

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

**WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Jaspar Co.
Well Name	STATES 1
Doc ID	1457882

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	237	80/20	150	3%CC, 2% GEL, 500# HULLS
Surface	12.25	8.625	23	237	60/40	150	4%CC, 2% GEL, 800# HULLS
Production	7.875	5.5	15.5	3600	COMMON	150	10% SALT, 5% GIL
Production	7.875	5.5	15.5	3600	QMDC	430	80/20
Surface	12.25	8.625	23	237	COMMON	40	500# hulls

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

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

No. 1204

Date	Sec.	Twp.	Range	County	State	On Location	Finish
1-12-19	12	7	20	Rooks	KS		3:30 AM
Location				Stackton 8W 11R 3N H 4 1/2 W 5 into			

Lease	States	Well No.	1	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor	WW #8			Charge To	Jasper Oil
Type Job	Surface	T.D.	237	Street	
Hole Size	12 1/4	Depth	236	City	State
Csg.	8 5/8			The above was done to satisfaction and supervision of owner agent or contractor.	
Tbg. Size				Cement Amount Ordered	150 80# 3/4 2/6EL
Tool				Meas Line	Displace 14 BCL
Cement Left in Csg.	10			Common	2/10
				Poz. Mix	60
				Gel.	5
				Calcium	13
				Hulls	800# (16)
				Salt	

EQUIPMENT

Pumptrk	20	No.	Cement Helper	Eric's
Bulktrk	14	No.	Driver	Brett
Bulktrk	9	No.	Driver	Tom

JOB SERVICES & REMARKS	
Remarks:	
Rat Hole	Flowseal
Mouse Hole	Kol-Seal
Centralizers	Mud CLR 48
Baskets	CFL-117 or CD110 CAF 38
D/V or Port Collar	Sand
8 5/8 on bottom - Est. Circulation	Handling
Might be 150SK with 800# Hulls Displace	Mileage
Cement - D/V - Est. Circulate	

FLOAT EQUIPMENT

Pumped 150SK with 800# Hulls.
Wait 8 HRS.

Thanks

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	Surface
Mileage	48

X Signature *Scott P. Leonard*

Tax	
Discount	
Total Charge	

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 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 785-483-2025
Cell 785-324-1041

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

No. 987 ^{+ Library}

Date 1-18-19	Sec. 12	Twp. 7	Range 20	County Rooks	State KS	On Location	Finish 8:00 AM
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Location Stockton 9W 1N 3W 1N 1/4 E

Lease States	Well No. #1	Owner Sinto
Contractor WW #8		To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Type Job Production String		
Hole Size 7 7/8	T.D. 3603	Charge To Jasper
Csg. 5 1/2	Depth 3600	Street
Tbg. Size	Depth	City State
Tool	Depth	The above was done to satisfaction and supervision of owner agent or contractor.
Cement Left in Csg. 43.35	Shoe Joint 43.35	Cement Amount Ordered 150sx com 10% salt
Meas Line	Displace 84 1/2 bbl	460sx 80% QMDC 5% Gilsonite

EQUIPMENT

Pumptrk 17 No.	Cementer Helper Brett	Common
Bulktrk 3 No.	Driver David	Poz. Mix
Bulktrk 19 No.	Driver Doug Jack	Gel.
		Calcium

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole - 30sx	Salt
Mouse Hole - 10	Flowseal
Centralizers 1, 6, 11, 23, 38, 46 + 53	Kol-Seal
Baskets 2, 7, 12, 24, 47 + 54	Mud CLR 48 - 500 Gal
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand
	Handling
	Mileage

FLOAT EQUIPMENT

Ran 3600 of 5 1/2 + Est cir	Guide Shoe
Mix 500 Gal Mud Flush	Centralizer - 7
Plugged Rat + Mouse hole	Baskets - 6
Mix 430 sx QMDC + 150sx	AFU Inserts
Displaced 84 1/2 bbl	Float Shoe - 1
	Latch Down - 1

Lift pressure @ 700 lbs

Landed @ 1600 lbs

Cement circulated

Signature *[Handwritten Signature]*

Tax
Discount
Total Charge

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(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.



Scale 1:240 Imperial

Well Name: STATES #1
Surface Location: NW SW NE NW Sec. 12 - 7S - 20W
Bottom Location:
API: 15-163-24379
License Number: 34903
Spud Date: 1/11/2019 Time: 5:00 PM
Region: ROOKS COUNTY
Drilling Completed: 1/17/2019 Time: 12:00 AM
Surface Coordinates: 890' FNL & 1545' FWL
Bottom Hole Coordinates:
Ground Elevation: 2098.00ft
K.B. Elevation: 2103.00ft
Logged Interval: 2800.00ft To: 3605.00ft
Total Depth: 3605.00ft
Formation: LANSING - KANSAS CITY; ARBUCKLE
Drilling Fluid Type: FRESH WATER / CHEMICAL GEL

OPERATOR

Company: JASPAR CO
Address: P.O. BOX 1120
HAYS, KS 67601
Contact Geologist: SHANE VEHIGE
Contact Phone Nbr: (785) 23-6982
Well Name: STATES #1
Location: NW SW NE NW Sec. 12 - 7S - 20W
API: 15-163-24379
Pool: State: KANSAS Field: WILDCAT
Country: USA

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: -99.5038996
Latitude: 39.4639735
N/S Co-ord: 890' FNL
E/W Co-ord: 1545' FWL

LOGGED BY



Company: BIG CREEK CONSULTING, INC.
Address: 1909 MAPLE
ELLIS, KS 67637

Phone Nbr: (785) 259-3737
 Logged By: GEOLOGIST

Name: JEFF LAWLER

CONTRACTOR

Contractor: WW DRILLING, LLC
 Rig #: 8
 Rig Type: MUD ROTARY
 Spud Date: 1/11/2019
 TD Date: 1/17/2019
 Rig Release: 1/19/2019

Time: 5:00 PM
 Time: 12:00 AM
 Time: 12:00 PM

ELEVATIONS

K.B. Elevation: 2103.00ft
 K.B. to Ground: 5.00ft

Ground Elevation: 2098.00ft

NOTES

DUE TO ECONOMICAL DST RECOVERY DECISION WAS MADE TO RUN 5 1/2" PRODUCTION CASING AND FURTHER EVALUATE ZONES OF INTEREST UPON COMPLETION.

RESPECTFULLY SUBMITTED,
 JEFF LAWLER

WELL COMPARISON SHEET

FORMATION	STATES #1				NESE NW NE 12-7-20				SW SE SE 1-7-20				SW NE SE SW 1-7-20				NESE SW SE 11-7-20			
	2103		2098		2095		2116		2133		2116		2116		2116		2116			
	KB	GL	KB	GL	KB	GL	KB	GL	KB	GL	KB	GL	KB	GL	KB	GL	KB	GL		
	LOG TOPS	SAMPLE TOPS	LOG	LOG	SMPL.	COMP. CARD	LOG	SMPL.	LOGS	LOG	SMPL.	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.			
DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM			
ANHYDRITE TOP	1665	438	1667	436	1651	444	- 6	- 8	1687	429	+ 9	+ 7	1689	444	- 6	- 8	1666	450	- 12	- 14
BASE	1697	406	1699	404	1683	412	- 6	- 8	1728	388	+ 18	+ 16	1723	410	- 4	- 6	1701	415	- 9	- 11
TOPEKA	3082	-979	3082	-979	3072	-977	- 2	- 2	3085	-969	- 10	- 10	3111	-978	- 1	- 1	3083	-967	- 12	- 12
HEEBNER SHALE	3280	-1177	3282	-1179	3269	-1174	- 3	- 5	3307	-1191	+ 14	+ 12	3311	-1178	+ 1	- 1	3284	-1168	- 9	- 11
TORONTO	3304	-1201	3307	-1204	3291	-1196	- 5	- 8	3333	-1217	+ 16	+ 13	3333	-1200	- 1	- 4	3308	-1192	- 9	- 12
LKC	3320	-1217	3324	-1221	3309	-1214	- 3	- 7	3348	-1232	+ 15	+ 11	3350	-1217	+ 0	- 4	3322	-1206	- 11	- 15
BKC	3529	-1426	3531	-1428	3519	-1424	- 2	- 4	3552	-1436	+ 10	+ 8	3559	-1426	+ 0	- 2	3532	-1416	- 10	- 12
ARBUCKLE	3570	-1467	3568	-1465	3558	-1463	- 4	- 2	3598	-1482	+ 15	+ 17	3602	-1469	+ 2	+ 4	3571	-1455	- 12	- 10
REAGAN SAND																	3629	-1513		
TOTAL DEPTH	3603	-1500	3605	-1502	3652	-1557	+ 57	+ 55	3680	-1564	+ 64	+ 62	3700	-1567	+ 67	+ 65	3651	-1535	+ 35	+ 33

DST #1 ARBUCKLE 3559' - 3579'

1/16/2019



Company: **Jaspar Company**
 Lease: **States #1**

DST #1 for - Diamond Testing, LLC

SEC: 12 TWN: 7S RNG: 20W
 County: ROOKS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 8
 Elevation: 2100 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 303

Operation:

Uploading recovery & pressures

DATE

January
16
 2019

DST #1 Formation: Arbutckle Test Interval: 3559 - 3579' Total Depth: 3579'

Time On: 10:02 01/16 Time Off: 16:34 01/16
 Time On Bottom: 12:15 01/16 Time Off Bottom: 14:45 01/16

Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
30	0.1476	OCM	0	23	0	77

Total Recovered: 30 ft
 Total Barrels Recovered: 0.1476

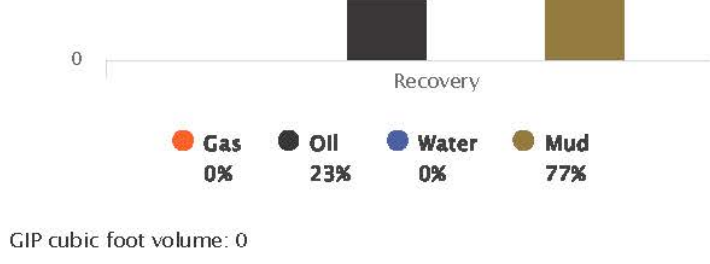
Reversed Out
NO

Recovery at a glance

Initial Hydrostatic Pressure 1737 PSI
 Initial Flow 23 to 24 PSI
 Initial Closed in Pressure 070 PSI

BBL 0.05

Initial Closed in Pressure	979	PSI
Final Flow Pressure	26 to 28	PSI
Final Closed in Pressure	933	PSI
Final Hydrostatic Pressure	1713	PSI
Temperature	103	°F
Pressure Change Initial Close / Final Close	4.7	%



DST #1 ARBUCKLE 3559' - 3579'

1/16



Company: Jaspar Company
Lease: States #1

SEC: 12 TWN: 7S RNG: 20W
 County: ROOKS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 8
 Elevation: 2100 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 303

Operation:
 Uploading recovery & pressures

DATE
 January
16
 2019

DST #1 Formation: Arbuckle Test Interval: 3559 - 3579' Total Depth: 3579'

Time On: 10:02 01/16 Time Off: 16:34 01/16
 Time On Bottom: 12:15 01/16 Time Off Bottom: 14:45 01/16

Electronic Volume Estimate:
 90'

1st Open
 Minutes: 30
 Current Reading:
 2.2" at 30 min
 Max Reading: 2.2"

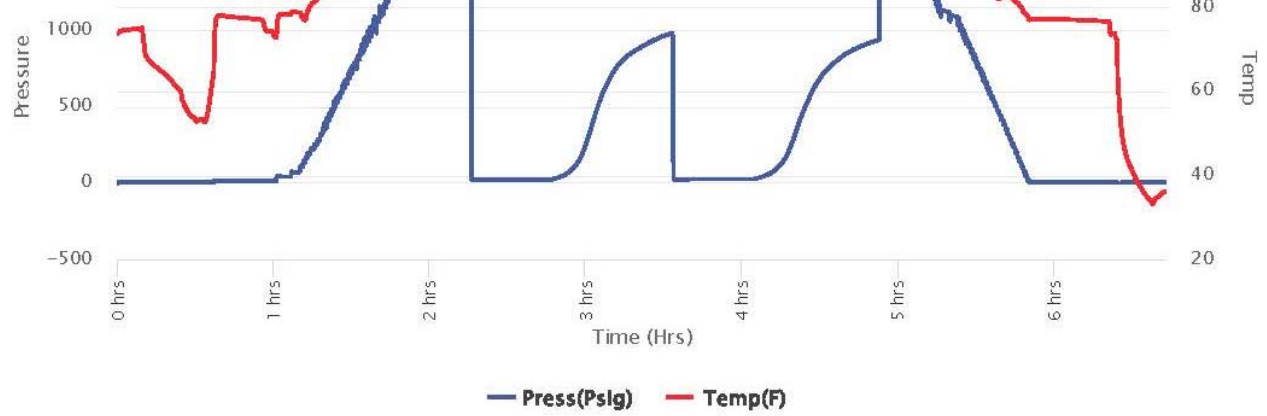
1st Close
 Minutes: 45
 Current Reading:
 .1" at 45 min
 Max Reading: .1"

2nd Open
 Minutes: 30
 Current Reading:
 1" at 30 min
 Max Reading: 1"

2nd Close
 Minutes: 45
 Current Reading:
 0" at 45 min
 Max Reading: .1"

Inside Recorder





http

1/6

DST #2 ARBUCKLE 3580' - 3605'



Company: Jaspar Company
Lease: States #1

SEC: 12 TWN: 7S RNG: 20W
 County: ROOKS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 8
 Elevation: 2100 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 303

Operation:
 Uploading recovery & pressures

DATE
 January
16
 2019

DST #2 **Formation: Arbuckle** **Test Interval: 3580 - 3605'** **Total Depth: 3605'**
 Time On: 22:50 01/16 Time Off: 06:36 01/17
 Time On Bottom: 01:12 01/17 Time Off Bottom: 04:42 01/17

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
85	0.6987103	SLGCO	10	90	0	0
62	0.30504	SLWCHOCM	0	30	5	65

Total Recovered: 147 ft
 Total Barrels Recovered: 1.0037503

Reversed Out
NO

Recovery at a glance

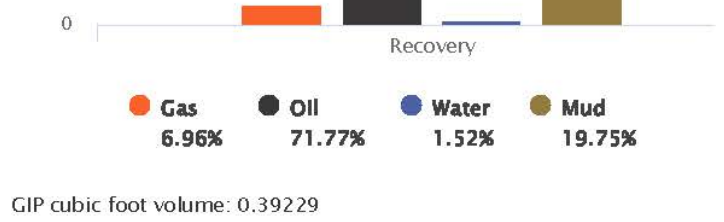
Initial Hydrostatic Pressure 1722 PSI
 Initial Flow 23 to 54 PSI
 Initial Closed in Pressure 975 PSI
 Final Flow Pressure 58 to 72 PSI

BBL

0.5



Final Flow Pressure	36 to 72	PSI
Final Closed in Pressure	884	PSI
Final Hydrostatic Pressure	1720	PSI
Temperature	103	°F
Pressure Change Initial Close / Final Close	9.4	%



DST #2 ARBUCKLE 3580' - 3605'



Company: Jaspar Company
Lease: States #1

SEC: 12 TWN: 7S RNG: 20W
 County: ROOKS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 8
 Elevation: 2100 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 303

Operation:
 Uploading recovery & pressures

DATE
 January
16
 2019

DST #2 **Formation: Arbuckle** **Test Interval: 3580 - 3605'** **Total Depth: 3605'**
 Time On: 22:50 01/16 Time Off: 06:36 01/17
 Time On Bottom: 01:12 01/17 Time Off Bottom: 04:42 01/17

Electronic Volume Estimate:
 216'

1st Open
 Minutes: 45
 Current Reading: 6.7" at 45 min
 Max Reading: 6.7"

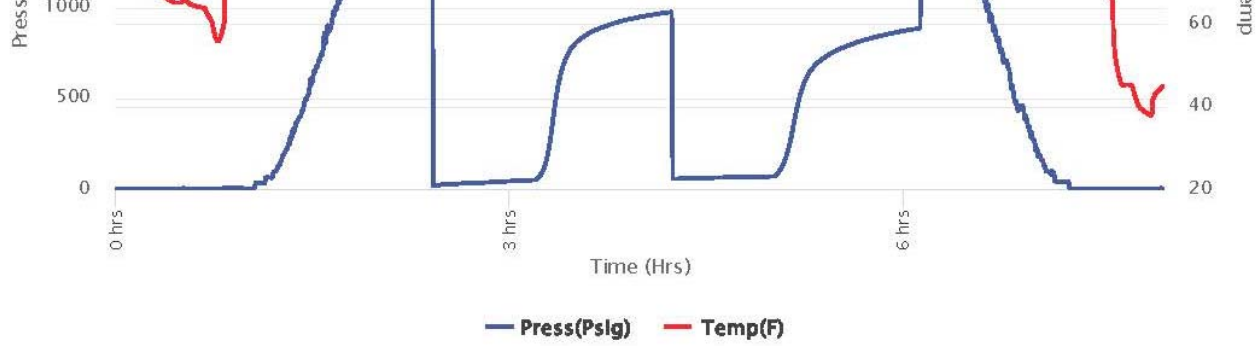
1st Close
 Minutes: 60
 Current Reading: .1" at 60 min
 Max Reading: .1"

2nd Open
 Minutes: 45
 Current Reading: 7.9" at 45 min
 Max Reading: 7.9"

2nd Close
 Minutes: 60
 Current Reading: .5" at 60 min
 Max Reading: .5"

Inside Recorder



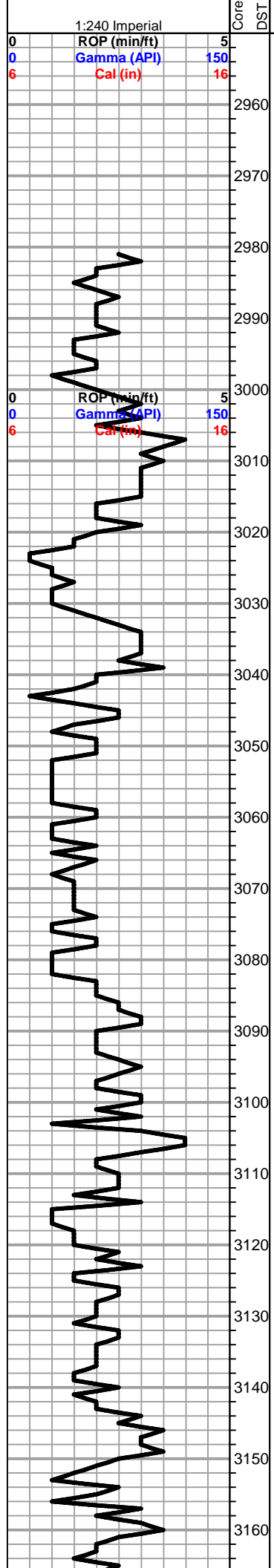


- ROCK TYPES**
- Dolprim
 - shale, grn
 - Carbon Sh
 - shale, red
 - Lmst fw7>
 - shale, gry
 - Shblk

- ACCESSORIES**
- FOSSIL**
 Oomoldic
 - TEXTURE**
 Chalky

- OTHER SYMBOLS**
- MISC**
 - DST**
 - Daily Report
 - DST Int
 - Digital Photo
 - DST alt
 - Document
 - Folder
 - Link
 - Vertical Log File
 - Horizontal Log File
 - Core Log File
 - Drill Cuttings Rpt

Curve Track #1		Depth Intervals	DST	Lithology	Oil Show	Geological Descriptions	Curve Track #3
ROP (min/ft)							
Gamma (API)							
Cal (in)							



1' DRILL TIME THROUGH ANHYDRITE FROM 1640' - 1710'
1' DRILL TIME FROM 2980' - RTD
10' WET/DRY SAMPLES FROM 3030' - RTD

GEOLOGICAL SUPERVISION BY JEFF LAWLER FROM 2980' - RTD

8 5/8" SURFACE PIPE SET @ 237' SURVEY 1/2 deg.

ANHYDRITE TOP 1667' (+436) E-LOG 1665' (+438)
ANHYDRITE BASE 1699' (+404) E-LOG 1697' (+406)

Sh- Gray Maroon, gummy argillaceous clumps

Lm- Gray, FXLN, fsl, trashy w/ fsl fragments, tight w/ poor vis. porosity, few pcs w/ no vis. porosity

Sh- Lt Gray, gummy clumps, Ss- Frosted, FN grn, consolidated & mod. sorted, sub-rounded, speckled w/ glauconite, barren

Lm- Lt & Drk Gray, FXLN, well cemented, mostly tight w/ sctrd XLN porosity, fsl w/ fragments, trashy, barren

Lm- Cream, FXLN, fsl & sl oolitic, massive, loosely-well cemented, much soft white chalk, sctrd XLN inter fsl porosity, barren

Sh- Gray Maroon, abundant argillaceous & micaceous clumps, gritty & earthy

Lm- Cream Off White, Vf Grn, dense tight mud supported matrix, well cemented, thin bench, & Gray FXLN, trashy & FXLN

Sh- Black Gray Red, argillaceous clumps, gritty & earthy, semi-waxy

TOPEKA 3082' (-979) E-LOG 3082' (-979) Lm- Cream Buff Tan, FXLN, mostly all dense & well cemented, sl fsl, sctrd XLN porosity, few pcs sl cherty w/ poor vis. porosity, barren

Lm- Cream Tan, VF-FXLN, dense, tight mix of sl cherty Ls & sl dolomitic Ls, all w/ tight micro XLN porosity, vry clean & barren

Sh- Black, semi-waxy

Lm- Cream, FXLN, dolomitic Ls w/ consistent micro XLN porosity, clean & barren

Sh- Black Gray, fissile & carbonaceous, silty & calcareous

Lm- Cream, FXLN, fsl & oolitic, massive & semi-granular, dense XLN porosity, barren, much soft white chalk

Lm- Cream, VF-FXLN, dense, well cemented, sl dolomitic Ls w/ consistent micro XLN porosity, barren

Lm- Cream, FXLN, well cemented dolomitic, consistent XLN porosity, few w/ secondary reXLN porosity, clean & barren

Lm- Cream, FXLN, heavy with fsl fragments, sctrd XLN porosity, several pcs of VFXLN cherty Ls w/ poor vis. porosity, barren

1:240 Imperial

VFXLN sl cherty Ls w/o vis. porosity, barren

3170
3180
3190
3200
3210
3220
3230
3240
3250
3260
3270
3280
3290
3300
3310
3320
3330
3340
3350
3360
3370
3380

0
0
6
IP (min/ft)
gamma (API)
Cal (in)

D
S
T

4

CFS @ 3320'

D
S

Lm- Gray Buff, FXLN, sl fsl, sl trashy, sctrd XLN porosity, barren

Sh- Black, fissile, semi-waxy, carbonaceous

Sh- Lt Gray White, abundant soft gummy clumps & wash

Sh- Lt Green Maroon, semi-waxy, gritty & earthy

Lm- Cream, Vf Grn, dense well cemented mudstone w/o vis. porosity, small pyrite inclusions

Lm- Gray w/ Lt Green, FXLN, fsl, sl trashy w/ fragments, sctrd XLN porosity

Sh- Gray, argillaceous clumps

Sh- Black Gray, carbonaceous, silty & calcareous

Ls- Tan Buff, FXLN, fsl & sl oolitic, few pcs w/ sl oomoldic vuggy porosity, sctrd XLN porosity, clean & barren, mixed w/ VFXLN dolomitic Ls & several pcs of milky gray fresh bedded chert/cherty Ls

Lm- Cream Off White, mix of Vf Grn, loosely cemented mud supported matrix, barren, some soft white chalk, mixed w/ vry competent well cemented mudstone w/o vis. porosity

○ Lm- Cream, FXLN, oolitic, poorly dev. w/ dark gray oolites, poor XLN inter oolite porosity, SCTRD DRK STN, TR FR O, NO ODR, soft white chalk

Lm- Cream Off White, FXLN, sl fsl, loosely cemented & chalky in part, sctrd XLN porosity, several pcs of chalky mud supported matrix & densely packed small oolitic translucent FXLN w/ dense XLN & secondary reXLN porosity, all barren

○ Lm- Tan, FXLN, well cemented, poorly dev. w/ vry dense XLN porosity (possible fracturing?) WK SCTRD STN, NSFO, TR ODR??

HEEBNER 3282' (-1179) E-LOG 3280' (-1177) Sh- Black Green, fissile & carbonaceous, semi-gummy

Sh- Gray Green, argillaceous clumps

○ **TORONTO 3307' (-1204) E-LOG 3304' (-1201)** Lm- Cream Off White, FXLN, sl fsl, sctrd dev w/ sctrd-dense XLN & some w/ sctrd fn ppt porosity, SCTRD LT STN, TR FO, WK ODR

Sh- Maroon, gritty & earthy

○ **LKC 3324' (-1221) E-LOG 3320' (-1217)** Lm- Off White Translucent, FXLN, fsl & oolitic, mod dev. & loosely cemented, sctrd-dense XLN porosity, WK TR STN, NSFO, TR ODR??, translucent heavily fractured with consistent dense XLN porosity throughout

Lm- Cream Off White, tight w/ poor vis. porosity, some sl chalky in part, vry clean & barren

○ Lm- Cream Off White, FXLN, oolitic, mod. dev. w/ sctrd- dense XLN & sctrd fn ppt inter oolite porosity, SCTRD LT STN, NSFO, WK ODR, several pcs of tight cherty Ls

Sh- Gray Maroon, gritty & earthy, gummy clumps

○ Lm- Off White, F-Med XLN, fsl w/ fusulinids, mod. well dev. w/ sctrd XLN & ppt inter fsl porosity, some reXLN w/in porosity, SCTRD LT STN, NSFO, FR ODR

DST #4 TORONTO (STRADDLE) 3278' - 3313' 30-45-30-60

154' TOTAL FLUID 30' GIP

30' SLGCO (2% G, 98% O)
62' SLWCHMCO (50% O, 2% W, 48% M)
62' SLWCHOCM (35% O, 10% W, 55% M)
Gr: 32.5

IFP: 19-58#
FFP: 68-76#
SIP: 540-530#

3275.jpg

3310.jpg

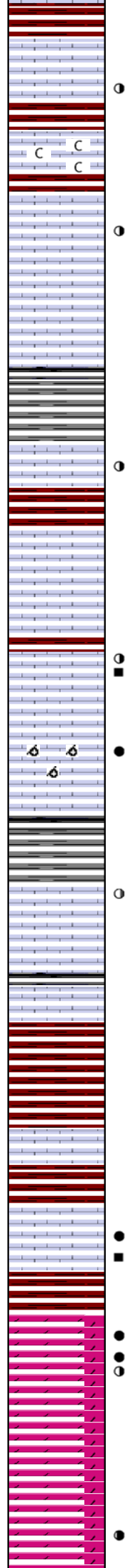
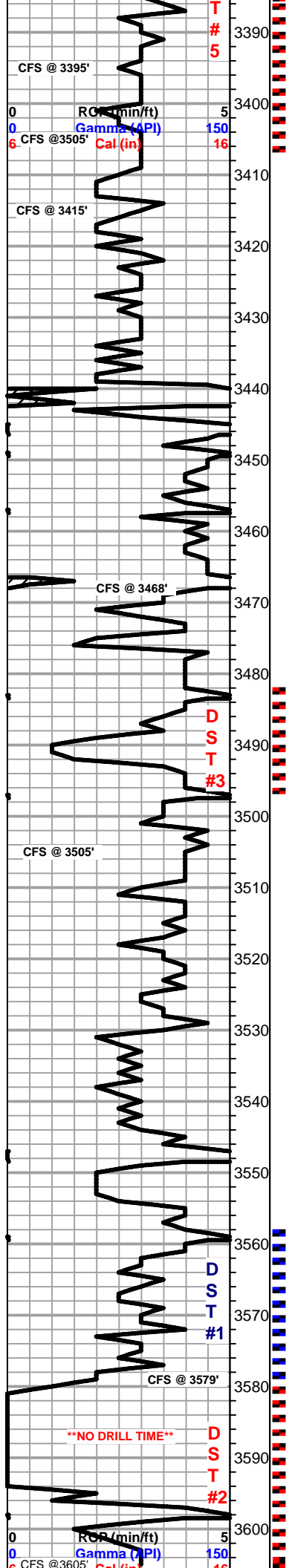
3328.jpg

DST #5 LKC D-E (STRADDLE) 3370' - 3408' 30-45-45-45

140' TOTAL FLUID 5' OIL Gr: 31
15' SLWCSLOC (10% O, 5% W, 85% M)
60' SLOCSLWCM (5% O, 10% W, 85% M)
60' SLOCHWCM (5% O, 30% W, 65% M)

IFP: 18-40#
FFP: 42-71#
SIP: 587-561#
BHT: 102

3367.jpg



Lm- Cream Tan, VF-FXLN, dense, well cemented, most w/ poor vis. porosity, barren

Lm- Cream Off White, VF-FXLN, mix of fsl & oolitic, well dev. w/ sctrd fn ppt inter oolite & XLN porosity, SCTRD LT STN, NSFO, FR ODR (POSSIBLE CARRYOVER FROM D ZONE??) & mostly tight w/ sctrd micro XLN porosity, clean & barren, some soft white chalk

Lm- Cream Off White, VF-FXLN, mostly tight & poorly dev. w/ sctrd XLN porosity at best, much soft white chalk, vry clean & barren

Lm- Cream Off White, FXLN, fsl & sl oolitic, sctrd XLN & fn ppt inter oolite porosity, SCTRD LT STN, 1-2 PCS W/ TR GSY OILY SHW, ODR

Lm- Cream Tan, VF-FXLN, dense tight mix of Ls w/ poor vis. porosity, soft white chalk, & tight dolomite, all clean & barren

Sh- Black Gray, fissile & carbonaceous, argillaceous clumps

AUTO DRILLER PROBLEM

Lm- Cream Off White, FXLN, oolitic w/ fusulinids, sctrd fn ppt inter fsl porosity, SCTRD DRK STN, TR FRO?, NO ODR

Lm- Buff, VF-FXLN, dense, well cemented & tight w/ sctrd XLN porosity, barren

Sh- Maroon Gray Green, sl fsl, trashy, gritty & earthy

Lm- Cream Off White, VF-FXLN, dense, well cemented, some sl chalky in part, sctrd to dense micro XLN porosity, LT SCTRD STN, NSFO, FR ODR, LT YLW FLOR.

Sh- Maroon, gritty & earthy

Lm- Cream Semi-Translucent, FXLN, oomoldic, poor/min. inter vugular connectivity, SCTRD DRK STN, NSFO, FR ODR

Sh- Black Gray, argillaceous clumps, silty & soft

Lm- Cream Tan, FXLN, sl oolitic w/ sctrd fn ppt to ppt inter oolite porosity, SCTRD DRK STN, TR FRO, FR ODR, mixed w/ VF-FXLN, poor vis. porosity, few sl chalky in part, barren

Lm- Off White, FXLN, well cemented mix of dolomite/dolomitic Ls w/ consistent XLN porosity barren

Lm- Cream Off White, VF-FXLN, dense, well cemented, cherty Ls w/ poor/min. vis. porosity, barren

BKC 3531' (-1428) E-LOG 3529' (-1426) Sh- Maroon Green Gray, gritty & earthy, sl sandy

Lm- Tan Maroon, VF-FXLN, sl conglomerate Ls, tight, barren

Sh- Maroon, gritty & earthy

Lm- Cream Frosted, mix of sl trashy oolitic & clean oolitic Ls, all w/ sctrd fn ppt porosity, SCTRD BLK DO STN, NSFO, & Fn Grn sandy Ls w/ Ca cementation, well consolidated & sorted, sub-rounded, LT BRWN STN, NSFO, FR ODR, LT YLW FLOR

ARBUCKLE 3568' (-1465) E-LOG 3570' (-1467) Dolo- Tan, FXLN, dense, well cemented, consistent XLN porosity throughout, barren

3579' 20"- Dolo- Cream Off White, VF-Med XLN, well dev. w/ sctrd to consistent XLN & fn ppt/ppt porosity, DRK STN, WK-GD SFO, FR ODR

40"- Dolo- Cream, A/A w/ CRS XLN, euhedral rhombs, ppt inter XLN porosity, DRK STN, FR SFO, GD ODR, w/ FXLN, w/ consistent XLN porosity, mostly all barren

60"- A/A w/ FXLN, consistent XLN porosity, SCTRD LT STN, TR FRO, FR ODR

GEOLOGRAPH PROBLEMS WHEN BACK TO DRILLING @ 3579' FIXED @ 3594'

3605'- Dolo- Cream Tan, F-Med XLN, mix of poorly dev. w/ consistent micro XLN porosity throughout, sctrd mint green tint, barren & well dev. w/ semi-euhedral rhombs & ppt XLN porosity, SCTRD DRK STN, TR FO, FR ODR

20"- Dolo- Brown, VFXLN, tight, consistent micro XLN, barren

40"- Dolo- Cream F-Med XLN, mod. well dev. w/ mostly consistent ppt inter XLN

3384.jpg

3400.jpg

3420.jpg

3455.jpg

3480.jpg

3490.jpg

3510.jpg

DST #3 LKC J 3483' - 3498' (STRADDLE) 45-45-60-60

186' TOTAL FLUID 62' MCHWCO (OIL SPOTS, 77% W, 235 M) 62' SLMCW (85%W, 15%M) 62' SLMCW (95%W, 5%M)

CHLOR: 38K

IFP: 17-61# FFP: 66-92# SIP: 670-665#

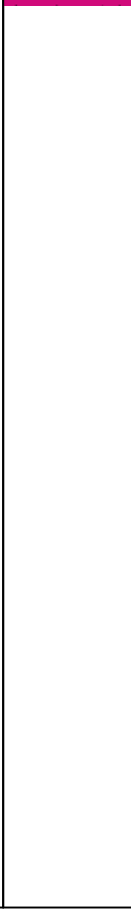
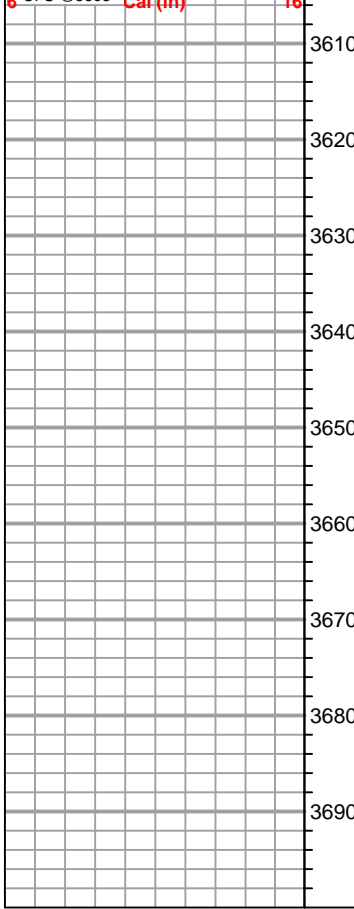
3565.jpg

3573.jpg

3579-40.jpg

3579-60.jpg

3600.jpg



porosity, few w/ sub-rounded fn grm qtz. & large glauconite inclusions, SCTRDR
STN, TR FR O, FR ODR

RTD 3605' (-1502) LTD 3603' (-1500) 1-17-2019

-  DST #3.1.jpg
-  DST #3.jpg
-  DST #4.1.jpg
-  DST #4.jpg
-  DST #5.1.jpg
-  DST #5.jpg

SHORT TRIP 49
STNDS
SURVEY 1 deg.
STRAP -2.04'

DST #1
ARBUCKLE
3559' - 3579'
30-45-30-45

30' OCM
(23% O, 77% M)

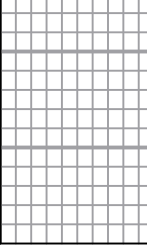
IFP: 23-24#
FFP: 26-28#
SIP: 979-933#
BHT: 103 deg.

DST #2
ARBUCKLE
3585' - 3605'
45-60-45-60

147' TOTAL FLUID
85' SLGCO
(10% G, 90% O)
62' SLWCHOCM
(30% O, 5% W, 65% M)

Gr: 29 deg.

IFP: 23-54#
FFP: 58-72#
SIP: 975-884#







3310'











3420'





3480'





3510'



3573.jpg

A013 1280x1024 2019/01/16 03:31:04 Unit: mm Magnification: 77.5 x 1



3573'

3579-40.jpg

A014 1280x1024 2019/01/16 04:10:25 Unit: mm Magnification: 77.5 x 1



3579' 40"

3579-60.jpg



3600.jpg



DST #3.1.jpg



Company: Jaspar Company
Lease: States #1

SEC: 12 TWN: 7S RNG: 20W
County: ROOKS
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 8
Elevation: 2100 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 303

Operation:
Uploading recovery & pressures

DATE
January
17
2019

DST #3 Formation: LKC "J" Test Interval: 3483 - 3498' Total Depth: 3605'
Time On: 15:28 01/17 Time Off: 22:29 01/17
Time On Bottom: 16:55 01/17 Time Off Bottom: 20:25 01/17

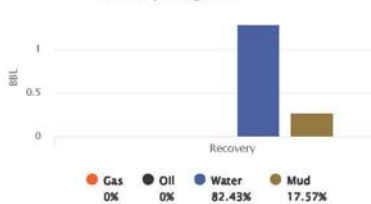
Recovered

Foot	BEELS	Description of Fluid	Gas %	Oil %	Water %	Mud %
62	0.88226	MCHWCO	0	spots	77	23
62	0.3714203	SLMCW	0	0	85	15
62	0.30504	SLMCW	0	0	95	5

Total Recovered: 186 ft
Total Barrels Recovered: 1.5587203

Reversed Out
NO

Recovery at a glance



Initial Hydrostatic Pressure	1717	PSI
Initial Flow	17 to 61	PSI
Initial Closed in Pressure	670	PSI
Final Flow Pressure	66 to 92	PSI
Final Closed in Pressure	665	PSI
Final Hydrostatic Pressure	1698	PSI
Temperature	106	°F
Pressure Change Initial Close / Final Close	0.6	%

GIP cubic foot volume: 0

DST #3.jpg



Company: Jaspar Company
Lease: States #1

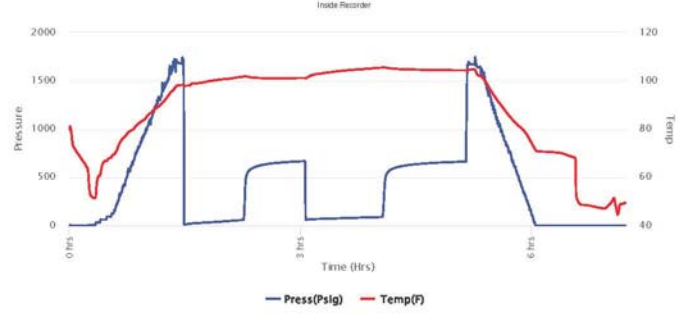
SEC: 12 TWN: 7S RNG: 20W
County: ROOKS
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 8
Elevation: 2100 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 303

Operation:
Uploading recovery & pressures

DATE
January
17
2019

DST #3 Formation: LKC "J" Test Interval: 3483 - 3498' Total Depth: 3605'
Time On: 15:28 01/17 Time Off: 22:28 01/17
Time On Bottom: 16:55 01/17 Time Off Bottom: 20:25 01/17

Electronic Volume Estimate: 157'	1st Open Minutes: 45 Current Reading: 3.75" at 45 min Max Reading: 3.75"	1st Close Minutes: 45 Current Reading: 0" at 45 min Max Reading: 0"	2nd Open Minutes: 60 Current Reading: 5.1" at 60 min Max Reading: 5.1"	2nd Close Minutes: 60 Current Reading: 0" at 60 min Max Reading: .1"
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DST #4.1.jpg



Company: Jaspur Company
Lease: States #1

SEC: 12 TWN: 7S RNG: 20W
County: ROOKS
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 8
Elevation: 2100 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 303

Operation:
Uploading recovery & pressures

DATE
January
18
2019

DST #4 Formation: Toronto Test Interval: 3278 - 3313' Total Depth: 3605'
Time On: 02:42 01/18 Time Off: 09:21 01/18
Time On Bottom: 04:49 01/18 Time Off Bottom: 07:34 01/18

Recovered

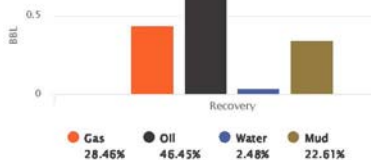
Foot	BELS	Description of Fluid	Gas %	Oil %	Water %	Mud %
30	0.4269	G	100	0	0	0
30	0.4269	SLGCO	2	98	0	0
62	0.3714203	SLWCHMCO	0	50	2	48
62	0.30504	SLWCHOCM	0	35	10	55

Total Recovered: 184 ft
Total Barrels Recovered: 1.5302603

Reversed Out
NO

Initial Hydrostatic Pressure	1575	PSI
Initial Flow	19 to 58	PSI
Initial Closed in Pressure	540	PSI
Final Flow Pressure	68 to 76	PSI
Final Closed in Pressure	530	PSI
Final Hydrostatic Pressure	1561	PSI
Temperature	96	°F
Pressure Change Initial Close / Final Close	1.9	%

Recovery at a glance



GIP cubic foot volume: 2.44477

DST #4.jpg



Company: Jaspar Company
Lease: States #1

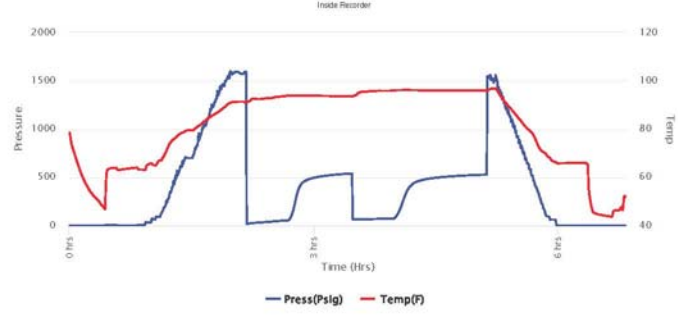
SEC: 12 TWN: 7S RNG: 20W
County: ROOKS
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 8
Elevation: 2100 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 303

Operation:
Uploading recovery & pressures

DATE
January
18
2019

DST #4 Formation: Toronto Test Interval: 3278 - 3313' Total Depth: 3605'
Time On: 02:42 01/18 Time Off: 09:21 01/18
Time On Bottom: 04:49 01/18 Time Off Bottom: 07:34 01/18

Electronic Volume Estimate: 199'	1st Open Minutes: 30 Current Reading: 7" at 30 min Max Reading: 7"	1st Close Minutes: 45 Current Reading: .1" at 45 min Max Reading: .1"	2nd Open Minutes: 30 Current Reading: 6.9" at 30 min Max Reading: 6.9"	2nd Close Minutes: 60 Current Reading: 5" at 60 min Max Reading: 5"
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DST #5.1.jpg



Company: Jasper Company
Lease: States #1

SEC: 12 TWN: 7S RNG: 20W
County: ROOKS
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 8
Elevation: 2100 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 303

Operation:
Uploading recovery & pressures

DATE
January
18
2019

DST #5 Formation: LKC "D-E"
Test Interval: 3370 - 3408'
Total Depth: 3605'
Time On: 10:02 01/18 Time Off: 17:40 01/18
Time On Bottom: 12:15 01/18 Time Off Bottom: 15:00 01/18

Recovered

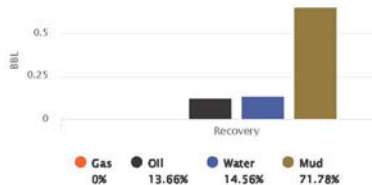
Foot	BELS	Description of Fluid	Gas %	Oil %	Water %	Mud %
5	0.07115	O	0	100	0	0
15	0.21345	SLWCSLOCM	0	10	5	85
60	0.3243403	SLOCSLWCM	0	5	10	85
60	0.2952	SLOCHWCM	0	5	30	65

Total Recovered: 140 ft
Total Barrels Recovered: 0.9041403

Reversed Out
NO

Initial Hydrostatic Pressure	1600	PSI
Initial Flow	18 to 40	PSI
Initial Closed in Pressure	587	PSI
Final Flow Pressure	42 to 71	PSI
Final Closed in Pressure	561	PSI
Final Hydrostatic Pressure	1587	PSI
Temperature	102	°F
Pressure Change Initial Close / Final Close	4.3	%

Recovery at a glance



GIP cubic foot volume: 0

DST #5.jpg



Company: Jaspar Company
Lease: States #1

SEC: 12 TWN: 7S RNG: 20W
 County: ROOKS
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 8
 Elevation: 2100 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 303

Operation:
 Uploading recovery & pressures

DATE
 January
18
 2019

DST #5 **Formation: LKC "D-E"** **Test Interval: 3370 - 3408'** **Total Depth: 3605'**
 Time On: 10:02 01/18 Time Off: 17:40 01/18
 Time On Bottom: 12:15 01/18 Time Off Bottom: 15:00 01/18

Electronic Volume Estimate: 139'	1st Open Minutes: 30 Current Reading: 3.7" at 30 min Max Reading: 3.7"	1st Close Minutes: 45 Current Reading: 0" at 45 min Max Reading: 0"	2nd Open Minutes: 45 Current Reading: 3.5" at 45 min Max Reading: 3.5"	2nd Close Minutes: 45 Current Reading: 0" at 45 min Max Reading: 0"
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