



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

O'Brien Resources LLC

S3-19S-17W

PO BOX 6149
Shreveport LA
71136+6149
ATTN: Steve Harris/ Jim C.

Moeder 3 #2

Job Ticket: 63501

DST#: 1

Test Start: 2017.02.09 @ 01:43:00

GENERAL INFORMATION:

Formation: **LKC 'B-C'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:09:15

Time Test Ended: 08:41:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Spencer J. Staab

Unit No: 84

Interval: 3494.00 ft (KB) To 3530.00 ft (KB) (TVD)

Reference Elevations: 2112.00 ft (KB)

Total Depth: 3530.00 ft (KB) (TVD)

2104.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8934 Outside

Press@RunDepth: 137.48 psig @ 3495.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.02.09

End Date:

2017.02.09

Last Calib.:

2017.02.09

Start Time: 01:43:05

End Time:

08:40:59

Time On Btm:

2017.02.09 @ 04:07:30

Time Off Btm:

2017.02.09 @ 07:08:30

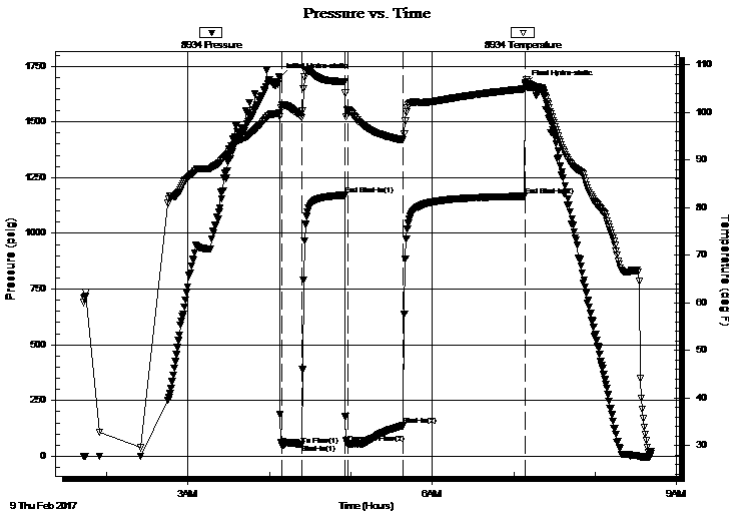
TEST COMMENT: 15-IF-BOB instantaneously; sw itched to Flow Line; Gas to surface in 2 minutes

30-ISI- No Blow Back

45-FF- Flow ed Gas

90-FSI-No Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1699.79	99.95	Initial Hydro-static
2	48.91	101.50	Open To Flow (1)
17	54.77	98.89	Shut-In(1)
48	1171.24	106.50	End Shut-In(1)
50	56.61	100.62	Open To Flow (2)
91	137.48	94.28	Shut-In(2)
181	1166.70	104.96	End Shut-In(2)
181	1667.01	106.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	Mud 100% M	0.49
0.00	GTS	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	17.00	49.81
Last Gas Rate	0.25	11.00	40.30
Max. Gas Rate	0.25	17.00	49.81



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Moeder 3 #2

Job Ticket: 63501

DST#: 1

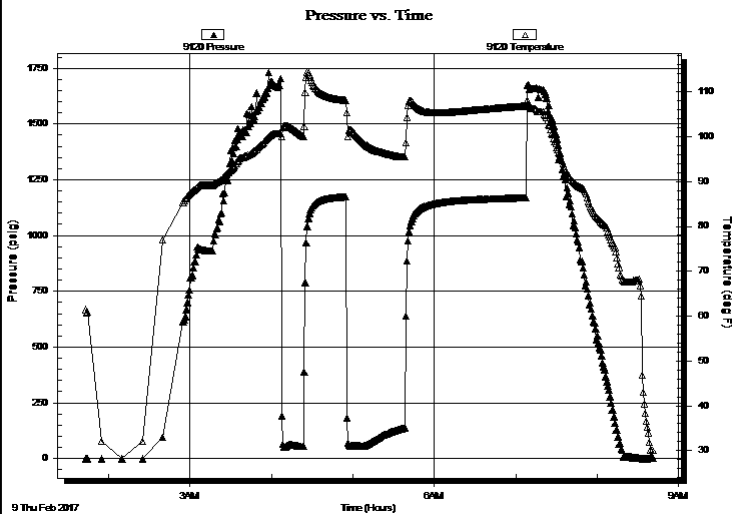
Test Start: 2017.02.09 @ 01:43:00

GENERAL INFORMATION:

Formation: **LKC 'B-C'**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 04:09:15 Tester: Spencer J. Staab
 Time Test Ended: 08:41:00 Unit No: 84
Interval: 3494.00 ft (KB) To 3530.00 ft (KB) (TVD) Reference Elevations: 2112.00 ft (KB)
 Total Depth: 3530.00 ft (KB) (TVD) 2104.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 9120 Inside
 Press@RunDepth: psig @ 3495.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.02.09 End Date: 2017.02.09 Last Calib.: 2017.02.09
 Start Time: 01:43:15 End Time: 08:41:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: 15-IF-BOB instantaneously; sw itched to Flow Line; Gas to surface in 2 minutes
 30-ISI- No Blow Back
 45-FF- Flow ed Gas
 90-FSI-No Blow Back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	Mud 100% M	0.49
0.00	GTS	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	17.00	49.81
Last Gas Rate	0.25	11.00	40.30
Max. Gas Rate	0.25	17.00	49.81



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DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Resources LLC

S3-19S-17W

PO BOX 6149
Shreveport LA
71136+6149

Moeder 3 #2

Job Ticket: 63501

DST#: 1

ATTN: Steve Harris/ Jim C.

Test Start: 2017.02.09 @ 01:43:00

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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	Mud 100% M	0.491
0.00	GTS	0.000

Total Length: 35.00 ft Total Volume: 0.491 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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DRILL STEM TEST REPORT

GAS RATES

O'Brien Resources LLC

S3-19S-17W

PO BOX 6149

Shreveport LA

71136+6149

ATTN: Steve Harris/ Jim C.

Moeder 3 #2

Job Ticket: 63501

DST#: 1

Test Start: 2017.02.09 @ 01:43:00

Gas Rates Information

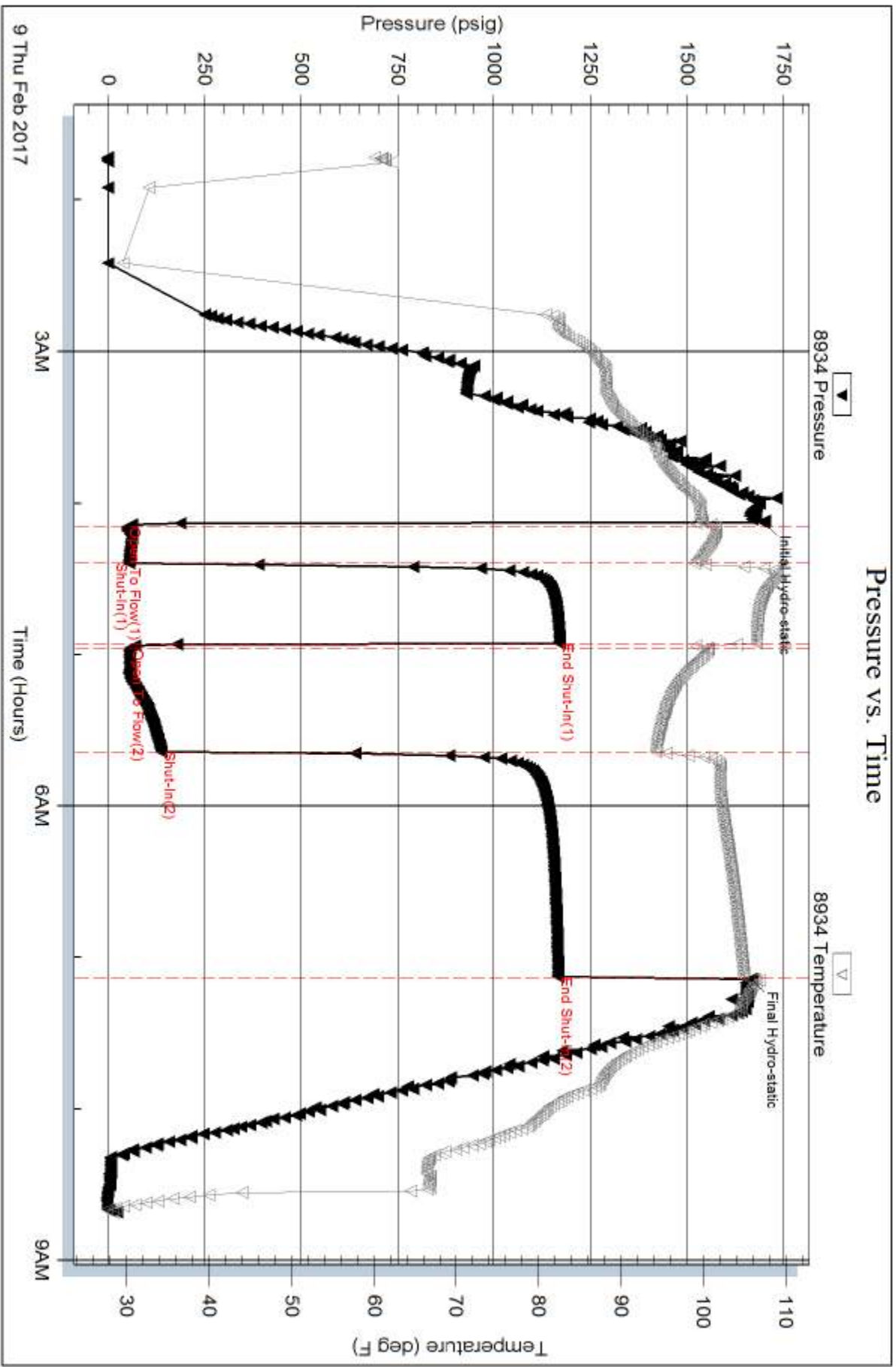
Temperature: 59 (deg F)

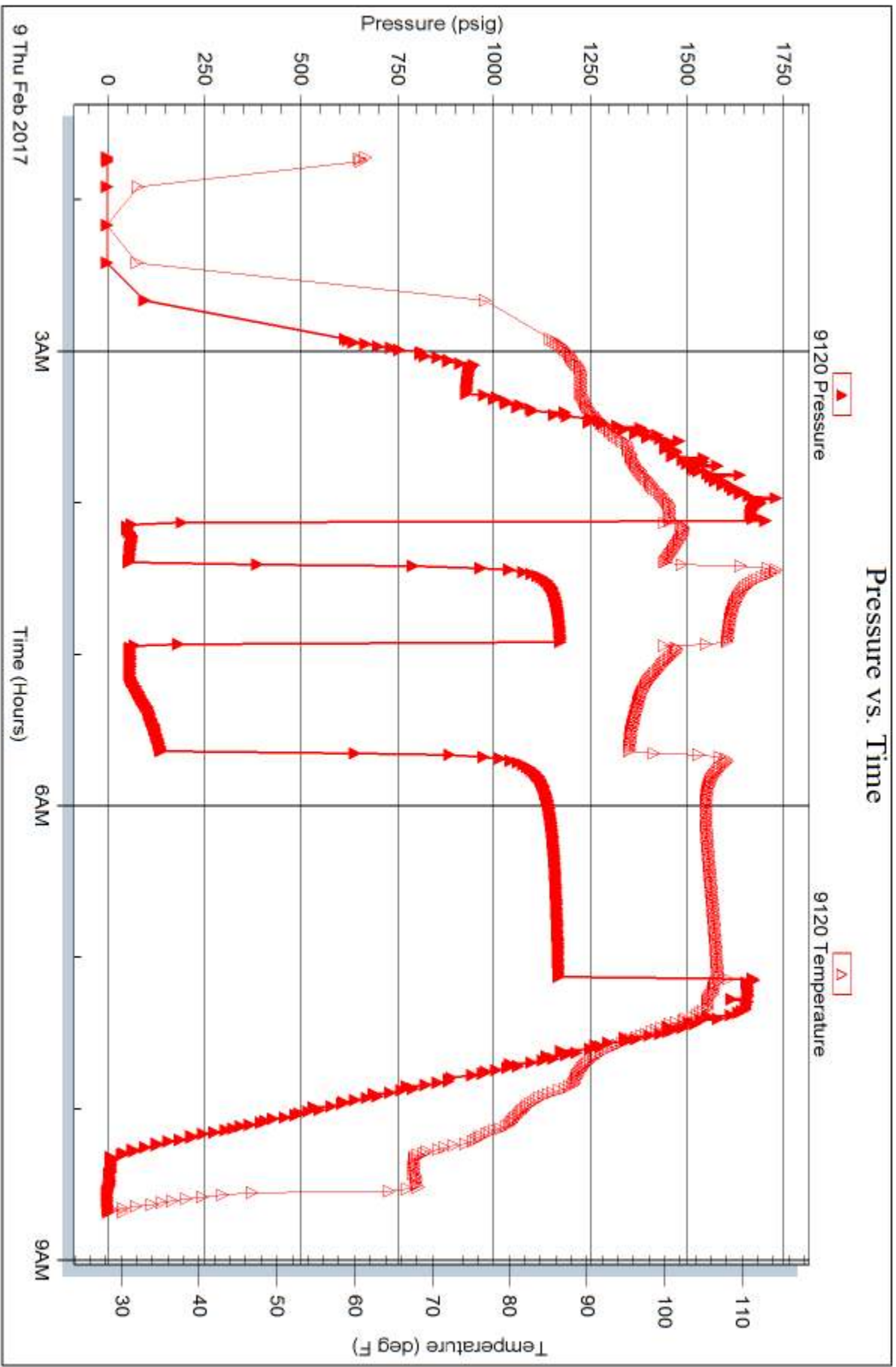
Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.25	17.00	49.81
2	20	0.25	14.00	45.05
2	30	0.25	12.00	41.88
2	40	0.25	11.00	40.30







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O'Brien Resources LLC

S3-19S-17W

PO BOX 6149
Shreveport LA
71136+6149
ATTN: Steve Harris/ Jim C.

Moeder 3 #2

Job Ticket: 63502

DST#: 2

Test Start: 2017.02.10 @ 13:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:39:30

Time Test Ended: 20:08:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Spencer J. Staab

Unit No: 84

Interval: 3778.00 ft (KB) To 3841.00 ft (KB) (TVD)

Reference Elevations: 2109.00 ft (KB)

Total Depth: 3841.00 ft (KB) (TVD)

2101.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8934 Outside

Press@RunDepth: 109.63 psig @ 3779.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.02.10 End Date: 2017.02.10

Last Calib.: 2017.02.10

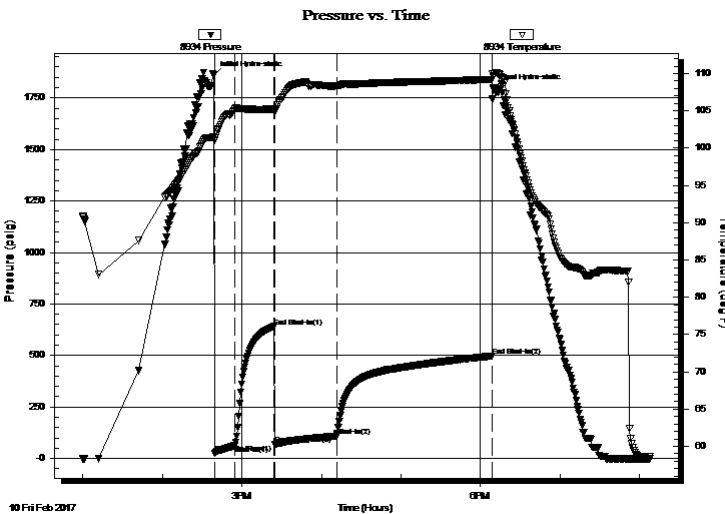
Start Time: 13:00:05 End Time: 20:07:59

Time On Btm: 2017.02.10 @ 14:39:00

Time Off Btm: 2017.02.10 @ 18:09:30

TEST COMMENT: 15-IF-BOB in 10 minutes
30-ISI-No Blow Back
45-FF-BOB in 9 minutes
120-FSI-No Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1860.60	101.57	Initial Hydro-static
1	24.41	100.98	Open To Flow (1)
16	62.77	105.28	Shut-In(1)
46	639.22	105.25	End Shut-In(1)
46	69.21	105.07	Open To Flow (2)
93	109.63	108.37	Shut-In(2)
210	497.42	109.24	End Shut-In(2)
211	1796.96	109.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	GOCM 5% G 40% O 55% M	0.86
63.00	GOCM 10% G 20% O 70% M	0.88
63.00	GMCO 15% G 55% O 30% M	0.88
63.00	GMCO 25% G 45% O 30% M	0.88

* Recovery from multiple tests

Gas Rates

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



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ATTN: Steve Harris/ Jim C.

Moeder 3 #2

Job Ticket: 63502

DST#: 2

Test Start: 2017.02.10 @ 13:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:39:30

Time Test Ended: 20:08:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Spencer J. Staab

Unit No: 84

Interval: **3778.00 ft (KB) To 3841.00 ft (KB) (TVD)**

Reference Elevations: 2109.00 ft (KB)

Total Depth: 3841.00 ft (KB) (TVD)

2101.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 9120 Inside

Press@RunDepth: psig @ 3779.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.02.10

End Date:

2017.02.10

Last Calib.:

2017.02.10

Start Time: 13:00:15

End Time:

20:08:00

Time On Btm:

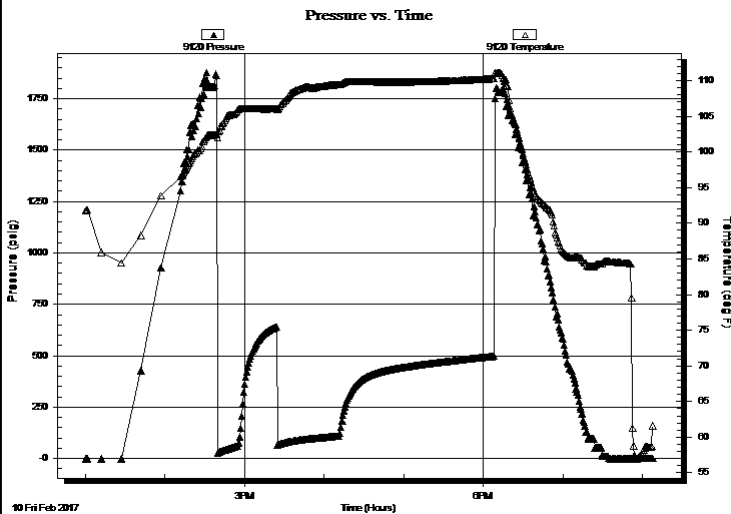
Time Off Btm:

TEST COMMENT: 15-IF-BOB in 10 minutes

30-ISI-No Blow Back

45-FF-BOB in 9 minutes

120-FSI-No Blow Back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
61.00	GOCM 5% G 40% O 55% M	0.86
63.00	GOCM 10% G 20% O 70% M	0.88
63.00	GMCO 15% G 55% O 30% M	0.88
63.00	GMCO 25% G 45% O 30% M	0.88

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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PO BOX 6149
Shreveport LA
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Moeder 3 #2

Job Ticket: 63502

DST#: 2

ATTN: Steve Harris/ Jim C.

Test Start: 2017.02.10 @ 13:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

47 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
61.00	GOCM 5% G 40% O 55% M	0.856
63.00	GOCM 10% G 20%O 70%M	0.884
63.00	GMCO 15%G 55% O 30%M	0.884
63.00	GMCO 25%G 45% O 30%M	0.884

Total Length: 250.00 ft

Total Volume: 3.508 bbl

Num Fluid Samples: 0

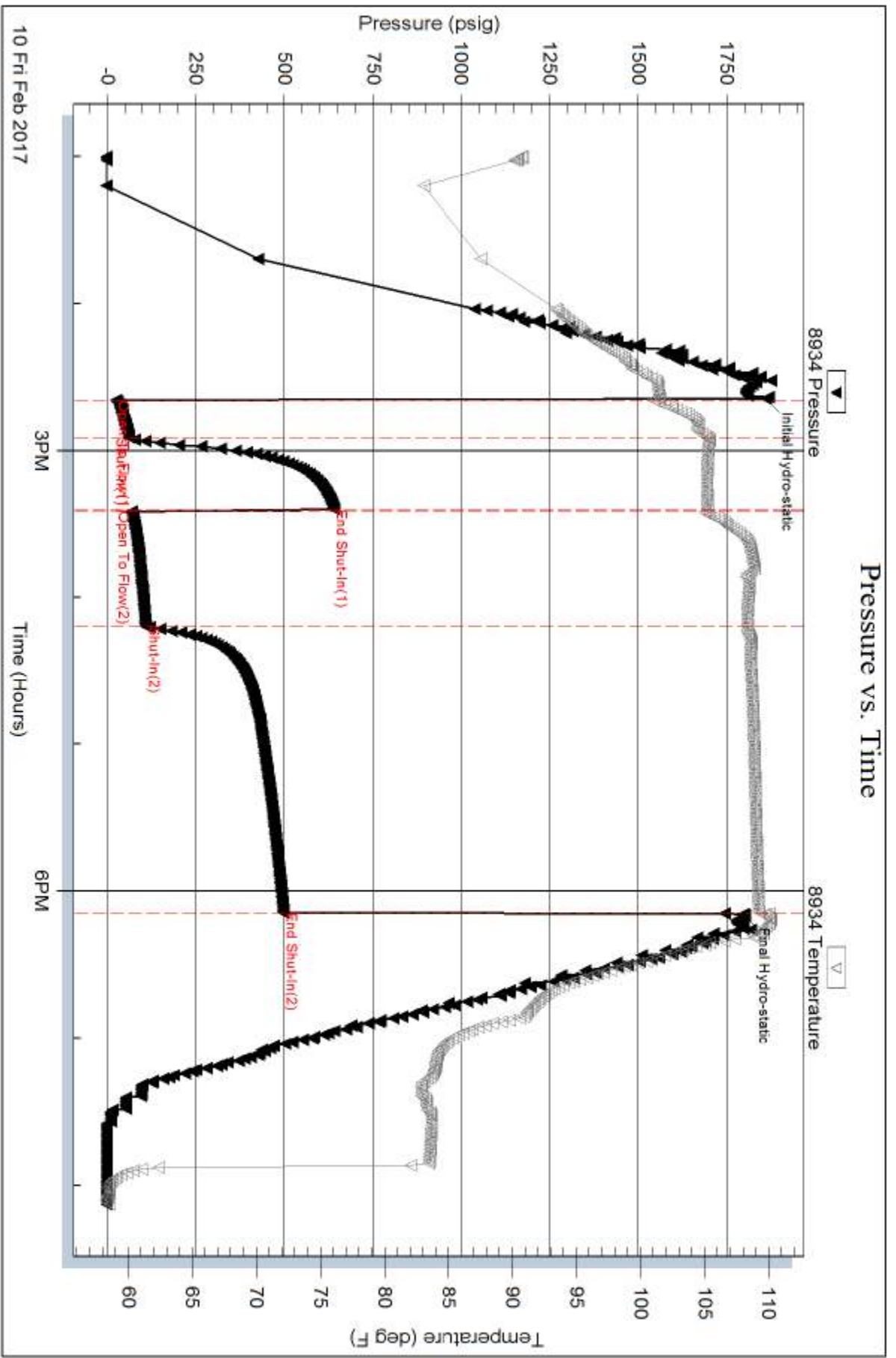
Num Gas Bombs: 0

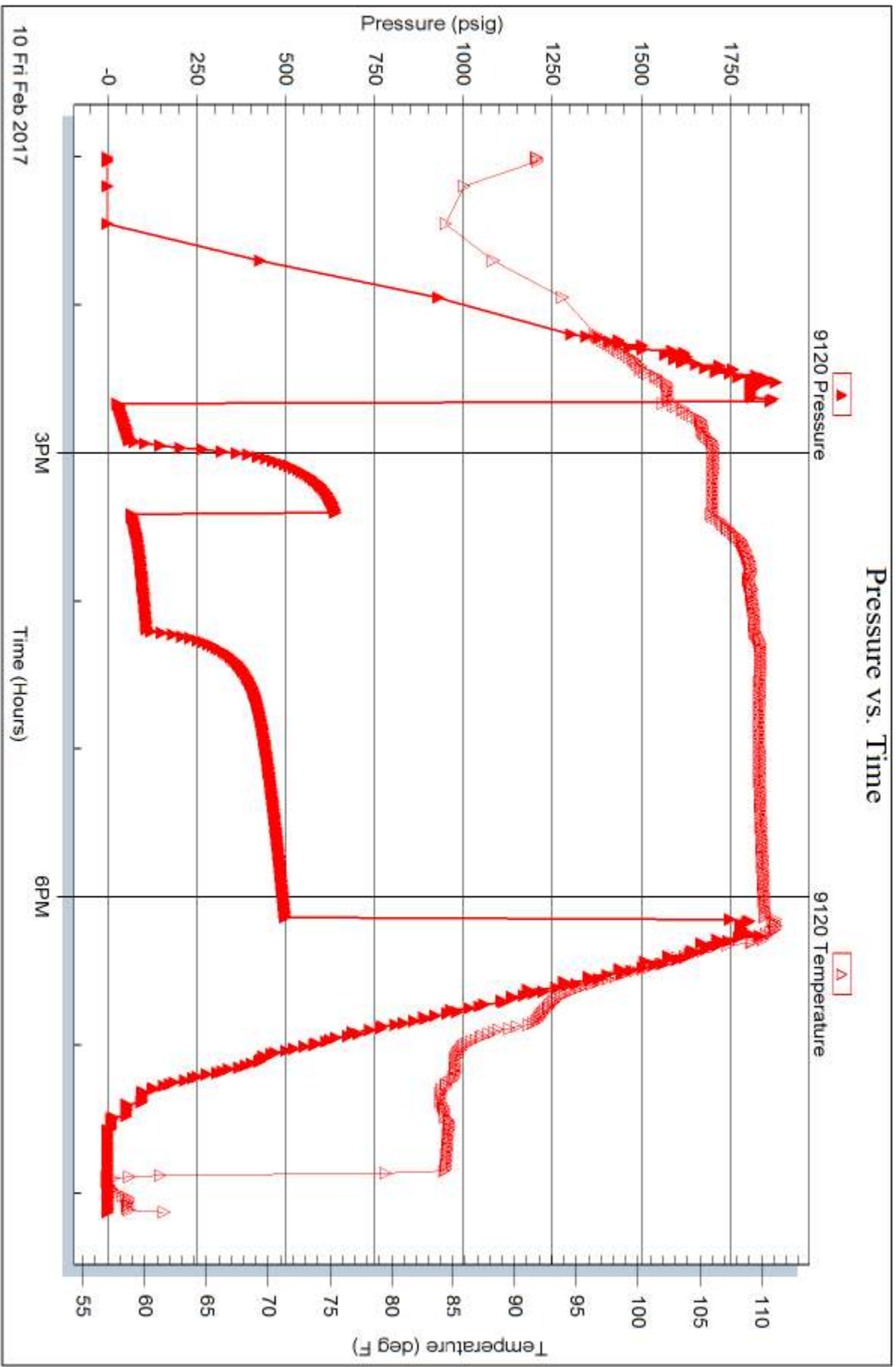
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







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O'Brien Resources LLC

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PO BOX 6149
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71136+6149
ATTN: Steve Harris/ Jim C.

Moeder 3 #2

Job Ticket: 63503

DST#: 3

Test Start: 2017.02.11 @ 02:13:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:57:15

Time Test Ended: 09:56:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Spencer J. Staab

Unit No: 84

Interval: 3778.00 ft (KB) To 3849.00 ft (KB) (TVD)

Reference Elevations: 2109.00 ft (KB)

Total Depth: 3849.00 ft (KB) (TVD)

2101.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8934 Outside

Press@RunDepth: 148.53 psig @ 3783.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.02.11

End Date:

2017.02.11

Last Calib.:

2017.02.11

Start Time: 02:13:05

End Time:

09:56:29

Time On Btm:

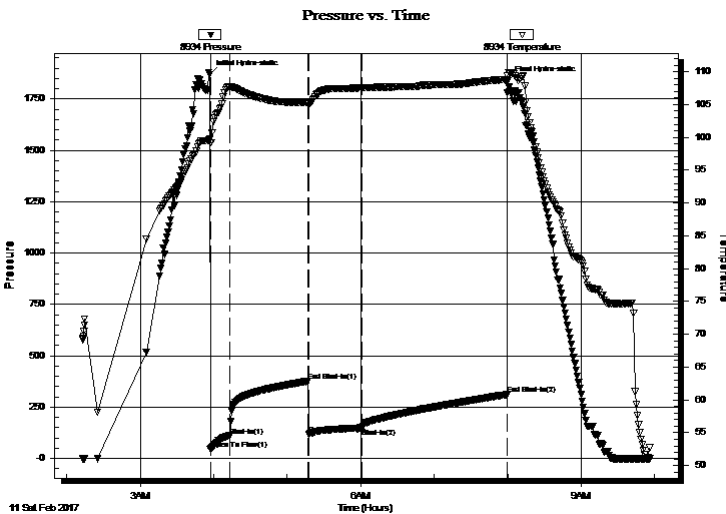
2017.02.11 @ 03:56:45

Time Off Btm:

2017.02.11 @ 08:00:00

TEST COMMENT: 15-IF-BOB in 3 minutes
30-ISI-Very Weak Blow Back; built from a surface blow to 1/4 inch
45-FF-BOB in 9 minutes
120-FSI-No Blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1867.94	99.70	Initial Hydro-static
1	43.52	99.22	Open To Flow (1)
16	109.74	107.66	Shut-In(1)
81	376.62	105.29	End Shut-In(1)
81	119.04	105.19	Open To Flow (2)
125	148.53	107.57	Shut-In(2)
243	310.84	108.85	End Shut-In(2)
244	1839.85	109.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Clean Oil 100% O	0.42
160.00	GMCO 15% G 40%M 45%O	2.24
110.00	GMCO 20%G 40%M 40%O	1.54
140.00	Muddy Gassy Oil 20%M 40%G 40%O	1.96

* Recovery from multiple tests

Gas Rates

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



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Job Ticket: 63503

DST#: 3

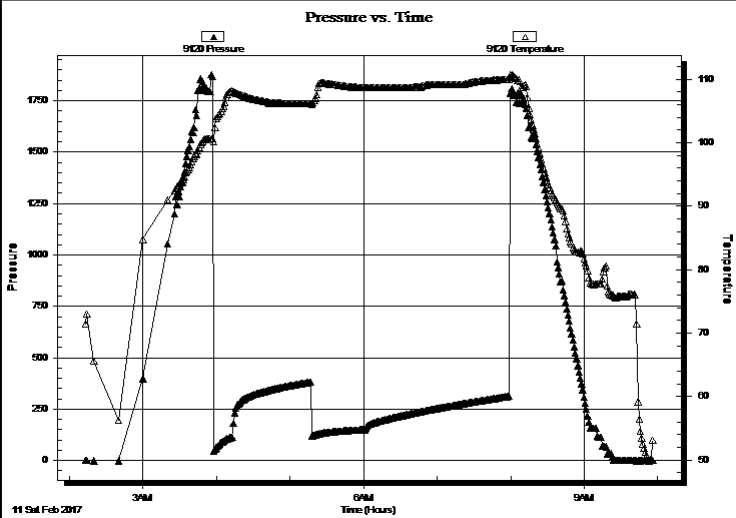
Test Start: 2017.02.11 @ 02:13:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 03:57:15 Tester: Spencer J. Staab
 Time Test Ended: 09:56:30 Unit No: 84
 Interval: **3778.00 ft (KB) To 3849.00 ft (KB) (TVD)** Reference Elevations: 2109.00 ft (KB)
 Total Depth: 3849.00 ft (KB) (TVD) 2101.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 9120 Inside
 Press@RunDepth: psig @ 3783.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.02.11 End Date: 2017.02.11 Last Calib.: 2017.02.11
 Start Time: 02:13:15 End Time: 09:56:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: 15-IF-BOB in 3 minutes
 30-ISI-Very Weak Blow Back; built from a surface blow to 1/4 inch
 45-FF-BOB in 9 minutes
 120-FSI-No Blow back



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

Recovery		
Length (ft)	Description	Volume (bbl)
30.00	Clean Oil 100% O	0.42
160.00	GMCO 15% G 40%M 45%O	2.24
110.00	GMCO 20%G 40%M 40%O	1.54
140.00	Muddy Gassy Oil 20%M 40%G 40%O	1.96

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

* Recovery from multiple tests



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Moeder 3 #2

Job Ticket: 63503

DST#: 3

ATTN: Steve Harris/ Jim C.

Test Start: 2017.02.11 @ 02:13:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 50.00 sec/qt
Water Loss: 9.19 in³
Resistivity: ohm.m
Salinity: 5100.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 47 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Clean Oil 100% O	0.421
160.00	GMCO 15% G 40%M 45%O	2.244
110.00	GMCO 20%G 40%M 40%O	1.543
140.00	Muddy Gassy Oil 20%M 40%G 40%O	1.964

Total Length: 440.00 ft Total Volume: 6.172 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

