



DRILL STEM TEST REPORT

Prepared For: **Charter Energy Inc**

PO Box 352
Great Bend KS 67530-0252

ATTN: Steve Baize, Kurt Ta

Johnston #1

24-13s-20w Ellis,KS

Start Date: 2014.03.15 @ 03:30:20

End Date: 2014.03.15 @ 08:55:14

Job Ticket #: 54084 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.03.20 @ 17:33:08



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Charter Energy Inc

24-13s-20w Ellis,KS

PO Box 352
Great Bend KS 67530-0252

Johnston #1

Job Ticket: 54084

DST#: 1

ATTN: Steve Baize, Kurt Ta

Test Start: 2014.03.15 @ 03:30:20

GENERAL INFORMATION:

Formation: **LKC H,I,J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:32:00

Time Test Ended: 08:55:14

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 70

Interval: 3588.00 ft (KB) To 3660.00 ft (KB) (TVD)

Reference Elevations: 2114.00 ft (KB)

Total Depth: 3660.00 ft (KB) (TVD)

2107.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8369

Inside

Press@RunDepth: 28.56 psig @ 3593.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.15

End Date:

2014.03.15

Last Calib.:

2014.03.15

Start Time: 03:30:20

End Time:

08:55:14

Time On Btm:

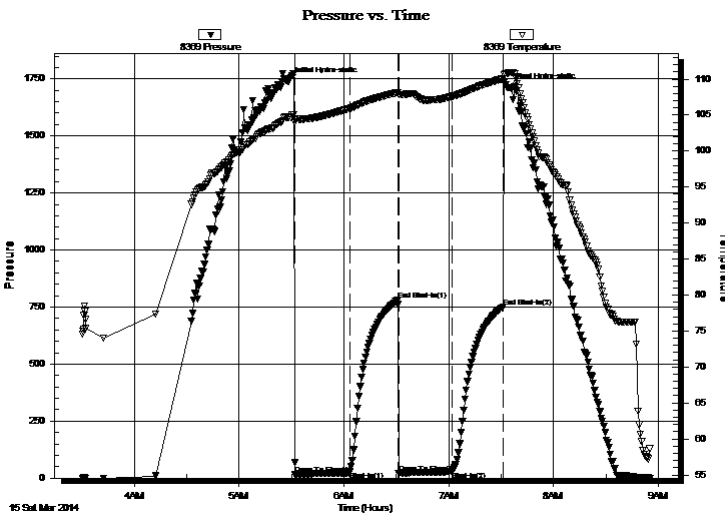
2014.03.15 @ 05:28:30

Time Off Btm:

2014.03.15 @ 07:34:00

TEST COMMENT: 30-IFP-w k bl thru-out 1/2"bl
30-ISIP-no bl
30-FFP-vy w k surface bl thru-out
30-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1739.73	104.72	Initial Hydro-static
4	16.33	104.51	Open To Flow (1)
35	27.79	105.92	Shut-In(1)
63	781.60	108.14	End Shut-In(1)
63	21.92	107.89	Open To Flow (2)
94	28.56	107.57	Shut-In(2)
123	750.40	110.06	End Shut-In(2)
126	1710.98	110.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud w/show of oil	0.28

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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Johnston #1

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Job Ticket: 54084

DST#: 1

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Time Test Ended: 08:55:14

Interval: 3588.00 ft (KB) To 3660.00 ft (KB) (TVD)

Total Depth: 3660.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 70

Reference Elevations: 2114.00 ft (KB)

2107.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8700 Outside

Press@RunDepth: psig @ 3593.00 ft (KB)

Start Date: 2014.03.15 End Date: 2014.03.15

Start Time: 03:30:08 End Time: 08:54:02

Capacity: 8000.00 psig

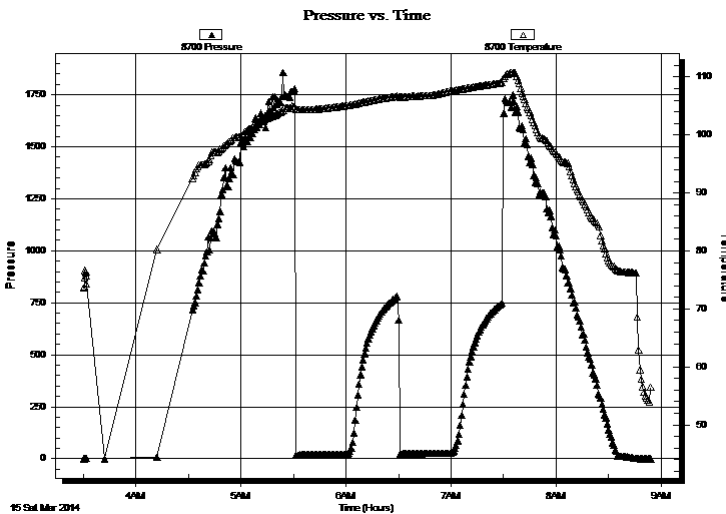
Last Calib.: 2014.03.15

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IFP-w k bl thru-out 1/2"bl
30-ISIP-no bl
30-FFP-vy w k surface bl thru-out
30-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud w/show of oil	0.28

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy Inc

24-13s-20w Ellis,KS

PO Box 352
Great Bend KS 67530-0252

Johnston #1

Job Ticket: 54084

DST#: 1

ATTN: Steve Baize, Kurt Ta

Test Start: 2014.03.15 @ 03:30:20

Tool Information

Drill Pipe:	Length: 3581.00 ft	Diameter: 3.80 inches	Volume: 50.23 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 50.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3588.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	72.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	0.00			3568.00	
Shut In Tool	5.00			3573.00	
Hydraulic tool	5.00			3578.00	
Packer	5.00			3583.00	20.00 Bottom Of Top Packer
Packer	5.00			3588.00	
Stubb	1.00			3589.00	
Perforations	4.00			3593.00	
Recorder	0.00	8369	Inside	3593.00	
Recorder	0.00	8700	Outside	3593.00	
Blank Spacing	64.00			3657.00	
Bullnose	3.00			3660.00	72.00 Bottom Packers & Anchor

Total Tool Length: 92.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy Inc

24-13s-20w Ellis,KS

PO Box 352
Great Bend KS 67530-0252

Johnston #1

Job Ticket: 54084

DST#: 1

ATTN: Steve Baize, Kurt Ta

Test Start: 2014.03.15 @ 03:30:20

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.93 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud w/show of oil	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

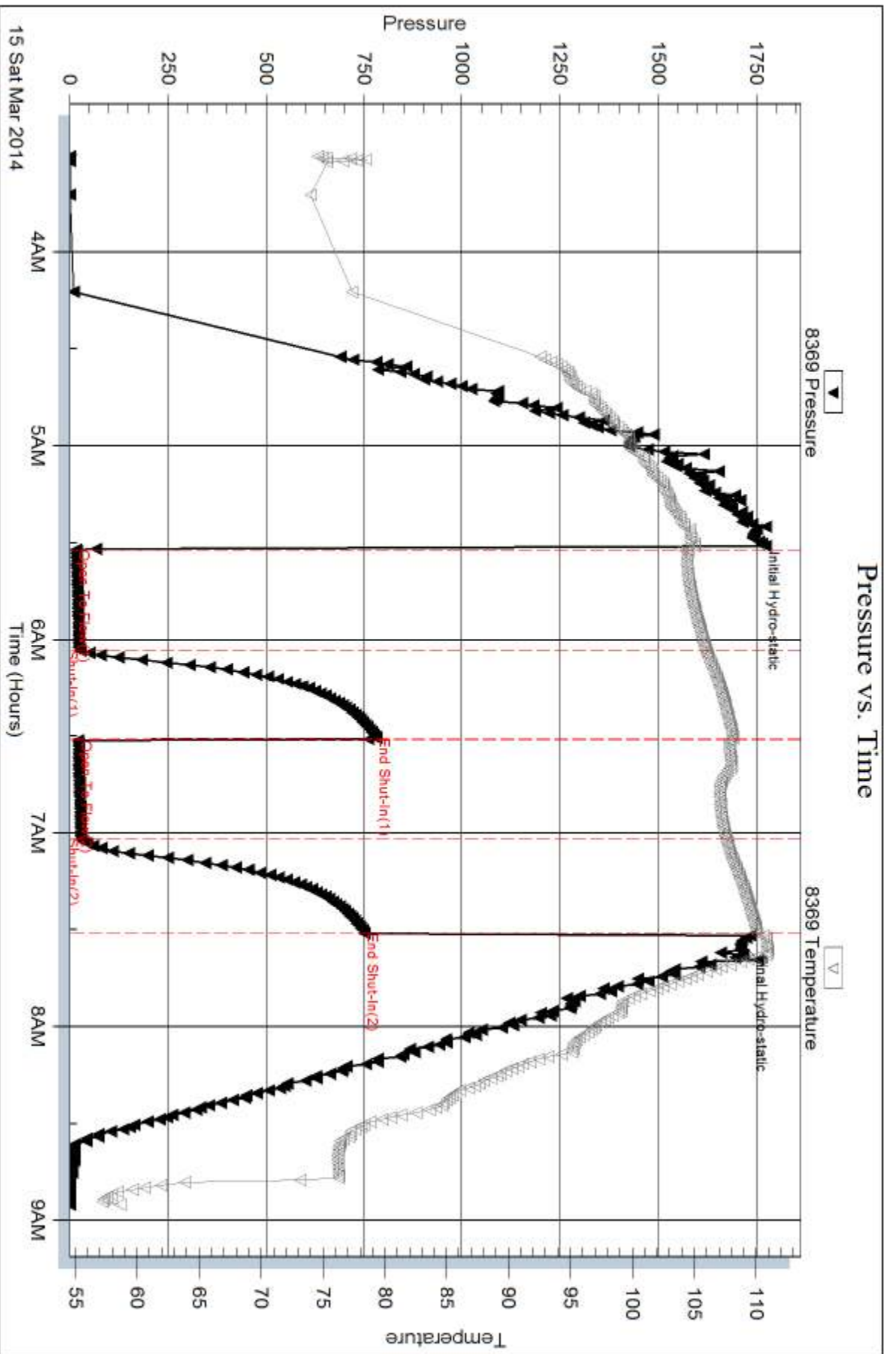
Num Gas Bombs: 0

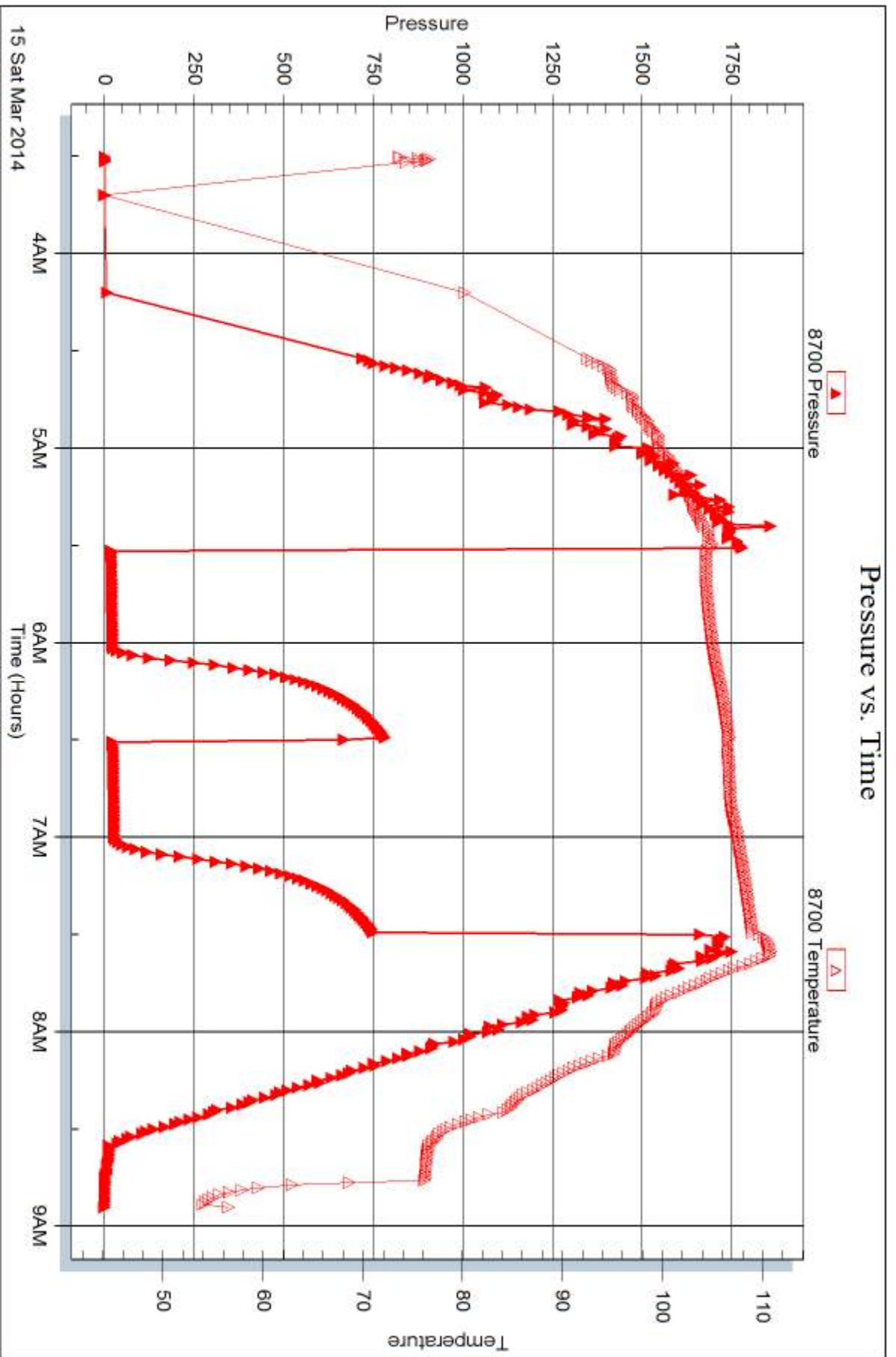
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Charter Energy Inc**

PO Box 352
Great Bend KS 67530-0252

ATTN: Steve Baize, Kurt Ta

Johnston #1

24-13s-20w Ellis,KS

Start Date: 2014.03.16 @ 02:36:02

End Date: 2014.03.16 @ 09:39:56

Job Ticket #: 54085 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.03.20 @ 17:32:36



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Charter Energy Inc

24-13s-20w Ellis,KS

PO Box 352
Great Bend KS 67530-0252

Johnston #1

Job Ticket: 54085

DST#: 2

ATTN: Steve Baize, Kurt Ta

Test Start: 2014.03.16 @ 02:36:02

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:29:42

Time Test Ended: 09:39:56

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3686.00 ft (KB) To 3785.00 ft (KB) (TVD)

Reference Elevations: 2114.00 ft (KB)

Total Depth: 3785.00 ft (KB) (TVD)

2107.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8369

Inside

Press@RunDepth: 189.02 psig @ 3692.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.16

End Date:

2014.03.16

Last Calib.:

2014.03.16

Start Time: 02:36:02

End Time:

09:39:56

Time On Btm:

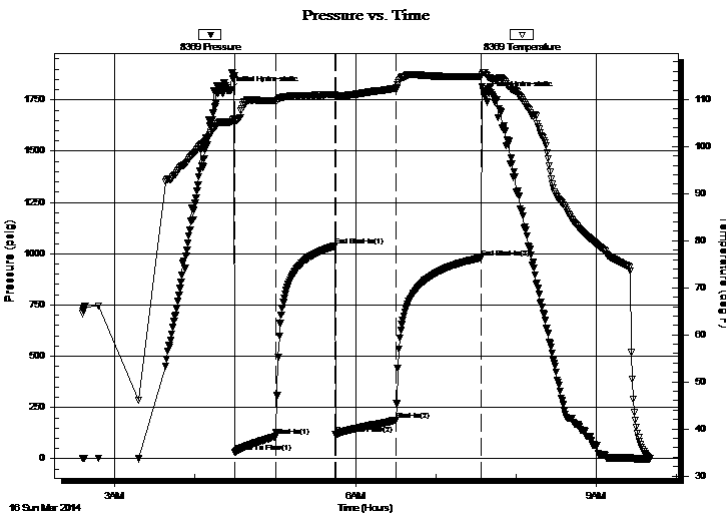
2014.03.16 @ 04:25:57

Time Off Btm:

2014.03.16 @ 07:36:26

TEST COMMENT: 30-IFP-w k to strg in 28 min
45-ISIP-no bl
45-FFP-w k to a gd bl 1/2"to 8"bl
60-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1796.83	105.22	Initial Hydro-static
4	32.53	105.21	Open To Flow (1)
35	108.22	109.72	Shut-In(1)
79	1036.87	111.04	End Shut-In(1)
79	117.66	110.71	Open To Flow (2)
125	189.02	112.35	Shut-In(2)
188	980.38	114.82	End Shut-In(2)
191	1769.65	115.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	CO	2.10
124.00	MGO 10%G25%M65%O	1.74
124.00	MGO 30%G15%M55%O	1.74

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy Inc

24-13s-20w Ellis,KS

PO Box 352
Great Bend KS 67530-0252

Johnston #1

Job Ticket: 54085

DST#: 2

ATTN: Steve Baize, Kurt Ta

Test Start: 2014.03.16 @ 02:36:02

Tool Information

Drill Pipe:	Length: 3676.00 ft	Diameter: 3.80 inches	Volume: 51.56 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 51.56 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3686.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	99.00 ft			
Tool Length:	119.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	0.00			3666.00	
Shut In Tool	5.00			3671.00	
Hydraulic tool	5.00			3676.00	
Packer	5.00			3681.00	20.00 Bottom Of Top Packer
Packer	5.00			3686.00	
Stubb	1.00			3687.00	
Perforations	5.00			3692.00	
Recorder	0.00	8369	Inside	3692.00	
Recorder	0.00	8700	Outside	3692.00	
Blank Spacing	65.00			3757.00	
Perforations	25.00			3782.00	
Bullnose	3.00			3785.00	99.00 Bottom Packers & Anchor

Total Tool Length: 119.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy Inc

24-13s-20w Ellis,KS

PO Box 352
Great Bend KS 67530-0252

Johnston #1

Job Ticket: 54085

DST#: 2

ATTN: Steve Baize, Kurt Ta

Test Start: 2014.03.16 @ 02:36:02

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 58.00 sec/qt
Water Loss: 7.96 in³
Resistivity: ohm.m
Salinity: 6300.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 28 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	CO	2.104
124.00	MGO 10%G25%M65%O	1.739
124.00	MGO 30%G15%M55%O	1.739

Total Length: 398.00 ft Total Volume: 5.582 bbl

Num Fluid Samples: 0

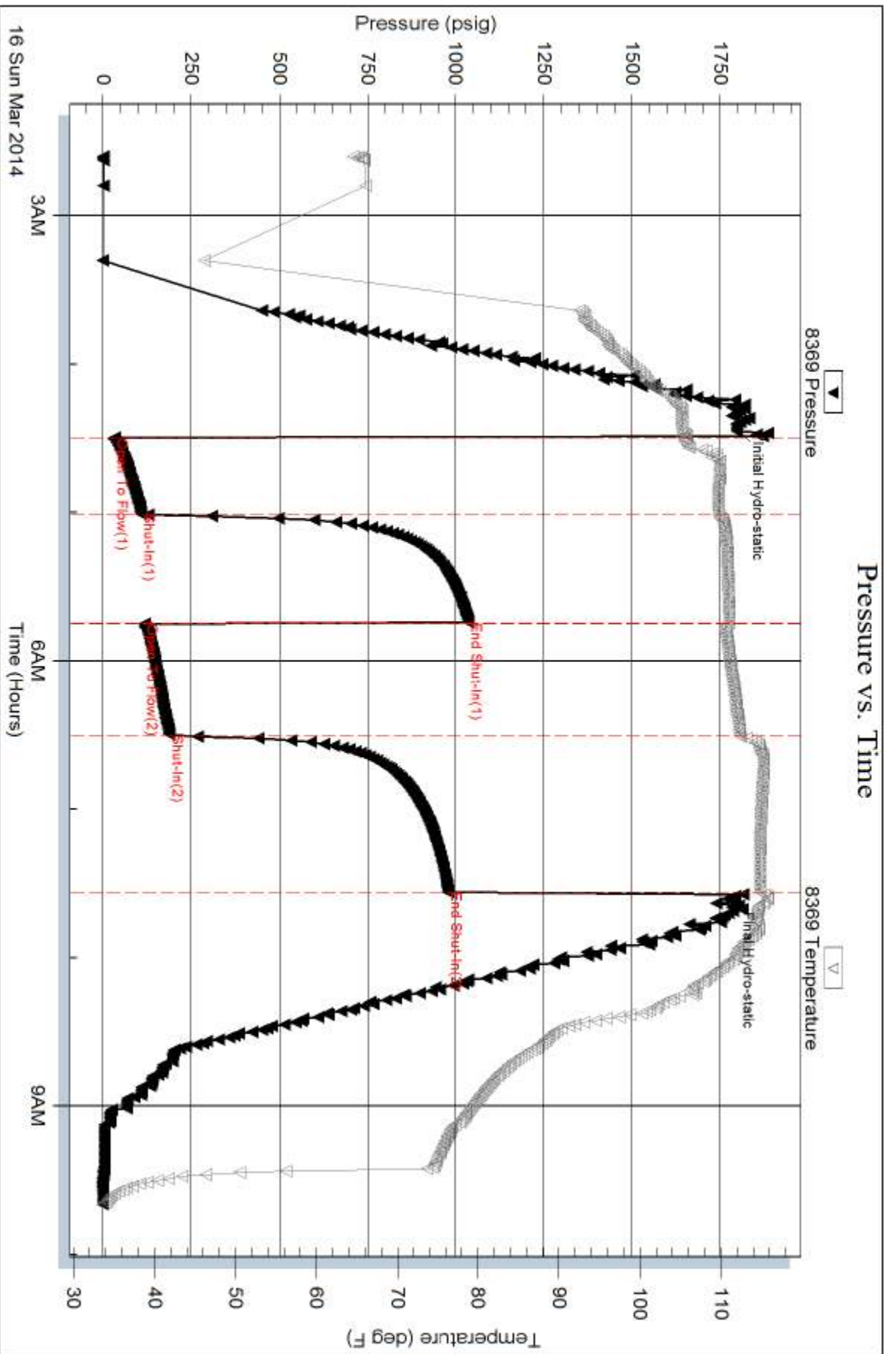
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

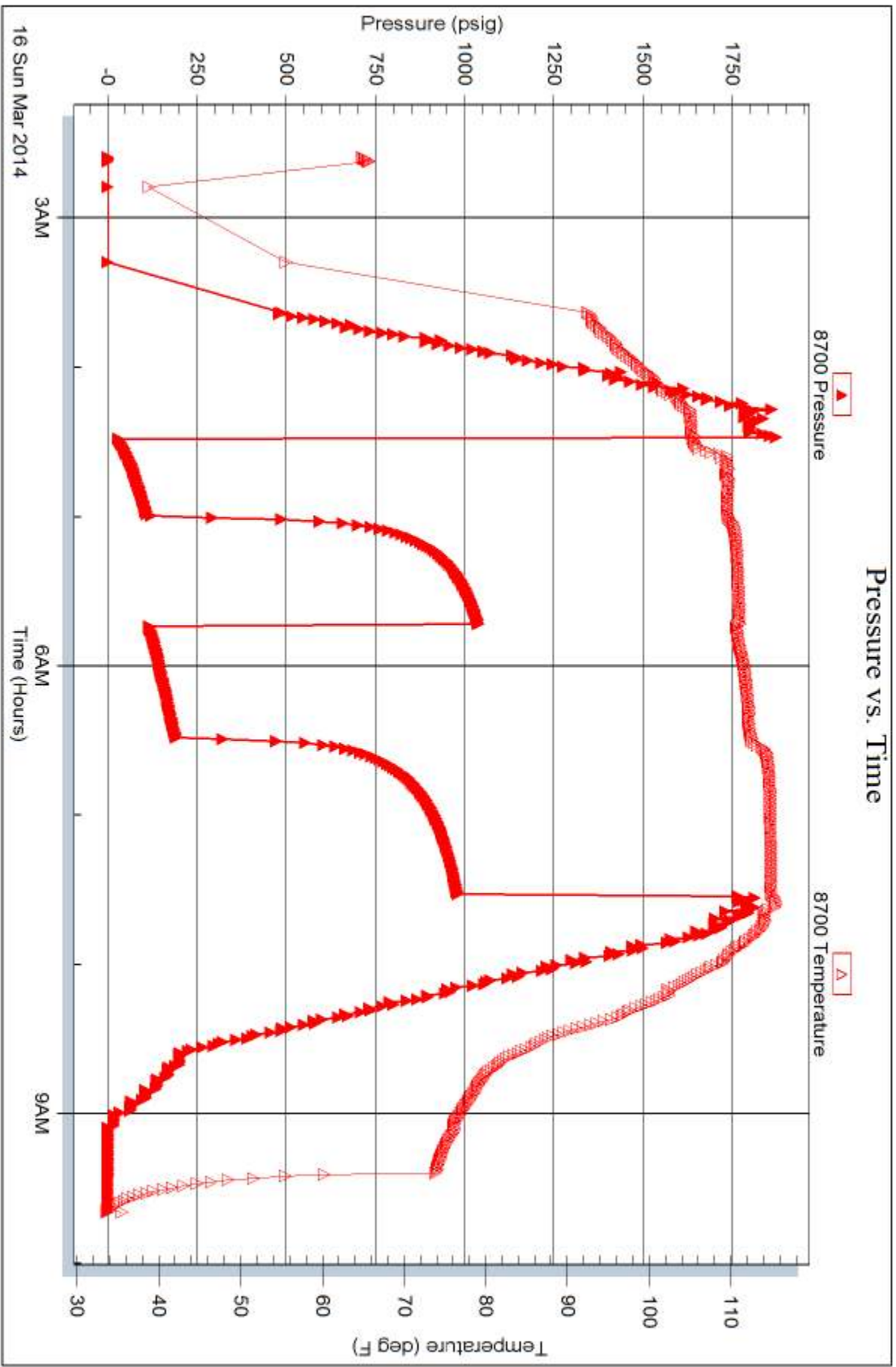


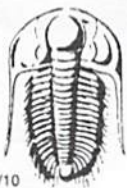
Serial #: 8700

Outside Charter Energy Inc

Johnston #1

DST Test Number: 2





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54084

Well Name & No. Johnston #1 Test No. 1 Date 3-15-14
 Company CHARTER Energy, Inc Elevation 2114 KB 2107 GL
 Address PO Box 352 Great Bend, Ks 67530-0252
 Co. Rep / Geo. KURT TALBOTT Rig Royalrig1
 Location: Sec. 24 Twp. 13^s Rge. 20^w Co. ELLIS State Ks

Interval Tested 3588-3660 Zone Tested LKC H-I-J
 Anchor Length 72 Drill Pipe Run 3581 Mud Wt. 9.2
 Top Packer Depth 3583 Drill Collars Run - Vis 50
 Bottom Packer Depth 3588 Wt. Pipe Run - WL 8
 Total Depth 3660 Chlorides 5100 ppm System LCM TR.

Blow Description IFP - WEAK BLOW 1/2" BLOW
ISIP - NO BLOW
FFP - VERY WEAK SURFACE BLOW THRU-OUT
FSIP - NO BLOW

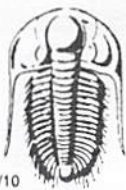
Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>Mud</u>				
	<u>w/show of oil</u>				

Rec Total 20 BHT 110 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>1739</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0100</u>
(B) First Initial Flow <u>16</u>	<input type="checkbox"/> Jars	T-Started <u>0330</u>
(C) First Final Flow <u>27</u>	<input type="checkbox"/> Safety Joint	T-Open <u>0530</u>
(D) Initial Shut-In <u>781</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0730</u>
(E) Second Initial Flow <u>21</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0855</u>
(F) Second Final Flow <u>28</u>	<input checked="" type="checkbox"/> Mileage <u>32 RT</u> 49.60	Comments
(G) Final Shut-In <u>750</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1710</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Open <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Initial Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1199.60</u>
Final Flow <u>30</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
Final Shut-In <u>30</u>	Sub Total <u>1199.60</u>	

Approved By _____ Our Representative Ray Schwager *Thank you*

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **54085**

Well Name & No. Johnston #1 Test No. 2 Date 3-16-14
 Company Charter Energy, Inc Elevation 2114 KB 2107 GL
 Address PO Box 352 Great Bend, Ks 67530-0252
 Co. Rep / Geo. Kurt Talbott Rig Royal rig 1
 Location: Sec. 24 Twp. 13^s Rge. 20^w Co. ELLIS State Ks

Interval Tested 3686-3785 Zone Tested Arbuckle
 Anchor Length 99 Drill Pipe Run 3676 Mud Wt. 9.4
 Top Packer Depth 3681 Drill Collars Run - Vis 58
 Bottom Packer Depth 3686 Wt. Pipe Run - WL 8
 Total Depth 3785 Chlorides 6300 ppm System LCM 1#

Blow Description IFP - WEAK TO STRONG IN 28 MIN
ISIP - NO BLOW
FFP - WEAK TO A GOOD BLOW 1/2" TO 8" BLOW
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>CO</u>				
<u>124</u>	<u>MGO</u>	<u>10</u>	<u>65</u>	<u>25</u>	
<u>124</u>	<u>MGO</u>	<u>30</u>	<u>55</u>	<u>15</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 398 BHT 114 Gravity 28 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 1796 Test 1150 T-On Location 0155
 (B) First Initial Flow 32 Jars _____ T-Started 0235
 (C) First Final Flow 108 Safety Joint _____ T-Open 0430
 (D) Initial Shut-In 1036 Circ Sub _____ T-Pulled 0730
 (E) Second Initial Flow 117 Hourly Standby _____ T-Out _____
 (F) Second Final Flow 189 Mileage 32 RT 49.60 Comments _____
 (G) Final Shut-In 980 Sampler _____
 (H) Final Hydrostatic 1769 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1199.60
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1199.60

Approved By _____ Our Representative RAY SCHWAGER *Thank you*

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.