

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 Recompletion Date

API No.: _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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

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

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

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

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

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

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

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

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

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

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

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	PETERSON TRUST 1-31
Doc ID	1597832

All Electric Logs Run

CDL/CNL
DIL
Micro
Sonic

810 E 7TH
 PO Box 92
 EUREKA, KS 67045
 (620) 583-5561



Cement or Acid Field Report
 Ticket No. **5841**
 Foreman David Gardner
 Camp Eureka

API # 15-111-20553

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State	
8-19-21	1397	Peterson Trust #1-31	31	16 S.	10 E.	Lyon	KS	
Customer <u>Mull Drilling Company, Inc.</u>			Safety Meeting DG JH SM		Unit # 105	Driver Jason	Unit # 112	Driver Steve
Mailing Address <u>1700 N. Waterfront PKWY BLDG 1200</u>			City <u>Wichita</u>		State <u>KS</u>	Zip Code <u>67206</u>		

Job Type Surface Hole Depth 232' K.B. Slurry Vol. 35 Bbl Tubing _____
 Casing Depth 212.72' B.L. Hole Size 12 1/4" Slurry Wt. 15" Drill Pipe _____
 Casing Size & Wt. 8 5/8" 20# Cement Left in Casing 15' 1/2" Water Gal/SK _____ Other _____
 Displacement 13 1/2 Bbl Displacement PSI _____ Bump Plug to _____ BPM _____

Remarks: Safety Meeting: Rig up to 8 5/8" casing. Break circulation w/ 10 Bbl fresh water. Mixed 135 sks Class #1 Cement w/ 3% Cacl2, 2% Gel, 1/4" Flarel/sk @ 15#/gal, yield 1.45 = 35 Bbl slurry. Displace w/ 13 1/2 Bbl fresh water. Shut down. Close casing in. Good circulation @ all times while cementing. No cement returns to surface. Wait 30 mins. Tag cement @ 16' below surface w/ weight on a string. Call back for more cement. Run 2" hose down + tag cement. Mixed cement until good cement returns to surface = 30 sks Class #1 Cement w/ 3% cacl2, 2% Gel, 1/4" Flarel/sk. Well standing full of cement on annular of 8 5/8" casing. Job complete. Rig down.

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C101	1	Pump Charge	890.00	890.00
C107	60	Mileage	4.20	252.00
C200	1165 sks	Class #1 Cement	17.35	2862.75
C205	4165 lb	Cacl2 3%	.69	320.85
C206	310 lb	Gel 2%	.28	86.80
C209	40 lb	Flarel 1/4"/sk	2.60	104.00
C103B	7.75 Tons	Ton Mileage - Bulk Truck	1.40	651.00
<u>Thank You</u>			Sub Total	5,116.70
			Less 5%	271.02
			Sales Tax	253.08
			7.5%	

Authorization by Charlie Cawther Title Lighthouse Drilling - Tool Rigger Total **5,149.46**

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

810 E 7TH
 PO Box 92
 EUREKA, KS 67045
 (620) 583-5561



Cement or Acid Field Report
 Ticket No. **5843**
 Foreman David Gardner
 Camp Eureka

API # 15-111-20553

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State	
8-25-21	1397	Peterson Trust #1-31	31	16 S.	10 E.	Lyon	KS	
Customer <u>Mull Drilling Company, INC.</u>			Safety Meeting DG JH BW KM		Unit #	Driver	Unit #	Driver
Mailing Address <u>1700 N. Waterfront PKWY BLDG 1200</u>					<u>105</u>	<u>Jason</u>		
City <u>Wichita</u>					<u>113</u>	<u>Broker</u>		
State <u>KS</u>					<u>115</u>	<u>Kevin</u>		
Zip Code <u>67206</u>					<u>Water TRK</u>	<u>Watt's</u>		

Job Type Longstring Hole Depth 3200' K.B. Slurry Vol. 64 Bbl Lead 33 Bbl Tail Tubing _____
 Casing Depth 3188' G.L. Hole Size 7 7/8" Slurry Wt. 13.8^{ppg} - Lead 13.2^{ppg} - Tail Drill Pipe _____
 Casing Size & Wt. 5 1/2" 14[#] Cement Left in Casing 41' S.I. Water Gall/SK _____ Other _____
 Displacement 78 1/2 Bbl Displacement PSI 1000 Bump Plug to 1400 PSI BPM _____

Remarks: Safety Meeting: 5 1/2" 14[#] used casing set @ 3188'. Rig up to 5 1/2" casing w/ Rotating cement swivel. Break circulation w/ 10 Bbl KCL water. Mixed 225 sks 60/40 Pozmix Cement w/ 8% Gel, 1/4% 2[#] Phenoseal/sk @ 13[#]/gal, yield 1.60 = 64 Bbl slurry. Tail in w/ 100 sks Thick Set Cement w/ 5[#] Kolseal/sk, 2[#] Phenoseal/sk, 1/4% CFL-115 @ 13.8[#]/gal, yield 1.85 = 33 Bbl slurry. Wash out Pump & lines. Shut down. Release 5 1/2" Latch Down Plug. Start Rotating casing. Displace plug to seat w/ 78 1/2 Bbl fresh water (KCL in 1st 40 Bbl). Final pumping pressure of 1000 PSI. Bump plug to 1400 PSI. Wait 2 mins. Release pressure. Float & Plug held good. Good circulation @ all times while cementing. Job complete. Rig down.

Thank You

Plug R.H. + M.H.

Centralizers on #1, 2, 3, 4, 5, 6, 8, 10 Basket on top of #7.

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C102	1	Pump Charge	1100.00	1100.00
C107	60	Mileage	4.20	252.00
C203	225 sks	60/40 Pozmix Cement	14.75	3318.75
C206	1550 [#]	Gel 8%	.28	434.00
C208	450 [#]	Phenoseal 2 [#] /sk	1.45	652.50
C211	50 [#]	CFL-115 1/4%	12.10	605.00
C201	100 sks	Thick Set Cement	22.55	2255.00
C207	500 [#]	Kolseal 5 [#] /sk	.52	260.00
C208	200 [#]	Phenoseal 2 [#] /sk	1.45	290.00
C211	25 [#]	CFL-115 1/4%	12.10	302.50
C108B	15.17 Tons	Ton Mileage - Bulk Trucks	1.40	1274.28
C113	6 HRS	80 Bbl Vac Truck	90.00/HR	540.00
C224	3300 Gals	City Water	11.00/1000	36.30
C222	7 Gals	KCL (10 Bbl Ahead water + 1 st 40 Bbl Displacement water)	30.00	210.00
C661	1	5 1/2" AFU Float Shoe	340.00	340.00
C681	1	5 1/2" Float Collar Body Only w/Latch Down Insert	237.00	237.00
C421	1	5 1/2" Latch Down Plug	266.00	266.00
C504	8	5 1/2" x 7 7/8" Centralizers	55.00	440.00
C604	1	5 1/2" Cement Basket	260.00	260.00
C781	1	5 1/2" Stop Collar	35.00	35.00
C112	1	Rotating Cement Swivel	105.00	105.00
Sub Total			13,213.33	
Less 5%			660.67	
			12,552.66	
			7.5% Sales Tax	941.45
				13,494.11

Authorization _____

Title _____

Sub Total
Less 5%

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

Prod Supt 8-25-21

753.53



Company: Mull Drilling Company, Inc

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling LLC Rig #1
Elevation: 1341 Est
Field Name: Wildcat
Pool: Wildcat
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery & pressures

DATE
August
22
2021

DST #1 **Formation:** **Test Interval: 2890 - 2895'** **Total Depth: 2895'**
Time On: 15:11 08/22 Time Off: 21:45 08/22
Time On Bottom: 17:43 08/22 Time Off Bottom: 19:58 08/22

Electronic Volume Estimate:
2'

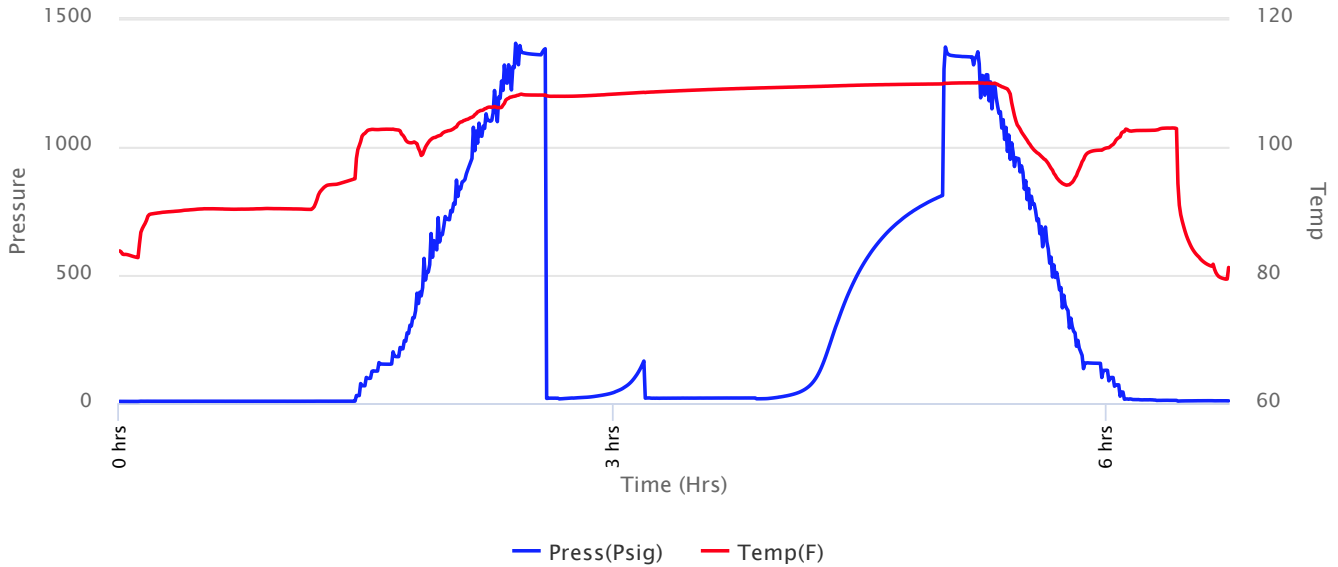
1st Open
Minutes: 5
Current Reading: .1" at 5 min
Max Reading: .1"

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

2nd Open
Minutes: 40
Current Reading: 0" at 40 min
Max Reading: 0"

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

Inside Recorder





**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
 County: LYON
 State: Kansas
 Drilling Contractor: Lighthouse Drilling
 LLC Rig #1
 Elevation: 1341 Est
 Field Name: Wildcat
 Pool: Wildcat
 Job Number: 507
 API #: 15-111-20553-00-00

Operation:
 Uploading recovery &
 pressures

DATE
 August
22
 2021

DST #1 **Formation:** **Test Interval: 2890 - 2895'** **Total Depth: 2895'**
 Time On: 15:11 08/22 Time Off: 21:45 08/22
 Time On Bottom: 17:43 08/22 Time Off Bottom: 19:58 08/22

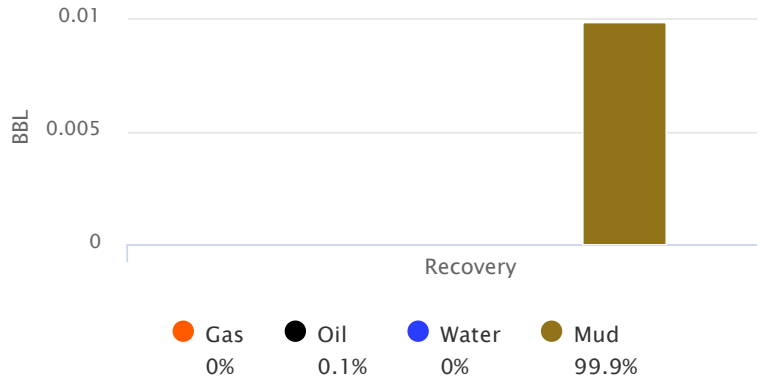
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
2	0.00984	M (trace O)	0	.1	0	99.9

Total Recovered: 2 ft
 Total Barrels Recovered: 0.00984

**Reversed Out
NO**

Initial Hydrostatic Pressure	1365	PSI
Initial Flow	19 to 20	PSI
Initial Closed in Pressure	165	PSI
Final Flow Pressure	21 to 20	PSI
Final Closed in Pressure	806	PSI
Final Hydrostatic Pressure	1357	PSI
Temperature	110	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling
LLC Rig #1
Elevation: 1341 Est
Field Name: Wildcat
Pool: Wildcat
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery &
pressures

DATE
August
22
2021

DST #1	Formation:	Test Interval: 2890 - 2895'	Total Depth: 2895'
	Time On: 15:11 08/22	Time Off: 21:45 08/22	
	Time On Bottom: 17:43 08/22	Time Off Bottom: 19:58 08/22	

BUCKET MEASUREMENT:

1st Open: Weak surface Blow built built to a strong surface blow in 5 minutes.

1st Close: No Return Blow.

2nd Open: No Blow over 40 minutes.

2nd Close: No Return Blow

REMARKS:

Tool Sample: 0% Gas .1% Oil 0% Water 99.9% Mud



**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
 County: LYON
 State: Kansas
 Drilling Contractor: Lighthouse Drilling
 LLC Rig #1
 Elevation: 1341 Est
 Field Name: Wildcat
 Pool: Wildcat
 Job Number: 507
 API #: 15-111-20553-00-00

Operation:
 Uploading recovery &
 pressures

DATE
 August
22
 2021

DST #1 **Formation:** **Test Interval: 2890 - 2895'** **Total Depth: 2895'**
 Time On: 15:11 08/22 Time Off: 21:45 08/22
 Time On Bottom: 17:43 08/22 Time Off Bottom: 19:58 08/22

Down Hole Makeup

Heads Up: 30.57 FT	Packer 1: 2885 FT
Drill Pipe: 2583.26 FT <i>ID-3 1/2</i>	Packer 2: 2890 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 2874.42 FT
Collars: 304.74 FT <i>ID-2 1/4</i>	Bottom Recorder: 2893 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 5	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 1 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): 3 FT <i>4 1/2-FH</i>	



Company: Mull Drilling Company, Inc

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling LLC Rig #1
Elevation: 1341 Est
Field Name: Wildcat
Pool: Wildcat
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery & pressures

DATE
August
22
2021

DST #1 **Formation:** **Test Interval: 2890 - 2895'** **Total Depth: 2895'**
Time On: 15:11 08/22 Time Off: 21:45 08/22
Time On Bottom: 17:43 08/22 Time Off Bottom: 19:58 08/22

Mud Properties

Mud Type: Chem. **Weight:** 9 **Viscosity:** 35 **Filtrate:** 13.6 **Chlorides:** 530 ppm



Company: Mull Drilling Company, Inc

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling LLC Rig #1
Elevation: 1341 Est
Field Name: Wildcat
Pool: Wildcat
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery & pressures

DATE
August
22
2021

DST #1 **Formation:** **Test Interval: 2890 - 2895'** **Total Depth: 2895'**
Time On: 15:11 08/22 Time Off: 21:45 08/22
Time On Bottom: 17:43 08/22 Time Off Bottom: 19:58 08/22

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Mull Drilling Company, Inc

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery & pressures

DATE
August
23
2021

DST #2 **Formation: Viola** **Test Interval: 2991 - 3004'** **Total Depth: 3004'**
Time On: 08:45 08/23 Time Off: 15:28 08/23
Time On Bottom: 10:35 08/23 Time Off Bottom: 13:10 08/23

Electronic Volume Estimate:
271'

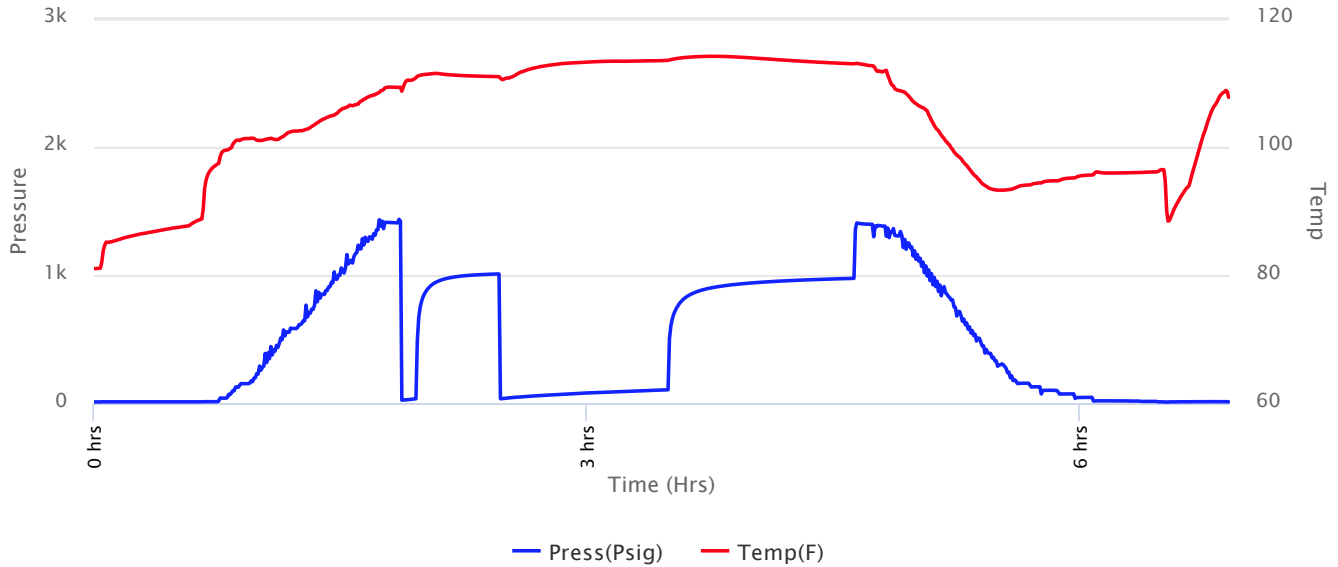
1st Open
Minutes: 5
Current Reading:
1.3" at 5 min
Max Reading: 1.3"

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

2nd Open
Minutes: 60
Current Reading:
11.8" at 60 min
Max Reading: 11.8"

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

Inside Recorder





**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
 County: LYON
 State: Kansas
 Drilling Contractor: Lighthouse Drilling
 LLC - Rig #1
 Elevation: 1341 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 507
 API #: 15-111-20553-00-00

Operation:
 Uploading recovery &
 pressures

DATE
 August
23
 2021

DST #2 **Formation: Viola** **Test Interval: 2991 - 3004'** **Total Depth: 3004'**
 Time On: 08:45 08/23 Time Off: 15:28 08/23
 Time On Bottom: 10:35 08/23 Time Off Bottom: 13:10 08/23

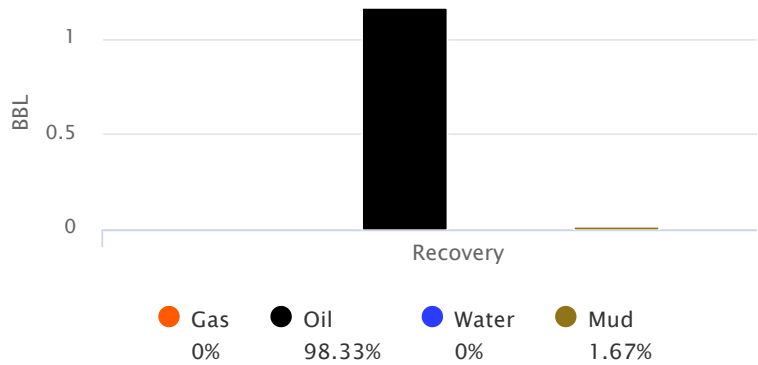
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
230	1.1316	O	0	100	0	0
10	0.0492	HMCO	0	60	0	40

Total Recovered: 240 ft
 Total Barrels Recovered: 1.1808

Reversed Out
 NO

Initial Hydrostatic Pressure	1410	PSI
Initial Flow	23 to 33	PSI
Initial Closed in Pressure	1008	PSI
Final Flow Pressure	35 to 103	PSI
Final Closed in Pressure	974	PSI
Final Hydrostatic Pressure	1401	PSI
Temperature	115	°F
Pressure Change Initial Close / Final Close	3.4	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling
LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery &
pressures

DATE
August
23
2021

DST #2 Formation: Viola Test Interval: 2991 - Total Depth: 3004'
3004'
Time On: 08:45 08/23 Time Off: 15:28 08/23
Time On Bottom: 10:35 08/23 Time Off Bottom: 13:10 08/23

BUCKET MEASUREMENT:

1st Open: Surface Blow built to 1-1/4" over 5 minutes.
1st Close: No Return Blow over 30 minutes.
2nd Open: BoB in 44 minutes 15 seconds.
2nd Close: No Return Blow over 60 minutes.

REMARKS:

Tool Sample: 0% Gas 30% Oil 0% Water 70% Mud
Gravity: 23.2 @ 60 °F



**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
 County: LYON
 State: Kansas
 Drilling Contractor: Lighthouse Drilling
 LLC - Rig #1
 Elevation: 1341 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 507
 API #: 15-111-20553-00-00

Operation:
 Uploading recovery &
 pressures

DATE
 August
23
 2021

DST #2 Formation: Viola Test Interval: 2991 - 3004' Total Depth: 3004'
 Time On: 08:45 08/23 Time Off: 15:28 08/23
 Time On Bottom: 10:35 08/23 Time Off Bottom: 13:10 08/23

Down Hole Makeup

Heads Up: 22.99 FT	Packer 1: 2986 FT
Drill Pipe: 2676.68 FT <i>ID-3 1/2</i>	Packer 2: 2991 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 2975.42 FT
Collars: 304.74 FT <i>ID-2 1/4</i>	Bottom Recorder: 3002 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 13	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 9 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): 3 FT <i>4 1/2-FH</i>	



**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling
LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery &
pressures

DATE
August
23
2021

DST #2 Formation: Viola Test Interval: 2991 - 3004' Total Depth: 3004'
Time On: 08:45 08/23 Time Off: 15:28 08/23
Time On Bottom: 10:35 08/23 Time Off Bottom: 13:10 08/23

Mud Properties

Mud Type: Chem. **Weight:** 9.0 **Viscosity:** 47 **Filtrate:** 10.6 **Chlorides:** 700 ppm



Company: Mull Drilling Company, Inc

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery & pressures

DATE
August
23
2021

DST #2 **Formation: Viola** **Test Interval: 2991 - 3004'** **Total Depth: 3004'**
Time On: 08:45 08/23 Time Off: 15:28 08/23
Time On Bottom: 10:35 08/23 Time Off Bottom: 13:10 08/23

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Mull Drilling Company, Inc

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery & pressures

DATE
August
24
2021

DST #3 **Formation: Viola** **Test Interval: 3024 - 3090'** **Total Depth: 3090'**
Time On: 00:34 08/24 Time Off: 07:10 08/24
Time On Bottom: 02:41 08/24 Time Off Bottom: 04:46 08/24

Electronic Volume Estimate:
2772'

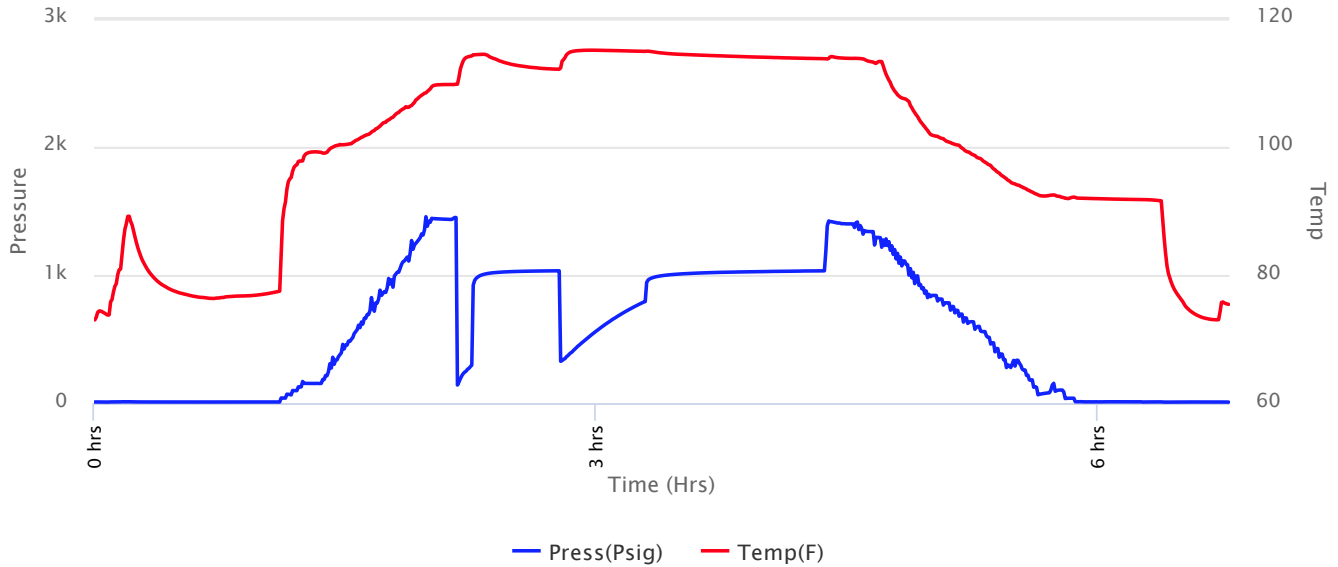
1st Open
Minutes: 5
Current Reading:
52.4" at 5 min
Max Reading: 52.4"

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

2nd Open
Minutes: 30
Current Reading:
344.6" at 30 min
Max Reading: 344.6"

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

Inside Recorder





**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
 County: LYON
 State: Kansas
 Drilling Contractor: Lighthouse Drilling
 LLC - Rig #1
 Elevation: 1341 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 507
 API #: 15-111-20553-00-00

Operation:
 Uploading recovery &
 pressures

DATE
 August
24
 2021

DST #3 **Formation: Viola** **Test Interval: 3024 - 3090'** **Total Depth: 3090'**
 Time On: 00:34 08/24 Time Off: 07:10 08/24
 Time On Bottom: 02:41 08/24 Time Off Bottom: 04:46 08/24

Recovered

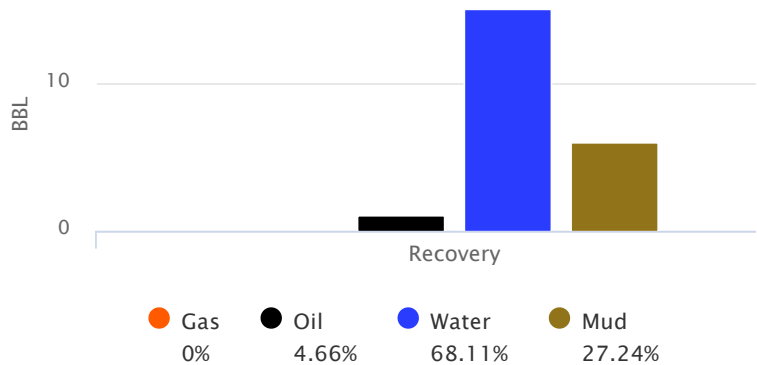
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
378	5.37894	SLOCHWCM	0	10	30	60
315	4.48245	SLOCHMCW	0	5	55	40
252	3.58596	SLOCSLMCW	0	5	82	13
504	7.1277906	SLOCSLMCW	0	1	93	6
290	1.4268	SLOCSLMCW	0	1	96	3
10	0.0492	SLOCM	0	1	0	99

Total Recovered: 1749 ft
 Total Barrels Recovered: 22.0511406

Reversed Out
 NO

Initial Hydrostatic Pressure	1439	PSI
Initial Flow	142 to 297	PSI
Initial Closed in Pressure	1033	PSI
Final Flow Pressure	362 to 789	PSI
Final Closed in Pressure	1033	PSI
Final Hydrostatic Pressure	1410	PSI
Temperature	115	°F
Pressure Change Initial Close / Final Close	0.1	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling
LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery &
pressures

DATE
August
24
2021

DST #3 Formation: Viola Test Interval: 3024 - 3090' Total Depth: 3090'
Time On: 00:34 08/24 Time Off: 07:10 08/24
Time On Bottom: 02:41 08/24 Time Off Bottom: 04:46 08/24

BUCKET MEASUREMENT:

1st Open: BoB in 41 seconds.
1st Close: No Return Blow over 30 min.
2nd Open: BoB in 52 seconds.
2nd Close: No Return Blow over 60 min.

REMARKS:

Tool Sample: 0% Gas 10% Oil 75% Water 15% Mud
Ph: 7
Measured RW: .5 @ 76 degrees °F
RW at Formation Temp: 0.34 @ 115 °F
Chlorides: 18000 ppm



**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling
LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery &
pressures

DATE
August
24
2021

DST #3 Formation: Viola Test Interval: 3024 - Total Depth: 3090'
3090'
Time On: 00:34 08/24 Time Off: 07:10 08/24
Time On Bottom: 02:41 08/24 Time Off Bottom: 04:46 08/24

Down Hole Makeup

Heads Up: 52.53 FT	Packer 1: 3018.53 FT
Drill Pipe: 2738.75 FT <i>ID-3 1/2</i>	Packer 2: 3023.53 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 3007.95 FT
Collars: 304.74 FT <i>ID-2 1/4</i>	Bottom Recorder: 3088 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 66.47	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 30 FT <i>4 1/2-FH</i>	
Change Over: .5 FT	
Drill Pipe: (in anchor): 31.47 FT <i>ID-3 1/2</i>	
Change Over: .5 FT	
Perforations: (below): 3 FT <i>4 1/2-FH</i>	



**Company: Mull Drilling
Company, Inc**

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling
LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery &
pressures

DATE
August
24
2021

DST #3 Formation: Viola Test Interval: 3024 - 3090' Total Depth: 3090'
Time On: 00:34 08/24 Time Off: 07:10 08/24
Time On Bottom: 02:41 08/24 Time Off Bottom: 04:46 08/24

Mud Properties

Mud Type: Chem. **Weight:** 9.0 **Viscosity:** 47 **Filtrate:** 10.6 **Chlorides:** 700 ppm



Company: Mull Drilling Company, Inc

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery & pressures

DATE
August
24
2021

DST #3 Formation: Viola Test Interval: 3024 - 3090' Total Depth: 3090'
Time On: 00:34 08/24 Time Off: 07:10 08/24
Time On Bottom: 02:41 08/24 Time Off Bottom: 04:46 08/24

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Mull Drilling Company, Inc

Lease: Peterson Trust #1-31

SEC: 31 TWN: 16S RNG: 10E
 County: LYON
 State: Kansas
 Drilling Contractor: Lighthouse Drilling LLC - Rig #1
 Elevation: 1341 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 507
 API #: 15-111-20553-00-00

Operation:
 Uploading recovery & pressures

DATE
 August
24
 2021

DST #4 Formation: Simpson snd. Test Interval: 3089 - 3110' Total Depth: 3110'
 Time On: 14:08 08/24 Time Off: 20:51 08/24
 Time On Bottom: 16:30 08/24 Time Off Bottom: 18:20 08/24

Recovered

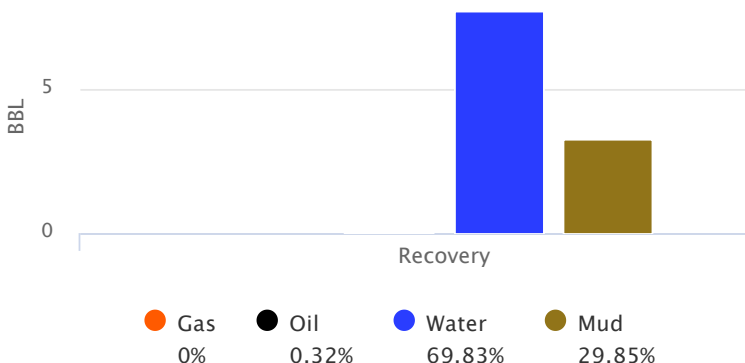
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
229	3.25867	SLOCSLWCM	0	1	15	84
189	2.68947	SLMCW (trace O)	0	.1	86.9	13
542	4.9686306	SLMCW	0	0	97	3
10	0.0492	WCM	0	0	25	75

Total Recovered: 970 ft
 Total Barrels Recovered: 10.9659706

**Reversed Out
 NO**

Initial Hydrostatic Pressure	1465	PSI
Initial Flow	77 to 172	PSI
Initial Closed in Pressure	1037	PSI
Final Flow Pressure	196 to 444	PSI
Final Closed in Pressure	1015	PSI
Final Hydrostatic Pressure	1452	PSI
Temperature	116	°F
Pressure Change Initial Close / Final Close	2.1	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Mull Drilling
Company, Inc
Lease: Peterson Trust #1-31**

SEC: 31 TWN: 16S RNG: 10E
County: LYON
State: Kansas
Drilling Contractor: Lighthouse Drilling
LLC - Rig #1
Elevation: 1341 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 507
API #: 15-111-20553-00-00

Operation:
Uploading recovery &
pressures

DATE
August
24
2021

DST #4 Formation: Simpson Test Interval: 3089 - Total Depth: 3110'
 snd. **3110'**
Time On: 14:08 08/24 Time Off: 20:51 08/24
Time On Bottom: 16:30 08/24 Time Off Bottom: 18:20 08/24

BUCKET MEASUREMENT:

- 1st Open: B.o.B. in 2 minutes 13 seconds.
- 1st Close: No Return Blow over 30 minutes.
- 2nd Open: BoB in 2 minutes 37 seconds.
- 2nd Close: No Return Blow over 45 minutes.

REMARKS:

Tool Sample: 0% Gas 5% Oil 90% Water 5% Mud
Ph: 7
Measured RW: 2 @ 80 degrees °F
RW at Formation Temp: 1.414 @ 116 °F
Chlorides: 12000 ppm

Well Name: PETERSON TRUST #1-31
API: _____
Location: 16S-10E-sec. 31 / SE SW NE SW / 1505' FSL & 1750' FWL
License Number: 35589
Spud Date: _____
Surface Coordinates: 16S-10E-sec. 31 / SE SW NE SW / 1505' FSL & 1750' FWL
Region: LYON Cty. KS
Drilling Completed: _____
Bottom Hole Coordinates: _____
Ground Elevation (ft): 1339
Logged Interval (ft): 1500 To: RTD
Total Depth (ft): 1351
Formation: VI>SP>HNTN>MS
Type of Fluid: CHEMICAL MUD DISPLACED AT _____
 Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: MULL DRILLING COMPANY
Address: 1700 N. WATERFRONT PKWY, BLDG 1200
 WICHITA, KS 67206
 316-264-6366

GEOLOGIST

Name: Blake Miller
Company: Blake S. Miller - WellSite & Consulting Geologist
Address: 235 N. Zelta
 Wichita, KS 67206

COMMENTS

Surface Casing: _____
Production Casing: _____

Deviation Surveys: 1.0 @ 232', 0.25 @ 717', 0.75 @ 1215', 1.0 @ 1712', 1.0 @ 2366', 1.75 @ 2693', 0.25 @ 2895'
Pipe Strap @ Contractor Bit Record: _____

Gas Detector: N/A
Mud System: CHEMICAL MUD, AJ'S SERVICES (EL DORADO, KS)
DSTs: DIAMOND TESTING, KEVIN MACK

DSTs

DST #1) HUNTON (2890-2895) 5-30-40-60, (1) WB, (2) NB, 2" OIL SPTD M, [165-806] FP: 19-20/21-20
DST #2) VIOLA (2990-3004) 5-30-60-60, (1) 1.3" BLO, (2) 12" BLO, 230' OIL (100%O), 10' HMCO (60%O) [1008-974] FP: 23-33/35-103
DST #3) VIOLA (3024-3089) 5-30-30-60, (1) BOB/41 sec., 52" BLO, (2) 345" BLO, 378' SOHWCW (10%O), 315' SOHMCW (5%O), 252' SO&MCW (5%O), 794' SO&CMW (1%O), 10' SOCM (1%O), [1033-1033] FP: 142-297/362-789

CREWS

TOOL PUSHER: DUKE COULTER
DAYLIGHT: CHARLIE COULTER
MORNING: BROKER WITAKER

ROCK TYPES

Anhy	Dol	Siltst	Shale 3
Bent	Gyp	Se	Silty dol
Chnt	Sdy lmsst	Black sh	Dol lmsst
Clyst	Lmst	Gry sh	Dol 2
Coal	Mrst	Shale	Granite wash
Congl	Salt	Shylystst	Lmst
Sdy dol	Shale	Siltysh	Calc dol
		Ss 2	Shale 3

ACCESSORIES

Chlorite	Pellet	Grysh
Dol	Pisolate	Gryslt
Sand	Plant	Lms
Sily	Strom	Sandylms
	Fus	Sh
	Oomoldic	Siltstn

TEXTURE

Boundst
Chalky
Crlyn
Earthy
FineXln
Grainst
Lithogr
Mucroxln
Microxt
Packet
Wackest

MINERAL

Anhy	Arg	Bent	Bit	Calcfrag	Calc	Carb	Chnt	Chlth	Dol	Ferrpel	Glau	Gyp	Marl	Nodule	Phos	Pyr	Salt	Sandy	Silt
------	-----	------	-----	----------	------	------	------	-------	-----	---------	------	-----	------	--------	------	-----	------	-------	------

FOSSIL

Algae	Amph	Belm	Bioclst	Brach	Bryozoa	Cephal	Coral	Crin	Echin	Fish	Foram	Fossil	Gastre	Oolite	Ostra
-------	------	------	---------	-------	---------	--------	-------	------	-------	------	-------	--------	--------	--------	-------

Curve Track 1
 ROP (min/ft) _____
 Gamma (API) _____

