



DRILL STEM TEST REPORT

Prepared For: **American Warrior Incorporated**

PO Box 399
Garden City, KS 67846

ATTN: Jason Alm

Mabel #1-19

19-23s-23w Hodgeman,KS

Start Date: 2016.08.19 @ 06:24:00

End Date: 2016.08.19 @ 14:00:30

Job Ticket #: 65112 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2016.08.19 @ 15:10:55



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

American Warrior Incorporated

19-23s-23w Hodgeman,KS

PO Box 399
Garden City, KS 67846

Mabel #1-19

Job Ticket: 65112

DST#: 1

ATTN: Jason Alm

Test Start: 2016.08.19 @ 06:24:00

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:49:30

Time Test Ended: 14:00:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 4662.00 ft (KB) To 4736.00 ft (KB) (TVD)

Reference Elevations: 2449.00 ft (KB)

Total Depth: 4736.00 ft (KB) (TVD)

2441.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 6999

Inside

Press@RunDepth: 747.66 psig @ 4731.67 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.19

End Date:

2016.08.19

Last Calib.:

2016.08.19

Start Time:

06:24:05

End Time:

14:00:29

Time On Btm:

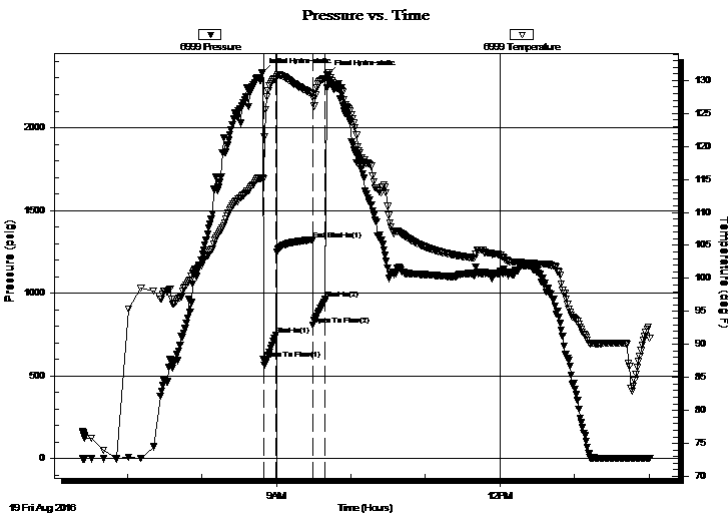
2016.08.19 @ 08:49:00

Time Off Btm:

2016.08.19 @ 09:41:30

TEST COMMENT: IFP 10 Minutes BOB in 55 seconds
FSI 30 Mintues BOB in 15 minutes
FFP 10 Minutes BOB in 55 seconds
Pulled test with tool open

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2332.66	115.26	Initial Hydro-static
1	599.61	115.13	Open To Flow (1)
11	747.66	130.30	Shut-In(1)
40	1320.46	127.97	End Shut-In(1)
41	809.01	127.40	Open To Flow (2)
51	962.70	130.30	Shut-In(2)
53	2321.38	131.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2294.00	SMCGO Mud 5% Gas 10% Oil 85%	31.91
124.00	GOCM Oil 10% Gas 10% Mud 80%	1.74
0.00	496 feet of gas in pipe	0.00

Gas Rates

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



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Garden City, KS 67846

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Time Test Ended: 14:00:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 4662.00 ft (KB) To 4736.00 ft (KB) (TVD)

Reference Elevations: 2449.00 ft (KB)

Total Depth: 4736.00 ft (KB) (TVD)

2441.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8960

Outside

Press@RunDepth: 1321.77 psig @ 4732.67 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.19

End Date:

2016.08.19

Last Calib.:

2016.08.19

Start Time:

06:24:05

End Time:

13:59:59

Time On Btm:

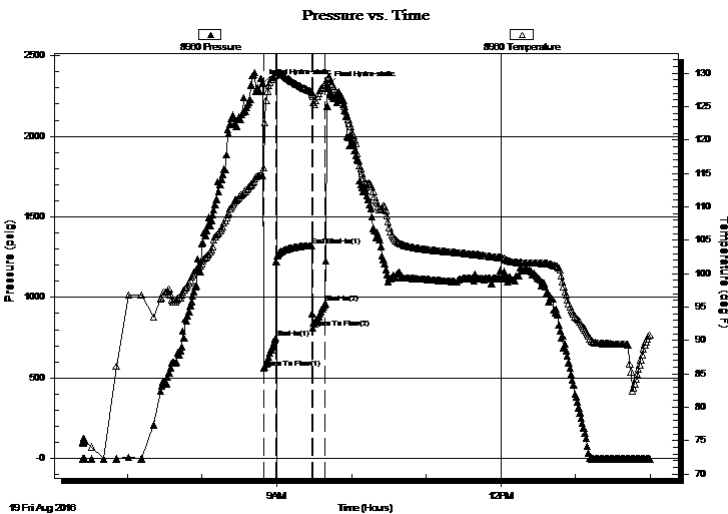
2016.08.19 @ 08:48:30

Time Off Btm:

2016.08.19 @ 09:41:00

TEST COMMENT: IFP 10 Minutes BOB in 55 seconds
FSI 30 Mintues BOB in 15 minutes
FFP 10 Minutes BOB in 55 seconds
Pulled test with tool open

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2329.78	114.67	Initial Hydro-static
1	561.68	115.85	Open To Flow (1)
11	747.32	129.65	Shut-In(1)
40	1321.77	127.20	End Shut-In(1)
41	811.43	126.57	Open To Flow (2)
51	962.98	128.39	Shut-In(2)
53	2316.45	129.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2294.00	SMCGO Mud 5% Gas 10% Oil 85%	31.91
124.00	GOCM Oil 10% Gas 10% Mud 80%	1.74
0.00	496 feet of gas in pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Incorporated

19-23s-23w Hodgeman,KS

PO Box 399
Garden City, KS 67846

Mabel #1-19

Job Ticket: 65112

DST#: 1

ATTN: Jason Alm

Test Start: 2016.08.19 @ 06:24:00

Tool Information

Drill Pipe:	Length: 4627.00 ft	Diameter: 3.80 inches	Volume: 64.90 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 65.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4662.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	73.67 ft			
Tool Length:	101.67 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Reversed fluid through circulating sub

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			4639.00	
Hydraulic tool	5.00			4644.00	
Jars	6.00			4650.00	
Safety Joint	2.00			4652.00	
Top Packer	5.00			4657.00	
Packer	5.00			4662.00	28.00 Bottom Of Top Packer
Anchor	5.00			4667.00	
Change Over Sub	1.00			4668.00	
Drill Pipe	31.67			4699.67	
Change Over Sub	1.00			4700.67	
Anchor	30.00			4730.67	
Recorder	1.00	6999	Inside	4731.67	
Recorder	1.00	8960	Outside	4732.67	
Bullnose	3.00			4735.67	73.67 Anchor Tool

Total Tool Length: 101.67



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Incorporated

19-23s-23w Hodgeman,KS

PO Box 399
Garden City, KS 67846

Mabel #1-19

Job Ticket: 65112

DST#: 1

ATTN: Jason Alm

Test Start: 2016.08.19 @ 06:24:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 9.17 in³
Resistivity: ohm.m
Salinity: 5700.00 ppm
Filter Cake: 1.00 inches

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

Oil API: 35 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2294.00	SMCGO Mud 5% Gas 10% Oil 85%	31.906
124.00	GOCM Oil 10% Gas 10% Mud 80%	1.739
0.00	496 feet of gas in pipe	0.000

Total Length: 2418.00 ft Total Volume: 33.645 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6999

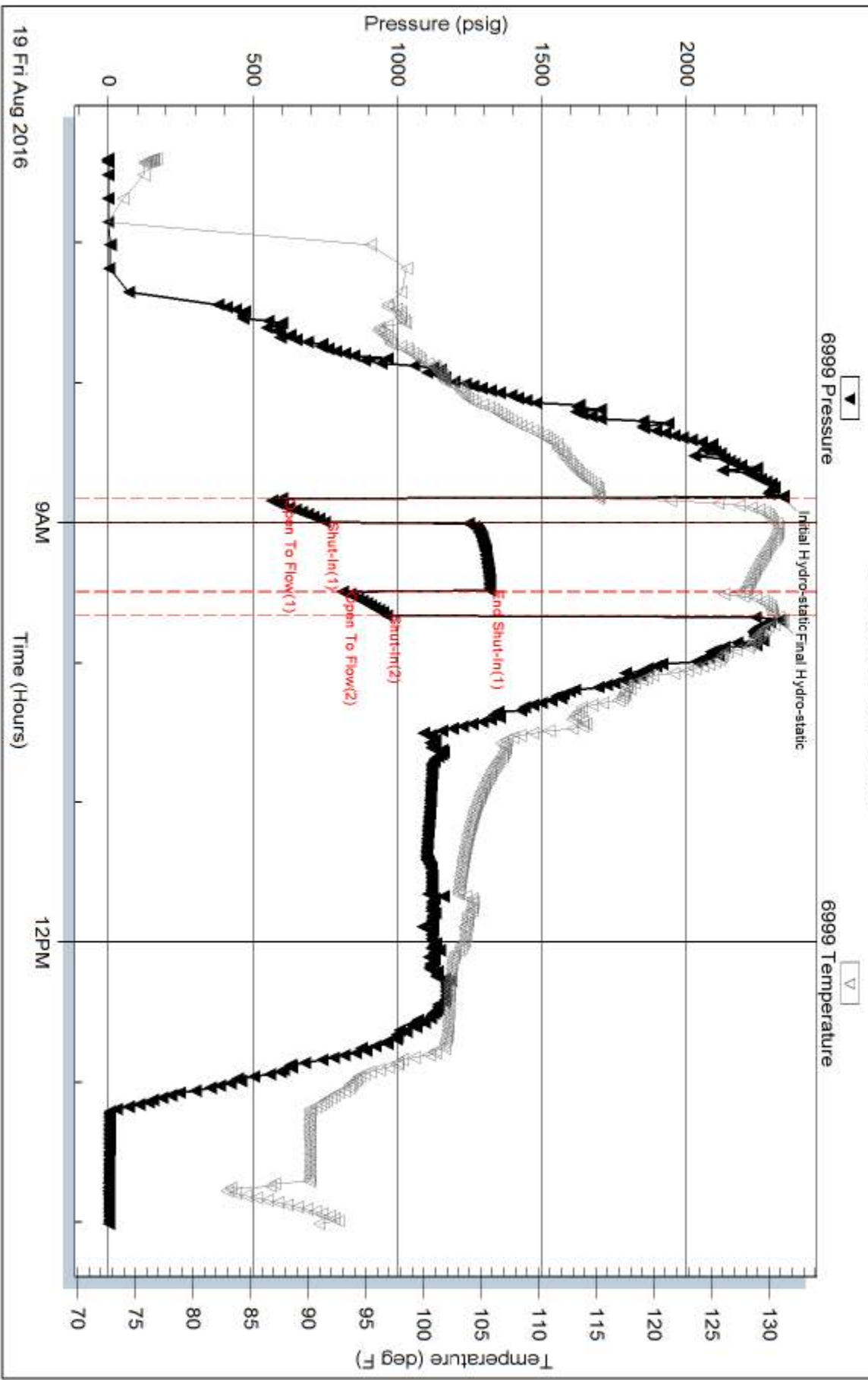
Inside

American Warrior Incorporated

Model #1-19

DST Test Number: 1

Pressure vs. Time

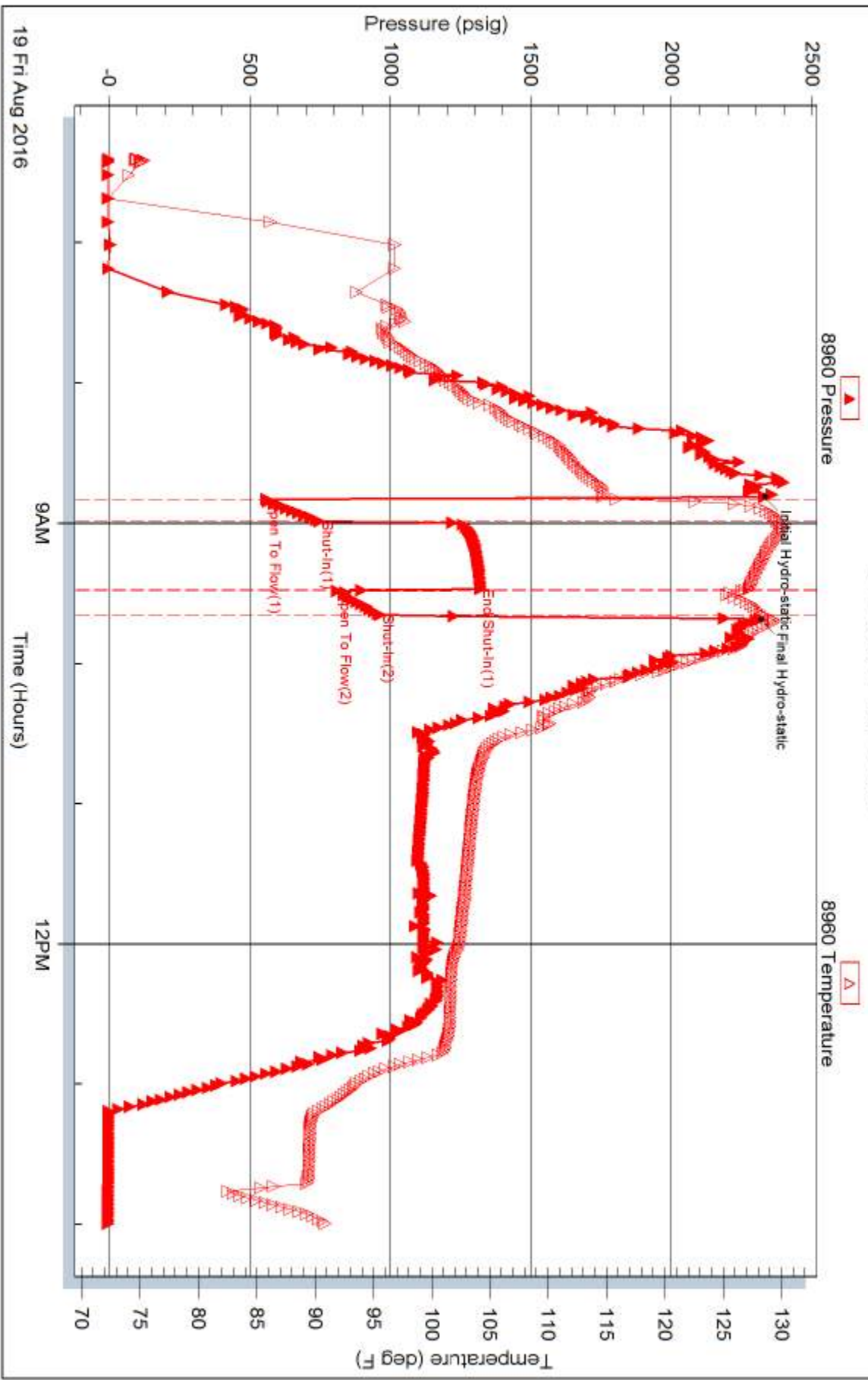


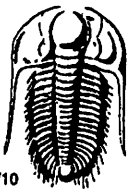
Triobite Testing, Inc

Ref. No: 65112

Printed: 2016.08.19 @ 15:10:56

Pressure vs. Time





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 65112

Well Name & No. Arabel # 1-19 Test No. 1 Date 19 Aug 16
 Company American Warrior Incorporated Elevation 2449 KB 2441 GL
 Address PO Box 399 3118 Cummings Road Garden City, KS 67846
 Co. Rep / Geo. Jason Alm Rig Discovery Rig 3
 Location: Sec. 19 Twp. 23S Rge. 23W Co. Hodgeman State KS

Interval Tested 4662-4736 Zone Tested Cherokee Sand
 Anchor Length 74 Drill Pipe Run 4627 Mud Wt. 9.3
 Top Packer Depth 4657 Drill Collars Run 30 Vis 48
 Bottom Packer Depth 4662 Wt. Pipe Run — WL 9.2
 Total Depth 4736 Chlorides 5700 ppm System LCM Trace

Blow Description F.F. Blow built to bottom of bucket in 55 seconds
I.S.I. blow back built to bottom of bucket in 15 minutes
F.F. Blow built to bottom of bucket in 55 seconds
Pull fast with tool open

Rec	Feet of	%gas	%oil	%water	%mud
<u>2294</u>	<u>Mud cut Gassy Oil</u>	<u>10</u>	<u>85</u>	<u>5</u>	<u>—</u>
<u>124</u>	<u>Oil and Gas cut Mud</u>	<u>10</u>	<u>10</u>	<u>80</u>	<u>—</u>
<u>496</u>	<u>Gas in Pipe</u>	<u>100</u>	<u>—</u>	<u>—</u>	<u>—</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2418 BHT 130 Gravity 35 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2332 Test 1150 T-On Location 4:20 am
 (B) First Initial Flow 599 Jars 250 T-Started 6:24 am
 (C) First Final Flow 747 Safety Joint 75 T-Open 8:49 am
 (D) Initial Shut-In 1320 Circ Sub — T-Pulled 9:39 am
 (E) Second Initial Flow 809 Hourly Standby — T-Out 2:00 pm
 (F) Second Final Flow 962 Mileage 138 103.50 Comments —
 (G) Final Shut-In — Sampler —
 (H) Final Hydrostatic 2331 Straddle — Ruined Shale Packer —

Initial Open 10 Ruined Packer and Packer ball
 Initial Shut-In 30 Extra Copies 320
 Final Flow 10 Sub Total 320
 Final Shut-In — Total 1898.50
 Sub Total 1578.50 MP/DST Disc't —

Approved By Jason Alm 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 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.