184 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.845
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.7	25.5	0.4
8	98	39.5	20.9	6.6
16	100	39.6	19.2	12.9
24	100	39.4	18.0	18.8
32	99	39.5	17.3	24.4
40	99	39.4	16.8	29.8
48	100	39.6	16.4	35.0
56	99	39.5	16.0	40.2
64	101	39.6	15.6	45.1
72	101	39.5	15.3	50.0
80	100	39.5	15.1	54.8

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop
Joint Identification	
Joint Number	2572
Reference	7653087
Created	28/10/2015 09:22:17
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	13.8 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.793 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	334.895
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	91	34.8	40.5	0.6
30	97	39.6	32.1	40.5
60	97	39.5	30.1	77.3
90	98	39.5	28.8	112.2
120	98	39.6	28.4	145.8
150	98	39.5	27.7	179.3
180	99	39.6	26.4	211.7
210	98	39.5	26.7	243.3
240	98	39.5	26.1	274.6
270	99	39.4	25.4	305.1
300	99	39.6	24.7	334.9

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop
Joint Identification	
Joint Number	2573
Reference	7653086
Created	28/10/2015 09:28:59
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	13 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	1.172 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.065
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.8	25.7	0.4
8	100	39.5	20.8	6.6
16	100	39.6	19.1	12.9
24	100	39.5	18.0	18.8
32	100	39.5	17.4	24.4
40	101	39.5	16.9	29.8
48	101	39.5	16.5	35.0
56	100	39.4	16.0	40.2
64	100	39.5	15.7	45.2
72	101	39.6	15.6	50.2
80	100	39.6	15.3	55.1

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop
Joint Identification	
Joint Number	2574
Reference	7653085
Created	28/10/2015 09:30:56
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	13.5 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.977 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.789
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.6	29.3	0.5
4	98	39.5	25.7	3.1
7	100	39.6	23.2	6.5
10	99	39.5	21.9	9.6
14	100	39.5	21.0	12.6
18	100	39.5	20.2	15.4
21	100	39.6	19.7	18.2
24	100	39.5	19.2	20.9
28	100	39.5	19.2	23.5
32	100	39.6	19.2	26.2
35	100	39.5	18.7	28.8

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop
Joint Identification	
Joint Number	2575
Reference	7653084
Created	28/10/2015 10:00:39
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.903 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	90	90
Energy (kJ)	-	80.021
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.5	34.3	0.5
9	98	39.5	27.6	9.9
18	99	39.7	25.4	19.3
27	98	39.5	23.7	28.0
36	100	39.6	22.5	36.2
45	99	39.5	21.6	44.1
54	100	39.6	20.9	51.7
63	100	39.6	20.6	59.0
72	100	39.5	19.9	66.2
81	100	39.6	19.4	73.2
90	101	39.6	19.0	80.0

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop

Joint Identification	
Joint Number	2576
Reference	7653083
Created	28/10/2015 10:25:35
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.2 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.793 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	337.408
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	92	35.0	40.7	0.6
30	94	39.4	32.3	40.7
60	97	39.5	30.3	77.8
90	97	39.5	28.9	112.9
120	97	39.3	29.3	147.0
150	97	39.5	27.6	180.9
180	98	39.6	27.2	213.6
210	98	39.5	26.8	245.8
240	99	39.6	26.2	277.2
270	99	39.5	25.5	307.7
300	99	39.6	24.7	337.4

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop

Joint Identification	
Joint Number	2577
Reference	7653082
Created	28/10/2015 10:31:17
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.879 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	29.361
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.6	31.6	0.5
4	99	39.5	26.7	3.3
7	100	39.6	24.0	6.8
10	99	39.5	22.5	10.0
14	101	39.6	21.5	13.0
18	100	39.4	20.7	15.9
21	101	39.5	20.1	18.7
24	99	39.5	19.6	21.5
28	100	39.5	19.2	24.2
32	101	39.6	18.7	26.8
35	100	39.5	18.4	29.4

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:44:00
Uploader	fnwworkshop

Joint Identification	
Joint Number	2578
Reference	7653081
Created	28/10/2015 10:32:34
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.16 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.302
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.8	26.0	0.4
8	100	39.5	21.1	6.7
16	100	39.5	19.2	13.1
24	100	39.5	18.1	18.9
32	100	39.6	17.4	24.5
40	100	39.6	16.9	30.0
48	102	39.6	16.6	35.2
56	101	39.5	16.2	40.4
64	100	39.5	15.8	45.5
72	101	39.6	15.5	50.4
80	102	39.5	15.4	55.3

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2579
Reference	7653080
Created	28/10/2015 10:48:38
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.001 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.457
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.7	29.1	0.5
4	97	39.4	25.6	3.1
7	99	39.7	23.1	6.4
10	100	39.6	21.8	9.5
14	100	39.6	20.9	12.5
18	99	39.5	20.1	15.3
21	100	39.6	19.6	18.1
24	99	39.5	19.2	20.7
28	99	39.5	18.7	23.4
32	100	39.6	18.4	25.9
35	99	39.6	18.0	28.5

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2580
Reference	7653079
Created	28/10/2015 10:49:45
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.7 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.928 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	40	40
Energy (kJ)	-	33.47
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.6	31.5	0.5
4	99	39.5	26.1	3.8
8	99	39.6	23.5	7.7
12	99	39.5	22.2	11.3
16	100	39.5	21.8	14.8
20	100	39.6	20.8	18.1
24	99	39.5	20.1	21.4
28	100	39.6	19.6	24.5
32	101	39.6	19.2	27.6
36	100	39.5	18.7	30.6
40	101	39.6	18.1	33.5

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2581
Reference	7653078
Created	28/10/2015 11:00:22
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.9 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.184 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.651
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.8	25.4	0.4
8	99	39.6	20.7	6.6
16	99	39.6	19.0	12.8
24	100	39.5	18.0	18.7
32	100	39.6	17.3	24.3
40	100	39.5	16.8	29.6
48	101	39.6	16.4	34.9
56	100	39.5	15.9	40.0
64	100	39.4	15.5	45.0
72	101	39.5	15.2	49.8
80	102	39.6	15.2	54.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2582
Reference	7653077
Created	28/10/2015 11:57:18
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.16 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.76
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.8	25.9	0.4
8	101	39.6	21.1	6.7
16	102	39.6	19.6	13.1
24	101	39.5	18.3	19.1
32	101	39.5	17.7	24.8
40	102	39.5	17.1	30.2
48	102	39.5	16.7	35.6
56	103	39.6	16.3	40.8
64	102	39.5	15.9	45.9
72	102	39.5	15.3	50.8
80	102	39.6	15.5	55.8

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2583
Reference	7653076
Created	28/10/2015 11:59:27
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.7 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.806 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	329.613
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.1	40.5	0.6
30	99	39.6	31.7	40.1
60	99	39.5	29.5	76.3
90	98	39.5	28.3	110.5
120	99	39.4	27.4	143.6
150	99	39.4	27.0	176.1
180	100	39.5	26.6	208.1
210	99	39.4	26.4	239.2
240	101	39.5	25.8	270.1
270	101	39.5	25.1	300.2
300	101	39.5	24.6	329.6

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2584
Reference	7653075
Created	28/10/2015 12:32:39
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.8 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	2.393 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	76	76
Energy (kJ)	-	42.639
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	101	36.2	14.7	0.2
8	102	39.6	15.2	4.2
15	103	39.6	14.7	8.7
23	102	39.5	14.4	13.0
30	102	39.5	14.2	17.3
38	102	39.5	14.0	21.6
46	103	39.6	13.8	25.7
53	102	39.5	14.2	29.9
61	102	39.4	14.0	34.2
68	102	39.6	13.8	38.4
76	103	39.6	14.8	42.6

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2585
Reference	7653074
Created	28/10/2015 12:35:27
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	17.1 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.891 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	29.232
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.7	31.3	0.5
4	100	39.6	26.9	3.3
7	100	39.5	23.9	6.8
10	102	39.6	22.4	10.0
14	101	39.5	21.2	13.0
18	102	39.6	20.4	15.9
21	102	39.5	19.9	18.6
24	102	39.6	19.5	21.4
28	102	39.5	19.2	24.0
32	103	39.6	18.9	26.7
35	102	39.6	18.4	29.2

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2586
Reference	7653073
Created	28/10/2015 13:10:24
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.3 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.818 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	328.776
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.0	40.1	0.6
30	99	39.6	31.6	39.9
60	99	39.5	29.7	76.1
90	100	39.6	28.4	110.4
120	99	39.4	27.3	143.4
150	100	39.5	26.6	175.3
180	100	39.5	26.6	206.5
210	101	39.6	26.2	237.8
240	101	39.4	25.6	268.4
270	101	39.5	25.6	298.8
300	101	39.5	25.0	328.8

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2587
Reference	7653072
Created	28/10/2015 13:17:37
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	18.2 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.903 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	29.389
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.7	31.0	0.5
4	99	39.4	26.6	3.3
7	101	39.6	24.0	6.7
10	101	39.5	22.6	10.0
14	102	39.5	21.6	13.0
18	102	39.5	20.8	15.9
21	102	39.5	20.2	18.8
24	103	39.6	19.7	21.5
28	103	39.5	19.2	24.2
32	102	39.5	18.7	26.8
35	102	39.5	18.4	29.4

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnwworkshop

Joint Identification	
Joint Number	2588
Reference	7653071
Created	28/10/2015 13:23:42
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	18.4 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.184 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.329
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	35.8	25.5	0.4
8	102	39.5	20.8	6.6
16	102	39.5	19.2	12.9
24	102	39.5	18.5	18.8
32	103	39.5	17.7	24.5
40	102	39.5	17.1	30.0
48	102	39.5	16.3	35.3
56	102	39.5	16.4	40.5
64	103	39.5	15.9	45.6
72	103	39.5	15.4	50.5
80	102	39.4	15.0	55.3

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnwworkshop

Joint Identification	
Joint Number	2589
Reference	7653070
Created	28/10/2015 15:06:33
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.2 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.806 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	326.553
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.1	39.9	0.5
30	98	39.6	32.0	40.4
60	98	39.5	29.6	76.7
90	99	39.5	28.3	110.9
120	99	39.5	27.3	143.8
150	99	39.5	26.5	175.6
180	99	39.4	26.2	206.9
210	99	39.5	25.9	237.9
240	100	39.6	25.2	268.1
270	100	39.5	24.6	297.6
300	100	39.5	24.2	326.6

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnwworkshop

Joint Identification	
Joint Number	2590
Reference	7653069
Created	28/10/2015 15:12:50
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.8 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	3.687 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	90	90
Energy (kJ)	-	37.238
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	102	36.3	9.4	0.1
9	103	39.5	10.6	3.4
18	102	39.5	10.6	7.2
27	102	39.5	10.6	10.9
36	101	39.5	10.5	14.7
45	103	39.6	10.6	18.5
54	103	39.4	10.6	22.2
63	103	39.5	10.6	26.0
72	102	39.4	10.5	29.7
81	102	39.5	10.5	33.5
90	103	39.5	10.5	37.2

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2591
Reference	7653068
Created	28/10/2015 15:15:16
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.8 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.928 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.658
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	96	35.6	30.0	0.5
4	100	39.4	26.2	3.2
7	101	39.5	23.4	6.6
10	101	39.5	21.9	9.7
14	101	39.4	20.7	12.7
18	99	39.4	19.9	15.5
21	101	39.5	19.4	18.2
24	101	39.4	18.9	20.8
28	101	39.4	19.0	23.4
32	101	39.5	18.9	26.1
35	100	39.5	18.4	28.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:59
Uploader	fnworkshop

Joint Identification	
Joint Number	2592
Reference	7653067
Created	28/10/2015 15:37:01
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	20.4 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	1.355 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	156	156
Energy (kJ)	-	99.666
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	35.8	22.8	0.4
16	101	39.5	19.2	12.3
31	102	39.6	17.9	23.6
47	101	39.5	17.0	34.4
62	101	39.5	16.3	44.6
78	100	39.5	15.7	54.5
94	101	39.5	15.2	64.0
109	101	39.5	14.8	73.3
125	102	39.5	14.4	82.3
140	101	39.5	14.1	91.1
156	102	39.5	13.8	99.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2593
Reference	7653066
Created	28/10/2015 15:40:18
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	20.9 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.208 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.66
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.8	25.1	0.4
8	101	39.4	20.7	6.6
16	99	39.4	18.9	12.8
24	101	39.5	17.9	18.6
32	101	39.5	17.3	24.2
40	102	39.5	16.9	29.6
48	101	39.5	16.4	34.9
56	102	39.5	16.0	40.0
64	101	39.6	15.6	45.0
72	103	39.5	15.3	49.9
80	102	39.5	15.2	54.7

Joint Record

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Joint Record

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Joint Record

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Joint Status	Power failure heat phase
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2594
Reference	7653065
Created	28/10/2015 16:13:52
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	20.6 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.818 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	17
Energy (kJ)	-	22.67
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	90	34.8	39.4	0.5
17	Aborted			

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2595
Reference	7653064
Created	28/10/2015 16:18:16
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.3 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.842 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	323.651
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	89	34.6	37.9	0.5
30	96	39.5	30.9	39.0
60	98	39.5	28.9	74.3
90	97	39.5	27.8	107.9
120	97	39.5	27.0	140.3
150	99	39.5	26.9	172.1
180	98	39.6	26.5	203.9
210	98	39.4	25.7	234.8
240	98	39.4	25.2	264.9
270	100	39.5	24.8	294.5
300	100	39.5	24.4	323.7

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2596
Reference	7653063
Created	28/10/2015 16:33:42
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	17.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.891 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	29.48
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.4	30.9	0.5
4	99	39.3	26.5	3.3
7	100	39.5	23.8	6.7
10	101	39.5	22.5	9.9
14	101	39.5	21.5	12.9
18	101	39.5	20.7	15.9
21	101	39.4	20.0	18.7
24	101	39.4	19.5	21.4
28	103	39.6	19.4	24.1
32	102	39.5	19.3	26.8
35	102	39.5	19.3	29.5

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2597
Reference	7653062
Created	28/10/2015 16:35:18
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	17 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.916 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.713
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.4	30.1	0.5
4	100	39.5	26.4	3.2
7	100	39.5	23.5	6.6
10	101	39.5	22.0	9.8
14	101	39.5	20.8	12.7
18	101	39.5	20.0	15.5
21	102	39.6	19.6	18.3
24	101	39.5	19.2	20.9
28	101	39.5	18.8	23.6
32	101	39.5	18.5	26.1
35	101	39.5	18.4	28.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2598
Reference	7653061
Created	28/10/2015 16:36:40
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.8 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.184 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.044
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	35.8	25.5	0.4
8	100	39.5	20.9	6.6
16	101	39.5	19.2	12.9
24	102	39.6	18.1	18.8
32	101	39.4	17.4	24.4
40	102	39.5	16.9	29.8
48	101	39.5	16.4	35.1
56	102	39.5	16.0	40.2
64	102	39.6	15.6	45.2
72	102	39.5	15.8	50.1
80	101	39.5	15.4	55.0

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2599
Reference	7653060
Created	28/10/2015 17:10:56
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.8 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.806 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	300	300
Energy (kJ)	-	329.306
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	91	34.9	40.2	0.6
30	98	39.6	31.5	39.7
60	99	39.6	29.4	75.7
90	99	39.6	28.2	109.8
120	99	39.5	27.4	142.7
150	99	39.5	27.2	175.1
180	100	39.6	26.9	207.1
210	99	39.6	25.3	238.1
240	100	39.5	26.1	269.0
270	100	39.5	25.4	299.5
300	100	39.5	24.9	329.3

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnwworkshop

Joint Identification	
Joint Number	2600
Reference	7653059
Created	28/10/2015 17:17:49
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.6 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	2.173 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	76	76
Energy (kJ)	-	35.13
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	100	36.2	14.7	0.2
8	102	39.4	13.7	4.0
15	103	39.6	12.8	7.9
23	103	39.6	12.3	11.7
30	103	39.6	11.9	15.3
38	103	39.5	11.5	18.8
46	102	39.6	11.2	22.2
53	103	39.5	11.0	25.6
61	103	39.6	10.7	28.8
68	102	39.5	10.5	32.0
76	102	39.5	10.3	35.1

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnwworkshop

Joint Identification	
Joint Number	2601
Reference	7653058
Created	28/10/2015 17:20:11
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.6 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.916 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.684
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.7	30.5	0.5
4	100	39.6	26.5	3.2
7	101	39.6	23.5	6.7
10	101	39.6	21.9	9.8
14	101	39.6	20.7	12.8
18	101	39.5	19.8	15.5
21	102	39.5	19.4	18.2
24	102	39.5	19.0	20.9
28	102	39.5	18.8	23.5
32	102	39.5	18.8	26.1
35	103	39.6	18.5	28.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnwworkshop

Joint Identification	
Joint Number	2602
Reference	7653057
Created	28/10/2015 17:21:06
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	14.6 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.16 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.324
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.8	26.0	0.4
8	101	39.4	21.0	6.7
16	100	39.5	19.2	13.1
24	102	39.6	18.2	19.0
32	102	39.5	17.5	24.6
40	101	39.5	17.0	30.0
48	102	39.5	16.5	35.3
56	102	39.6	16.1	40.5
64	102	39.6	15.8	45.5
72	102	39.6	15.4	50.4
80	101	39.5	15.3	55.3

Joint Record

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Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2603
Reference	7653056
Created	29/10/2015 08:58:35
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.7 °C

Pipe/Fitting Details	
Fitting Type	Manual Fitting
Coil Resistance	0.745 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	390	390
Energy (kJ)	-	459.375
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	87	34.3	42.8	0.6
39	94	39.6	35.3	57.7
78	94	39.5	32.7	109.9
117	95	39.6	31.1	159.0
156	96	39.5	30.0	206.1
195	96	39.5	28.9	251.5
234	96	39.5	28.0	295.4
273	97	39.6	27.2	337.9
312	96	39.5	26.5	379.3
351	97	39.6	26.0	419.7
390	96	39.4	25.4	459.4

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:58
Uploader	fnworkshop

Joint Identification	
Joint Number	2604
Reference	7653055
Created	29/10/2015 09:39:19
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	4.211 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	100	100
Energy (kJ)	-	18.572
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	36.3	7.0	0.1
10	98	39.6	5.7	2.3
20	100	39.7	5.1	4.4
30	100	39.7	4.8	6.4
40	101	39.6	4.7	8.2
50	100	39.5	4.6	10.1
60	100	39.6	4.5	11.9
70	99	39.5	4.3	13.6
80	99	39.6	4.2	15.3
90	100	39.5	4.1	17.0
100	100	39.5	4.0	18.6

Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnworkshop

Joint Identification	
Joint Number	2605
Reference	7653054
Created	29/10/2015 09:42:27
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.9 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	4.236 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	100	100
Energy (kJ)	-	18.097
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	99	36.4	6.9	0.1
10	100	39.6	5.4	2.3
20	101	39.6	4.8	4.3
30	100	39.6	4.6	6.1
40	100	39.6	4.5	7.9
50	98	39.6	4.5	9.7
60	99	39.5	4.4	11.5
70	99	39.5	4.3	13.2
80	100	39.6	4.2	14.9
90	101	39.5	4.1	16.5
100	99	39.5	4.0	18.1

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop
Joint Identification	
Joint Number	2606
Reference	7653053
Created	29/10/2015 09:44:49
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.16 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.198
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.7	25.9	0.4
8	97	39.5	21.0	6.7
16	97	39.5	19.2	13.1
24	98	39.5	18.1	18.9
32	99	39.6	17.4	24.5
40	100	39.6	17.0	30.0
48	100	39.6	16.5	35.3
56	99	39.6	16.1	40.4
64	99	39.5	15.7	45.5
72	99	39.6	15.4	50.4
80	99	39.5	15.1	55.2

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop
Joint Identification	
Joint Number	2607
Reference	7653052
Created	29/10/2015 10:22:28
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	4.272 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	100	100
Energy (kJ)	-	18.56
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	36.5	6.9	0.1
10	101	39.6	5.6	2.3
20	101	39.6	5.2	4.4
30	101	39.5	5.0	6.4
40	100	39.5	4.8	8.3
50	101	39.5	4.6	10.2
60	102	39.6	4.4	12.0
70	101	39.5	4.3	13.7
80	102	39.6	4.1	15.4
90	101	39.5	4.0	17.0
100	102	39.5	4.1	18.6

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop
Joint Identification	
Joint Number	2608
Reference	7653051
Created	29/10/2015 10:45:49
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	17 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.903 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.939
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.7	31.0	0.5
4	97	39.4	26.7	3.3
7	98	39.5	23.7	6.7
10	99	39.6	22.2	9.9
14	100	39.5	21.1	12.9
18	98	39.4	20.1	15.7
21	99	39.5	19.6	18.5
24	99	39.5	19.2	21.2
28	100	39.6	18.9	23.8
32	99	39.5	18.6	26.4
35	100	39.5	18.3	28.9

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop

Joint Identification	
Joint Number	2609
Reference	7653050
Created	29/10/2015 10:47:08
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.5 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.172 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.139
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	97	35.9	25.9	0.4
8	100	39.6	21.0	6.7
16	100	39.5	19.2	13.0
24	101	39.6	18.2	18.9
32	100	39.5	17.5	24.5
40	100	39.5	16.9	30.0
48	101	39.5	16.4	35.2
56	102	39.6	16.0	40.4
64	102	39.6	15.9	45.4
72	102	39.6	15.4	50.3
80	101	39.5	15.2	55.1

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop

Joint Identification	
Joint Number	2610
Reference	7653049
Created	29/10/2015 11:00:31
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.5 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.83 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	50	50
Energy (kJ)	-	46.726
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.5	34.9	0.5
5	97	39.5	28.8	5.4
10	98	39.6	26.2	10.8
15	99	39.6	24.9	15.9
20	99	39.6	23.9	20.7
25	100	39.6	23.0	25.3
30	99	39.5	22.7	29.8
35	99	39.5	22.3	34.2
40	100	39.6	21.4	38.5
45	99	39.5	20.8	42.7
50	101	39.6	20.9	46.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop

Joint Identification	
Joint Number	2611
Reference	7653048
Created	29/10/2015 11:05:28
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.7 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.891 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	28.729
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.6	30.8	0.5
4	99	39.5	26.7	3.3
7	99	39.5	23.7	6.7
10	101	39.6	22.1	9.9
14	100	39.6	20.9	12.9
18	100	39.6	20.0	15.7
21	101	39.5	19.3	18.4
24	100	39.5	18.9	21.0
28	99	39.6	18.6	23.6
32	99	39.4	18.3	26.2
35	101	39.5	18.3	28.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnworkshop

Joint Identification	
Joint Number	2612
Reference	7653047
Created	29/10/2015 11:23:18
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	15.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.879 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	29.468
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	94	35.7	31.6	0.5
4	97	39.6	27.1	3.3
7	98	39.6	24.0	6.8
10	98	39.5	22.4	10.0
14	98	39.6	21.3	13.1
18	97	39.4	20.5	16.0
21	99	39.6	20.1	18.7
24	99	39.6	19.7	21.5
28	99	39.6	19.3	24.2
32	99	39.6	18.9	26.9
35	99	39.5	18.9	29.5

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnworkshop

Joint Identification	
Joint Number	2613
Reference	7653046
Created	29/10/2015 12:51:42
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	16.7 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	4.224 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	100	100
Energy (kJ)	-	18.129
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	36.3	6.9	0.1
10	99	39.5	5.5	2.2
20	99	39.6	5.0	4.3
30	99	39.5	4.7	6.2
40	100	39.6	4.6	8.0
50	100	39.6	4.5	9.8
60	99	39.5	4.4	11.6
70	99	39.5	4.2	13.3
80	99	39.5	4.1	15.0
90	100	39.6	4.0	16.6
100	101	39.6	3.9	18.1

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnworkshop

Joint Identification	
Joint Number	2614
Reference	7653045
Created	29/10/2015 13:04:41
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	17.2 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.001 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	60	60
Energy (kJ)	-	48.041
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.7	30.1	0.5
6	97	39.6	25.1	5.8
12	98	39.6	22.5	11.4
18	98	39.5	21.0	16.6
24	99	39.5	20.0	21.4
30	100	39.6	19.4	26.1
36	100	39.6	19.3	30.6
42	98	39.4	18.6	35.1
48	100	39.6	18.4	39.5
54	98	39.5	17.9	43.8
60	100	39.6	17.5	48.0

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop

Joint Identification	
Joint Number	2615
Reference	7653044
Created	29/10/2015 13:16:13
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	17.8 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.184 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.722
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.8	25.5	0.4
8	99	39.6	20.9	6.6
16	99	39.6	19.1	12.9
24	98	39.6	17.9	18.8
32	98	39.5	17.1	24.3
40	100	39.5	16.7	29.7
48	101	39.6	16.3	34.9
56	98	39.5	16.1	40.0
64	100	39.6	15.7	45.0
72	100	39.5	15.2	50.0
80	100	39.6	14.9	54.7

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop

Joint Identification	
Joint Number	2616
Reference	7653043
Created	29/10/2015 13:51:37
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	20.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	4.285 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	100	100
Energy (kJ)	-	18.608
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	99	36.3	6.8	0.1
10	99	39.5	5.6	2.3
20	101	39.6	5.3	4.4
30	100	39.5	5.0	6.4
40	102	39.6	4.8	8.4
50	101	39.5	4.6	10.2
60	101	39.5	4.4	12.0
70	101	39.6	4.3	13.8
80	101	39.6	4.1	15.4
90	102	39.6	4.0	17.0
100	101	39.5	3.9	18.6

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop

Joint Identification	
Joint Number	2617
Reference	7653042
Created	29/10/2015 13:58:09
Operator	P.RIGBY

Project Details	
Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.3 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	0.891 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	35	35
Energy (kJ)	-	29.173
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	95	35.5	31.0	0.5
4	98	39.4	26.7	3.3
7	99	39.6	23.9	6.7
10	100	39.5	22.3	9.9
14	100	39.5	21.2	12.9
18	100	39.4	20.4	15.8
21	101	39.5	19.9	18.6
24	101	39.6	19.5	21.3
28	100	39.5	19.1	24.0
32	102	39.6	18.7	26.6
35	101	39.5	18.4	29.2

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:57
Uploader	fnwworkshop
Joint Identification	
Joint Number	2618
Reference	7653041
Created	29/10/2015 13:59:06
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.6 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.196 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	54.856
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	35.9	25.3	0.4
8	100	39.4	20.6	6.6
16	101	39.6	18.9	12.8
24	101	39.6	17.8	18.6
32	101	39.5	17.1	24.1
40	101	39.5	16.9	29.5
48	101	39.5	16.5	34.8
56	101	39.6	16.1	39.9
64	102	39.5	15.9	45.0
72	102	39.6	15.5	50.0
80	101	39.5	15.4	54.9

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:56
Uploader	fnwworkshop
Joint Identification	
Joint Number	2619
Reference	7653040
Created	29/10/2015 14:09:02
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	20.1 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.196 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	55.034
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	35.8	25.4	0.4
8	101	39.6	20.9	6.6
16	99	39.5	19.2	12.9
24	100	39.5	18.2	18.8
32	100	39.5	17.4	24.5
40	100	39.5	16.9	29.9
48	101	39.6	16.5	35.2
56	100	39.4	16.0	40.3
64	100	39.5	15.7	45.3
72	101	39.5	15.4	50.2
80	101	39.5	15.1	55.0

Joint Record

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Joint Status	COMPLETE
Account	7351N56
Uploaded	13/11/2015 15:43:56
Uploader	fnwworkshop
Joint Identification	
Joint Number	2620
Reference	7653039
Created	29/10/2015 14:11:29
Operator	P.RIGBY

Project Details

Machine	
Model	QBOX
Serial Number	Q-BOX10702
Owner	INFINIS
Software version	3.1
Operating Voltage	110V

Location & Environment	
Location	BROOKHILL
Ambient Temp	19.6 °C

Pipe/Fitting Details	
Fitting Type	Fusamatic Fitting
Coil Resistance	1.221 ohm

Welding Parameters	TARGET	ACTUAL
Fusion Time (s)	80	80
Energy (kJ)	-	53.903
Voltage (V)	39.5	-
Cool Time (s)	-	-

Time	Input Voltage	Output Voltage	Output Current	Output Energy
(s)	(V)	(V)	(I)	(kJ)
1	98	35.8	24.8	0.4
8	101	39.5	20.3	6.5
16	101	39.5	18.7	12.6
24	101	39.5	17.7	18.3
32	101	39.6	17.4	23.8
40	101	39.5	16.8	29.2
48	100	39.5	16.3	34.4
56	102	39.6	15.7	39.5
64	101	39.5	15.3	44.4
72	100	39.4	15.0	49.2
80	102	39.5	14.7	53.9

Flintshire County Council Waste Management Services

Brookhill Landfill Site

Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

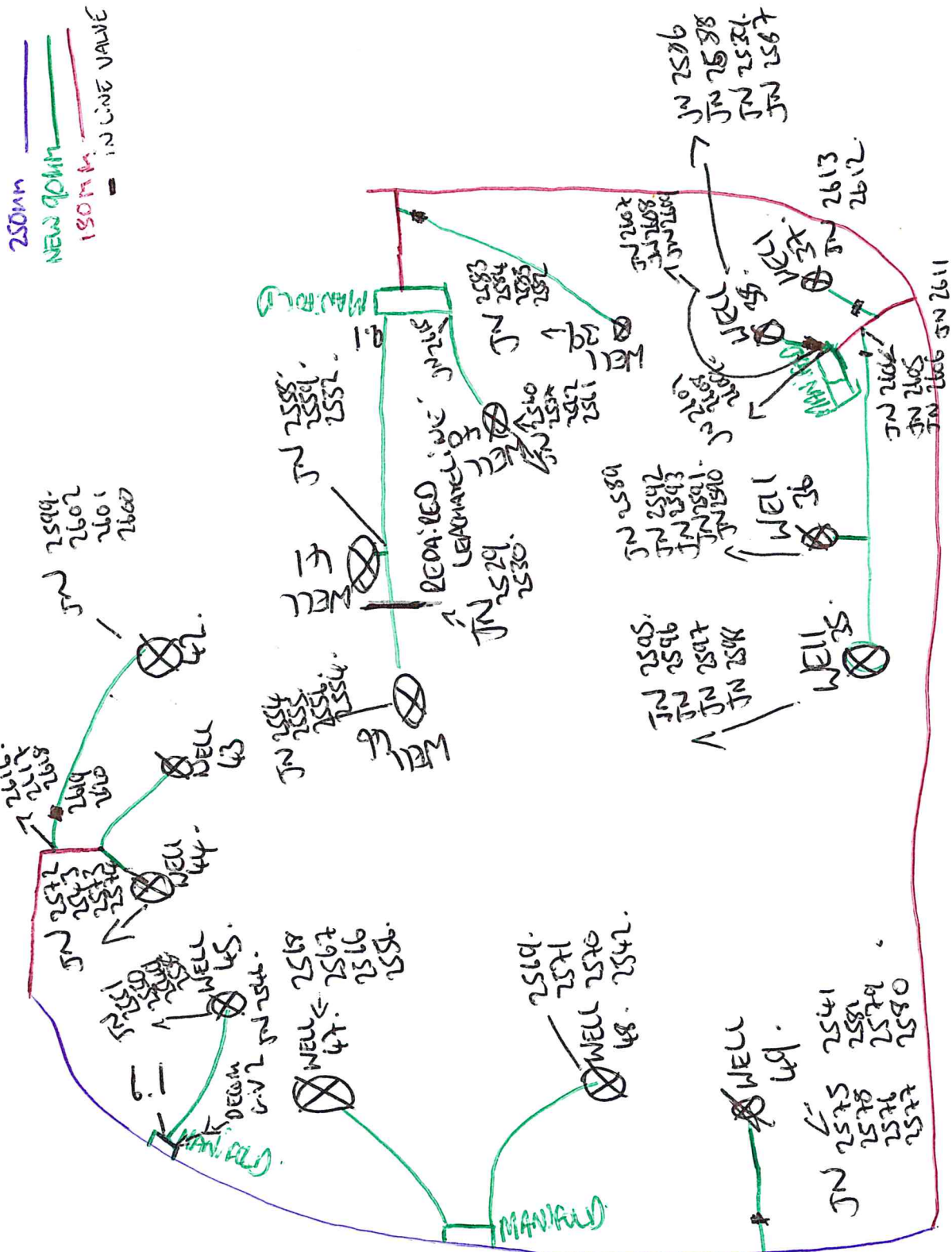
Construction Quality Assurance Report

7. Pipework Sketches

PIPEWORK JOINT SKETCH RECORD

Site:	Brookhill	Project:	GAS COLLECTION
Date:		Sheet No:	
CQA Inspector	STUART DARRSHIRE		

FROM THE MANIFOLD 63MM TO A CENTER/DOWN PIPE TO GAS WELLS



Flintshire County Council Waste Management Services

Brookhill Landfill Site

Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

8. Photographic Log of Works

PHOTO LOG

Plate No.	Description
1	Butt fusion welding pipework joints.
2	Butt fusion welded pipework lengths.
3	Drill rig commences drilling borehole.
4	Installing 160mm pipework within borehole.
5	Installing 20-40mm non-calcareous aggregate.
6	Measuring depth of installed aggregate.
7	Installing bentonite blinding layer.
8	Installing pre-mixed hydrated bentonite slurry.
9	Installed well with completed bentonite seal.
10	De-odouriser present on site during works.
11	Butt fusion welding pipework joints
12	Well head installation

Plate 1



Plate 2



Plate 3



Plate 4



Plate 5



Plate 6



Plate 7



Plate 8



Plate 9



Plate 10



Plate 11



Plate 12



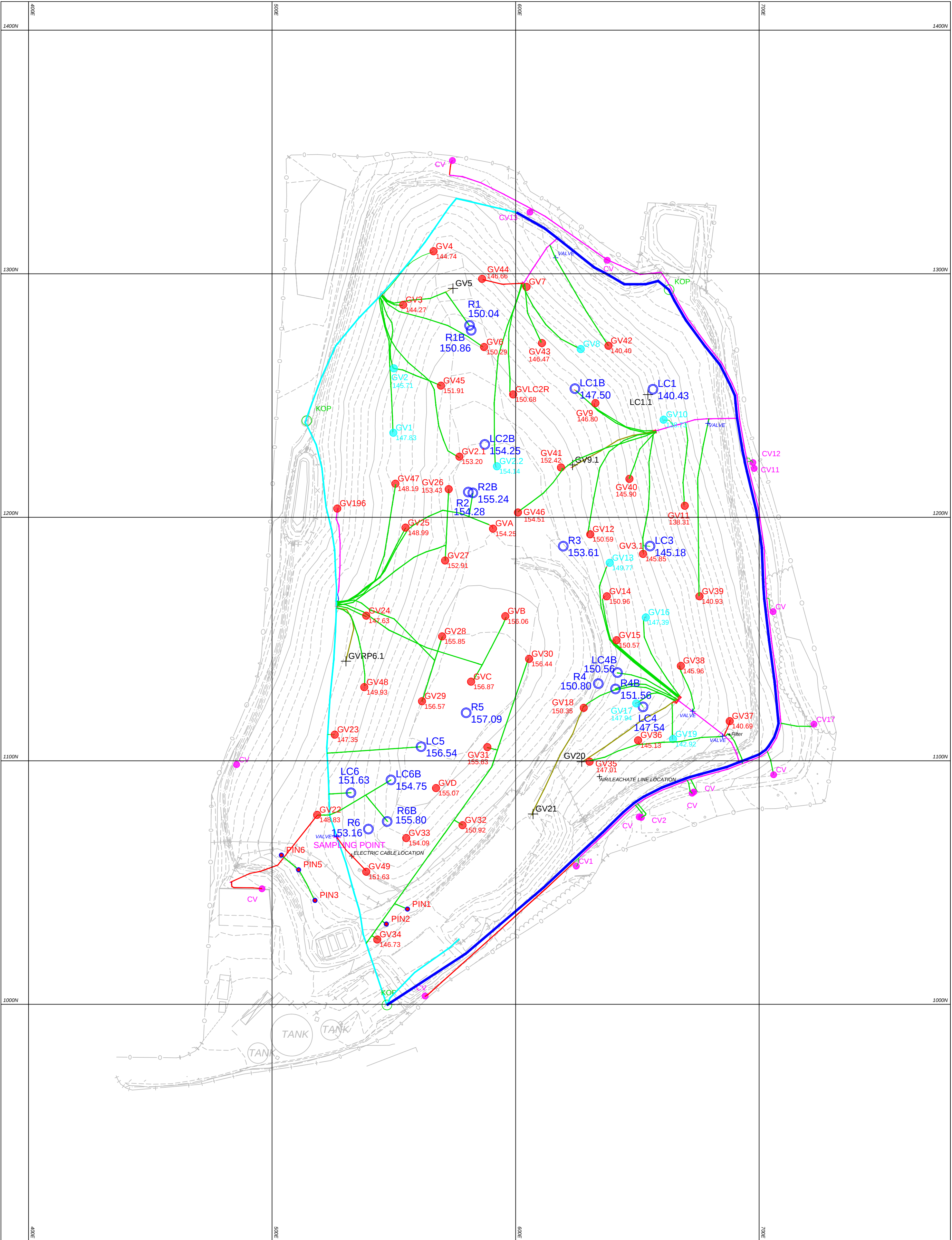
Flintshire County Council Waste Management Services

Brookhill Landfill Site

Retro-Drilling of Gas Wells and Installation of Gas Collection Pipework

Construction Quality Assurance Report

9. Updated Site Plan



SITE

Brookhill
Landfill Site

PROJECT

Gas System Layout

SCALE

1:1000 @ A2

DATE

13-11-2015

DRAWING No.

8240a Rev.0

Caulmert

Engineering, Environmental and Planning

NOTES

Pipe 63mm

Pipe 90mm

Pipe 180mm

Pipe 250mm

Pipe 315mm

Pipe Redundant

LC5

GV31

GV17

GV20

PIN6

Prop. 44

Leachate Well

Gas Vent Switched On

Gas Vent Switched Off

Gas Vent Removed

Pin Gas Ven

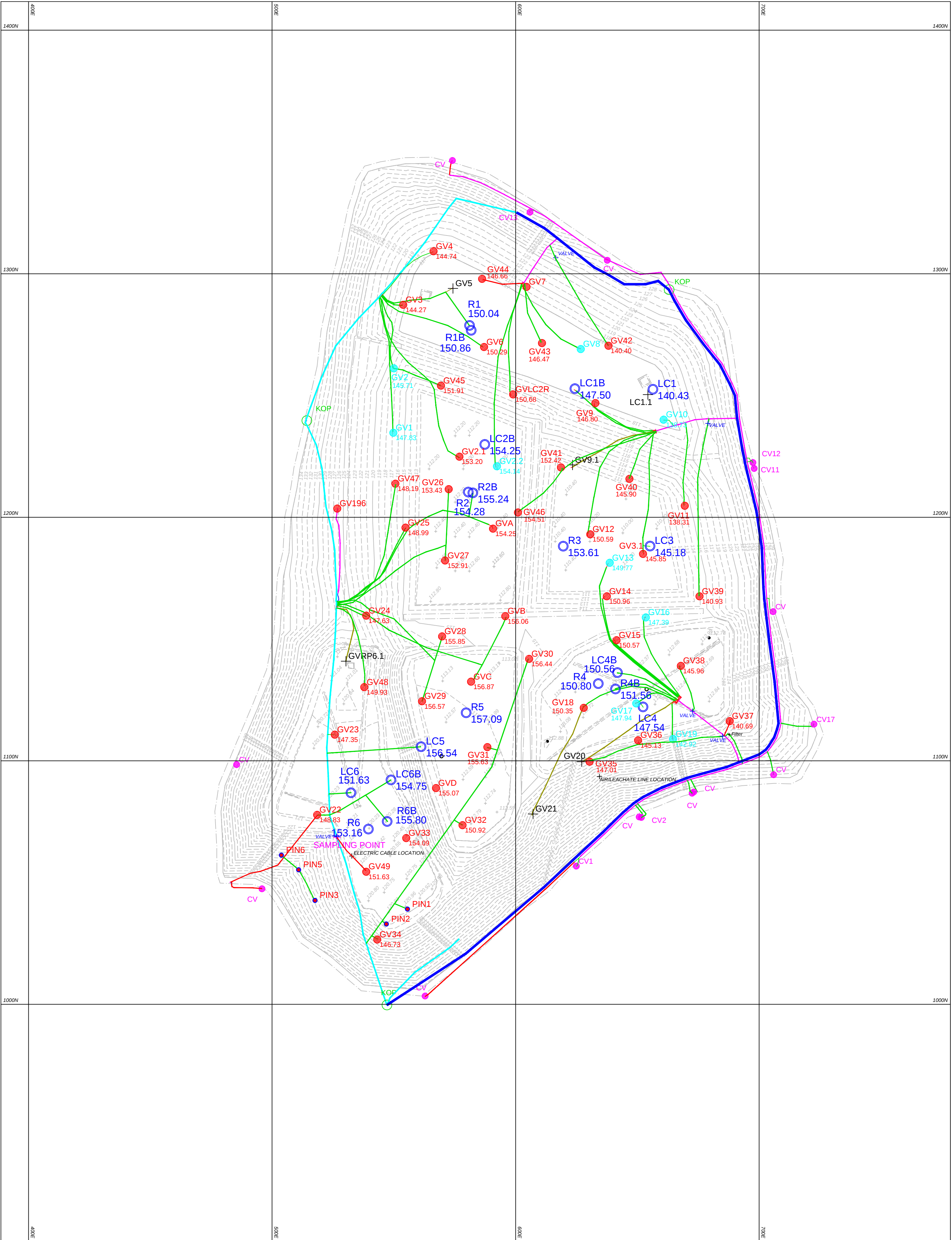
Proposed Gas Vent

stafsurv

LAND SURVEYORS

www.stafsurv.com

Vernon Courtyard, Main Road, Sudbury, Derbyshire. DE6 5HS
T 01283 584800 > F 01284 584844 > E info@stafsurv.com



SITE

Brookhill
Landfill Site

PROJECT

Gas System Layout & Base Plan

SCALE

1:1000 @ A2

DATE

13-11-2015

DRAWING No.

8240b Rev.0

Caulmert

Engineering, Environmental and Planning

NOTES

Pipe 63mm

Pipe 90mm

Pipe 180mm

Pipe 250mm

Pipe 315mm

Pipe Redundant

LC5

GV31

GV17

GV20

PIN6

Prop. 44

Leachate Well

Gas Vent Switched On

Gas Vent Switched Off

Gas Vent Removed

Pin Gas Ven

Proposed Gas Vent

stafsurv

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www.stafsurv.com

Vernon Courtyard, Main Road, Sudbury, Derbyshire. DE6 5HS
T 01283 584800 > F 01284 584844 > E info@stafsurv.com

**ENGINEERING
ENVIRONMENTAL
HEALTH & SAFETY**



North Wales Office:

Tre Felin

Bangor

Gwynedd

LL57 4LH

T: 01248 355 996

F: 01248 371 996

Cheshire Office:

Mere View Farm Offices

Park Lane, Pickmere

Near Knutsford, Cheshire

WA16 0LG

T: 01565 732 930

F: 01565 732 931

www.egniol.com