



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

O'Brien Resources, LLC

28 14s 30w Gove, Ks

PO Box 6149
Shreveport La 71136

MSJ-Penner 28-1

ATTN: Sean Deenihan

Job Ticket: 56393

DST#: 1

Test Start: 2014.03.17 @ 16:36:00

GENERAL INFORMATION:

Formation: **LKC - A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:21:30

Time Test Ended: 02:02:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 69

Interval: 3815.00 ft (KB) To 3876.00 ft (KB) (TVD)

Reference Elevations: 2773.00 ft (KB)

Total Depth: 3876.00 ft (KB) (TVD)

2765.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8522 Outside

Press @ Run Depth: 322.41 psig @ 3816.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.17

End Date: 2014.03.18

Last Calib.: 2014.03.18

Start Time: 16:36:05

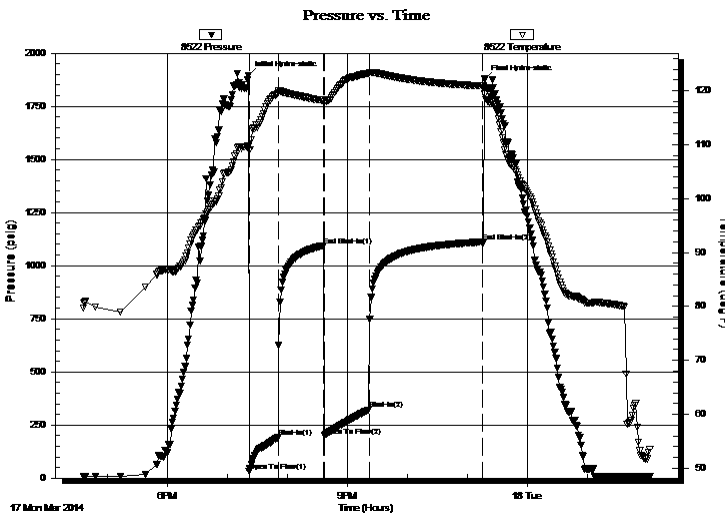
End Time: 02:02:30

Time On Btm: 2014.03.17 @ 19:21:15

Time Off Btm: 2014.03.17 @ 23:17:30

TEST COMMENT: IF: BOB @ 11 min.
IS: No return.
FF: BOB @ 12 min.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1894.10	109.72	Initial Hydro-static
1	32.97	108.88	Open To Flow (1)
30	192.13	119.66	Shut-In(1)
76	1094.15	118.24	End Shut-In(1)
76	198.69	117.90	Open To Flow (2)
121	322.41	123.24	Shut-In(2)
234	1111.57	120.90	End Shut-In(2)
237	1877.16	119.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
490.00	mcw 10m 90w (oil spots)	4.78
80.00	omcw 20o 40m 40w	1.12
20.00	oil 100o	0.28

Gas Rates

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



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FLUID SUMMARY

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Shreveport La 71136

MSJ-Penner 28-1

Job Ticket: 56393

DST#: 1

ATTN: Sean Deenihan

Test Start: 2014.03.17 @ 16:36:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

100000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
490.00	mcw 10m 90w (oil spots)	4.778
80.00	omcw 20o 40m 40w	1.122
20.00	oil 100o	0.281

Total Length: 590.00 ft Total Volume: 6.181 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

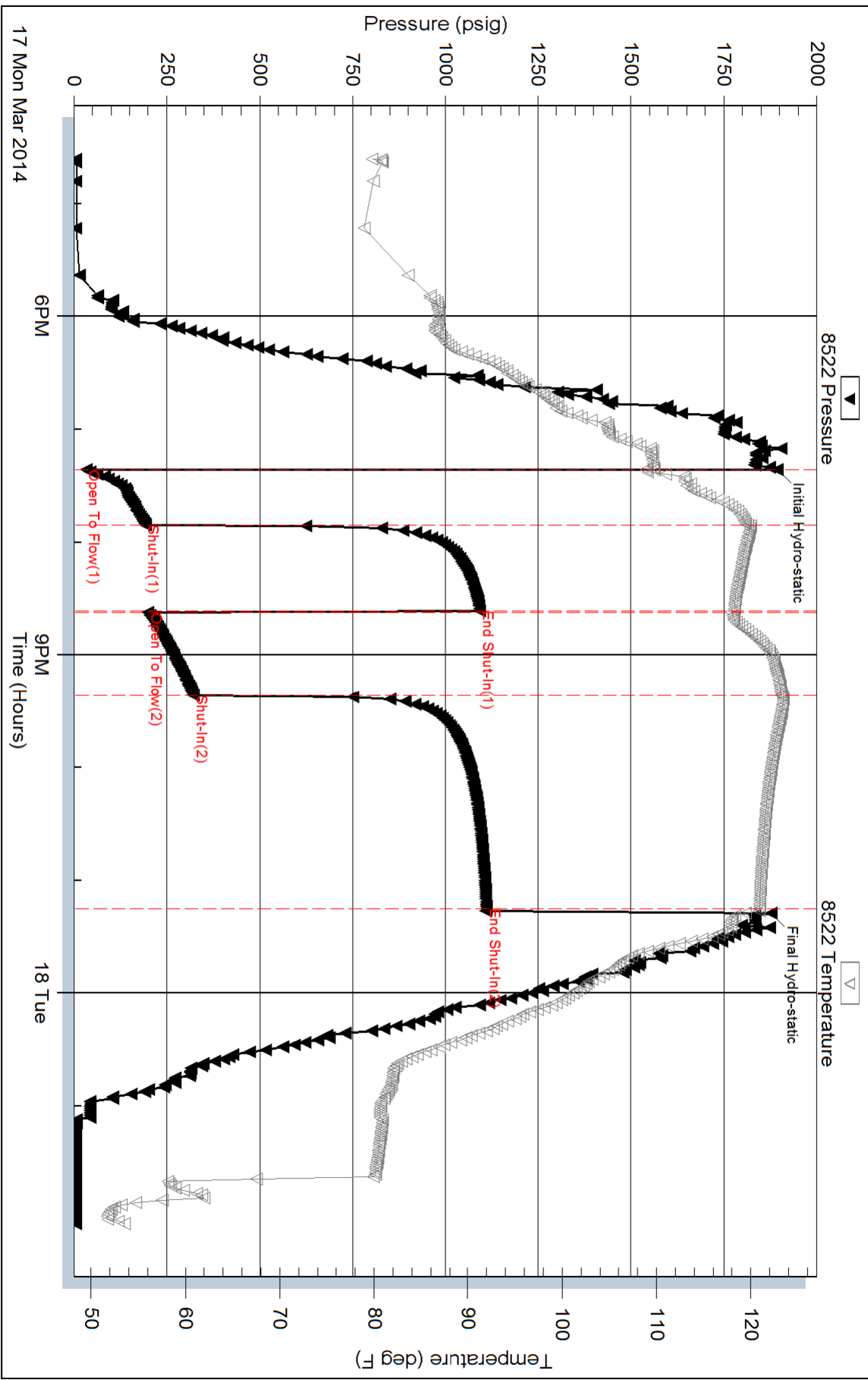
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .110 @ 54F = 100,000ppm

Pressure vs. Time





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DRILL STEM TEST REPORT

O'Brien Resources, LLC

28 14s 30w Gove, Ks

PO Box 6149
Shreveport La 71136

Job Ticket: 56394

DST#: 2

ATTN: Sean Deenihan

Test Start: 2014.03.18 @ 13:36:00

GENERAL INFORMATION:

Formation: **LKC- B - F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:41:15

Time Test Ended: 22:11:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 3873.00 ft (KB) To 3958.00 ft (KB) (TVD)

Reference Elevations: 2773.00 ft (KB)

Total Depth: 3958.00 ft (KB) (TVD)

2765.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8522 Outside

Press@RunDepth: 331.12 psig @ 3874.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.18

End Date:

2014.03.18

Last Calib.:

2014.03.18

Start Time: 13:36:05

End Time:

22:11:45

Time On Btm:

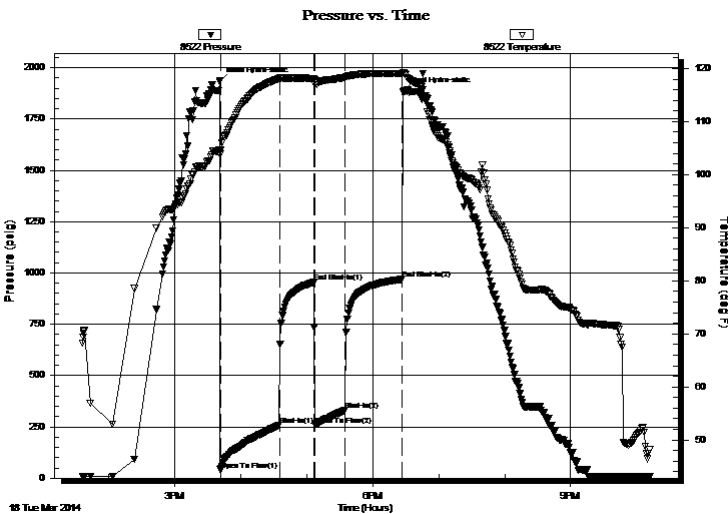
2014.03.18 @ 15:41:00

Time Off Btm:

2014.03.18 @ 18:27:45

TEST COMMENT: IF: BOB @ 10 min.
IS: No return.
FF: BOB @ 13 min.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1935.36	104.55	Initial Hydro-static
1	40.44	103.86	Open To Flow (1)
54	258.03	118.12	Shut-In(1)
86	954.42	118.09	End Shut-In(1)
87	259.64	117.49	Open To Flow (2)
114	331.12	118.32	Shut-In(2)
166	969.72	119.04	End Shut-In(2)
167	1885.85	119.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	mcw 95m 5 w (oil spots)	2.31
440.00	omcw 10o 20m 70w	6.17

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Resources, LLC

28 14s 30w Gove, Ks

PO Box 6149
Shreveport La 71136

Job Ticket: 56394

DST#: 2

ATTN: Sean Deenihan

Test Start: 2014.03.18 @ 13:36:00

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:

80000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
240.00	mcw 95m 5 w (oil spots)	2.310
440.00	omcw 10o 20m 70w	6.172

Total Length: 680.00 ft Total Volume: 8.482 bbl

Num Fluid Samples: 0

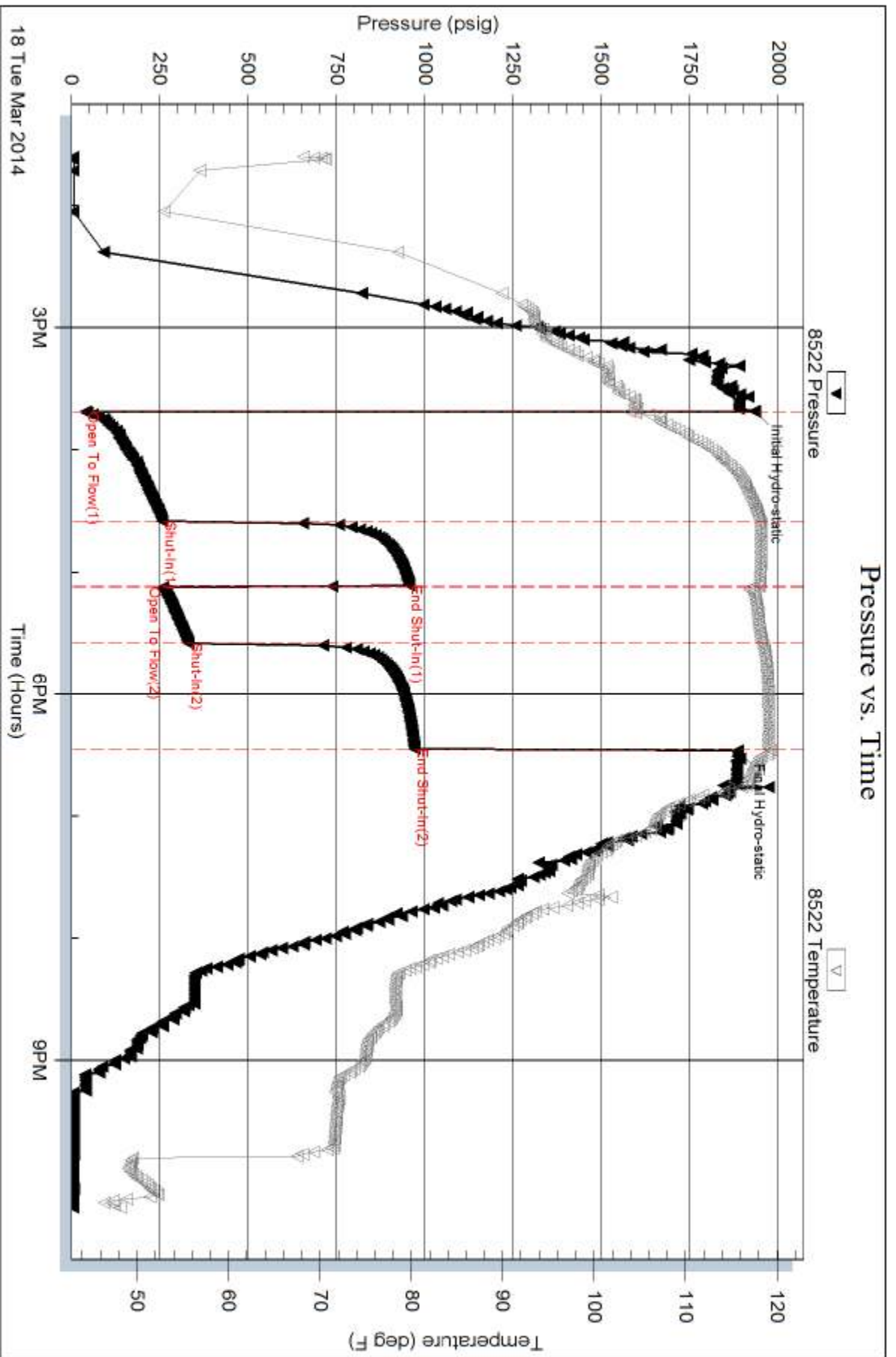
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .150 @ 45 = 80,000ppm





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DRILL STEM TEST REPORT

O'Brien Resources, LLC

28 14s 30w Gove, Ks

PO Box 6149
Shreveport La 71136

Job Ticket: 56395

DST#: 3

ATTN: Sean Deenihan

Test Start: 2014.03.19 @ 16:36:00

GENERAL INFORMATION:

Formation: **LKC- H - K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:56:00

Time Test Ended: 23:19:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4024.00 ft (KB) To 4140.00 ft (KB) (TVD)

Reference Elevations: 2773.00 ft (KB)

Total Depth: 4140.00 ft (KB) (TVD)

2765.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8522 Outside

Press@RunDepth: 588.42 psig @ 4025.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.19

End Date:

2014.03.19

Last Calib.:

2014.03.19

Start Time: 16:36:05

End Time:

23:19:29

Time On Btm:

2014.03.19 @ 18:55:45

Time Off Btm:

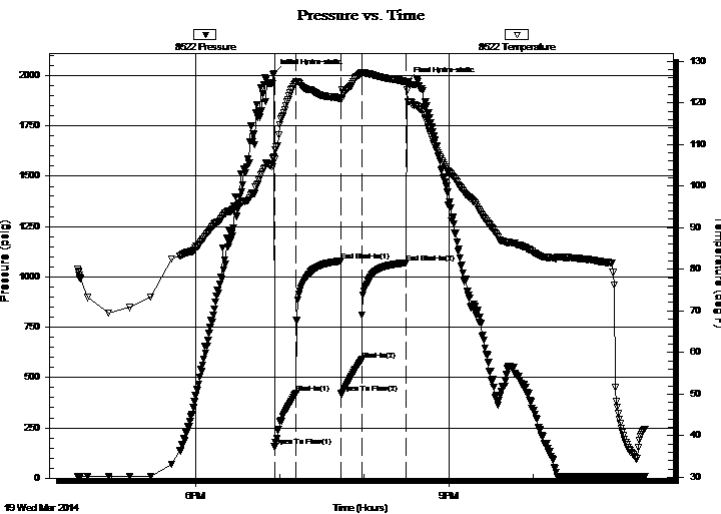
2014.03.19 @ 20:30:30

TEST COMMENT: IF: BOB @ 1 1/2 min.

IS: No return.

FF: BOB @ 2 min.

FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2011.54	106.90	Initial Hydro-static
1	156.11	106.47	Open To Flow (1)
16	423.97	124.87	Shut-In(1)
48	1079.64	121.01	End Shut-In(1)
48	423.17	120.77	Open To Flow (2)
63	588.42	127.14	Shut-In(2)
94	1067.78	125.12	End Shut-In(2)
95	1967.75	123.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1240.00	mcw 10m 90w	16.30

* Recovery from multiple tests

Gas Rates

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



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28 14s 30w Gove, Ks

PO Box 6149
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Job Ticket: 56395

DST#: 3

ATTN: Sean Deenihan

Test Start: 2014.03.19 @ 16:36:00

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:

73000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1240.00	mcw 10m 90w	16.301

Total Length: 1240.00 ft Total Volume: 16.301 bbl

Num Fluid Samples: 0

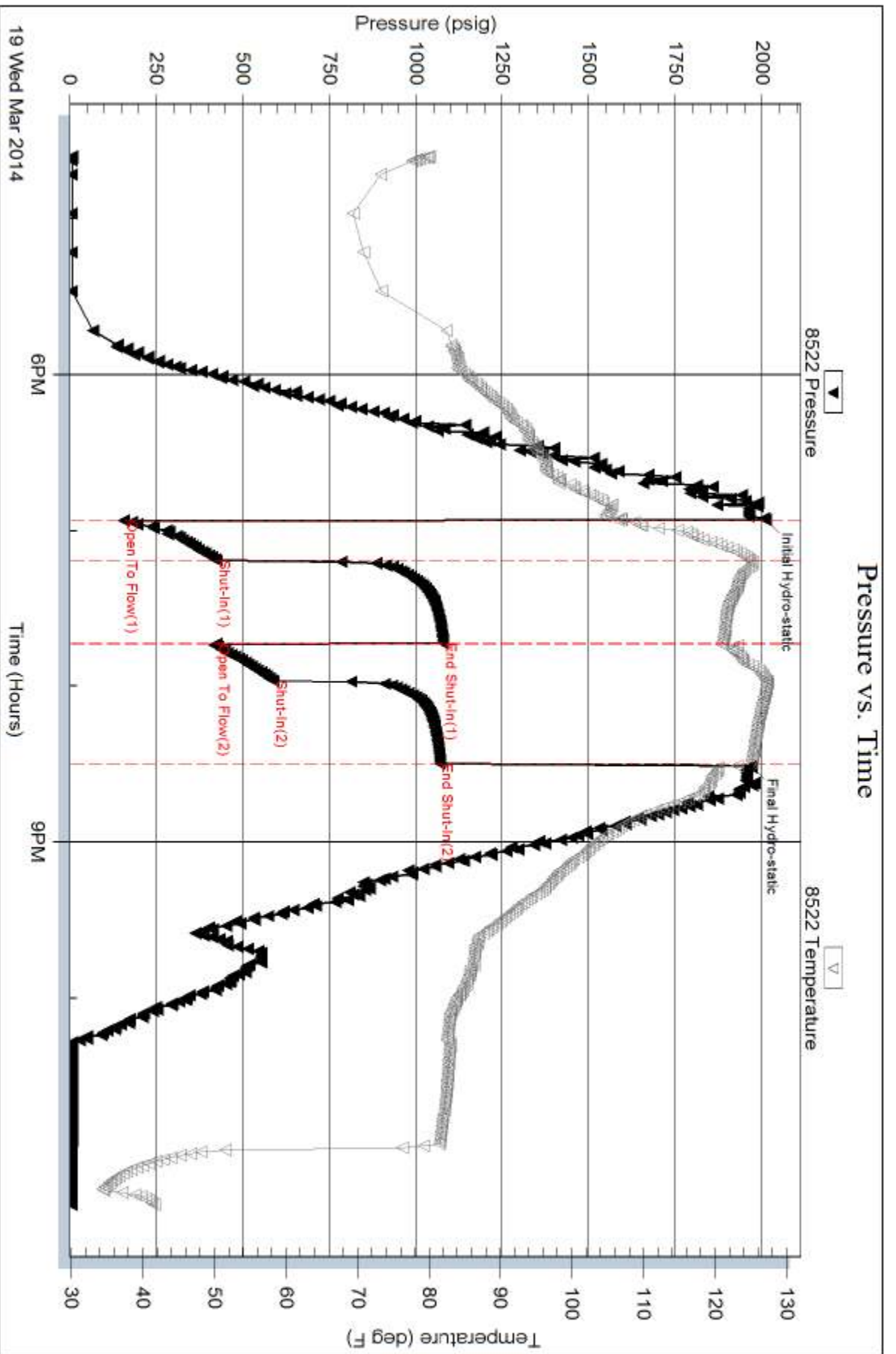
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .146 @ 50F = 73000ppm





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MSJ-Penner 28-1

Job Ticket: 56396

DST#: 4

ATTN: Sean Deenihan

Test Start: 2014.03.20 @ 20:52:00

GENERAL INFORMATION:

Formation: **Myric Station**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:29:15

Time Test Ended: 06:10:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4328.00 ft (KB) To 4358.00 ft (KB) (TVD)

Reference Elevations: 2773.00 ft (KB)

Total Depth: 4358.00 ft (KB) (TVD)

2765.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8522 Outside

Press @ Run Depth: 286.08 psig @ 4329.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.20

End Date:

2014.03.21

Last Calib.:

2014.03.21

Start Time: 20:52:05

End Time:

06:10:30

Time On Btm:

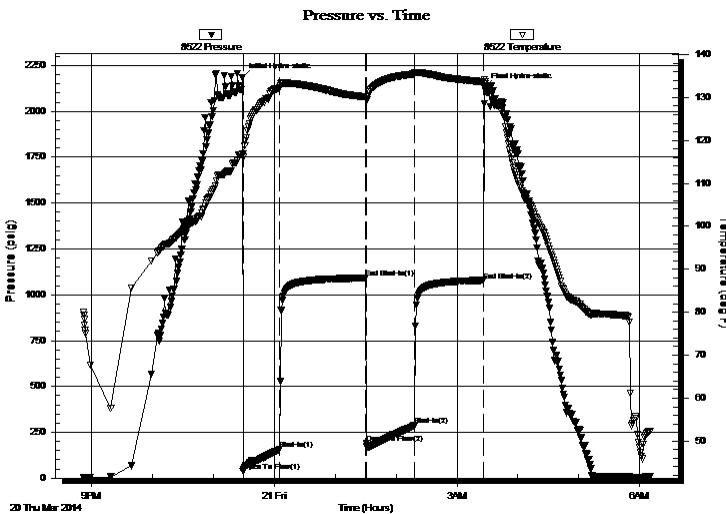
2014.03.20 @ 23:29:00

Time Off Btm:

2014.03.21 @ 03:27:15

TEST COMMENT: IF: BOB @ 5 Min.
IS: 9" return.
FF: BOB @ 6 min.
FS: BOB @ 15 min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2184.16	116.87	Initial Hydro-static
1	37.26	116.09	Open To Flow (1)
36	156.42	132.19	Shut-In(1)
121	1091.16	130.10	End Shut-In(1)
122	189.24	129.50	Open To Flow (2)
169	286.08	135.47	Shut-In(2)
237	1077.64	133.65	End Shut-In(2)
239	2130.87	133.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	gow cm 20g 20o 20w 40m	0.63
60.00	gmco 40g 20m 40o	0.84
450.00	go 35g 65o	6.31
0.00	830' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



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Job Ticket: 56396

DST#: 4

ATTN: Sean Deenihan

Test Start: 2014.03.20 @ 20:52:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	gow cm 20g 20o 20w 40m	0.627
60.00	gmco 40g 20m 40o	0.842
450.00	go 35g 65o	6.312
0.00	830' GIP	0.000

Total Length: 630.00 ft

Total Volume: 7.781 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

