

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
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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
<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)</i> <i>(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	BEREXCO LLC
Well Name	MRM 2
Doc ID	1485649

All Electric Logs Run

Porosity
Resistivity
Microlog
Sonic



WF (C) Tony V
 Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

PRESSURE PUMPING

Job Log

Customer:	Berexco LLC	Cement Pump No.:	37223 19572 14HRS	Operator TRK No.:	86531
Address:	2020 N. Bramblewood	Ticket #:	1718 19786 L	Bulk TRK No.:	27808 19578 Corey
City, State, Zip:	Wichita, Kansas 67206-1094	Job Type:	Z-42 Cement Surface Casing		
Service District:	1718-Liberal Ks	Well Type:			
Well Name and No.:	MRM #2	Well Location:	15 - 10S - 33W	County:	Thomas
				State:	Kansas

Type of Cmt	Sacks	Additives	Truck Loaded On		
Class C Cement	300	3% Calcium Chloride, +.25pps Cello-Flake	27808 19578 Corey	Front	Back
			27808 19578	Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel
Lead:	14.8	1.35	6.35	405	TT Man Hours 46
Tail:					# of Men on Job: 3

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps		Pressure(PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
12:30pm							Arrived at location
12:45pm							Spot trucks/Rig up
16:00pm							Safety meeting
16:40pm	2	5			80		Pump 5 bbls of fresh water spacer
16:43pm	5	72			200		Pump 72bbls of cement from 300sks at 14.8lbs
							Shut down/Wash pump and lines
17:0pm							Start displacement with fresh water
17:04pm	4.3	10					10bbls gone
17:06pm	5	20					20bbls gone
17:09pm	3	22					Bump plug/Close valve on swedge
							Got 30bbls of cement to surface
							Rig down
							Job completed
							Thanked company man and rig crew

Size Hole	12 1/4	Depth	394		TYPE	Float Shoe	
Size & Wt. Csg.	8 5/8 24#	Depth	390.65	New / Used	Float Shoe	348.46	Depth
Landing Psi	500+	Depth			Retainer		Depth
Shoe Joint	42.19	Type			Perfs		CIBP

Customer Signature:	Basic Representative:	Victor A. Corona
	Basic Signature:	<i>Victor A. Corona</i>
	Date of Service:	10/23/2019



Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

PRESSURE PUMPING Job Log

Customer:	Berexco LLC	Cement Pump No.:	38117, 19919 14Hrs.	Operator TRK No.:	96816
Address:	2020 N. Bramblewood	Ticket #:	1718 19816 L	Bulk TRK No.:	37712, 19883 27808, 19578
City, State, Zip:	Wichita, Kansas 67206-1094	Job Type:	Z-42 Cement Two-Stage		
Service District:	1718 - Liberal, Ks.	Well Type:			
Well Name and No.:	MRM #2	Well Location:	15-10S-33W	County:	Thomas State: Kansas

Type of Cmt	Sacks	Additives	Truck Loaded On		
A-Serv Lite	125	1/4# Polyflake	37712, 19883	Front	Back
AA2 Cement	225	10% Gypsum, 10% SALT, 6pps Gilsonite, .5% C-17, 1/2# Defoamer	27808, 19578 Corey	Front	Back
A-Serv Lite	525	1/4# Polyflake	19827, 37725	Front	Back
Rat & Mouse	50		19827, 37725	Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	13	1.73	9.08	216.25	TT Man Hours:	89
Tail:	15	1.46	6.16	328.5		
Tail 2:	13	1.73	9.08	908.25		
					# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps		Pressure (PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
15:40							ON LOCATION & SAFETY MEETING
12:00 AM							RIG TO CIRCULATE
1:00 AM							RIG UP
2:20 AM							RIG TO PT
2:23 AM							PRESSURE TEST TO 2380PSI
2:27	5	38.5 slurry				310	PUMP 125SX LEAD @ 13#
2:39	5	58.5 slurry				200	PUMP 225SX TAIL @ 15#
2:52							SHUTDOWN / DROP PLUG / WP
3:00	5.5	10				160	DISPLACE W/ H2O
	6.2	20				160	
	6.5	30				170	
	6.2	40				160	
	0.5	48				150	DISPLACE W/ MUD
	2.4	60				150	
	4	70				150	
	6.9	80				710	
	6.7	90				960	
3:20	6.7	100				1030	SLOW RATE TO 2.1BPM @ 720PSI
3:28	2	110.9				930	LAND PLUG / PRESSURE UP TO 1510PSI
3:30							RELEASE BACK --- PLUG HELD

Size Hole	7 7/8"	Depth				TYPE	Plug Container	
Size & Wt. Csg.	5 1/2" 15.5#	Depth	4747'	DV Tool	2677'	Packer	Depth	
Landing Press. 1	856.7psi	Landing Press. 2	640.6psi			Retainer	Depth	
Shoe Jt.	85.05'	Type				Perfs	CIBP	

Customer Signature: *Jon Hayward* Basic Representative: Daniel Beck
 Basic Signature: *Daniel Beck*
 Date of Service: 11/7/2019



Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

PRESSURE PUMPING Job Log

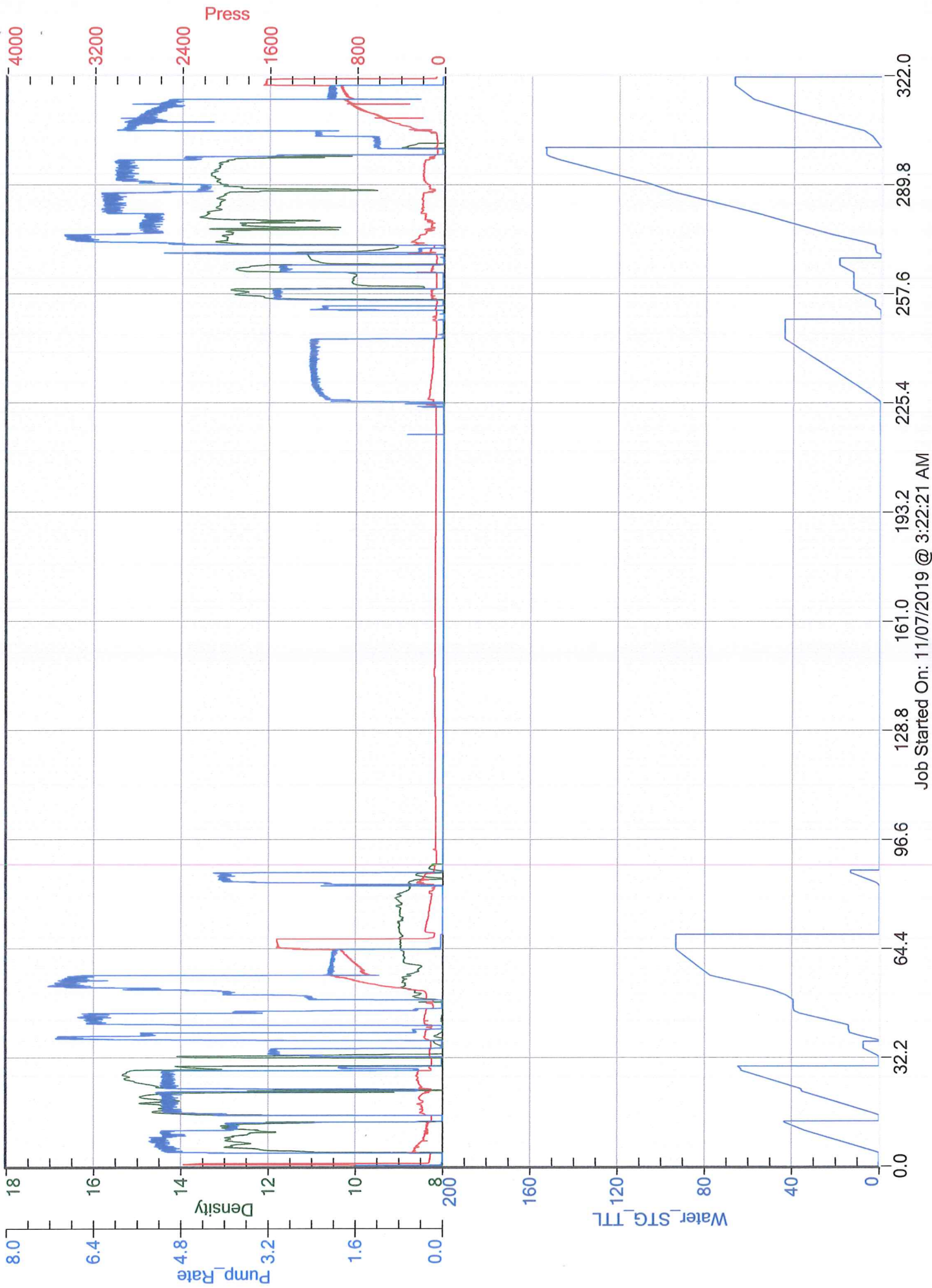
Customer:	Berexco LLC	Cement Pump No.:	38117, 19919 14Hrs.	Operator TRK No.:	96816
Address:		Ticket #:	1718 19816 L	Bulk TRK No.:	37712, 19883 27808, 19578
City, State, Zip:		Job Type:	Z-42 Cement Two-Stage		
Service District:	1718-Liberal	Well Type:	0		

Well Name and No.:	MRM #2	Well Location:	15 - 10S - 33W	County:	Thomas	State:	Kansas
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Time (am/pm)	Volume (BPM)	Volume (BBLs)	Pumps		Pressure(PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
3:37							DROP OPENING TOOL
3:47							PUMP OPENING TOOL W/ 930PSI
6:00 AM							PLUG RAT & MOUSE W/ 50SX
6:56 AM	6.5	161.7 slurry				280	PUMP 525SX TAIL 2 @ 13#
7:24 AM							SHUTDOWN / DROP CLOSING PLUG
7:25	5.8	10				400	DISPLACE
	5.7	20				480	PUMP 525SX TAIL 2 @ 13#
	5.5	30				600	SHUTDOWN / DROP CLOSING PLUG
	5.2	40				760	DISPLACE
	5	50				870	
7:39	5	53				910	SLOW RATE TO 2.0BPM @ 860PSI
	2	60				940	
7:43	2	62.9				940	LAND CLOSING PLUG / PRESSURE UP TO 1650PSI
							RELEASE BACK --- PLUG HELD
							JOB COMPLETE

Size Hole	7 7/8"	Depth				TYPE	Plug Container	
Size & Wt. Csg.	5 1/2" 15.5#	Depth	4747'	DV Tool	2677'	Packer	Depth	
Landing Press. 1	856.7psi	Landing Press. 2	640.6psi			Retainer	Depth	
Shoe Jt.	85.05'	Type				Perfs	CIBP	
Customer Signature:						Basic Representative:	Daniel Beck	
						Basic Signature:	<i>Daniel Beck</i>	
						Date of Service:	11/7/2019	

Berexco LLC
MFM #2



Job Started On: 11/07/2019 @ 3:22:21 AM



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco LLC
 2020 N Bramblewood
 Wichita KS
 67206
 ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

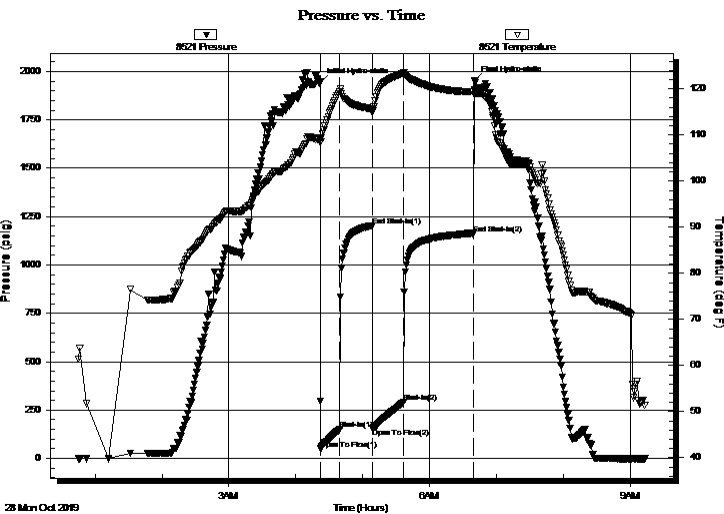
MRM #2
 Job Ticket: 63938 **DST#: 1**
 Test Start: 2019.10.28 @ 00:45:15

GENERAL INFORMATION:

Formation: **Plattsmouth-Toronto**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:22:30
 Time Test Ended: 09:13:30
 Interval: **4030.00 ft (KB) To 4080.00 ft (KB) (TVD)**
 Total Depth: 4080.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 3160.00 ft (KB)
 3150.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8521 Inside
 Press@RunDepth: 288.78 psig @ 4065.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.10.28 End Date: 2019.10.28 Last Calib.: 2019.10.29
 Start Time: 00:45:15 End Time: 09:13:30 Time On Btm: 2019.10.28 @ 04:22:00
 Time Off Btm: 2019.10.28 @ 06:40:45

TEST COMMENT: IF:BOB in 9 min Built to 17" blow
 IS:No return blow
 FF:BOB in 8 min Built to 22 3/4" blow
 FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1944.63	109.07	Initial Hydro-static
1	49.11	108.57	Open To Flow (1)
18	149.82	119.47	Shut-In(1)
47	1203.31	115.58	End Shut-In(1)
47	156.62	114.86	Open To Flow (2)
75	288.78	123.31	Shut-In(2)
138	1159.22	119.41	End Shut-In(2)
139	1953.04	119.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
310.00	wcm 10%w 90%m	3.82
248.00	mcsw 10%m 90%sw	3.48

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63938

DST#: 1

Test Start: 2019.10.28 @ 00:45:15

GENERAL INFORMATION:

Formation: **Plattsmouth-Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:22:30

Time Test Ended: 09:13:30

Interval: 4030.00 ft (KB) To 4080.00 ft (KB) (TVD)

Total Depth: 4080.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 81

Reference Elevations: 3160.00 ft (KB)

3150.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8968

Press@RunDepth: psig @ ft (KB)

Start Date: 2019.10.28

End Date: 2019.10.28

Capacity: 8000.00 psig

Last Calib.: 2019.10.29

Start Time: 00:45:15

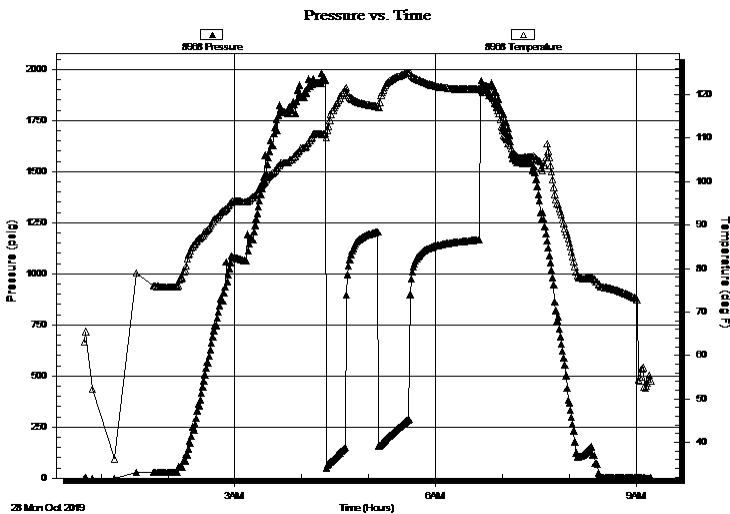
End Time: 09:13:30

Time On Btm:

Time Off Btm:

TEST COMMENT: IF:BOB in 9 min Built to 17" blow
IS:No return blow
FF:BOB in 8 min Built to 22 3/4" blow
FS:No return blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
310.00	wcm 10%w 90%m	3.82
248.00	mcsw 10%m 90%sw	3.48

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63938

DST#: 1

Test Start: 2019.10.28 @ 00:45:15

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:

34000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.00 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1300.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
310.00	wcm 10%w 90%m	3.820
248.00	mcsw 10%m 90%sw	3.479

Total Length: 558.00 ft Total Volume: 7.299 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

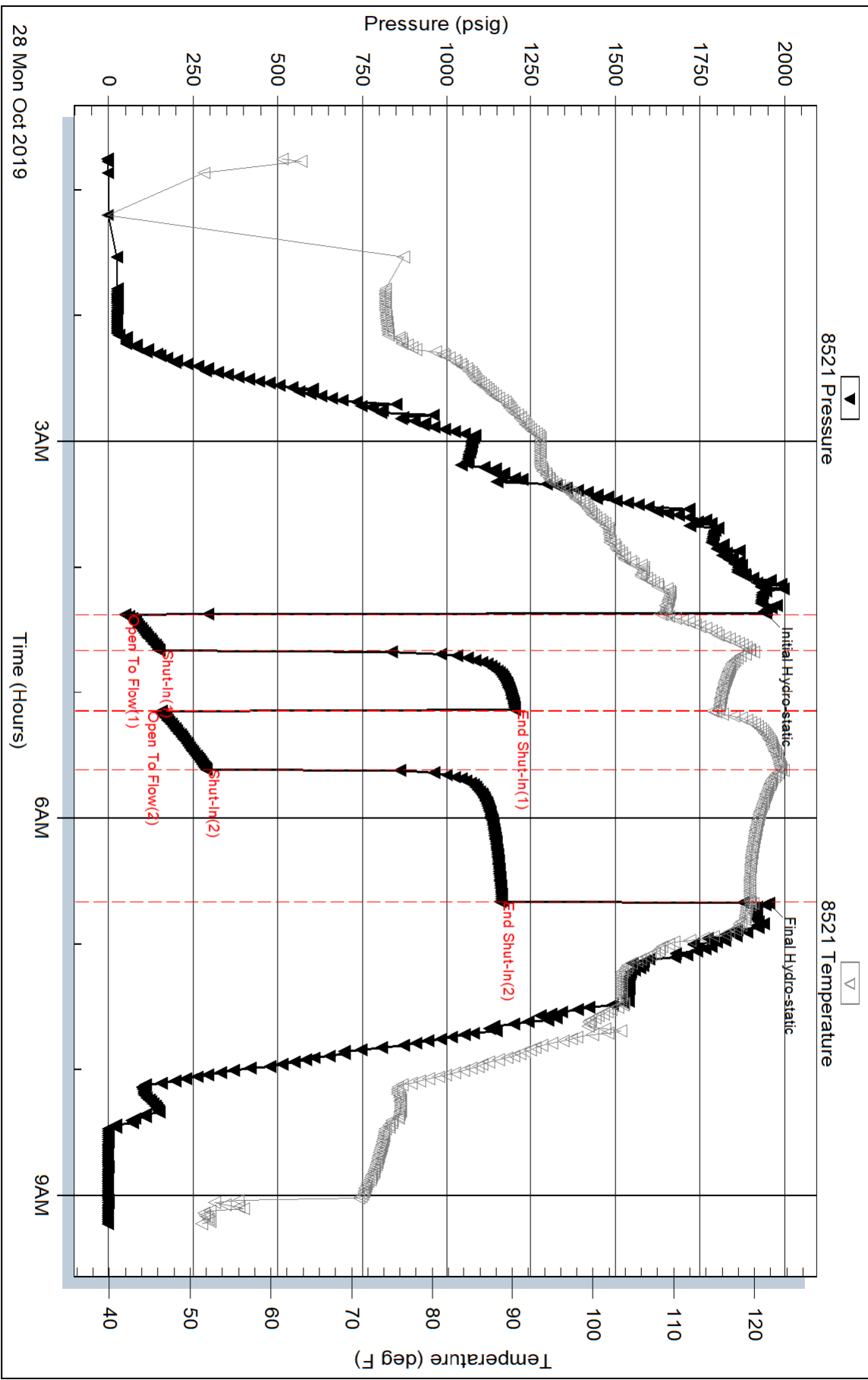
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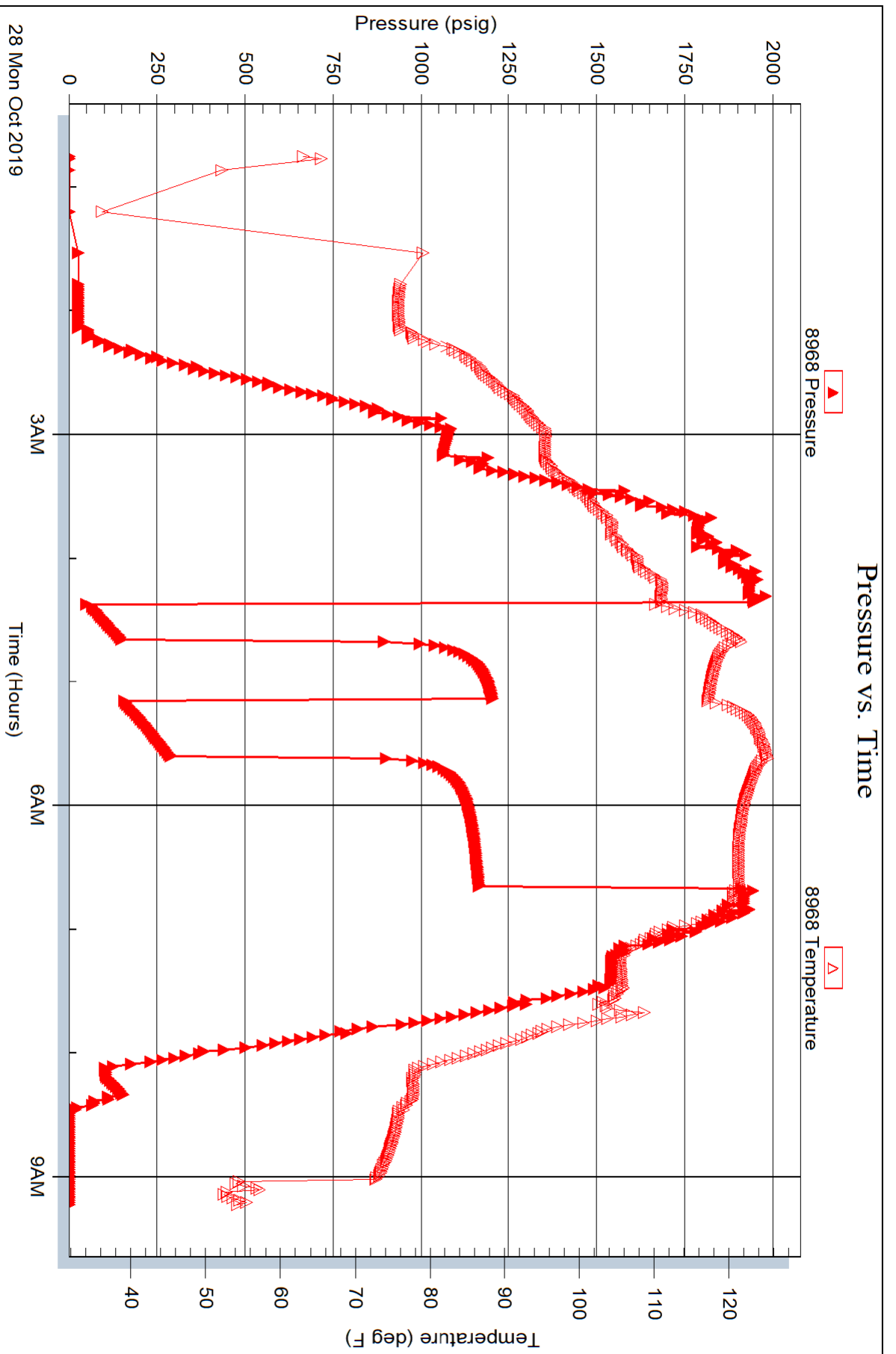
Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .289@45.8= 34,000 ppm

Pressure vs. Time







TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63939

DST#: 2

Test Start: 2019.10.29 @ 19:45:15

GENERAL INFORMATION:

Formation: **A -B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:21:45

Time Test Ended: 03:58:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4080.00 ft (KB) To 4135.00 ft (KB) (TVD)

Reference Elevations: 3160.00 ft (KB)

Total Depth: 4135.00 ft (KB) (TVD)

3150.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8521

Inside

Press@RunDepth: 139.29 psig @ 4120.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.10.29

End Date:

2019.10.30

Last Calib.: 2019.10.30

Start Time: 19:45:15

End Time:

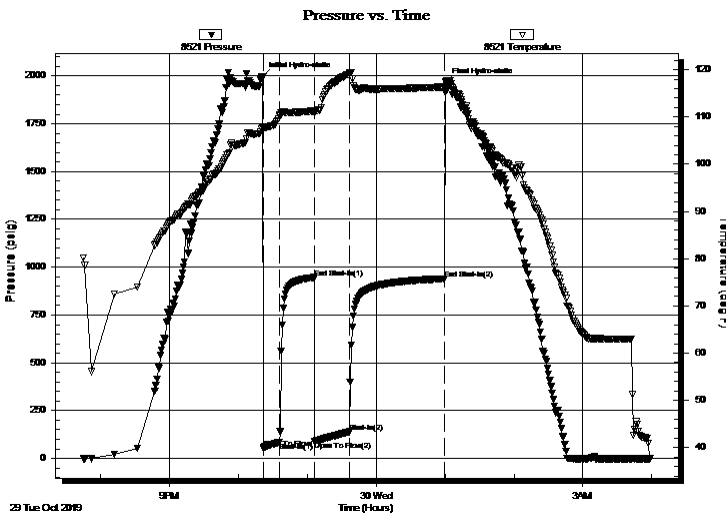
03:58:15

Time On Btm: 2019.10.29 @ 22:21:15

Time Off Btm: 2019.10.30 @ 01:00:30

TEST COMMENT: IF: Built to 7" blow
IS: No return blow
FF: Built to 11" blow
FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1994.30	107.91	Initial Hydro-static
1	52.81	107.42	Open To Flow (1)
15	84.02	110.31	Shut-In(1)
45	942.65	111.24	End Shut-In(1)
45	89.93	110.76	Open To Flow (2)
76	139.29	119.07	Shut-In(2)
159	939.33	116.36	End Shut-In(2)
160	1967.43	116.49	Final Hydro-static

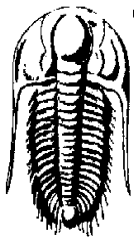
Recovery

Length (ft)	Description	Volume (bbl)
182.00	socm 2%o 98%m	2.02

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco LLC
 2020 N Bramblewood
 Wichita KS
 67206
 ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

MRM #2

Job Ticket: 63939

DST#: 2

Test Start: 2019.10.29 @ 19:45:15

GENERAL INFORMATION:

Formation: **A -B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:21:45

Time Test Ended: 03:58:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4080.00 ft (KB) To 4135.00 ft (KB) (TVD)

Reference Elevations: 3160.00 ft (KB)

Total Depth: 4135.00 ft (KB) (TVD)

3150.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8968

Outside

Press@RunDepth: psig @ 4120.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.10.29 End Date: 2019.10.30

Last Calib.: 2019.10.30

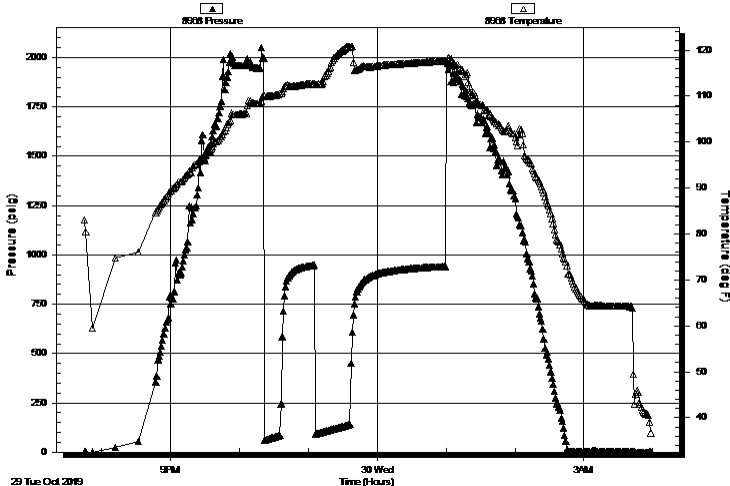
Start Time: 19:45:15 End Time: 03:58:15

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Built to 7" blow
 IS: No return blow
 FF: Built to 11" blow
 FS: No return blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
182.00	socm 2%o 98%m	2.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63939

DST#: 2

Test Start: 2019.10.29 @ 19:45:15

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
182.00	socm 2%o 98%m	2.025

Total Length: 182.00 ft Total Volume: 2.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8521

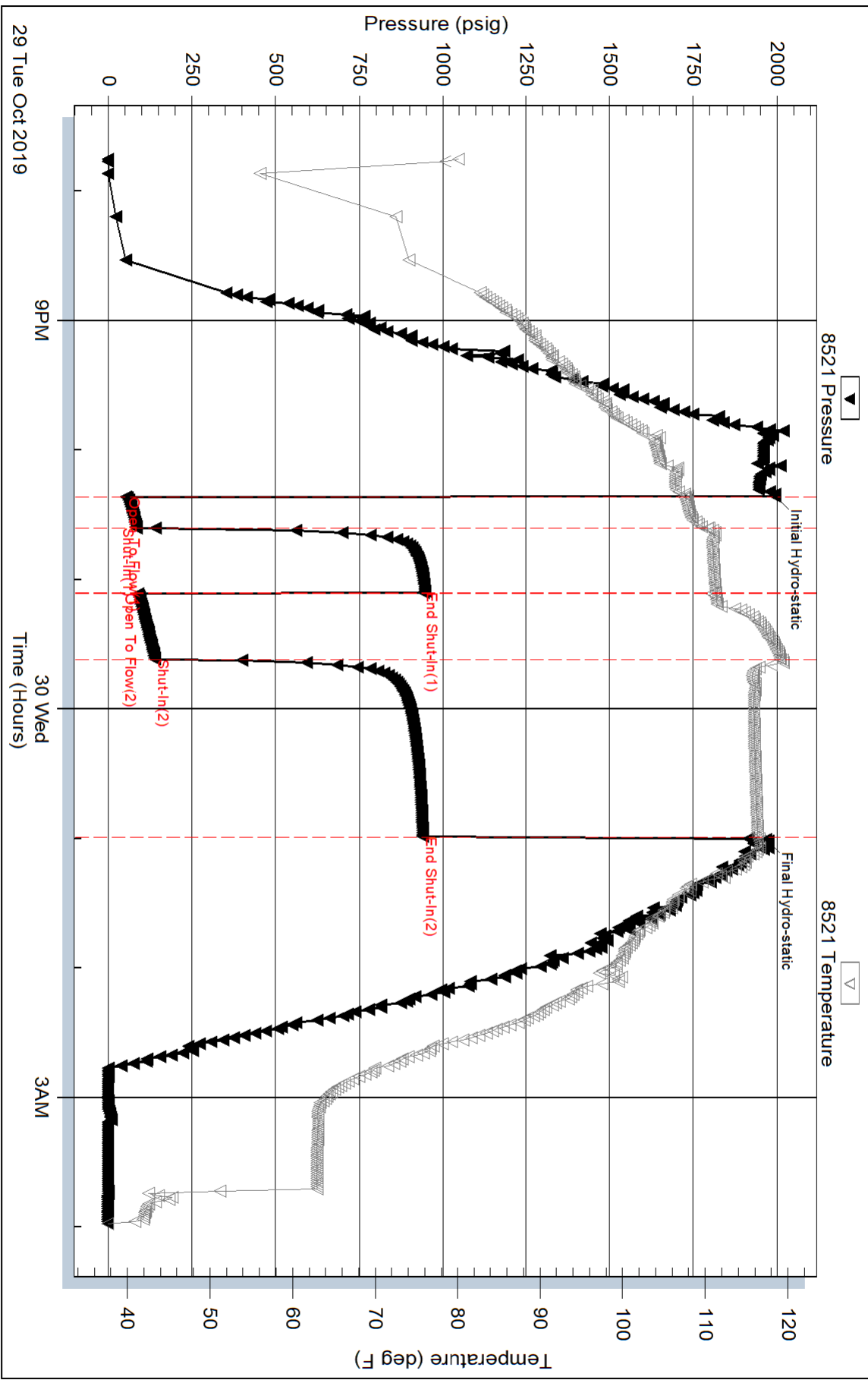
Inside

Berexco LLC

MRM#2

DST Test Number: 2

Pressure vs. Time

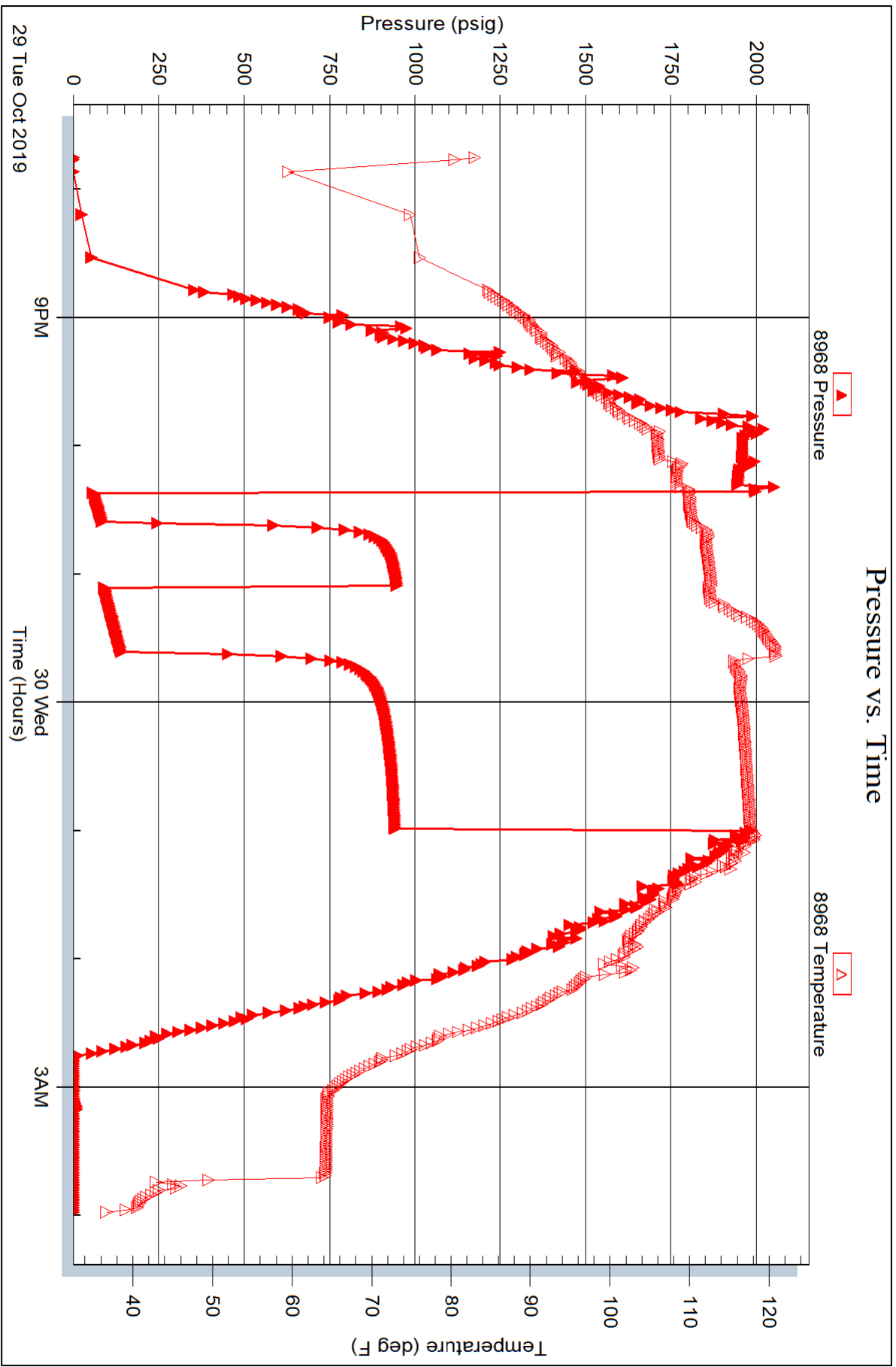


Serial #: 8968

Outside Berexco LLC

MRM#2

DST Test Number: 2





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco LLC
2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

MRM #2

Job Ticket: 63940

DST#: 3

Test Start: 2019.10.30 @ 13:13:15

GENERAL INFORMATION:

Formation: **C**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:46:30
 Time Test Ended: 19:55:30
 Interval: **4130.00 ft (KB) To 4145.00 ft (KB) (TVD)**
 Total Depth: 4135.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 3160.00 ft (KB)
 3150.00 ft (CF)
 KB to GR/CF: 10.00 ft

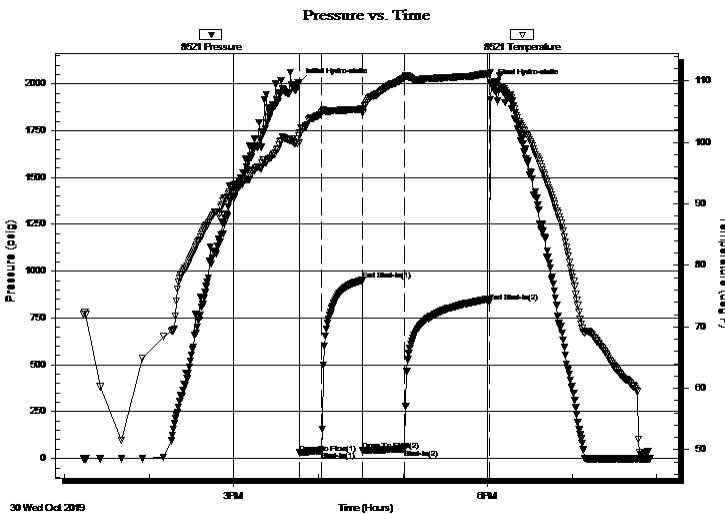
Serial #: 8521

Inside

Press@RunDepth: 50.19 psig @ 4131.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.10.30 End Date: 2019.10.30 Last Calib.: 2019.10.30
 Start Time: 13:13:15 End Time: 19:55:30 Time On Btm: 2019.10.30 @ 15:46:15
 Time Off Btm: 2019.10.30 @ 18:03:00

TEST COMMENT: IF: Built to 1" blow
 IS: No return blow
 FF: Built to 1/8" blow
 FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2007.70	101.06	Initial Hydro-static
1	29.94	99.99	Open To Flow (1)
16	41.04	104.82	Shut-In(1)
45	951.01	105.45	End Shut-In(1)
46	42.59	104.80	Open To Flow (2)
75	50.19	110.51	Shut-In(2)
136	835.62	111.18	End Shut-In(2)
137	1999.62	109.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	mud 100% m	0.31

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63940

DST#: 3

Test Start: 2019.10.30 @ 13:13:15

GENERAL INFORMATION:

Formation: **C**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 15:46:30 Tester: Mike Roberts
 Time Test Ended: 19:55:30 Unit No: 81
 Interval: **4130.00 ft (KB) To 4145.00 ft (KB) (TVD)** Reference Elevations: 3160.00 ft (KB)
 Total Depth: 4135.00 ft (KB) (TVD) 3150.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

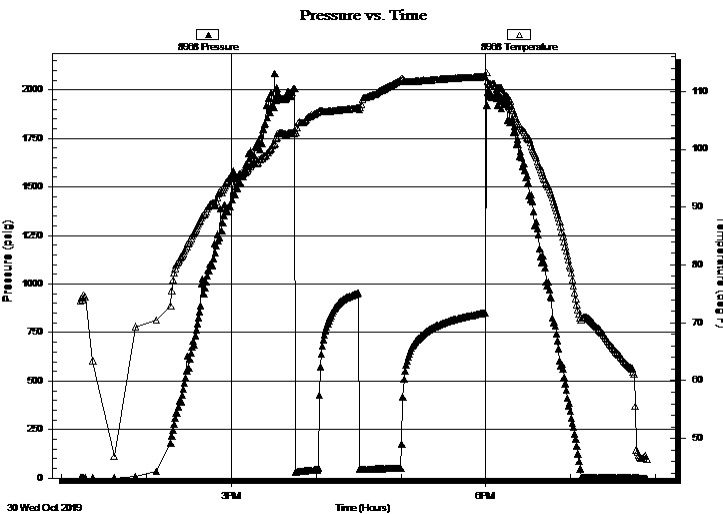
Serial #: 8968

Outside

Press@RunDepth: psig @ 4131.00 ft (KB)
 Start Date: 2019.10.30 End Date: 2019.10.30
 Start Time: 13:13:15 End Time: 19:54:23

Capacity: 8000.00 psig
 Last Calib.: 2019.10.30
 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Built to 1" blow
 IS: No return blow
 FF: Built to 1/8" blow
 FS: No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	mud 100%m	0.31

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206

MRM #2

Job Ticket: 63940

DST#: 3

ATTN: Bryan Bynog

Test Start: 2019.10.30 @ 13:13:15

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	mud 100%m	0.313

Total Length: 60.00 ft Total Volume: 0.313 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

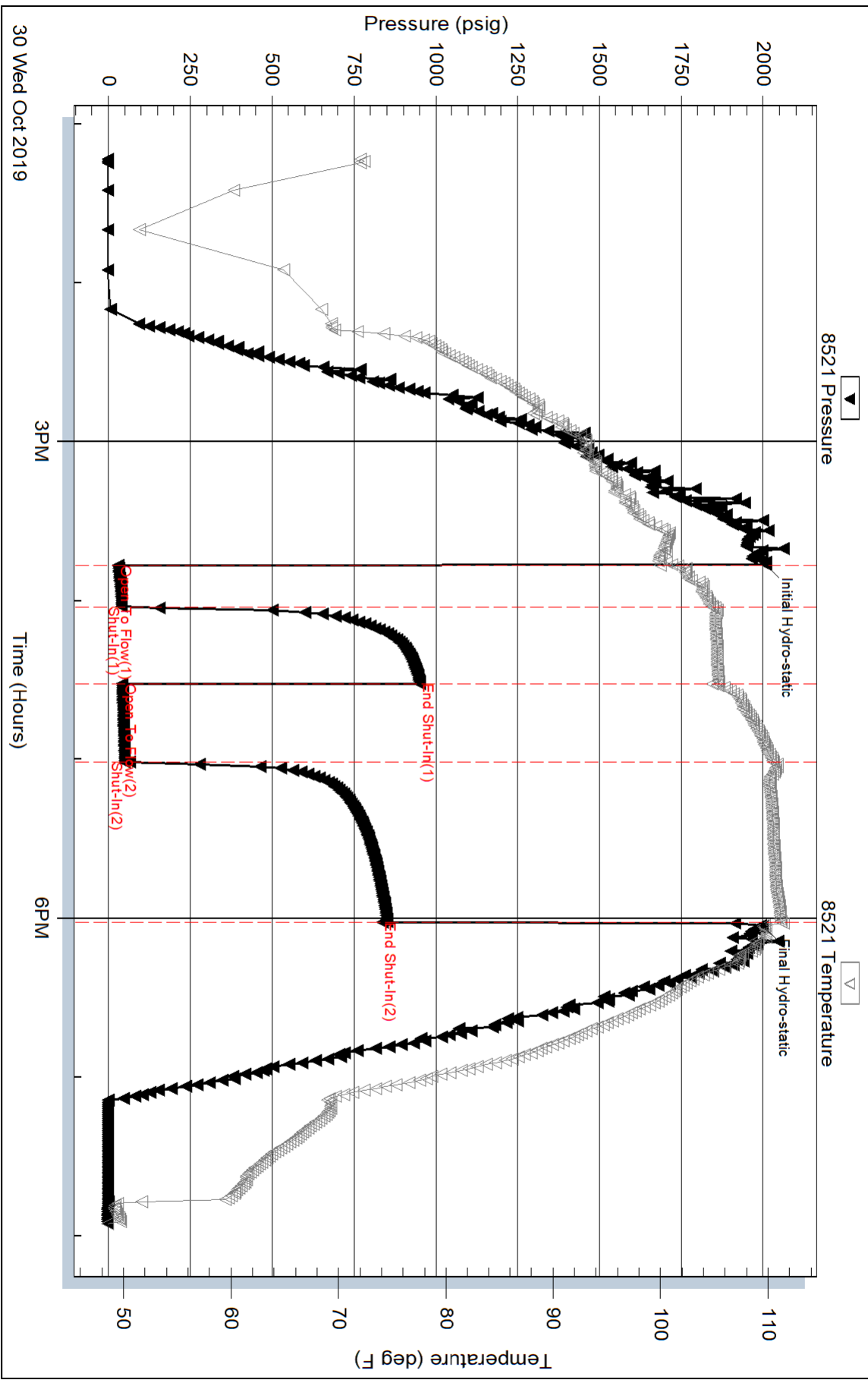
Serial #:

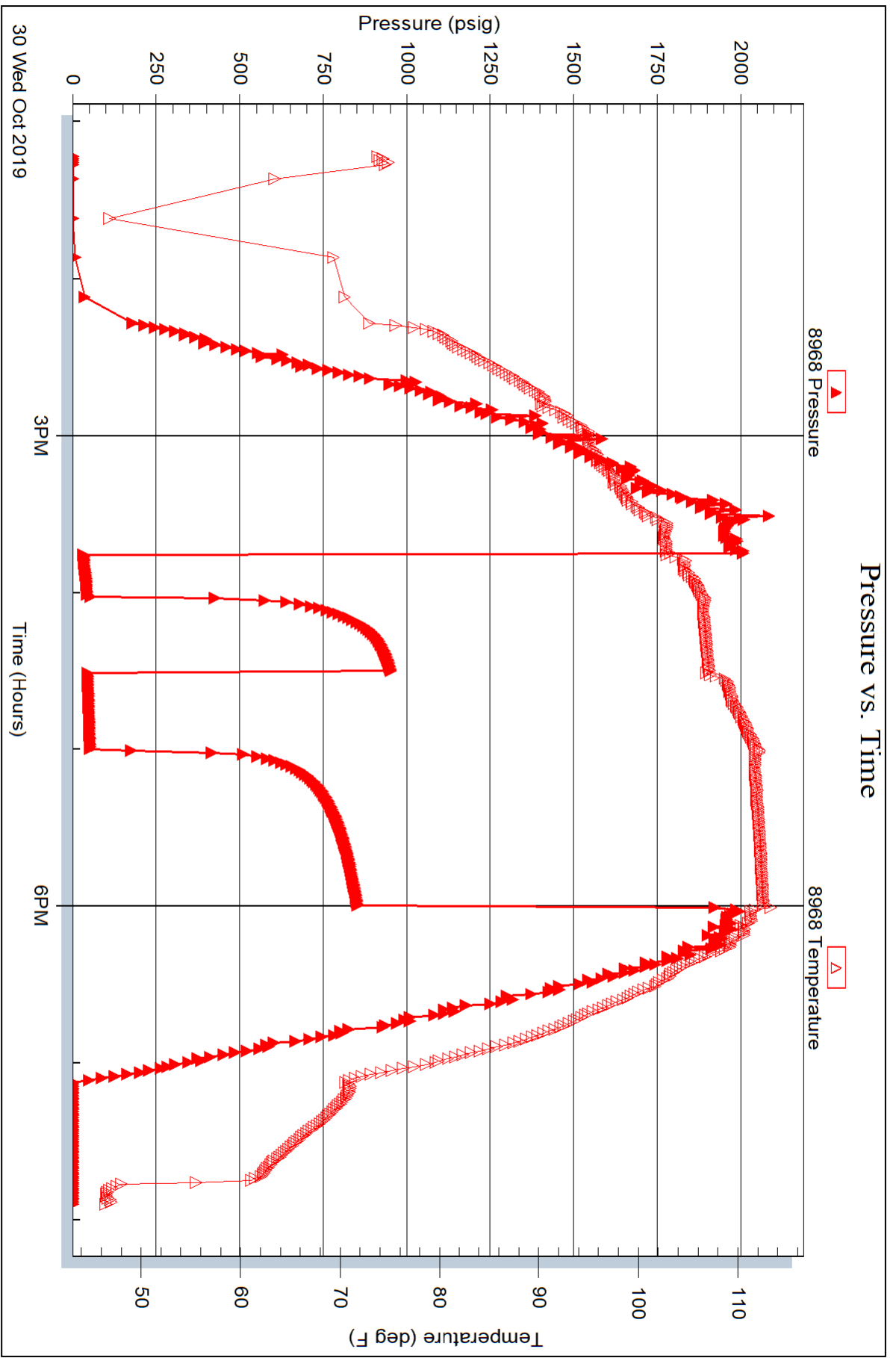
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco LLC
2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

MRM #2
Job Ticket: 63941 **DST#: 4**
Test Start: 2019.10.31 @ 07:40:15

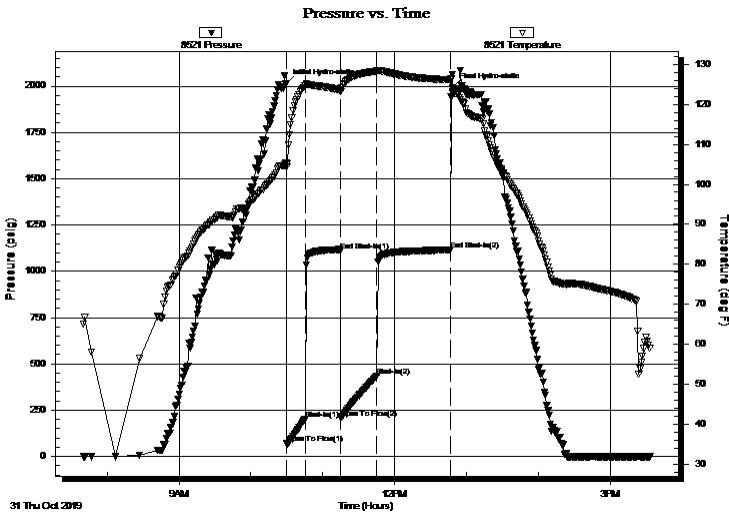
GENERAL INFORMATION:

Formation: **E**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 10:30:00 Tester: Mike Roberts
Time Test Ended: 15:33:15 Unit No: 81
Interval: 4150.00 ft (KB) To 4180.00 ft (KB) (TVD) Reference Elevations: 3160.00 ft (KB)
Total Depth: 4180.00 ft (KB) (TVD) 3150.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 8521 Inside
Press@RunDepth: 435.15 psig @ 4151.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2019.10.31 End Date: 2019.10.31 Last Calib.: 2019.10.31
Start Time: 07:40:15 End Time: 15:33:15 Time On Btm: 2019.10.31 @ 10:29:45
Time Off Btm: 2019.10.31 @ 12:48:30

TEST COMMENT: IF: Built to 31 1/2" blow ..BOB in 10 min
IS: No return blow
FF: Built to 45" blow BOB in 10 min
FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2012.88	105.35	Initial Hydro-static
1	70.00	104.43	Open To Flow (1)
16	202.15	124.67	Shut-In(1)
46	1108.75	123.49	End Shut-In(1)
46	208.53	123.14	Open To Flow (2)
76	435.15	128.30	Shut-In(2)
137	1114.70	126.13	End Shut-In(2)
139	1991.00	122.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	free oil 100%o	0.02
186.00	ocw m 10%o 30%w 60%m	2.13
248.00	ocmw 10%o 40%m 50%w	3.48
186.00	ocmw 5%o 5%m 90%w	2.61
248.00	sw 100% sw	3.48

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco LLC
2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

MRM #2
Job Ticket: 63941 **DST#: 4**
Test Start: 2019.10.31 @ 07:40:15

GENERAL INFORMATION:

Formation: **E**
Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole (Reset)**
Time Tool Opened: **10:30:00** Tester: **Mike Roberts**
Time Test Ended: **15:33:15** Unit No: **81**

Interval: 4150.00 ft (KB) To 4180.00 ft (KB) (TVD) Reference Elevations: **3160.00 ft (KB)**
Total Depth: **4180.00 ft (KB) (TVD)** **3150.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair** KB to GR/CF: **10.00 ft**

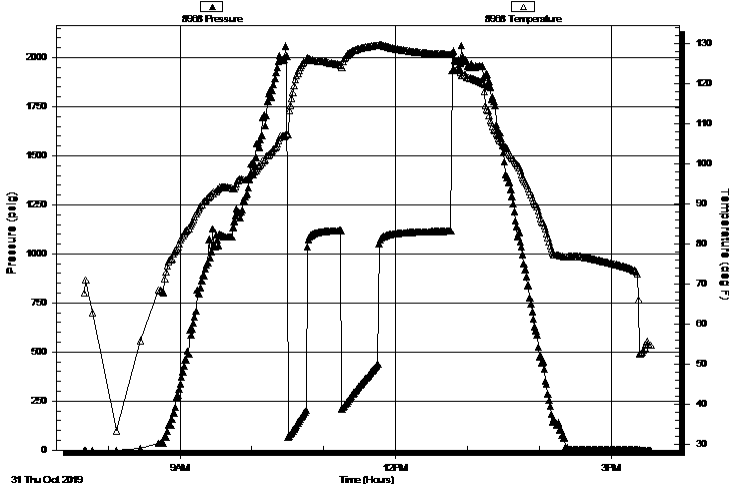
Serial #: 8968

Outside

Press@RunDepth: **psig @ 4151.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2019.10.31** End Date: **2019.10.31** Last Calib.: **2019.10.31**
Start Time: **07:40:15** End Time: **15:33:15** Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Built to 31 1/2" blow ..BOB in 10 min
IS: No return blow
FF: Built to 45" blow BOB in 10 min
FS: No return blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	free oil 100%o	0.02
186.00	ocw m 10%o 30%w 60%m	2.13
248.00	ocmw 10%o 40%m 50%w	3.48
186.00	ocmw 5%o 5%m 90%w	2.61
248.00	sw 100% sw	3.48

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63941

DST#: 4

Test Start: 2019.10.31 @ 07:40:15

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:

24000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	free oil 100%o	0.025
186.00	ocw m 10%o 30%w 60%m	2.126
248.00	ocmw 10%o 40%m 50%w	3.479
186.00	ocmw 5%o 5%m 90%w	2.609
248.00	sw 100% sw	3.479

Total Length: 873.00 ft Total Volume: 11.718 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

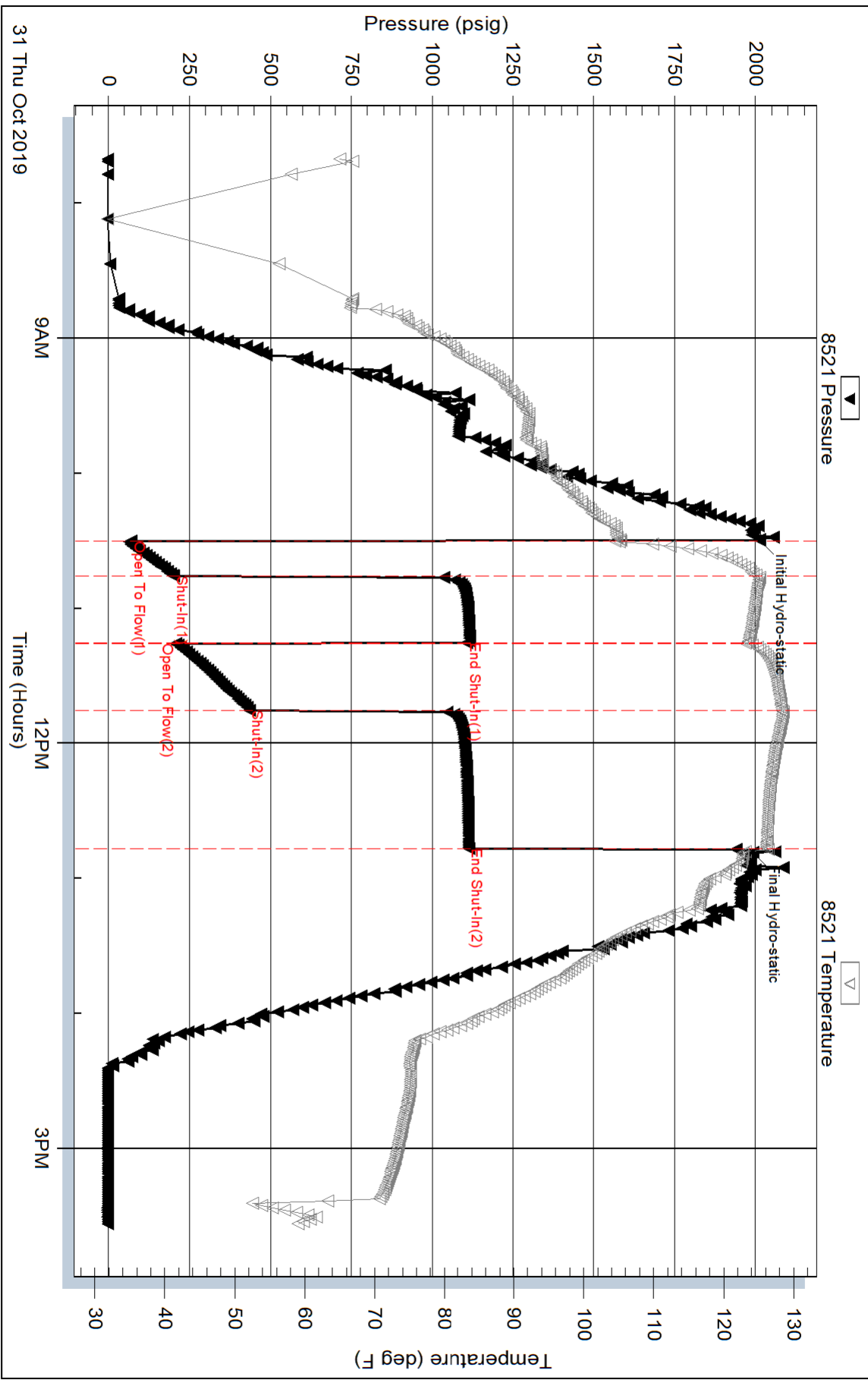
Laboratory Name:

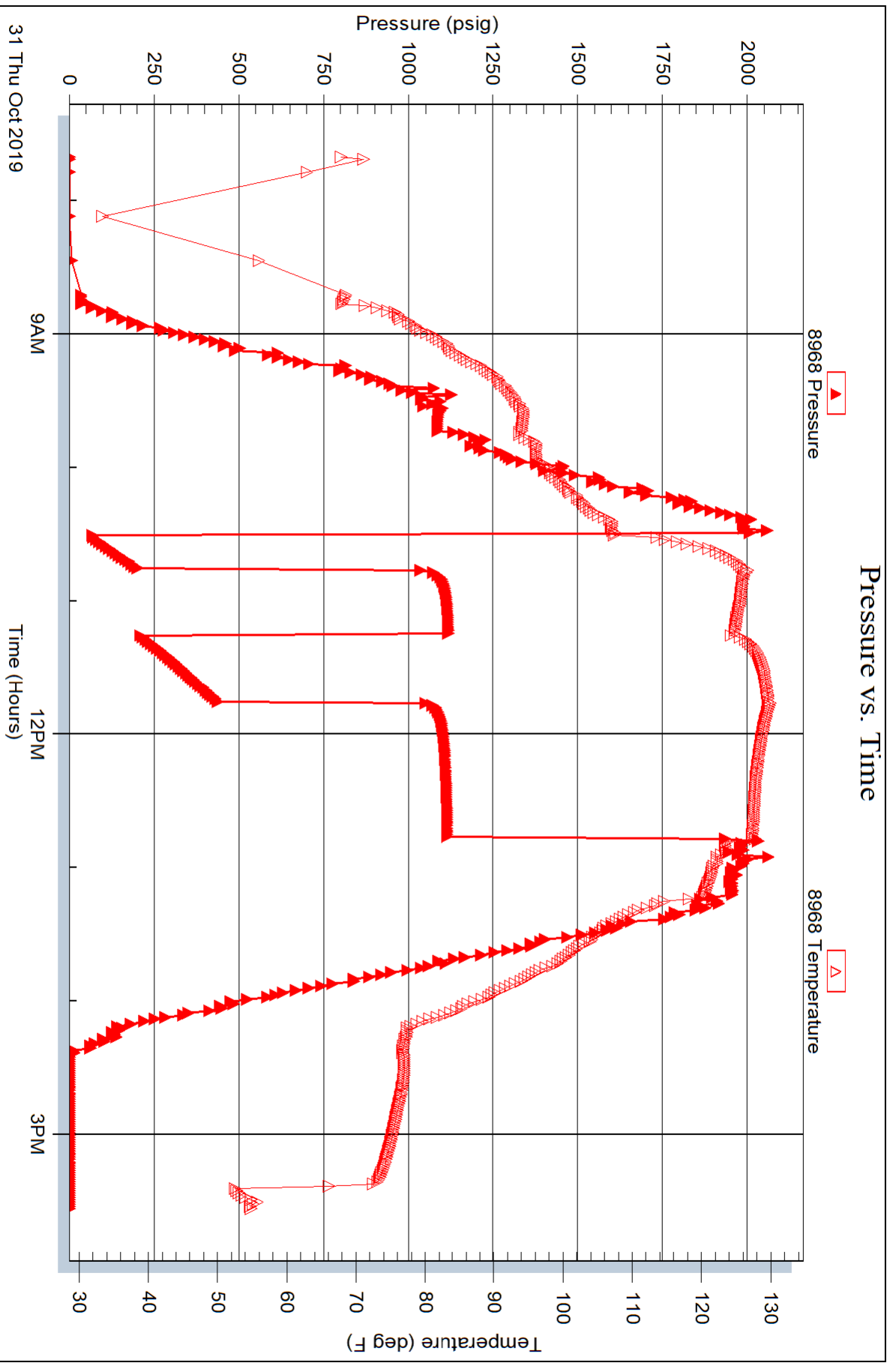
Laboratory Location:

Recovery Comments: RW= .491@ 47.1 = 24,000 ppm

API= 32 @ 60

Pressure vs. Time







TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco LLC
 2020 N Bramblewood
 Wichita KS
 67206
 ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

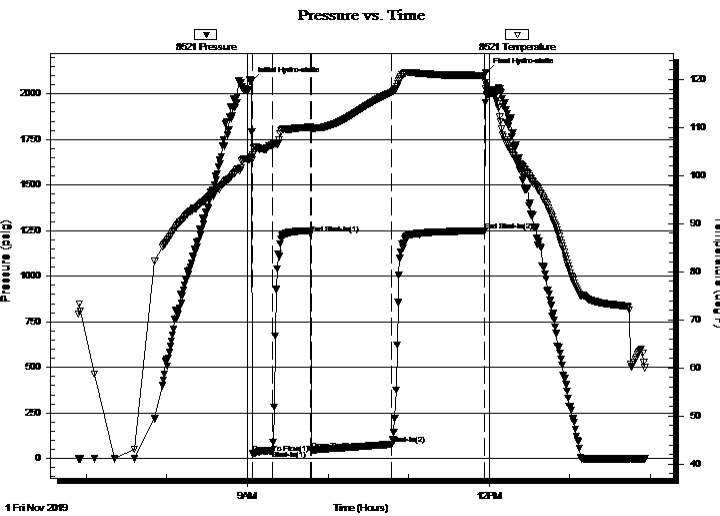
MRM #2
 Job Ticket: 63942 **DST#: 5**
 Test Start: 2019.11.01 @ 06:54:15

GENERAL INFORMATION:

Formation: **H**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:03:30
 Time Test Ended: 13:55:45
Interval: 4220.00 ft (KB) To 4260.00 ft (KB) (TVD)
 Total Depth: 4260.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 3160.00 ft (KB)
 3150.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8521 Inside
 Press@RunDepth: 77.86 psig @ 4221.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.11.01 End Date: 2019.11.01 Last Calib.: 2019.11.01
 Start Time: 06:54:15 End Time: 13:55:45 Time On Btm: 2019.11.01 @ 09:03:00
 Time Off Btm: 2019.11.01 @ 11:57:30

TEST COMMENT: IF: Built to 2 3/4" blow
 IF: No return blow
 FF: Built to 1 3/4" blow
 FS: No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2067.32	103.95	Initial Hydro-static
1	26.15	103.39	Open To Flow (1)
16	43.34	106.33	Shut-In(1)
44	1232.53	110.08	End Shut-In(1)
45	47.67	109.55	Open To Flow (2)
105	77.86	117.33	Shut-In(2)
174	1246.16	120.80	End Shut-In(2)
175	2117.58	118.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	free oil 100% o	0.05
82.00	ocm 20%o 80%m	0.71
58.00	mcw 40%m 60%w	0.81

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco LLC
 2020 N Bramblewood
 Wichita KS
 67206
 ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

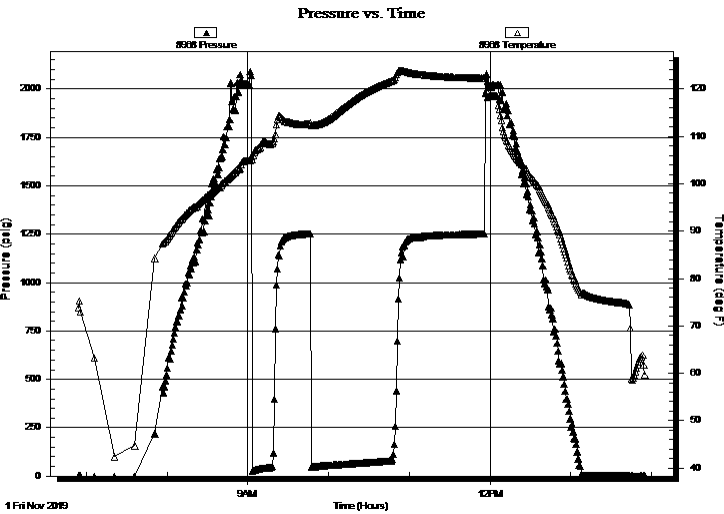
MRM #2
 Job Ticket: 63942 **DST#: 5**
 Test Start: 2019.11.01 @ 06:54:15

GENERAL INFORMATION:

Formation: **H**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 09:03:30 Tester: Mike Roberts
 Time Test Ended: 13:55:45 Unit No: 81
Interval: 4220.00 ft (KB) To 4260.00 ft (KB) (TVD)
 Reference Elevations: 3160.00 ft (KB)
 Total Depth: 4260.00 ft (KB) (TVD) 3150.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 8968 Outside
 Press@RunDepth: psig @ 4221.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.11.01 End Date: 2019.11.01 Last Calib.: 2019.11.01
 Start Time: 06:54:15 End Time: 13:55:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Built to 2 3/4" blow
 IF: No return blow
 FF: Built to 1 3/4" blow
 FS: No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	free oil 100% o	0.05
82.00	ocm 20%o 80%m	0.71
58.00	mcw 40%m 60%w	0.81

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63942

DST#: 5

Test Start: 2019.11.01 @ 06:54:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

25000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	free oil 100% o	0.049
82.00	ocm 20%o 80%m	0.713
58.00	mcw 40%m 60%w	0.814

Total Length: 150.00 ft Total Volume: 1.576 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

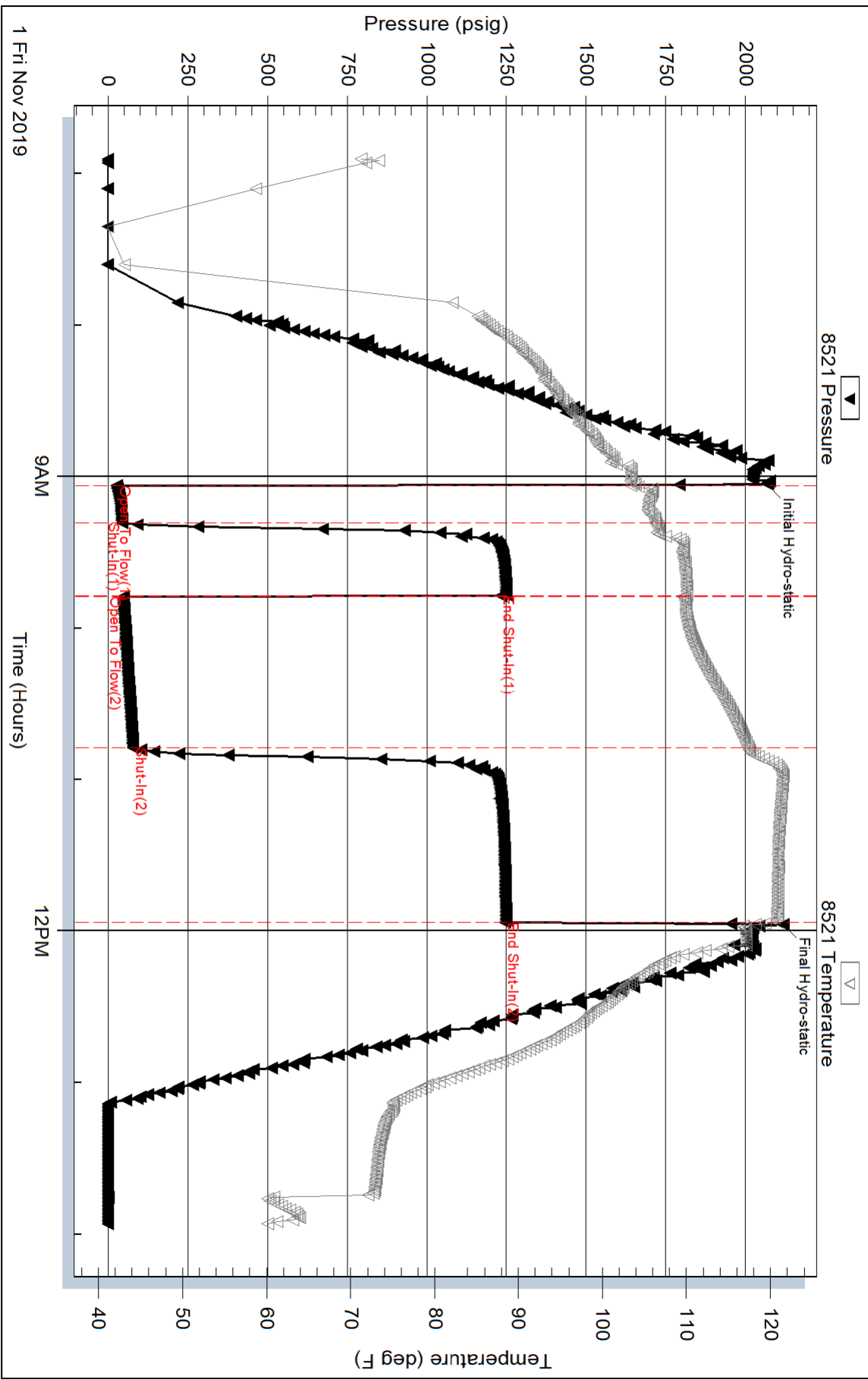
Laboratory Name:

Laboratory Location:

Recovery Comments: API= 33

RW= .471@53.7 = 25,500 PPM

Pressure vs. Time

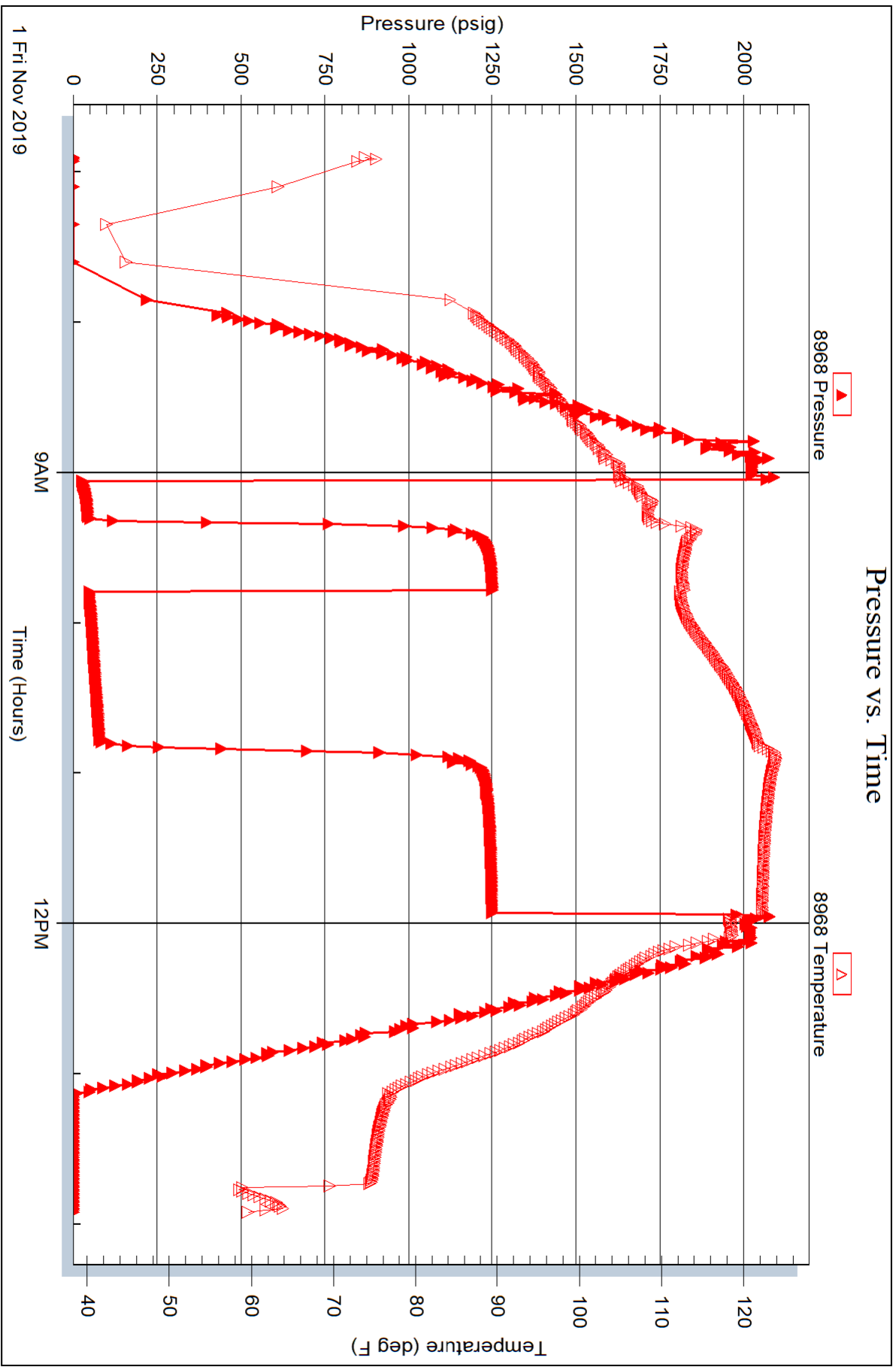


Serial #: 8968

Outside Berexco LLC

MRM#2

DST Test Number: 5





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63943

DST#: 6

Test Start: 2019.11.02 @ 03:36:15

GENERAL INFORMATION:

Formation: **I-J**
 Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole (Reset)**
 Time Tool Opened: **06:52:45** Tester: **Mike Roberts**
 Time Test Ended: **12:29:30** Unit No: **81**
Interval: 4255.00 ft (KB) To 4320.00 ft (KB) (TVD) Reference Elevations: **3160.00 ft (KB)**
 Total Depth: **4320.00 ft (KB) (TVD)** **3150.00 ft (CF)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair** KB to GR/CF: **10.00 ft**

Serial #: 8521

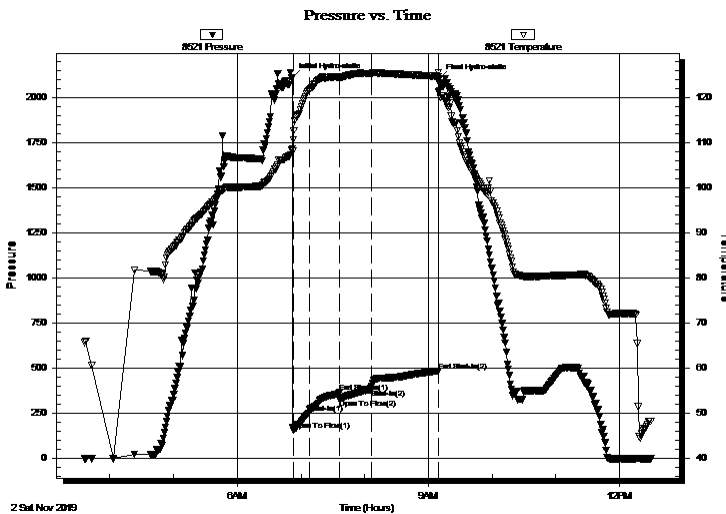
Inside

Press@RunDepth: **383.60 psig @ 4290.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2019.11.02** End Date: **2019.11.02** Last Calib.: **2019.11.02**
 Start Time: **03:36:15** End Time: **12:29:30** Time On Btm: **2019.11.02 @ 06:52:00**
 Time Off Btm: **2019.11.02 @ 09:10:30**

TEST COMMENT: IF:BOB in 3 min. Built to 71" blow
 IS:BOB in 10 min. Built to 38 1/2" blow
 FF:BOB in 5 min Built to 70" blow
 FS:BOB in 40 min. Built to 17" blow

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2112.75	108.66	Initial Hydro-static
1	154.83	110.65	Open To Flow (1)
16	253.13	121.53	Shut-In(1)
44	366.01	124.30	End Shut-In(1)
45	329.68	124.29	Open To Flow (2)
74	383.60	125.37	Shut-In(2)
137	485.73	124.68	End Shut-In(2)
139	2106.89	121.55	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
0.00	GIP= 1054 ft	0.00
960.00	gco 10%g 90%o	12.94
58.00	mcog 10%m 30%o 60%g	0.81

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Berexco LLC
2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

MRM #2

Job Ticket: 63943

DST#: 6

Test Start: 2019.11.02 @ 03:36:15

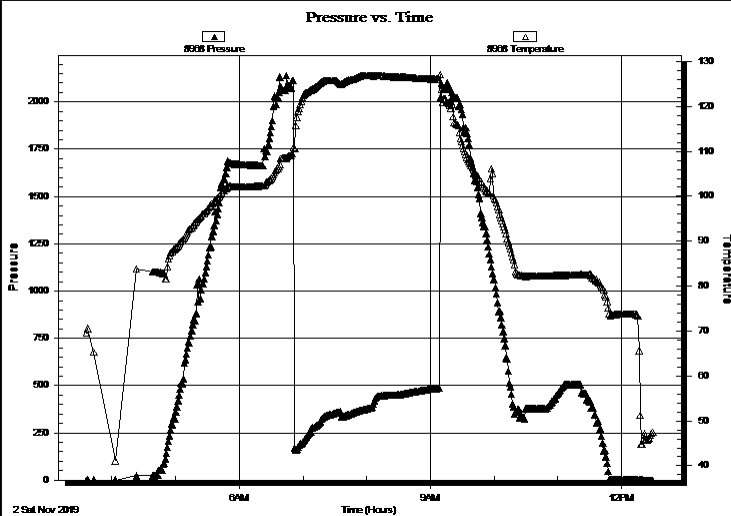
GENERAL INFORMATION:

Formation: **I-J**
Deviated: **No Whipstock:** ft (KB) Test Type: **Conventional Bottom Hole (Reset)**
Time Tool Opened: 06:52:45 Tester: **Mike Roberts**
Time Test Ended: 12:29:30 Unit No: **81**

Interval: 4255.00 ft (KB) To 4320.00 ft (KB) (TVD) Reference Elevations: **3160.00 ft (KB)**
Total Depth: **4320.00 ft (KB) (TVD)** **3150.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair** KB to GR/CF: **10.00 ft**

Serial #: 8968 Outside
Press@RunDepth: psig @ **4290.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2019.11.02** End Date: **2019.11.02** Last Calib.: **2019.11.02**
Start Time: **03:36:15** End Time: **12:29:15** Time On Btm:
Time Off Btm:

TEST COMMENT: IF:BOB in 3 min. Built to 71" blow
IS:BOB in 10 min. Built to 38 1/2" blow
FF:BOB in 5 min Built to 70" blow
FS:BOB in 40 min. Built to 17" blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	GIP= 1054 ft	0.00
960.00	gco 10%g 90%o	12.94
58.00	mcog 10%m 30%o 60%g	0.81

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63943

DST#: 6

Test Start: 2019.11.02 @ 03:36:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

30 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4300.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	GIP= 1054 ft	0.000
960.00	gco 10%g 90%o	12.938
58.00	mcog 10%m 30%o 60%g	0.814

Total Length: 1018.00 ft Total Volume: 13.752 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

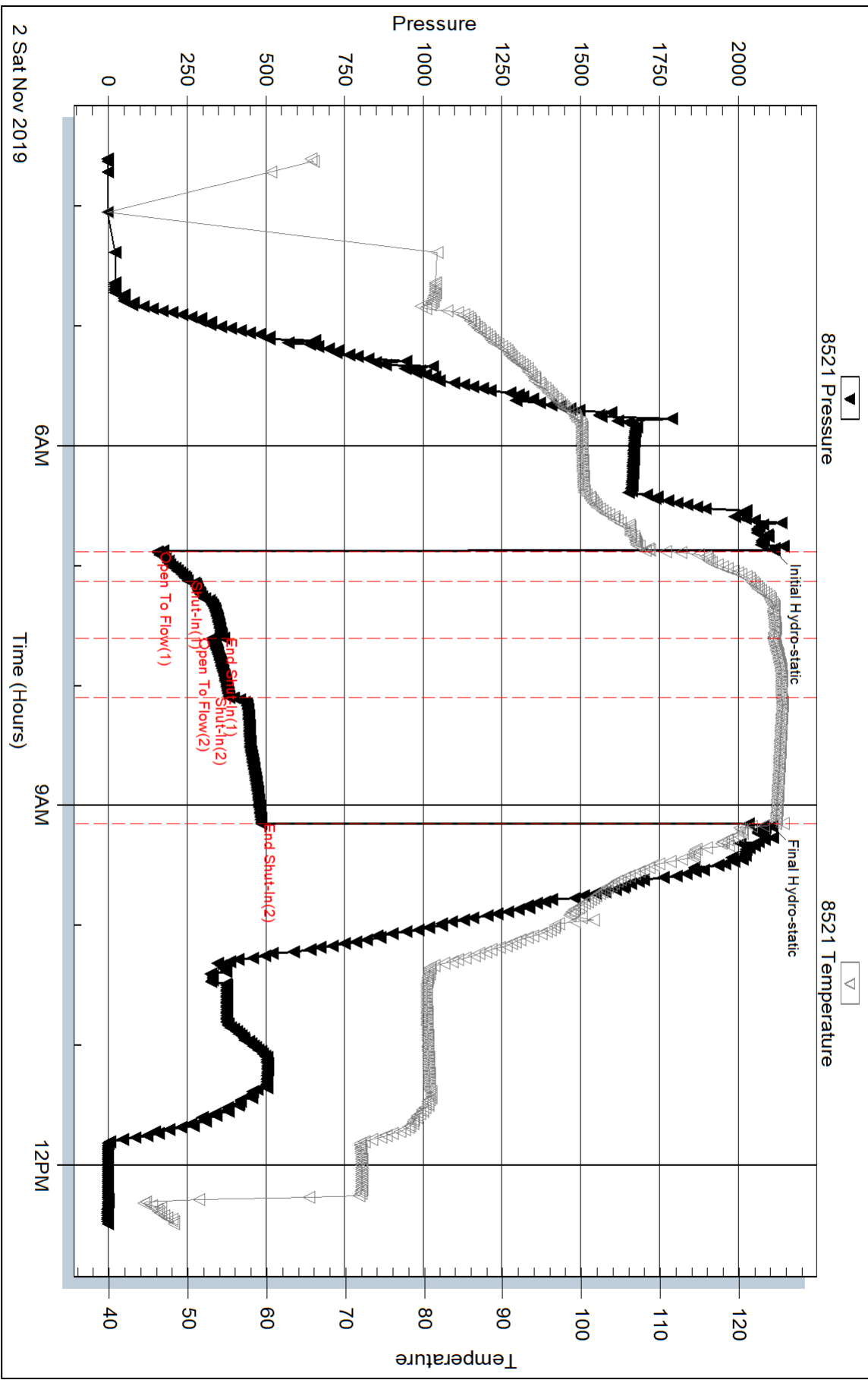
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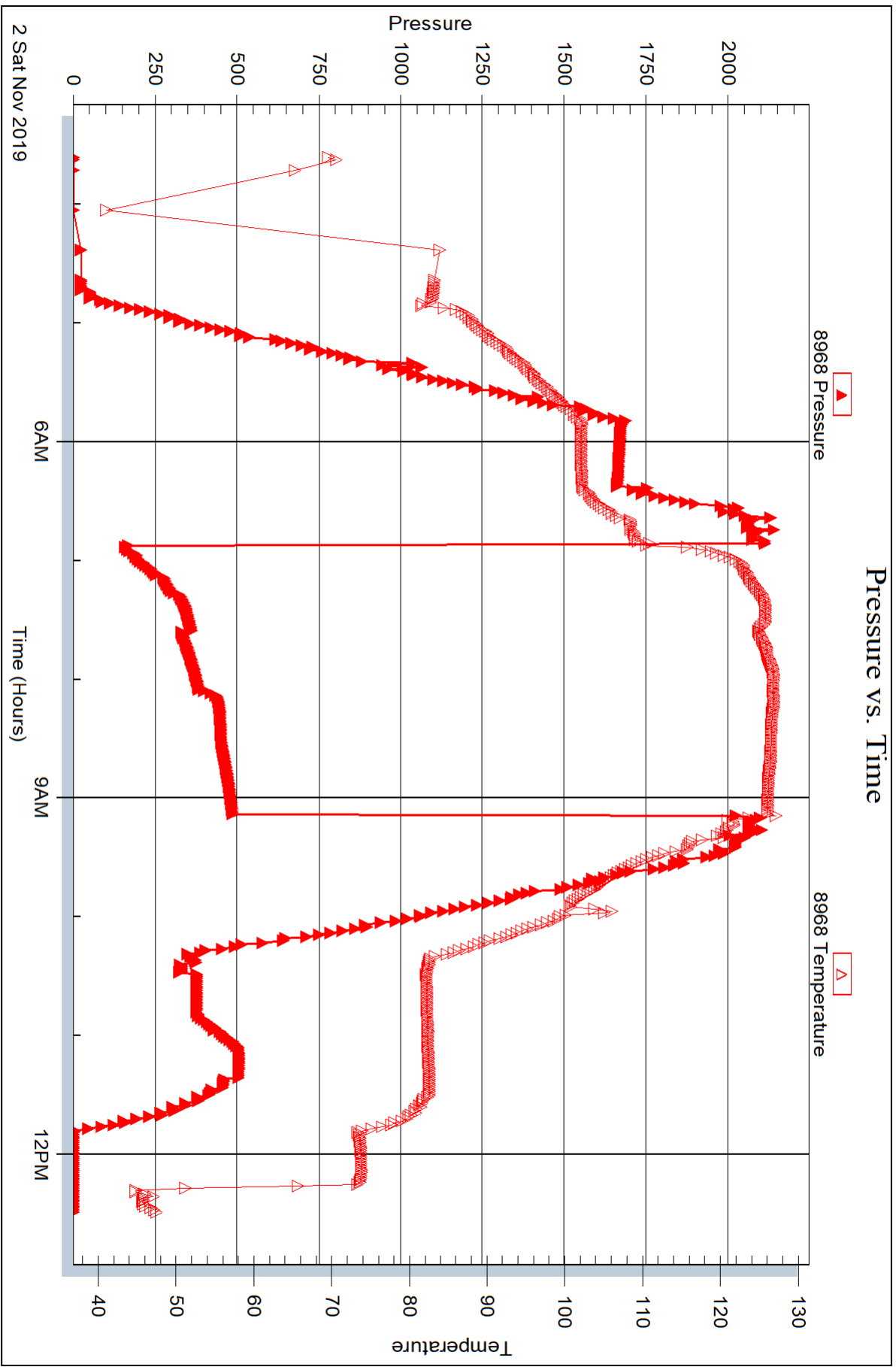
Laboratory Name:

Laboratory Location:

Recovery Comments: API= 32@ 40 corrected to 32 @60

Pressure vs. Time







**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63944

DST#: 7

Test Start: 2019.11.02 @ 01:53:15

GENERAL INFORMATION:

Formation: **K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:45:30
 Time Test Ended: 11:23:30
 Interval: **4310.00 ft (KB) To 4360.00 ft (KB) (TVD)**
 Total Depth: 4360.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 3160.00 ft (KB)
 3150.00 ft (CF)
 KB to GR/CF: 10.00 ft

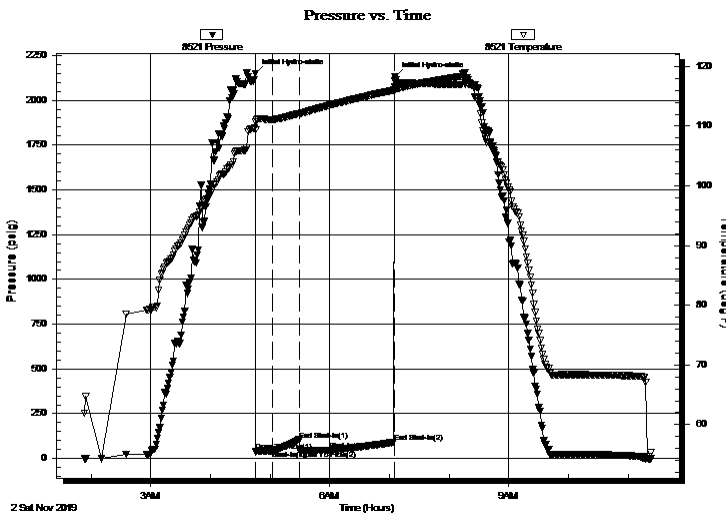
Serial #: 8521

Inside

Press@RunDepth: 46.03 psig @ 4345.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.11.02 End Date: 2019.11.02 Last Calib.: 2019.11.03
 Start Time: 01:53:15 End Time: 11:23:30 Time On Btm: 2019.11.02 @ 04:45:15
 Time Off Btm:

TEST COMMENT: IF:Weak surface blow
 IS:No return blow
 FF:Weak surface blow
 FS:No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2148.89	110.64	Initial Hydro-static
1	40.17	109.40	Open To Flow (1)
17	43.25	111.11	Shut-In(1)
44	103.58	112.13	End Shut-In(1)
45	44.69	112.10	Open To Flow (2)
75	46.03	113.49	Shut-In(2)
140	91.06	116.03	End Shut-In(2)
141	2133.31	116.35	Initial Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100% _m	0.02

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco LLC

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

15-10s-33w Thomas Co KS

MRM #2

Job Ticket: 63944

DST#: 7

Test Start: 2019.11.02 @ 01:53:15

GENERAL INFORMATION:

Formation:	K			Test Type:	Conventional Bottom Hole (Reset)
Deviated:	No	Whipstock:	ft (KB)	Tester:	Mike Roberts
Time Tool Opened:	04:45:30			Unit No:	81
Time Test Ended:	11:23:30				
Interval:	4310.00 ft (KB) To 4360.00 ft (KB) (TVD)			Reference Elevations:	3160.00 ft (KB)
Total Depth:	4360.00 ft (KB) (TVD)				3150.00 ft (CF)
Hole Diameter:	7.88 inches	Hole Condition:	Fair	KB to GR/CF:	10.00 ft

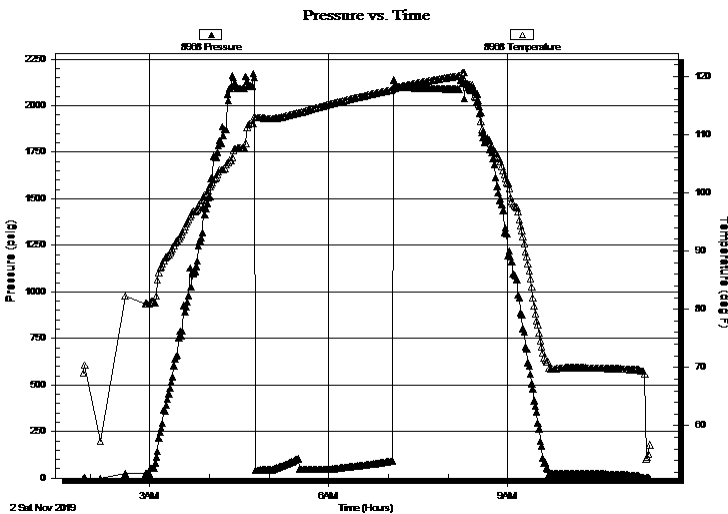
Serial #: 8968

Outside

Press@RunDepth:	psig @	4345.00 ft (KB)	Capacity:	8000.00 psig	
Start Date:	2019.11.02	End Date:	2019.11.02	Last Calib.:	2019.11.03
Start Time:	01:53:15	End Time:	11:23:15	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF:Weak surface blow
IS:No return blow
FF:Weak surface blow
FS:No return blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco LLC

15-10s-33w Thomas Co KS

2020 N Bramblewood
Wichita KS
67206
ATTN: Bryan Bynog

MRM #2

Job Ticket: 63944

DST#: 7

Test Start: 2019.11.02 @ 01:53:15

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: 61.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.99 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 4300.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

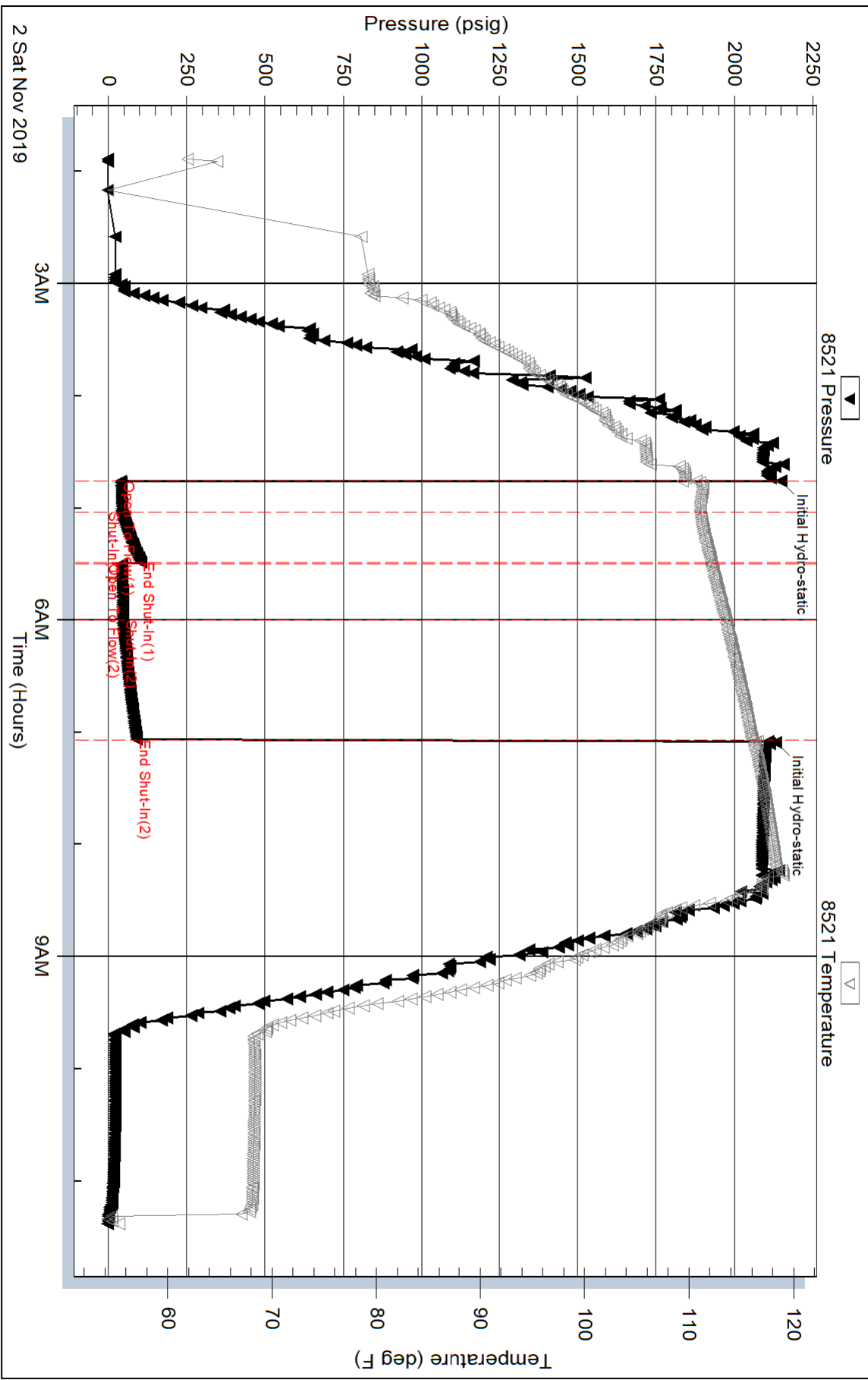
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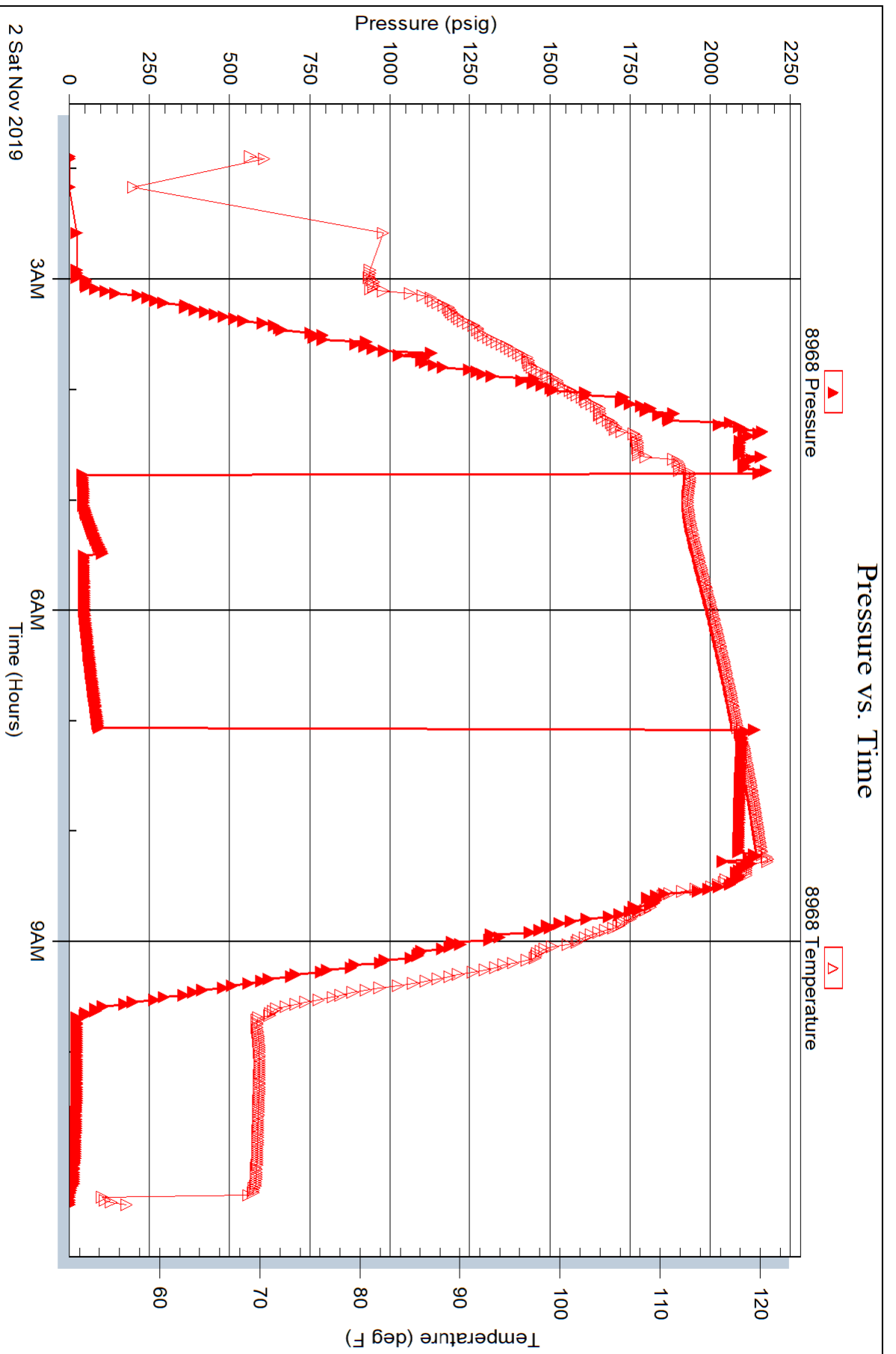
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





LITHOLOGY STRIP LOG

WellSight Systems

Scale 1:240 (5"=100') Imperial

Measured Depth Log

Well Name: MRM #2

Well Id:

Location: NWNENE SECTION 15 10S-33W THOMAS COUNTY, KANSAS

License Number: 15-193-21059

Region: Midcontinent

Spud Date: 10-23-2019

Drilling Completed: 11-6-2019

Surface Coordinates: 340' FNL & 995' FEL

Bottom Hole

Coordinates:

Ground Elevation (ft): 3150

K.B. Elevation (ft): 3158

Logged Interval (ft): 3600

To: 4750

Total Depth (ft): 4750

Formation: LKC, FT. SCOTT, JOHNSON & MISSISSIPPI

Type of Drilling Fluid: WBM

Printed by WellSight LogViewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: BEREXCO, LLC.

Address: 2020 N. Bramblewood
Wichita, Kansas 67206

GEOLOGIST

Name: William B. Bynog

Company:

Address: P.O.Box 687
Pinecliffe, Co. 80471

Surveys

DEPTH	ANGLE
395'	.50
3677'	1
4135'	2

DSTs

DST#1 4030-4080, DST#2 4080-4135, DST#3 4130-4145, DST#4 4150-4180, DST#5 4220-4260, DST#6 4255-4320, DST#7 4310-4360

Remarks

PRODUCTIVE WELL

ROCK TYPES

- Anhy
- Bent
- Brec
- Cht
- Clyst

- Coal
- Congl
- Dol
- Gyp
- Igne

- Lmst
- Meta
- Mrlst
- Salt
- Shale

- Shcol
- Shgy
- Sltst
- Ss
- Till

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymn
- Kaol
- Marl

- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral

- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol

- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackst

OTHER SYMBOLS

POROSITY

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang

- Angular

OIL SHOW

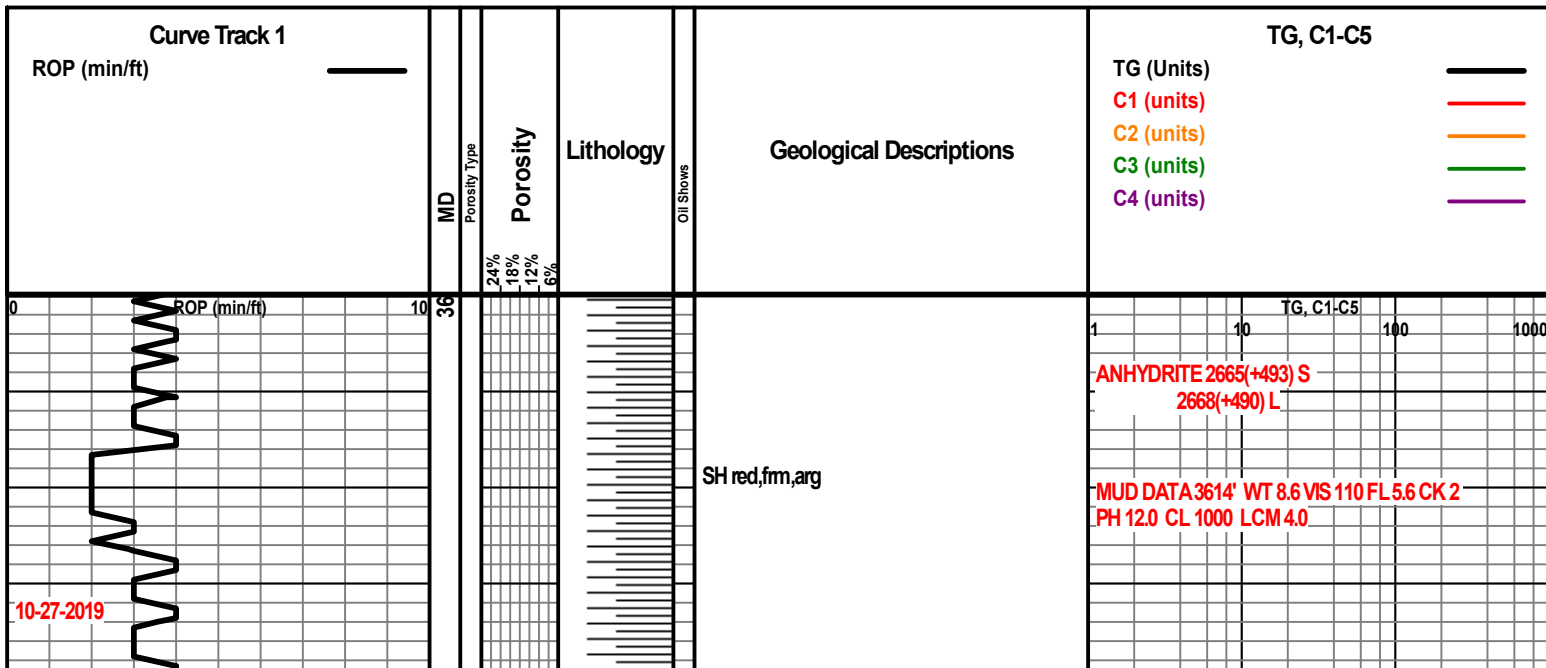
- Even
- Spotted
- Ques
- Dead

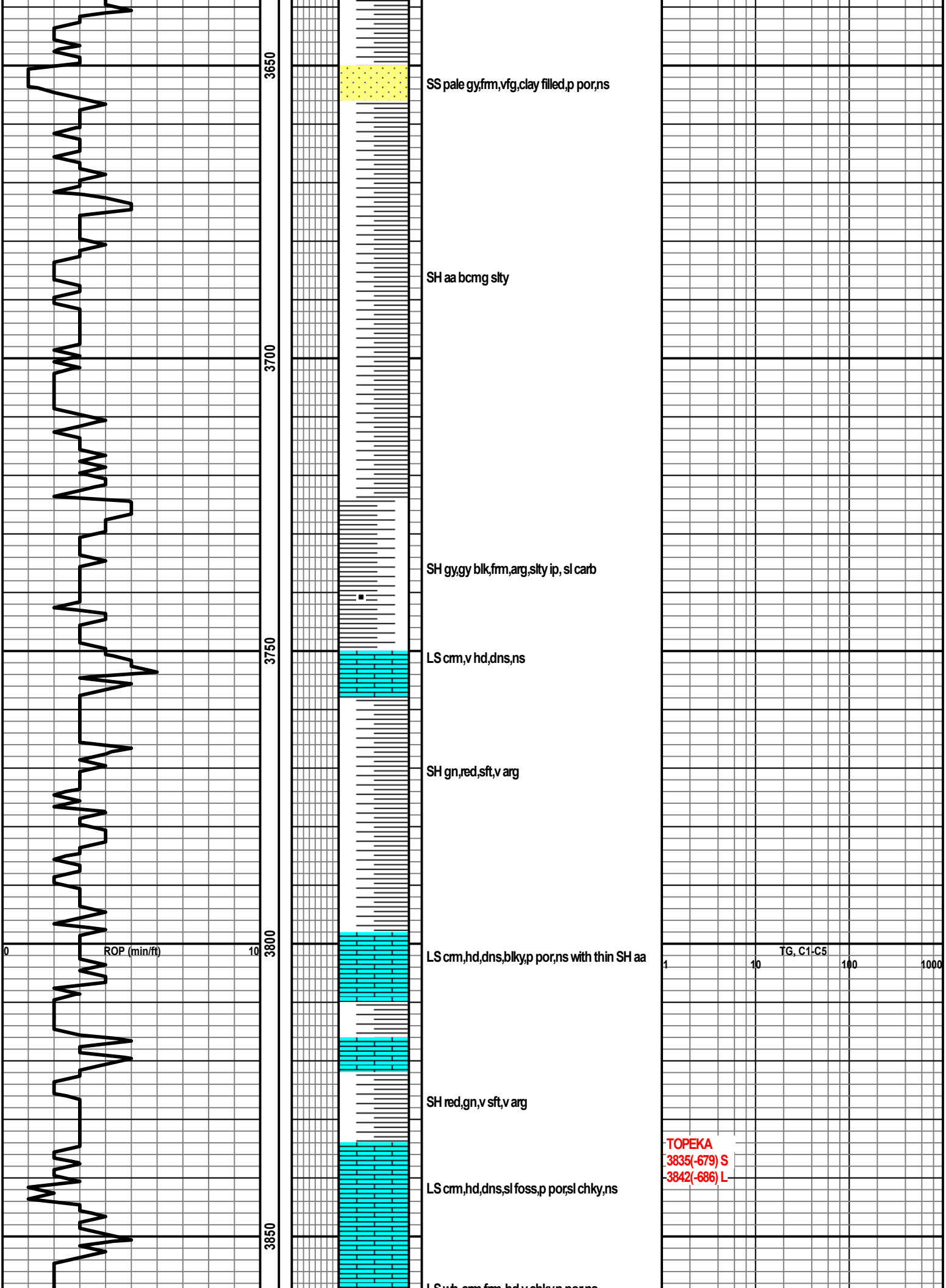
INTERVAL

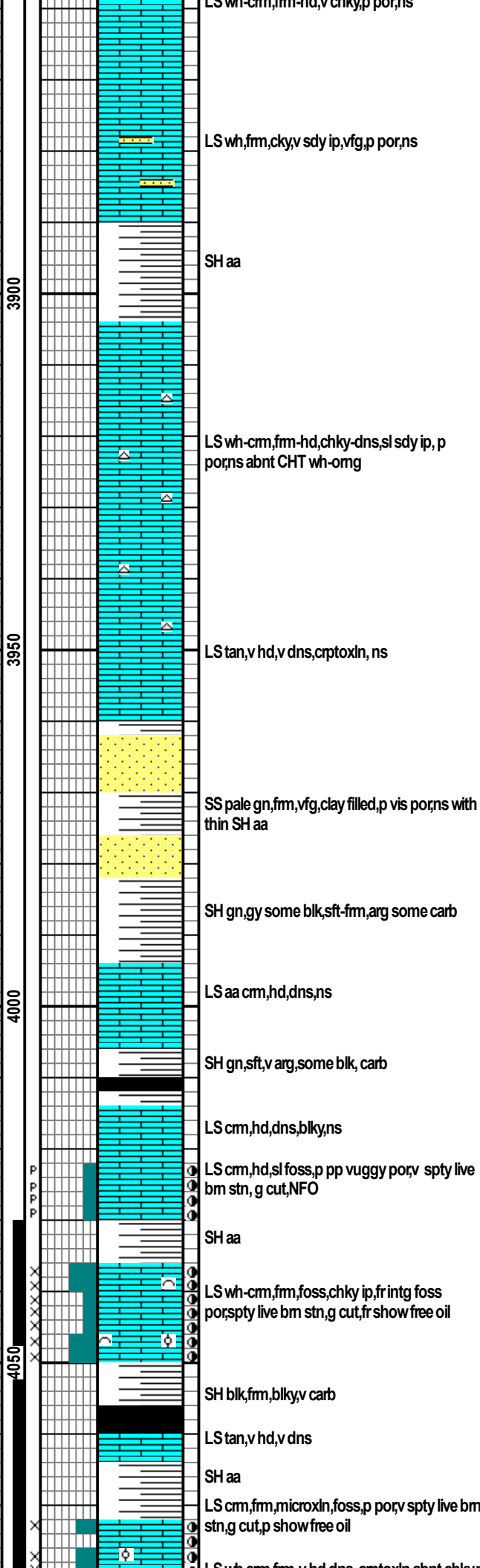
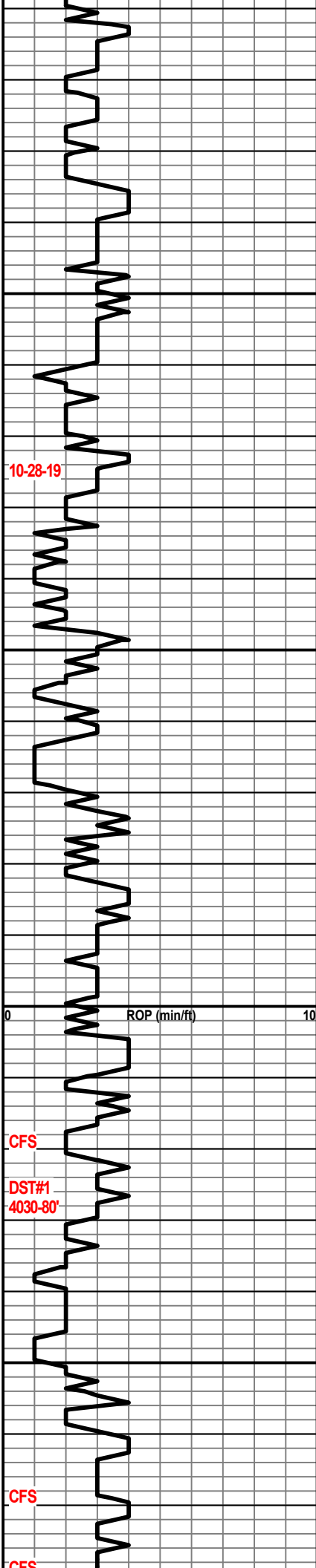
- Dst
- Dst

EVENT

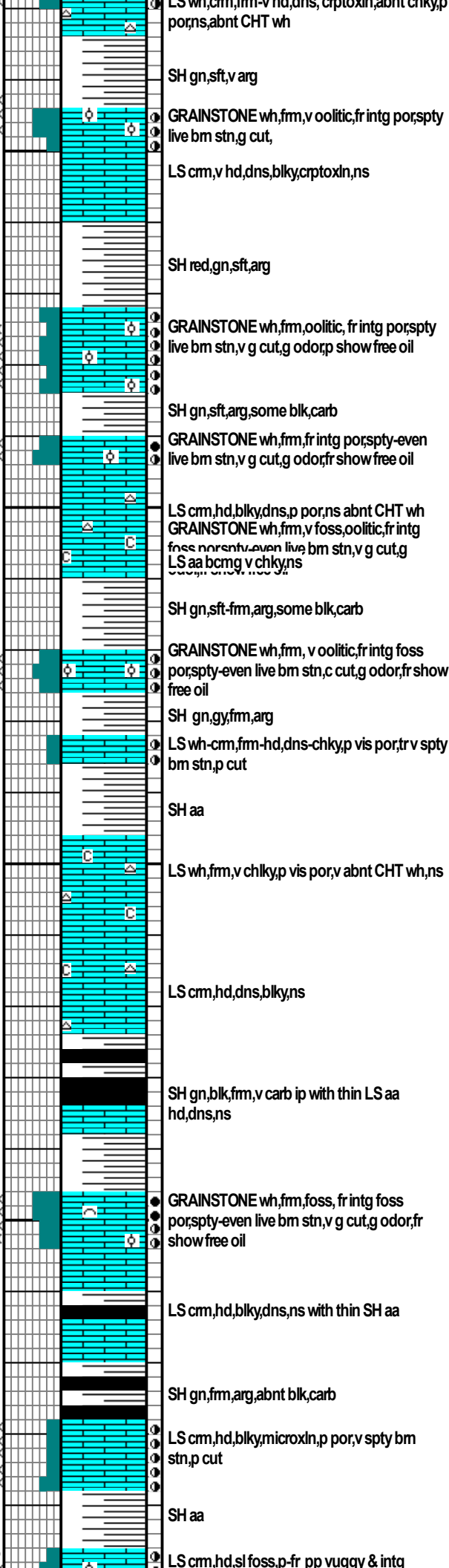
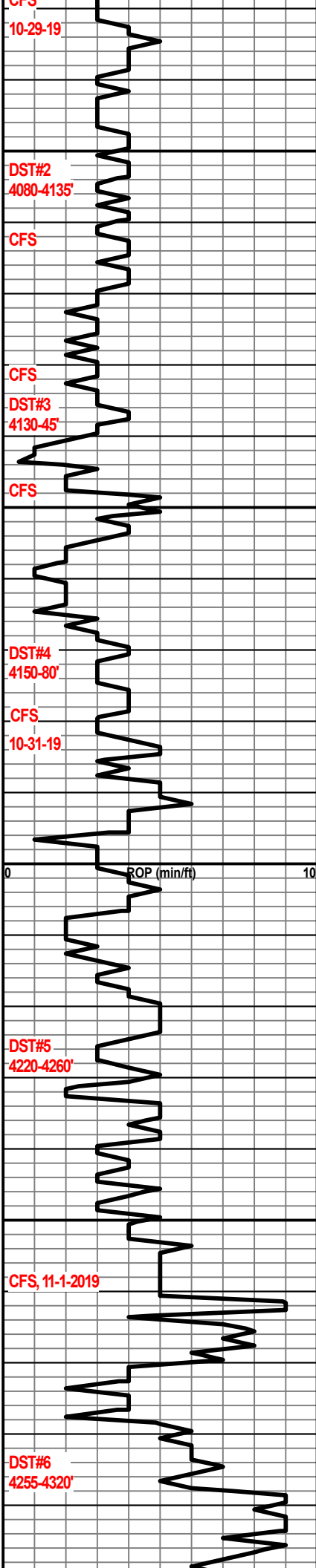
- Rft
- Sidewall







Depth (ft)	Notes
3900 - 3950	
3950 - 4000	
4000 - 4050	
4050 - 4080	<p>PLATTSMOUTH 4014(-856) S 4018(-860) L</p> <p>DST#1 4030-4080' PLATTSMOUTH & TORONTO 15-30-30-60 min. IH 1944 IF 49-149 (BOB 9 m) ISI 1203 FF 156-288 (BOB 8 m) FSI 1159 FH 1953 REC: 558' MSW</p> <p>MUD DATA 4059' WT 8.7 VIS 60 FL 6.0 CK 2 PH 11.5 CL 1300 LCM 2.0</p>
4080 - 4100	<p>HEEBNER 4050(-892) S 4056(-898) L</p>
4100 - 4120	<p>TORONTO 4072(-914) S 4076(-918) L</p>
4120 - 4150	<p>MUD DATA 4080' WT 9.0 VIS 52 FL 6.8 CK 2</p>



PH 11.5 CL 3800 LCM 2.0

A ZONE
4094(-936) S
4098(-940) L

DST#2 4080-4135' A & B ZONES
15-30-30-60 min.
IH 1994 IF 52-84 (7" blw) ISI 942
FF 89-139 (11" blw) FSI 939 FH 1967
REC: 182' OCM (2% OIL)

B ZONE
4122(-964) S
4128(-970) L

MUD DATA 4145' WT 8.9 VIS 59 FL 6.4 CK 2
PH 11.0 CL 2800 LCM 2.0

C ZONE
4140(-982) S
4144(-986) L

DST#3 4130-415' C ZONE
15-30-30-60 min.
IH 2007 IF 29-41 (1" blw) ISI 951
FF 42-50 (1/8"blw) FSI 835 FH 1999
REC: 60' MUD

E ZONE
4170(-1012) S
4174(-1016) L

DST#4 4150-4180' E ZONE
15-30-30-60 min.
IH 2012 IF 70-202 (31.5"blw) ISI 1108
FF 208-435 (45" blw) FSI 1114 FH 1991

REC: 873' TOTAL, 5' CO (gravity 32),
186'OCWM (10% O), 248' OCMW (10% O),
186' OCMW (5% O) & 248'SW

TG, C1-C5

MUD DATA 4180' WT 8.9 VIS 60 FL 6.8 CK 2
PH 11.0 CL 2800 LCM 2.0

DST#5 4220-4260' H ZONE
15-30-60-60 min.
IH 2067 IF 26-43(2.75") ISI 1232 FF 47-77
(1.75") FSI 1246 FH 2117
REC: 10' CO (gravity 33), 82' OCM (20% O)
& 58' MCW

H ZONE
4246(-1088) S
4248(-1090) L

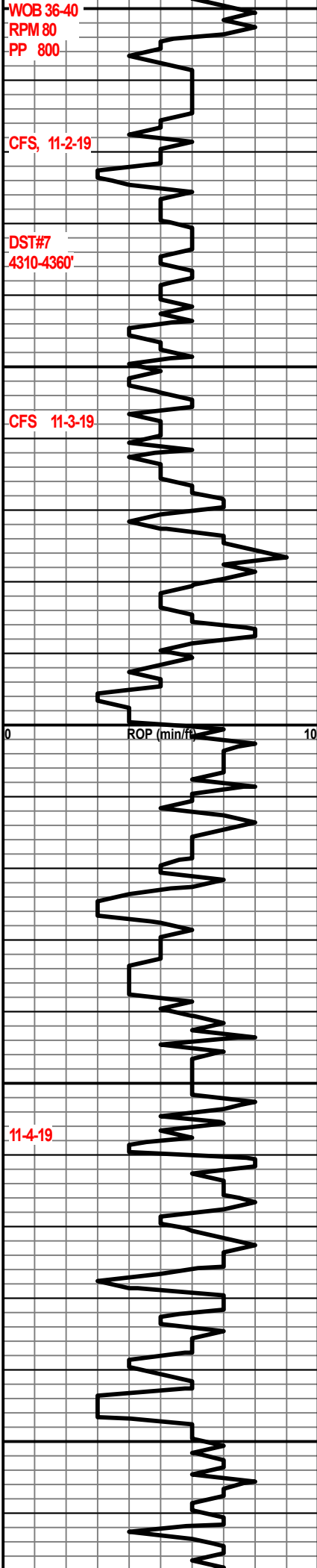
MUD DATA 4260' WT 8.9 VIS 60 FL 6.4 CK 2
PH 11.0 CL 4300 LCM 2.0

I ZONE
4278(-1120) S
4279(-1121) L

DST #6 4255-4320' I & J ZONES
15-30-30-60 min.
IH 2112 IF 154-253 (71" B), ISI 366 (38.5" BB)
FF 329-383 (70" B) FSI 485 (17" BB) FH 2106

REC: 1054' GIP, 960' GCO (gravity 30) & 58'
MCOG (60% G & 30% O)

J ZONE



WOB 36-40
RPM 80
PP 800

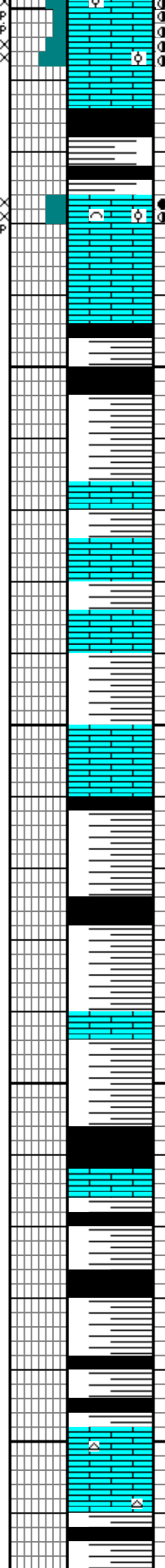
CFS, 11-2-19

DST#7
4310-4360'

CFS 11-3-19

11-4-19

430
4350
4400
4450
4500



por,spty live bm str,g cut,fr show free oil,g odor

LS cm,v hd,dns,blk,ns

SH gn,red,sft,v arg,abnt blk carb

LS wh-crm,frm,foss,p pp vuggy por & intg foss por;spty-even live bm str,g cut,g odor,p show free oil

LS cm,v hd,dns,cryptoxln, ppor,ns

H aa abnt blk,carb

LS cm,v hd,dns,cryptoxln,p por,ns with thin bedded SH aa

LS aa bcrg v chky,p por,ns

SH red,v sft,v arg,some blk,carb with thin LS aa

SH gn,blk,fiss,frm,blk,y,v carb

SH & LS aa ns

SH red-gn,frm,fiss,arg

LS cm,v hd,dns,abnt chky,p por,abnt CHT wh

SH aa,abnt blk,carb

K ZONE
4296(-1138) S
4300(-1142) L

MUD DATA 4320' WT 9.1 VIS 61 FL 6.0 CK 2
PH 11.0 CL 4300 LCM 2.0

K ZONE
4326(-1168) S
4327(-1169) L

DST#7 4310-4360' K ZONE
15-30-30-60 min.
IH 2148 IF 40-43 (wk blw) ISI 103 FF
44-46 (wk blw) FSI 91 FH 2133
REC: 5' OSM

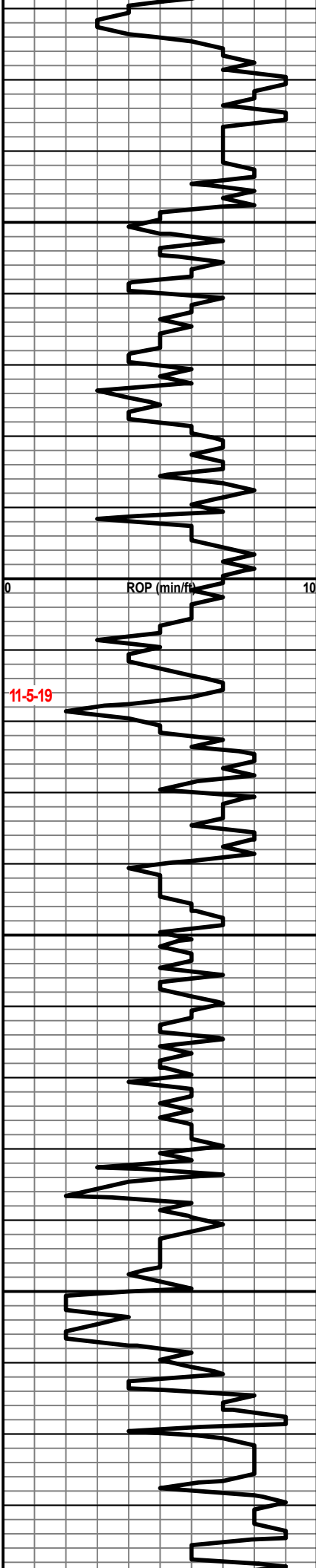
MUD DATA 4360' WT 9.1 VIS 66 FL 6.0 CK 2
PH 11.0 CL 3900 LCM 2.0

TG, C1-C5

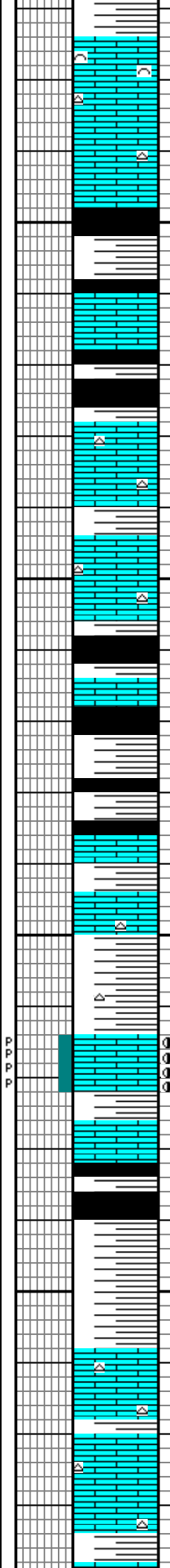
1 10 100 1000

BKC
4410(-1252) S
4413(-1255) L

MUD DATA 4458' WT 9.2 VIS 86 FL 6.8 CK 2
PH 10.5 CL 4100 LCM 2.0



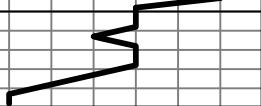
4550
4600
4650
4700



LS wh, fm, sl foss, gran tex, chky, p por, ns
 LS cm, hd, ns aa abnt CHT wh
 SH gn, sft, arg, abnt blk, v carb
 LS aa dns
 SH aa abnt blk, carb
 LS cm, v hd, dns, crptoxln, chky ip, p por, ns
 abnt CHT wh
 SH aa
 LS tan, v hd, v dns, blk, crptoxln, no vis por, ns
 SH gn, red, sft, v arg, v abnt CHT wh, omg
 LS cm, hd, dns, ns, some rare p pp vuggy with
 v spty live blk str, g cut, NFO, poss. cavings ?
 SH gn, red, fm, fiss some blk, carb with thin LS
 cm, v hd, v dns, p por, ns
 SH gn, yell, red, fm, fiss
 LS wh, fm, v chky, p por, abnt CHT wh, omg
 LS cm, hd, dns, blk, p por, ns, abnt CHT aa

PAWNEE
 4524(-1366) S
 4526(-1368) L
 FT SCOTT
 4578(-1420) S
 4580(-1422) L
 TG, C1-C5
 1 10 100 1000
 JOHNSON
 4644(-1476) S
 4643(-1475) L
 MUD DATA 4655' WT 9.2 VIS 52 FL 8.0 CK 2
 PH 10.5 CL 4000 LCM 2.0
 MISSISSIPPIAN
 4708(-1550) S
 4708(-1550) L

11-6-2019



4750

4800

50

ROP (min/ft)

10

50

LS pale gy,hd,dns,blky,,ns with thin SH aa

RTD 4750'
LTD 4753'

TG, C1-C5

1

10

100

1000