



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

O'Brien Resources, LLC

1-17s-30w Lane Co. KS

PO Box 6149  
Shreveport LA, 71136

Jennison 1-3

ATTN: Kurt Talbolt

Job Ticket: 53100

DST#: 1

Test Start: 2013.08.05 @ 11:20:00

## GENERAL INFORMATION:

Formation: **Lansing "A-F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:47:15

Time Test Ended: 19:30:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 150

Interval: **3942.00 ft (KB) To 4030.00 ft (KB) (TVD)**

Reference Elevations: 2857.00 ft (KB)

Total Depth: 4030.00 ft (KB) (TVD)

2846.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8675 Inside**

Press @ Run Depth: 74.52 psig @ 3943.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.05 End Date: 2013.08.05

Last Calib.: 2013.08.05

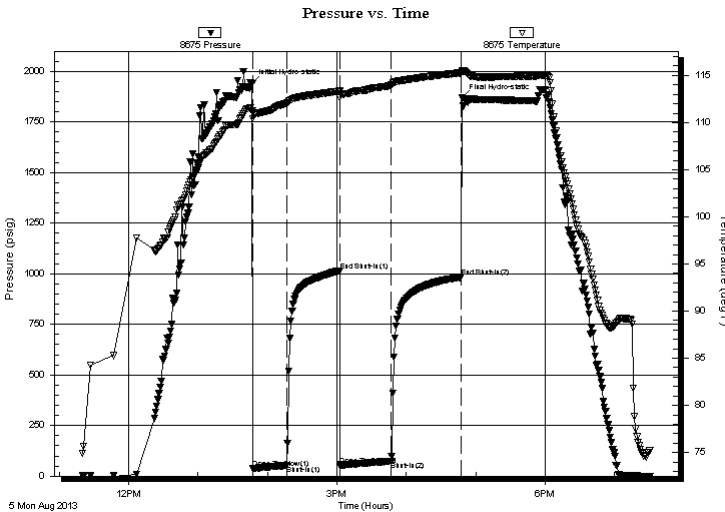
Start Time: 11:20:15 End Time: 19:30:15

Time On Btm: 2013.08.05 @ 13:46:45

Time Off Btm: 2013.08.05 @ 16:48:15

**TEST COMMENT:** Built to 5" blow  
No return blow  
Built to 2" blow  
No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1939.46	111.24	Initial Hydro-static
1	40.30	110.38	Open To Flow (1)
30	52.74	112.04	Shut-In(1)
76	1015.09	113.34	End Shut-In(1)
76	54.25	112.67	Open To Flow (2)
121	74.52	114.00	Shut-In(2)
181	983.51	115.27	End Shut-In(2)
182	1867.52	115.54	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
122.00	100%Mud with few oil spots in tool	1.71

## Gas Rates

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



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**FLUID SUMMARY**

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 53100

**DST#: 1**

ATTN: Kurt Talbolt

Test Start: 2013.08.05 @ 11:20:00

## 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
122.00	100%Mud w ith few oil spots in tool	1.711

Total Length: 122.00 ft

Total Volume: 1.711 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

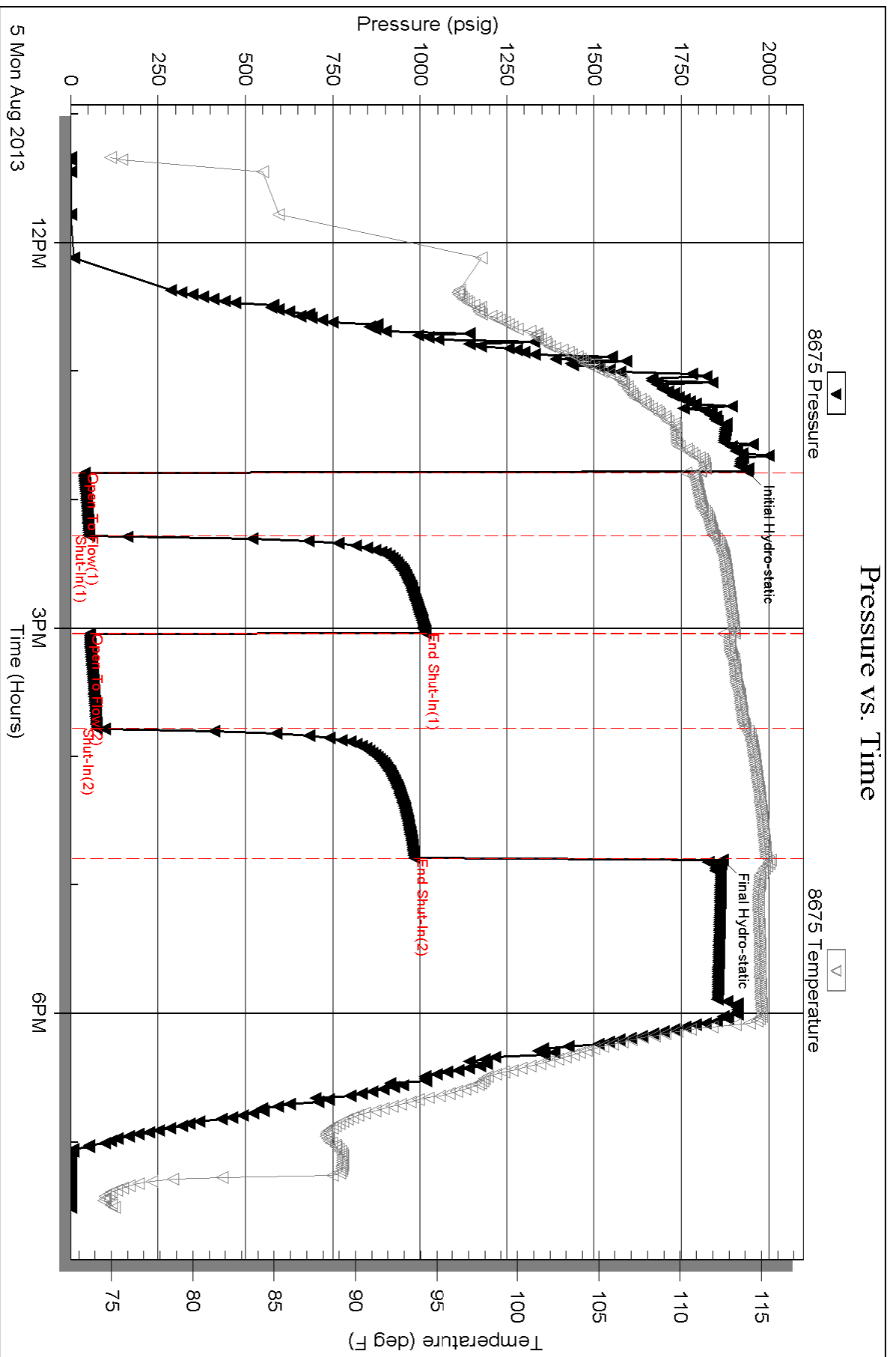
Serial #: 8675

Inside

O'Brien Resources, LLC

Jennison 1-3

DST Test Number: 1





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O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52796

**DST#: 6**

ATTN: Kurt Talbolt

Test Start: 2013.08.10 @ 13:33:00

## GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:43:40

Time Test Ended: 21:40:50

Test Type: Conventional Straddle (Reset)

Tester: Chuck Smith

Unit No: 62

**Interval: 4483.00 ft (KB) To 4555.00 ft (KB) (TVD)**

Reference Elevations: 2857.00 ft (KB)

Total Depth: 4668.00 ft (KB) (TVD)

2846.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 8018**

**Inside**

Press @ RunDepth: 48.19 psig @ 4484.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.10

End Date:

2013.08.10

Last Calib.:

2013.08.10

Start Time: 13:33:02

End Time:

21:40:50

Time On Btm:

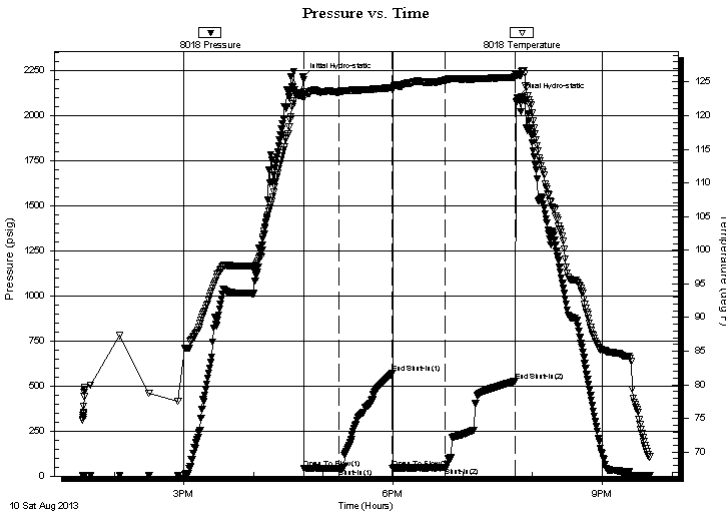
2013.08.10 @ 16:42:20

Time Off Btm:

2013.08.10 @ 19:47:00

**TEST COMMENT:** Surface blow .  
No return.  
No blow .  
No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2215.70	123.11	Initial Hydro-static
2	42.37	122.69	Open To Flow (1)
32	44.92	123.52	Shut-In(1)
77	569.34	124.16	End Shut-In(1)
78	44.53	123.92	Open To Flow (2)
123	48.19	125.27	Shut-In(2)
183	527.97	125.72	End Shut-In(2)
185	2103.72	125.96	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	M100m	0.14

\* Recovery from multiple tests

## Gas Rates

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





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**FLUID SUMMARY**

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52796

**DST#: 6**

ATTN: Kurt Talbolt

Test Start: 2013.08.10 @ 13:33:00

## 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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M 100m	0.140

Total Length: 10.00 ft      Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

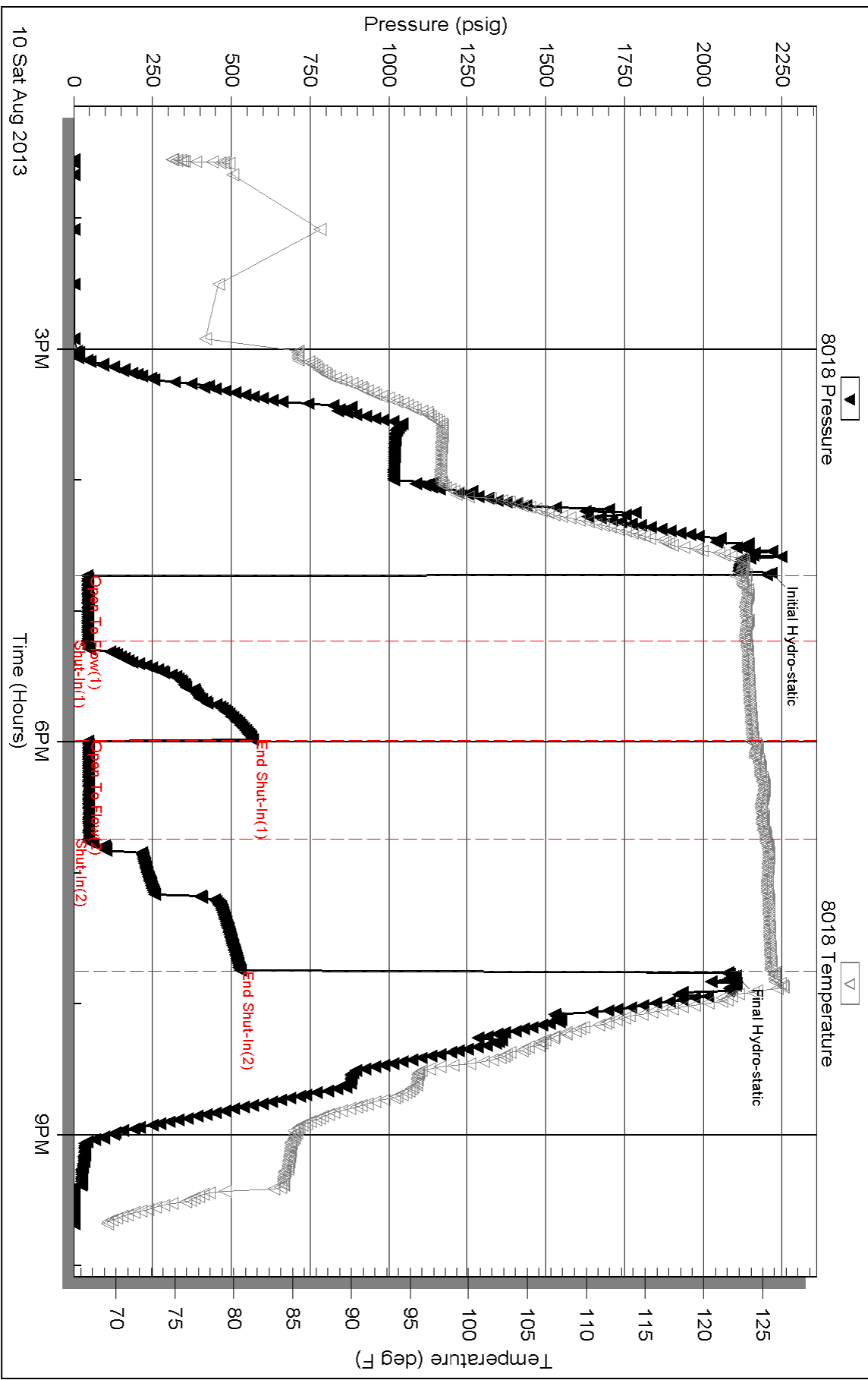
Serial #:

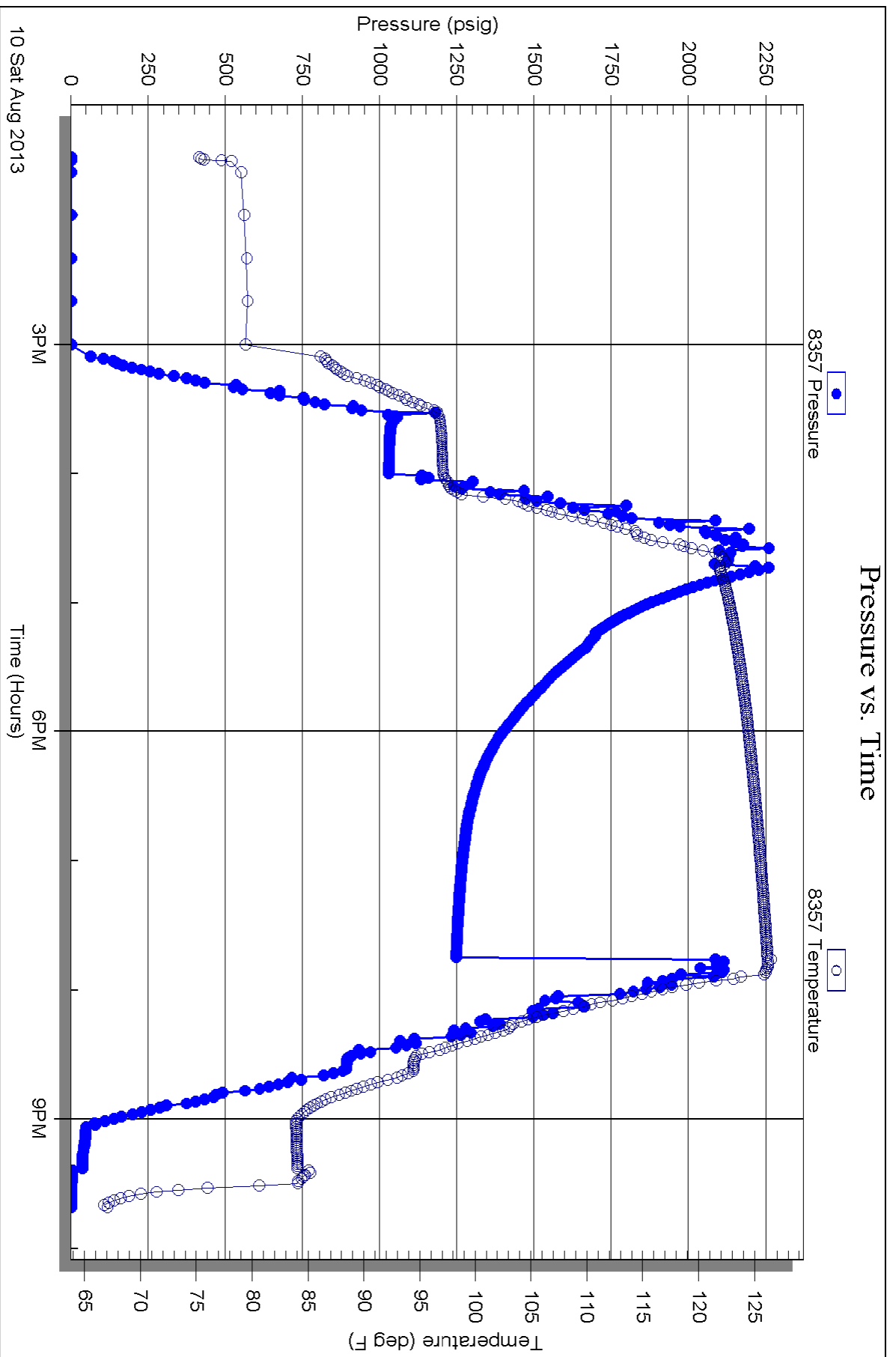
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time









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**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52954

**DST#: 5**

ATTN: Kurt Talbolt

Test Start: 2013.08.09 @ 08:20:00

## GENERAL INFORMATION:

Formation: **Johnson Zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:15:30

Time Test Ended: 15:02:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 150

**Interval: 4501.00 ft (KB) To 4535.00 ft (KB) (TVD)**

Reference Elevations: 2857.00 ft (KB)

Total Depth: 4535.00 ft (KB) (TVD)

2846.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8675 Inside**

Press @ Run Depth: 29.03 psig @ 4502.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.09

End Date: 2013.08.09

Last Calib.: 2013.08.09

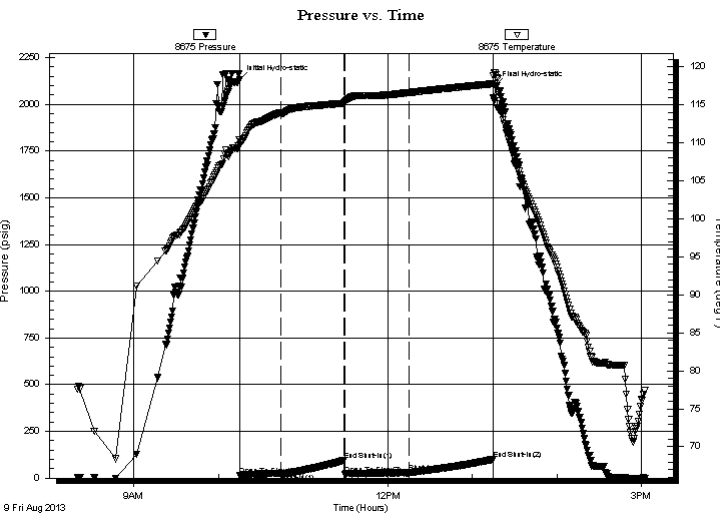
Start Time: 08:20:15

End Time: 15:02:45

Time On Btm: 2013.08.09 @ 10:15:00

Time Off Btm: 2013.08.09 @ 13:16:15

**TEST COMMENT:** Built to 2 1/2" blow  
No return blow  
Built to 3" blow  
No return blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2134.22	110.35	Initial Hydro-static
1	14.92	109.77	Open To Flow (1)
29	24.70	113.98	Shut-In(1)
75	95.37	115.22	End Shut-In(1)
75	20.73	115.35	Open To Flow (2)
120	29.03	116.61	Shut-In(2)
180	100.50	117.78	End Shut-In(2)
182	2101.87	119.18	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	50 Feet Weak Gas In Pipe	0.00
40.00	gcom 10%G 20%O 70 %M	0.56

\* Recovery from multiple tests

## Gas Rates

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



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**FLUID SUMMARY**

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52954

**DST#: 5**

ATTN: Kurt Talbolt

Test Start: 2013.08.09 @ 08:20:00

## 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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	50 Feet Weak Gas In Pipe	0.000
40.00	gcom 10%G 20%O 70 %M	0.561

Total Length: 40.00 ft      Total Volume: 0.561 bbl

Num Fluid Samples: 0

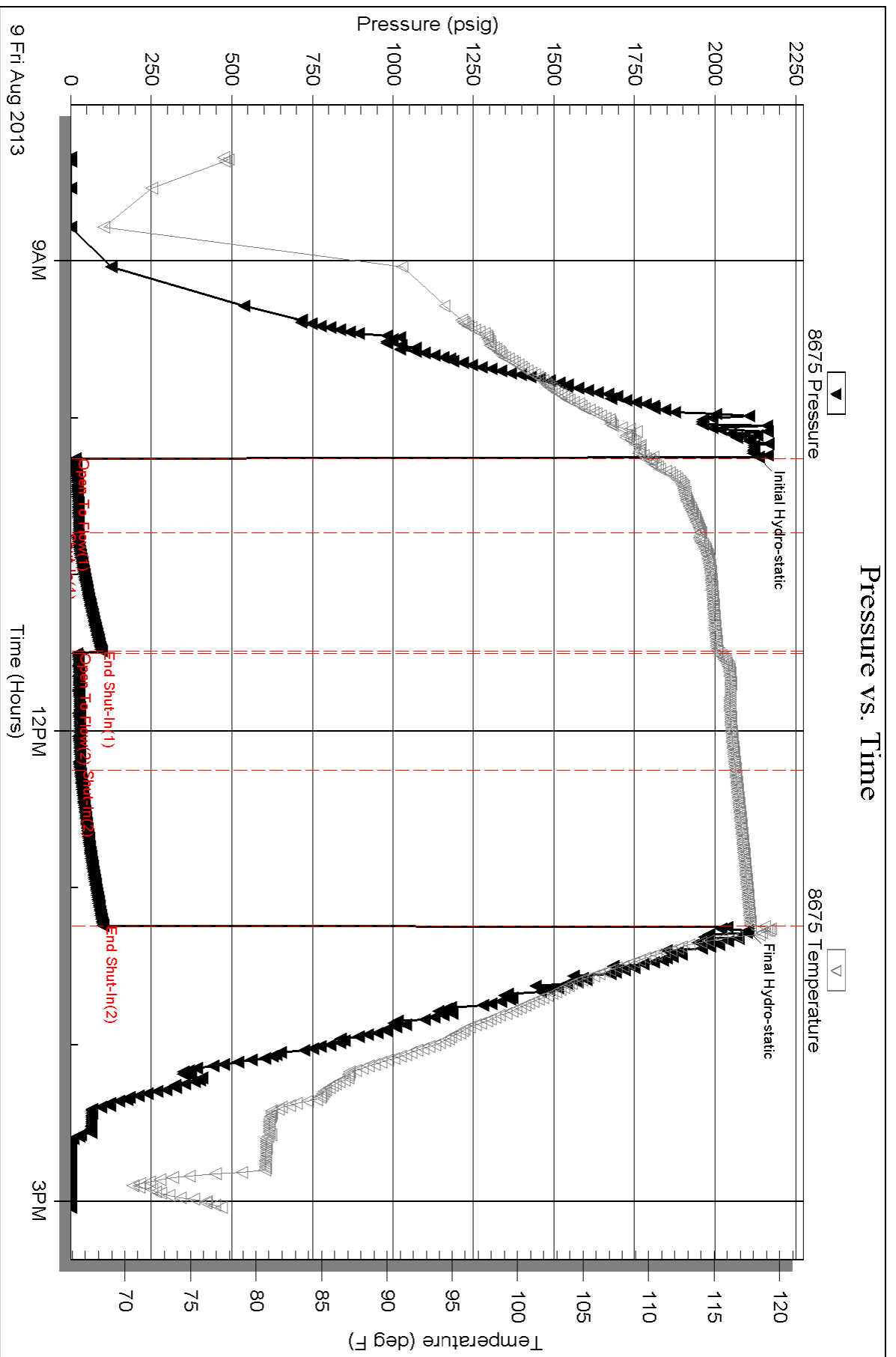
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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# DRILL STEM TEST REPORT

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

ATTN: Kurt Talbolt

Job Ticket: 52953

**DST#: 4**

Test Start: 2013.08.08 @ 16:55:00

## GENERAL INFORMATION:

Formation: **Fort Scott & Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:36:45

Time Test Ended: 22:06:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 150

**Interval: 4409.00 ft (KB) To 4495.00 ft (KB) (TVD)**

Reference Elevations: 2857.00 ft (KB)

Total Depth: 4495.00 ft (KB) (TVD)

2846.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 29.60 psig @ 4410.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.08

End Date:

2013.08.08

Last Calib.:

2013.08.08

Start Time: 16:55:15

End Time:

22:06:00

Time On Btm:

2013.08.08 @ 18:36:30

Time Off Btm:

2013.08.08 @ 20:36:30

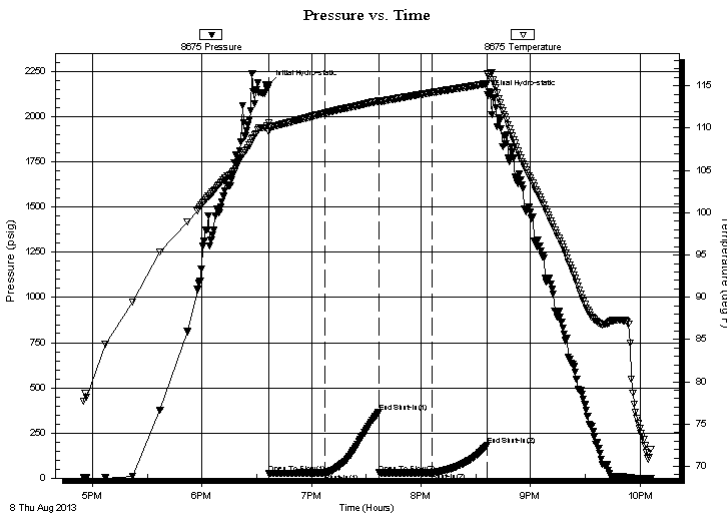
**TEST COMMENT:** Built to 1 1/2" died to 1" blow

No return blow

No blow

No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2175.66	110.59	Initial Hydro-static
1	26.88	109.60	Open To Flow (1)
31	28.78	111.78	Shut-In(1)
61	363.15	113.21	End Shut-In(1)
61	28.68	113.10	Open To Flow (2)
90	29.60	114.21	Shut-In(2)
120	183.53	115.26	End Shut-In(2)
120	2120.73	116.38	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	100% Mud w with few oil spots in tool	0.42

\* Recovery from multiple tests

## Gas Rates

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



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**FLUID SUMMARY**

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52953

**DST#: 4**

ATTN: Kurt Talbolt

Test Start: 2013.08.08 @ 16:55:00

## 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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
30.00	100% Mud with few oil spots in tool	0.421

Total Length: 30.00 ft      Total Volume: 0.421 bbl

Num Fluid Samples: 0

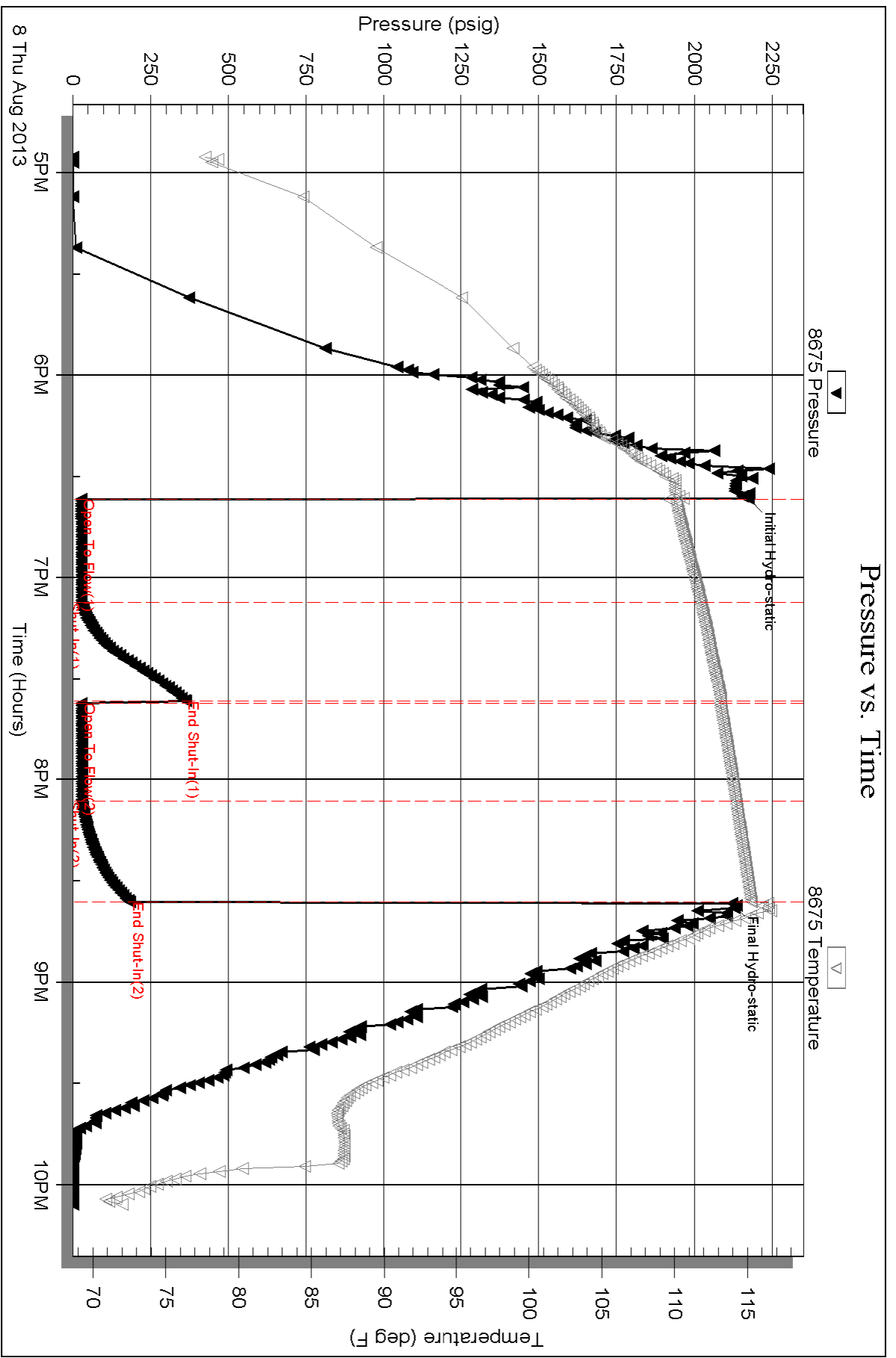
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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# DRILL STEM TEST REPORT

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52952

**DST#: 3**

ATTN: Kurt Talbolt

Test Start: 2013.08.07 @ 18:15:00

## GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:56:00

Time Test Ended: 00:42:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 150

**Interval: 4275.00 ft (KB) To 4390.00 ft (KB) (TVD)**

Reference Elevations: 2857.00 ft (KB)

Total Depth: 4390.00 ft (KB) (TVD)

2846.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 331.72 psig @ 4276.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.07

End Date:

2013.08.08

Last Calib.:

2013.08.08

Start Time:

18:15:15

End Time:

00:42:30

Time On Btm:

2013.08.07 @ 19:55:45

Time Off Btm:

2013.08.07 @ 22:56:15

## TEST COMMENT:

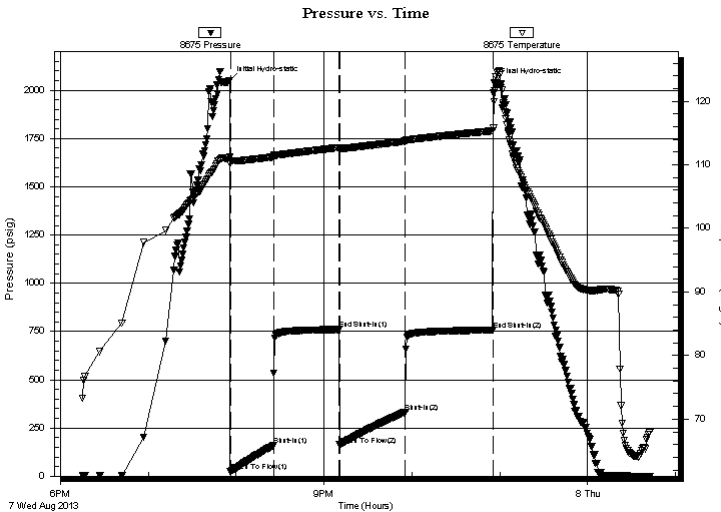
B.O.B. in 11 min.

Bled off for 5 min. No return blow

B.O.B. in 15 min.

Bled off for 5 min. No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2050.97	111.18	Initial Hydro-static
1	23.28	110.26	Open To Flow (1)
30	158.92	111.24	Shut-In(1)
75	760.55	112.71	End Shut-In(1)
75	162.00	112.47	Open To Flow (2)
120	331.72	113.70	Shut-In(2)
180	757.34	115.35	End Shut-In(2)
181	2041.51	119.96	Final Hydro-static

## Recovery

## Gas Rates

Length (ft)	Description	Volume (bbl)
625.00	100% Water	8.77

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

\* Recovery from multiple tests



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52952

**DST#: 3**

ATTN: Kurt Talbolt

Test Start: 2013.08.07 @ 18:15:00

## 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:

50000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
625.00	100% Water	8.767

Total Length: 625.00 ft      Total Volume: 8.767 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

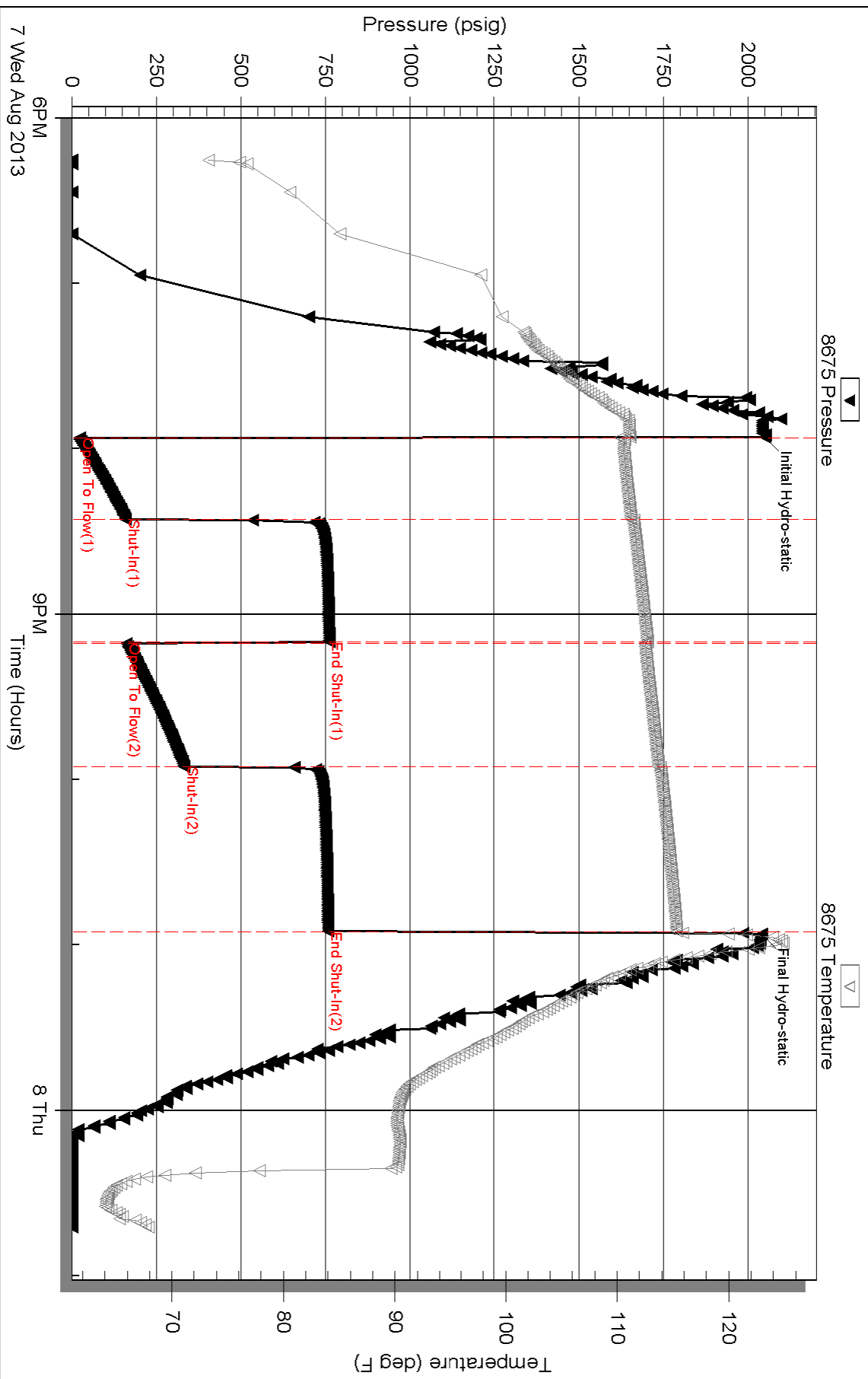
Laboratory Name:

Laboratory Location:

Recovery Comments: RW .15 @ 70 F = 50,000



# Pressure vs. Time





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52951

**DST#: 2**

ATTN: Kurt Talbolt

Test Start: 2013.08.06 @ 18:00:00

## GENERAL INFORMATION:

Formation: **Kansas City "K&L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:44:15

Time Test Ended: 00:30:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 150

**Interval: 4199.00 ft (KB) To 4267.00 ft (KB) (TVD)**

Reference Elevations: 2857.00 ft (KB)

Total Depth: 4267.00 ft (KB) (TVD)

2846.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 89.08 psig @ 4200.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.06

End Date:

2013.08.07

Last Calib.:

2013.08.07

Start Time: 18:00:15

End Time:

00:30:30

Time On Btm:

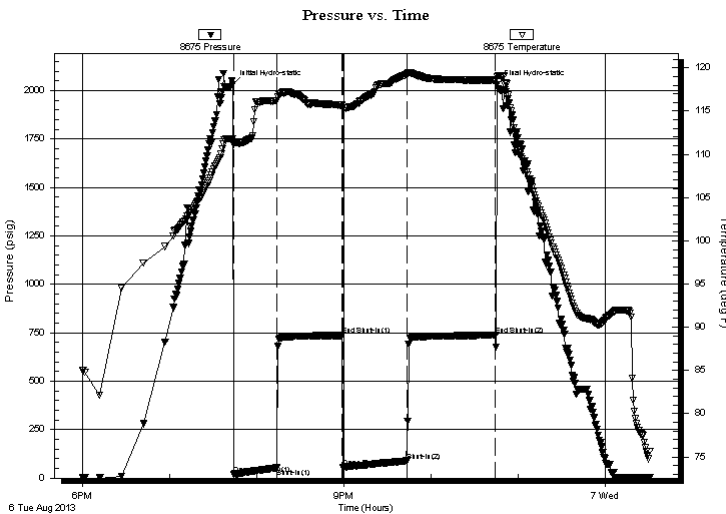
2013.08.06 @ 19:43:30

Time Off Btm:

2013.08.06 @ 22:45:15

**TEST COMMENT:** Built to 6" blow  
No return blow  
Built to 4" blow  
No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2029.69	111.79	Initial Hydro-static
1	21.09	111.14	Open To Flow (1)
31	52.84	116.19	Shut-In(1)
76	736.08	115.69	End Shut-In(1)
76	54.71	115.41	Open To Flow (2)
120	89.08	119.22	Shut-In(2)
181	737.25	118.58	End Shut-In(2)
182	2030.97	119.01	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
152.00	100% Mud	2.13

## Gas Rates

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

\* Recovery from multiple tests



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

O'Brien Resources, LLC

**1-17s-30w Lane Co. KS**

PO Box 6149  
Shreveport LA, 71136

**Jennison 1-3**

Job Ticket: 52951

**DST#: 2**

ATTN: Kurt Talbolt

Test Start: 2013.08.06 @ 18:00:00

## 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: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
152.00	100% Mud	2.132

Total Length: 152.00 ft      Total Volume: 2.132 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time

