

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Charles N. Griffin**

PO Box 347
Pratt, KS 67124-0347

ATTN: Bruce Reed

Randels "B" #4

34-32s.-12w. Barber,KS

Start Date: 2012.10.29 @ 11:58:11

End Date: 2012.10.29 @ 20:21:56

Job Ticket #: 49590 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

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Charles N. Griffin

34-32s.-12w. Barber,KS

Randels "B" #4

DST # 1

Simpson

2012.10.29



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DRILL STEM TEST REPORT

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PO Box 347
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ATTN: Bruce Reed

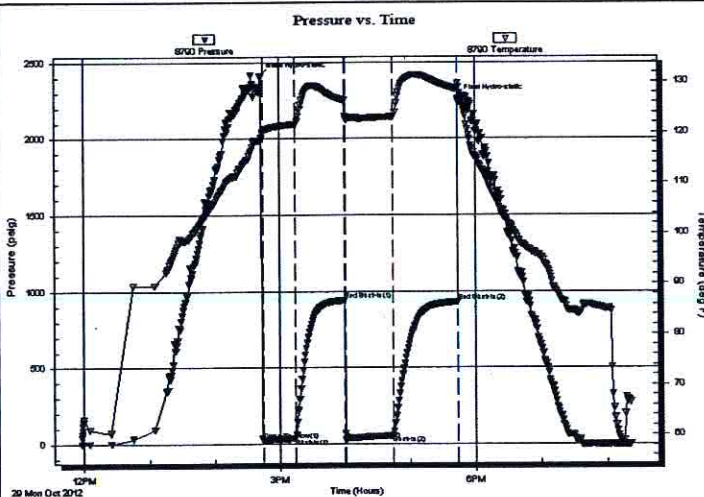
34-32s.-12w. Barber,KS
Randels "B" #4
Job Ticket: 49590 **DST#: 1**
Test Start: 2012.10.29 @ 11:58:11

GENERAL INFORMATION:

Formation: **Simpson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:44:11
Time Test Ended: 20:21:56
Interval: **4760.00 ft (KB) To 4790.00 ft (KB) (TVD)**
Total Depth: 4790.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Test Type: Conventional Bottom Hole (Initial)
Tester: Ryan Reynolds
Unit No: 48
Reference Elevations: 1542.00 ft (KB)
1534.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8790 **Inside**
Press@RunDepth: 54.61 psig @ 4761.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.10.29 End Date: 2012.10.29 Last Calib.: 2012.10.29
Start Time: 11:58:16 End Time: 20:21:55 Time On Btm: 2012.10.29 @ 14:41:41
Time Off Btm: 2012.10.29 @ 17:44:11

TEST COMMENT: IF: Strong blow . BOB 90 sec. No GTS.
IS: No blow
FF: Strong blow . BOB immed. GTS @ 12 min. Gauged gas throughout
FS: Weak surf. BB



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2412.03	118.45	Initial Hydro-static
3	24.08	119.72	Open To Flow (1)
33	38.31	121.63	Shut-In(1)
78	941.22	126.31	End Shut-In(1)
79	28.15	122.56	Open To Flow (2)
123	54.61	123.09	Shut-In(2)
182	931.32	128.51	End Shut-In(2)
183	2261.10	129.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	SLI OCGM Trc%oil, 5%gas, 95%mud	0.28
40.00	GCM 7%gas, 93%mud	0.22

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	8.50	8.57
Last Gas Rate	0.13	12.00	9.88
Max. Gas Rate	0.13	12.00	9.88



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TOOL DIAGRAM

Charles N. Griffin

34-32s.-12w. Barber,KS

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Randels "B" #4

Job Ticket: 49590

DST#: 1

ATTN: Bruce Reed

Test Start: 2012.10.29 @ 11:58:11

Tool Information

Drill Pipe:	Length: 4650.00 ft	Diameter: 3.80 inches	Volume: 65.23 bbl	Tool Weight:	1900.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	23000.00 lb
Drill Collar:	Length: 126.00 ft	Diameter: 2.40 inches	Volume: 0.71 bbl	Weight to Pull Loose:	73000.00 lb
			<u>Total Volume: 65.94 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	36.00 ft			String Weight: Initial	61000.00 lb
Depth to Top Packer:	4760.00 ft			Final	61000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	30.00 ft				
Tool Length:	50.00 ft				
Number of Packers:	2	Diameter: 6.50 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4745.00	
Hydraulic tool	5.00			4750.00	
Packer	5.00			4755.00	20.00 Bottom Of Top Packer
Packer	5.00			4760.00	
Stubb	1.00			4761.00	
Recorder	0.00	8790	Inside	4761.00	
Recorder	0.00	8792	Outside	4761.00	
Perforations	26.00			4787.00	
Bullnose	3.00			4790.00	30.00 Bottom Packers & Anchor
Total Tool Length:	50.00				



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FLUID SUMMARY

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34-32s.-12w. Barber,KS
Randels "B" #4
Job Ticket: 49590 DST#: 1
Test Start: 2012.10.29 @ 11:58:11

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 9.59 in³
Resistivity: ohm.m
Salinity: 6000.00 ppm
Filter Cake: 0.02 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig
Oil API: deg API
Water Salinity: 6000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	SLI OCGM Trc%oil, 5%gas, 95%mud	0.280
40.00	GCM 7%gas, 93%mud	0.224

Total Length: 90.00 ft Total Volume: 0.504 bbl
Num Fluid Samples: 1 Num Gas Bombs: 1 Serial #: RR-1
Laboratory Name: Caraway Laboratory Location: Liberal, KS
Recovery Comments:



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DRILL STEM TEST REPORT

GAS RATES

Charles N. Griffin
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ATTN: Bruce Reed

34-32s.-12w. Barber,KS
Randels "B" #4
Job Ticket: 49590 DST#: 1
Test Start: 2012.10.29 @ 11:58:11

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)
2	20	0.13	8.50	8.57
2	30	0.13	10.00	9.13
2	40	0.13	11.00	9.51
2	45	0.13	12.00	9.88

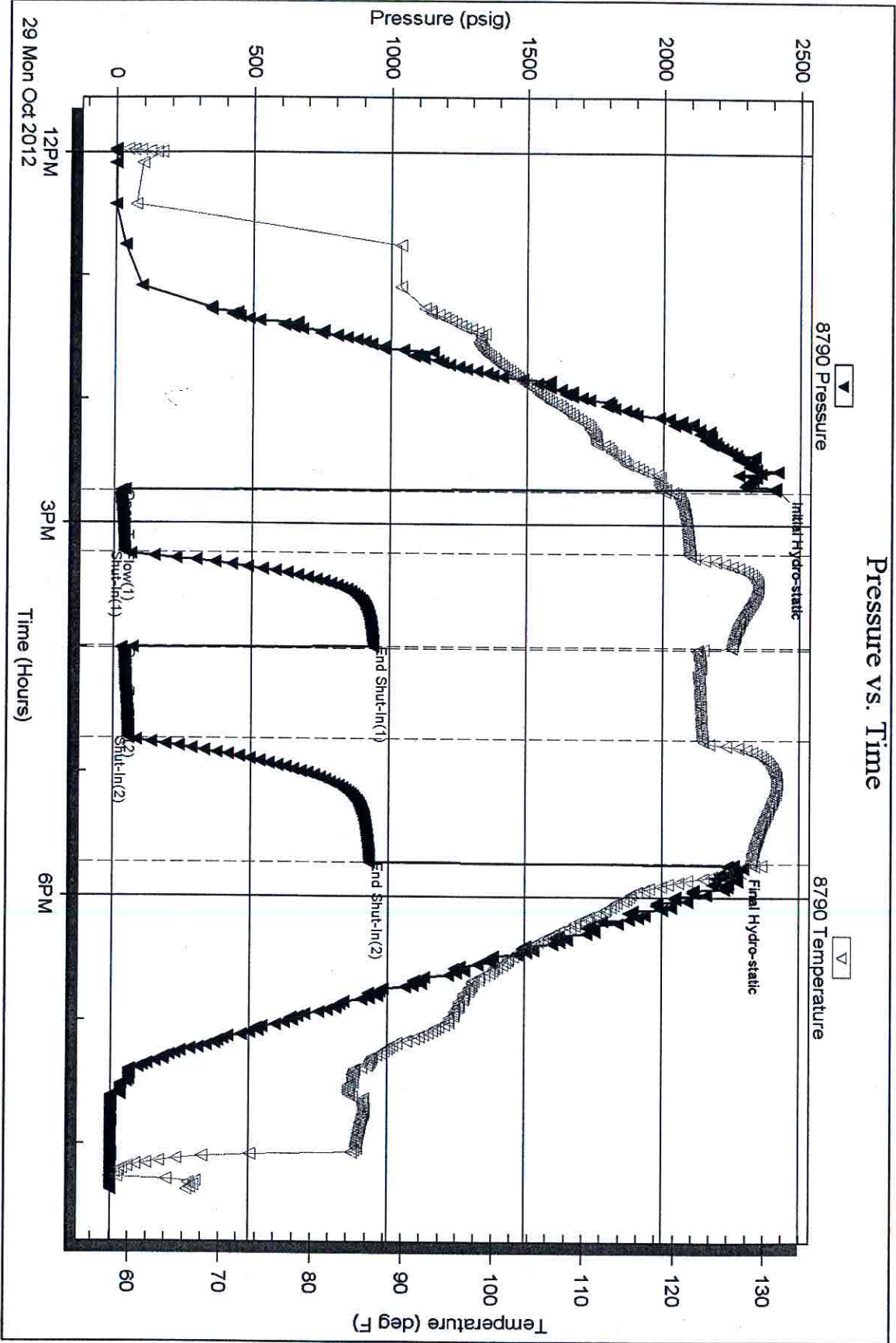
Serial #: 8790

Inside

Charles N. Griffin

Randels "B" #4

DST Test Number: 1

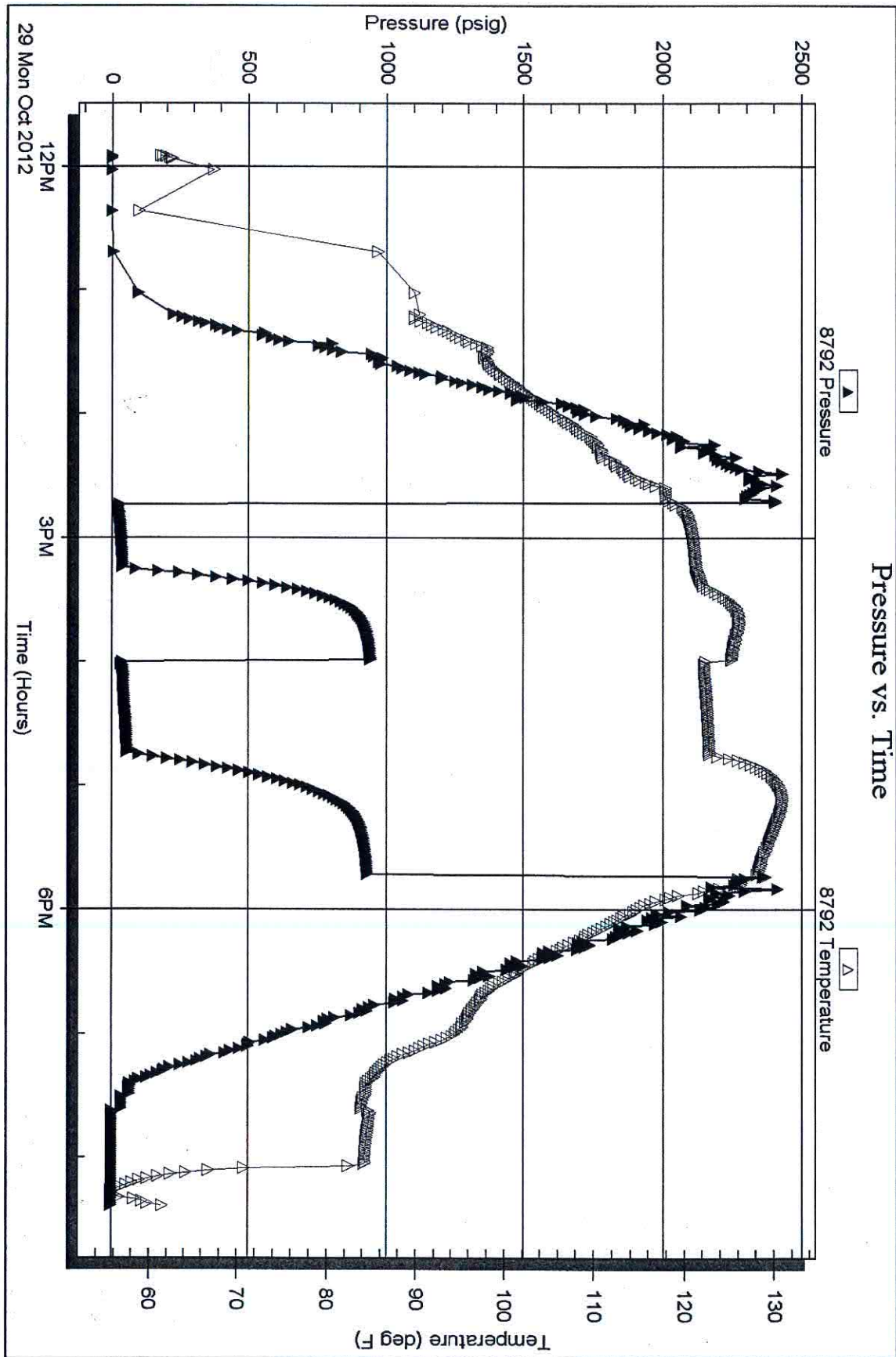


Serial #: 8792

Outside Charles N. Griffin

Randel's "B" #4

DST Test Number: 1



Trilobe Testing, Inc

Ref. No: 49590

Printed: 2012.11.02 @ 08:37:29



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 49590

Well Name & No. Randels "B" #4 Test No. 1 Date 10-29-12
 Company CNG Elevation 1542 KB 1534 GL
 Address P.O. Box 347 Pratt, KS 67124-0347
 Co. Rep / Geo. Bruce Reed Rig Fossil #2
 Location: Sec. 34 Twp. 32s. Rge. 12w. Co. Barber State KS

Interval Tested 4760-4790 Zone Tested Simpson
 Anchor Length 30' Drill Pipe Run 4650 Mud Wt. 9.3
 Top Packer Depth 4755 Drill Collars Run 126 Vis 47
 Bottom Packer Depth 4760 Wt. Pipe Run Ø WL 9.6
 Total Depth 4790 Chlorides 6000 ppm System LCM 3#
 Blow Description IF: Strong blow. BoB 90 sec. No GTS ISI: No blow

FF: Strong blow. BoB immed. GTS @ 12 min. Guaged gas
FSI: Weak surf. BB

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>GCM</u>	<u>7</u>		<u>93</u>	
<u>50</u>	<u>SLI OCGM</u>	<u>5</u>	<u>TRC</u>	<u>95</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 90 BHT _____ Gravity N/C API RW N/C @ N/C F Chlorides 6000 ppm
 (A) Initial Hydrostatic 2412 Test 1250 T-On Location 1100
 (B) First Initial Flow 24 Jars _____ T-Started 1158
 (C) First Final Flow 38 Safety Joint _____ T-Open 1444
 (D) Initial Shut-In 941 Circ Sub _____ T-Pulled 1740
 (E) Second Initial Flow 28 Hourly Standby _____ T-Out 2022
 (F) Second Final Flow 55 Mileage (test) (Pick up tools) 80 + 80 248 Comments _____
 (G) Final Shut-In 931 Sampler _____
 (H) Final Hydrostatic 2261 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 60
 Sub Total 0
 Total 1498
 MP/DST Disc't _____

Approved By Bruce Reed Our Representative Ryan Reynolds
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