



DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

88 Inverness Circ
E Unit F 104
Englewood CO 80112

ATTN: Tom Williams

Tucker #3-34

34-30s-41w Stanton,KS

Start Date: 2014.12.31 @ 03:53:00

End Date: 2014.12.31 @ 15:20:30

Job Ticket #: 56588 DST #: 1

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

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TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Norstar Petroleum Inc.
 88 Inverness Circ
 E Unit F 104
 Englewood CO 80112
 ATTN: Tom Williams

34-30s-41w Stanton, KS

Tucker #3-34

Job Ticket: 56588 **DST#: 1**
 Test Start: 2014.12.31 @ 03:53:00

GENERAL INFORMATION:

Formation: **Keyes Sands**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 10:50:15 Tester: Cornelio Landa III
 Time Test Ended: 15:20:30 Unit No: 44
 Interval: **5360.00 ft (KB) To 5462.00 ft (KB) (TVD)** Reference Elevations: 3405.00 ft (KB)
 Total Depth: 5462.00 ft (KB) (TVD) 3395.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

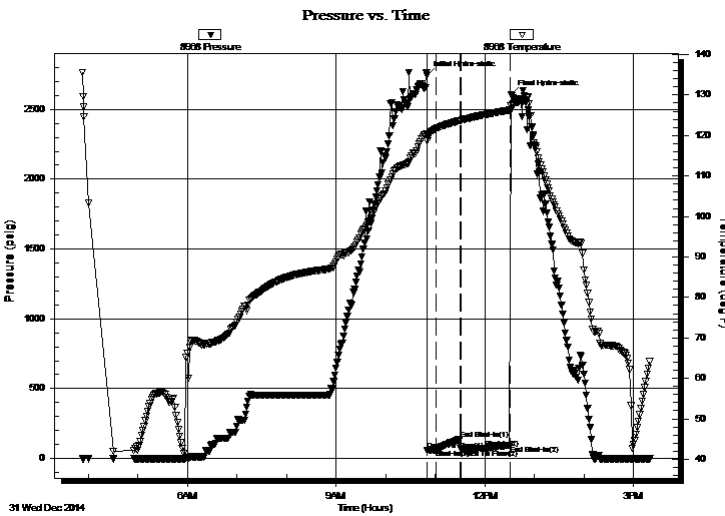
Serial #: 8968

Outside

Press@RunDepth: 71.08 psig @ 5362.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.31 End Date: 2014.12.31 Last Calib.: 2014.12.31
 Start Time: 03:53:05 End Time: 15:20:30 Time On Btm: 2014.12.31 @ 10:50:00
 Time Off Btm: 2014.12.31 @ 12:31:45

TEST COMMENT: IF: Weak surface blow -Built to 1/8" blow
 IS: No return
 FF: No blow
 FS: No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2741.19	120.42	Initial Hydro-static
1	57.82	118.69	Open To Flow (1)
12	62.67	121.73	Shut-In(1)
40	136.78	123.70	End Shut-In(1)
41	68.92	123.74	Open To Flow (2)
70	71.08	125.15	Shut-In(2)
101	96.24	126.27	End Shut-In(2)
102	2605.64	127.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
97.00	Mud 100m	0.48

Gas Rates

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



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GENERAL INFORMATION:

Formation: **Keyes Sands**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:50:15

Time Test Ended: 15:20:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Cornelio Landa III

Unit No: 44

Interval: 5360.00 ft (KB) To 5462.00 ft (KB) (TVD)

Reference Elevations: 3405.00 ft (KB)

Total Depth: 5462.00 ft (KB) (TVD)

3395.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8969 Inside

Press@RunDepth: psig @ 5362.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.31

End Date:

2014.12.31

Last Calib.:

2014.12.31

Start Time: 03:53:05

End Time:

15:20:30

Time On Btm:

Time Off Btm:

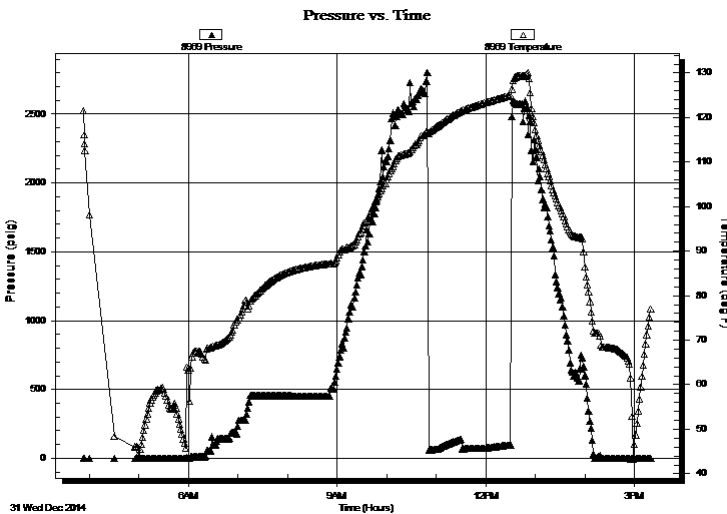
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PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
97.00	Mud 100m	0.48

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum Inc.

34-30s-41w Stanton,KS

88 Inverness Circ
E Unit F 104
Englewood CO 80112
ATTN: Tom Williams

Tucker #3-34

Job Ticket: 56588

DST#: 1

Test Start: 2014.12.31 @ 03:53:00

Tool Information

Drill Pipe:	Length: 4999.00 ft	Diameter: 3.80 inches	Volume: 70.12 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 360.00 ft	Diameter: 2.25 inches	Volume: 1.77 bbl	Weight to Pull Loose: 12000.00 lb
			<u>Total Volume: 71.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	5360.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	102.00 ft			
Tool Length:	129.00 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			5334.00	
Shut In Tool	5.00			5339.00	
Hydraulic tool	5.00			5344.00	
Jars	5.00			5349.00	
Safety Joint	2.00			5351.00	
Packer	5.00			5356.00	27.00 Bottom Of Top Packer
Packer	4.00			5360.00	
Stubb	1.00			5361.00	
Change Over Sub	1.00			5362.00	
Recorder	0.00	8969	Inside	5362.00	
Recorder	0.00	8968	Outside	5362.00	
Drill Pipe	94.00			5456.00	
Change Over Sub	1.00			5457.00	
Perforations	2.00			5459.00	
Bullnose	3.00			5462.00	102.00 Bottom Packers & Anchor

Total Tool Length: 129.00



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FLUID SUMMARY

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34-30s-41w Stanton,KS

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ATTN: Tom Williams

Tucker #3-34

Job Ticket: 56588

DST#: 1

Test Start: 2014.12.31 @ 03:53:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 44.00 sec/qt

Water Loss: 7.96 in³

Resistivity: 0.00 ohm.m

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
97.00	Mud 100m	0.477

Total Length: 97.00 ft Total Volume: 0.477 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

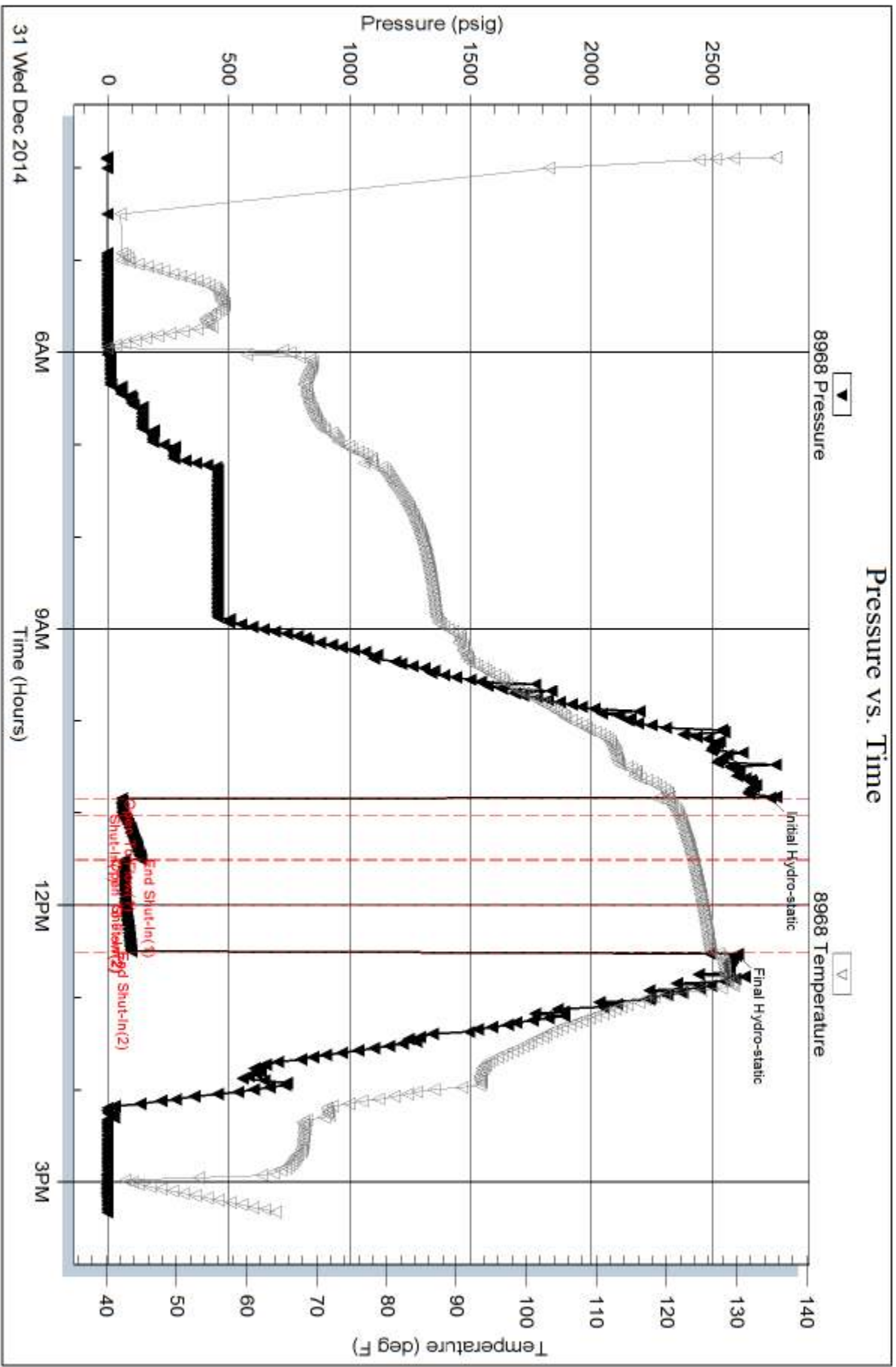
Recovery Comments:

Serial #: 8968

Outside Norstar Petroleum Inc.

Tucker #3-34

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 56588

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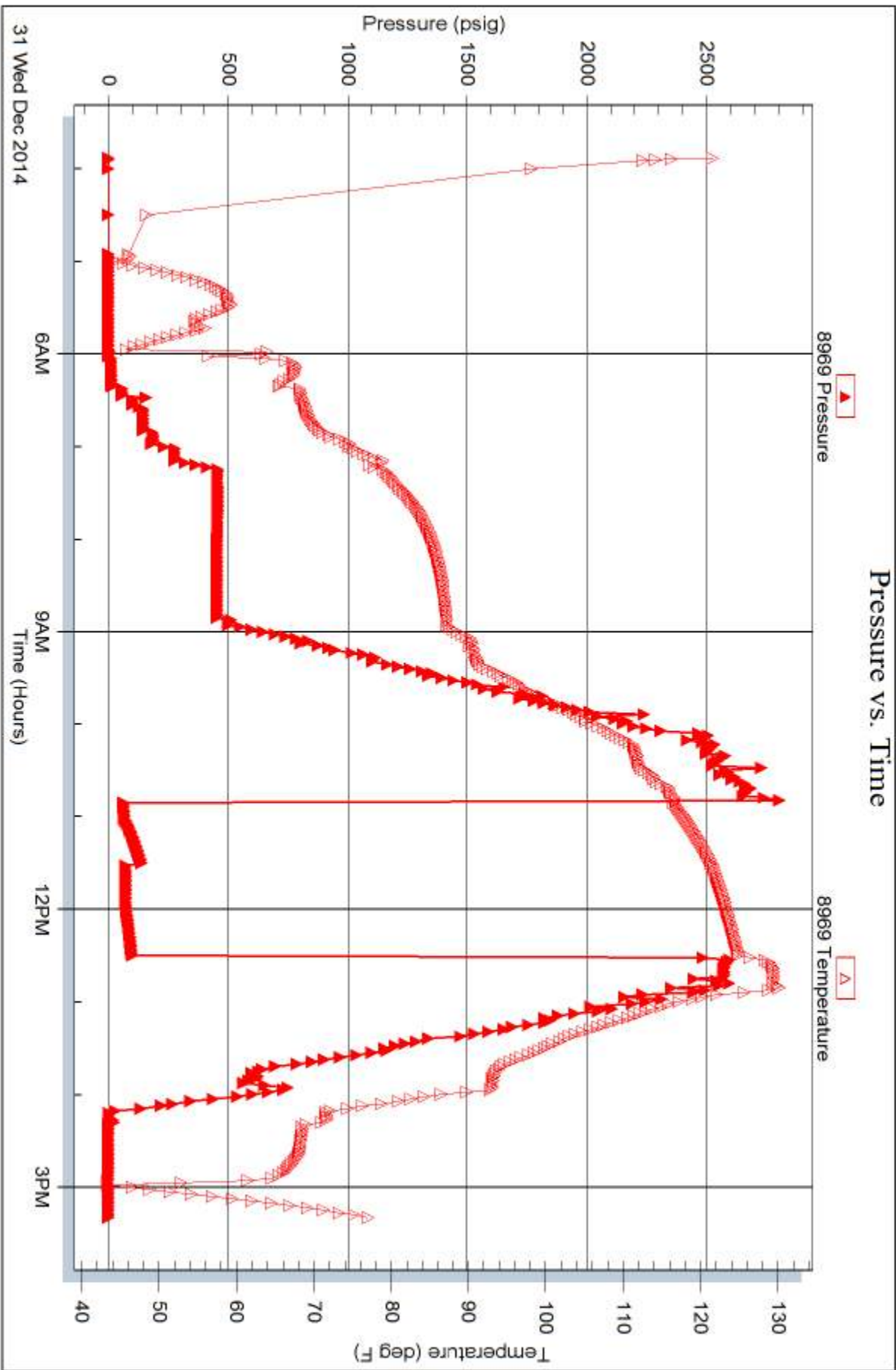
Serial #: 8969

Inside

Norstar Petroleum Inc.

Tucker #3-34

DST Test Number: 1



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Ref. No: 56588

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56588

Well Name & No. Tucker #3-34 Test No. 1 Date 12-31-14
 Company Norstar Petroleum Elevation 3405 KB 3395 GL
 Address 88 Inverness Cir E Unit F 104
 Co. Rep / Geo. Tom Williams Rig Tomcat #3
 Location: Sec. 34 Twp. 30-5 Rge. 41-W Co. Stanton State Ks

Interval Tested 5360-5462 Zone Tested Keyes Sand
 Anchor Length 102' Drill Pipe Run 4999 Mud Wt. 9.3
 Top Packer Depth 5356 Drill Collars Run 360' Vis 44
 Bottom Packer Depth 5360 Wt. Pipe Run Ø WL 8.0
 Total Depth 5462 Chlorides 800 ppm System LCM #7

Blow Description IF: Weak surface blow - Built to 1/8" Blow
ISF: No Return
FF: No Blow
FSI: No Return

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>97</u>	Feet of <u>Mud</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 97 BHT 127 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2741</u>	<input checked="" type="checkbox"/> Test <u>1350</u>	T-On Location <u>3:50</u>
(B) First Initial Flow <u>58</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>3:53</u>
(C) First Final Flow <u>63</u>	<input type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:50</u>
(D) Initial Shut-In <u>137</u>	<input checked="" type="checkbox"/> Circ Sub <u>nk</u>	T-Pulled <u>12:30</u>
(E) Second Initial Flow <u>69</u>	<input type="checkbox"/> Hourly Standby <u>.5h 50</u>	T-Out <u>15:20</u>
(F) Second Final Flow <u>71</u>	<input checked="" type="checkbox"/> Mileage <u>85 RIT</u> 131.75	Comments _____
(G) Final Shut-In <u>96</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>2606</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>10</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>2256.75</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input checked="" type="checkbox"/> Accessibility <u>150</u>	
	Sub Total <u>2256.75</u>	

Approved By Tom Williams 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.