



## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources**

1616 S Voss rd ste 600  
Houston, Tx 77057

ATTN: Terry McLeod

### **Decker #4-9**

### **9-17s-34w Scott,KS**

Start Date: 2015.01.04 @ 16:31:27

End Date: 2015.01.05 @ 02:09:57

Job Ticket #: 59678                      DST #: 1

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

Printed: 2015.01.09 @ 09:38:21



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources  
1616 S Voss rd ste 600  
Houston, Tx 77057  
ATTN: Terry McLeod

**9-17s-34w Scott,KS**  
**Decker #4-9**  
Job Ticket: 59678      **DST#: 1**  
Test Start: 2015.01.04 @ 16:31:27

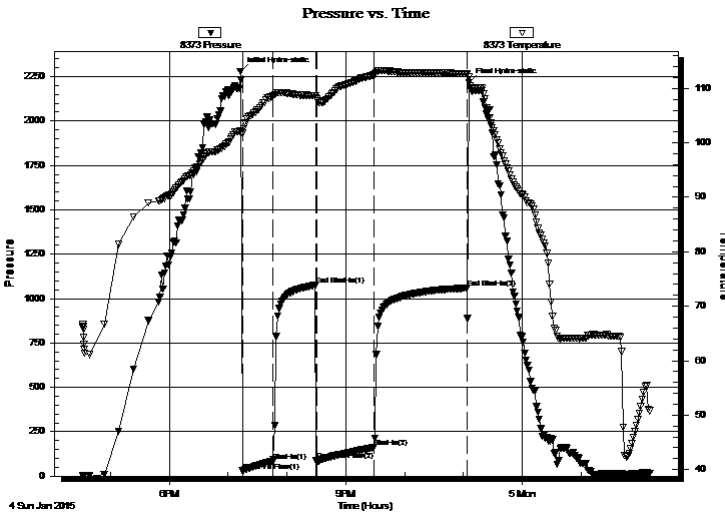
## GENERAL INFORMATION:

Formation: **Marmaton**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 19:14:27  
Time Test Ended: 02:09:57  
Interval: **4477.00 ft (KB) To 4535.00 ft (KB) (TVD)**  
Total Depth: 4535.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Brandon Turley  
Unit No: 60  
Reference Elevations: 3142.00 ft (KB)  
3132.00 ft (CF)  
KB to GR/CF: 10.00 ft

**Serial #: 8373      Inside**  
Press@RunDepth: 162.55 psig @ 4482.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2015.01.04      End Date: 2015.01.05      Last Calib.: 2015.01.05  
Start Time: 16:31:32      End Time: 02:09:57      Time On Btm: 2015.01.04 @ 19:12:27  
Time Off Btm: 2015.01.04 @ 23:05:27

TEST COMMENT: IF: BOB in 19 min.  
IS: Surface blow built to 2"  
FF: BOB in 21 min.  
FS: Surface blow built to 6"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2280.23	102.22	Initial Hydro-static
2	29.11	101.79	Open To Flow (1)
33	84.78	108.61	Shut-In(1)
77	1075.75	108.70	End Shut-In(1)
78	88.96	108.05	Open To Flow (2)
137	162.55	112.54	Shut-In(2)
231	1059.35	112.69	End Shut-In(2)
233	2217.97	112.07	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	gocm 5%g10%o 85%m	1.74
217.00	go 5%g 95%o	3.04

## Gas Rates

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



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ATTN: Terry McLeod

**9-17s-34w Scott,KS**  
**Decker #4-9**  
Job Ticket: 59678      **DST#: 1**  
Test Start: 2015.01.04 @ 16:31:27

## GENERAL INFORMATION:

Formation: **Marmaton**  
Deviated: No Whipstock: ft (KB)      Test Type: Conventional Bottom Hole (Initial)  
Time Tool Opened: 19:14:27      Tester: Brandon Turley  
Time Test Ended: 02:09:57      Unit No: 60

Interval: **4477.00 ft (KB) To 4535.00 ft (KB) (TVD)**      Reference Elevations: 3142.00 ft (KB)  
Total Depth: 4535.00 ft (KB) (TVD)      3132.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good      KB to GR/CF: 10.00 ft

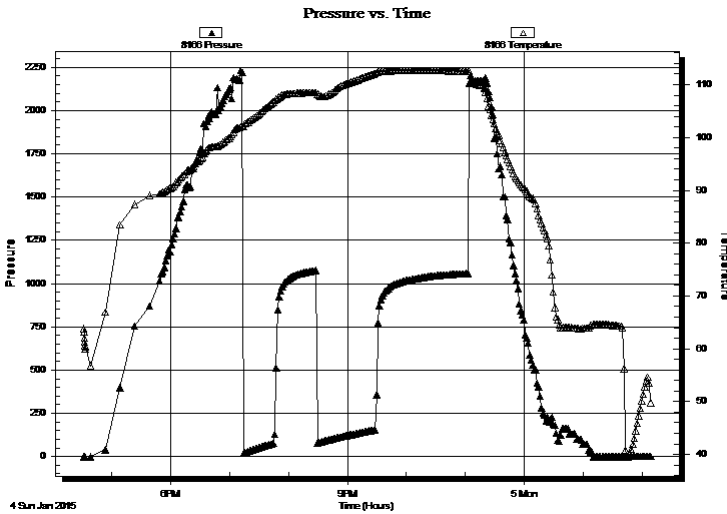
## Serial #: 8166

Outside

Press@RunDepth: psig @ 4482.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2015.01.04      End Date: 2015.01.05      Last Calib.: 2015.01.05  
Start Time: 16:31:31      End Time: 02:09:26      Time On Btm:  
Time Off Btm:

**TEST COMMENT:** IF: BOB in 19 min.  
IS: Surface blow built to 2"  
FF: BOB in 21 min.  
FS: Surface blow built to 6"

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	gocm 5%g10%o 85%m	1.74
217.00	go 5%g 95%o	3.04

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Landmark Resources  
1616 S Voss rd ste 600  
Houston, Tx 77057  
ATTN: Terry McLeod

**9-17s-34w Scott,KS**  
**Decker #4-9**  
Job Ticket: 59678      **DST#: 1**  
Test Start: 2015.01.04 @ 16:31:27

**Tool Information**

Drill Pipe:	Length: 4469.00 ft	Diameter: 3.80 inches	Volume: 62.69 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 62.69 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4477.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Stubb	1.00			4460.00	
Shut In Tool	5.00			4465.00	
Hydraulic tool	5.00			4470.00	
Safety Joint	2.00			4472.00	
Packer	5.00			4477.00	18.00      Bottom Of Top Packer
Packer - Shale	4.00			4481.00	
Stubb	1.00			4482.00	
Recorder	0.00	8373	Inside	4482.00	
Recorder	0.00	8166	Outside	4482.00	
Perforations	19.00			4501.00	
Change Over Sub	1.00			4502.00	
Drill Pipe	31.00			4533.00	
Change Over Sub	1.00			4534.00	
Bullnose	5.00			4539.00	62.00      Anchor Tool

**Total Tool Length: 80.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

## FLUID SUMMARY

Landmark Resources

**9-17s-34w Scott,KS**

1616 S Voss rd ste 600  
Houston, Tx 77057

**Decker #4-9**

Job Ticket: 59678

**DST#: 1**

ATTN: Terry McLeod

Test Start: 2015.01.04 @ 16:31:27

### 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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	gocm 5%g10%o 85%m	1.739
217.00	go 5%g 95%o	3.044

Total Length: 341.00 ft      Total Volume: 4.783 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

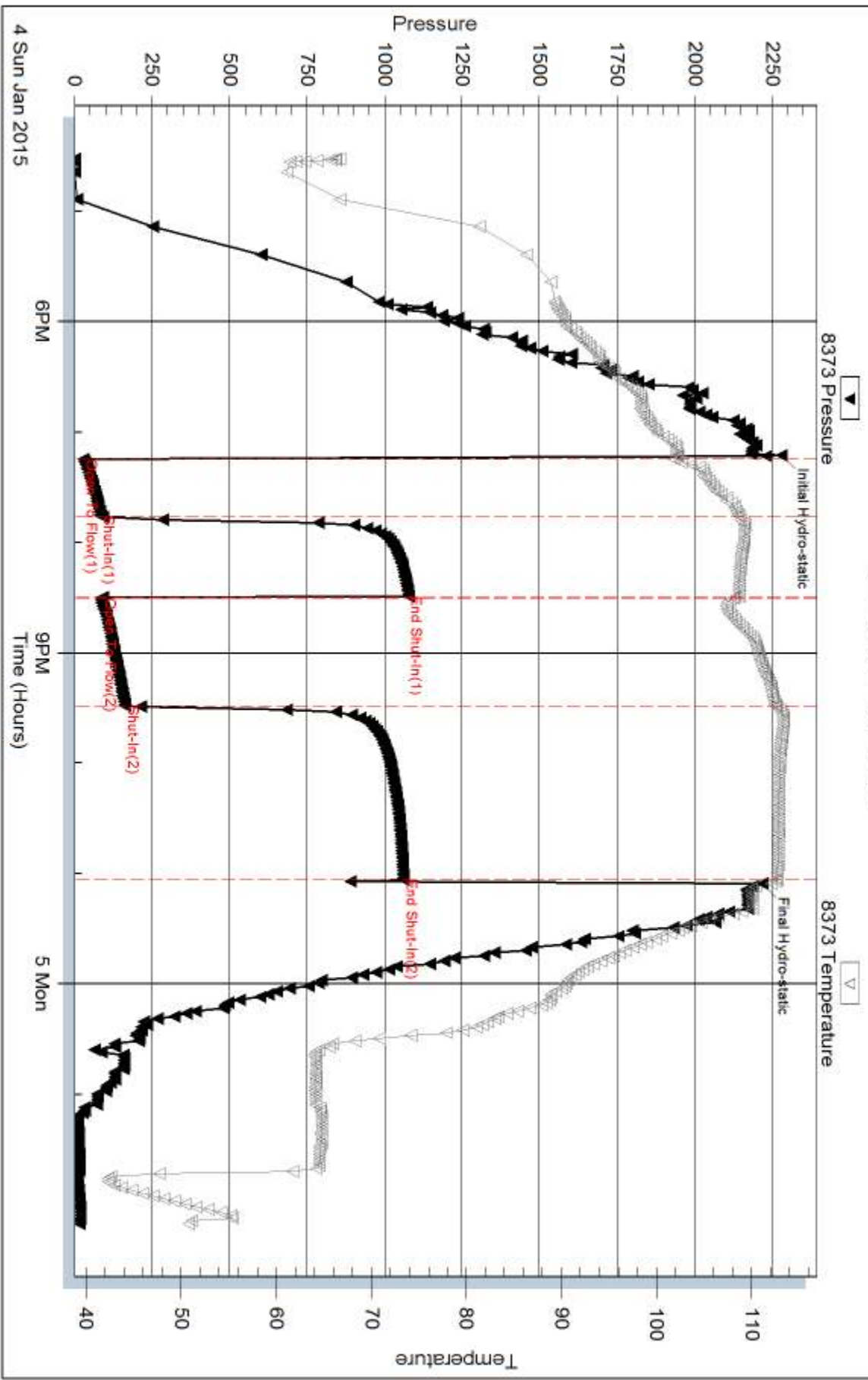
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 24@10=29

### Pressure vs. Time

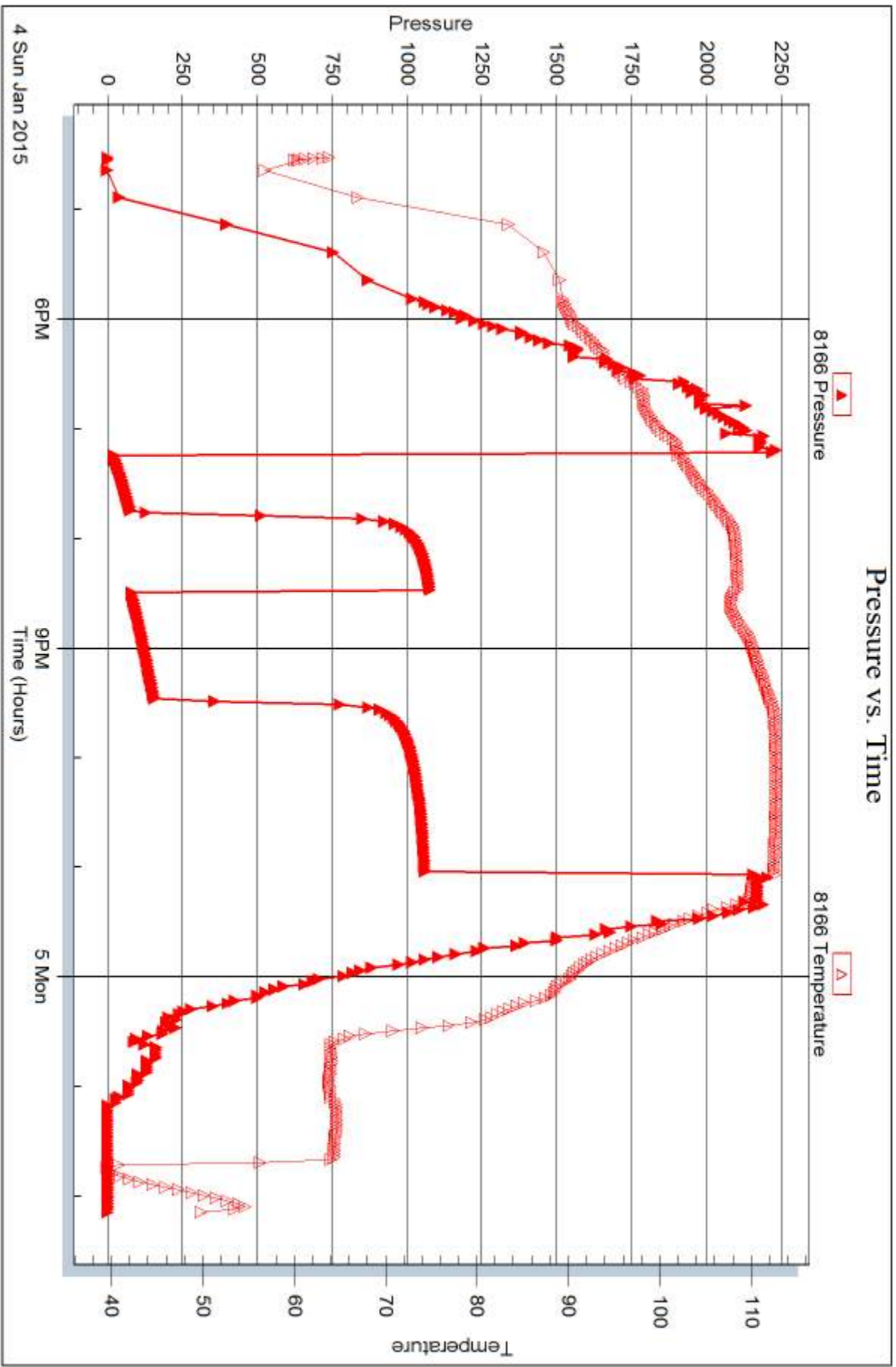


Serial #: 8166

Outside Landmark Resources

Decker #4-9

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59678

Printed: 2015.01.09 @ 09:38:22



## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources**

1616 S Voss rd ste 600  
Houston, Tx 77057

ATTN: Terry McLeod

### **Decker #4-9**

### **9-17s-34w Scott,KS**

Start Date: 2015.01.05 @ 13:35:53

End Date: 2015.01.05 @ 20:40:23

Job Ticket #: 59679                      DST #: 2

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

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**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources  
 1616 S Voss rd ste 600  
 Houston, Tx 77057  
 ATTN: Terry McLeod

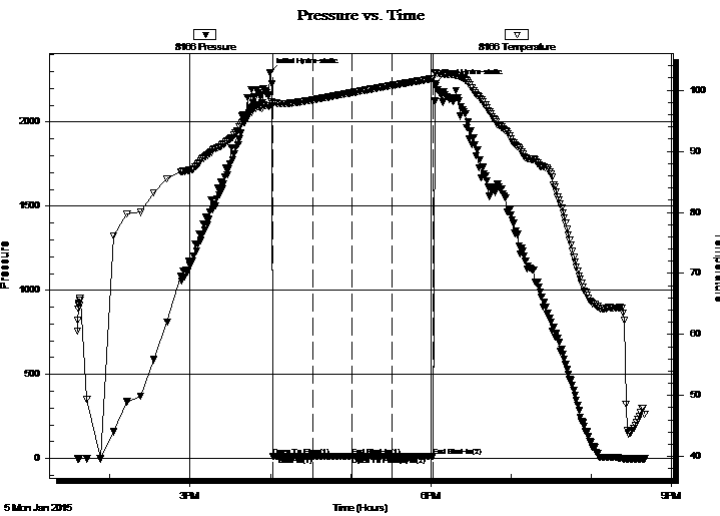
**9-17s-34w Scott,KS**  
**Decker #4-9**  
 Job Ticket: 59679      **DST#: 2**  
 Test Start: 2015.01.05 @ 13:35:53

## GENERAL INFORMATION:

Formation: **Altamont**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 16:01:53  
 Tester: Brandon Turley  
 Time Test Ended: 20:40:23  
 Unit No: 60  
**Interval: 4538.00 ft (KB) To 4560.00 ft (KB) (TVD)**  
 Reference Elevations: 3142.00 ft (KB)  
 Total Depth: 4560.00 ft (KB) (TVD)  
 3132.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Good  
 KB to GR/CF: 10.00 ft

**Serial #: 8166      Outside**  
 Press@RunDepth: 12.95 psig @ 4543.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2015.01.05      End Date: 2015.01.05      Last Calib.: 2015.01.05  
 Start Time: 13:35:58      End Time: 20:40:22      Time On Btm: 2015.01.05 @ 15:59:53  
 Time Off Btm: 2015.01.05 @ 18:03:23

**TEST COMMENT:** IF: 1/4" blow died in 10 min.  
 IS: No return.  
 FF: No blow.  
 FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2295.48	97.51	Initial Hydro-static
2	13.09	97.85	Open To Flow (1)
32	13.17	98.42	Shut-In(1)
61	14.66	99.60	End Shut-In(1)
62	12.85	99.62	Open To Flow (2)
91	12.95	100.79	Shut-In(2)
122	14.07	101.91	End Shut-In(2)
124	2227.56	102.92	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.07

\* Recovery from multiple tests

## Gas Rates

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



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Landmark Resources  
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Houston, Tx 77057  
ATTN: Terry McLeod

**9-17s-34w Scott,KS**  
**Decker #4-9**  
Job Ticket: 59679      **DST#: 2**  
Test Start: 2015.01.05 @ 13:35:53

## GENERAL INFORMATION:

Formation: **Altamont**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 16:01:53  
Time Test Ended: 20:40:23

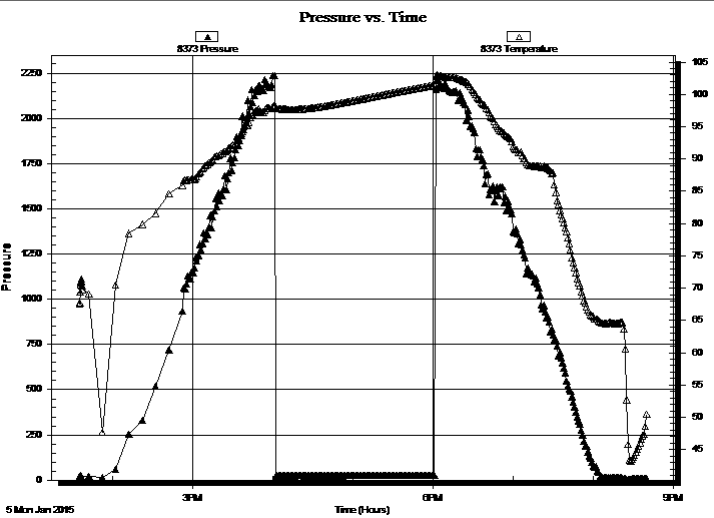
Test Type: Conventional Bottom Hole (Reset)  
Tester: Brandon Turley  
Unit No: 60

Interval: **4538.00 ft (KB) To 4560.00 ft (KB) (TVD)**  
Reference Elevations: 3142.00 ft (KB)  
Total Depth: 4560.00 ft (KB) (TVD)      3132.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Good      KB to GR/CF: 10.00 ft

**Serial #: 8373      Inside**

Press@RunDepth:      psig @ 4543.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2015.01.05      End Date: 2015.01.05      Last Calib.: 2015.01.05  
Start Time: 13:35:06      End Time: 20:40:00      Time On Btm:  
Time Off Btm:

TEST COMMENT: IF: 1/4" blow died in 10 min.  
IS: No return.  
FF: No blow.  
FS: No return.



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

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.07

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

\* Recovery from multiple tests



**TRILOBITE  
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# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Landmark Resources

**9-17s-34w Scott,KS**

1616 S Voss rd ste 600  
Houston, Tx 77057

**Decker #4-9**

Job Ticket: 59679

**DST#: 2**

ATTN: Terry McLeod

Test Start: 2015.01.05 @ 13:35:53

## Tool Information

Drill Pipe:	Length: 4530.00 ft	Diameter: 3.80 inches	Volume: 63.54 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 63.54 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4538.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	44.00 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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Stubb	1.00			4521.00	
Shut In Tool	5.00			4526.00	
Hydraulic tool	5.00			4531.00	
Safety Joint	2.00			4533.00	
Packer	5.00			4538.00	18.00 Bottom Of Top Packer
Packer - Shale	4.00			4542.00	
Stubb	1.00			4543.00	
Recorder	0.00	8373	Inside	4543.00	
Recorder	0.00	8166	Outside	4543.00	
Perforations	16.00			4559.00	
Bullnose	5.00			4564.00	26.00 Anchor Tool

**Total Tool Length: 44.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

## FLUID SUMMARY

Landmark Resources

**9-17s-34w Scott,KS**

1616 S Voss rd ste 600  
Houston, Tx 77057

**Decker #4-9**

Job Ticket: 59679

**DST#: 2**

ATTN: Terry McLeod

Test Start: 2015.01.05 @ 13:35:53

### 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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%m	0.070

Total Length: 5.00 ft      Total Volume: 0.070 bbl

Num Fluid Samples: 0

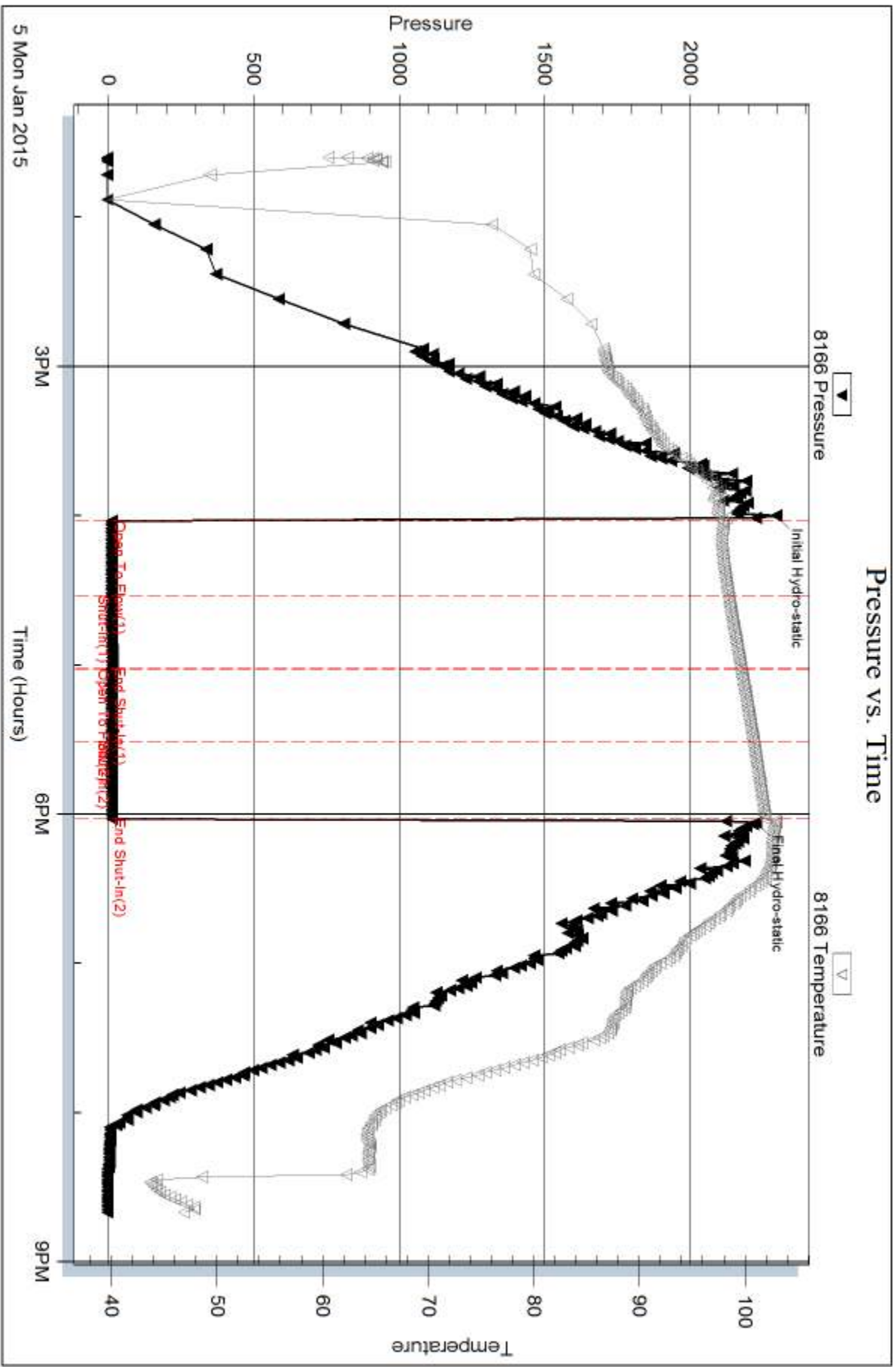
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



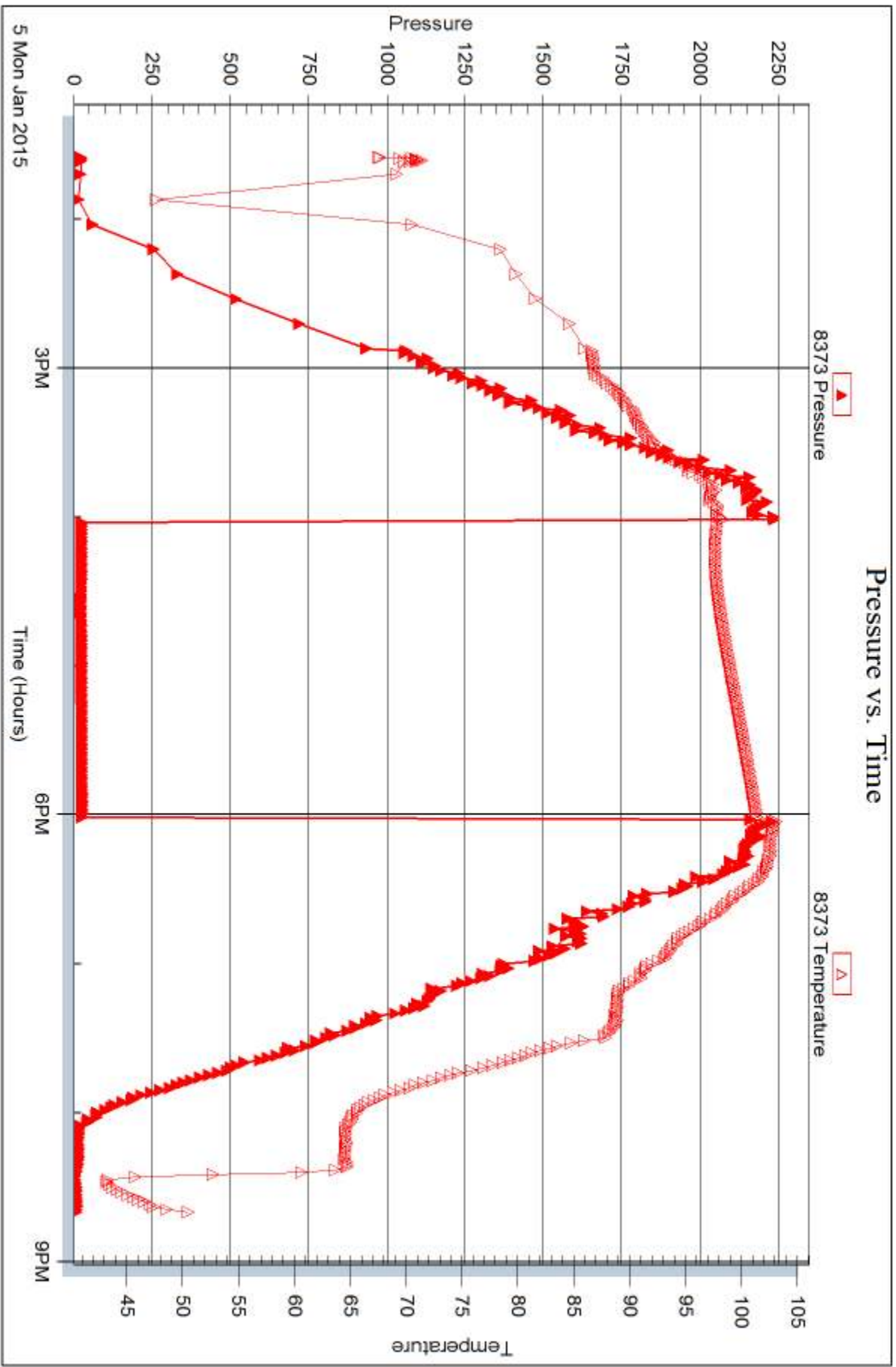
Serial #: 8373

Inside

Landmark Resources

Decker #4-9

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 59679

Printed: 2015.01.09 @ 09:37:57



## DRILL STEM TEST REPORT

Prepared For: **Landmark Resources**

1616 S Voss rd ste 600  
Houston, Tx 77057

ATTN: Terry McLeod

### **Decker #4-9**

### **9-17s-34w Scott,KS**

Start Date: 2015.01.07 @ 01:22:07

End Date: 2015.01.07 @ 09:52:07

Job Ticket #: 59680                      DST #: 3

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

Printed: 2015.01.09 @ 09:37:12



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Landmark Resources  
1616 S Voss rd ste 600  
Houston, Tx 77057  
ATTN: Terry McLeod

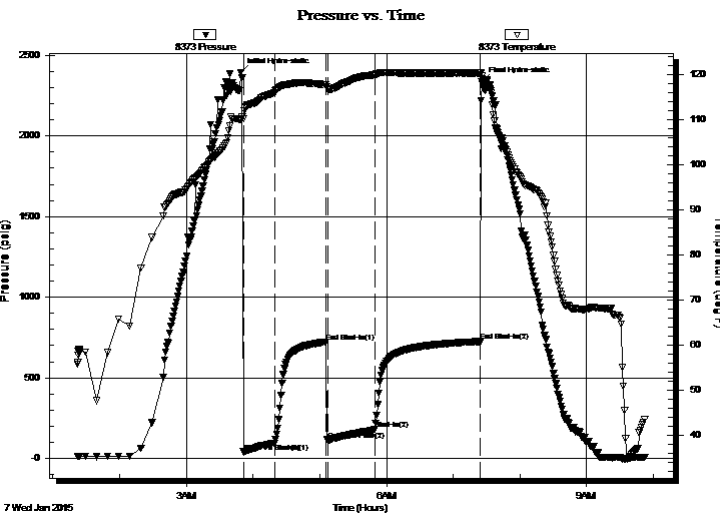
**9-17s-34w Scott,KS**  
**Decker #4-9**  
Job Ticket: 59680 **DST#: 3**  
Test Start: 2015.01.07 @ 01:22:07

## GENERAL INFORMATION:

Formation: **Johnson**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 03:51:07  
Time Test Ended: 09:52:07  
Interval: **4735.00 ft (KB) To 4785.00 ft (KB) (TVD)**  
Total Depth: 4785.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Brandon Turley  
Unit No: 60  
Reference Elevations: 3142.00 ft (KB)  
3132.00 ft (CF)  
KB to GR/CF: 10.00 ft

**Serial #: 8373 Inside**  
Press@RunDepth: 179.28 psig @ 4740.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2015.01.07 End Date: 2015.01.07 Last Calib.: 2015.01.07  
Start Time: 01:22:12 End Time: 09:52:06 Time On Btm: 2015.01.07 @ 03:49:07  
Time Off Btm: 2015.01.07 @ 07:25:37

TEST COMMENT: IF: BOB in 12 min.  
IS: BOB in 30 min.  
FF: BOB in 12 min.  
FS: BOB in 25 min.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2394.20	110.18	Initial Hydro-static
2	40.44	110.25	Open To Flow (1)
30	94.75	115.98	Shut-In(1)
77	723.43	117.77	End Shut-In(1)
79	112.49	116.79	Open To Flow (2)
120	179.28	119.99	Shut-In(2)
216	725.43	120.40	End Shut-In(2)
217	2338.22	119.76	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	mcgo 40%g 40%o 20%m	1.74
124.00	mcgo 30%g 60%o 10%m	1.74
155.00	mcgo 5%g 55%o 40%m	2.17
0.00	1023 GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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





TRILOBITE  
TESTING, INC

DRILL STEM TEST REPORT

Landmark Resources  
1616 S Voss rd ste 600  
Houston, Tx 77057  
ATTN: Terry McLeod

9-17s-34w Scott,KS  
Decker #4-9  
Job Ticket: 59680 DST#: 3  
Test Start: 2015.01.07 @ 01:22:07

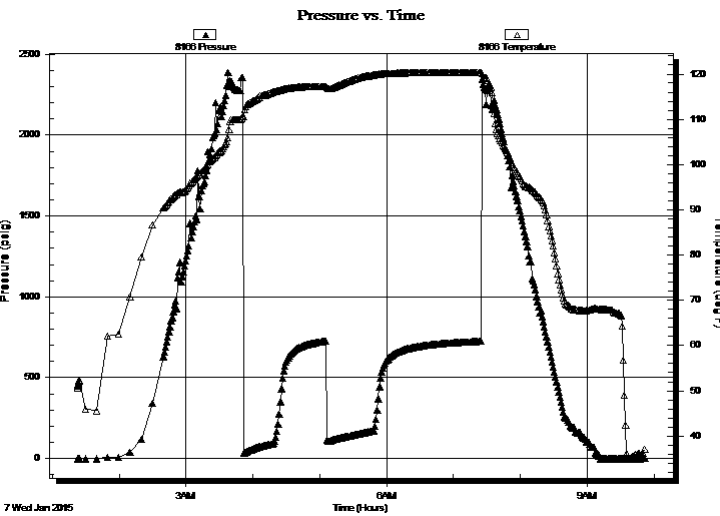
GENERAL INFORMATION:

Formation: **Johnson**  
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 03:51:07 Tester: Brandon Turley  
 Time Test Ended: 09:52:07 Unit No: 60  
 Interval: **4735.00 ft (KB) To 4785.00 ft (KB) (TVD)** Reference Elevations: 3142.00 ft (KB)  
 Total Depth: 4785.00 ft (KB) (TVD) 3132.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 8166 Outside

Press@RunDepth: psig @ 4740.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.01.07 End Date: 2015.01.07 Last Calib.: 2015.01.07  
 Start Time: 01:22:36 End Time: 09:52:00 Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF: BOB in 12 min.  
 IS: BOB in 30 min.  
 FF: BOB in 12 min.  
 FS: BOB in 25 min.



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

Recovery

Length (ft)	Description	Volume (bbl)
124.00	mcgo 40%g 40%o 20%m	1.74
124.00	mcgo 30%g 60%o 10%m	1.74
155.00	mcgo 5%g 55%o 40%m	2.17
0.00	1023 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

**9-17s-34w Scott,KS**

1616 S Voss rd ste 600  
Houston, Tx 77057

**Decker #4-9**

Job Ticket: 59680

**DST#: 3**

ATTN: Terry McLeod

Test Start: 2015.01.07 @ 01:22:07

## Tool Information

Drill Pipe:	Length: 4727.00 ft	Diameter: 3.80 inches	Volume: 66.31 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 66.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4735.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	72.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4718.00	
Shut In Tool	5.00			4723.00	
Hydraulic tool	5.00			4728.00	
Safety Joint	2.00			4730.00	
Packer	5.00			4735.00	18.00 Bottom Of Top Packer
Packer - Shale	4.00			4739.00	
Stubb	1.00			4740.00	
Recorder	0.00	8373	Inside	4740.00	
Recorder	0.00	8166	Outside	4740.00	
Perforations	11.00			4751.00	
Change Over Sub	1.00			4752.00	
Drill Pipe	31.00			4783.00	
Change Over Sub	1.00			4784.00	
Bullnose	5.00			4789.00	54.00 Anchor Tool

**Total Tool Length: 72.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Landmark Resources

**9-17s-34w Scott,KS**

1616 S Voss rd ste 600  
Houston, Tx 77057

**Decker #4-9**

Job Ticket: 59680

**DST#: 3**

ATTN: Terry McLeod

Test Start: 2015.01.07 @ 01:22:07

## 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
124.00	mcgo 40%g 40%o 20%m	1.739
124.00	mcgo 30%g 60%o 10%m	1.739
155.00	mcgo 5%g 55%o 40%m	2.174
0.00	1023 GIP	0.000

Total Length: 403.00 ft

Total Volume: 5.652 bbl

Num Fluid Samples: 0

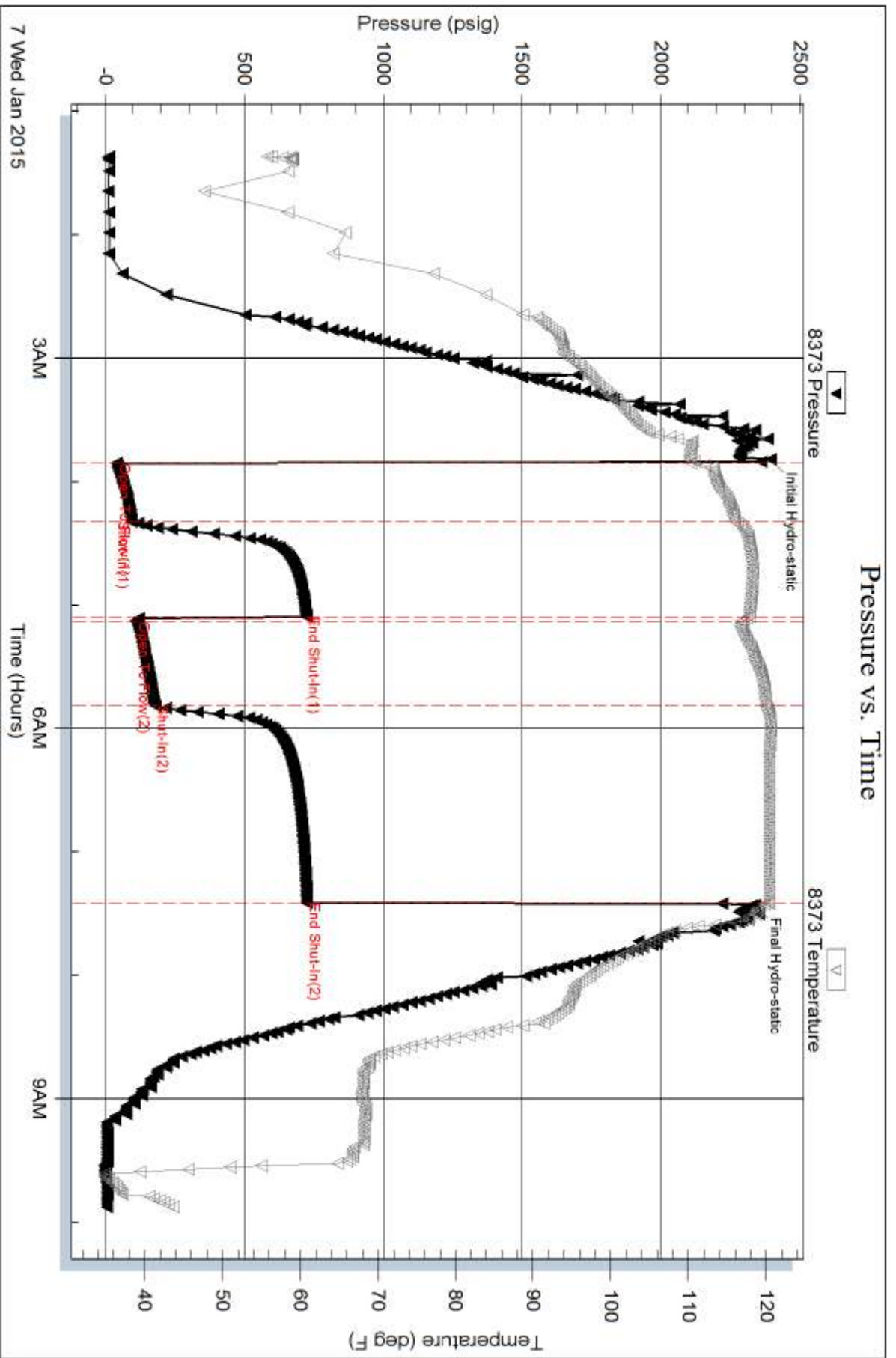
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

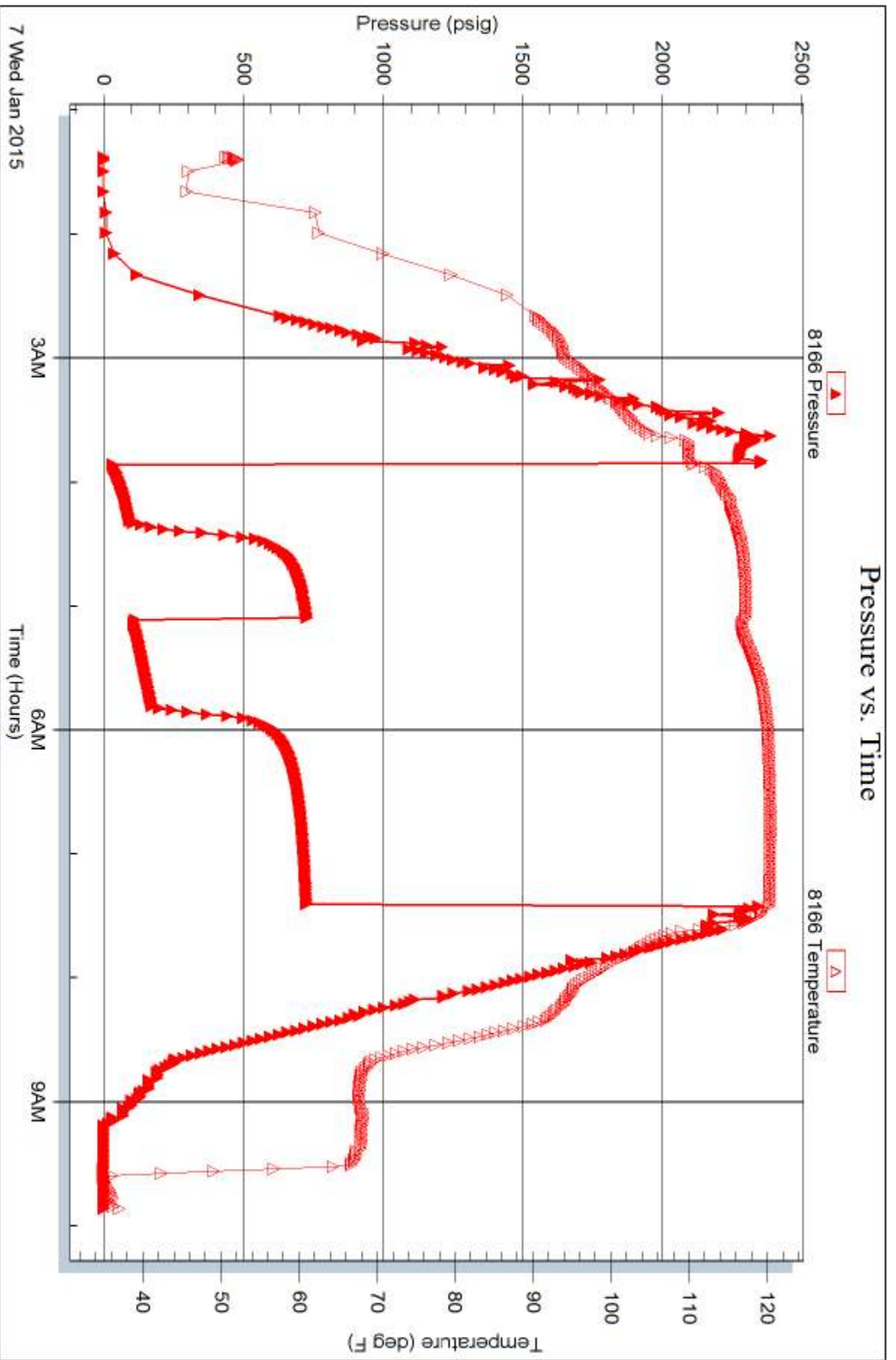


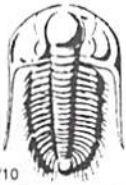
Serial #: 8166

Outside Landmark Resources

Decker #4-9

DST Test Number: 3





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59678

4/10

Well Name & No. Decker 4-9 Test No. 1 Date 1-4-15  
 Company Landmark Resources Elevation 3142 KB 3132 GL  
 Address 1616 S Voss Rd Ste 600 Houston, TX 77057  
 Co. Rep / Geo. Terry McLeod Rig U81 #1  
 Location: Sec. 9 Twp. 17 Rge. 34 Co. Scott State KS

Interval Tested 4477 4535 Zone Tested Marmaton  
 Anchor Length 58 Drill Pipe Run 4469 Mud Wt. 9.4  
 Top Packer Depth 4472 Drill Collars Run — Vis 54  
 Bottom Packer Depth 4477 Wt. Pipe Run — WL 10.4  
 Total Depth 4535 Chlorides 4000 ppm System LCM 2

Blow Description IF: BoB in 19 min.  
IS: surface blow built to 2.  
FF: BoB in 21 min.  
ES: Surface blow built to 6.

Rec	Feet of	%gas	%oil	%water	%mud
<u>217</u>	<u>90</u>	<u>5</u>	<u>95</u>		
<u>124</u>	<u>90cm</u>	<u>5</u>	<u>10</u>		<u>85</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

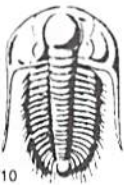
Rec Total 341 BHT 112 Gravity 29 API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic 2280  Test 1150 T-On Location 14:12  
 (B) First Initial Flow 29  Jars T-Started 16:31  
 (C) First Final Flow 84  Safety Joint 75 T-Open 19:13  
 (D) Initial Shut-In 1075  Circ Sub NIC T-Pulled 22:58  
 (E) Second Initial Flow 88  Hourly Standby 1.25h 100 T-Out 2:10  
 (F) Second Final Flow 162  Mileage 44-44 Comments ON bank At 3:00pm  
 (G) Final Shut-In 1059  Sampler  
 (H) Final Hydrostatic 2217  Straddle  
 Shale Packer 250  Ruined Shale Packer  
 Extra Packer  Ruined Packer  
 Extra Recorder  Extra Copies  
 Sub Total 0  
 Initial Open 30  Day Standby  
 Initial Shut-In 45  Accessibility  
 Final Flow 60 Total 1619  
 Final Shut-In 90 MP/DST Disc't

Sub Total 1619

Approved By Terry McLeod 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. 59679

Well Name & No. Decker 4-9 Test No. 2 Date 1-5-15  
 Company Landmark Resources Elevation 3142 KB 3132 GL  
 Address \_\_\_\_\_  
 Co. Rep / Geo. Ferry McLeod Rig V91 #1  
 Location: Sec. 9 Twp. 17 Rge. 34 Co. Scott State KS

Interval Tested 4538 4560 Zone Tested Altamont  
 Anchor Length 22 Drill Pipe Run 4530 Mud Wt. 9.2  
 Top Packer Depth 4533 Drill Collars Run — Vis 53  
 Bottom Packer Depth 4538 Wt. Pipe Run — WL 8.8  
 Total Depth 4560 Chlorides 3500 ppm System LCM 2

Blow Description IF: 1/4 blow died in 10 min.  
IS: No return,  
FF: No blow.  
FS: No return,

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</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 5 BHT 101 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2295  Test 1150 T-On Location 12:00  
 (B) First Initial Flow 13  Jars \_\_\_\_\_ T-Started 13:35  
 (C) First Final Flow 13  Safety Joint 75 T-Open 16:00  
 (D) Initial Shut-In 14  Circ Sub NIL T-Pulled 18:00  
 (E) Second Initial Flow 12  Hourly Standby 1-100.00 T-Out 20:40  
 (F) Second Final Flow 12  Mileage 44 44 Comments on the bank at  
 (G) Final Shut-In 14  Sampler \_\_\_\_\_ 12:30  
 (H) Final Hydrostatic 2227  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer 250  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 30  Day Standby \_\_\_\_\_ Total 1519  
 Final Flow 30  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 30 Sub Total 1519

Approved By Ferry McLeod Our Representative [Signature]  
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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59680

Well Name & No. Decker 4-9 Test No. 3 Date 1-7-15  
 Company Landmark Resources Elevation 3142 KB 3132 GL  
 Address \_\_\_\_\_  
 Co. Rep / Geo. Ferry McLeod Rig V-91 #1  
 Location: Sec. 9 Twp. 17 Rge. 34 Co. Scott State KS

Interval Tested 4735 4785 Zone Tested Johnson  
 Anchor Length \_\_\_\_\_ 50 Drill Pipe Run 4727 Mud Wt. 9.3  
 Top Packer Depth \_\_\_\_\_ 4730 Drill Collars Run \_\_\_\_\_ Vis 56  
 Bottom Packer Depth \_\_\_\_\_ 4735 Wt. Pipe Run \_\_\_\_\_ WL 9.6  
 Total Depth \_\_\_\_\_ 4785 Chlorides 4500 ppm System LCM 2

Blow Description IF: BoB in 12 min.  
IS: BoB in 30 min.  
FF: BoB in 12 min.  
FS: BoB in 25 min.

Rec	Feet of	%gas	%oil	%water	%mud
<u>155</u>	<u>MC90</u>	<u>5</u>	<u>55</u>	<u>40</u>	
<u>124</u>	<u>MC90</u>	<u>30</u>	<u>60</u>	<u>10</u>	
<u>124</u>	<u>MC90</u>	<u>40</u>	<u>40</u>	<u>20</u>	
Rec _____	Feet of <u>1023 GIP</u>	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud

Rec Total 403 BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm  
 (A) Initial Hydrostatic 2394  Test 1150 T-On Location DO:50  
 (B) First Initial Flow 40  Jars \_\_\_\_\_ T-Started 1:22  
 (C) First Final Flow 94  Safety Joint 75 T-Open 3:50  
 (D) Initial Shut-In 723  Circ Sub NIC T-Pulled 7:20  
 (E) Second Initial Flow 112  Hourly Standby \_\_\_\_\_ T-Out 9:52  
 (F) Second Final Flow 179  Mileage 44 44 Comments \_\_\_\_\_  
 (G) Final Shut-In ~~723~~ 725  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2338  Straddle \_\_\_\_\_  Ruined Shale Packer 350  
 Shale Packer 250  Ruined Packer \_\_\_\_\_  
 Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 45  Extra Recorder \_\_\_\_\_ Sub Total 141.67+350  
 Final Flow ~~45~~ 45  Day Standby 1d 4.25h Total 2010.67  
 Final Shut-In 90  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1519

Approved By July L. Miller Our Representative [Signature]  
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