



## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

88 Inverness Cir A Unit f104  
Englewood CO 80112

ATTN: Tyler Sanders

### **Solomon Creek #1-34**

### **34-9s-35w Thomas,KS**

Start Date: 2014.11.27 @ 04:39:28

End Date: 2014.11.27 @ 12:22:22

Job Ticket #: 58607                      DST #: 1

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

Printed: 2014.12.03 @ 13:51:17

Norstar Petroleum Inc.

34-9s-35w Thomas,KS

Solomon Creek #1-34

DST # 1

KC "H"

2014.11.27



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Norstar Petroleum Inc.  
88 Inverness Cir A Unit f104  
Englewood CO 80112  
ATTN: Tyler Sanders

**34-9s-35w Thomas,KS**  
**Solomon Creek #1-34**  
Job Ticket: 58607 **DST#: 1**  
Test Start: 2014.11.27 @ 04:39:28

## GENERAL INFORMATION:

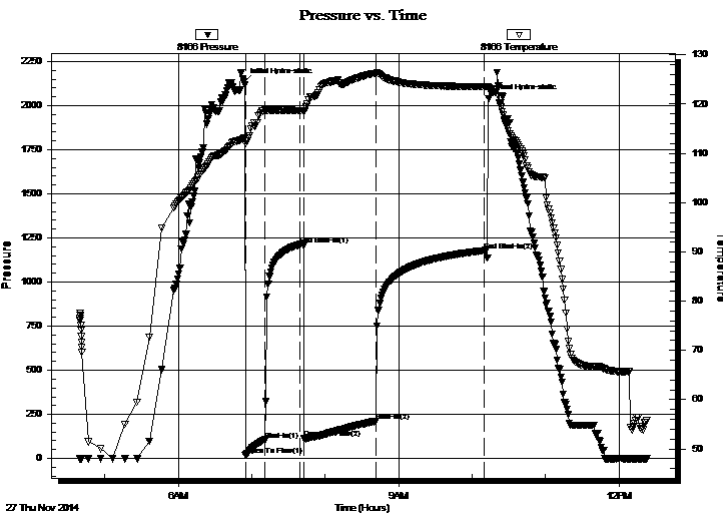
Formation: **KC "H"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 06:54:53  
Time Test Ended: 12:22:22  
Interval: **4343.00 ft (KB) To 4394.00 ft (KB) (TVD)**  
Total Depth: 4394.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Poor  
Test Type: Conventional Bottom Hole (Initial)  
Tester: James Geier  
Unit No: 79  
Reference Elevations: 3335.00 ft (KB)  
3330.00 ft (CF)  
KB to GR/CF: 5.00 ft

## Serial #: 8166

## Outside

Press@RunDepth: 211.78 psig @ 4377.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.11.27 End Date: 2014.11.27 Last Calib.: 2014.11.27  
Start Time: 04:39:28 End Time: 12:22:22 Time On Btm: 2014.11.27 @ 06:53:23  
Time Off Btm: 2014.11.27 @ 10:13:23

TEST COMMENT: IF: 6" blow @ 15 min.  
IS: No return  
FF: 5" blow  
FS: No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2132.98	113.06	Initial Hydro-static
2	16.41	111.90	Open To Flow (1)
18	105.76	118.97	Shut-In(1)
46	1212.80	118.70	End Shut-In(1)
50	112.61	118.44	Open To Flow (2)
108	211.78	126.25	Shut-In(2)
196	1178.33	123.53	End Shut-In(2)
200	2038.52	123.34	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
496.00	w c m 40% w 60% m	3.53

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum Inc.

**34-9s-35w Thomas,KS**

88 Inverness Cir A Unit f104  
Englewood CO 80112

**Solomon Creek #1-34**

Job Ticket: 58607

**DST#: 1**

ATTN: Tyler Sanders

Test Start: 2014.11.27 @ 04:39:28

## Tool Information

Drill Pipe:	Length: 4220.00 ft	Diameter: 2.25 inches	Volume: 20.75 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 3.80 inches	Volume: 1.68 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4343.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	74.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00		Inside	4321.00	
Shut In Tool	5.00			4326.00	
Hydraulic tool	5.00			4331.00	
Safety Joint	3.00			4334.00	
Packer	5.00			4339.00	23.00 Bottom Of Top Packer
Packer	4.00			4343.00	
Stubb	1.00			4344.00	
Change Over Sub	1.00			4345.00	
Drill Pipe	31.00			4376.00	
Change Over Sub	1.00			4377.00	
Recorder	0.00	8166	Outside	4377.00	
Recorder	0.00	8373	Outside	4377.00	
Perforations	12.00			4389.00	
Bullnose	5.00			4394.00	51.00 Bottom Packers & Anchor

**Total Tool Length: 74.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Norstar Petroleum Inc.

**34-9s-35w Thomas,KS**

88 Inverness Cir A Unit f104  
Englewood CO 80112

**Solomon Creek #1-34**

Job Ticket: 58607

**DST#: 1**

ATTN: Tyler Sanders

Test Start: 2014.11.27 @ 04:39:28

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

4800 ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.73 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4700.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
496.00	w c m40% w 60% m	3.532

Total Length: 496.00 ft

Total Volume: 3.532 bbl

Num Fluid Samples: 0

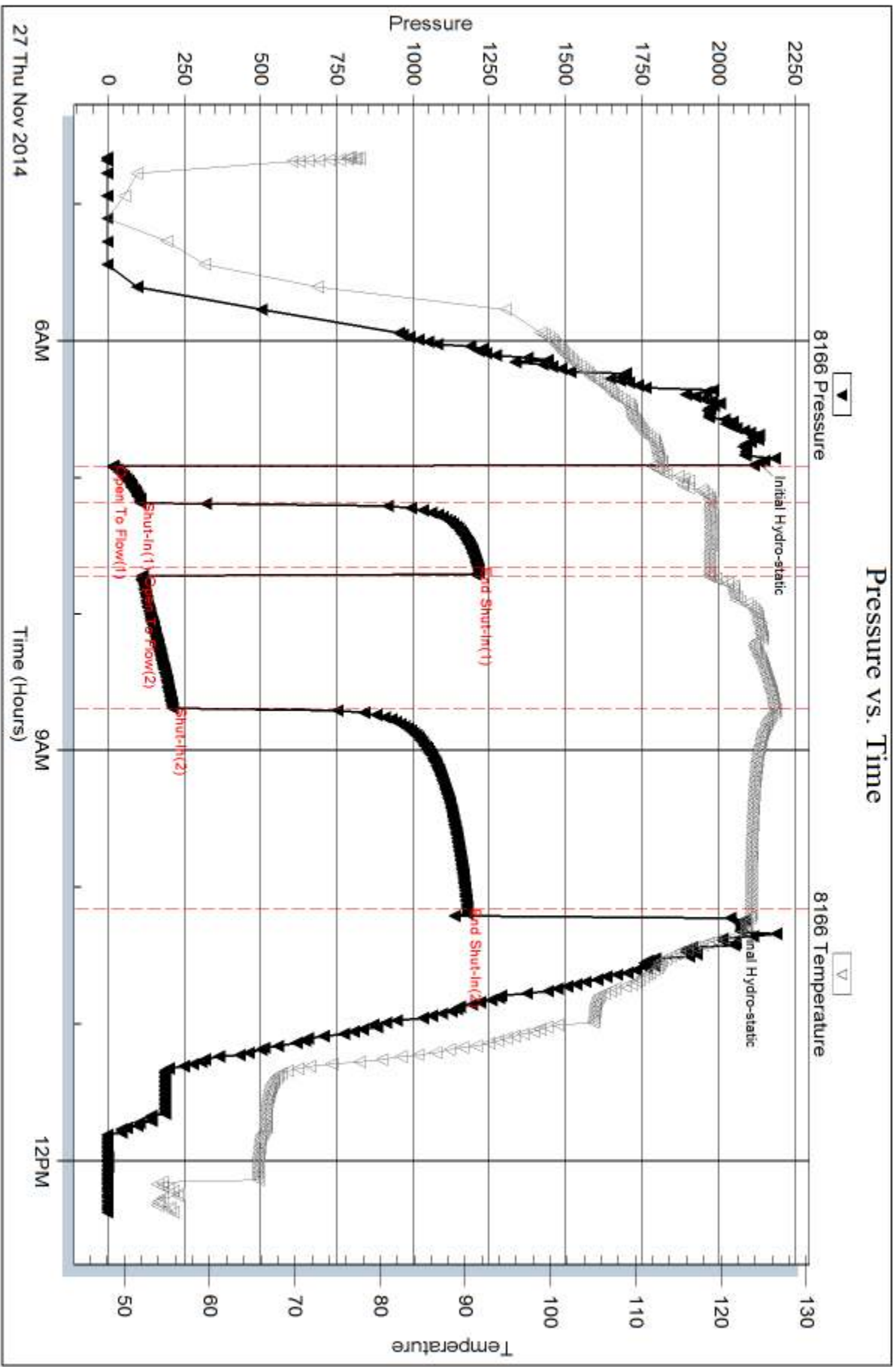
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

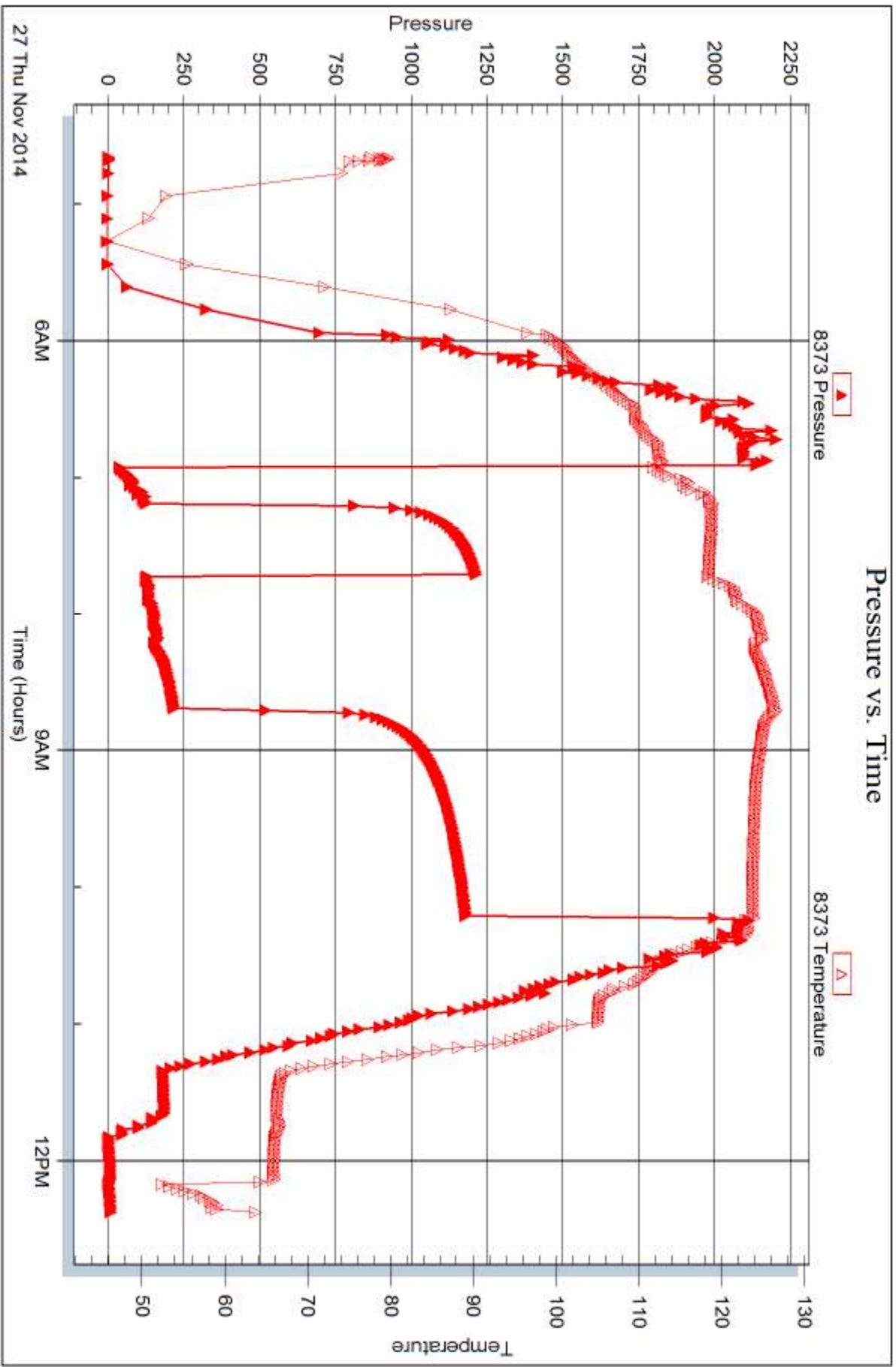


Serial #: 8373

Outside Norstar Petroleum Inc.

Solomon Creek #1-34

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

88 Inverness Cir A Unit f104  
Englewood CO 80112

ATTN: Tyler Sanders

### **Solomon Creek #1-34**

### **34-9s-35w Thomas,KS**

Start Date: 2014.11.27 @ 19:08:32

End Date: 2014.11.28 @ 00:48:26

Job Ticket #: 58608                      DST #: 2

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

Printed: 2014.12.03 @ 13:50:57





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Norstar Petroleum Inc.  
 88 Inverness Cir A Unit f104  
 Englewood CO 80112  
 ATTN: Tyler Sanders

**34-9s-35w Thomas,KS**  
**Solomon Creek #1-34**  
 Job Ticket: 58608 **DST#: 2**  
 Test Start: 2014.11.27 @ 19:08:32

## GENERAL INFORMATION:

Formation: **KC "I"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:05:57  
 Time Test Ended: 00:48:26  
 Interval: **4387.00 ft (KB) To 4415.00 ft (KB) (TVD)**  
 Total Depth: 4415.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: James Geier  
 Unit No: 79  
 Reference Elevations: 3335.00 ft (KB)  
 3330.00 ft (CF)  
 KB to GR/CF: 5.00 ft

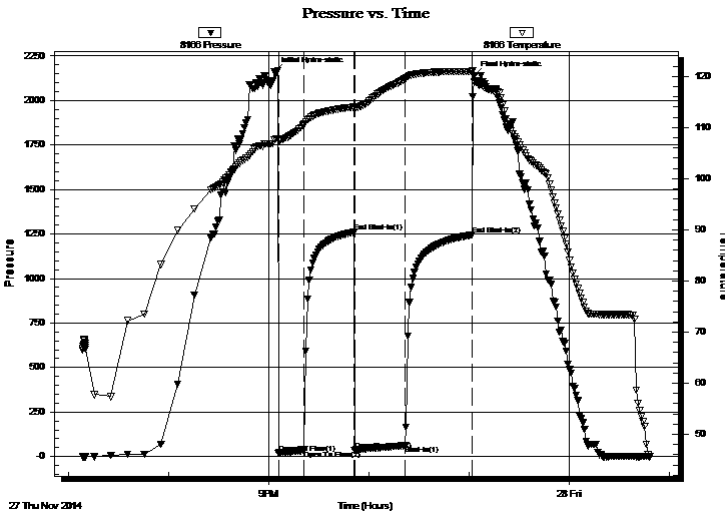
## Serial #: 8166

Outside

Press@RunDepth: 61.27 psig @ 4388.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.11.27 End Date: 2014.11.28 Last Calib.: 2014.11.28  
 Start Time: 19:08:32 End Time: 00:48:26 Time On Btm: 2014.11.27 @ 21:03:27  
 Time Off Btm: 2014.11.27 @ 23:03:27

TEST COMMENT: IF: 15 1" blow @ end of open  
 IS: 30 No return  
 FF: 30 1/8 " blow / died @ 25 min.  
 FS: 30 No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2164.43	107.65	Initial Hydro-static
3	19.64	107.45	Open To Flow (1)
18	33.61	110.50	Open To Flow (2)
48	1260.12	114.03	End Shut-In (1)
48	36.19	113.49	Open To Flow (3)
79	61.27	119.56	Shut-In (1)
119	1244.59	121.03	End Shut-In (2)
120	2141.66	118.88	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	Mud	0.98

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum Inc.

**34-9s-35w Thomas,KS**

88 Inverness Cir A Unit f104  
Englewood CO 80112

**Solomon Creek #1-34**

Job Ticket: 58608

**DST#: 2**

ATTN: Tyler Sanders

Test Start: 2014.11.27 @ 19:08:32

## Tool Information

Drill Pipe:	Length: 4250.00 ft	Diameter: 2.25 inches	Volume: 20.90 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 3.80 inches	Volume: 1.68 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4387.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00		Inside	4365.00	
Shut In Tool	5.00			4370.00	
Hydraulic tool	5.00			4375.00	
Safety Joint	3.00			4378.00	
Packer	5.00			4383.00	23.00 Bottom Of Top Packer
Packer	4.00			4387.00	
Stubb	1.00			4388.00	
Recorder	0.00	8166	Outside	4388.00	
Recorder	0.00	8373	Outside	4388.00	
Perforations	22.00			4410.00	
Bullnose	5.00			4415.00	28.00 Bottom Packers & Anchor

**Total Tool Length: 51.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Norstar Petroleum Inc.

**34-9s-35w Thomas,KS**

88 Inverness Cir A Unit f104  
Englewood CO 80112

**Solomon Creek #1-34**

Job Ticket: 58608

**DST#: 2**

ATTN: Tyler Sanders

Test Start: 2014.11.27 @ 19:08:32

## 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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.94 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	Mud	0.982

Total Length: 70.00 ft      Total Volume: 0.982 bbl

Num Fluid Samples: 0

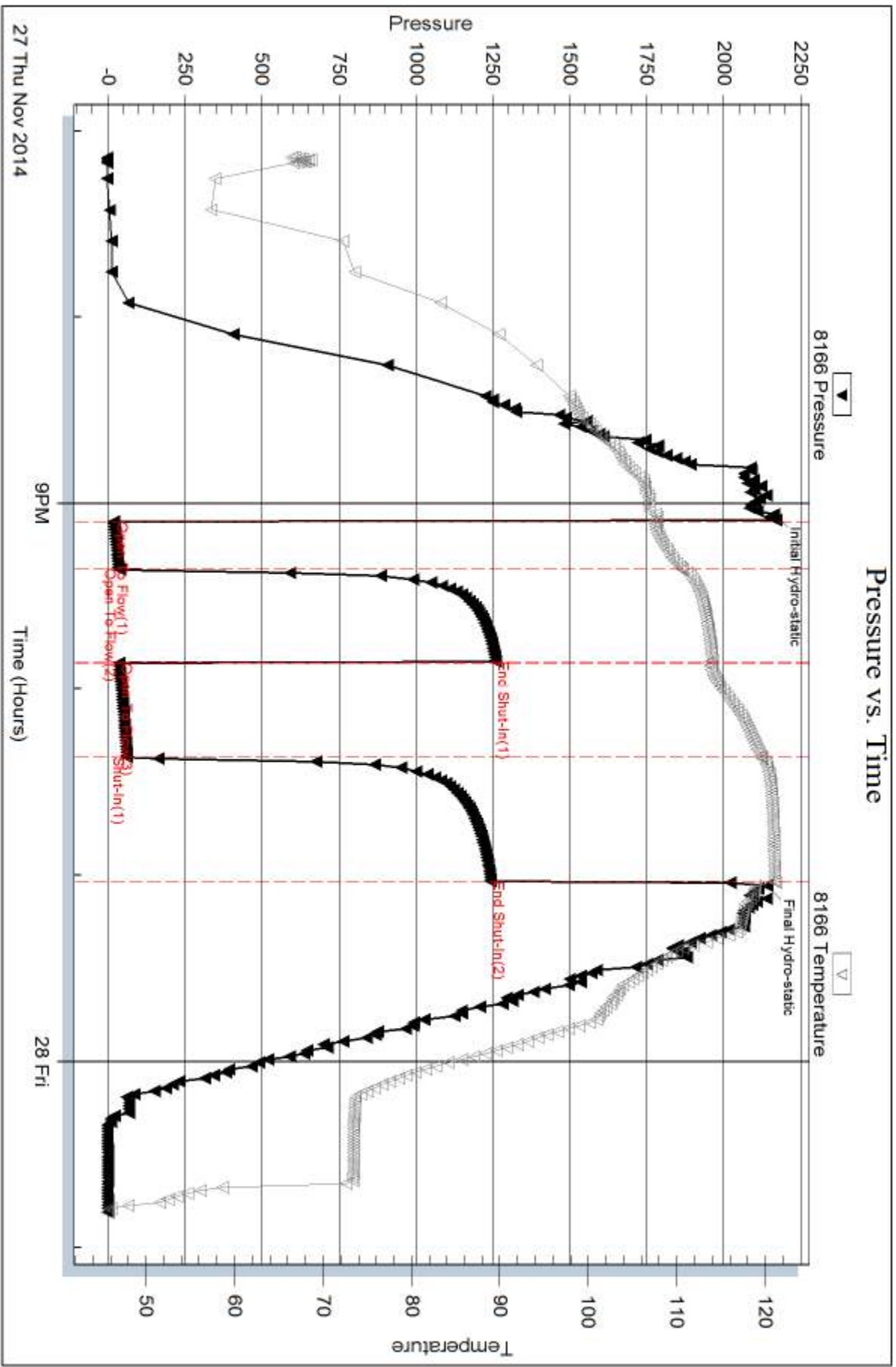
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

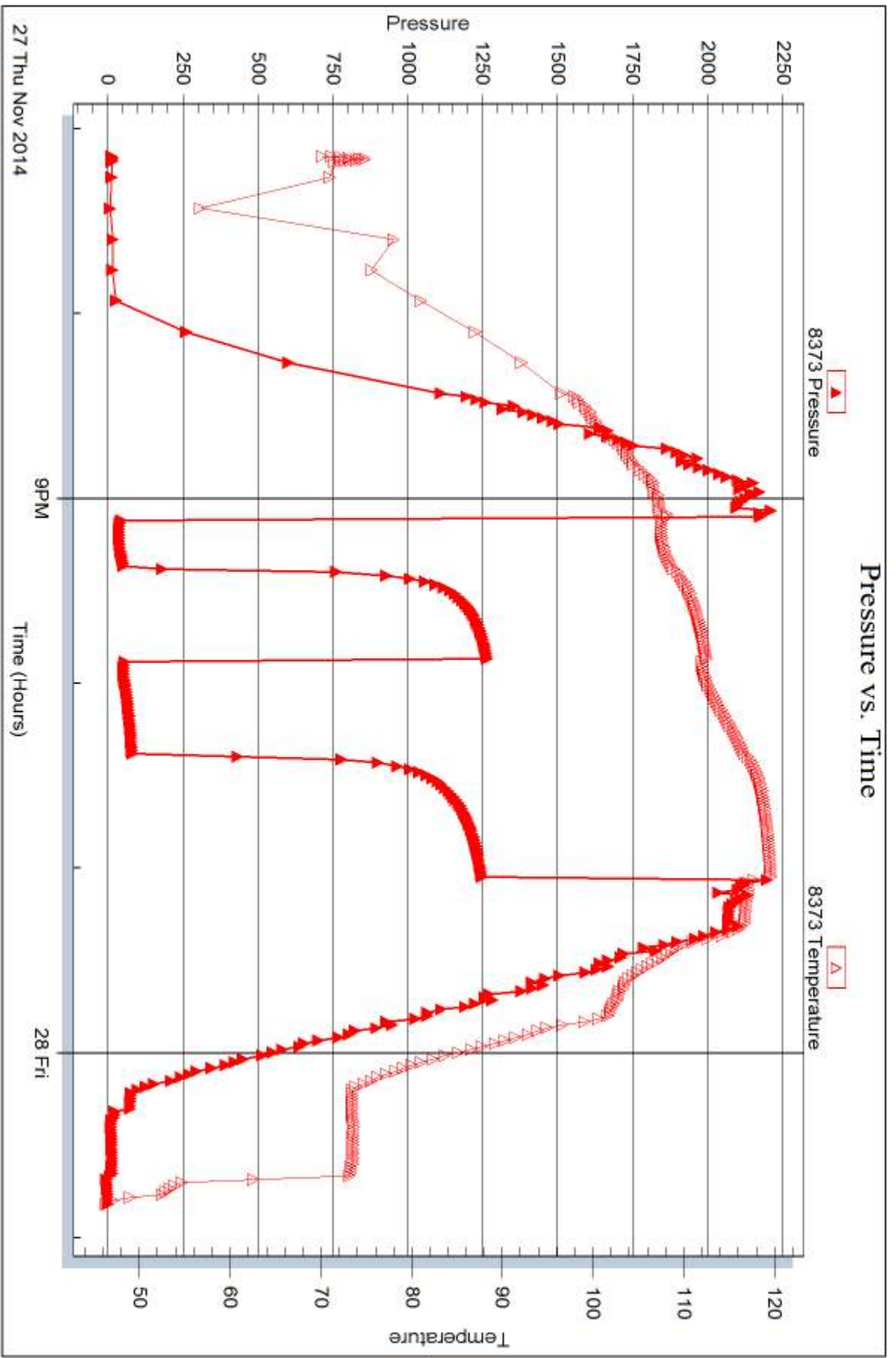


Serial #: 8373

Outside Norstar Petroleum Inc.

Solomon Creek #1-34

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 59608

Printed: 2014, 12, 03 @ 13:50:58



## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

88 Inverness Cir A Unit f104  
Englewood CO 80112

ATTN: Tyler Sanders

### **Solomon Creek #1-34**

### **34-9s-35w Thomas,KS**

Start Date: 2014.11.28 @ 10:41:50

End Date: 2014.11.28 @ 18:35:14

Job Ticket #: 58610                      DST #: 3

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

Printed: 2014.12.03 @ 13:50:28



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Norstar Petroleum Inc.  
88 Inverness Cir A Unit f104  
Englewood CO 80112  
ATTN: Tyler Sanders

**34-9s-35w Thomas,KS**  
**Solomon Creek #1-34**  
Job Ticket: 58610 **DST#: 3**  
Test Start: 2014.11.28 @ 10:41:50

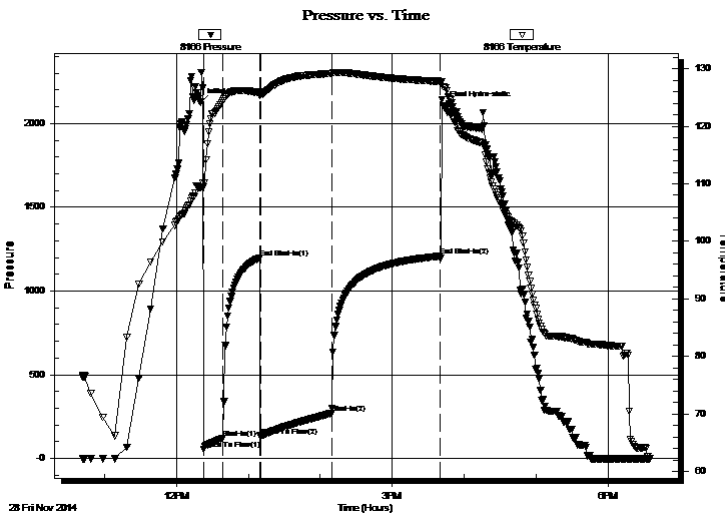
## GENERAL INFORMATION:

Formation: **KC**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 12:22:45  
Time Test Ended: 18:35:14  
Interval: **4435.00 ft (KB) To 4474.00 ft (KB) (TVD)**  
Total Depth: 4474.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Poor  
Reference Elevations: 3335.00 ft (KB)  
3330.00 ft (CF)  
KB to GR/CF: 5.00 ft  
Test Type: Conventional Bottom Hole (Reset)  
Tester: James Geier  
Unit No: 79

**Serial #: 8166 Outside**  
Press@RunDepth: 269.32 psig @ 4436.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.11.28 End Date: 2014.11.28 Last Calib.: 2014.11.28  
Start Time: 10:41:50 End Time: 18:35:14 Time On Btm: 2014.11.28 @ 12:20:15  
Time Off Btm: 2014.11.28 @ 15:42:44

**TEST COMMENT:** IF: 15 BOB in 9 min.  
IS: 30 2" return @ end ISI  
FF: 60 BOB in 10 min.  
FS: 90

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2126.25	109.30	Initial Hydro-static
3	54.16	109.46	Open To Flow (1)
19	121.80	124.36	Shut-In(1)
49	1198.75	125.83	End Shut-In(1)
50	134.21	125.55	Open To Flow (2)
109	269.32	129.18	Shut-In(2)
200	1208.03	127.81	End Shut-In(2)
203	2106.59	126.91	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
310.00	g c o 5% g 95% o	2.62
155.00	g c o m 5% g 35% o 60% m	0.76
120.00	g c w m 5% g 60% w 35% m	0.59

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum Inc.

**34-9s-35w Thomas,KS**

88 Inverness Cir A Unit f104  
Englewood CO 80112

**Solomon Creek #1-34**

Job Ticket: 58610

**DST#: 3**

ATTN: Tyler Sanders

Test Start: 2014.11.28 @ 10:41:50

## Tool Information

Drill Pipe:	Length: 4312.00 ft	Diameter: 2.25 inches	Volume: 21.21 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 3.80 inches	Volume: 1.68 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 22.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4435.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	39.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00		Inside	4413.00	
Shut In Tool	5.00			4418.00	
Hydraulic tool	5.00			4423.00	
Safety Joint	3.00			4426.00	
Packer	5.00			4431.00	23.00 Bottom Of Top Packer
Packer	4.00			4435.00	
Stubb	1.00			4436.00	
Recorder	0.00	8166	Outside	4436.00	
Recorder	0.00	8373	Outside	4436.00	
Perforations	33.00			4469.00	
Bullnose	5.00			4474.00	39.00 Bottom Packers & Anchor

**Total Tool Length: 62.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Norstar Petroleum Inc.

**34-9s-35w Thomas,KS**

88 Inverness Cir A Unit f104  
Englewood CO 80112

**Solomon Creek #1-34**

Job Ticket: 58610

**DST#: 3**

ATTN: Tyler Sanders

Test Start: 2014.11.28 @ 10:41:50

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

48000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.34 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
310.00	g c o 5% g 95% o	2.618
155.00	g c o m 5% g 35% o 60% m	0.762
120.00	g c w m 5% g 60% w 35% m	0.590

Total Length: 585.00 ft      Total Volume: 3.970 bbl

Num Fluid Samples: 0

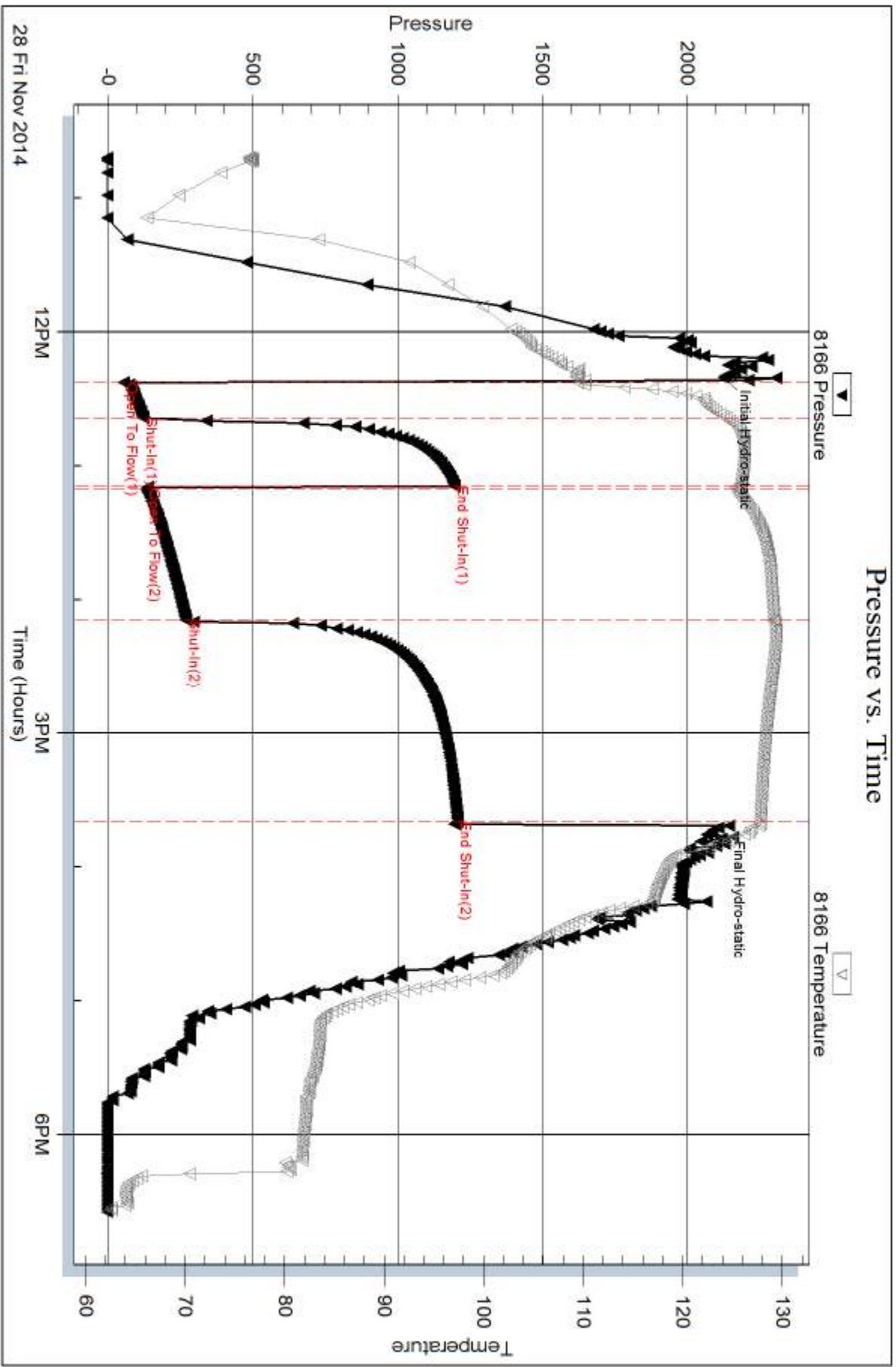
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gas in pipe 445'

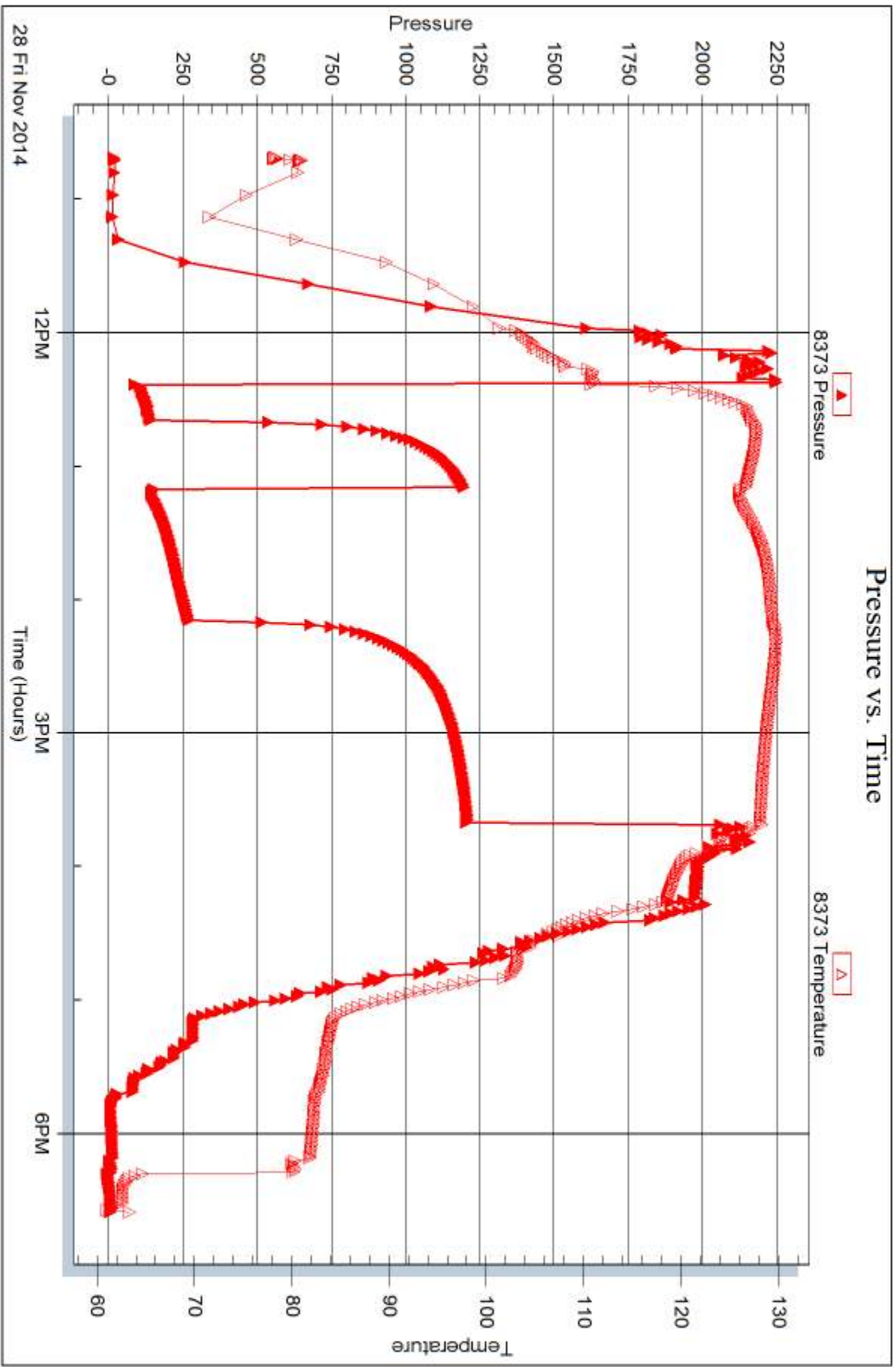


Serial #: 8373

Outside Norstar Petroleum Inc.

Solomon Creek #1-34

DST Test Number: 3





## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc.**

88 Inverness Cir A Unit f104  
Englewood CO 80112

ATTN: Tyler Sanders

### **Solomon Creek #1-34**

#### **34-9s-35w Thomas,KS**

Start Date: 2014.11.30 @ 05:36:47

End Date: 2014.11.30 @ 13:20:47

Job Ticket #: 59670                      DST #: 4

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

Printed: 2014.12.03 @ 13:49:58

Norstar Petroleum Inc.

34-9s-35w Thomas,KS

Solomon Creek #1-34

DST # 4

Johnson

2014.11.30



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Norstar Petroleum Inc.  
 88 Inverness Cir A Unit f104  
 Englewood CO 80112  
 ATTN: Tyler Sanders

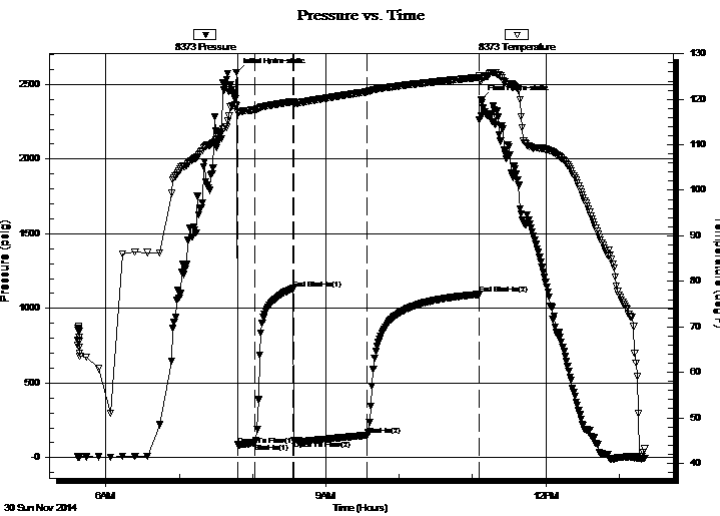
**34-9s-35w Thomas,KS**  
**Solomon Creek #1-34**  
 Job Ticket: 59670 **DST#: 4**  
 Test Start: 2014.11.30 @ 05:36:47

## GENERAL INFORMATION:

Formation: **Johnson**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 07:47:47 Tester: Brandon Turley  
 Time Test Ended: 13:20:47 Unit No: 79  
 Interval: **4730.00 ft (KB) To 4804.00 ft (KB) (TVD)** Reference Elevations: 3335.00 ft (KB)  
 Total Depth: 4804.00 ft (KB) (TVD) 3330.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 5.00 ft

**Serial #: 8373 Outside**  
 Press@RunDepth: 150.34 psig @ 4799.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.11.30 End Date: 2014.11.30 Last Calib.: 2014.11.30  
 Start Time: 05:36:52 End Time: 13:20:46 Time On Btm: 2014.11.30 @ 07:46:47  
 Time Off Btm: 2014.11.30 @ 11:07:17

TEST COMMENT: IF: 1/4" blow built to 7" in 15 mins.  
 IS: No return.  
 FF: BOB in 22 min.  
 FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2581.06	118.55	Initial Hydro-static
1	86.19	117.05	Open To Flow (1)
15	97.17	117.70	Shut-In(1)
47	1132.63	119.53	End Shut-In(1)
47	118.70	119.17	Open To Flow (2)
107	150.34	121.65	Shut-In(2)
199	1094.43	124.81	End Shut-In(2)
201	2401.02	124.19	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	gocm 10%g 10%o 80%m	1.68
248.00	go 10%g 90%o	1.22
0.00	248 GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum Inc.

**34-9s-35w Thomas,KS**

88 Inverness Cir A Unit f104  
Englewood CO 80112

**Solomon Creek #1-34**

Job Ticket: 59670

**DST#: 4**

ATTN: Tyler Sanders

Test Start: 2014.11.30 @ 05:36:47

## Tool Information

Drill Pipe:	Length: 4597.00 ft	Diameter: 2.25 inches	Volume: 22.61 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 3.80 inches	Volume: 1.68 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 24.29 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4730.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.00 ft			
Tool Length:	97.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00		Inside	4708.00	
Shut In Tool	5.00			4713.00	
Hydraulic tool	5.00			4718.00	
Safety Joint	3.00			4721.00	
Packer	5.00			4726.00	23.00 Bottom Of Top Packer
Packer	4.00			4730.00	
Stubb	1.00			4731.00	
Perforations	3.00			4734.00	
Change Over Sub	1.00			4735.00	
Drill Pipe	63.00			4798.00	
Change Over Sub	1.00			4799.00	
Recorder	0.00	8166	Outside	4799.00	
Recorder	0.00	8373	Outside	4799.00	
Bullnose	5.00			4804.00	74.00 Bottom Packers & Anchor

**Total Tool Length: 97.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Norstar Petroleum Inc.

**34-9s-35w Thomas,KS**

88 Inverness Cir A Unit f104  
Englewood CO 80112

**Solomon Creek #1-34**

Job Ticket: 59670

**DST#: 4**

ATTN: Tyler Sanders

Test Start: 2014.11.30 @ 05:36:47

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

29 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6600.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	gocm 10%g 10%o 80%m	1.683
248.00	go 10%g 90%0	1.220
0.00	248 GIP	0.000

Total Length: 368.00 ft

Total Volume: 2.903 bbl

Num Fluid Samples: 0

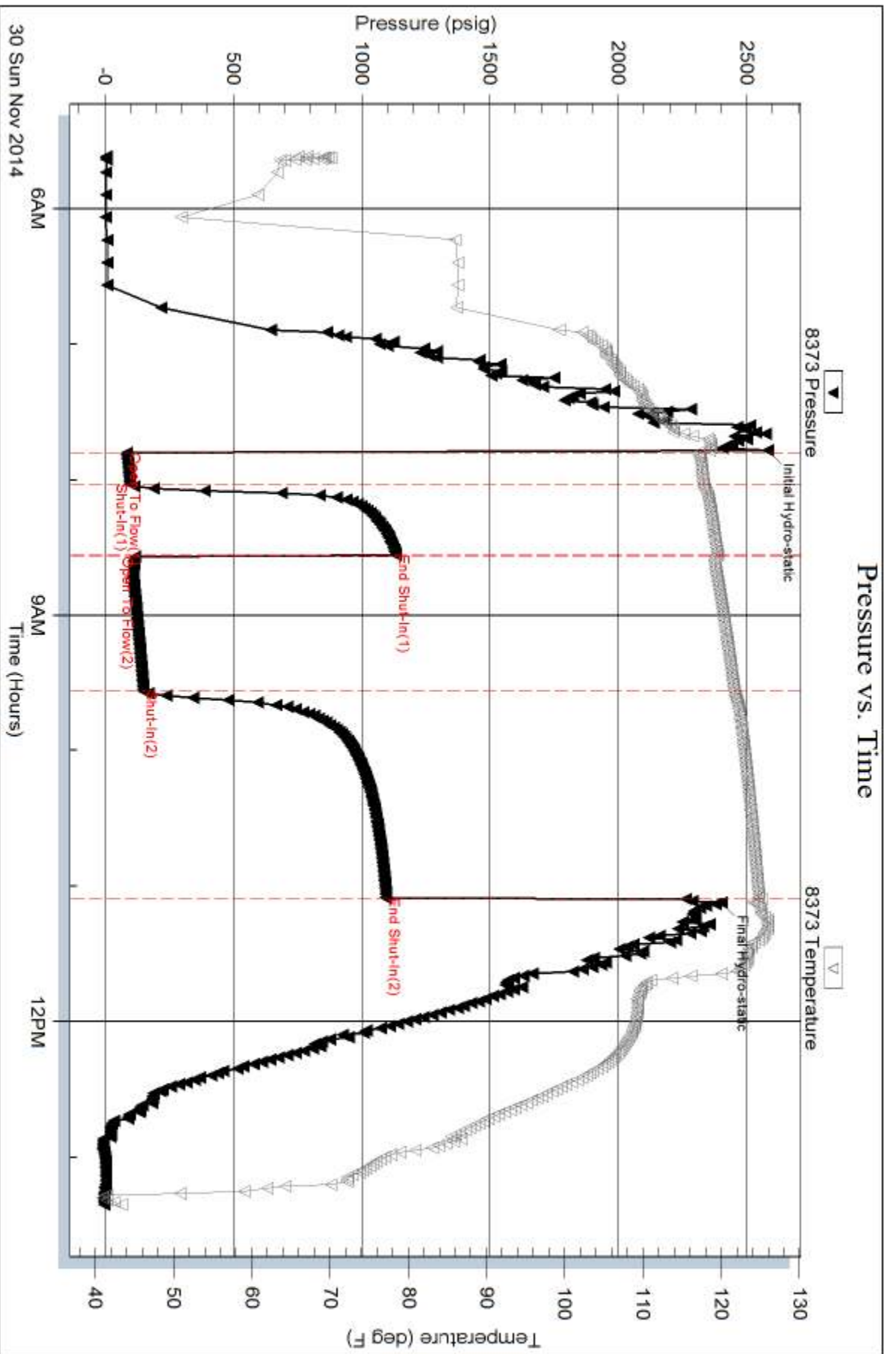
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 26@30=29

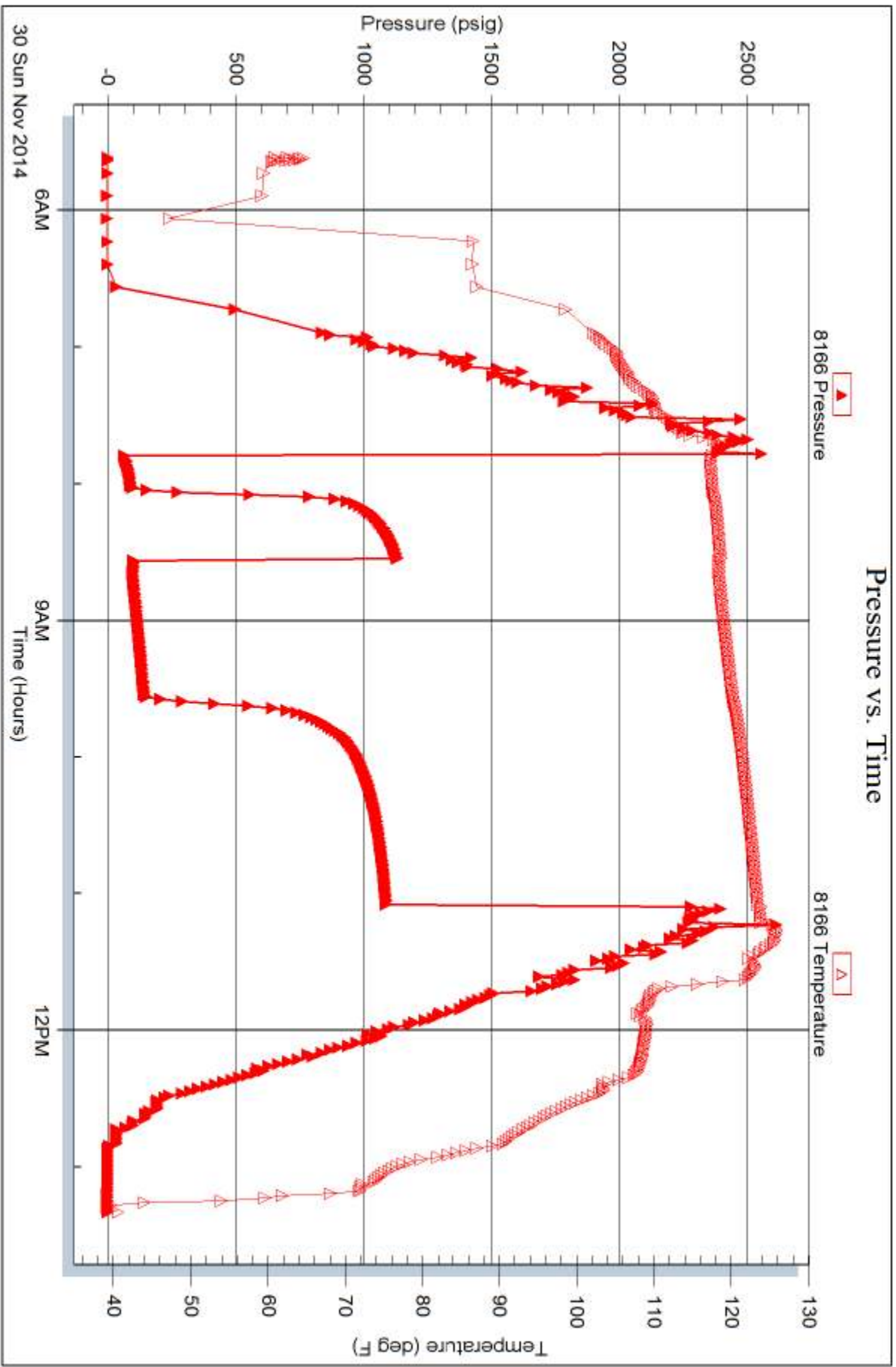


Serial #: 8166

Outside Norstar Petroleum Inc.

Solomon Creek #1-34

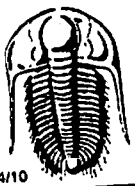
DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 59670

Printed: 2014, 12, 03 @ 13:49:59



# TRILOBITE TESTING INC.

1515 Commerce Parkway - Hays, Kansas 67601

JAMES COVIN  
(719) 688 9844

## Test Ticket

NO. 58607

Well Name & No. Solomon Creek / 34 Test No. 1 Date 11/27/14  
 Company Norstar Petroleum Inc Elevation 3330 KB 3335 GL  
 Address 88 Inverness Circle Unit F104 Englewood CO 80112  
 Co. Rep / Geo. Tyler Sanders Rig UNW Rig 2  
 Location: Sec. 34 Twp. 9 Rge. 35W Co. Thomas State KS

Interval Tested 4343 - 4394 Zone Tested KC R 14"  
 Anchor Length 51' Drill Pipe Run 4200 Mud Wt. 9.1  
 Top Packer Depth 4339 Drill Collars Run 100 Vis 63  
 Bottom Packer Depth 4343 Wt. Pipe Run 9 WL 88  
 Total Depth 4394 Chlorides 4700 ppm System LCM 2  
 Blow Description IP: 6" blow in 15  
1st. No Return  
FP 5" blow  
FST: No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>376</u>	<u>WCM</u>			<u>40</u>	<u>60</u>
<u>120</u>	<u>WCM</u>			<u>40</u>	<u>60</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 496 BHT 123  
 (A) Initial Hydrostatic 2147  
 (B) First Initial Flow 41  
 (C) First Final Flow 1108  
 (D) Initial Shut-In 1211  
 (E) Second Initial Flow 126  
 (F) Second Final Flow 1040  
 (G) Final Shut-In 1179  
 (H) Final Hydrostatic 2081

Gravity \_\_\_\_\_ API RW 1.5 @ 60° F Chlorides 4000 ppm  
 Test 1250  
 Jars \_\_\_\_\_  
 Safety Joint 75  
 Circ Sub 1/2  
 Hourly Standby \_\_\_\_\_  
 Mileage 160% 148 rt 229.10  
 Sampler \_\_\_\_\_  
 Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1554.40

T-On Location 0245  
 T-Started 0439  
 T-Open 0650  
 T-Pulled 1005  
 T-Out 1222  
 Comments \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 Sub Total 0  
 Total 1554.40  
 MP/DST Disc't \_\_\_\_\_

Initial Open 15  
 Initial Shut-In 30  
 Final Flow 100  
 Final Shut-In 90

Approved By \_\_\_\_\_ Our Representative [Signature]  
 Trilobite Testing Inc. shall not be liable for damaged or destroyed 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.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 58608

Well Name & No. Solomon Creek #1-34 Test No. 2 Date 11/27/14  
 Company Nonstar Petroleum Inc Elevation 3335 KB 3330 GL  
 Address 880 W. Kansas Ave "e" unit Flat Englewood Co 80112  
 Co. Rep / Geo. Lyle Sanders Rig WN Rig 8  
 Location: Sec. 34 Twp. 9 Rge. 35W Co. Thomas State KS

Interval Tested 4387-4415 Zone Tested KC "I"  
 Anchor Length 28 Drill Pipe Run 4250 Mud Wt. 9.1  
 Top Packer Depth 4383 Drill Collars Run 120 Vis SB  
 Bottom Packer Depth 4387 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4415 Chlorides 5500 ppm System LCM 1

Blow Description IP: 1" flow @ end  
ISI: No Return  
PF: 1/2" blow/died @ 25min  
FST: No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>				<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
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 119 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2173  Test 1250 T-On Location 1900  
 (B) First Initial Flow 44  Jars \_\_\_\_\_ T-Started 1908  
 (C) First Final Flow 1150  Safety Joint 75 T-Open 2105  
 (D) Initial Shut-In 1265  Circ Sub 1/2 T-Pulled 2250  
 (E) Second Initial Flow 54  Hourly Standby \_\_\_\_\_ T-Out 049  
 (F) Second Final Flow 1134  Mileage 1609.4 229.40 Comments \_\_\_\_\_  
 (G) Final Shut-In 1245  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2032  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 15  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 30  Day Standby \_\_\_\_\_ Total 1554.40  
 Final Shut-In 30  Accessibility \_\_\_\_\_ MP/DST Disc'y \_\_\_\_\_  
 Sub Total 1554.40

Approved By \_\_\_\_\_ 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.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 58610

Well Name & No. Solomon Creek 1-34 Test No. 13 Date 11/28/14  
 Company NonStop Petroleum Inc Elevation 3335 KB 3330 GL  
 Address 28 Inverness Ave Unit #104 Englewood CO 80112  
 Co. Rep / Geo. Tyler Sanders Rig 10W Rig 8  
 Location: Sec. 34 Twp. 9 Rge. 35W Co. Thomas State Ks

Interval Tested 4435-4474 Zone Tested \_\_\_\_\_  
 Anchor Length 39 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.2  
 Top Packer Depth 4431 Drill Collars Run 100 Vis 54  
 Bottom Packer Depth 4435 Wt. Pipe Run 0 WL 10.4  
 Total Depth 4474 Chlorides 6000 ppm System LCM 1

Blow Description IF: 30B in 9min  
ISI: 2" return @ end SI  
FF: 30B in 10min  
KSI: 1/2" return blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>310</u>	<u>900</u>	<u>5</u>	<u>95</u>		
<u>155</u>	<u>900m</u>	<u>5</u>	<u>35</u>		<u>60</u>
<u>120</u>	<u>900m</u>	<u>5</u>		<u>60</u>	<u>35</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

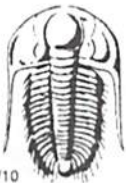
Rec Total 585 BHT 127 Gravity 33 API RW 46 @ 63 °F Chlorides 18000 ppm

(A) Initial Hydrostatic 2247  Test 1250 T-On Location 1600  
 (B) First Initial Flow 88  Jars \_\_\_\_\_ T-Started 1041  
 (C) First Final Flow 137  Safety Joint 75 T-Open 1221  
 (D) Initial Shut-In 1185  Circ Sub N/E T-Pulled 1536  
 (E) Second Initial Flow 144  Hourly Standby \_\_\_\_\_ T-Out 1835  
 (F) Second Final Flow 263  Mileage 160 1/4 229.40 Comments \_\_\_\_\_  
 (G) Final Shut-In 1205  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2150  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1554.40  
 Accessibility \_\_\_\_\_ MP/DST Disc \_\_\_\_\_

Initial Open 15  
 Initial Shut-In 30  
 Final Flow 600  
 Final Shut-In 90  
 Sub Total 1554.40

Approved By \_\_\_\_\_ 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.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59670

Well Name & No. Solomon creek 1-34 Test No. 4 Date 11-30-14  
 Company Norstar Pet Elevation 3335 KB 3330 GL  
 Address \_\_\_\_\_  
 Co. Rep / Geo. Tyler Sanders Rig WW#8  
 Location: Sec. 34 Twp. 9 Rge. 35W Co. Thomas State KS

Interval Tested 4730 4804 Zone Tested Johnson  
 Anchor Length \_\_\_\_\_ Drill Pipe Run 4597 Mud Wt. 9.3  
 Top Packer Depth \_\_\_\_\_ Drill Collars Run 120 Vis 57  
 Bottom Packer Depth 4730 Wt. Pipe Run \_\_\_\_\_ WL 10.2  
 Total Depth 4804 Chlorides 6600 ppm System LCM 1

Blow Description IF: 1/4 blow built to 7 in 15 min.  
FS: No return.  
FF: BoB in 22 min.  
FS: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>248</u>	<u>90</u>	<u>10</u>	<u>90</u>		
<u>120</u>	<u>90cm</u>	<u>10</u>	<u>10</u>		<u>80</u>
	<u>248 GEP</u>				

Rec Total 368 BHT 124 Gravity 29 API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2581</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>5:00</u>
(B) First Initial Flow <u>86</u>	<input type="checkbox"/> Jars <u>250</u>	T-Started <u>5:36</u>
(C) First Final Flow <u>97</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>7:45</u>
(D) Initial Shut-In <u>1132</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>11:00</u>
(E) Second Initial Flow <u>118</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>13:20</u>
(F) Second Final Flow <u>150</u>	<input checked="" type="checkbox"/> Mileage <u>162-X2</u> 229.40	Comments _____
(G) Final Shut-In <u>1694</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2401</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>15</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>350</u>
Final Flow <u>60</u>	<input checked="" type="checkbox"/> Day Standby <u>1d 10.5h</u>	Total <u>2383.80</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>2033.80</u>	

Approved By \_\_\_\_\_ Our Representative \_\_\_\_\_  
 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.