

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 Recompletion Date _____ 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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Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
11
 2019

DST #1 **Formation: Lansing "A-C"** **Test Interval: 3071 - 3114'** **Total Depth: 3114'**
 Time On: 03:40 12/11 Time Off: 11:32 12/11
 Time On Bottom: 06:20 12/11 Time Off Bottom: 09:50 12/11

Electronic Volume Estimate:
 55'

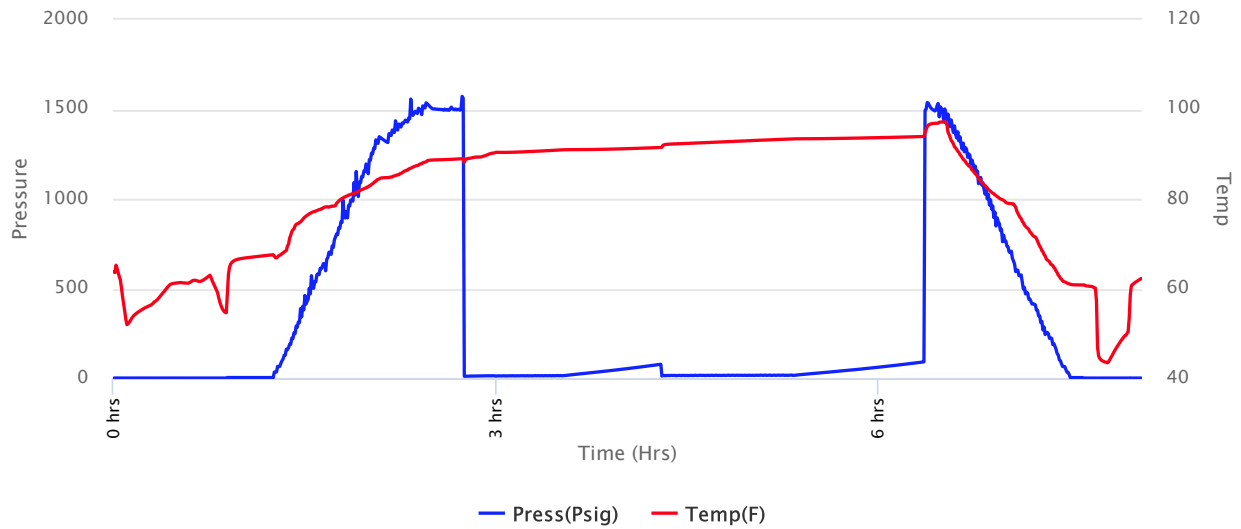
1st Open
 Minutes: 45
 Current Reading: 2.7" at 45 min
 Max Reading: 2.7"

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

2nd Open
 Minutes: 60
 Current Reading: 4.1" at 60 min
 Max Reading: 4.1"

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

Inside Recorder





Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
11
 2019

DST #1 **Formation: Lansing "A-C"** **Test Interval: 3071 - 3114'** **Total Depth: 3114'**
 Time On: 03:40 12/11 Time Off: 11:32 12/11
 Time On Bottom: 06:20 12/11 Time Off Bottom: 09:50 12/11

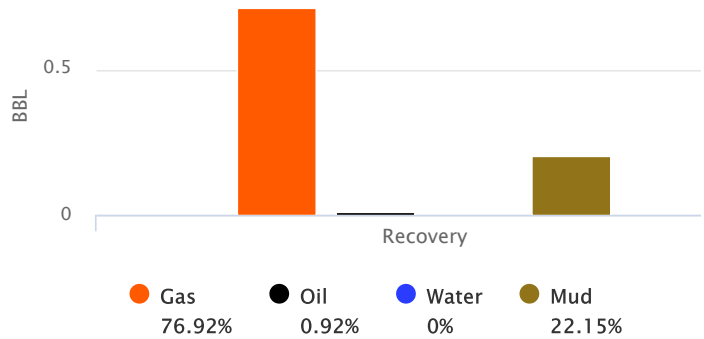
<u>Recovered</u>		<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
<u>Foot</u>	<u>BBLs</u>					
50	0.7115	G	100	0	0	0
15	0.21345	SLOCM	0	4	0	96

Total Recovered: 65 ft
 Total Barrels Recovered: 0.92495

**Reversed Out
 NO**

Initial Hydrostatic Pressure	1495	PSI
Initial Flow	12 to 15	PSI
Initial Closed in Pressure	78	PSI
Final Flow Pressure	13 to 18	PSI
Final Closed in Pressure	92	PSI
Final Hydrostatic Pressure	1494	PSI
Temperature	94	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 3.99472



Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
11
 2019

DST #1 Formation: Lansing "A-C" Test Interval: 3071 - 3114' Total Depth: 3114'
 Time On: 03:40 12/11 Time Off: 11:32 12/11
 Time On Bottom: 06:20 12/11 Time Off Bottom: 09:50 12/11

BUCKET MEASUREMENT:

Diesel in Bucket

1st Open: Surface blow building to 3 1/4"

1st Close: No BB

2nd Open: 1 1/2" blow building to 4 3/4"

2nd Close: No BB

REMARKS:

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



Company: RJM Oil Company, Inc

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL

Operation:Uploading recovery &
pressures**Lease: Krug "G" #2**Field Name: Trapp
Pool: Infield
Job Number: 425
API #: 15-167-24099-00-00**DATE**December
11
2019

DST #1	Formation: Lansing "A-C"	Test Interval: 3071 - 3114'	Total Depth: 3114'
	Time On: 03:40 12/11	Time Off: 11:32 12/11	
	Time On Bottom: 06:20 12/11	Time Off Bottom: 09:50 12/11	

Down Hole Makeup

Heads Up: 20.73 FT	Packer 1: 3066 FT
Drill Pipe: 3066.57 FT <i>ID-3 1/2</i>	Packer 2: 3071 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 3058 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 3079 FT
Test Tool: 26.16 FT <i>ID-3 1/2-FH</i>	Well Bore Size: 7 7/8
Total Anchor: 43	Surface Choke: 1"
	Bottom Choke: 5/8"
<u>Anchor Makeup</u>	
Packer Sub: 1 FT	
Perforations: (top): 6 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 36 FT <i>4 1/2-FH</i>	



Operation:

**Company: RJM Oil Company,
Inc**
Lease: Krug "G" #2

 SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling,
 Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield



Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
12
 2019

DST #2 **Formation: L/KC "H-K"** **Test Interval: 3200 - 3290'** **Total Depth: 3290'**
 Time On: 04:29 12/12 Time Off: 11:33 12/12
 Time On Bottom: 06:33 12/12 Time Off Bottom: 09:33 12/12

Electronic Volume Estimate:
 77'

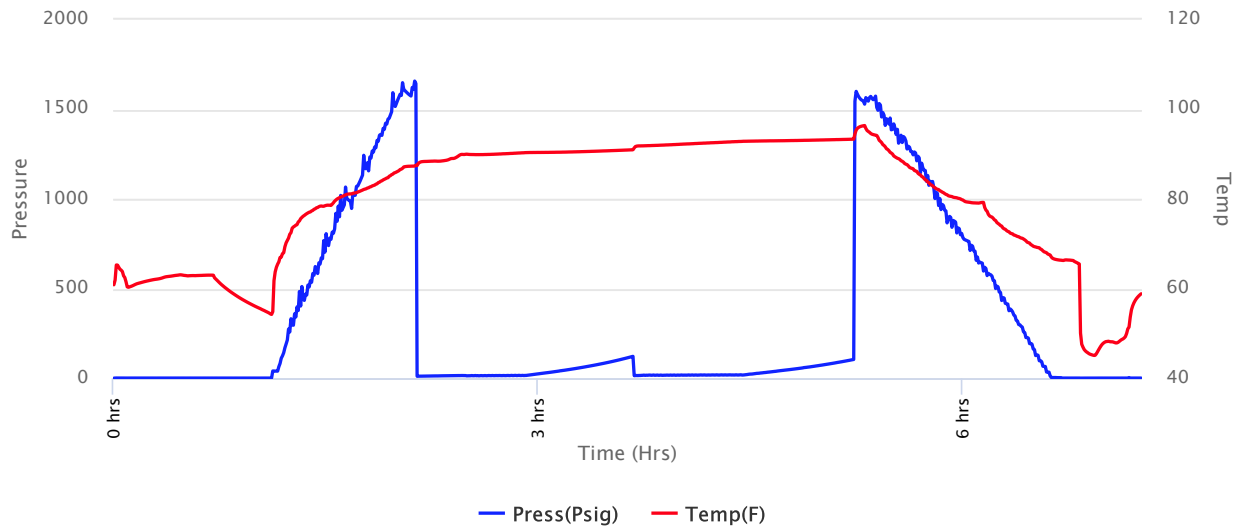
1st Open
 Minutes: 45
 Current Reading: 3.7" at 45 min
 Max Reading: 3.7"

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

2nd Open
 Minutes: 45
 Current Reading: 5.5" at 45 min
 Max Reading: 5.5"

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

Inside Recorder





Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
12
 2019

DST #2 **Formation: L/KC "H-K"** **Test Interval: 3200 - 3290'** **Total Depth: 3290'**
 Time On: 04:29 12/12 Time Off: 11:33 12/12
 Time On Bottom: 06:33 12/12 Time Off Bottom: 09:33 12/12

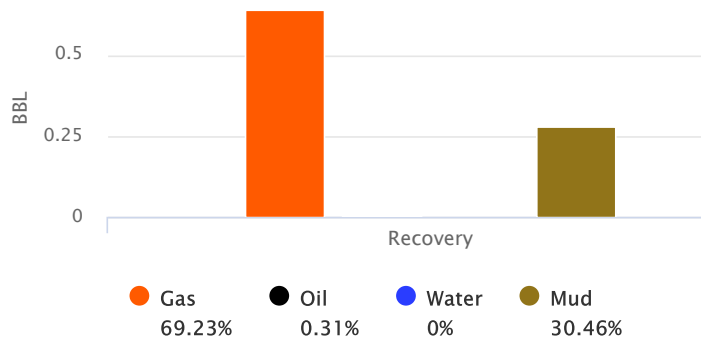
<u>Recovered</u>		<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
<u>Foot</u>	<u>BBLs</u>					
45	0.64035	G	100	0	0	0
20	0.2846	SLOCM	0	1	0	99

Total Recovered: 65 ft
 Total Barrels Recovered: 0.92495

**Reversed Out
 NO**

Initial Hydrostatic Pressure	1612	PSI
Initial Flow	12 to 16	PSI
Initial Closed in Pressure	121	PSI
Final Flow Pressure	15 to 21	PSI
Final Closed in Pressure	105	PSI
Final Hydrostatic Pressure	1600	PSI
Temperature	94	°F
Pressure Change Initial Close / Final Close	12.9	%

Recovery at a glance



GIP cubic foot volume: 3.59525

Operation:Uploading recovery &
pressures**Lease: Krug "G" #2**Field Name: Trapp
Pool: Infield
Job Number: 425
API #: 15-167-24099-00-00**DATE**December
12
2019

DST #2	Formation: L/KC "H-K"	Test Interval: 3200 - 3290'	Total Depth: 3290'
	Time On: 04:29 12/12	Time Off: 11:33 12/12	
	Time On Bottom: 06:33 12/12	Time Off Bottom: 09:33 12/12	

Down Hole Makeup

Heads Up: 19.09 FT	Packer 1: 3195.3 FT
Drill Pipe: 3194.23 FT <i>ID-3 1/2</i>	Packer 2: 3200.3 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 3187.3 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 3272 FT
Test Tool: 26.16 FT <i>ID-3 1/2-FH</i>	Well Bore Size: 7 7/8
Total Anchor: 89.7	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 5 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 62.70 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 19 FT <i>4 1/2-FH</i>	



Operation:

**Company: RJM Oil Company,
Inc**
Lease: Krug "G" #2

 SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling,
 Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield

Uploading recovery & pressures

Job Number: 425
API #: 15-167-24099-00-00

DATE
December
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2019

DST #2 **Formation: L/KC "H-K"** **Test Interval: 3200 - 3290'** **Total Depth: 3290'**
Time On: 04:29 12/12 Time Off: 11:33 12/12
Time On Bottom: 06:33 12/12 Time Off Bottom: 09:33 12/12

Mud Properties

Mud Type: Chemical **Weight:** 9.4 **Viscosity:** 51 **Filtrate:** 8.8 **Chlorides:** 5,000 ppm



Operation:
Uploading recovery & pressures

Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
County: RUSSELL
State: Kansas
Drilling Contractor: Southwind Drilling, Inc - Rig 3
Elevation: 1879 GL
Field Name: Trapp
Pool: Infield
Job Number: 425
API #: 15-167-24099-00-00

DATE

December

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2019

DST #2 **Formation: L/KC "H-K"** **Test Interval: 3200 - 3290'** **Total Depth: 3290'**

Time On: 04:29 12/12

Time Off: 11:33 12/12

Time On Bottom: 06:33 12/12 Time Off Bottom: 09:33 12/12

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
12
 2019

DST #3 Formation: Arbuckle Test Interval: 3298 - 3331' Total Depth: 3331'
 Time On: 21:10 12/12 Time Off: 03:47 12/13
 Time On Bottom: 22:54 12/12 Time Off Bottom: 01:54 12/13

Electronic Volume Estimate:
 11'

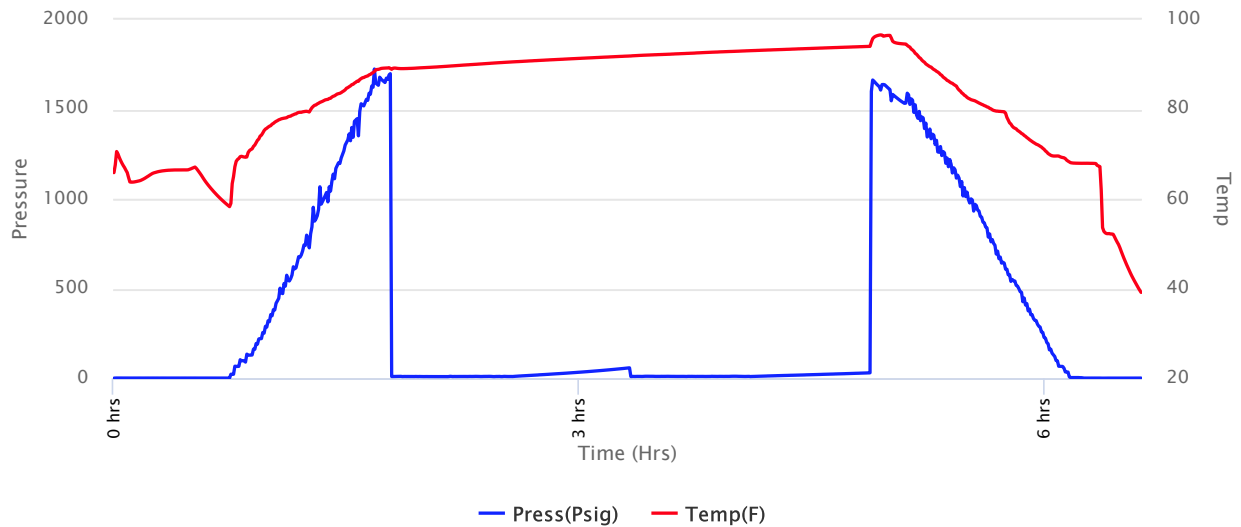
1st Open
 Minutes: 45
 Current Reading: 1.2" at 45 min
 Max Reading: 1.3"

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

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

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

Inside Recorder





Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
12
 2019

DST #3 Formation: Arbuckle Test Interval: 3298 - 3331' Total Depth: 3331'
 Time On: 21:10 12/12 Time Off: 03:47 12/13
 Time On Bottom: 22:54 12/12 Time Off Bottom: 01:54 12/13

Recovered

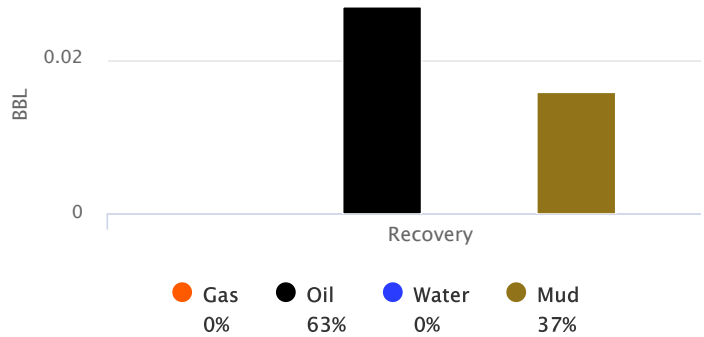
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
3	0.04269	HMCO	0	63	0	37

Total Recovered: 3 ft
 Total Barrels Recovered: 0.04269

**Reversed Out
 NO**

Initial Hydrostatic Pressure	1666	PSI
Initial Flow	10 to 10	PSI
Initial Closed in Pressure	58	PSI
Final Flow Pressure	10 to 11	PSI
Final Closed in Pressure	31	PSI
Final Hydrostatic Pressure	1663	PSI
Temperature	95	°F
Pressure Change Initial Close / Final Close	48.0	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: RJM Oil Company,
Inc**
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
County: RUSSELL
State: Kansas
Drilling Contractor: Southwind Drilling,
Inc - Rig 3
Elevation: 1879 GL
Field Name: Trapp
Pool: Infield
Job Number: 425
API #: 15-167-24099-00-00

Operation:
Uploading recovery &
pressures

DATE
December
12
2019

DST #3 Formation: Arbuckle Test Interval: 3298 - Total Depth: 3331'
3331'
Time On: 21:10 12/12 Time Off: 03:47 12/13
Time On Bottom: 22:54 12/12 Time Off Bottom: 01:54 12/13

BUCKET MEASUREMENT:

Diesel in Bucket

1st Open: Surface blow building to 1 1/4"

1st Close: No BB

2nd Open: Very weak surface blow lasting 8 min.

2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas 28% Oil 0% Water 72% Mud



**Company: RJM Oil Company,
Inc**

SEC: 13 TWN: 15S RNG: 14W
County: RUSSELL
State: Kansas
Drilling Contractor: Southwind Drilling,
Inc - Rig 3
Elevation: 1879 GL

Operation:Uploading recovery &
pressures**Lease: Krug "G" #2**Field Name: Trapp
Pool: Infield
Job Number: 425
API #: 15-167-24099-00-00**DATE**December
12
2019**DST #3 Formation: Arbuckle Test Interval: 3298 - 3331' Total Depth: 3331'**Time On: 21:10 12/12 Time Off: 03:47 12/13
Time On Bottom: 22:54 12/12 Time Off Bottom: 01:54 12/13**Down Hole Makeup**

Heads Up: 16.45 FT	Packer 1: 3293 FT
Drill Pipe: 3289.29 FT <i>ID-3 1/2</i>	Packer 2: 3298 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 3285 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 3300 FT
Test Tool: 26.16 FT <i>ID-3 1/2-FH</i>	Well Bore Size: 7 7/8
Total Anchor: 33	Surface Choke: 1"
<u>Anchor Makeup</u>	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 32 FT <i>4 1/2-FH</i>	



Operation:

**Company: RJM Oil Company,
Inc**
Lease: Krug "G" #2SEC: 13 TWN: 15S RNG: 14W
County: RUSSELL
State: Kansas
Drilling Contractor: Southwind Drilling,
Inc - Rig 3
Elevation: 1879 GL
Field Name: Trapp
Pool: Infield

Uploading recovery &
pressures

Job Number: 425
API #: 15-167-24099-00-00

DATE
December
12
2019

DST #3 **Formation: Arbuckle** **Test Interval: 3298 - 3331'** **Total Depth: 3331'**
Time On: 21:10 12/12 Time Off: 03:47 12/13
Time On Bottom: 22:54 12/12 Time Off Bottom: 01:54 12/13

Mud Properties

Mud Type: Chemical **Weight:** 9.5 **Viscosity:** 48 **Filtrate:** 8.8 **Chlorides:** 6,000 ppm



Operation:

Uploading recovery &
pressures

**Company: RJM Oil Company,
Inc**
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
County: RUSSELL
State: Kansas
Drilling Contractor: Southwind Drilling,
Inc - Rig 3
Elevation: 1879 GL
Field Name: Trapp
Pool: Infield
Job Number: 425
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DATE

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12

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DST #3 Formation: Arbuckle Test Interval: 3298 - 3331' Total Depth: 3331'

Time On: 21:10 12/12 Time Off: 03:47 12/13

Time On Bottom: 22:54 12/12 Time Off Bottom: 01:54 12/13

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
13
 2019

DST #4 Formation: Arbuckle Test Interval: 3297 - 3337' Total Depth: 3337'
 Time On: 09:48 12/13 Time Off: 17:43 12/13
 Time On Bottom: 11:52 12/13 Time Off Bottom: 15:22 12/13

Electronic Volume Estimate:
 205'

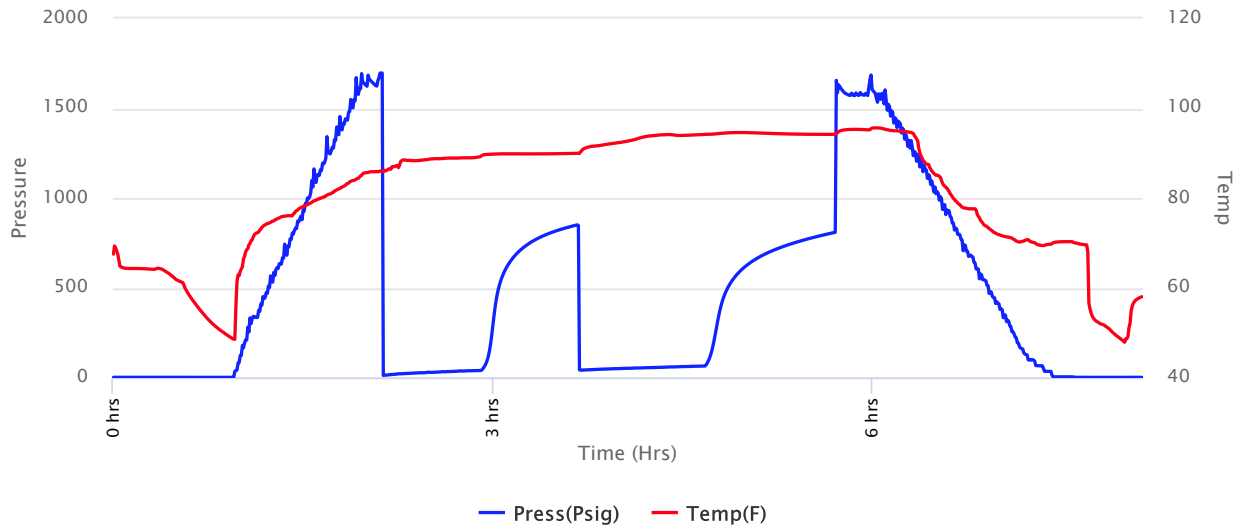
1st Open
 Minutes: 45
 Current Reading: 11.4" at 45 min
 Max Reading: 11.4"

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

2nd Open
 Minutes: 60
 Current Reading: 12.7" at 60 min
 Max Reading: 12.7"

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

Inside Recorder





Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL
 Field Name: Trapp
 Pool: Infield
 Job Number: 425
 API #: 15-167-24099-00-00

Operation:
 Uploading recovery & pressures

DATE
 December
13
 2019

DST #4 Formation: Arbuckle Test Interval: 3297 - 3337' Total Depth: 3337'
 Time On: 09:48 12/13 Time Off: 17:43 12/13
 Time On Bottom: 11:52 12/13 Time Off Bottom: 15:22 12/13

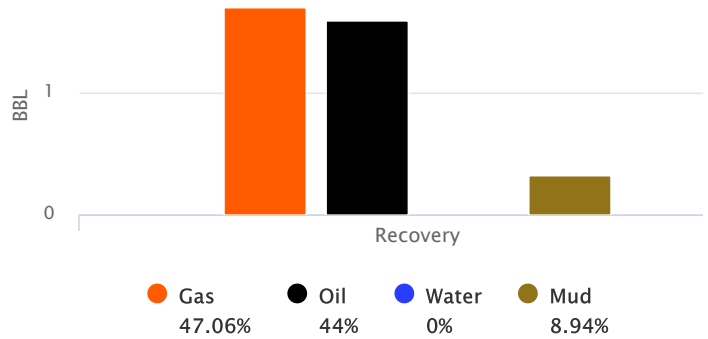
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
120	1.7076	G	100	0	0	0
95	1.35185	O	0	100	0	0
40	0.5692	HOCM	0	43	0	57

Total Recovered: 255 ft
 Total Barrels Recovered: 3.62865

**Reversed Out
 NO**

Initial Hydrostatic Pressure	1623	PSI
Initial Flow	12 to 43	PSI
Initial Closed in Pressure	851	PSI
Final Flow Pressure	41 to 64	PSI
Final Closed in Pressure	809	PSI
Final Hydrostatic Pressure	1622	PSI
Temperature	95	°F
Pressure Change Initial Close / Final Close	4.9	%

Recovery at a glance



GIP cubic foot volume: 9.58732



Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
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 Drilling Contractor: Southwind Drilling, Inc - Rig 3
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DST #4 Formation: Arbuckle Test Interval: 3297 - 3337' Total Depth: 3337'
 Time On: 09:48 12/13 Time Off: 17:43 12/13
 Time On Bottom: 11:52 12/13 Time Off Bottom: 15:22 12/13

BUCKET MEASUREMENT:

Diesel in Bucket

1st Open: 1/4" blow building to BOB 41 1/2 min.

1st Close: Surface BB

2nd Open: 1" blow building to BOB 43 1/2 min.

2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas 63% Oil 0% Water 37% Mud

Gravity: 35.6 @ 60 °F



Company: RJM Oil Company, Inc

SEC: 13 TWN: 15S RNG: 14W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1879 GL

Operation:Uploading recovery &
pressures**Lease: Krug "G" #2**Field Name: Trapp
Pool: Infield
Job Number: 425
API #: 15-167-24099-00-00**DATE**December
13
2019**DST #4 Formation: Arbuckle Test Interval: 3297 - 3337' Total Depth: 3337'**

Time On: 09:48 12/13

Time Off: 17:43 12/13

Time On Bottom: 11:52 12/13

Time Off Bottom: 15:22 12/13

Down Hole Makeup**Heads Up:** 17.55 FT**Packer 1:** 3292 FT**Drill Pipe:** 3289.39 FT**Packer 2:** 3297 FT*ID-3 1/2***Top Recorder:** 3284 FT**Weight Pipe:** 0 FT**Bottom Recorder:** 3303 FT*ID-2 7/8***Collars:** 0 FT**Well Bore Size:** 7 7/8*ID-2 1/4***Surface Choke:** 1"**Test Tool:** 26.16 FT**Bottom Choke:** 5/8"*ID-3 1/2-FH***Total Anchor:** 40**Anchor Makeup****Packer Sub:** 1 FT**Perforations: (top):** 4 FT*4 1/2-FH***Change Over:** 0 FT**Drill Pipe: (in anchor):** 0 FT*ID-3 1/2***Change Over:** 0 FT**Perforations: (below):** 35 FT*4 1/2-FH***Operation:****Company: RJM Oil Company,
Inc****Lease: Krug "G" #2**SEC: 13 TWN: 15S RNG: 14W
County: RUSSELL
State: Kansas
Drilling Contractor: Southwind Drilling,
Inc - Rig 3
Elevation: 1879 GL
Field Name: Trapp
Pool: Infield

Uploading recovery &
pressures

Job Number: 425
API #: 15-167-24099-00-00

DATE
December
13
2019

DST #4 **Formation: Arbuckle** **Test Interval: 3297 - 3337'** **Total Depth: 3337'**
Time On: 09:48 12/13 Time Off: 17:43 12/13
Time On Bottom: 11:52 12/13 Time Off Bottom: 15:22 12/13

Mud Properties

Mud Type: Chemical **Weight:** 9.5 **Viscosity:** 52 **Filtrate:** 10.8 **Chlorides:** 8,000 ppm



Operation:

Uploading recovery &
pressures

Company: RJM Oil Company, Inc
Lease: Krug "G" #2

SEC: 13 TWN: 15S RNG: 14W
County: RUSSELL
State: Kansas
Drilling Contractor: Southwind Drilling, Inc - Rig 3
Elevation: 1879 GL
Field Name: Trapp
Pool: Infield
Job Number: 425
API #: 15-167-24099-00-00

DATE

December

13

2019

DST #4 Formation: Arbuckle Test Interval: 3297 - Total Depth: 3337'
3337'

Time On: 09:48 12/13

Time Off: 17:43 12/13

Time On Bottom: 11:52 12/13 Time Off Bottom: 15:22 12/13

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Musgrove

Petroleum Geology
212 Main Street, Claflin KS

NOTES

Company: RJM COMPANY

Lease: KRUG G #2

Field: Trapp

Location: NW-SW--NE(2250'FNL & 1170'FEL)

Sec: 13 Twsp: 15S Rge: 14W

County: Russell State: Kansas

KB: 1888' GL: 1879'

Contractor: Southwind Drilling, Inc. (Rig #3)

Spud: 12-4-2019 Comp: 12-13-2019

RTD: 3337'

Mud Up: 2200' Type Mud: Chemical

Samples Saved From: 2300' to RTD

Drilling Time Kept From: 2300' to RTD

Samples Examined From: 2300' to RTD

Geological Supervision from: 2300' to RTD

Geologist on Well: Jim musgrove (2300 -3300) & Wyatt Urban (3300-RTD)

Surface Casing: 8 5/8@ 400'

Production Casing: 5 1/2" @ 3335'

Electronic Surveys: None



DRILLING					OIL			
RJM CO.					CITIES SERVICE OIL CO.			
KRUG 'G' #2					KRUG 'F' #5			
13-15S-14W (2290 FNL & 1170 FEL)					13-15S-14W (760' FNL & 1420' FEL)			
KB	1888	GL	1879	KB	1886			
LOG		SAMPLE			LOG		SMPL.	
FORMATION	DEPTH	DATUM	DEPTH 2	DATUM 3	DEPTH	DATUM 4	0	structure
ANHYDRITE TOP			865	1023	862	1024	-	1
ANHYDRITE BASE			891	997	884	1002	-	5
GRAND HAVEN			2433	-545	2432	-546	+	1
TARKIO SD. 1st			2436	-548	2438	-552	+	4
DOVER			2453	-565	2451	-565	+	0
TARKIO SD. 2nd			2456	-568	2458	-572	+	4
TARKIO LIME			2502	-614	2501	-615	+	1
ELMONT			2564	-676	2564	-678	+	2
HOWARD			2703	-815	2704	-818	+	3
SEVERY Sh.			2751	-863	2754	-868	+	5
TOPEKA			2770	-882	2773	-887	+	5

KING HILL Sh.			2858	-970	2858	-972	+	2
QUEEN HILL Sh.			2920	-1032	2922	-1036	+	4
PLATTSMOUTH			2939	-1051	2940	-1054	+	3
HEEBNER			2998	-1110	3004	-1118	+	8
TORONTO			3016	-1128	3019	-1133	+	5
DOUGLAS			3034	-1146	3035	-1149	+	3
LANSING			3066	-1178	3070	-1184	+	6
BASE KC.			3316	-1428	3320	-1434	+	6
ARBUCKLE			3320	-1432	3324	-1438	+	6
RTD			3337	-1449	3345	-1459	+	10

LEGEND

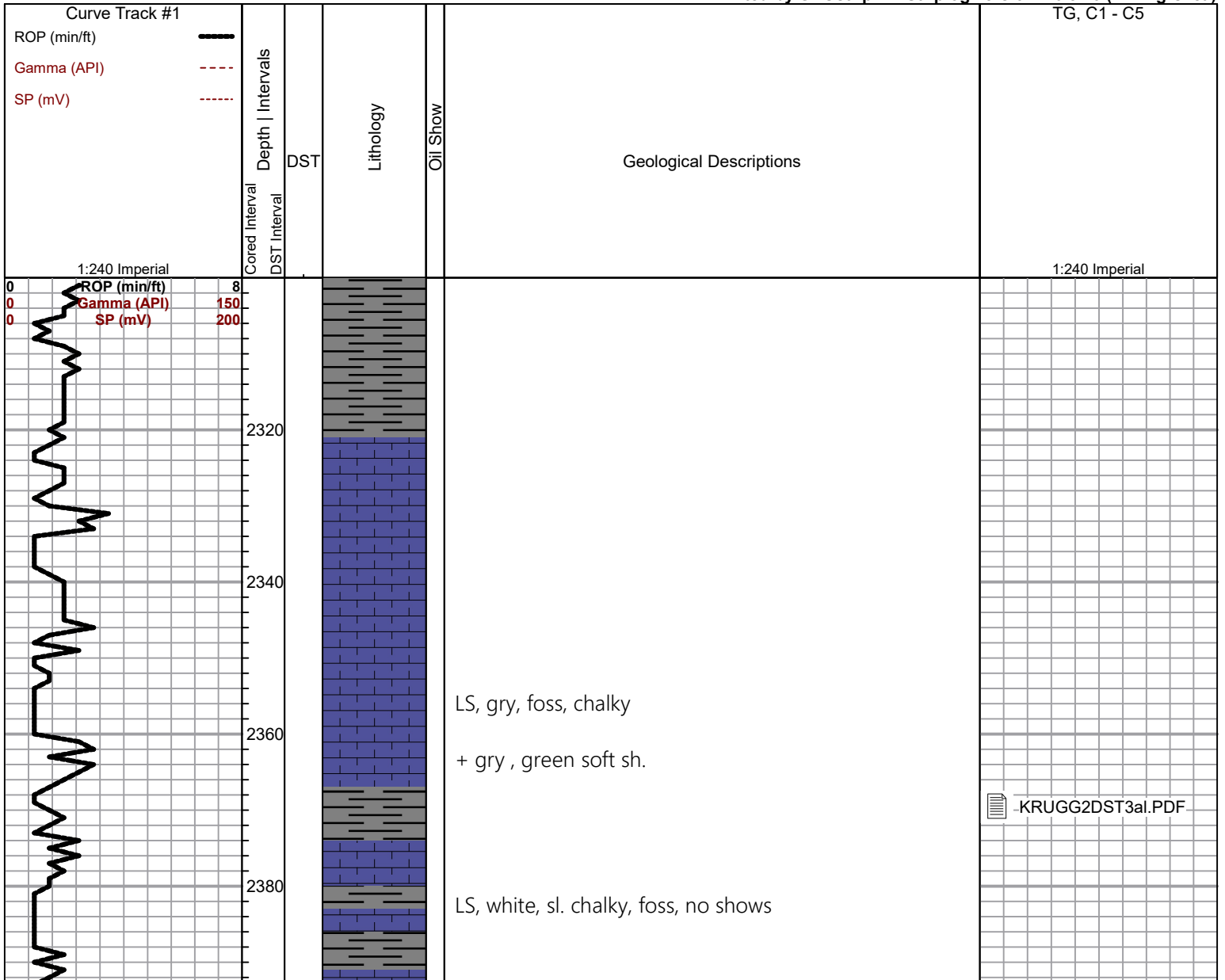
Oil Show

- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- * Gas

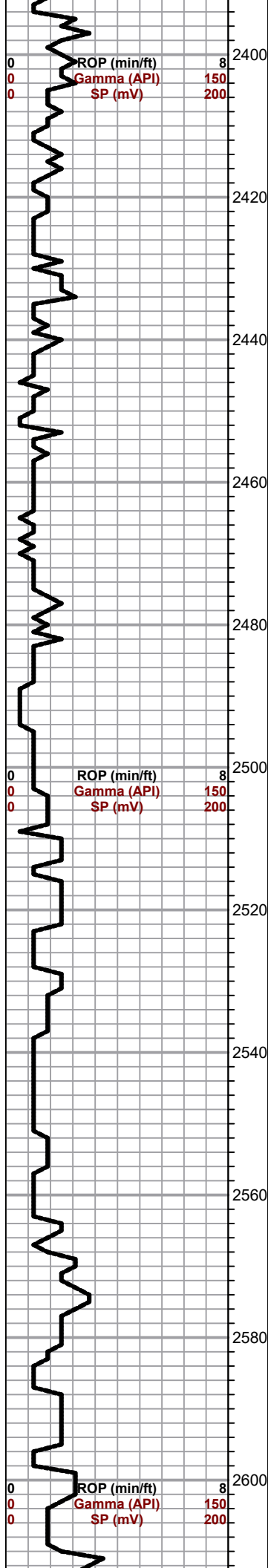
DST

- DST Int
- DST alt
- Core
- tail pipe

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📄 KRUGG2DST3al.PDF



Sh, gry gryish, green soft silty

Sh. gry , maroon, rusty brn, silty sh.

Grand Haven 2433.0 (-545.0)

LS, white, cream, chalky

1st Tarkio Sand 2436.0 (-548.0)

Sd. gry, silty, shaley, poorly developed, no shows

Dover 2453.0 (-565.0)

LS, tan, gry foss, chalky

2nd Tarkio Sand 2456.0 (-568.0)

Tr. vfg silty sh/ sd. , poorly developed, no shows

Sd, a/a, gry, gryish, green/ dk green silty sh.

Tarkio Lime 2502.0 (-614.0)

LS, white, gry chalky, poor vis. por., no shows

Sd, gry, gryish green dk gry silty sh.

Tr. sd, white, gry, vfg, mica, scattered por., brn - lt. brn stain, nsfo, no odor

Sh, gry, green silty shale

Elmont 2564.0 (-676.0)

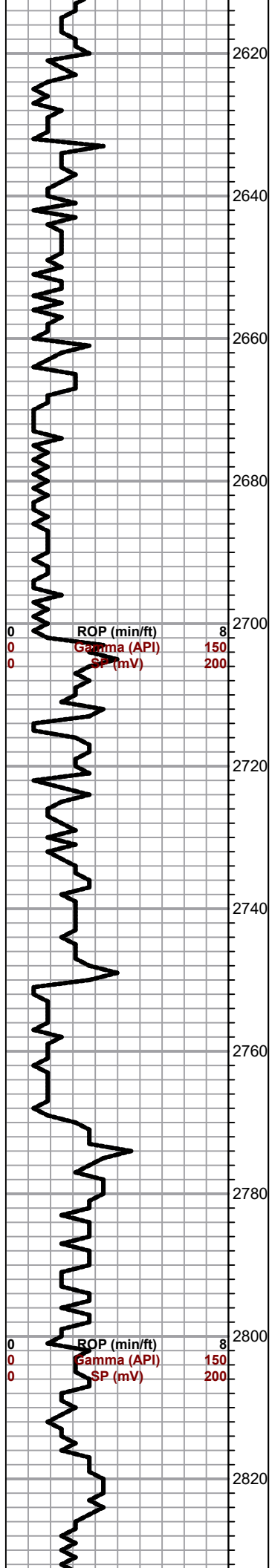
LS, white, LS, white, gry, foss, chalky in pt, few cherty

Sh gry, rusty brn sh.

LS, white, foss, few glauc. chalky, no shows

a/a, + LS, tan, gry med xln, chalky, poor porosity

LS, white, gry, fxl, chalky, shaley in pt, tr. pyrite



LS, white, gry, fxl, chalky, shaley in pt.

Sh, gry, lt. gry, soft

A/a, silty sh.

Sh, a/a

Howard 2703.0 (-815.0)

LS, tan, foss, cherty in ps, no shows

LS, a/a +gry, tan, foss chert

LS, tan, gry, foss, f- med xln , chalky, poor porosity

Severy 2751.0 (-863.0)

Gry - green sh+tr. pyrite

Topeka 2770.0 (-882.0)

LS, tan, brn, fxl, cherty (dense)

LS, gry, tan, foss, chalky, poor vis. por.,

LS, a/a, + gry chert

LS, tan, brn fxl, foss, sl. glauc.

2840

King Hill 2858.0 (-970.0)

Black carb sh.

2860

LS, tr. white, gry, cream, cherty, dense

2880

LS, white, cream, chalky, poor vis. porosity, no shows

2900

ROP (min/ft) 8
Gamma (API) 150
SP (mV) 200

LS, brn tan, fxl, dense, cherty

Queen Hill 2920.0 (-1032.0)

black carb sh,

2920

LS, tan, foss, poor por., tr. golden brn stain, nsfo, no odor

2940

LS, white, crm, chalky, poor por., no shows

2960

LS, white, crm, few foss, poor vis. por., no shows, tr. tan, white cherts

2980

Heebner 2998.0 (-1110.0)

Sh, black carb

3000

Sh, gry, dark gry

Toronto 3016.0 (-1128.0)

LS, white, cream, slightly foss, chalky, poor por., brn stain, nsfo, ft odor

3020

Douglas 3034.0 (-1146.0)

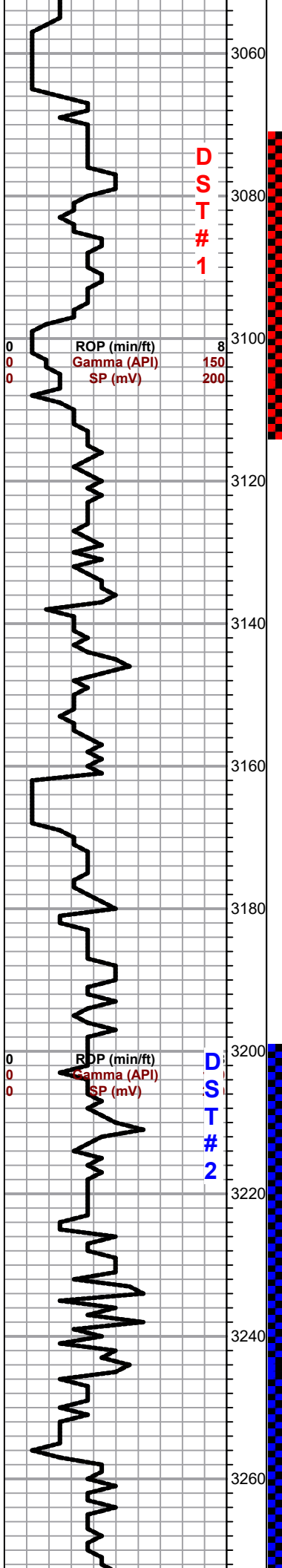
Sh, maroon, gryish green sh.

3040

DST #1 3071-3114
45-45-60-60

1st Open:
weak building to 2.7"

2nd Open :



Sh, gry, greenish, silty , mica

Lansing 3066.0 (-1178.0)

○ LS, tan, foss, chalky, poor vis. porosity, tr. brn stain , nsfo, no odor

● LS, cream, fair - good vuggy oom por., sl. chalky, fr-good stain, good sfo, strong odor

○ LS, gry, tan, chalky, poor vis. por. no shows

○ LS, white, gry foss, chalky, no shows

○ LS, white, crm,ool, chalky, scattered por., brn/ golden brn stn, tr. fo, no odor

○ LS, crm, white, ool, oom, fair por., tr. spty stain , nsfo, ??? odor

○ LS, gry, white, chalky, +tr gry chert

○ LS, a/a

Muncie Creek 3212.0 (-1284.0)

○ Sh, black carb

○ Tr. white and opaque cherts

○ LS, gry white foss, chalky, white, crm, ool, scattered por. tr. brn /golden brn stain, tr. fo, no odor

○ LS, tan, ool, oom, fr. oom por.. slightly chalky, brn stain, sfo, ft. odor

Weak building blow 4"

Recovery:

50' GIP
15' SLOCM
(4%O, 95%M)

Pressures:

ISIP 78 psi
FSIP 92 psi
IFP 12-15 psi
FFP 13-18 psi
HSH 1495-1494 psi

DST#2 3200-3290
45-45-45-45

1st Open:

1/4" blow building to 4"

2nd Open:

2" blow building to 6.5"

Recovery:

45' GIP
20' SLOCM
(1%O, 99%M)

Pressures:

ISIP 121 psi
FSIP 105 psi
IFP 12-16 psi
FFP 15-21 psi
HSH 1612-1600 psi

DST #3 3298-3331
30-30-30-30

1st Open:

1.25" surface blow

2nd open

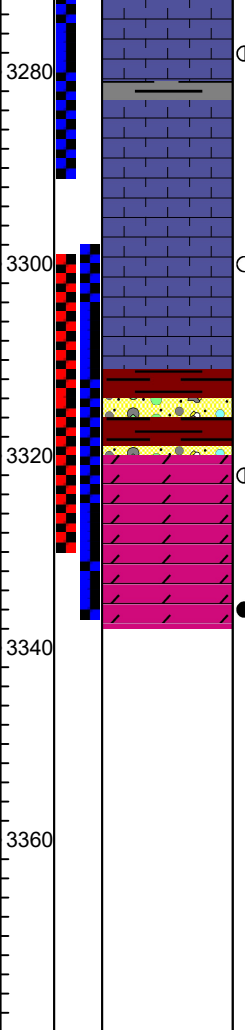
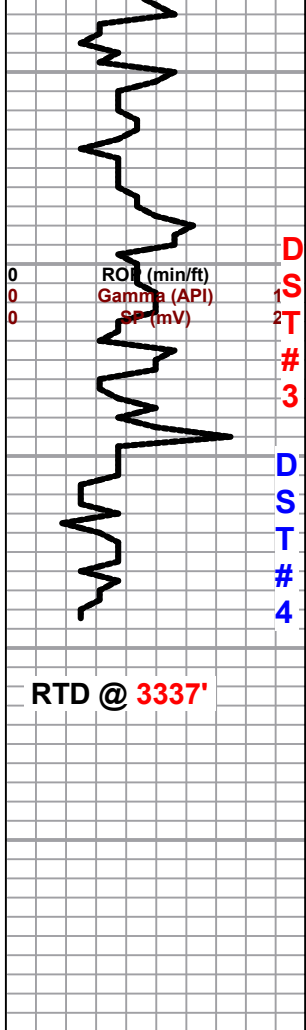
weak surf. blow lasting 8 min.

Recovery:

3' HMCO
(63%O, 37%M)

Pressures:

ISIP 58 psi
FSIP 31 psi
IFP 10-10 psi
FFP 10-11 psi
HSH 1666-1663 psi



,LS, tan, ool foss scatter p.p.. por, foss, scattered por.
brn stain , sfo, odor

LS, tan, crm, fxl, few foss, poor scattered por, tr. brn stain,
weak spty sfo, ??? odor

BKC 3316.0 (-1428.0)

Sh, maroon, aqua green silty, tr. white & opaque cherts

Arbuckle 3321.0 (-1432.0)

Dol, white, fxl, suc. fair inxln or.n lt.. brn stain , lt. spty
sfo, ft. odor in crushed samples

40" sample- Dol, gry white, dense, poor inxln por., dk blk
tarry-flakey sfo, poor odor

Dol, white, med xln good inxln por. golden brn stain,
brn sfo, strong odor

RTD 3337.0 (-1449.0)

DST # 4 3297-3337
45-45-60-60

1st Open:
BOB 41 mins.

1st Shutin:
weak surface return

2nd Open:
BOB 43 mins.

2nd shut-in:
No return

Recovery:
120' GIP
95' Clean Oil
40' HOCM
(43%O, 57M)

Pressures:
ISIP 851 psi
FSIP 809 psi
IFP 12-43 psi
FFP 41-64 psi
HSH 1623-1622 psi

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1905

Date	12-14-19	Sec.	13	Twp.	15	Range	14	County	Russell	State	Ks	On Location		Finish	5.00 HWA
Lease								Well No.		Owner					
Krug Co.								2		To Quality Oilwell Cementing, Inc.					
Contractor								You are hereby requested to rent cementing equipment and furnish							
Southwind #3								cement and helper to assist owner or contractor to do work as listed.							
Type Job								Charge To							
Production String								R. J. M.							
Hole Size				T.D.				Street							
7 7/8				3337											
Csg.				Depth				City				State			
5 1/2				3326											
Tbg. Size				Depth				City				State			
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.				Shoe Joint				Cement Amount Ordered							
21.13				21.13				180 com 10% salt							
Meas Line				Displace				5-1/2 Gilsonite				500 gal med clear			
				76' BCL											
EQUIPMENT															
Pumptrk		No.	Cementer		Helper										
17			Co's												
Bulktrk		No.	Driver												
			DAVID												
Bulktrk		No.	Driver												
1			LANCE												
JOB SERVICES & REMARKS															
Remarks:								Hulls							
Rat Hole								Salt							
30SK								16							
Mouse Hole								Flowseal							
								Kol-Seal							
								900 #							
Centralizers								Mud CLR 48							
								500 gal							
Baskets								CFL-117 or CD110 CAF 38							
DV or Port Collar								Sand							
5 1/2 csg @ 3326								Handling							
Balled @ 3304								177							
Est. Completion Pump								Mileage							
500 gal med clear															
Dmg Rat Hole with 30SK Cement								FLOAT EQUIPMENT							
5 1/2 with 150SK Clear lines								Guide Shoe							
Displace Plug - 150SK								Centralizer							
								9							
Plug landed @ - 150SK								Baskets							
								2							
Lift Pressure - 70#								AFU Inserts							
								Float Shoe							
								1							
								Latch Down							
								1							
								Pumptrk Charge							
								Prod String							
								Mileage							
								13							
Tax															
Discount															
Total Charge															
X Signature		Jay Hoover													

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

- **TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

- **ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.

- **PRICES AND TAXES:** All merchandise listed in "QUALITY'S" current price shall schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.

- **TOWING CHARGES:** QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.

- **PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.

- **DEADHAUL CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

- **SERVICE CONDITIONS AND LIABILITIES:** 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1900

Date	12-7-19	Sec.	13	Twp.	15	Range	14	County	Russell	State	KS	On Location		Finish	3:15 AM				
Lease								Well No.		Owner									
Krug G								2		To Quality Oilwell Cementing, Inc.									
Contractor								You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.											
Southwind #3																			
Type Job								Charge To											
Surface								R.J.M.											
Hole Size				T.D.				Street				City				State			
12 1/4				422															
Csg.				Depth				Cement Amount Ordered											
8 5/8				421				190 @ 40 41.00 21.00											
Tbg. Size				Depth				The above was done to satisfaction and supervision of owner agent or contractor.											
Tool				Depth				Cement Left in Csg.				Shoe Joint							
								15'											
Meas Line								Displace											
								25 1/2 BC											
EQUIPMENT								Common											
Pumptrk								115											
20 No. Cementer								75											
Helper																			
Bulktrk								Gel.											
No. Driver								3											
3 No. Driver								Calcium											
Lance								9											
JOB SERVICES & REMARKS								Hulls											
Remarks:								Salt											
Rat Hole								Flowseal											
Mouse Hole								Kol-Seal											
Centralizers								Mud CLR 48											
Baskets								CFL-117 or CD110 CAF 38											
DV or Port Collar								Sand											
8 5/8 on bottom. Est. Circulation								Handling											
Mix 19054 & Displace								202											
Cement Circulation								Mileage											
								FLOAT EQUIPMENT											
								8 5/8 Surage											
								Guide Shoe											
								Centralizer											
								Baskets											
								AFU Inserts											
								Float Shoe											
								Latch Down											
								Pumptrk Charge											
								Surface											
								Mileage											
								15											
								Tax											
								Discount											
								Total Charge											
X Signature																			
Joy M... (Signature)																			

Thanks

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

- **TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

- **ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.

- **PRICES AND TAXES:** All merchandise listed in "QUALITY'S" current price schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.

- **TOWING CHARGES:** QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.

- **PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.

- **DEADHAUL CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

- **SERVICE CONDITIONS AND LIABILITIES:** 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be constructed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.