



**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date      Date Reached TD      Completion Date or Recompletion Date

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1105988

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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# GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOGS

<p>COMPANY: <b>BOB West L &amp; C</b></p> <p>LEASE: <b>Lan Meter # 20-1</b></p> <p>FIELD: _____</p> <p>LOCATION: <b>2,003' FSL # 2185' FSL</b></p> <p>SEC: <b>20</b> TWP: <b>16 S</b> RGF: <b>1 W</b></p> <p>COUNTY: <b>Saline</b> STATE: <b>KS</b></p> <p>CONTRACTOR: <b>C &amp; G Drilling Co</b></p> <p>SPUD: <b>10/30/12</b> COMP: <b>11/6/12</b></p> <p>R/D: <b>2710'</b> LTD: <b>2710'</b></p> <p>MAID UP: <b>1700'</b> TYPE MUD: <b>Chem</b></p> <p>DI/ELECTRICAL SURVEYS: <b>DI/CND</b></p>	<p>ELEVATIONS</p> <p>KB: <b>1328'</b></p> <p>DF: _____</p> <p>GL: <b>1319'</b></p> <p>FROM: _____</p> <p>TO: _____</p> <p>CASING: _____</p> <p>MEASUREMENTS ARE ALL _____</p> <p>PRODUCTION: <b>5% @ 2700'</b></p>
<p>SAMPLES SAVED FROM: <b>1700'</b> TO: <b>RTD</b></p> <p>DRILLING TIME KEPT FROM: <b>1700'</b> TO: <b>RTD</b></p> <p>SAMPLES EXAMINED FROM: <b>1700'</b> TO: <b>RTD</b></p> <p>GEOLOGICAL SUPERVISION FROM: <b>1700'</b> TO: <b>RTD</b></p> <p>GEOLOGIST ON WELL: <b>Ken Wallace</b></p>	<p>FORMATION TOPS</p> <p>LOG</p> <p>SAMPLES</p>

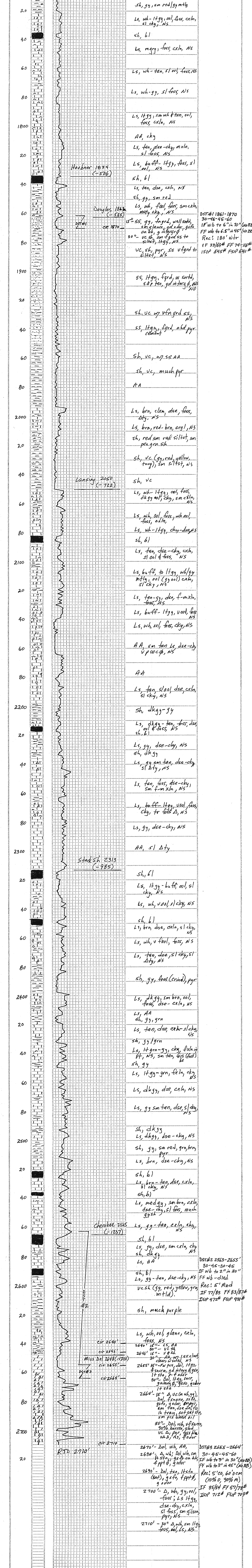
REMARKS: **Good shows observed in Miss. DST #3 recovered so. Pipe set to further evaluate.**

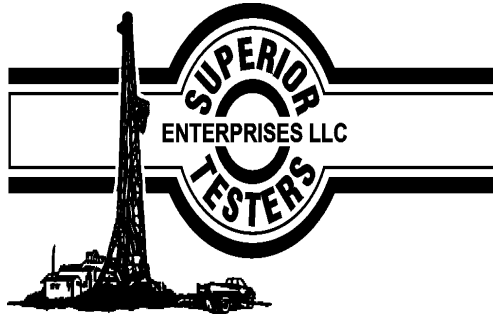
*Ken Wallace*

**LEGEND**

Anhydrite	Soft	Sandstone	Shale	Carb sh	Limestone	Ool.Lime	Chert	Dolomite

**SCALE " = 100'**





## DRILL STEM TEST REPORT

Prepared For: **BOP West L.L.C**

Po Box 129 Wooster OH 44691

ATTN: Ken Wallace

**Van Meter#20-1**

**20-16-1 Saline**

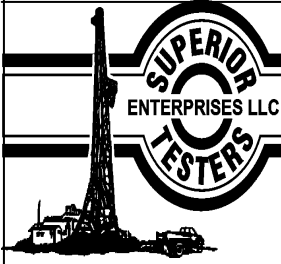
Start Date: 2012.11.02 @ 02:40:00

End Date: 2012.11.02 @ 09:14:30

Job Ticket #: 16891                      DST #: 1

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2012.11.02 @ 09:31:34



# DRILL STEM TEST REPORT

BOP West L.L.C  
 Po Box 129 Wooster OH 44691  
 ATTN: Ken Wallace

**20-16-1 Saline**  
**Van Meter#20-1**  
 Job Ticket: 16891 **DST#: 1**  
 Test Start: 2012.11.02 @ 02:40:00

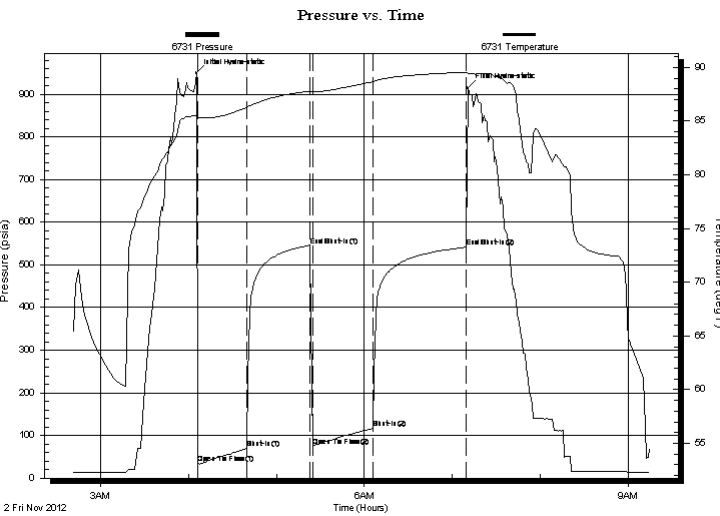
## GENERAL INFORMATION:

Formation: **Douglas**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 04:06:30 Tester: Jared Scheck  
 Time Test Ended: 09:14:30 Unit No: 3320-220-Great Bend  
 Interval: **1861.00 ft (KB) To 1870.00 ft (KB) (TVD)** Reference Elevations: 1325.00 ft (KB)  
 Total Depth: 1870.00 ft (KB) (TVD) 1319.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 6.00 ft

## Serial #: 6731

Press@RunDepth: 116.21 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.11.02 End Date: 2012.11.02 Last Calib.: 2012.11.02  
 Start Time: 02:40:00 End Time: 09:14:30 Time On Btm: 2012.11.02 @ 04:05:30  
 Time Off Btm: 2012.11.02 @ 07:10:30

**TEST COMMENT:** 1st Opening 30 Minutes-Weak blow built 6 inches into bucket w ater in 30 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 45 Minutes-Weak blow built 6 1/2 inches into bucket w ater in 45 minutes  
 2nd Shut-in 60 Minutes-No blow back



## PRESSURE SUMMARY

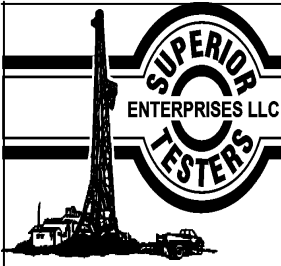
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	949.70	85.49	Initial Hydro-static
1	33.60	85.31	Open To Flow (1)
34	69.02	86.23	Shut-In(1)
78	545.78	87.78	End Shut-In(1)
79	74.41	87.70	Open To Flow (2)
120	116.21	88.66	Shut-In(2)
184	541.37	89.53	End Shut-In(2)
185	914.74	89.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	Water 95%w ater 5%mud	0.89
0.00	Chlorides 100,000 resistivity .1@65deg	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

BOP West L.L.C  
 Po Box 129 Wooster OH 44691  
 ATTN: Ken Wallace

**20-16-1 Saline**  
**Van Meter#20-1**  
 Job Ticket: 16891 **DST#: 1**  
 Test Start: 2012.11.02 @ 02:40:00

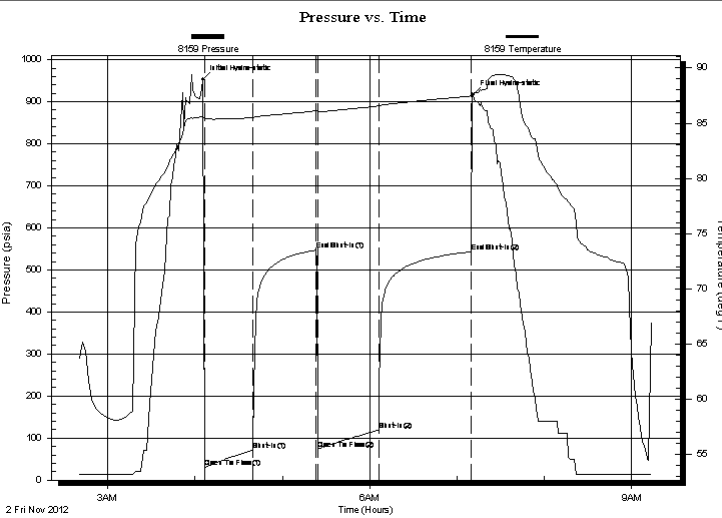
## GENERAL INFORMATION:

Formation: **Douglas**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 04:06:30 Tester: Jared Scheck  
 Time Test Ended: 09:14:30 Unit No: 3320-220-Great Bend  
 Interval: **1861.00 ft (KB) To 1870.00 ft (KB) (TVD)** Reference Elevations: 1325.00 ft (KB)  
 Total Depth: 1870.00 ft (KB) (TVD) 1319.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 6.00 ft

## Serial #: 8159

Press@RunDepth: 542.92 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.11.02 End Date: 2012.11.02 Last Calib.: 2012.11.02  
 Start Time: 02:40:00 End Time: 09:14:00 Time On Btm: 2012.11.02 @ 04:05:30  
 Time Off Btm: 2012.11.02 @ 07:11:00

**TEST COMMENT:** 1st Opening 30 Minutes-Weak blow built 6 inches into bucket w ater in 30 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 45 Minutes-Weak blow built 6 1/2 inches into bucket w ater in 45 minutes  
 2nd Shut-in 60 Minutes-No blow back



## PRESSURE SUMMARY

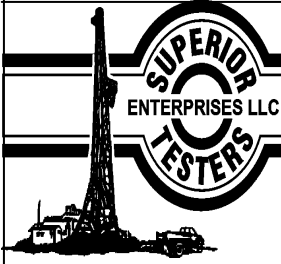
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	952.89	85.58	Initial Hydro-static
2	31.44	85.41	Open To Flow (1)
34	71.28	85.50	Shut-In(1)
78	547.24	86.11	End Shut-In(1)
79	73.95	86.03	Open To Flow (2)
121	118.56	86.55	Shut-In(2)
184	542.92	87.45	End Shut-In(2)
186	915.95	87.72	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	Water 95%w ater 5%mud	0.89
0.00	Chlorides 100,000 resistivity .1@65deg	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

BOP West L.L.C  
 Po Box 129 Wooster OH 44691  
 ATTN: Ken Wallace

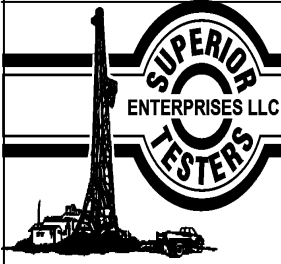
**20-16-1 Saline**  
**Van Meter#20-1**  
 Job Ticket: 16891      **DST#: 1**  
 Test Start: 2012.11.02 @ 02:40:00

**Tool Information**

Drill Pipe:	Length: 1620.00 ft	Diameter: 3.80 inches	Volume: 22.72 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 46000.00 lb
			<u>Total Volume: 23.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	1861.00 ft			Final 20000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	35.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			1840.00	
Hydraulic Tool	5.00			1845.00	
Jars	6.00			1851.00	
Packer	5.00			1856.00	26.00      Bottom Of Top Packer
Packer	5.00			1861.00	
Anchor	4.00			1865.00	
Recorder	1.00	6731	Inside	1866.00	
Recorder	1.00	8159	Outside	1867.00	
Bullnose	3.00			1870.00	9.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>35.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

BOP West L.L.C  
 Po Box 129 Wooster OH 44691  
 ATTN: Ken Wallace

**20-16-1 Saline**  
**Van Meter#20-1**  
 Job Ticket: 16891      **DST#: 1**  
 Test Start: 2012.11.02 @ 02:40:00

### 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: 0.00 sec/qt	Cushion Volume: bbl		
Water Loss: 0.00 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2400.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

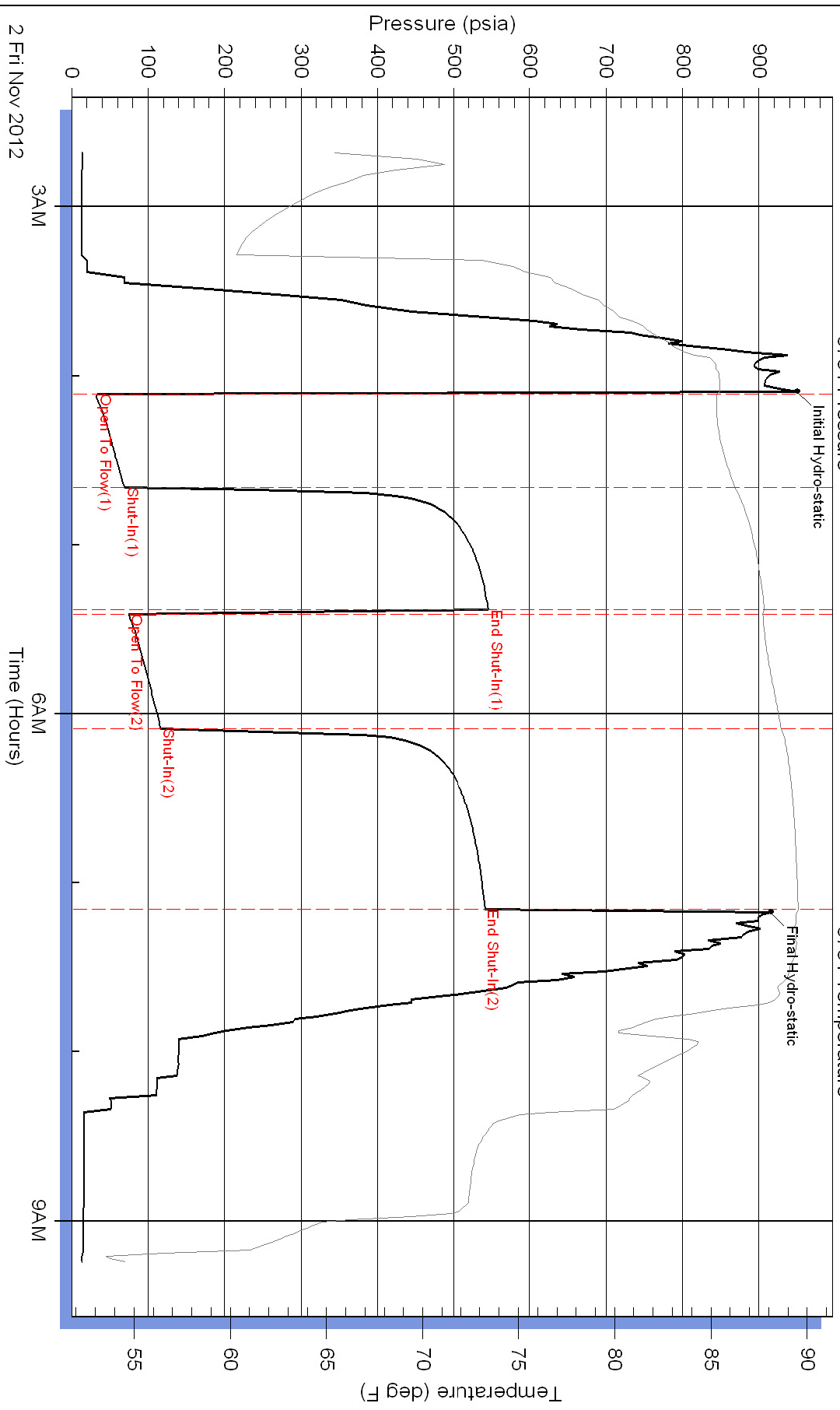
Recovery Table

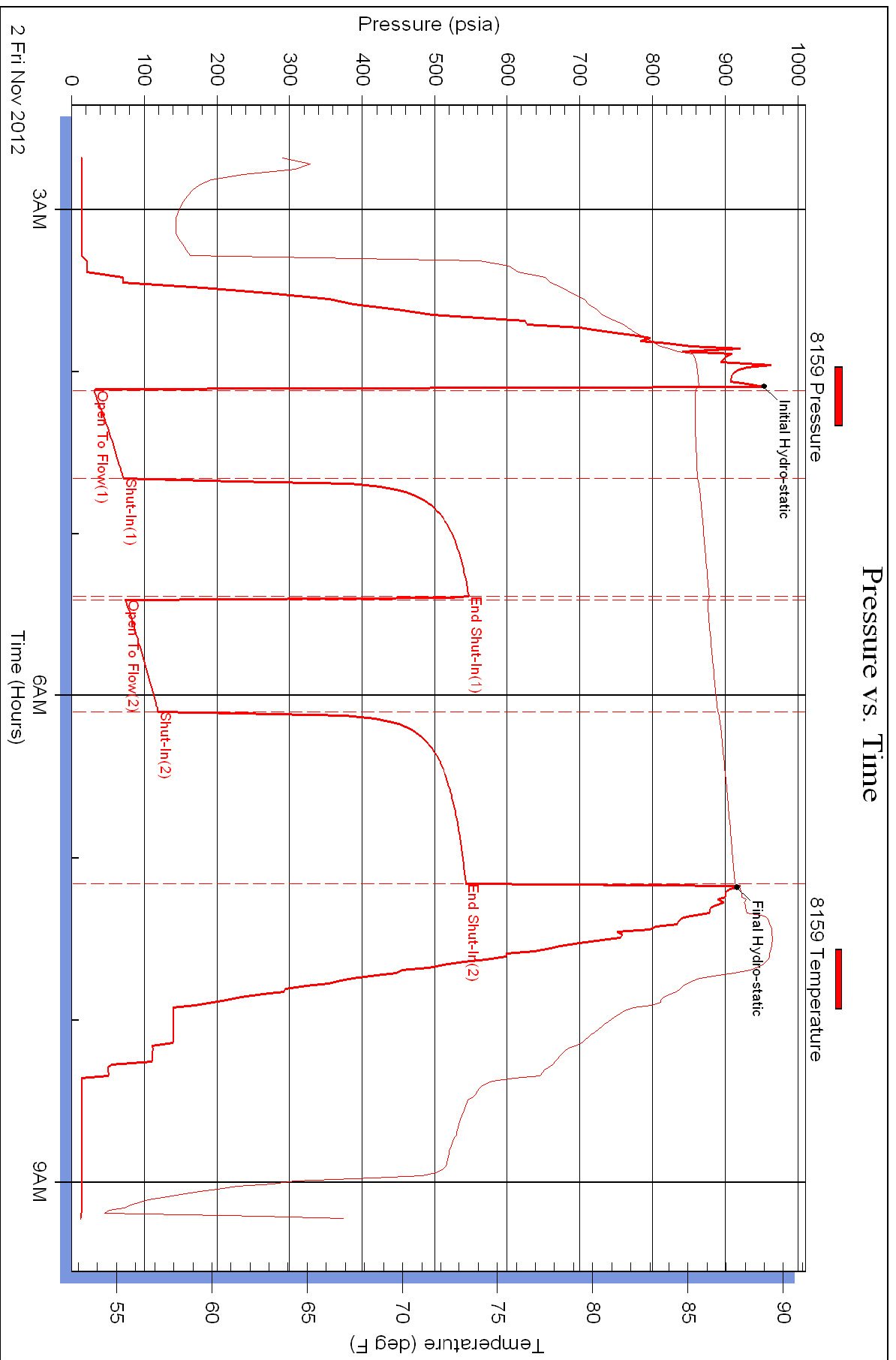
Length ft	Description	Volume bbl
180.00	Water 95%w ater 5%mud	0.885
0.00	Chlorides 100,000 resistivity .1@65deg	0.000

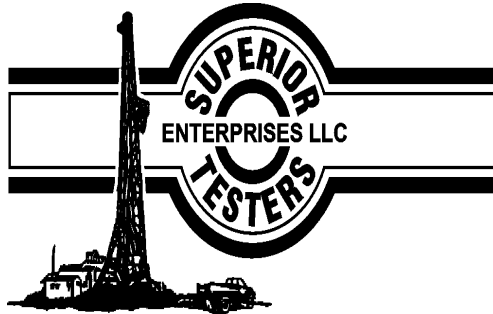
Total Length: 180.00 ft      Total Volume: 0.885 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **BOP West L.L.C**

Po Box 129 Wooster OH 44691

ATTN: Ken Wallace

**Van Meter#20-1**

**20-16-1 Saline**

Start Date: 2012.11.04 @ 11:45:00

End Date: 2012.11.04 @ 18:10:30

Job Ticket #: 16892                      DST #: 2

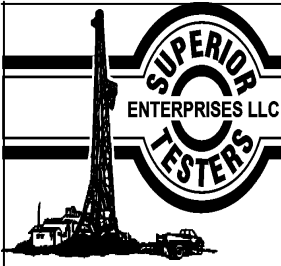
Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2012.11.04 @ 17:56:32

BOP West L.L.C  
20-16-1 Saline  
Van Meter#20-1  
DST # 2  
Mississippi  
2012.11.04







# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

BOP West L.L.C  
 Po Box 129 Wooster OH 44691  
 ATTN: Ken Wallace

**20-16-1 Saline**  
**Van Meter#20-1**  
 Job Ticket: 16892      **DST#: 2**  
 Test Start: 2012.11.04 @ 11:45:00

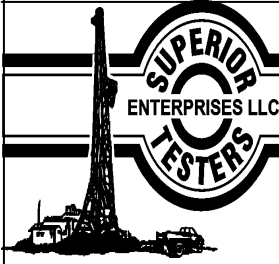
**Tool Information**

Drill Pipe:	Length: 2305.00 ft	Diameter: 3.80 inches	Volume: 32.33 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 56000.00 lb
			<u>Total Volume: 33.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	2563.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	92.00 ft			
Tool Length:	118.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			2542.00	
Hydraulic Tool	5.00			2547.00	
Jars	6.00			2553.00	
Packer	5.00			2558.00	26.00      Bottom Of Top Packer
Packer	5.00			2563.00	
Anchor	0.00			2563.00	
Change Over Sub	0.75			2563.75	
Drill Pipe	63.50			2627.25	
Change Over Sub	0.75			2628.00	
Anchor	22.00			2650.00	
Recorder	1.00	6731	Inside	2651.00	
Recorder	1.00	8159	Outside	2652.00	
Bullnose	3.00			2655.00	92.00      Bottom Packers & Anchor

**Total Tool Length: 118.00**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

BOP West L.L.C

**20-16-1 Saline**

Po Box 129 Wooster OH 44691

**Van Meter#20-1**

Job Ticket: 16892

**DST#:2**

ATTN: Ken Wallace

Test Start: 2012.11.04 @ 11:45:00

### 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: 34.00 sec/qt

Cushion Volume:

bbl

Water Loss: 12.10 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

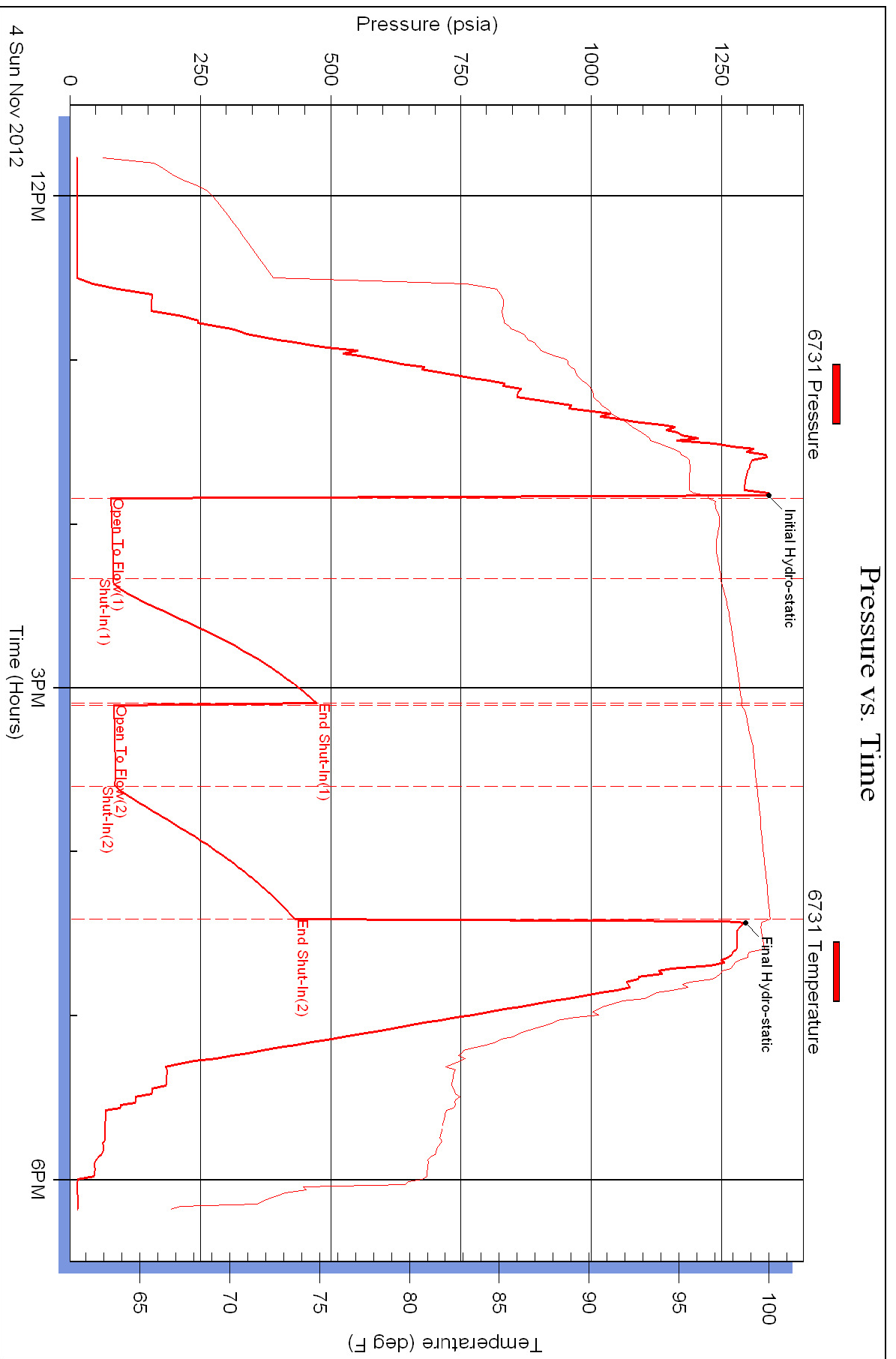
Num Gas Bombs: 0

Serial #:

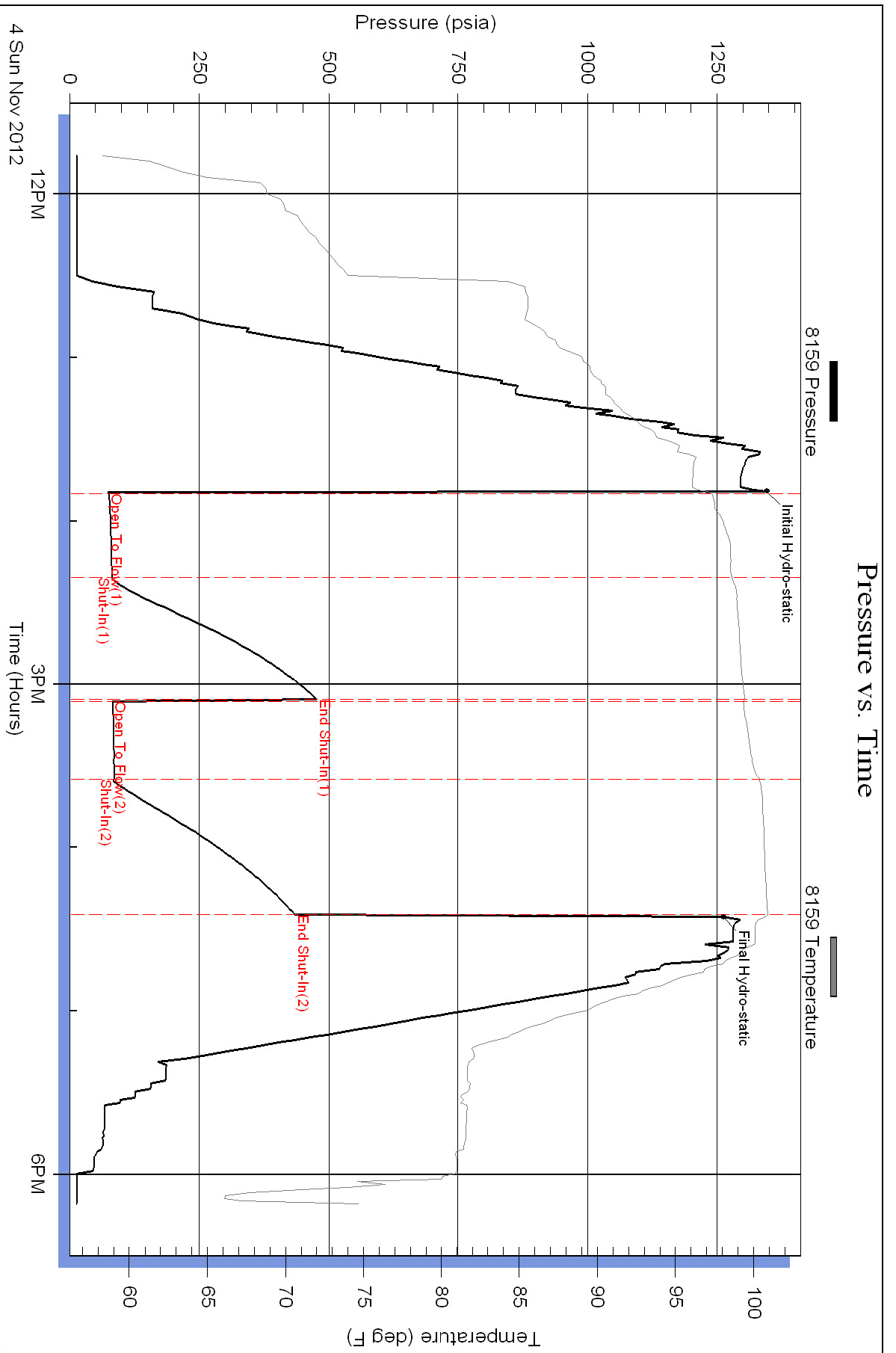
Laboratory Name:

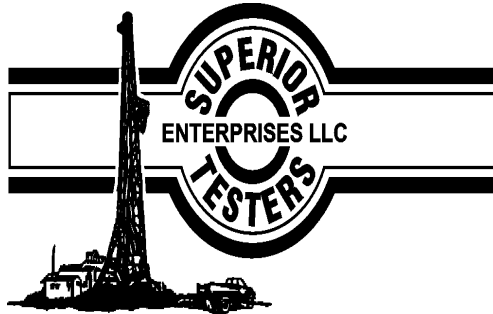
Laboratory Location:

Recovery Comments:









## DRILL STEM TEST REPORT

Prepared For: **BOP West L.L.C**

Po Box 129 Wooster OH 44691

ATTN: Ken Wallace

**Van Meter#20-1**

**20-16-1 Saline**

Start Date: 2012.11.04 @ 23:15:00

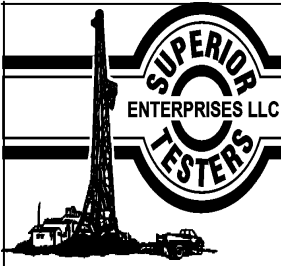
End Date: 2012.11.05 @ 05:49:00

Job Ticket #: 16893                      DST #: 3

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2012.11.05 @ 05:41:41

BOP West L.L.C  
20-16-1 Saline  
Van Meter#20-1  
DST # 3  
Mississippi  
2012.11.04



# DRILL STEM TEST REPORT

BOP West L.L.C  
 Po Box 129 Wooster OH 44691  
 ATTN: Ken Wallace

**20-16-1 Saline**  
**Van Meter#20-1**  
 Job Ticket: 16893 **DST#: 3**  
 Test Start: 2012.11.04 @ 23:15:00

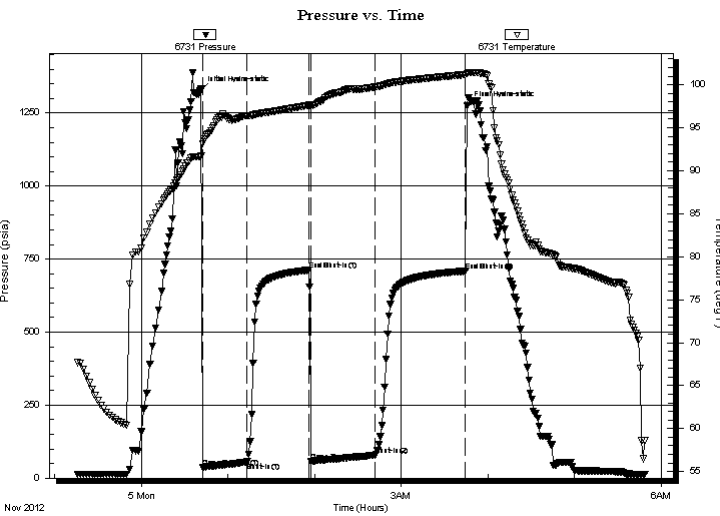
## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:42:30  
 Time Test Ended: 05:49:00  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 3320-Great Bend-240  
 Interval: **2655.00 ft (KB) To 2664.00 ft (KB) (TVD)**  
 Reference Elevations: 1325.00 ft (KB)  
 Total Depth: 2664.00 ft (KB) (TVD)  
 1319.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 6.00 ft

## Serial #: 6731

Press@RunDepth: 78.63 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.11.04 End Date: 2012.11.05 Last Calib.: 2012.11.05  
 Start Time: 23:15:00 End Time: 05:49:00 Time On Btm: 2012.11.05 @ 00:41:00  
 Time Off Btm: 2012.11.05 @ 03:45:30

**TEST COMMENT:** 1st Opening 30 Minutes-Weak blow built 3 inches into bucket w ater in 30 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 45 Minutes-Weak blow built 3 inches into bucket w ater in 45 minutes  
 2nd Shut-in 60 Minutes-No blow back



## PRESSURE SUMMARY

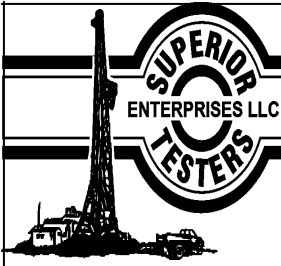
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1325.61	91.64	Initial Hydro-static
2	35.83	93.11	Open To Flow (1)
32	54.38	96.38	Shut-In(1)
75	712.12	97.61	End Shut-In(1)
77	57.72	97.54	Open To Flow (2)
121	78.63	99.74	Shut-In(2)
184	709.02	101.18	End Shut-In(2)
185	1274.36	101.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	clean oil 100%oil	0.02
60.00	mud oil 10%oil 90%mud	0.30
0.00	Gravity oil 42	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

BOP West L.L.C  
 Po Box 129 Wooster OH 44691  
 ATTN: Ken Wallace

**20-16-1 Saline**  
**Van Meter#20-1**  
 Job Ticket: 16893 **DST#: 3**  
 Test Start: 2012.11.04 @ 23:15:00

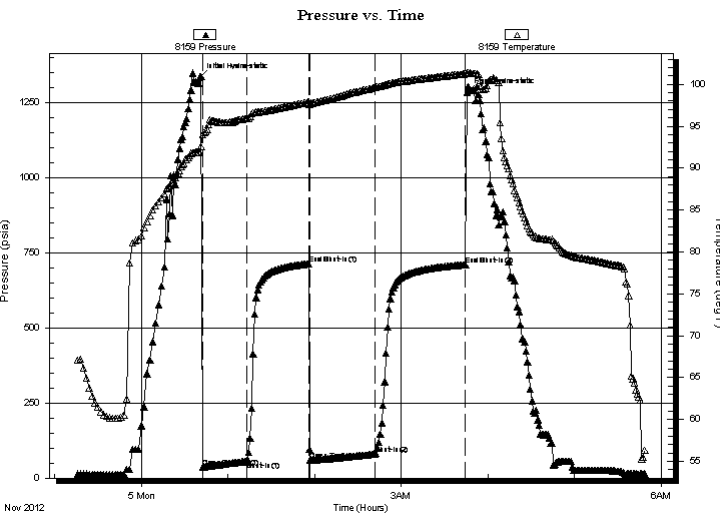
## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 00:42:30 Tester: Jared Scheck  
 Time Test Ended: 05:49:00 Unit No: 3320-Great Bend-240  
 Interval: **2655.00 ft (KB) To 2664.00 ft (KB) (TVD)** Reference Elevations: 1325.00 ft (KB)  
 Total Depth: 2664.00 ft (KB) (TVD) 1319.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 6.00 ft

## Serial #: 8159

Press@RunDepth: 710.16 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.11.04 End Date: 2012.11.05 Last Calib.: 2012.11.05  
 Start Time: 23:15:00 End Time: 05:49:00 Time On Btm: 2012.11.05 @ 00:40:30  
 Time Off Btm: 2012.11.05 @ 03:45:30

**TEST COMMENT:** 1st Opening 30 Minutes-Weak blow built 3 inches into bucket w ater in 30 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 45 Minutes-Weak blow built 3 inches into bucket w ater in 45 minutes  
 2nd Shut-in 60 Minutes-No blow back



## PRESSURE SUMMARY

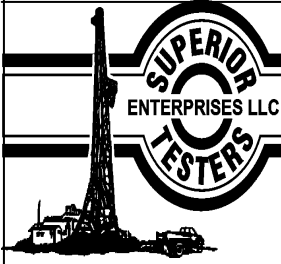
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1334.69	91.91	Initial Hydro-static
2	36.14	93.98	Open To Flow (1)
33	55.89	95.91	Shut-In(1)
76	713.39	97.88	End Shut-In(1)
77	58.99	97.74	Open To Flow (2)
122	79.72	99.64	Shut-In(2)
184	710.16	101.25	End Shut-In(2)
185	1284.66	101.42	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	clean oil 100%oil	0.02
60.00	mud oil 10%oil 90%mud	0.30
0.00	Gravity oil 42	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

BOP West L.L.C  
 Po Box 129 Wooster OH 44691  
 ATTN: Ken Wallace

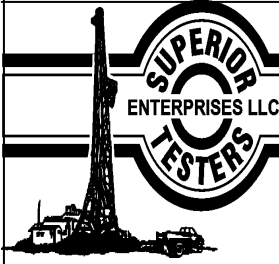
**20-16-1 Saline**  
**Van Meter#20-1**  
 Job Ticket: 16893      **DST#: 3**  
 Test Start: 2012.11.04 @ 23:15:00

**Tool Information**

Drill Pipe:	Length: 2399.00 ft	Diameter: 3.80 inches	Volume: 33.65 bbl	Tool Weight:	1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 34.83 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	2655.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	9.00 ft				
Tool Length:	35.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			2634.00	
Hydraulic Tool	5.00			2639.00	
Jars	6.00			2645.00	
Packer	5.00			2650.00	26.00      Bottom Of Top Packer
Packer	5.00			2655.00	
Anchor	4.00			2659.00	
Recorder	1.00	6731	Inside	2660.00	
Recorder	1.00	8159	Outside	2661.00	
Bullnose	3.00			2664.00	9.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>35.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

BOP West L.L.C

**20-16-1 Saline**

Po Box 129 Wooster OH 44691

**Van Meter#20-1**

Job Ticket: 16893

**DST#: 3**

ATTN: Ken Wallace

Test Start: 2012.11.04 @ 23:15:00

### 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:

ppm

Viscosity: 34.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 12.10 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	clean oil 100%oil	0.025
60.00	mud oil 10%oil 90%mud	0.295
0.00	Gravity oil 42	0.000

Total Length: 65.00 ft      Total Volume: 0.320 bbl

Num Fluid Samples: 0

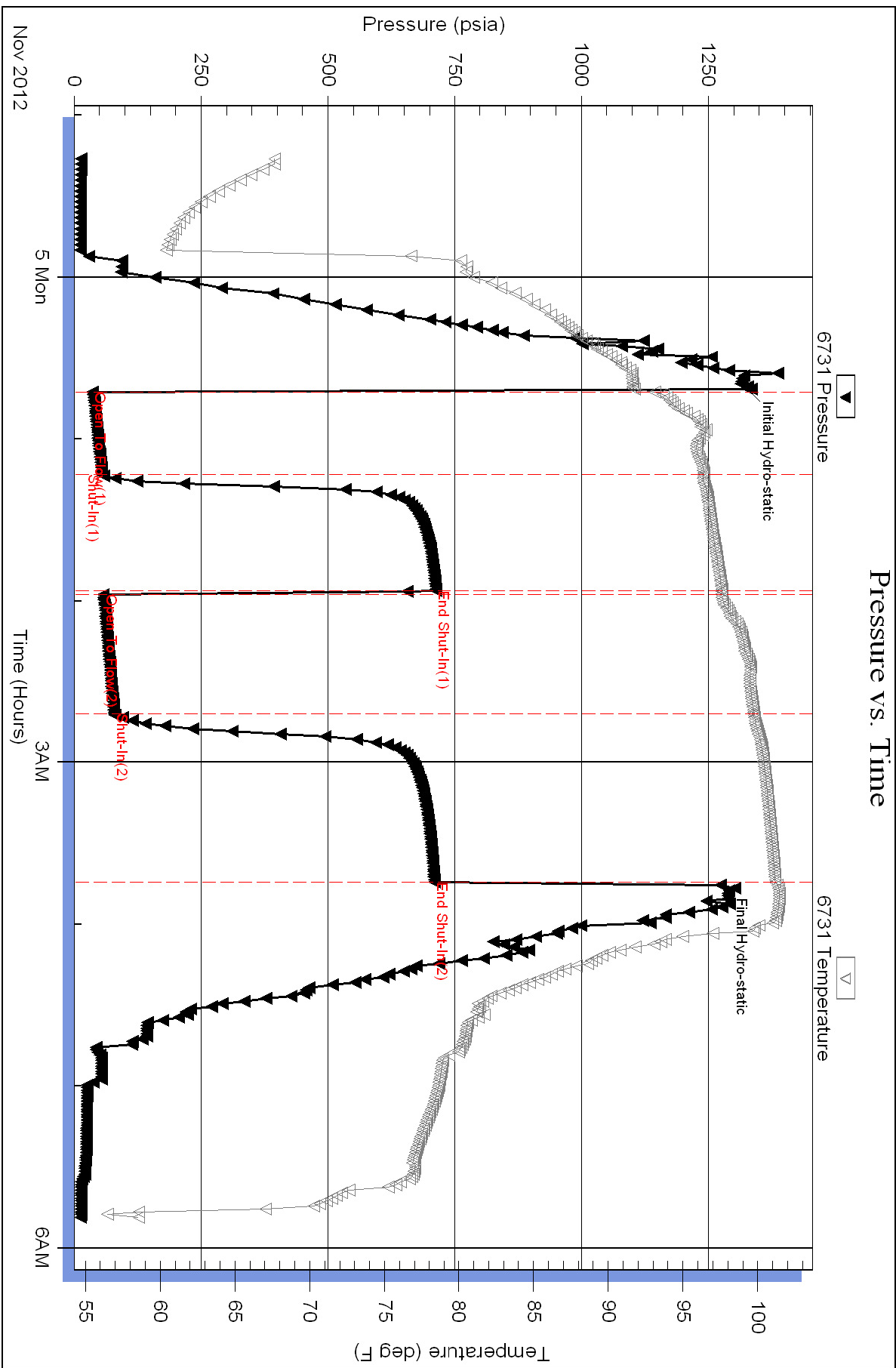
Num Gas Bombs: 0

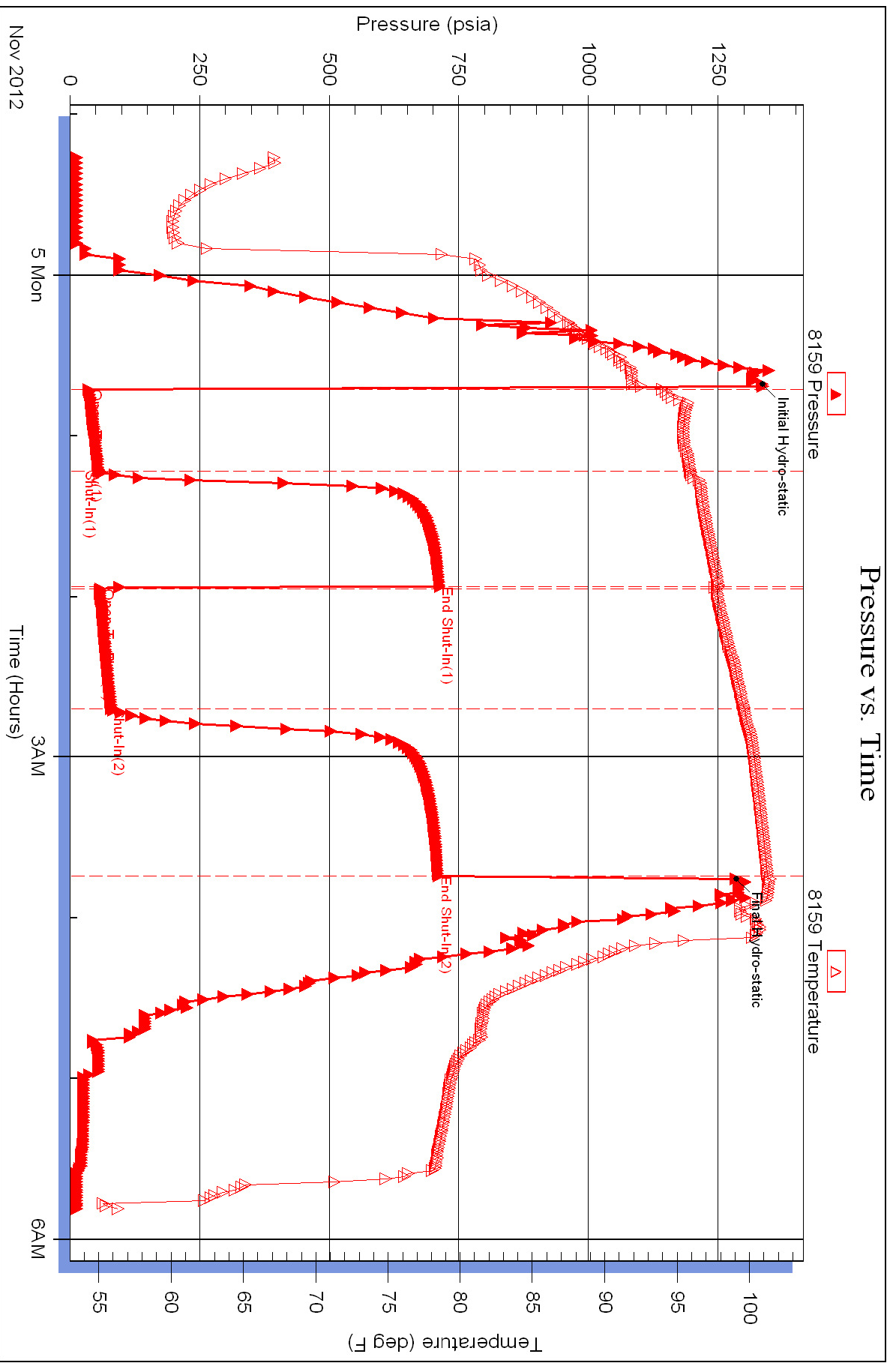
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:









TICKET NUMBER 35574  
 LOCATION Fureka, KS  
 FOREMAN Shannon Feck

PO Box 884, Chanute, KS 66720  
 620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT

CEMENT APF # 15-169-20342

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
10-30-12	1754	Van meter 20-1	20	16S	1W	Saline
CUSTOMER BOP West LLC		C+G Drig	TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS P.O. Box 129			445	Dave G		
CITY Wooster		STATE OH	ZIP CODE 44691	667	Rick L	

JOB TYPE S/R HOLE SIZE 12 1/4" HOLE DEPTH 219' CASING SIZE & WEIGHT 8 5/8"  
 CASING DEPTH 222' K.B DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 14.5-15# SLURRY VOL 32 Bbl WATER gal/sk 6.5 CEMENT LEFT in CASING 15'  
 DISPLACEMENT 13 Bbl DISPLACEMENT PSI 100 MIX PSI 100 RATE 5 BPM

REMARKS: Rig up to 8 5/8" casing, Break circulation w/ 10 Bbl water, mixed 140 SKS Class "A" cement w/ 3% calcium 2% gel & 1/4# Flo-tele/sk @ 14.5-15#/gal. Displace w/ 13 Bbl water & shut casing in. Good circulation @ all times & Bbl slurry to pit, Job complete.

"Thanks Shannon & crew"

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	825.00	825.00
5406	100	MILEAGE	4.00	400.00
11045	140 SKS	Class A cement	14.95	2093.00
1102	39.5#	Calcium @ 3%	.74	292.30
118B	264#	Gel @ 2%	.21	55.44
1107	35#	Flo-tele @ 1/4#/sk	2.35	82.25
5407A	6.92 Tons	Ton mileage bulk Truck	1.34	927.28
			Subtotal	4675.27
			7.3% SALES TAX	184.18
			ESTIMATED TOTAL	4859.45

Ravin 3737

201168

AUTHORIZATION [Signature] TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.