

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Charles N. Griffin**

PO Box 347
Pratt KS 67124

ATTN: Bruce Reed

Randels #5X

34-32s-12w Baber,KS

Start Date: 2015.11.07 @ 22:10:34

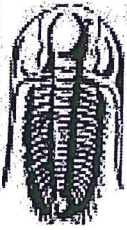
End Date: 2015.11.08 @ 06:04:49

Job Ticket #: 59800 DST #: 1

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

Printed: 2015.11.09 @ 16:23:29

Charles N. Griffin
34-32s-12w Baber,KS
Randels #5X
DST # 1
Simpson Sd.
2015.11.07



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Charles N. Griffin
 PO Box 347
 Pratt KS 67124
 ATTN: Bruce Reed

34-32s-12w Baber,KS

Randels #5X

Job Ticket: 59800

DST#: 1

Test Start: 2015.11.07 @ 22:10:34

GENERAL INFORMATION:

Formation: **Simpson Sd.**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:28:34
 Time Test Ended: 06:04:49
 Interval: **4704.00 ft (KB) To 4740.00 ft (KB) (TVD)**
 Total Depth: 4740.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)
 Tester: Gary Pevoteaux
 Unit No: 80
 Reference Elevations: 1519.00 ft (KB)
 1514.00 ft (CF)
 KB to GR/CF: 5.00 ft

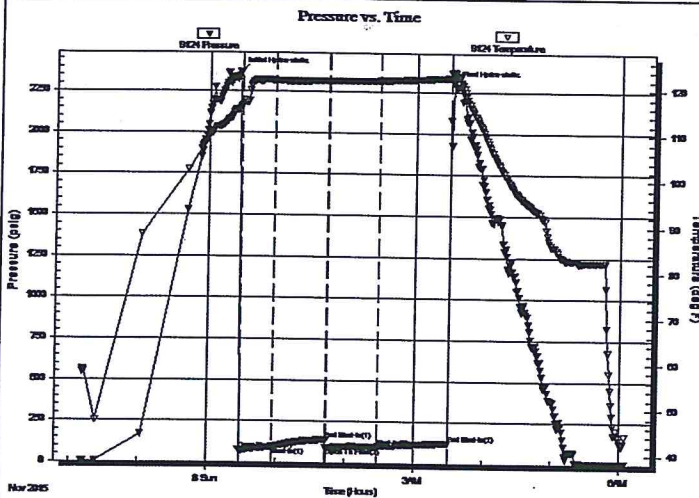
Serial #: 9124

Outside

Press@RunDepth: 100.32 psig @ 4705.00 ft (KB)
 Start Date: 2015.11.07 End Date: 2015.11.08
 Start Time: 22:10:39 End Time: 06:04:48

Capacity: 8000.00 psig
 Last Calib.: 2015.11.08
 Time On Btm: 2015.11.08 @ 00:26:49
 Time Off Btm.: 2015.11.08 @ 03:32:49

TEST COMMENT: IF:Strong blow . B.O.B. in 3 mins.
 IS:No blow .
 FF:Weak blow . Slow increase to 5".
 FSI:No blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2370.37	115.93	Initial Hydro-static
2	73.26	116.57	Open To Flow (1)
31	92.14	121.96	Shut-In(1)
77	140.62	121.97	End Shut-In(1)
77	89.87	121.95	Open To Flow (2)
122	100.32	122.00	Shut-In(2)
184	122.85	122.68	End Shut-In(2)
186	2301.36	124.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
170.00	WM 36%w 64%m	1.29
0.00	385 ft.of GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Charles N. Griffin

34-32s-12w Baber,KS

PO Box 347
Pratt KS 67124

Randels #5X

Job Ticket: 59800

DST#: 1

ATTN: Bruce Reed

Test Start: 2015.11.07 @ 22:10:34

GENERAL INFORMATION:

Formation: **Simpson Sd.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:28:34

Time Test Ended: 06:04:49

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 80

Interval: **4704.00 ft (KB) To 4740.00 ft (KB) (TVD)**

Reference Elevations: 1519.00 ft (KB)

Total Depth: 4740.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6798

Inside

Press@RunDepth: psig @ 4705.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.11.07 End Date: 2015.11.08

Last Calib.: 2015.11.08

Start Time: 22:05:13 End Time: 06:02:22

Time On Btm:

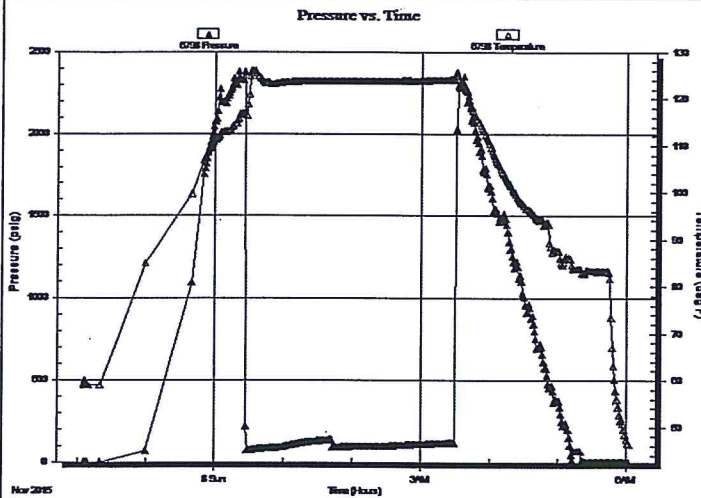
Time Off Btm:

TEST COMMENT: IF:Strong blow . B.O.B. in 3 mins.

IS:No blow .

FF:Weak blow . Slow increase to 5".

FSI:No blow .



PRESSURE SUMMARY

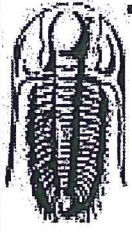
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
-------------	-----------------	--------------	------------

Recovery

Length (ft)	Description	Volume (bbl)
170.00	WM 36%w 64%m	1.29
0.00	385 ft.of GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N. Griffin

34-32s-12w Baber,KS

PO Box 347
Pratt KS 67124

Randels #5X

Job Ticket: 59800

DST#: 1

ATTN: Bruce Reed

Test Start: 2015.11.07 @ 22:10:34

Tool Information

Drill Pipe:	Length: 4568.00 ft	Diameter: 3.80 inches	Volume: 64.08 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 109000.0 lb
			Total Volume: 64.67 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 72500.00 lb
Depth to Top Packer:	4704.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	64.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4677.00	
Shut In Tool	5.00			4682.00	
Hydraulic tool	5.00			4687.00	
Jars	5.00			4692.00	
Safety Joint	3.00			4695.00	
Packer	4.00			4699.00	28.00 Bottom Of Top Packer
Packer	5.00			4704.00	
Stubb	1.00			4705.00	
Recorder	0.00	9124	Outside	4705.00	
Recorder	0.00	6798	Inside	4705.00	
Perforations	30.00			4735.00	
Bullnose	5.00			4740.00	36.00 Bottom Packers & Anchor

Total Tool Length: 64.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N. Griffin

34-32s-12w Baber,KS

PO Box 347
Pratt KS 67124

Randels #5X

Job Ticket: 59800

DST#: 1

ATTN: Bruce Reed

Test Start: 2015.11.07 @ 22:10:34

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:	76000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.79 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6300.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
170.00	WM 36%w 64%m	1.292
0.00	385 ft.of GIP	0.000

Total Length: 170.00 ft Total Volume: 1.292 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

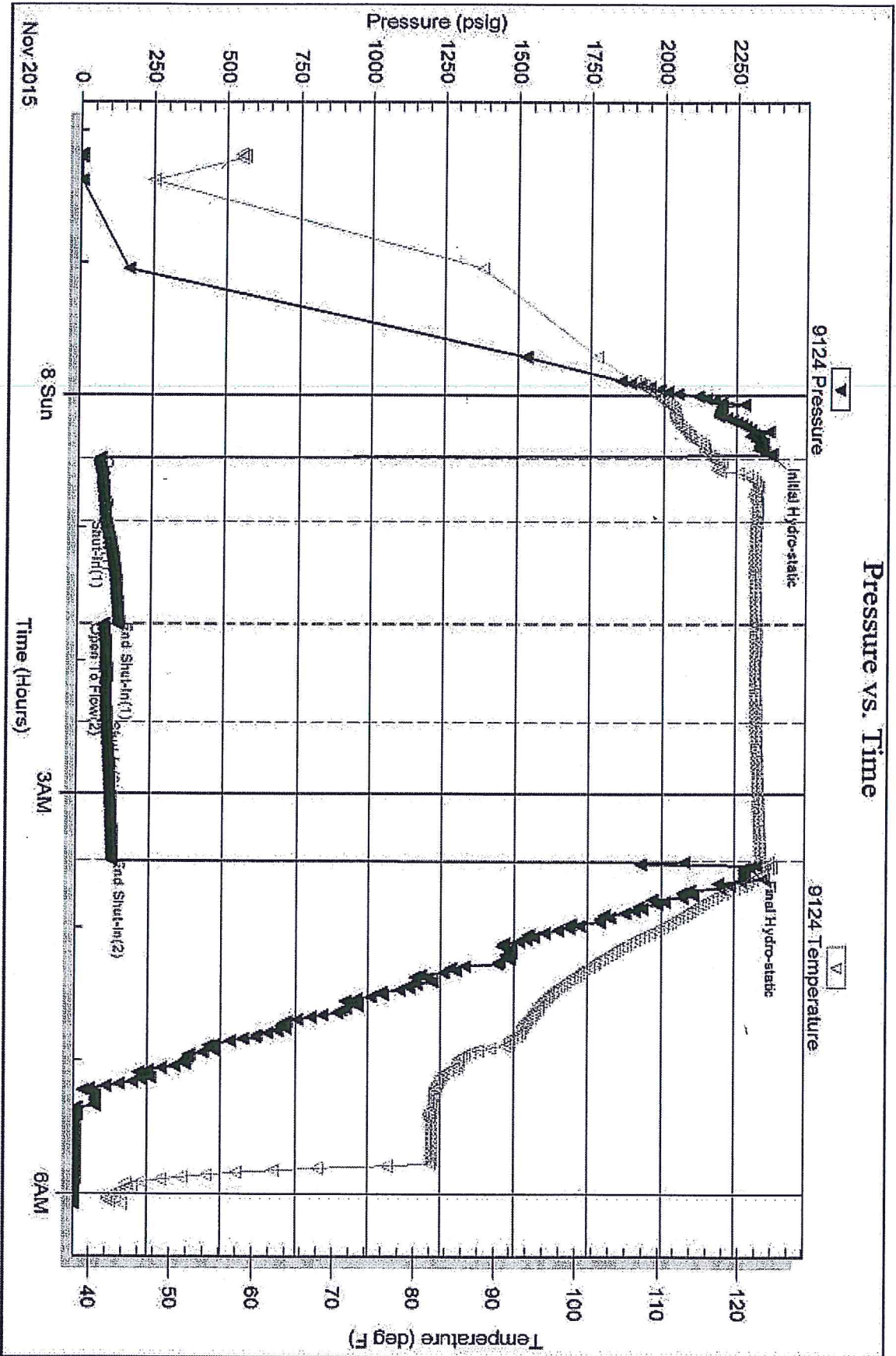
Recovery Comments: Rw .16 ohms @ 45 deg

Serial #: 9124

Outside Charles N. Griffin

Randels #5X

DST Test Number: 1



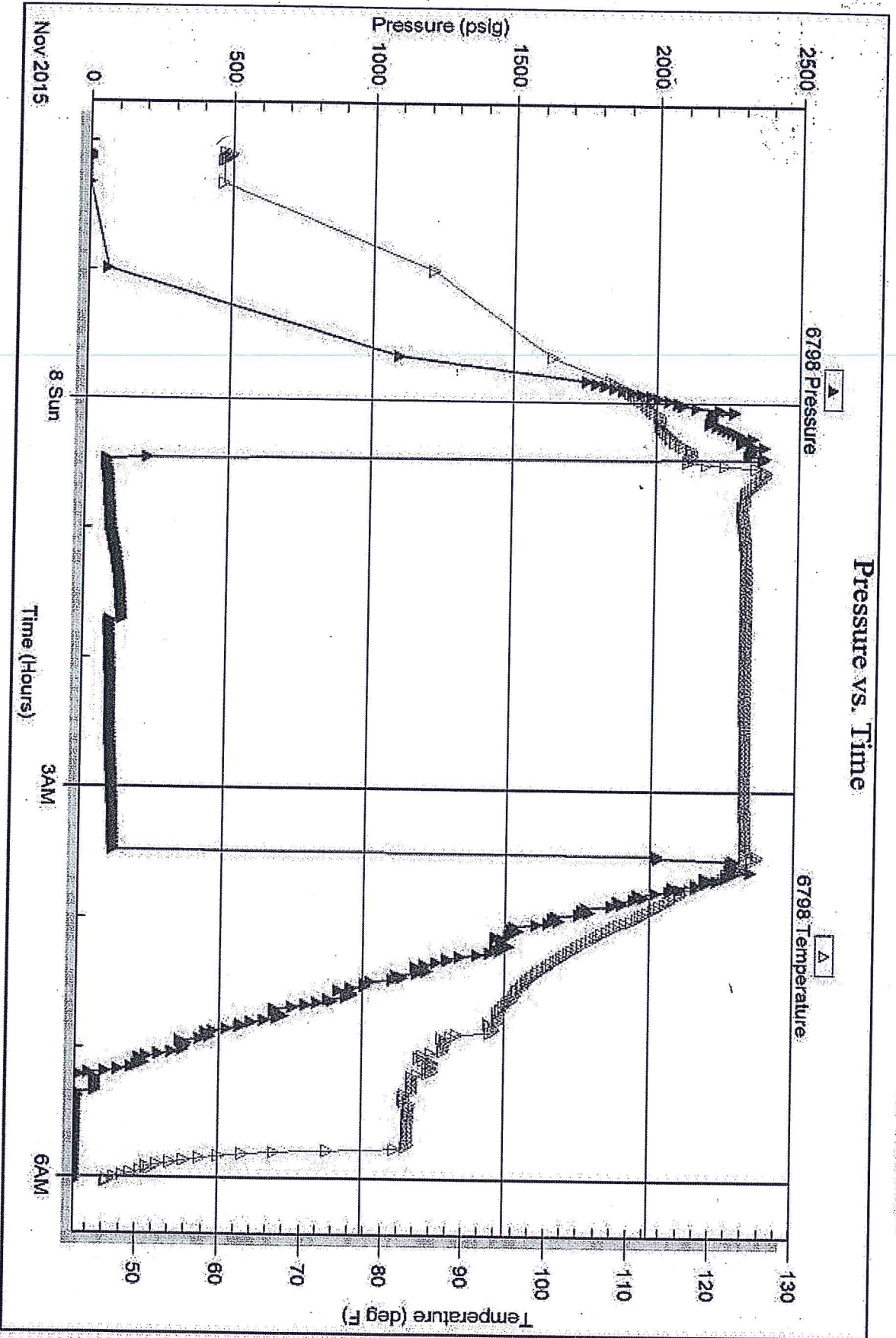
Serial #: 6798

Inside

Charles N. Griffin

Randels #5X

DSI Test Number: 1



Tribble Testing, Inc

Ref. No: 59800

Printed: 2015, 11:09 @ 16:23:52



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59800

Well Name & No. RAUDELS SX Test No. 1 Date 11-7-15
 Company CHARLES N. GRIFFEN Elevation 1519 KB 1594 GL
 Address P.O. Box 347, PRATT KS. 67124
 Co. Rep / Geo. BRUCE REED Rig WW DRUG. #4
 Location: Sec. 34 Twp. 32S Rge. 12W Co. BARBER State KS

Interval Tested 4704 - 4740' Zone Tested SIMPSON SD.
 Anchor Length 36' Drill Pipe Run 4568' Mud Wt. 9.2
 Top Packer Depth 4699' Drill Collars Run 120' Vis SI
 Bottom Packer Depth 4704' Wt. Pipe Run 0 WL 10.8 cc
 Total Depth 4740' Chlorides 6300 ppm System LCM 2H

Blow Description IF: Strong blow. B.O.B. in 3 mins.
ISS: No blow.
FF: Weak blow. slow increase to 5". EST: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>385</u>	<u>Gas in pipe</u>				
<u>170</u>	<u>WM /</u>			<u>36%</u>	<u>64%</u>

Rec Total 170 initial BHT 1230 Gravity N/A API RW -16 @ 45 ° F Chlorides 76000 ppm
 (A) Initial Hydrostatic 2370 Test 1150 T-On Location 2110
 (B) First Initial Flow 73 Jars 250 T-Started 2210
 (C) First Final Flow 92 Safety Joint 75 T-Open 0028
 (D) Initial Shut-In 141 Circ Sub _____ T-Pulled 0331
 (E) Second Initial Flow 89 Hourly Standby _____ T-Out 0604
 (F) Second Final Flow 100 Mileage 787 x 2* 156 Comments loaded 11/8 21:00
 (G) Final Shut-In 123 Sampler _____ * RETURNED TO LOAD Tool
 (H) Final Hydrostatic 2301 Straddle _____ OPERATOR REQUESTED TOOLS TO
BE LEFT.
 Ruined Shale Packer _____
 Ruined Packer _____

Initial Open 30 Extra Packer _____
 Initial Shut-In 45 Extra Recorder _____
 Final Flow 45 Day Standby _____
 Final Shut-In 60 Accessibility _____
 Sub Total 1631 MP/DST Disc'd _____

Approved By Bruce A. Reed Our Representative Corey R. Stearns

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.