ENGINEERING
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Infinis Energy Services Ltd.

Pen-Y-Bont (Chirk) Landfill Site

Retro Drilling of Gas Wells

Construction Quality Assurance Report

August 2015

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Infinis Energy Services Ltd.

Chirk Landfill Site

Retro-Drilling of Gas Wells

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Infinis Energy Services Ltd.

Chirk Landfill Site

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Construction Quality Assurance Report

August 2015

Prepared for

Infinis Energy Services Ltd.

Prepared by

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Document Review

Version No.	Date of Review	Prepared By	Reviewed By	Approved By
1.0	24.08.2015	Karen O'Neill	Richard Furniss	Richard Furniss

1.0 INTRODUCTION

1.1 Egniol Environmental Ltd. (Egniol) of Tre Felin, Bangor, Gwynedd have been appointed by Infinis Energy Services Ltd. (Infinis) as Construction Quality Assurance (CQA) Consultants for the Retro-Drilling of gas wells at Chirk 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 Plan for the works (Egniol Environmental Ltd.: *Chirk Landfill Site, Retro Drilling Gas Wells, Construction Quality Assurance Report, Version 1.0, April 2015*).

1.3 In accordance with this appointment, Egniol have produced this report which covers the retro drilling of gas wells at Chirk Landfill Site.

2.0 LOCATION AND DESCRIPTION OF SITE

2.1 Site Location

Chirk Landfill Site is located approximately 3 miles west of the town of Chirk, in the county borough of Wrexham

2.2 Site Address

Pen-Y-Bont (Chirk) Landfill Site
Pen-Y-Bont
Chirk
Wrexham
LL14 5AR

3.0 BRIEF DESCRIPTION AND TIMING OF WORKS

3.1 Description of Works

In accordance with the approved CQA Plan (Egniol Environmental Ltd.: *Chirk Landfill Site, Retro Drilling Gas Wells, Construction Quality Assurance Report, Version 1.0, April 2015).* 15 no. landfill gas extraction wells were to be installed into areas of capped and uncapped waste at Chirk Landfill Site by means of Retro-Drilling.

The Works commenced on the 11th May 2015 and were completed on the 29th May 2015

The proposed locations were supplied by Infinis, following checking and approval by FCC (the Site Permit Holder) 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. Once the well was installed, the marker peg was erected next to the well. Once the Infinis representative fitted the headworks, the reference number was written to the headworks.

Table 1 – Well Location and Drill Depth Information

Gas Well I.D.	Eastings	Northings	Proposed Drill Depth (mBGL)	Actual Drill Depth (mBGL)	Theoretical Stone Installation Volume (m^3)	Actual Stone Installation Volume (m^3)
PW79R	329234.915	341655.392	23.0	23.0	1.522	1.52
PW122	329136.516	341747.187	46.0	46.0	3.273	3.27
PW17R2	329118.999	341734.919	44.0	44.0	3.120	3.12
PW121	329122.924	341699.956	35.0	35.0	2.435	2.43
PW80R	329263.826	341664.351	20.0	20.0	1.294	1.29
PW81R	329293.754	341668.676	13.0	13.0	0.761	0.76
PW73R	329316.438	341760.504	34.0	34.0	2.359	2.35
PW93R	329273.343	341789.735	34.0	34.0	2.359	2.35
PW91R	329292.911	341774.383	38.0	38.0	2.664	2.66
PW010R	329128.27	341816.131	34.0	34.0	2.359	2.35
PW120	329135.394	341678.274	30.0	30.0	2.055	2.05
PW43R	329167.542	341692.086	44.0	42.7	3.021	3.02
PW25R2	329158.251	341647.781	28.0	28.0	1.903	1.90
PW21R	329185.988	341773.062	47.0	29.0	1.979	1.98
PW2AR2	329180.14	341714.246	46.0	36.0	2.511	2.51

Well Locations as supplied by Infinis Energy Services Ltd. via email dated 27th August 2015.

4.0 CONSTRUCTION QUALITY ASSURANCE

4.1 Specification

All pipework lengths were connected using butt-fusion welding techniques within the site compound to the required length for each well as stated in the CQA Plan. All butt-fusion welding was carried out under the supervision of Infinis.

The pipework installed consisted of 160mm diameter HDPE SDR11 pipe with a solid upper section and a lower perforated section. The upper section of solid pipework had a minimum of 3.7m installed below ground level and 1.0m above ground level. The base of the perforated pipework was fitted with a solid welded end cap. The solid pipework was fitted with a push fit air-tight end cap to await installation of the gas well headwork's and connection to the landfill gas extraction system.

The annulus between the HDPE pipe and waste was backfilled with 20-40mm non-calcareous smooth gravel to a minimum depth of 3.0m below ground level. The remaining annulus was sealed using a hydrated bentonite seal to ground level.

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

Gas Well PW79R

Gas Well PW79R was drilled to the target depth of 23.0m Below Ground Level (BGL). Pipework was installed to a depth of 23.0m BGL and consisted of 18.0m perforated casing and 6.0m solid casing (including 1.0m Above Ground Level (AGL)). Gravel was installed to a depth of 3.0m BGL; approximately 1.52m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW122

Gas Well PW122 was drilled to the target depth of 46.0m BGL. Pipework was installed to a depth of 46.0m BGL and consisted of 41.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 3.27m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW17R2

Gas Well PW17R2 was drilled to the target depth of 44.0m BGL. Pipework was installed to a depth of 44.0m BGL and consisted of 39.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 3.12m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW121

Gas Well PW121 was drilled to the target depth of 35.0m BGL. Pipework was installed to a depth of 35.0mBGL and consisted of 30.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 2.43m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW80R

Gas Well PW80R was drilled to the target depth of 20.0m BGL. Pipework was installed to a depth of 20.0m BGL and consisted of 15.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 1.29m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW81R

Gas Well PW81R was drilled to the target depth of 13.0m BGL. Pipework was installed to a depth of 13.0m BGL and consisted of 8.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 0.76m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW73R

Gas Well PW73R was drilled to the target depth of 34.0m BGL. Pipework was installed to a depth of 34.0m BGL and consisted of 29.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 2.35m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW93R

Gas Well PW93R was drilled to the target depth of 34.0m BGL. Pipework was installed to a depth of 34.0mBGL and consisted of 29.0m perforated casing and

6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 2.35m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW91R

Gas Well PW91R was drilled to the target depth of 38.0m BGL. Pipework was installed to a depth of 38.0m BGL and consisted of 33.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 2.66m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW010R

Gas Well PW010R was drilled to the target depth of 34.0m BGL. Pipework was installed to a depth of 34.0m BGL and consisted of 29.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 2.35m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW120

Gas Well PW120 was drilled to the target depth of 30.0m BGL. Pipework was installed to a depth of 30.0m BGL and consisted of 25.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 2.05m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW43R

Gas Well PW43R was drilled to the target depth of 44.0m BGL. During the installation of the well pipework, waste was observed to have collapsed at the bottom of the base; Infinis were informed and instructed that the well pipework was to be installed at the achieved depth of 42.70m BGL.

Pipework was installed to 42.7m BGL and consisted of 39.0m perforated casing and 6.0m solid casing (including 2.3m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 3.02m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW25R2

Gas Well PW25R2 was drilled to the target depth of 28.0m BGL. Pipework was installed to a depth of 28.0m BGL and consisted of 23.0m perforated casing and

6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 1.90m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW21R

Gas Well PW21R was drilled to a depth of 29.0m, short of the target depth of 47.0m BGL. Initial drilling reached 33.0m BGL whereupon no further arisings could be recovered; Infinis were informed and instructed to install at 33.0m. Upon installation to this depth, it was recorded that waste had collapsed into the borehole, reducing the depth to 29.0m. Infinis were again contacted and instructed that the installation proceed at 29.0m.

Pipework consisted of 24.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 2.51m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a seal to ground level.

Gas Well PW2AR2

Drilling of Well PW2AR2 reached 20.0m BGL whereupon an obstruction was encountered. Infinis were contacted and they instructed that the borehole be backfilled with waste arisings to 2.0m below ground level and a hydrated bentonite seal added to the borehole to ground level. The well location was then moved by 2.0m, as instructed by Infinis, with drilling recommencing to the target depth of 46.0m.

Upon recommencement of the drilling, works proceeded to a depth of 36.0m, short of the target depth of 46.0m BGL, as no waste arisings could be retrieved past this depth. Pipework was installed to a depth of 36.0m BGL and consisted of 31.0m perforated casing and 6.0m solid casing (including 1.0m AGL). Gravel was installed to a depth of 3.0m BGL; approximately 1.98m^3 was installed. The remaining portion of the annulus was backfilled with a hydrated bentonite which was mixed outside and poured into the annulus to form a 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.

All waste arisings excavated as a result of the drilling works were disposed by the means of a dumper then transported to the tip face Details of the waste arisings can be found in the CQA Inspectors drilling logs enclosed in Appendix 2 of this CQA Report.

A deodourising unit was utilized during the drilling works.

5.0 ISSUES ENCOUNTERED

5.1 Whilst drilling Gas Well PW21R to a target depth of 47.0m, no waste arisings could be recovered past 36.0m BGL. Infinis instructed that the well pipework was to be installed to the achieved depth of 36.0m.

5.2 Drilling of Gas Well PW43R proceeded to a target depth of 44.0m. Upon installation of the pipework, waste collapsed back into the borehole, reducing the depth to 42.7m; Infinis instructed installation proceed at this depth, with 2.3m of solid pipework above ground level

5.3 Whilst drilling Gas Well PW2AR2 to a target depth of 46.0m an obstruction was encountered at 20.0mBGL. Infinis instructed that the borehole was to be aborted and backfilled with waste arisings to 2.0m BGL, with the final section of the borehole sealed with a hydrated bentonite seal.

Infinis further instructed that the well location was moved by 2.0m from the previous proposed location. Drilling recommenced to a depth of 36.0m BGL, whereupon no further arisings could be recovered. Infinis were again contacted and they instructed that installation proceed at the achieved depth of 36.0m.

5.4 No further issues were encountered.

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 Chirk Landfill Site to a satisfactory standard and in accordance with the previously approved CQA Plan.

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Infinis Energy Services Ltd.

Chirk Landfill Site

Retro-Drilling of Gas Wells

Construction Quality Assurance Report

1. CQA Inspectors Daily Logs

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Monday 11th May 2015
Weather	Previous Night a.m p.m	Dry Sunny Sunny / Cloudy
Site Hours: Contractors Arrival Time: CQA Arrival Time: Contractors Departure Time: CQA Departure Time:		07.00 – 17.00 09.30 07.30 16.30 16.00
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. 13.50hrs Drilling rig underwent Inspections. Passed for the upcoming works. **Gas Extraction Well PW 79R** MDL Positioned the drilling rig at peg location PW 79R. 15.45hrs - MDL commenced drilling to gas well PW 79R to a proposed target depth of 23.00m BGL. 160mm pipework was not installed because rig broke down. Place seal to control odour overnight. All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth.
Meetings/ Correspondence		Inductions with FCC and Infinis. Pre start meeting and walk over to discuss the upcoming drilling works.
Health and Safety		No issues.
Visitors to Site		Leanne Smith Infinis
Comments		

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Tuesday 12th May 2015
Weather	Previous Night	Dry
	a.m	O/Cast, showers
	p.m	Sunny
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.00
Contractors Departure Time:		17.45
CQA Departure Time:		17.45
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. 13.50hrs Drilling rig underwent Inspections. Passed for the upcoming works. **Gas Extraction Well PW 79R** Rig repaired at 13.00. MDL clean Well PW 79R before pipe installation. 160mm pipework was installed to a depth of 23.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL. Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite slurry installed. **Gas Extraction Well PW 122** MDL Positioned the drilling rig at peg location PW 122. 15.00hrs - MDL commenced drilling to gas well PW 122 to a proposed target depth of 46.00 m BGL. 1.30hrs - MDL not completed borehole to a depth of 46.00m BGL to gas well PW 122. Stop operation on depth 20.0mBGL. Place seal to control odour overnight.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked.
Meetings/ Correspondence		N/A

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Health and Safety	No issues.
Visitors to Site	
Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Wednesday 13th May 2015
Weather	Previous Night	Dry
	a.m	O/Cast
	p.m	O/Cast
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.00
Contractors Departure Time:		17.45
CQA Departure Time:		17.45
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 122** Continue drilling gas well PW 122 from depth 20.0mBGL. 160mm pipework was installed to a depth of 46.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL. Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite slurry installed. **Gas Extraction Well PW 17R2** MDL Positioned the drilling rig at peg location PW 17R2. 12.50hrs - MDL commenced drilling to gas well PW 17R2 to a proposed target depth of 44.00 m BGL. MDL completed borehole to a depth of 39.00m BGL to gas well PW 17R2, 160mm pipework was installed to a depth of 39.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked.
Meetings/ Correspondence		N/A

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Health and Safety	No issues.
Visitors to Site	
Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Thursday 14th May 2015
Weather	Previous Night	Dry
	a.m	O/Cast, Shower
	p.m	O/Cast, Showers
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.00
Contractors Departure Time:		17.45
CQA Departure Time:		17.45
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 17R2** Continue drilling gas well PW 17R2 from depth 39.00mBGL. MDL completed borehole to a depth of 44.0m BGL to gas well PW 17R2. 160mm pipework was installed to a depth of 44.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL. Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite slurry installed. **Gas Extraction Well PW 121** MDL Positioned the drilling rig at peg location PW 121. 13.40hrs - MDL commenced drilling to gas well PW 121 to a proposed target depth of 35.00 m BGL. MDL completed borehole to a depth of 35.0m BGL to gas well PW 121. 160mm pipework was not installed today.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked.
Meetings/ Correspondence		N/A
Health and Safety		No issues.
Visitors to Site		

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Friday 15th May 2015
Weather	Previous Night	Showers
	a.m	Sunny with O/Cast
	p.m	Sunny
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.00
Contractors Departure Time:		10.00
CQA Departure Time:		10.45
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 121** Continue drilling gas well PW 121 from depth 33.00mBGL. MDL completed borehole to a depth of 35.0m BGL to gas well PW 121. 160mm pipework was installed to a depth of 35.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite slurry installed.
Testing Undertaken		Visual inspection & photographs taken. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked.
Meetings/ Correspondence		N/A
Health and Safety		No issues.
Visitors to Site		
Comments		All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC. Rig broke down, hydraulic pipes problem.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Monday 18th May 2015
Weather	Previous Night	Rain
	a.m	Rain
	p.m	O/Cast, passing showers
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		09.00
CQA Arrival Time:		07.25
Contractors Departure Time:		17.45
CQA Departure Time:		17.45
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. Maintaining rig (replaced hydraulic pipe) till 10.20. **Gas Extraction Well PW 80R** MDL Positioned the drilling rig at peg location PW 80R. 10.40hrs - MDL commenced drilling to gas well PW 80R to a proposed target depth of 20.00 m BGL. MDL completed borehole to a depth of 20.00m BGL to gas well PW 80R, 160mm pipework was installed to a depth of 20.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL. Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed. **Gas Extraction Well PW 81R** MDL Positioned the drilling rig at peg location PW 81R. 12.50hrs - MDL commenced drilling to gas well PW 81R to a proposed target depth of 13.00 m BGL. MDL completed borehole to a depth of 13.00m BGL to gas well PW 81R, 160mm pipework was installed to a depth of 13.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed. **Gas Extraction Well PW 73R** MDL Positioned the drilling rig at peg location PW 73R 14.10hrs - MDL commenced drilling to gas well PW 73R to a proposed target depth of 34.00 m BGL. MDL completed borehole to a depth of 20.00m BGL today. Place bentonite seal to control odour overnight.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

	Depth of bentonite seal checked..
Meetings/ Correspondence	N/A
Health and Safety	No issues.
Visitors to Site	
Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Tuesday 19th May 2015
Weather	Previous Night	Rain
	a.m	Showers
	p.m	O/Cast, passing showers
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		09.00
CQA Arrival Time:		07.30
Contractors Departure Time:		18.45
CQA Departure Time:		18.45
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 73R** MDL completed borehole to a depth of 34.00m BGL to gas well PW 73R, 160mm pipework was installed to a depth of 34.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed. **Gas Extraction Well PW 93R** MDL Positioned the drilling rig at peg location PW 93R. 14.10hrs - MDL commenced drilling to gas well PW 93R to a proposed target depth of 34.00 m BGL. MDL completed borehole to a depth of 34.00m BGL to gas well PW 93R, 160mm pipework was installed to a depth of 34.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL. Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed. **Gas Extraction Well PW 91R** MDL Positioned the drilling rig at peg location PW 91R
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked..
Meetings/ Correspondence		N/A
Health and Safety		No issues.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Visitors to Site	
Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Wednesday 20th May 2015
Weather	Previous Night	Dry
	a.m	Sunny
	p.m	Sunny
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.20
Contractors Departure Time:		18.15
CQA Departure Time:		18.15
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 91R** MDL Positioned the drilling rig at peg location PW 91R 11.10 hrs - MDL commenced drilling to gas well PW 91R to a proposed target depth of 38.00 m BGL. MDL completed borehole to a depth of 38.00m BGL to gas well PW 93R, 160mm pipework was installed to a depth of 38.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed. **Gas Extraction Well PW 010R** MDL Positioned the drilling rig at peg location PW 010R 14.30 hrs - MDL commenced drilling to gas well PW 010R to a proposed target depth of 34.00 m BGL. MDL completed borehole to a depth of 20.00m BGL to gas well PW 010R.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked..
Meetings/ Correspondence		N/A
Health and Safety		No issues.
Visitors to Site		

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC. Replace hydraulic pipe between 13:40 to 14:20

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Thursday 21st May 2015
Weather	Previous Night	Dry
	a.m	Sunny
	p.m	Sunny
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.20
Contractors Departure Time:		18.15
CQA Departure Time:		18.15
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper. Manitou 923 Telehandler. Water Carrier. De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 010R** MDL completed borehole to a depth of 34.00m BGL to gas well PW 010R, 160mm pipework was installed to a depth of 34.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL. Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed **Gas Extraction Well PW 120** MDL Positioned the drilling rig at peg location PW 120. 11.10 hrs - MDL commenced drilling to gas well PW 120 to a proposed target depth of 30.00 m BGL. MDL completed borehole to a depth of 30.00m BGL to gas well PW 120, 160mm pipework was installed to a depth of 30.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed. **Gas Extraction Well PW 43R** MDL Positioned the drilling rig at peg location PW 43R. 15.00 hrs - MDL commenced drilling to gas well PW 43R to a proposed target depth of 44.00 m BGL. MDL completed borehole to a depth of 20.00m BGL today.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked..
Meetings/ Correspondence		N/A

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Health and Safety	No issues.
Visitors to Site	
Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Friday 22nd May 2015
Weather	Previous Night	Dry
	a.m	O/Cast
	p.m	o/Cast
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.20
Contractors Departure Time:		18.15
CQA Departure Time:		18.15
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 43R** 7.50 - MDL continue drilling borehole from depth of 20.00m BGL to gas well PW43R, proposal depth 44.00 m BGL, 160mm pipework was installed to a depth of 42.70m BGL due to collapse of waste at base. Infinis contacted. MDL Installed 20/40 gravel pack to 3.0m BGL. Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed. **Gas Extraction Well PW 25R2** MDL Positioned the drilling rig at peg location PW 25R2. 11.30 hrs - MDL commenced drilling to gas well PW 25R2 to a proposed target depth of 28.00 m BGL. MDL completed borehole to a depth of 28.00m BGL to gas well PW 25R2. 160mm pipework was installed to a depth of 28.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked..
Meetings/ Correspondence		N/A
Health and Safety		No issues.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Visitors to Site	
Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Tuesday 26th May 2015
Weather	Previous Night a.m p.m	Dry O/Cast o/Cast
Site Hours: Contractors Arrival Time: CQA Arrival Time: Contractors Departure Time: CQA Departure Time:		07.00 – 17.00 09.30 07.30 16.10 16.10
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper. Manitou 923 Telehandler. Water Carrier. De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 21R** MDL Positioned the drilling rig at peg location PW 21R 10.20 hrs - MDL commenced drilling to gas well PW 21R to a proposed target depth of 47.00 m BGL. 16.00 MDL stopped drilling PW 21R to 25.00 m BGL today.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked..
Meetings/ Correspondence		N/A
Health and Safety		No issues.
Visitors to Site		
Comments		All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Wednesday 27th May 2015
Weather	Previous Night	Dry
	a.m	Sunny
	p.m	O/Cast, L/Showers
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.30
Contractors Departure Time:		18.00
CQA Departure Time:		18.00
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrie De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 21R** 9.20 - MDL continue drilling borehole from depth of 25.00m BGL to gas well PW 21R, proposal depth 47.00 m BGL. No recovery on 33.00 m BGL. CQA Engineer informed Infinis and been instructed by Roy Bonham to install pipe. During pipe installation PW 21R collapse, depth reduced to 29.00m. Infinis contacted. 160mm pipework was installed to a depth of 29.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed. **Gas Extraction Well PW 2AR2** MDL Positioned the drilling rig at peg location PW 2AR2 16.10 hrs - MDL commenced drilling to gas well PW 2AR2 to a proposed target depth of 46.00 m BGL. MDL completed borehole to a depth of 18.00m BGL today. Seal overnight to control odour.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked..
Meetings/ Correspondence		N/A
Health and Safety		No issues.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Visitors to Site	
Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Thursday 28th May 2015
Weather	Previous Night	Dry
	a.m	O/Cast, Dry
	p.m	O/Cast, Dry
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.30
CQA Arrival Time:		07.30
Contractors Departure Time:		18.00
CQA Departure Time:		18.00
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper Manitou 923 Telehandler Water Carrier De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 2AR2** 7.40 - MDL continue drilling borehole from depth of 17.00m BGL to gas well PW2AR2, proposal depth 46.00 m BGL, Obstruction during drilling borehole on 20.00 m BGL. CQA Informed Infinis and been instructed by Roy Bonham to move 2.0 m off proposal location. All locations to be resurvey after complete all installations. Borehole backfilled with waste to 2.0m BGL, remainder filled with hydrated bentonite to ground level. MDL Positioned the drilling rig at new location PW 2AR2 (under instruction from Infinis). 10.40 hrs - MDL commenced drilling to gas well PW 2AR2 to a proposed target depth of 46.00 m BGL. MDL stopped borehole to a depth of 35.00m BGL today. Place bentonite seal to control odour overnight.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked..
Meetings/ Correspondence		N/A
Health and Safety		No issues.
Visitors to Site		

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Comments	All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC.

For Egniol Environmental Ltd: Maciej Turkowski

CQA Inspector's Daily Report

Site Name: Chirk LFS

Project: Retro-Drilling of Gas Wells

Date		Thursday 28th May 2015
Weather	Previous Night	Rain
	a.m	Rain from 10.00 am showers
	p.m	O/Cast, Showers
Site Hours:		07.00 – 17.00
Contractors Arrival Time:		07.20
CQA Arrival Time:		07.150
Contractors Departure Time:		13.00
CQA Departure Time:		13.00
Contractors Plant / Resources Utilised		**Magpie Environmental Drilling Ltd** Comacchio MC3000s Drilling Rig Terex TA6 Forward Tipping Dumper. Manitou 923 Telehandler. Water Carrier. De Odourizer 2 x Drilling Crew
Contract Works Undertaken		**Magpie Drilling Ltd**. **Gas Extraction Well PW 2AR2** 7.30 - MDL continue drilling borehole from depth of 35.00m BGL to gas well PW 2AR2, proposal depth 46.00 m BGL. No recovery on 36.00 m BGL. CQA Engineer informed Infinis and been instructed by Roy Bonham to install pipe. 160mm pipework was installed to a depth of 36.00m BGL. MDL Installed 20/40 gravel pack to 3.0m BGL Hydrated Bentonite seal backfilled to ground level. Air tight gas seal cap fitted. 4 bags of Bentonite installed.
Testing Undertaken		Visual inspection & photographs taken. Verticality Checks every 5m. Borehole depth checks 3m above target depth. Borehole depth checked prior to installing pipework. Depth of 20-40m gravel pack checked. Depth of bentonite seal checked..
Meetings/ Correspondence		N/A
Health and Safety		No issues.
Visitors to Site		
Comments		All waste arising were placed the dumper and placed on the tip face as instructed by Infinis and FCC.

For Egniol Environmental Ltd: Maciej Turkowski

ENGINEERING
ENVIRONMENTAL
HEALTH & SAFETY

egniol

Infinis Energy Services Ltd.

Chirk Landfill Site

Retro-Drilling of Gas Wells

Construction Quality Assurance Report

2. CQA Drilling Logs.

DRILLING REPORT						Well Number:	**PW 79R**
CQA INSPECTOR:-	**Maciej Turkowski**						
CLIENT:	**Infins Energy Services Ltd**					Site:	**Chirk LFS**
Date:	**11-12.05.2015**		Installation Details			Target Depth (m):	**23.00**
Drilling Rig type:	**Comacchio MC3000s**		Solid AGL (m):		**1.00**	Actual Depth (m):	**23.00**
Extruder Dimensions:	**350mm**		Solid BGL (m):		**5.00**	Dip Level (mBGL):	
Auger Dimensions:	**350mm**		Perforated BGL (m):		**18.00**	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:			Bentonite (m):		**3.00**	HDPE Casing Dimensions:	**160mm**
			Gravel (m):		**20.00**		

Depth From (m)	Depth To (m)	Interval (m)		DESCRIPTION		STRATA
			m		**m**	
	+1.0	1	+1			
					+0.5	GL
0.0	0.0	0	**0**			GL
0.0			**0**	Clay/Soils		**Clay/Soil**
	1.0			Clay/Soils	**0.5**	**LLDPE CAP 1m BGL**
1.0		1	**1**	Clay/Soils		
	2.0			Clay/Soils	**1.5**	**Hydrated Bentonite**
2.0		1	**2**	Damp Consolidated 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 34**
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**	**Damp Waste**
8.0		1	**8**	Damp Consolidated Waste		
	9.0			Damp Consolidated Waste	**8.5**	
9.0		1	**9**	Damp Consolidated Waste		**20/40 Gravel**
	10.0			Damp Consolidated Waste	**9.5**	
10.0		1	**10**	Damp Consolidated Waste		
	11.0			Damp Consolidated Waste	**10.5**	**J.N 35**
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**	Wet Consolidated Waste		
	17.0			Wet Consolidated Waste	**16.5**	**Wet Waste** **J.N 36**
17.0		1	**17**	Wet Consolidated Waste		
	18.0			Wet 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**	**Damp Waste**
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		
	23.0			Damp Consolidated Waste	**22.5**	**J.N 37**
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**	

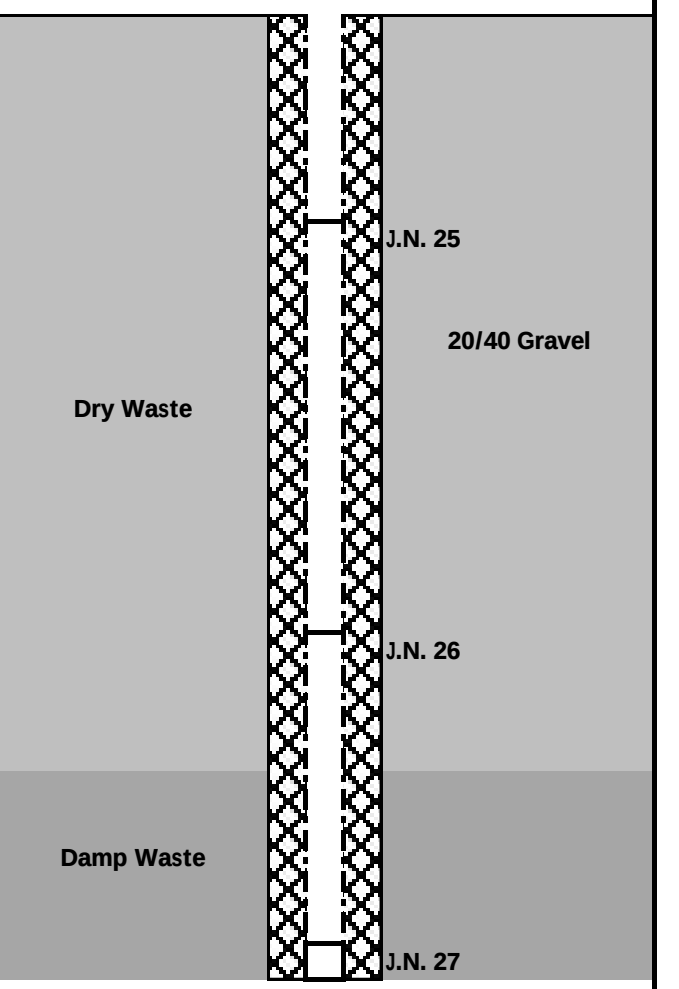
DRILLING REPORT					Well Number:	PW 122
CQA INSPECTOR:-	Maciej Turkowski					
CLIENT:	Infins Energy Services Ltd				Site:	Chirk LFS
Date:	12-13.05.2015	Installation Details			Target Depth (m):	46.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):		1.00	Actual Depth (m):	46.00
Extruder Dimensions:	350mm	Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):		41.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):		3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):		43.00		

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	Dry Mixed Waste		
	1.0			Dry Mixed Waste	0.5	
1.0		1	1	Dry Mixed Waste		
	2.0			Dry Mixed Waste	1.5	
2.0		1	2	Dry Mixed Waste		
	3.0			Dry Mixed Waste	2.5	
3.0		1	3	Dry Mixed Waste		
	4.0			Dry Mixed Waste	3.5	
4.0		1	4	Dry Mixed Waste		
	5.0			Dry Mixed Waste	4.5	
5.0		1	5	Wet Consolidated Waste		
	6.0			Wet 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		
	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	
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		
	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		
	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	

STRATA: Dry Waste; Wet Waste; Dry Waste; Bentonite; 20/40 Gravel; J.N 20; J.N 21; J.N 22; J.N 23; J.N 24

DRILLING REPORT				Well Number:	PW 122
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	12-13.05.2015	Installation Details		Target Depth (m):	46.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	46.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	41.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160 mm
		Gravel (m):	43.00		

Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION	STRATA
			m	m
32.0		1	32 Dry Consolidated Waste	
	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 Dry Consolidated Waste	
	37.0		Dry Consolidated Waste	36.5
37.0		1	37 Dry Consolidated Waste	
	38.0		Dry Consolidated Waste	37.5
38.0		1	38 Dry Consolidated Waste	
	39.0		Dry Consolidated Waste	38.5
39.0		1	39 Dry Consolidated Waste	
	40.0		Dry Consolidated Waste	39.5
40.0		1	40 Dry Consolidated Waste	
	41.0		Dry Consolidated Waste	40.5
41.0		1	41 Dry Consolidated Waste	
	42.0		Dry Consolidated Waste	41.5
42.0		1	42 Dry Consolidated Waste	
	43.0		Dry Consolidated Waste	42.5
43.0		1	43 Damp Consolidated Waste	
	44.0		Damp Consolidated Waste	43.5
44.0		1	44 Damp Consolidated Waste	
	45.0		Damp Consolidated Waste	44.5
45.0		1	45 Damp Consolidated Waste	
	46.0		Damp Consolidated Waste	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



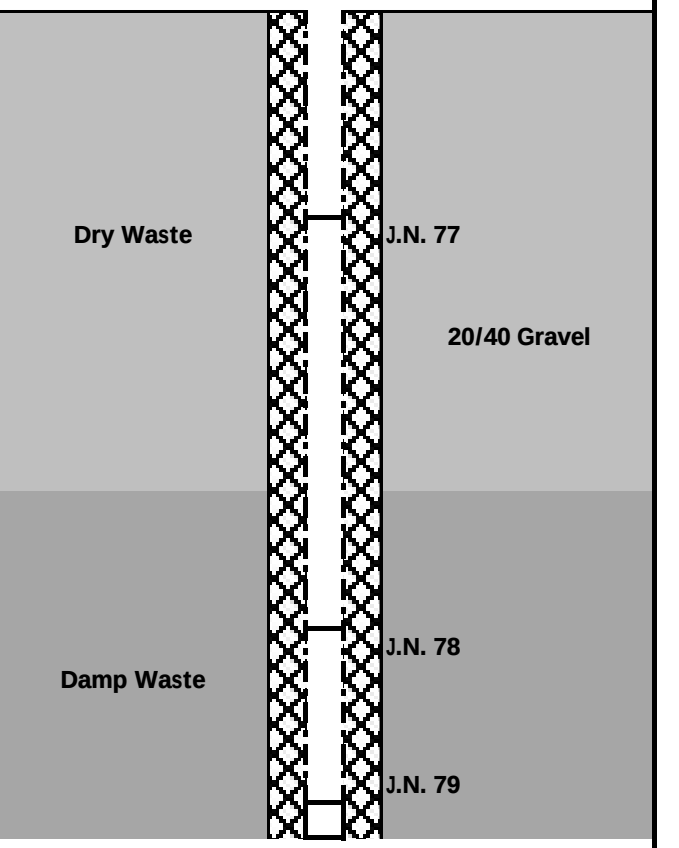
DRILLING REPORT					Well Number:	PW 17R2
CQA INSPECTOR:-	Maciej Turkowski					
CLIENT:	Infins Energy Services Ltd				Site:	Chirk LFS
Date:	13-14.05.2015	Installation Details			Target Depth (m):	44.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):		1.00	Actual Depth (m):	44.00
Extruder Dimensions:	350mm	Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):		39.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):		3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):		41.00		

Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION		STRATA
			m	m	
	+1.0	1	+1	+0.5	GL
0.0	0.0	0	0		GL
0.0	1.0	1	0 Damp Mixed Mixed Waste	0.5	Damp Waste
1.0	2.0	1	1 Damp Mixed Mixed Waste	1.5	Damp Waste
2.0	3.0	1	2 Damp Mixed Mixed Waste	2.5	Damp Waste
3.0	4.0	1	3 Damp Mixed Mixed Waste	3.5	Damp Waste
4.0	5.0	1	4 Wet Consolidated Waste	4.5	Wet Waste
5.0	6.0	1	5 Wet Consolidated Waste	5.5	Wet Waste
6.0	7.0	1	6 Dry Consolidated Waste	6.5	Dry Waste
7.0	8.0	1	7 Dry Consolidated Waste	7.5	Dry Waste
8.0	9.0	1	8 Dry Consolidated Waste	8.5	Dry Waste
9.0	10.0	1	9 Dry Consolidated Waste	9.5	Dry Waste
10.0	11.0	1	10 Dry Consolidated Waste	10.5	Dry Waste
11.0	12.0	1	11 Dry Consolidated Waste	11.5	Dry Waste
12.0	13.0	1	12 Dry Consolidated Waste	12.5	Dry Waste
13.0	14.0	1	13 Dry Consolidated Waste	13.5	Dry Waste
14.0	15.0	1	14 Dry Consolidated Waste	14.5	Dry Waste
15.0	16.0	1	15 Dry Consolidated Waste	15.5	Dry Waste
16.0	17.0	1	16 Dry Consolidated Waste	16.5	Dry Waste
17.0	18.0	1	17 Dry Consolidated Waste	17.5	Dry Waste
18.0	19.0	1	18 Dry Consolidated Waste	18.5	Dry Waste
19.0	20.0	1	19 Dry Consolidated Waste	19.5	Dry Waste
20.0	21.0	1	20 Dry Consolidated Waste	20.5	Dry Waste
21.0	22.0	1	21 Dry Consolidated Waste	21.5	Dry Waste
22.0	23.0	1	22 Dry Consolidated Waste	22.5	Dry Waste
23.0	24.0	1	23 Dry Consolidated Waste	23.5	Dry Waste
24.0	25.0	1	24 Dry Consolidated Waste	24.5	Dry Waste
25.0	26.0	1	25 Dry Consolidated Waste	25.5	Dry Waste
26.0	27.0	1	26 Dry Consolidated Waste	26.5	Dry Waste
27.0	28.0	1	27 Dry Consolidated Waste	27.5	Dry Waste
28.0	29.0	1	28 Dry Consolidated Waste	28.5	Dry Waste
29.0	30.0	1	29 Dry Consolidated Waste	29.5	Dry Waste
30.0	31.0	1	30 Dry Consolidated Waste	30.5	Dry Waste
31.0	32↓	1	31 Dry Consolidated Waste	31.5	Dry Waste

Bentonite
J.N 72
J.N 73
20/40 Gravel
J.N 74
J.N 75
J.N 76

DRILLING REPORT				Well Number:	PW 17R2
CQA INSPECTOR:-	Maciej Turkowski				
CLIENT:	Infins Energy Services Ltd			Site:	Chirk LFS
Date:	13-14.05.2015	Installation Details		Target Depth (m):	44.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	44.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	39.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160 mm
		Gravel (m):	41.00		

Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION		STRATA
			m	m	
32.0		1	32	Dry Consolidated Waste	
	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	Dry Consolidated Waste	
	37.0			Dry Consolidated Waste	36.5
37.0		1	37	Dry Consolidated Waste	
	38.0			Dry Consolidated Waste	37.5
38.0		1	38	Dry Consolidated Waste	
	39.0			Dry Consolidated Waste	38.5
39.0		1	39	Damp Consolidated Waste	
	40.0			Damp Consolidated Waste	39.5
40.0		1	40	Damp Consolidated Waste	
	41.0			Damp Consolidated Waste	40.5
41.0		1	41	Damp Consolidated Waste	
	42.0			Damp Consolidated Waste	41.5
42.0		1	42	Damp Consolidated Waste	
	43.0			Damp Consolidated Waste	42.5
43.0		1	43	Damp Consolidated Waste	
	44.0			Damp Consolidated Waste	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:	PW 121
CQA INSPECTOR:-	Maciej Turkowski					
CLIENT:	Infins Energy Services Ltd				Site:	Chirk LFS
Date:	14-15.05.2015	Installation Details			Target Depth (m):	35.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):		1.00	Actual Depth (m):	35.00
Extruder Dimensions:	350mm	Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):		30.00	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	GL
0.0	0.0	0	0			GL
0.0			0	Damp Mixed Waste		Dry Waste
	1.0			Damp Mixed Waste	0.5	
1.0		1	1	Damp Mixed Waste		
	2.0			Damp Mixed Waste	1.5	
2.0		1	2	Damp Mixed Waste		
	3.0			Damp Mixed Waste	2.5	
3.0		1	3	Damp Mixed Waste		
	4.0			Damp Mixed Waste	3.5	
4.0		1	4	Wet Consolidated Waste		Wet Waste
	5.0			Wet Consolidated Waste	4.5	
5.0		1	5	Wet Consolidated Waste		
	6.0			Wet Consolidated Waste	5.5	
6.0		1	6	Damp Consolidated Waste		Damp 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		
	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	Dry Consolidated Waste		Dry 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		
	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		
	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		
	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	

Bentonite

J.N 66

J.N 67

20/40 Gravel

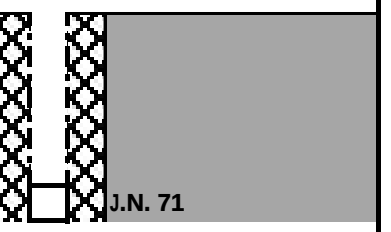
J.N 68

J.N 69

J.N. 70

DRILLING REPORT				Well Number:	PW 121
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	14-15.05.2015	Installation Details		Target Depth (m):	35.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	35.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	30.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160 mm
		Gravel (m):	32.00		

Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION	STRATA
			m	m
32.0	33.0	1	32 Damp Consolidated Waste	Damp Waste
33.0	34.0	1	33 Damp Consolidated Waste	
34.0	35.0	1	34 Damp Consolidated Waste	
35.0	36.0	1	35	
36.0	37.0	1	36	
37.0	38.0	1	37	
38.0	39.0	1	38	
39.0	40.0	1	39	
40.0	41.0	1	40	
41.0	42.0	1	41	
42.0	43.0	1	42	
43.0	44.0	1	43	
44.0	45.0	1	44	
45.0	46.0	1	45	
46.0	47.0	1	46	
47.0	48.0	1	47	
48.0	49.0	1	48	
49.0	50.0	1	49	
50.0	51.0	1	50	
51.0	52.0	1	51	
52.0	53.0	1	52	
53.0	54.0	1	53	
54.0	55.0	1	54	
55.0	56.0	1	55	
56.0	57.0	1	56	
57.0	58.0	1	57	
58.0	59.0	1	58	
59.0	60.0	1	59	
60.0	61.0	1	60	
61.0	62.0	1	61	
62.0	63.0	1	62	
63.0	64.0	1	63	
64.0	65.0	1	64	
			--- 32.5	
			--- 33.5	
			--- 34.5	
			--- 35.5	
			--- 36.5	
			--- 37.5	
			--- 38.5	
			--- 39.5	
			--- 40.5	
			--- 41.5	
			--- 42.5	
			--- 43.5	
			--- 44.5	
			--- 45.5	
			--- 46.5	
			--- 47.5	
			--- 48.5	
			--- 49.5	
			--- 50.5	
			--- 51.5	
			--- 52.5	
			--- 53.5	
			--- 54.5	
			--- 55.5	
			--- 56.5	
			--- 57.5	
			--- 58.5	
			--- 59.5	
			--- 60.5	
			--- 61.5	
			--- 62.5	
			--- 63.5	
			--- 64.5	



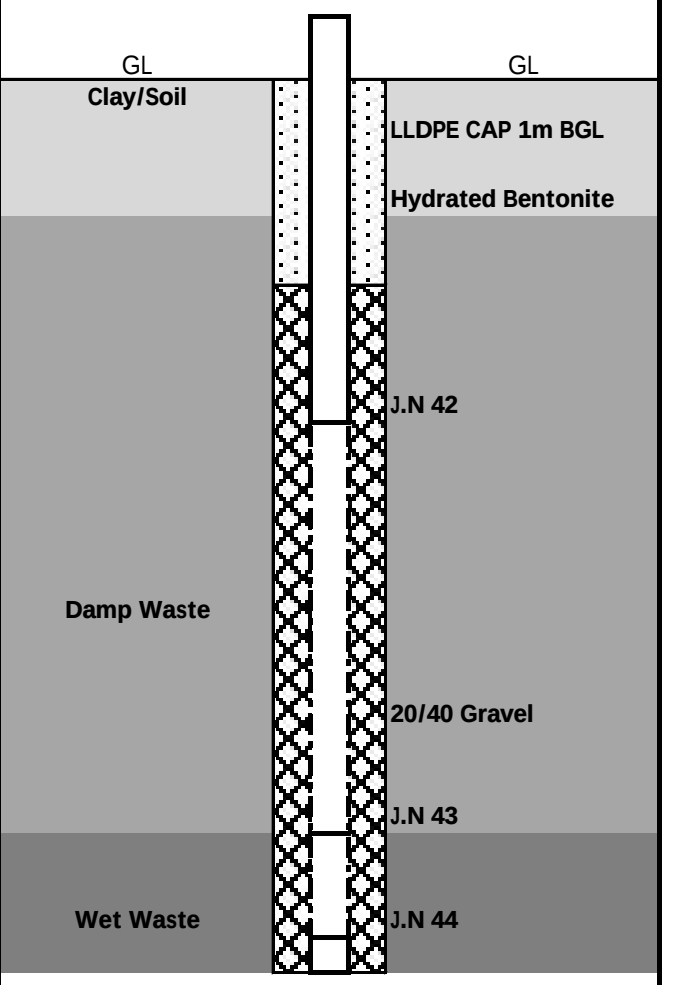
DRILLING REPORT					Well Number:	PW 80R
CQA INSPECTOR:-	Maciej Turkowski					
CLIENT:	Infins Energy Services Ltd				Site:	Chirk LFS
Date:	18.05.2015	Installation Details			Target Depth (m):	20.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):		1.00	Actual Depth (m):	20.00
Extruder Dimensions:	350mm	Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):		15.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):		3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):		17.00		

Depth From (m)	Depth To (m)	Interval (m)		DESCRIPTION		STRATA
			m		m	
	+1.0	1	+1			
					+0.5	GL GL
0.0	0.0	0	0			
0.0			0	Clay/Soils		Clay/Soil
	1.0			Clay/Soils	0.5	LLDPE CAP 1m BGL
1.0		1	1	Clay/Soils		
	2.0			Clay/Soils	1.5	Hydrated Bentonite
2.0		1	2	Damp Consolidated 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 38
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	Damp Waste
8.0		1	8	Damp Consolidated Waste		
	9.0			Damp Consolidated Waste	8.5	
9.0		1	9	Damp Consolidated Waste		20/40 Gravel
	10.0			Damp Consolidated Waste	9.5	
10.0		1	10	Damp Consolidated Waste		
	11.0			Damp Consolidated Waste	10.5	J.N 39
11.0		1	11	Damp Consolidated Waste		
	12.0			Damp Consolidated Waste	11.5	
12.0		1	12	Wet Consolidated Waste		Wet Waste
	13.0			Wet 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		Dry Waste
	17.0			Dry Consolidated Waste	16.5	J.N. 40
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. 41
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:	PW 81R
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	18.05.2015	Installation Details		Target Depth (m):	13.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	13.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	8.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):	10.00		

Depth From (m)	Depth To (m)	Interval (m)	m	DESCRIPTION	m
	+1.0	1	+1		
					+0.5
0.0	0.0	0	0		
0.0			0	Clay/Soils	
	1.0			Clay/Soils	0.5
1.0		1	1	Clay/Soils	
	2.0			Clay/Soils	1.5
2.0		1	2	Damp Consolidated 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
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	
	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	
	11.0			Damp Consolidated Waste	10.5
11.0		1	11	Wet Consolidated Waste	
	12.0			Wet Consolidated Waste	11.5
12.0		1	12	Wet Consolidated Waste	
	13.0			Wet Consolidated Waste	12.5
13.0		1	13		
	14.0				13.5
14.0		1	14		
	15.0				14.5
15.0		1	15		
	16.0				15.5
16.0		1	16		
	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

STRATA



DRILLING REPORT				Well Number:	**PW 73R**
CQA INSPECTOR:-	**Maciej Turkowski**				
CLIENT:	**Infins Energy Services Ltd**			Site:	**Chirk LFS**
Date:	**18-19.05.2015**	Installation Details		Target Depth (m):	**34.00**
Drilling Rig type:	**Comacchio MC3000s**	Solid AGL (m):	**1.00**	Actual Depth (m):	**34.00**
Extruder Dimensions:	**350mm**	Solid BGL (m):	**5.00**	Dip Level (mBGL):	
Auger Dimensions:	**350mm**	Perforated BGL (m):	**29.00**	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	**3.00**	HDPE Casing Dimensions:	**160mm**
		Gravel (m):	**31.00**		

Depth From (m)	Depth To (m)	Interval (m)	m	DESCRIPTION	m	STRATA
	+1.0	1	+1		+0.5	GL GL
0.0	0.0	0	0			
0.0	1.0	1	0	Clay/Soils	0.5	Clay/Soils; LLDPE CAP 1 m BGL; Bentonite
1.0	2.0	1	1	Clay/Soils	1.5	
2.0	3.0	1	2	Damp Consolidated Waste	2.5	
3.0	4.0	1	3	Damp Consolidated Waste	3.5	
4.0	5.0	1	4	Damp Consolidated Waste	4.5	Damp Waste; J.N. 46
5.0	6.0	1	5	Damp Consolidated Waste	5.5	
6.0	7.0	1	6	Damp Consolidated Waste	6.5	
7.0	8.0	1	7	Damp Consolidated Waste	7.5	20/40 Gravel
8.0	9.0	1	8	Wet Consolidated Waste	8.5	Wet Waste
9.0	10.0	1	9	Wet Consolidated Waste	9.5	
10.0	11.0	1	10	Damp Consolidated Waste	10.5	J.N. 47
11.0	12.0	1	11	Damp Consolidated Waste	11.5	
12.0	13.0	1	12	Damp Consolidated Waste	12.5	
13.0	14.0	1	13	Damp Consolidated Waste	13.5	
14.0	15.0	1	14	Damp Consolidated Waste	14.5	Damp Waste
15.0	16.0	1	15	Damp Consolidated Waste	15.5	
16.0	17.0	1	16	Damp Consolidated Waste	16.5	J.N. 48
17.0	18.0	1	17	Damp Consolidated Waste	17.5	
18.0	19.0	1	18	Damp Consolidated Waste	18.5	
19.0	20.0	1	19	Damp Consolidated Waste	19.5	
20.0	21.0	1	20	Damp Consolidated Waste	20.5	
21.0	22.0	1	21	Dry Consolidated Waste	21.5	
22.0	23.0	1	22	Dry Consolidated Waste	22.5	J.N. 49
23.0	24.0	1	23	Dry Consolidated Waste	23.5	
24.0	25.0	1	24	Dry Consolidated Waste	24.5	
25.0	26.0	1	25	Dry Consolidated Waste	25.5	
26.0	27.0	1	26	Dry Consolidated Waste	26.5	Dry Waste
27.0	28.0	1	27	Dry Consolidated Waste	27.5	
28.0	29.0	1	28	Dry Consolidated Waste	28.5	J.N. 50
29.0	30.0	1	29	Dry Consolidated Waste	29.5	
30.0	31.0	1	30	Dry Consolidated Waste	30.5	
31.0	32↓	1	31	Dry Consolidated Waste	31.5	

DRILLING REPORT				Well Number:	PW 73R
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	18-19.05.2015	Installation Details		Target Depth (m):	34.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.30	Actual Depth (m):	34.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	29.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160 mm
		Gravel (m):	31.00		

Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION	STRATA
			m	m
32.0	33.0	1	32 Dry Consolidated Waste --- 32.5	Dry Waste J.N. 51
33.0	34.0	1	33 Dry Consolidated Waste --- 33.5	
34.0	35.0	1	34 --- 34.5	
35.0	36.0	1	35 --- 35.5	
36.0	37.0	1	36 --- 36.5	
37.0	38.0	1	37 --- 37.5	
38.0	39.0	1	38 --- 38.5	
39.0	40.0	1	39 --- 39.5	
40.0	41.0	1	40 --- 40.5	
41.0	42.0	1	41 --- 41.5	
42.0	43.0	1	42 --- 42.5	
43.0	44.0	1	43 --- 43.5	
44.0	45.0	1	44 --- 44.5	
45.0	46.0	1	45 --- 45.5	
46.0	47.0	1	46 --- 46.5	
47.0	48.0	1	47 --- 47.5	
48.0	49.0	1	48 --- 48.5	
49.0	50.0	1	49 --- 49.5	
50.0	51.0	1	50 --- 50.5	
51.0	52.0	1	51 --- 51.5	
52.0	53.0	1	52 --- 52.5	
53.0	54.0	1	53 --- 53.5	
54.0	55.0	1	54 --- 54.5	
55.0	56.0	1	55 --- 55.5	
56.0	57.0	1	56 --- 56.5	
57.0	58.0	1	57 --- 57.5	
58.0	59.0	1	58 --- 58.5	
59.0	60.0	1	59 --- 59.5	
60.0	61.0	1	60 --- 60.5	
61.0	62.0	1	61 --- 61.5	
62.0	63.0	1	62 --- 62.5	
63.0	64.0	1	63 --- 63.5	
64.0	65.0	1	64 --- 64.5	

DRILLING REPORT				Well Number:	PW 93R
CQA INSPECTOR:-	Maciej Turkowski				
CLIENT:	Infins Energy Services Ltd			Site:	Chirk LFS
Date:	19.05.2015	Installation Details		Target Depth (m):	34.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	34.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	29.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):	31.00		

Depth From (m)	Depth To (m)	Interval (m)	m	DESCRIPTION	m	STRATA
	+1.0	1	+1		+0.5	GL GL
0.0	0.0	0	0			
0.0	1.0	1	0	Clay/Soils	0.5	Clay/Soils; LLDPE CAP 0.8 m BGL; Bentonite
1.0	2.0	1	1	Clay/Soils	1.5	
2.0	3.0	1	2	Damp Consolidated Waste	2.5	
3.0	4.0	1	3	Damp Consolidated Waste	3.5	
4.0	5.0	1	4	Damp Consolidated Waste	4.5	Damp Waste; J.N. 95
5.0	6.0	1	5	Damp Consolidated Waste	5.5	
6.0	7.0	1	6	Damp Consolidated Waste	6.5	
7.0	8.0	1	7	Wet Consolidated Waste	7.5	Wet Waste
8.0	9.0	1	8	Wet Consolidated Waste	8.5	
9.0	10.0	1	9	Damp Consolidated Waste	9.5	
10.0	11.0	1	10	Damp Consolidated Waste	10.5	J.N. 96
11.0	12.0	1	11	Damp Consolidated Waste	11.5	Damp Waste
12.0	13.0	1	12	Damp Consolidated Waste	12.5	20/40 Gravel
13.0	14.0	1	13	Damp Consolidated Waste	13.5	
14.0	15.0	1	14	Dry Consolidated Waste	14.5	
15.0	16.0	1	15	Dry Consolidated Waste	15.5	
16.0	17.0	1	16	Dry Consolidated Waste	16.5	J.N. 97
17.0	18.0	1	17	Dry Consolidated Waste	17.5	
18.0	19.0	1	18	Dry Consolidated Waste	18.5	
19.0	20.0	1	19	Dry Consolidated Waste	19.5	
20.0	21.0	1	20	Dry Consolidated Waste	20.5	
21.0	22.0	1	21	Dry Consolidated Waste	21.5	
22.0	23.0	1	22	Dry Consolidated Waste	22.5	Dry Waste; J.N. 98
23.0	24.0	1	23	Dry Consolidated Waste	23.5	
24.0	25.0	1	24	Dry Consolidated Waste	24.5	
25.0	26.0	1	25	Dry Consolidated Waste	25.5	
26.0	27.0	1	26	Dry Consolidated Waste	26.5	
27.0	28.0	1	27	Dry Consolidated Waste	27.5	
28.0	29.0	1	28	Dry Consolidated Waste	28.5	J.N. 99
29.0	30.0	1	29	Dry Consolidated Waste	29.5	
30.0	31.0	1	30	Dry Consolidated Waste	30.5	
31.0	32↓	1	31	Dry Consolidated Waste	31.5	

DRILLING REPORT				Well Number:	PW 93R
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	19.05.2015	Installation Details		Target Depth (m):	34.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	34.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	29.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160 mm
		Gravel (m):	31.00		

Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION	STRATA
			m	m
32.0	33.0	1	32 Dry Consolidated Waste --- 32.5	Dry Waste J.N. 100
33.0	34.0	1	33 Dry Consolidated Waste --- 33.5	
34.0	35.0	1	34 --- 34.5	
35.0	36.0	1	35 --- 35.5	
36.0	37.0	1	36 --- 36.5	
37.0	38.0	1	37 --- 37.5	
38.0	39.0	1	38 --- 38.5	
39.0	40.0	1	39 --- 39.5	
40.0	41.0	1	40 --- 40.5	
41.0	42.0	1	41 --- 41.5	
42.0	43.0	1	42 --- 42.5	
43.0	44.0	1	43 --- 43.5	
44.0	45.0	1	44 --- 44.5	
45.0	46.0	1	45 --- 45.5	
46.0	47.0	1	46 --- 46.5	
47.0	48.0	1	47 --- 47.5	
48.0	49.0	1	48 --- 48.5	
49.0	50.0	1	49 --- 49.5	
50.0	51.0	1	50 --- 50.5	
51.0	52.0	1	51 --- 51.5	
52.0	53.0	1	52 --- 52.5	
53.0	54.0	1	53 --- 53.5	
54.0	55.0	1	54 --- 54.5	
55.0	56.0	1	55 --- 55.5	
56.0	57.0	1	56 --- 56.5	
57.0	58.0	1	57 --- 57.5	
58.0	59.0	1	58 --- 58.5	
59.0	60.0	1	59 --- 59.5	
60.0	61.0	1	60 --- 60.5	
61.0	62.0	1	61 --- 61.5	
62.0	63.0	1	62 --- 62.5	
63.0	64.0	1	63 --- 63.5	
64.0	65.0	1	64 --- 64.5	

DRILLING REPORT				Well Number:	PW 91R
CQA INSPECTOR:-	Maciej Turkowski				
CLIENT:	Infins Energy Services Ltd			Site:	Chirk LFS
Date:	20.05.2015	Installation Details		Target Depth (m):	38.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	38.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	33.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):	35.00		

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/Soils		
	1.0			Clay/Soils	0.5	Clay/Soils — LLDPE CAP 1.5 m BGL; Bentonite
1.0		1	1	Clay/Soils		
	2.0			Clay/Soils	1.5	
2.0		1	2	Damp Consolidated 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	Damp Waste — J.N. 52
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		
	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	Wet Consolidated Waste		
	11.0			Wet Consolidated Waste	10.5	Wet Waste — J.N. 53
11.0		1	11	Wet Consolidated Waste		
	12.0			Wet Consolidated Waste	11.5	
12.0		1	12	Damp Consolidated Waste		
	13.0			Damp Consolidated Waste	12.5	20/40 Gravel
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		
	17.0			Damp Consolidated Waste	16.5	Damp Waste — J.N. 54
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		
	23.0			Damp Consolidated Waste	22.5	J.N. 55
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		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		
	28.0			Dry Consolidated Waste	27.5	
28.0		1	28	Dry Consolidated Waste		
	29.0			Dry Consolidated Waste	28.5	J.N. 56
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:	PW 91R
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	20.05.2015	Installation Details		Target Depth (m):	38.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	38.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	33.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160 mm
		Gravel (m):	35.00		

Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION	STRATA
			m	
32.0		1	32 Dry Consolidated Waste	Dry Waste
	33.0		Dry Consolidated Waste	J.N. 57
33.0		1	33 Dry Consolidated Waste	
	34.0		Dry Consolidated Waste	
34.0		1	34 Dry Consolidated Waste	
	35.0		Dry Consolidated Waste	
35.0		1	35 Dry Consolidated Waste	
	36.0		Dry Consolidated Waste	J.N. 58
36.0		1	36 Dry Consolidated Waste	
	37.0		Dry Consolidated Waste	
37.0		1	37 Dry Consolidated Waste	
	38.0		Dry Consolidated Waste	
38.0		1	38	
	39.0			
39.0		1	39	
	40.0			
40.0		1	40	
	41.0			
41.0		1	41	
	42.0			
42.0		1	42	
	43.0			
43.0		1	43	
	44.0			
44.0		1	44	
	45.0			
45.0		1	45	
	46.0			
46.0		1	46	
	47.0			
47.0		1	47	
	48.0			
48.0		1	48	
	49.0			
49.0		1	49	
	50.0			
50.0		1	50	
	51.0			
51.0		1	51	
	52.0			
52.0		1	52	
	53.0			
53.0		1	53	
	54.0			
54.0		1	54	
	55.0			
55.0		1	55	
	56.0			
56.0		1	56	
	57.0			
57.0		1	57	
	58.0			
58.0		1	58	
	59.0			
59.0		1	59	
	60.0			
60.0		1	60	
	61.0			
61.0		1	61	
	62.0			
62.0		1	62	
	63.0			
63.0		1	63	
	64.0			
64.0		1	64	
	65.0			

m
32.5
33.5
34.5
35.5
36.5
37.5
38.5
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
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52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5

DRILLING REPORT					Well Number:	PW 010R
CQA INSPECTOR:-	Maciej Turkowski					
CLIENT:	Infins Energy Services Ltd				Site:	Chirk LFS
Date:	20-21.05.2015	Installation Details			Target Depth (m):	34.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):		1.00	Actual Depth (m):	34.00
Extruder Dimensions:	350mm	Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):		29.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):		3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):		31.00		

Depth From (m)	Depth To (m)	Interval (m)		DESCRIPTION		STRATA
			m		m	
	+1.0	1	+1			
					+0.5	GL
0.0	0.0	0	0			GL
0.0			0	Clay/Soils		
	1.0			Clay/Soils	0.5	Clay/Soils
1.0		1	1	Clay/Soils		
	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	
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		
	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	
11.0		1	11	Dry Consolidated Waste		
	12.0			Dry Consolidated Waste	11.5	
12.0		1	12	Wet Consolidated Waste		Wet Waste
	13.0			Wet 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	
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		
	23.0			Dry Consolidated Waste	22.5	Dry Waste
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		
	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	

LLDPE CAP 1.2 m BGL
Bentonite
J.N. 80
J.N. 81
20/40 Gravel
J.N. 82
J.N. 83
J.N. 84

DRILLING REPORT				Well Number:	PW 010R
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	20-21.05.2015	Installation Details		Target Depth (m):	34.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	34.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	29.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160 mm
		Gravel (m):	31.00		

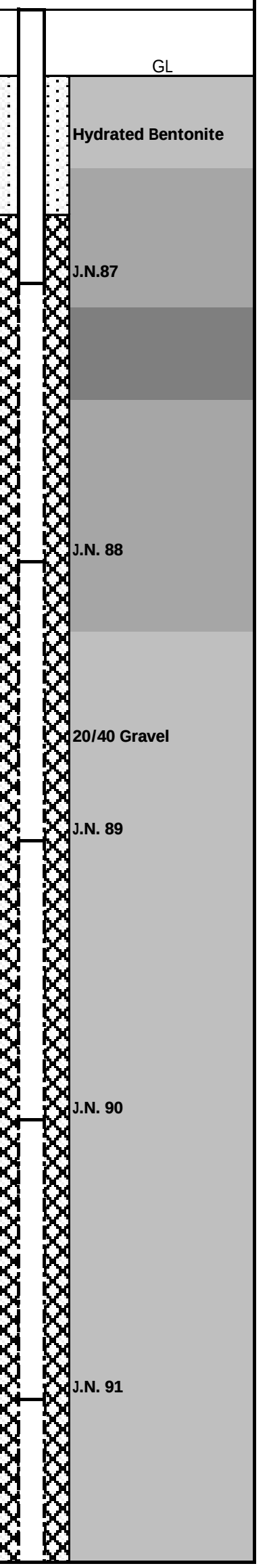
Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION	STRATA
			m	m
32.0	33.0	1	32 Dry Consolidated Waste --- 32.5	Dry Waste J.N. 86
33.0	34.0	1	33 Dry Consolidated Waste --- 33.5	
34.0	35.0	1	34 --- 34.5	
35.0	36.0	1	35 --- 35.5	
36.0	37.0	1	36 --- 36.5	
37.0	38.0	1	37 --- 37.5	
38.0	39.0	1	38 --- 38.5	
39.0	40.0	1	39 --- 39.5	
40.0	41.0	1	40 --- 40.5	
41.0	42.0	1	41 --- 41.5	
42.0	43.0	1	42 --- 42.5	
43.0	44.0	1	43 --- 43.5	
44.0	45.0	1	44 --- 44.5	
45.0	46.0	1	45 --- 45.5	
46.0	47.0	1	46 --- 46.5	
47.0	48.0	1	47 --- 47.5	
48.0	49.0	1	48 --- 48.5	
49.0	50.0	1	49 --- 49.5	
50.0	51.0	1	50 --- 50.5	
51.0	52.0	1	51 --- 51.5	
52.0	53.0	1	52 --- 52.5	
53.0	54.0	1	53 --- 53.5	
54.0	55.0	1	54 --- 54.5	
55.0	56.0	1	55 --- 55.5	
56.0	57.0	1	56 --- 56.5	
57.0	58.0	1	57 --- 57.5	
58.0	59.0	1	58 --- 58.5	
59.0	60.0	1	59 --- 59.5	
60.0	61.0	1	60 --- 60.5	
61.0	62.0	1	61 --- 61.5	
62.0	63.0	1	62 --- 62.5	
63.0	64.0	1	63 --- 63.5	
64.0	65.0	1	64 --- 64.5	

DRILLING REPORT					Well Number:	PW 120
CQA INSPECTOR:-	Maciej Turkowski					
CLIENT:	Infins Energy Services Ltd				Site:	Chirk LFS
Date:	21.05.2015	Installation Details			Target Depth (m):	30.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):		1.00	Actual Depth (m):	30.00
Extruder Dimensions:	350mm	Solid BGL (m):		5.00	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):		25.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):		3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):		27.00		

Depth From (m)	Depth To (m)	Interval (m)		DESCRIPTION		STRATA
			m		m	
	+1.0	1	+1			
					+0.5	GL
0.0	0.0	0	0			GL
0.0			0	Damp Consolidated Waste		
	1.0			Damp Consolidated Waste	0.5	Damp Waste
1.0		1	1	Damp Consolidated Waste		Hydrated Bentonite
	2.0			Damp Consolidated Waste	1.5	
2.0		1	2	Damp Consolidated 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	Wet Consolidated Waste		Wet Waste
	6.0			Wet 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	Damp Waste
8.0		1	8	Damp Consolidated Waste		
	9.0			Damp Consolidated Waste	8.5	
9.0		1	9	Damp Consolidated Waste		20/40 Gravel
	10.0			Damp Consolidated Waste	9.5	
10.0		1	10	Damp Consolidated Waste		
	11.0			Damp Consolidated Waste	10.5	J.N 60
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	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		
	17.0			Dry Consolidated Waste	16.5	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		
	23.0			Dry Consolidated Waste	22.5	J.N. 62
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	Damp Consolidated Waste		
	26.0			Damp Consolidated Waste	25.5	
26.0		1	26	Damp Consolidated Waste		
	27.0			Damp Consolidated Waste	26.5	Damp Waste
27.0		1	27	Damp Consolidated Waste		
	28.0			Damp Consolidated Waste	27.5	
28.0		1	28	Damp Consolidated Waste		
	29.0			Damp Consolidated Waste	28.5	
29.0		1	29	Damp Consolidated Waste		J.N. 63
	30.0			Damp Consolidated Waste	29.5	
30.0		1	30			
	31.0				30.5	
31.0		1	31			
	32↓				31.5	

DRILLING REPORT				Well Number:	PW 43R
CQA INSPECTOR:-	Maciej Turkowski				
CLIENT:	Infins Energy Services Ltd			Site:	Chirk LFS
Date:	21-22.05.2015	Installation Details		Target Depth (m):	44.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	2.30	Actual Depth (m):	42.70
Extruder Dimensions:	350mm	Solid BGL (m):	3.70	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	39.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):	39.70		

Depth From (m)	Depth To (m)	Interval (m)	m	DESCRIPTION	m
	+1.0	1	+1		
					+0.5
0.0	0.0	0	0		
0.0			0	Dry Consolidated Waste	
	1.0			Dry Consolidated Waste	0.5
1.0		1	1	Dry Consolidated Waste	
	2.0			Dry Consolidated Waste	1.5
2.0		1	2	Damp Consolidated 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
5.0		1	5	Wet Consolidated Waste	
	6.0			Wet Consolidated Waste	5.5
6.0		1	6	Wet Consolidated Waste	
	7.0			Wet 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	
	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	
	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	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
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	
	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	
	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



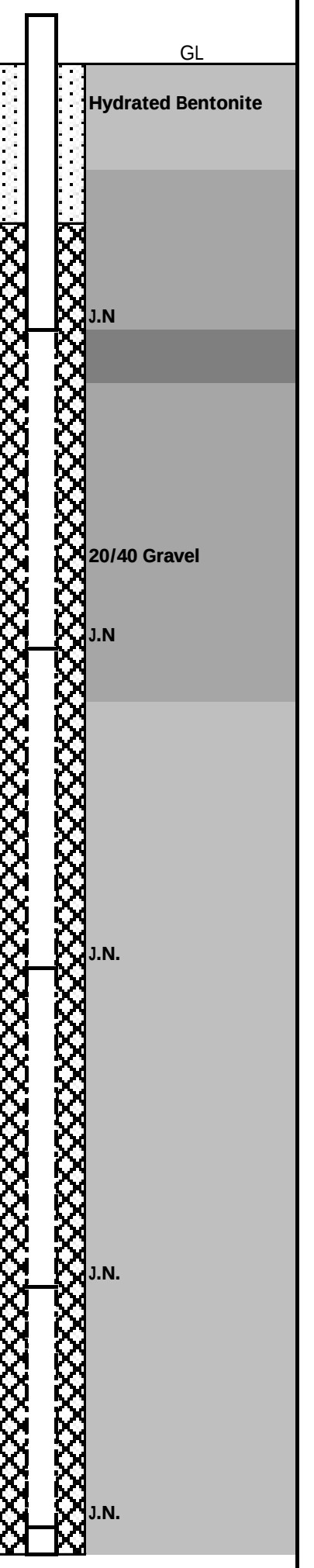
DRILLING REPORT				Well Number:	PW 43R
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	21-22.05.2015	Installation Details		Target Depth (m):	44.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	2.30	Actual Depth (m):	42.70
Extruder Dimensions:	350mm	Solid BGL (m):	3.70	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	39.00	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160 mm
		Gravel (m):	39.70		

Depth From (m)	Depth To (m)	Interval (m)	DESCRIPTION	STRATA
			m	m
32.0	33.0	1	32 Dry Consolidated Waste Dry Consolidated Waste 32.5	
33.0	34.0	1	33 Dry Consolidated Waste Dry Consolidated Waste 33.5	
34.0	35.0	1	34 Dry Consolidated Waste Dry Consolidated Waste 34.5	Dry Waste
35.0	36.0	1	35 Dry Consolidated Waste Dry Consolidated Waste 35.5	
36.0	37.0	1	36 Dry Consolidated Waste Dry Consolidated Waste 36.5	
37.0	38.0	1	37 Dry Consolidated Waste Dry Consolidated Waste 37.5	
38.0	39.0	1	38 Damp Consolidated Waste Damp Consolidated Waste 38.5	
39.0	40.0	1	39 Damp Consolidated Waste Damp Consolidated Waste 39.5	
40.0	41.0	1	40 Damp Consolidated Waste Damp Consolidated Waste 40.5	Damp Waste
41.0	42.0	1	41 Damp Consolidated Waste Damp Consolidated Waste 41.5	
42.0	43.0	1	42 Damp Consolidated Waste Damp Consolidated Waste 42.5	
43.0	44.0	1	43 43.5	
44.0	45.0	1	44 44.5	
45.0	46.0	1	45 45.5	
46.0	47.0	1	46 46.5	
47.0	48.0	1	47 47.5	
48.0	49.0	1	48 48.5	
49.0	50.0	1	49 49.5	
50.0	51.0	1	50 50.5	
51.0	52.0	1	51 51.5	
52.0	53.0	1	52 52.5	
53.0	54.0	1	53 53.5	
54.0	55.0	1	54 54.5	
55.0	56.0	1	55 55.5	
56.0	57.0	1	56 56.5	
57.0	58.0	1	57 57.5	
58.0	59.0	1	58 58.5	
59.0	60.0	1	59 59.5	
60.0	61.0	1	60 60.5	
61.0	62.0	1	61 61.5	
62.0	63.0	1	62 62.5	
63.0	64.0	1	63 63.5	
64.0	65.0	1	64 64.5	

DRILLING REPORT				Well Number:	**PW 25R2**
CQA INSPECTOR:-	**Maciej Turkowski**				
CLIENT:	**Infins Energy Services Ltd**			Site:	**Chirk LFS**
Date:	**22.05.2015**	Installation Details		Target Depth (m):	**28.00**
Drilling Rig type:	**Comacchio MC3000s**	Solid AGL (m):	**1.00**	Actual Depth (m):	**28.00**
Extruder Dimensions:	**350mm**	Solid BGL (m):	**5.00**	Dip Level (mBGL):	
Auger Dimensions:	**350mm**	Perforated BGL (m):	**23.00**	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	**3.00**	HDPE Casing Dimensions:	**160mm**
		Gravel (m):	**25.00**		

Depth From (m)	Depth To (m)	Interval (m)		DESCRIPTION	
			m		**m**
	+1.0	1	+1		
					+0.5
0.0	0.0	0	**0**		
0.0			**0**	Dry Consolidated Waste	
	1.0			Dry Consolidated Waste	**0.5**
1.0		1	**1**	Dry Consolidated Waste	
	2.0			Dry Consolidated Waste	**1.5**
2.0		1	**2**	Damp Consolidated 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**
5.0		1	**5**	Wet Consolidated Waste	
	6.0			Wet 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	
	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	
	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**	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**
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	
	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	
	28.0			Dry Consolidated Waste	**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**

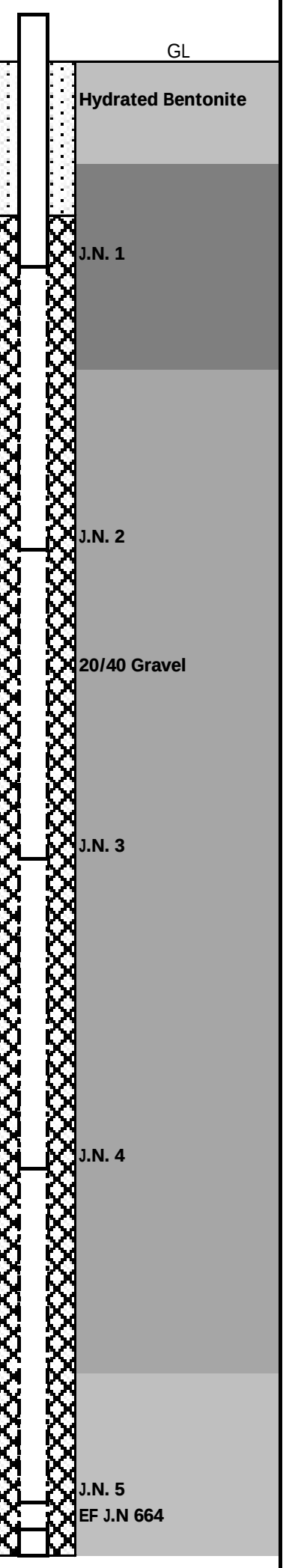
STRATA



Joint Numbers rubbed off during moving pipe

DRILLING REPORT				Well Number:	PW 21R
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	26-27.05.2015	Installation Details		Target Depth (m):	47.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	29.00
Extruder Dimensions:	350mm	Solid BGL (m):	3.50	Dip Level (mBGL):	
Auger Dimensions:	350mm	Perforated BGL (m):	25.50	Dip Level (mBGL) after 24hrs:	
Casing Dimensions:		Bentonite (m):	3.00	HDPE Casing Dimensions:	160mm
		Gravel (m):	26.00		

Depth From (m)	Depth To (m)	Interval (m)	m	DESCRIPTION	m
	+1.0	1	+1		+0.5
0.0	0.0	0	0		
0.0	1.0	1	0	Dry Consolidated Waste	0.5
1.0	2.0	1	1	Dry Consolidated Waste	1.5
2.0	3.0	1	2	Wet Consolidated Waste	2.5
3.0	4.0	1	3	Wet Consolidated Waste	3.5
4.0	5.0	1	4	Wet Consolidated Waste	4.5
5.0	6.0	1	5	Wet Consolidated Waste	5.5
6.0	7.0	1	6	Damp Consolidated Waste	6.5
7.0	8.0	1	7	Damp Consolidated Waste	7.5
8.0	9.0	1	8	Damp Consolidated Waste	8.5
9.0	10.0	1	9	Damp Consolidated Waste	9.5
10.0	11.0	1	10	Damp Consolidated Waste	10.5
11.0	12.0	1	11	Damp Consolidated Waste	11.5
12.0	13.0	1	12	Damp Consolidated Waste	12.5
13.0	14.0	1	13	Damp Consolidated Waste	13.5
14.0	15.0	1	14	Damp Consolidated Waste	14.5
15.0	16.0	1	15	Damp Consolidated Waste	15.5
16.0	17.0	1	16	Damp Consolidated Waste	16.5
17.0	18.0	1	17	Damp Consolidated Waste	17.5
18.0	19.0	1	18	Damp Consolidated Waste	18.5
19.0	20.0	1	19	Damp Consolidated Waste	19.5
20.0	21.0	1	20	Damp Consolidated Waste	20.5
21.0	22.0	1	21	Damp Consolidated Waste	21.5
22.0	23.0	1	22	Damp Consolidated Waste	22.5
23.0	24.0	1	23	Damp Consolidated Waste	23.5
24.0	25.0	1	24	Damp Consolidated Waste	24.5
25.0	26.0	1	25	Damp Consolidated Waste	25.5
26.0	27.0	1	26	Dry Consolidated Waste	26.5
27.0	28.0	1	27	Dry Consolidated Waste	27.5
28.0	29.0	1	28	Dry Consolidated Waste	28.5
29.0	30.0	1	29		29.5
30.0	31.0	1	30		30.5
31.0	32↓	1	31		31.5



DRILLING REPORT					Well Number:	PW 2AR2
CQA INSPECTOR:-	Maciej Turkowski					
CLIENT:	Infins Energy Services Ltd				Site:	Chirk LFS
Date:	28-29.05.2015	Installation Details			Target Depth (m):	46.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):		1.00	Actual Depth (m):	36.00
Extruder Dimensions:	350mm	Solid BGL (m):		5.00	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):		33.00		

Depth From (m)	Depth To (m)	Interval (m)		DESCRIPTION		STRATA
			m		m	
	+1.0	1	+1			
					+0.5	GL
0.0	0.0	0	0			GL
0.0			0	Dry Consolidated Waste		
	1.0			Dry Consolidated Waste	0.5	
1.0		1	1	Dry Consolidated Waste		Dry Waste
	2.0			Dry Consolidated Waste	1.5	
2.0		1	2	Damp Consolidated Waste		
	3.0			Damp Consolidated Waste	2.5	
3.0		1	3	Damp Consolidated Waste		Damp Waste
	4.0			Damp Consolidated Waste	3.5	
4.0		1	4	Damp Consolidated Waste		
	5.0			Damp Consolidated Waste	4.5	
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	Wet Consolidated Waste		
	8.0			Wet Consolidated Waste	7.5	
8.0		1	8	Wet Consolidated Waste		
	9.0			Wet Consolidated Waste	8.5	Wet Waste
9.0		1	9	Wet Consolidated Waste		
	10.0			Wet Consolidated Waste	9.5	
10.0		1	10	Damp Consolidated Waste		
	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		
	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	Damp Waste
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		
	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			Damp Consolidated Waste	26.5	
27.0		1	27	Damp Consolidated Waste		
	28.0			Damp Consolidated Waste	27.5	
28.0		1	28	Wet Consolidated Waste		
	29.0			Wet Consolidated Waste	28.5	Wet Waste
29.0		1	29	Wet Consolidated Waste		
	30.0			Wet Consolidated Waste	29.5	
30.0		1	30	Damp Consolidated Waste		
	31.0			Damp Consolidated Waste	30.5	
31.0		1	31	Damp Consolidated Waste		Damp Waste
	32↓			Damp Consolidated Waste	31.5	

Hydrated Bentonite
J.N 11
J.N. 13
20/40 Gravel
J.N. 14
J.N. 15
J.N. 16

DRILLING REPORT				Well Number:	PW 2AR2
CQA INSPECTOR:- Maciej Turkowski					
CLIENT: Infins Energy Services Ltd				Site:	Chirk LFS
Date:	28-29.05.2015	Installation Details		Target Depth (m):	46.00
Drilling Rig type:	Comacchio MC3000s	Solid AGL (m):	1.00	Actual Depth (m):	36.00
Extruder Dimensions:	350mm	Solid BGL (m):	5.00	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:	160 mm
		Gravel (m):	33.00		

Depth From (m)	Depth To (m)	Interval (m)	m	DESCRIPTION	m	STRATA
32.0		1	32	Damp Consolidated Waste		Damp Waste
	33.0			Damp Consolidated Waste	32.5	
33.0		1	33	Damp Consolidated Waste		
	34.0			Damp Consolidated Waste	33.5	
34.0		1	34	Damp Consolidated Waste		
	35.0			Damp Consolidated Waste	34.5	
35.0		1	35	Damp Consolidated Waste		
	36.0			Damp Consolidated Waste	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	

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Infinis Energy Services Ltd.

Chirk Landfill Site

Retro-Drilling of Gas Wells

Construction Quality Assurance Report

3. Photographic log

PHOTO LOG

Plate No.	Description
1	Drilling Rig
2	Installation of HDPE Pipework
3	Installation of 20/40 Gravel
4	Checking the depth of Gravel
5	Mixing of Bentonite outside of the borehole
6	Pouring of Bentonite into the borehole
7	Completed installation to Gas Well 21R

Plate 1

Plate 2

Plate 3

Plate 4

Plate 5

Plate 6

Plate 7

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Infinis Energy Services Ltd.

Chirk Landfill Site

Retro-Drilling of Gas Wells

Construction Quality Assurance Report

4. Welding Logs.

Joint Record

www.jointmanager.com

Joint Status	**DUMMY JOINT COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:27
Uploader	jrumney
Joint Identification	
Joint Number	1
Reference	6892641
Created	07/05/2015 10:26:08
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	8.3°C
Pipe Selected	
	PE80 160mm SDR 11 Black

Pipe/Fitting Details

Welding Parameters

Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	11.1 (bar)
	Dynamic Drag	11.1 (bar)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.5
Bead Pressure (bar)	[11.12]+17.0	28.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[11.12]+17.0	0.0
Cool Time (s)	600.0	0.0
Joint Simulated	Yes	
Final Bead OK	No	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:27
Uploader	jrumney
Joint Identification	
Joint Number	2
Reference	6892642
Created	07/05/2015 10:41:33
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	9°C
Pipe Selected	
	PE80 160mm SDR 11 Black

Pipe/Fitting Details

Welding Parameters

Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	11.0 (bar)
	Dynamic Drag	11.0 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.5
Bead Pressure (bar)	[11]+17.0	28.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[11]+17.0	28.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:27
Uploader	jrumney
Joint Identification	
Joint Number	3
Reference	6892643
Created	07/05/2015 11:02:23
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	12°C
Pipe Selected	
	PE80 160mm SDR 11 Black

Pipe/Fitting Details

Welding Parameters

Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.1 (bar)
	Dynamic Drag	8.1 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.2
Bead Pressure (bar)	[8.13]+17.0	24.5
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.13]+17.0	25.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	4	
Reference	6892644	
Created	07/05/2015 11:22:31	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	12.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	11.8 (bar)
	Dynamic Drag	11.8 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.2
Bead Pressure (bar)	[11.75]+17.0	29.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[11.75]+17.0	28.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	5	
Reference	6892645	
Created	07/05/2015 11:42:22	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	14.8°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.4 (bar)
	Dynamic Drag	8.4 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.2
Bead Pressure (bar)	[8.37]+17.0	25.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.37]+17.0	25.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**Cool time short**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	6	
Reference	6892646	
Created	07/05/2015 12:07:59	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.9 (bar)
	Dynamic Drag	8.9 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.2
Bead Pressure (bar)	[8.88]+17.0	26.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.88]+17.0	25.8
Cool Time (s)	600.0	596.6
Final Bead OK	No	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	7	
Reference	6892647	
Created	07/05/2015 13:39:43	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	16°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	9.4 (bar)
	Dynamic Drag	9.4 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.8
Bead Pressure (bar)	[9.38]+17.0	26.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[9.38]+17.0	26.4
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	8	
Reference	6892648	
Created	07/05/2015 14:03:33	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	17.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.8 (bar)
	Dynamic Drag	8.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[8.75]+17.0	26.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.75]+17.0	26.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	9	
Reference	6892649	
Created	07/05/2015 14:24:54	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	18.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	11.6 (bar)
	Dynamic Drag	11.6 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.2
Bead Pressure (bar)	[11.63]+17.0	28.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[11.63]+17.0	28.5
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:27
Uploader	jrumney
Joint Identification	
Joint Number	10
Reference	6892650
Created	07/05/2015 14:47:07
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	17°C
Pipe Selected	
	PE80 160mm SDR 11 Black

Pipe/Fitting Details

Welding Parameters

Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.4 (bar)
	Dynamic Drag	6.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[6.38]+17.0	23.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.38]+17.0	23.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:27
Uploader	jrumney
Joint Identification	
Joint Number	11
Reference	6892651
Created	07/05/2015 15:18:39
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	17.7°C
Pipe Selected	
	PE80 160mm SDR 11 Black

Pipe/Fitting Details

Welding Parameters

Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	10.1 (bar)
	Dynamic Drag	10.1 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[10.13]+17.0	27.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[10.13]+17.0	27.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**DUMMY JOINT COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:27
Uploader	jrumney
Joint Identification	
Joint Number	12
Reference	6892652
Created	08/05/2015 09:50:18
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	12.2°C
Pipe Selected	
	PE80 160mm SDR 11 Black

Pipe/Fitting Details

Welding Parameters

Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.2 (bar)
	Dynamic Drag	7.2 (bar)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.8
Bead Pressure (bar)	[7.25]+17.0	25.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.25]+17.0	0.0
Cool Time (s)	600.0	0.0
Joint Simulated	Yes	
Final Bead OK	No	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	13	
Reference	6892653	
Created	08/05/2015 10:05:47	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	13.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.1 (bar)
	Dynamic Drag	7.1 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.0
Bead Pressure (bar)	[7.13]+17.0	25.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.13]+17.0	23.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	14	
Reference	6892654	
Created	08/05/2015 10:26:45	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	15°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.2 (bar)
	Dynamic Drag	8.2 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[8.25]+17.0	25.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.25]+17.0	25.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	15	
Reference	6892655	
Created	08/05/2015 10:46:21	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	14°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.1 (bar)
	Dynamic Drag	7.1 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[7.13]+17.0	24.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.13]+17.0	24.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:27		
Uploader	jrumney		
Joint Identification			
Joint Number	16		
Reference	6892656		
Created	08/05/2015 11:05:04		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	14.2°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	7.2 (bar)	
	Dynamic Drag	7.2 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.5	
Bead Pressure (bar)	[7.25]+17.0	24.5	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[7.25]+17.0	24.1	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:27		
Uploader	jrumney		
Joint Identification			
Joint Number	17		
Reference	6892657		
Created	08/05/2015 11:23:55		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	14°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	8.4 (bar)	
	Dynamic Drag	8.4 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.5	
Bead Pressure (bar)	[8.37]+17.0	26.5	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[8.37]+17.0	25.5	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:27		
Uploader	jrumney		
Joint Identification			
Joint Number	18		
Reference	6892658		
Created	08/05/2015 11:42:39		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	14.2°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	7.4 (bar)	
	Dynamic Drag	7.4 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	231.5	
Bead Pressure (bar)	[7.37]+17.0	24.0	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[7.37]+17.0	24.5	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	19	
Reference	6892659	
Created	08/05/2015 12:07:29	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	15.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.6 (bar)
	Dynamic Drag	6.6 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.2
Bead Pressure (bar)	[6.62]+17.0	23.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.62]+17.0	23.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	20	
Reference	6892660	
Created	08/05/2015 12:33:42	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	18.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	9.1 (bar)
	Dynamic Drag	9.1 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.0
Bead Pressure (bar)	[9.12]+17.0	26.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[9.12]+17.0	26.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:27	
Uploader	jrumney	
Joint Identification		
Joint Number	21	
Reference	6892661	
Created	08/05/2015 12:54:44	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.2 (bar)
	Dynamic Drag	7.2 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.2
Bead Pressure (bar)	[7.25]+17.0	24.5
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.25]+17.0	24.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	22	
Reference	6892662	
Created	08/05/2015 13:15:02	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.6 (bar)
	Dynamic Drag	7.6 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.2
Bead Pressure (bar)	[7.63]+17.0	25.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.63]+17.0	24.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	23	
Reference	6892663	
Created	08/05/2015 13:51:12	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	18.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.6 (bar)
	Dynamic Drag	7.6 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.8
Bead Pressure (bar)	[7.63]+17.0	24.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.63]+17.0	24.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	24	
Reference	6892664	
Created	08/05/2015 14:11:04	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	18.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.0 (bar)
	Dynamic Drag	8.0 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.2
Bead Pressure (bar)	[8]+17.0	24.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8]+17.0	24.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	25	
Reference	6892665	
Created	08/05/2015 14:31:03	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.4 (bar)
	Dynamic Drag	7.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.8
Bead Pressure (bar)	[7.37]+17.0	24.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.37]+17.0	24.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	26	
Reference	6892666	
Created	08/05/2015 14:51:15	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.0 (bar)
	Dynamic Drag	8.0 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.2
Bead Pressure (bar)	[8]+17.0	25.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8]+17.0	24.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	27	
Reference	6892667	
Created	08/05/2015 15:11:45	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.8 (bar)
	Dynamic Drag	7.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.2
Bead Pressure (bar)	[7.75]+17.0	24.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.75]+17.0	24.5
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**DUMMY JOINT COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	28	
Reference	6892668	
Created	11/05/2015 08:51:14	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	11.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.5 (bar)
	Dynamic Drag	8.5 (bar)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.8
Bead Pressure (bar)	[8.5]+17.0	27.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.5]+17.0	0.0
Cool Time (s)	600.0	0.0
Joint Simulated	Yes	
Final Bead OK	No	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	29	
Reference	6892669	
Created	11/05/2015 09:00:40	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	13°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.8 (bar)
	Dynamic Drag	8.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[8.75]+17.0	25.5
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.75]+17.0	25.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	30	
Reference	6892670	
Created	11/05/2015 09:22:53	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	17.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	9.1 (bar)
	Dynamic Drag	9.1 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[9.12]+17.0	26.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[9.12]+17.0	25.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	31	
Reference	6892671	
Created	11/05/2015 10:04:46	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	20.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.9 (bar)
	Dynamic Drag	8.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.0
Bead Pressure (bar)	[8.88]+17.0	27.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.88]+17.0	25.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	32	
Reference	6892672	
Created	11/05/2015 10:29:14	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	20°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.0 (bar)
	Dynamic Drag	8.0 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.8
Bead Pressure (bar)	[8]+17.0	25.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8]+17.0	24.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	33	
Reference	6892673	
Created	11/05/2015 10:47:30	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	23°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.5 (bar)
	Dynamic Drag	6.5 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[6.5]+17.0	23.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.5]+17.0	23.5
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	34	
Reference	6892674	
Created	11/05/2015 11:07:18	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	26.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.8 (bar)
	Dynamic Drag	8.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.0
Bead Pressure (bar)	[8.75]+17.0	26.5
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.75]+17.0	25.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	35	
Reference	6892675	
Created	11/05/2015 11:26:06	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	28.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	9.8 (bar)
	Dynamic Drag	9.8 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[9.75]+17.0	27.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[9.75]+17.0	26.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	36	
Reference	6892676	
Created	11/05/2015 11:44:37	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	28.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.4 (bar)
	Dynamic Drag	7.2 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.8
Bead Pressure (bar)	[7.37]+17.0	24.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.25]+17.0	24.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	37	
Reference	6892677	
Created	11/05/2015 12:02:32	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	27.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.6 (bar)
	Dynamic Drag	6.6 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.0
Bead Pressure (bar)	[6.62]+17.0	23.5
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.62]+17.0	23.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	38	
Reference	6892678	
Created	11/05/2015 13:04:09	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	23°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.5 (bar)
	Dynamic Drag	8.5 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.0
Bead Pressure (bar)	[8.5]+17.0	26.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.5]+17.0	25.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	39	
Reference	6892679	
Created	11/05/2015 13:23:12	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	22.8°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.1 (bar)
	Dynamic Drag	7.1 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[7.13]+17.0	24.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.13]+17.0	24.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	40	
Reference	6892680	
Created	11/05/2015 13:40:45	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	22.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.9 (bar)
	Dynamic Drag	6.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.8
Bead Pressure (bar)	[6.88]+17.0	23.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.88]+17.0	23.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	41	
Reference	6892681	
Created	11/05/2015 14:00:58	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	22°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.2 (bar)
	Dynamic Drag	6.1 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.8
Bead Pressure (bar)	[6.25]+17.0	23.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.12]+17.0	23.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:28	
Uploader	jrumney	
Joint Identification		
Joint Number	42	
Reference	6892682	
Created	11/05/2015 14:19:06	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	21°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.8 (bar)
	Dynamic Drag	8.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.0
Bead Pressure (bar)	[8.75]+17.0	25.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.75]+17.0	25.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	43	
Reference	6892683	
Created	11/05/2015 14:36:56	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	21.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.0 (bar)
	Dynamic Drag	7.0 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[7]+17.0	23.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7]+17.0	24.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	44	
Reference	6892684	
Created	11/05/2015 14:53:40	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	21.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.0 (bar)
	Dynamic Drag	7.0 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[7]+17.0	23.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7]+17.0	24.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**DUMMY JOINT COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	45	
Reference	6892685	
Created	12/05/2015 08:44:11	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	9.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	9.2 (bar)
	Dynamic Drag	9.2 (bar)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.5
Bead Pressure (bar)	[9.25]+17.0	28.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[9.25]+17.0	0.0
Cool Time (s)	600.0	0.0
Joint Simulated	Yes	
Final Bead OK	No	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	46	
Reference	6892686	
Created	12/05/2015 08:55:24	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	10.8°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	9.9 (bar)
	Dynamic Drag	9.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.2
Bead Pressure (bar)	[9.88]+17.0	26.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[9.88]+17.0	27.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	47	
Reference	6892687	
Created	12/05/2015 09:13:54	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	12.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	9.6 (bar)
	Dynamic Drag	9.6 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.2
Bead Pressure (bar)	[9.63]+17.0	27.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[9.63]+17.0	26.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	48	
Reference	6892688	
Created	12/05/2015 09:33:15	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	13.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.9 (bar)
	Dynamic Drag	7.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[7.88]+17.0	24.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.88]+17.0	24.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	49	
Reference	6892689	
Created	12/05/2015 09:52:25	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	14.8°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.4 (bar)
	Dynamic Drag	7.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[7.37]+17.0	24.5
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.37]+17.0	24.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	50	
Reference	6892690	
Created	12/05/2015 10:12:18	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	16°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.2 (bar)
	Dynamic Drag	8.2 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.2
Bead Pressure (bar)	[8.25]+17.0	24.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.25]+17.0	25.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	51	
Reference	6892691	
Created	12/05/2015 10:32:47	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	17°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.8 (bar)
	Dynamic Drag	6.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[6.75]+17.0	23.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.75]+17.0	23.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	52	
Reference	6892692	
Created	12/05/2015 11:01:47	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	18.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.1 (bar)
	Dynamic Drag	8.1 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[8.13]+17.0	26.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.13]+17.0	25.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	53	
Reference	6892693	
Created	12/05/2015 11:25:27	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	24°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.5 (bar)
	Dynamic Drag	7.5 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.2
Bead Pressure (bar)	[7.5]+17.0	24.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.5]+17.0	24.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	54	
Reference	6892694	
Created	12/05/2015 11:43:11	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	23.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.8 (bar)
	Dynamic Drag	7.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.2
Bead Pressure (bar)	[7.75]+17.0	24.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.75]+17.0	24.5
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	55	
Reference	6892695	
Created	12/05/2015 12:01:07	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	24.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.0 (bar)
	Dynamic Drag	8.0 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[8]+17.0	24.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8]+17.0	25.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	56	
Reference	6892696	
Created	12/05/2015 13:10:24	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	21.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.9 (bar)
	Dynamic Drag	8.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	233.0
Bead Pressure (bar)	[8.88]+17.0	26.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.88]+17.0	25.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	57	
Reference	6892697	
Created	12/05/2015 13:31:39	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.2 (bar)
	Dynamic Drag	8.2 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[8.25]+17.0	25.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.25]+17.0	25.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	58	
Reference	6892698	
Created	12/05/2015 13:50:24	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	20°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.2 (bar)
	Dynamic Drag	6.2 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[6.25]+17.0	24.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.25]+17.0	23.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	59	
Reference	6892699	
Created	12/05/2015 14:13:57	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.6 (bar)
	Dynamic Drag	7.6 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.8
Bead Pressure (bar)	[7.63]+17.0	24.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.63]+17.0	24.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	60	
Reference	6892700	
Created	12/05/2015 14:31:53	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.8 (bar)
	Dynamic Drag	7.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.0
Bead Pressure (bar)	[7.75]+17.0	24.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.75]+17.0	24.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	61	
Reference	6892701	
Created	12/05/2015 14:49:47	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	18.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.8 (bar)
	Dynamic Drag	8.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[8.75]+17.0	25.5
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.75]+17.0	25.4
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	62	
Reference	6892702	
Created	12/05/2015 15:07:44	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	17.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.8 (bar)
	Dynamic Drag	8.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.0
Bead Pressure (bar)	[8.75]+17.0	26.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.75]+17.0	25.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	63	
Reference	6892703	
Created	12/05/2015 15:25:54	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	16.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.4 (bar)
	Dynamic Drag	6.4 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.2
Bead Pressure (bar)	[6.38]+17.0	22.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.38]+17.0	23.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**DUMMY JOINT COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	64	
Reference	6892704	
Created	13/05/2015 08:40:46	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	14.8°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.5 (bar)
	Dynamic Drag	6.5 (bar)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.5
Bead Pressure (bar)	[6.5]+17.0	23.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.5]+17.0	0.0
Cool Time (s)	600.0	0.0
Joint Simulated	Yes	
Final Bead OK	No	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	65	
Reference	6892705	
Created	13/05/2015 08:50:47	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	18.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.4 (bar)
	Dynamic Drag	6.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.0
Bead Pressure (bar)	[6.38]+17.0	22.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.38]+17.0	23.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	66	
Reference	6892706	
Created	13/05/2015 09:10:48	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	16.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.4 (bar)
	Dynamic Drag	7.4 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.8
Bead Pressure (bar)	[7.37]+17.0	24.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.37]+17.0	24.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	67	
Reference	6892707	
Created	13/05/2015 09:28:40	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	17.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.5 (bar)
	Dynamic Drag	7.5 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[7.5]+17.0	24.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.5]+17.0	24.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	68	
Reference	6892708	
Created	13/05/2015 09:47:57	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	22.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.0 (bar)
	Dynamic Drag	7.0 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.8
Bead Pressure (bar)	[7]+17.0	24.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7]+17.0	24.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	69	
Reference	6892709	
Created	13/05/2015 10:05:55	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	22.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.9 (bar)
	Dynamic Drag	7.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.8
Bead Pressure (bar)	[7.88]+17.0	25.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.88]+17.0	24.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	70	
Reference	6892710	
Created	13/05/2015 10:23:55	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	21.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.9 (bar)
	Dynamic Drag	7.9 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[7.88]+17.0	24.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.88]+17.0	24.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	71	
Reference	6892711	
Created	13/05/2015 10:41:11	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	21.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.9 (bar)
	Dynamic Drag	6.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[6.88]+17.0	23.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.88]+17.0	23.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:29	
Uploader	jrumney	
Joint Identification		
Joint Number	72	
Reference	6892712	
Created	13/05/2015 11:03:12	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	20.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.8 (bar)
	Dynamic Drag	7.8 (bar)
	Dwell Time	1.6 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.2
Bead Pressure (bar)	[7.75]+17.0	24.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.75]+17.0	24.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	73	
Reference	6892713	
Created	13/05/2015 11:20:55	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	19.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.8 (bar)
	Dynamic Drag	7.8 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[7.75]+17.0	25.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.75]+17.0	24.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	74	
Reference	6892714	
Created	13/05/2015 11:39:21	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	26°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.4 (bar)
	Dynamic Drag	8.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.2
Bead Pressure (bar)	[8.37]+17.0	25.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.37]+17.0	25.4
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	75	
Reference	6892715	
Created	13/05/2015 11:57:51	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	26.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.4 (bar)
	Dynamic Drag	8.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[8.37]+17.0	25.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.37]+17.0	25.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	76		
Reference	6892716		
Created	13/05/2015 12:54:39		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	23.5°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	8.1 (bar)	
	Dynamic Drag	8.1 (bar)	
	Dwell Time	1.6 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	232.5	
Bead Pressure (bar)	[8.13]+17.0	25.8	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[8.13]+17.0	25.0	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	77		
Reference	6892717		
Created	13/05/2015 13:15:30		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	20.2°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	8.9 (bar)	
	Dynamic Drag	8.9 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	231.2	
Bead Pressure (bar)	[8.88]+17.0	25.6	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[8.88]+17.0	25.8	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	78		
Reference	6892718		
Created	13/05/2015 13:35:44		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	19.2°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	7.2 (bar)	
	Dynamic Drag	7.2 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	232.2	
Bead Pressure (bar)	[7.25]+17.0	24.0	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[7.25]+17.0	24.2	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	79	
Reference	6892719	
Created	13/05/2015 13:56:26	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	20.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	6.5 (bar)
	Dynamic Drag	6.5 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	233.2
Bead Pressure (bar)	[6.5]+17.0	22.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.5]+17.0	23.4
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	80	
Reference	6892720	
Created	13/05/2015 14:22:41	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	24°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.1 (bar)
	Dynamic Drag	8.1 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.2
Bead Pressure (bar)	[8.13]+17.0	25.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.13]+17.0	25.2
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	81	
Reference	6892721	
Created	13/05/2015 14:41:41	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	22.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.4 (bar)
	Dynamic Drag	8.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[8.37]+17.0	25.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.37]+17.0	25.4
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	82	
Reference	6892722	
Created	13/05/2015 15:01:24	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	23.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.5 (bar)
	Dynamic Drag	8.5 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.0
Bead Pressure (bar)	[8.5]+17.0	25.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.5]+17.0	25.4
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	83	
Reference	6892723	
Created	13/05/2015 15:19:41	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	25.8°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.5 (bar)
	Dynamic Drag	8.5 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.2
Bead Pressure (bar)	[8.5]+17.0	25.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.5]+17.0	25.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	84	
Reference	6892724	
Created	13/05/2015 15:37:46	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	27.8°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.0 (bar)
	Dynamic Drag	8.0 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.2
Bead Pressure (bar)	[8]+17.0	25.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8]+17.0	24.9
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**DUMMY JOINT COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:30
Uploader	jrumney
Joint Identification	
Joint Number	85
Reference	6892725
Created	14/05/2015 08:20:23
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	6.2°C
Pipe Selected	
	PE80 160mm SDR 11 Black
Pipe/Fitting Details	
Welding Parameters	
Standard	WIS4-32-08

Drag Parameters (##)	Peak Drag	7.1 (bar)
	Dynamic Drag	7.1 (bar)

	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.8
Bead Pressure (bar)	[7.13]+17.0	24.6
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.13]+17.0	0.0
Cool Time (s)	600.0	0.0

Joint Simulated	Yes
Final Bead OK	No

Joint Record

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Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:30
Uploader	jrumney
Joint Identification	
Joint Number	86
Reference	6892726
Created	14/05/2015 08:29:15
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	6.8°C
Pipe Selected	
	PE80 160mm SDR 11 Black
Pipe/Fitting Details	
Welding Parameters	
Standard	WIS4-32-08

Drag Parameters (##)	Peak Drag	6.9 (bar)
	Dynamic Drag	6.9 (bar)
	Dwell Time	1.7 (secs)

	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.8
Bead Pressure (bar)	[6.88]+17.0	24.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[6.88]+17.0	23.6
Cool Time (s)	600.0	600.0

Final Bead OK	Yes

Joint Record

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Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	21/05/2015 18:08:30
Uploader	jrumney
Joint Identification	
Joint Number	87
Reference	6892727
Created	14/05/2015 09:10:18
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	7°C
Pipe Selected	
	PE80 160mm SDR 11 Black
Pipe/Fitting Details	
Welding Parameters	
Standard	WIS4-32-08

Drag Parameters (##)	Peak Drag	13.2 (bar)
	Dynamic Drag	13.2 (bar)
	Dwell Time	1.7 (secs)

	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.5
Bead Pressure (bar)	[13.25]+17.0	29.5
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[13.25]+17.0	30.6
Cool Time (s)	600.0	600.0

Final Bead OK	Yes

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	88		
Reference	6892728		
Created	14/05/2015 09:30:06		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	8.8°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	9.0 (bar)	
	Dynamic Drag	9.0 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.2	
Bead Pressure (bar)	[9]+17.0	26.2	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[9]+17.0	25.8	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	89		
Reference	6892729		
Created	14/05/2015 09:48:24		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	10°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	9.1 (bar)	
	Dynamic Drag	9.1 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.2	
Bead Pressure (bar)	[9.12]+17.0	26.1	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[9.12]+17.0	26.0	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	90		
Reference	6892730		
Created	14/05/2015 10:07:18		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	10°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	9.8 (bar)	
	Dynamic Drag	9.8 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.5	
Bead Pressure (bar)	[9.75]+17.0	26.5	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[9.75]+17.0	26.9	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	91	
Reference	6892731	
Created	14/05/2015 10:26:30	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	10.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.6 (bar)
	Dynamic Drag	7.6 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[7.63]+17.0	24.2
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.63]+17.0	24.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	92	
Reference	6892732	
Created	14/05/2015 10:45:40	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	11.3°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.9 (bar)
	Dynamic Drag	7.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.8
Bead Pressure (bar)	[7.88]+17.0	25.0
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.88]+17.0	24.8
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	93	
Reference	6892733	
Created	14/05/2015 11:05:30	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	12.2°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.9 (bar)
	Dynamic Drag	7.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[7.88]+17.0	24.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.88]+17.0	25.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	94		
Reference	6892734		
Created	14/05/2015 11:23:28		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	12.7°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	7.1 (bar)	
	Dynamic Drag	7.1 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	229.2	
Bead Pressure (bar)	[7.13]+17.0	24.1	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[7.13]+17.0	24.0	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	95		
Reference	6892735		
Created	14/05/2015 11:47:40		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	12.7°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	8.4 (bar)	
	Dynamic Drag	8.4 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.5	
Bead Pressure (bar)	[8.37]+17.0	25.2	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[8.37]+17.0	25.2	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	21/05/2015 18:08:30		
Uploader	jrumney		
Joint Identification			
Joint Number	96		
Reference	6892736		
Created	14/05/2015 13:00:04		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	11°C		
Pipe Selected			
	PE80 160mm SDR 11 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	WIS4-32-08		
Drag Parameters (##)	Peak Drag	8.0 (bar)	
	Dynamic Drag	8.0 (bar)	
	Dwell Time	1.7 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	231.5	
Bead Pressure (bar)	[8]+17.0	24.6	
Bead Distance (µm)	200.0	200.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	205.0	205.0	
Fusion Pressure (bar)	[8]+17.0	24.8	
Cool Time (s)	600.0	600.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	97	
Reference	6892737	
Created	14/05/2015 13:18:17	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	11.7°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.4 (bar)
	Dynamic Drag	8.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.2
Bead Pressure (bar)	[8.37]+17.0	25.4
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.37]+17.0	25.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	98	
Reference	6892738	
Created	14/05/2015 13:36:27	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	13°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	8.1 (bar)
	Dynamic Drag	8.1 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.2
Bead Pressure (bar)	[8.13]+17.0	26.1
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[8.13]+17.0	25.0
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:30	
Uploader	jrumney	
Joint Identification		
Joint Number	99	
Reference	6892739	
Created	14/05/2015 13:57:09	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	13.5°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	10.2 (bar)
	Dynamic Drag	10.2 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.8
Bead Pressure (bar)	[10.25]+17.0	26.9
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[10.25]+17.0	27.1
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	21/05/2015 18:08:31	
Uploader	jrumney	
Joint Identification		
Joint Number	100	
Reference	6892740	
Created	14/05/2015 14:15:04	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	14.8°C	
Pipe Selected		
	PE80 160mm SDR 11 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	WIS4-32-08	
Drag Parameters (##)	Peak Drag	7.9 (bar)
	Dynamic Drag	7.9 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.8
Bead Pressure (bar)	[7.88]+17.0	24.8
Bead Distance (µm)	200.0	200.0
Soak Pressure (bar)	0	0
Soak Time (s)	205.0	205.0
Fusion Pressure (bar)	[7.88]+17.0	24.6
Cool Time (s)	600.0	600.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**DUMMY JOINT COMPLETE**	
Account	JSR20M	
Uploaded	05/06/2015 17:57:03	
Uploader	jrumney	
Joint Identification		
Joint Number	101	
Reference	6959481	
Created	15/05/2015 08:41:09	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	17.5°C	
Pipe Selected		
	PE80 160mm SDR 26 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	8.2 (bar)
	Dynamic Drag	8.2 (bar)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	232.2
Bead Pressure (bar)	[8.25]+7.0	14.8
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[8.25]+7.0	0.0
Cool Time (s)	140.0	0.0
Joint Simulated	Yes	
Final Bead OK	No	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	05/06/2015 17:57:03	
Uploader	jrumney	
Joint Identification		
Joint Number	102	
Reference	6959482	
Created	15/05/2015 08:47:02	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	18.5°C	
Pipe Selected		
	PE80 160mm SDR 26 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	8.4 (bar)
	Dynamic Drag	8.4 (bar)
	Dwell Time	1.8 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[8.37]+7.0	15.1
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[8.37]+7.0	15.4
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:03		
Uploader	jrumney		
Joint Identification			
Joint Number	103		
Reference	6959483		
Created	15/05/2015 08:54:52		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	19.7°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	9.1 (bar)	
	Dynamic Drag	9.1 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	229.5	
Bead Pressure (bar)	[9.12]+7.0	16.8	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[9.12]+7.0	15.9	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:03		
Uploader	jrumney		
Joint Identification			
Joint Number	104		
Reference	6959484		
Created	15/05/2015 09:05:35		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	22.2°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	8.1 (bar)	
	Dynamic Drag	8.1 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	229.5	
Bead Pressure (bar)	[8.13]+7.0	15.4	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[8.13]+7.0	15.1	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:03		
Uploader	jrumney		
Joint Identification			
Joint Number	105		
Reference	6959485		
Created	15/05/2015 09:15:13		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	24.5°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	8.5 (bar)	
	Dynamic Drag	8.5 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	229.5	
Bead Pressure (bar)	[8.5]+7.0	15.9	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[8.5]+7.0	15.4	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	05/06/2015 17:57:04	
Uploader	jrumney	
Joint Identification		
Joint Number	106	
Reference	6959486	
Created	15/05/2015 09:22:14	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	25.3°C	
Pipe Selected		
	PE80 160mm SDR 26 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	8.8 (bar)
	Dynamic Drag	8.8 (bar)
	Dwell Time	1.8 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[8.75]+7.0	15.1
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[8.75]+7.0	16.0
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	05/06/2015 17:57:04	
Uploader	jrumney	
Joint Identification		
Joint Number	107	
Reference	6959487	
Created	15/05/2015 09:30:04	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	26.5°C	
Pipe Selected		
	PE80 160mm SDR 26 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	7.6 (bar)
	Dynamic Drag	7.6 (bar)
	Dwell Time	1.8 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.5
Bead Pressure (bar)	[7.63]+7.0	14.9
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[7.63]+7.0	14.5
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	05/06/2015 17:57:04	
Uploader	jrumney	
Joint Identification		
Joint Number	108	
Reference	6959488	
Created	15/05/2015 10:07:33	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	29°C	
Pipe Selected		
	PE80 160mm SDR 26 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	8.0 (bar)
	Dynamic Drag	8.0 (bar)
	Dwell Time	1.8 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	233.2
Bead Pressure (bar)	[8]+7.0	14.8
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[8]+7.0	14.9
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	05/06/2015 17:57:04	
Uploader	jrumney	
Joint Identification		
Joint Number	109	
Reference	6959489	
Created	15/05/2015 10:16:03	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	29°C	
Pipe Selected		
	PE80 160mm SDR 26 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	8.8 (bar)
	Dynamic Drag	8.5 (bar)
	Dwell Time	1.8 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[8.75]+7.0	15.6
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[8.5]+7.0	15.6
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	05/06/2015 17:57:04	
Uploader	jrumney	
Joint Identification		
Joint Number	110	
Reference	6959490	
Created	15/05/2015 10:24:59	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	29.5°C	
Pipe Selected		
	PE80 160mm SDR 26 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	9.4 (bar)
	Dynamic Drag	9.4 (bar)
	Dwell Time	1.7 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[9.38]+7.0	16.2
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[9.38]+7.0	16.2
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**	
Account	JSR20M	
Uploaded	05/06/2015 17:57:04	
Uploader	jrumney	
Joint Identification		
Joint Number	111	
Reference	6959491	
Created	29/05/2015 13:16:44	
Operator	JSRCG	
Project Details		
Project Joint Number	0.*	
Machine		
Model	Gator	
Type	GATOR180	
Serial Number	G180-2003	
Owner	FUSION HIRE	
Software version	VH.64TS/GB	
Operating Voltage	110V	
Location & Environment		
Location	1514 C2	
Ambient Temp	10.8°C	
Pipe Selected		
	PE80 160mm SDR 26 Black	
Pipe/Fitting Details		
Welding Parameters		
Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	7.2 (bar)
	Dynamic Drag	7.2 (bar)
	Dwell Time	1.8 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	231.8
Bead Pressure (bar)	[7.25]+7.0	14.1
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[7.25]+7.0	14.2
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	112		
Reference	6959492		
Created	29/05/2015 13:24:53		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	11.3°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	7.5 (bar)	
	Dynamic Drag	7.5 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.5	
Bead Pressure (bar)	[7.5]+7.0	15.4	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[7.5]+7.0	14.2	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	113		
Reference	6959493		
Created	29/05/2015 13:33:36		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	12.5°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	7.2 (bar)	
	Dynamic Drag	7.2 (bar)	
	Dwell Time	1.9 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.8	
Bead Pressure (bar)	[7.25]+7.0	14.8	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[7.25]+7.0	14.2	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	114		
Reference	6959494		
Created	29/05/2015 13:39:59		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	13°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	7.5 (bar)	
	Dynamic Drag	7.5 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	229.8	
Bead Pressure (bar)	[7.5]+7.0	14.8	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[7.5]+7.0	14.4	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	115		
Reference	6959495		
Created	29/05/2015 13:47:15		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	13.7°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	7.2 (bar)	
	Dynamic Drag	7.2 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.2	
Bead Pressure (bar)	[7.25]+7.0	14.1	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[7.25]+7.0	14.4	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	116		
Reference	6959496		
Created	29/05/2015 13:53:52		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	13.5°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	7.9 (bar)	
	Dynamic Drag	7.9 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	229.2	
Bead Pressure (bar)	[7.88]+7.0	15.2	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[7.88]+7.0	14.9	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	117		
Reference	6959497		
Created	29/05/2015 13:59:54		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	14.2°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	7.6 (bar)	
	Dynamic Drag	7.6 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	229.5	
Bead Pressure (bar)	[7.63]+7.0	14.5	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[7.63]+7.0	14.6	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	118		
Reference	6959498		
Created	29/05/2015 14:06:37		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	14.5°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	7.5 (bar)	
	Dynamic Drag	7.5 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	230.2	
Bead Pressure (bar)	[7.5]+7.0	14.6	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[7.5]+7.0	14.4	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	119		
Reference	6959499		
Created	29/05/2015 14:14:50		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	15.2°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	7.6 (bar)	
	Dynamic Drag	7.6 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	231.0	
Bead Pressure (bar)	[7.63]+7.0	15.0	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[7.63]+7.0	14.6	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

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Joint Status	**COMPLETE**		
Account	JSR20M		
Uploaded	05/06/2015 17:57:04		
Uploader	jrumney		
Joint Identification			
Joint Number	120		
Reference	6959500		
Created	29/05/2015 14:20:55		
Operator	JSRCG		
Project Details			
Project Joint Number	0.*		
Machine			
Model	Gator		
Type	GATOR180		
Serial Number	G180-2003		
Owner	FUSION HIRE		
Software version	VH.64TS/GB		
Operating Voltage	110V		
Location & Environment			
Location	1514 C2		
Ambient Temp	15.5°C		
Pipe Selected			
	PE80 160mm SDR 26 Black		
Pipe/Fitting Details			
Welding Parameters			
Standard	Fusion FW Landfill		
Drag Parameters (##)	Peak Drag	8.0 (bar)	
	Dynamic Drag	8.0 (bar)	
	Dwell Time	1.8 (secs)	
	TARGET	ACTUAL	
Heater Temp (°C)	233.0	229.8	
Bead Pressure (bar)	[8]+7.0	14.5	
Bead Distance (µm)	400.0	400.0	
Soak Pressure (bar)	0	0	
Soak Time (s)	15.0	15.0	
Fusion Pressure (bar)	[8]+7.0	14.9	
Cool Time (s)	140.0	140.0	
Final Bead OK	Yes		

Joint Record

www.jointmanager.com

Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	05/06/2015 17:57:04
Uploader	jrumney
Joint Identification	
Joint Number	121
Reference	6959501
Created	29/05/2015 14:27:51
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	16.5°C
Pipe Selected	
	PE80 160mm SDR 26 Black

Pipe/Fitting Details

Welding Parameters

Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	7.8 (bar)
	Dynamic Drag	7.8 (bar)
	Dwell Time	1.8 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[7.75]+7.0	15.2
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[7.75]+7.0	14.9
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	05/06/2015 17:57:04
Uploader	jrumney
Joint Identification	
Joint Number	122
Reference	6959502
Created	29/05/2015 14:35:24
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	15.5°C
Pipe Selected	
	PE80 160mm SDR 26 Black

Pipe/Fitting Details

Welding Parameters

Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	7.6 (bar)
	Dynamic Drag	7.6 (bar)
	Dwell Time	1.9 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	229.8
Bead Pressure (bar)	[7.63]+7.0	15.6
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[7.63]+7.0	14.8
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

Joint Record

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Joint Status	**COMPLETE**
Account	JSR20M
Uploaded	05/06/2015 17:57:04
Uploader	jrumney
Joint Identification	
Joint Number	123
Reference	6959503
Created	29/05/2015 14:44:21
Operator	JSRCG
Project Details	
Project Joint Number	0.*
Machine	
Model	Gator
Type	GATOR180
Serial Number	G180-2003
Owner	FUSION HIRE
Software version	VH.64TS/GB
Operating Voltage	110V
Location & Environment	
Location	1514 C2
Ambient Temp	16.7°C
Pipe Selected	
	PE80 160mm SDR 26 Black

Pipe/Fitting Details

Welding Parameters

Standard	Fusion FW Landfill	
Drag Parameters (##)	Peak Drag	7.4 (bar)
	Dynamic Drag	7.4 (bar)
	Dwell Time	1.8 (secs)
	TARGET	ACTUAL
Heater Temp (°C)	233.0	230.5
Bead Pressure (bar)	[7.37]+7.0	14.5
Bead Distance (µm)	400.0	400.0
Soak Pressure (bar)	0	0
Soak Time (s)	15.0	15.0
Fusion Pressure (bar)	[7.37]+7.0	14.5
Cool Time (s)	140.0	140.0
Final Bead OK	Yes	

ENGINEERING
ENVIRONMENTAL
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egniol

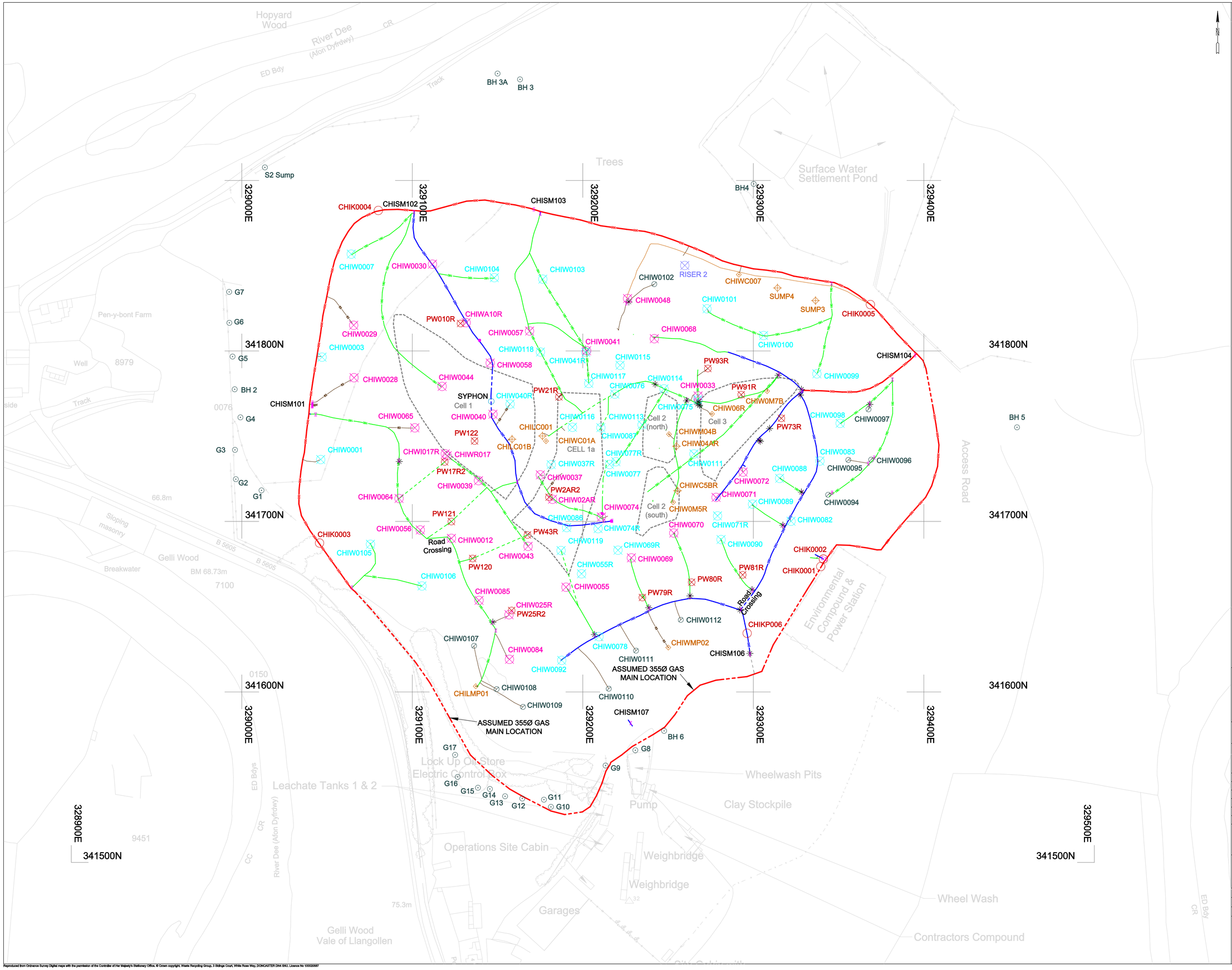
Infinis Energy Services Ltd.

Chirk Landfill Site

Retro-Drilling of Gas Wells

Construction Quality Assurance Report

5. Site Gas System Plan



LEGEND

Monitoring Points

- Landfill Gas Monitoring Borehole
- Landfill Gas Surface Monitoring Point
- Combined Gas/ Groundwater Monitoring Point
- Gas Flare Stack
- Landfill Gas Extraction/ Leachate Monitoring Point
- Condensate Unit (Knock-out Pot)
- Groundwater Monitoring Borehole
- Groundwater Pumping Point
- Surface Water Monitoring Point
- Leachate Collection Point
- Leachate Monitoring Point
- Leachate Recirculation Point
- Valve
- KOP
- PEG
- Manifold
- Finn Drains
- Pinwell

Gas Wells

- Gas Well 63Ø
- Gas Well 90Ø
- Gas Well 110Ø
- Gas Well 120Ø
- Gas Well 160Ø
- Gas Well 180Ø
- Gas Well 225Ø
- Gas Well 250Ø >
- Proposed Gas Well
- Decommissioned Gas Well

Infrastructure Pipework

Above ground Pipe	Underground Pipe
32mm Gas Pipe	
55mm Gas Pipe	
63mm Gas Pipe	
90mm Gas Pipe	
110mm Gas Pipe	
120mm Gas Pipe	
125mm Gas Pipe	
160mm Gas Pipe	
180mm Gas Pipe	
200mm Gas Pipe	
250mm Gas Pipe	
280mm Gas Pipe	
315mm Gas Pipe	
355mm Gas Pipe	
400mm Gas Pipe	
450mm Gas Pipe	
500mm Gas Pipe	
650mm Gas Pipe	
Leachate Pipe	
Airline Pipe	
Air and Discharge Pipe	
Discharge Pipe	
Condensate Pipe	
Leachate Recirculation Pipe	
Assumed Pipe	

Notes:

1. All dimensions are in metres unless otherwise stated.
2. All survey co-ordinates related to local site co-ordinate system.
3. For ground levels and top of well levels please refer to spreadsheet: '5484_G004 - CHIrk - Gas Well Co-ordinates and levels - October 2013.xls'
4. Background mapping copied from plan: '4864187-2011.dwg'
5. Boreholes copied from plan: '7751-1A.dwg'
6. 5484_DE amendments carried out as a "desk top exercise". No site survey undertaken, wells & pipes added from client supplied data. Please refer to file 'filename-1.pdf' for details of required amendments.

Disclaimer

THIS INFORMATION SHOULD NOT BE REGARDED AS ACCURATE AND SHOULD BE USED FOR GUIDANCE PURPOSES ONLY.

UTEC STARNET

GARD ID Prefix: CHI

Files/ Information used:

REVISIONS

No	Description	By	Ch'd	Date

Project:

CHIRK
LANDFILL SITE

Title:

Gas Infrastructure Plan

Drawn By	J.R.	Date	20/08/15
Ch'd By	A.M.	Date	20/08/15
Scale 1:	1000	Sheet Size	A1

infinis Limited
First Floor
500 Pavilion Drive
Northampton Business Park
Northampton
NN4 7YJ

infinis

Drawing No: 5484_DE

Plan 1

ENGINEERING
ENVIRONMENTAL
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