

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27  NAD83  WGS84

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

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

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

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

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

Total Vertical 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

Confidentiality Requested

Date: \_\_\_\_\_

Confidential Release Date: \_\_\_\_\_

Wireline Log Received  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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 Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

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
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	WOLF 1-19
Doc ID	1461688

All Electric Logs Run

Micro
Resistivity
Porosity
Sonic
Directional









PRESSURE PUMPING LLC

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

100297

4049A

TICKET NUMBER 56024

LOCATION Oakley

FOREMAN Jerry

FIELD TICKET & TREATMENT REPORT  
CEMENT

Invoice #900620 KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
3-24-19	2777	Wolf 1-19	19	105	31W	Thomas	
CUSTOMER <u>Culbreath</u>		MAILING ADDRESS <u>3501 South Yale Avenue</u>		TRUCK #	DRIVER	TRUCK #	DRIVER
CITY <u>Tulsa</u>		STATE <u>OK</u>		ZIP CODE <u>74135</u>			
				731	Cory D		
				70	Markabil		
				535	Jerry Y		
				1098	Wolf D		

JOB TYPE	HOLE SIZE	HOLE DEPTH	CASING SIZE & WEIGHT
<u>plug</u>	<u>2 7/8</u>	<u>4749</u>	
CASING DEPTH	DRILL PIPE	TUBING	OTHER
	<u>4 1/2</u>		
SLURRY WEIGHT	SLURRY VOL	WATER gal/sk	CEMENT LEFT in CASING
<u>13.8</u>	<u>1.42</u>		
DISPLACEMENT	DISPLACEMENT PSI	MIX PSI	RATE

REMARKS: Safety meeting on rig upon Southwind to plug as ordered with 260 sks  
60/40 4% 1/4 # P10  
50 sks @ 2604'  
1005 sks @ 1880'  
50 sks @ 315'  
10 sks @ 40' with 8 3/8 wiper plug  
20 sks MH  
30 sks RH

Thank you  
Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0451	1	PUMP CHARGE	1900.00	1900.00
CE0002	5	MILEAGE	7.15	35.75
CE0711	11.18	ten mileage delivery min	660.00	660.00
CC 5829	260 sks	litc blend II	16.00	4160.00
CC6075	65 #L	Flo Seal	3.00	195.00
CP8228	1	8 3/8 wood plug	165.00	165.00
			subtotal	7115.75
			-25%	1728.94
			subtotal	5386.81
			SALES TAX	271.20
			ESTIMATED TOTAL	5608.01

206  
SCANNED

SCANNED

Ravin 3737

AUTHORIZATION W. J. P.

TITLE Tool Pusher

DATE 3-24-19



# GEOLOGICAL REPORT FINAL

## Larry A. Nicholson

NAD 83  
39.169856346  
-100.819789938

COMPANY & WELL: **Culbreath Oil & Gas Co. Inc. Wolf #1-19**  
LOCATION: **2540 FNL 1470 FEL SE SW NE**  
SEC: **19** TWP: **10S** RGE: **31W**  
COUNTY: **Thomas** STATE: **Ks**

COMPANY	<b>Culbreath Oil &amp; Gas Co. Inc.</b>	FIELD	<b>Wolf-19</b>
API #	<b>15193-21039</b>	WELL #	<b>#1-19</b>
LEASE	<b>Wolf #1-19 SE SW NE</b>		
LOCATION	<b>SE SW SW NE</b>		
SURVEY	<b>2540 FNL 1470 FEL</b>		
SECTION	<b>19</b>	TWP	<b>10S</b>
COUNTY	<b>Thomas</b>	STATE	<b>Kansas</b>
CONTRACTOR	<b>Southwind TP Wes Pfaff, Rig # 21</b>		
SPUD	<b>03-11-2019 9:00 PM</b>	COMP	<b>K.B. 3046</b>
RTD	<b>4748 7:25am 03-25-19</b>	LTD	<b>4744</b>
MUD UP AT	<b>3475-3488</b>		
MUD TYPE	<b>Chemical Andy's Acon Blue</b>		
SAMPLES SAVED	FROM <b>2700</b> TO <b>RTD</b>		
DRILLING TIME	FROM <b>2700</b> TO <b>RTD</b>		
SAMPLES EXAMINED	FROM <b>2700</b> TO <b>RTD</b>		
GEOLOGICAL SUPERVISION	<b>LARRY A. NICHOLSON</b>		
WELL SITE GEOLOGIST	<b>LARRY A. NICHOLSON</b>		

ELEVATIONS	
K.B.	3046
D.F.	
G.L.	3036
All measurements from K.B. 3046	

CASING RECORD

Conductor	266	of	8 5/8"	w/	185	ft
Production						
Drig Supervision	Harold Bellavre					

ELECTRICAL SURVEYS - Halliburton-New, Den, Micron, Dual, Sonic					
FORMATION	SAMPLE TOPS	SURSEA DATUM	ELEC LOG TOPS	SURSEA DATUM	REFERENCE WELL
Anhydrite			2590	-456	
B/Anhydrite			2618	-428	
Heabner Sh			4028	-922	
Lansing			4174	-1028	
Muncie Sh			4198	-1152	
Stark Sh			4284	-1238	
BKC			4348	-1302	
Pawnee			4470	-1424	
Myrick St			4519	-1473	
Cherokee Sh			4570	-1524	
Miss			4649	-1603	
RTD			4748	-1702	
LTD			4744	-1698	

LAN 792, Modified 5/05, 11/11, 4/12, 4/18 1inch=25.4mm 8.5 x 9.5 216 mm x 2480 mm

DRILLSTEM TEST SUMMARY

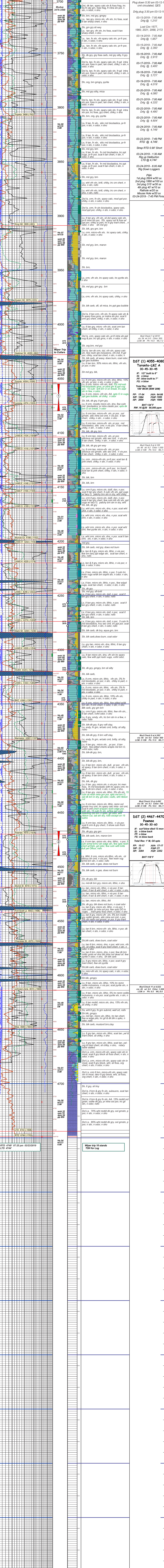
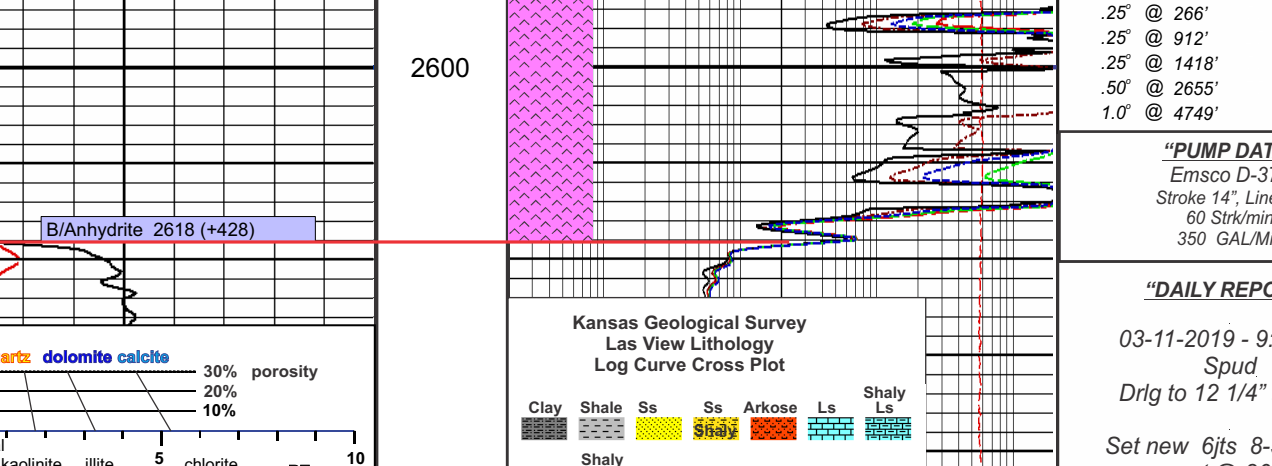
DP1 #1 4055-4080 (Top-LKC A) 30.45 30.45	FF-17.54	FF-8.98	SI 1084-1909
Rec 189' MCW (80W 2M) IF 12" built to 8", nr	FF 14" built to 7", nr		
BHT 124, RW, 16 @ 30, 30K ppg			
DP1 #2 4447-4480 (Pawnee) 30.45 30.80	IF-15.17	IF-17.17	SI 21-21
Rec 1 (100M) IF surf blow died 13mm, nr	FF no blow, nr		
BHT 118			

REMARKS & RECOMMENDATIONS:

Based on DST results, n shows, low structure

The well was P&A

### LEGEND



COMPANY & WELL: **Culbreath Oil & Gas Co. Inc. Wolf #1-19 SE SW NE**  
LOCATION: **2540 FNL 1470 FEL SE**  
SEC: **19** TWP: **10S** RGE: **31W**  
COUNTY: **Thomas** STATE: **Ks**

COMPANY	<b>Culbreath Oil &amp; Gas Co. Inc.</b>	FIELD	<b>Wolf-19</b>
API #	<b>15193-21039</b>	WELL #	<b>#1-19</b>
LEASE	<b>Wolf #1-19 SE SW NE</b>		
LOCATION	<b>SE SW SW NE</b>		
SURVEY	<b>2540 FNL 1470 FEL</b>		
SECTION	<b>19</b>	TWP	<b>10S</b>
COUNTY	<b>Thomas</b>	STATE	<b>Kansas</b>
CONTRACTOR	<b>Southwind TP Wes Pfaff, Rig # 21</b>		
SPUD	<b>03-11-2019 9:00 PM</b>	COMP	<b>K.B. 3046</b>
RTD	<b>4748 7:25am 03/23/2019</b>	LTD	<b>4744</b>
MUD UP AT	<b>3475-3488</b>		
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SAMPLES SAVED	FROM <b>2700</b> TO <b>RTD</b>		
DRILLING TIME	FROM <b>2700</b> TO <b>RTD</b>		
SAMPLES EXAMINED	FROM <b>2700</b> TO <b>RTD</b>		
GEOLOGICAL SUPERVISION	<b>LARRY A. NICHOLSON</b>		
WELL SITE GEOLOGIST	<b>LARRY A. NICHOLSON</b>		

ELEVATIONS	
K.B.	3046
D.F.	
G.L.	3036
All measurements from K.B. 3046	

CASING RECORD

Conductor	266	of	8 5/8"	w/	185	ft
Production						
Drig Supervision	Harold Bellavre					





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Culbreath oil & Gas

**19-10-31 Thomas Ks**

3501 S Yale Ave  
Tulsa, Ok 74135

**Wolf 1-19**

Job Ticket: 65158

**DST#: 1**

ATTN: Larry

Test Start: 2019.03.19 @ 19:28:03

## GENERAL INFORMATION:

Formation: **Toronto- Lansing A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:22:33

Time Test Ended: 04:19:03

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 79

Interval: **4055.00 ft (KB) To 4080.00 ft (KB) (TVD)**

Reference Elevations: 3045.00 ft (KB)

Total Depth: 4080.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

**Serial #: 8166 Outside**

Press@RunDepth: 98.72 psig @ 4056.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.03.19

End Date:

2019.03.20

Last Calib.: 2019.03.20

Start Time: 19:28:08

End Time:

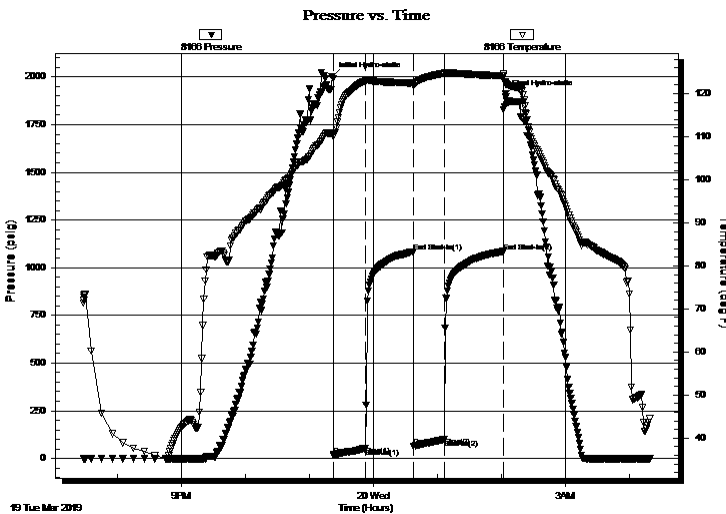
04:19:03

Time On Btm: 2019.03.19 @ 23:21:03

Time Off Btm: 2019.03.20 @ 02:03:33

TEST COMMENT: IF: 1/2 blow built to 8.  
IS: No return.  
FF: 1/4 blow built to 7.  
FS: No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2000.59	110.66	Initial Hydro-static
2	17.55	109.97	Open To Flow (1)
32	54.70	122.88	Shut-In(1)
76	1084.03	122.44	End Shut-In(1)
77	64.46	121.83	Open To Flow (2)
105	98.72	124.68	Shut-In(2)
161	1085.03	124.10	End Shut-In(2)
163	1909.36	122.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
189.00	mcw 80%w 20%m	2.65

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Culbreath oil & Gas

**19-10-31 Thomas Ks**

3501 S Yale Ave  
Tulsa, Ok 74135

**Wolf 1-19**

Job Ticket: 65158

**DST#: 1**

ATTN: Larry

Test Start: 2019.03.19 @ 19:28:03

### 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:

90000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
189.00	mcw 80%w 20%m	2.651

Total Length: 189.00 ft      Total Volume: 2.651 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

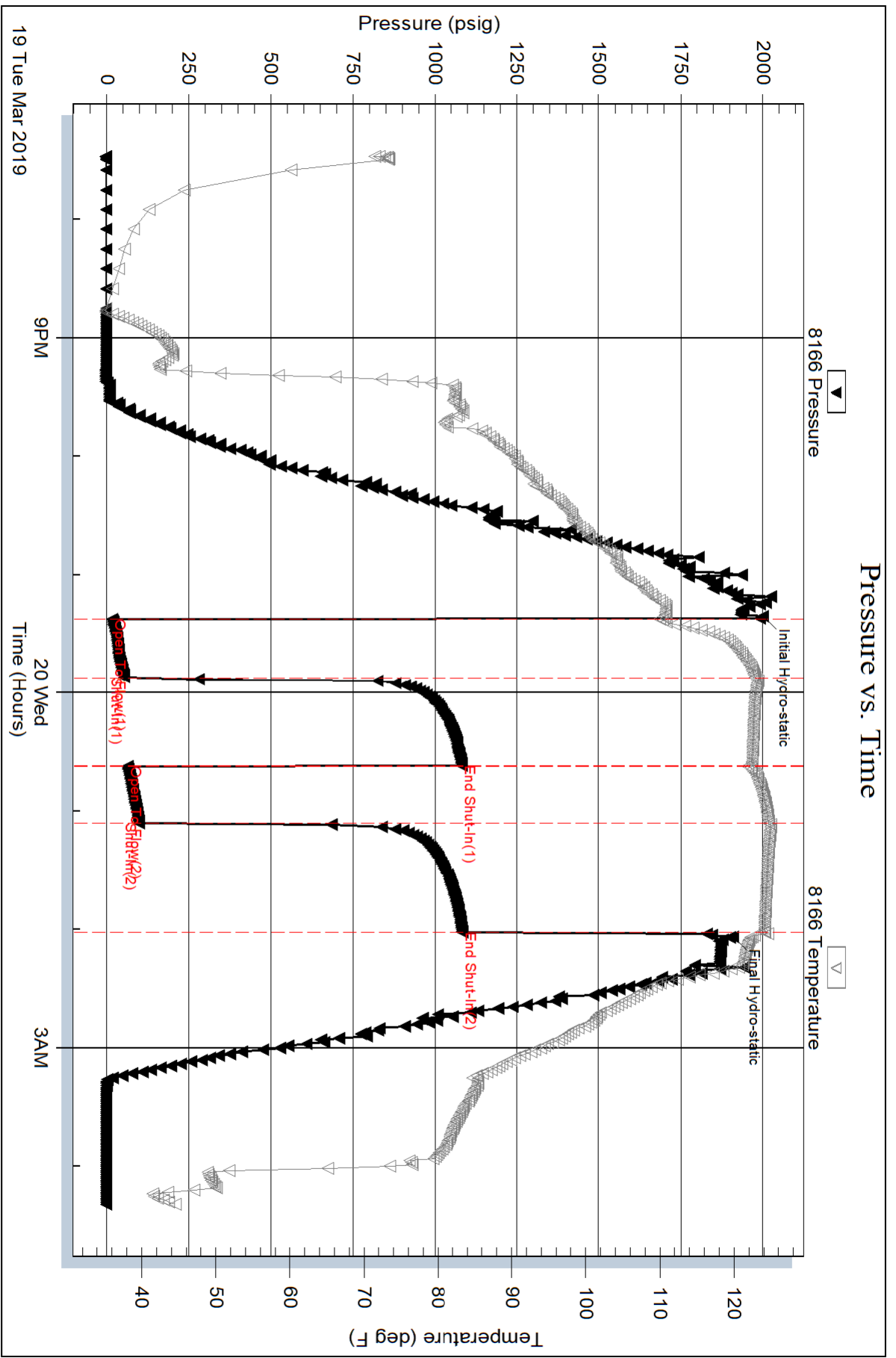
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .16@39=90000





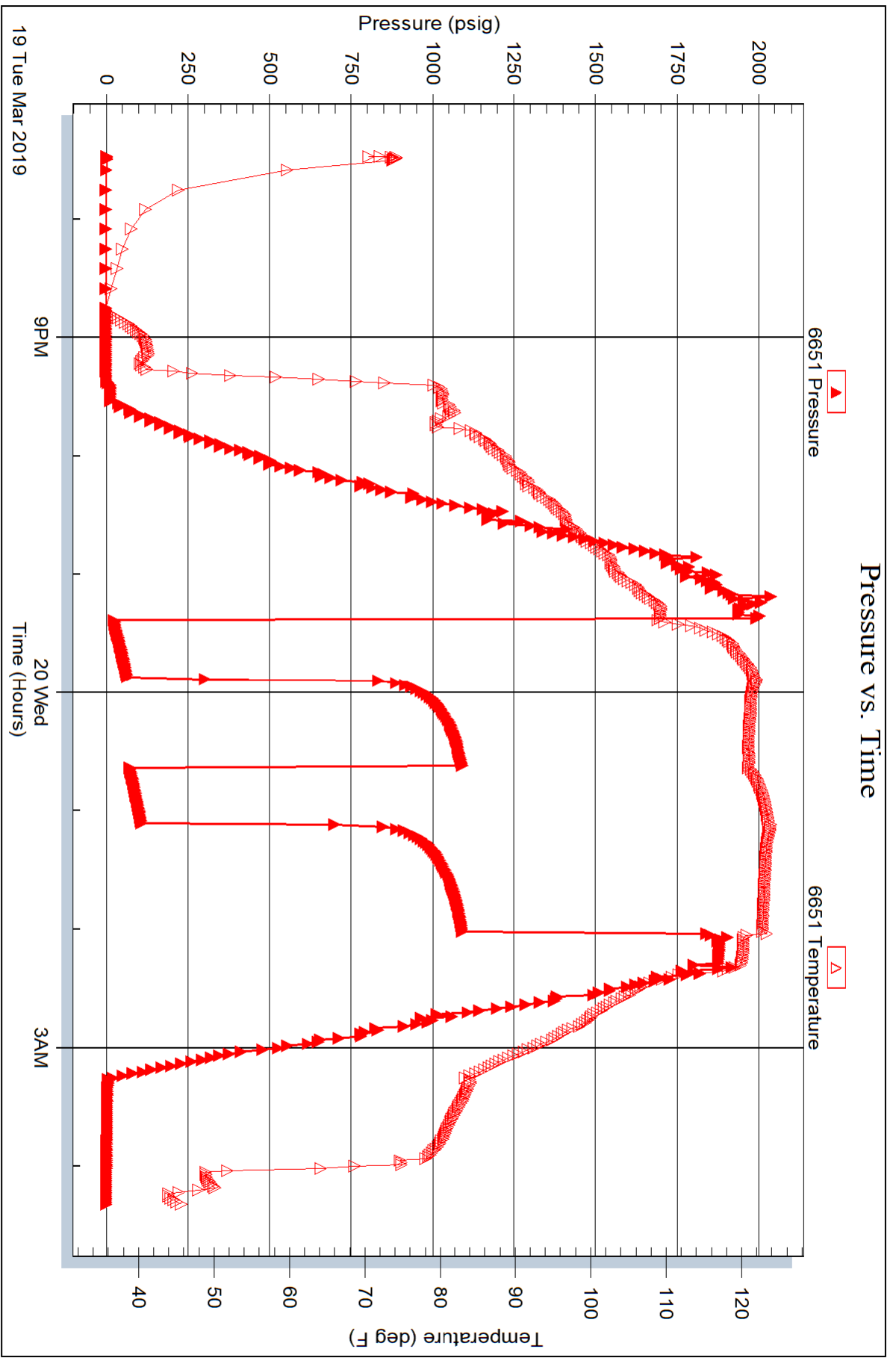
Serial #: 6651

Inside

Culbreath oil & Gas

Wolf 1-19

DST Test Number: 1







**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Culbreath oil & Gas

**19-10-31 Thomas,KS**

3501 S Yale Ave  
Tulsa, Ok 74135

**Wolf 1-19**

Job Ticket: 65159

**DST#: 2**

ATTN: Larry

Test Start: 2019.03.22 @ 06:50:41

## GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:50:41

Time Test Ended: 14:53:11

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

**Interval: 4467.00 ft (KB) To 4490.00 ft (KB) (TVD)**

Reference Elevations: 3045.00 ft (KB)

Total Depth: 4490.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

**Serial #: 8166 Outside**

Press@RunDepth: 17.48 psig @ 4468.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.03.22 End Date: 2019.03.22

Last Calib.: 2019.03.22

Start Time: 06:50:46 End Time: 14:53:10

Time On Btm: 2019.03.22 @ 09:49:11

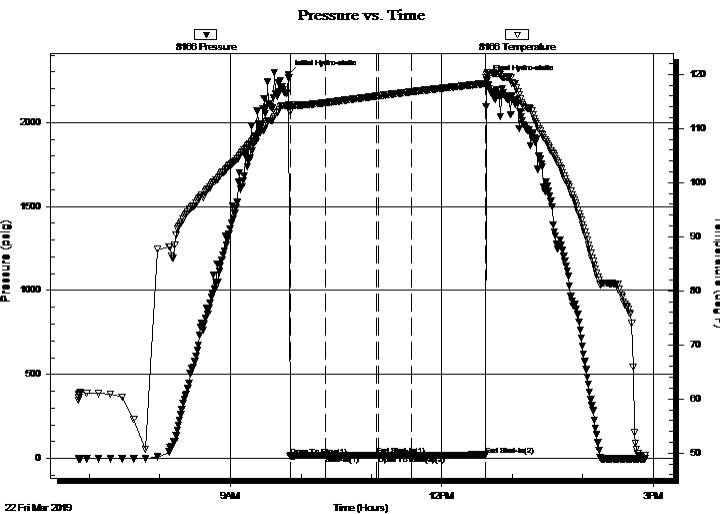
Time Off Btm: 2019.03.22 @ 12:38:11

TEST COMMENT: IF: Surface blow died in 13 min.

IS: No return.

FF: No blow.

FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2284.84	114.28	Initial Hydro-static
2	15.12	113.07	Open To Flow (1)
32	17.73	114.75	Shut-In(1)
76	21.07	115.99	End Shut-In(1)
77	17.16	116.01	Open To Flow (2)
105	17.48	116.78	Shut-In(2)
168	21.94	118.30	End Shut-In(2)
169	2252.35	120.02	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud 100% <sub>m</sub>	0.01

## Gas Rates

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

\* Recovery from multiple tests







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Culbreath oil & Gas

**19-10-31 Thomas,KS**

3501 S Yale Ave  
Tulsa, Ok 74135

**Wolf 1-19**

Job Ticket: 65159

**DST#: 2**

ATTN: Larry

Test Start: 2019.03.22 @ 06:50:41

## 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:

0 ppm

Viscosity: 66.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	mud 100%m	0.014

Total Length: 1.00 ft      Total Volume: 0.014 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

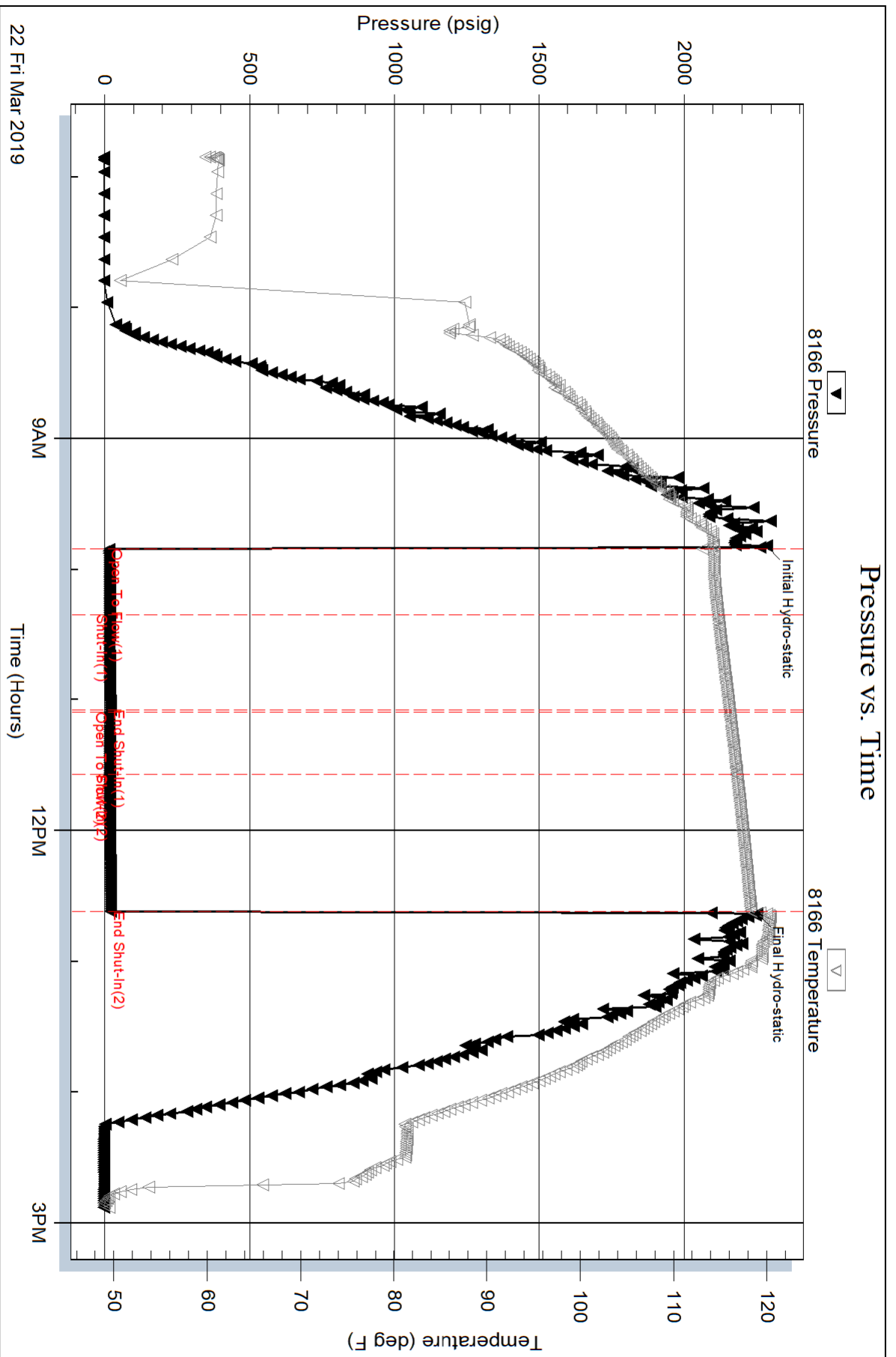
Recovery Comments:

Serial #: 8166

Outside Culbreath oil & Gas

Wolf 1-19

DST Test Number: 2



Serial #: 6651

Inside

Culbreath oil & Gas

Wolf 1-19

DST Test Number: 2

