

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) (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	BARRETT TRUST 1-20
Doc ID	1423573

All Electric Logs Run

COMPENSATED DENSITY / NEUTRON LOG
DUAL INDUCTION LOG
MICRO LOG
SONIC LOG

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	BARRETT TRUST 1-20
Doc ID	1423573

Tops

Name	Top	Datum
ANHYDRITE	2792	+470
BASE ANHYDRITE	2823	+439
STOTLER	3679	-417
HEEBNER	4085	-823
LANSING	4130	-868
BASE KANSAS CITY	4393	-1131
PAWNEE	4516	-1254
FORT SCOTT	4576	-1314
CHEROKEE	4607	-1345
MISSISSIPPI	4720	-1458

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.
 LEASE #1-20 BARRETT TRUST
 FIELD _____
 LOCATION 330' FNL 1/4 2310' FWL
 SEC 20 TWP 8s RGE 34w
 COUNTY THOMAS STATE KANSAS
 CONTRACTOR L. D. DRILLING, INC.
 SPUD 8-1-18 COMP 8-14-18
 RTD 4804 LTD 4805
 MUD UR 3470 TYPE MUD CHEMICAL

ELEVATIONS
 KB 3262
 DF _____
 CL 3257
 Measurements An. All
 From 3262 KB
 CASING
 SURFACE 8 5/8" @ 3 1/6'
 PRODUCTION _____
 ELECTRICAL SURVEYS
 Dual Ind, DENS-N, Micro Sonic

SAMPLES SAVED FROM 3500 TO 4804
 DRILLING TIME KEPT FROM 3500 TO 4804
 SAMPLES EXAMINED FROM 3500 TO 4804
 GEOLOGICAL SUPERVISION FROM 3700 TO 4804
 GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	2792-470	2792-470
B/ANH.	2823-439	2823-439
STOTLER	3679-417	3677-415
HEEBNER	4085-823	4084-822
LANSING	4130-868	4125-863
B/KC	4393-1131	4387-1125
PAWNEE	4516-1254	4513-1251
FORT SCOT	4576-1314	4573-1311
CHEROKEE	4607-1345	4605-1343
MISSISSIPPI	4720-1458	4714-1452

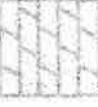
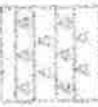









REMARKS

API: 15-193-21024

8-1-18 SPUD 8-13 @ 4730'
 8-2 @ 339' 8-14 @ 4804'
 8-3 @ 1630'
 8-4 @ 2627'
 8-5 @ 3195'
 8-6 @ 3672'
 8-7 @ 4010'
 8-8 @ 4204'
 8-9 @ 4311'
 8-10 @ 4380'
 8-11 @ 4480'
 8-12 @ 4585'

LEGEND

-  Dolomite
-  Gist
-  Oil-Lime
-  Liasstone
-  Carb. oil
-  Shale
-  Sandstone
-  Salt
-  Anhydrite

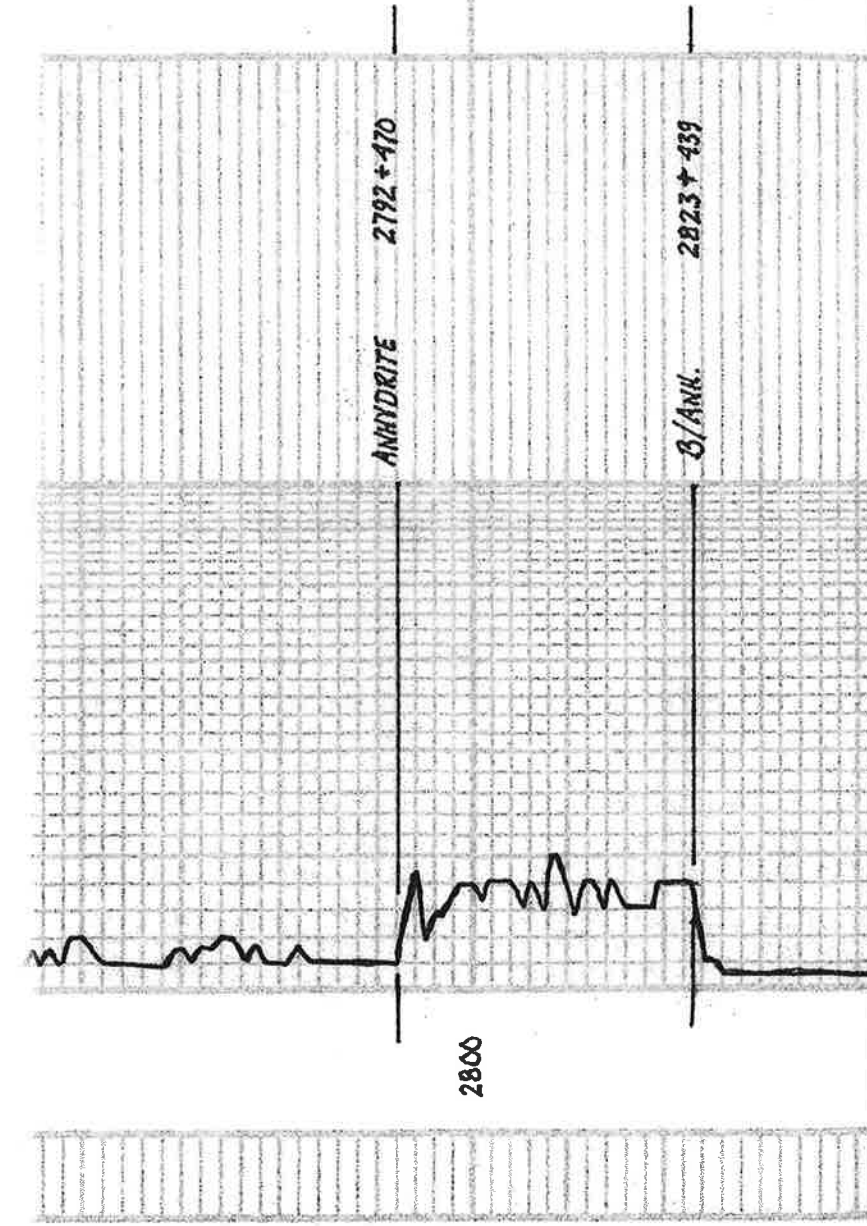
DRILLING TIME IN MINUTES
 PER FOOT
 Rate of Penetration Increases



LITHOLOGY

REMARKS

SAMPLE DESCRIPTIONS



2850

3500

3600

3700

Samples are logged

Sh. Rd. sdy. Silty

Dol. G. V. Fresh S. Silty

Sd. Clay. V. Fresh. Sub Bl.

Sh. Rd

Ls. To G. V. Sil. Foss.

Sh. G. Lu

Ls. w/ Foss. dol.

Ls. To wt. dol. Foss. V. Sil. ch. lky.

Ls. wt. Foss. Sil. sdy.

Sh. Rtg. Silty

Sh. Lt. Blue. Silty

STOTLER 3677-915

Ls. wt. Lig. Sil. Foss. w/ Blk. Tally (3700)

Nb: 50
Wt: 8.8
Nb: 6.4
Cl: 2200

Ls. To Bl. wt. Sil. Foss. P. Bl. p
D. S. Sil. F. Sil. No. Foss. (3720)

Ls. To Foss. Sil. D

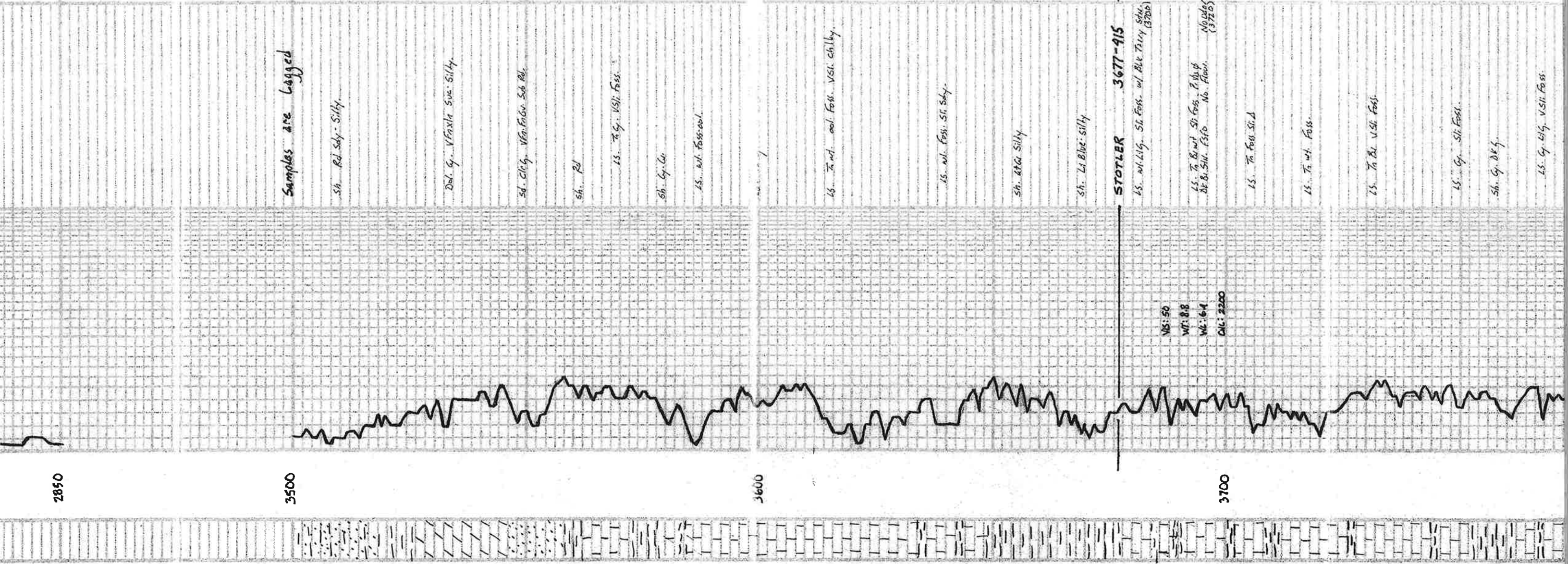
Ls. To wt. Foss.

Ls. To Bl. V. Sil. Foss.

Ls. G. Sil. Foss.

Sb. G. Def.

Ls. G. Lig. V. Sil. Foss.



LS. Gy. silty. V.Si. Foss.

LS. Gy. Dr.

Sh. LG.

LS. 14. 1/4 to 1/2 in. Micro-Foss. Silty. P. Fin. Pp. Bl. Sp. Silty. Foss. No Floor. (3800)

Sh. 11 Blue. Gy.

LS. Tr. silty. V.Si. Foss.

LS. 11. 1/4 V.Si. Foss. Silty

Sh. LG.

HOWARD 3890-578

LS. Tr. Foss. Silty. F. V. Sp. DE. Bl. Red. Sp. Silty. Foss. No Floor. No Order (3800)

LS. 11. 1/4. V.Si. Silty.

Sh. G.

LS. Gy. Silty. Foss.

Sh. LG. Silty.

Sh. 11. 1/4 G.

TOPEKA 3893-631

LS. Tr. silty. ex. 0.00. V.Si. Chly.

LS. wh. V.Si. Foss. Chly.

LS. Tr. Silty. Foss. Silty

LS. wh. silty. silty. Silty.

LS. 11. 1/4. Silty. Foss. silty.

Sh. 11. 1/4

LS. wh. Silty. Foss. Silty.

LS. wh. V.Si. Foss. Silty.

Sh. BL.

Sh. LG.

LS. wh. 11. 1/4. Foss.

Sh. 11. 1/4 Silty. Silty.

LS. Tr. Silty. Foss. Silty

LS. wh. Foss. Silty. Silty

Sh. 11. 1/4

LS. wh. Silty. Foss. Silty

HEEBNER 4084-822

Sh. BL. G. b.

3800

3900

4000

4100

V. 10. 1/4

V.Si: 49
WT: 91
Wt: 96
Cl: 2400

V. 10. 1/4

Sh. Lt Blue Gy
LS. wt. To Sil. Foss. Sil. A. P. V. 100
Bl. Spid. Sil. Foss. Dull. Flour
No. 0601
(4020 30)

Sh. H Blue Rd
LANSING 4125-863

LS. wt. Sil. Foss. Sil. A

LS. wt. gy. V. Sil. Foss. V. Sil. Saly.

Sh. Lt Blue

LS. wt. Sil. Foss. V. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4100 80)

Sh. Lt Blue

LS. wt. Foss. V. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4100 80)

Sh. Lt Blue

LS. wt. Foss. V. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4100 80)

DST (1) 4191-4204
1st OPEN: Blow built to 1"
2nd OPEN: Ince to Surface Blow
30-30-30-30

Rec. 15' MM (66/100 31.1M)
Bl. Spid. Sil. Foss. V. Sil. Saly.
FP: 13-17 18-19 H
SIP: 1051-950 #

Temp. 125°F

LS. wt. Sil. Foss. Sil. Chalky

Sh. Lt Blue

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4200 30)

Sh. Lt Blue

LS. wt. Sil. Foss. Sil. Chalky

DST (2) 4243-4275
1st OPEN: Blow built to 6 1/4"
2nd OPEN: " " " 7"
30-45-45-60

Rec. 2' Clean Oil. Grav. 23.3 @ 60°F
Bl. Spid. Sil. Foss. V. Sil. Saly.
FP: 17-21 53-101 #
SIP: 1309-1309 #

Temp. 134°F

MUNCIE CREEK 4247-985

Sh. Lt Blue

LS. wt. Sil. Foss. Sil. Chalky

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4247 30)

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4247 30)

DST (3) 4277-4327
1st OPEN: Blow built to 7"
2nd OPEN: Bottom bucket 45 min.
30-45-45-60

Rec. 190' G.I.P.
Bl. Spid. Sil. Foss. V. Sil. Saly.
FP: 15-25 24-39 #
SIP: 1217-1171 #

Temp. 127°F

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4325 30)

Sh. Lt Blue

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4325 30)

DST (4) 4325-4380
1st OPEN: Blow built to 4 1/2"
2nd OPEN: " " " 4"
30-45-45-60

Rec. 122 @ 22°F. Rec. 50' V. Sil. Foss. V. Sil. Saly. Dull. Flour
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4325 30)

Temp. 122°F

STARK 4328-1066

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4328 30)

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4328 30)

DST (5) 4383-4480
1st OPEN: Blow built to 1 1/2"
2nd OPEN: No Blow
30-30-30-30

Rec. 8' V. Sil. Foss. V. Sil. Saly. Dull. Flour
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4383 30)

FP: 16-17 18-18 H
SIP: 145-83 #

Temp. 125°F

MARMATON 4408-1146

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4408 30)

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4408 30)

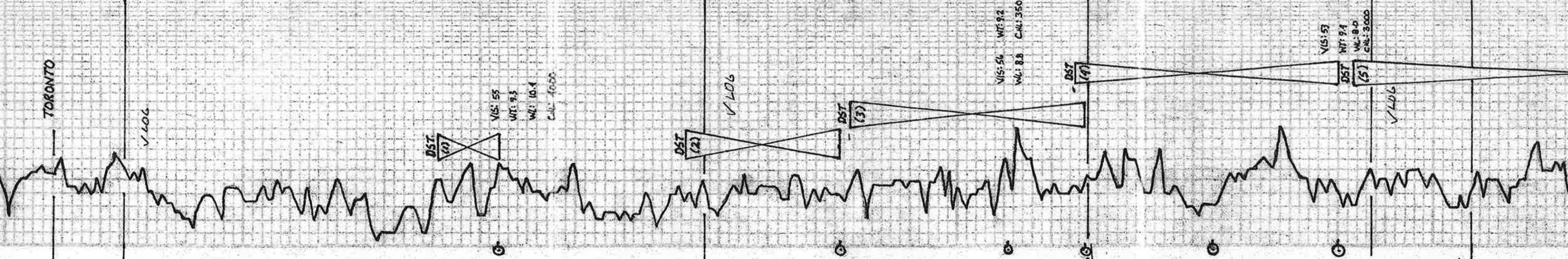
DST (6) 4387-1125

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4387 30)

Sh. Lt Blue Gy

LS. wt. Sil. Foss. Sil. Chalky. F. V. 100
Bl. Spid. Sil. Foss. V. Sil. Saly. Dull. Flour
(4387 30)



1000
2000
3000
4000
4400

TORONTO

LANSING

MUNCIE CREEK

STARK

MARMATON

DST (1)

DST (2)

DST (3)

DST (4)

DST (5)

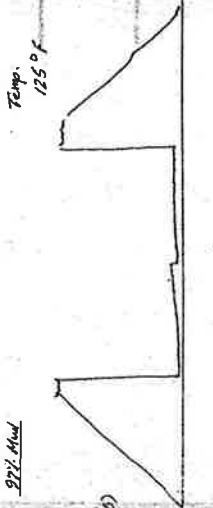
DST (6)

WT: 55
WT: 93
WT: 10.4
WT: 92
WT: 88
WT: 94
WT: 80

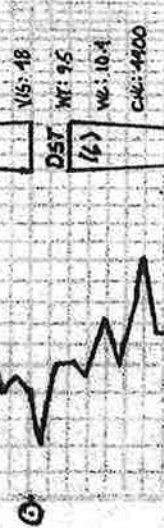
CALL: 3000

CALL: 3000

CALL: 3000

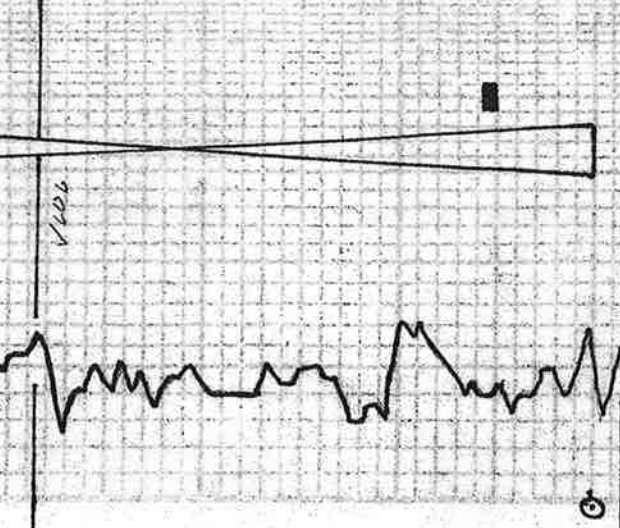


15. wt. VSI Foss Sil. A. P. V. 10.0
 Bl. Sp. H. Sil. V. 5500 No Flow
 (4500)
 15. g. Silty
 Sh. Bl. Purple
 15. Tr. wt. VSI Foss VSI Chly VSI A
 Sh. Bl. G.



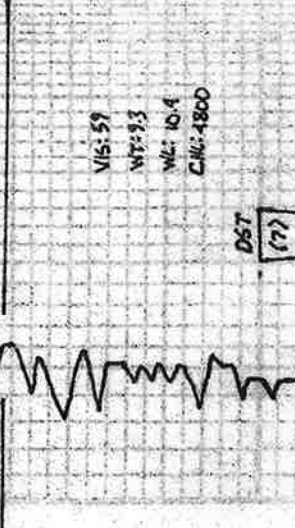
DST (6) 4184-4570
 1st OPEN: Blow built to 14"
 2nd OPEN: No Blow
 30-30-30-30
 Rec. 20' USOCM (120199241)

PAWNEE 4513-1251
 15. wt. VSI Foss VSI A. P. V. 10.0
 Bl. Sp. H. Sil. V. 5500 No Flow
 (4500)
 15. g. Silty
 Sh. Bl. Purple
 15. Tr. wt. VSI Foss VSI Chly VSI A
 Sh. Bl. G.



Rec. 20' USOCM (120199241)
 FP: 16-30 21-23"
 SIP: 962-886#
 Temp: 126°F

FORT SCOT 4573-1311
 15. wt. VSI Foss VSI A. P. V. 10.0
 Bl. Sp. H. Sil. V. 5500 No Flow
 (4500)
 15. g. Silty
 Sh. Bl. Purple
 15. Tr. wt. VSI Foss VSI Chly VSI A
 Sh. Bl. G.

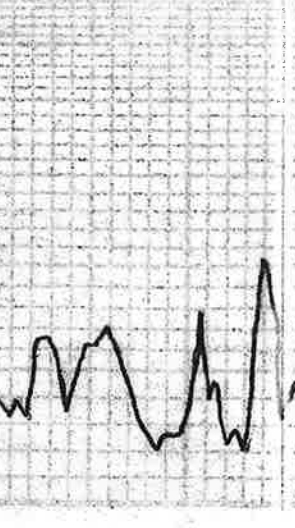


DST (7) 4600-4670
 1st OPEN: Blow built to 14"
 2nd OPEN: No Blow
 30-30-30-30
 Rec. 7' USOCM (170199241)

CHEROKEE 4605-1393
 15. wt. VSI Foss VSI A. P. V. 10.0
 Bl. Sp. H. Sil. V. 5500 No Flow
 (4500)
 15. g. Silty
 Sh. Bl. Purple
 15. Tr. wt. VSI Foss VSI Chly VSI A
 Sh. Bl. G.



JOHNSON 4618-1386
 15. wt. VSI Foss VSI A. P. V. 10.0
 Bl. Sp. H. Sil. V. 5500 No Flow
 (4500)
 15. g. Silty
 Sh. Bl. Purple
 15. Tr. wt. VSI Foss VSI Chly VSI A
 Sh. Bl. G.



MISSISSIPPI 4714-1452
 15. wt. VSI Foss VSI A. P. V. 10.0
 Bl. Sp. H. Sil. V. 5500 No Flow
 (4500)
 15. g. Silty
 Sh. Bl. Purple
 15. Tr. wt. VSI Foss VSI Chly VSI A
 Sh. Bl. G.



15. wt. VSI Foss VSI A. P. V. 10.0
 Bl. Sp. H. Sil. V. 5500 No Flow
 (4500)
 15. g. Silty
 Sh. Bl. Purple
 15. Tr. wt. VSI Foss VSI Chly VSI A
 Sh. Bl. G.



15. wt. VSI Foss VSI A. P. V. 10.0
 Bl. Sp. H. Sil. V. 5500 No Flow
 (4500)
 15. g. Silty
 Sh. Bl. Purple
 15. Tr. wt. VSI Foss VSI Chly VSI A
 Sh. Bl. G.

Dol. Gy. Fr. Sls. Sw.

Δ R. w/ Sl. Fac.

Dol. R. Gy. V. Fr. Sls. w/ Det. Fr. Fac.

Δ R. w/ Fac.

Dol. Gy. Fr. Sls. Sw. Sl: Δ.

4800



RTD 4804-1592





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: NA
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

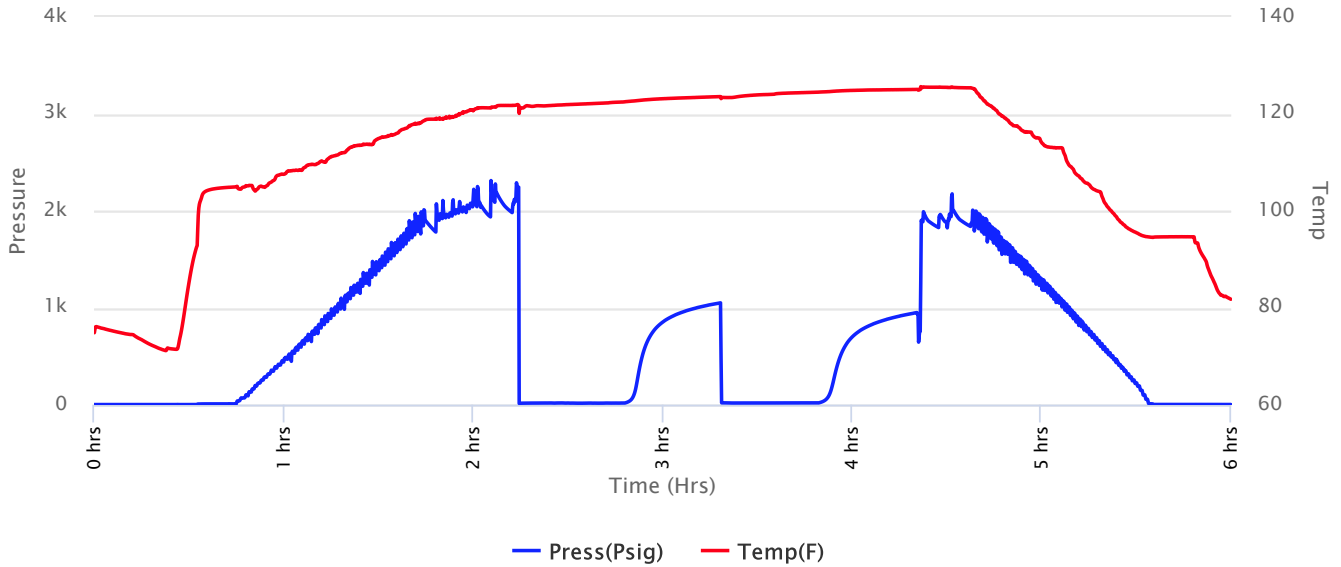
DATE
 August
08
 2018

DST #1 Formation: LANS 'E' Test Interval: 4191 - Total Depth: 4204'
4204'
 Time On: 02:45 08/08 Time Off: 08:41 08/08
 Time On Bottom: 05:00 08/08 Time Off Bottom: 07:00 08/08

Electronic Volume Estimate:
 13'

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

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: NA
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
08
 2018

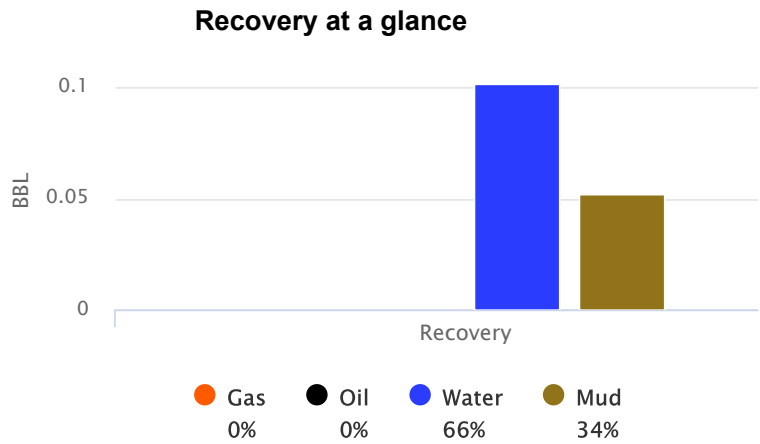
DST #1 Formation: LANS 'E' Test Interval: 4191 - Total Depth: 4204'
4204'
 Time On: 02:45 08/08 Time Off: 08:41 08/08
 Time On Bottom: 05:00 08/08 Time Off Bottom: 07:00 08/08

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
15	0.1539	HMCW	0	0	66	34

Total Recovered: 15 ft
 Total Barrels Recovered: 0.1539

Reversed Out
 NO

Initial Hydrostatic Pressure	2018	PSI
Initial Flow	13 to 17	PSI
Initial Closed in Pressure	1051	PSI
Final Flow Pressure	18 to 19	PSI
Final Closed in Pressure	950	PSI
Final Hydrostatic Pressure	1998	PSI
Temperature	125	°F
Pressure Change Initial Close / Final Close	9.6	%





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: NA
Pool: Infield
Job Number: 200

Operation:

Uploading recovery &
pressures

DATE

August
08
2018

DST #1 Formation: LANS 'E' Test Interval: 4191 - Total Depth: 4204'
4204'

Time On: 02:45 08/08

Time Off: 08:41 08/08

Time On Bottom: 05:00 08/08

Time Off Bottom: 07:00 08/08

BUCKET MEASUREMENT:

1st Open: WSB-INCREASING TO 1" IN 30 MINUTES

1st Close: NO BLOW BACK

2nd Open: NO BLOW-INCREASING TO WSB IN 30 MINUTES

2nd Close: NO BLOW BACK

REMARKS:

TRACE OF OIL IN 15' RECOVERY

Tool Sample: 0% Gas 2% Oil 38% Water 60% Mud

Ph: 9

Measured RW: .41 @ 70 degrees °F

RW at Formation Temp: 0.239 @ 125 °F

Chlorides: 19000 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: NA
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
08
 2018

DST #1 Formation: LANS 'E' Test Interval: 4191 - 4204' Total Depth: 4204'

Time On: 02:45 08/08 Time Off: 08:41 08/08
 Time On Bottom: 05:00 08/08 Time Off Bottom: 07:00 08/08

Down Hole Makeup

Heads Up: 23.39 FT	Packer 1: 4186 FT
Drill Pipe: 4181.82 FT <i>ID-3 1/4</i>	Packer 2: 4191 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4175.42 FT
Collars: FT <i>ID-2 1/4</i>	Bottom Recorder: 4196 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: 13	Surface Choke: 1"
Anchor Makeup	
Packer Sub: 1 FT	Bottom Choke: 5/8"
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: FT	
Drill Pipe: (in anchor): FT <i>ID-3 1/4</i>	
Change Over: FT	
Perforations: (below): 9 FT <i>4 1/2-FH</i>	



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: NA
Pool: Infield
Job Number: 200

Operation:
Uploading recovery &
pressures

DATE
August
08
2018

DST #1 Formation: LANS 'E' Test Interval: 4191 - Total Depth: 4204'
4204'
Time On: 02:45 08/08 Time Off: 08:41 08/08
Time On Bottom: 05:00 08/08 Time Off Bottom: 07:00 08/08

Mud Properties

Mud Type: CHEMICAL **Weight:** 9.1 **Viscosity:** 49 **Filtrate:** 9.6 **Chlorides:** 2400 ppm



Company: L. D. Drilling, Inc

Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: NA
Pool: Infield
Job Number: 200

Operation:
Uploading recovery &
pressures

DATE
August
08
2018

DST #1 **Formation: LANS 'E'** **Test Interval: 4191 - 4204'** **Total Depth: 4204'**

Time On: 02:45 08/08 Time Off: 08:41 08/08
Time On Bottom: 05:00 08/08 Time Off Bottom: 07:00 08/08

Gas Volume Report

1st Open

Time	Orifice	PSI	MCF/D
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2nd Open

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



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Test Complete

DATE
 August
08
 2018

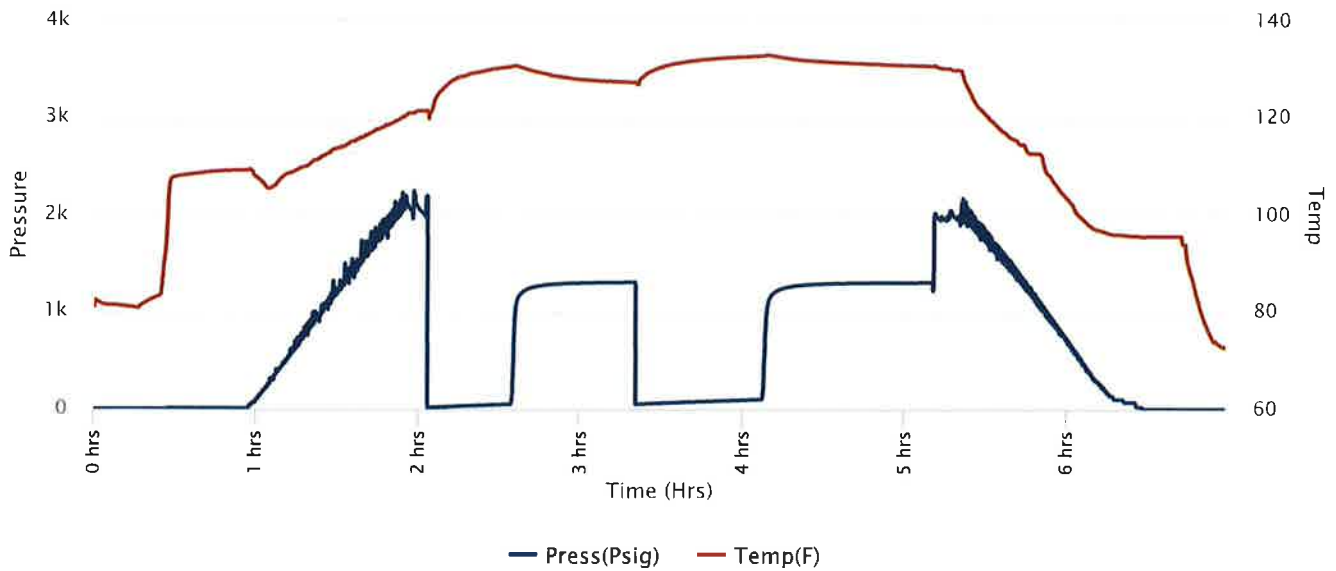
DST #2 Formation: L/KC 'H' Test Interval: 4243 - 4275' Total Depth: 4275'

Time On: 18:25 08/08 Time Off: 01:13 08/09
 Time On Bottom: 20:22 08/08 Time Off Bottom: 23:22 08/08

Electronic Volume Estimate:
 160'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 45	Minutes: 45	Minutes: 60
Current Reading: 6.75" at 30 min	Current Reading: 0" at 45 min	Current Reading: 7" at 45 min	Current Reading: 0" at 60 min
Max Reading: 6.75"	Max Reading: 0"	Max Reading: 7"	Max Reading: 0"

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Test Complete

DATE
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08
 2018

DST #2 Formation: L/KC 'H' Test Interval: 4243 - 4275' Total Depth: 4275'
 Time On: 18:25 08/08 Time Off: 01:13 08/09
 Time On Bottom: 20:22 08/08 Time Off Bottom: 23:22 08/08

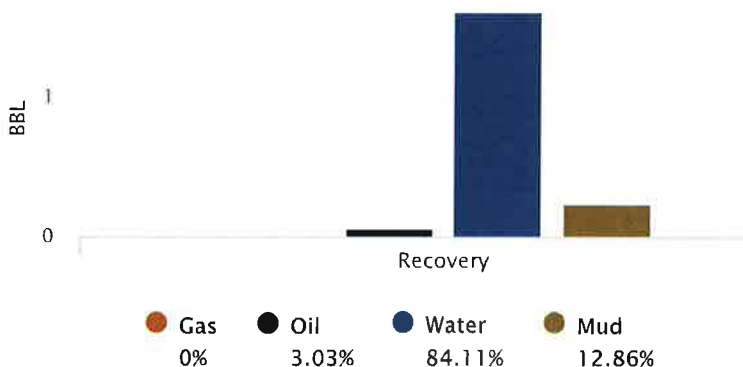
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
2	0.02052	O	0	100	0	0
188	1.92888	SLOCSLMCW	0	2	85	13

Total Recovered: 190 ft
 Total Barrels Recovered: 1.9494

Reversed Out
 NO

Recovery at a glance



Initial Hydrostatic Pressure	2047	PSI
Initial Flow	17 to 52	PSI
Initial Closed in Pressure	1309	PSI
Final Flow Pressure	53 to 101	PSI
Final Closed in Pressure	1309	PSI
Final Hydrostatic Pressure	2025	PSI
Temperature	134	°F
Pressure Change Initial Close / Final Close	0.0	%



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:

Test Complete

DATE

August

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2018

DST #2 Formation: L/KC 'H' Test Interval: 4243 - Total Depth: 4275'
4275'

Time On: 18:25 08/08

Time Off: 01:13 08/09

Time On Bottom: 20:22 08/08

Time Off Bottom: 23:22 08/08

BUCKET MEASUREMENT:

1st Open: 1/2" BLOW-INCREASING TO 6 3/4" IN 30 MINUTES

1st Close: NO BLOW BACK

2nd Open: NO BLOW-INCREASING TO 7" IN 45 MINUTES

2nd Close: NO BLOW BACK

REMARKS:

Tool Sample: 0% Gas 2% Oil 98% Water 0% Mud

Gravity: 23.3 @ 60 °F

Ph: 7

Measured RW: .11 @ 65 degrees °F

RW at Formation Temp: 0.056 @ 134 °F

Chlorides: 77000 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Test Complete

DATE
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DST #2 Formation: L/KC 'H' Test Interval: 4243 - 4275' Total Depth: 4275'
 Time On: 18:25 08/08 Time Off: 01:13 08/09
 Time On Bottom: 20:22 08/08 Time Off Bottom: 23:22 08/08

Down Hole Makeup

Heads Up: 33.38 FT	Packer 1: 4238 FT
Drill Pipe: 4243.81 FT <i>ID-3 1/4</i>	Packer 2: 4243 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4227.42 FT
Collars: FT <i>ID-2 1/4</i>	Bottom Recorder: 4248 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: 32	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: FT	
Drill Pipe: (in anchor): FT <i>ID-3 1/4</i>	
Change Over: FT	
Perforations: (below): 28 FT <i>4 1/2-FH</i>	



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:

Test Complete

DATE

August

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DST #2 Formation: L/KC 'H' Test Interval: 4243 - Total Depth: 4275'
4275'

Time On: 18:25 08/08

Time Off: 01:13 08/09

Time On Bottom: 20:22 08/08

Time Off Bottom: 23:22 08/08

Mud Properties

Mud Type: CHEMICAL Weight: 9.3

Viscosity: 55

Filtrate: 10.4

Chlorides: 4000 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:
Test Complete

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DST #2 **Formation: L/KC 'H'** **Test Interval: 4243 - 4275'** **Total Depth: 4275'**
Time On: 18:25 08/08 Time Off: 01:13 08/09
Time On Bottom: 20:22 08/08 Time Off Bottom: 23:22 08/08

Gas Volume Report

1st Open

2nd Open

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



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
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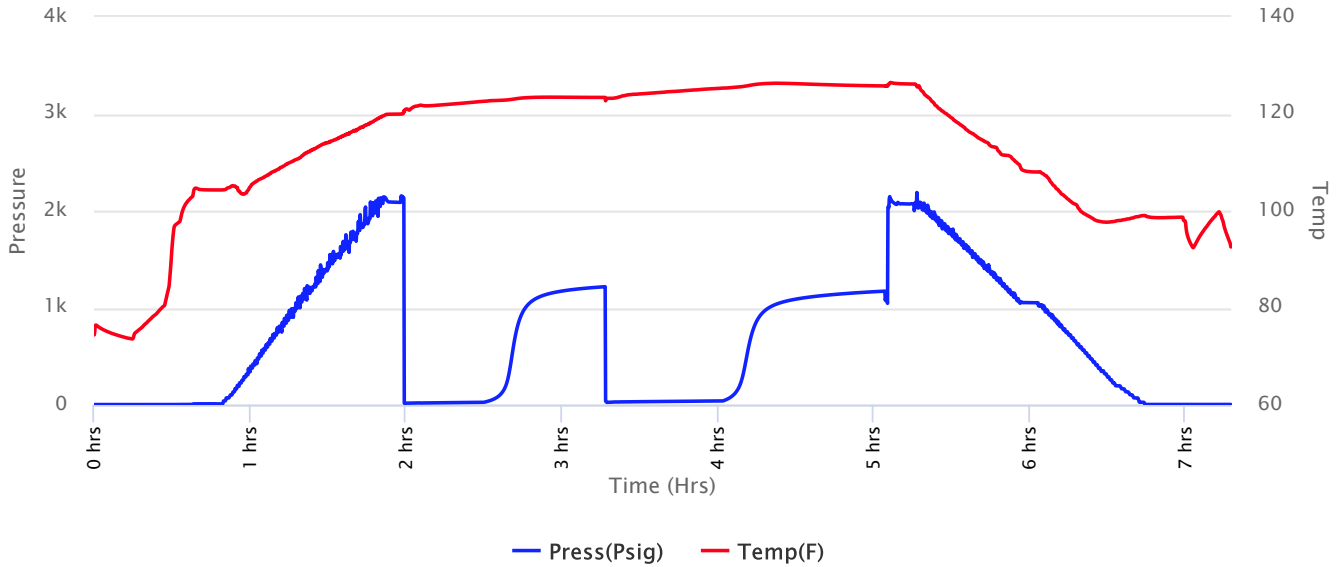
DST #3 Formation: L/KC 'I-J' Test Interval: 4277 - 4327' Total Depth: 4327'

Time On: 11:00 08/09 Time Off: 18:09 08/09
 Time On Bottom: 12:58 08/09 Time Off Bottom: 15:58 08/09

Electronic Volume Estimate:
 222'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 45	Minutes: 45	Minutes: 60
Current Reading: 7" at 30 min	Current Reading: 0" at 45 min	Current Reading: 12" at 45 min	Current Reading: 0" at 60 min
Max Reading: 7"	Max Reading: 0"	Max Reading: 12"	Max Reading: 0"

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
09
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DST #3 Formation: L/KC 'I-J' Test Interval: 4277 - 4327' Total Depth: 4327'

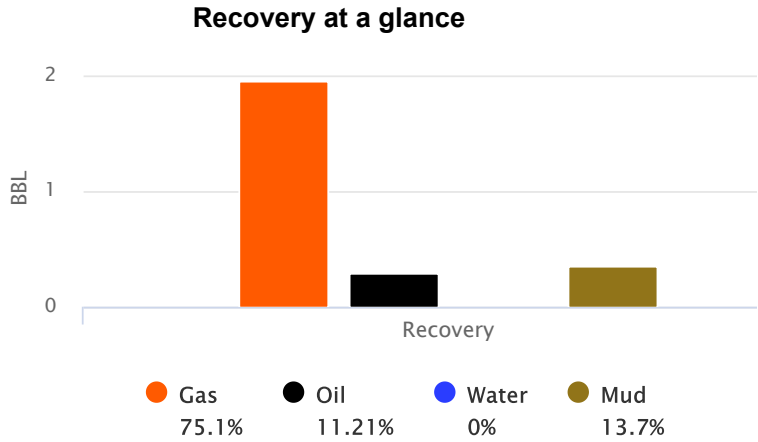
Time On: 11:00 08/09 Time Off: 18:09 08/09
 Time On Bottom: 12:58 08/09 Time Off Bottom: 15:58 08/09

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
190	1.9494	G	100	0	0	0
63	0.64638	HOCM	0	45	0	55

Total Recovered: 253 ft
 Total Barrels Recovered: 2.59578

Reversed Out
 NO

Initial Hydrostatic Pressure	2089	PSI
Initial Flow	15 to 25	PSI
Initial Closed in Pressure	1217	PSI
Final Flow Pressure	24 to 39	PSI
Final Closed in Pressure	1171	PSI
Final Hydrostatic Pressure	2071	PSI
Temperature	127	°F
Pressure Change Initial Close / Final Close	3.8	%





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:
Uploading recovery &
pressures

DATE
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DST #3 Formation: L/KC 'I-J' Test Interval: 4277 - Total Depth: 4327'
4327'
Time On: 11:00 08/09 Time Off: 18:09 08/09
Time On Bottom: 12:58 08/09 Time Off Bottom: 15:58 08/09

BUCKET MEASUREMENT:

1st Open: 1/4"BLOW-INCREASING TO 7" IN 30 MINUTES

1st Close: NO BLOW BACK

2nd Open: 1/2"BLOW-INCREASING TO BOTTOM OF BUCKET IN 45 MINUTES

2nd Close: NO BLOW BACK

REMARKS:

Tool Sample: 0% Gas 50% Oil 5% Water 45% Mud



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc -
 Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery &
 pressures

DATE
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DST #3 Formation: L/KC 'I-J' Test Interval: 4277 - Total Depth: 4327'
4327'
 Time On: 11:00 08/09 Time Off: 18:09 08/09
 Time On Bottom: 12:58 08/09 Time Off Bottom: 15:58 08/09

Down Hole Makeup

Heads Up: 30.91 FT	Packer 1: 4272 FT
Drill Pipe: 4275.34 FT <i>ID-3 1/4</i>	Packer 2: 4277 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4261.42 FT
Collars: FT <i>ID-2 1/4</i>	Bottom Recorder: 4315 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: 50	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 31.5 FT <i>ID-3 1/4</i>	
Change Over: .5 FT	
Perforations: (below): 13 FT <i>4 1/2-FH</i>	



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:
Uploading recovery &
pressures

DATE
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DST #3 Formation: L/KC 'I-J' Test Interval: 4277 - Total Depth: 4327'
4327'

Time On: 11:00 08/09 Time Off: 18:09 08/09
Time On Bottom: 12:58 08/09 Time Off Bottom: 15:58 08/09

Mud Properties

Mud Type: CHEMICAL Weight: 9.2 Viscosity: 56 Filtrate: 8.8 Chlorides: 3500 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery &
 pressures

DATE
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DST #3 Formation: L/KC 'I-J' Test Interval: 4277 - Total Depth: 4327'
4327'
 Time On: 11:00 08/09 Time Off: 18:09 08/09
 Time On Bottom: 12:58 08/09 Time Off Bottom: 15:58 08/09

Gas Volume Report

1st Open

2nd Open

Time	Orifice	PSI	MCF/D
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Time	Orifice	PSI	MCF/D
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Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

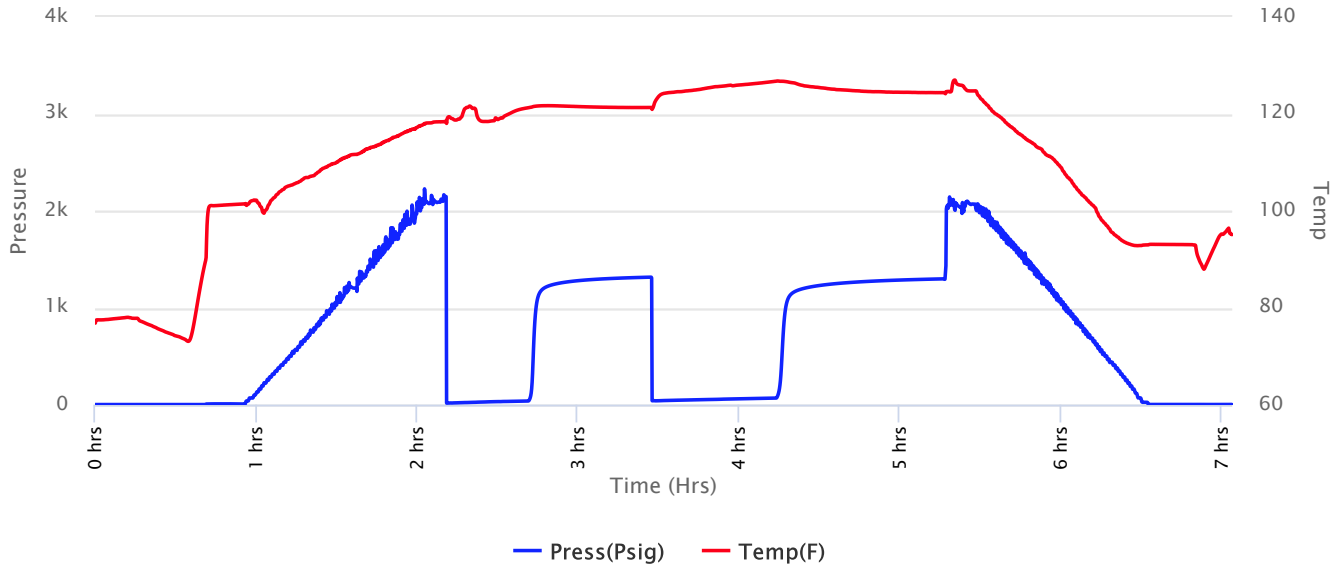
DATE
 August
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 2018

DST #4 **Formation: L/KC 'K&L'** **Test Interval: 4325 - 4380'** **Total Depth: 4380'**
 Time On: 05:30 08/10 Time Off: 12:25 08/10
 Time On Bottom: 07:37 08/10 Time Off Bottom: 10:37 08/10

Electronic Volume Estimate:
 100'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 45	Minutes: 45	Minutes: 60
Current Reading: 4.4" at 30 min	Current Reading: 0" at 45 min	Current Reading: 4" at 45 min	Current Reading: 0" at 60 min
Max Reading: 4.4"	Max Reading: 0"	Max Reading: 4"	Max Reading: 0"

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
10
 2018

DST #4 **Formation: L/KC 'K&L'** **Test Interval: 4325 - 4380'** **Total Depth: 4380'**
 Time On: 05:30 08/10 Time Off: 12:25 08/10
 Time On Bottom: 07:37 08/10 Time Off Bottom: 10:37 08/10

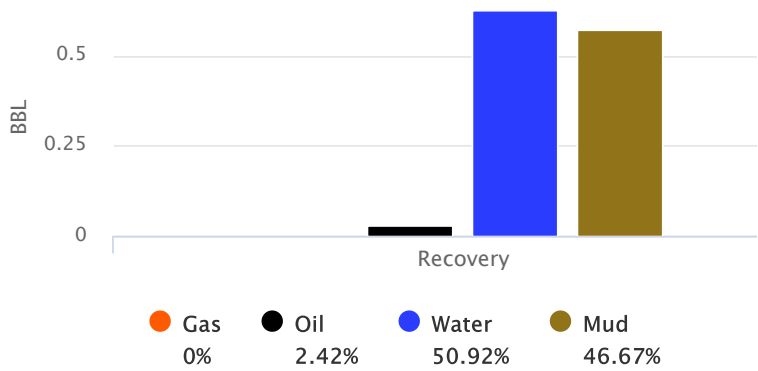
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
50	0.513	SLOCWCM	0	3	27	70
70	0.7182	SLOCHMCW	0	2	68	30

Total Recovered: 120 ft
 Total Barrels Recovered: 1.2312

Reversed Out
 NO

Initial Hydrostatic Pressure	2094	PSI
Initial Flow	16 to 38	PSI
Initial Closed in Pressure	1315	PSI
Final Flow Pressure	41 to 69	PSI
Final Closed in Pressure	1298	PSI
Final Hydrostatic Pressure	2084	PSI
Temperature	127	°F
Pressure Change Initial Close / Final Close	1.3	%

Recovery at a glance





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:

Uploading recovery &
pressures

DATE

August
10
2018

DST #4	Formation: L/KC 'K&L'	Test Interval: 4325 - 4380'	Total Depth: 4380'
	Time On: 05:30 08/10	Time Off: 12:25 08/10	
	Time On Bottom: 07:37 08/10	Time Off Bottom: 10:37 08/10	

BUCKET MEASUREMENT:

1st Open: 1/4"BLOW-INCREASING TO 4 1/2" IN 30 MINUTES

1st Close: NO BLOW BACK

2nd Open: NO BLOW-INCREASING TO 4" IN 45 MINUTES

2nd Close: NO BLOW BACK

REMARKS:

Tool Sample: 0% Gas TRACE% Oil 35% Water 65% Mud

Ph: 11

Measured RW: .19 @ 79 degrees °F

RW at Formation Temp: 0.122 @ 127 °F

Chlorides: 33000 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
10
 2018

DST #4	Formation: L/KC 'K&L'	Test Interval: 4325 - 4380'	Total Depth: 4380'
	Time On: 05:30 08/10	Time Off: 12:25 08/10	
	Time On Bottom: 07:37 08/10		Time Off Bottom: 10:37 08/10

Down Hole Makeup

<p>Heads Up: 14.18 FT</p> <p>Drill Pipe: 4306.61 FT <i>ID-3 1/4</i></p> <p>Weight Pipe: FT <i>ID-2 7/8</i></p> <p>Collars: FT <i>ID-2 1/4</i></p> <p>Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i></p> <p>Total Anchor: 55</p> <p style="padding-left: 20px;"><u>Anchor Makeup</u></p> <p>Packer Sub: 1 FT</p> <p>Perforations: (top): 3 FT <i>4 1/2-FH</i></p> <p>Change Over: 1 FT</p> <p>Drill Pipe: (in anchor): 31.5 FT <i>ID-3 1/4</i></p> <p>Change Over: .5 FT</p> <p>Perforations: (below): 18 FT <i>4 1/2-FH</i></p>	<p>Packer 1: 4320 FT</p> <p>Packer 2: 4325 FT</p> <p>Top Recorder: 4309.42 FT</p> <p>Bottom Recorder: 4363 FT</p> <p>Well Bore Size: 7 7/8</p> <p>Surface Choke: 1"</p> <p>Bottom Choke: 5/8"</p>
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Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:
Uploading recovery &
pressures

DATE
August
10
2018

DST #4 **Formation: L/KC** **Test Interval: 4325 -** **Total Depth: 4380'**
 'K&L' **4380'**
Time On: 05:30 08/10 Time Off: 12:25 08/10
Time On Bottom: 07:37 08/10 Time Off Bottom: 10:37 08/10

Mud Properties

Mud Type: CHEMICAL **Weight:** 9.2 **Viscosity:** 56 **Filtrate:** 8.8 **Chlorides:** 3500 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation: Uploading recovery & pressures
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DATE August 10 2018
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DST #4	Formation: L/KC 'K&L'	Test Interval: 4325 - 4380'	Total Depth: 4380'
	Time On: 05:30 08/10	Time Off: 12:25 08/10	
	Time On Bottom: 07:37 08/10	Time Off Bottom: 10:37 08/10	

Gas Volume Report

1st Open

Time	Orifice	PSI	MCF/D
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2nd Open

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



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
11
 2018

DST #5 **Formation: MARMATON** **Test Interval: 4383 - 4480'** **Total Depth: 4480'**
 Time On: 02:30 08/11 Time Off: 07:58 08/11
 Time On Bottom: 04:15 08/11 Time Off Bottom: 06:15 08/11

Electronic Volume Estimate:
 6'

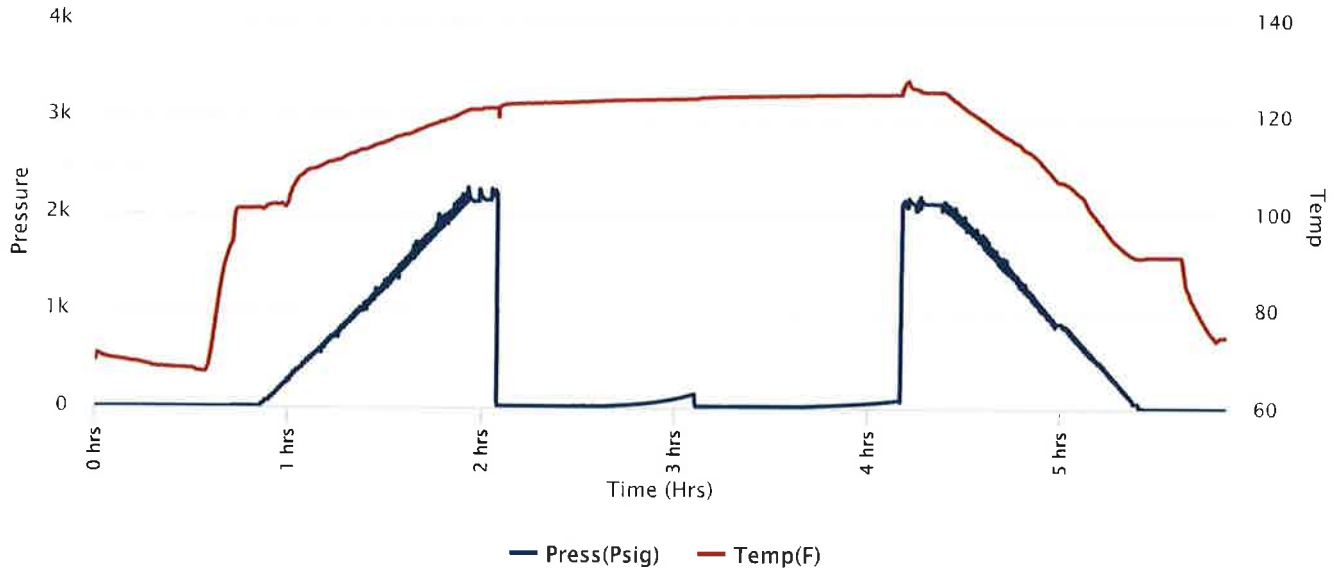
1st Open
 Minutes: 30
 Current Reading: .4" at 30 min
 Max Reading: .5"

1st Close
 Minutes: 30
 Current Reading: 0" at 30 min
 Max Reading: 0"

2nd Open
 Minutes: 30
 Current Reading: 0" at 30 min
 Max Reading: 0"

2nd Close
 Minutes: 30
 Current Reading: 0" at 30 min
 Max Reading: 0"

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
11
 2018

DST #5 **Formation: MARMATON** **Test Interval: 4383 - 4480'** **Total Depth: 4480'**
 Time On: 02:30 08/11 Time Off: 07:58 08/11
 Time On Bottom: 04:15 08/11 Time Off Bottom: 06:15 08/11

Recovered

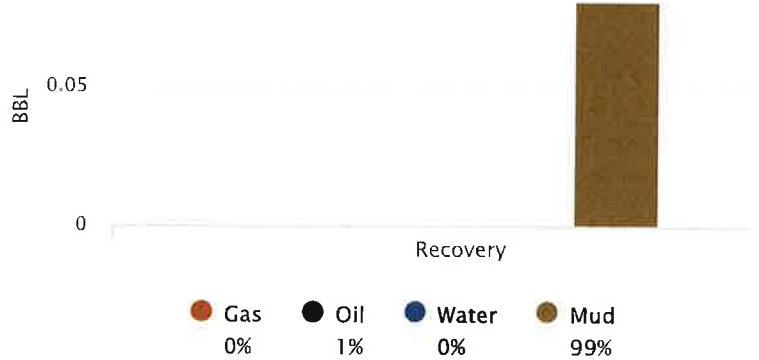
Foot	BBLS	Description of Fluid	Gas %	Oil %	Water %	Mud %
8	0.08208	SLOCM	0	1	0	99

Total Recovered: 8 ft
 Total Barrels Recovered: 0.08208

Reversed Out
 NO

Recovery at a glance

Initial Hydrostatic Pressure	2137	PSI
Initial Flow	16 to 17	PSI
Initial Closed in Pressure	145	PSI
Final Flow Pressure	18 to 18	PSI
Final Closed in Pressure	83	PSI
Final Hydrostatic Pressure	2124	PSI
Temperature	125	°F
Pressure Change Initial Close / Final Close	42.9	%





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:

Uploading recovery &
pressures

DATE

August
11
2018

DST #5

Formation:
MARMATON

Test Interval: 4383 -
4480'

Total Depth: 4480'

Time On: 02:30 08/11

Time Off: 07:58 08/11

Time On Bottom: 04:15 08/11

Time Off Bottom: 06:15 08/11

BUCKET MEASUREMENT:

1st Open: WSB-INCREASING TO 1/2" IN 30 MINUTES

1st Close: NO BLOW BACK

2nd Open: NO BLOW-NO BUILD

2nd Close: NO BLOW BACK

REMARKS:

Tool Sample: 0% Gas 3% Oil 0% Water 97% Mud



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
11
 2018

DST #5 **Formation: MARMATON** **Test Interval: 4383 - 4480'** **Total Depth: 4480'**
 Time On: 02:30 08/11 Time Off: 07:58 08/11
 Time On Bottom: 04:15 08/11 Time Off Bottom: 06:15 08/11

Down Hole Makeup

Heads Up: 18.44 FT	Packer 1: 4378 FT
Drill Pipe: 4368.87 FT <i>ID-3 1/4</i>	Packer 2: 4383 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4367.42 FT
Collars: FT <i>ID-2 1/4</i>	Bottom Recorder: 4452 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: 97	Surface Choke: 1"
Anchor Makeup	
Packer Sub: 1 FT	Bottom Choke: 5/8"
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 62.5 FT <i>ID-3 1/4</i>	
Change Over: .5 FT	
Perforations: (below): 29 FT <i>4 1/2-FH</i>	



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:

Uploading recovery &
pressures

DATE

August
11
2018

DST #5

Formation:
MARMATON

Test Interval: 4383 -
4480'

Total Depth: 4480'

Time On: 02:30 08/11

Time Off: 07:58 08/11

Time On Bottom: 04:15 08/11

Time Off Bottom: 06:15 08/11

Mud Properties

Mud Type: CHEMICAL **Weight:** 9.4

Viscosity: 53

Filtrate: 8.0

Chlorides: 3000 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:
Uploading recovery &
pressures

DATE
August
11
2018

DST #5 **Formation:** **Test Interval: 4383 -** **Total Depth: 4480'**
MARMATON
Time On: 02:30 08/11 Time Off: 07:58 08/11
Time On Bottom: 04:15 08/11 Time Off Bottom: 06:15 08/11

Gas Volume Report

1st Open

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

2nd Open

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



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

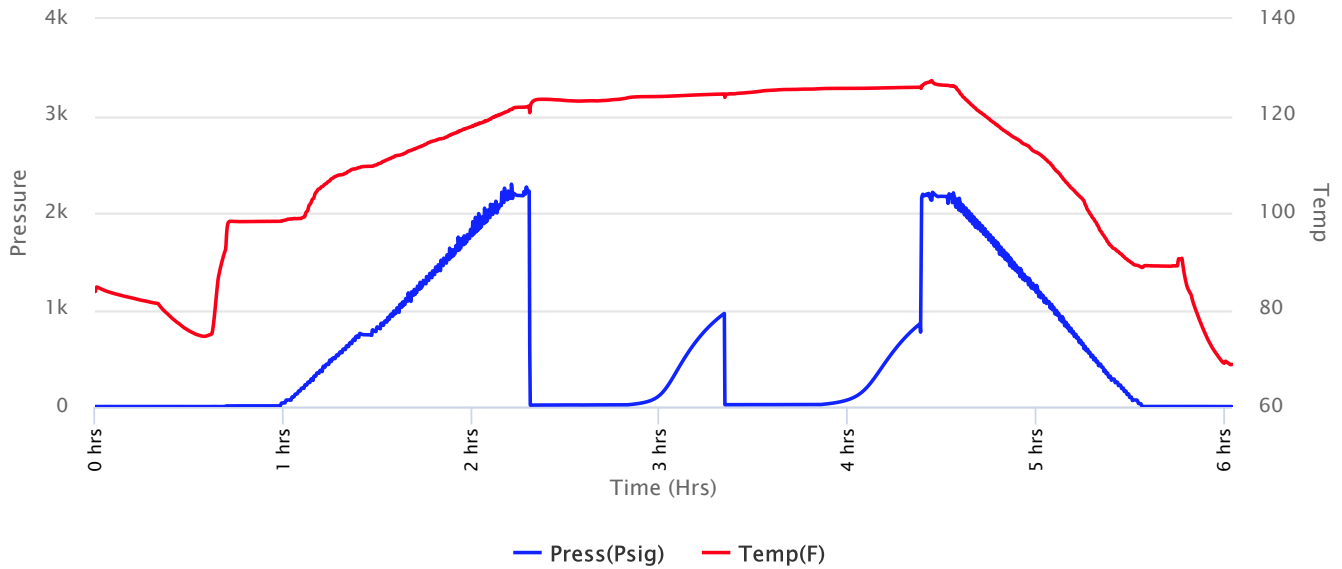
DATE
 August
11
 2018

DST #6 **Formation: PAWNEE/MYRICK** **Test Interval: 4484 - 4570'** **Total Depth: 4570'**
 Time On: 21:35 08/11 Time Off: 03:28 08/12
 Time On Bottom: 23:48 08/11 Time Off Bottom: 01:48 08/12

Electronic Volume Estimate:
 15'

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

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
11
 2018

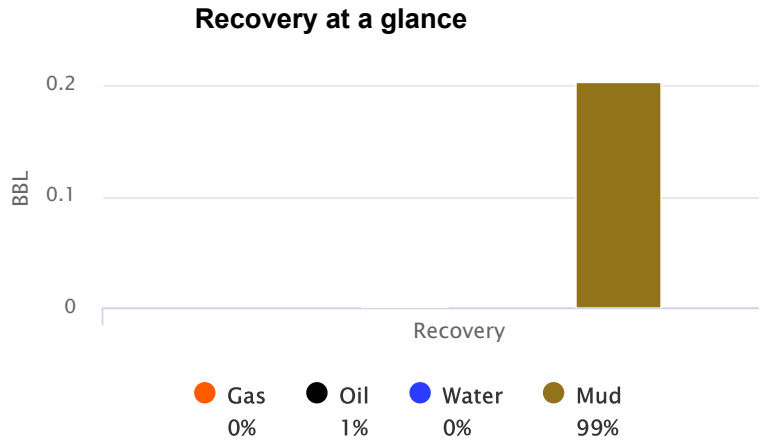
DST #6 **Formation: PAWNEE/MYRICK** **Test Interval: 4484 - 4570'** **Total Depth: 4570'**
 Time On: 21:35 08/11 Time Off: 03:28 08/12
 Time On Bottom: 23:48 08/11 Time Off Bottom: 01:48 08/12

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
20	0.2052	SLOCM	0	1	0	99

Total Recovered: 20 ft
 Total Barrels Recovered: 0.2052

Reversed Out
 NO

Initial Hydrostatic Pressure	2179	PSI
Initial Flow	16 to 20	PSI
Initial Closed in Pressure	962	PSI
Final Flow Pressure	21 to 23	PSI
Final Closed in Pressure	856	PSI
Final Hydrostatic Pressure	2170	PSI
Temperature	126	°F
Pressure Change Initial Close / Final Close	11.0	%





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:
Uploading recovery &
pressures

DATE
August
11
2018

DST #6	Formation: PAWNEE/MYRICK	Test Interval: 4484 - 4570'	Total Depth: 4570'
	Time On: 21:35 08/11	Time Off: 03:28 08/12	
	Time On Bottom: 23:48 08/11	Time Off Bottom: 01:48 08/12	

BUCKET MEASUREMENT:

1st Open: WSB-INCREASING TO 1 1/4" IN 30 MINUTES

1st Close: NO BLOW BACK

2nd Open: NO BLOW-NO BUILD

2nd Close: NO BLOW BACK

REMARKS:

Tool Sample: 0% Gas 3% Oil 0% Water 97% Mud



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc -
 Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery &
 pressures

DATE
 August
11
 2018

DST #6 **Formation: PAWNEE/MYRICK** **Test Interval: 4484 - 4570'** **Total Depth: 4570'**
 Time On: 21:35 08/11 Time Off: 03:28 08/12
 Time On Bottom: 23:48 08/11 Time Off Bottom: 01:48 08/12

Down Hole Makeup

Heads Up: 11.19 FT	Packer 1: 4479 FT
Drill Pipe: 4462.62 FT <i>ID-3 1/4</i>	Packer 2: 4484 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4468.42 FT
Collars: FT <i>ID-2 1/4</i>	Bottom Recorder: 4553 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: 86	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 62.5 FT <i>ID-3 1/4</i>	
Change Over: .5 FT	
Perforations: (below): 18 FT <i>4 1/2-FH</i>	



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:
Uploading recovery &
pressures

DATE
August
11
2018

DST #6 **Formation: PAWNEE/MYRICK** **Test Interval: 4484 - 4570'** **Total Depth: 4570'**
Time On: 21:35 08/11 Time Off: 03:28 08/12
Time On Bottom: 23:48 08/11 Time Off Bottom: 01:48 08/12

Mud Properties

Mud Type: CHEMICAL **Weight:** 9.5 **Viscosity:** 48 **Filtrate:** 10.4 **Chlorides:** 4400 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc -
 Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery &
 pressures

DATE
 August
11
 2018

DST #6 **Formation: PAWNEE/MYRICK** **Test Interval: 4484 - 4570'** **Total Depth: 4570'**
 Time On: 21:35 08/11 Time Off: 03:28 08/12
 Time On Bottom: 23:48 08/11 Time Off Bottom: 01:48 08/12

Gas Volume Report

1st Open

2nd Open

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

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



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc -
 Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery &
 pressures

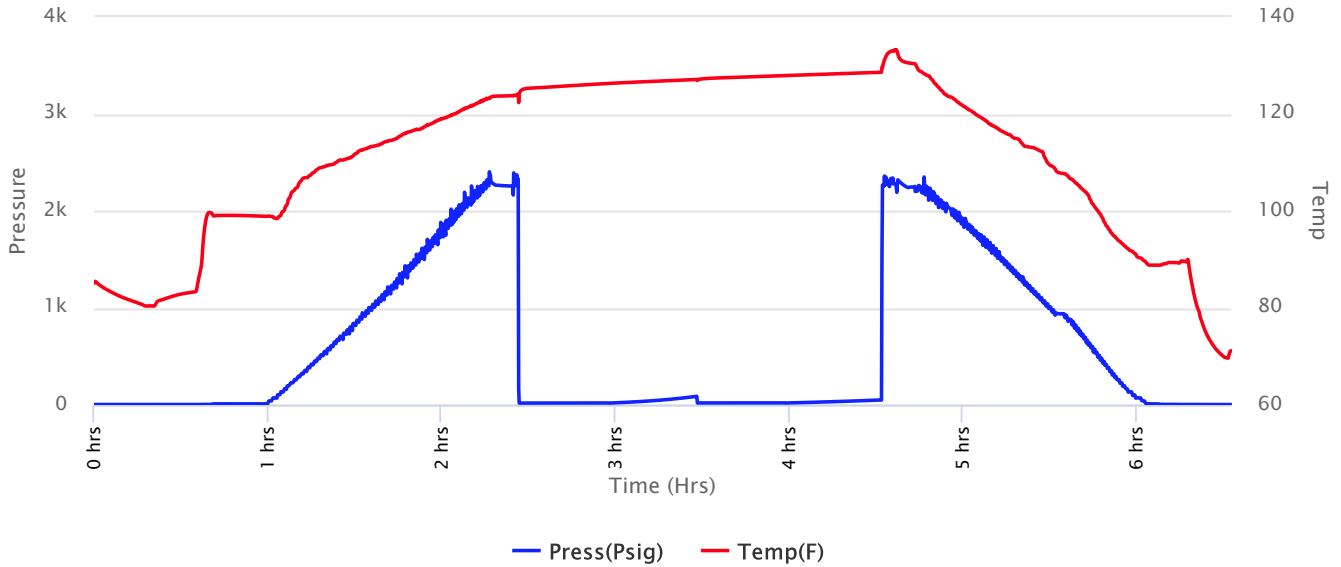
DATE
 August
12
 2018

DST #7 **Formation: CHEROKEE/JOHNSON** **Test Interval: 4600 - 4670'** **Total Depth: 4670'**
 Time On: 17:35 08/12 Time Off: 23:57 08/12
 Time On Bottom: 19:55 08/12 Time Off Bottom: 21:55 08/12

Electronic Volume
 Estimate:
 3'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 30	Minutes: 30	Minutes: 30
Current Reading: .1" at 30 min	Current Reading: 0" at 30 min	Current Reading: 0" at 30 min	Current Reading: 0" at 30 min
Max Reading: .25"	Max Reading: 0"	Max Reading: 0"	Max Reading: 0"

Inside Recorder





Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery & pressures

DATE
 August
12
 2018

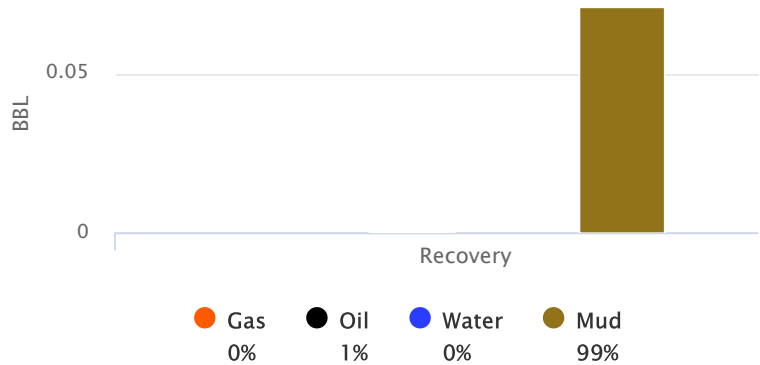
DST #7 **Formation: CHEROKEE/JOHNSON** **Test Interval: 4600 - 4670'** **Total Depth: 4670'**
 Time On: 17:35 08/12 Time Off: 23:57 08/12
 Time On Bottom: 19:55 08/12 Time Off Bottom: 21:55 08/12

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
7	0.07182	SLOCM	0	1	0	99

Total Recovered: 7 ft
 Total Barrels Recovered: 0.07182

Reversed Out
 NO

Recovery at a glance



Initial Hydrostatic Pressure	2260	PSI
Initial Flow	16 to 18	PSI
Initial Closed in Pressure	87	PSI
Final Flow Pressure	18 to 19	PSI
Final Closed in Pressure	49	PSI
Final Hydrostatic Pressure	2251	PSI
Temperature	129	°F
Pressure Change Initial Close / Final Close	44.3	%



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:

Uploading recovery &
pressures

DATE

August
12
2018

DST #7	Formation: CHEROKEE/JOHNSON	Test Interval: 4600 - 4670'	Total Depth: 4670'
	Time On: 17:35 08/12	Time Off: 23:57 08/12	
	Time On Bottom: 19:55 08/12	Time Off Bottom: 21:55 08/12	

BUCKET MEASUREMENT:

1st Open: WSB-INCEASING TO 1/4" THEN DECREASED TO WSB IN 30 MINUTES

1st Close: NO BLOW BACK

2nd Open: NO BLOW-NO BUILD

2nd Close: NO BLOW BACK

REMARKS:

Tool Sample: 0% Gas 2% Oil 0% Water 98% Mud



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc -
 Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery &
 pressures

DATE
 August
12
 2018

DST #7 **Formation:** **Test Interval: 4600 -** **Total Depth: 4670'**
 CHEROKEE/JOHNSON **4670'**
 Time On: 17:35 08/12 Time Off: 23:57 08/12
 Time On Bottom: 19:55 08/12 Time Off Bottom: 21:55 08/12

Down Hole Makeup

Heads Up: 20.17 FT	Packer 1: 4595 FT
Drill Pipe: 4587.6 FT <i>ID-3 1/4</i>	Packer 2: 4600 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4584.42 FT
Collars: FT <i>ID-2 1/4</i>	Bottom Recorder: 4638 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: 70	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 31.5 FT <i>ID-3 1/4</i>	
Change Over: .5 FT	
Perforations: (below): 33 FT <i>4 1/2-FH</i>	



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
County: THOMAS
State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 3261 EGL
Field Name: Morgan Ext
Pool: Infield
Job Number: 200

Operation:

Uploading recovery &
pressures

DATE

August
12
2018

DST #7 **Formation: CHEROKEE/JOHNSON** **Test Interval: 4600 - 4670'** **Total Depth: 4670'**
Time On: 17:35 08/12 Time Off: 23:57 08/12
Time On Bottom: 19:55 08/12 Time Off Bottom: 21:55 08/12

Mud Properties

Mud Type: CHEMICAL **Weight:** 9.3 **Viscosity:** 59 **Filtrate:** 10.4 **Chlorides:** 4800 ppm



Company: L. D. Drilling, Inc
Lease: Barrett Trust #1-20

SEC: 20 TWN: 8S RNG: 34W
 County: THOMAS
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc -
 Rig 1
 Elevation: 3261 EGL
 Field Name: Morgan Ext
 Pool: Infield
 Job Number: 200

Operation:
 Uploading recovery &
 pressures

DATE
 August
12
 2018

DST #7 **Formation:** **Test Interval: 4600 -** **Total Depth: 4670'**
 CHEROKEE/JOHNSON **4670'**
 Time On: 17:35 08/12 Time Off: 23:57 08/12
 Time On Bottom: 19:55 08/12 Time Off Bottom: 21:55 08/12

Gas Volume Report

1st Open

2nd Open

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

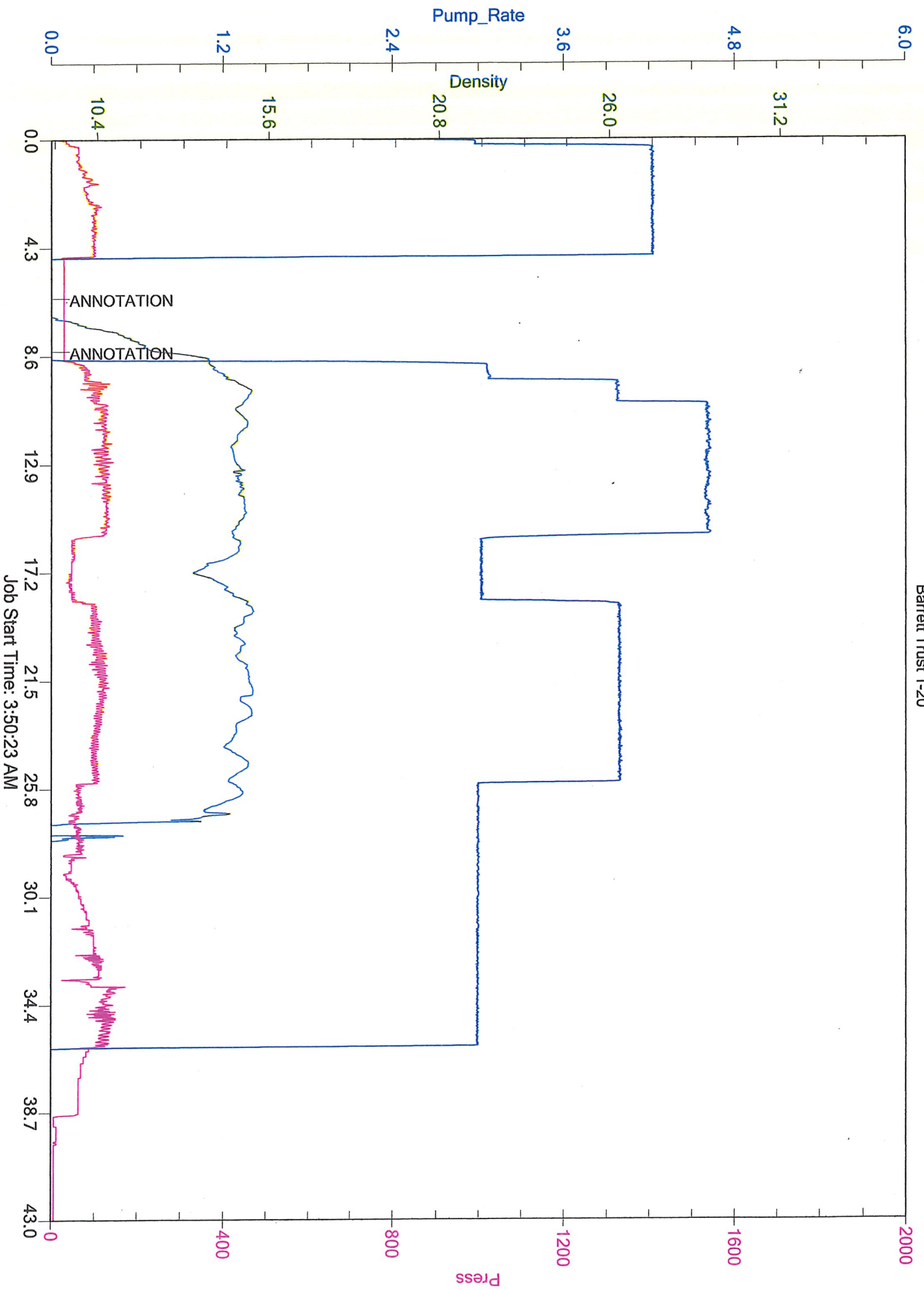
Customer LD Drilling	Lease No.	Date 8-2-18
Lease Barrett Trust	Well # 1-20	
Field Order # 7046	Station Pratt Kansas	Casing 8.625"
		Depth 339
Type Job 8.625" surface casing 242	Formation	County Thomas
		State KS
		Legal Description 20-85-34W

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size, "	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
8.625				Pre Pad	Max		5 Min.
Depth 339	Depth	From	To	Pad	Min		10 Min.
Volume 21.6	Volume	From	To	Frac	Avg		15 Min.
Max Press 500	Max Press	From	To		HHP Used		Annulus Pressure
Well Connection 6.0	Annulus Vol.	From	To	Flush	Gas Volume		Total Load
Plug Depth	Packer Depth	From	To				

Customer Representative Rick Wilson	Station Manager Justin Westerman	Treater Ferris Gooding
Service Units 72868 72686 86779 14355 37724		
Driver Names Ferris Mike Mike Marc Marc		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
0000					Arrived on Location / safety meeting
0015					Rig up equipment
0350	120		20	4	Pump 120 Ahead
0357	80			3	Start mixing 325 s x 60/40 po2 @ 14.6 gpl
0407	100		30	3	150 s x 60/40 po2 away @ 14.4 gpl
0417	90		70	3	End cement
0418	90			3	Start displacement
0422	100		10	3	Saw cement 10 BBLs into displacement = 11 BBLs
0426	110		21		End displacement shut in sledge
0440					Rig Down
0500					Leave location
					Saw cement 10 BBLs into displacement
					Per Tool Pusher = 11 BBLs cement to surface
					100-339' TOC - SURFACE
					10' cement left in shoe
					ANNULAR VOLUME - calculated - 25 BBLs

LD Drilling Inc
Barrett Trust 1-20





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

PRESSURE PUMPING Job Log

Customer:	LD DRILLING	Cement Pump No.:	38750-19842 5Hrs	Operator TRK No.:	34726 Ruben	
Address:		Ticket #:	1718 15831 L	Bulk TRK No.:	14355-37724	Santiago
City, State, Zip:		Job Type:	Z42 - Cement Plug to Abandon			
Service District:	1718 Liberal, Ks.	Well Type:	OIL			
Well Name and No.:	Barrett Trust 1-20	Well Location:	20,8,34	County:	Thomas	State: Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
60/40	240	4% Total Gel, 1/4# Polyflake	14355-37724 Santiago	Front	Back
				Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	13.5	1.51	7.5	362.4	Man Hours:	42
Tail:					# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLs)	Pumps		Pressure (PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
2:30							ON LOCATION
2:45							SAFETY MEETING/RIG UP
3:45 AM	W				1000		PRESSURE TEST
							1ST PLUG @ 2810'-50SX @13.5#
3:49 AM	W	10			260		PUMP WATER AHEAD
3:54	4.2	13			270		PUMP 50SX @13.5# HOC 244'
3:59	4.2	3			270		PUMP WATER BEHIND
4:02 AM		36.6					DISPLACE MUD WITH RIG @2566'
4:06							SHUT DOWN
							2ND PLUG @1960'-100SX@13.5#
4:52	4.1	10			250		PUMP WATER AHEAD
4:56	4.3	17.8			270		<u>PUMP 100SX@13.5# HOC 488'</u>
5:05	4	3			260		PUMP WATER BEHIND
5:11		20.9					DISPLACE MUD WITH RIG @1472'
5:13							SHUT DOWN
							3RD PLUG @ 390'-50SX@13.5#
6:42	4.5	25			150		PUMP WATER AHEAD
6:51	4.5	13			150		PUMP 50SX @13.5# HOC 230'
6:58	4.5	2			150		DISPLACE @160'
6:59							SHUT DOWN
							4TH PLUG @40'-10SX@13.5# Drop plug
7:48	3	3			50		PUMP 50SX @13.5#
7:56	3	8			50		PLUG RAT HOLE WITH 30SX@13.5#
Size Hole		Depth					TYPE
Size & Wt. Csg.		Depth					Packer
tbg.		Depth					Retainer
Top Plugs		Type					Perfs

Customer Signature: <i>Rubén W. Martínez</i>	Basic Representative:	Ruben Martinez
	Basic Signature:	<i>Ruben Martinez</i>
	Date of Service:	8/14/2018