

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	LENORE 1-16
Doc ID	1400535

All Electric Logs Run

Neutron Density
Micro
Induction
Sonic

GEOLOGIST'S REPORT

DRILLING TIME & SAMPLE LOG

COMPANY Berexco LLC
 LEASE Lenore NO. L-16
 LOCATION 1621' ENL + 1893' FWL
 SEC. 16 TWP. 23S RNG. 31W
 COUNTY Finney, STATE Kansas
 FIELD Willcat

ELEVATIONS
 KB 2894
 DF 2891
 GL 2882
 MEASUREMENTS ARE ALL FROM KB

CONTRACTOR Berexco/Delgado Rig #1

COMM. 11-28-2017 COMP. _____
 RTD 4985 LTD _____

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

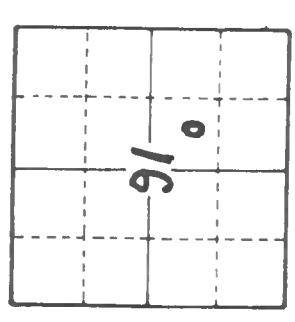
SAMPLES SAVED FROM 3800 TO TD
 DRILLING TIME KEPT FROM 3800 TO TD

SAMPLES EXAMINED FROM 3800 TO TD
 GEOLOGICAL SUPERVISION FROM 3800 TO TD

GEOLOGIST ON WELL Edwin H. Greives

FORMATION TOPS

FORMATION TOPS	SAMPLE	LOG	SUBSEA
<u>Base Heelner</u>	<u>3990</u>		
<u>Lansing Fm.</u>	<u>4080</u>		
<u>Kansas City "A"</u>	<u>4367</u>		
<u>BXC</u>	<u>4497</u>		
<u>Marmiton</u>	<u>4522</u>		
<u>Prague</u>	<u>4602</u>		
<u>Et Scott</u>	<u>4626</u>		
<u>Cherokee Fm</u>	<u>4647</u>		
<u>Meadow Fm</u>	<u>4780</u>		
<u>St. Genevieve</u>	<u>4807</u>		
<u>St. Louis</u>	<u>4836</u>		
<u>TD</u>	<u>4985</u>		



API# 15-055-22466

REMARKS Earth-Tech had an unmanned gas detection trailer on this well from 3800 feet to total depth.

Thank you,
 Edwin H. Greives
 Geologist

ITHOLOGY

- SANDSTONE
- LIMESTONE
- SHALE
- CHERT

- SILTSTONE
- DOLOMITE
- GRANITE WASH
- ANY & GYP

CHROMATOGRAPH

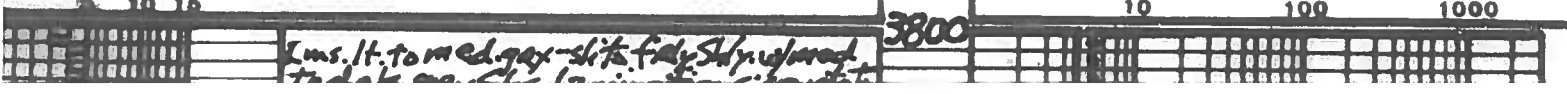
HOT WIRE BY
 TOTAL GAS VOLUME

- C1 = METHANE
- C2 = ETHANE
- C3 = PROPANE
- C4 = ISOBUTANE
- C5 = BUTANE
- C6 = ISOPENTANE
- C7 = PENTANE

DRILL TIME SCALE

SAMPLE DESCRIPTION

GAS SCALE



Ins. It. to med. gas slit. fully submerged

DRILL TIME SCALE

5 10 15

SAMPLE DESCRIPTION

GAS SCALE

10 100 1000

3800

Lms. lt. to med. gray-slit. f. sh. shly. w/ med. to dk. gray sh. 13 magnatitic; crypto to v.v. fu. xlu.; sub-chlk, trs. sub-sucro and packstn. trs. less; dul. lt. yel. fluor; No Cut No Vis. POR.

Lms. trs. to abn. wht. to crm. chlk to grayish tan; crypto to v.v. fu. xlu.; sub-chlk, sub-sucro to sucro + packstn.; phantom micro-oolitic to micro-oolitic IP's; dul. lt. to yel. fluor. No Cut; hvy. trs. to abn. pr. fr. ad. trs. excel. micro-pp + interxlu. por. to sli. trs. fr. to gd. vugular fbr.

Lms. similar 3800-3818 becoming grayish-tan to tan; crypto to v.v. fu. xlu. sub-chlk, trs. sub-sucro + packstn. dul. lt. yel. fluor. IP's; No Cut; No Vis. POR.

Lms. hvy. trs. to abn. wht. to crm. chlk + tan to grayish tan grading to tan gray; crypto to v.v. fu. xlu.; sub-chlk, sub-sucro to v. sucro + trs. packstn.; trs. phantom micro-oolitic, to trs. phantom micro-oolitic; sli. trs. clear, to med. calc. xls. + fr. agm.; dul. lt. yel. to dul. yel. fluor. No Cut; abn. pr. fr. ad. to excel. p.p., micro-pp + interxlu. por.

Lms. lt. to med. gray; sli. to v. shly. for sli. to v. silty grading to lt. gray. Siltstn.; h. m. crypto to v.v. fu. xlu.; sub-chlk trs. sub-sucro + packstn.; siltstn. + fine gr.; shly. calc; No fluor; No cut; No Vis. POR. sh. v. dark gray to black carb. lating

4007-4017 Lms. abn. wht. to crm. chlk + tan grayish. IP's crypto to v.v. fu. xlu. sub-chlk, sub-sucro. to v. sucro; abn. phantom micro-oolitic to trs. micro-oolitic + for hvy. trs. phantom micro-oolitic to micro-oolitic; dul. lt. to lt. yel. fluor; No cut abn. pr. fr. ad. to excel p.p., micro-pp + interxlu. por.; trs. chert wht. to v. lt. gray; opaque

4017-4020 Interbedded Lmst + Shs 1. Lms. grayish tan; crypto to v.v. fu. xlu.; sub-chlk, sub-sucro, packstn. + siltstn. dul. lt. to lt. yel. fluor; No cut; No Vis. POR.

2. Lms. grayish tan to lt. gray sli. to v. shly; crypto to v.v. fu. xlu.; trs. sub-chlk, trs. sub-sucro, packstn. + trs. siltstn. trs. w/ dul. lt. yel. fluor; No cut No Vis. POR.

3. Shs. lt., med. to trs. dk. gray; sli. to ext. calc IP's

High Porosity 11% hrs

Base Freebner 3990-1096

Trap Check

Zeroed

Lms. med. tan

Geological
F. W. H. B.

Vertical text on the left margin, possibly a well log or depth scale.

4017-4080 Interbedded Lms + sh
1. Lms grayish tan, crypto to v. fu. sh. sub-
sub-
dull H. to yel. fluor; No cut; No Vis For
2. Lms. grayish. tan to light gray. sli. to sh. y;
crypto. to v. fu. xlu. i. tas. sub-
tas sub-sucro, packstn TAS sub-
tas. w/ dull H. yel. fluor; No cut
No Vis For.
3. Sh. H., med to tes drk. gray; sli. to
extaly calc lps
4. tas chert H. gray to whit, opque
Lms. tas. whit. to cream. chert + tan, grayish
lps; crypto. to v. fu. sh. + tas. whit. to tan. m.
tomed calc xst + foz. m.; sub-
to sucro; tas. Reduzed foz. idull
to H. yel. fluor; No cut; abn. pat
ta + tas. qd. micro-pp to prob. interst
por. w/ tas chert whit opque

2000
Lansing Fm
4000-4186

4087-4099 Lms. grayish tan to tan
crypto. to v. fu. sh., tas sub-
sub-sucro + packstn sub-
dull H. to yel. fluor; No cut
No Vis For w/ sli. tas chert, grayish to opque
4099-4104 Sh. to med gray v.
to extaly calc. grading to sh. y. h. w. t.
4104-4124 Lms. tas. whit. to cream. chert + tan
grayish lps sub-
+ tas. packstn; dull yel. to yel. fluor.
No cut; tas. to huy. tas. prob. to
micro-pp por to prob. interst
por; w/ tas chert H. gray to whit opque

4100

4129-30 Sh. v. drk. gray to blk. carb. looking
4130-39 Lms. tan, grayish tan to tan. H. gray
crypto. to v. fu. sh. i. sub-sucro, packstn
+ tas. sub-
No cut; No Vis For.
4139-4156 Lms. tas. whit. to cream. chert
+ tan, sli. grayish lps, v. fu. xlu
sub-sucro. to sucro; dull yel. to
yel. fluor; w/ abn. pat. to huy. tas
qd. to tas. excel pp, micro-pp
+ prob. interst. por

TRAP Check
Repairing Stairs

4156-59 Lms similar to 4130-4139
4159-63 Sh. med gray. sli. to v. calc lps
4163-65 Lms similar to 4130-4139
4165-93 Lms. tas. whit. to cream. chert
+ tan to grayish tan; crypto. to v. fu. sh.
sub-
sub-
(tan to gray) dull yel. fluor
lps No cut; No Vis For; w/ huy. tas
Chert whit. gray, mottled lps
+ tan, opque

4200

4193-97 Sh. v. drk. gray to blk. carb. looking
4197-4221 Lms. extaly abn. whit. to cream. chert
+ wht. H. tan to tan; crypto. to v. fu. sh.
w/ tas. v. fu. to sh. clear calc xst;
sub-
dull yel. to yel. fluor; No cut;
abn. pat. huy. tas. to qd. micro-pp
+ prob. interst. por
4221-39 Lms. H. gray to tan; crypto. to v. fu. sh.
tas. sub-
tas. foz. foz. idull yel. fluor lps
No cut; No Vis For
4239-45 Sh. med. to v. drk. gray to
v. drk. gray to blk. carb. looking

4245-47 Lms. similar to 4211-4239
4247-4250 Sh. med. to v. drk. gray calc lps
4250-60 Lms. H. gray to grayish tan; crypto. to v. fu. sh.
packstn, dull yel. fluor lps, but No Vis For
4260-71 Lms. tas. whit. to cream. chert + tan; crypto. to v. fu. sh. i. sub-
sub-sucro to v. sucro
dull yel. fluor; No cut; abn. pat. to huy. tas. qd. micro-pp to
interst. por; tas. chert + tan
4272-76 Lms. H. gray to tan; crypto. to v. fu. sh. packstn
to huy. tas. sub-
No cut; No Vis For
4276-79 Sh. v. drk. gray to blk. carb. looking

TRAP Check

4279-4302 Lms. similar to 4271-4276

4300

4302-4322 Lms. tas. whit. to cream. chert + tan,
grayish lps; crypto. to v. fu. sh. i. to extaly calc
lps, med. to huy. tas. sub-
packstn; dull yel. fluor; No cut; No Vis For

C11

4322-45 Lms. abn. whit. to cream. chert + tan;

11210 - MSHVADALG9700KZAD0004

4279-4302 Lms. similar 4271-4276

4300

4301-4322 Lms. Tns. wht. to cream-chalk & tan, grayish IP's; crypto. to v. fn. xln.; to extly oolitic (sm. med. tlg.) matrix sub-chlk, sub-sucro & packstn.; dul. yel. fluor.; No cut, No vis for

C1

4322-45 Lms. abn. wht. to cream-chalk & tan; crypto. to v. fn. xln.; phantom micr. oolitic to crystal micr. oolitic & sli. tas. v. oolitic IP's matrix sub-chlk, sub-sucro to v. sucro yel. to glau. yel. fluor.; No cut, w/

4345-61 Lms. H. gray to tan; crypto. to v. fn. xln. sub-chlk, sub-sucro & packstn.; phantom oolitic to ool. y. & IP's; dul. yel. to yel. fluor.; No cut, No vis for

Kansas City 1400
4367-4473

Sh. med. to v. dk. gray - calc. to v. dk. gray. to black carb looking

Lms. similar 4345-4361
Lms. Tns. wht. to cream-chalk & tan; crypto. to v. v. fn. xln.; Tns. sub-chlk, sub-sucro.; phantom oolitic IP's to Tns. oolitic; dul. yel. to yel. fluor.; No cut; abn. gr. to fa. thuytes ab. to excel. micr. oolitic in part. Lms. H. gray; grayish. tan to tan; crypto. to v. v. fn. xln.; Tns. sub-chlk, sub-sucro. and packstn.; dul. yel. to dus. yel. fluor. IP's; No cut, No vis for

4400

Sh. v. dk. gray. to black carb looking

4409-4497 Interbedded Limestones & scattered thin Shales
1. Slower Dalg. lms. similar 4384-4403
2. Faster Dalg. lms. similar 4379-4384
3. Shs. med. to v. dk. gray - calc. IP's to v. dk. gray. to black carb looking

C1 BKE
4497-1603

4500

Shs. H. to med. grays, greens, reds & maroons

Marionton Fm
4529-1628

Lms. w/ Tns to abn. wht. to cream-chalk & tan to tan, grayish. IP's; crypto. to v. fn. xln.; Tns. sub-chlk, sub-sucro & packstn.; abn. sli. to v. oolitic; dul. yel. fluor.; No cut; No vis for. w/ Tns. gray to to tan chert, opque

Lms. H. to med. gray - sli. to extly sdy. IP's grading to extly calc. Shs & grayish tan to tan; crypto. to v. v. fn. xln.; Tns. sub-chlk, Tns. sub-sucro, packstn. & Tns. sub-sucro; dul. yel. fluor. IP's

Lms. w/trs to a bn. w/st. to cam-chalk. It. tan to tan, grayish. IP's: crypto. to v.v. xln. trs. sub-chlk, sub-sucro + pacdstn. 2bn. sl. to v. opitic; dul. yel. fluor. No cut; No vis por. w/trs gray to tan chert, opque

4522-1628

Lms. lt. to med. gray - sl. to ext. sh. IP's grading to ext. calc. sh. & grayish tan to tan; crypto to v.v. xln. trs. sub-chlk, trs. sub-sucro, pacdstn + trs. sub-lithog. dul. yel. fluor. IP's No cut; No vis por.

C

4599-4602 Sh. v. drk gray to black carb. looking

4600

Truck Creek

Lms. trs. to hvy. trs. w/lt. to crm. chlk. IP's + grayish tan to tan; crypto. to v.v. xln. sub-chlk, sub-sucro + pacdstn. hvy. trs. dr. to tan opitic + oolitic dul. lt. yel. fluor. IP's; No cut; No vis por. Sh. v. drk gray to black - carb. 4626-4647 Interbedded sh. + lms. 1. lms. similar 4602-4622

3 2 1/2 mi. S. of Payneville 4600-1708

2. Sh. lt. to med. grays, greenish gray, grayish greens w/hvy. trs. brownish reds to m. reds; trs. sl. to very silty w/trs. v.v. xln. lt. gray siltstn. Sh. v. drk gray to black - carb.

3 1/2 mi. S. of Payneville 4626-1732

Cherokee

4652-4780 Interbedded lms. + sh. 1. Lms. trs. w/cam. chlk + tan; crypto to v.v. xln.; trs. sub-chlk, hvy. trs. sub-sucro, pacdstn. + trs. sub-lithog. dul. lt. yel. to dul. yel. fluor. IP's; No cut; No vis por. 2. hvy. trs. Lms. lt. to med. gray - sl. to sh. shly. crypto. xln.; sub-chlk + shly. + pacdstn.; No fluor.; No cut; No vis por. 3. Shs. med. to v. drk gray. calc. IP's to v. drk gray to black - carb. looking. 4. Scattered trs. Chert. grays, tans to oranges; opque

4652-1753

A. 4780-4794 Interbedded sh. + siltstns 1. 1/2 sh. greenish grays to grayish greens to olive greens 2. 1/4 sh. med. gray soft + mushy to drk. grays siltstn w/trs v. drk gray to black - carb. looking 3. 1/4 siltstn lt. grays; sh. filled IP's trs w/trs. glauc. + or chlorite. Calc. IP's; No fluor.; No cut; No vis por. B. Sd. st. v.v. fine gr. dr. - and to trs. to almost 100% micro-oolites - highly re-sized IP's; H. gray to tan; a bn. lt. gray sh. filled; trs. w/trs. glauc. + or chlorite extr. a bn. lt. brn. from ci/stn w/dul. glau.

4700

WOB 40000
RFM 70
SPM 65
PP 1000

to glau. yel. fluor. w/flush to good staining cuts trs. pr. to siltstns fr. micro. pp. + prob interxln por. Quest. Perm

C. 4802-4807 Interbedded shales + siltstns similar 4780-4794

D. 4708-4836 Lms. can to tan w/ 10% w/spd. to even brn to blk oil stn. + fair oil ader; stn. has glau. yel. fluor. w/flush to excel. staining cuts; ext. micro-oolitic w/trs. to hvy. trs. dr. to tan - v.v. xln.; 2bn. xln. chlk, sub-chlk + sub-sucro trs. pr. to siltstns; micro. pp. por.; Quest. Perm

4800

MORROW 4780-1886

3 1/2 mi. S. of Payneville WOB 35000 RFM 70 SPM 56 PP 1000 SACONVILLE

DST#1
SEE BELOW

DST#1

see Below

DST#2

see Below

to gln. yel. fluor w/ flush to good
straining cuts trs. pr. to siltstns fr
micro pp. + prob interxlu por
Quest. Perm

C. 4801-4807 Interbedded Shales
+ siltstns similar 4780-4794

D. 4708-4836 Lms cam totan w/
10% w/ sptd. to even brn to
blk oil str. + fair oil ader;
str. has gln. yel. fluor w/ flush
to excel straining cuts; extaly
micro oolitic w/ trs to hyp
trs Qtz. gms - v. fine; jng;
matrix crypto to v. fine
xlu. i chlk, sub-sucro + sub-sucro
trs. pr. to siltstns fr micro pp
por; Quest. Perm

E. 4836-4851 Lms. siltstns crm-
chlk + tan, grayish. IP's; crypto
to v. v. fn. xlu. y. to extaly oolitic
(sm, med + bn. lg), matrix
sub-chlk, sub-sucro + packstn.
dul. yel. fluor IP's No cut;
No v. is por w/ trs chert tan
to orange; opaque

F. 4851-4858 Lms. trs. wht to crm-
chlk + tan; crypto. to v. fine; jng;
extaly oolitic IP's (sm, med + lg.)
w/ hyp trs. Perm to beccrate

G. matrix trs. sub-chlk, sub-sucro
to trs. sucro + in oil ader
sptd. to even, brn to tan, blk
oil str. w/ dul. gln. to gln. yel. fluor.
flush to excel straining cuts; trs
pr. micro pp por to prob
interxlu por. in matrix
w/ hyp trs. v. angular to solution
por. w/ chert; v. fine calc xls IP's;
v. 2 bn. loose dolites, Quest Perm
hyp. trs chert wht. tan to orange
mottled IP's trs orange w/ wht
dolites; opaque

H. 4858-4911 Lms. tan, crypto to
v. v. fn. xlu. v. to extaly micro, sm
to trs med oolitic; matrix
trs. sub-chlk, sub-sucro + packstn;
dul. yel. fluor; no cut; no v. is por
w/ trs to hyp trs. chert tan + jng.
to orange; opaque to trans.

I. Lms. w/ chert similar 4851-49
siltstns top to v. in bottom chlk - wht to crm
becoming silt. dolomitic IP's w/ hyp
trs in top to bn. in bottom med lg.

J. 4920-4929 Lms. v. 2bn. wht. to
crm. - chlk, trs. w/ chlk oolites
+ grayish tan totan; crypto to
v. v. fn. xlu.; v. to extaly oolitic
(med. to lg. trs sm) matrix chlk
sub-chlk, sub-sucro to sucro.

3rd packstn; dul yel. fluor;
No cut; hyp. trs. pr. to good
+ trs excel pp, micro pp
+ inter oolitic por; w/ trs
chert tan + jng to orange; opaque

K. 4929-4985 Lms. trs. wht. to crm-
chlk + tan to hyp trs grayish tan; crypto
to v. v. fn. xlu.; v. to extaly oolitic
(sm, med to tan to 2bn. lg) matrix
sub-chlk, sub-sucro + packstn.
w/ trs to hyp. trs crypto xlu. packstn
+ sub-titlagre. w/ nodules; both
silt. dolomitic IP's v. dul. to dul. yel. fluor
No cut; No v. is por; silt. trs chert gray, tan to
orange; opaque

TD 4985

Bit Infb. 7 7/8 inch
1. POC MDI 606 1832 out 3698
2. NewSmith F214 3698 4985 TB

RAM 70
SPM 65
PP 1000

MORROW 4780-1886

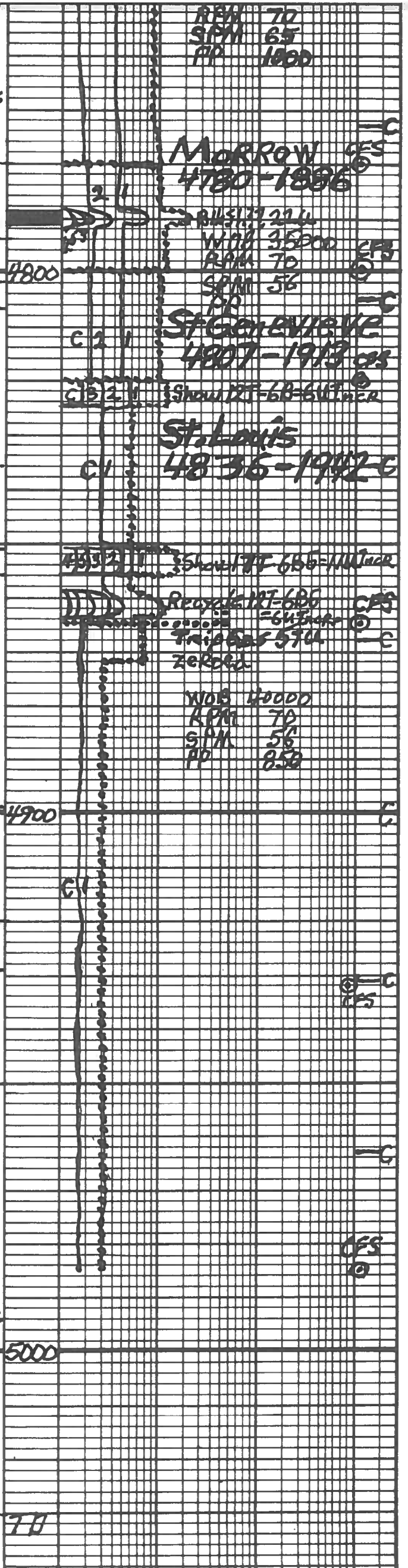
RAM 70
SPM 56
PP

St. Genevieve 4807-1913

St. Louis 4836-1942

Recycle RT-606
Triplex 574
Zerded

WOB 4000
RAM 70
SPM 56
PP 850



ISIP 035 # in 60 min
 FFP 20436 # in 60 min
 FSIP 965 # in 120 min
 FHP 2256 #
 Max Temp 116 °F

DST #2 St Louis 4846-4865

IF weak surface to 6 1/2"
 FF weak surface to 7 3/4"

Rec:
 180 MCU (fr. oil) .1% oil wtr mud
 180 SLIMCM 0 86% 14%
 90 HMLM 0 56% 44%

450ft Total Fluid
 Tool Sample Oil Specks 48% wtr
 51% Mud
 Ph: 6.0 Rw: 14 @ 62 °F
 Chl 69000 ppm

IHP 2262
 IFP 14 to 94 # in 30 min
 ISIP 1255 # in 60 min
 FFP 101 to 222 # in 60 min
 FSIP 1260 # in 120 min
 FHP 2258 #
 Max Temp 112 °F

Mud Info:

Date	12-5 6:00A	12-6 10:55A	12-7 7:00A	12-8 7:00A	12-9 11:00P	12-10 12:00P	12-11 12:00P	12-12 10:30A
Depth	2842	3603	3698	3698	4028	4309	4667	4810
Wt.	9.4	8.6	8.3	8.3	8.9	9.1	9.4	9.3
Vis	28	48	46	43	45	46	44	48
PV	-	16	15	14	15	15	15	16
YP	-	15	14	12	14	15	16	17
GS	-	1430	1429	1428	1432	1433	1429	1432
WL	N/C	7.2	7.2	7.2	7.2	7.2	8.0	8.0
Cake	-	1/32	1/32	1/32	1/32	1/32	1/32	1/32
pH	7.0	11.5	11.0	11.0	10.0	10.0	9.0	10.0
Chl	14000	2100	2000	2000	4000	4200	4300	4000
Ca	Hwy	20	20	20	20	20	40	40
LCM	TR.	TR.	TR.	4.0	4.0	4.0	4.0	4.0

Date	12-13 12:00A	12-14 11:00A	12-15 11:00P
Depth	4821	4865	4985
Wt.	9.3	9.3	9.3
Vis	51	51	55
PV	16	16	17
YP	19	19	20
GS	1435	1435	1436
WL	8.0	8.0	7.2

FHP 101 to 222# in 60 min
 FHP 1260# in 120 min
 FHP 2258#
 Max Temp 122°F

Mud Info:

Date	12-5 6:00A	12-6 1:15A	12-7 7:00A	12-8 7:00A	12-9 1:00P	12-10 12:00P	12-11 2:00P	12-12 10:40A
Depth	2842	3603	3698	3698	4028	4309	4667	4810
WT.	9.4	8.6	8.7	8.7	8.9	9.1	9.4	9.3
Vis	28	48	46	43	45	46	44	48
PV	-	16	15	14	15	15	15	16
YP	-	15	14	12	14	15	16	17
GS	-	14/30	12/29	12/28	12/32	12/33	12/29	14/32
WL	N/C	7.2	7.2	7.2	7.2	7.2	8.0	8.0
Cake	-	1/32	1/32	1/32	1/32	1/32	2/32	2/32
pH	7.0	11.5	11.0	11.0	10.0	10.0	9.0	10.0
Chl	4400	2100	2000	2000	4000	4500	4300	4000
Ca	Hvy	20	20	20	20	20	40	40
LCM	TR.	TR.	TR.	4.0	4.0	4.0	4.0	4.0

Date	12-13 12:00A	12-14 11:00A	12-15 12:00P					
Depth	4821	4865	4985					
WT.	9.3	9.3	9.3					
Vis	51	51	55					
PV	16	16	17					
YP	19	19	20					
GS	14/35	14/35	14/36					
WL	8.0	8.0	7.2					
Cake	2/32	2/32	1/32					
pH	10.0	9.0	10.0					
Chl	4300	4000	4000					
Ca	40	40	40					
LCM	3.0	4.0	4.0					

OPERATOR Berexco LLC LOCATION 1621' ENL + 1893' FWL
 LEASE Lenore NO. 1-16 SEC. 16 TWP. 23S RANG. 31W
 ELEVATION 2894 KB RTD 4985 COUNTY Finney STATE Kansas



Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
 County: FINNEY
 State: Ks
 Drilling Contractor: Beredco - Rig 1
 Elevation: 2885 EGL
 Field Name: Wildcat
 Pool: Wildcat
 Job Number: 88

DATE
 December
12
 2017

DST #1 **Formation: Morrow Sdst** **Test Interval: 4775 - 4820'** **Total Depth: 4820'**
 Time On: 17:06 12/12 Time Off: 06:44 12/13
 Time On Bottom: 22:07 12/12 Time Off Bottom: 02:37 12/13

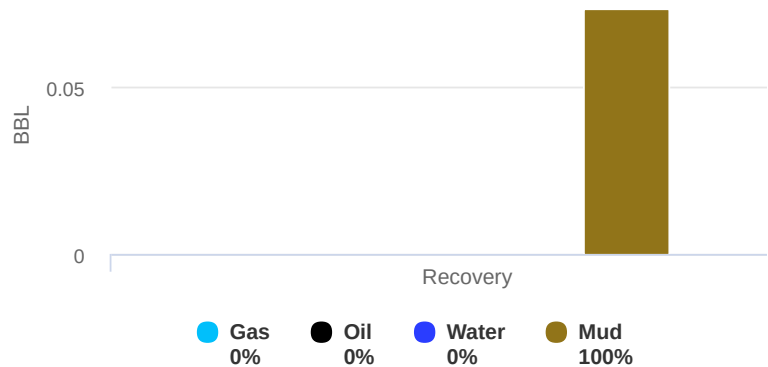
Recovered

<u>Foot</u>	<u>BBLs</u>	<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
15	0.0738	M	0	0	0	100

Total Recovered: 15 ft
 Total Barrels Recovered: 0.0738

Reversed Out
 NO

Recovery at a glance



Initial Hydrostatic Pressure	2262	PSI
Initial Flow	11 to 18	PSI
Initial Closed in Pressure	635	PSI
Final Flow Pressure	20 to 36	PSI
Final Closed in Pressure	965	PSI
Final Hydrostatic Pressure	2256	PSI
Temperature	116	°F
Pressure Change Initial Close / Final Close	0.0	%



Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
County: FINNEY
State: Ks
Drilling Contractor: Beredco - Rig 1
Elevation: 2885 EGL
Field Name: Wildcat
Pool: Wildcat
Job Number: 88

DATE December 12 2017
--

DST #1	Formation: Morrow Sdst	Test Interval: 4775 - 4820'	Total Depth: 4820'
	Time On: 17:06 12/12	Time Off: 06:44 12/13	
	Time On Bottom: 22:07 12/12	Time Off Bottom: 02:37 12/13	

REMARKS:

IF: 1/2 inch blow
ISI: No BB
FF: Surf. blow lasting 37 min
FSI: No BB

TOOL SAMPLE: 100% MUD



Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
County: FINNEY
State: Ks
Drilling Contractor: Beredco - Rig 1
Elevation: 2885 EGL
Field Name: Wildcat
Pool: Wildcat
Job Number: 88

DATE December 12 2017
--

DST #1	Formation: Morrow Sdst	Test Interval: 4775 - 4820'	Total Depth: 4820'
	Time On: 17:06 12/12	Time Off: 06:44 12/13	
	Time On Bottom: 22:07 12/12	Time Off Bottom: 02:37 12/13	

Mud Properties

Mud Type: Chemical **Weight:** 9.3 **Viscosity:** 48 **Filtrate:** 8.0 **Chlorides:** 4,000 ppm



Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
 County: FINNEY
 State: Ks
 Drilling Contractor: Beredco - Rig 1
 Elevation: 2885 EGL
 Field Name: Wildcat
 Pool: Wildcat
 Job Number: 88

DATE
 December
14
 2017

DST #2 Formation: St. Louis Test Interval: 4846 - Total Depth: 4865'
4865'

Time On: 01:11 12/14 Time Off: 13:23 12/14
 Time On Bottom: 05:43 12/14 Time Off Bottom: 10:13 12/14

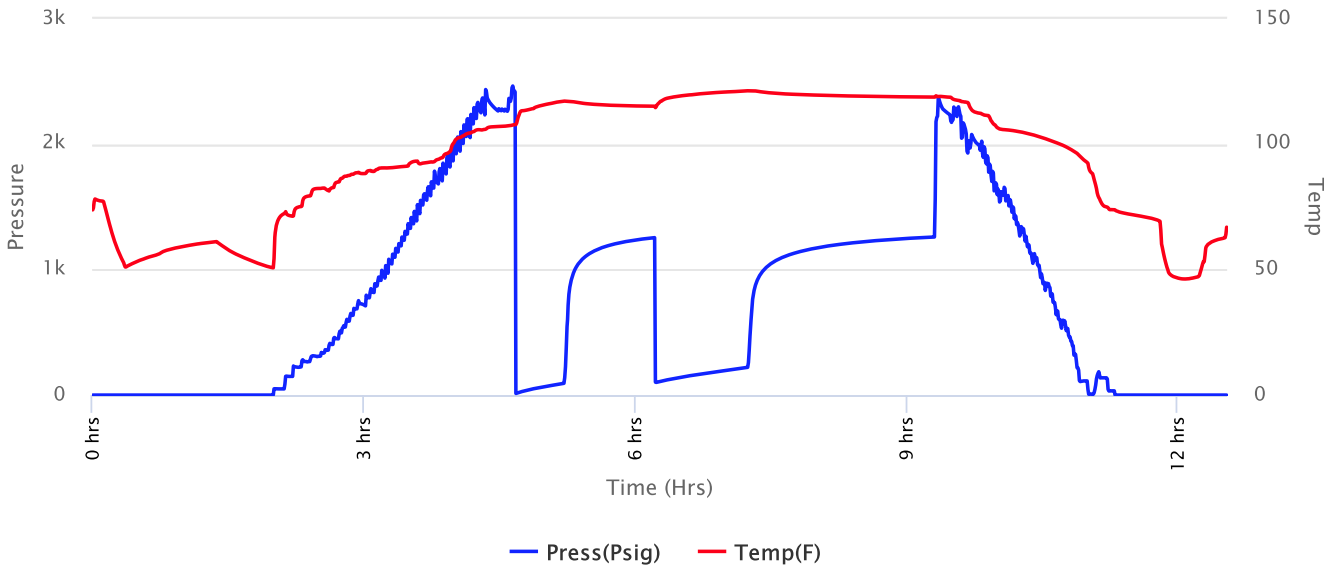
Electronic Volume
 Estimate:
 497'

1st Open
 Minutes: 30
 6.5" at 30 min

1st Close
 Minutes: 60
 0" at 60 min

2nd Open
 Minutes: 60
 7.9" at 60 min

2nd Close
 Minutes: 120
 0" at 120 min





Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
 County: FINNEY
 State: Ks
 Drilling Contractor: Beredco - Rig 1
 Elevation: 2885 EGL
 Field Name: Wildcat
 Pool: Wildcat
 Job Number: 88

DATE
 December
14
 2017

DST #2 Formation: St. Louis Test Interval: 4846 - 4865' Total Depth: 4865'

Time On: 01:11 12/14 Time Off: 13:23 12/14
 Time On Bottom: 05:43 12/14 Time Off Bottom: 10:13 12/14

Recovered

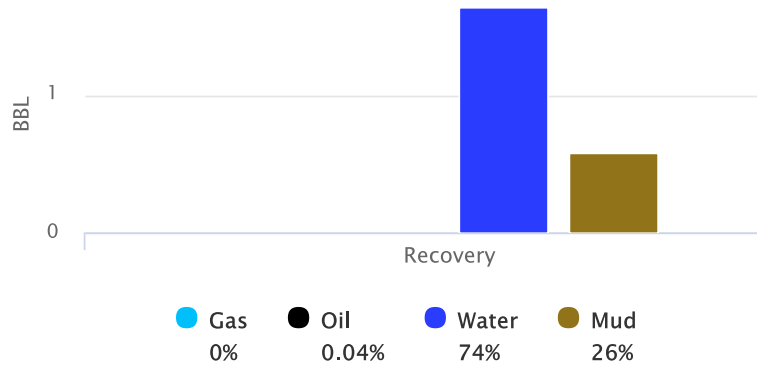
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
180	0.8856	MCW (trace O)	0	.1	71	29
180	0.8856	SLMCW	0	0	86	14
90	0.4428	HMCW	0	0	56	44

Total Recovered: 450 ft
 Total Barrels Recovered: 2.214

Reversed Out
 NO

Initial Hydrostatic Pressure	2262	PSI
Initial Flow	14 to 94	PSI
Initial Closed in Pressure	1255	PSI
Final Flow Pressure	102 to 222	PSI
Final Closed in Pressure	1260	PSI
Final Hydrostatic Pressure	2258	PSI
Temperature	122	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance





Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
County: FINNEY
State: Ks
Drilling Contractor: Beredco - Rig 1
Elevation: 2885 EGL
Field Name: Wildcat
Pool: Wildcat
Job Number: 88

<p>DATE December 14 2017</p>
--

DST #2 Formation: St. Louis Test Interval: 4846 - Total Depth: 4865'
4865'

Time On: 01:11 12/14 Time Off: 13:23 12/14
Time On Bottom: 05:43 12/14 Time Off Bottom: 10:13 12/14

REMARKS:

IF: 6 1/2 inch blow
ISI: No BB
FF: 7 3/4 inch blow
FSI: No BB

TOOL SAMPLE: OIL SPECKS, 48% WATER, 52% MUD

Ph: 6.0

RW: .14 @ 62 degrees F

Chlorides: 69,000 ppm



Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
 County: FINNEY
 State: Ks
 Drilling Contractor: Beredco - Rig 1
 Elevation: 2885 EGL
 Field Name: Wildcat
 Pool: Wildcat
 Job Number: 88

<p>DATE December 14 2017</p>

DST #2 Formation: St. Louis Test Interval: 4846 - 4865' Total Depth: 4865'

Time On: 01:11 12/14 Time Off: 13:23 12/14
 Time On Bottom: 05:43 12/14 Time Off Bottom: 10:13 12/14

Down Hole Makeup

Heads Up: 13.6 FT	Packer 1: 4840.5 FT
Drill Pipe: 4194.9 FT <i>ID-3.826</i>	Packer 2: 4846 FT
Weight Pipe: 0 FT	Top Recorder: 4829.92 FT
Collars: 631.63 FT <i>ID-2.25</i>	Bottom Recorder: 4848 FT
Test Tool: 34.07 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7.875
Total Anchor: 19	Surface Choke: 1"
<u>Anchor Makeup</u>	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3.826</i>	
Change Over: 0 FT	
Perforations: (below): 18 FT <i>4 1/2-FH</i>	



Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
County: FINNEY
State: Ks
Drilling Contractor: Beredco - Rig 1
Elevation: 2885 EGL
Field Name: Wildcat
Pool: Wildcat
Job Number: 88

<p>DATE December 14 2017</p>
--

DST #2 **Formation: St. Louis** **Test Interval: 4846 - 4865'** **Total Depth: 4865'**

Time On: 01:11 12/14 Time Off: 13:23 12/14
Time On Bottom: 05:43 12/14 Time Off Bottom: 10:13 12/14

Mud Properties

Mud Type: Chemical **Weight:** 9.3 **Viscosity:** 53 **Filtrate:** 8.0 **Chlorides:** 4,300 ppm



Company: Berexco, LLC
Lease: Lenore #1-16

SEC: 16 TWN: 23S RNG: 31W
County: FINNEY
State: Ks
Drilling Contractor: Beredco - Rig 1
Elevation: 2885 EGL
Field Name: Wildcat
Pool: Wildcat
Job Number: 88

DATE December 14 2017
--

DST #2 Formation: St. Louis Test Interval: 4846 - Total Depth: 4865'
4865'

Time On: 01:11 12/14 Time Off: 13:23 12/14
Time On Bottom: 05:43 12/14 Time Off Bottom: 10:13 12/14

Gas Volume Report

1st Open

Time	Orifice	PSI	MCF/D
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2nd Open

Time	Orifice	PSI	MCF/D
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DEC 11 2017

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

PRESSURE PUMPING Job Log

Customer:	Berexco Inc	Cement Pump No.:	38117, 19919 7Hrs.	Operator TRK No.:	78938
Address:	2020 N BRAMBLEWOOD	Ticket #:	1718 14596 L	Bulk TRK No.:	70897, 19808 Ruben 14354, 19578 Santiago
City, State, Zip:	WICHITA KS 67206	Job Type:	Z42 - Cement Surface Casing		
Service District:	1718 - Liberal, Ks.	Well Type:	OIL		
Well Name and No.:	Lenore 1-16	Well Location:	16,23,31	County:	Finney
				State:	Ks

Type of Cmt	Sacks	Additives	Truck Loaded On	
A-Serv Lite	600	2% Calcium Chloride, 1/4# Polyflake	70897, 19808 Ruben	Front Back
Premium Plus Cement	150	2% Calcium Chloride, 1/4# Polyflake	14354, 19578 Santiago	Front Back
				Front Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	12.1	2.19	12.34	1314	TT Man Hours:	50
Tail:	14.8	1.34	6.33	201	# of Men on Job:	4

Time (am/pm)	(BPM)	Volume (BBLs)	Pumps		Pressure (PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
8:15							ON LOCATION
8:20							SAFETY MEETING & WAIT
11:50 AM							RIG TO CIRCULATE
12:33 PM							RIG TO P.T.
12:36 PM							PRESSURE TEST TO 1980PSI
12:38	6.3	234.0 slurry				170	PUMP 600SX LEAD @ 12.1#
13:15	6.4	35.7 slurry				230	PUMP 150SX TAIL @ 14.8#
1:21 PM							SHUTDOWN / DROP PLUG 27BBLs IN CEMENT RETURNS
13:23	6.4	10				80	DISPLACE
	6.4	20				120	
	6.4	30				170	
	6.4	40				200	
	6.3	50				240	
	6.3	60				300	
	6.1	70				340	
	6.2	80				400	
	6.2	90				460	
	6.1	100				520	
13:43	6	104				550	SLOW RATE TO 2.0BPM @ 470PSI
	2	110				500	
13:49	2	114.7				520	LAND PLUG / PRESSURE UP TO 1010PSI
13:52							RELEASE BACK -- FLOAT HELD
							JOB COMPLETE

Size Hole	12 1/4"	Depth			TYPE	Plug Container	
Size & Wt. Csg.	8 5/8" 23#	Depth	1833.00'	New / Used	Packer	Depth	
Landing Press.	407.5psi	Depth			Retainer	Depth	
Shoe Jt.	42.14'	Type			Perfs	CIBP	

Customer Signature: *[Signature]* Basic Representative: Daniel Beck
 Basic Signature: *[Signature]*
 Date of Service: 12/2/2017



BASIC
ENERGY SERVICES

PRESSURE PUMPING

DEC 21 2017

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

Job Log

Customer:	Berexco Inc	Cement Pump No.:	38117, 19919 6Hrs.	Operator TRK No.:	78938
Address:	2020 N BRAMBLEWOOD	Ticket #:	1718 15532 L	Bulk TRK No.:	14354, 19578 Ruben
City, State, Zip:	WICHITA KS 67206	Job Type:	Z42 - Cement Plug To Abandon		
Service District:	1718 - Liberal, Ks.	Well Type:	OIL		
Well Name and No.:	Lenore 1-16	Well Location:	16,23,31	County:	Finney
				State:	Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
60/40 Poz	210	2% Calcium Chloride, 1/4# Polyflake, 4% Total Gel	14354, 19578 Ruben	Front	Back
				Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel
Tail:	13.5	1.53	7.55	321.3	TT Man Hours: 33
Tail:					# of Men on Job: 3

Time (am/pm)	(BPM)	Volume (BBLs)	Pumps		Pressure (PSI)		Description of Operation and Materials
			T	C	Drill Pipe	Casing	
10:00							ON LOCATION
10:05							SAFETY MEETING
10:15 AM							RIG UP
11:20 AM	5	13.6 slurry			200		PUMP 50SX TAIL @ 13.5# / 1840'
11:24 AM	5	22.8			90		DISPLACE
11:29							SHUTDOWN
12:06	5.1	13.6 slurry			170		PUMP 50SX TAIL @ 13.5# / 1200'
12:09 PM	5	13.7			100		DISPLACE
12:12							SHUTDOWN
13:08	5	10.8 slurry			140		PUMP 40SX TAIL @ 13.5# / 525'
13:11	4.7	4.8			90		DISPLACE
13:12							SHUTDOWN
15:00	3.8	8.1 slurry					PLUG RAT HOLE
15:07	3.8	5.4 slurry					PUMP 20SX TAIL @ 13.5# / 60'
15:09							SHUTDOWN
15:12	3.7	5.4 slurry					PLUG MOUSE HOLE
							JOB COMPLETE

Size Hole	7 7/8"	Depth			TYPE	Swage	
Size & Wt. Csg.	8 5/8" 23#	Depth		New / Used	Packer	Depth	
Drill Pipe	4 1/2" 16.6#	Depth			Retainer	Depth	
Plugs	1840'	1200'	525'	60'	Rat & Mouse	Perfs	CIBP

Customer Signature: <i>[Signature]</i>	Basic Representative:	Daniel Beck
	Basic Signature:	<i>[Signature]</i>
	Date of Service:	12/16/2017