



DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt, KS 67124

ATTN: Bruce Reed

Springer #3

34-32S-12W Barber,KS

Start Date: 2016.10.29 @ 10:18:31

End Date: 2016.10.29 @ 18:16:31

Job Ticket #: 57965 DST #: 1

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

Printed: 2016.10.31 @ 10:27:19



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charles N Griffin

34-32S-12W Barber,KS

PO Box 347
Pratt, KS 67124

Springer #3

Job Ticket: 57965

DST#: 1

ATTN: Bruce Reed

Test Start: 2016.10.29 @ 10:18:31

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:26:16

Time Test Ended: 18:16:31

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: 4790.00 ft (KB) To 4818.00 ft (KB) (TVD)

Reference Elevations: 1571.00 ft (KB)

Total Depth: 4818.00 ft (KB) (TVD)

1566.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8159 Inside

Press@RunDepth: 51.56 psig @ 4791.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.29

End Date:

2016.10.29

Last Calib.:

2016.10.29

Start Time:

10:18:32

End Time:

19:16:31

Time On Btm:

2016.10.29 @ 14:25:46

Time Off Btm:

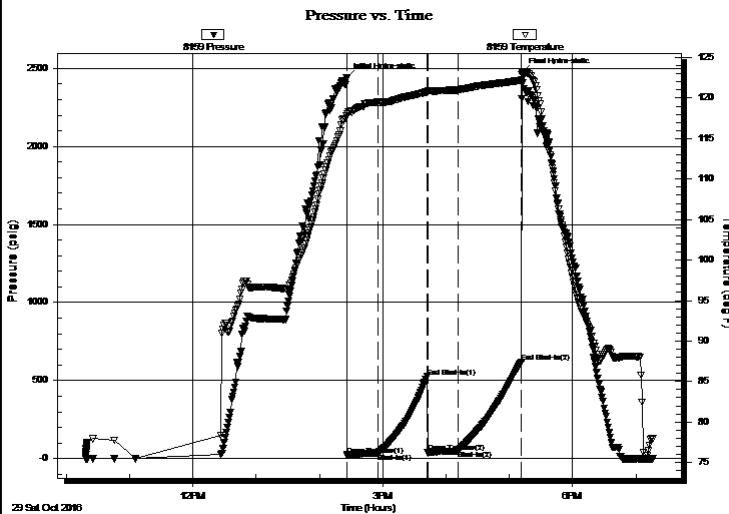
2016.10.29 @ 17:12:16

TEST COMMENT: IF: Fair Blow , BOB in 20 minutes

IS: No Blow Back

FF: Fair Blow , BOB in 22 minutes

FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2437.76	117.84	Initial Hydro-static
1	21.72	117.75	Open To Flow (1)
30	36.71	119.49	Shut-In(1)
76	524.32	120.77	End Shut-In(1)
77	37.28	120.79	Open To Flow (2)
106	51.56	121.01	Shut-In(2)
166	620.29	122.21	End Shut-In(2)
167	2473.98	123.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	SOWCM 5%O 5%W 90%M	0.34

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charles N Griffin

34-32S-12W Barber,KS

PO Box 347
Pratt, KS 67124

Springer #3

Job Ticket: 57965

DST#: 1

ATTN: Bruce Reed

Test Start: 2016.10.29 @ 10:18:31

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:26:16

Time Test Ended: 18:16:31

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: 4790.00 ft (KB) To 4818.00 ft (KB) (TVD)

Reference Elevations: 1571.00 ft (KB)

Total Depth: 4818.00 ft (KB) (TVD)

1566.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6806 Outside

Press@RunDepth: psig @ 4791.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.29 End Date: 2016.10.29

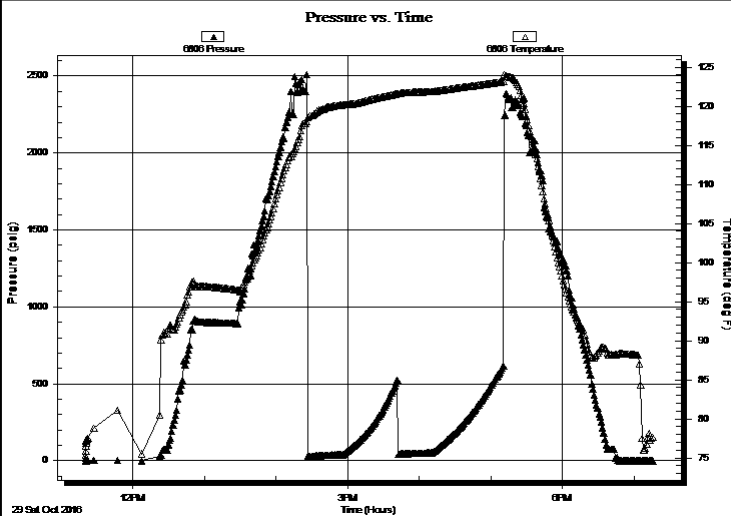
Last Calib.: 2016.10.29

Start Time: 11:20:32 End Time: 19:16:31

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Fair Blow , BOB in 20 minutes
IS: No Blow Back
FF: Fair Blow , BOB in 22 minutes
FS: No Blow Back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
70.00	SOWCM 5%O 5%W 90%M	0.34

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 Barber,KS

PO Box 347
Pratt, KS 67124

Springer #3

Job Ticket: 57965

DST#: 1

ATTN: Bruce Reed

Test Start: 2016.10.29 @ 10:18:31

Tool Information

Drill Pipe:	Length: 4664.00 ft	Diameter: 3.80 inches	Volume: 65.42 bbl	Tool Weight: 2100.00 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: 118.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 66.00 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4790.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	54.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4769.00	
Hydraulic tool	5.00			4774.00	
Jars	5.00			4779.00	
Safety Joint	2.00			4781.00	
Packer	5.00			4786.00	26.00 Bottom Of Top Packer
Packer	4.00			4790.00	
Stubb	1.00			4791.00	
Recorder	0.00	8159	Inside	4791.00	
Recorder	0.00	6806	Outside	4791.00	
Perforations	24.00			4815.00	
Bullnose	3.00			4818.00	28.00 Bottom Packers & Anchor

Total Tool Length: 54.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

34-32S-12W Barber,KS

PO Box 347
Pratt, KS 67124

Springer #3

Job Ticket: 57965

DST#: 1

ATTN: Bruce Reed

Test Start: 2016.10.29 @ 10:18:31

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	SOWCM 5%O 5%W 90%M	0.344

Total Length: 70.00 ft Total Volume: 0.344 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

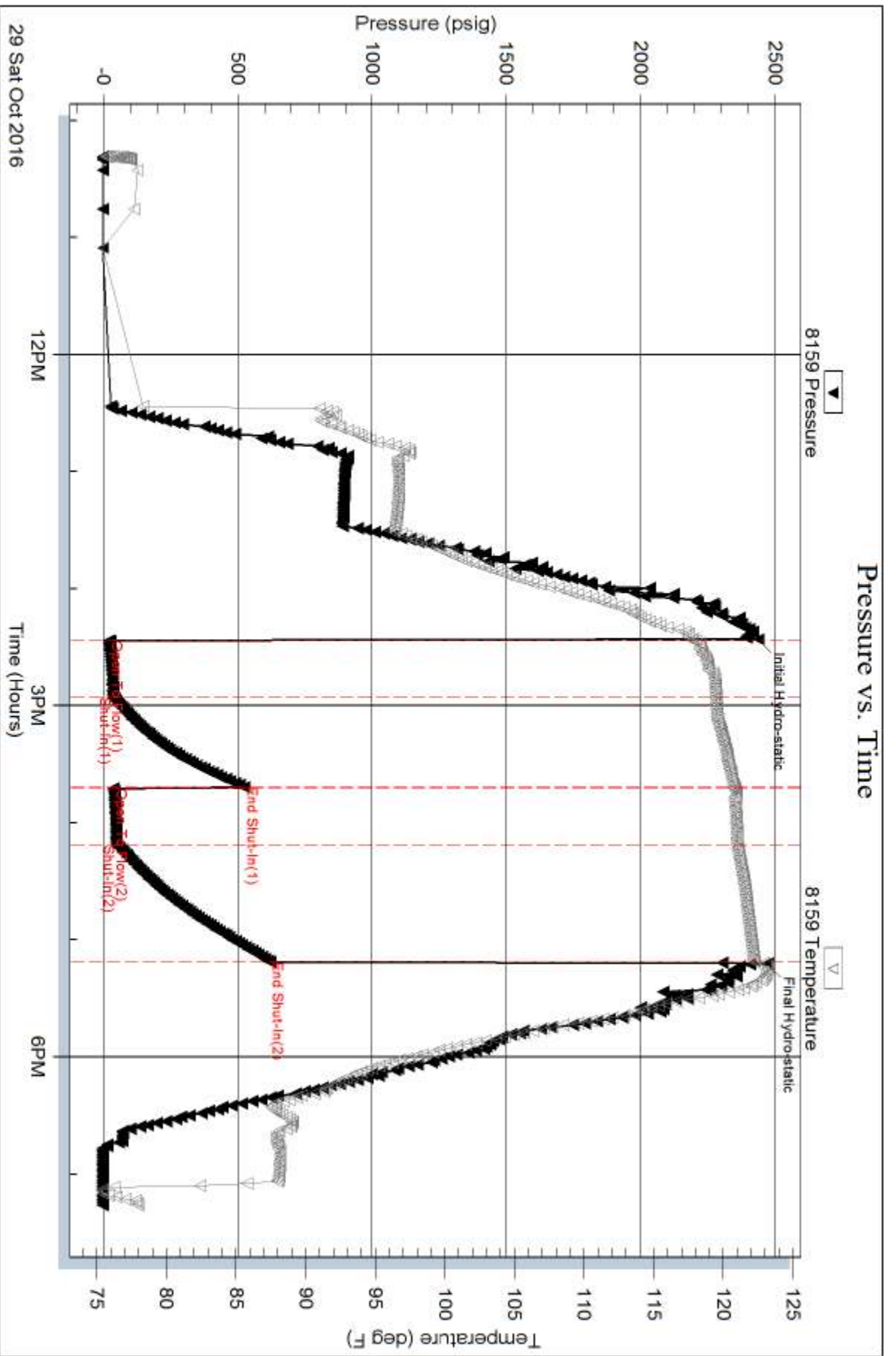
Serial #: 8159

Inside

Charles N Griffin

Springer #3

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 57965

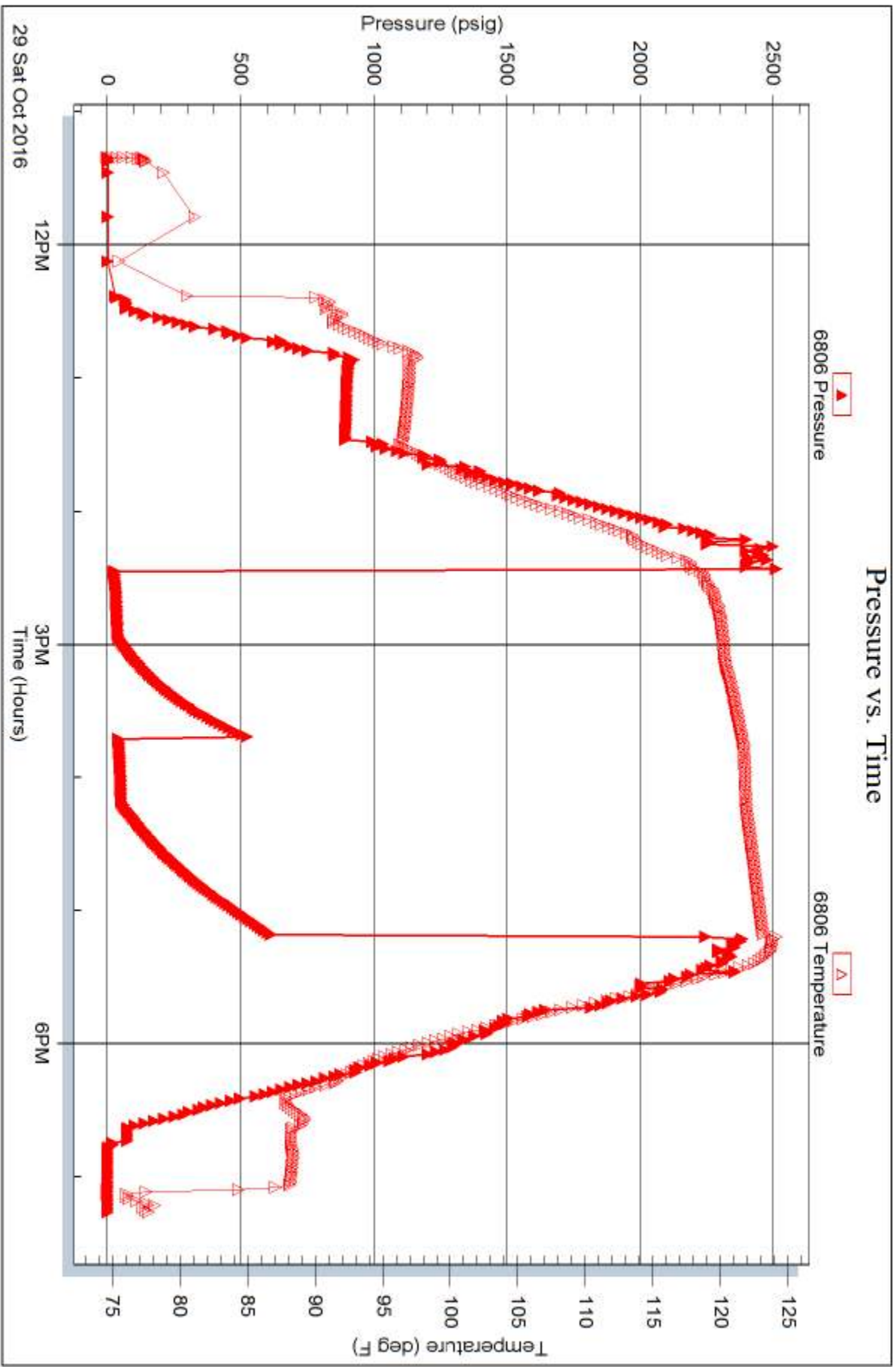
Printed: 2016.10.31 @ 10:27:20

Serial #: 6806

Outside Charles N Griffin

Springer #3

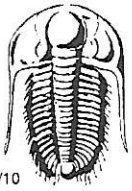
DST Test Number: 1



Triobite Testing, Inc

Ref. No: 57965

Printed: 2016.10.31 @ 10:27:20



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57965

Well Name & No. Springer 3 Test No. 1 Date 10/29/16
 Company Charles N. Griffin Elevation 1571 KB 1566 GL
 Address PO Box 347 Pratt, KS 67124
 Co. Rep / Geo. Bruce Reed Rig WW 8
 Location: Sec. 34 Twp. 32S Rge. 12W Co. Barber State KS

Interval Tested 4790 - 4818 Zone Tested SIMPSON
 Anchor Length 28 Drill Pipe Run 4664 Mud Wt. 9.3
 Top Packer Depth 4785 Drill Collars Run 118 Vis 54
 Bottom Packer Depth 4790 Wt. Pipe Run 0 WL 9.2
 Total Depth 4818 Chlorides 4500 ppm System LCM 1.5

Blow Description IF: Fair Blow, BOB in 20 minutes
ISI: NO Blow Back
FF: Fair Blow, BOB in 22 minutes
FST: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>50WCM</u>		<u>5</u>	<u>5</u>	<u>90</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 70 BHT 123 Gravity N/C API RW N/C @ N/C° F Chlorides N/C ppm
 (A) Initial Hydrostatic 2438 Test 1150 T-On Location 09:00
 (B) First Initial Flow 22 Jars 250 T-Started 10:18
 (C) First Final Flow 37 Safety Joint 75 T-Open 14:26
 (D) Initial Shut-In 524 Circ Sub _____ T-Pulled 17:11
 (E) Second Initial Flow 37 Hourly Standby _____ T-Out 18:16
 (F) Second Final Flow 52 Mileage 809 120 Comments Loaded Tools @ 11:00 on 10/30
 (G) Final Shut-In 620 Sampler _____
 (H) Final Hydrostatic 2474 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 1595
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1595

Approved By Bruce Reed Our Representative [Signature]
 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 of 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.