



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

O'Brien Resources L.L.C

S33-18S-17W

PO Box 6149
Shreveport LA, 71136+6149

Besperat #33-1

Job Ticket: 61870

DST#: 1

ATTN: Jim Musgrove/ Steve

Test Start: 2016.12.20 @ 01:28:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:26:00

Time Test Ended: 08:30:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Spencer J. Staab

Unit No: 84

Interval: 3811.00 ft (KB) To 3819.00 ft (KB) (TVD)

Reference Elevations: 2068.00 ft (KB)

Total Depth: 3819.00 ft (KB) (TVD)

2060.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8368

Inside

Press@RunDepth: 43.14 psig @ 3819.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.12.20 End Date: 2016.12.20

Last Calib.: 2016.12.20

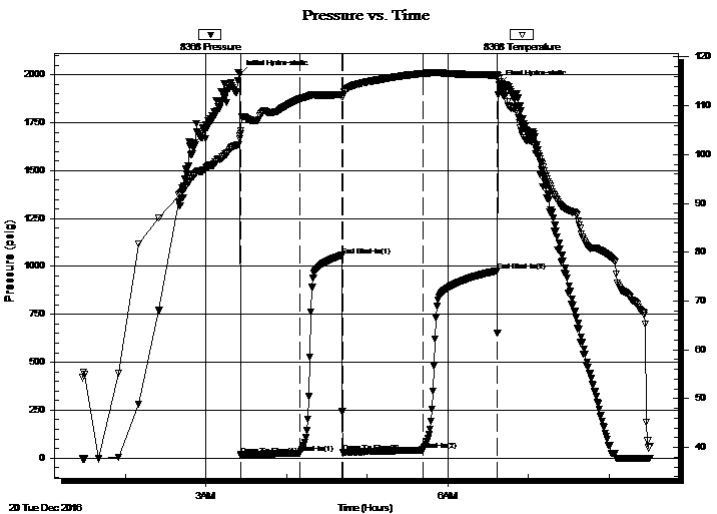
Start Time: 01:28:15 End Time: 08:30:45

Time On Btm: 2016.12.20 @ 03:25:15

Time Off Btm: 2016.12.20 @ 06:38:15

TEST COMMENT: 45-IF-Fair Blow ; Built slow ly to 7 inches
30-ISI-No Blow Back
60-FF-Fair Blow ; Built very slow ly to 8 inches
60-FSI-No Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2000.17	103.91	Initial Hydro-static
1	15.33	104.92	Open To Flow (1)
45	25.38	111.42	Shut-In(1)
76	1057.80	112.26	End Shut-In(1)
77	30.47	111.99	Open To Flow (2)
136	43.14	116.60	Shut-In(2)
192	976.97	116.29	End Shut-In(2)
193	1948.38	114.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	OCM45% O 55% M	0.42
60.00	Clean Oil 100% O	0.84

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Resources L.L.C

S33-18S-17W

PO Box 6149
Shreveport LA, 71136+6149

Besperat #33-1

Job Ticket: 61870

DST#: 1

ATTN: Jim Musgrove/ Steve

Test Start: 2016.12.20 @ 01:28:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	OCM 45% O 55% M	0.421
60.00	Clean Oil 100% O	0.842

Total Length: 90.00 ft Total Volume: 1.263 bbl

Num Fluid Samples: 0

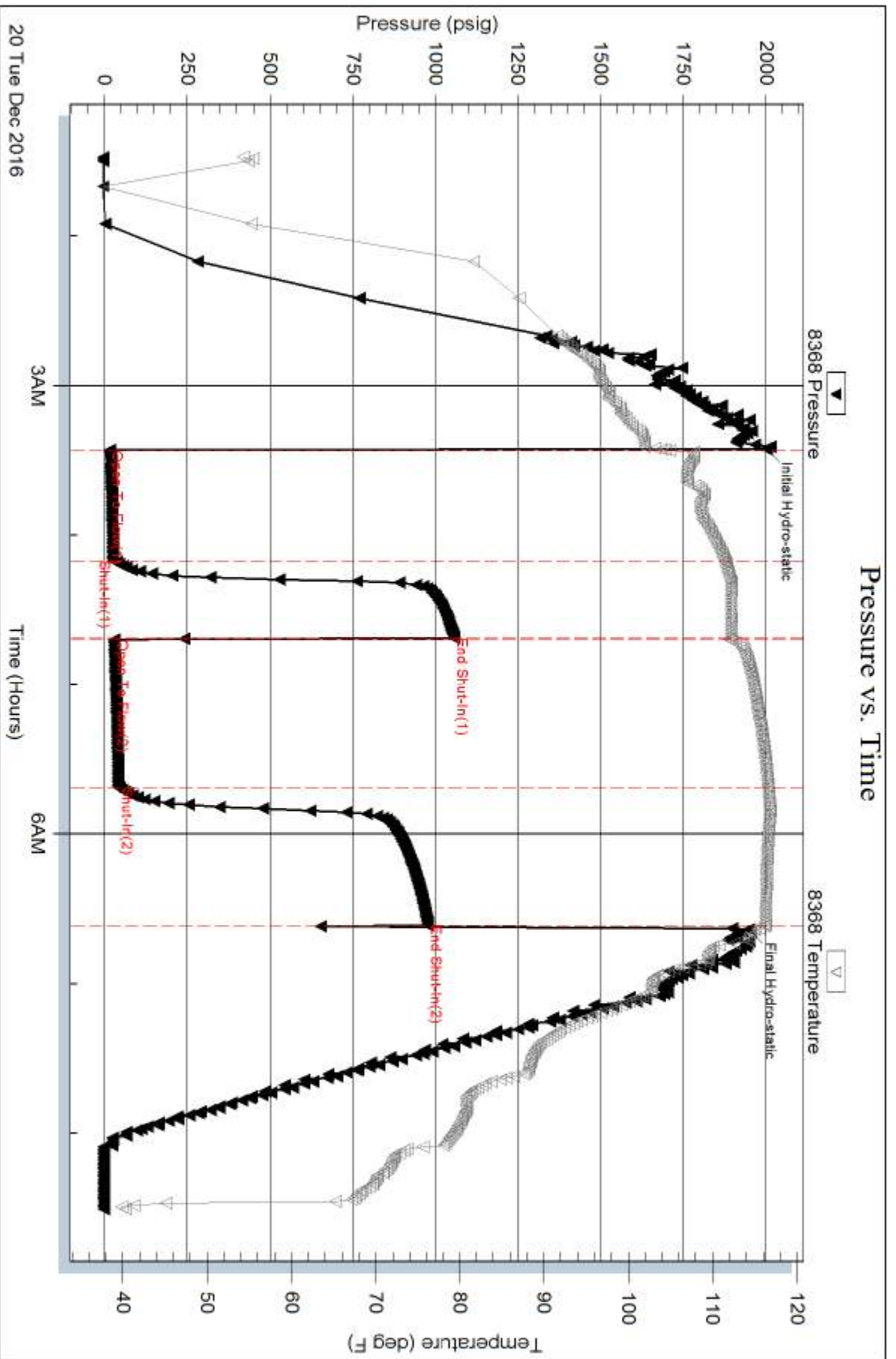
Num Gas Bombs: 0

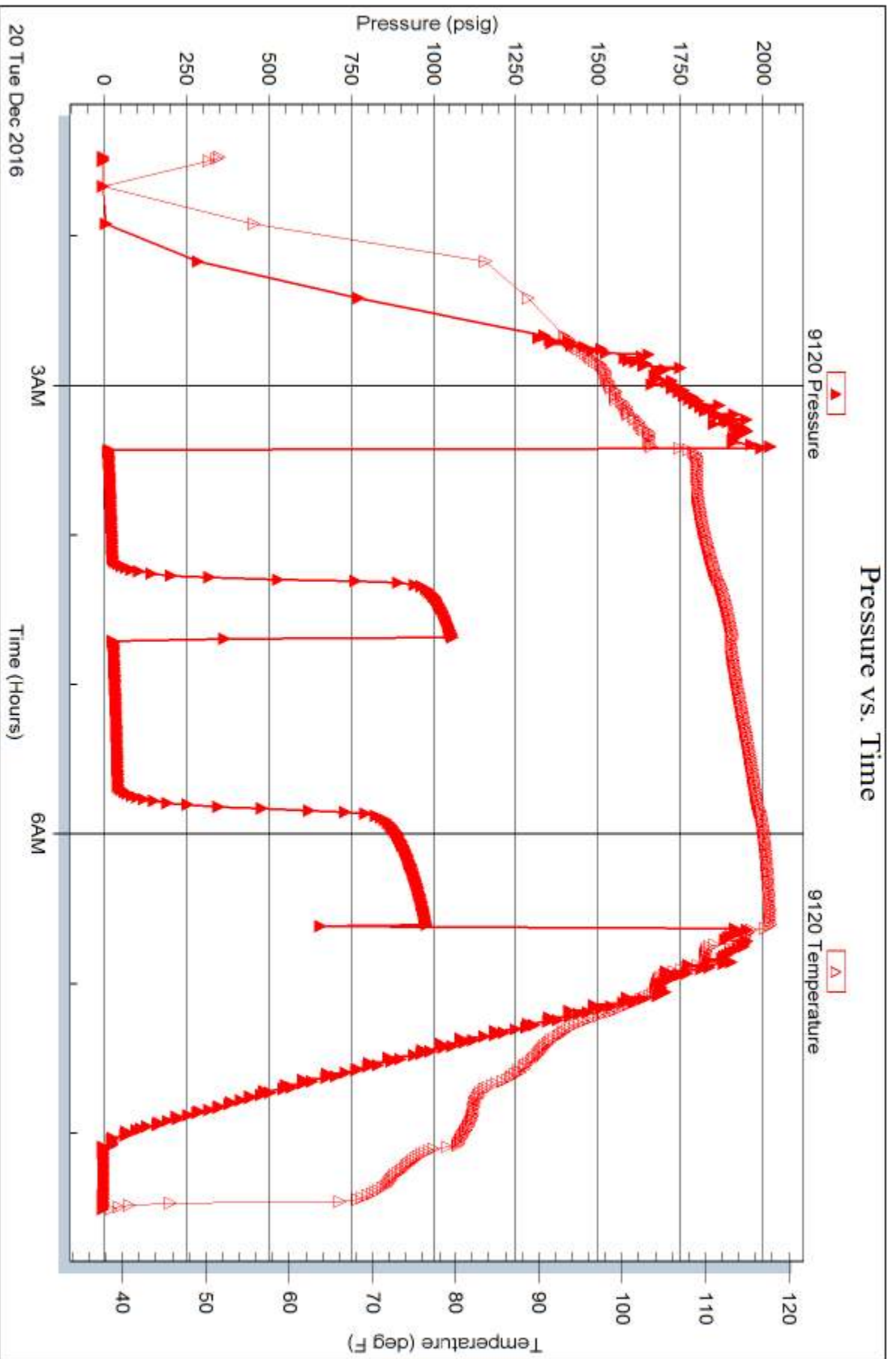
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

O'Brien Resources L.L.C

S33-18S-17W Rush, KS

PO Box 6149
Shreveport LA, 71136+6149

Besperat #33-1

Job Ticket: 61871

DST#: 2

ATTN: Jim Musgrove/ Steve

Test Start: 2016.12.21 @ 01:09:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:24:00

Time Test Ended: 08:53:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Spencer J. Staab

Unit No: 84

Interval: 3811.00 ft (KB) To 3824.00 ft (KB) (TVD)

Reference Elevations: 2068.00 ft (KB)

Total Depth: 3819.00 ft (KB) (TVD)

2060.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8368

Inside

Press@RunDepth: 129.23 psig @ 3816.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.12.21

End Date:

2016.12.21

Last Calib.:

2016.12.21

Start Time: 01:09:15

End Time:

08:53:30

Time On Btm:

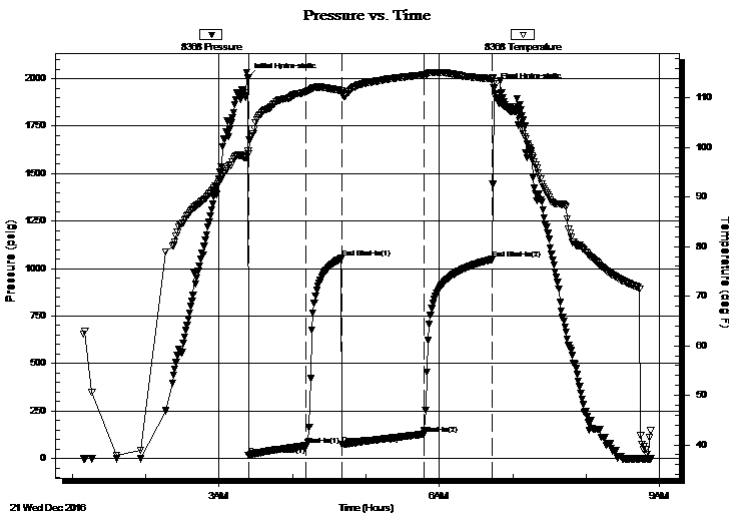
2016.12.21 @ 03:23:45

Time Off Btm:

2016.12.21 @ 06:44:30

TEST COMMENT: 45-IF-BOB in 20 minutes
30-ISI-No Blow Back
60-FF-BOB in 16 minutes
60-FSI-No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2003.80	99.34	Initial Hydro-static
1	15.14	98.80	Open To Flow (1)
48	66.62	111.27	Shut-In(1)
77	1054.05	111.41	End Shut-In(1)
77	72.40	110.95	Open To Flow (2)
144	129.23	114.64	Shut-In(2)
200	1048.09	113.86	End Shut-In(2)
201	1951.79	112.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCM 50% O	0.84
260.00	Clean Gassy Oil 35% G 65% O	3.65

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 Resources L.L.C

S33-18S-17W Rush,KS

PO Box 6149
Shreveport LA, 71136+6149

Besperat #33-1

Job Ticket: 61871

DST#: 2

ATTN: Jim Musgrove/ Steve

Test Start: 2016.12.21 @ 01:09:00

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:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 13.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 11200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCM 50% O	0.842
260.00	Clean Gassy Oil 35% G 65% O	3.647

Total Length: 320.00 ft Total Volume: 4.489 bbl

Num Fluid Samples: 0

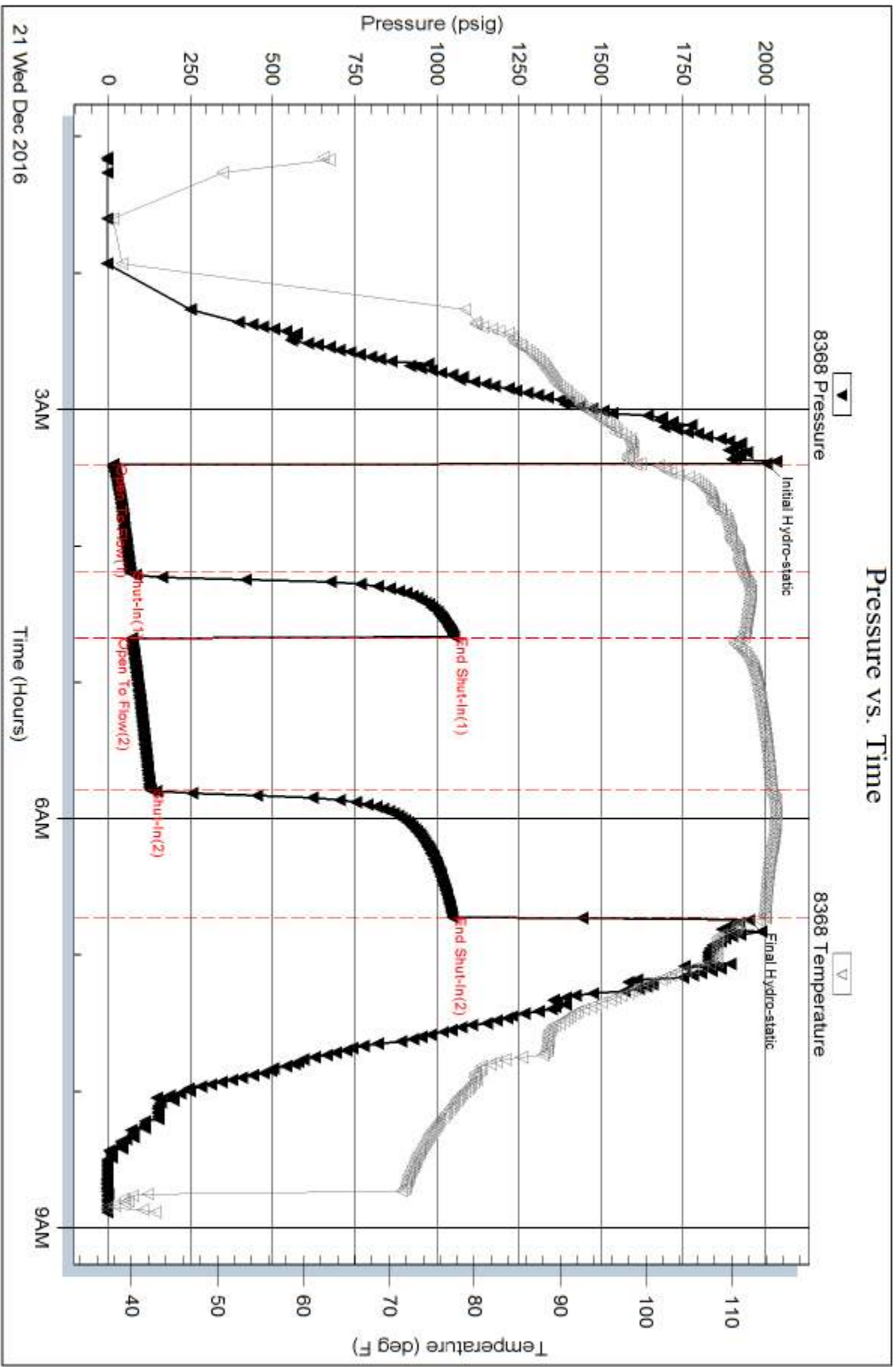
Num Gas Bombs: 0

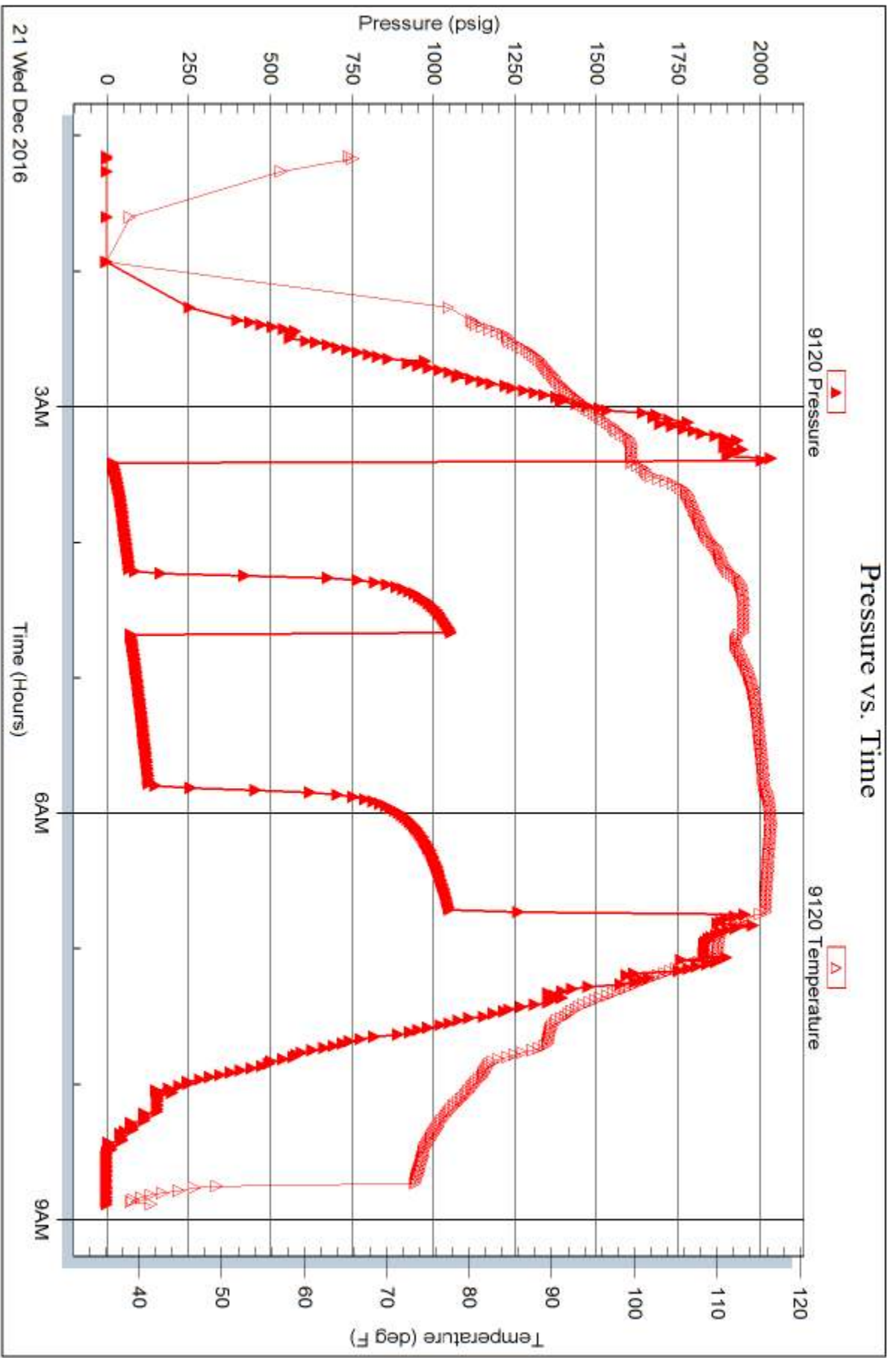
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

O'Brien Resources L.L.C

S33-18S-17W

PO Box 6149
Shreveport LA, 71136+6149

Besperat #33-1

Job Ticket: 61872

DST#: 3

ATTN: Jim Musgrove/ Steve

Test Start: 2016.12.21 @ 18:50:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:45:15

Time Test Ended: 02:21:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Spencer J. Staab

Unit No: 84

Interval: 3811.00 ft (KB) To 3836.00 ft (KB) (TVD)

Reference Elevations: 2068.00 ft (KB)

Total Depth: 3836.00 ft (KB) (TVD)

2060.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8368

Inside

Press@RunDepth: 200.98 psig @ 3816.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.12.21

End Date:

2016.12.22

Last Calib.:

2016.12.22

Start Time:

18:50:15

End Time:

02:21:30

Time On Btm:

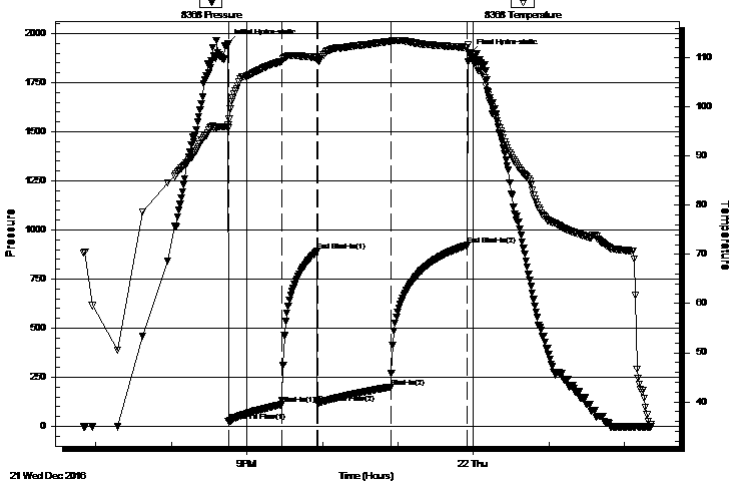
2016.12.21 @ 20:45:00

Time Off Btm:

2016.12.21 @ 23:57:15

TEST COMMENT: 45-IF-BOB in 7 minutes
30-ISI-Fair Blow ; built to 3 inches
60-FF-BOB in 6 minutes
60-FSI-Weak Blow ; built to 3/4 inch

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1946.26	96.39	Initial Hydro-static
1	24.98	95.79	Open To Flow (1)
43	111.56	109.23	Shut-In(1)
71	890.80	110.05	End Shut-In(1)
71	117.72	109.70	Open To Flow (2)
130	200.98	113.33	Shut-In(2)
190	922.09	112.09	End Shut-In(2)
193	1895.99	110.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MCO 30% M 70% O	1.68
404.00	Clean Gassy Oil 25% G 75% O	5.67

* 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 Resources L.L.C

S33-18S-17W

PO Box 6149
Shreveport LA, 71136+6149

Besperat #33-1

Job Ticket: 61872

DST#: 3

ATTN: Jim Musgrove/ Steve

Test Start: 2016.12.21 @ 18:50:00

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:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 12.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 12100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	MCO 30% M 70%O	1.683
404.00	Clean Gassy Oil 25% G 75% O	5.667

Total Length: 524.00 ft

Total Volume: 7.350 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

