

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	L. D. Drilling, Inc.
Well Name	CLEM 1-14
Doc ID	1489002

All Electric Logs Run

Dual Induction Log
Compensated Density/Neutron log
Micro Log
Sonic Log

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	CLEM 1-14
Doc ID	1489002

Tops

Name	Top	Datum
Anhydrite	2354	+647
Base Anhydrite	2373	+628
Stotler	3544	-543
Heebner	3924	-923
Lansing	3968	-967
Stark	4238	-1237
Pawnee	4462	-1461
Fort Scott	4506	-1505
Cherokee	4534	-1533
Mississippi	4744	-1743

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-854-9709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY	L. D. DRILLING, INC.	ELEVATIONS
LEASE	1-14 CLEM	TO 3001
FIELD	WILDCAT	OF
LOCATION	595' FSL 7 730' FEL	SI 2996
SEG	14 WSP 16s RGE 33w	Measurements Are All From 3001 KB
COUNTY	SCOTT STATE KANSAS	
OPERATOR	L. D. DRILLING, INC.	CASING
SPUD	9-27-19	8 5/8" @ 261'
DATE	9-8-19	FORMATION
WELL NO.	4850	ELECTRICAL SURVEYS
WELL ID.	3503	DUAL IND., DENS.-N. MICRO. SONIC
TYPE MUD	CHEMICAL	
SAMPLES SAVED FROM	3700	TO 4850
DRILLING TIME KEPT FROM	3400	TO 4850
SAMPLES EXAMINED FROM	3700	TO 4850
GEOLOGICAL SUPERVISION FROM	3800	TO 4850
GEOLOGIST ON WELL	KIM B. SHOEMAKER	

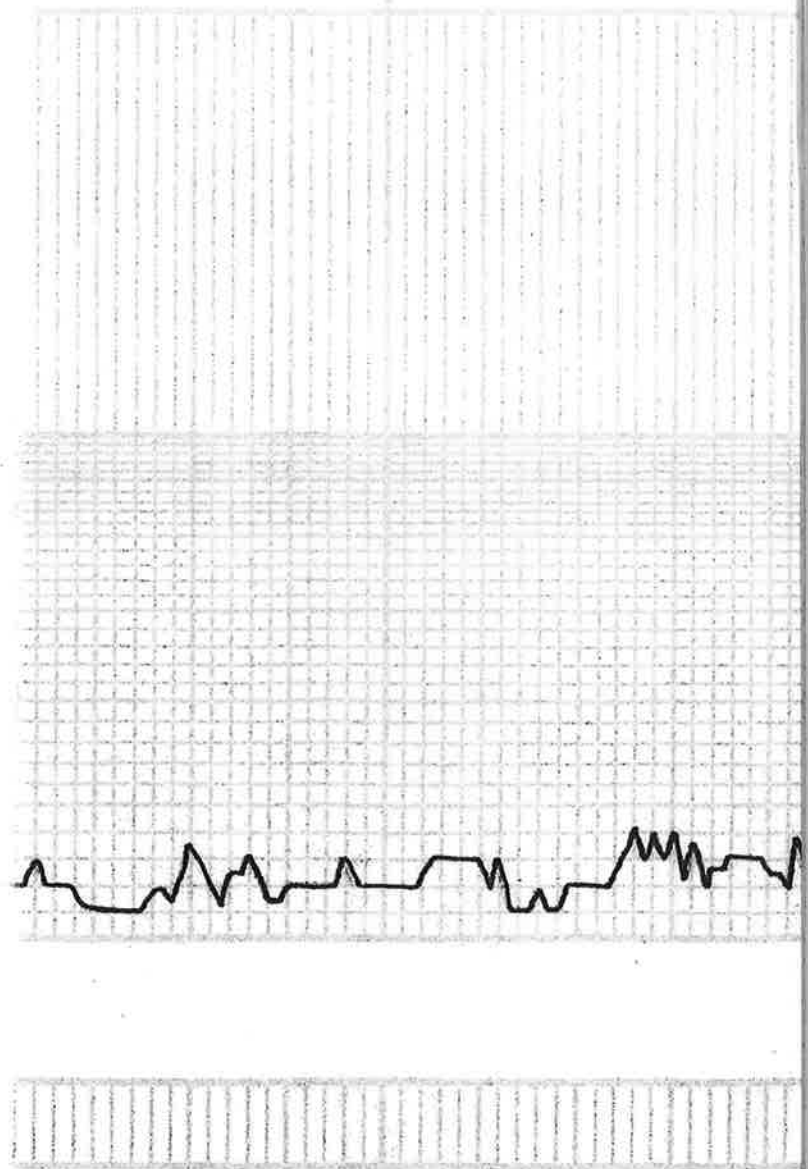
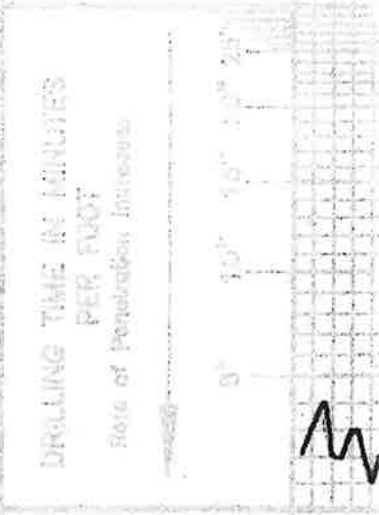
FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	2354+ 647	
B/ANK.	2373+ 628	
STOTLER	3544- 543	3546- 545
HEEBNER	3924- 923	3930- 929
LANSING	3968- 967	3971- 970
STARK	4238- 1237	4240- 1239
PAWNEE	4462- 1461	4464- 1463
FORT SCOTT	4506- 1505	4507- 1506
CHEROKEE	4534- 1533	4537- 1536
MISSISSIPPI	4744- 1743	4746- 1745

API: 15-171-21260
 Drill time for AMK. 2300-2400 was not available due to geologist about stopped.

- REMARKS
- 9-27-19 SPUD
 - 9-28 @ 264'
 - 9-29 @ 1465'
 - 9-30 @ 2595'
 - 10-1 @ 3170'
 - 10-2 @ 3600'
 - 10-3 @ 4075'
 - 10-4 @ 4393'
 - 10-5 @ 4520'
 - 10-6 @ 4635'
 - 10-7 @ 4689'
 - 10-8 @ 4848'

LEGEND

Hydrate Salt Sandstone Shale Limestone Crinoidal Part Possible



3500

STOTLER 3546-545

3600

VIS: 44 WT: 8.1
WL: 8.4 CW: 2000

Samples are Lagged

15. wt. clay. ool. sil. Glastic

15. clay. VST. A

15. wt. ool. sil. clay

15. T. L. B. Sil. A

15. B. G. Sil. Foss.

Sh. G.

15. wt. clay. Sil. Foss. Sil. clay

Sh. G.

15. B. G. ool. Sil. A

15. B. G. ool. VST. clay

15. T. Foss Glastic

Sh. Bk.

Sh. Glastic. Sil. G. Sil.

3700

3800

Sh. Blk.
 Sh. Albleckn. Silly - Sky
 L.S. To VSH Foss.
 L.S. To Sl. Foss. Sl. A
 Sh. Gp.
 L.S. To Foss-ool.
 L.S. w/ Lfg. Foss-ool. VSI. chllg.
 L.S. Dol. To VSH Vln Sue.
 Sh. Gp.
 L.S. To G. Sl. Foss.

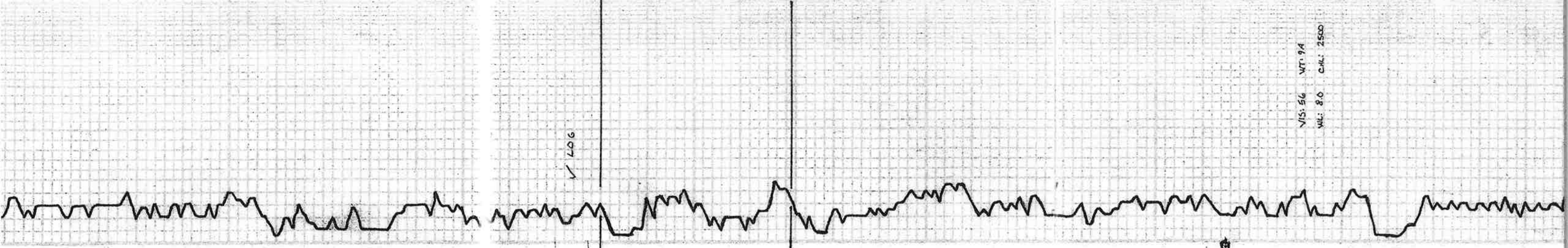
Sh. Clay
 L.S. To Vln Sl. Foss.
 Sh. Blk. Carb.
NEEBNER 3930-939

Sh. Lfg. G.
 L.S. To G. VSI Foss.
 L.S. w/ Sl. Foss. Sl. A
 Sh. R. L. G.
LANSING 3971-970

L.S. w/ ool. Sl. A
 L.S. To w/ VSI Foss. Sl. A
 Sh. Lfg. G.
 L.S. w/ Sl. Foss. Sl. Olenitic
 L.S. To VSI Foss. Sl. A

L.S. w/ Sl. ool. Sl. A
 L.S. To VSI Foss. Sl. A
 Sh. D. G.
 L.S. To Sl. Foss. Sl. A
 Sh. Blue-G.
 L.S. To O. L. Sl. Foss. Sl. A
 L.S. w/ Sl. Foss. Sl. Olenitic
 L.S. w/ Sl. Foss. Sl. A

Sh. Lfg. G.
 L.S. To Lfg. ool. Sl. ool.
 L.S. Lfg. To VSI Foss. VSI. A
 L.S. To w/ VSI Foss. Sl. A
 L.S. To Lfg. VSI. A



3900

4000

4100

LOG

VIS: 56 WT: 9A
 WIL: 8.0 C.M.: 2500

45. 74 Lt Gy. VSi: A

MUNCIE CREEK 4150-1149

45. Lt Gy. VSi: Foss. Sil. Calcitic

Sh. Lt Blue

45. wt. Sil Foss Sil A

45. wt. VSi: Foss VSi: Calcitic

Sh. Dk G.

45. B. VSi: Foss Sil A

Lt Blue Gy.

45. wt. Sil Foss Sil A

Sh. Lt Blue

45. Bl Gy. Sil: Foss

45. 74 Gy. VSi: Foss Sil A

STARK 4240-1239

Sh. Lt Blue

45. wt. VSi: Foss VSi: Foss

Δ wt.

45. wt. Lt Gy. Sil: Foss Foss Calcitic

45. wt. Chk.

45. wt. Lt Gy. VSi: Foss

Δ wt.

45. 74 wt Foss Sil: Foss Sil A

HOSPICKNEY 4284-1283

Δ Gy.

45. Gy. Foss w/ Def Ind.

45. Gy. VSi: Foss Sil A

Δ Gy. 45 wt Chk

B/KC 4322-1321

Δ Bl Gy.

45. Lt Gy. VSi: Foss Sil A

Δ Bl Gy.

45. Lt Gy. ool. VSi: Chk.

Sh. Lt Gy

Sh. Lt Gy. Blue Gy Silky Sil

MARMATON 4350-1357

45. 74 Gy. Sil A

Sh. Bl. Lt Gy

45. B. Sil A

45. Lt Gy.

45. Gy. Sil: Foss VSi: Lt Gy

Sh. Blue Gy

45. 74 wt Foss VSi: Chk. P. VSi: F
45. Sil: 55 Fb. Fl. Flour (4428)

Sh. Lt Gy. Blre

45. Gy. VSi: Foss Sil A

45. 74 Foss Sil A. Dm.

45. 74 Foss Sil A

Sh. Bl. Lt Gy.

Sh. Lt Blue Gy

4200

4300

4400

VIS: 49 NIT: 94

WEL: 916 CHL: 3200

DST (1) 4398-4520

1st OPEN: Blow built to 1 1/4"

2nd OPEN: " " " 1/4"

30-45-45-60

4800

RTD 4850-1849

⊙

LS wt ool. Sil chly.

Sl. DEChy

LS. wt ool. vSi: silky chly.

LS. 7/8 ool. vSi: chly. vSi:A

LS. wt ool. Sil chly.

LS. 7/8 LPS ool.

LS. R. Si: A Calcite

LS. 7/8 Gy. Sil Foss. Si:A

LS. 7/8 Gy. Sil ool.

Δ Gy. Foss.

LS. L/S. ool. w/ DE Ch ool.



Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
 County: SCOTT
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2998 EGL
 Field Name: Wildcat
 Pool: Infield
 Job Number: 388
 API #: 15-171-21260-00-00

Operation:
 Uploading recovery & pressures

DATE
 October
04
 2019

DST #1 **Formation: Altamont-Ft. Scott** **Test Interval: 4398 - 4520'** **Total Depth: 4520'**
 Time On: 22:50 10/04 Time Off: 05:52 10/05
 Time On Bottom: 01:00 10/05 Time Off Bottom: 04:05 10/05

Electronic Volume Estimate:
 28'

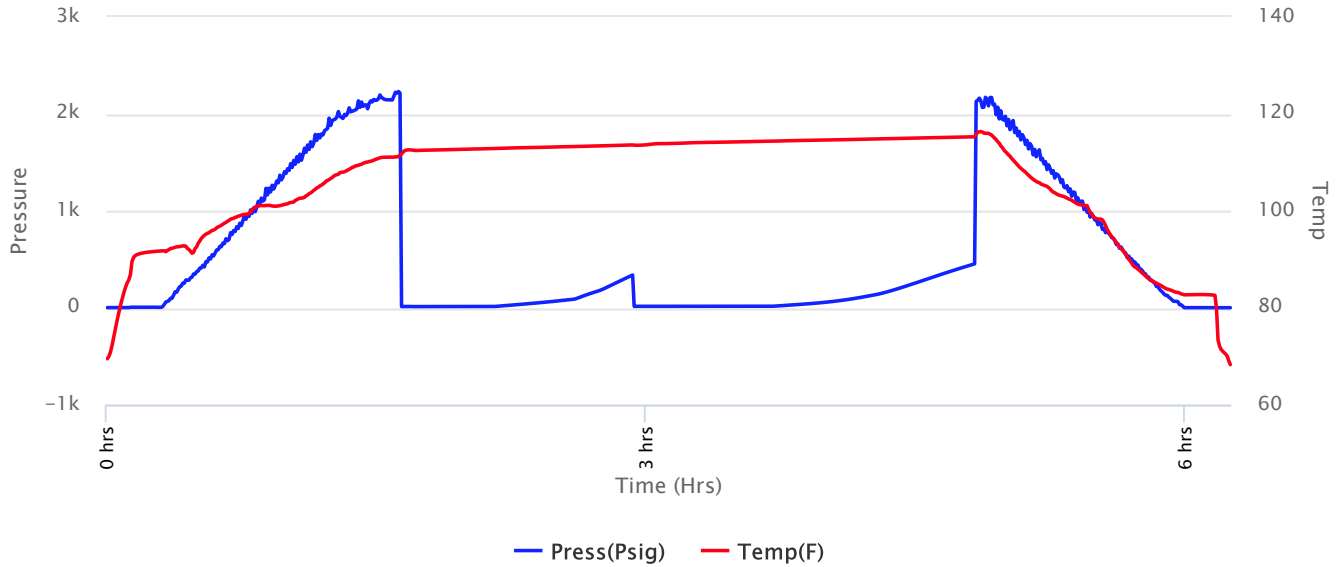
1st Open
 Minutes: 30
 Current Reading: 1.6" at 30 min
 Max Reading: 1.6"

1st Close
 Minutes: 45
 Current Reading: 0" at 45 min
 Max Reading: 0"

2nd Open
 Minutes: 45
 Current Reading: .6" at 45 min
 Max Reading: .7"

2nd Close
 Minutes: 65
 Current Reading: 0" at 65 min
 Max Reading: 0"

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
 County: SCOTT
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2998 EGL
 Field Name: Wildcat
 Pool: Infield
 Job Number: 388
 API #: 15-171-21260-00-00

Operation:
 Uploading recovery & pressures

DATE
 October
04
 2019

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 Time On Bottom: 01:00 10/05 Time Off Bottom: 04:05 10/05

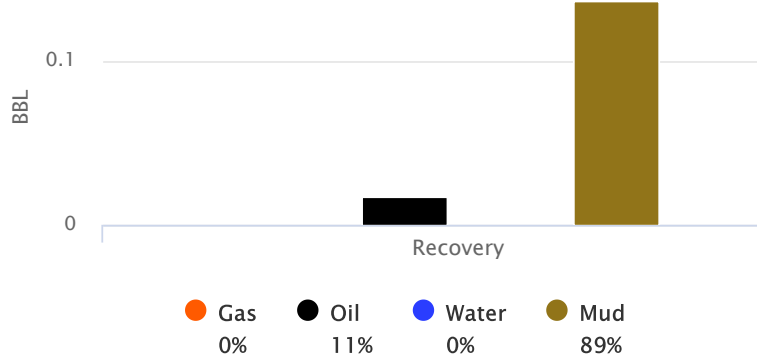
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
15	0.1539	SLOCM	0	11	0	89

Total Recovered: 15 ft
 Total Barrels Recovered: 0.1539

Reversed Out
NO

Initial Hydrostatic Pressure	2143	PSI
Initial Flow	12 to 13	PSI
Initial Closed in Pressure	338	PSI
Final Flow Pressure	14 to 16	PSI
Final Closed in Pressure	452	PSI
Final Hydrostatic Pressure	2139	PSI
Temperature	116	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 0



Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
County: SCOTT
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 2998 EGL
Field Name: Wildcat
Pool: Infield
Job Number: 388
API #: 15-171-21260-00-00

Operation:
Uploading recovery &
pressures

DATE
October
04
2019

DST #1 **Formation:** **Test Interval: 4398 -** **Total Depth: 4520'**
 Altamont-Ft. Scott **4520'**
Time On: 22:50 10/04 Time Off: 05:52 10/05
Time On Bottom: 01:00 10/05 Time Off Bottom: 04:05 10/05

BUCKET MEASUREMENT:

1st Open: Surface blow building to 1 1/4"
1st Close: No BB
2nd Open: Surface blow building to 1/4"
2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas 19% Oil 0% Water 81% Mud



Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
County: SCOTT
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 2998 EGL
Field Name: Wildcat
Pool: Infield
Job Number: 388
API #: 15-171-21260-00-00

Operation:
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pressures

DATE
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DST #1 **Formation:** **Test Interval: 4398 -** **Total Depth: 4520'**
 Altamont-Ft. Scott **4520'**
Time On: 22:50 10/04 Time Off: 05:52 10/05
Time On Bottom: 01:00 10/05 Time Off Bottom: 04:05 10/05

Mud Properties

Mud Type: Chemical **Weight:** 9.4 **Viscosity:** 49 **Filtrate:** 9.6 **Chlorides:** 3,200 ppm



Company: L. D. Drilling, Inc
Lease: Clem #1-14

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 Elevation: 2998 EGL
 Field Name: Wildcat
 Pool: Infield
 Job Number: 388
 API #: 15-171-21260-00-00

Operation:
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DATE
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DST #1 **Formation: Altamont-Ft. Scott** **Test Interval: 4398 - 4520'** **Total Depth: 4520'**
 Time On: 22:50 10/04 Time Off: 05:52 10/05
 Time On Bottom: 01:00 10/05 Time Off Bottom: 04:05 10/05

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: L. D. Drilling, Inc
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 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2998 EGL
 Field Name: Wildcat
 Pool: Infield
 Job Number: 388
 API #: 15-171-21260-00-00

Operation:
 Uploading recovery & pressures

DATE
 October
05
 2019

DST #2 **Formation: Cherokee/Johnson** **Test Interval: 4525 - 4635'** **Total Depth: 4635'**
 Time On: 23:46 10/05 Time Off: 06:48 10/06
 Time On Bottom: 01:47 10/06 Time Off Bottom: 04:47 10/06

Electronic Volume Estimate:
 11'

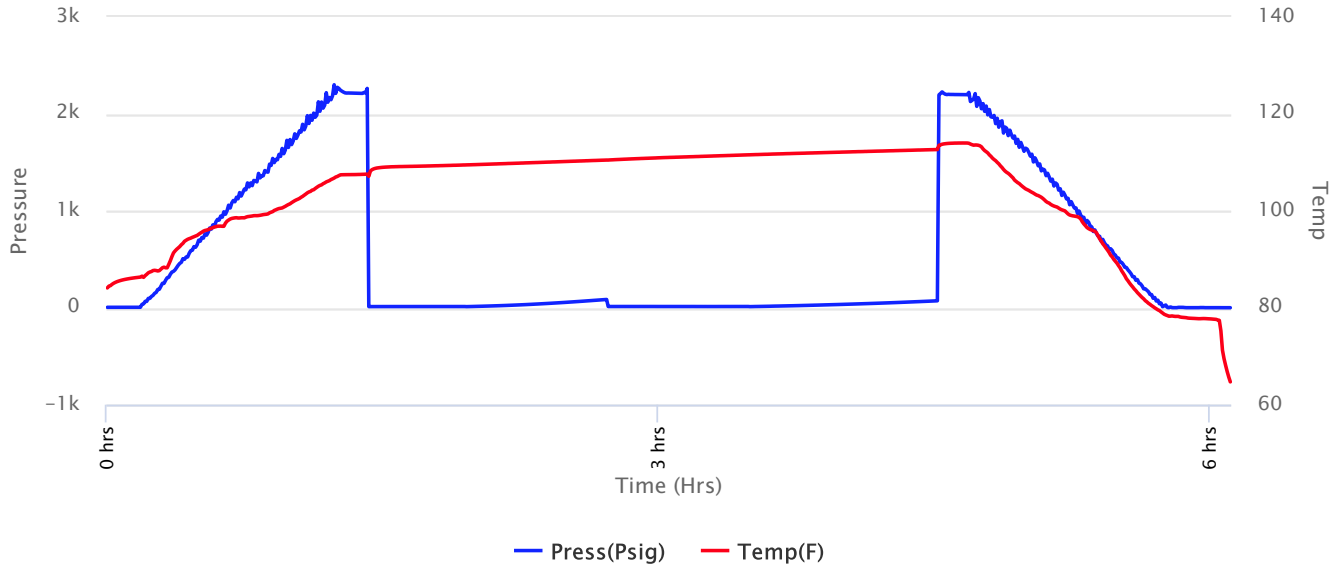
1st Open
 Minutes: 30
 Current Reading: .8" at 30 min
 Max Reading: .9"

1st Close
 Minutes: 45
 Current Reading: 0" at 45 min
 Max Reading: 0"

2nd Open
 Minutes: 45
 Current Reading: 0" at 45 min
 Max Reading: 0"

2nd Close
 Minutes: 60
 Current Reading: 0" at 60 min
 Max Reading: 0"

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
 County: SCOTT
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2998 EGL
 Field Name: Wildcat
 Pool: Infield
 Job Number: 388
 API #: 15-171-21260-00-00

Operation:
 Uploading recovery & pressures

DATE
 October
05
 2019

DST #2 **Formation: Cherokee/Johnson** **Test Interval: 4525 - 4635'** **Total Depth: 4635'**
 Time On: 23:46 10/05 Time Off: 06:48 10/06
 Time On Bottom: 01:47 10/06 Time Off Bottom: 04:47 10/06

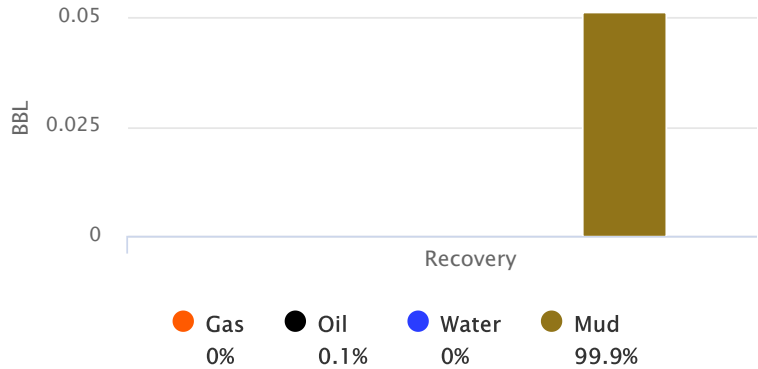
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
5	0.0513	M (trace O)	0	.1	0	99.9

Total Recovered: 5 ft
 Total Barrels Recovered: 0.0513

Reversed Out
NO

Initial Hydrostatic Pressure	2217	PSI
Initial Flow	11 to 13	PSI
Initial Closed in Pressure	85	PSI
Final Flow Pressure	13 to 13	PSI
Final Closed in Pressure	71	PSI
Final Hydrostatic Pressure	2212	PSI
Temperature	113	°F
Pressure Change Initial Close / Final Close	16.3	%

Recovery at a glance



GIP cubic foot volume: 0



Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
County: SCOTT
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 2998 EGL
Field Name: Wildcat
Pool: Infield
Job Number: 388
API #: 15-171-21260-00-00

Operation:
Uploading recovery &
pressures

DATE
October
05
2019

DST #2	Formation: Cherokee/Johnson	Test Interval: 4525 - 4635'	Total Depth: 4635'
	Time On: 23:46 10/05	Time Off: 06:48 10/06	
	Time On Bottom: 01:47 10/06	Time Off Bottom: 04:47 10/06	

BUCKET MEASUREMENT:

1st Open: Surface blow building to 1/2"

1st Close: No BB

2nd Open: Very weak surface blow lasting 7 min.

2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas .1% Oil 0% Water 99.9% Mud



Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
 County: SCOTT
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc -
 Rig 1
 Elevation: 2998 EGL
 Field Name: Wildcat
 Pool: Infield
 Job Number: 388
 API #: 15-171-21260-00-00

Operation:
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 pressures

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DST #2 **Formation:** Cherokee/Johnson **Test Interval: 4525 - 4635'** **Total Depth: 4635'**
 Time On: 23:46 10/05 Time Off: 06:48 10/06
 Time On Bottom: 01:47 10/06 Time Off Bottom: 04:47 10/06

Down Hole Makeup

Heads Up: 35.99 FT	Packer 1: 4519.78 FT
Drill Pipe: 4528.2 FT <i>ID-3 1/4</i>	Packer 2: 4524.78 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4509.2 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 4624 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 110.22	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 2 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 93.22 FT <i>ID-3 1/4</i>	
Change Over: 1 FT	
Perforations: (below): 12 FT <i>4 1/2-FH</i>	



Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
County: SCOTT
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 2998 EGL
Field Name: Wildcat
Pool: Infield
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pressures

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Time On: 23:46 10/05 Time Off: 06:48 10/06
Time On Bottom: 01:47 10/06 Time Off Bottom: 04:47 10/06

Mud Properties

Mud Type: Chemical **Weight:** 9.5 **Viscosity:** 59 **Filtrate:** 10.4 **Chlorides:** 4,500 ppm



Company: L. D. Drilling, Inc
Lease: Clem #1-14

SEC: 14 TWN: 16S RNG: 33W
 County: SCOTT
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2998 EGL
 Field Name: Wildcat
 Pool: Infield
 Job Number: 388
 API #: 15-171-21260-00-00

Operation:
 Uploading recovery & pressures

DATE
 October
05
 2019

DST #2 **Formation: Cherokee/Johnson** **Test Interval: 4525 - 4635'** **Total Depth: 4635'**
 Time On: 23:46 10/05 Time Off: 06:48 10/06
 Time On Bottom: 01:47 10/06 Time Off Bottom: 04:47 10/06

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: L. D. Drilling, Inc
Lease: Clem #1-14

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 County: SCOTT
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2998 EGL
 Field Name: Wildcat
 Pool: Infield
 Job Number: 388
 API #: 15-171-21260-00-00

Operation:
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DST #3 Formation: Morrow Test Interval: 4629 - 4689' Total Depth: 4689'
 Time On: 19:00 10/06 Time Off: 03:58 10/07
 Time On Bottom: 21:26 10/06 Time Off Bottom: 00:26 10/07

Electronic Volume Estimate:
 2360'

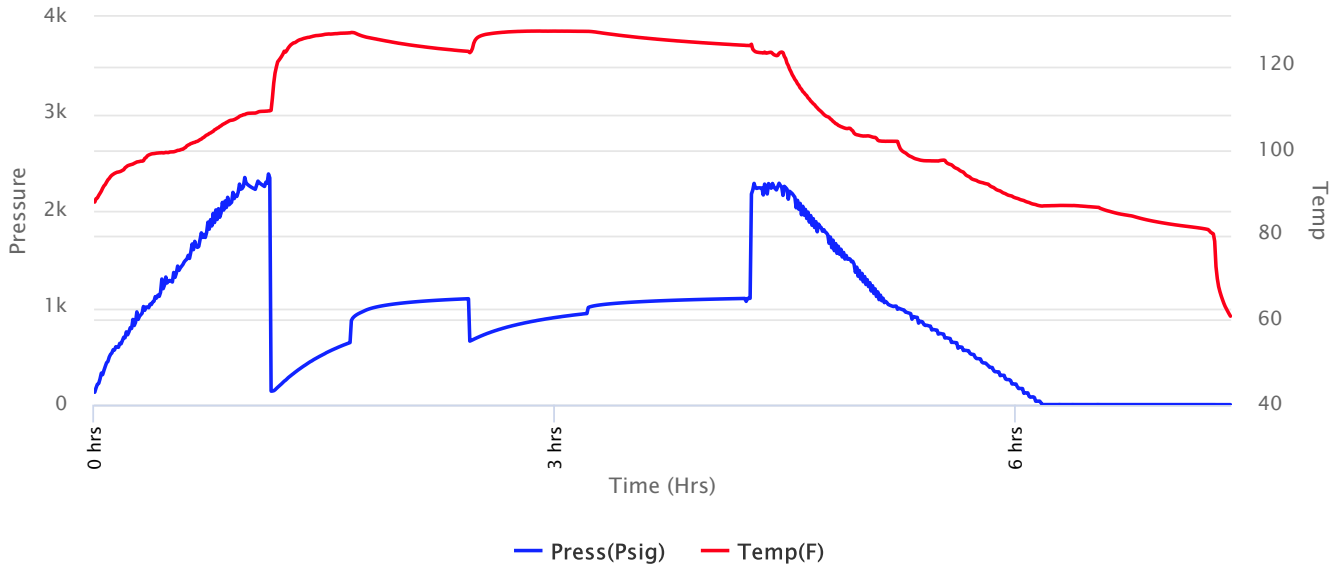
1st Open
 Minutes: 30
 Current Reading: 133.1" at 30 min
 Max Reading: 133.1"

1st Close
 Minutes: 45
 Current Reading: 0" at 45 min
 Max Reading: 0"

2nd Open
 Minutes: 45
 Current Reading: 83.5" at 45 min
 Max Reading: 83.5"

2nd Close
 Minutes: 60
 Current Reading: 0" at 60 min
 Max Reading: 0"

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Clem #1-14

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 County: SCOTT
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 Elevation: 2998 EGL
 Field Name: Wildcat
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DATE
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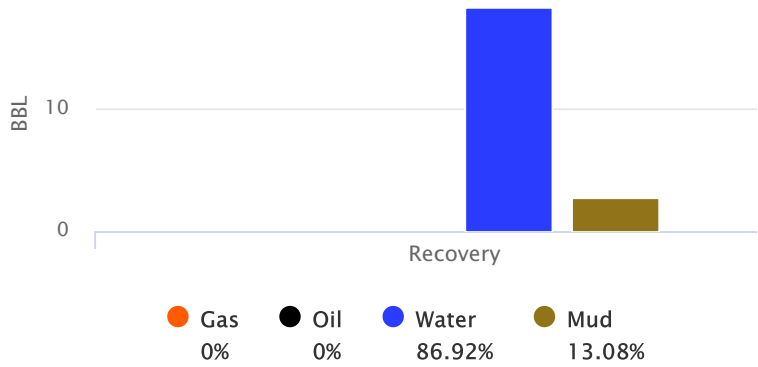
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
435	4.4631	HMCW	0	0	57	43
1610	16.5186	SLMCW	0	0	95	5

Total Recovered: 2045 ft
 Total Barrels Recovered: 20.9817

Reversed Out
 NO

Initial Hydrostatic Pressure	2283	PSI
Initial Flow	140 to 641	PSI
Initial Closed in Pressure	1093	PSI
Final Flow Pressure	656 to 940	PSI
Final Closed in Pressure	1096	PSI
Final Hydrostatic Pressure	2283	PSI
Temperature	129	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 0



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Rig 1
Elevation: 2998 EGL
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4689'
Time On: 19:00 10/06 Time Off: 03:58 10/07
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BUCKET MEASUREMENT:

1st Open: 3" blow building to BOB 1 1/2 min.

1st Close: No BB

2nd Open: 1 1/2" blow building to BOB 3 1/2 min.

2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas 0% Oil 100% Water 0% Mud

Ph: 6.5

Measured RW: .49 @ 58 degrees °F

RW at Formation Temp: 0.234 @ 129 °F

Chlorides: 14,000 ppm



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Down Hole Makeup

Heads Up: 25.54 FT	Packer 1: 4624.05 FT
Drill Pipe: 4622.02 FT <i>ID-3 1/4</i>	Packer 2: 4629.05 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4613.47 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 4666 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 59.95	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 2 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 30.95 FT <i>ID-3 1/4</i>	
Change Over: 1 FT	
Perforations: (below): 24 FT <i>4 1/2-FH</i>	



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Mud Properties

Mud Type: Chemical **Weight:** 9.5 **Viscosity:** 50 **Filtrate:** 8.8 **Chlorides:** 4,700 ppm



Company: L. D. Drilling, Inc
Lease: Clem #1-14

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Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D

Customer LD Drilling, Inc.	Lease No.	Date 10/8/2019
Lease Clom	Well # 1-14	
Field Order # 18199	Station Prst/1ks	Casing
Type Job 242/PTA	Depth	County Scott
	Formation	State KS
		Legal Description 14-16s-29s

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth	Depth	From	To	Pre Pad	Max		5 Min.
Volume	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	Packer Depth	From	To	Flush WATER, mud	Gas Volume		Total Load

Customer Representative Rick W. Isen	Station Manager Justin Westerman	Treater Darin Franklin
Service Units 92911 78982 19843 38119 37725		
Driver Names Darin Brett Brett SSM SSM		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
3:30 pm					ON LOCATION / Safety meeting
					270 SK 60/40 P02, 4% G01, 1/4# CF
					2380'-50SK
4:15 pm	200		8	5	8 WATER
	200		13	5	50 SK Cement
	200		24	5	24 Displacement 3 water, 21 mud
					1650'-80 SK
	200		8	5	8 WATER 60'-20 SK
	200		20	5	80 SK Cement
	200		15	5	3 WATER, 12 mud RH-30 SK
					800'-50 SK
	100		15		15 WATER
	100		13		50 SK Cement
	100		5		5 WATER
					300'-40 SK
	100		3		3 WATER
	100		10		40 SK
	100		1		1 WATER

BASIC

energy services, L.P.

TREATMENT REPORT

Customer	LD Drilling	Lease No.		Date	9/28/2019		
Lease	Clem	Well #	1-14				
Field Order #	18194	Station	Pratt, KS	Casing	8 5/8"	Depth	264
Type Job	24 2/ 8 5/8 Surface			Formation	TD-264	County	Scott
						State	KS
						Legal Description	14-165-33W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME	
Casing Size	Tubing Size	Shots/Ft		Acid		RATE	PRESS
8 5/8"							ISIP
Depth	Depth	From	To	Pre Pad	Max		5 Min.
264							
Volume	Volume	From	To	Pad	Min		10 Min.
16.8							
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load
244				Water			

Customer Representative	ERIC WILSON	Station Manager	JOSHN WESTERMAN	Treater	Darin FRANCIS
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Service Units	92911	78982	19843	84981	19918	70959	19860			
Driver Names	Darin	Bren	Bren	Disz	D. Sz	Darin	Darin			

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
8:00am					ON location / system meeting
					200SK Galva Poz, 3% Calcium Chloride, 2% sel, 1/4 HCellulose
					14.8ppg, 1.214+112, 5.18 water
11:45pm			3		Pump 3 bbls water
			1843		mix 200SK cement
			15		Displace water
12:15pm					Shut Pn
					Cement did not circulate
					Run 2 joints of 1" + 99 ft 20'
6:00pm	100		21	3	mix 100SK class B + 3% CC
					Cement did circulate
6:45pm					Job complete / Darin & crew
					Thank you!!!