



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

O'Brien Res., LLC.

28-11s.-14w. Russell Co., KS

P.O. Box 6149
Shreveport, LA 71136

Bar S Ranch 28 #1

Job Ticket: 52347

DST#: 1

ATTN: Sean Deenihan/Steve

Test Start: 2013.08.08 @ 03:49:54

GENERAL INFORMATION:

Formation: **Lansing**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 05:51:24

Time Test Ended: 08:55:09

Test Type: Conventional Bottom Hole (Initial)

Tester: Ryan Reynolds

Unit No: 48

Interval: 2952.00 ft (KB) To 2982.00 ft (KB) (TVD)

Reference Elevations: 1741.00 ft (KB)

Total Depth: 2982.00 ft (KB) (TVD)

1732.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8790

Inside

Press @ Run Depth: 40.73 psig @ 2953.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.08

End Date:

2013.08.08

Last Calib.:

2013.08.08

Start Time:

03:49:59

End Time:

08:55:08

Time On Btm:

2013.08.08 @ 05:50:39

Time Off Btm:

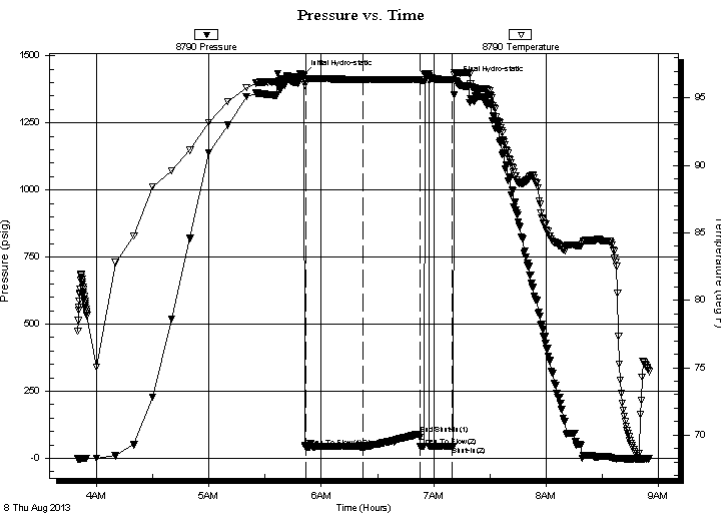
2013.08.08 @ 07:11:39

TEST COMMENT: IF: Weak blow . 1/2" - Dead @ 8min.

IS: No blow

FF: No blow . (Fishd tool 5min. into) No blow

No FSI.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1428.60	96.64	Initial Hydro-static
1	42.24	96.31	Open To Flow (1)
32	40.73	96.37	Shut-In(1)
62	91.17	96.36	End Shut-In(1)
63	43.34	96.33	Open To Flow (2)
80	45.07	96.38	Shut-In(2)
81	1406.64	96.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Drig mud 100%mud	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Res., LLC.

28-11s.-14w. Russell Co., KS

P.O. Box 6149
Shreveport, LA 71136

Bar S Ranch 28 #1

Job Ticket: 52347

DST#: 1

ATTN: Sean Deenihan/Steve

Test Start: 2013.08.08 @ 03:49:54

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:

5400 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5400.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Drig mud 100%mud	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

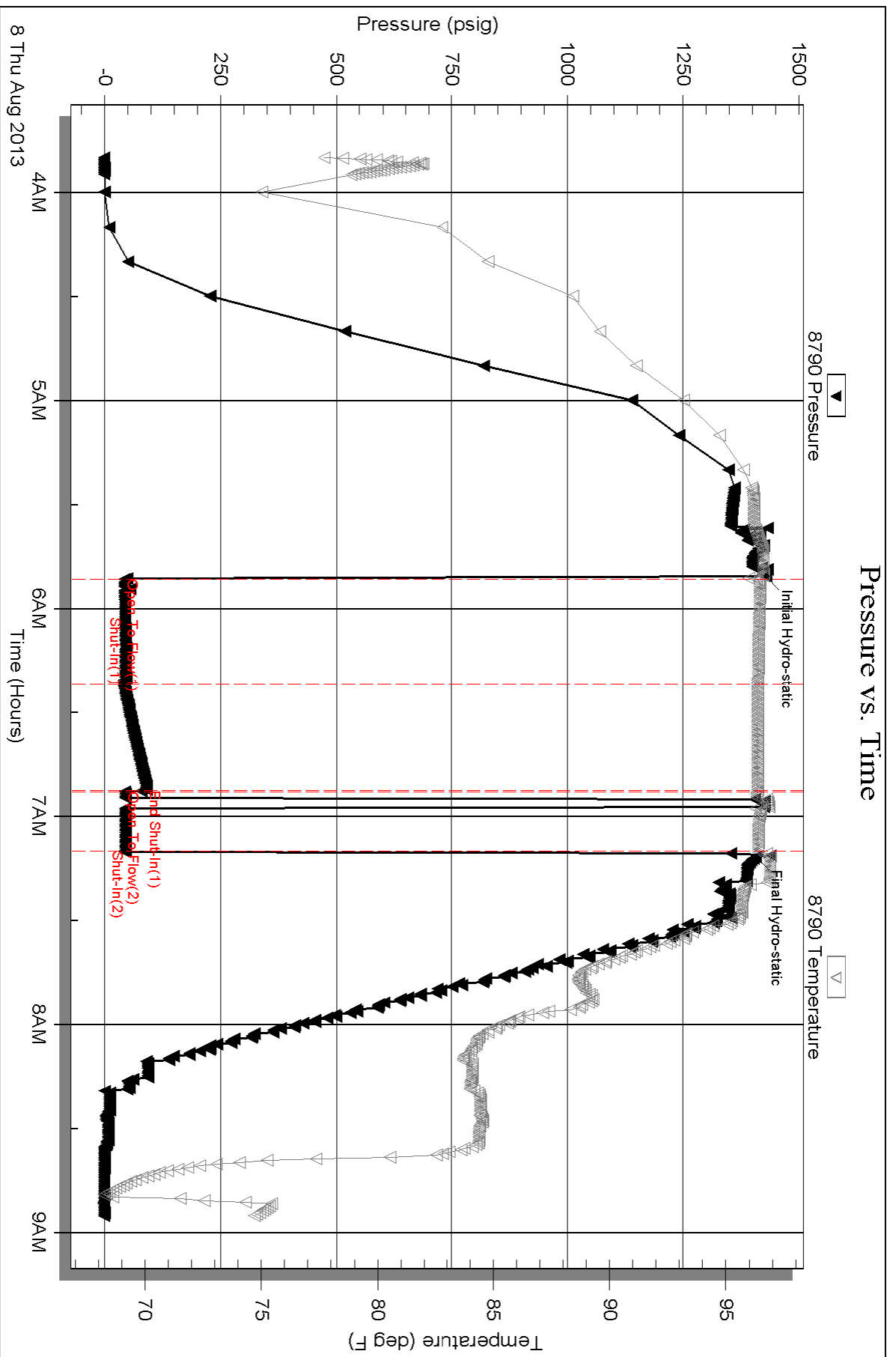
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

O'Brien Res., LLC.

28-11s.-14w. Russell Co., KS

P.O. Box 6149
Shreveport, LA 71136

Bar S Ranch 28 #1

Job Ticket: 52348

DST#: 2

ATTN: Sean Deenihan/Steve

Test Start: 2013.08.08 @ 18:21:54

GENERAL INFORMATION:

Formation: **Lansing**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 20:36:09

Time Test Ended: 02:06:54

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Reynolds

Unit No: 48

Interval: 2990.00 ft (KB) To 3020.00 ft (KB) (TVD)

Reference Elevations: 1741.00 ft (KB)

Total Depth: 3020.00 ft (KB) (TVD)

1732.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8790

Inside

Press @ Run Depth: 236.10 psig @ 2991.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.08

End Date:

2013.08.09

Last Calib.:

2013.08.09

Start Time:

18:21:59

End Time:

02:06:53

Time On Btm:

2013.08.08 @ 20:26:09

Time Off Btm:

2013.08.09 @ 00:08:09

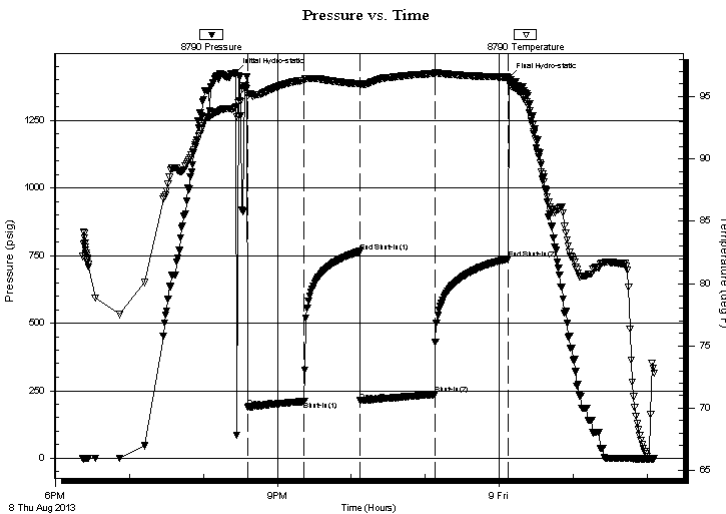
TEST COMMENT: IF: Weak blow . surf. - 1 1/2" (Tool slid 20')

IS: No blow

FF: Weak blow . surf. - 3"

FS: No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1427.31	94.17	Initial Hydro-static
10	189.13	95.08	Open To Flow (1)
56	210.15	96.30	Shut-In(1)
101	764.75	96.02	End Shut-In(1)
101	212.54	95.90	Open To Flow (2)
162	236.10	96.85	Shut-In(2)
221	738.25	96.55	End Shut-In(2)
222	1408.65	96.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	MCW 30% mud, 70% w tr	1.26
300.00	WCM 11% w tr, 89% mud	4.21

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Res., LLC.

28-11s.-14w. Russell Co., KS

P.O. Box 6149
Shreveport, LA 71136

Bar S Ranch 28 #1

Job Ticket: 52348

DST#: 2

ATTN: Sean Deenihan/Steve

Test Start: 2013.08.08 @ 18:21:54

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:

74000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5400.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	MCW 30% mud, 70% w tr	1.262
300.00	WCM 11% w tr, 89% mud	4.208

Total Length: 390.00 ft

Total Volume: 5.470 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

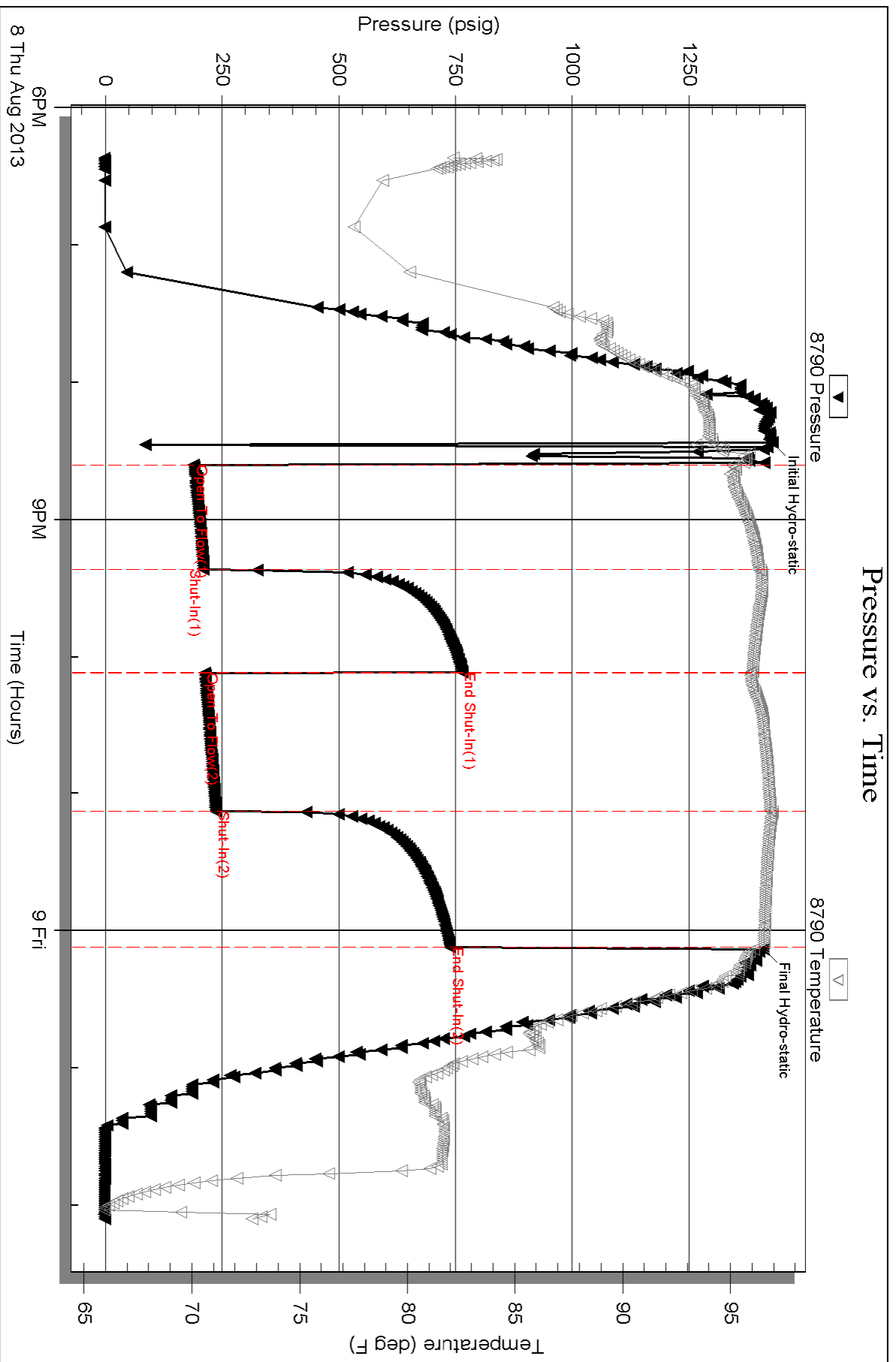
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

O'Brien Res., LLC.

28-11s.-14w. Russell Co., KS

P.O. Box 6149
Shreveport, LA 71136

Bar S Ranch 28 #1

Job Ticket: 54268

DST#: 3

ATTN: Sean Deenihan/Steve

Test Start: 2013.08.11 @ 00:30:41

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 01:57:21

Time Test Ended: 05:38:05

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3032.00 ft (KB) To 3074.00 ft (KB) (TVD)

Reference Elevations: 1741.00 ft (KB)

Total Depth: 3074.00 ft (KB) (TVD)

1730.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8369 Inside

Press @ Run Depth: 30.15 psig @ 3038.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.11 End Date: 2013.08.11

Last Calib.: 2013.08.11

Start Time: 00:30:41 End Time: 05:38:05

Time On Btm: 2013.08.11 @ 01:52:51

Time Off Btm: 2013.08.11 @ 04:03:06

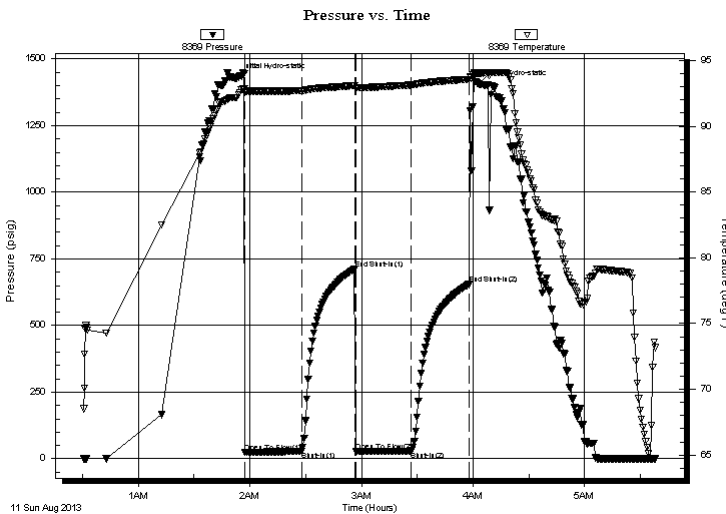
TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1 1/4" bl slid tool 10' to bottom

30-ISIP-no bl

30-FFP-no bl

30-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1428.03	92.17	Initial Hydro-static
5	23.52	92.54	Open To Flow (1)
35	26.91	92.70	Shut-In(1)
64	712.28	93.08	End Shut-In(1)
64	27.20	92.87	Open To Flow (2)
94	30.15	93.13	Shut-In(2)
125	654.91	93.57	End Shut-In(2)
131	1405.61	94.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud	0.42

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Res., LLC.

28-11s.-14w. Russell Co., KS

P.O. Box 6149
Shreveport, LA 71136

Bar S Ranch 28 #1

Job Ticket: 54268

DST#: 3

ATTN: Sean Deenihan/Steve

Test Start: 2013.08.11 @ 00:30:41

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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.54 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

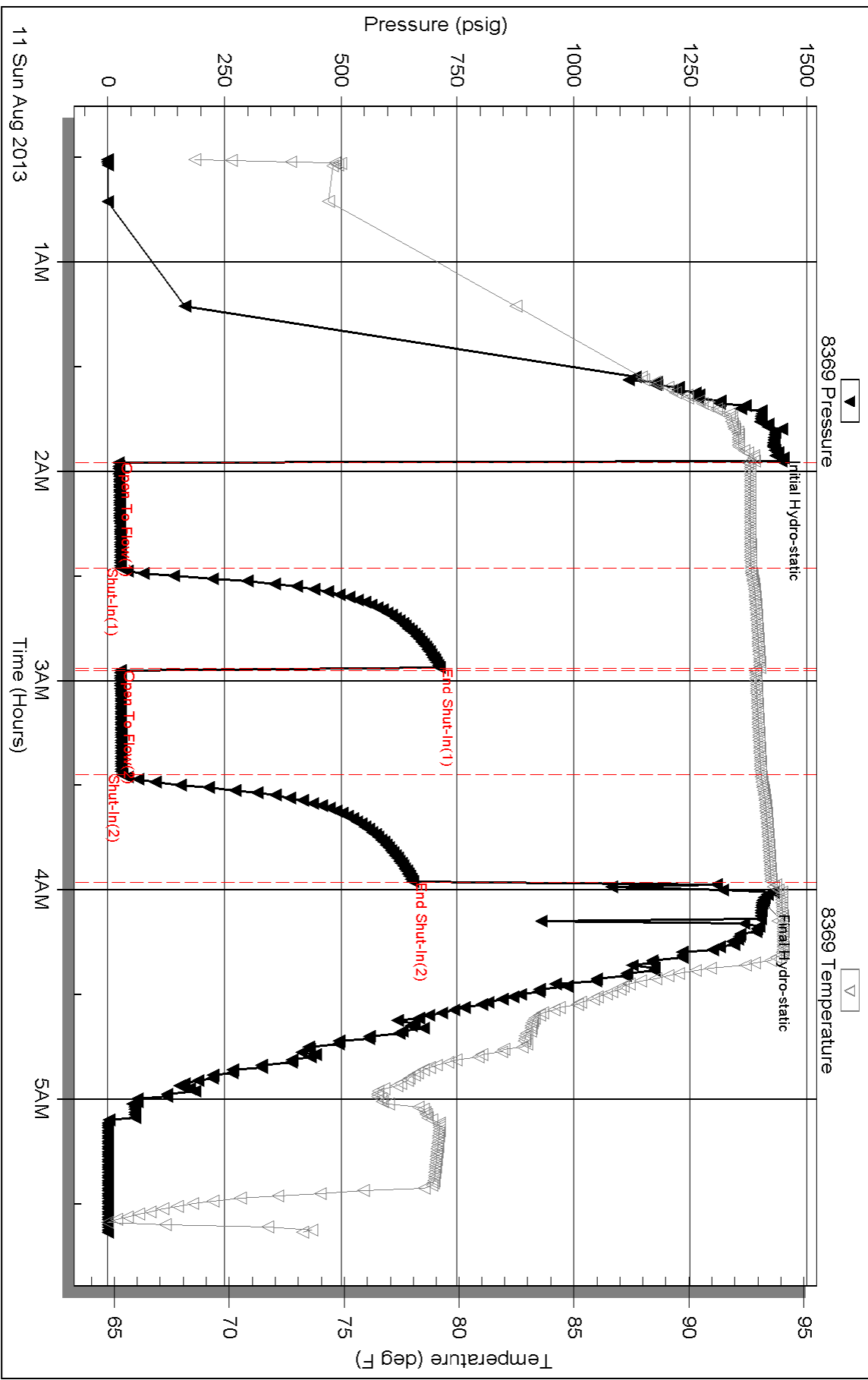
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

O'Brien Res., LLC.

28-11s.-14w. Russell Co., KS

P.O. Box 6149
Shreveport, LA 71136

Bar S Ranch 28 #1

Job Ticket: 54269

DST#: 4

ATTN: Sean Deenihan/Steve

Test Start: 2013.08.11 @ 15:35:23

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 17:28:03

Time Test Ended: 20:42:17

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3138.00 ft (KB) To 3174.00 ft (KB) (TVD)

Reference Elevations: 1741.00 ft (KB)

Total Depth: 3174.00 ft (KB) (TVD)

1730.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8369

Inside

Press @ Run Depth: 23.64 psig @ 3144.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.11

End Date: 2013.08.11

Last Calib.: 2013.08.11

Start Time: 15:35:23

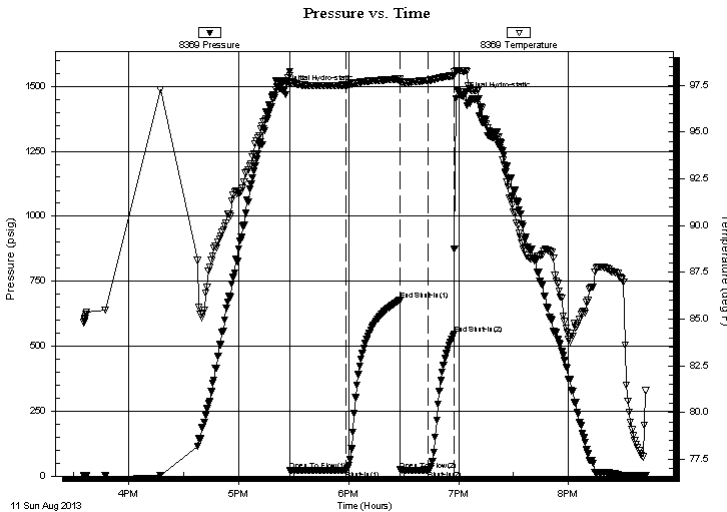
End Time: 20:42:17

Time On Btm: 2013.08.11 @ 17:25:03

Time Off Btm: 2013.08.11 @ 19:02:18

TEST COMMENT: 30-IFP-w k surface bl , died in 20min ,slid tool 5' to bottom
30-ISIP-no bl
15-FFP-no bl
15-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1486.23	97.70	Initial Hydro-static
3	21.05	97.56	Open To Flow (1)
34	21.73	97.51	Shut-In(1)
63	676.09	97.83	End Shut-In(1)
64	24.19	97.67	Open To Flow (2)
79	23.64	97.76	Shut-In(2)
93	545.50	98.00	End Shut-In(2)
98	1461.39	98.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.05

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Res., LLC.

28-11s.-14w. Russell Co., KS

P.O. Box 6149
Shreveport, LA 71136

Bar S Ranch 28 #1

Job Ticket: 54269

DST#: 4

ATTN: Sean Deenihan/Steve

Test Start: 2013.08.11 @ 15:35:23

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: 10.75 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

