

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
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	---	------------------------------------

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	RAMSEY TRUST 15B 1
Doc ID	1482945

All Electric Logs Run

DUAL COMP POROSITY LOG
MICRORESISTIVITY LOG
DUAL INDUCTION LOG
BOREHOLE COMPENSATED SONIC LOG

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	RAMSEY TRUST 15B 1
Doc ID	1482945

Tops

Name	Top	Datum
ANHYDRITE	2268	+692
BASE ANHYDRITE	2286	+674
STOTLER	3529	-569
HEEBNER	3918	-958
LANSING	3958	-998
MUNCIE	4140	-1180
BASE KANSAS CITY	4323	-1363
ALTAMONT	4377	-1417
PAWNEE	4450	-1490
FT SCOTT	4499	-1539
CHEROKEE	4520	-1560
JOHNSON	4560	-1600
MISSISSIPPI	4590	-1630



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

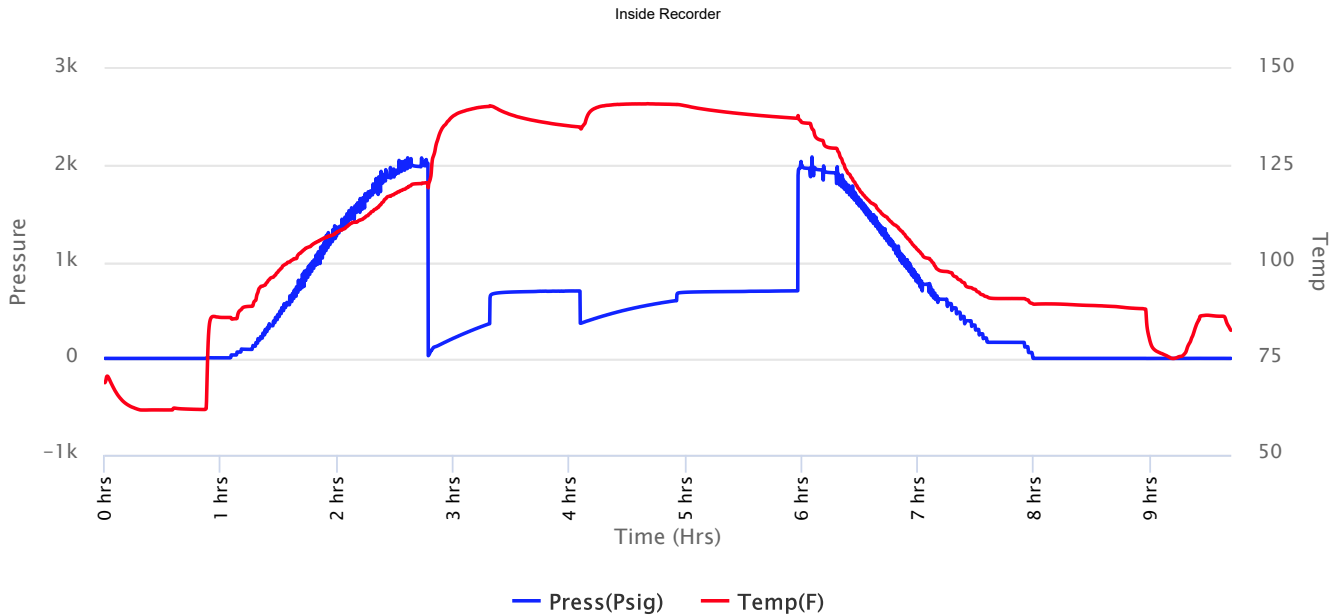
Operation:
 Uploading recovery & pressures

DATE
 June
19
 2019

DST #1 **Formation: Lans H** **Test Interval: 4126 - 4180'** **Total Depth: 4180'**
 Time On: 01:44 06/19 Time Off: 11:09 06/19
 Time On Bottom: 04:27 06/19 Time Off Bottom: 07:27 06/19

Electronic Volume Estimate:
 1305'

<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: 60.8" at 30 min	Current Reading: 0" at 45 min	Current Reading: 57.1" at 45 min	Current Reading: 0" at 60 min
Max Reading: 60.8"	Max Reading: 0"	Max Reading: 57.1"	Max Reading: 0"





Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

DATE
 June
19
 2019

DST #1 **Formation: Lans H** **Test Interval: 4126 - 4180'** **Total Depth: 4180'**
 Time On: 01:44 06/19 Time Off: 11:09 06/19
 Time On Bottom: 04:27 06/19 Time Off Bottom: 07:27 06/19

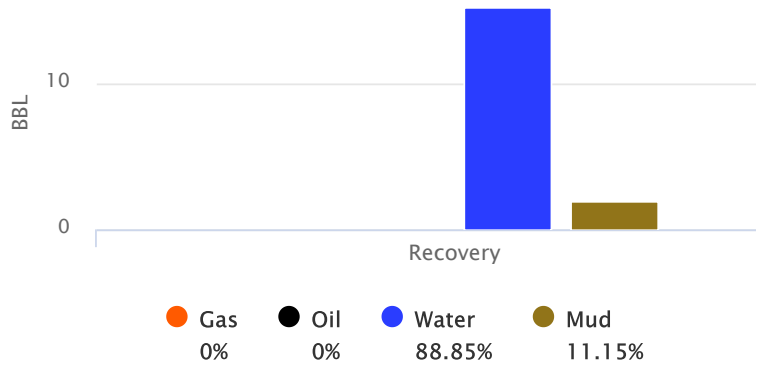
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
184	2.61832	HMCW	0	0	55	45
1134	14.404229	SLMCW	0	0	95	5

Total Recovered: 1318 ft
 Total Barrels Recovered: 17.022549

Reversed Out
 NO

Initial Hydrostatic Pressure	1988	PSI
Initial Flow	28 to 359	PSI
Initial Closed in Pressure	699	PSI
Final Flow Pressure	364 to 598	PSI
Final Closed in Pressure	700	PSI
Final Hydrostatic Pressure	1984	PSI
Temperature	141	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
19
2019

DST #1 Formation: Lans H Test Interval: 4126 - Total Depth: 4180'
4180'
Time On: 01:44 06/19 Time Off: 11:09 06/19
Time On Bottom: 04:27 06/19 Time Off Bottom: 07:27 06/19

BUCKET MEASUREMENT:

1st Open: 1" Blow. BOB in 5 mins
1st Close: NOBB
2nd Open: 1/4" Blow. BOB in 7 3/4 mins
2nd Close: NOBB

REMARKS:

Tool Sample: 0% Gas 0% Oil 95% Water 5% Mud
Ph: 7
Measured RW: .26 @ 61 degrees °F
RW at Formation Temp: 0.119 @ 141 °F
Chlorides: 26,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
19
2019

DST #1 Formation: Lans H Test Interval: 4126 - 4180' Total Depth: 4180'
Time On: 01:44 06/19 Time Off: 11:09 06/19
Time On Bottom: 04:27 06/19 Time Off Bottom: 07:27 06/19

Down Hole Makeup

Heads Up: 13.16 FT	Packer 1: 4120.71 FT
Drill Pipe: 3920.2 FT <i>ID-3 1/2</i>	Packer 2: 4125.71 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4110.13 FT
Collars: 186.1 FT <i>ID-2 1/4</i>	Bottom Recorder: 4164 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: 54.29	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): 31.29 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 17 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
19
2019

DST #1 Formation: Lans H Test Interval: 4126 - Total Depth: 4180'
4180'
Time On: 01:44 06/19 Time Off: 11:09 06/19
Time On Bottom: 04:27 06/19 Time Off Bottom: 07:27 06/19

Mud Properties

Mud Type: Chem **Weight:** 9 **Viscosity:** 64 **Filtrate:** 6.4 **Chlorides:** 1500 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
19
2019

DST #1 **Formation: Lans H** **Test Interval: 4126 - 4180'** **Total Depth: 4180'**
Time On: 01:44 06/19 Time Off: 11:09 06/19
Time On Bottom: 04:27 06/19 Time Off Bottom: 07:27 06/19

Gas Volume Report

1st Open

2nd Open

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

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



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

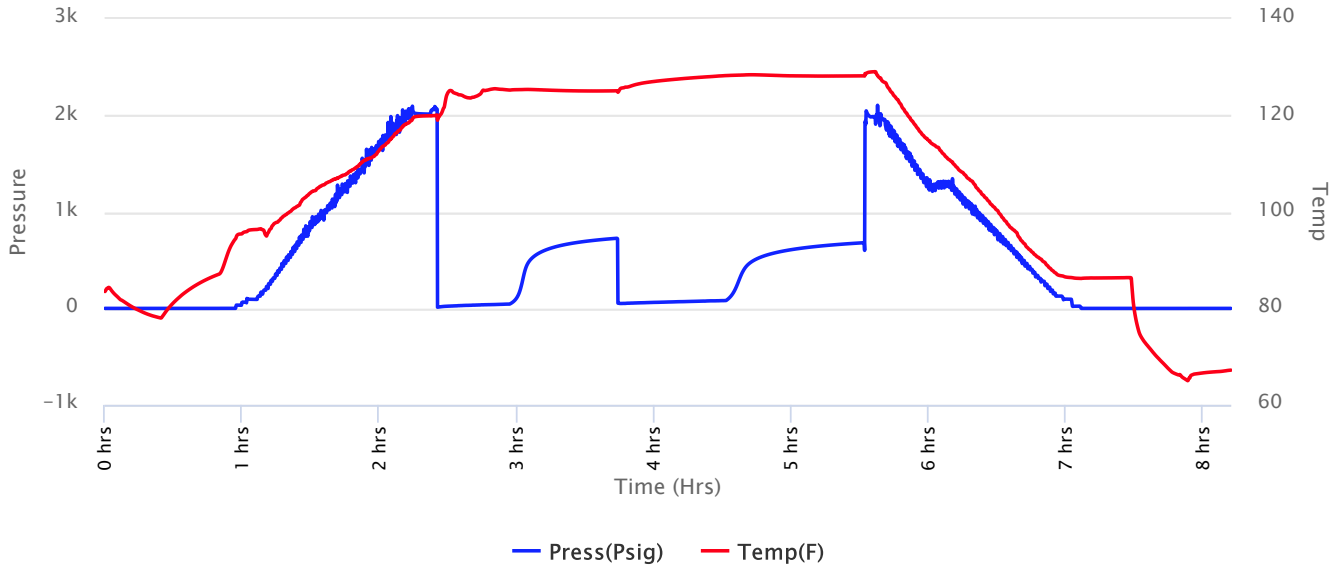
DATE
June
19
2019

DST #2 **Formation: Lans I** **Test Interval: 4182 - 4210'** **Total Depth: 4210'**
Time On: 19:28 06/19 Time Off: 03:26 06/20
Time On Bottom: 21:49 06/19 Time Off Bottom: 00:49 06/20

Electronic Volume Estimate:
230'

<u>1st Open</u>	1st Close	<u>2nd Open</u>	2nd Close
Minutes: 30	Minutes: 45	Minutes: 45	Minutes: 60
Current Reading: 3.2" at 30 min	Current Reading: 0" at 45 min	Current Reading: 5.3" at 45 min	Current Reading: .1" at 60 min
Max Reading: 3.2"	Max Reading: 1.2"	Max Reading: 5.3"	Max Reading: .1"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

DATE
 June
19
 2019

DST #2 **Formation: Lans I** **Test Interval: 4182 - 4210'** **Total Depth: 4210'**
 Time On: 19:28 06/19 Time Off: 03:26 06/20
 Time On Bottom: 21:49 06/19 Time Off Bottom: 00:49 06/20

Recovered

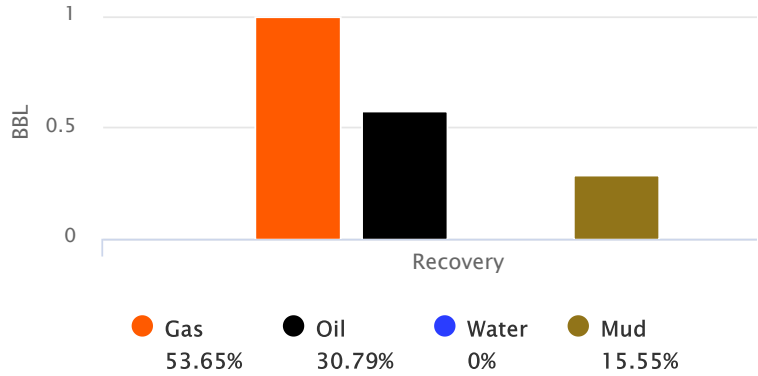
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
73	0.972689	G	100	0	0	0
116	0.57072	O	0	100	0	0
63	0.30996	SLGCM	7	0	0	93

Total Recovered: 252 ft
 Total Barrels Recovered: 1.853369

Reversed Out
 NO

Initial Hydrostatic Pressure	2013	PSI
Initial Flow	12 to 45	PSI
Initial Closed in Pressure	726	PSI
Final Flow Pressure	51 to 82	PSI
Final Closed in Pressure	681	PSI
Final Hydrostatic Pressure	2011	PSI
Temperature	129	°F
Pressure Change Initial Close / Final Close	6.3	%

Recovery at a glance



GIP cubic foot volume: 5.58298



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
19
2019

DST #2 Formation: Lans I Test Interval: 4182 - Total Depth: 4210'
4210'
Time On: 19:28 06/19 Time Off: 03:26 06/20
Time On Bottom: 21:49 06/19 Time Off Bottom: 00:49 06/20

BUCKET MEASUREMENT:

1st Open: WSB. Built to 3 1/4 inch in 30 mins
1st Close: NOBB
2nd Open: WSB. Built to 5 1/4 inch in 45 mins
2nd Close: Weak Surface Below

REMARKS:

Tool Sample: 10% Gas 10% Oil 0% Water 80% Mud
Gravity: 29 @ 60 °F



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
19
2019

DST #2 **Formation: Lans I** **Test Interval: 4182 - 4210'** **Total Depth: 4210'**
Time On: 19:28 06/19 Time Off: 03:26 06/20
Time On Bottom: 21:49 06/19 Time Off Bottom: 00:49 06/20

Down Hole Makeup

Heads Up: 19.23 FT	Packer 1: 4177 FT
Drill Pipe: 3982.56 FT <i>ID-3 1/2</i>	Packer 2: 4182 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4166.42 FT
Collars: 186.1 FT <i>ID-2 1/4</i>	Bottom Recorder: 4184 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: 28	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): FT <i>4 1/2-FH</i>	
Change Over: FT	
Drill Pipe: (in anchor): FT <i>ID-3 1/2</i>	
Change Over: FT	
Perforations: (below): 27 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
19
2019

DST #2 Formation: Lans I Test Interval: 4182 - Total Depth: 4210'
4210'
Time On: 19:28 06/19 Time Off: 03:26 06/20
Time On Bottom: 21:49 06/19 Time Off Bottom: 00:49 06/20

Mud Properties

Mud Type: Chem **Weight:** 9.2 **Viscosity:** 54 **Filtrate:** 6.8 **Chlorides:** 2000 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
19
2019

DST #2 **Formation: Lans I** **Test Interval: 4182 - 4210'** **Total Depth: 4210'**
Time On: 19:28 06/19 Time Off: 03:26 06/20
Time On Bottom: 21:49 06/19 Time Off Bottom: 00:49 06/20

Gas Volume Report

1st Open

2nd Open

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

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



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

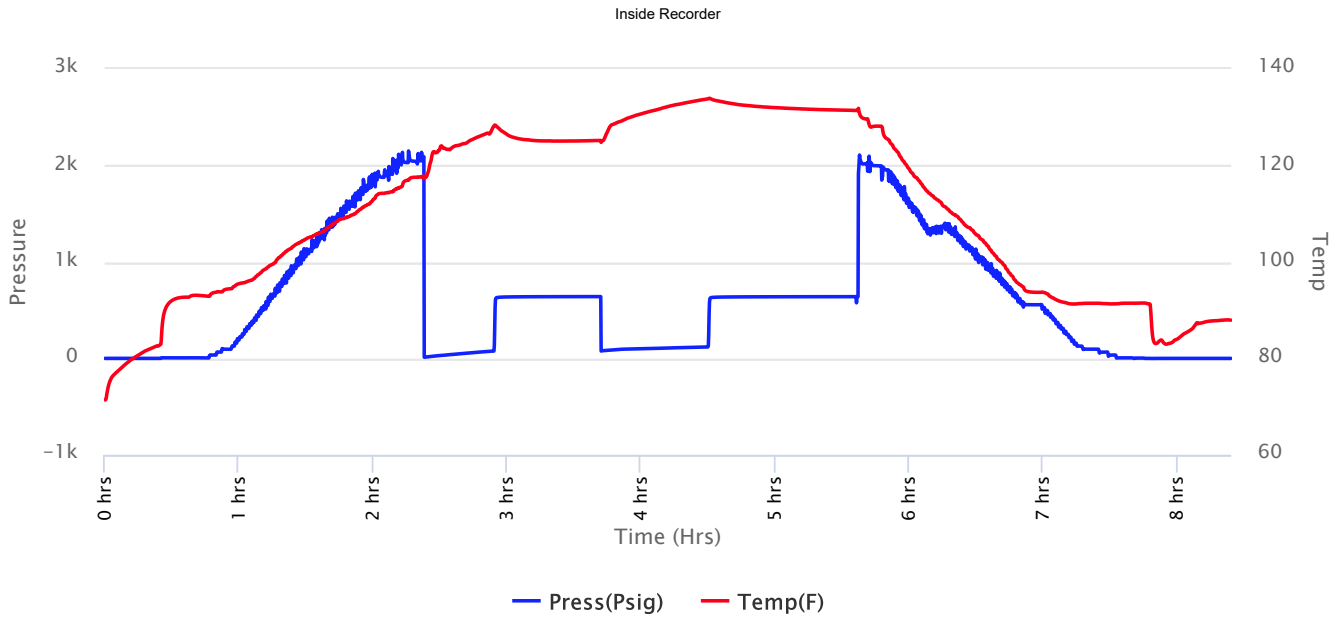
DATE
June
20
2019

DST #3 Formation: Lans J Test Interval: 4212 - 4238' Total Depth: 4237.60'

Time On: 10:50 06/20 Time Off: 19:00 06/20
Time On Bottom: 13:09 06/20 Time Off Bottom: 16:09 06/20

Electronic Volume Estimate:
205'

<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" at 30 min	Current Reading: 0" at 45 min	Current Reading: 3.5" at 45 min	Current Reading: 0" at 60 min
Max Reading: 4"	Max Reading: 0"	Max Reading: 3.5"	Max Reading: 0"





Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

DATE
 June
20
 2019

DST #3 **Formation: Lans J** **Test Interval: 4212 - 4238'** **Total Depth: 4237.60'**
 Time On: 10:50 06/20 Time Off: 19:00 06/20
 Time On Bottom: 13:09 06/20 Time Off Bottom: 16:09 06/20

Recovered

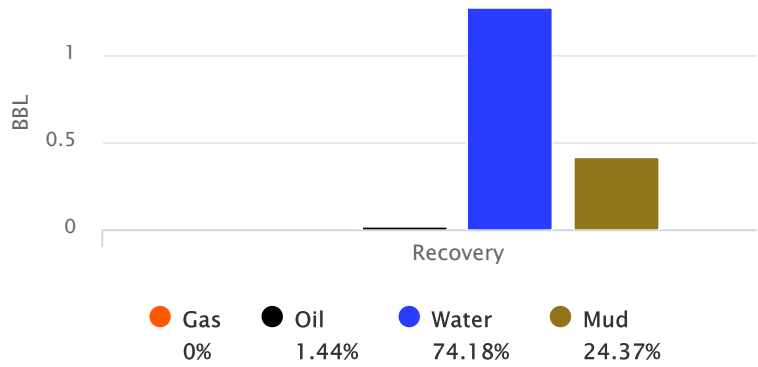
Foot	BBLS	Description of Fluid	Gas %	Oil %	Water %	Mud %
53	0.75419	SLOCHMCW	0	2	63	35
189	0.956879	SLOCSLMCW	0	1	83	16

Total Recovered: 242 ft
 Total Barrels Recovered: 1.711069

Reversed Out
 NO

Initial Hydrostatic Pressure	2041	PSI
Initial Flow	12 to 77	PSI
Initial Closed in Pressure	640	PSI
Final Flow Pressure	76 to 119	PSI
Final Closed in Pressure	639	PSI
Final Hydrostatic Pressure	2043	PSI
Temperature	134	°F
Pressure Change Initial Close / Final Close	0.1	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
20
2019

DST #3 Formation: Lans J Test Interval: 4212 - Total Depth: 4237.60'
4238'
Time On: 10:50 06/20 Time Off: 19:00 06/20
Time On Bottom: 13:09 06/20 Time Off Bottom: 16:09 06/20

BUCKET MEASUREMENT:

1st Open: 1/4" Blow. Built 4 inches in 30 mins
1st Close: NOBB
2nd Open: WSB. Built to 3 1/2 inches in 45 mins
2nd Close: NOBB

REMARKS:

Tool Sample: 0% Gas 10% Oil 60% Water 30% Mud
Ph: 7
Measured RW: .33 @ 80 degrees °F
RW at Formation Temp: 0.203 @ 134 °F
Chlorides: 22,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
20
2019

DST #3 Formation: Lans J Test Interval: 4212 - Total Depth: 4237.60'
4238'
Time On: 10:50 06/20 Time Off: 19:00 06/20
Time On Bottom: 13:09 06/20 Time Off Bottom: 16:09 06/20

Down Hole Makeup

Heads Up: 20.52 FT	Packer 1: 4207 FT
Drill Pipe: 4013.85 FT <i>ID-3 1/2</i>	Packer 2: 4212 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4196.42 FT
Collars: 186.1 FT <i>ID-2 1/4</i>	Bottom Recorder: 4214.6 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: 25	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): FT <i>4 1/2-FH</i>	
Change Over: FT	
Drill Pipe: (in anchor): FT <i>ID-3 1/2</i>	
Change Over: FT	
Perforations: (below): 24 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
20
2019

DST #3 Formation: Lans J Test Interval: 4212 - Total Depth: 4237.60'
4238'
Time On: 10:50 06/20 Time Off: 19:00 06/20
Time On Bottom: 13:09 06/20 Time Off Bottom: 16:09 06/20

Mud Properties

Mud Type: Chem **Weight:** 9.2 **Viscosity:** 53 **Filtrate:** 7.2 **Chlorides:** 2500 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
20
2019

DST #3 Formation: Lans J Test Interval: 4212 - Total Depth: 4237.60'
4238'
Time On: 10:50 06/20 Time Off: 19:00 06/20
Time On Bottom: 13:09 06/20 Time Off Bottom: 16:09 06/20

Gas Volume Report

1st Open

2nd Open

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

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



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

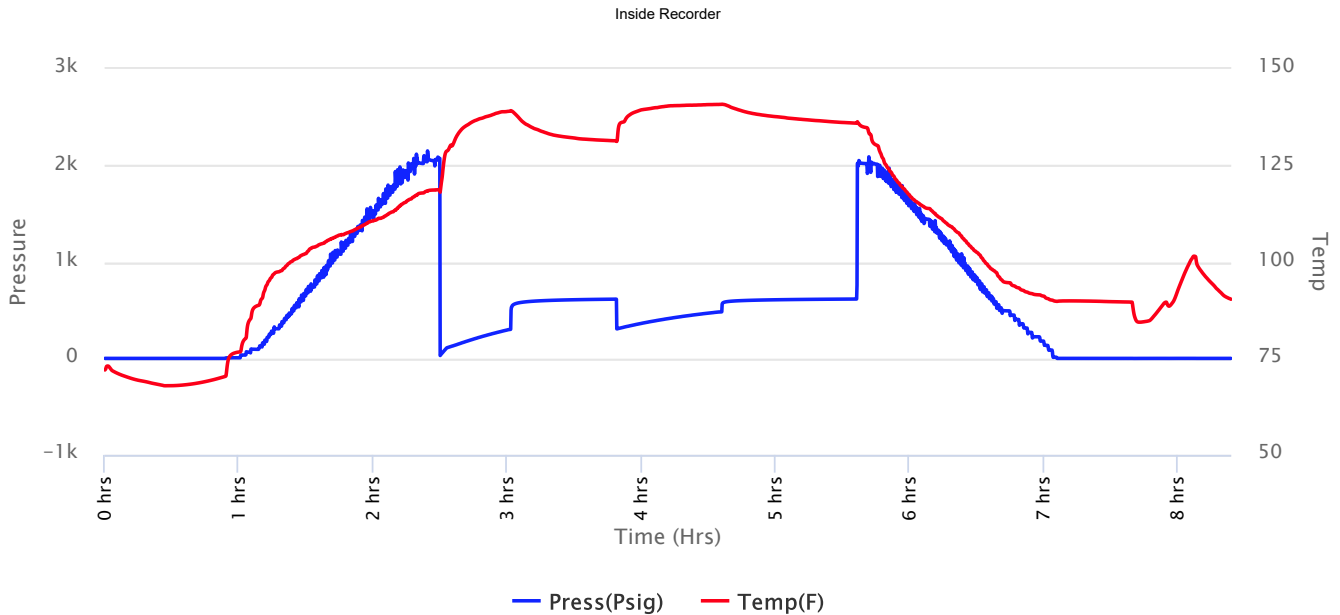
Operation:
 Uploading recovery & pressures

DATE
 June
21
 2019

DST #4 **Formation: Lans K+L** **Test Interval: 4240 - 4326'** **Total Depth: 4326'**
 Time On: 07:49 06/21 Time Off: 15:59 06/21
 Time On Bottom: 10:16 06/21 Time Off Bottom: 13:16 06/21

Electronic Volume Estimate:
 1039'

<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: 47.9" at 30 min	Current Reading: 0" at 45 min	Current Reading: 38.7" at 45 min	Current Reading: 0" at 60 min
Max Reading: 47.9"	Max Reading: 0"	Max Reading: 38.7"	Max Reading: 0"





Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

DATE
 June
21
 2019

DST #4 **Formation: Lans K+L** **Test Interval: 4240 - 4326'** **Total Depth: 4326'**
 Time On: 07:49 06/21 Time Off: 15:59 06/21
 Time On Bottom: 10:16 06/21 Time Off Bottom: 13:16 06/21

Recovered

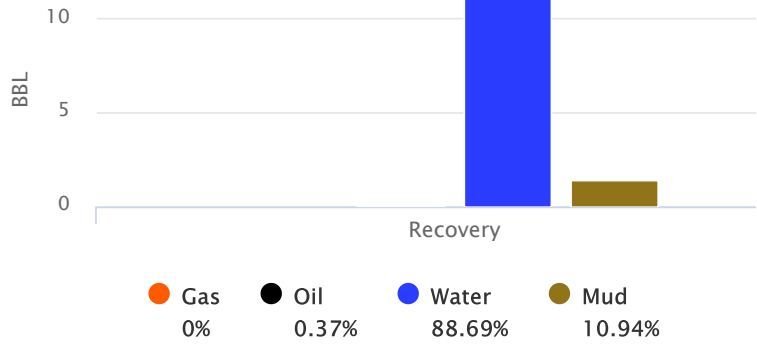
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
174	2.47602	SLOCHWCM	0	2	48	50
882	10.818269	SLMCW	0	0	98	2

Total Recovered: 1056 ft
 Total Barrels Recovered: 13.294289

Reversed Out
 NO

Initial Hydrostatic Pressure	2018	PSI
Initial Flow	30 to 302	PSI
Initial Closed in Pressure	614	PSI
Final Flow Pressure	306 to 483	PSI
Final Closed in Pressure	615	PSI
Final Hydrostatic Pressure	2018	PSI
Temperature	141	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
21
2019

DST #4	Formation: Lans K+L	Test Interval: 4240 - 4326'	Total Depth: 4326'
	Time On: 07:49 06/21	Time Off: 15:59 06/21	
	Time On Bottom: 10:16 06/21	Time Off Bottom: 13:16 06/21	

BUCKET MEASUREMENT:

1st Open: 1/2" Blow. BOB in 6 mins
1st Close: NOBB
2nd Open: 1/4" Blow. BOB in 11 mins
2nd Close: NOBB

REMARKS:

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

Ph: 7

Measured RW: .33 @ 80 degrees °F

RW at Formation Temp: 0.194 @ 141 °F

Chlorides: 27,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
21
2019

DST #4 **Formation: Lans K+L** **Test Interval: 4240 - 4326'** **Total Depth: 4326'**
Time On: 07:49 06/21 Time Off: 15:59 06/21
Time On Bottom: 10:16 06/21 Time Off Bottom: 13:16 06/21

Down Hole Makeup

Heads Up: 22.36 FT	Packer 1: 4235.09 FT
Drill Pipe: 4043.78 FT <i>ID-3 1/2</i>	Packer 2: 4240.09 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4224.51 FT
Collars: 186.1 FT <i>ID-2 1/4</i>	Bottom Recorder: 4310 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: 85.91	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: .5 FT	
Drill Pipe: (in anchor): 63.41 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 17 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:

Uploading recovery &
pressures

DATE

June
21
2019

DST #4	Formation: Lans K+L	Test Interval: 4240 - 4326'	Total Depth: 4326'
	Time On: 07:49 06/21	Time Off: 15:59 06/21	
	Time On Bottom: 10:16 06/21	Time Off Bottom: 13:16 06/21	

Mud Properties

Mud Type: Chem

Weight: 9.3

Viscosity: 51

Filtrate: 6.4

Chlorides: 2000 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
21
2019

DST #4 **Formation: Lans K+L** **Test Interval: 4240 - 4326'** **Total Depth: 4326'**
Time On: 07:49 06/21 Time Off: 15:59 06/21
Time On Bottom: 10:16 06/21 Time Off Bottom: 13:16 06/21

Gas Volume Report

1st Open

2nd Open

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

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



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

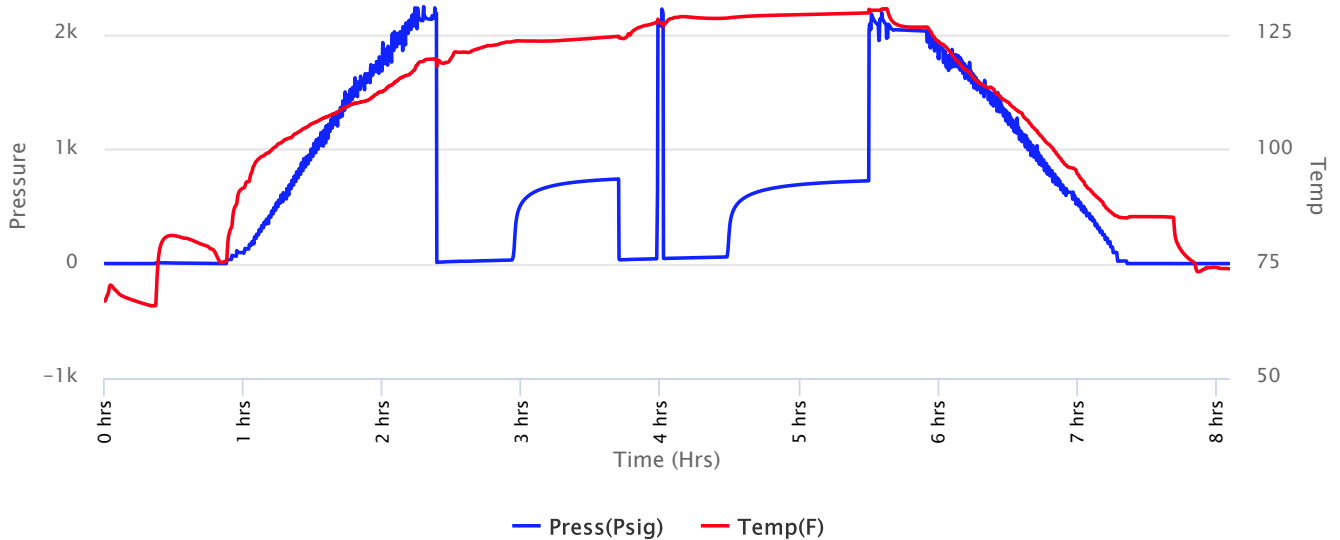
DATE
 June
22
 2019

DST #5 **Formation: Altamont B** **Test Interval: 4394 - 4412'** **Total Depth: 4412'**
 Time On: 09:15 06/22 Time Off: 17:07 06/22
 Time On Bottom: 11:35 06/22 Time Off Bottom: 14:35 06/22

Electronic Volume Estimate:
 64'

<u>1st Open</u>	1st Close	<u>2nd Open</u>	2nd Close
Minutes: 30	Minutes: 45	Minutes: 45	Minutes: 60
Current Reading: 1.2" at 30 min	Current Reading: 0" at 45 min	Current Reading: .7" at 45 min	Current Reading: 0" at 60 min
Max Reading: 1.2"	Max Reading: 0"	Max Reading: .7"	Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

DATE
 June
22
 2019

DST #5 **Formation: Altamont B** **Test Interval: 4394 - 4412'** **Total Depth: 4412'**
 Time On: 09:15 06/22 Time Off: 17:07 06/22
 Time On Bottom: 11:35 06/22 Time Off Bottom: 14:35 06/22

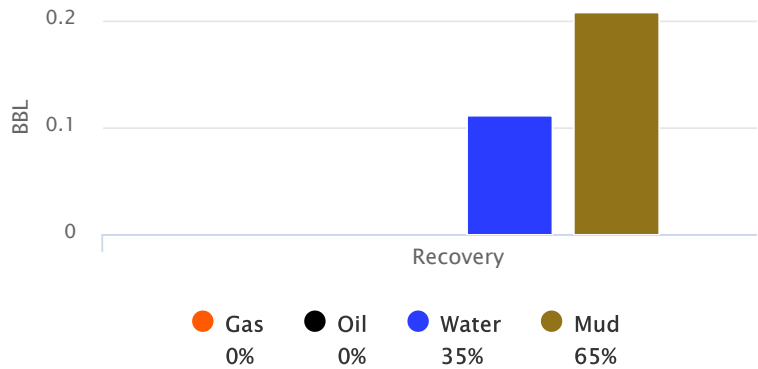
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
65	0.3198	HWCM	0	0	35	65

Total Recovered: 65 ft
 Total Barrels Recovered: 0.3198

Reversed Out
 NO

Initial Hydrostatic Pressure	2131	PSI
Initial Flow	9 to 33	PSI
Initial Closed in Pressure	738	PSI
Final Flow Pressure	33 to 59	PSI
Final Closed in Pressure	723	PSI
Final Hydrostatic Pressure	2132	PSI
Temperature	130	°F
Pressure Change Initial Close / Final Close	2.1	%

Recovery at a glance



GIP cubic foot volume: 0



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
22
2019

DST #5 **Formation: Altamont B** **Test Interval: 4394 - 4412'** **Total Depth: 4412'**
Time On: 09:15 06/22 Time Off: 17:07 06/22
Time On Bottom: 11:35 06/22 Time Off Bottom: 14:35 06/22

Down Hole Makeup

Heads Up: 25.17 FT	Packer 1: 4389 FT
Drill Pipe: 4200.5 FT <i>ID-3 1/2</i>	Packer 2: 4394 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Packer 3: 4412 FT
Collars: 186.1 FT <i>ID-2 1/4</i>	Top Recorder: 4378.42 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Bottom Recorder: 4396 FT
Total Anchor: 18	Below Straddle Recorder: 4413 FT
Anchor Makeup	Well Bore Size: 7 7/8
Packer Sub: 1 FT	Surface Choke: 1"
Perforations: (top): FT <i>4 1/2-FH</i>	Bottom Choke: 5/8"
Change Over: FT	
Drill Pipe: (in anchor): FT <i>ID-3 1/2</i>	
Change Over: FT	
Perforations: (below): 17 FT <i>4 1/2-FH</i>	
STRADDLE	
Straddle Packer(s): FT	
Change Over: FT	
Drill Pipe: FT <i>ID-3 1/2"</i>	
Change Over: FT	
Perforations (in tail pipe): FT <i>4 1/2-FH</i>	



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
22
2019

DST #5 **Formation: Altamont B** **Test Interval: 4394 - 4412'** **Total Depth: 4412'**
Time On: 09:15 06/22 Time Off: 17:07 06/22
Time On Bottom: 11:35 06/22 Time Off Bottom: 14:35 06/22

Gas Volume Report

1st Open

2nd Open

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

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



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

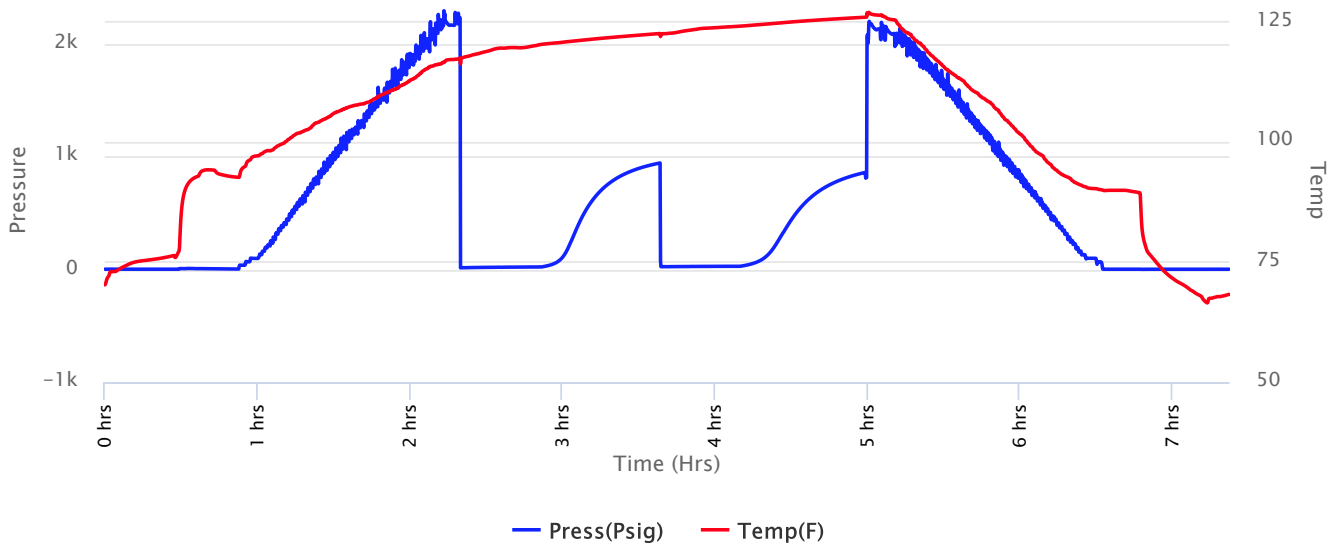
DATE
June
23
2019

DST #6 **Formation:** Pawnee/MyRick/Ft.Scott **Test Interval:** 4445 - 4512' **Total Depth:** 4512'
Time On: 12:25 06/23 Time Off: 19:35 06/23
Time On Bottom: 14:41 06/23 Time Off Bottom: 17:11 06/23

Electronic Volume Estimate:
31'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 45	Minutes: 30	Minutes: 45
Current Reading: .8" at 30 min	Current Reading: .1" at 45 min	Current Reading: 0" at 30 min	Current Reading: 0" at 45 min
Max Reading: .8"	Max Reading: .1"	Max Reading: 0"	Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

DATE
 June
23
 2019

DST #6 **Formation:** Pawnee/MyRick/Ft.Scott **Test Interval:** 4445 - 4512' **Total Depth:** 4512'
 Time On: 12:25 06/23 Time Off: 19:35 06/23
 Time On Bottom: 14:41 06/23 Time Off Bottom: 17:11 06/23

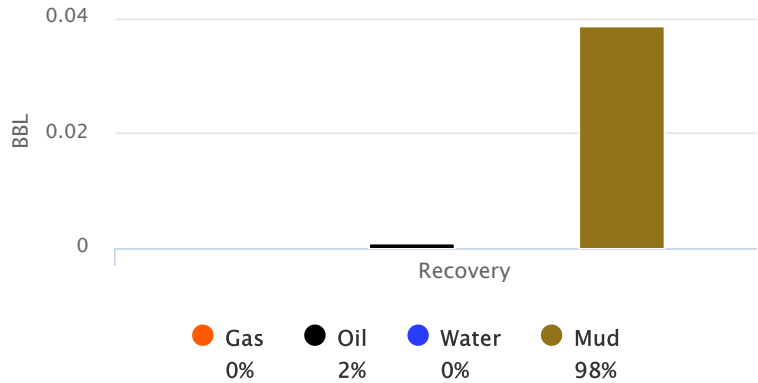
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
8	0.03936	SLOCM	0	2	0	98

Total Recovered: 8 ft
 Total Barrels Recovered: 0.03936

Reversed Out
 NO

Initial Hydrostatic Pressure	2160	PSI
Initial Flow	12 to 20	PSI
Initial Closed in Pressure	941	PSI
Final Flow Pressure	22 to 26	PSI
Final Closed in Pressure	857	PSI
Final Hydrostatic Pressure	2157	PSI
Temperature	126	°F
Pressure Change Initial Close / Final Close	9.0	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
23
2019

DST #6 **Formation:** **Test Interval: 4445 -** **Total Depth: 4512'**
Pawnee/MyRick/Ft.Scott **4512'**
Time On: 12:25 06/23 Time Off: 19:35 06/23
Time On Bottom: 14:41 06/23 Time Off Bottom: 17:11 06/23

BUCKET MEASUREMENT:

1st Open: WSB. Built to 3/4 inch in 30 mins.

1st Close: NOBB

2nd Open: No Blow

2nd Close: NOBB

REMARKS:

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



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
23
2019

DST #6 **Formation:** Pawnee/MyRick/Ft.Scott **Test Interval:** 4445 - 4512' **Total Depth:** 4512'
Time On: 12:25 06/23 Time Off: 19:35 06/23
Time On Bottom: 14:41 06/23 Time Off Bottom: 17:11 06/23

Down Hole Makeup

Heads Up: 5.13 FT	Packer 1: 4439.96 FT
Drill Pipe: 4231.42 FT <i>ID-3 1/2</i>	Packer 2: 4444.96 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4429.38 FT
Collars: 186.1 FT <i>ID-2 1/4</i>	Bottom Recorder: 4482 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: 67.04	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: .5 FT	
Drill Pipe: (in anchor): 31.54 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 31 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
23
2019

DST #6 **Formation:** **Test Interval: 4445 -** **Total Depth: 4512'**
Pawnee/MyRick/Ft.Scott **4512'**
Time On: 12:25 06/23 Time Off: 19:35 06/23
Time On Bottom: 14:41 06/23 Time Off Bottom: 17:11 06/23

Mud Properties

Mud Type: Chem **Weight:** 9.3 **Viscosity:** 62 **Filtrate:** 9.6 **Chlorides:** 3000 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
23
2019

DST #6 **Formation:** **Test Interval: 4445 -** **Total Depth: 4512'**
Pawnee/MyRick/Ft.Scott **4512'**
Time On: 12:25 06/23 Time Off: 19:35 06/23
Time On Bottom: 14:41 06/23 Time Off Bottom: 17:11 06/23

Gas Volume Report

1st Open

2nd Open

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

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



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

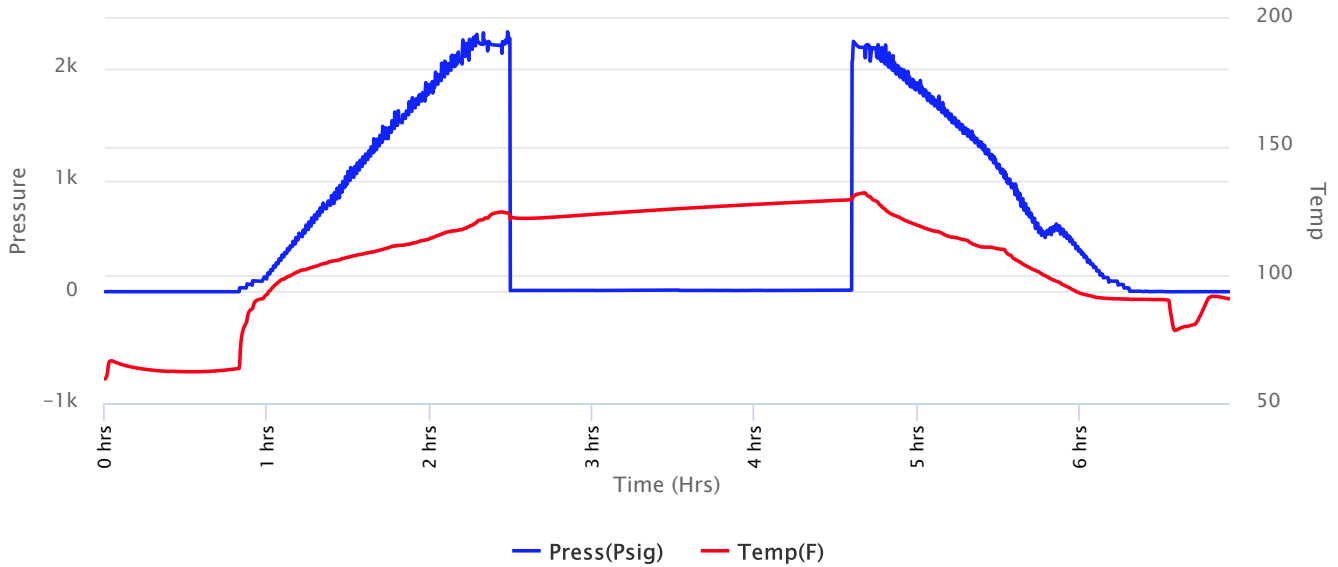
DATE
June
24
2019

DST #7 **Formation: Morrow+Miss** **Test Interval: 4566 - 4594'** **Total Depth: 4594'**
Time On: 08:22 06/24 Time Off: 15:05 06/24
Time On Bottom: 10:48 06/24 Time Off Bottom: 12:48 06/24

Electronic Volume Estimate:
5'

<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: .15"	Max Reading: 0"	Max Reading: 0"	Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

DATE
 June
24
 2019

DST #7 **Formation: Morrow+Miss** **Test Interval: 4566 - 4594'** **Total Depth: 4594'**
 Time On: 08:22 06/24 Time Off: 15:05 06/24
 Time On Bottom: 10:48 06/24 Time Off Bottom: 12:48 06/24

Recovered

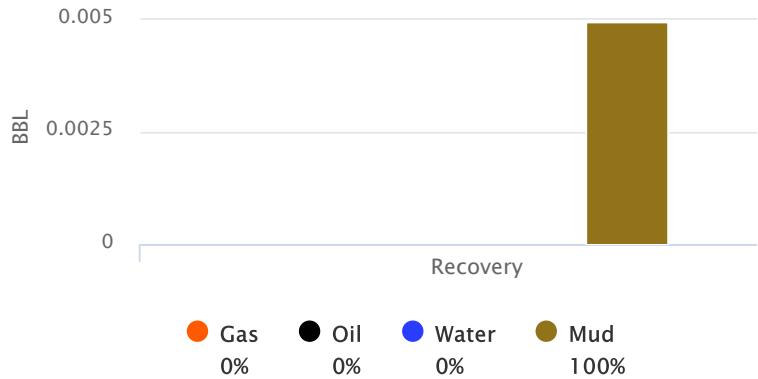
<u>Foot</u>	<u>BBLs</u>	<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
1	0.00492	M	0	0	0	100

Total Recovered: 1 ft
 Total Barrels Recovered: 0.00492

Reversed Out
 NO

Initial Hydrostatic Pressure	2210	PSI
Initial Flow	10 to 12	PSI
Initial Closed in Pressure	15	PSI
Final Flow Pressure	12 to 13	PSI
Final Closed in Pressure	14	PSI
Final Hydrostatic Pressure	2208	PSI
Temperature	130	°F
Pressure Change Initial Close / Final Close	4.6	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
24
2019

DST #7	Formation: Morrow+Miss	Test Interval: 4566 - 4594'	Total Depth: 4594'
	Time On: 08:22 06/24	Time Off: 15:05 06/24	
	Time On Bottom: 10:48 06/24	Time Off Bottom: 12:48 06/24	

BUCKET MEASUREMENT:

1st Open: Surface Blow. Blow didnt build
1st Close: NOBB
2nd Open: NOBB
2nd Close: NOBB

REMARKS:

Tool Sample: 0% Gas 1% Oil 0% Water 99% Mud



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
24
2019

DST #7 **Formation:** Morrow+Miss **Test Interval:** 4566 - 4594' **Total Depth:** 4594'
Time On: 08:22 06/24 Time Off: 15:05 06/24
Time On Bottom: 10:48 06/24 Time Off Bottom: 12:48 06/24

Down Hole Makeup

Heads Up: 9.98 FT	Packer 1: 4561 FT
Drill Pipe: 4357.31 FT <i>ID-3 1/2</i>	Packer 2: 4566 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4550.42 FT
Collars: 186.1 FT <i>ID-2 1/4</i>	Bottom Recorder: 4568 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: 28	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): FT <i>4 1/2-FH</i>	
Change Over: FT	
Drill Pipe: (in anchor): FT <i>ID-3 1/2</i>	
Change Over: FT	
Perforations: (below): 27 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery &
pressures

DATE
June
24
2019

DST #7 **Formation:** **Test Interval: 4566 -** **Total Depth: 4594'**
Morrow+Miss **4594'**
Time On: 08:22 06/24 Time Off: 15:05 06/24
Time On Bottom: 10:48 06/24 Time Off Bottom: 12:48 06/24

Mud Properties

Mud Type: Chem **Weight:** 9.3 **Viscosity:** 62 **Filtrate:** 9.6 **Chlorides:** 3000 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
24
2019

DST #7 **Formation: Morrow+Miss** **Test Interval: 4566 - 4594'** **Total Depth: 4594'**
Time On: 08:22 06/24 Time Off: 15:05 06/24
Time On Bottom: 10:48 06/24 Time Off Bottom: 12:48 06/24

Gas Volume Report

1st Open

2nd Open

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

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



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
25
2019

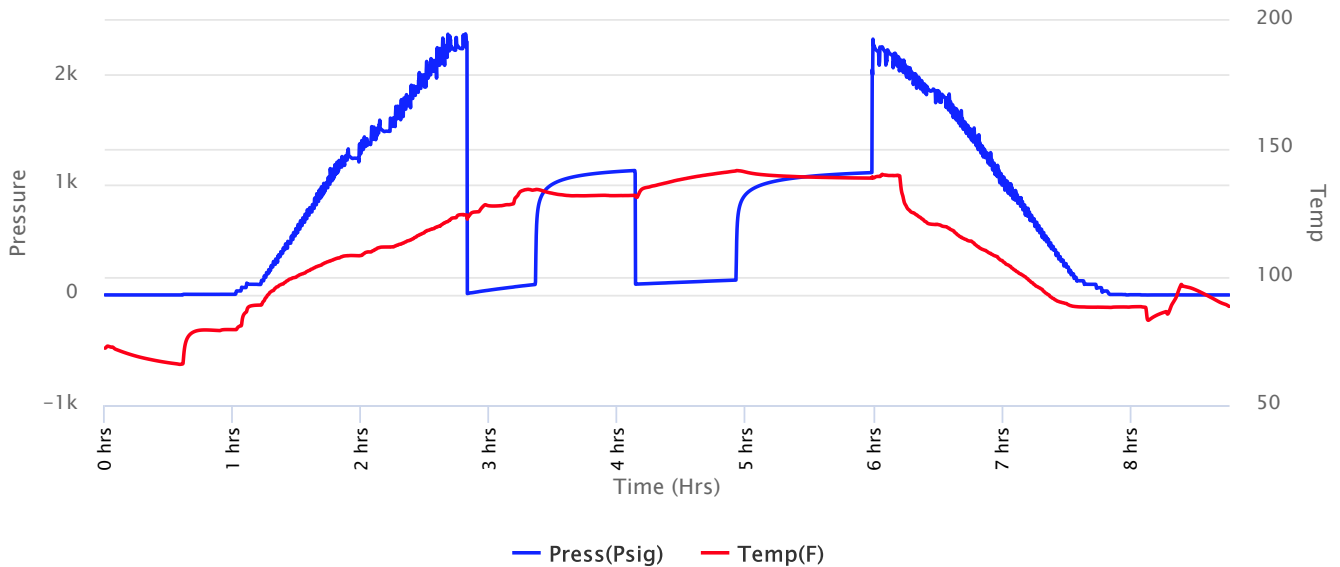
DST #8 Formation: Spergen Test Interval: 4596 - 4620' Total Depth: 4620'

Time On: 05:57 06/25 Time Off: 14:30 06/25
Time On Bottom: 08:43 06/25 Time Off Bottom: 11:43 06/25

Electronic Volume Estimate:
247'

<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: 5" at 30 min	Current Reading: 0" at 45 min	Current Reading: 5.3" at 45 min	Current Reading: 0" at 60 min
Max Reading: 5"	Max Reading: 0"	Max Reading: 5.3"	Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
 County: SCOTT
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2952 EGL
 Field Name: Grigston SW Ext
 Pool: Infield
 Job Number: 358
 API #: 15-171-21251

Operation:
 Uploading recovery & pressures

DATE
 June
25
 2019

DST #8 **Formation: Spergen** **Test Interval: 4596 - 4620'** **Total Depth: 4620'**
 Time On: 05:57 06/25 Time Off: 14:30 06/25
 Time On Bottom: 08:43 06/25 Time Off Bottom: 11:43 06/25

Recovered

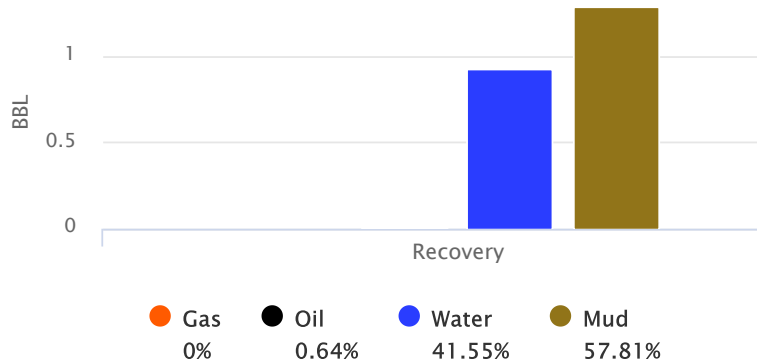
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
1	0.01423	O	0	100	0	0
88	1.25224	SLWCM	0	0	5	95
189	0.956879	SLMCW	0	0	90	10

Total Recovered: 278 ft
 Total Barrels Recovered: 2.223349

Reversed Out
 NO

Initial Hydrostatic Pressure	2221	PSI
Initial Flow	12 to 95	PSI
Initial Closed in Pressure	1129	PSI
Final Flow Pressure	98 to 135	PSI
Final Closed in Pressure	1110	PSI
Final Hydrostatic Pressure	2222	PSI
Temperature	142	°F
Pressure Change Initial Close / Final Close	1.7	%

Recovery at a glance



GIP cubic foot volume: 0



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
25
2019

DST #8 Formation: Spergen Test Interval: 4596 - 4620' Total Depth: 4620'
Time On: 05:57 06/25 Time Off: 14:30 06/25
Time On Bottom: 08:43 06/25 Time Off Bottom: 11:43 06/25

BUCKET MEASUREMENT:

1st Open: 1/4" Blow. Built to 5 inches in 30 mins.
1st Close: NOBB
2nd Open: Weak Blow. Built to 5 1/4 inch in 45 mins
2nd Close: NOBB

REMARKS:

Tool Sample: 0% Gas 1% Oil 49% Water 50% Mud
Gravity: 31.8 @ 60 °F
Ph: 7
Measured RW: .44 @ 88 degrees °F
RW at Formation Temp: 0.28 @ 142 °F
Chlorides: 16000 ppm



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
25
2019

DST #8 Formation: Spergen Test Interval: 4596 - 4620' Total Depth: 4620'
Time On: 05:57 06/25 Time Off: 14:30 06/25
Time On Bottom: 08:43 06/25 Time Off Bottom: 11:43 06/25

Down Hole Makeup

Heads Up: 11.42 FT	Packer 1: 4591 FT
Drill Pipe: 4388.75 FT <i>ID-3 1/2</i>	Packer 2: 4596 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4580.42 FT
Collars: 186.1 FT <i>ID-2 1/4</i>	Bottom Recorder: 4598 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: 24	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): FT <i>4 1/2-FH</i>	
Change Over: FT	
Drill Pipe: (in anchor): FT <i>ID-3 1/2</i>	
Change Over: FT	
Perforations: (below): 23 FT <i>4 1/2-FH</i>	



Company: Ritchie Exploration, Inc.

Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W
County: SCOTT
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2952 EGL
Field Name: Grigston SW Ext
Pool: Infield
Job Number: 358
API #: 15-171-21251

Operation:
Uploading recovery & pressures

DATE
June
25
2019

DST #8 Formation: Spergen Test Interval: 4596 - 4620' Total Depth: 4620'
Time On: 05:57 06/25 Time Off: 14:30 06/25
Time On Bottom: 08:43 06/25 Time Off Bottom: 11:43 06/25

Gas Volume Report

1st Open

2nd Open

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

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

Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Ritchie Exploration
 LEASE #1 Ramsey Trust 15B
 FIELD Unknown
 LOCATION 1258'FNL, 1735'FWL
 SEC 15 TWP 19 RGE 31W
 COUNTY Scott STATE KS

ELEVATIONS
 KB 2960
 DF _____
 GL 2952
 Measurements Are All
 From KB

CONTRACTOR WW #12
 SPUD 6-13-19 COMP 6-26-19
 RTD 4690 LTD 4691
 MUD UP 3420 TYPE MUD Chem

CASING
 SURFACE 8 7/8 @ 251'
 PRODUCTION _____
 ELECTRICAL SURVEYS
 DI _____ MICRO _____
 COMP NID SONIC _____

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION		
				A	B	C
Anhydrite	2272	2268	692	688	693	683
Base Anhydrite	2290	2286	674	671	675	665
Stotler	3530	3529	-569	-572	-564	-577
Heehner	3920	3918	-958	-963	-952	-965
Lansing	3961	3958	-998	-1005	-995	-1007
Muncie	4142	4140	-1180	-1188	-1169	-1191
BKC	4321	4323	-1363	-1367	-1354	-1372
Altamont	4371	4377	-1417	-1422	-1405	-1422
Pawnee	4448	4450	-1490	-1492	-1484	-1497
Ft. Scott	4493	4499	-1539	-1537	-1528	-1543
Cherokee	4514	4520	-1560	-1558	-1548	-1563
Johnson	4557	4560	-1600	-1600	-1589	-1604
Miss	4584	4590	-1630	-1638	-1616	-1639
Spargen	4610	4610	-1650	-1651	-1634	-1653

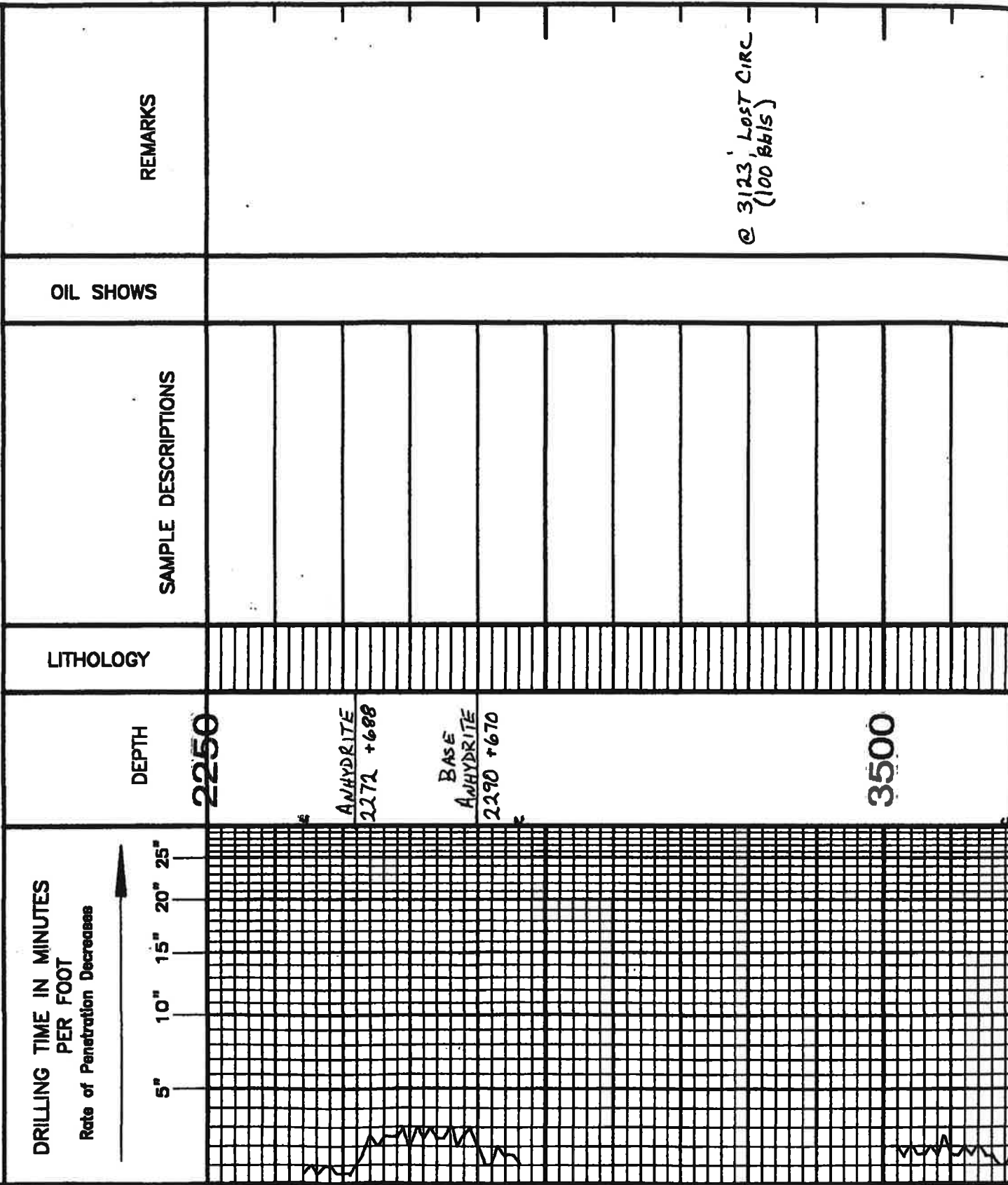
REFERENCE WELLS FOR STRUCTURE

- a Drilling #1 Houloose 1650'FSL, 1650'FWL 15-19-31W
- b FIML #1A Deardon 330'FNL, 330'FEI, 16-19-31W
- c Chief #1 Popp 990'FSL, 990'FWL 10-19-31W

REMARKS

LEGEND

-  Dolomite
-  Chert
-  Col. Lime
-  Limestone
-  Carb sh
-  Shale
-  Sandstone
-  Salt
-  Anhydrite



LOG 7710

STETLER
3530 -570

7:41 AM 6-17-19
DRILLER 3580'

3600

START SAMPLES

MUD CHECK
VIS: 55 WT: 8.9
CHLOR: 2.000 LCM: 3
FILT: 6.4

LS, TAN, M XTLN, S-M HRD,
GRNY TCT, B.N.S

LS, WHT, CRM, F XTLN, M HRD,
CHKY, VP-TITE, NS

LS, WHT, VF XTLN, M HRD, Pcs
DWS, NO VIS P, NS

LS, BRN, GRN, F XTLN, HRD, FOSS,
TITE, NS

LS, GRN, VF XTLN, V DWS, V HRD,
TITE, NS

LS, GRN, SOFT, V SHLY, NS

LS, TAN, BRN, F XTLN, BRTL, M HRD,
Pcs FOSS, P, NS

LS, LT GRN, TAN, F XTLN, SL DWS,
HRD, TITE, NS

SH, GRN

LS, GRN, TAN, F XTLN, Pcs DWS,
Pcs SL GRNY, HRD, TITE, NS

LS, BRN/GRN, CHKY, SOFT, NS

LS, WHT, F XTLN, M HRD, SL DWS,
NO VIS P, NS

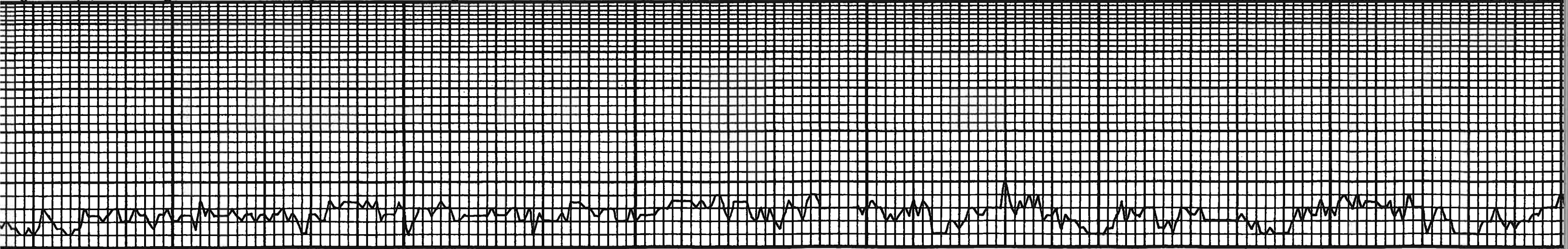
LS, TAN, BRN, F-M XTLN, Pcs GRNY,
HRD, NO VIS P, NS
Pcs TAN CHNT, SOFT

LS, WHT, M XTLN, M XTLN, W/UTS
M HRD, MIN FLUOR, F-6-6-1/2
SET FOSS

CHT, WHT, SHARP, FOSS, NS

LS, GRN, WHT, VF XTLN, HRD,
ABUN FOSS, TITE, NS

DIESEL
CONTAMINATED
SAMPLES



3700

3800

LS, GRAY, WHT, VF XTLN, HRD, ABOUT POSSIBLE, NS					
SM, GRAY					
LS, GRAY, F XTLN, V HRD, SCT WHT CHT + FRAGS, VP + TITE, NS					
LS, TAN, F XTLN, CRS TXY, BATTLE, F XTLN, NS					
CHALK					
LS, TAN, FOM XTLN, M HRD, ? AT ODOR, SET BRT FLUOR STN, NSFD					
LS, TAN, BRN, FOM XTLN, SOFT, SL CHLKY, G XTLN, NS					
SH, BLK, CARB					
LS, CRM, WHT, F XTLN, HRD, Pcs DNS, NO VIS P, NS					
CHT, WHT-TRIP, NO VIS P.					
CHT, WHT/GRY, FRESH, SHARP, NS					
LS, CRM, F XTLN, S-V HRD, SCT FOSS P, Pcs V FOSS, NS					
LS, A.A. Pcs SET CHT-WHT, NS					
LS, WHT, CRM, VF XTLN, V HRD, DNS, SCT WHT CHT-FRESH, NS					
LS, TAN/GRY, VF XTLN, DNS, M HRD, BRTL, NO VIS P, NS					
LS, A.A.					
LS, CRM, WHT, EXTLN, Pcs ALLGAL, S-M HRD, F P, Pcs FOSS + FRAGS, NS					
CHALK					
LS, GRY/TAN, VF XTLN, M HRD FEW SET LG XTLN, M HRD XTLN, NS					
LS, GRY/TAN, VF XTLN, M HRD, VG VUG P, NS					
SH, GRY					
LS, GRY, VF XTLN, DNS, HRD, TITE, NS					
LS, BDEF, F XTLN, HRD, V FOSS, Pcs W CMT'D OOL, TITE, NS					
CHY, WHT, FRESH, SHARP, Pcs SL FOSS, NS					
LS, BRN, FOM XTLN, HRD, SCT DOM P, NS					
LS, CRM/WHT, FOM XTLN, M HRD, SCT CRS XTLN, NS					
A.A.					
A.A.					
LS, BRN, VF XTLN, M HRD, G FLUOR STNG, GSFO ON BRK, G FLUOR + ODOR, BRT FLUOR FOM XTLN, F P, NS					
SH, BLK					
SH, GRY					
LS, BUFF, M-CRS XTLN, G XTLN, M HRD, NS					
LS, BUFF, F XTLN, SL SUCR, F + G XTLN P, GSFO					
LS, TAN, F XTLN, SL REWI, SCT FOSS, F P, NS					

3900

HEERNER
3920 - 960

TORONTO
3936 - 976

LANSING
3961 - 1001

4000

4100

MINNIE
4142 - 1188

DEV 3/4

JET #1

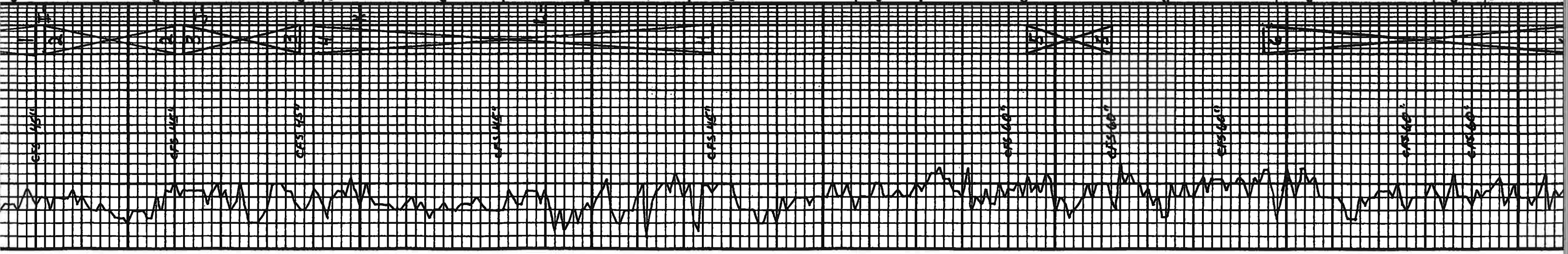
7:AM 6-18-19
DRLC @ 4035'

MUD CHECK
VLS: 64 WT: 9.0
CHLOR: 1,500 LCM: 3
FILT: 6.4
DST #1 4126-4180
30-45-45-60
IF: BOB 5^{min} 151: NO BB
FF: BOB 7^{min} 151: NO BB
REC: 184' HMCW - 55% W
1134' SLMCW - 95% W
FP: 28-359, 364-598
SIP: 699-700
HP: 1988-1984

DST #2 4182-4210
30-45-45-60
IF: 3 3/4" 151: NO BB
FF: 5 3/4" 151: NO BB
REC: 73' GIP
116' OIL
63' SLGCM - 7% GAS
FP: 12-45, 51-82
SIP: 726-681
HP: 2013-2011

39 STAD SHORT TRIP
STRAP 4209.05
BOARD 4206.43
LONG 2.62

6-19-19 7:AM



DEV 3%	LS, BRN, F XTLN, M HRD, G STNG, G XTLN, G SFO, NO FLUOR	F G FODOR
4200	LS, BRN, F → M XTLN, V HRD → M HRD, BRN OIL, SET BK TARRY OIL, PCS DEAD → VG F O W BRK, V SLSHOGAS BBS, NO VIS ENERGY, NO FLUOR	G SFO G ODR BRN → BLK OIL
STARK 4242 -1282	LS, WHT, F XTLN, S → M HRD, G INT XTLN, G SAT FLOWR STNG, G ODR, V LT DIL, RAINBOW N COP	G SAT STN G ODR FLOR
HUSHPOCKNEY 4281 -1321	LS, WHT, M XTLN, M HRD, CHALKY, ALL CHALK HAD STNG + FB	G FLOR G ODR ESFO FLOR
4300	LS, BRN, F XTLN, G RAY TX, M HRD, G PP XTLN, V G STNG, MED BRN F, G SFO, SL BLEED, DULL FLUOR, ABUN SNORKS, G RAINBOW N COP	G ODR G SFO BLEED
BKC 4321 -1361	LS, WHT, GRY, BRN, V F XTLN, DNS, TITE, NS	G ODR BLK OIL
MARMATON 4357 -1397	SS, GRY CMT, F GRNS, W CMT, W SORT, S → M HRD, F → G DNS	TARRY DIL NO ODR
ALTA MOUNT 4371 -1411	LS, TAN, BRN, V F XTLN, HRD, SCT F → G XTLN, BLK DB TARRY OIL STNG, NO FO, NO ODR	LS, BRN, V F XTLN, V HRD, TITE, SHARPINS
4400	LS, WHT, F → M XTLN, S L BRN, V HRD, TITE, NS	LS, TAN, BRN, V F XTLN, DNS, SHRDI FOSS, PRINC
PAWNEE 4448 -1488	LS, TAN, CRM, V F XTLN, DNS, NS	LS, WHT, F XTLN, M HRD, G UG, SCT BLK → DK BRN STN, SOME G F O W BRK, WET
MYRICK 4482 -1522	LS, CRM, EXTLN, M HRD, VP XTLN, NS	LS, TAN, CRM, V F XTLN, DNS, TITE, NS
FT. SCOTT 4493 -1533	LS, CRM, BRN, F XTLN, HRD, NO VIS, NS	LS, BRN, F XTLN, DNS, HRD, TITE, NS
4500	LS, WHT, V F XTLN, HRD, DNS, TITE, NS	LS, CRM, EXTLN, V HRD, ABUN OIL, SCT POOL, F SFO, FLUOR STN, HT ODR
	LS, BRN, F XTLN, M XTLN, W/L V M HRD, SCT F → G XTLN, SCT STNG, F SFO, ON BRK, FLUOR, V LT ODR	LS, BRN, F XTLN, M XTLN, W/L V M HRD, SCT F → G XTLN, SCT STNG, F SFO, ON BRK, FLUOR, V LT ODR
	LS, DK BRN, V F XTLN, DNS, V HRD, TITE, NS	LS, DK BRN, V F XTLN, DNS, V HRD, TITE, NS
	CHT, GRY, SHARP, FOSS, NS	CHT, GRY, SHARP, FOSS, NS
	SH, BLK	SH, BLK
	LS, TAN, BRN, F XTLN, CMT, B ODS, SCT PCS W/ F → G FLUOR STN, FLUOR, HT ODR, PLATY + RND FO SPTS	LS, TAN, BRN, F XTLN, CMT, B ODS, SCT PCS W/ F → G FLUOR STN, FLUOR, HT ODR, PLATY + RND FO SPTS
	LS, TAN, V F XTLN, DNS, V HRD, TITE, NS	LS, TAN, V F XTLN, DNS, V HRD, TITE, NS

1049 2.62
6-19-19 7:AM
DST#1 @ 4180'
MUD CHECK
VIS: 5.4 WT: 9.2
CHLOR: 2000 LCM: 2
FILT: 6.8
7:AM 6-20-19
DRLG @ 4225'
MUD CHECK
VIS: 5.2 WT: 9.2
CHLOR: 2,500 LCM: 2
FILT: 7.2
DST#3 4212-4237
30.45-45.60
IF: 4" ISI: NO BB
FF: 3 1/2" FSI: NO BB
REC: 53' SLOC MW
189' SLOC MW
1% W, 83% W
FP: 12-77, 76-119
SIP: 640-639
HP: 2041-2043
DST#4 4240-4326
30.45-45.60
IF: 1/2" 808.6 MI, NO BB
FF: 808.11 MI, NO BB
REC: 174' SLOC MW
210.487 W
862' SLOC MW - 98% W
FP: 30-302, 306-483
SIP: 614-615
HP: 2018-2018
7:AM 6-21-19
DST#4 @ 4326'
MUD CHECK
VIS: 5.1 WT: 9.3
CHLOR: 2,000 LCM: 2
FILT: 6.4
DST#5 4394-4412
30.45-45.60
IF: 1" ISI: NO BB
FF: DEAP, FLUSH, 34" FSI: NO BB
REC: 65' H WCM - 35% W
FP: 7.33, 33.59
SIP: 758-743
HP: 2131-2132
← 4410 DRG SMPL
7:AM 6-22-19
DST#5 @ 4412'
MUD CHECK
VIS: 5.4 WT: 9.3
CHLOR: 2,500 LCM: 1
FILT: 6.8
DST#5 SHORT TRIP
DST#6 4445-4512
30.45-30-45
IF: 3/4" ISI: NO BB
FF: DEAP FSI: NO BB
REC: 8' SLOC MW - 2% OIL
FP: 12-20, 22-26
SIP: 941-857
HP: 2160-2157
7:AM 6-23-19
DRLG @ 4505'



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

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

15-19-31

FIELD SERVICE TICKET
1718 17875 A

DATE _____ TICKET NO. _____

DATE OF JOB 6/26/2019 DISTRICT Pratt, KS		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 Romsy Trust WELL NO. 15B#1							
ADDRESS		COUNTY Scott STATE KS							
CITY STATE		SERVICE CREW Darin, Brett, Digz							
AUTHORIZED BY		JOB TYPE: 24 2 1/2 Longstring							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
19843	1						6/24		12:30
19860	1/2					ARRIVED AT JOB	6/24	AM	6:30
						START OPERATION	6/24	AM	10:30
						FINISH OPERATION	6/24	PM	11:30
						RELEASED	6/24	PM	12:00
						MILES FROM STATION TO WELL	170		

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: *Ruby Papp*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
BC145	Dr2 Cement Premium	SK	150		2,850 00
BC132	60/40 Poz	SK	30		810 00
CC102	Cellofiske	Lb	35		152 00
CC105	C-41 P	Lb	71		284 00
CC111	S914	Lb	815		467 50
CC113	Gypsum	Lb	705		218 55
CC187	C-17	Lb	92		2,208 00
CC201	Gilsonite	LB	901		901 00
CC133	KCL	Gal	5		365 00
CC151	Mud Flush	Gal	1,100		1,500 00
ME101	Light Vehicle Mileage	MI	100		500 00
ME102	Heavy Equipment Mileage	MP	200		1,600 00
CC5	Depth Charge, 4,000' - 5,000'	HR	1		2,500 00
CE240	Blending & Mixing Service Charge	SK	180		252 00
CF851	5 1/2 FLOST Shoe (Blue)	ES	1		425 00
CF607	Lower Down Plug & Baffle, 5 1/2 (Blue)	ES	1		400 00
CF1901	5 1/2 Basket (Blue)	ES	2		580 00
CF1651	Turbolizers, 5 1/2 (Blue)	ES	12		1,320 00
CF481	5 1/2" Port Collar	ES	1		3,500 00
BE143	Supervisor Charge	EA	1		75 00
BE144	Driver Charge	EA	1		105 00
SUB TOTAL					20,955 05

CHEMICAL/ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
Discounted TOTAL		14,721 14

SERVICE REPRESENTATIVE *Darin Fulkerson* THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: *Ruby Papp*
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO. _____

Customer LD Drilling	Lease No.	Date 6/26/2019
Lease Rmsy Trust	Well # 15B-1	
Field Order # 17875	Station PRATT KS	Casing 5 1/2
		Depth 4681
Type Job 242/5 1/2 long string	Formation TD-4690	Legal Description 15-19-31
		County Scott
		State KS

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
5 1/2							
Depth 4681	Depth	From	To	Pre Pad	Max		5 Min.
Volume 111.4	Volume	From	To	Pad	Min		10 Min.
Max Press 1500	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 4685	Packer Depth	From	To	Flush KCL wster	Gas Volume		Total Load

Customer Representative Rick Pupp	Station Manager Justin Westerman	Treater Darin Froneman
Service Units 92911	78982	19843
19860	19860	
Driver Names Darin	Brett	Brett
Diaz	Diaz	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
6:30pm					On Location / Safety meeting
					150 SK PA2 Premium Cement, 10% S91+
					10% Gypsum, 6# G. Isocore, - 5% Fluid Loss
					- 5% Defoamer, - 25# Cellulose
					14.8 ppg, 1.54 vpd, 6.52 wster
10:30pm	300		5	5	Pump 5 bbls wster
	300		24	5	Pump 24 bbls mix Flush
	300		5	5	Pump 5 bbls wster
	300		41	6	mix 150 SK PA2
					Shut down
					Wash pump & lines
					Release Plug
	200		0	6	Start displacement
	400		85	6	Lift Pressure
	500		101	3	Slow Rate
10:24pm	1500		110	3	Bump Plug
					Flow - Held
	0		7	3	Plug Rat hole - 30SK 60/40 Poz 4% Gai
11:30pm					Job Complete / Darin crew
					Thank you!!!



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

PRESSURE PUMPING Job Log

Customer:	LD Drilling Inc	Cement Pump No.:	70897, 19919 5.5Hrs.	Operator TRK No.:	96816
Address:		Ticket #:	1718 19584 L	Bulk TRK No.:	33021, 14284 Kirby
City, State, Zip:		Job Type:	Z41 - Squeeze Perfs		
Service District:	1718 - Liberal, Ks.	Well Type:	OIL		
Well Name and No.:	Ramsey Trust 15B-1	Well Location:	15,19,31	County:	Scott
				State:	Ks

Type of Cmt	Sacks	Additives	Truck Loaded On	
Premium / Common	150	Neat	33021, 14284 Kirby	Front Back
Premium / Common	150	Neat		Front Back
				Front Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel
Lead:	16.4	1.06	4.31	159	TT Man Hours: 39
Tail:				150	# of Men on Job: 3

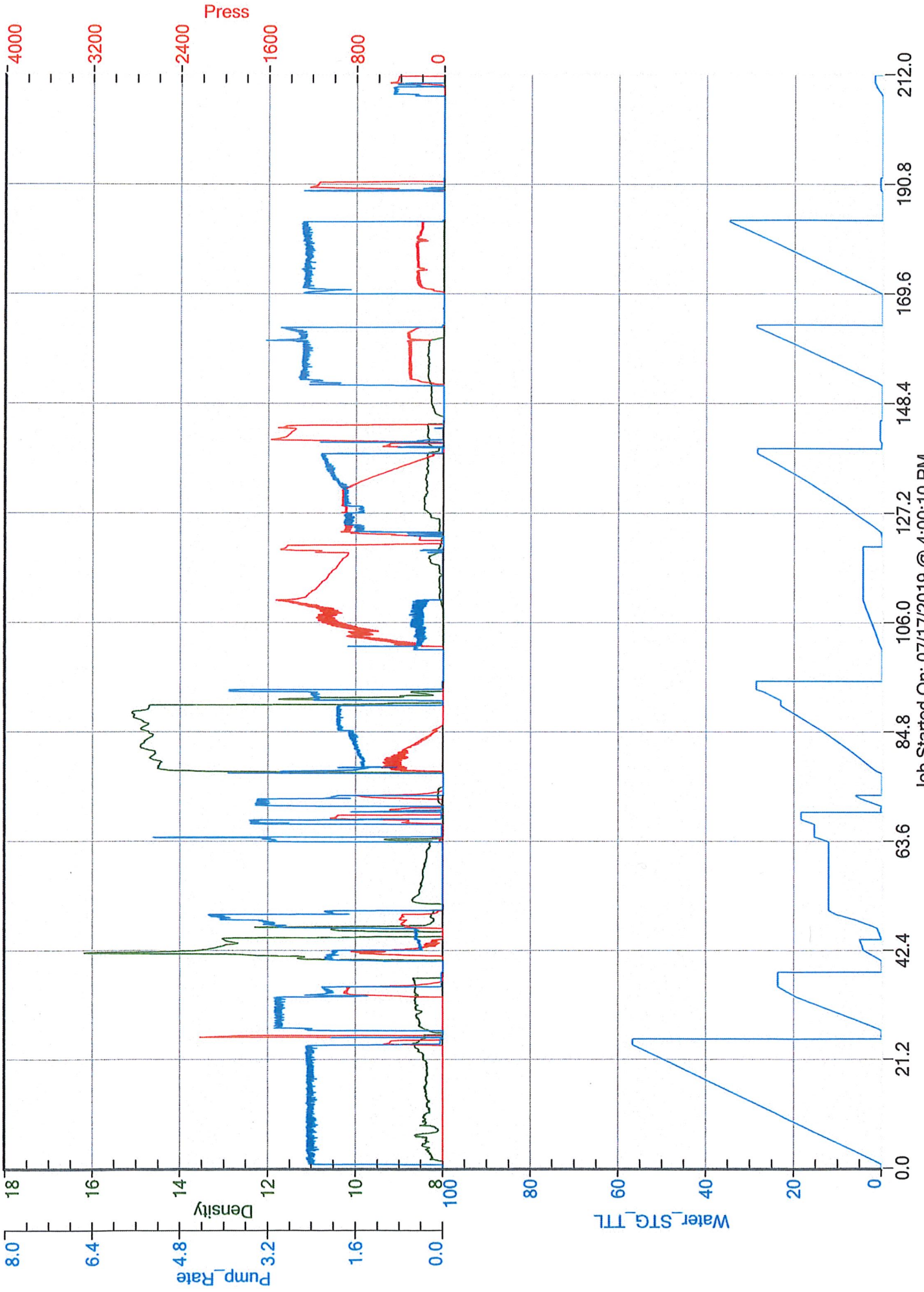
Time (am/pm)	(BPM)	Volume (BBLs)	Pumps		Pressure(PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
15:00							ON LOCATION & SAFETY MEETING
15:15							RIG UP
4:00 PM		56.5				500	PRESSURE UP BS TO 500PSI
4:26 PM							PRESSURE TEST TO 2200PSI
4:27 PM	2	23				880	GET AN INJECTION RATE / LOADED W/19.5BBL
16:41							PUMP 10SX PLUGGED OFF / REVERSE OUT
17:10						500	LOAD BS TO 500PSI
5:17 PM	1.9	26.4 slurry				440	PUMP 140SX @ 16.4#
17:30							SHUTDOWN / WP
17:35		1 THRU 8					DISPLACE / ON VACUUM 1.25BPM
17:41	0.4	8				350	
	0.4	9				950	
17:51		12				1400	SHUTDOWN / STAGE
18:04							REVERSE OUT W/ 25BBL
18:21		0.25				520	LOAD BS TO 520PSI
18:22		0.5				1550	PRESSURE UP TB TO 1550PSI
18:24							RUN IN W/ TB WASH CASING
19:06							PULL TB
19:29						490	PRESSURE UP TO 490PSI / CLOSE IN
							JOB COMPLETE

Size Hole	Depth		TYPE	Swage	
Size & Wt. Csg. 5 1/2" 15.5#	Depth	New / Used	Packer	4087'	Depth
tb. 2 7/8" 6.7#	Depth		Retainer		Depth
Top Plugs	Type		Perfs	4194' -4200'	CIBP

Customer Signature: <i>[Signature]</i>	Basic Representative:	Daniel Beck
	Basic Signature:	<i>[Signature]</i>
	Date of Service:	7/17/2019

L&D Drilling

RamseyT15B1



Job Started On: 07/17/2019 @ 4:00:10 PM



PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

100617
40817

TICKET NUMBER 56132
LOCATION Oakley, KS
FOREMAN Cory Davis

FIELD TICKET & TREATMENT REPORT
CEMENT

Walt Dinkal
Invoice # 900957

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6-13-19	7173	Ramsey Trust 15-B #1	15	19 ³	31 ⁴	Scott
CUSTOMER			TRUCK #			
Ritchie Explorations			760			
Mailing Address			DRIVER			
P.O. Box 783188			Caleb Compton			
CITY			TRUCK #			
Wichita			566			
STATE			DRIVER			
KS			Alex H. Bksman, Exaver Colby			
ZIP CODE			TRUCK #			
67278-3188			703			
			DRIVER			
			Cory Davis			
			TRUCK #			
			1098			
			DRIVER			
			Walt Dinkal			

JOB TYPE Surface HOLE SIZE 12 1/4" HOLE DEPTH 251' CASING SIZE & WEIGHT 8 5/8 24#
 CASING DEPTH 251' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 15.2 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 15-20'
 DISPLACEMENT 14 3/4 DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 BPM
 REMARKS: Safety Meeting, Rig up on WW #12, cure casing on bottom.
mix 180 sks com, 3% cc-2% co1, Displace 14 3/4 BBL H2O. Shut in.

Thanks You
Walt + Crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
Ceo 471	1	PUMP CHARGE	1,150.00	1,150.00
Ceo 002	45	MILEAGE	7.15	321.75
Ceo 710	8.46	Tan Mileage Delivery	1.15	666.45
CC 5871	180 sk	Surface Blend II	24.00	4,320.00
SCANNED				6,458.20
less 25% -				1,614.55
				4,843.65
				278.40
				519.05

SR37

Ravin 3737

AUTHORIZATION [Signature] TITLE [Signature] DATE 6-13-19

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

TERMS AND CONDITIONS

ATTENTION: THESE TERMS AND CONDITIONS CONTAIN INDEMNITY PROVISIONS FOR DAMAGE TO PERSONS AND PROPERTY.

All Services or Products provided by QES Pressure Pumping LLC (f/k/a Consolidated Oil Well Services LLC) are subject to these Terms and Conditions unless superseded by a Master Service Agreement signed by the parties. In the event Customer does not accept these Terms and Conditions as written, Customer must request a Master Service Agreement from QES' Contracts Administration Department at msa@qesllp.com.

The operations, services, supplies, materials, personnel or goods to be provided ("Services" or "Products" as applicable) by QES Pressure Pumping LLC ("QES") will be provided to you as customer ("Customer") in accordance with the following terms and conditions ("Agreement"). QES and Customer may be referred to as "Party" or "Parties".

1. Price and Taxes. Customer will pay QES for the Services or Products in accordance with QES' quoted price which excludes applicable taxes or process license fees. Customer shall pay all applicable taxes and process license fees related to the Services and/or Products. QES' prices are subject to change without notice.

2. Terms of Payment. Customer will pay QES cash in advance for Services and Products unless QES has approved credit prior to the performance of the Services and/or delivery of the Products. Credit terms for approved accounts require full payment of the invoice amount within 30 days from the date of invoice. All invoices not paid within 30 days will be charged an interest rate of 15% per month or the maximum rate allowed under applicable state law, whichever is higher. Customer will be responsible for any fees incurred by QES in the collection of any amounts owed to QES including but not limited to attorney's fees and/or collection fees costs.

3. Proof of Services or Delivery of Products. QES will furnish verification of proof of Services performed and Product delivered to Customer's representative at the time of performance of the Services or Product delivery. Customer agrees to sign and return such verification indicating Customer's acceptance of the Services or Products.

4. Delivery or Completion. At inception and responsibility of QES ceases when: (1) Products are delivered to the Customer by QES and no longer in the care, custody and control of QES or (2) when the carrier receives the Products en route shipment. QES will not be responsible for loss or damage to Products in transit or for delays of carriers in delivering goods. In case of shortage, non-conformance, or apparent damage, it is the Customer's responsibility to secure written acknowledgment from the carrier before Customer accepts delivery. Additionally, QES will not be liable for any damage for delays in delivery or completion due to a Force Majeure (as defined below), acts or omissions of the Customer, third party material or manufacturing delays, impossibility or impracticability of performance or any other cause or causes beyond the control of QES. In the event of a delay caused by the aforesaid, the delivery or completion date will be extended for a period equal to any such delay, and the purchase or service will not be void or voidable as a result thereof.

5. Well or Service Site Conditions. Customer, having custody and control of the well and/or service site and having superior knowledge of the same and the conditions surrounding them, warrant that the well and/or service site will be in proper condition to receive and accommodate Services and Products. Upon QES' request, Customer will provide documentation to verify that the well or service site is adequate to support the Services and the delivery of Products. Customer also warrants that QES' personnel and equipment will be able to safely access the well and service site and that any special equipment or road improvements required for such access will be the responsibility of Customer, unless otherwise agreed to by the parties.

6. Chemical Handling and Hazardous Materials. Customer agrees that for any waste created as part of the Services, Customer will be considered the "generator" for purposes of any applicable laws or regulations pertaining to the transportation, storage and handling of chemicals and hazardous materials.

7. Data, Data Integrity and Storage. QES does not warrant or guarantee the accuracy of any research analysis, survey, or other data generated for the Services. QES is not responsible for any accidental or intentional interception of such data by third parties and it is the responsibility of the Customer to safeguard such data against loss including any need to secure digital or paper copies for storage.

8. WARRANTIES - LIMITATION OF LIABILITY

(a) QES warrants that the Services and Products will: (i) be free from defects in materials and workmanship; (ii) be performed in a good and workmanlike manner, in accordance with good oilfield servicing practices; and (iii) conform to the plans, specifications and technical information provided in writing by Customer until the Services or Products are accepted by Customer or QES' contractual obligations are met. In the event that Customer discovers a defect in the Services or Products within the warranty period specified above, Customer will notify QES of such defect. In the event that QES confirms that the Services or Products are defective, QES's liability and Customer's exclusive remedy is any cause of action (whether in tort, contract, breach of warranty or otherwise) arising out of the sale or use of any Services or Products is expressly limited to, at QES' option, the (i) replacement of such Services or Products upon their return to QES or (ii) a credit to Customer for the full price paid by Customer for the defective segment of the Services or Products upon their return to QES. In the case of products or parts not wholly of QES' manufacture, QES' liability will be limited to the extent of its recovery from the manufacturer of such products or parts under its liability to QES. QES will not be liable for any damages, claims, losses or expenses of Customer resulting from such defects or for damages resulting from delays, loss of use, or other direct, indirect, incidental, punitive or consequential damages of any kind. QES will not be responsible for: (i) failures of Services that have been in any way tampered with or altered by anyone other than an authorized representative of QES; (ii) failures due to lack of compliance with recommended maintenance procedures; and (iii) products requiring replacement due to normal wear and tear.

(b) EXCEPT FOR THE WARRANTIES EXPRESSLY STATED ABOVE, THERE ARE NO OTHER WARRANTIES. THE PARTIES EXPRESSLY EXCLUDE AND CUSTOMER WAIVES ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) IN NO EVENT WILL QES' ENTIRE LIABILITY (IN TORT, CONTRACT, WARRANTY, INFRINGEMENT OR OTHERWISE) TO CUSTOMER EXCEED THE PURCHASE PRICE ACTUALLY PAID BY CUSTOMER FOR THE SERVICES OR PRODUCTS THAT GIVE RISE TO A DISPUTE. THIS PROVISION WILL SURVIVE ANY TERMINATION OF THIS AGREEMENT.

9. INDEMNIFICATION AND WAIVER OF CONSEQUENTIAL DAMAGES

9.1 For purpose of this Section 9, the following definitions will apply: "QES Group" means QES Pressure Pumping LLC, its parent company, and affiliated companies and its and their officers, directors, employees, contractors, subcontractors and its owners; "Customer Group" means Customer, its parent (if any), subsidiary and affiliated companies, co-venturers, partners and any entity with whom Customer has an economic interest with respect to the Services, including Customer's joint interest owners and partners and its and their officers, directors, employees, contractors (not including QES) subcontractors and invitees.

9.2 QES INDEMNITY. QES AGREES TO PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS CUSTOMER GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS, AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER, ARISING IN CONNECTION WITH THE SERVICES, ON ACCOUNT OF BODILY INJURY, ILLNESS, OR DEATH OF ANY MEMBER OF QES GROUP OR, DAMAGE TO OR LOSS OF PROPERTY OF ANY MEMBER OF QES GROUP.

9.3 CUSTOMER INDEMNITY. CUSTOMER AGREES TO PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS, AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER, ARISING IN CONNECTION WITH THE SERVICES, ON ACCOUNT OF BODILY INJURY, ILLNESS, OR DEATH OF ANY MEMBER OF CUSTOMER GROUP OR DAMAGE TO OR LOSS OF PROPERTY OF ANY MEMBER OF CUSTOMER GROUP.

9.4 WELL. CUSTOMER WILL RELEASE, PROTECT, DEFEND, AND INDEMNIFY QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER IN THE EVENTS OF: (i) LOSS OR DAMAGE TO ANY GEOLOGICAL FORMATION, STRATA OR OIL OR GAS RESERVOIR OR MINERAL OR WATER RESOURCE BENEATH THE SURFACE OF THE LAND OR WATER, (ii) LOSS OR DAMAGE TO THE HOLE OR WELL, (iii)

IMPAIRMENT OF PROPERTY RIGHTS OR OTHER INTERESTS IN OR TO OIL, GAS, MINERAL OR WATER RESOURCES, AND (iv) REGAINING CONTROL OF ANY WILD WELL OR OUT OF CONTROL WELL, UNDERGROUND OR ABOVE THE SURFACE, INCLUDING REMOVAL OF WRECK, DEBRIS, EQUIPMENT, AND HAZARDOUS MATERIALS AND REMEDIATING ENVIRONMENTAL DAMAGE.

9.5 POLLUTION RESPONSIBILITY. Subject to paragraphs 9.2 and 9.3, it is understood and agreed between Customer and QES that the responsibility for pollution shall be as follows:

(a) QES WILL ASSUME RESPONSIBILITY FOR CONTROL AND REMOVAL OF AND WILL PROTECT, DEFEND AND INDEMNIFY CUSTOMER GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND OF CHARACTER ARISING FROM POLLUTION OR CONTAMINATION WHICH ORIGINATES ABOVE THE SURFACE OF THE LAND OR WATER FROM THE EQUIPMENT OF ANY MEMBER OF QES GROUP MAINTAINED IN QES GROUP'S CARE, CUSTODY AND CONTROL, AND ARISING FROM THE PERFORMANCE OF THE SERVICES;

(b) CUSTOMER WILL ASSUME RESPONSIBILITY FOR CONTROL AND REMOVAL OF AND WILL PROTECT, DEFEND AND INDEMNIFY QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER ARISING FROM POLLUTION OTHER THAN THAT DESCRIBED IN SECTION 9.5(A) ABOVE, WHICH MAY OCCUR DURING THE CONDUCT OF OPERATIONS HEREUNDER INCLUDING, BUT NOT LIMITED TO, POLLUTION RESULTING FROM FIRE, BLOWOUT, CRATERING, SEEPAGE OR OTHER UNCONTROLLED FLOW OF OIL, GAS OR OTHER SUBSTANCE.

9.6 WAIVER OF CONSEQUENTIAL DAMAGES. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY, CUSTOMER AND QES FURTHER AGREE THAT NEITHER PARTY WILL BE LIABLE TO THE OTHER OR EACH OTHER'S RESPECTIVE GROUP FOR ANY CONSEQUENTIAL, INCIDENTAL OR INDIRECT DAMAGES, INCLUDING BUT NOT LIMITED TO, LOSS OF PROFIT, LOSS OF PRODUCTION, REVENUE, OR ANTICIPATED BUSINESS ("LOSSES"). CUSTOMER AGREES TO INDEMNIFY AND HOLD QES GROUP HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS FOR SUCH LOSSES ASSERTED BY MEMBERS OF CUSTOMER GROUP. QES AGREES TO INDEMNIFY AND HOLD CUSTOMER GROUP HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS FOR SUCH LOSSES ASSERTED BY MEMBERS OF QES GROUP.

9.7 EXCEPT AS OTHERWISE EXPRESSLY LIMITED BY THIS AGREEMENT OR BY LAW ALL RELEASES, INDEMNITY OBLIGATIONS AND OTHER LIABILITIES ASSUMED UNDER THIS AGREEMENT WILL BE WITHOUT LIMIT AND WITHOUT REGARD TO THE CAUSE OR CAUSES INCLUDING, WITHOUT LIMITATION, PREEXISTING CONDITIONS, UNSEAWORTHINESS, STRICT LIABILITY, WILLFUL MISCONDUCT, AND THE SOLE, JOINT, GROSS, OR CONCURRENT NEGLIGENCE OF ANY PARTY.

9.8 Each Party hereunder agrees to support its indemnity obligations with liability insurance coverage with limits of liability not less than ten million dollars (\$10,000,000). It is the express intention of the Parties that the indemnities contained herein apply to the fullest extent permitted by applicable law, and in no event will a Party's indemnity obligation be limited to the amount of insurance carried by each Party.

THIS SECTION 9 WILL SURVIVE THE TERMINATION OR EXPIRATION OF THIS AGREEMENT

10. Insurance. All insurance policies of either Party, in any way related to the Services, whether or not required by this Agreement, shall to the extent of the risks and liabilities assumed by such party, (i) name the other party group, as additional insured (except for worker's compensation, QES' COW, its professional liability policies); (ii) waive subrogation to the other party group; and (iii) be primary and non-contributory, to any insurance of the other party group.

11. Force Majeure. Except the obligation to make payments when due, neither QES nor Customer will be liable nor deemed to be in breach of this Agreement for any delay or failure in performance resulting from the acts of God, civil or military authority, material change of law, any governmental action, acts of public enemy, war, accidents, fires, explosions, earthquakes, floods, failure of transportation, national strikes, acute or unusual labor material or equipment shortages, or any similar or dissimilar cause beyond the reasonable control of either Party. The Party so affected will, as soon as such a cause or event occurs, promptly notify the other Party in writing concerning the cause and the estimated effect and take reasonable measures with proper dispatch to remedy the condition. In the event Customer declares a force majeure occurrence, QES will be compensated at the standard daily rate for the materials and personnel that are standing idle as a consequence of the force majeure occurrence until Customer terminates the work order or work resumes.

12. Governing Law. This Agreement will be governed by the laws of the State of Texas, without regard to its conflicts of law provisions. The Parties agree to submit to the exclusive jurisdiction of the federal or state courts located in Houston, Harris County, Texas with respect to any and all disputes that arise out of or are related in any way to the subject matter of this Agreement. This Section 12 will survive the termination or expiration of this Agreement.

13. Independent Contractor. QES will be an independent contractor with respect to the Services performed and neither QES nor anyone employed by QES will be deemed for any purpose to be the employee, agent, servant, borrowed servant or representative of Customer.

14. Severability. In the event any provision of the Agreement is unenforceable with or contrary to any applicable law, rule or regulation, the provision will be deemed modified to the extent required to comply and the remaining terms, as modified, will remain in full force and effect.

15. Waiver. A waiver of the part of either Party of any breach of any term, provision or condition of this Agreement will not constitute a precedent and not bind either Party hereto to a waiver of any, succeeding or other breach of the same or any other term, provision or condition of this Agreement.

16. Entire Agreement. This Agreement contains the entire agreement of the Parties with regard to the subject matter hereof and supersedes any prior oral and written agreements, contracts, representations or warranty between the Parties relating to the subject matter hereof. No amendment or modification of this Agreement will be effective unless it is in writing and signed by an authorized representative of each Party. If the Parties enter into a Master Service Agreement, then any term or condition herein which conflicts with the provisions of such Master Service Agreement will be deemed invalid.



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

Job Log

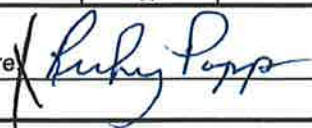
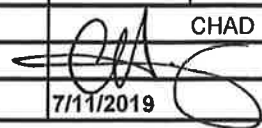
Customer:	LD Drilling Inc	Cement Pump No.:	38750-19842 4.5 HRS	Operator TRK No.:	96815
Address:		Ticket #:	1718-19823 L	Bulk TRK No.:	37712-19883
City, State, Zip:		Job Type:	Z41 - Squeeze Perfs		
Service District:		Well Type:	OIL		
Well Name and No.:	Ramsey Trust 15B-1	Well Location:	15,19,31	County:	Scott State: Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
PREMIUM	50	.5%C-17, 1/4#C-41P	37712-19883	Front	Back
PREMIUM	150	NEAT		Front	Back
				Front	Back

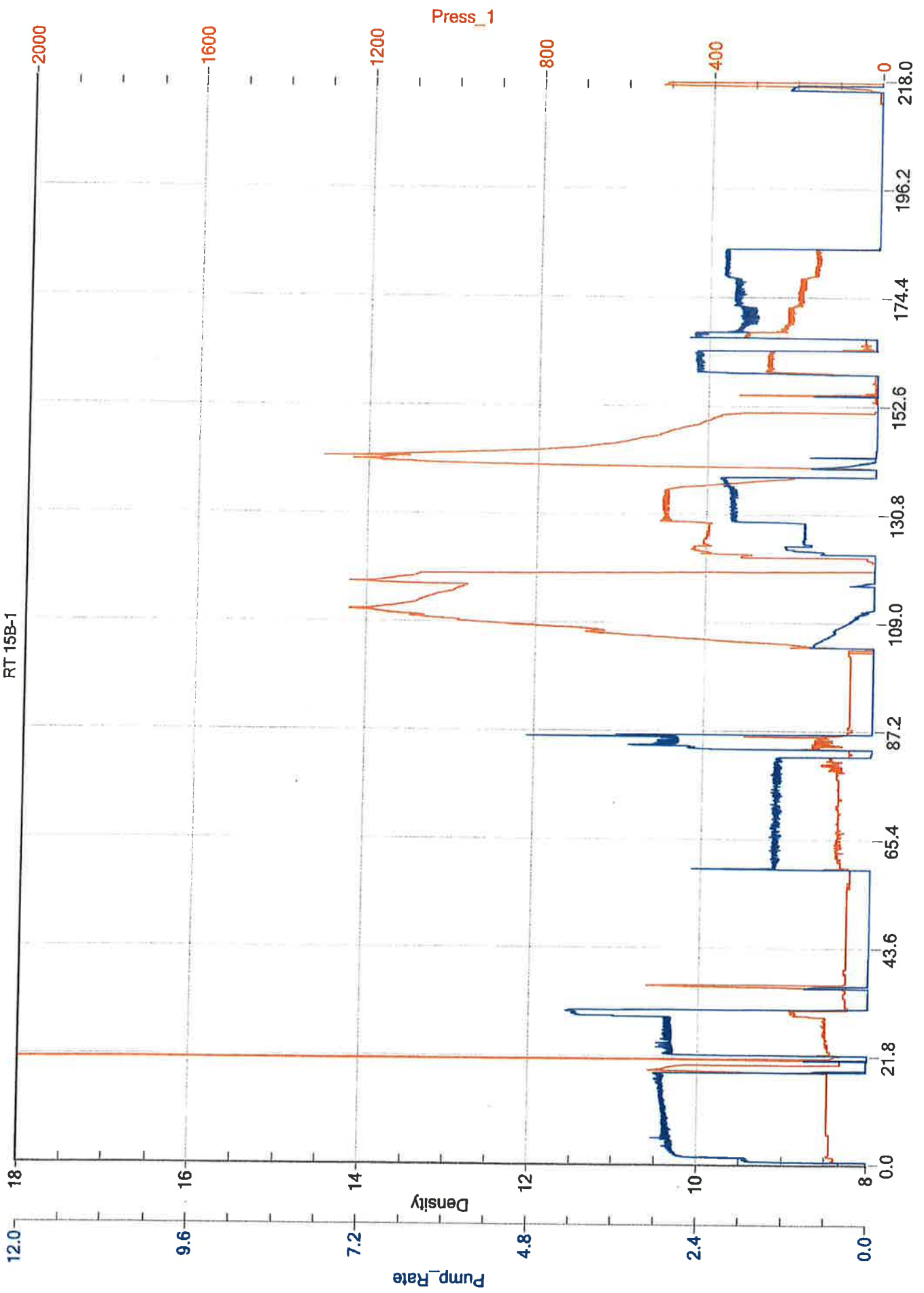
Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	16.4	1.06	4.35	53	Man Hours:	26
Tail:	16.4	1.06	4.35	159	# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps		Pressure (PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
8:00							ON LOC, SAFTEY MTG, R.U.
8:58	2	51				500	LOAD B.S.
9:19 AM					2100		TEST LINES
9:20 AM	4.2	28			180		INJECTION RATE
9:55 AM	1.4				80		START MIXING 50 SX W/FL @ 16.4#
10:03	1.4	9.4			80		ON NEAT @ 16.4#
10:20		28.3					SHUT DOWN, WASHUP
10:25 AM	GRAV						START DISPLACEMENT
10:42	0.9	16.5			200		K.I.P.
10:50		20.5			1200		K.O.P. W.O.C
10:55		20.5			990-1200		BUMP PSI
10:57							RELEASE PSI
11:01	2	28				500	REVERSE OUT
11:19					1200		PSI UP TUBING
11:29							RELEASE PSI, TIH 1 JT
11:37	2	14				220	REV OUT CEMENT
11:40							TIH 1 JT
11:44	2	30				220	REV OUT CEMENT
12:01							TOOH W 22 JTS
12:32					500	500	PSI UP WELL SHUT IN
							JOB COMPLETE
							THANK YOU FOR YOUR BUSINESS!!!

Size Hole	Depth			TYPE	
Size & Wt. Csg.	Depth		New / Used	Packer	Depth
lbg.	Depth			Retainer	Depth
Top Plugs	Type			Perfs	CIBP

Customer Signature: 	Basic Representative:	CHAD HINZ
	Basic Signature:	
	Date of Service:	7/11/2019

LD DRILLING RT 15B-1





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

PRESSURE PUMPING Job Log

Customer:	LD Drilling Inc	Cement Pump No.:	70897, 19919 5.5Hrs.	Operator TRK No.:	96816
Address:		Ticket #:	1718 19584 L	Bulk TRK No.:	33021, 14284 Kirby
City, State, Zip:		Job Type:	Z41 - Squeeze Perfs		
Service District:	1718 - Liberal, Ks.	Well Type:	OIL		
Well Name and No.:	Ramsey Trust 15B-1	Well Location:	15,19,31	County:	Scott
				State:	Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
Premium / Common	150	Neat	33021, 14284 Kirby	Front	Back
Premium / Common	150	Neat		Front	Back
				Front	Back

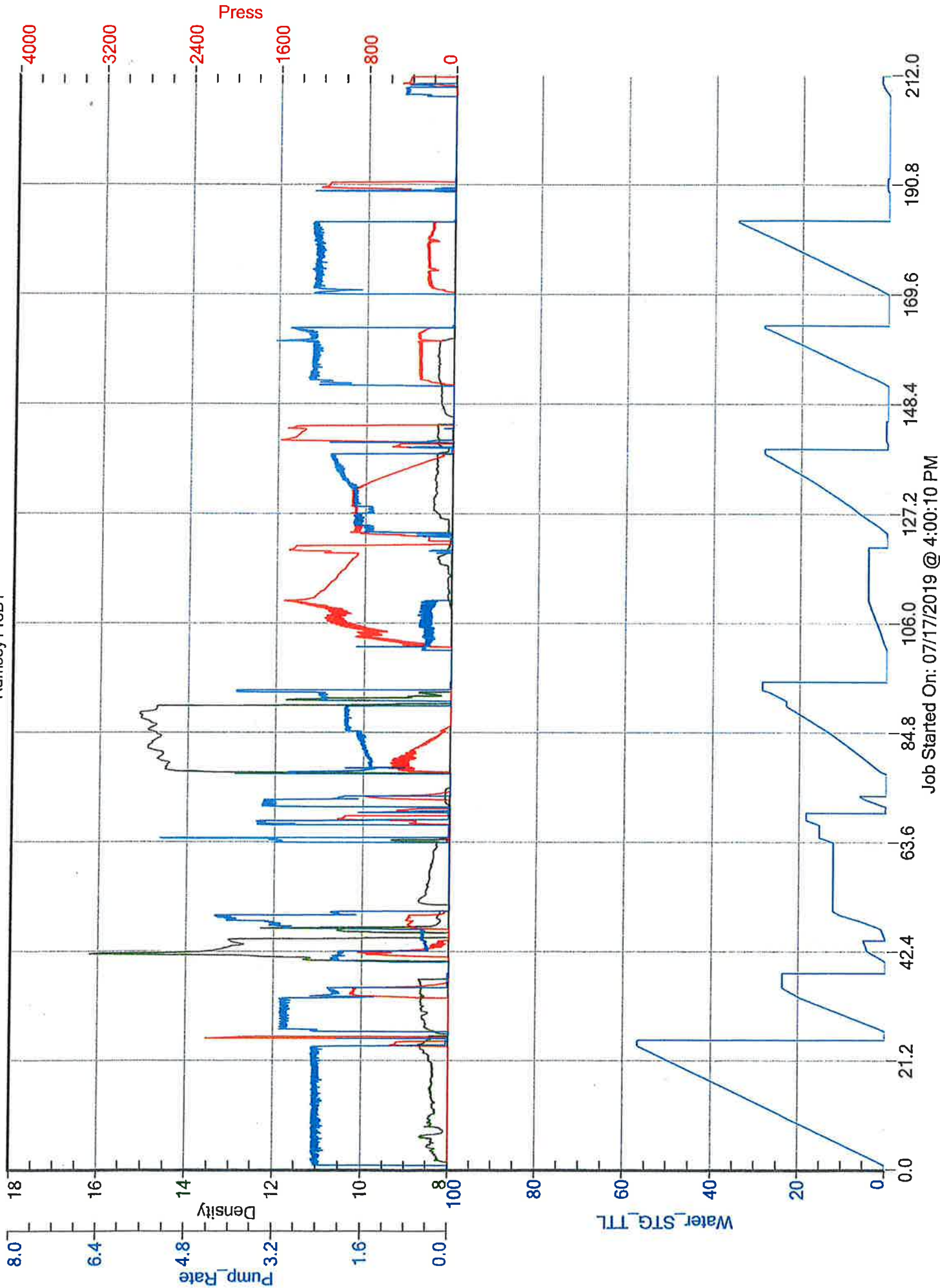
Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	16.4	1.06	4.31	159	TT Man Hours:	39
Tail:				150	# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLs)	Pumps		Pressure(PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
15:00							ON LOCATION & SAFETY MEETING
15:15							RIG UP
4:00 PM		56.5			500		PRESSURE UP BS TO 500PSI
4:26 PM							PRESSURE TEST TO 2200PSI
4:27 PM	2	23			880		GET AN INJECTION RATE / LOADED W/19.5BBL
16:41							PUMP 10SX PLUGGED OFF / REVERSE OUT
17:10					500		LOAD BS TO 500PSI
5:17 PM	1.9	26.4 slurry			440		PUMP 140SX @ 16.4#
17:30							SHUTDOWN / WP
17:35		1 THRU 8					DISPLACE / ON VACUUM 1.25BPM
17:41	0.4	8			350		
	0.4	9			950		
17:51		12			1400		SHUTDOWN / STAGE
18:04							REVERSE OUT W/ 25BBL
18:21		0.25			520		LOAD BS TO 520PSI
18:22		0.5			1550		PRESSURE UP TB TO 1550PSI
18:24							RUN IN W/ TB WASH CASING
19:06							PULL TB
19:29					490	490	PRESSURE UP TO 490PSI / CLOSE IN
							JOB COMPLETE

Size Hole	Depth	TYPE		Swage	
Size & Wt. Csg.	5 1/2" 15.5#	Depth	New / Used	Packer	4087' Depth
tbg.	2 7/8" 6.7#	Depth		Retainer	Depth
Top Plugs	Type			Perfs	4194' -4200' CIBP

Customer Signature: <i>[Signature]</i>	Basic Representative:	Daniel Beck
	Basic Signature:	<i>[Signature]</i>
	Date of Service:	7/17/2019

L&D Drilling
RamseyT15B1



Job Started On: 07/17/2019 @ 4:00:10 PM