



## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources Inc**

1616 S Voss rd STE 600  
Houston TX 77057

ATTN: Terry McLeod

### **Janzen #4-7**

#### **7-17s-33w Scott,KS**

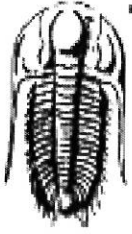
Start Date: 2014.11.24 @ 08:36:00

End Date: 2014.11.24 @ 17:19:00

Job Ticket #: 60641                      DST #: 1

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

Printed: 2014.11.28 @ 11:29:34



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources Inc

7-17s-33w Scott,KS

1616 S Voss rd STE 600  
Houston TX 77057

**Janzen #4-7**

Job Ticket: 60641

DST#: 1

ATTN: Terry McLeod

Test Start: 2014.11.24 @ 08:36:00

## GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:18:15

Time Test Ended: 17:19:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Cody Bloedorn

Unit No: 73

Interval: **4408.00 ft (KB) To 4475.00 ft (KB) (TVD)**

Reference Elevations: 3096.00 ft (KB)

Total Depth: 4475.00 ft (KB) (TVD)

3086.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

**Serial #: 8648**

Inside

Press@RunDepth: 64.70 psig @ 4445.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.24

End Date:

2014.11.24

Last Calib.: 2014.11.24

Start Time: 08:36:05

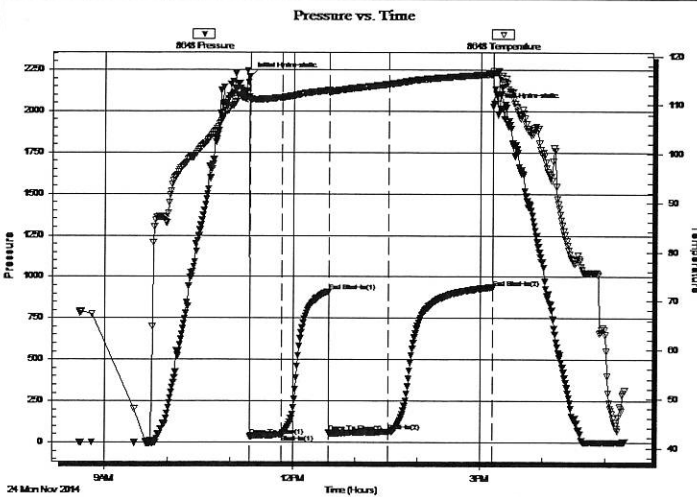
End Time:

17:19:00

Time On Btm: 2014.11.24 @ 11:18:00

Time Off Btm: 2014.11.24 @ 15:12:15

TEST COMMENT: 30 - IF- 2" blow  
45 - IS- No return  
60 - FF- 1 1/4" blow  
90 - FS- No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2207.26	111.63	Initial Hydro-static
1	34.04	110.94	Open To Flow (1)
31	47.38	111.49	Shut-In(1)
76	908.37	112.97	End Shut-In(1)
76	57.80	112.46	Open To Flow (2)
133	64.70	114.21	Shut-In(2)
234	932.94	116.32	End Shut-In(2)
235	2028.30	117.02	Final Hydro-static

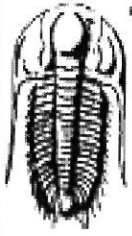
## Recovery

Length (ft)	Description	Volume (bbl)
60.00	HOCM, 40%O, 60%M	0.30
15.00	MCO, 20%M, 80%O	0.07
0.00	124' of G.I.P.	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Landmark Resources Inc

7-17s-33w Scott,KS

1616 S Voss rd STE 600  
Houston TX 77057

Janzen #4-7

Job Ticket: 60641

DST#: 1

ATTN: Terry McLeod

Test Start: 2014.11.24 @ 08:36:00

### Tool Information

Drill Pipe:	Length: 4164.00 ft	Diameter: 3.80 inches	Volume: 58.41 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: 30000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 94000.00 lb
			<u>Total Volume: 59.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 90000.00 lb
Depth to Top Packer:	4408.00 ft			Final 90000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	67.00 ft			
Tool Length:	90.00 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			4386.00	
Shut In Tool	5.00			4391.00	
Hydraulic tool	5.00			4396.00	
Safety Joint	3.00			4399.00	
Packer	5.00			4404.00	23.00 Bottom Of Top Packer
Packer	4.00			4408.00	
Stubb	1.00			4409.00	
Perforations	3.00			4412.00	
Change Over Sub	1.00			4413.00	
Drill Pipe	31.00			4444.00	
Change Over Sub	1.00			4445.00	
Recorder	0.00	8648	Inside	4445.00	
Recorder	0.00	8940	Outside	4445.00	
Perforations	27.00			4472.00	
Bullnose	3.00			4475.00	67.00 Bottom Packers & Anchor

**Total Tool Length: 90.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Landmark Resources Inc

7-17s-33w Scott,KS

1616 S Voss rd STE 600  
Houston TX 77057

**Janzen #4-7**

Job Ticket: 60641

**DST#: 1**

ATTN: Terry McLeod

Test Start: 2014.11.24 @ 08:36:00

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 7.16 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 4000.00 ppm

Filter Cake: 3.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: deg API

Water Salinity: ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HOCM, 40%O, 60%M	0.295
15.00	MCO, 20%M, 80%O	0.074
0.00	124' of G.I.P.	0.000

Total Length: 75.00 ft      Total Volume: 0.369 bbl

Num Fluid Samples: 0

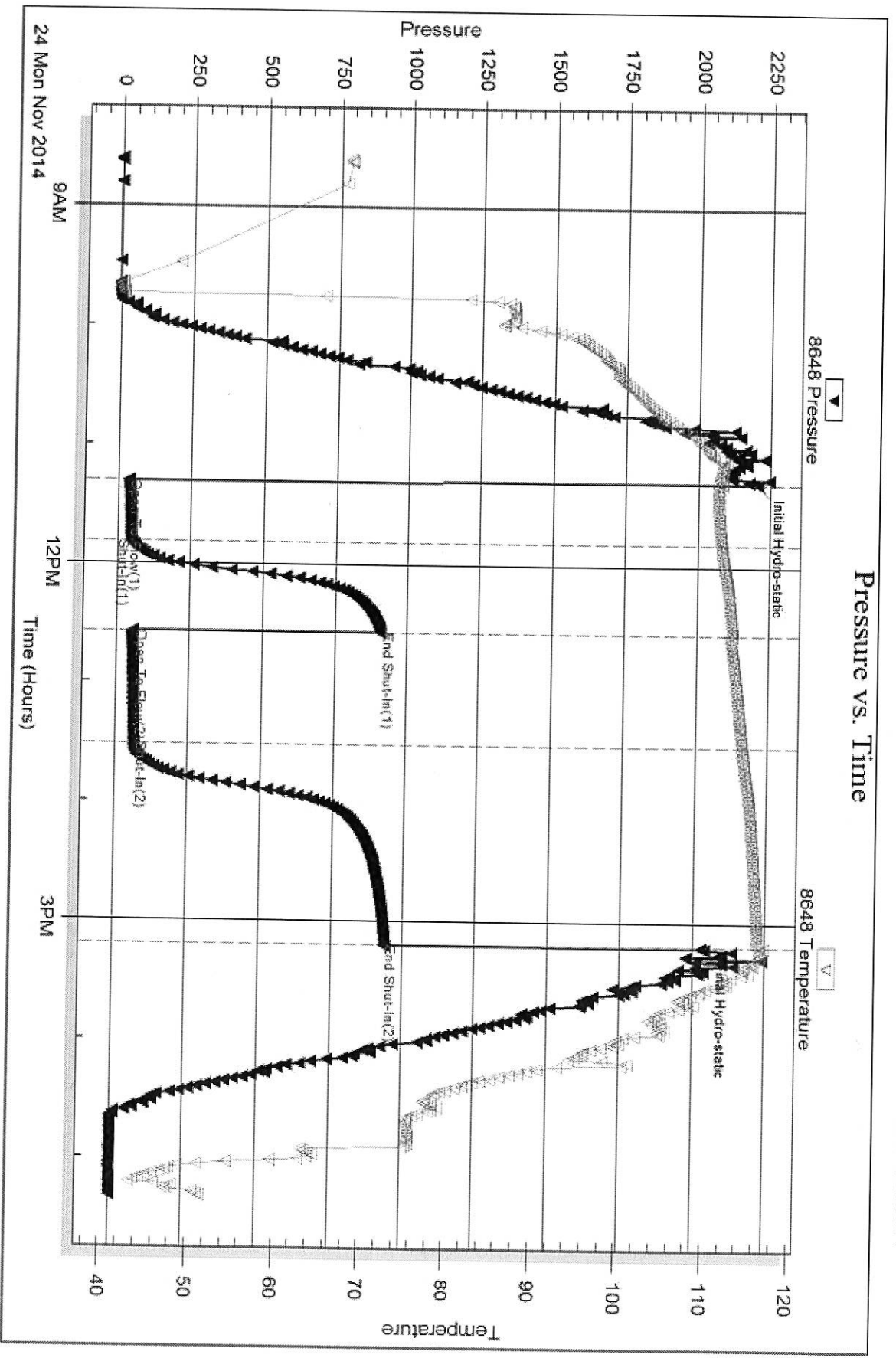
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: thick oil

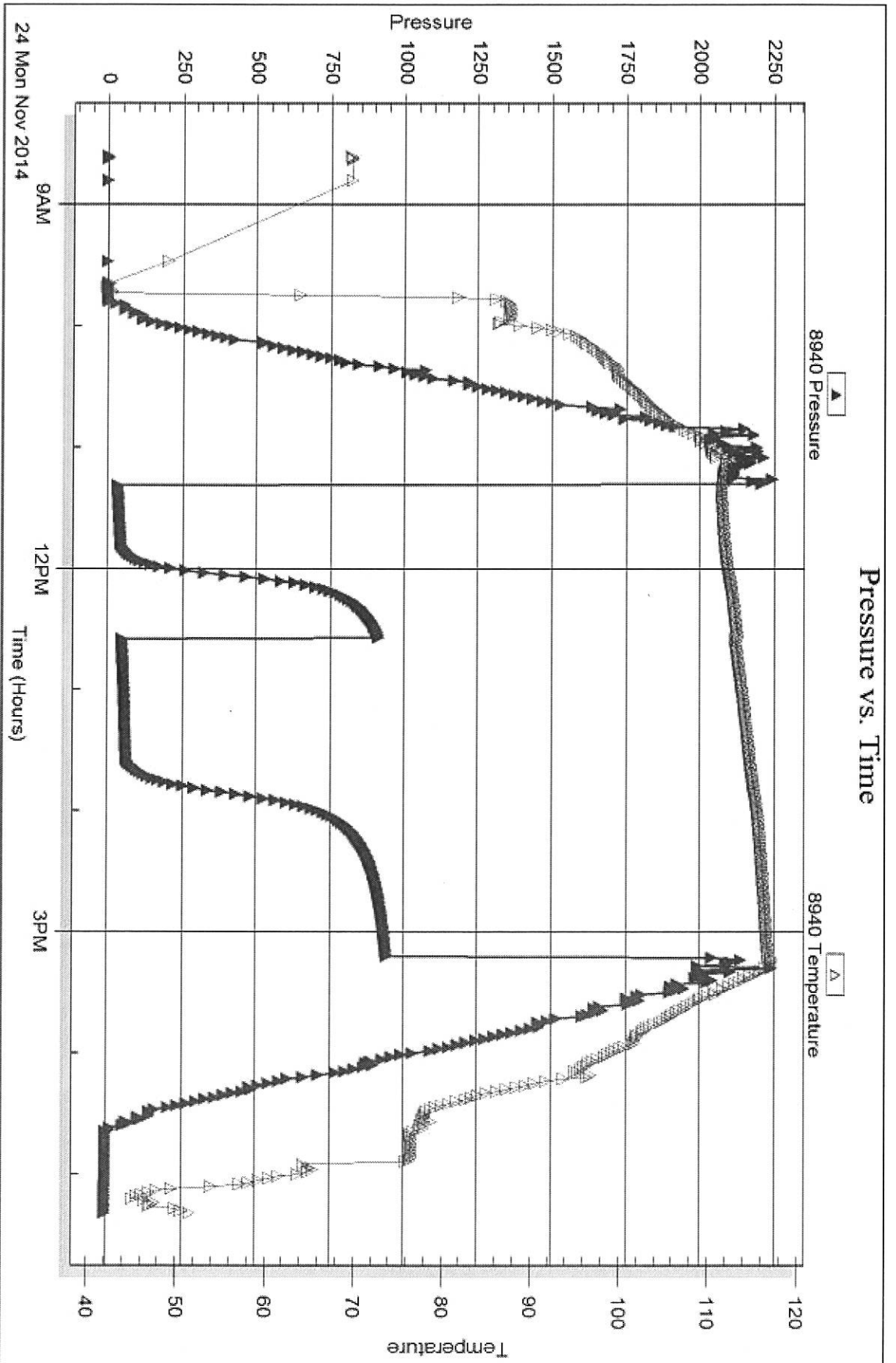


Serial #: 8940

Outside Landmark Resources Inc

Janzen #4-7

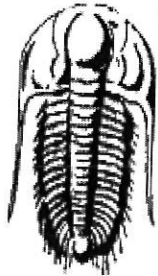
DST Test Number: 1



Tripoble Testing, Inc

Ref. No: 60641

Printed: 2014, 11, 28 @ 11:29:36



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources Inc**

1616 S Voss rd STE 600  
Houston TX 77057

ATTN: Terry McLeod

**Janzen #4-7**

**7-17s-33w Scott,KS**

Start Date: 2014.11.25 @ 00:20:05

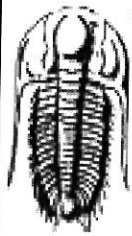
End Date: 2014.11.25 @ 09:53:30

Job Ticket #: 60642                      DST #: 2

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

Printed: 2014.11.28 @ 11:29:13

Landmark Resources Inc  
7-17s-33w Scott,KS  
Janzen #4-7  
DST # 2  
2014.11.25



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources Inc

7-17s-33w Scott,KS

1616 S Voss rd STE 600  
Houston TX 77057

**Janzen #4-7**

ATTN: Terry McLeod

Job Ticket: 60642

DST#: 2

Test Start: 2014.11.25 @ 00:20:05

## GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:03:30

Time Test Ended: 09:53:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Cody Bloedorn

Unit No: 73

Interval: 4481.00 ft (KB) To 4522.00 ft (KB) (TVD)

Total Depth: 4522.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3096.00 ft (KB)

3086.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 8940**

Outside

Press@RunDepth: 259.94 psig @ 4518.00 ft (KB)

Start Date: 2014.11.25 End Date: 2014.11.25

Start Time: 00:20:05 End Time: 09:53:30

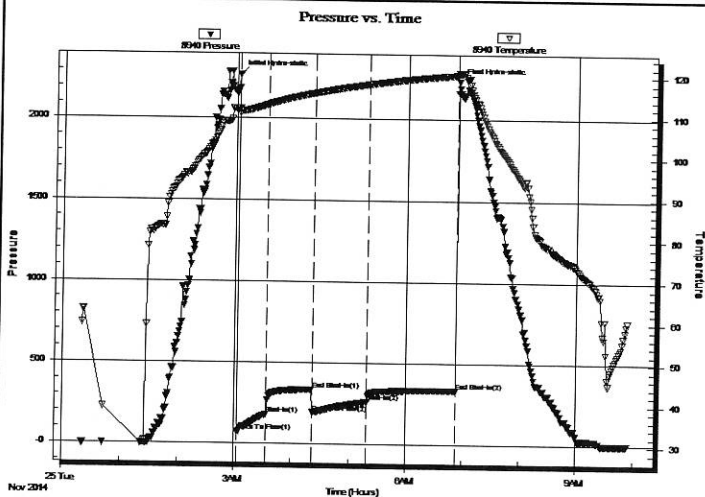
Capacity: 8000.00 psig

Last Calib.: 2014.11.25

Time On Btm: 2014.11.25 @ 03:03:15

Time Off Btm: 2014.11.25 @ 06:53:59

TEST COMMENT: 30 - IF- B.O.B. in 2 1/2 minutes  
45 - ISI- 2. 1/2" Return  
60 - FF- B.O.B. in 7 minutes  
90 - FSI- 3" blow, died back to 1" blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2268.36	112.01	Initial Hydro-static
1	69.68	110.89	Open To Flow (1)
31	178.55	113.02	Shut-In(1)
79	332.03	115.86	End Shut-In(1)
79	192.54	115.78	Open To Flow (2)
136	259.94	118.09	Shut-In(2)
230	329.40	120.42	End Shut-In(2)
231	2232.15	120.78	Final Hydro-static

## Recovery

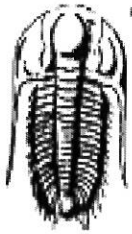
Length (ft)	Description	Volume (bbl)
62.00	GOCM, 20%O, 30%G, 50%M	0.30
124.00	GHOCM, 30%G, 30%M, 40%O	0.61
248.00	GMCO, 15%G, 75%O	2.99
248.00	GMCO, 40%G, 60%O	3.48
0.00	1116' of G.I.P.	0.00

\* 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

7-17s-33w Scott,KS

1616 S Voss rd STE 600  
Houston TX 77057

Janzen #4-7

Job Ticket: 60642

DST#: 2

ATTN: Terry McLeod

Test Start: 2014.11.25 @ 00:20:05

### Tool Information

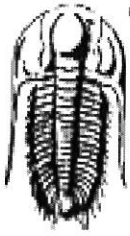
Drill Pipe:	Length: 4229.00 ft	Diameter: 3.80 inches	Volume: 59.32 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 96000.00 lb
			<u>Total Volume: 60.50 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 90000.00 lb
Depth to Top Packer:	4481.00 ft			Final 92000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	64.00 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			4459.00	
Shut In Tool	5.00			4464.00	
Hydraulic tool	5.00			4469.00	
Safety Joint	3.00			4472.00	
Packer	5.00			4477.00	23.00 Bottom Of Top Packer
Packer	4.00			4481.00	
Stubb	1.00			4482.00	
Perforations	3.00			4485.00	
Change Over Sub	1.00			4486.00	
Drill Pipe	31.00			4517.00	
Change Over Sub	1.00			4518.00	
Recorder	0.00	8648	Inside	4518.00	
Recorder	0.00	8940	Outside	4518.00	
Perforations	1.00			4519.00	
Bullnose	3.00			4522.00	41.00 Bottom Packers & Anchor

**Total Tool Length: 64.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Landmark Resources Inc

**7-17s-33w Scott,KS**

1616 S Voss rd STE 600  
Houston TX 77057

**Janzen #4-7**

Job Ticket: 60642

**DST#: 2**

ATTN: Terry McLeod

Test Start: 2014.11.25 @ 00:20:05

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.15 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 3.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	GOCM, 20%O, 30%G, 50%M	0.305
124.00	GHOCM, 30%G, 30%M, 40%O	0.610
248.00	GMCO, 15%G, 75%O	2.987
248.00	GMCO, 40%G, 60%O	3.479
0.00	1116' of G.I.P.	0.000

Total Length:

682.00 ft

Total Volume:

7.381 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 29 @ 40 Degrees = 31

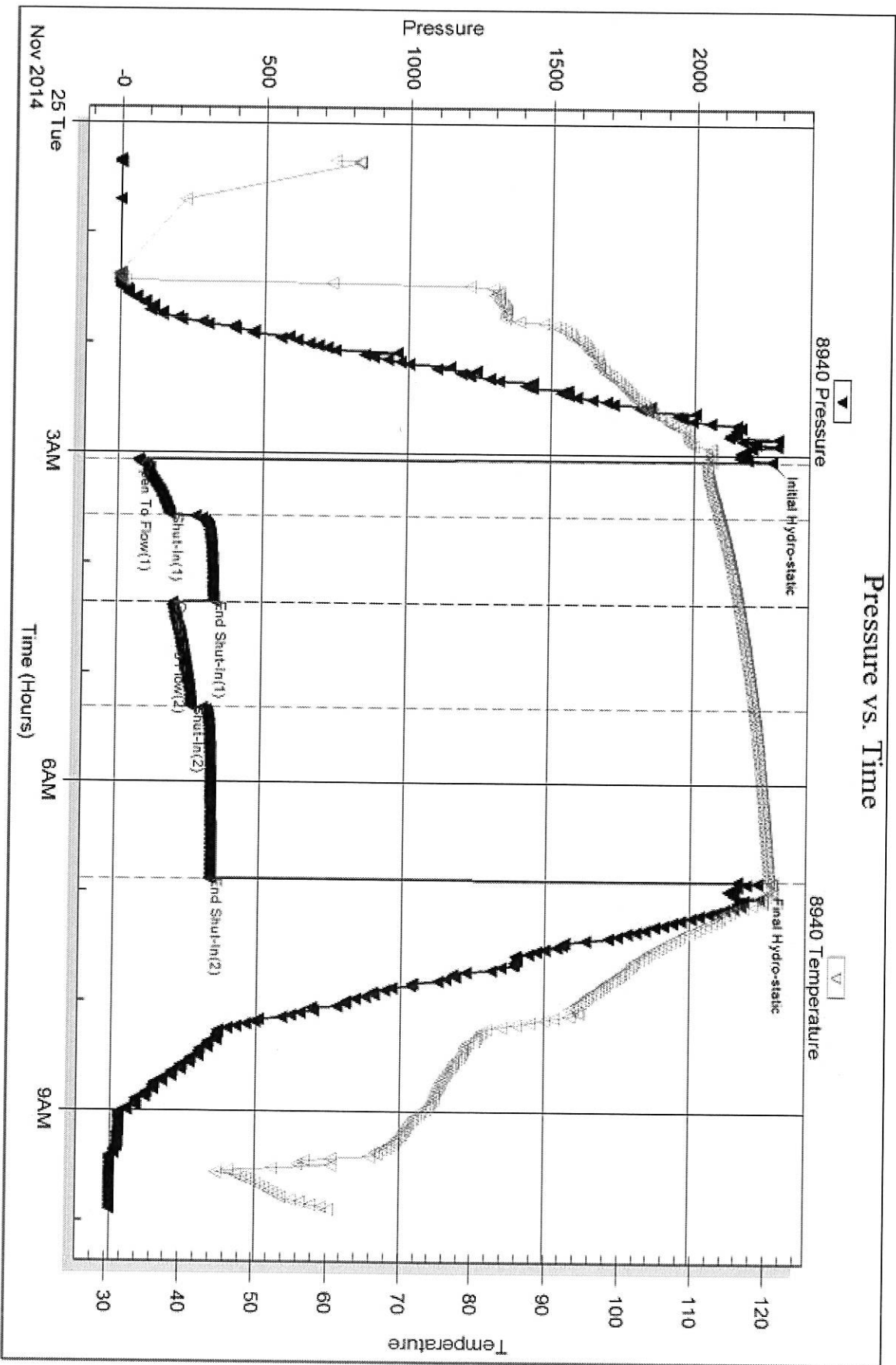


Serial #: 8940

Outside Landmark Resources Inc

Janzen #4-7

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 60642

Printed: 2014, 11:28 @ 11:29:14

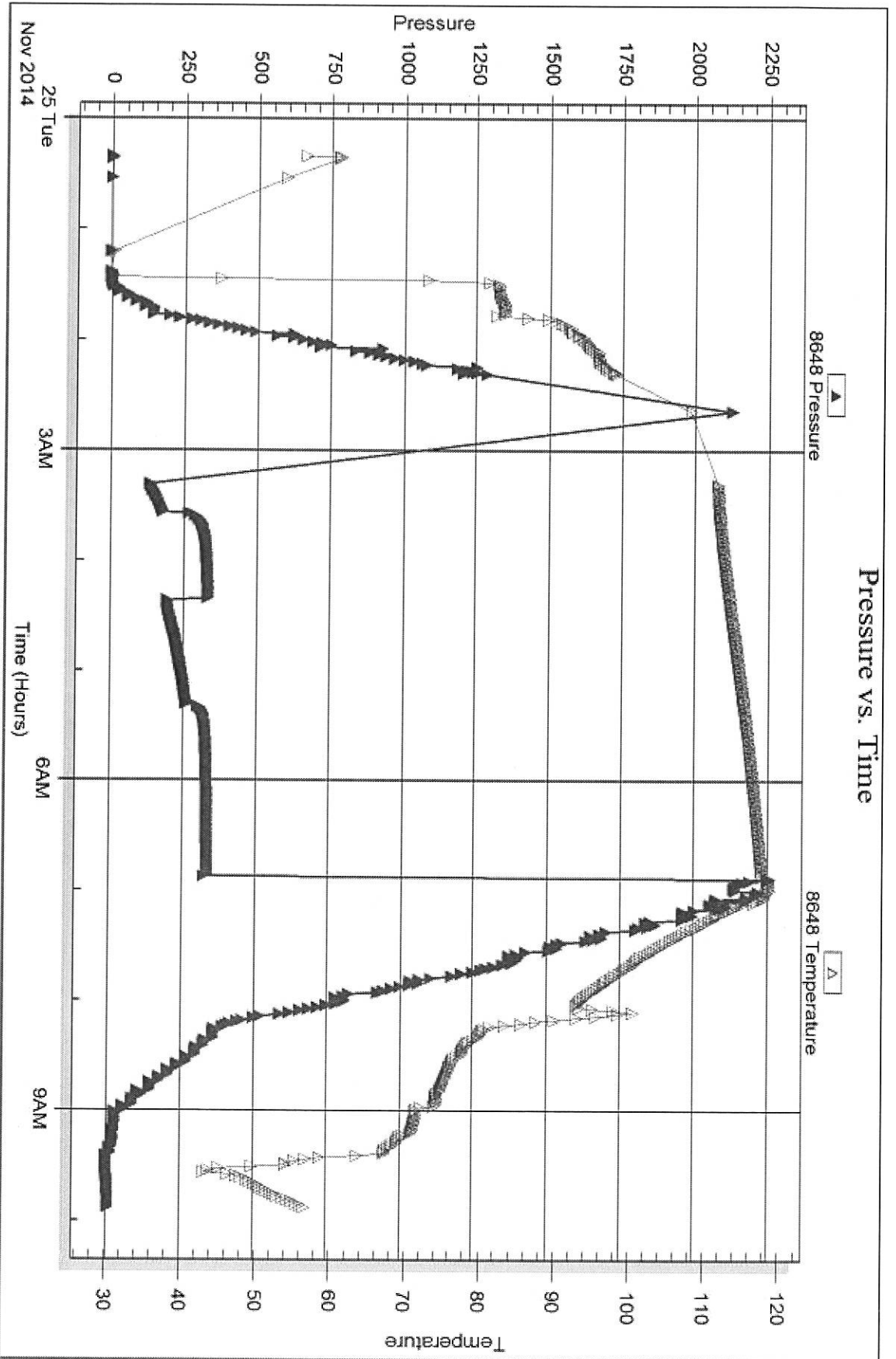
Serial #: 8648

Inside

Landmark Resources Inc

Janzen #4-7

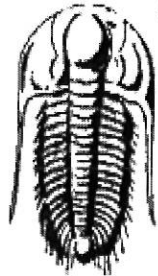
DSI Test Number: 2



Tribble Testing, Inc

Ref. No: 60642

Printed: 2014.11.28 @ 11:29:14



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources Inc**

1616 S Voss rd STE 600  
Houston TX 77057

ATTN: Terry McLeod

**Janzen #4-7**

**7-17s-33w Scott,KS**

Start Date: 2014.11.25 @ 21:15:15

End Date: 2014.11.26 @ 03:58:30

Job Ticket #: 59221                      DST #: 3

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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

Printed: 2014.11.28 @ 11:28:51

Landmark Resources Inc

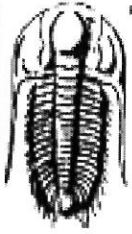
7-17s-33w Scott,KS

Janzen #4-7

DST # 3

Myrick St. - Ft.Scot

2014.11.25



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources Inc

7-17s-33w Scott,KS

1616 S Voss rd STE 600  
Houston TX 77057

Janzen #4-7

Job Ticket: 59221

DST#: 3

ATTN: Terry McLeod

Test Start: 2014.11.25 @ 21:15:15

## GENERAL INFORMATION:

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

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:24:45

Time Test Ended: 03:58:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 65

Interval: **4545.00 ft (KB) To 4610.00 ft (KB) (TVD)**

Total Depth: 4610.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3096.00 ft (KB)

3086.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **8846**

Inside

Press@RunDepth: 37.30 psig @ 4547.00 ft (KB)

Start Date: 2014.11.25

End Date:

2014.11.26

Start Time: 21:15:15

End Time:

03:58:30

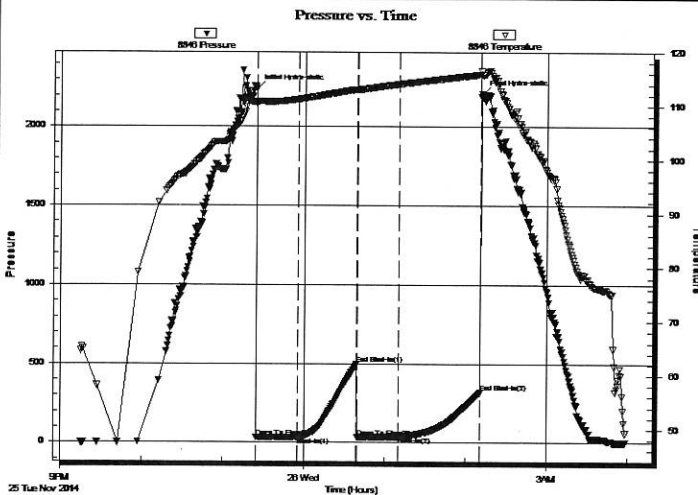
Capacity: 8000.00 psig

Last Calib.: 2014.11.26

Time On Btm: 2014.11.25 @ 23:24:30

Time Off Btm: 2014.11.26 @ 02:11:30

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



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2242.62	110.71	Initial Hydro-static
1	32.39	110.31	Open To Flow (1)
31	34.11	111.25	Shut-In(1)
75	497.54	113.08	End Shut-In(1)
75	35.31	112.98	Open To Flow (2)
106	37.30	114.07	Shut-In(2)
166	318.61	115.92	End Shut-In(2)
167	2206.96	115.80	Final Hydro-static

## Recovery

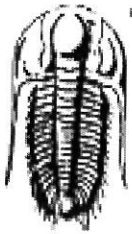
Length (ft)	Description	Volume (bbl)
2.00	mud 100% m	0.01

\* 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

7-17s-33w Scott,KS

1616 S Voss rd STE 600  
Houston TX 77057

Janzen #4-7

Job Ticket: 59221

DST#: 3

ATTN: Terry McLeod

Test Start: 2014.11.25 @ 21:15:15

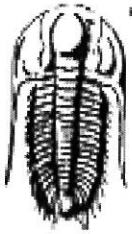
### Tool Information

Drill Pipe:	Length: 4302.00 ft	Diameter: 3.80 inches	Volume: 60.35 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: 25000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 11000.00 lb
			<u>Total Volume: 61.53 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 90000.00 lb
Depth to Top Packer:	4545.00 ft			Final 90000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.00 ft			
Tool Length:	89.00 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			4522.00	
Shut In Tool	5.00			4527.00	
Hydraulic tool	5.00			4532.00	
Jars	5.00			4537.00	
Safety Joint	3.00			4540.00	
Packer	5.00			4545.00	24.00 Bottom Of Top Packer
Packer - Shale	0.00			4545.00	
Stubb	1.00			4546.00	
Perforations	1.00			4547.00	
Recorder	0.00	8846	Inside	4547.00	
Recorder	0.00	8737	Outside	4547.00	
Change Over Sub	1.00			4548.00	
Blank Spacing	31.00			4579.00	
Change Over Sub	1.00			4580.00	
Perforations	25.00			4605.00	
Bullnose	5.00			4610.00	65.00 Anchor Tool
<b>Total Tool Length:</b>	<b>89.00</b>				



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Landmark Resources Inc

**7-17s-33w Scott,KS**

1616 S Voss rd STE 600  
Houston TX 77057

**Janzen #4-7**

Job Ticket: 59221

**DST#: 3**

ATTN: Terry McLeod

Test Start: 2014.11.25 @ 21:15:15

### 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:

0 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.15 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 3.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	mud 100%m	0.010

Total Length: 2.00 ft      Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

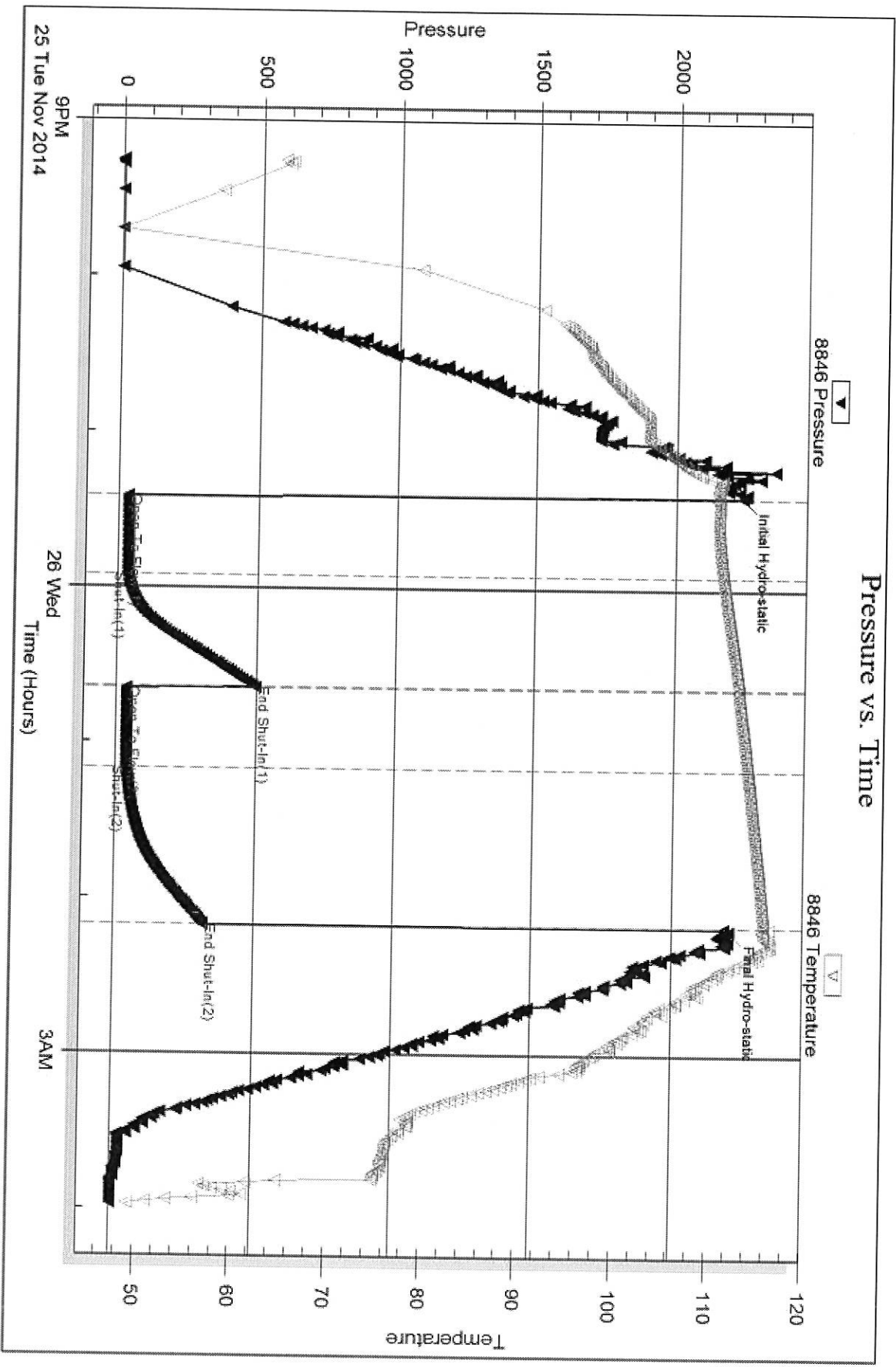
Serial #: 8846

Inside

Landmark Resources Inc

Janzen #4-7

DST Test Number: 3



Tribble Testing, Inc

Ref. No: 59221

Printed: 2014, 11:28 @ 11:28:52

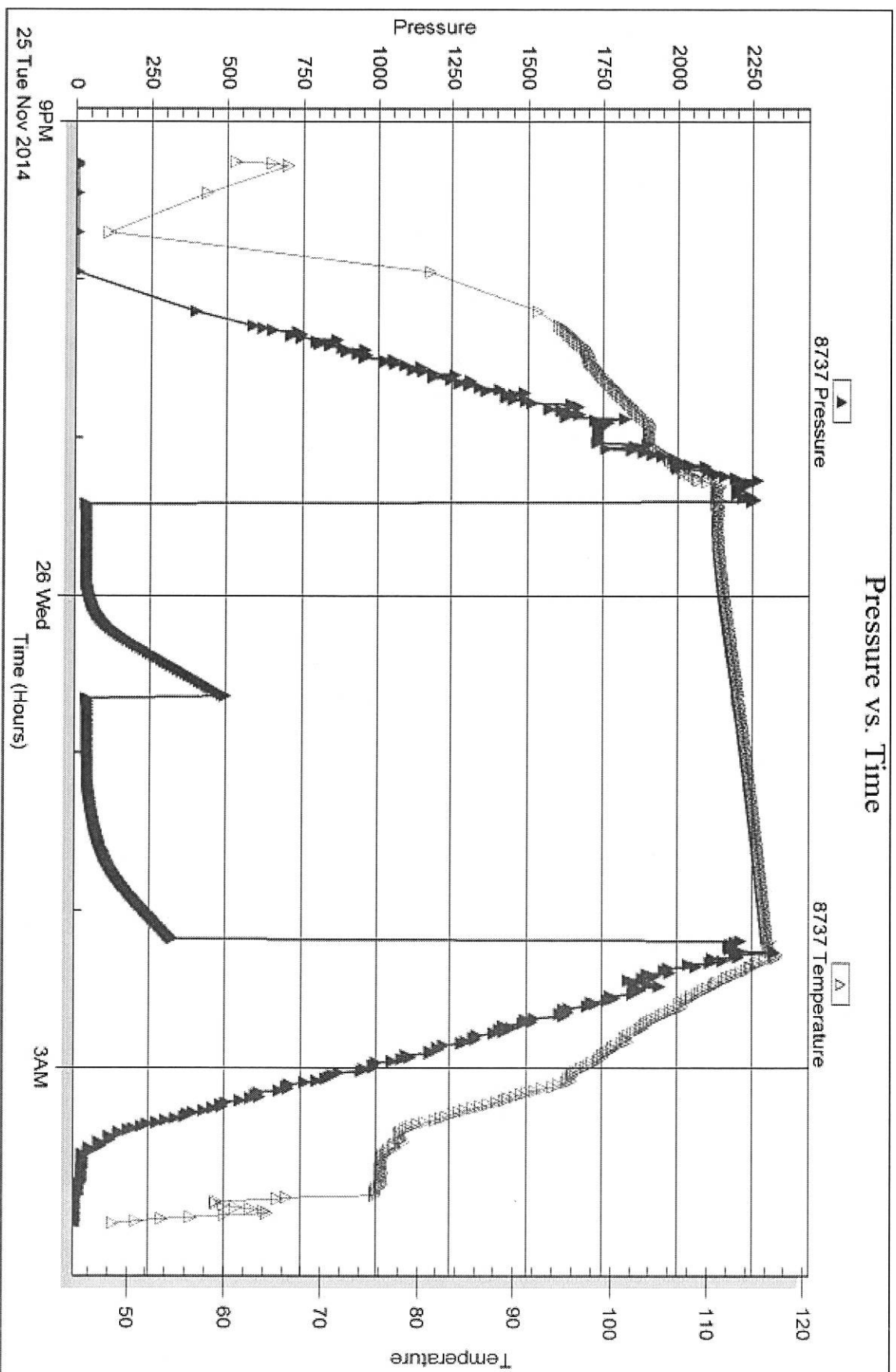


Serial #: 8737

Outside Landmark Resources Inc

Janzen #4-7

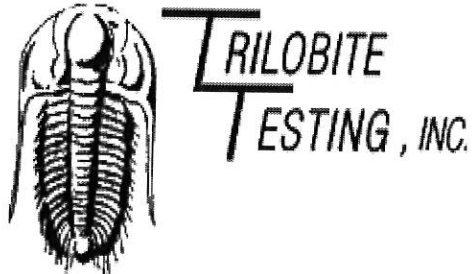
DST Test Number: 3



Trioble Testing, Inc

Ref. No: 59221

Printed: 2014.11.26 @ 11:26:52



## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources Inc**

1616 S Voss rd STE 600  
Houston TX 77057

ATTN: Terry McLeod

### **Janzen #4-7**

#### **7-17s-33w Scott,KS**

Start Date: 2014.11.26 @ 16:06:15

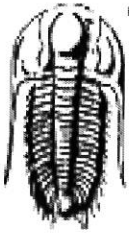
End Date: 2014.11.26 @ 22:47:30

Job Ticket #: 59222                      DST #: 4

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

Printed: 2014.11.28 @ 11:28:15

Landmark Resources Inc  
7-17s-33w Scott,KS  
Janzen #4-7  
DST # 4  
Johnson  
2014.11.26



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources Inc  
 1616 S Voss rd STE 600  
 Houston TX 77057  
 ATTN: Terry McLeod

**7-17s-33w Scott,KS**  
**Janzen #4-7**  
 Job Ticket: 59222      DST#: 4  
 Test Start: 2014.11.26 @ 16:06:15

**GENERAL INFORMATION:**

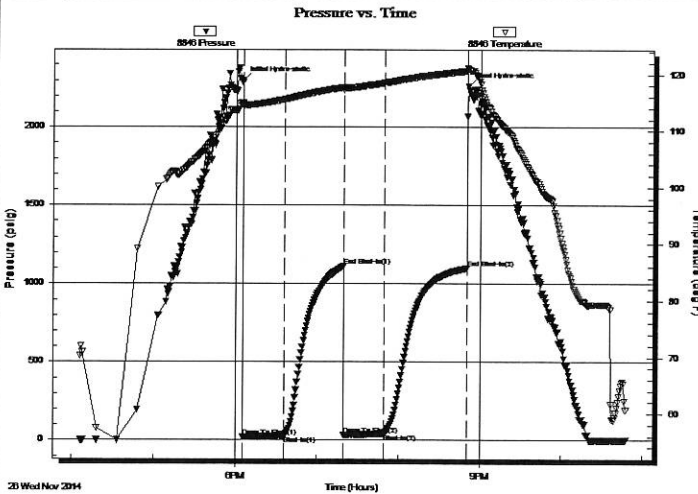
Formation: **Johnson**  
 Deviated: No    Whipstock:                    ft (KB)  
 Time Tool Opened: 18:05:30  
 Time Test Ended: 22:47:30  
 Interval: **4657.00 ft (KB) To 4735.00 ft (KB) (TVD)**  
 Total Depth: 4735.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches    Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Mike Roberts  
 Unit No: 65  
 Reference Elevations: 3096.00 ft (KB)  
 3086.00 ft (CF)  
 KB to GR/CF: 10.00 ft

**Serial #: 8846**

Inside

Press@RunDepth: 40.95 psig @ 4664.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2014.11.26      End Date: 2014.11.26      Last Calib.: 2014.11.26  
 Start Time: 16:06:15      End Time: 22:47:30      Time On Btm: 2014.11.26 @ 18:05:15  
 Time Off Btm: 2014.11.26 @ 20:51:15

TEST COMMENT: IF: Built to 1" blow  
 IS: No return blow  
 FF: No blow  
 FS: No return blow



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2296.89	114.94	Initial Hydro-static
1	19.71	114.44	Open To Flow (1)
31	29.92	115.59	Shut-In(1)
75	1113.05	117.74	End Shut-In(1)
75	35.28	117.17	Open To Flow (2)
104	40.95	118.52	Shut-In(2)
165	1099.90	120.63	End Shut-In(2)
166	2259.71	120.94	Final Hydro-static

**Recovery**

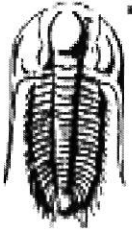
Length (ft)	Description	Volume (bbl)
30.00	mud w ith oil spots 100%m	0.15

**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

**7-17s-33w Scott,KS**

1616 S Voss rd STE 600  
Houston TX 77057

**Janzen #4-7**

Job Ticket: 59222

**DST#: 4**

ATTN: Terry McLeod

Test Start: 2014.11.26 @ 16:06:15

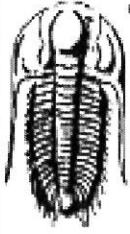
### Tool Information

Drill Pipe:	Length: 4399.00 ft	Diameter: 3.80 inches	Volume: 61.71 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: 25000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 110000.0 lb
			<u>Total Volume: 62.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	1.00 ft			String Weight: Initial 90000.00 lb
Depth to Top Packer:	4657.00 ft			Final 91000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	78.00 ft			
Tool Length:	97.00 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			4639.00	
Shut In Tool	5.00			4644.00	
Hydraulic tool	5.00			4649.00	
Safety Joint	3.00			4652.00	
Packer	5.00			4657.00	19.00 Bottom Of Top Packer
Packer - Shale	0.00			4657.00	
Stubb	1.00			4658.00	
Perforations	6.00			4664.00	
Recorder	0.00	8846	Inside	4664.00	
Recorder	0.00	8737	Outside	4664.00	
Change Over Sub	1.00			4665.00	
Blank Spacing	64.00			4729.00	
Change Over Sub	1.00			4730.00	
Bullnose	5.00			4735.00	78.00 Anchor Tool

**Total Tool Length: 97.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Landmark Resources Inc

**7-17s-33w Scott,KS**

1616 S Voss rd STE 600  
Houston TX 77057

**Janzen #4-7**

Job Ticket: 59222

**DST#: 4**

ATTN: Terry McLeod

Test Start: 2014.11.26 @ 16:06:15

**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:	0 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.76 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 1.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
30.00	mud w ith oil spots 100%m	0.148

Total Length: 30.00 ft      Total Volume: 0.148 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

Serial #: 8846

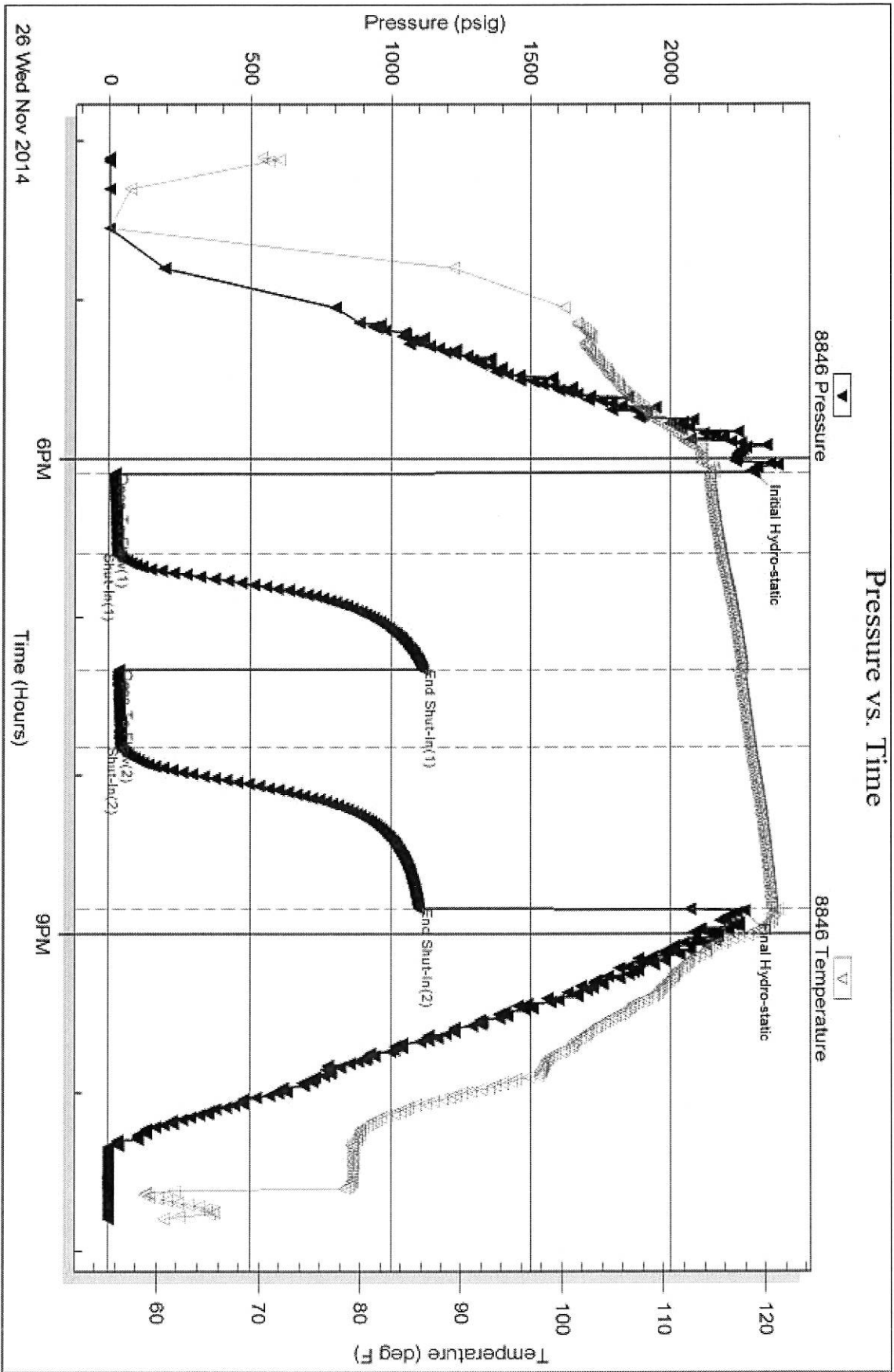
Inside

Landmark Resources Inc

Janzen #4-7

DST Test Number: 4

### Pressure vs. Time



26 Wed Nov 2014

Tribble Testing, Inc

Ref. No: 59222

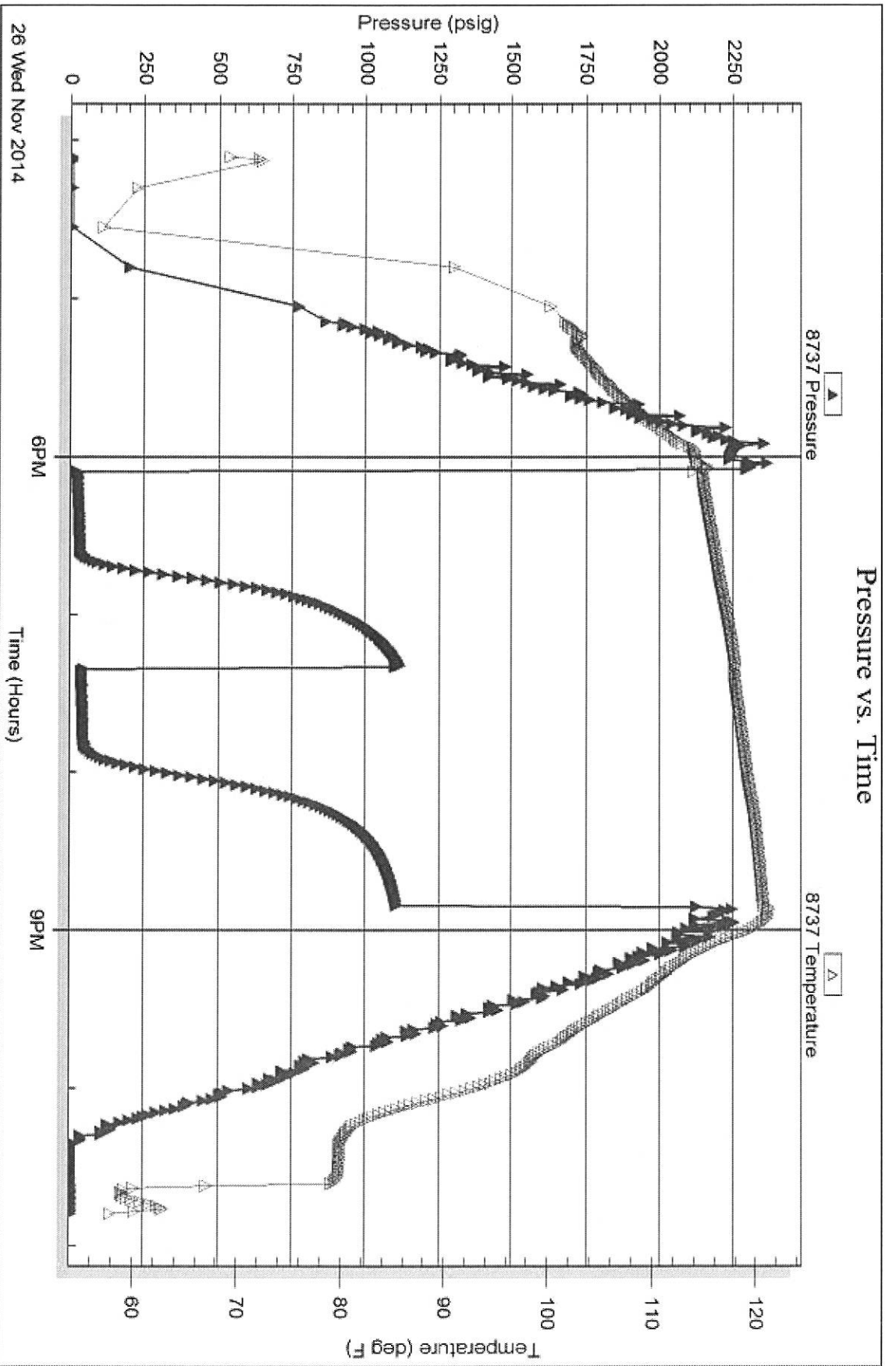
Printed: 2014 11 28 @ 11:28:16

Serial #: 8737

Outside Landmark Resources Inc

Janzen #4-7

DST Test Number: 4

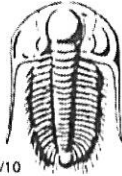


Triobite Testing, Inc

Ref. No: 59222

Printed: 2014, 11:28 @ 11:28:16





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 60641

Well Name & No. Janzen # 4-7 Test No. 1 Date 11-24-14  
 Company Landmark Resources, Inc Elevation 3085 KB 3075 GL  
 Address 1616 S. VOSS Rd STE 600, Houston TX, 77057  
 Co. Rep / Geo. \_\_\_\_\_ Rig Murfin 21  
 Location: Sec. 7 Twp. 17s Rge. 33w Co. Scott State KS

Interval Tested 4408 - 4475 Zone Tested Marmaton  
 Anchor Length 67' Drill Pipe Run 4164 Mud Wt. 9.3  
 Top Packer Depth 4403 Drill Collars Run 240' Vis 51  
 Bottom Packer Depth 4408 Wt. Pipe Run - WL 7.2  
 Total Depth 4475 Chlorides 4,000 ppm System LCM 3

Blow Description IF-2" blow  
ISI- No return  
FF-1/4" blow  
F3I- No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>HOCM</u>	<u>40</u>		<u>60</u>	
<u>15</u>	<u>MCO - Thick oil</u>	<u>80</u>		<u>20</u>	
	<u>124' G.I.P.</u>				

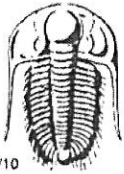
Rec Total 75' BHT 116° Gravity - API RW - @ - ° F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2267  Test 1250 T-On Location 0814  
 (B) First Initial Flow 34  Jars \_\_\_\_\_ T-Started 0836  
 (C) First Final Flow 47  Safety Joint 75 T-Open 1122  
 (D) Initial Shut-In 908  Circ Sub \_\_\_\_\_ T-Pulled 1507  
 (E) Second Initial Flow 57  Hourly Standby \_\_\_\_\_ T-Out 1723  
 (F) Second Final Flow 64  Mileage 224RT 30rt 46.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 932  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2028  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer 250  Ruined Packer \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 45  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 60  Day Standby \_\_\_\_\_ Total 1621.50  
 Final Shut-In 90  Accessibility 1621.50 MP/DST Disc't \_\_\_\_\_  
 Sub Total \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Cody Kline

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. 60642

Well Name & No. Janzen #4-7 Test No. 2 Date 11-25-14  
 Company Landmark Resources Inc Elevation 3085 KB 3075 GL  
 Address 16165. VOSS rd STE 600, Houston TX, 77057  
 Co. Rep / Geo. Terry Rig Murfin 21  
 Location: Sec. 7 Twp. 17s Rge. 33w Co. Scott State KS

Interval Tested 4481 - 4522 Zone Tested \_\_\_\_\_  
 Anchor Length 41' Drill Pipe Run 4229' Mud Wt. 9.3  
 Top Packer Depth 4476 Drill Collars Run 240' Vis 51  
 Bottom Packer Depth 4481 Wt. Pipe Run \_\_\_\_\_ WL 7.2  
 Total Depth 4522 Chlorides 4,000 ppm System LCM 3

Blow Description IF - B.O.B. in 2 1/2 minutes  
ISI - 2 1/2" blow  
FF - B.O.B. in 7 minutes  
FSI - 3" blow, dyed back to 1"

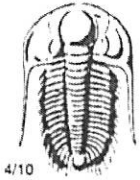
Rec	Feet of	%gas	%oil	%water	%mud
<u>62</u>	<u>60CM</u>	<u>30</u>	<u>20</u>	<u>50</u>	
<u>124</u>	<u>6HOCM</u>	<u>30</u>	<u>40</u>	<u>30</u>	
<u>248</u>	<u>6MCO</u>	<u>15</u>	<u>75</u>		
<u>248</u>	<u>6MCO</u>	<u>40</u>	<u>60</u>		
Rec _____	Feet of <u>1116' G.I.P</u>	%gas	%oil	%water	%mud

Rec Total 682' BHT 117° Gravity 31 API RW 29 @ 40° F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2163</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>1205</u>
(B) First Initial Flow <u>133</u>	<input type="checkbox"/> Jars _____	T-Started <u>1220</u>
(C) First Final Flow <u>178</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0304</u>
(D) Initial Shut-In <u>333</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>0639</u>
(E) Second Initial Flow <u>196</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>0954</u>
(F) Second Final Flow <u>261</u>	<input checked="" type="checkbox"/> Mileage <u>224RT</u> 46.50	Comments _____
(G) Final Shut-In <u>334</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2257</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>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1621.50</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1621.50</u>	

Approved By \_\_\_\_\_ Our Representative Cody Beck

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59221

Well Name & No. Janzen 4-7 Test No. 3 Date 11-25-14  
 Company Landmark Resources Inc Elevation 3096 KB 3085 GL  
 Address 1616 Voss Rd STE 600 Houston TX 77057  
 Co. Rep / Geo. Terry McLeod Rig Martin 21  
 Location: Sec. 7 Twp. 17 Rge. 33 Co. SCOTT State KS

Interval Tested 4545-4610 Zone Tested Myrick<sup>st</sup> Ft. Scott  
 Anchor Length 65 Drill Pipe Run 4302 Mud Wt. 9.3  
 Top Packer Depth 4540 Drill Collars Run 240 Vis 51  
 Bottom Packer Depth 4545 Wt. Pipe Run φ WL 7.1  
 Total Depth 4610 Chlorides 4000 ppm System LCM 3

Blow Description IF: Built to 1/8" Blow  
IS: NO Return Blow  
FF: NO Blow  
FS: NO Return Blow

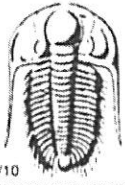
Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>MUD</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2 BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2242</u>	<input checked="" type="checkbox"/> Test <u>1250.00</u>	T-On Location <u>20:10</u>
(B) First Initial Flow <u>32</u>	<input type="checkbox"/> Jars _____	T-Started <u>21:15</u>
(C) First Final Flow <u>34</u>	<input checked="" type="checkbox"/> Safety Joint <u>75.00</u>	T-Open <u>23:28</u>
(D) Initial Shut-In <u>497</u>	<input checked="" type="checkbox"/> Circ Sub _____	T-Pulled <u>02:10</u>
(E) Second Initial Flow <u>35</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>03:58</u>
(F) Second Final Flow <u>37</u>	<input checked="" type="checkbox"/> Mileage <u>30RT 46.50/-</u>	Comments _____
(G) Final Shut-In <u>318</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>2206</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250.00</u>	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1621.50</u>
Final Shut-In <u>600</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>4621.50/-</u>	

Approved By Terry McLeod Our Representative Mike Roberts

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59222

Well Name & No. Janzen 4-7 Test No. ~~1111~~ 4 Date 11-26-14  
 Company Landmark Resources Inc. Elevation 3096 KB 3085 GL  
 Address 1616 Voss Rd STE 600 Houston TX 77057  
 Co. Rep / Geo. Terry McLeod Rig Murkin 21  
 Location: Sec. 7 Twp. 17 Rge. 33 Co. SCOTT State KS

Interval Tested 4657-4735 Zone Tested Johnson  
 Anchor Length 78 Drill Pipe Run 4399 Mud Wt. 9.4  
 Top Packer Depth 4652 Drill Collars Run 240 Vis 50  
 Bottom Packer Depth 4657 Wt. Pipe Run Ø WL 8.8  
 Total Depth 4735 Chlorides 6000 ppm System LCM 3

Blow Description IF: Built to 1" Blow  
IS: No Return Blow  
FF: No Blow  
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>MUD with oil spots</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 Total 30 BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

- (A) Initial Hydrostatic 2296
- (B) First Initial Flow 19
- (C) First Final Flow 29
- (D) Initial Shut-In 1113
- (E) Second Initial Flow 35
- (F) Second Final Flow 40
- (G) Final Shut-In 1099
- (H) Final Hydrostatic 2259

- Test \$120.00
- Jars
- Safety Joint \$75.00/-
- Circ Sub
- Hourly Standby
- Mileage 30RT = \$46.50/-
- Sampler
- Straddle
- Shale Packer \$250.00/-
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total \$1621.50/-

T-On Location 15:00  
 T-Started 16:06  
 T-Open 18:05  
 T-Pulled 20:50  
 T-Out 22:47

Comments \_\_\_\_\_  
 Ruined Shale Packer  
 Ruined Packer  
 Extra Copies  
 Sub Total 0  
 Total 1621.50  
 MP/DST Disc't \_\_\_\_\_

Approved By Terry McLeod Our Representative Mike Roberts

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