

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	MCINTYRE 1-20
Doc ID	1462289

Tops

Name	Top	Datum
ANHYDRITE	1040	+963
BASE ANHYDRITE	1068	+935
TARKIO	2784	-781
TOPEKA	2919	-916
HEEBNER	3244	-1241
LANSING	3302	-1299
BASE KANSAS CITY	3525	-1522
REAGAN	3603	-1600
GRANITY WASH	3656	-1653

Form	ACO1 - Well Completion
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Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	1040	A-CONN	255	3%CC 1/4#CF
Surface	12.25	8.625	23	1040	COMMON	155	2%CC
Production	7.875	5.5	15.5	3700	AA-2	150	4%GEL
Production	7.875	5.5	15.5	3700	60/40 POZMIX	30	@ RATHOLE

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY	L. D. DRILLING, INC.	ELEVATIONS
LEAST	* 1-20 MCINTYRE	KB 2003
FIELD	OTIS-ALBERT	DF
LOCATION	1980 FSL & 990 FEL W/2 NE SE	GL 1998
SEC	20 T1SP 18s R07 16w	Measurements Are From 2003 KB
COUNTY	RUSH STATE KANSAS	CASING
CONTRACTOR	L. D. DRILLING, INC.	SURFACE 8 5/8" @ 1040
SPUD	2-1-19 COMP 2-10-19	PRODUCTION 5 1/2" @
TRD	3705 TD 3695	ELECTRICAL SURVEY
NOV UP	2748 TYPE 100 CHEMICAL	DUAL IND., DENS-N, MICRO SONIC

SAMPLES SAVED FROM	2760 TO 3705
DRILLING TIME KEPT FROM	2700 TO 3705
SAMPLES EXAMINED FROM	2760 TO 3705
GEOLOGICAL SUPERVISION FROM	2900 TO 3705
GEOLOGIST ON WELL	KIM B. SHOEMAKER

FORMATION TOPS	TOP	SAMPLES
ANHYDRITE	1040 + 963	1036 + 967
B/ANH	1068 + 935	1069 + 934
TARKIO	2784 - 781	2785 + 782
TOPEKA	2919 - 916	2918 + 915
HEEBNER	3244 - 1241	3244 - 1241
LANSING	3302 - 1299	3302 - 1299
B/KC	3525 - 1522	3525 - 1522
REAGAN	3603 - 1600	3600 - 1597
GRANITE WASH	3656 - 1653	3656 - 1652

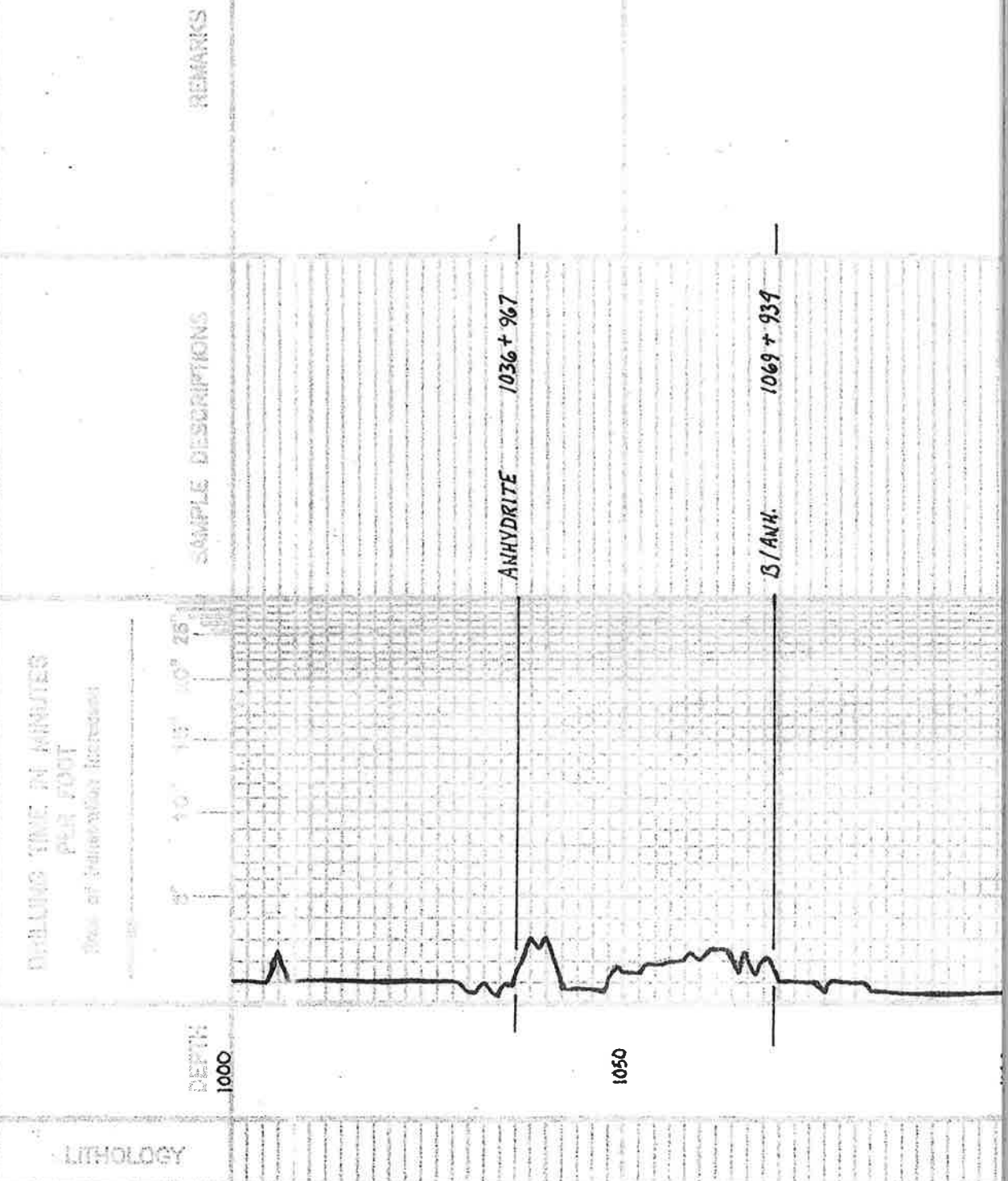


API: 15-165-22163

- REMARKS
- 2-1-19 SPUD
 - 2-2 @ 700'
 - 2-3 @ 1041'
 - 2-4 @ 2025'
 - 2-5 @ 2748'
 - 2-6 @ 3338'
 - 2-7 @ 3608'
 - 2-8 @ 3615'
 - 2-9 @ 3623'
 - 2-10 @ 3705'

LEGEND

- Bismuthite
- Chert
- Dolomite
- Limestone
- Sandstone
- Shale
- Siltstone
- Claystone
- Mudstone
- Shale
- Sandstone
- Siltstone
- Claystone
- Mudstone
- Shale
- Sandstone
- Siltstone
- Claystone
- Mudstone



1100

2700

2800

2900

Samples are lagged

STOTLER 2726-723

Sh. clay. silty

Sh. clay. silty

TARKIO 2785-782

ss. to silty ss. fossil.

ss. to med. silty fossil.

ss. to med. fossil. calcite

ss. to silty ss. fossil

Sh. clay. & silty. silty.

ss. clay. silty fossil.

Sh. clay. & silty. silty.

ss. to silty ss. fossil.

Sh. clay. silty.

TOPEKA 2918-915

ss. clay. silty fossil.

Sh. clay.

ss. to silty ss. fossil.

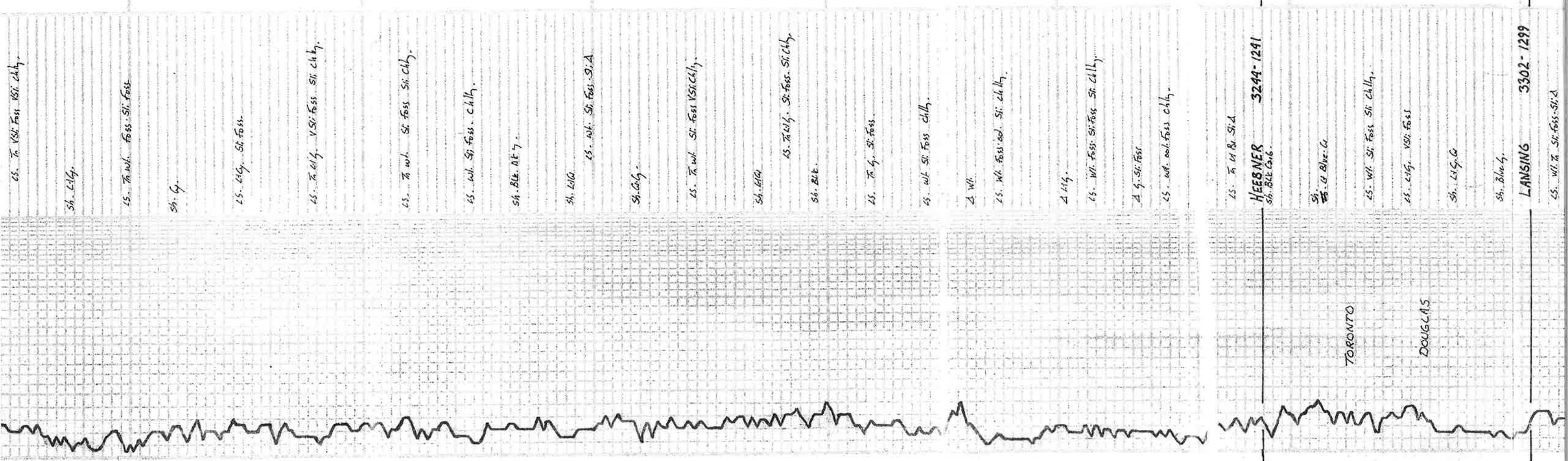
Sh. clay.

ss. to silty ss. fossil.

Sh. Blue clay.

ss. to silty fossil. silty clay.

VIS: 52
WT: 86
WL: 8.0
CIL: 6500



3000

3100

3200

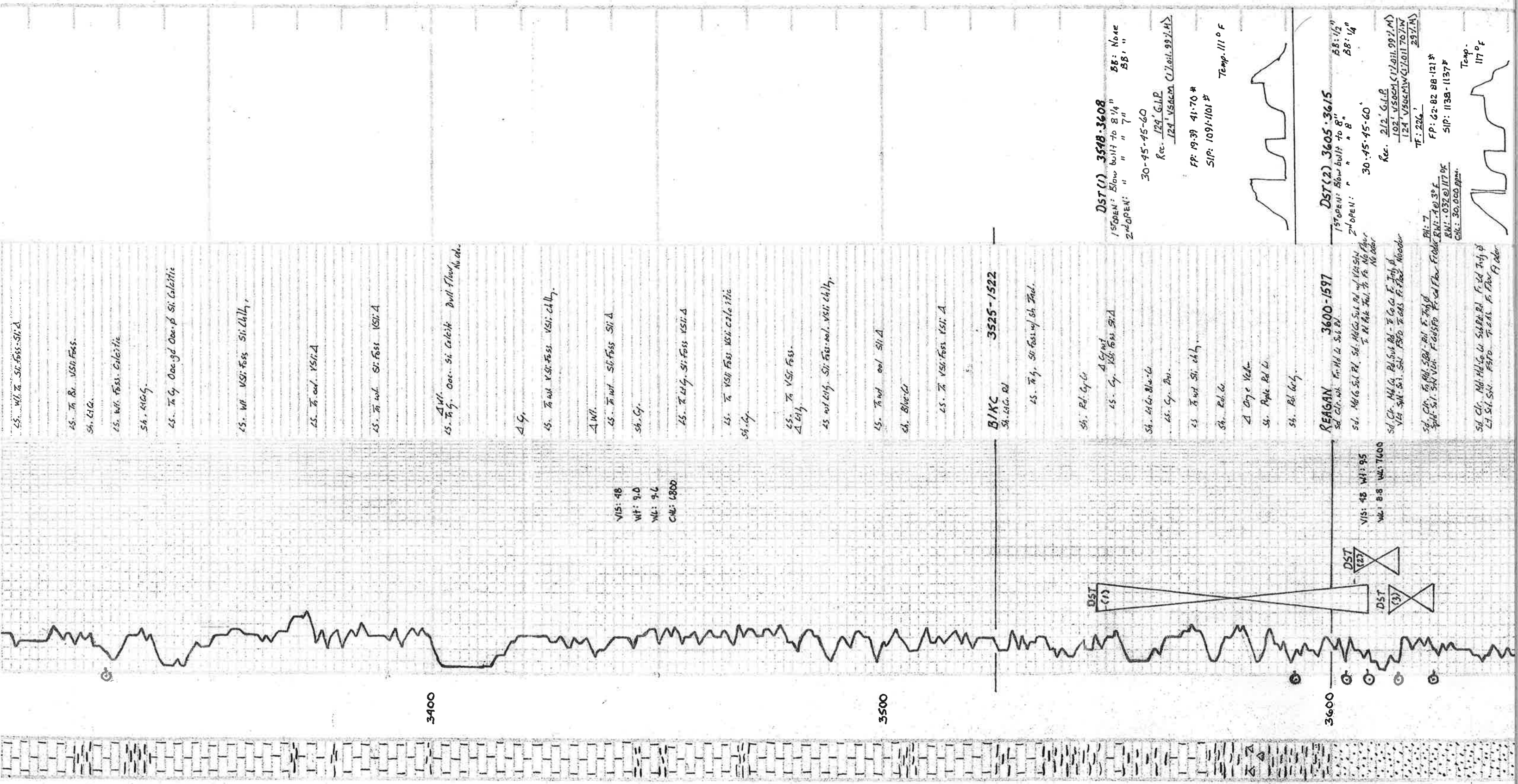
3300

TORONTO

DOUGLAS

HEBNER 3244-1241

LANSING 3302-1299



ls. to bl. VSi. Foss. Sil. A

ls. to bl. VSi. Foss.

sh. clay.

ls. blk. Foss. Calcitic

sh. clay.

ls. to gy. Ool. to Ool. Sil. Calcitic

ls. blk. VSi. Foss. Sil. clay.

ls. to ool. VSi. A

ls. to blk. VSi. Foss. VSi. A

ls. to blk. VSi. Foss. VSi. clay. Bull. Flow. No. ch.

sh. clay.

ls. to blk. VSi. Foss. VSi. clay.

sh. clay.

ls. to blk. VSi. Foss. Sil. A

sh. clay.

ls. to blk. VSi. Foss. VSi. calcitic

sh. clay.

ls. to blk. VSi. Foss.

ls. to blk. VSi. Foss. VSi. clay.

sh. blue gr.

ls. to blk. VSi. Foss. VSi. A

BIK 3525-1522
sh. clay. rd.

ls. to blk. VSi. Foss. w/ sh. Foss.

sh. red. clay.

ls. to blk. VSi. Foss. Sil. A

sh. blue gr.

ls. to blk. VSi. Foss.

sh. red. clay.

sh. blue gr.

REAGAN 3600-1597
sh. clay. blk. VSi. Foss. Sil. A

sh. blue gr.

sh. red. clay.

sh. blue gr.

sh. red. clay.

Vis: 48
WT: 9.0
ML: 9.6
CML: 1800

Vis: 48 WT: 9.5
ML: 8.8 ML: 7100

DST (1)

DST (2)

DST (3)

DST (1) 3548-3608
1st OPEN: Blow built to 8 1/4"
2nd OPEN: " " " 7"
30-95-45-60
Rec. 124' G.I.P.
124' VSACM (1/01.99/1.1)

FP: 19-39 41-70 #
SIP: 1091-1101 #
Temp. 110 F



DST (2) 3605-3615

1st OPEN: Blow built to 8"
2nd OPEN: " " " 8"
30-45-45-60
Rec. 212' G.I.P.
102' VSACM (1/01.99/1.1)
124' VSACM (1/01.70/1.1)
TF: 226'

FP: 62-82 88-121 #
SIP: 1138-1137 #
Temp. 117 F



Calc: 30,000 ppm



Temp. 117°F

DST (3) 3673-3623

1500N: Salton bucket / min. 58: 5 1/2"
2nd OPEN: " " 7 " 58: 3"

30.45-45-60

Rec. 610 G.I.P.

10' VSOCH (27.01, 987M)
G2 WCO (607.411, 907M)
186' WTR (27.01, 987M)

Tool Sample 186' WTR (1007M)

PH: 7

SW: 5.018°F

FW: 37112 122-243°F

CR: 40.000

Temp. 124°F



Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

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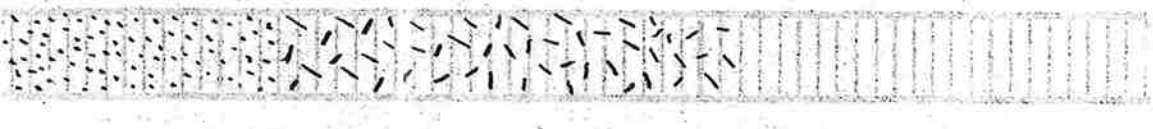
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L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Sd Cl: Md Hb Co Li Sub R. Pl. F. sd T. y. d
L. S. S. W. F. SD. T. H. S. F. Fl. W. F. I. d. e. r.

Vis: 51
WT: 9.25
XU: 11.2
CW: 9100

3700

RTD 3705-1702





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

SEC: 20 TWN: 18S RNG: 16W
 County: RUSH
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2002 EGL
 Field Name: Otis-Albert
 Pool: Infield
 Job Number: 298

Operation:
 Uploading recovery & pressures

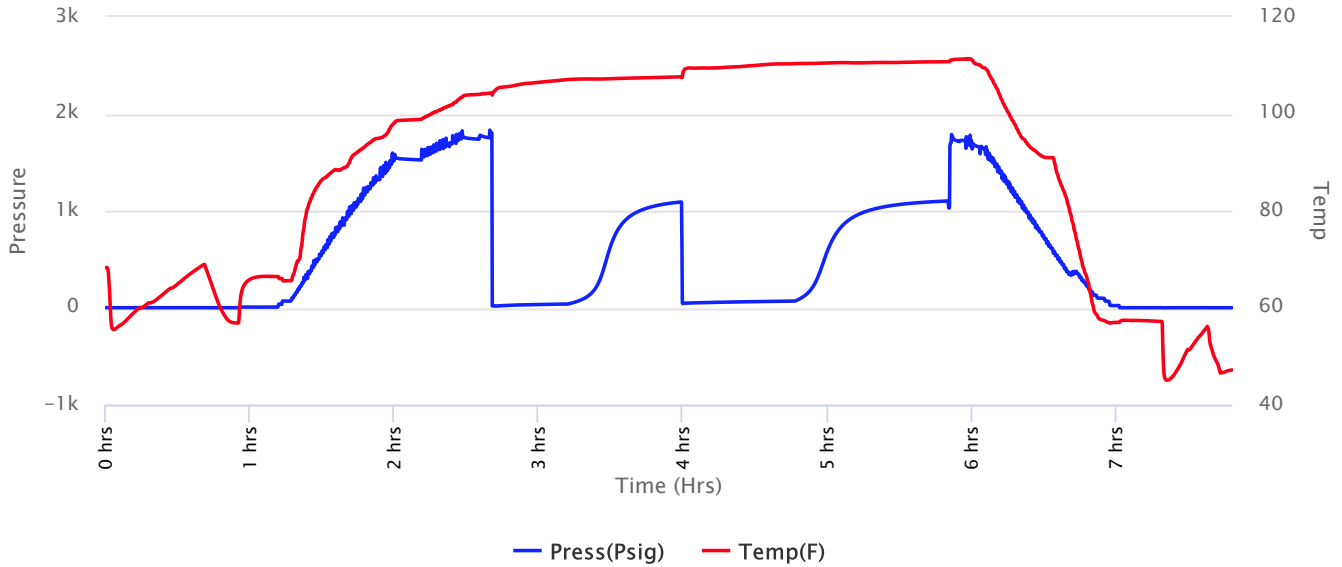
DATE
 February
07
 2019

DST #1 **Formation: Reagan Sand** **Test Interval: 3548 - 3608'** **Total Depth: 3608'**
 Time On: 06:59 02/07 Time Off: 14:40 02/07
 Time On Bottom: 09:39 02/07 Time Off Bottom: 12:39 02/07

Electronic Volume Estimate:
 141'

<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: 8.3" at 30 min	Current Reading: 0" at 45 min	Current Reading: 7" at 45 min	Current Reading: 0" at 60 min
Max Reading: 8.3"	Max Reading: 0"	Max Reading: 7"	Max Reading: 0"

Inside Recorder





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

SEC: 20 TWN: 18S RNG: 16W
 County: RUSH
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2002 EGL
 Field Name: Otis-Albert
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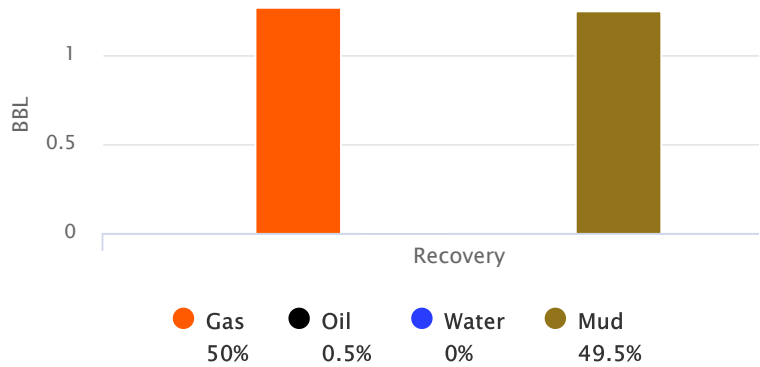
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
124	1.27224	G	100	0	0	0
124	1.27224	SLOSM	0	1	0	99

Total Recovered: 248 ft
 Total Barrels Recovered: 2.54448

Reversed Out
 NO

Initial Hydrostatic Pressure	1738	PSI
Initial Flow	19 to 39	PSI
Initial Closed in Pressure	1091	PSI
Final Flow Pressure	41 to 70	PSI
Final Closed in Pressure	1101	PSI
Final Hydrostatic Pressure	1736	PSI
Temperature	111	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 7.14299



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Rig 1
Elevation: 2002 EGL
Field Name: Otis-Albert
Pool: Infield
Job Number: 298

Operation:
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pressures

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DST #1	Formation: Reagan Sand	Test Interval: 3548 - 3608'	Total Depth: 3608'
	Time On: 06:59 02/07	Time Off: 14:40 02/07	
	Time On Bottom: 09:39 02/07	Time Off Bottom: 12:39 02/07	

BUCKET MEASUREMENT:

1st Open: 1/4" Blow. Built to 8 1/4 inches in 30 mins
1st Close: NOBB
2nd Open: 1" Blow. Built to 7 inches in 45 mins
2nd Close: NOBB



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 Uploading recovery &
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Down Hole Makeup

Heads Up: 13.13 FT	Packer 1: 3542.96 FT
Drill Pipe: 3528.52 FT <i>ID-3 1/4</i>	Packer 2: 3547.96 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 3532.38 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 3586 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: 60.04	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): 31.04 FT <i>ID-3 1/4</i>	
Change Over: 1 FT	
Perforations: (below): 23 FT <i>4 1/2-FH</i>	



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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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 Elevation: 2002 EGL
 Field Name: Otis-Albert
 Pool: Infield
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Operation:
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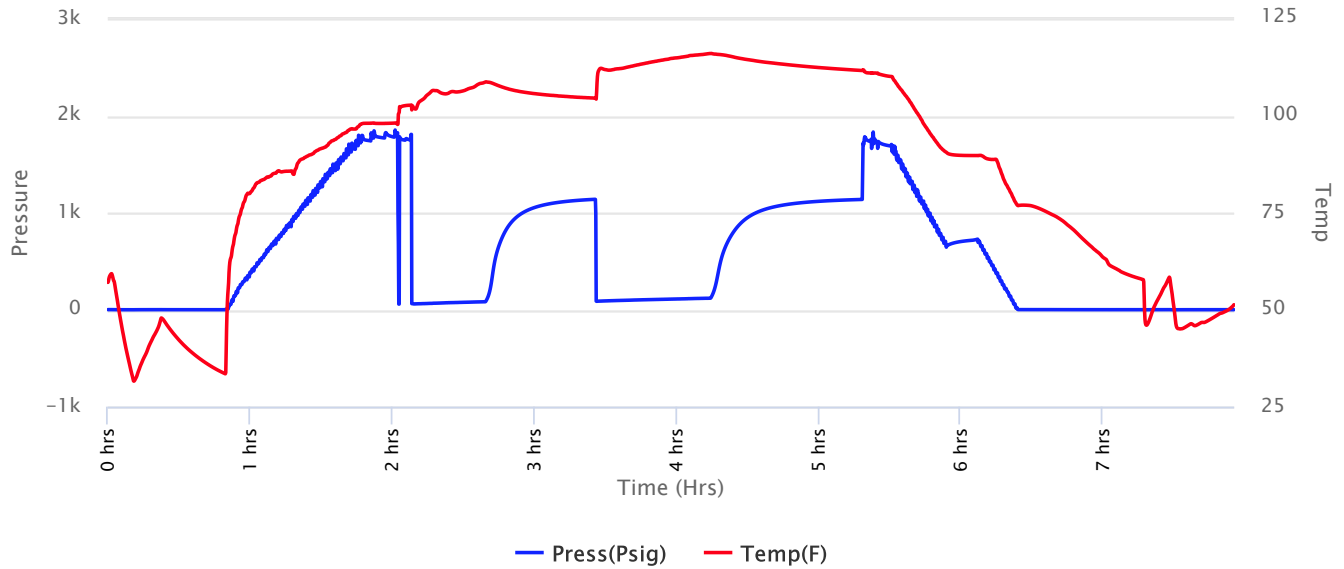
DATE
 February
07
 2019

DST #2 **Formation: Reagan Sand** **Test Interval: 3605 - 3615'** **Total Depth: 3615'**
 Time On: 22:29 02/07 Time Off: 06:12 02/08
 Time On Bottom: 00:34 02/08 Time Off Bottom: 03:34 02/08

Electronic Volume Estimate:
 156'

<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: 8" at 30 min	Current Reading: .5" at 45 min	Current Reading: 7.9" at 45 min	Current Reading: .25" at 60 min
Max Reading: 8"	Max Reading: .5"	Max Reading: 7.9"	Max Reading: .25"

Inside Recorder





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

SEC: 20 TWN: 18S RNG: 16W
 County: RUSH
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2002 EGL
 Field Name: Otis-Albert
 Pool: Infield
 Job Number: 298

Operation:
 Uploading recovery & pressures

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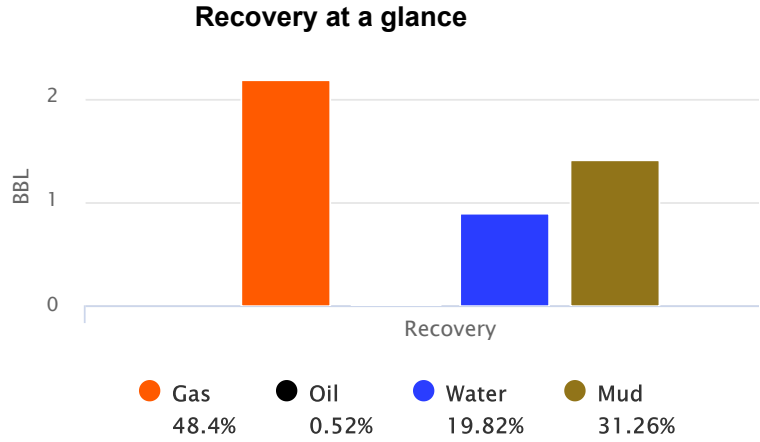
DST #2 **Formation: Reagan Sand** **Test Interval: 3605 - 3615'** **Total Depth: 3615'**
 Time On: 22:29 02/07 Time Off: 06:12 02/08
 Time On Bottom: 00:34 02/08 Time Off Bottom: 03:34 02/08

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
212	2.17512	G	100	0	0	0
102	1.04652	OSM	0	1	0	99
124	1.27224	SLOCMCW	0	1	70	29

Total Recovered: 438 ft
 Total Barrels Recovered: 4.49388

Reversed Out
 NO

Initial Hydrostatic Pressure	1749	PSI
Initial Flow	62 to 82	PSI
Initial Closed in Pressure	1138	PSI
Final Flow Pressure	88 to 121	PSI
Final Closed in Pressure	1137	PSI
Final Hydrostatic Pressure	1749	PSI
Temperature	117	°F
Pressure Change Initial Close / Final Close	0.1	%



GIP cubic foot volume: 12.21221



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

SEC: 20 TWN: 18S RNG: 16W
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State: Kansas
Drilling Contractor: L. D. Drilling, Inc -
Rig 1
Elevation: 2002 EGL
Field Name: Otis-Albert
Pool: Infield
Job Number: 298

Operation:
Uploading recovery &
pressures

DATE
February
07
2019

DST #2	Formation: Reagan Sand	Test Interval: 3605 - 3615'	Total Depth: 3615'
	Time On: 22:29 02/07	Time Off: 06:12 02/08	
	Time On Bottom: 00:34 02/08	Time Off Bottom: 03:34 02/08	

BUCKET MEASUREMENT:

Diesel in Bucket

1st Open: 1'4" Blow. Built to 8 inches in 30 mins

1st Close: 1/2" Blow Back

2nd Open: 1" Blow Built to 8 inches in 45 mins

2nd Close: 1/4" Blow Back

REMARKS:

Hit Bridge on First Attempt to Set Packers. Most of the Mud was From The First Attempt and Second Attempt Went Fine but slid through the first opening.

Tool Sample: Blown Out

Ph: 7

Measured RW: .4 @ 3 degrees °F

RW at Formation Temp: 0.032 @ 117 °F

Chlorides: 30,000 ppm



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

SEC: 20 TWN: 18S RNG: 16W
 County: RUSH
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc -
 Rig 1
 Elevation: 2002 EGL
 Field Name: Otis-Albert
 Pool: Infield
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 Uploading recovery &
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DST #2 **Formation: Reagan Sand** **Test Interval: 3605 - 3615'** **Total Depth: 3615'**
 Time On: 22:29 02/07 Time Off: 06:12 02/08
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Down Hole Makeup

Heads Up: 18.63 FT	Packer 1: 3600 FT
Drill Pipe: 3591.06 FT <i>ID-3 1/4</i>	Packer 2: 3605 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 3589.42 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 3607 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: 10	Surface Choke: 1"
Anchor Makeup	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 1/4</i>	
Change Over: 0 FT	
Perforations: (below): 9 FT <i>4 1/2-FH</i>	



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

SEC: 20 TWN: 18S RNG: 16W
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 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2002 EGL
 Field Name: Otis-Albert
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 Uploading recovery & pressures

DATE
 February
07
 2019

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 Time On: 22:29 02/07 Time Off: 06:12 02/08
 Time On Bottom: 00:34 02/08 Time Off Bottom: 03:34 02/08

Gas Volume Report

1st Open

2nd Open

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

Time	Orifice	PSI	MCF/D
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Company: L. D. Drilling, Inc
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SEC: 20 TWN: 18S RNG: 16W
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 Elevation: 2002 EGL
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Operation:
 Uploading recovery & pressures

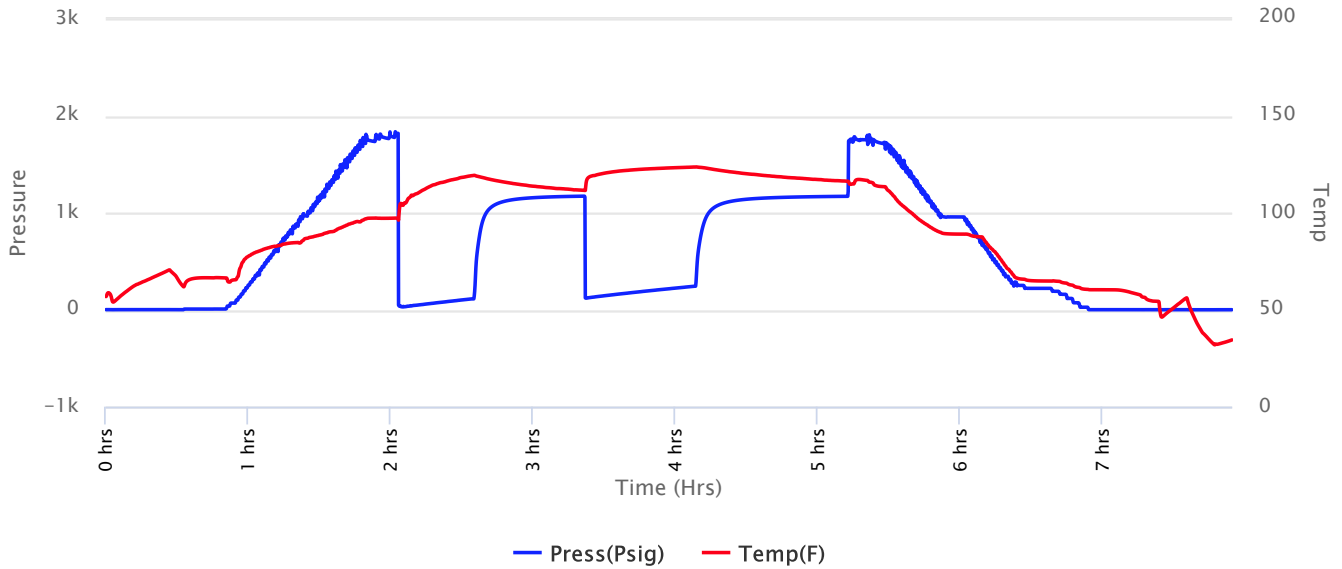
DATE
 February
08
 2019

DST #3 **Formation: Reagan Sand** **Test Interval: 3613 - 3623'** **Total Depth: 3623'**
 Time On: 20:21 02/08 Time Off: 04:22 02/09
 Time On Bottom: 22:22 02/08 Time Off Bottom: 01:22 02/09

Electronic Volume Estimate:
 1286'

<u>1st Open</u>	1st Close	<u>2nd Open</u>	2nd Close
Minutes: 30	Minutes: 45	Minutes: 45	Minutes: 60
Current Reading: 81.6" at 30 min	Current Reading: 4.4" at 45 min	Current Reading: 61.5" at 45 min	Current Reading: 3" at 60 min
Max Reading: 81.6"	Max Reading: 5.5"	Max Reading: 61.5"	Max Reading: 3"

Inside Recorder





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

SEC: 20 TWN: 18S RNG: 16W
 County: RUSH
 State: Kansas
 Drilling Contractor: L. D. Drilling, Inc - Rig 1
 Elevation: 2002 EGL
 Field Name: Otis-Albert
 Pool: Infield
 Job Number: 298

Operation:
 Uploading recovery & pressures

DATE
 February
08
 2019

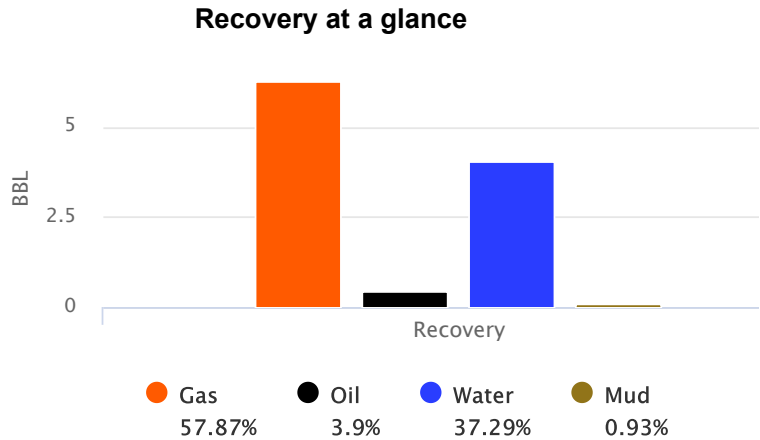
DST #3 **Formation: Reagan Sand** **Test Interval: 3613 - 3623'** **Total Depth: 3623'**
 Time On: 20:21 02/08 Time Off: 04:22 02/09
 Time On Bottom: 22:22 02/08 Time Off Bottom: 01:22 02/09

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
610	6.2586	G	100	0	0	0
10	0.1026	SLOCM	0	2	0	98
62	0.63612	HWCO	0	60	40	0
186	1.90836	SLOCW	0	2	98	0
186	1.90836	W	0	0	100	0

Total Recovered: 1054 ft
 Total Barrels Recovered: 10.81404

Reversed Out
 NO

Initial Hydrostatic Pressure	1777	PSI
Initial Flow	37 to 112	PSI
Initial Closed in Pressure	1171	PSI
Final Flow Pressure	122 to 243	PSI
Final Closed in Pressure	1170	PSI
Final Hydrostatic Pressure	1758	PSI
Temperature	124	°F
Pressure Change Initial Close / Final Close	0.1	%



GIP cubic foot volume: 35.13891



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

SEC: 20 TWN: 18S RNG: 16W
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 Rig 1
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Gas Volume Report

1st Open

2nd Open

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



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

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

FIELD SERVICE TICKET
1718 17637 A

DATE _____ TICKET NO. _____

DATE OF JOB 2-10-19 DISTRICT Pratt		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:						
CUSTOMER LD Drilling inc		LEASE McIntyre WELL NO. 1-20						
ADDRESS		COUNTY Rush STATE KS						
CITY STATE		SERVICE CREW MATTAI Marquez Dominguez SCOTT						
AUTHORIZED BY		JOB TYPE: 2-42 5 1/2" Long string						
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	TIME
20920	1						2-10	2:45
						ARRIVED AT JOB		8:40
						START OPERATION		8:39
19918	.5					FINISH OPERATION		9:30
						RELEASED		10:30
						MILES FROM STATION TO WELL		65

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

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

SIGNED: X RRL WLR
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 105	AA-2 cmt	SK	150		2,550.00
CP 103	60/40 P02	SK	30		360.00
CC 102	Colliflax	lb	38		1,400.00
CC 105	C-41 P	lb	71		284.00
CC 111	SAT	lb	814		407.00
CC 113	Gypsum	lb	705		528.75
CC 148	C-17	lb	92		1,840.00
CC 200	cmt gel	lb	52		13.00
CC 201	Gilsonite	lb	898		601.66
CR 125	Auto fill float shut 5 1/2	ea	1		360.00
CR 607	Latch down plug + basket 5 1/2	ea	1		400.00
CR 190	basket 5 1/2	ea	1		290.00
CR 165	turbulizer 5 1/2	ea	8		680.00
E 100	P.U. miles	Mi	65		292.50
E 101	heavy eq miles	Mi	130		975.00
E 113	prop + bulk del	TM	543		1,356.84
CR 204	depth chaser 3001-4000'	4hr	1		2,160.00
CC 240	blend + mix	SK	180		252.00
	plug container	job	1		250.00
S 003	supervisor	ea	1		1,500.00
CC 151	CHEMICAL / ACID DATA: muo flush	gal	1,000		1,500.00
				SB TOTAL	15,616.39

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		9,369.83

SERVICE REPRESENTATIVE Mike Mattai	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY <u>X RRL WLR</u>
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FIELD SERVICE ORDER NO. _____ (WELL OWNER OPERATOR CONTRACTOR OR AGENT)

Customer LD Drilling inc	Lease No.	Date 2-10-19
Lease McIntyre	Well # 1-20	
Field Order # 17637	Station Pratt	Casing 5 1/2
		Depth 3205
Type Job 2-42 5 1/2" Long String	Formation	County Rush
		State KS
		Legal Description 20-18S-16W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME	
Casing Size 5 1/2	Tubing Size	Shots/Ft		Acid 150 SXS AA-2	RATE 2 1/2 bbl/min	PRESS 490 psi	ISIP
Depth 3700	Depth	From	To	Pre Pad 35 SXS AA-2	Max 4040 PSI	490 psi	5 Min.
Volume 88.1	Volume	From	To	Pad	Min		10 Min.
Max Press 1,500	Max Press	From	To	Frac	Avg		15 Min.
Well Connection PC	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 3084	Packer Depth	From	To	Flush 87.6	Gas Volume		Total Load

Customer Representative Rick Wilson	Station Manager Westerman	Treater MATTAL
Service Units 83353	84980	20920
Driver Names MATTAL	Marquez	Domingo
		19960
		19918

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
6:40					ON LOCATION
					16' shoe JT 15.5# csng (used)
					Turbos 1,3,5,7,9,11,13,15 BASKET 2
7:30					CSNG ON BOTTOM
7:38					HOOK TO CSNG/BREAK CIRC W. RIG
8:39	300		5	5.5	PUMP 5 bbl WATER
8:41	300		24	5.5	PUMP 24 bbl mud flush
8:44	300		5	5.5	PUMP 5 bbl WATER
8:47	400		41	5	MIX 150 SXS AA-2
8:55			4	4	WASH PUMP+LINE/DROP PLUG
8:57	200		-	6.5	START DISPLACEMENT
9:10	300		67	6.5	LIFT PRESSURE
9:12	400		77	3	slow rate
9:15	1500		87.6	-	plug down, released + held
9:20			7		plug RAT hold
					circulation thru JOB
					JOB complete
					THANK YOU!
					MIKE MATTAL
					SCOTTY, EDMOND, DOMINGO



PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1002333	1718	02/04/2019
INVOICE NUMBER			
92902940			

Pratt (620) 672-1201

B L.D. DRILLING INC
 I ***7 SW 26TH AVE.***
 L GREAT BEND
 L KS US 67530
 T
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME MCINTYRE 1-20
 O LOCATION
 B COUNTY RUSH
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T JOB CONTACT
 E

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41159179	19843		Net - 30 days	03/06/2019

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<i>For Service Dates: 02/03/2019 to 02/03/2019</i>				
0041159179				
171817574A Cement-New Well Casing/Pi 02/03/2019 8 5/8" SURFACE CASING				
A-Con' Blend	255.00	EA	10.80	2,754.00 T
Common CEMENT	155.00	EA	9.60	1,488.00 T
Calcium Chloride	1,012.00	LB	0.63	637.56 T
Celloflake	103.00	LB	2.22	228.66 T
Flapper Type Insert Float Valves. 8 5/8"	1.00	EA	168.00	168.00
Top Rubber Cement Plug, 8 5/8"	1.00	EA	135.00	135.00
"Unit Mileage Chg (PU, cars one way)"	65.00	MI	2.70	175.50
Heavy Equipment Mileage	195.00	MI	4.50	877.50
Proppant & Bulk Del. Chgs., per ton mil	1.00	EA	1,881.75	1,881.75
Depth Charge; 1001'-2000'	1.00	EA	900.00	900.00
Blending & Mixing Service Charge	410.00	SK	0.84	344.40
"Service Supervisor, first 8 hrs on loc.	1.00	EA	105.00	105.00

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	9,695.37
BASIC ENERGY SERVICES,LP	BASIC ENERGY SERVICES,LP	TAX	332.03
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	10,027.40
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

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

20-185-16W

FIELD SERVICE TICKET
1718 17574 A

DATE _____ TICKET NO. _____

DATE OF JOB: 7/3/2019		DISTRICT: Pratts		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:						
CUSTOMER: LD Drilling		LEASE: McIntyre		WELL NO.: 1-20						
ADDRESS:		COUNTY: Rush		STATE: KS						
CITY:		STATE:		SERVICE CREW: Dgrin, Bieri, Pisz, Ed, Clarence						
AUTHORIZED BY:		JOB TYPE: 242/8 5/8 surface								
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME
19843	1/2						7/2			3:15
21010	1/2						7/2			5:30
19862	1/2						7/3			12:00
							7/3			1:00
							7/3			1:30
										MILES FROM STATION TO WELL: 73

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

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

SIGNED: [Signature]
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP101	A-Con Blend Common	SK	255		4,590.00
CP100c	Common Cement	SK	155		2,480.00
CC109	Calcium Chloride	Lb	1012		1,062.60
CC102	Cellofiske	Lb	103		381.10
CF1453	Flapper Type Insert Float Valves, 8 5/8	EQ	1		280.00
CF105	Top Rubber Plug 8 5/8	EQ	1		225.00
E100	Unit Mileage Charge - Pickups, Small, USIS & Accs	mi	65		292.50
E101	Hesvy Equipment Mileage	mi	195		1,462.50
E113	Proppant and Bulk Delivery Charge, per ton/mile	Ton/mi	1255		3,136.25
CE202	Depth Charge, 1,001 - 2,000	4hr	1		1,500.00
CE240	Blending & Mixing Service Charge	SK	410		574.00
S003	Service Supervisor, first 8 hrs on Loc.	EQ	1		175.00
				SUB TOTAL	16,158.95

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
Discount		
TOTAL		9,695.37

SERVICE REPRESENTATIVE: [Signature] THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: [Signature]
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO. _____

