

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 Recompletion Date \_\_\_\_\_ 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
--	---

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
---	---	------------------------------------

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:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	HUSEMAN 3-18
Doc ID	1563929

All Electric Logs Run

Dual Induction
Density/Neutron
Microlog
Triple Combo

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	HUSEMAN 3-18
Doc ID	1563929

Perforations

Shots Per Foot	Perforation Top	Perforation Bottom	BridgePlugType	BridgePlugSet At	Material Record
4	4570	4572			350 gal 15% MCA w/ 2% RAS-10, retreat w/ 500 gal 15% NEFE-HCL w/ 2% RAS-10
4	4512	4514			
4	4532	4539			750 gal 15% MCA w/ 2% RAS-10
4	4353	4355			250 gal 15% MCA w/ 2% RAS-10
4	4292	4294			Treated 4292-4294' and 4305-4308' w/ 750 gal 15% MCA w/ 2% RAS-10
4	4305	4308			



QUASAR ENERGY SERVICES, INC.

3288 FM 51

Gainesville, Texas 76240

Office: 940-612-3336

Fax: 940-612-3336 | qesi@qeserve.com

Form 185-2c

12/17/20

CEMENTING JOB LOG

CEMENTING JOB LOG

Company: BERESEXCO INC Well Name: HUSEMAN # 3-18

Type Job: Cement- Surface AFE #:

CASING DATA					
Size:	8 5/8	Grade:	J-55	Weight:	24
Casing Depths	Top:	Bottom:			
Drill Pipe:	Size:	Weight:			
Tubing:	Size:	Weight:		Grade:	TD (ft): 305
Open Hole:	Size: 12 1/4	T.D. (ft):	305		
Perforations	From (ft):	To:	Packer Depth(ft):		

CEMENT DATA						
Spacer Type:						
Amt.	Sks Yield	ft <sup>3</sup> /sk		Density (PPG)		
LEAD: CLASS C -- 2% CC, 1/4 # CELLOFLAKE						
Excess						
Amt.	250	Sks Yield	1.34	ft <sup>3</sup> /sk	Density (PPG)	14.8
TAIL:						
Excess						
Amt.	Sks Yield	ft <sup>3</sup> /sk		Density (PPG)		

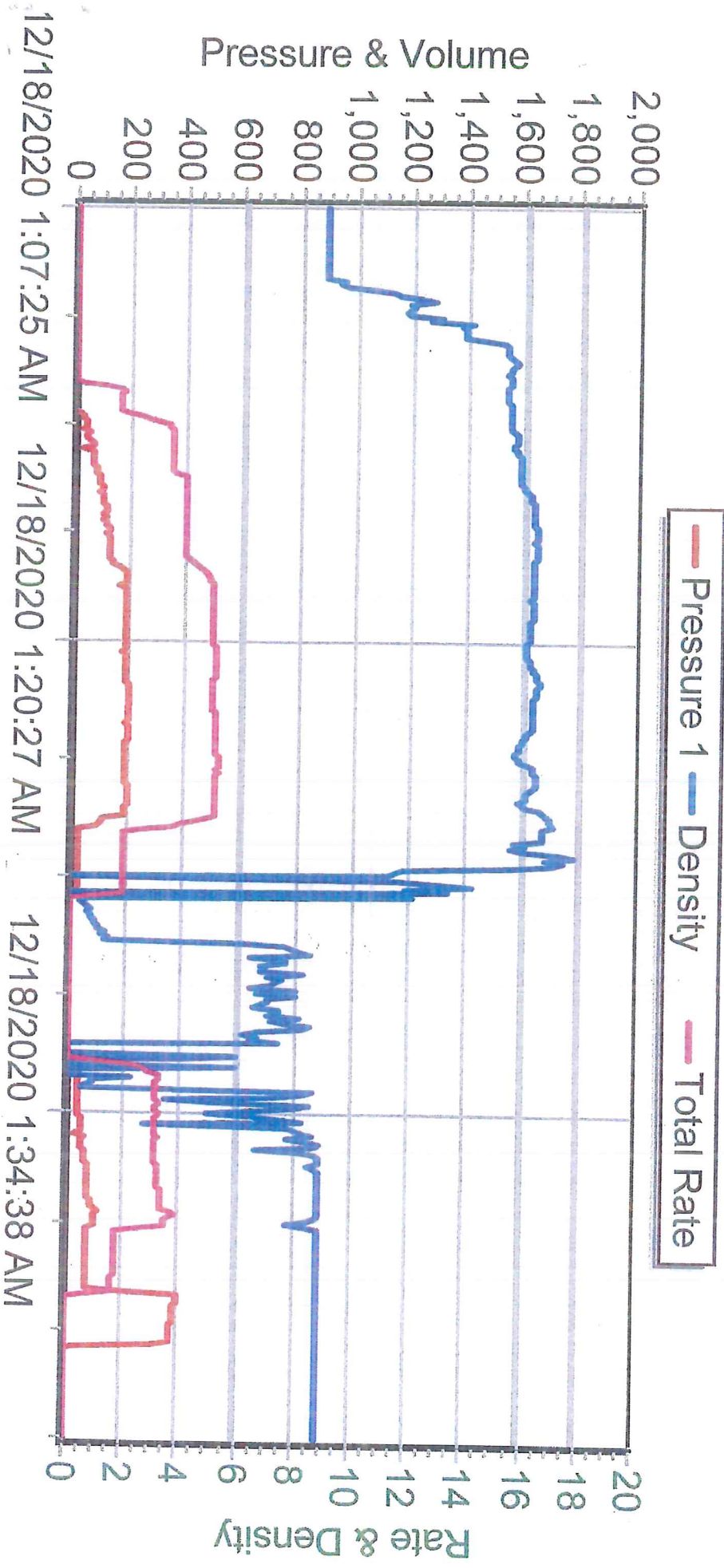
WATER: Lead: gals/sk: 6.35 Tail: gals/sk: Total (bbls):

Pump Trucks Used: 110 -- DP7  
 Bulk Equipment: 228 -- 660-23  
 Disp. Fluid Type: FRESH WATER Amt. (Bbls.) 18 Weight (PPG): 8.33  
 Mud Type: Weight (PPG):

COMPANY REPRESENTATIVE: CEMENTER: KIRBY HARPER

TIME AM/PM	PRESSURES PSI			FLUID PUMPED DATA		REMARKS
	Casing	Tubing	ANNULUS	TOTAL	RATE	
2200						ON LOCATION -- SPOT AND RIG UP
0030						CASING ON BOTTOM -- BREAK CIRC.
0045						SAFETY MEETING
0105	1000					PRESSURE TEST
0112	200			60	5	START MIXING 250 SK CLASS C @ 14.8 PPG
0128						SHUT DOWN -- DROP TOP PLUG
0134	50			0	4	START DISPLACING WITH FRESH WATER
0137	200			10	2	SLOW RATE
0140	200-700			18		BUMP PLUG
0141	700-0					RELEASE PRESSURE -- FLOAT HELD
				15		CIRCULATE CEMENT TO THE PIT

**BEREXCO INC**  
**HUSEMAN 3-18**  
**8.625 SURFACE**  
**12/18/2020**



Quasar Energy Services, Inc.  
 3288 FM 51  
 Gainesville, TX 76240

*WTF* *o*

# Invoice

Date	Invoice #
1/12/2021	140084

Bill To
Berexco LLC 2020 North Bramblewood Wichita, KS 67206

As of 09/22/2015 any invoice with a discount must be paid within 60 days of the invoice date. After 60 days the discount will be removed and the invoice will reflect the full price.

*EJ*

Description	Quantity	Rate	Well
			Huseman 3-18
Pickup Mileage	70	3.15	220.50
Equipment Mileage	210	6.00	1,260.00
Pump Charge	1	1,575.00	1,575.00
Pump Charge	1	1,814.40	1,814.40
Class H Cement	200	18.90	3,780.00
Class A-Lite Cement	580	15.75	9,135.00
Auto Fill Float Shoe	1	378.00	378.00
Latch down plug & baffle	1	819.00	819.00
DV Tool-5 1/2	1	6,552.00	6,552.00
Centralizers	13	63.00	819.00
Cement Baskets	3	289.80	869.40
C-17	95	10.71	1,017.45
Defoamer	3	44.10	132.30
Cello Flakes	145	2.52	365.40
Gypsum	1,880	0.95	1,786.00
Kol seal	1,350	0.78	1,053.00
Salt	1,181	0.32	377.92
Mud flush	420	1.26	529.20
Subtotal			32,483.57
Discount - 40%		-40.00%	-12,993.43

*ACP*

*per b.e*

<b>Total</b>	\$19,490.14
<b>Payments/Credits</b>	\$0.00
<b>Balance Due</b>	\$19,490.14

All accounts are past due net 30 days following the date of invoice. A finance charge of 1.5% per month or 18% annual percentage rate will be charged on all past due accounts.



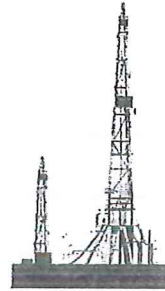
# QUASAR ENERGY SERVICES, INC.



3288 FM 51  
 Gainesville, Texas 76240  
 Office: 940-612-3336

Fax: 940-612-3336 | qesi@qeserve.com

## FRACTURING / ACID / CEMENT



BID #: 3304				AFE#/PO#: 0									
TYPE / PURPOSE OF JOB				Cement- Production		SERVICE POINT		Liberal, KS					
CUSTOMER				BEREXCO INC		WELL NAME		HUSEMAN 3-18					
ADDRESS				LOCATION		SCOTT, KS							
CITY			STATE		ZIP		TYPE AND PURPOSE OF JOB			Cement- Production			
DATE OF SALE				1/8/2021		COUNTY		SCOTT		STATE		KS	
QTY.	CODE	YD	UNIT	PUMPING AND EQUIPMENT USED				UNIT PRICE	AMOUNT				
70	1000	L	Mile	Mileage - Pickup - Per Mile				\$3.15	\$ 220.50				
210	1010	L	Mile	Mileage - Equipment Mileage - Per Mile				\$6.00	\$ 1,260.00				
1	5440	L	Per Well	Pumping Charge 0'-3500'				\$1,575.00	\$ 1,575.00				
1	5470	L	Per Well	Pumping Charge 4501'-5000'				\$1,814.40	\$ 1,814.40				

**Subtotal for Pumping & Equipment Charges** \$ 4,869.90

QTY.	CODE	YD	UNIT	MATERIALS	UNIT PRICE	AMOUNT	
200	5640	L	Per Sack	Cement - Class H	\$18.90	\$ 3,780.00	
580	5660	L	Per Sack	Cement - Lite - A	\$15.75	\$ 9,135.00	
1	4300	L	Each	Auto Fill Shoe (Blue) 5 1/2"	\$378.00	\$ 378.00	
1	4370	L	Each	Latch Down Plug & Baffle 5 1/2"	\$819.00	\$ 819.00	
1	4380	L	Each	D.V. Tool (Red) 5 1/2"	\$6,552.00	\$ 6,552.00	
13	4450	L	Each	Centralizers 5 1/2"	\$63.00	\$ 819.00	
3	4470	L	Each	Cement Basket 5 1/2"	\$289.80	\$ 869.40	
95	5693	L	Per Lb.	C-17 Fluid Loss	\$10.71	\$ 1,017.45	
3	5751	L	Per Gal.	C-41L Defoamer Liquid	\$44.10	\$ 132.30	
145	5800	L	Per Lb.	Cello Flakes-Poly Flake 1/8" cut	\$2.52	\$ 365.40	
1,880	5850	L	Per Lb.	Gypsum	\$0.95	\$ 1,786.00	
1,350	5860	L	Per Lb.	Kol-Seal	\$0.78	\$ 1,053.00	
1,181	5890	L	Per Lb.	Salt	\$0.32	\$ 377.92	
420	5870	L	Per Gal.	Mud Flush	\$1.26	\$ 529.20	

**Subtotal for Material Charges** \$ 27,613.67

WORKERS		TOTAL	\$ 32,483.57
CHAD HINZ		DISCOUNT: 40%	DISCOUNT \$ 12,993.43
DANIEL BECK		DISCOUNTED TOTAL	\$ 19,490.14
MARC SCHUPMAN			

**STAMPS & NOTES:**

As of 9/22/15 any invoice with a discount must be paid within 60 days of the invoice date. After 60 days the discount will be removed and the invoice will reflect full price.

CUSTOMER SIGNATURE & DATE

\*\*All accounts are past due net 30 days following the date of invoice. A finance charge of 1 1/2% per month or 18% annual percentage rate will be charged on all past due accounts.



**QUASAR ENERGY SERVICES, INC.**

3288 FM 51  
 Gainesville, Texas 76240  
 Office: 940-612-3336  
 Fax: 940-612-3336 | qesi@qeserve.com

Form 185-2c

1/8/21

CEMENTING JOB LOG

**CEMENTING JOB LOG**

<b>Company:</b> BEREXCO INC		<b>Well Name:</b> HUSEMAN 3-18	
<b>Type Job:</b> Cement- Production		<b>AFE #:</b>	
<b>CASING DATA</b>			
<b>Size:</b> 5 1/2	<b>Grade:</b> J-55	<b>Weight:</b> 15.5	
<b>Casing Depths</b> Top: Bottom:			
<b>Drill Pipe:</b> Size: Weight:			
<b>Tubing:</b> Size: Weight:	<b>Grade:</b>	<b>TD (ft):</b>	
<b>Open Hole:</b> Size: T.D. (ft):			
<b>Perforations</b> From (ft): To: Packer Depth(ft):	2227.54 D.V. TOOL		
<b>CEMENT DATA</b>			
<b>Spacer Type:</b>		<b>MUD FLUSH</b>	
<b>Amt.</b> 420 GAL	<b>Sks Yield</b>	<b>ft<sup>3</sup>/sk</b>	<b>Density (PPG)</b> 8.4
<b>LEAD:</b> CLASS A 65/35		Excess	
<b>Amt.</b> 580	<b>Sks Yield</b> 1.97	<b>ft<sup>3</sup>/sk</b>	<b>Density (PPG)</b> 12.4
<b>TAIL:</b> CLASS H		Excess	
<b>Amt.</b> 200	<b>Sks Yield</b> 1.58	<b>ft<sup>3</sup>/sk</b>	<b>Density (PPG)</b> 14.8
<b>WATER:</b>			
<b>Lead:</b> 10.9	<b>gals/sk:</b>	<b>Tail:</b> 6.9	<b>gals/sk:</b> Total (bbls):
<b>Pump Trucks Used:</b> 210-DP11			
<b>Bulk Equipment:</b> 230 660-24 / 228 660-23			
<b>Disp. Fluid Type:</b> WATER/MUD	<b>Amt. (Bbls.)</b>	<b>Weight (PPG):</b> 8.3 / 9.3	
<b>Mud Type:</b>		<b>Weight (PPG):</b>	

**COMPANY REPRESENTATIVE:** \_\_\_\_\_ **CEMENTER:** CHAD HINZ

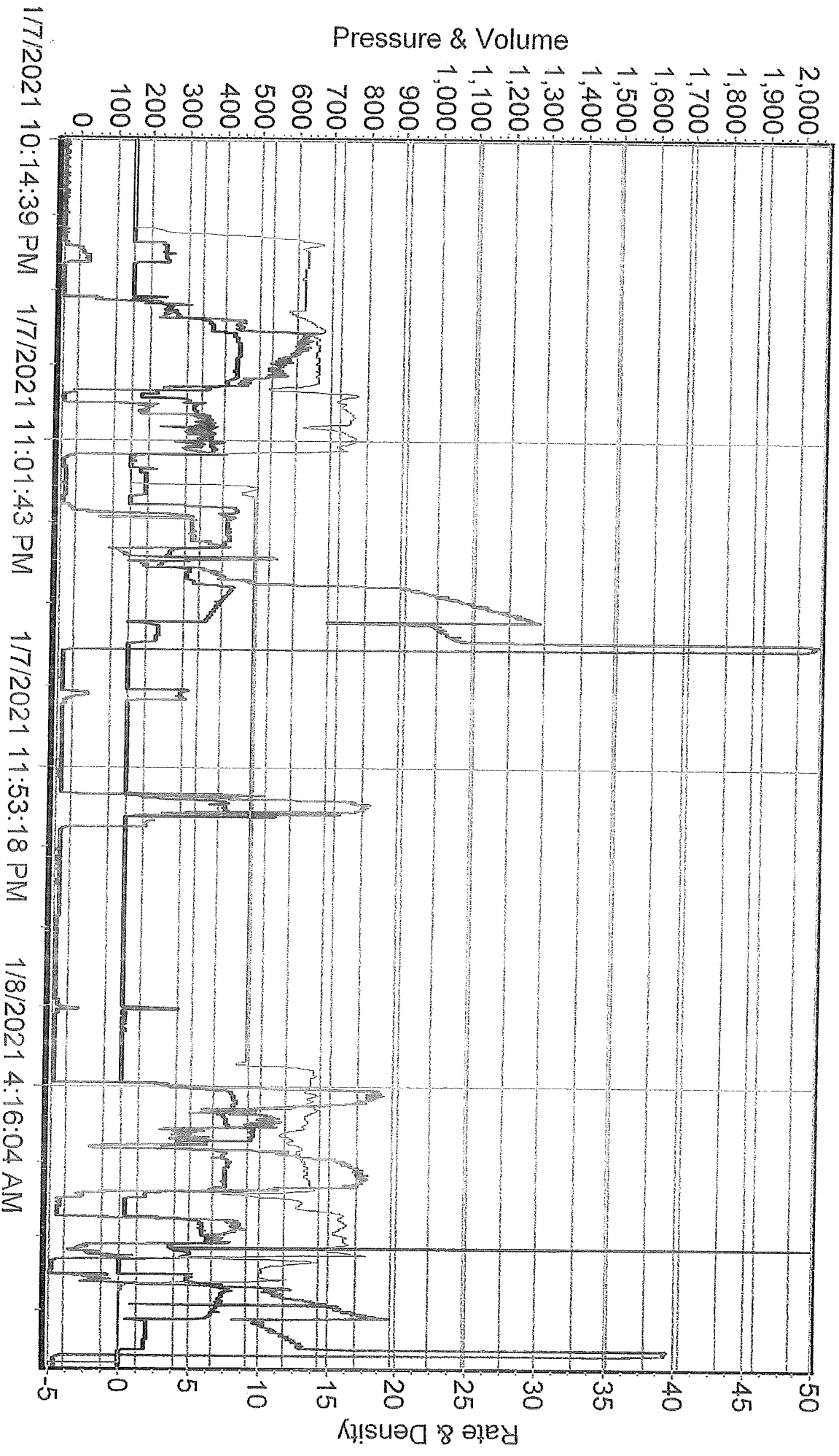
TIME	PRESSURES PSI			FLUID PUMPED DATA		REMARKS
	AM/PM	Casing	Tubing	ANNULUS	TOTAL	
1730						ON LOC W/ F.E.
1745						START CASING
2100						ON BOTTOM BREAK CIRC
2231						PLUG RH
2240	240				3.2	PUMP MUD FLUSH
2244	640			10	7.3	START MIXING LEAD @ 12.4#
2255	200			77	4	ON TAIL AT 14.8#
2306				42		SHUT DOWN, DROP PLUG, WASHUP
2311	300				7.4	START DISPLACEMENT
2321	100			52	4	ON MUD
2330	1000				2	SLOW RATE
2333	2050			105		PLUG DOWN
2335						RELEASE PSI DROP BOMB
2357	800			6	7.3	OPEN TOOL
000						HOOK TO RIG CIRC 4 HRS
0416	850				7.6	START LEAD @ 12.4#
0436	470			126	5.8	ON TAIL AT 14.8#
0443				14		SHUT DOWN , DROP PLUG
0445	720				7.4	START DISPLACEMENT WASHUP ON PLUG
0452	550			43	2	SLOW RATE
0457	1660			53		PLUG DOWN, TOOL CLOSED
0500						RELEASE PSI, JOB COMPLETE



TIME	PRESSURES PSI			FLUID PUMPED DATA		REMARKS
	AM/PM	Casing	Tubing	ANNULUS	TOTAL	
<b>Type Job:</b>	Cement- Production				<b>AFE #:</b>	
<b>Date:</b>	CEMENTING JOB LOG				QUASAR ENERGY SERVICES, INC.   185-2	

**BEREXCO INC**  
**HUESMAN 3-18 5 1/2 D.V. L.S.**

— Pressure 1 — Total Rate — Density





**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
 County: SCOTT  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 1  
 Elevation: 2958 GL  
 Field Name: Beckley  
 Pool: Infield  
 Job Number: 467  
 API #: 15-171-21269

**Operation:**  
 Uploading recovery & pressures

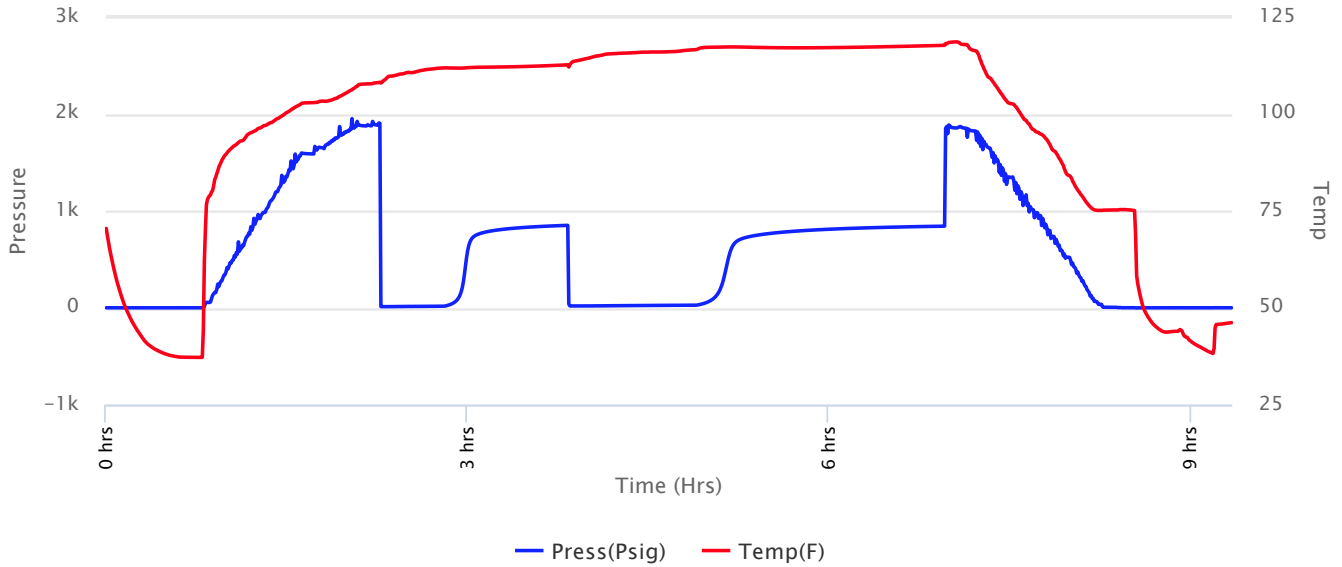
**DATE**  
 January  
**03**  
 2021

**DST #1      Formation: Lans B      Test Interval: 3958 - 3968'      Total Depth: 3968'**  
 Time On: 19:46 01/03      Time Off: 04:58 01/04  
 Time On Bottom: 22:06 01/03      Time Off Bottom: 02:36 01/04

Electronic Volume Estimate:  
 26'

<u>1st Open</u>	1st Close	<u>2nd Open</u>	2nd Close
Minutes: 30	Minutes: 60	Minutes: 60	Minutes: 120
Current Reading: 1" at 30 min	Current Reading: 0" at 60 min	Current Reading: 1.25" at 60 min	Current Reading: 0" at 120 min
Max Reading: 1"	Max Reading: 0"	Max Reading: 1.4"	Max Reading: 0"

Inside Recorder





**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
 County: SCOTT  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 1  
 Elevation: 2958 GL  
 Field Name: Beckley  
 Pool: Infield  
 Job Number: 467  
 API #: 15-171-21269

**Operation:**  
 Uploading recovery & pressures

**DATE**  
 January  
**03**  
 2021

**DST #1**      **Formation: Lans B**      **Test Interval: 3958 - 3968'**      **Total Depth: 3968'**  
 Time On: 19:46 01/03      Time Off: 04:58 01/04  
 Time On Bottom: 22:06 01/03      Time Off Bottom: 02:36 01/04

Recovered

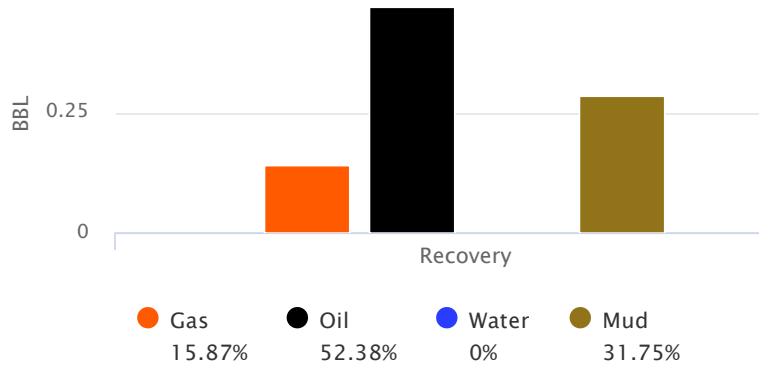
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
10	0.1423	G	100	0	0	0
13	0.18499	O	0	100	0	0
40	0.5692	HMCO	0	50	0	50

Total Recovered: 63 ft  
 Total Barrels Recovered: 0.89649

Reversed Out  
 NO

Initial Hydrostatic Pressure	1883	PSI
Initial Flow	11 to 17	PSI
<b>Initial Closed in Pressure</b>	<b>850</b>	<b>PSI</b>
Final Flow Pressure	19 to 26	PSI
<b>Final Closed in Pressure</b>	<b>841</b>	<b>PSI</b>
Final Hydrostatic Pressure	1885	PSI
Temperature	118	°F
Pressure Change Initial Close / Final Close	1.0	%

**Recovery at a glance**



GIP cubic foot volume: 0.79894



**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
County: SCOTT  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2958 GL  
Field Name: Beckley  
Pool: Infield  
Job Number: 467  
API #: 15-171-21269

**Operation:**  
Uploading recovery &  
pressures

**DATE**  
January  
**03**  
2021

**DST #1**      **Formation: Lans B**      **Test Interval: 3958 -**  
**3968'**      **Total Depth: 3968'**  
Time On: 19:46 01/03      Time Off: 04:58 01/04  
Time On Bottom: 22:06 01/03      Time Off Bottom: 02:36 01/04

**BUCKET MEASUREMENT:**

1st Open: 1/4" Blow. Built to 1 inch in 30 mins  
1st Close: NOBB  
2nd Open: WSB. Built to 1 1/2 inches in 60 mins  
2nd Close: NOBB

**REMARKS:**

Do to the thick oil it didn't grind out well.  
Tool Sample: 0% Gas 90% Oil 0% Water 10% Mud  
Gravity: 22.7 @ 60 °F





**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
 County: SCOTT  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 1  
 Elevation: 2958 GL  
 Field Name: Beckley  
 Pool: Infield  
 Job Number: 467  
 API #: 15-171-21269

**Operation:**  
 Uploading recovery & pressures

**DATE**  
 January  
**03**  
 2021

**DST #1      Formation: Lans B      Test Interval: 3958 - 3968'      Total Depth: 3968'**  
 Time On: 19:46 01/03      Time Off: 04:58 01/04  
 Time On Bottom: 22:06 01/03      Time Off Bottom: 02:36 01/04

**Down Hole Makeup**

<b>Heads Up:</b> 14.77 FT	<b>Packer 1:</b> 3953 FT
<b>Drill Pipe:</b> 3940.2 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3958 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3942.42 FT
<b>Collars:</b> 0 FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3960 FT
<b>Test Tool:</b> 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	<b>Well Bore Size:</b> 7 7/8
<b>Total Anchor:</b> 10	<b>Surface Choke:</b> 1"
<b>Anchor Makeup</b>	<b>Bottom Choke:</b> 5/8"
<b>Packer Sub:</b> 1 FT	
<b>Perforations: (top):</b> FT <i>4 1/2-FH</i>	
<b>Change Over:</b> FT	
<b>Drill Pipe: (in anchor):</b> FT <i>ID-3 1/2</i>	
<b>Change Over:</b> FT	
<b>Perforations: (below):</b> 9 FT <i>4 1/2-FH</i>	



**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
County: SCOTT  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2958 GL  
Field Name: Beckley  
Pool: Infield  
Job Number: 467  
API #: 15-171-21269

**Operation:**  
Uploading recovery &  
pressures

**DATE**  
January  
**03**  
2021

**DST #1      Formation: Lans B      Test Interval: 3958 -      Total Depth: 3968'**  
**3968'**  
Time On: 19:46 01/03      Time Off: 04:58 01/04  
Time On Bottom: 22:06 01/03      Time Off Bottom: 02:36 01/04

**Mud Properties**

**Mud Type:** Chem      **Weight:** 8.9      **Viscosity:** 50      **Filtrate:** 6.4      **Chlorides:** 1200 ppm



**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
 County: SCOTT  
 State: Kansas  
 Drilling Contractor: Southwind Drilling,  
 Inc - Rig 1  
 Elevation: 2958 GL  
 Field Name: Beckley  
 Pool: Infield  
 Job Number: 467  
 API #: 15-171-21269

**Operation:**  
 Uploading recovery &  
 pressures

**DATE**  
 January  
**03**  
 2021

**DST #1**      **Formation: Lans B**      **Test Interval: 3958 - 3968'**      **Total Depth: 3968'**  
 Time On: 19:46 01/03      Time Off: 04:58 01/04  
 Time On Bottom: 22:06 01/03      Time Off Bottom: 02:36 01/04

**Gas Volume Report**

1st Open

Time	Orifice	PSI	MCF/D
------	---------	-----	-------

2nd Open

Time	Orifice	PSI	MCF/D
------	---------	-----	-------



**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
 County: SCOTT  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 1  
 Elevation: 2958 GL  
 Field Name: Beckley  
 Pool: Infield  
 Job Number: 467  
 API #: 15-171-21269

**Operation:**  
 Uploading recovery & pressures

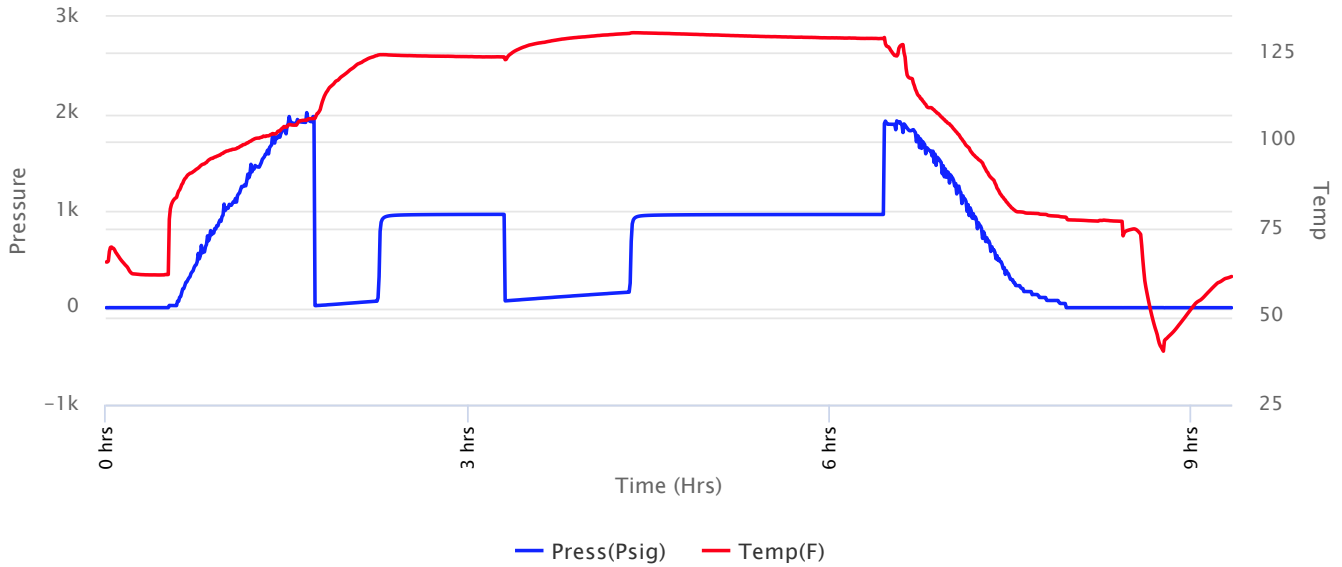
**DATE**  
 January  
**04**  
 2021

**DST #2      Formation: Lans E      Test Interval: 4020 - 4028'      Total Depth: 4028'**  
 Time On: 14:30 01/04      Time Off: 23:35 01/04  
 Time On Bottom: 16:11 01/04      Time Off Bottom: 20:41 01/04

Electronic Volume Estimate:  
 247'

<u>1st Open</u>	1st Close	<u>2nd Open</u>	2nd Close
Minutes: 30	Minutes: 60	Minutes: 60	Minutes: 120
Current Reading: 11.2" at 30 min	Current Reading: 0" at 60 min	Current Reading: 11" at 60 min	Current Reading: 0" at 120 min
Max Reading: 11.2"	Max Reading: .2"	Max Reading: 11"	Max Reading: .5"

Inside Recorder





**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
 County: SCOTT  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 1  
 Elevation: 2958 GL  
 Field Name: Beckley  
 Pool: Infield  
 Job Number: 467  
 API #: 15-171-21269

**Operation:**  
 Uploading recovery & pressures

**DATE**  
 January  
**04**  
 2021

**DST #2**      **Formation: Lans E**      **Test Interval: 4020 - 4028'**      **Total Depth: 4028'**  
 Time On: 14:30 01/04      Time Off: 23:35 01/04  
 Time On Bottom: 16:11 01/04      Time Off Bottom: 20:41 01/04

Recovered

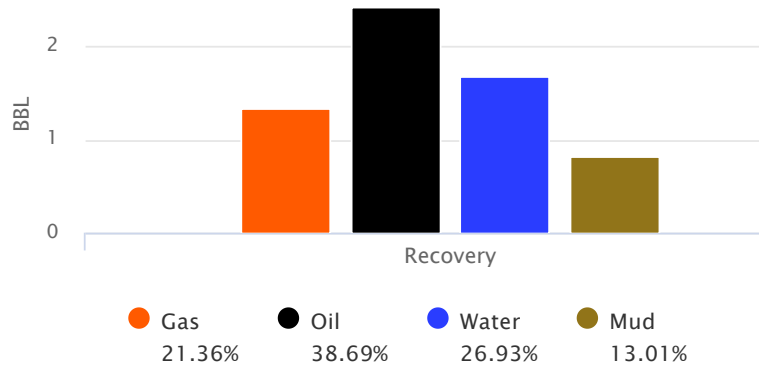
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
94	1.33762	G	100	0	0	0
161	2.29103	O	0	100	0	0
59	0.83957	SLOCHWCM	0	5	30	65
126	1.79298	SLOCSLMCW	0	5	80	15

Total Recovered: 440 ft  
 Total Barrels Recovered: 6.2612

Reversed Out  
 NO

Initial Hydrostatic Pressure	1912	PSI
Initial Flow	22 to 68	PSI
<b>Initial Closed in Pressure</b>	<b>963</b>	<b>PSI</b>
Final Flow Pressure	71 to 161	PSI
<b>Final Closed in Pressure</b>	<b>962</b>	<b>PSI</b>
Final Hydrostatic Pressure	1907	PSI
Temperature	131	°F
Pressure Change Initial Close / Final Close	0.1	%

**Recovery at a glance**



GIP cubic foot volume: 7.51007



**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
County: SCOTT  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2958 GL  
Field Name: Beckley  
Pool: Infield  
Job Number: 467  
API #: 15-171-21269

**Operation:**  
Uploading recovery &  
pressures

**DATE**  
January  
**04**  
2021

**DST #2      Formation: Lans E      Test Interval: 4020 -      Total Depth: 4028'**  
**4028'**  
Time On: 14:30 01/04      Time Off: 23:35 01/04  
Time On Bottom: 16:11 01/04      Time Off Bottom: 20:41 01/04

**BUCKET MEASUREMENT:**

*Diesel in Bucket*

1st Open: 1/4" Blow. Built to 11 1/4 inches in 30 mins

1st Close: 1/4" Blow Back

2nd Open: WSB. Built to 11 inches in 60 mins

2nd Close: 1/2" Blow Back

**REMARKS:**

Tool Sample: 0% Gas 10% Oil 90% Water 0% Mud

Gravity: 24.1 @ 60 °F

Ph: 7

Measured RW: 2.2 @ 35 degrees °F

RW at Formation Temp: 0.667 @ 131 °F

Chlorides: 30000 ppm



**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
 County: SCOTT  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 1  
 Elevation: 2958 GL  
 Field Name: Beckley  
 Pool: Infield  
 Job Number: 467  
 API #: 15-171-21269

**Operation:**  
 Uploading recovery & pressures

**DATE**  
 January  
**04**  
 2021

**DST #2      Formation: Lans E      Test Interval: 4020 - 4028'      Total Depth: 4028'**  
 Time On: 14:30 01/04      Time Off: 23:35 01/04  
 Time On Bottom: 16:11 01/04      Time Off Bottom: 20:41 01/04

**Down Hole Makeup**

<b>Heads Up:</b> 16.27 FT	<b>Packer 1:</b> 4015 FT
<b>Drill Pipe:</b> 4003.7 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 4020 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 4004.42 FT
<b>Collars:</b> 0 FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 4022 FT
<b>Test Tool:</b> 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	<b>Well Bore Size:</b> 7 7/8
<b>Total Anchor:</b> 8	<b>Surface Choke:</b> 1"
<b>Anchor Makeup</b>	<b>Bottom Choke:</b> 5/8"
<b>Packer Sub:</b> 1 FT	
<b>Perforations: (top):</b> FT <i>4 1/2-FH</i>	
<b>Change Over:</b> FT	
<b>Drill Pipe: (in anchor):</b> FT <i>ID-3 1/2</i>	
<b>Change Over:</b> FT	
<b>Perforations: (below):</b> 7 FT <i>4 1/2-FH</i>	



**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
County: SCOTT  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2958 GL  
Field Name: Beckley  
Pool: Infield  
Job Number: 467  
API #: 15-171-21269

**Operation:**  
Uploading recovery &  
pressures

**DATE**  
January  
**04**  
2021

**DST #2      Formation: Lans E      Test Interval: 4020 -      Total Depth: 4028'**  
**4028'**  
Time On: 14:30 01/04      Time Off: 23:35 01/04  
Time On Bottom: 16:11 01/04      Time Off Bottom: 20:41 01/04

**Mud Properties**

**Mud Type:** Chem      **Weight:** 9      **Viscosity:** 52      **Filtrate:** 6.4      **Chlorides:** 1800 ppm





**Company: Berexco, LLC**  
**Lease: Huseman #3-18**

SEC: 18 TWN: 18S RNG: 31W  
County: SCOTT  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2958 GL  
Field Name: Beckley  
Pool: Infield  
Job Number: 467  
API #: 15-171-21269

**Operation:**  
Uploading recovery &  
pressures

**DATE**  
January  
**04**  
2021

**DST #2      Formation: Lans E      Test Interval: 4020 -      Total Depth: 4028'**  
**4028'**  
Time On: 14:30 01/04      Time Off: 23:35 01/04  
Time On Bottom: 16:11 01/04      Time Off Bottom: 20:41 01/04

**Gas Volume Report**

1st Open

2nd Open

Time	Orifice	PSI	MCF/D
------	---------	-----	-------

Time	Orifice	PSI	MCF/D
------	---------	-----	-------

# REPORT

DRILLING TIME & SAMPLE LOG

COMPANY Berexco LLC  
 LEASE Husman NO. 3-18  
 LOCATION 1423'FNL + 2975'FEL  
 SEC. 18 TWP. 185 RNG. 31W  
 COUNTY Scott STATE Kansas  
 FIELD Beckley

### ELEVATIONS

KB 2968  
 DF 2966  
 GL 2958

MEASUREMENTS ARE ALL FROM KB

CONTRACTOR Southwind Drilg. Rig #1  
 COMM. 12-17-2020 COMP. 1-7-2021  
 RTD 4660 LTD \_\_\_\_\_

CASING RECORD  
8 5/8" at 304 w/ 250 sx.  
 \_\_\_\_\_ at \_\_\_\_\_ w/ \_\_\_\_\_ sx.  
 \_\_\_\_\_ at \_\_\_\_\_ w/ \_\_\_\_\_ sx.  
 \_\_\_\_\_ at \_\_\_\_\_ w/ \_\_\_\_\_ sx.

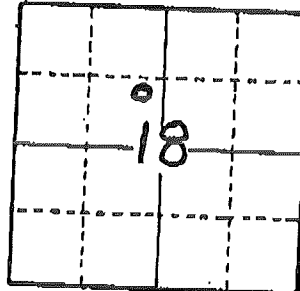
EL. LOG \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

No. of DST'S 2 No. of CORES None

SAMPLES SAVED FROM 3700 TO TD  
 DRILLING TIME KEPT FROM 3700 TO TD  
 SAMPLES EXAMINED FROM 3700 TO TD  
 GEOLOGICAL SUPERVISION FROM 3700 TO TD  
 GEOLOGIST ON WELL Edwin H. Grieves

### FORMATION TOPS

FORMATION TOPS	SAMPLE	LOG	SUBSEA
<u>Plattsouth</u>	<u>3843</u>	_____	_____
<u>Base Heebner</u>	<u>3881</u>	_____	_____
<u>Lansing Fm</u>	<u>3922</u>	_____	_____
<u>Lansing "B"</u>	<u>3957</u>	_____	_____
<u>Lansing "E"</u>	<u>4014</u>	_____	_____
<u>Lansing "F"</u>	<u>4057</u>	_____	_____
<u>Lansing "G"</u>	<u>4106</u>	_____	_____
<u>Lansing "K"</u>	<u>4203</u>	_____	_____
<u>Lansing "L"</u>	<u>4240</u>	_____	_____
<u>BKC</u>	<u>4281</u>	_____	_____
<u>Pleasanton</u>	<u>4289</u>	_____	_____
<u>Marmaton "B"</u>	<u>4350</u>	_____	_____
<u>Cherokee</u>	<u>4445</u>	_____	_____
<u>Johnson</u>	<u>4509</u>	_____	_____
<u>Mississippi Dol.</u>	<u>4568</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



API# 15-171-21269

REMARKS No Gas Detector was used on this well

WELL TIME

SCALE

SAI

16208725739

GAS SCALE

<p>3702-3780</p>	<p>sh. v. dk grey to black          3702 - 3780 Interbedded Lmst + Shs          1. Lms. crm, greyish-tan to tan; + trs w/ht to crm. chlk. IPS; crypto. tan. xln.; sub-sucro + p. chstn; huy. trs to zbn oolitic (tan w/ sl. trs. lt. gry.) scattered tr. foss.; d. yel. to yel. fluor. IPS; No cut; scattered TRS. pr. micro-pp por.</p> <p>2. Lms. lt. to med. gry.; sl. to v. tanish IPS; crypto. tan. xln.; sl. to v. shly tan oolitic (lt. to med. gry.) tr. v. d. w/ yel. fluor. No cut; No vis por</p>	<p>3700</p> <p>10 100 1000</p> <p>WDR 37000          RPM 70-80          SPAN 80          PP 650</p>
<p>3780-3800</p>	<p>3. Sh med to dk. gry.; sl. to extremely shly          4. Sh dk. to v. dk. gry. to black</p> <p>Lms. lt. gry. to tan w/ trs. w/ht to crm. chlk v. xln.; sub-sucro. to sucro; trs. foss; tr. yel. fluor.; No cut; sl. trs. pr to pr. micro-pp por + poss. inter xln por</p>	<p>3800</p> <p>WDR 38000          RPM 80          SPAN 150          PP 745</p>
<p>3800-3848</p>	<p>Interbedded Lmst + Shs similar 3702-3780</p>	<p>3848 - 875</p> <p>Flat smooth</p>
<p>3848-3881</p>	<p>Lms. greyish-tan to tan, huy. trs to zbn. chlk-w/ht to crm.; CR + plat. v. fg + huy. tr. xln.; sl. to fairly oolitic IPS sub-sucro. to sucro. + huy. trs. p. chstn v. scattered d. tan sptd. oil str. w/ faint staining. IPS to faint to fr ring cuts; zbn. pr. fr to d. + huy. trs excel. inter xln + p.p. por</p>	<p>Base Heabner          3881-913</p>
<p>3881-3900</p>	<p>Sh v. dk gry. to blk - carb.</p> <p>Sh. lt. gry. to ft green silty IPS w/ trs Lms tan; crypto xln; p. chstn to sub-lithoge; d. w/ yel. fluor.; No cut; No vis por.</p>	<p>3900</p>

16208725739

3900

Lms. cem. totan, grayish IP's + trs. whitocrm-znk  
 crypto. to v. fu. xlu, w/ trs. fu. to med. whit. zlc xls;  
 sub-chlk, sub-sucro to sucro + pckstn. No oil  
 odea; scattered sptd tan to ban oil stn  
 w/dul. gldn yel. fluor.; w/ fat to fast ring  
 cuts; trs. sptd sl. trs. fa. micro-pp por IP's  
 w/ poss. vulg. por. trs. chert fky, opp.

Lms tan, grayish. It. gw/str wnt to cem. dlck  
 crypto to v. v. fu. xlu. it. as sub-chlk  
 sub-sucro, pckstn + trs sub-lithogr  
 fnt oil odea; scattered trs H. ban sptd oil  
 stn; w/dul yel fluor.; w/ fat strung to  
 gd. Ring cuts; No Vis POR

Lansing Fm  
 3902-954

Sh v. drk gray to blk

Sh med to drk gray, extalyzic IP's +  
 trs. Lms. med. gray. dense, tilted hard  
 Lms. Htan w/sptd to even oil stn 50 oolitic  
 matric fu. xlu, sub-sucro to extalyzic sucro  
 50% fu. xlu sub-sucro to sucro, gd. oil odea  
 fluor wgd cuts; fr. to excl interxlu + p.p.p.a.

Lansing "B"  
 3957-989

WOP 32000  
 RPM 80  
 SPN 88  
 PP 850-900

Sh med to v. drk gray; sl. zlc. IP's  
 Lms. tan, trs. wht. to crm, chlk crypto. to v. fu. xlu  
 sub-sucro, pckstn, sub-lithogr, No cut, No Vis POR

Lms. CRM. totan + abu wht to crm. chlk;  
 crypto. to v. v. fu. xlu; sub-chlk, sub-sucro  
 + pckstn. trs oolitic; huy trs sptd. dk. tanta  
 ban oil stn. in top, decr. w/dpth, dul gldn  
 yel. fluor. trs. strung to fat ring cuts  
 scattered trs. pr. micro-pp por

4000

sh drk gray to blk

Lms gray to tan; crypto. xlu; pckstn no fluor  
 No cut; trs. chert lt. gray opp.

Lm. lt. gray totan w/ even sptd oil stn  
 gd. oil odea, crypto to fu. xlu w/ med white calc  
 sl. to v. oolitic, matric sub-sucro to v. sucro  
 + pckstn. j. gldn yel fluor wgd cuts  
 zon. pr. to excl interxlu, p.p.vulg. por

Lm. H. to med gray gdu to sh; crypto to trs  
 v. fu. xlu along frz. w/ tan to ban stn. fluor  
 + gd cuts; trs. pr. interxlu to micro-pp por

Lansing "E"  
 4014-1046

WOP 32000  
 RPM 80  
 SPN 88  
 PP 850

Lms w/ trs. stn fluor cuts only  
 sl. trs. pr. micro-pp to interxlu por.

Lansing "F"  
 4051-1083

Lms. grayish. totan w/ v. abu wht to crm. chlk  
 crypto. to v. fu. xlu. j. sub-sucro to sucro  
 pckstn; trs sptd tantoban. oil stn.  
 fluor + cut. huy. trs. pr. micro-pp  
 por + poss. interxlu pore

Lms. lt. to med gray. crypto xlu; pckstn to  
 sub-lithogr.; fluor, No cut; No Vis POR  
 Lms. lt. gray totan w/ sub-chlk; crypto to trs  
 v. fu. xlu; pckstn + sub-chlk w/ trs  
 sub-sucro to sucro, fluor, No cut  
 sl. trs. pr. micro-pp por IP's

Lansing "G"  
 4106-1130

Lms lt. gray to grayish. tan; crypto. to v. fu  
 xlu; sub-sucro to sucro + pckstn; sl.  
 oolitic IP's; fluor; No cut; No Vis POR

4100

Sh. v. drk gray to black

WOP 32000  
 RPM 80  
 SPN 88

oolitic IP's; fl. 16208725739 POR 4100  
 Sh. v. dark gray to black  
 Lms. similar 4098-4104

WOB 32000  
 RPM 80  
 SPN 50  
 PP 850

Lms. similar 4098-4104 w/ sh med  
 gray calc IP's; trs chert gray. opaque

Lms. H. gray to grayish tan; crypto to hvy trs  
 v. fn to fn. w/ trs med to coarse w/ calc  
 xls; pred. pachy + sub-lithogr. w/ trs  
 sub-sucro to sucro (poss along trace)  
 w/ trs. sptd tan to brn oil stn; dull  
 glauy el fluor; ft. to fo or o der;  
 trs pr. interxlu + micro-pp  
 poss vug. por.

Sh H. to med gray; slit. v. calc w/ sh  
 Lms. H. gray; crypto xlu; pachy +  
 trs. oolitic; fluor; No cut;  
 No U is Por

Sh. blk - carb  
 Lms. H. to med gray, shly IP's; crypto + trs  
 v. fn. xlu; pachy + trs oolitic +  
 trs sub-sucro. to sucro w/ scattered  
 trs sptd tan to brn oil stn w/ dull  
 glauy el fluor w/ pr to r string to  
 Ring cuts; shly trs pr. micro-pp + poss  
 interxlu por

Lansing "K"  
 4203 - 1275

Sh blk - carb

WOB 32000  
 RPM 80  
 SPN 50  
 PP 870

Lansing "L"  
 4240 - 1272

Lms w/ shows similar 4203-4238

4201-89 sh med to dark gray, slit  
 v. calc + v. dark gray to blk carb  
 trs flr.  
 4289-93 Lm string oil der, tan w/  
 zbn eventos pidaak. tan to brn oil stn  
 v. fn. to fn. + trs med xlu w/ trs crypto  
 xlu; sub-sucro to sucro + trs  
 pachy; glauy el fluor; gdcuts  
 hvy trs pr. to f + zbn gdt to ex d iter  
 xlu, micro-pp, pp + vug por  
 Lms dense tight, hnd No flms, No cut, No VP

BKC  
 4281 - 1313  
 Pleasanton  
 4289 - 1321

Sh med. gray. w/ trs greenish gray + trs  
 slit stn H gray, shly mic calc NS  
 Lms H. gray. v. to extel shly IP's gdn to

4260

16208725739, RbVT

4360  
 Sh med. gray. w/ tan grayish gray + tan  
 siltstn H gray, silmicaceous NS  
 Lms. lt. gray, v. to extaly shly IP's gadu to  
 H. gray sh.; cryptoxlu.; sl. oolitic IP's NS  
 No Uis POR w/ tan lms. / spid to even tan to  
 bn. oil stn; v. fu. xln. sub-sucro to small  
 fat tot oil ader; fluor, cuts, tr spr  
 interbedded micro-ppor; w/ sl. tan H. gray  
 siltstns - carb

Lms. lt. to med. gray, sl. to extaly shly. IP's  
 crypto. to v. u. fu. xln.; tan sub-sucro,  
 p. ch. stn + tan sub-lithogr.; No fluor  
 No cut; No Uis POR

4350-55 Lms. grayish tan; crypto. w/ abn  
 v. fu. to med xln; sub-sucro to v. sucro  
 w/ abn. packstn; pyritic IP's; ad oil

ad. oil; abn. oil; to even tan to dark bn. oil stn  
 gl. to dull gl. d. yel. fluor. flush to oil  
 stam cuts; abn. packstn + tan lms  
 qd to excel. interbedded micro-pp  
 + v. u. POR; Quast. Porln IP's

4355-4377 Lms. H. gray. tot tan; crypto to  
 tan v. u. fu. xln.; tan sub-sucro, packstn  
 + sub-lithogr.; tan fluor; No cut  
 No Uis POR

Sh v. dk gray to blk - carb

Lms. lt. gray. - sl. to extaly shly IP's +  
 tan; crypto to tan v. fu. xln.;  
 sub-sucro + packstn; sl. to extaly oolitic  
 IP's; dul. lt. yel. fluor. IP's; No cut; No Uis POR

Sh v. dk. gray to blk - carb

Lms. similar 4300-29 w/ tan; tan to abn  
 Lms. bn. from oil stn; crypto to v. u. fu. xln  
 sub-sucro. to sucro + packstn; sl. to extaly oolitic IP's  
 gl. to dull gl. d. yel. fluor. flush to oil  
 pr. to extaly interbedded micro-ppor; Quast. Porln

Lms. lt. to med gray. - sl. to extaly. Shly IP's  
 crypto xln.; packstn + tan sub-lithogr.;  
 tan dul. lt. yel. fluor; No cut; No Uis POR

Sh. v. dk. gray. to blk - carb  
 Lms. tan, grayish IP's; cryptoxln; packstn  
 to sub-lithogr; dul. lt. yel. fluor.;  
 No cut; No Uis POR

Interbedded Lms + siltstns  
 Lms similar 4447-4459 + 4461-4486  
 Sh med, to v. dk gray, calc to dk gray  
 to black - carb

4360

MARINETAN 1084  
 4350-1382

WOB	32000
RPM	80
SPM	58
PP	600

4400

WOB	32000
RPM	80
SPM	58
PP	875

CHEMSEE  
 4445-1477

4500

JOHNSTON  
 4449-1481

Lms similar 16208725739 4461-4486  
Shs med, tov. drk gray, calc. to drk gray  
to black - 128 lbs

4500

Johnson  
4509-1541

Lms. H. gray. to tan; crypto. xln.; pecksta.;  
slit. to oolitic IP's; sl. to faly Shly IP's  
No fluor.; No cut; No Vis POR; w/ trs  
top zn. to hyp. trs bottom zn. of v. fn. xln  
sub-sucro w/ spid. to eventant drk.  
brn. to trs blk oil stn.; fnt oil oler top  
to fruil oler bottom; dul. gl. in yel. fluor.  
flush to gd. stamp. cuts; trs to hyp. tr. pr.  
to tr. inter. xln + micro-ppor; Quest Rem.  
Lms. tan; crypto. xln.; sub-lithogr; No fluor.  
No por

Lm. similar 4537-4545 w/abu. whit to cream-  
calc + trs H. gray to f. gray silt stn - Sh  
filled; trs H. gray to f. gray + red shs;  
silt stn. in cr. to hyp. trs w/ depth and  
trs med. to coarse wht. calc xln; in  
bottom 10' trs chert tan, opque

Mississippi Dolomite  
4568-1300

Dolo. tr. tan rest drk. tan to drk. tan  
frm oil stn. trs. sub-sucro, sucro to exte.  
sucro; v. micro-ppolizastic tov. micro-oolitic  
gl. in yel. fluor. gadu; pr. gadu to ex. calcitic  
POR, matrix abngd. to trs ex. calc. inter. xln  
+ micro-pp to trs p.p. por; gd. oil oler  
Lms. H. gray; crypto. tov. v. fn. xln; v. to exte.  
oolitic (Lms med. + lg) matrix sub-sucro  
pecksta. trs dul. yel. fluor; No cut; No Vis POR  
Lms similar 4578-4588 becoming  
faly. dolomitic IP's

4600

Lms similar 4578-4588 w/ trs.  
slit. to faly dolomitic; slit. trs chert  
wht to tan; opque

Dolo H. gray to tan; v. v. fn. xln; v. sucro  
dul. yel. fluor; No cut; No Vis POR

# TD 4660

Bit Info:  
#1 12 1/4" JZ Retip to 304'  
#2 7 7/8" JZ PDE 304 to 3612'  
#3 7 7/8" JZ HA 20KT 3612 to 4660TD