



DRILL STEM TEST REPORT

Prepared For: **Landmark Resources, Inc.**

1616 S Voss Rd STE 600
Houston TX 77057-2641

ATTN: Terry McLeod

Sleeping Indian 1-11

11-17s-34w Scott,KS

Start Date: 2014.07.24 @ 04:18:00

End Date: 2014.07.24 @ 11:56:15

Job Ticket #: 57037 DST #: 1

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

Printed: 2014.07.29 @ 11:13:02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Landmark Resources, Inc.

11-17s-34w Scott,KS

1616 S Voss Rd STE 600
Houston TX 77057-2641

Sleeping Indian 1-11

ATTN: Terry McLeod

Job Ticket: 57037

DST#: 1

Test Start: 2014.07.24 @ 04:18:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:22:45

Time Test Ended: 11:56:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 75

Interval: 4447.00 ft (KB) To 4500.00 ft (KB) (TVD)

Reference Elevations: 3116.00 ft (KB)

Total Depth: 4500.00 ft (KB) (TVD)

3105.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8675

Inside

Press@RunDepth: 35.77 psig @ 4448.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.24

End Date:

2014.07.24

Last Calib.:

2014.07.24

Start Time: 04:18:15

End Time:

11:56:15

Time On Btm:

2014.07.24 @ 07:22:15

Time Off Btm:

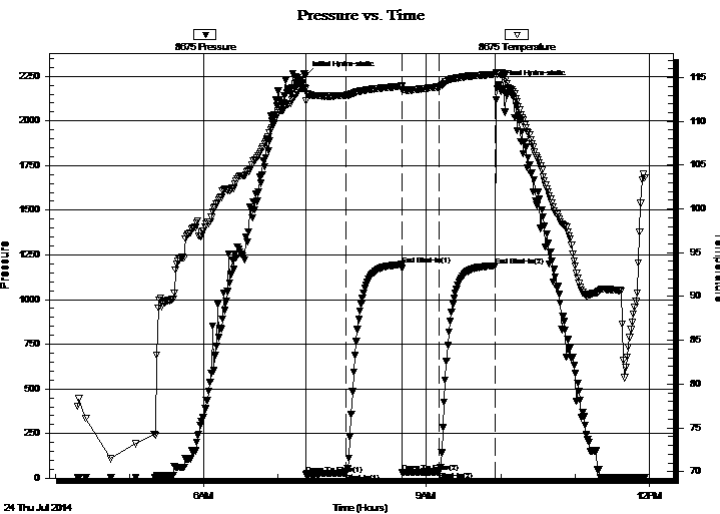
2014.07.24 @ 09:58:15

TEST COMMENT: Built to 1/2" blow

No return blow

No blow

No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2254.49	113.78	Initial Hydro-static
1	22.21	112.30	Open To Flow (1)
33	28.30	112.96	Shut-In(1)
78	1196.63	114.02	End Shut-In(1)
79	30.80	113.55	Open To Flow (2)
109	35.77	113.96	Shut-In(2)
153	1189.89	115.34	End Shut-In(2)
156	2204.89	115.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	100%Mud	0.15

Gas Rates

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



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Job Ticket: 57037

DST#: 1

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Total Depth: 4500.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 75

Reference Elevations: 3116.00 ft (KB)

3105.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8650 Outside

Press@RunDepth: psig @ 4448.00 ft (KB)

Start Date: 2014.07.24

End Date:

2014.07.24

Start Time: 04:18:15

End Time:

11:56:00

Capacity: 8000.00 psig

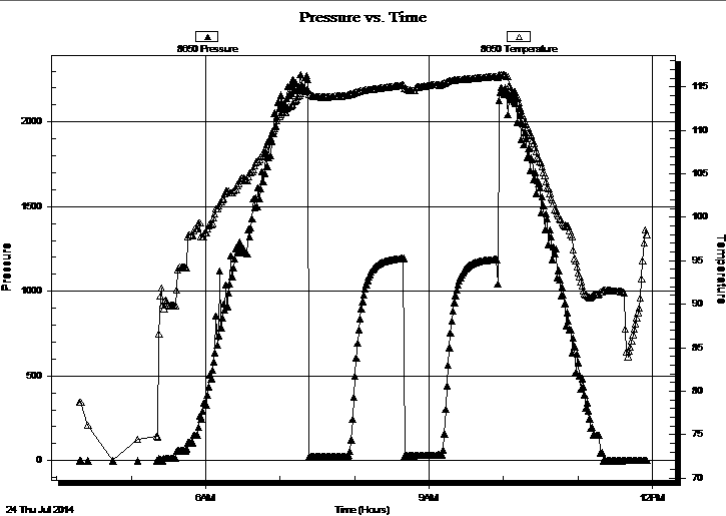
Last Calib.:

2014.07.24

Time On Btm:

Time Off Btm:

TEST COMMENT: Built to 1/2" blow
No return blow
No blow
No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
30.00	100%Mud	0.15

Gas Rates

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



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Landmark Resources, Inc.

11-17s-34w Scott,KS

1616 S Voss Rd STE 600
Houston TX 77057-2641

Sleeping Indian 1-11

Job Ticket: 57037

DST#: 1

ATTN: Terry McLeod

Test Start: 2014.07.24 @ 04:18:00

Tool Information

Drill Pipe:	Length: 4155.07 ft	Diameter: 3.80 inches	Volume: 58.28 bbl	Tool Weight: 1500.00 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: 276.73 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 94000.00 lb
			<u>Total Volume: 59.64 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.30 ft			String Weight: Initial 84000.00 lb
Depth to Top Packer:	4447.00 ft			Final 84000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.00 ft			
Tool Length:	75.50 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			4425.50	
Shut In Tool	5.00			4430.50	
Hydraulic tool	5.00			4435.50	
safety Joint	2.50			4438.00	
Packer	5.00			4443.00	22.50 Bottom Of Top Packer
Packer	4.00			4447.00	
Stubb	1.00			4448.00	
Recorder	0.00	8675	Inside	4448.00	
Recorder	0.00	8650	Outside	4448.00	
perforations	10.00			4458.00	
Change Over Sub	1.00			4459.00	
Drill Pipe	32.00			4491.00	
Change Over Sub	1.00			4492.00	
Bullnose	8.00			4500.00	53.00 Bottom Packers & Anchor

Total Tool Length: 75.50



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DRILL STEM TEST REPORT

FLUID SUMMARY

Landmark Resources, Inc.

11-17s-34w Scott,KS

1616 S Voss Rd STE 600
Houston TX 77057-2641

Sleeping Indian 1-11

Job Ticket: 57037

DST#: 1

ATTN: Terry McLeod

Test Start: 2014.07.24 @ 04:18:00

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

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
30.00	100%Mud	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0

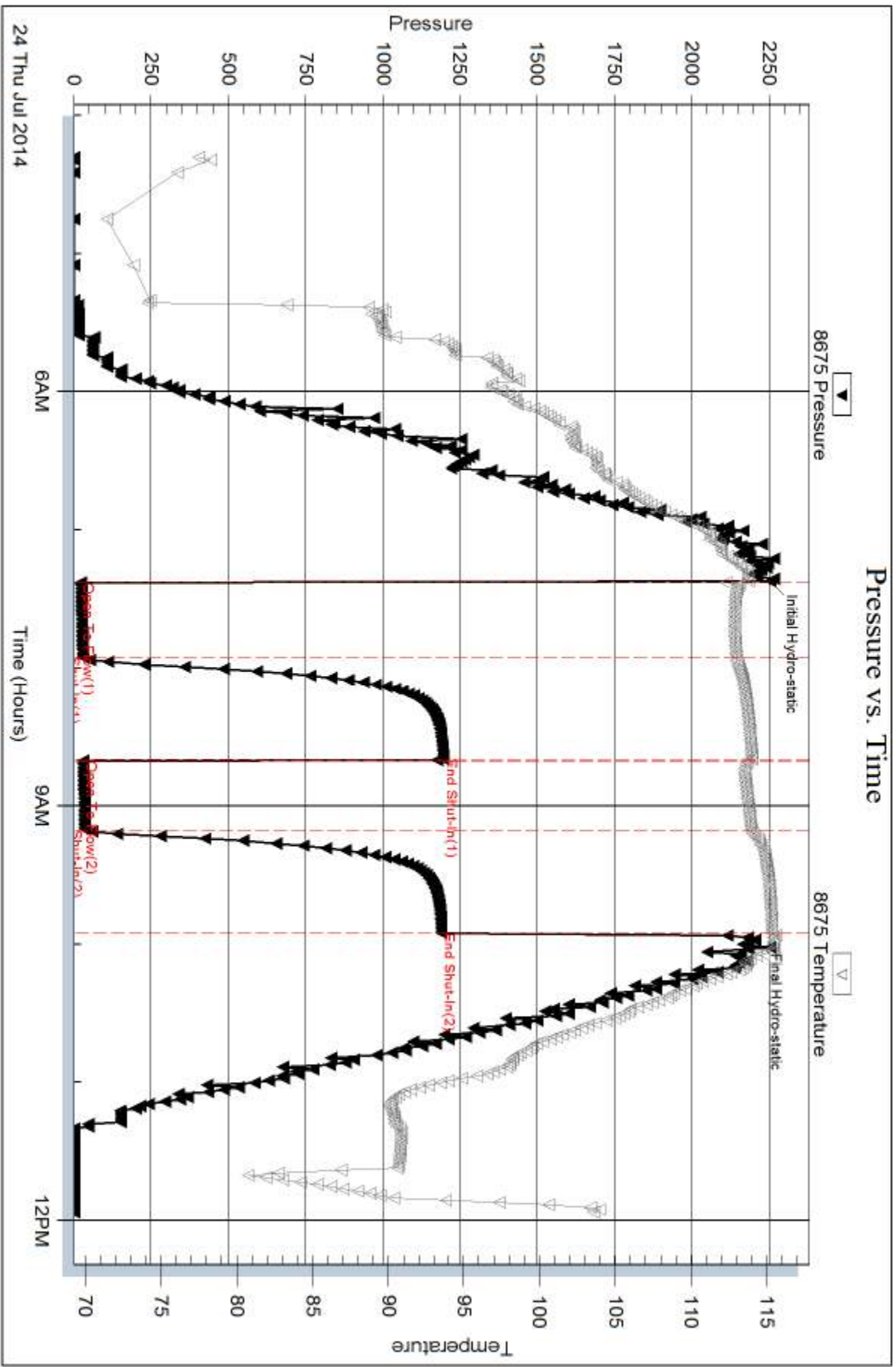
Num Gas Bombs: 0

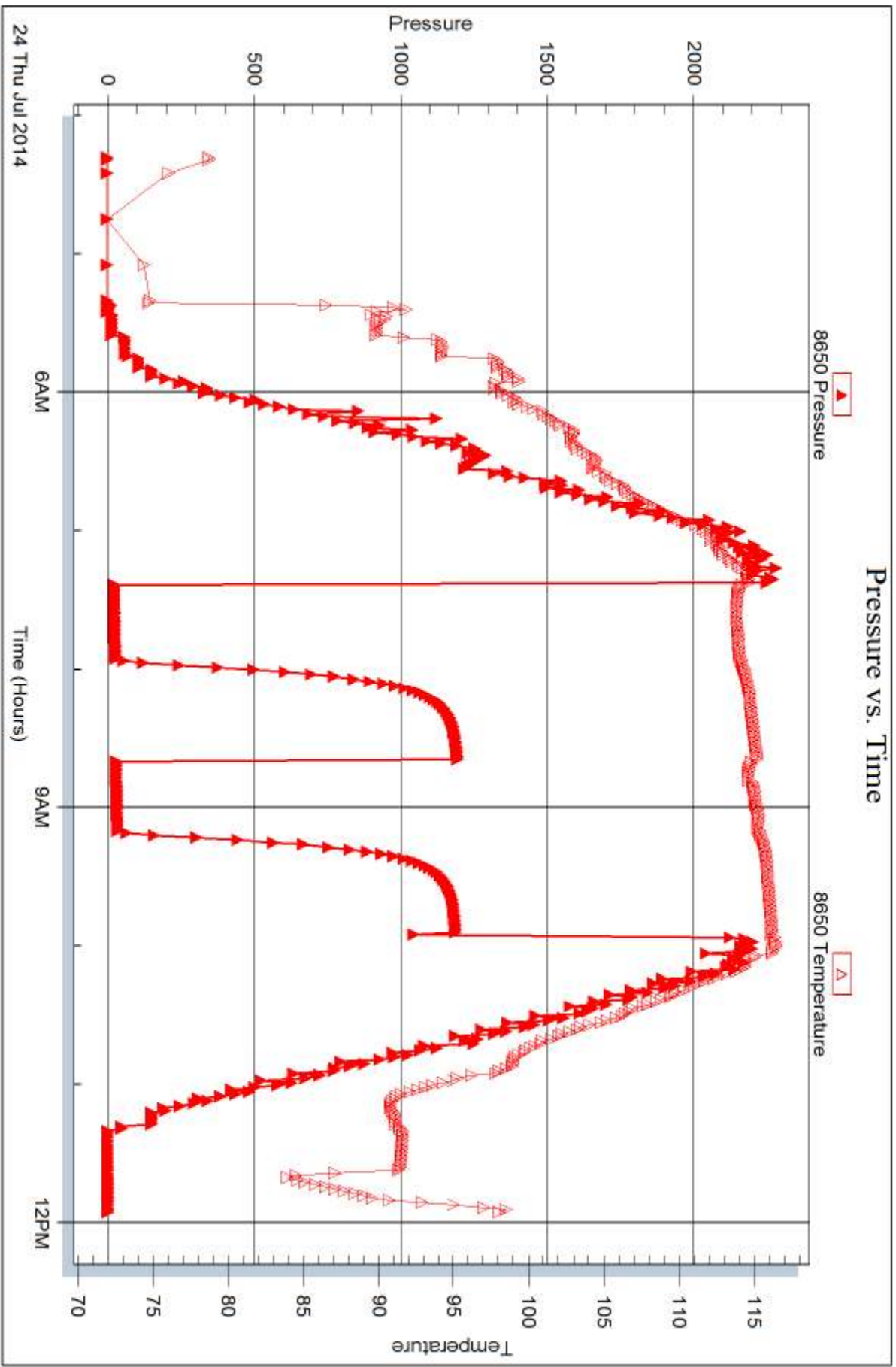
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Landmark Resources, Inc.**

1616 S Voss Rd STE 600
Houston TX 77057-2641

ATTN: Terry McLeod

Sleeping Indian 1-11

11-17s-34w Scott,KS

Start Date: 2014.07.24 @ 20:30:00

End Date: 2014.07.25 @ 04:55:15

Job Ticket #: 57038 DST #: 2

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

Printed: 2014.07.29 @ 11:12:28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Landmark Resources, Inc.

11-17s-34w Scott,KS

1616 S Voss Rd STE 600
Houston TX 77057-2641

Sleeping Indian 1-11

ATTN: Terry McLeod

Job Ticket: 57038

DST#: 2

Test Start: 2014.07.24 @ 20:30:00

GENERAL INFORMATION:

Formation: **Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:31:00

Time Test Ended: 04:55:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 75

Interval: 4490.00 ft (KB) To 4545.00 ft (KB) (TVD)

Reference Elevations: 3116.00 ft (KB)

Total Depth: 4545.00 ft (KB) (TVD)

3105.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8675 Inside

Press@RunDepth: 77.60 psig @ 4491.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.24

End Date:

2014.07.25

Last Calib.:

2014.07.25

Start Time: 20:30:15

End Time:

04:55:15

Time On Btm:

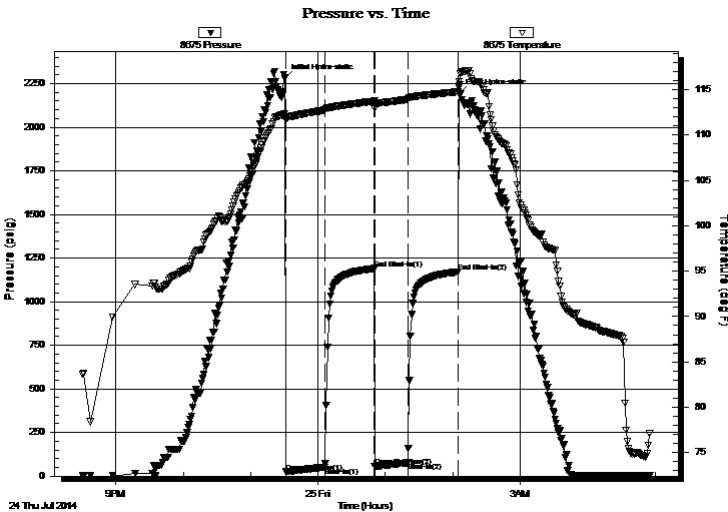
2014.07.24 @ 23:30:30

Time Off Btm:

2014.07.25 @ 02:05:30

TEST COMMENT: Built to 1 3/4" blow
Bled off for 3 min. No return blow
Very weak surface blow
Bled off for 3 min. No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2279.76	112.36	Initial Hydro-static
1	24.24	111.65	Open To Flow (1)
36	52.27	112.75	Shut-In(1)
80	1190.09	113.74	End Shut-In(1)
80	54.65	112.92	Open To Flow (2)
110	77.60	113.93	Shut-In(2)
155	1171.32	114.78	End Shut-In(2)
155	2193.55	115.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	100% Mud	0.49

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Landmark Resources, Inc.

11-17s-34w Scott,KS

1616 S Voss Rd STE 600
Houston TX 77057-2641

Sleeping Indian 1-11

Job Ticket: 57038

DST#: 2

ATTN: Terry McLeod

Test Start: 2014.07.24 @ 20:30:00

Tool Information

Drill Pipe:	Length: 4218.52 ft	Diameter: 3.80 inches	Volume: 59.17 bbl	Tool Weight: 1500.00 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: 276.73 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 97000.00 lb
			<u>Total Volume: 60.53 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.75 ft			String Weight: Initial 86000.00 lb
Depth to Top Packer:	4490.00 ft			Final 87000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	77.50 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			4468.50	
Shut In Tool	5.00			4473.50	
Hydraulic tool	5.00			4478.50	
safety Joint	2.50			4481.00	
Packer	5.00			4486.00	22.50 Bottom Of Top Packer
Packer	4.00			4490.00	
Stubb	1.00			4491.00	
Recorder	0.00	8675	Inside	4491.00	
Recorder	0.00	8650	Outside	4491.00	
perforations	10.00			4501.00	
Change Over Sub	1.00			4502.00	
Drill Pipe	32.00			4534.00	
Change Over Sub	1.00			4535.00	
Bullnose	10.00			4545.00	55.00 Bottom Packers & Anchor

Total Tool Length: 77.50



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1616 S Voss Rd STE 600
Houston TX 77057-2641

Sleeping Indian 1-11

Job Ticket: 57038

DST#: 2

ATTN: Terry McLeod

Test Start: 2014.07.24 @ 20:30:00

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: 64.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	100% Mud	0.492

Total Length: 100.00 ft Total Volume: 0.492 bbl

Num Fluid Samples: 0

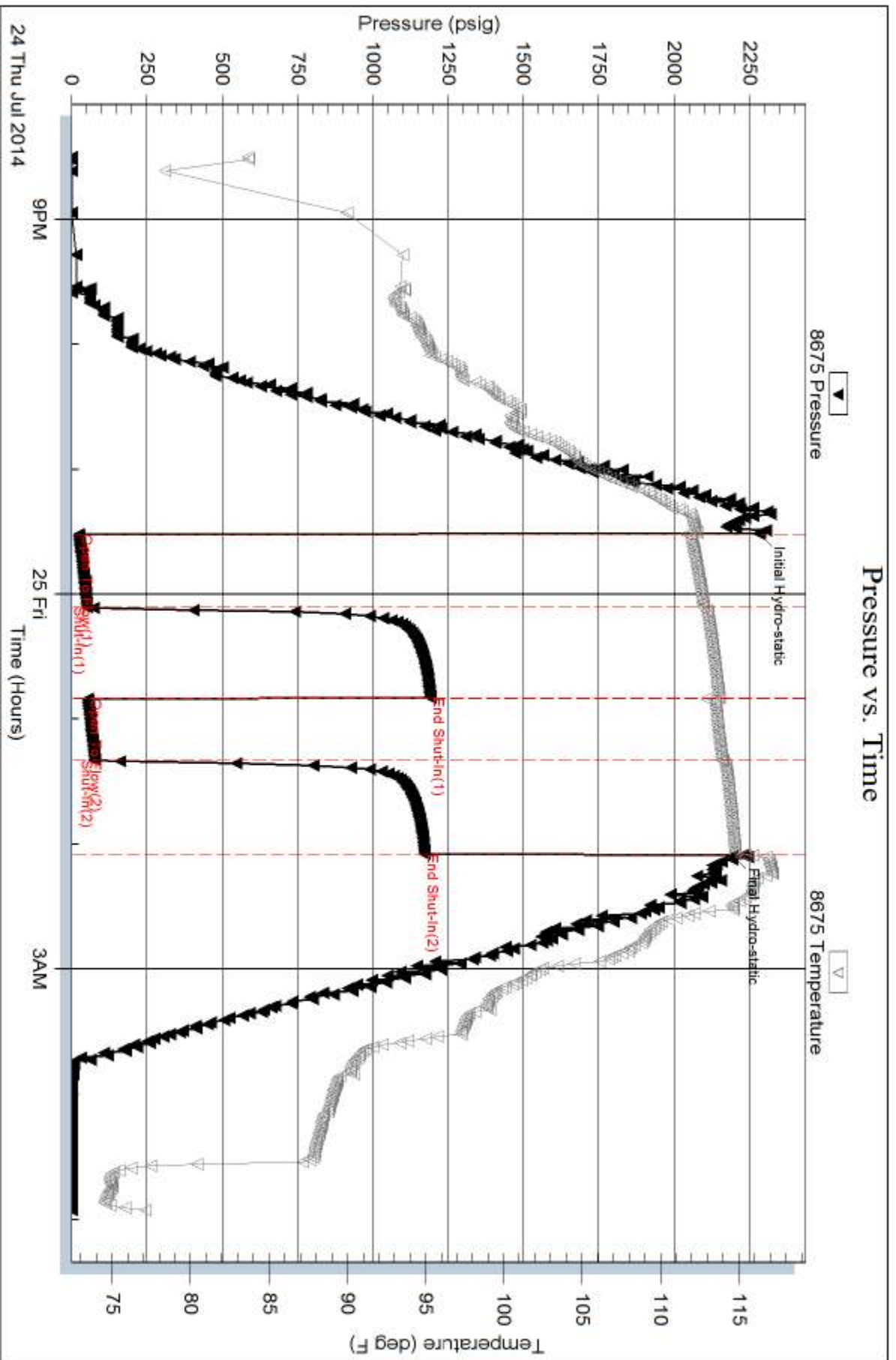
Num Gas Bombs: 0

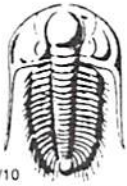
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57037

Well Name & No. Sleeping Indian 1-11 Test No. 1 Date 7/24/14
 Company Landmark Resources, Inc Elevation 3116 KB 3105 GL
 Address 1666 S Voss Rd STE 600, Houston TX, 77057-2641
 Co. Rep / Geo. Jerry McLeod Rig Murking Drilling Company Rig 4
 Location: Sec. 11 Twp. 17s Rge. 34w Co. Scott County State K5

Interval Tested 4447-4500 Zone Tested Marmaton
 Anchor Length 53 Drill Pipe Run 4155.07 Mud Wt. 9.4
 Top Packer Depth 4443 Drill Collars Run 276.73 Vis 50
 Bottom Packer Depth 4447 Wt. Pipe Run _____ WL 9.6
 Total Depth 4500 Chlorides 4,000 ppm System LCM 4#
 Blow Description Built to 1/2" below
No return below
No below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</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 30 BHT 115 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm
 (A) Initial Hydrostatic 2,254 Test 1250 T-On Location 03:10
 (B) First Initial Flow 22 Jars _____ T-Started 04:18
 (C) First Final Flow 28 Safety Joint 75 T-Open 07:21
 (D) Initial Shut-In 1,197 Circ Sub n/c T-Pulled 09:51
 (E) Second Initial Flow 31 Hourly Standby _____ T-Out 11:56
 (F) Second Final Flow 36 Mileage 38 AT 58.90 Comments _____
 (G) Final Shut-In 1,190 Sampler _____
 (H) Final Hydrostatic 2,205 Straddle _____
 Shale Packer 250 Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____
 Initial Open 30 Day Standby _____ Sub Total 0
 Initial Shut-In 45 Accessibility 150 Total 1783.90
 Final Flow 30 Sub Total 1783.90 MP/DST Disc't _____
 Final Shut-In 45

Approved By _____ Our Representative _____

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57038

4/10

Well Name & No. Sleeping Indian 1-11 Test No. 2 Date 7/24/14 7/25/14
 Company Landmark Resources Inc Elevation 3116 KB 3105 GL
 Address 11616 S Voss Rd STE 600, Houston TX, 77057-2641
 Co. Rep / Geo. Terry McLeod Rig Murkin Drilling Rig 4
 Location: Sec. 11 Twp. 17s Rge. 34w Co. Scott County State KS

Interval Tested 4490 - 4545 Zone Tested Altamont
 Anchor Length 55 Drill Pipe Run 4218.52 Mud Wt. 9.4
 Top Packer Depth 4486 Drill Collars Run 276.73 Vis 6.4
 Bottom Packer Depth 4490 Wt. Pipe Run _____ WL 8.8
 Total Depth 4545 Chlorides 3,600 ppm System LCM 5#

Blow Description Built to 1 3/4" below
Bled off for 3 min. No return below
Very weak surface below
Bled off for 3 min. No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>100</u>	<u>Mud</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 100 BHT 115 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm
 (A) Initial Hydrostatic 2,280 Test _____ T-On Location 19:40
 (B) First Initial Flow 24 Jars _____ T-Started 20:30
 (C) First Final Flow 52 Safety Joint _____ 75 T-Open 23:30
 (D) Initial Shut-In 1,190 Circ Sub N/C T-Pulled 02:00
 (E) Second Initial Flow 55 Hourly Standby _____ T-Out 04:55
 (F) Second Final Flow 77 Mileage 38AT X2 117.80 Comments Loaded tools 7/26
 (G) Final Shut-In 1,171 Sampler _____ @ 09:55
 (H) Final Hydrostatic 2,194 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ 250 Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 800
 Initial Shut-In 45 Day Standby 1 day + 5 hours Total 2642.80
 Final Flow 30 Accessibility 150 MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1842.80

Approved By _____ Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.