



## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources Inc.**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

ATTN: Terry McLeod

### **Rose #1-31**

### **S31-16s-33w Scott,KS**

Start Date: 2014.05.23 @ 06:06:00

End Date: 2014.05.23 @ 11:41:30

Job Ticket #: 57691                      DST #: 1

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

Printed: 2014.05.28 @ 08:41:50

Landmark Resources Inc.

S31-16s-33w Scott,KS

Rose #1-31

DST # 1

Marmaton, Altamont

2014.05.23



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57691

**DST#: 1**

ATTN: Terry McLeod

Test Start: 2014.05.23 @ 06:06:00

## GENERAL INFORMATION:

Formation: **Marmaton, Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:02:20

Time Test Ended: 11:41:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Smith

Unit No: 62

**Interval: 4433.00 ft (KB) To 4545.00 ft (KB) (TVD)**

Reference Elevations: 3100.00 ft (KB)

Total Depth: 4545.00 ft (KB) (TVD)

3095.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8357 Inside**

Press@RunDepth: psig @ 4435.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.23

End Date:

2014.05.23

Last Calib.: 1899.12.30

Start Time: 06:06:02

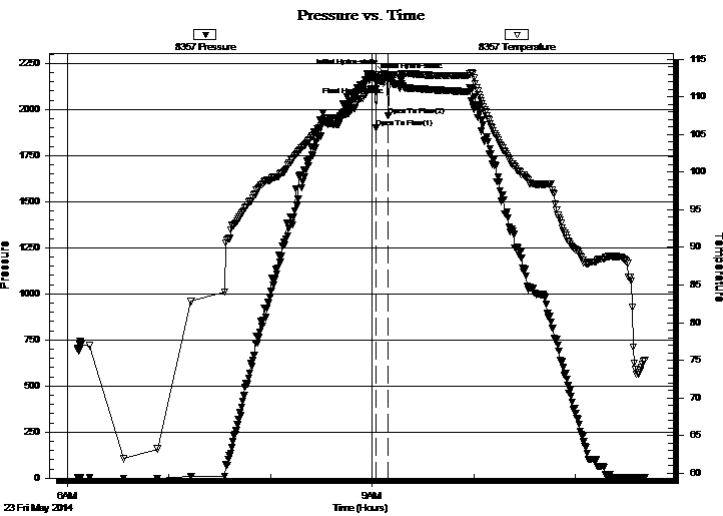
End Time:

11:41:30

Time On Btm: 2014.05.23 @ 09:00:50

Time Off Btm: 2014.05.23 @ 09:10:20

TEST COMMENT: Packer seat failed twice, pulled tool.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2173.49	111.03	Initial Hydro-static
2	1898.93	111.01	Open To Flow (1)
7	2195.48	112.72	Initial Hydro-static
9	1967.48	112.54	Open To Flow (2)
10	2161.78	112.98	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
220.00	M 100m	3.09

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57691

**DST#: 1**

ATTN: Terry McLeod

Test Start: 2014.05.23 @ 06:06:00

## Tool Information

Drill Pipe:	Length: 4438.00 ft	Diameter: 3.80 inches	Volume: 62.25 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 62.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.50 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	4433.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	112.00 ft			
Tool Length:	139.50 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			4406.50	
Shut In Tool	5.00			4411.50	
Hydraulic tool	5.00			4416.50	
Jars	5.00			4421.50	
Safety Joint	2.50			4424.00	
Packer	5.00			4429.00	27.50 Bottom Of Top Packer
Packer	4.00			4433.00	
Stubb	1.00			4434.00	
Perforations	1.00			4435.00	
Recorder	0.00	8357	Inside	4435.00	
Recorder	0.00	8645	Outside	4435.00	
Perforations	11.00			4446.00	
Change Over Sub	1.00			4447.00	
Drill Pipe	94.00			4541.00	
Change Over Sub	1.00			4542.00	
Bullnose	3.00			4545.00	112.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>139.50</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57691

**DST#: 1**

ATTN: Terry McLeod

Test Start: 2014.05.23 @ 06:06:00

## 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: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
220.00	M 100m	3.086

Total Length: 220.00 ft      Total Volume: 3.086 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

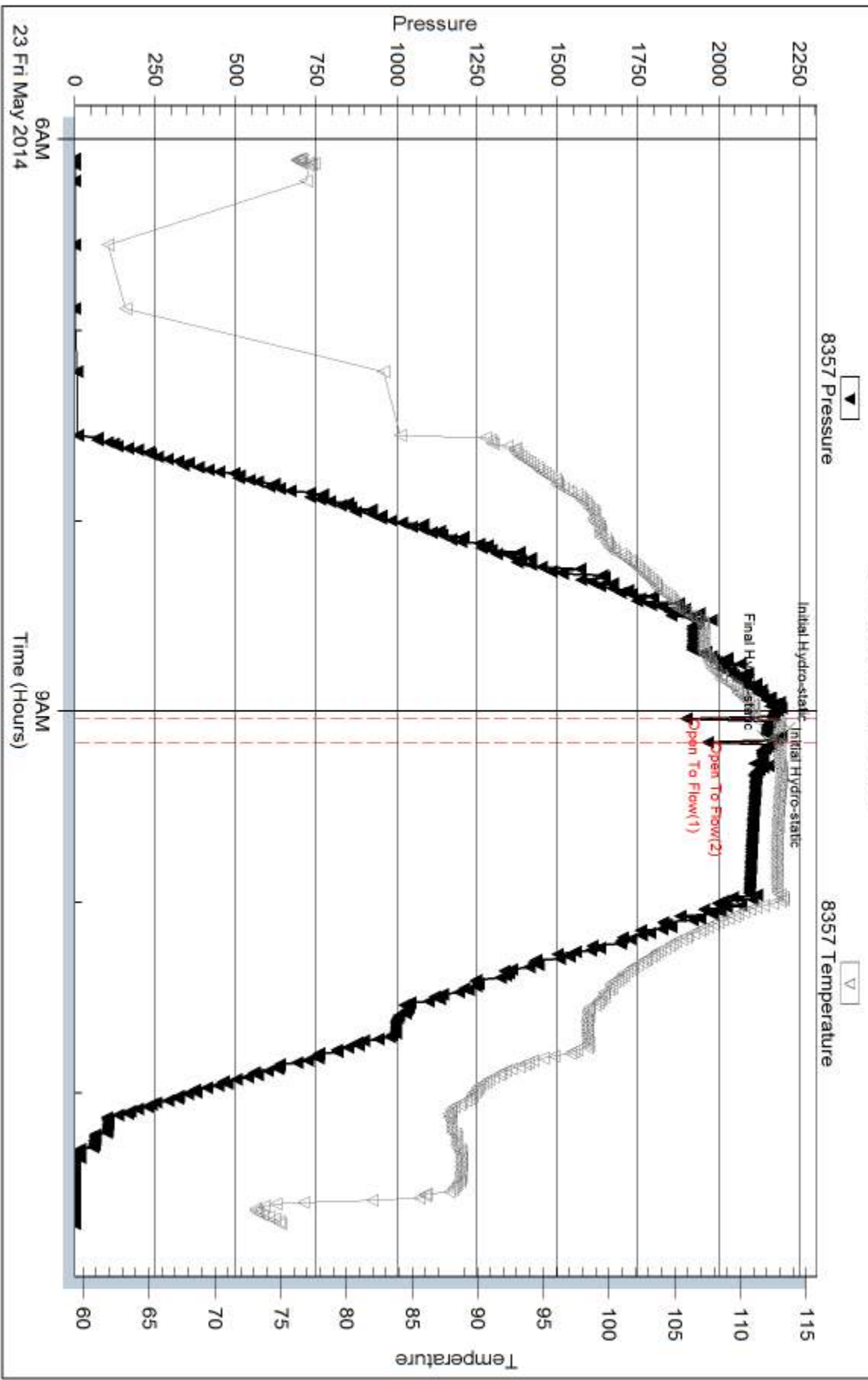
Serial #:

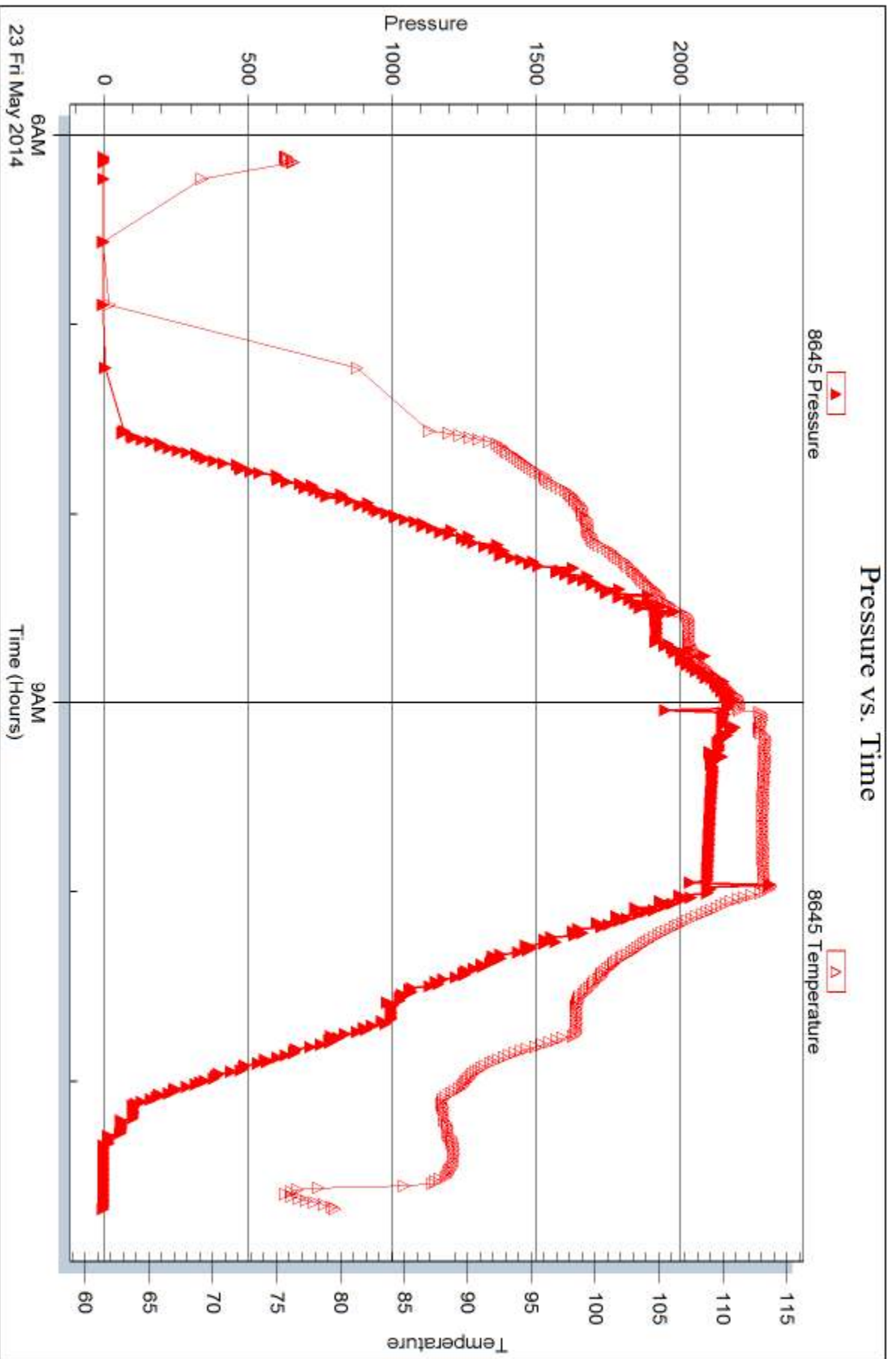
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources Inc.**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

ATTN: Terry McLeod

### **Rose #1-31**

### **S31-16s-33w Scott,KS**

Start Date: 2014.05.23 @ 12:02:00

End Date: 2014.05.23 @ 18:53:20

Job Ticket #: 57692                      DST #: 2

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

Printed: 2014.05.28 @ 08:41:28





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57692

**DST#: 2**

ATTN: Terry McLeod

Test Start: 2014.05.23 @ 12:02:00

## GENERAL INFORMATION:

Formation: **Marmaton, Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:42:40

Time Test Ended: 18:53:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: **4469.00 ft (KB) To 4545.00 ft (KB) (TVD)**

Reference Elevations: 3100.00 ft (KB)

Total Depth: 4545.00 ft (KB) (TVD)

3095.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8357 Inside**

Press@RunDepth: 28.01 psig @ 4471.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.23

End Date:

2014.05.23

Last Calib.: 2014.05.23

Start Time: 12:02:02

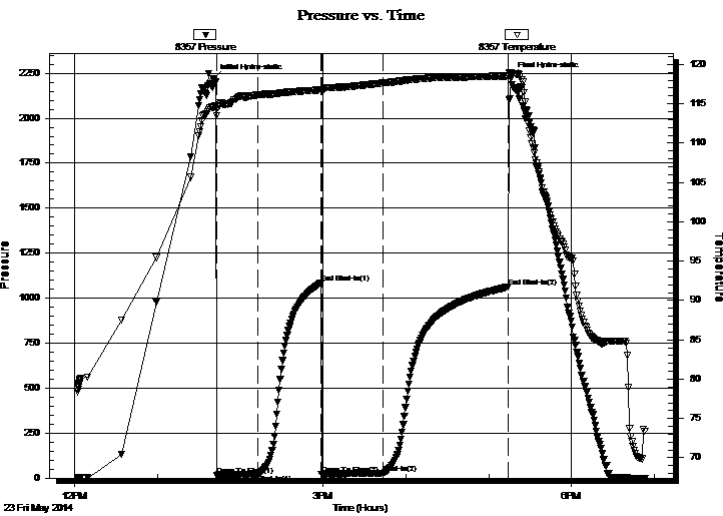
End Time:

18:53:19

Time On Btm: 2014.05.23 @ 13:40:20

Time Off Btm: 2014.05.23 @ 17:16:00

TEST COMMENT: 30- 1 1/2" Blow .  
45- No return.  
45- 4" Blow .  
90- No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2218.00	114.59	Initial Hydro-static
3	16.08	113.45	Open To Flow (1)
33	21.64	116.12	Shut-In(1)
78	1083.49	116.76	End Shut-In(1)
79	19.51	116.58	Open To Flow (2)
124	28.01	117.63	Shut-In(2)
214	1062.18	118.54	End Shut-In(2)
216	2230.81	118.98	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
35.00	gocm 15G 25O 60M	0.49
0.00	30' 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**

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57692

**DST#: 2**

ATTN: Terry McLeod

Test Start: 2014.05.23 @ 12:02:00

## Tool Information

Drill Pipe:	Length: 4476.00 ft	Diameter: 3.80 inches	Volume: 62.79 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 62.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.50 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4469.00 ft			Final 69000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	76.00 ft			
Tool Length:	98.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4447.50	
Shut In Tool	5.00			4452.50	
Hydraulic tool	5.00			4457.50	
Safety Joint	2.50			4460.00	
Packer	5.00			4465.00	22.50 Bottom Of Top Packer
Packer	4.00			4469.00	
Stubb	1.00			4470.00	
Perforations	1.00			4471.00	
Recorder	0.00	8357	Inside	4471.00	
Recorder	0.00	6751	Outside	4471.00	
Perforations	6.00			4477.00	
Change Over Sub	1.00			4478.00	
Drill Pipe	63.00			4541.00	
Change Over Sub	1.00			4542.00	
Bullnose	3.00			4545.00	76.00 Bottom Packers & Anchor

**Total Tool Length: 98.50**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57692

**DST#: 2**

ATTN: Terry McLeod

Test Start: 2014.05.23 @ 12:02:00

### 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:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	gocm 15G 25O 60M	0.491
0.00	30' GIP	0.000

Total Length: 35.00 ft      Total Volume: 0.491 bbl

Num Fluid Samples: 0

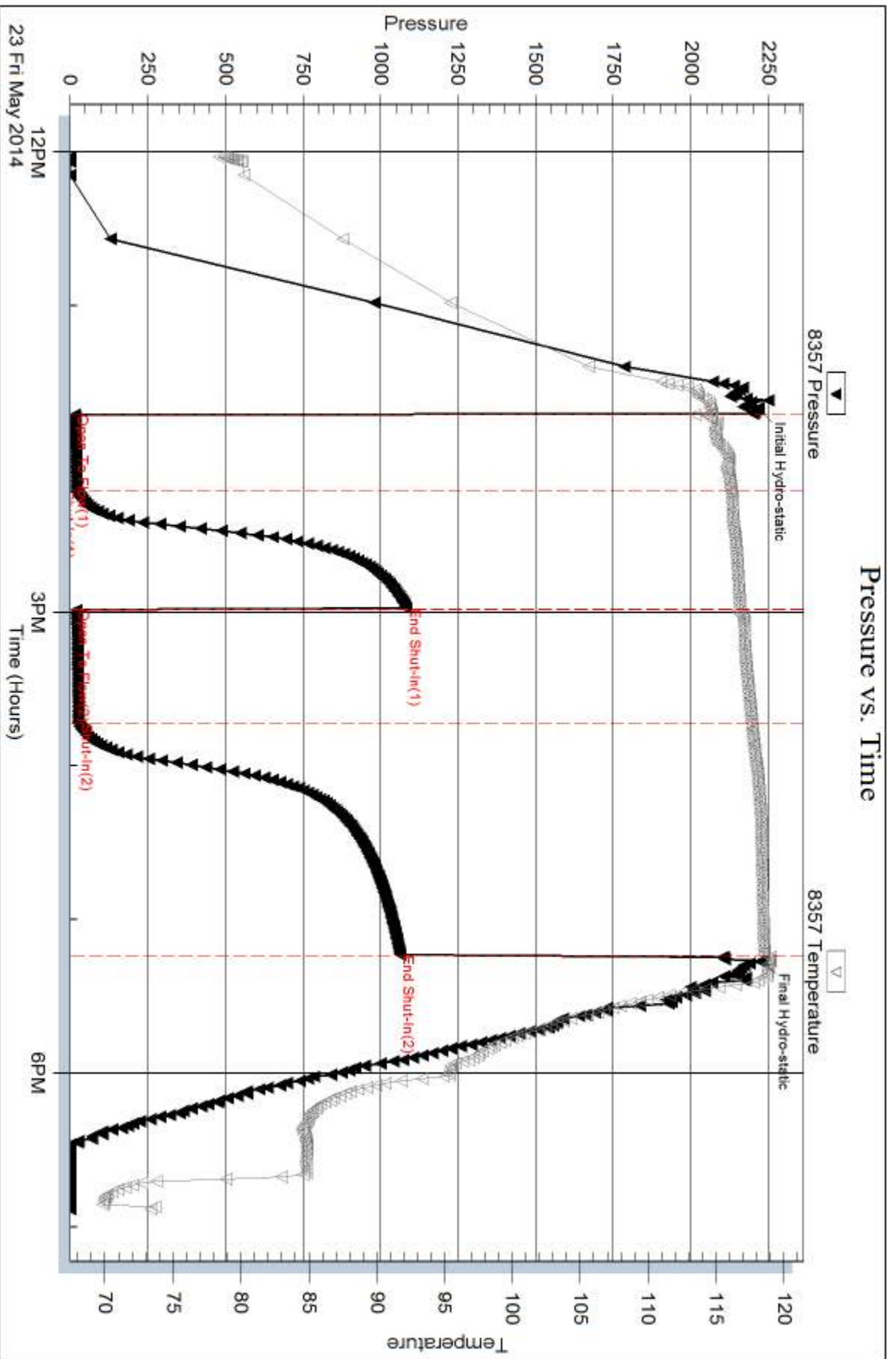
Num Gas Bombs: 0

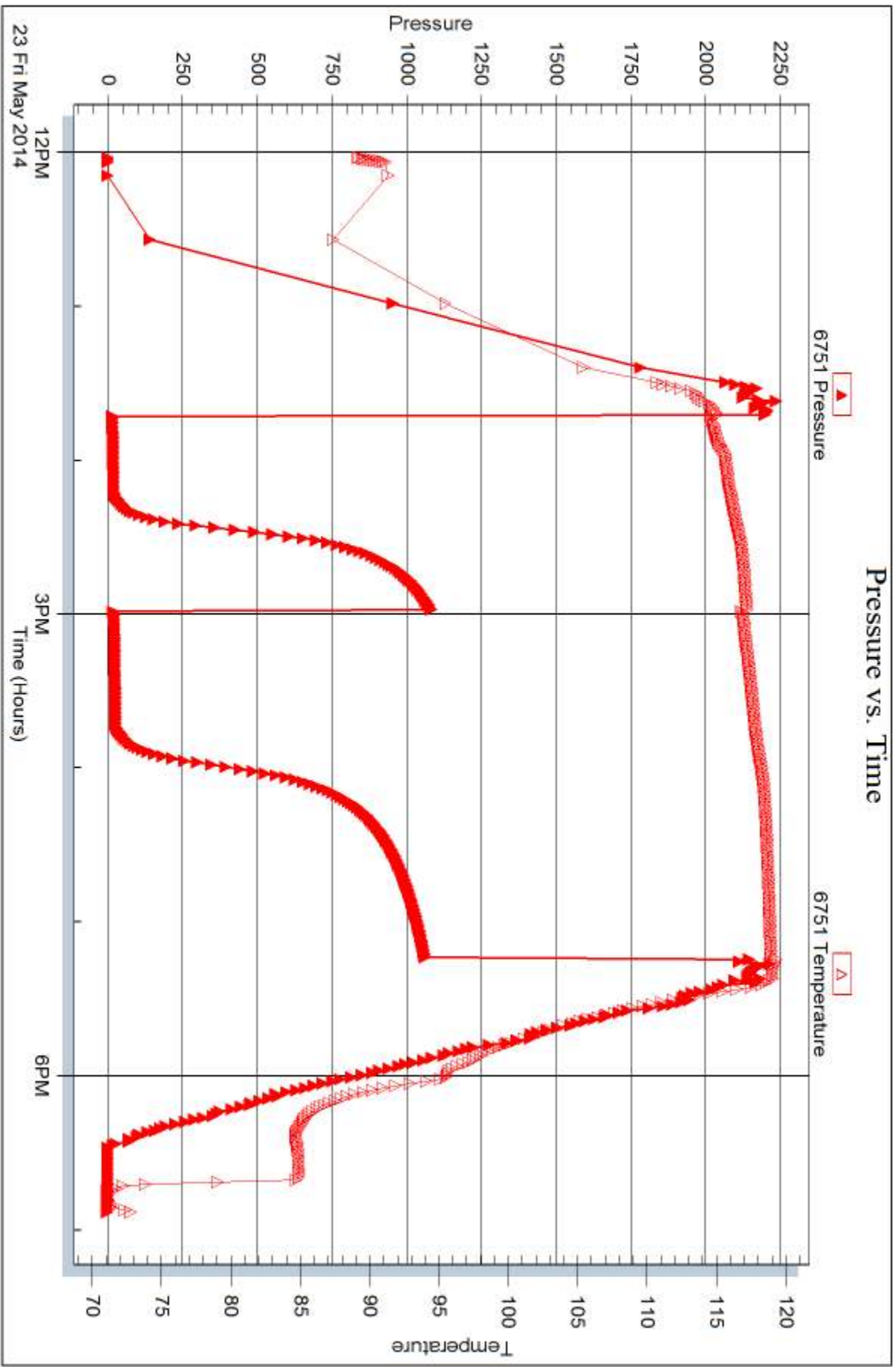
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: 35 @ 80 Degrees F = 33







## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources Inc.**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

ATTN: Terry McLeod

### **Rose #1-31**

### **S31-16s-33w Scott,KS**

Start Date: 2014.05.24 @ 08:00:00

End Date: 2014.05.24 @ 16:10:39

Job Ticket #: 57693                      DST #: 3

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

Printed: 2014.05.28 @ 08:41:05

Landmark Resources Inc.

S31-16s-33w Scott,KS

Rose #1-31

DST # 3

Mythic St. - Ft. Scot

2014.05.24



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57693

**DST#: 3**

ATTN: Terry McLeod

Test Start: 2014.05.24 @ 08:00:00

## GENERAL INFORMATION:

Formation: **Myric St. - Ft. Scot**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:54:40

Time Test Ended: 16:10:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

**Interval: 4568.00 ft (KB) To 4626.00 ft (KB) (TVD)**

Total Depth: 4626.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3100.00 ft (KB)

3095.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8357 Inside**

Press@RunDepth: 21.53 psig @ 4570.00 ft (KB)

Start Date: 2014.05.24

End Date:

2014.05.24

Start Time: 08:00:02

End Time:

16:10:40

Capacity: 8000.00 psig

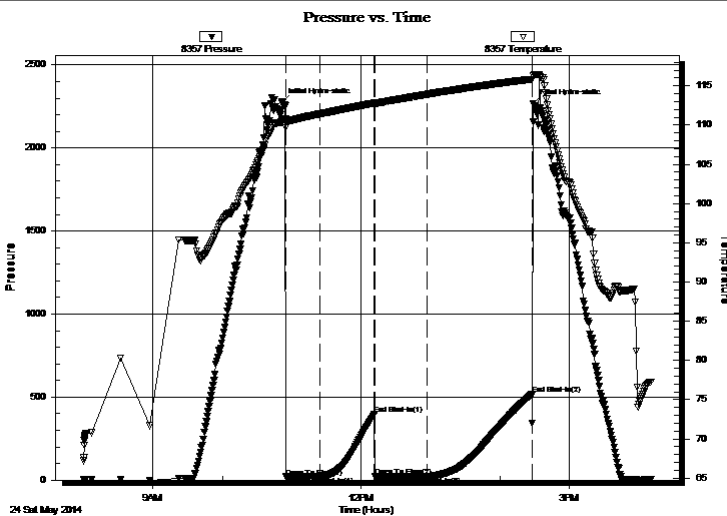
Last Calib.: 2014.05.24

Time On Btm: 2014.05.24 @ 10:51:30

Time Off Btm: 2014.05.24 @ 14:28:39

TEST COMMENT: 30- 1 1/4" Blow .  
45- No return.  
45- No blow .  
90- No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2274.39	110.54	Initial Hydro-static
4	19.96	109.63	Open To Flow (1)
33	22.10	111.42	Shut-In(1)
80	395.92	112.80	End Shut-In(1)
81	21.66	112.73	Open To Flow (2)
125	21.53	113.91	Shut-In(2)
216	515.38	115.85	End Shut-In(2)
218	2269.39	116.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	OSM 100 M	0.14

## Gas Rates

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

\* Recovery from multiple tests







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57693

**DST#: 3**

ATTN: Terry McLeod

Test Start: 2014.05.24 @ 08:00:00

## Tool Information

Drill Pipe:	Length: 4576.00 ft	Diameter: 3.80 inches	Volume: 64.19 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 64.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	35.50 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4568.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	85.50 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			4541.50	
Shut In Tool	5.00			4546.50	
Hydraulic tool	5.00			4551.50	
Jars	5.00			4556.50	
Safety Joint	2.50			4559.00	
Packer	5.00			4564.00	27.50 Bottom Of Top Packer
Packer	4.00			4568.00	
Stubb	1.00			4569.00	
Perforations	1.00			4570.00	
Recorder	0.00	8357	Inside	4570.00	
Recorder	0.00	6751	Outside	4570.00	
Perforations	19.00			4589.00	
Change Over Sub	1.00			4590.00	
Drill Pipe	32.00			4622.00	
Change Over Sub	1.00			4623.00	
Bullnose	3.00			4626.00	58.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>85.50</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57693

**DST#: 3**

ATTN: Terry McLeod

Test Start: 2014.05.24 @ 08:00:00

## 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: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 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
10.00	OSM 100 M	0.140

Total Length: 10.00 ft      Total Volume: 0.140 bbl

Num Fluid Samples: 0

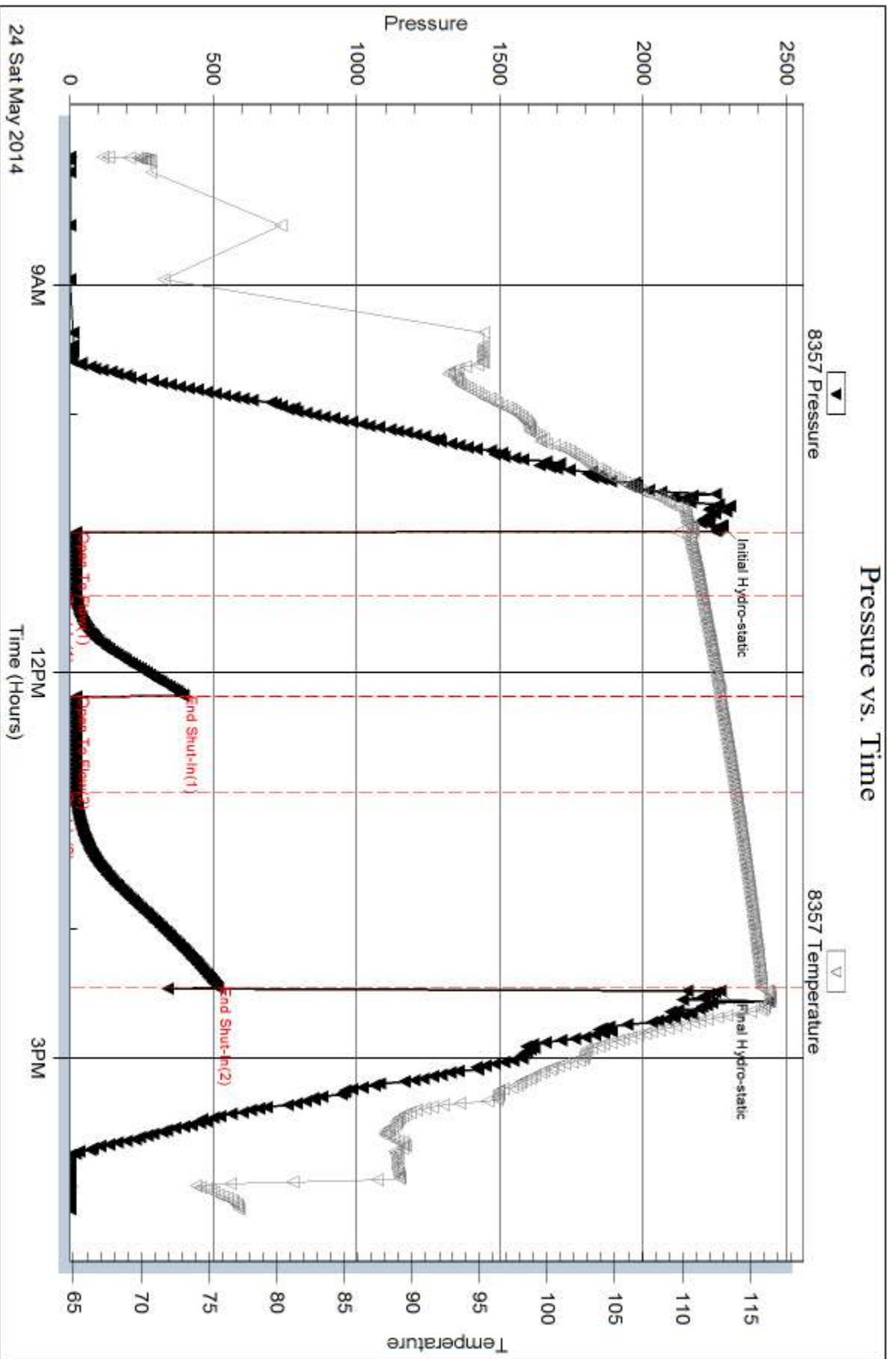
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: @ Degrees F =



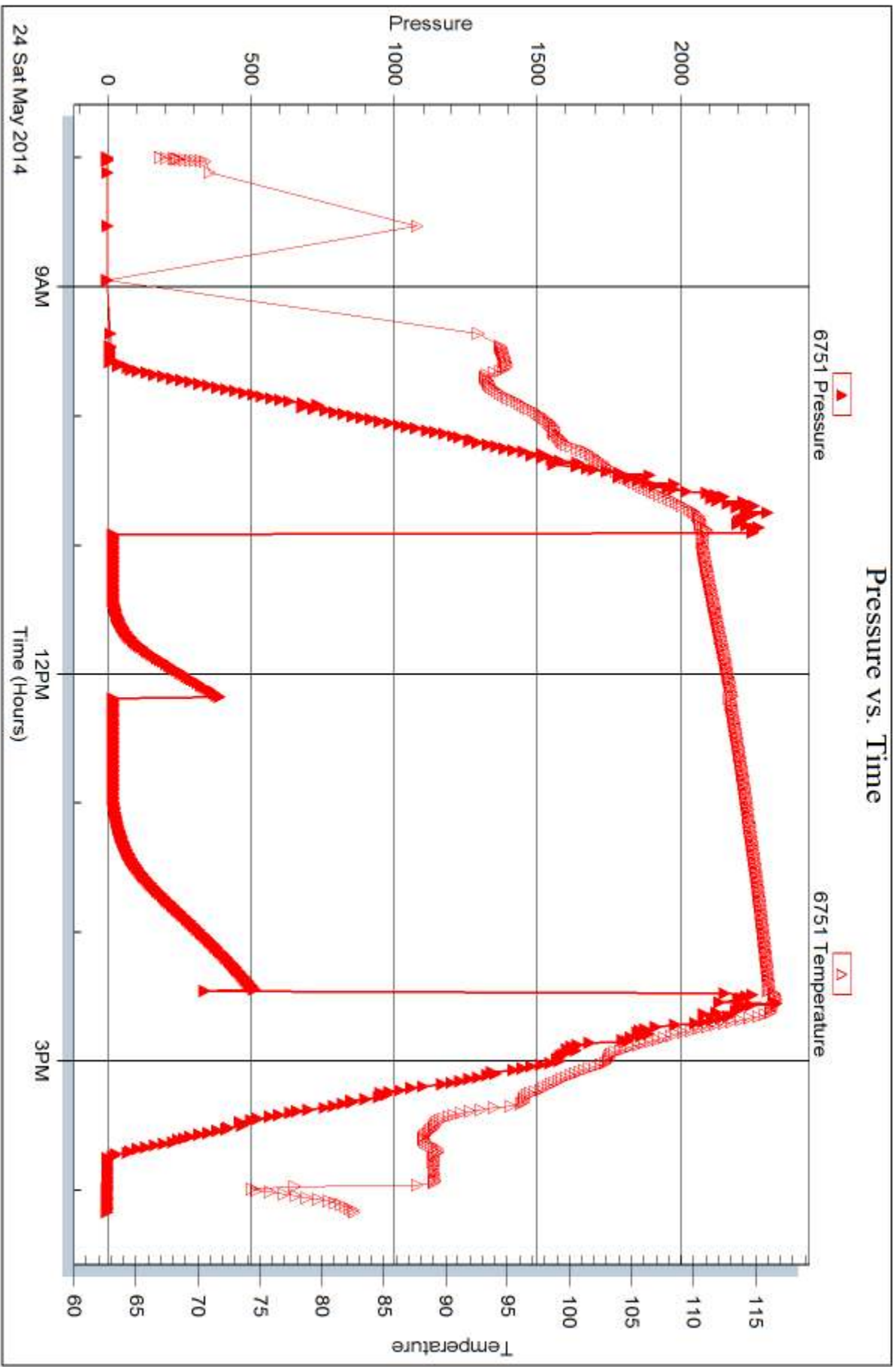
Serial #: 6751

Outside

Landmark Resources Inc.

Rose #1-31

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 57693

Printed: 2014.05.28 @ 08:41:06



## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources Inc.**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

ATTN: Terry McLeod

### **Rose #1-31**

### **S31-16s-33w Scott,KS**

Start Date: 2014.05.25 @ 08:00:02

End Date: 2014.05.25 @ 14:54:50

Job Ticket #: 57694                      DST #: 4

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

Printed: 2014.05.28 @ 08:40:08



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57694

**DST#: 4**

ATTN: Terry McLeod

Test Start: 2014.05.25 @ 08:00:02

## GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:15:10

Time Test Ended: 14:54:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

**Interval: 4642.00 ft (KB) To 4745.00 ft (KB) (TVD)**

Reference Elevations: 3100.00 ft (KB)

Total Depth: 4745.00 ft (KB) (TVD)

3095.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8357**

**Inside**

Press@RunDepth: 21.40 psig @ 4644.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.25

End Date:

2014.05.25

Last Calib.:

2014.05.25

Start Time: 08:00:02

End Time:

14:54:49

Time On Btm:

2014.05.25 @ 10:11:30

Time Off Btm:

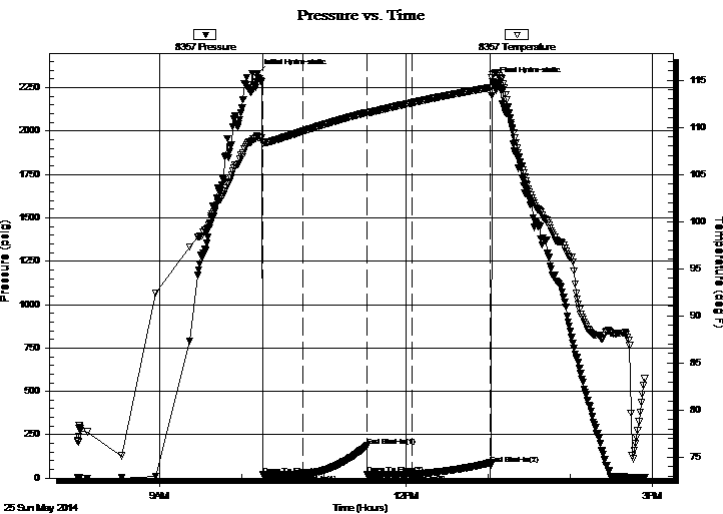
2014.05.25 @ 13:03:20

TEST COMMENT: 30- 1/2" Blow died @ 28 min.

45- No return.

30- No blow .

60- No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2332.87	108.96	Initial Hydro-static
4	18.37	108.31	Open To Flow (1)
34	19.60	109.58	Shut-In(1)
80	185.81	111.57	End Shut-In(1)
81	19.85	111.53	Open To Flow (2)
113	21.40	112.60	Shut-In(2)
171	82.20	114.21	End Shut-In(2)
172	2284.51	115.62	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 100m	0.07

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57694

**DST#: 4**

ATTN: Terry McLeod

Test Start: 2014.05.25 @ 08:00:02

## Tool Information

Drill Pipe:	Length: 4635.00 ft	Diameter: 3.80 inches	Volume: 65.02 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 65.02 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.50 ft			String Weight: Initial 69000.00 lb
Depth to Top Packer:	4642.00 ft			Final 69000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	103.00 ft			
Tool Length:	130.50 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			4615.50	
Shut In Tool	5.00			4620.50	
Hydraulic tool	5.00			4625.50	
Jars	5.00			4630.50	
Safety Joint	2.50			4633.00	
Packer	5.00			4638.00	27.50 Bottom Of Top Packer
Packer	4.00			4642.00	
Stubb	1.00			4643.00	
Perforations	1.00			4644.00	
Recorder	0.00	8357	Inside	4644.00	
Recorder	0.00	6751	Outside	4644.00	
Perforations	2.00			4646.00	
Change Over Sub	1.00			4647.00	
Drill Pipe	94.00			4741.00	
Change Over Sub	1.00			4742.00	
Bullnose	3.00			4745.00	103.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>130.50</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Landmark Resources Inc.

**S31-16s-33w Scott,KS**

1616 S. Voss Rd. Suite 600  
Houston, TX 77057

**Rose #1-31**

Job Ticket: 57694

**DST#: 4**

ATTN: Terry McLeod

Test Start: 2014.05.25 @ 08:00:02

### 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: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OSM 100m	0.070

Total Length: 5.00 ft      Total Volume: 0.070 bbl

Num Fluid Samples: 0

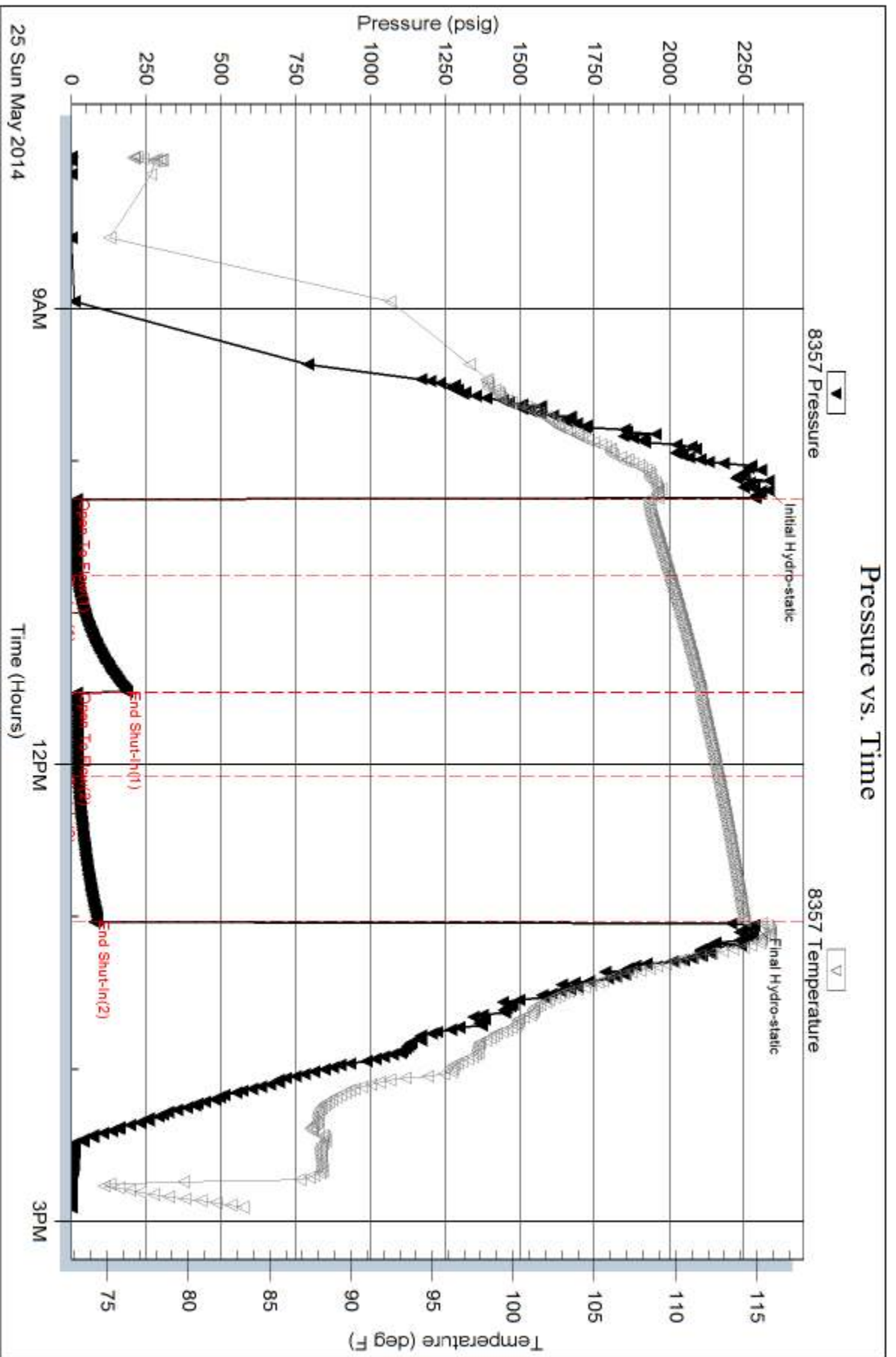
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: @ Degrees F =

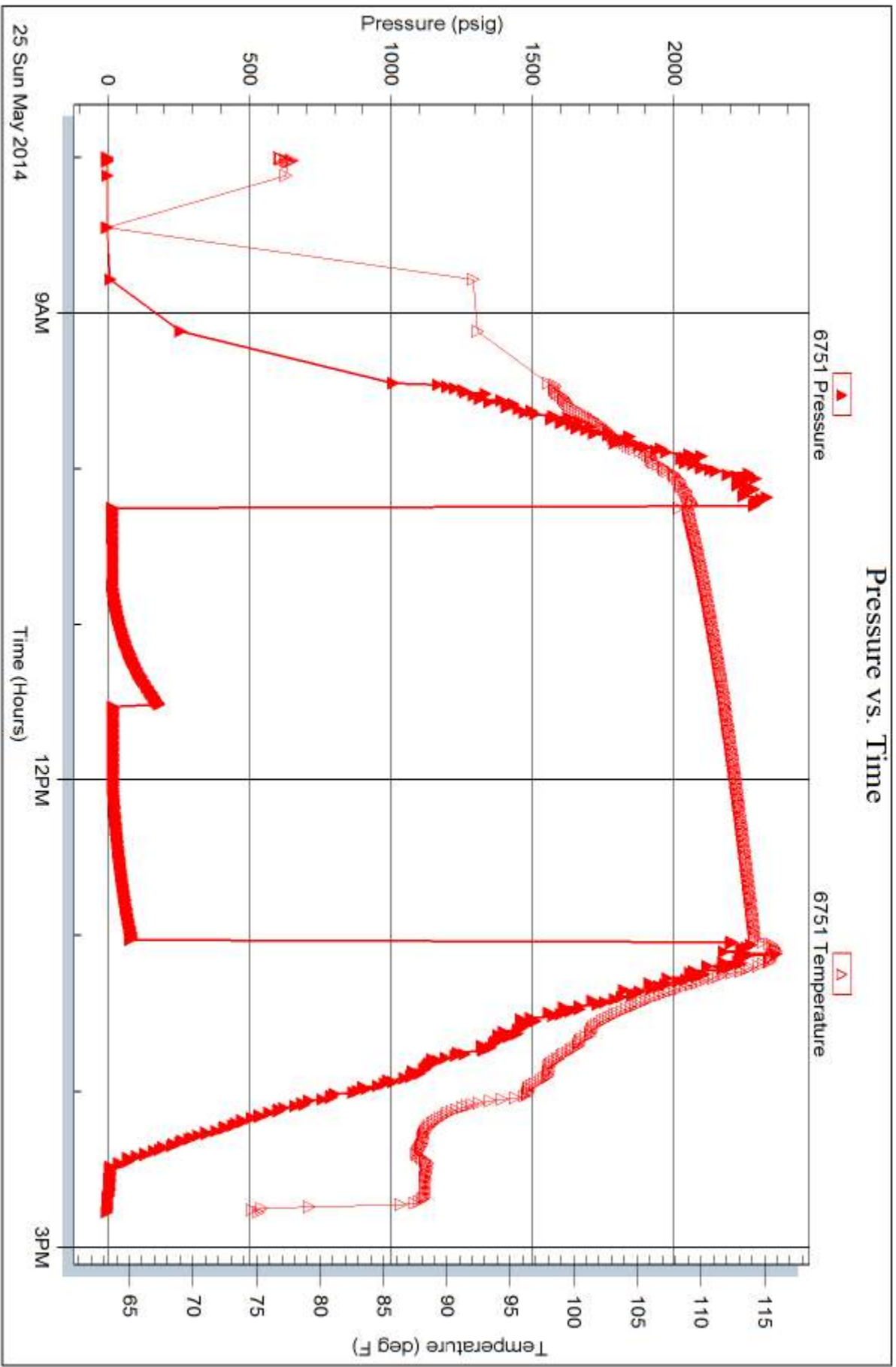


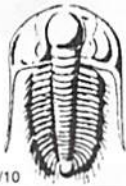
Serial #: 6751

Outside Landmark Resources Inc.

Rose #1-31

DST Test Number: 4





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 57691

Well Name & No. Rose #1-31 Test No. 1 Date 5-23-14  
 Company Landmark Resources, Inc. Elevation 3100 KB 3095 GL  
 Address 1616 E Voss Rd. Ste 600 Houston, TX 77057  
 Co. Rep / Geo. Terry McLeard Rig LD#1  
 Location: Sec. 31 Twp. 16s Rge. 33W Co. Scott State KS

Interval Tested 4433-4545 Zone Tested Marmaton, Altamont  
 Anchor Length 112 Drill Pipe Run 4438 Mud Wt. 9.1  
 Top Packer Depth 4429 Drill Collars Run 0 Vis 58  
 Bottom Packer Depth 4433 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4545 Chlorides 4000 ppm System LCM 1<sup>st</sup>  
 Blow Description Packer sent failed twice, pulled tool.

Rec	Feet of	%gas	%oil	%water	%mud
<u>220</u>	<u>M</u>			<u>100</u>	

Rec Total 220 BHT N/A Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2174  Test 1050 T-On Location 6:10  
 (B) First Initial Flow 1899  Jars \_\_\_\_\_ T-Started 6:15  
 (C) First Final Flow N/A  Safety Joint 75 T-Open 9:02  
 (D) Initial Shut-In \_\_\_\_\_  Circ Sub \_\_\_\_\_ T-Pulled 9:10  
 (E) Second Initial Flow \_\_\_\_\_  Hourly Standby \_\_\_\_\_ T-Out 11:42  
 (F) Second Final Flow \_\_\_\_\_  Mileage 35 RT 54.25 Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2162  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1179.25  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1179.25

Approved By Terry McLeard Our Representative Chuck Smith

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. 57692

Well Name & No. Rose #1-31 Test No. 2 Date 5-23-14  
 Company Landmark Resources, Inc. Elevation 3100 KB 3095 GL  
 Address \_\_\_\_\_  
 Co. Rep / Geo. Terry McLeod Rig LD#1  
 Location: Sec. 31 Twp. 16s Rge. 33W Co. Scott State KS

Interval Tested 4469-4545 Zone Tested Altamont  
 Anchor Length 76 Drill Pipe Run 4476 Mud Wt. 9.2  
 Top Packer Depth 4465 Drill Collars Run 0 Vis 55  
 Bottom Packer Depth 4469 Wt. Pipe Run 0 WL 7.2  
 Total Depth 4545 Chlorides 5000 ppm System LCM 1<sup>st</sup>  
 Blow Description 1 1/2" Blow  
No return.  
4" Blow.  
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>35</u>	Feet of <u>60CM</u>	<u>15</u> %gas	<u>25</u> %oil	%water	<u>60</u> %mud
Rec _____	Feet of <u>30' GIP</u>	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud

Rec Total 35 BHT 119 Gravity 33 API RW - @ \_\_\_\_\_ ° F Chlorides - ppm

(A) Initial Hydrostatic <u>2218</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>11:45</u>
(B) First Initial Flow <u>16</u>	<input type="checkbox"/> Jars _____	T-Started <u>12:02</u>
(C) First Final Flow <u>22</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>13:43</u>
(D) Initial Shut-In <u>1083</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>17:14</u>
(E) Second Initial Flow <u>20</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>18:53</u>
(F) Second Final Flow <u>28</u>	<input checked="" type="checkbox"/> Mileage <u>35RT</u> 54.25	Comments _____
(G) Final Shut-In <u>1062</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>2231</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby _____	Total <u>1629.25</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1629.25</u>	

Approved By Terry McLeod

Our Representative Chuck Smith

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 57693

Well Name & No. Rose #1-31 Test No. 3 Date 5-24-14  
 Company Landmark Resources, Inc. Elevation 3100 KB 3095 GL  
 Address 1616 E. Voss Rd. Ste 600 Houston, TX 77057  
 Co. Rep / Geo. Terry McLead Rig LD#1  
 Location: Sec. 31 Twp. 16s Rge. 33w Co. Scott State KS

Interval Tested 4568-4626 Zone Tested Myric St. - Ft. Scott  
 Anchor Length 58 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.2  
 Top Packer Depth 4564 Drill Collars Run 0 Vis 57  
 Bottom Packer Depth 4568 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4626 Chlorides 5500 ppm System LCM 2"  
 Blow Description 1 1/4" Blow.  
No return  
No blow.  
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>10</u>	Feet of <u>11</u>				<u>100</u> %mud
Rec _____	Feet of _____				%mud
Rec _____	Feet of _____				%mud
Rec _____	Feet of _____				%mud

Rec Total 10 BHT 116 Gravity — API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides — ppm

(A) Initial Hydrostatic <u>2274</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>8:00</u>
(B) First Initial Flow <u>20</u>	<input type="checkbox"/> Jars _____	T-Started <u>8:00</u>
(C) First Final Flow <u>22</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:55</u>
(D) Initial Shut-In <u>396</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>14:27</u>
(E) Second Initial Flow <u>22</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>16:11</u>
(F) Second Final Flow <u>22</u>	<input checked="" type="checkbox"/> Mileage <u>35RT</u> 54.25	Comments _____
(G) Final Shut-In <u>515</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2269</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Day Standby _____	Total <u>1629.25</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1629.25</u>	

Approved By Terry McLead Our Representative Chuck Smith

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 57694

Well Name & No. Rose #1:31 Test No. 4 Date 5-25-14  
 Company Landmark Resources, Inc. Elevation 3100 KB 3095 GL  
 Address 1616 S. Voss Rd. Ste. 600 Houston, TX 77057  
 Co. Rep / Geo. Terry McLead Rig LD#1  
 Location: Sec. 31 Twp. 16s Rge. 33w Co. Scott State KS

Interval Tested 4642-4745 Zone Tested Johnson  
 Anchor Length 103 Drill Pipe Run 4635 Mud Wt. 9.2  
 Top Packer Depth 4638 Drill Collars Run 0 Vis 54  
 Bottom Packer Depth 4642 Wt. Pipe Run 0 WL 7.2  
 Total Depth 4745 Chlorides 4500 ppm System LCM 2<sup>nd</sup>  
 Blow Description 1/2" Blow died @ 28 min.  
No return.  
No blow.  
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>5</u>	Feet of <u>OSM</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 114 Gravity — API RW @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2333  Test 1250 T-On Location 7:57  
 (B) First Initial Flow 18  Jars T-Started 8:00  
 (C) First Final Flow 20  Safety Joint 75 T-Open 10:15  
 (D) Initial Shut-In 186  Circ Sub NIC T-Pulled 13:02  
 (E) Second Initial Flow 20  Hourly Standby T-Out 14:55  
 (F) Second Final Flow 21  Mileage 35 RT x 2 108.50  
 (G) Final Shut-In 82  Sampler  
 (H) Final Hydrostatic 2285  Straddle  
 Ruined Shale Packer 350

Initial Open 30  Shale Packer 250  Ruined Packer  
 Initial Shut-In 45  Extra Packer  Extra Copies  
 Final Flow 30  Extra Recorder Sub Total 0  
 Final Shut-In 60  Day Standby Total 2033.50  
 Accessibility MP/DST Disc't  
 Sub Total 1683.50

Approved By Terry McLead Our Representative Chuck Smith

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