

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](mailto: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	HINES 27X
Doc ID	1509267

All Electric Logs Run

Microlog
Neutron Density
Gamma Ray/Neutron
Resistivity



DEC 03 2019



PAGE 1 of 1	CUST NO 1000335	YARD # 1718	INVOICE DATE 12/05/2019
INVOICE NUMBER <b>93099307</b>			

Pratt (620) 672-1201  
 B BEREXCO LLC  
 I 2020 N BRAMBLEWOOD  
 L WICHITA  
 L KS US 67206  
 T  
 O ATTN: VICKEY LOVETTE

J LEASE NAME Hines Unit 27X  
 O LOCATION  
 B COUNTY Russell  
 S STATE KS  
 I JOB DESCRIPTION Cement-New Well Casing/Pi  
 T JOB CONTACT  
 E

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41196924	19843		Net - 30 days	01/04/2020

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<i>For Service Dates: 12/04/2019 to 12/04/2019</i>				
0041196924				
171818510A Cement-New Well Casing/Pi 12/04/2019				
Cement Surface				
Class A Cement	250.00	SK	7.75	1,937.50 T
Cement Gel	470.00	LB	0.13	61.10 T
Calcium Chloride	705.00	LB	0.25	176.25 T
Depth Charge, 0'-1000'	1.00	HR	300.00	300.00
Light Vehicle Mileage	75.00	MI	1.25	93.75
Heavy Equipment Mileage	150.00	MI	2.00	300.00
Ton Mileage	881.00	MI	0.75	660.75
Blending & Mixing Service Charge	250.00	SK	0.35	87.50
Service Supervisor Charge	1.00	EA	75.00	75.00
Driver Charge	3.00	EA	35.00	105.00

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:		
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	SUB TOTAL	3,796.85
PO BOX 841903	801 CHERRY ST, STE 2100	TAX	184.86
DALLAS, TX 75284-1903	FORT WORTH, TX 76102	INVOICE TOTAL	3,981.71



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

71mH: 40  
17-115-15w

FIELD SERVICE TICKET

1718 18510 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB 12/4/2019 DISTRICT Pratt, KS		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>		PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/>		CUSTOMER ORDER NO.:			
CUSTOMER Berexco LLC		LEASE Hines Unit		WELL NO. 27x					
ADDRESS		COUNTY Russell		STATE KS					
CITY		STATE		SERVICE CREW Darcin, Brett, Digz					
AUTHORIZED BY		JOB TYPE: 242/85/8 Surface							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM/PM	TIME
19843	1/2						12/3	AM	11:00
19918	1/2						12/4	AM	2:30
							12/4	AM	5:00
							12/4	AM	5:30
							12/4	AM	6:00
						MILES FROM STATION TO WELL	115		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *Bruce Barber*  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT	
BC100	C/955 A Cement	SK	250		7,750.00	
CC200	Cement Gel	LB	470		235.00	
CC109	Calcium Chloride	LB	705		705.00	
CC1	Depth Charge; 0-1000'	HR	1		1,200.00	
ME101	Pickup Mileage	MI	75		375.00	
ME102	Truck Mileage	MI	130		1,200.00	
TM	Ton Mileage	MI	881		2,643.00	
CE240	Blending & mixing Charge	SK	250		350.00	
BE143	Supervisor Charge	EA	1		75.00	
BE144	Driver Charge	EA	3		105.00	
					SUB TOTAL	14,638.00

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
DISCOUNT TOTAL		3,796.85

SERVICE REPRESENTATIVE <i>Darcin Krasinski</i>	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY <i>Bruce Barber</i> (WELL OWNER OPERATOR CONTRACTOR OR AGENT)
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FIELD SERVICE ORDER NO.



10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

FIELD SERVICE TICKET  
1718 18510 A

17 115-15w

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB: 12/11/2019		DISTRICT: Pittsburg		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>		PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/>		CUSTOMER ORDER NO.:		
CUSTOMER: Barco LLC				LEASE: Hoes VA				WELL NO: 27		
ADDRESS:				COUNTY: Russell				STATE: KS		
CITY:				STATE:				SERVICE CREW: Dora B... D... D...		
AUTHORIZED BY:				JOB TYPE: 212/85/30/140						
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME
17543	4						12/11			11:00
17918	11						12/11			2:30
							12/11			5:00
							12/11			5:30
							12/11			6:00
						MILES FROM STATION TO WELL: 115				

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT	
BC100	Class A Cement	SK	250		7,750.00	
CC200	Cement Gel	LB	470		235.00	
CC109	CGI Gum Chloride	LB	705		705.00	
CC1	Deptra Cement	HR	1		1,200.00	
MF101	Pickup Service	MI	75		375.00	
MF102	Truck Service	MT	150		1,200.00	
FM	Ton Miles	MI	931		2,643.00	
CF240	Heavy Duty Cement	SK	230		350.00	
BT147	Superior Cement	EA	1		75.00	
BF144	Deptra Cement	EA	3		105.00	
					SUB TOTAL	14,658.00

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		3,796.00

SERVICE REPRESENTATIVE: _____	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: _____ (WELL OWNER OPERATOR CONTRACTOR OR AGENT)
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FIELD SERVICE ORDER NO.

Customer Bereco LLC	Lease No.	Date 12/4/2019
Lease Hines unit	Well # 27x	
Field Order # 18300	Station P99211cs	Casing 8 5/8
	Depth 265	County Russell
Type Job 242/8 5/8 Sulfate	Formation TD-264	Legal Description 17-115-15w

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size 8 5/8	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth 265	Depth	From	To	Pre Pad	Max		5 Min.
Volume 16.8	Volume	From	To	Pad	Min		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 245	Packer Depth	From	To	Flush Water	Gas Volume		Total Load

Customer Representative Bryd Parker	Station Manager Justin Westerman	Treater Darin Franklin
Service Units 92911 78982 19843 84981 19918		
Driver Names Darin Bear Bear Digz Digz		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
2:30pm					ON LOCATION / SLOW MEETING 250SK CLASS C CEMENT 3% calcium chloride, 2% Gel 14.8 ppg, 1.38 veils, 6.45 water.
5:00pm	200		3	6	Pump 3 bbls water
	200		62	6	mix 250SK cement
	200		16	4	DSPIC 16 bbls
5:30pm					Shut in Cement dia Circulate - 10 bbls
					Job complete / Darin & crew THANK YOU!!!



# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

WILLIAM WALKER  
W.D. No. 1867

Phone 785-483-1071  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

Date	12-12-19	Sec.	17	Twp.	11	Range	15	County	Russell	State	Ks	On Location	Finish	7:15 PM
								Location						
								Gorham - 1E, N to Curve, 1/2W, 3N, 1/4E						

Lease	Hires	Well No.	27X	Owner	N into
Contractor	Beredco	#10	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.		
Type Job	Top Stage				
Hole Size	7 7/8"	T.D.	3525'	Charge To	Berexco LLC
Csg.	now 5 1/2" 14#	Depth	3515'	Street	
Tbg. Size		Depth		City	State
Tool	DU Tool	Depth	982'	The above was done to satisfaction and supervision of owner agent or contractor.	
Cement Left in Csg.		Shoe Joint		Cement Amount Ordered	300 sx lite Cement
Meas Line		Displace	24 BLS		1/4 # flo-seal

EQUIPMENT				Common	180
Pumptrk	17	No.	Cement Helper	Poz. Mix	120
			David	Driver	16
Bulktrk	1	No.	Driver	Calcium	
			Mike		
Bulktrk	1	No.	Driver		
			Tony		

JOB SERVICES & REMARKS		Hulls	
Remarks:		Salt	
Rat Hole		Flowseal	75#
Mouse Hole		Kol-Seal	
Centralizers		Mud CLR 48	
Baskets		CFL-117 or CD110 CAF 38	
DAV or Port Collar		Sand	
Break Circulation. Plug Rathole w/ 30 sx Cement. Shut down Hook to 5 1/2" Casing to max 270 sx Cement. Shut down Displaced plug w/ 24 BLS #20 Released + held.		Handling	316
		Mileage	
FLOAT EQUIPMENT			
Lift pressure 400 # Closed tool @ 1900 #		Guide Shoe	
Cement did Circulate		Centralizer	
		Baskets	
		AFU Inserts	
		Float Shoe	
		Latch Down	

Pumptrk Charge	prod string Top Stage	Tax	
Mileage	2.5	Discount	
		Total Charge	

X Signature: *Jon Hayward*

*Thanks*

DEC 19 2019



# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

Well No. 27X  
COSTON No. 1866

Date	12-12-19	Sec.	17	Twp.	11	Range	15	County	Russell	State	KS	On Location		Finish	4:20 PM
------	----------	------	----	------	----	-------	----	--------	---------	-------	----	-------------	--	--------	---------

Lease Hines Well No. 27X Location Gocham, IE, N to Curve, 1/2w, 3N,  
Owner 1/4E, N 1/4to

Contractor Beredco #10  
Type Job Bottom Stage  
To Quality Oilwell Cementing, Inc.  
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size 7 7/8" T.D. 3525' Charge To Berexco = LLC

Csg. 5 1/2" New 14# Depth 3515' Street \_\_\_\_\_

Tbg. Size \_\_\_\_\_ Depth \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Tool DU Tool #62 Depth 982' The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 84.87 Shoe Joint 84.87' Cement Amount Ordered 125 sx lite Cement,  
Meas Line Displace 85 3/4 BLS 225 Com 2 1/2 bel 10% salt 5% G.I. sonite

EQUIPMENT		Common
Pumptrk <u>17</u> No.	Cementer <u>David Rick</u>	<u>300</u>
	Helper _____	Poz. Mix <u>50</u>
Bulktrk <u>3</u> No.	Driver <u>Mike</u>	Gel. <u>7</u>
	Driver _____	Calcium _____
Bulktrk <u>15</u> No.	Driver <u>Tony</u>	
	Driver _____	

JOB SERVICES & REMARKS  
Hulls \_\_\_\_\_

Remarks: \_\_\_\_\_ Salt 17

Rat Hole \_\_\_\_\_ Flowseal \_\_\_\_\_

Mouse Hole \_\_\_\_\_ Kol-Seal 1125 #

Centralizers 5' off of float shoe 1-17, 72 Mud CLR 48 505 gal

Baskets 61, 64 CFL-117 or CD110 CAF-38

DN or Port Collar #62 982' Sand \_\_\_\_\_

Pipe on bottom break Circulation Handling 380

pump 125 sx lite Cement + Mileage \_\_\_\_\_

225 sx Com. Cement, Shut down

wash pump + lines Displaced

w/ 85 3/4 BLS of H<sub>2</sub>O. Released -

held. Drop Dart

Lift pressure 800 #,

Land plug to 1500 #

open tool 800 # DU Tool w/ latch down

Thanks

Pumptrk Charge prod string Bottom stage

Mileage 25 Tax \_\_\_\_\_ Discount \_\_\_\_\_ Total Charge \_\_\_\_\_

Signature: John Hayward

DEC 19 2019



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
 2020 N Bramblewood  
 Wichita KS 67206+1094  
 ATTN: Jerry Smith

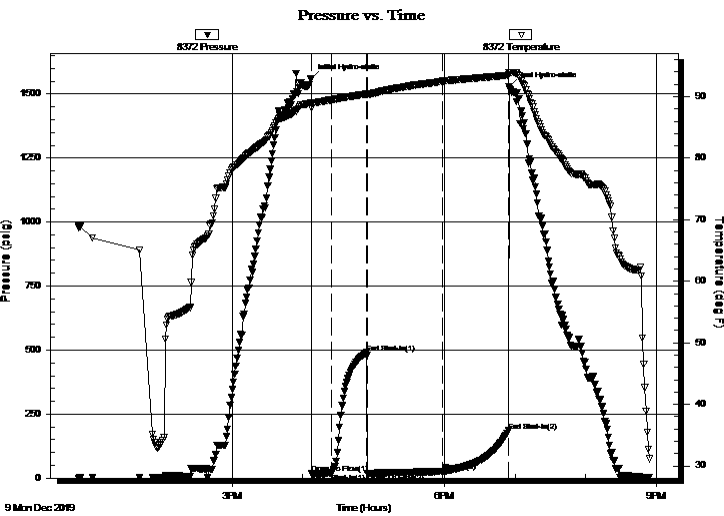
**17-11s-15w Russell KS**  
**Hlnes Unit #27X**  
 Job Ticket: 66368 **DST#: 1**  
 Test Start: 2019.12.09 @ 12:50:00

## GENERAL INFORMATION:

Formation: **LKC J**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 16:07:17  
 Time Test Ended: 20:55:02  
**Interval: 3168.00 ft (KB) To 3200.00 ft (KB) (TVD)**  
 Total Depth: 3200.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Spencer J Staab  
 Unit No: 84  
 Reference Elevations: 1876.00 ft (KB)  
 1869.00 ft (CF)  
 KB to GR/CF: 7.00 ft

**Serial #: 8372 Outside**  
 Press@RunDepth: 26.17 psig @ 3169.00 ft (KB) Capacity: psig  
 Start Date: 2019.12.09 End Date: 2019.12.09 Last Calib.: 2019.12.09  
 Start Time: 12:50:01 End Time: 20:55:02 Time On Btm: 2019.12.09 @ 16:07:02  
 Time Off Btm: 2019.12.09 @ 18:55:02

**TEST COMMENT:** 15-IF-Weak; Built to 1/4"  
 30-ISI-No Return  
 60-FF-Weak Surface  
 60-FSI-No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1559.66	89.04	Initial Hydro-static
1	16.82	88.15	Open To Flow (1)
18	18.39	89.49	Shut-In(1)
47	489.71	90.39	End Shut-In(1)
48	18.70	90.38	Open To Flow (2)
112	26.17	92.53	Shut-In(2)
168	184.57	93.54	End Shut-In(2)
168	1528.05	93.95	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	OSM 100%M	0.05

## 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+1094  
 ATTN: Jerry Smith

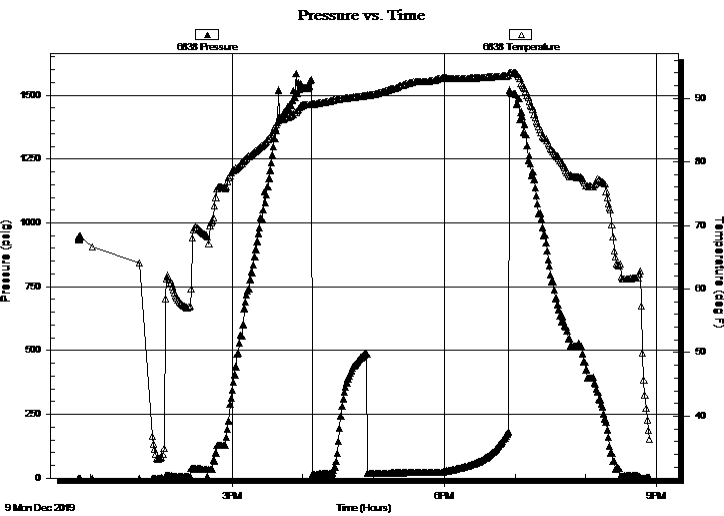
**17-11s-15w Russell KS**  
**Hlnes Unit #27X**  
 Job Ticket: 66368 **DST#: 1**  
 Test Start: 2019.12.09 @ 12:50:00

**GENERAL INFORMATION:**

Formation: **LKC J**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 16:07:17 Tester: Spencer J Staab  
 Time Test Ended: 20:55:02 Unit No: 84  
**Interval: 3168.00 ft (KB) To 3200.00 ft (KB) (TVD)**  
 Reference Elevations: 1876.00 ft (KB)  
 Total Depth: 3200.00 ft (KB) (TVD) 1869.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

**Serial #: 6838 Inside**  
 Press@RunDepth: psig @ 3169.00 ft (KB) Capacity: psig  
 Start Date: 2019.12.09 End Date: 2019.12.09 Last Calib.: 2019.12.09  
 Start Time: 12:50:01 End Time: 20:55:02 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 15-IF-Weak; Built to 1/4"  
 30-ISI-No Return  
 60-FF-Weak Surface  
 60-FSI-No Return



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

Recovery		
Length (ft)	Description	Volume (bbl)
10.00	OSM 100%M	0.05

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco LLC  
2020 N Bramblewood  
Wichita KS 67206+1094  
ATTN: Jerry Smith

**17-11s-15w Russell KS**  
**Hlines Unit #27X**  
Job Ticket: 66368      **DST#: 1**  
Test Start: 2019.12.09 @ 12:50:00

## 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: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

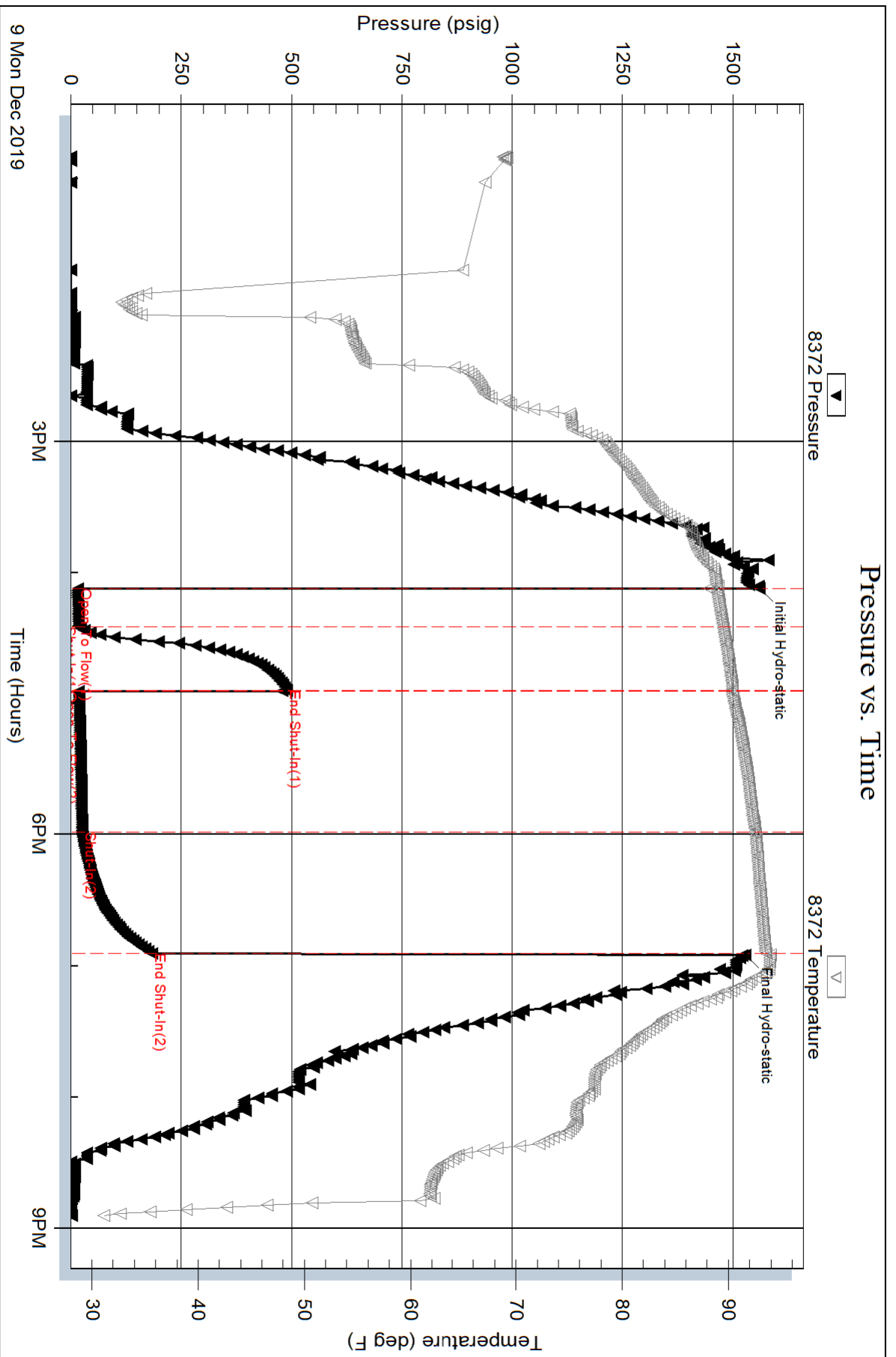
Length ft	Description	Volume bbl
10.00	OSM 100%M	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: 2#LCM



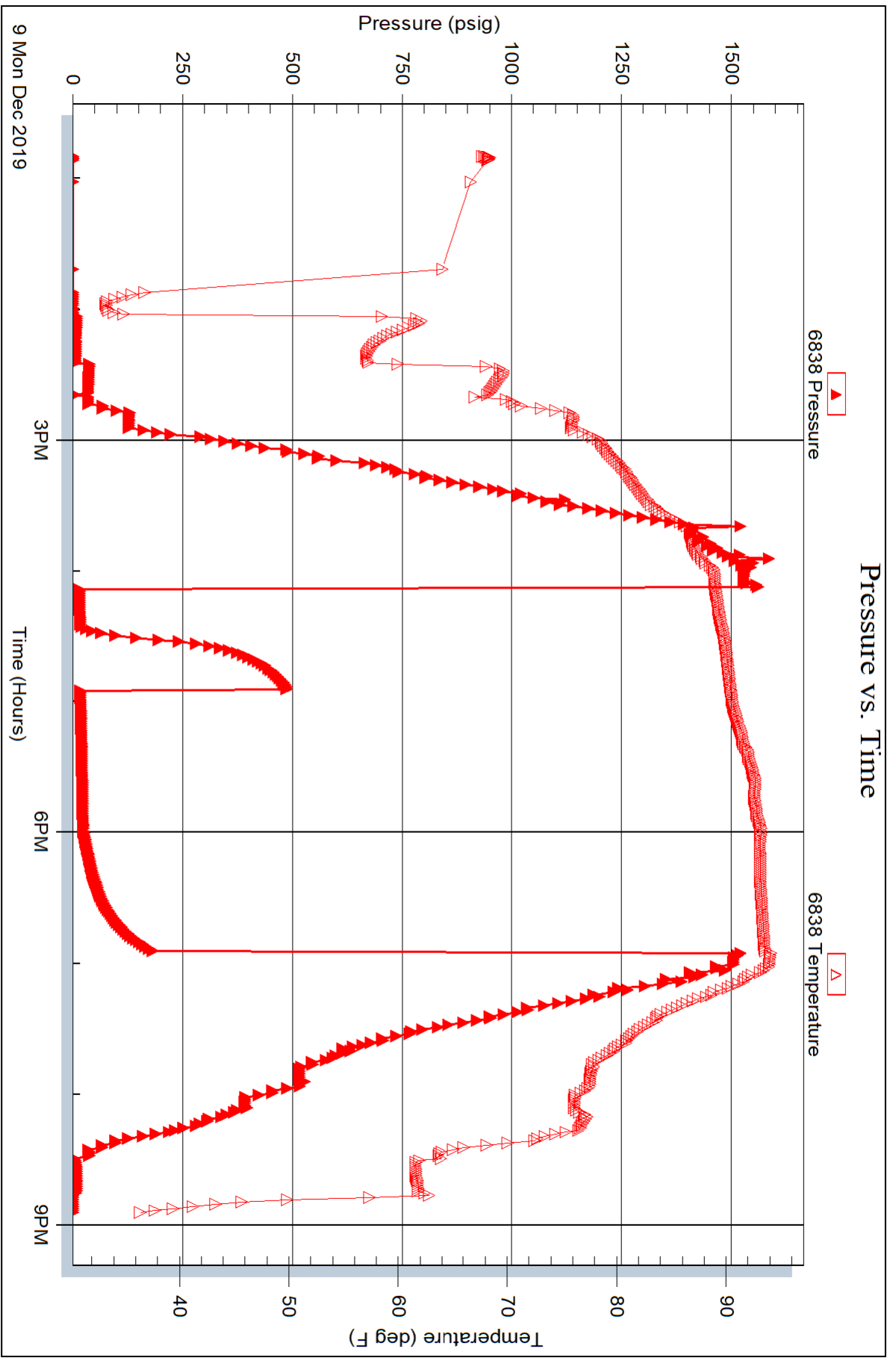
Serial #: 6838

Inside

Berexco LLC

Hines Unit #27X

DST Test Number: 1





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
 2020 N Bramblewood  
 Wichita KS 67206+1094  
 ATTN: Jerry Smith

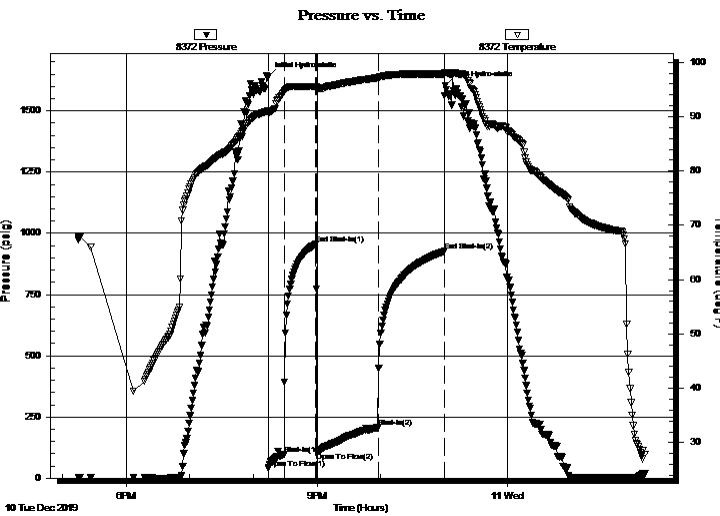
**17-11s-15w Russell KS**  
**Hlnes Unit #27X**  
 Job Ticket: 66369 **DST#: 2**  
 Test Start: 2019.12.10 @ 17:15:00

## GENERAL INFORMATION:

Formation: **Cong. Ss**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:14:02  
 Time Test Ended: 02:10:02  
 Interval: **3265.00 ft (KB) To 3340.00 ft (KB) (TVD)**  
 Total Depth: 3340.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Spencer J Staab  
 Unit No: 84  
 Reference Elevations: 1876.00 ft (KB)  
 1869.00 ft (CF)  
 KB to GR/CF: 7.00 ft

**Serial #: 8372 Inside**  
 Press@RunDepth: 206.58 psig @ 3268.00 ft (KB) Capacity: psig  
 Start Date: 2019.12.10 End Date: 2019.12.11 Last Calib.: 2019.12.11  
 Start Time: 17:15:01 End Time: 02:10:02 Time On Btm: 2019.12.10 @ 20:13:47  
 Time Off Btm: 2019.12.10 @ 23:01:17

**TEST COMMENT:** 15-IF-BOB 11 mins; Built to 14"  
 30-ISI-Very Weak Surface Blow  
 60-FF-BOB 17 mins; Built to 17"  
 60-FSI-No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1639.20	91.01	Initial Hydro-static
1	40.23	90.78	Open To Flow (1)
16	97.52	94.66	Shut-In(1)
45	956.21	95.48	End Shut-In(1)
46	107.05	95.31	Open To Flow (2)
104	206.58	97.18	Shut-In(2)
167	926.83	97.87	End Shut-In(2)
168	1604.30	98.14	Final Hydro-static

## Recovery

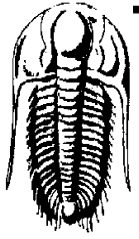
Length (ft)	Description	Volume (bbl)
420.00	GMO 10%G 30%M 60%O	5.41
30.00	GO 10%G 90%O	0.43
0.00	30 GIP 100%G	0.00

\* 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+1094  
ATTN: Jerry Smith

**17-11s-15w Russell KS**  
**Hlines Unit #27X**  
Job Ticket: 66369 **DST#: 2**  
Test Start: 2019.12.10 @ 17:15:00

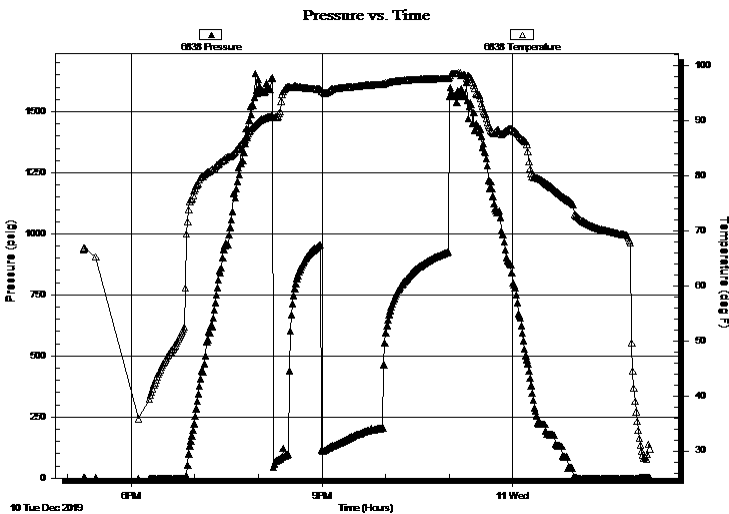
## GENERAL INFORMATION:

Formation: <b>Cong. Ss</b>			
Deviated: No Whipstock:		ft (KB)	Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 20:14:02			Tester: Spencer J Staab
Time Test Ended: 02:10:02			Unit No: 84
<b>Interval: 3265.00 ft (KB) To 3340.00 ft (KB) (TVD)</b>			Reference Elevations: 1876.00 ft (KB)
Total Depth: 3340.00 ft (KB) (TVD)			1869.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair		KB to GR/CF: 7.00 ft

<b>Serial #: 6838</b>	<b>Inside</b>			
Press@RunDepth:	psig @	3268.00 ft (KB)	Capacity:	psig
Start Date:	2019.12.10	End Date:	2019.12.11	Last Calib.: 2019.12.11
Start Time:	17:15:01	End Time:	02:10:02	Time On Btm:
				Time Off Btm:

**TEST COMMENT:** 15-IF-BOB 11 mins; Built to 14"  
30-ISI-Very Weak Surface Blow  
60-FF-BOB 17 mins; Built to 17"  
60-FSI-No Return

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
420.00	GMO 10%G 30%M 60%O	5.41
30.00	GO 10%G 90%O	0.43
0.00	30 GIP 100%G	0.00

\* 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  
2020 N Bramblewood  
Wichita KS 67206+1094  
ATTN: Jerry Smith

**17-11s-15w Russell KS**  
**Hlines Unit #27X**  
Job Ticket: 66369      **DST#: 2**  
Test Start: 2019.12.10 @ 17:15:00

## Mud and Cushion Information

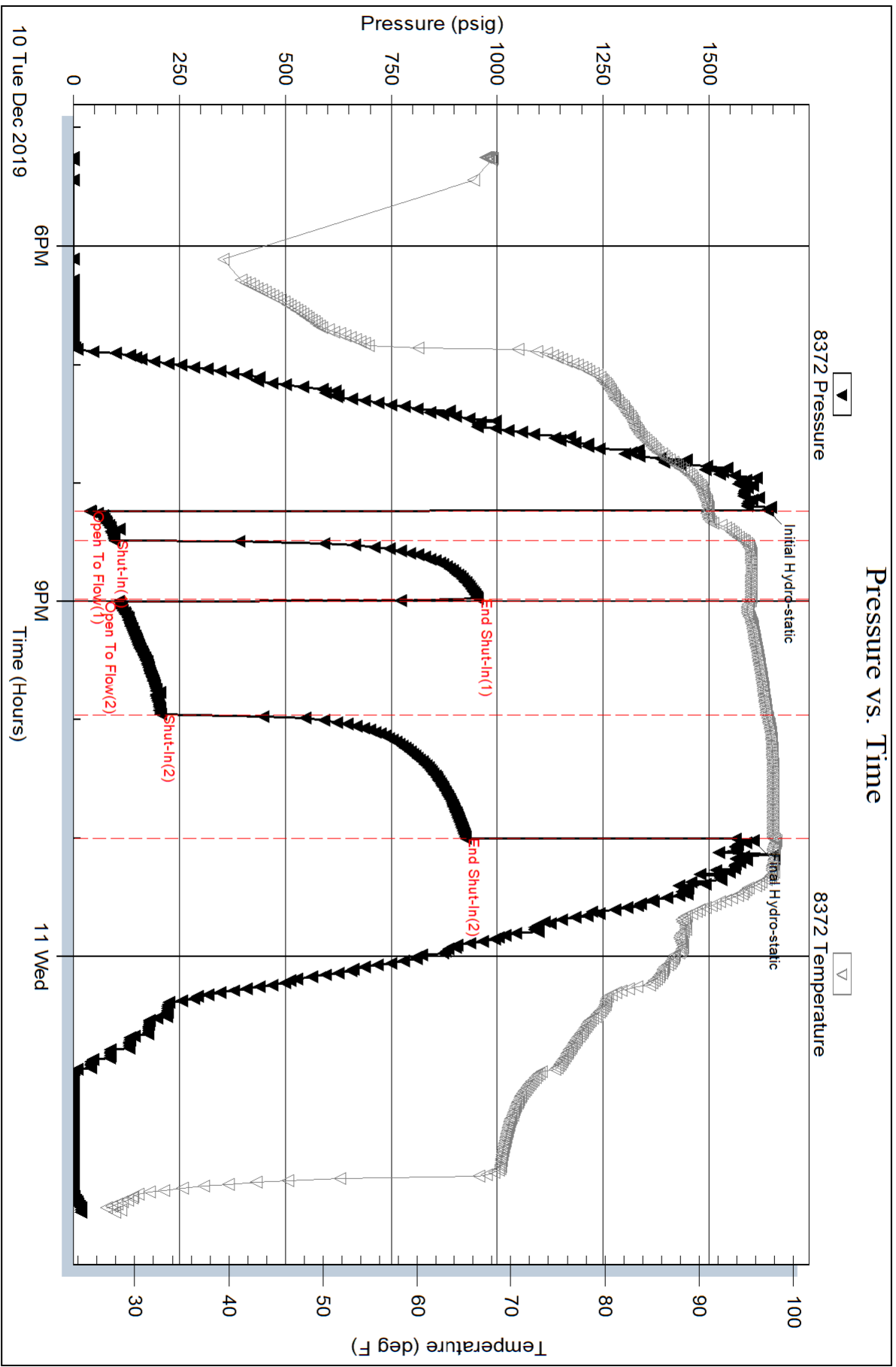
Mud Type: Gel Chem	Cushion Type:	Oil API: 25 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 49.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 3000.00 ppm		
Filter Cake: inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
420.00	GMO 10%G 30%M 60%O	5.407
30.00	GO 10%G 90%O	0.425
0.00	30 GIP 100%G	0.000

Total Length: 450.00 ft      Total Volume: 5.832 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: 2#LCM



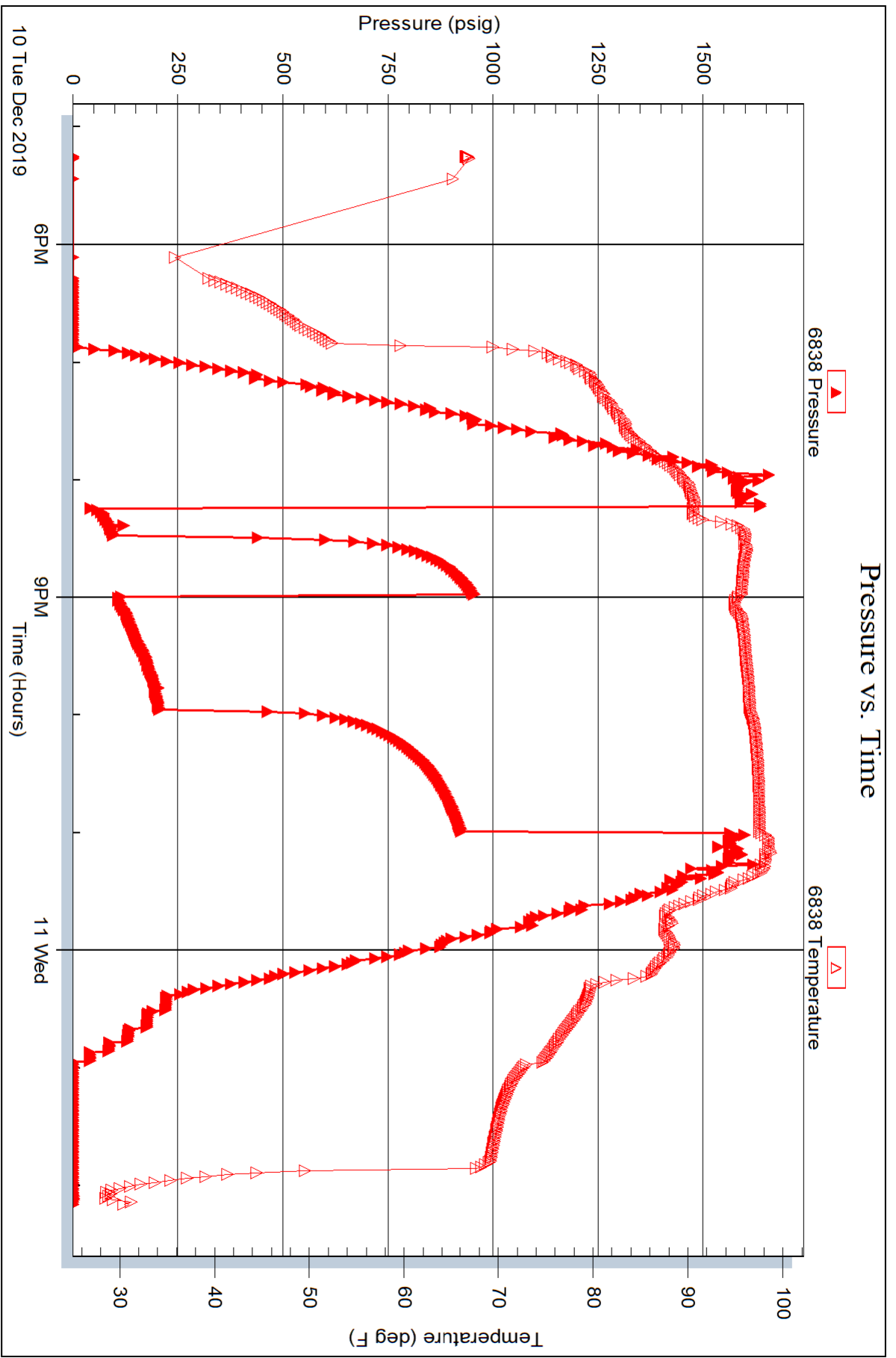
Serial #: 6838

Inside

Berexco LLC

Hines Unit #27X

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 66369

Printed: 2019.12.11 @ 04:57:07



