



DRILL STEM TEST REPORT

Prepared For: **Charter Energy Incorporated**

PO Box 252
Great Bend, KS 67530+0252

ATTN: Jim Musgrove

Symns #2

28-22s-14w Stafford,KS

Start Date: 2014.08.24 @ 13:01:00

End Date: 2014.08.24 @ 18:16:00

Job Ticket #: 60260 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.27 @ 11:44:16



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60260

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.08.24 @ 13:01:00

GENERAL INFORMATION:

Formation: **LKC D-E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:12:30

Time Test Ended: 18:16:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: S1 Great Bend/66

Interval: 3620.00 ft (KB) To 3642.00 ft (KB) (TVD)

Reference Elevations: 1957.00 ft (KB)

Total Depth: 3642.00 ft (KB) (TVD)

1950.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6749 Inside

Press@RunDepth: 81.73 psig @ 3638.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.24

End Date:

2014.08.24

Last Calib.: 2014.08.24

Start Time: 13:02:00

End Time:

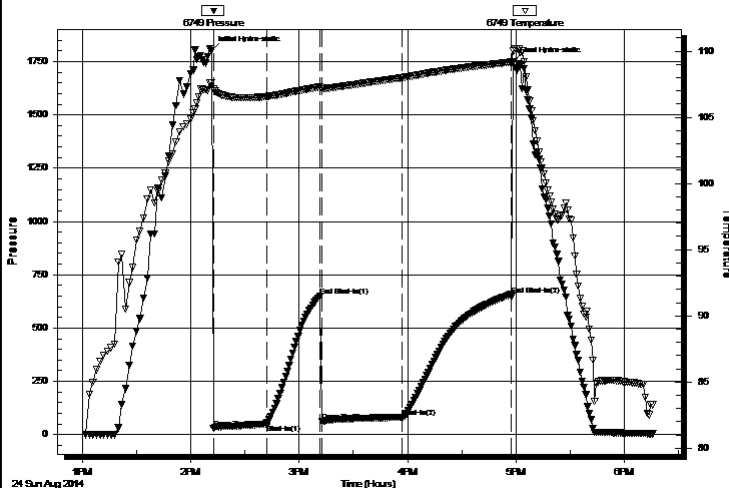
18:16:00

Time On Btm: 2014.08.24 @ 14:11:30

Time Off Btm: 2014.08.24 @ 16:58:30

TEST COMMENT: IFP 30 - Blow built to BOB in 4 min
ISI 30 - Blow back built to 3/4"
FFP 45 - Blow built to BOB in 30 seconds then slow ed after 2 minutes
FSI 60 - Blow back built to 2"

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1801.08	107.60	Initial Hydro-static
1	30.31	107.12	Open To Flow (1)
31	50.78	106.57	Shut-In(1)
60	648.78	107.31	End Shut-In(1)
61	64.09	107.18	Open To Flow (2)
106	81.73	108.00	Shut-In(2)
166	657.42	109.17	End Shut-In(2)
167	1749.19	110.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GWCO 10%G 15%W 75%O (65% Emuls	1.68
40.00	VGWCO 50%G 15%W 35%O 10% Emuls	0.56
0.00	2444' GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60260

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.08.24 @ 13:01:00

GENERAL INFORMATION:

Formation: **LKC D-E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:12:30

Time Test Ended: 18:16:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: S1 Great Bend/66

Interval: 3620.00 ft (KB) To 3642.00 ft (KB) (TVD)

Reference Elevations: 1957.00 ft (KB)

Total Depth: 3642.00 ft (KB) (TVD)

1950.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6663 Outside

Press@RunDepth: 657.23 psig @ 3639.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.24

End Date:

2014.08.24

Last Calib.:

2014.08.24

Start Time: 13:02:00

End Time:

18:16:30

Time On Btm:

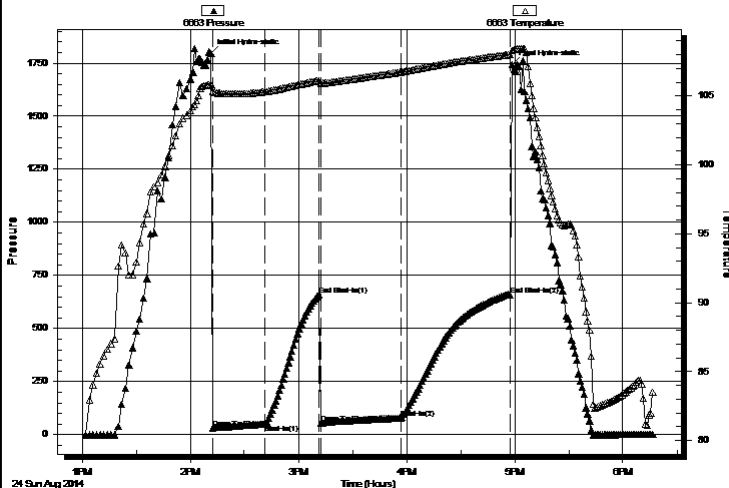
2014.08.24 @ 14:11:30

Time Off Btm:

2014.08.24 @ 16:58:30

TEST COMMENT: IFP 30 - Blow built to BOB in 4 min
ISI 30 - Blow back built to 3/4"
FFP 45 - Blow built to BOB in 30 seconds then slow ed after 2 minutes
FSI 60 - Blow back built to 2"

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1793.86	105.81	Initial Hydro-static
1	31.05	105.35	Open To Flow (1)
30	49.94	105.31	Shut-In(1)
60	659.49	106.12	End Shut-In(1)
61	55.20	105.95	Open To Flow (2)
106	79.06	106.74	Shut-In(2)
166	657.23	108.01	End Shut-In(2)
167	1744.06	108.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GWCO 10%G 15%W 75%O (65% Emuls	1.68
40.00	VGWCO 50%G 15%W 35%O 10% Emuls	0.56
0.00	2444' GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60260

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.08.24 @ 13:01:00

Tool Information

Drill Pipe:	Length:	3625.00 ft	Diameter:	3.80 inches	Volume:	50.85 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	48000.00 lb
					Total Volume:	50.85 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		25.00 ft					String Weight: Initial	44000.00 lb
Depth to Top Packer:		3620.00 ft					Final	44000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		22.00 ft						
Tool Length:		42.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			3605.00	
Hydraulic tool	5.00			3610.00	
Top Packer	5.00			3615.00	
Packer	5.00			3620.00	20.00 Bottom Of Top Packer
Anchor	17.00			3637.00	
Recorder	1.00	6749	Inside	3638.00	
Recorder	1.00	6663	Outside	3639.00	
Bullnose	3.00			3642.00	22.00 Anchor Tool

Total Tool Length: 42.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60260

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.08.24 @ 13:01:00

Mud and Cushion Information

Mud Type: Invert

Mud Weight: 9.00 lb/gal

Viscosity: 60.00 sec/qt

Water Loss: 10.18 in³

Resistivity: ohm.m

Salinity: 8500.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GWCO 10%G 15%W 75%O (65% Emuls Oil)	1.683
40.00	VGWCO 50%G 15%W 35%O 10% Emulsified	0.561
0.00	2444' GIP	0.000

Total Length: 160.00 ft

Total Volume: 2.244 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6749

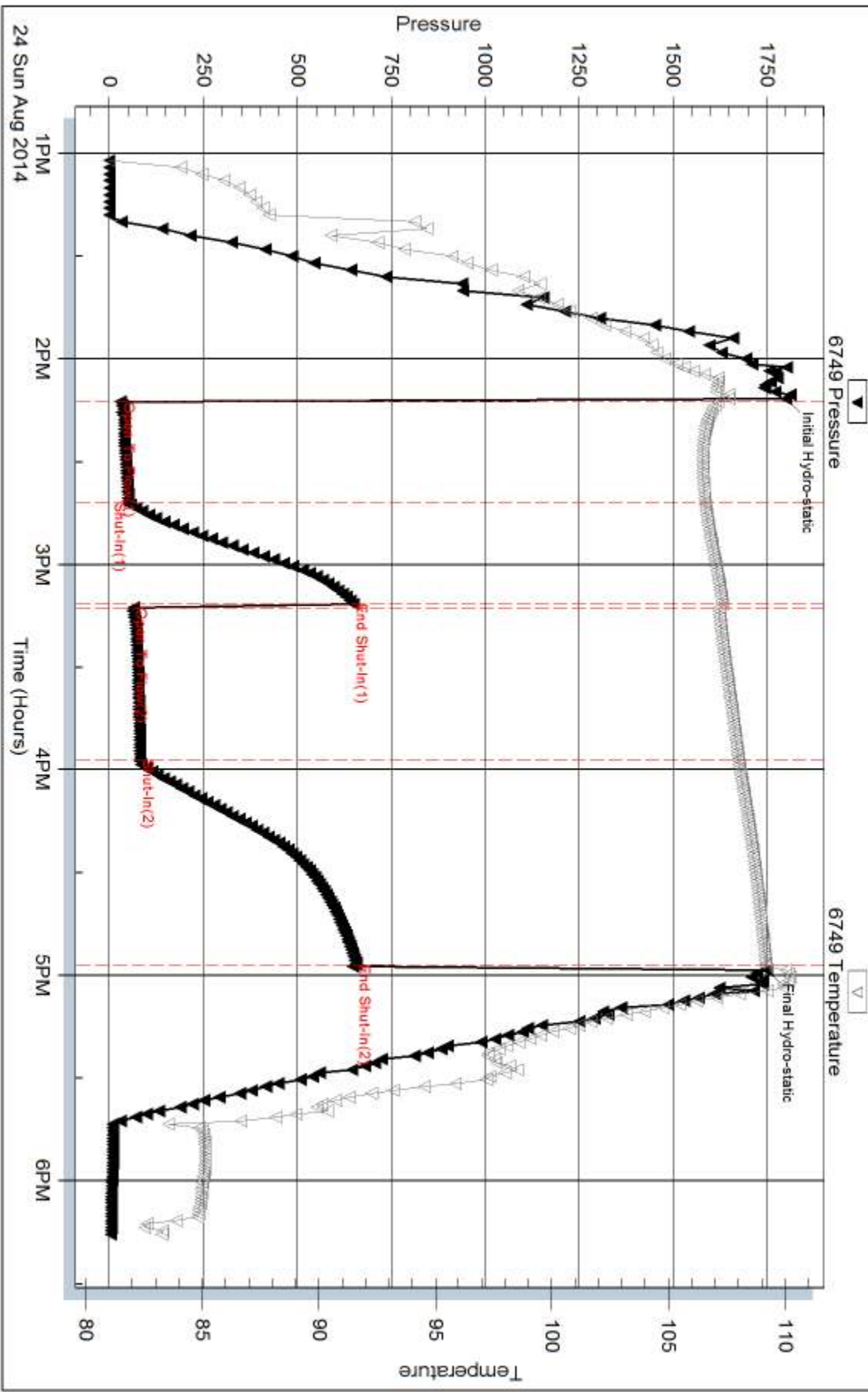
Inside

Charter Energy Incorporated

Syms #2

DST Test Number: 1

Pressure vs. Time

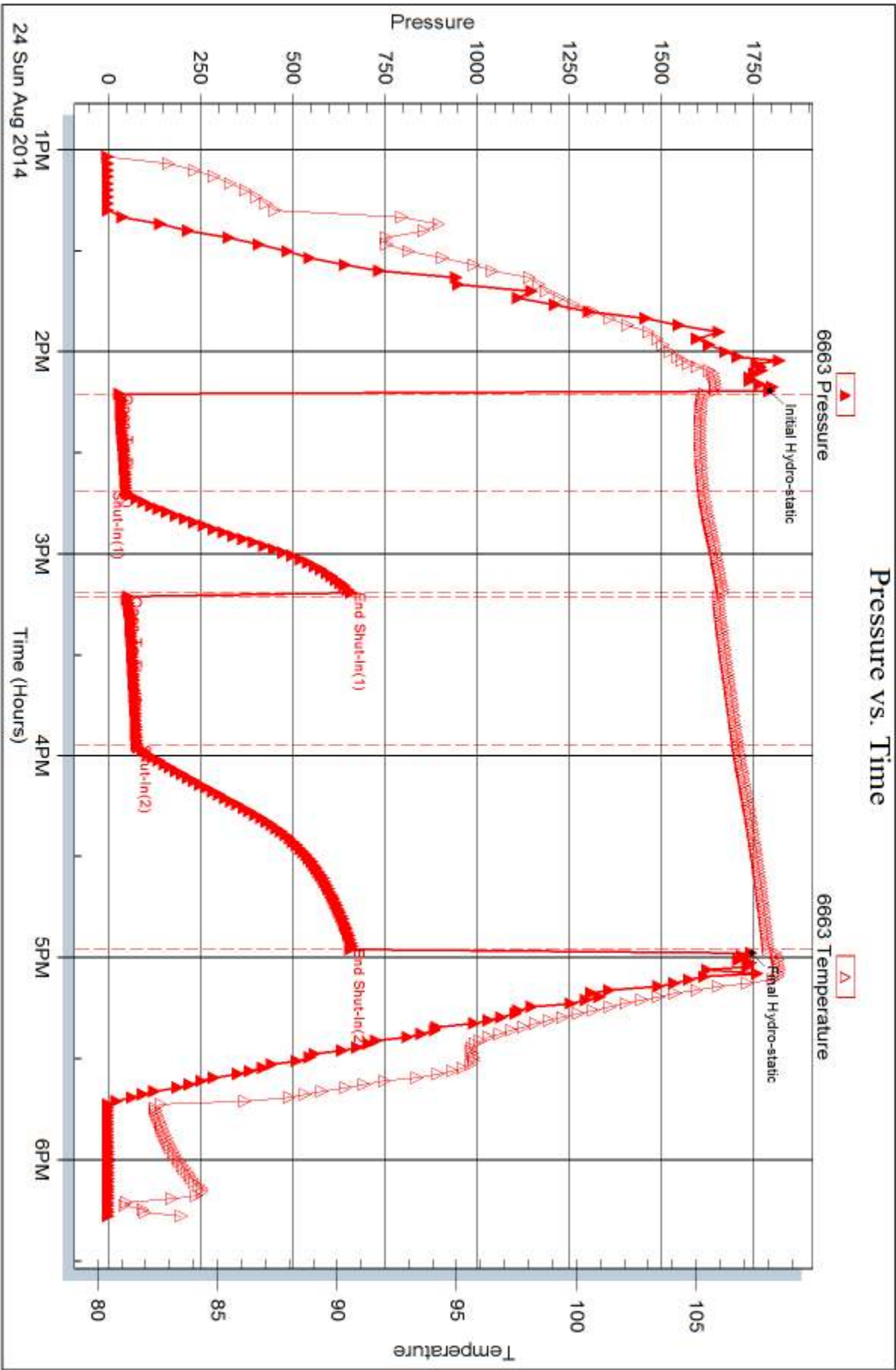


Serial #: 6663

Outside Charter Energy Incorporated

Syms #2

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Charter Energy Incorporated**

PO Box 252
Great Bend, KS 67530+0252

ATTN: Jim Musgrove

Symns #2

28-22s-14w Stafford,KS

Start Date: 2014.08.25 @ 01:18:00

End Date: 2014.08.25 @ 08:19:30

Job Ticket #: 60261 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.27 @ 11:15:22



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60261

DST#: 2

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 01:18:00

GENERAL INFORMATION:

Formation: **LKC I-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:42:30

Time Test Ended: 08:19:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: S1 Great Bend/66

Interval: 3642.00 ft (KB) To 3680.00 ft (KB) (TVD)

Reference Elevations: 1957.00 ft (KB)

Total Depth: 3680.00 ft (KB) (TVD)

1950.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6749 Inside

Press@RunDepth: 571.64 psig @ 3676.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.25

End Date:

2014.08.25

Last Calib.: 2014.08.25

Start Time: 01:19:00

End Time:

08:19:30

Time On Btm: 2014.08.25 @ 02:42:00

Time Off Btm: 2014.08.25 @ 05:30:30

TEST COMMENT: IFP 30 BOB in 15 seconds Gas to surface 5 minutes

ISI 30 Strong blow back

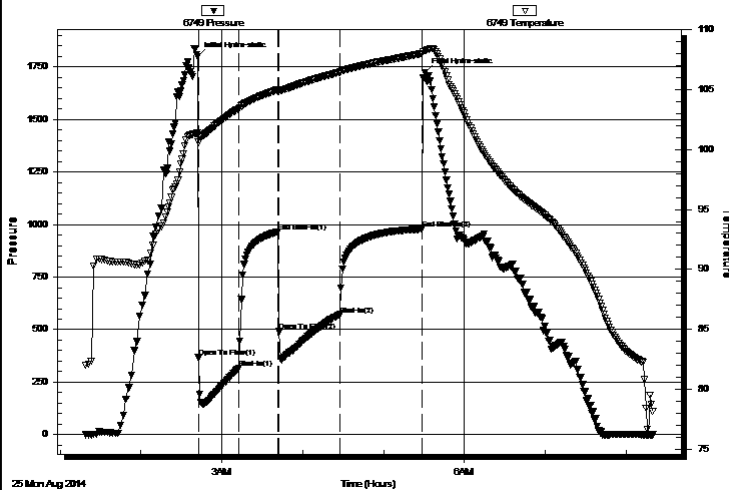
FFP 45 BOB in 10 seconds

FSI 60 Strong blow back

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1798.29	101.38	Initial Hydro-static
1	367.20	100.60	Open To Flow (1)
31	318.07	103.40	Shut-In(1)
60	964.95	104.99	End Shut-In(1)
61	490.93	104.90	Open To Flow (2)
106	571.64	106.44	Shut-In(2)
167	978.85	107.98	End Shut-In(2)
169	1723.71	108.22	Final Hydro-static

Pressure vs. Time



Recovery

Length (ft)	Description	Volume (bbl)
2170.00	CGO 20%G 80%O	30.44

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	45.00	94.23
Last Gas Rate	0.25	14.86	46.42
Max. Gas Rate	0.25	45.00	94.23



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DRILL STEM TEST REPORT

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60261

DST#: 2

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 01:18:00

GENERAL INFORMATION:

Formation: **LKC I-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:42:30

Time Test Ended: 08:19:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: S1 Great Bend/66

Interval: 3642.00 ft (KB) To 3680.00 ft (KB) (TVD)

Reference Elevations: 1957.00 ft (KB)

Total Depth: 3680.00 ft (KB) (TVD)

1950.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6663 Outside

Press@RunDepth: 979.88 psig @ 3677.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.25

End Date:

2014.08.25

Last Calib.:

2014.08.25

Start Time: 01:19:00

End Time:

08:19:30

Time On Btm:

2014.08.25 @ 02:42:30

Time Off Btm:

2014.08.25 @ 05:30:30

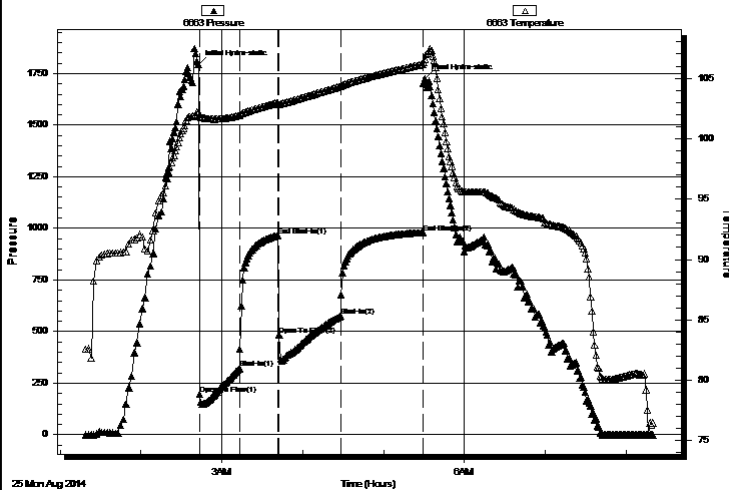
TEST COMMENT: IFP 30 BOB in 15 seconds Gas to surface 5 minutes

ISI 30 Strong blow back

FFP 45 BOB in 10 seconds

FSI 60 Strong blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1792.18	102.24	Initial Hydro-static
1	197.87	101.83	Open To Flow (1)
31	321.04	101.91	Shut-In(1)
59	965.70	103.00	End Shut-In(1)
60	481.06	102.80	Open To Flow (2)
106	574.57	104.33	Shut-In(2)
167	979.88	106.16	End Shut-In(2)
168	1725.63	106.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2170.00	CGO 20%G 80%O	30.44

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	45.00	94.23
Last Gas Rate	0.25	14.86	46.42
Max. Gas Rate	0.25	45.00	94.23



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60261

DST#: 2

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 01:18:00

Tool Information

Drill Pipe:	Length:	3625.00 ft	Diameter:	3.80 inches	Volume:	50.85 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	60000.00 lb
					Total Volume:	50.85 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		3.00 ft					String Weight: Initial	46000.00 lb
Depth to Top Packer:		3642.00 ft					Final	51000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		38.00 ft						
Tool Length:		58.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			3627.00	
Hydraulic tool	5.00			3632.00	
Top Packer	5.00			3637.00	
Packer	5.00			3642.00	20.00 Bottom Of Top Packer
Anchor	33.00			3675.00	
Recorder	1.00	6749	Inside	3676.00	
Recorder	1.00	6663	Outside	3677.00	
Bullnose	3.00			3680.00	38.00 Anchor Tool

Total Tool Length: 58.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60261

DST#: 2

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 01:18:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 60.00 sec/qt

Water Loss: 10.19 in³

Resistivity: ohm.m

Salinity: 8500.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

28 deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2170.00	CGO 20%G 80%O	30.439

Total Length: 2170.00 ft

Total Volume: 30.439 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60261

DST#: 2

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 01:18:00

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	10	0.25	45.00	94.23
1	10	0.25	45.00	94.23
1	20	0.25	35.60	79.32
1	30	0.25	35.60	79.32
2	10	0.25	6.75	33.55
2	20	0.25	16.40	48.86
2	30	0.25	14.86	46.42

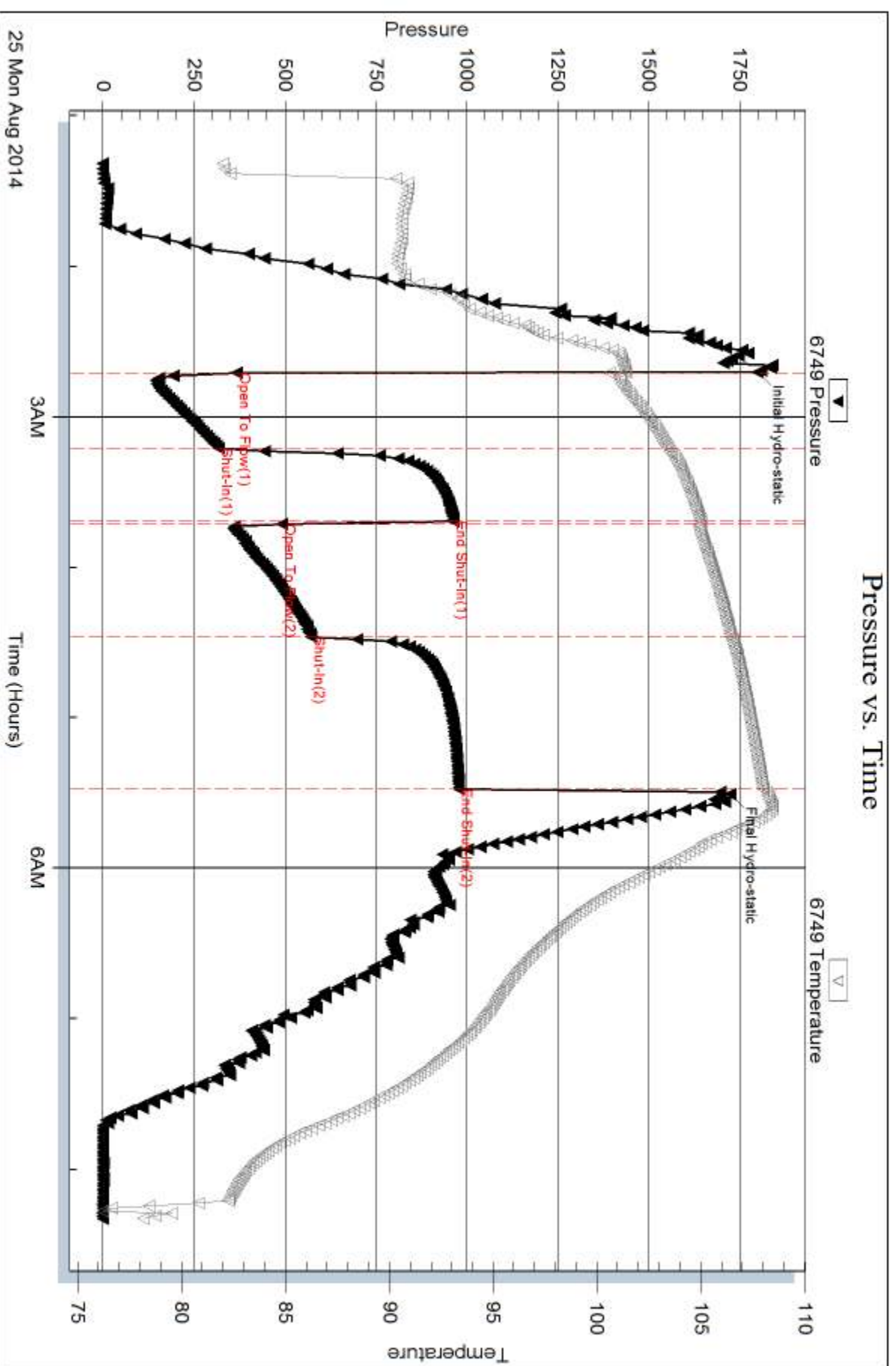
Serial #: 6749

Inside

Charter Energy Incorporated

Syms #2

DST Test Number: 2

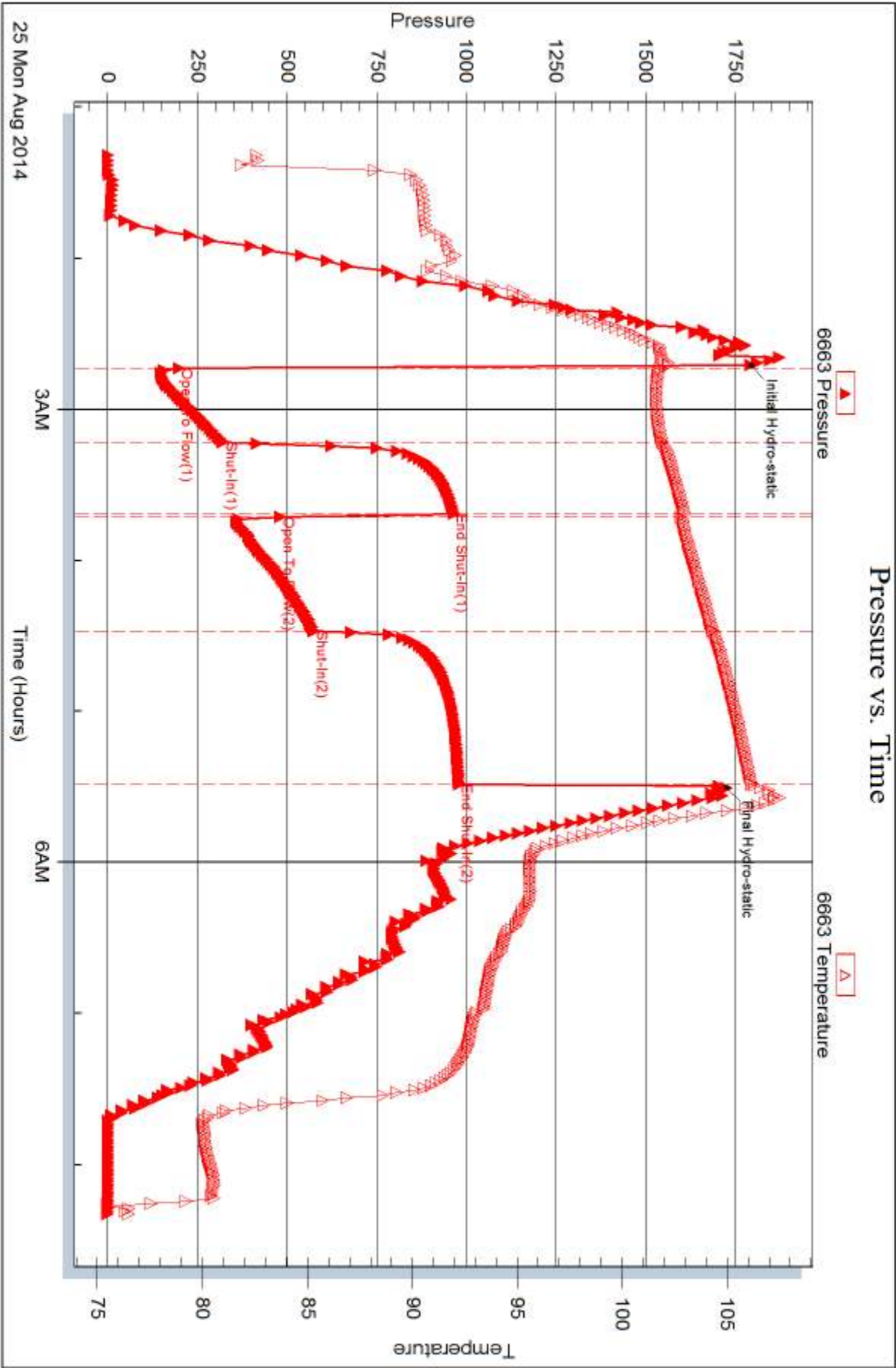


Serial #: 6663

Outside Charter Energy Incorporated

Syms #2

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Charter Energy Incorporated**

PO Box 252
Great Bend, KS 67530+0252

ATTN: Jim Musgrove

Symns #2

28-22s-14w Stafford,KS

Start Date: 2014.08.25 @ 15:22:00

End Date: 2014.08.25 @ 21:08:00

Job Ticket #: 60262 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.27 @ 11:43:07



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60262

DST#: 3

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 15:22:00

GENERAL INFORMATION:

Formation: **LKC K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:28:00

Time Test Ended: 21:08:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: S1

Interval: 3686.00 ft (KB) To 3710.00 ft (KB) (TVD)

Total Depth: 3710.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1957.00 ft (KB)

1950.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 6749 Inside

Press@RunDepth: 246.56 psig @ 3706.00 ft (KB)

Start Date: 2014.08.25

End Date:

2014.08.25

Start Time: 15:23:00

End Time:

21:08:00

Capacity: 8000.00 psig

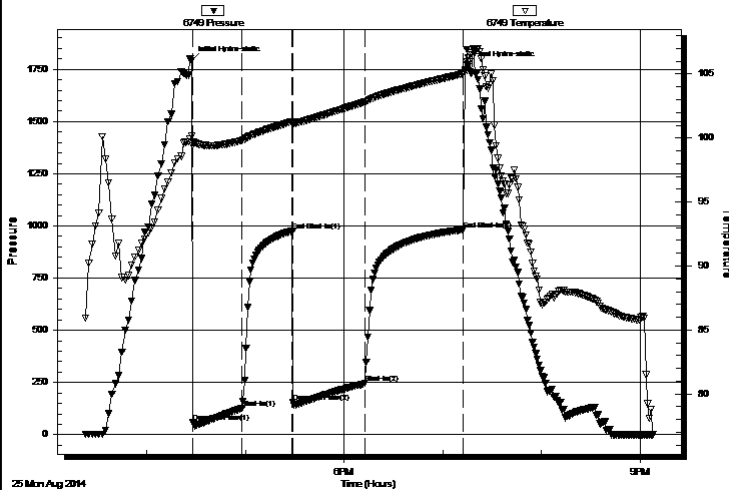
Last Calib.: 2014.08.25

Time On Btm: 2014.08.25 @ 16:27:30

Time Off Btm: 2014.08.25 @ 19:15:00

TEST COMMENT: IFP 30 BOB in 1 min 15 sec
ISI 30 Blow back built to 9"
FFP 45 BOB in 2 min 15 sec Gas to surface 17 min too weak to guage
FSI 60 Blow back built to BOB

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1790.75	100.14	Initial Hydro-static
1	57.56	99.39	Open To Flow (1)
31	127.58	99.82	Shut-In(1)
61	975.05	101.29	End Shut-In(1)
62	154.31	101.14	Open To Flow (2)
105	246.56	102.79	Shut-In(2)
165	982.52	105.03	End Shut-In(2)
168	1770.27	105.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
93.00	SOCW 1%O 99%W	1.30
589.00	GO 15%G 85%O	8.26
62.00	GEO 20%G 80%O	0.87

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60262

DST#: 3

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 15:22:00

GENERAL INFORMATION:

Formation: **LKC K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:28:00

Time Test Ended: 21:08:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: S1

Interval: 3686.00 ft (KB) To 3710.00 ft (KB) (TVD)

Reference Elevations: 1957.00 ft (KB)

Total Depth: 3710.00 ft (KB) (TVD)

1950.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6663 Outside

Press@RunDepth: 983.79 psig @ 3707.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.25

End Date:

2014.08.25

Last Calib.:

2014.08.25

Start Time: 15:23:00

End Time:

21:08:00

Time On Btm:

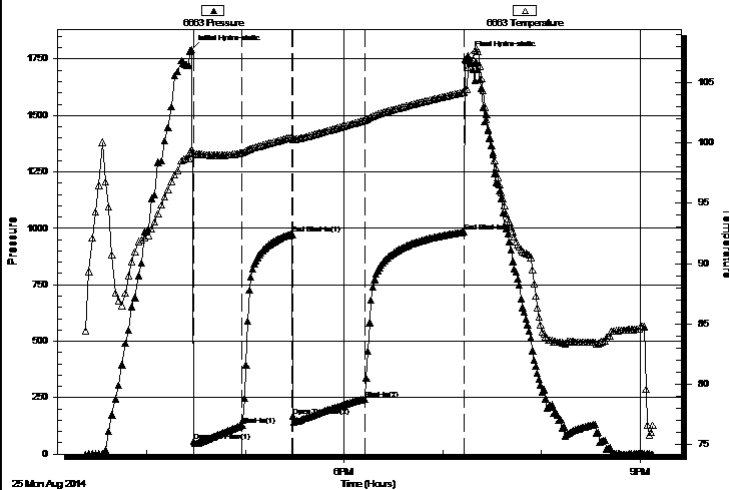
2014.08.25 @ 16:27:30

Time Off Btm:

2014.08.25 @ 19:15:30

TEST COMMENT: IFP 30 BOB in 1 min 15 sec
ISI 30 Blow back built to 9"
FFP 45 BOB in 2 min 15 sec Gas to surface 17 min too weak to guage
FSI 60 Blow back built to BOB

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1793.22	99.40	Initial Hydro-static
1	57.37	99.10	Open To Flow (1)
31	127.79	99.16	Shut-In(1)
61	975.56	100.46	End Shut-In(1)
62	169.56	100.29	Open To Flow (2)
105	244.47	101.86	Shut-In(2)
166	983.79	104.20	End Shut-In(2)
168	1766.15	106.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
93.00	SOCW 1%O 99%W	1.30
589.00	GO 15%G 85%O	8.26
62.00	GEO 20%G 80%O	0.87

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60262

DST#: 3

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 15:22:00

Tool Information

Drill Pipe:	Length:	3688.00 ft	Diameter:	3.80 inches	Volume:	51.73 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	90000.00 lb
					Total Volume:	51.73 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		22.00 ft					String Weight: Initial	46000.00 lb
Depth to Top Packer:		3686.00 ft					Final	48000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		24.00 ft						
Tool Length:		44.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			3671.00	
Hydraulic tool	5.00			3676.00	
Top Packer	5.00			3681.00	
Packer	5.00			3686.00	20.00 Bottom Of Top Packer
Anchor	19.00			3705.00	
Recorder	1.00	6749	Inside	3706.00	
Recorder	1.00	6663	Outside	3707.00	
Bullnose	3.00			3710.00	24.00 Anchor Tool

Total Tool Length: 44.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy Incorporated

28-22s-14w Stafford,KS

PO Box 252
Great Bend, KS 67530+0252

Symns #2

Job Ticket: 60262

DST#: 3

ATTN: Jim Musgrove

Test Start: 2014.08.25 @ 15:22:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 66.00 sec/qt

Water Loss: 14.59 in³

Resistivity: ohm.m

Salinity: 12800.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

27 deg API

Water Salinity:

32000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
93.00	SOCW 1%O 99%W	1.305
589.00	GO 15%G 85%O	8.262
62.00	GEO 20%G 80%O	0.870

Total Length: 744.00 ft

Total Volume: 10.437 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6749

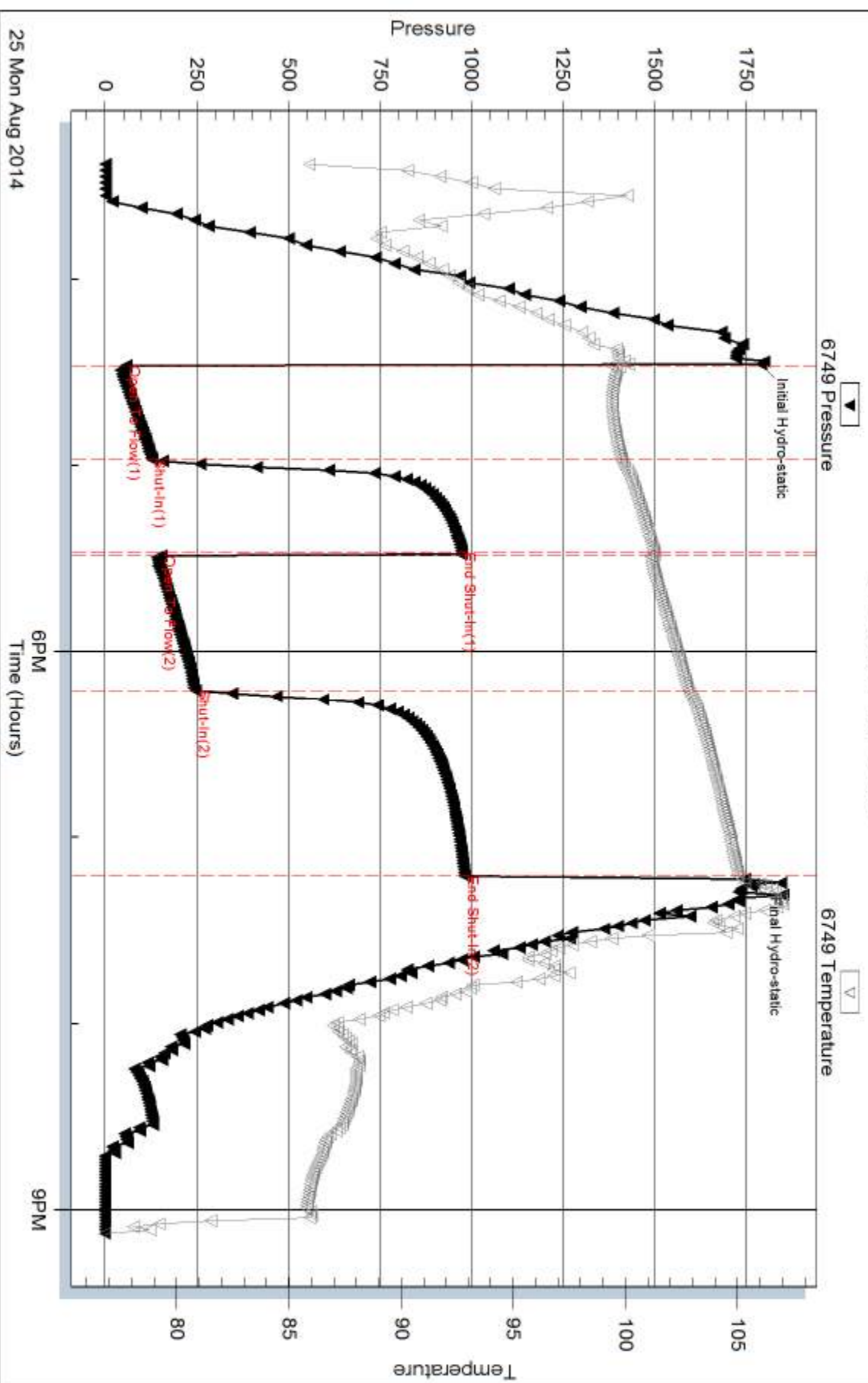
Inside

Charter Energy Incorporated

Syms #2

DST Test Number: 3

Pressure vs. Time



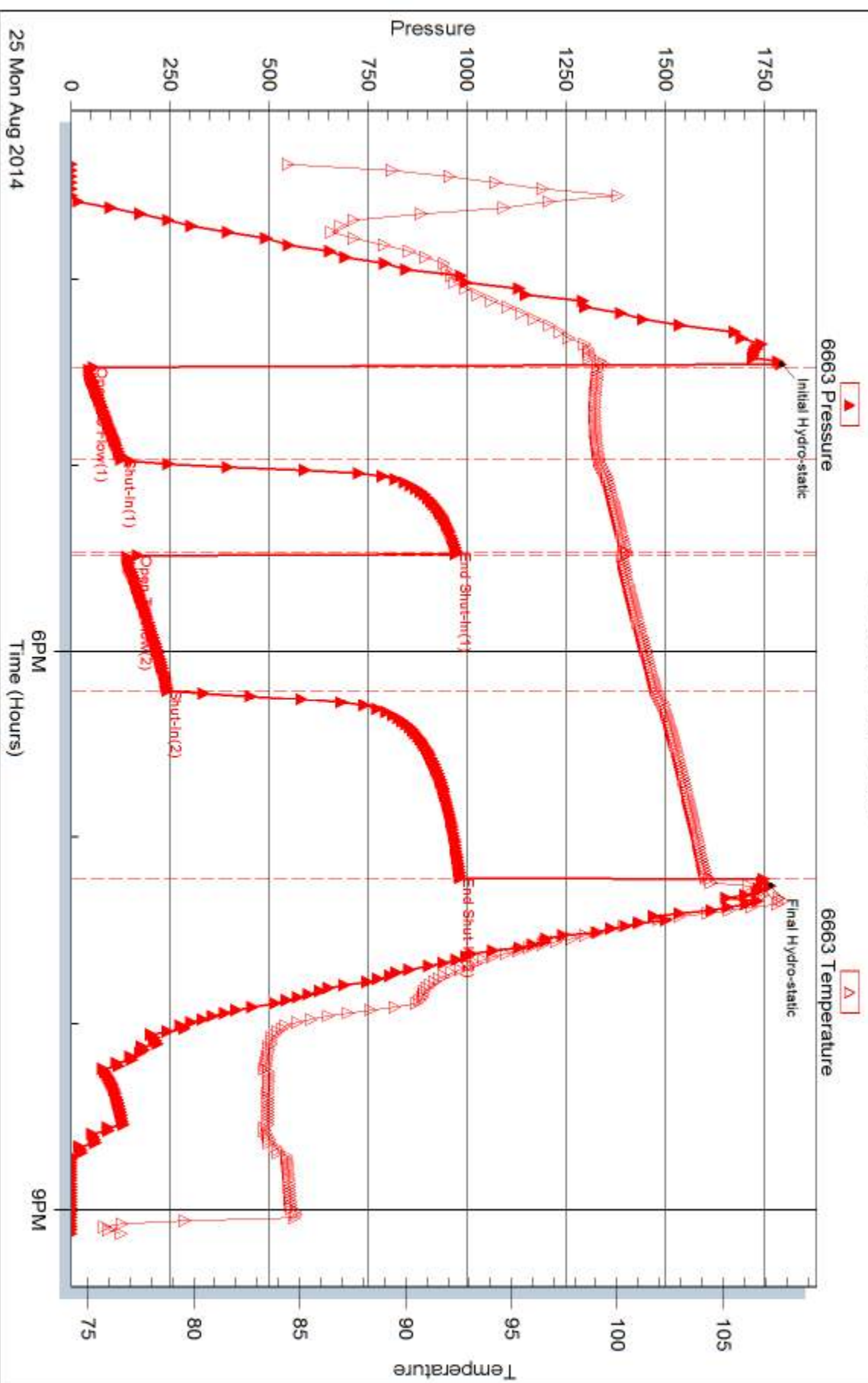
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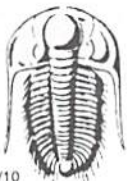
Outside Charter Energy Incorporated

Syms #2

DST Test Number: 3

Pressure vs. Time





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **60260**

Well Name & No. Synns #2 Test No. 1 Date 24 Aug 14
 Company Charter Energy Incorporated Elevation 1957 KB 1950 GL
 Address PO Box 252 Great Bend Kansas 67530 Q52
 Co. Rep / Geo. Jim Musgrove Rig Royal Rig 2
 Location: Sec. 28 Twp. 22S Rge. 14W Co. Stafford State KS

Interval Tested 3620-3642 Zone Tested _____
 Anchor Length 22 Drill Pipe Run 3625 Mud Wt. 9.3
 Top Packer Depth 3615 Drill Collars Run 0 Vis 60
 Bottom Packer Depth 3620 Wt. Pipe Run 0 WL 10.2
 Total Depth 3642 Chlorides 8500 ppm System LCM -

Blow Description Good blow/Blow built to bottom of bucket in 4 minutes
blow back built to 3/4 inch

Strong blow/Built to bottom of bucket in 30 seconds but then
slowed considerably after 2 minutes/Blow back built to 2 inch

Rec	Feet of	%gas	%oil	%water	%mud
<u>2444</u>	<u>Gas in pipe</u>	<u>100</u>			
<u>410</u>	<u>Water cut oily gas</u>	<u>50</u>	<u>35</u>	<u>15</u>	
<u>120</u>	<u>Water cut gassy oil</u>	<u>10</u>	<u>75</u>	<u>15</u>	

Rec Total 160 BHT 110 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 1801 ☐ Test 1150
 (B) First Initial Flow 30 ☐ Jars _____
 (C) First Final Flow 50 ☐ Safety Joint _____
 (D) Initial Shut-In 648 ☐ Circ Sub _____
 (E) Second Initial Flow 64 ☐ Hourly Standby _____
 (F) Second Final Flow 81 ☐ Mileage 66 102.30
 (G) Final Shut-In 657 ☐ Sampler _____
 (H) Final Hydrostatic 1749 ☐ Straddle _____

T-On Location 12:45
 T-Started #1:09
 T-Open 2:12
 T-Pulled 4:57
 T-Out 4:57
 Comments _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 45
 Final Shut-In 60

☐ Shale Packer _____
☐ Extra Packer _____
☐ Extra Recorder _____
☐ Day Standby _____
☐ Accessibility _____
 Sub Total _____

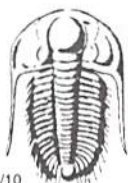
☐ Ruined Shale Packer _____
☐ Ruined Packer _____
☐ Extra Copies _____
 Sub Total _____
 Total _____
 MP/DST Disc't _____

Approved By _____

Our Representative _____

Ken

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **60261**

Well Name & No. Symms #2 Test No. 2 Date 25 Aug 14
 Company Chatter Energy Incorporated Elevation 1957 KB 1950 GL
 Address PO Box 252 Great Bend, Kansas 67530-0252
 Co. Rep / Geo. Jim Musgrove Rig Royal Rig #2
 Location: Sec. 28 Twp. 22S Rge. 14W Co. Stafford State KS

Interval Tested 3642-3680 Zone Tested Kansas City zones I+J
 Anchor Length 38 Drill Pipe Run 3625 Mud Wt. 9.3
 Top Packer Depth 3637 Drill Collars Run 0 Vis 60
 Bottom Packer Depth 3642 Wt. Pipe Run 0 WL 10.2
 Total Depth 3680 Chlorides 8500 ppm System LCM —

Blow Description Strong blow/Blow built to bottom of bucket in 15 seconds, Gas
to surface in 5 minutes/Strong blow back
Strong blow/Blow built to bottom of bucket in 10 seconds
Strong blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>2170</u>	<u>Clean Gassy (C.)</u>	<u>20%</u>	<u>80%</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 108 BHT 108 Gravity 28 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>1798</u>	☐ Test <u>1150</u>	T-On Location <u>1:10 am</u>
(B) First Initial Flow <u>367</u>	☐ Jars	T-Started <u>1:18 am</u>
(C) First Final Flow <u>318</u>	☐ Safety Joint	T-Open <u>2:42 am</u>
(D) Initial Shut-In <u>964</u>	☐ Circ Sub	T-Pulled <u>5:27 am</u>
(E) Second Initial Flow <u>1190</u>	☐ Hourly Standby	T-Out <u>8:15 am</u>
(F) Second Final Flow <u>571</u>	☐ Mileage <u>66</u> <u>102.30</u>	Comments
(G) Final Shut-In <u>773 978</u>	☐ Sampler	
(H) Final Hydrostatic <u>1723</u>	☐ Straddle	☐ Ruined Shale Packer

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Packer
Initial Shut-In <u>30</u>	☐ Extra Packer	☐ Extra Copies
Final Flow <u>45</u>	☐ Extra Recorder	Sub Total
Final Shut-In <u>60</u>	☐ Day Standby	Total
	☐ Accessibility	MP/DST Disc't
	Sub Total	

Approved By _____ Our Representative Jim Musgrove

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60262

Well Name & No. Symms #2 Test No. 3 Date 25 Aug 14
 Company Charter Energy Incorporated Elevation 1957 KB 1950 GL
 Address PO Box 252 Great Bend Kansas 67530-0252
 Co. Rep / Geo. Jim Musgrave Rig Royal Rig 2
 Location: Sec. 28 Twp. 22S Rge. 14W Co. Stafford State KS

Interval Tested 3686 - 3710 Zone Tested Kansas City K zone
 Anchor Length 24 Drill Pipe Run 3688 Mud Wt. 9.2
 Top Packer Depth 3681 Drill Collars Run 0 Vis 66
 Bottom Packer Depth 3686 Wt. Pipe Run 0 WL 141.6
 Total Depth 3710 Chlorides 12,800 ppm System LCM -

Blow Description Strong blow/ Blow built to bottom of bucket in
1 minute 15 seconds/ Blow back built to 9 inches/
Good blow/ Blow built to bottom of bucket in
2 minutes 15 seconds/ Gas to surface 17 minutes 2nd open/ Blow back
built to bottom of bucket

Rec	Feet of	%gas	%oil	%water	%mud
589	Gassy Oil	15%	85%		
93	Slightly Oil Cut Water		1%	99%	
62	Gassy Emulsified Oil	20%	80%		
		%gas	%oil	%water	%mud
		%gas	%oil	%water	%mud

Rec Total 744 BHT 106 Gravity 27 API RW .18 @ 82° F Chlorides 32000 ppm

(A) Initial Hydrostatic	<u>1790</u>	☐ Test	<u>1150</u>	T-On Location	<u>3:15 pm</u>
(B) First Initial Flow	<u>57</u>	☐ Jars		T-Started	<u>3:22 pm</u>
(C) First Final Flow	<u>127</u>	☐ Safety Joint		T-Open	<u>4:28 pm</u>
(D) Initial Shut-In	<u>975</u>	☐ Circ Sub		T-Pulled	<u>7:13 pm</u>
(E) Second Initial Flow	<u>154</u>	☐ Hourly Standby		T-Out	<u>9:06 pm</u>
(F) Second Final Flow	<u>246</u>	☐ Mileage	<u>66 102.30</u>	Comments	
(G) Final Shut-In	<u>982</u>	☐ Sampler			
(H) Final Hydrostatic	<u>1770</u>	☐ Straddle		☐ Ruined Shale Packer	

Initial Open	<u>30</u>	☐ Shale Packer		☐ Ruined Packer	
Initial Shut-In	<u>30</u>	☐ Extra Packer		☐ Extra Copies	
Final Flow	<u>45</u>	☐ Extra Recorder		Sub Total	
Final Shut-In	<u>60</u>	☐ Day Standby		Total	
		☐ Accessibility		MP/DST Disc't	
		Sub Total			

Approved By _____

Our Representative Keith D. Harris

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