

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
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

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	Shelby Resources LLC
Well Name	STOSS 2-24
Doc ID	1417125

All Electric Logs Run

Dual Induction
Compensated Neutron
Micro
Sonic





**Company: Shelby Resources  
LLC**  
**Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

<b>DATE</b>
May
<b>26</b>
2018

<b>DST #1</b>	<b>Formation: Lansing F</b>	<b>Test Interval: 3216 - 3270'</b>	<b>Total Depth: 3270'</b>
	Time On: 00:26 05/26	Time Off: 06:46 05/26	
	Time On Bottom: 02:52 05/26	Time Off Bottom: 04:27 05/26	

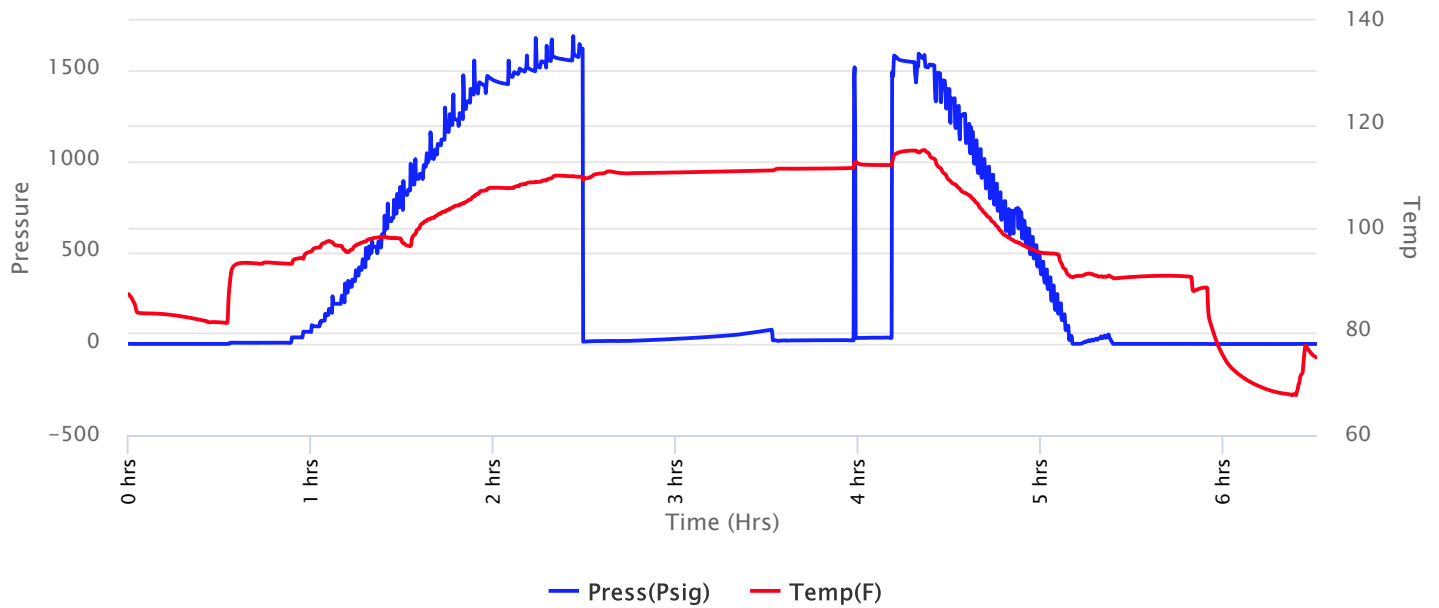
Electronic Volume  
Estimate:  
15'

1st Open  
Minutes: 15  
1" at 15 min

1st Close  
Minutes: 45  
0" at 45 min

2nd Open  
Minutes: 30  
0" at 30 min

2nd Close  
N/A





**Company: Shelby Resources LLC**  
**Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: Sterling Drilling Company - Rig 5  
 Elevation: 1898 EGL  
 Field Name: District 65  
 Pool: WILDCAT  
 Job Number: 159

<b>DATE</b>
May
<b>26</b>
2018

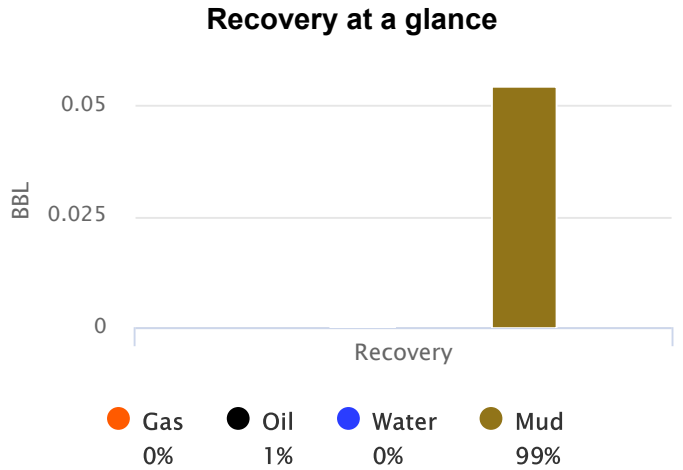
**DST #1**      **Formation: Lansing F**      **Test Interval: 3216 - 3270'**      **Total Depth: 3270'**  
 Time On: 00:26 05/26      Time Off: 06:46 05/26  
 Time On Bottom: 02:52 05/26      Time Off Bottom: 04:27 05/26

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
10	0.0548	SLOCM	0	1	0	99

Total Recovered: 10 ft  
 Total Barrels Recovered: 0.0548

**Reversed Out  
NO**

Initial Hydrostatic Pressure	1559	PSI
Initial Flow	11 to 15	PSI
<b>Initial Closed in Pressure</b>	<b>77</b>	<b>PSI</b>
Final Flow Pressure	16 to 34	PSI
<b>Final Closed in Pressure</b>	<b>0</b>	<b>PSI</b>
Final Hydrostatic Pressure	1550	PSI
Temperature	113	°F
Pressure Change Initial Close / Final Close	100.0	%





**Company: Shelby Resources  
LLC  
Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

<b>DATE</b> May <b>26</b> 2018
-----------------------------------------

<b>DST #1</b>	<b>Formation: Lansing F</b>	<b>Test Interval: 3216 - 3270'</b>	<b>Total Depth: 3270'</b>
	Time On: 00:26 05/26	Time Off: 06:46 05/26	
	Time On Bottom: 02:52 05/26	Time Off Bottom: 04:27 05/26	

**REMARKS:**

If: wsb built to 1" in 15min

lc: nobb

Ff: no build flush tool 25min in gd flush pulled out 35 min in

Fc: na

Tool sample: 1o - 99m



**Company: Shelby Resources  
LLC  
Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

<b>DATE</b> May <b>26</b> 2018
-----------------------------------------

<b>DST #1</b>	<b>Formation: Lansing F</b>	<b>Test Interval: 3216 - 3270'</b>	<b>Total Depth: 3270'</b>
	Time On: 00:26 05/26	Time Off: 06:46 05/26	
	Time On Bottom: 02:52 05/26	Time Off Bottom: 04:27 05/26	

**Down Hole Makeup**

<b>Heads Up:</b> 26.49 FT	<b>Packer 1:</b> 3211 FT
<b>Drill Pipe:</b> 2995.31 FT <i>ID-3 1/4</i>	<b>Packer 2:</b> 3216 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3200.42 FT
<b>Collars:</b> 214.61 FT <i>ID-2 3/8</i>	<b>Bottom Recorder:</b> 3253 FT
<b>Test Tool:</b> 33.57 FT <i>ID-3 1/2-FH Jars Safety Joint</i>	<b>Well Bore Size:</b> 7 7/8
<b>Total Anchor:</b> 54	<b>Surface Choke:</b> 1"
<b>Anchor Makeup</b>	<b>Bottom Choke:</b> 5/8"
<b>Packer Sub:</b> 1 FT	
<b>Perforations: (top):</b> 2 FT <i>4 1/2-FH</i>	
<b>Change Over:</b> .5 FT	
<b>Drill Pipe: (in anchor):</b> 32 FT <i>ID-3 1/4</i>	
<b>Change Over:</b> .5 FT	
<b>Perforations: (below):</b> 18 FT <i>4 1/2-FH</i>	





**Company: Shelby Resources  
LLC  
Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

<p><b>DATE</b> May <b>26</b> 2018</p>
---------------------------------------------------

<b>DST #1</b>	<b>Formation: Lansing</b>	<b>Test Interval: 3216 -</b>	<b>Total Depth: 3270'</b>
	<b>F</b>	<b>3270'</b>	
	Time On: 00:26 05/26	Time Off: 06:46 05/26	
	Time On Bottom: 02:52 05/26	Time Off Bottom: 04:27 05/26	

### Mud Properties

**Mud Type:** Chemical      **Weight:** 8.9      **Viscosity:** 51      **Filtrate:** 8.4      **Chlorides:** 3500 ppm



# Company: Shelby Resources LLC

## Lease: Stoss #2-24

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

**DATE**  
May  
**27**  
2018

**DST #2**    **Formation: Arbuckle**    **Test Interval: 3375 - 3418'**    **Total Depth: 3418'**

Time On: 00:45 05/27    Time Off: 08:38 05/27  
Time On Bottom: 02:52 05/27    Time Off Bottom: 06:22 05/27

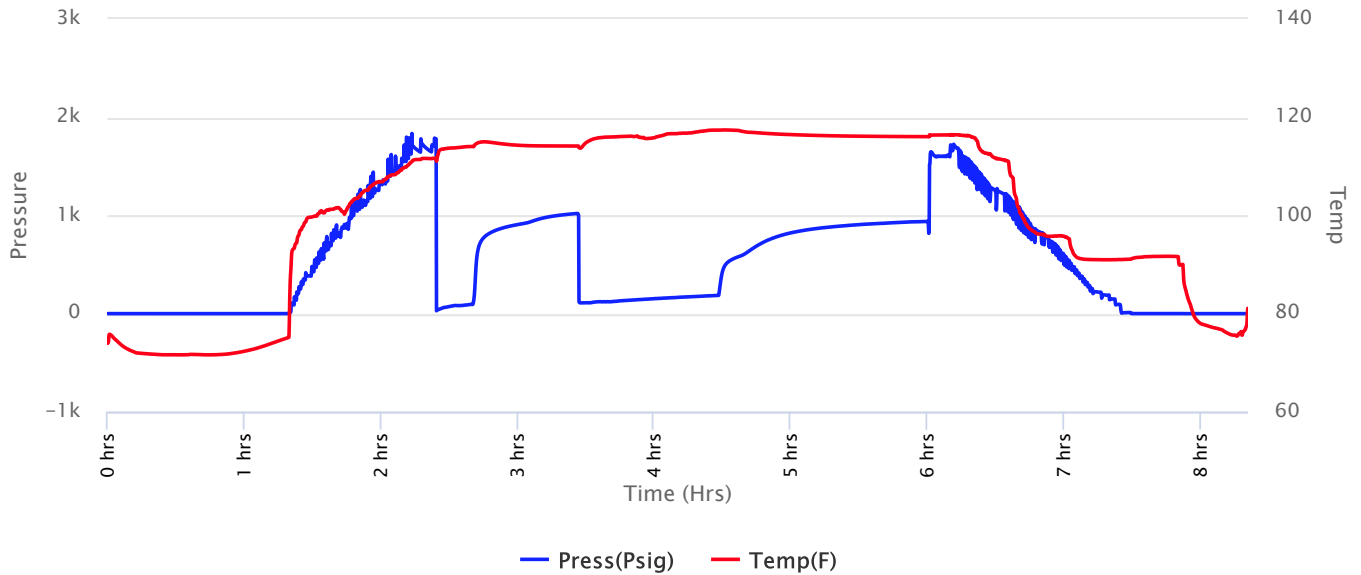
Electronic Volume Estimate:  
1376'

1st Open  
Minutes: 15  
41.8" at 15 min

1st Close  
Minutes: 45  
3.5" at 45 min

2nd Open  
Minutes: 60  
111" at 60 min

2nd Close  
Minutes: 90  
8.6" at 90 min





**Company: Shelby Resources  
LLC  
Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

**DATE**  
May  
**27**  
2018

**DST #2 Formation: Arbuckle Test Interval: 3375 - 3418' Total Depth: 3418'**

Time On: 00:45 05/27 Time Off: 08:38 05/27  
Time On Bottom: 02:52 05/27 Time Off Bottom: 06:22 05/27

Recovered

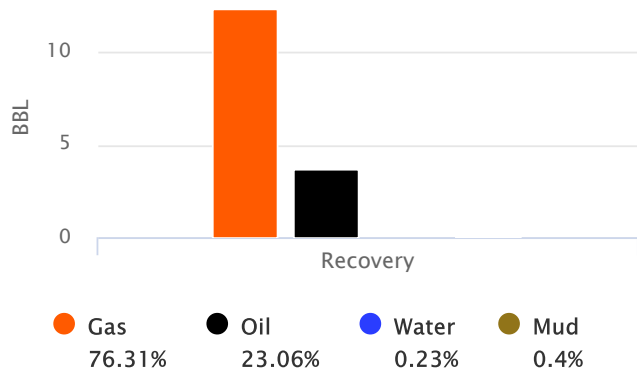
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
1197	12.282417	G	100	0	0	0
414	3.51842559	O	0	100	0	0
62	0.33976	SLGCSLWCSLMCO	10	60	11	19

Total Recovered: 1673 ft  
Total Barrels Recovered:  
16.14060259

**Reversed Out  
NO**

Initial Hydrostatic Pressure	1694	PSI
Initial Flow	28 to 93	PSI
<b>Initial Closed in Pressure</b>	<b>1019</b>	<b>PSI</b>
Final Flow Pressure	109 to 184	PSI
<b>Final Closed in Pressure</b>	<b>938</b>	<b>PSI</b>
Final Hydrostatic Pressure	1657	PSI
Temperature	118	°F
Pressure Change Initial Close / Final Close	8.0	%

**Recovery at a glance**





**Company: Shelby Resources  
LLC  
Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

<b>DATE</b> May <b>27</b> 2018
-----------------------------------------

<b>DST #2</b>	<b>Formation: Arbuckle</b>	<b>Test Interval: 3375 - 3418'</b>	<b>Total Depth: 3418'</b>
	Time On: 00:45 05/27	Time Off: 08:38 05/27	
	Time On Bottom: 02:52 05/27	Time Off Bottom: 06:22 05/27	

**REMARKS:**

If: 3/4" Bob in 5.5min  
Ic: built to 3.5" in 10min  
Ff: 1" Bob in 5.5min  
Fc: built to 8" in 30min

Tool sample: 7g - 45o - 11w - 37m

Gravity: 43.8 @ 60 degrees F

Ph: 7

RW: .41 @ 75 degrees F

Chlorides: 16000 ppm



# Company: Shelby Resources LLC

## Lease: Stoss #2-24

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

<b>DATE</b> May <b>27</b> 2018
-----------------------------------------

**DST #2**      **Formation: Arbuckle**      **Test Interval: 3375 - 3418'**      **Total Depth: 3418'**  
Time On: 00:45 05/27      Time Off: 08:38 05/27  
Time On Bottom: 02:52 05/27      Time Off Bottom: 06:22 05/27

### Down Hole Makeup

<b>Heads Up:</b> 26.65 FT	<b>Packer 1:</b> 3370 FT
<b>Drill Pipe:</b> 3154.47 FT <i>ID-3 1/4</i>	<b>Packer 2:</b> 3375 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3359.42 FT
<b>Collars:</b> 214.61 FT <i>ID-2 3/8</i>	<b>Bottom Recorder:</b> 3378 FT
<b>Test Tool:</b> 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	<b>Well Bore Size:</b> 7 7/8
	<b>Surface Choke:</b> 1"
	<b>Bottom Choke:</b> 5/8"

**Total Anchor:** 43

#### Anchor Makeup

**Packer Sub:** 1 FT

**Perforations: (top):** 1 FT  
*4 1/2-FH*

**Change Over:** FT

**Drill Pipe: (in anchor):** FT  
*ID-3 1/4*

**Change Over:** FT

**Perforations: (below):** 41 FT  
*4 1/2-FH*



**Company: Shelby Resources  
LLC  
Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

**DATE**

May

**27**

2018

**DST #2      Formation: Arbuckle      Test Interval: 3375 -      Total Depth: 3418'**  
**3418'**

Time On: 00:45 05/27

Time Off: 08:38 05/27

Time On Bottom: 02:52 05/27

Time Off Bottom: 06:22 05/27

**Mud Properties**

**Mud Type:** Chemical

**Weight:** 8.7

**Viscosity:** 72

**Filtrate:** 9.2

**Chlorides:** 7300 ppm



**Company: Shelby Resources  
LLC  
Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

<b>DATE</b>
May
<b>27</b>
2018

**DST #2      Formation: Arbuckle      Test Interval: 3375 -      Total Depth: 3418'**  
**3418'**  
Time On: 00:45 05/27      Time Off: 08:38 05/27  
Time On Bottom: 02:52 05/27      Time Off Bottom: 06:22 05/27

**Gas Volume Report**

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D





# 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. 775

Date	5-23-18	Sec.	24	Twp.	18	Range	14	County	Barton	State	Ks	On Location		Finish	2:30 PM
------	---------	------	----	------	----	-------	----	--------	--------	-------	----	-------------	--	--------	---------

Lease Stoss Well No. 224 Location 281 + 4 Jct - 5 around 2nd Curve

Contractor Sterling #4 Owner V25, E15

Type Job Surface 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.

Hole Size 12 1/4" T.D. 860' Charge To Shelby Resources

Csg. 8 3/8" Depth 856' 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. 42' Shoe Joint 42' Cement Amount Ordered 350 60/40 4% cc 2% Col

Meas Line Displace 51 3/4 BLS

**EQUIPMENT**

Pumptrk 17 No. Cementer David Common 210

Bulktrk 13 No. Driver Doug Poz. Mix 140

Bulktrk p.u. No. Driver Rick Gel. 7

Calcium 15

**JOB SERVICES & REMARKS**

Remarks: Cement did Circulate Halls

Rat Hole Salt

Mouse Hole Flowseal

Centralizers Kol-Seal

Baskets Mud CLR 48

D/V or Port Collar CFL-117 or CD110 CAF 38

Handling 38 372 Sand

Mileage

**FLOAT EQUIPMENT**

Guide Shoe J. weld on

Centralizer Rubber plug

Baskets Baffle plate

AFU Inserts

Float Shoe

Latch Down

Pumptrk Charge long Surface

Mileage 15

Signature Tommy S. Salgado Tax

Tax	
Discount	
Total Charge	



Customer Shelby Oil Services	Lease No.	Date 5-28-18
Lease STUSS	Well # 2-24	
Field Order # 16779	Station Pratt	Casing 5 1/2
		Depth R23490
Type Job 2-42	Formation 5 1/2" Long string	County Barton
		State MS
		Legal Description 24-18-14

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

Customer Representative Chris Gottschalk	Station Manager W. S. ...	Treater MATT
---------------------------------------------	------------------------------	-----------------

Service Units	8335	78982	86779	70959	19862				
Driver Names	MATT	McGraw		John					

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
12:00					on location / safety meeting
1:10					Run 5 1/2" casing - 21.98' sh.
					Turn on 1/2" 5.75" - KASPER CO SH.
2:00					Casing on bit
2:50					Hook to casing / break line w. rig
4:47	230		5	5	Pump 5 bbl water
4:50	200		11	4	Mix 50 SKI 5000-10
4:53	175		24	5	Mix 100 SKI AA-2
5:00			0	4	Wash pump + line / Drop Plug
5:00	130		-	6	Start displacement
5:17	210		60	6	Like pressure
5:19	400		74	3	slow rate
5:23	150		84.4		plug being released + hold
5:35					Plug RT + mouse hole
					Job complete
					Thank you!
					Mike Matt
					Mike + John



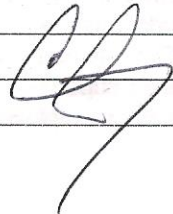
# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 839

Date	6.6.18	Sec.	Twp.	Range	County	State	On Location	Finish
					Barton	Ks		10:30 AM
					Location Boyd 5 to Curve 1E1s			
Lease	Stoss			Well No.	2-24			
Contractor	DSS W			Owner				
Type Job	Retainer			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.				
Hole Size				T.D.	Charge To Shelby Resources			
Csg. Size	5 1/2			Depth	Street			
Tbg. Size	2 3/8			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 50 COM			
Meas Line				Displace				
<b>EQUIPMENT</b>					Common 50			
Pumptrk	18	No.	Cementar	Help				
Bulktrk		No.	Driver	Brett				
Bulktrk	3	No.	Driver	Jordan				
<b>JOB SERVICES &amp; REMARKS</b>					Hulls			
Remarks:				Salt				
Rat Hole				Flowseal				
Mouse Hole				Kol-Seal				
Centralizers				Mud CLR 48				
Baskets				CFL-117 or CD110 CAF 38				
D/V or Port Collar				Sand				
Retainer @ 3430					Handling 50			
Pumps @ 3433					Mileage			
Rate 2BIC @ 2200#					<b>FLOAT EQUIPMENT</b>			
Misc 50SK Squeeze @ 3400#					Guide Shoe			
					Centralizer			
					Baskets			
					AFU Inserts			
					Float Shoe			
					Latch Down			
					Pumptrk Charge Squeeze			
					Mileage 15			
					Tax			
					Discount			
					Total Charge			



Scale 1:240 Imperial

Well Name: Stoss #2-24  
 Surface Location: 1934' FSL, 1510' FWL, Sec. 24-18S-14W  
 Bottom Location:  
 API: 15-009-26215-0000  
 License Number:  
 Spud Date: 5/22/2018 Time: 6:30 PM  
 Region: Barton County  
 Drilling Completed: 5/27/2018 Time: 5:55 PM  
 Surface Coordinates:  
 Bottom Hole Coordinates:  
 Ground Elevation: 1898.00ft  
 K.B. Elevation: 1909.00ft  
 Logged Interval: 2800.00ft To: 3490.00ft  
 Total Depth: 3490.00ft  
 Formation: Arbuckle  
 Drilling Fluid Type: Chemical/Fresh Water Gel

**OPERATOR**

Company: Shelby Resources, LLC  
 Address: 13949 W Colfax Ave., Bldg 1, Ste 120  
 Lakewood, CO 80401  
 Contact Geologist: Janine Sturdavant  
 Contact Phone Nbr: 303-907-2209 / 720-274-4682  
 Well Name: Stoss #2-24  
 Location: 1934' FSL, 1510' FWL, Sec. 24-18S-14W  
 API: 15-009-26215-0000  
 Pool: Field: Wildcat  
 State: Kansas Country: USA

**LOGGED BY**



Company: Shelby Resources, LLC  
 Address: 13949 W Colfax Ave., Bldg 1, Ste 120  
 Lakewood, CO 80401  
 Phone Nbr: 203-671-6034  
 Logged By: Geologist Name: Jeremy Schwartz

**NOTES**

The Shelby Resources, LLC Stoss #2-24 was drilled to a total depth of 3490', bottoming in the Arbuckle. A TookeDaq gas detector was employed in the drilling of said well.

Two DST's were conducted throughout the Lansing-Kansas City and Arbuckle zones during the drilling of this well. The DST reports can be found at the bottom of this log.

Due to positive DST results in the Arbuckle, sample shows, gas kicks, and log analysis it was determined by all parties involved to further test the well through production casing. The dry samples were saved and will be available for further review at the Kansas Geological Society Well Sample Library, located in Wichita, KS.

Respectfully Submitted,  
Jeremy Schwartz  
Geologist

**CONTRACTOR**

Contractor: Sterling Drilling Co



Rig #: 4  
 Rig Type: mud rotary  
 Spud Date: 5/22/2018  
 TD Date: 5/27/2018  
 Rig Release:

Time: 6:30 PM  
 Time: 5:55 PM  
 Time:








### ELEVATIONS

K.B. Elevation: 1909.00ft      Ground Elevation: 1898.00ft  
 K.B. to Ground: 11.00ft



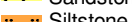
DATE	DEPTH	ACTIVITY
Friday, May 25, 2018	3025'	Geologist Jeremy Schwartz on Location @ 0615hrs, ~3025', Drlg ahead through Heebner,
	3162'	Douglas, Brown Lime, CFS @ 3162', drop survey, strap out, conduct Bit Trip,
	3257'	successful bit trip, resume drlg, CFS @ 3257', resume drlg, CFS @ 3270'
	3270'	conduct DST #1 in the Lansing "F"
Saturday, May 26, 2018	3373'	successful test, resume drlg, CFS @ 3342', resume drlg, CFS @ 3373', resume drlg,
	3418'	CFS @ 3393', resume drlg, CFS @ 3406', repair gas extractor, resume drlg, CFS @ 3418'
Sunday, May 27, 2018		conduct DST #2 in the Arbuckle, successful test, resume drlg, CFS @ 3425,
	3490'	resume drlg, CFS @ 3432', resume drlg ahead to TD of 3490', TD reached @ 1755hrs,
		CTCH 1hr, drop survey, trip out for logs, conduct logging operations
		logging operations complete @ 2355hrs
Monday, May 28, 2018		Geologist Jeremy Schwartz off location @ 0030hrs

		Oil - EOR															
		Klima Well Service, Inc.				Klima Well Service, Inc.				Shelby Resources, LLC							
		Johnson #2				Johnson #1				Tindall Trust #1-26							
		NE-SW-SW 24-T18S-R14W				C-SW-SE-SW 24-T18S-R14W				SE-NW-NE-NE 26-T18S-R14W							
		STOSS #2-24				1901				1903				1906			
		KB		1909		KB		1901		KB		1903		KB		1906	
		LOG TOPS		SAMPLE TOPS		COMP. CARD		LOG		SMPL.		COMP. CARD		LOG		SMPL.	
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	
ANHYDRITE TOP	834	1075	835	1074	829	1072	+ 3	+ 2	820	1083	- 8	- 9	829	1077	- 2	- 3	
BASE	862	1047	862	1047	849	1052	- 5	- 5	850	1053	- 6	- 6	858	1048	- 1	- 1	
TOPEKA	2862	-953	2861	-952					2846	-943	- 10	- 9	2855	-949	- 4	- 3	
HEEBNER SHALE	3082	-1173	3078	-1169	3068	-1167	- 6	- 2	3066	-1163	- 10	- 6	3075	-1169	- 4	+ 0	
TORONTO	3092	-1183	3089	-1180	3078	-1177	- 6	- 3	3076	-1173	- 10	- 7	3086	-1180	- 3	+ 0	
DOUGLAS SHALE	3106	-1197	3104	-1195					3092	-1189	- 8	- 6	3101	-1195	- 2	+ 0	
BROWN LIME	3162	-1253	3159	-1250	3148	-1247	- 6	- 3	3146	-1243	- 10	- 7	3156	-1250	- 3	+ 0	
LANSING (LKC)	3172	-1263	3175	-1266	3158	-1257	- 6	- 9	3156	-1253	- 10	- 13	3170	-1264	+ 1	- 2	
LKC G POROSITY	3270	-1361	3266	-1357	3255	-1354	- 7	- 3	3249	-1346	- 15	- 11	3261	-1355	- 6	- 2	
MUNCIE CREEK	3294	-1385	3293	-1384	3280	-1379	- 6	- 5	3282	-1379	- 6	- 5	3287	-1381	- 4	- 3	
LKC H	3302	-1393	3299	-1390	3286	-1385	- 8	- 5	3290	-1387	- 6	- 3	3294	-1388	- 5	- 2	
STARK SHALE	3352	-1443	3352	-1443	3340	-1439	- 4	- 4	3338	-1435	- 8	- 8	3345	-1439	- 4	- 4	
BKC	3380	-1471	3378	-1469	3368	-1467	- 4	- 2	3371	-1468	- 3	- 1	3374	-1468	- 3	- 1	
ARBUCKLE	3409	-1500	3408	-1499	3392	-1491	- 9	- 8	3392	-1489	- 11	- 10	3400	-1494	- 6	- 5	
RTD			3490	-1581	3421	-1520		61	3402	-1499		82	3480	-1574		7	
LTD	3492	-1583			3421	-1520	- 63		3400	-1497	- 86		3478	-1572	- 11		

### ROCK TYPES










 Congl     
  Lmst fw<7  
 Dolprim     
  shale, grn     
  shale, gry     
  shale, red  
 Carbon Sh

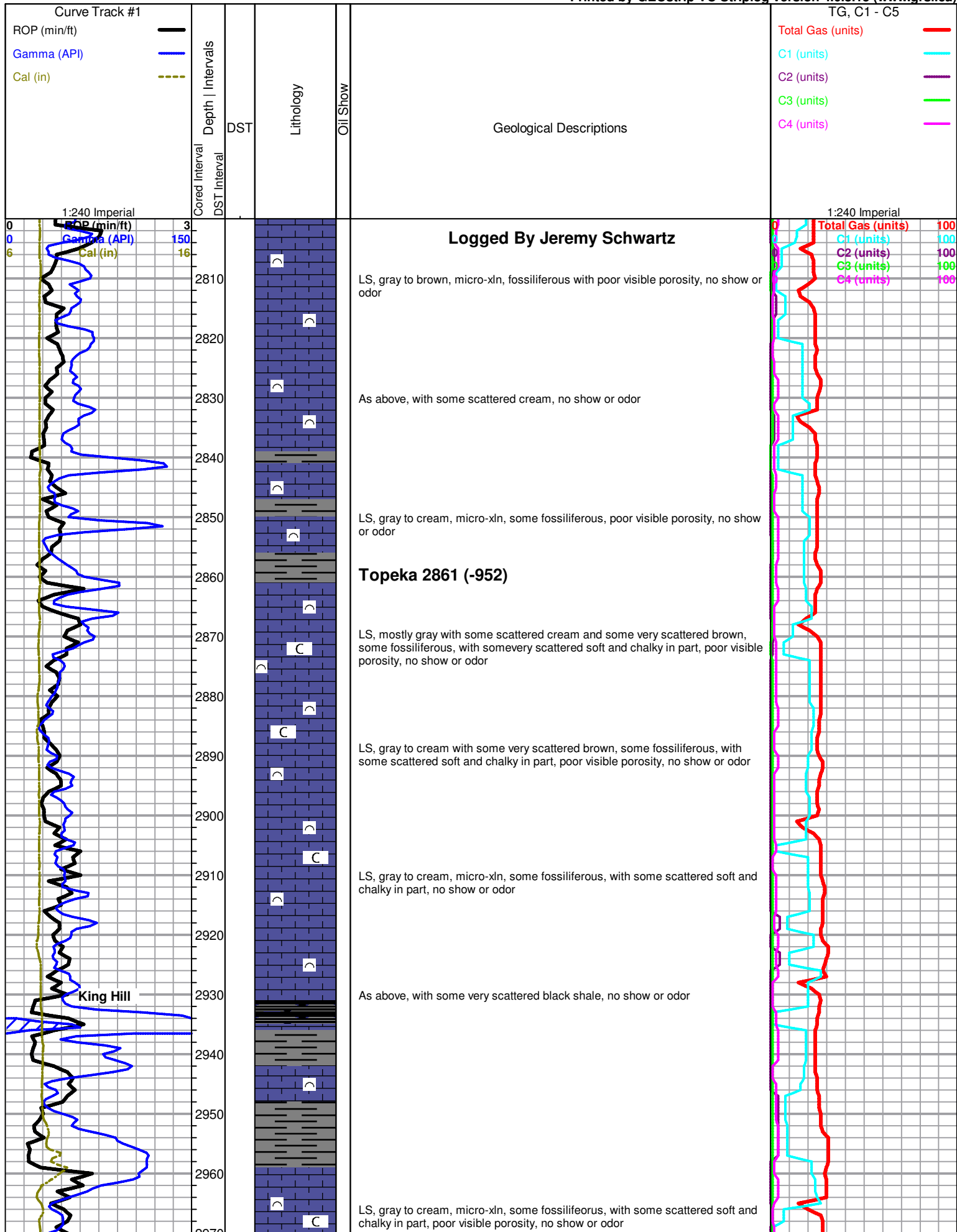
### ACCESSORIES

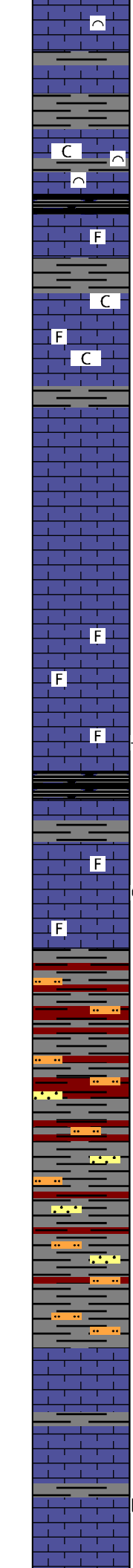
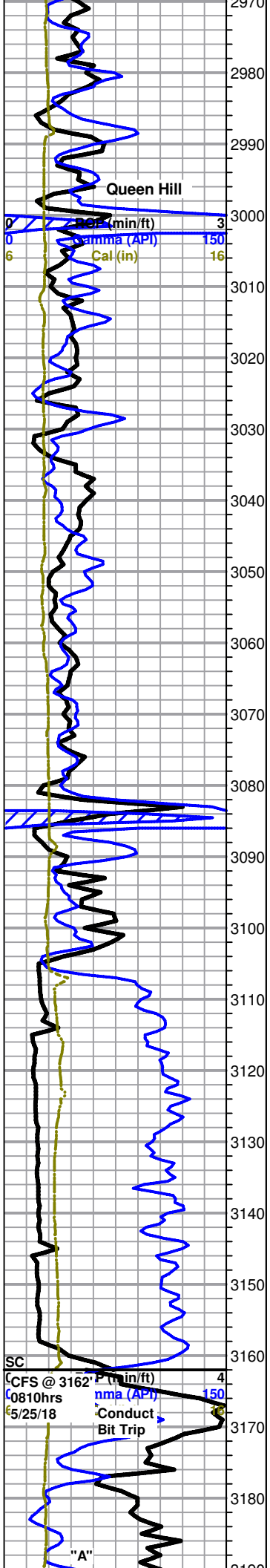
**FOSSIL**  
 ^ Bioclastic or Fragmental  
 F Fossils < 20%  
**STRINGER**  
 ~~~ Chert  
 Limestone  
 Sandstone  
 Siltstone

**TEXTURE**  
 C Chalky

### OTHER SYMBOLS

**MISC**  
 Daily Report  
 Digital Photo  
 Document  
 Folder  
 Link  
 Vertical Log File  
 Horizontal Log File  
**DST**  
 DST Int  
 DST alt





LS as above, with some scattered black shale, no show or odor

LS, mostly cream with some gray, micro-xln, some slightly fossiliferous, most dense with poor visible porosity, some very scattered soft and chalky in part, no show or odor

LS, mostly cream with some white and gray, micro-xln, mostly dense with poor visible porosity, no show or odor

LS, cream to gray with some scattered white, mostly dense with poor visible porosity, no show or odor

LS, mostly cream with some white and gray, micro-xln, some slightly fossiliferous, trace oomoldic with mostly poor visible oomold porosity, chips appear barren, no cut, no visible stain, some scattered gas bubbles, with some very scattered dull fluor., fair fleeting odor in wet cup

**Heebner 3078 (-1169)**

Shale, black carbonaceous

**Toronto 3089 (-1180)**

LS, cream to light gray with some scattered white, micro-xln, mostly lithographic with some scattered slightly fossiliferous, poor visible porosity, few very scattered chips cream, lithographic with scattered areas of slightly vuggy porosity on edges with saturated black stain in porosity only, slow streaming cut with milky white fluor., NSFO, poor fleeting odor in wet cup

**Douglas 3104 (-1195)**

Gray and red shale, some silty

Shale as above, some sandy

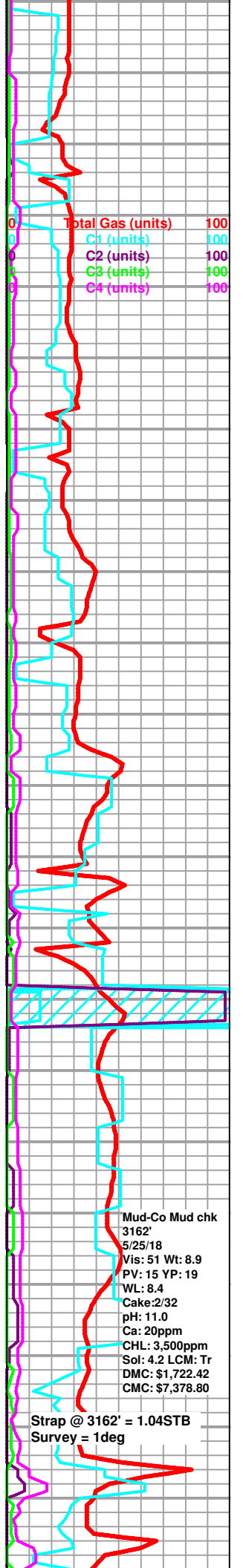
Gray shale with some red, some silty, less sandy

**Brown Lime 3159 (-1250)**

LS, brown, micro-xln, fossiliferous and very dense with no visible porosity, no show or odor

**Lansing 3175 (-1266)**

LS, cream to light gray, micro-xln, fossiliferous to lithographic with poor visible porosity, few very scattered chips with very scattered flaky dead black stain, trace sub-oomoldic with poor visible porosity and barren, no fluor., or odor

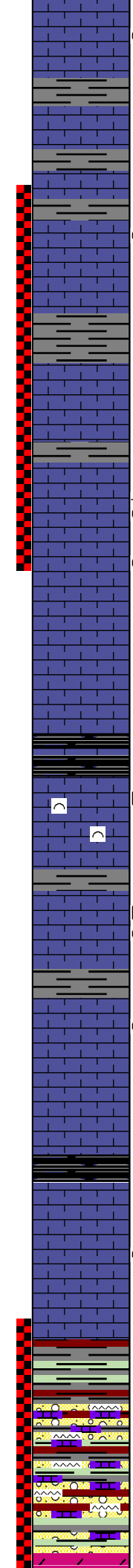
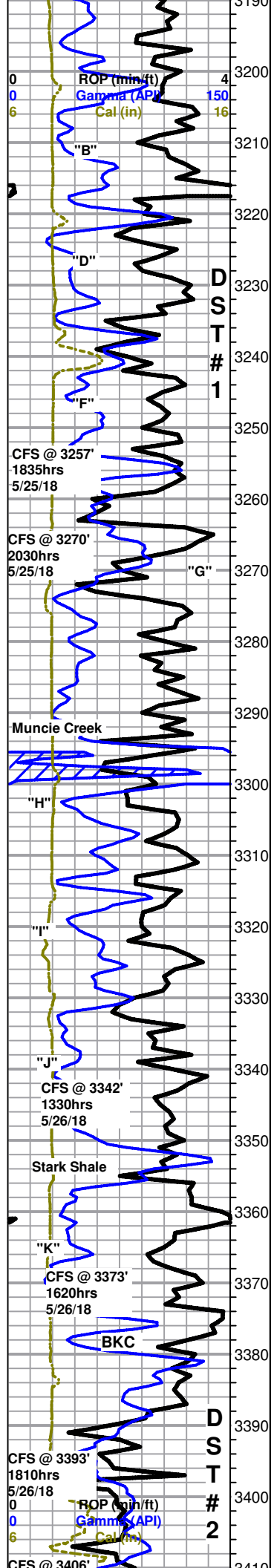


|                   |     |
|-------------------|-----|
| Total Gas (units) | 100 |
| C1 (units)        | 100 |
| C2 (units)        | 100 |
| C3 (units)        | 100 |
| C4 (units)        | 100 |

Mud-Co Mud chk  
3162'  
5/25/18  
Vis: 51 Wt: 8.9  
PV: 15 YP: 19  
WL: 8.4  
Cake: 2/32  
pH: 11.0  
Ca: 20ppm  
CHL: 3,500ppm  
Sol: 4.2 LCM: Tr  
DMC: \$1,722.42  
CMC: \$7,378.80

Strap @ 3162' = 1.04STB  
Survey = 1deg

SC  
CFS @ 3162' P (min/ft) 4  
0810hrs nma (API) 150  
5/25/18 Conduct Bit Trip



LS, cream to gray, micro-xln, fossiliferous to lithographic with poor visible porosity, no show, fluor., or odor

LS as above, few very scattered chips cream with areas of scattered fair visible pinpoint porosity to very slightly vuggy with scattered stain in porosity, only, NSFO upon break, very slow cut with dull milky fluor., trace oomoldic with poor oomold porosity and barren, no fluor., no odor in cup

LS, cream to gray, micro-xln, mostly lithographic with poor visible porosity, no show or odor

As above, with few very scattered chips sub-oomoldic with mostly poor visible oomold porosity, few chips have stain in some scattered oomolds only, few oomolds chalk filled, very dense, SSFO upon break (opaque droplets), NSFO in tray, no fluor., or odor

LS, cream to gray with some scattered white, mostly lithographic with poor visible porosity, no show, fluor., or odor

LS, mostly cream with some scattered gray, micro-xln, mostly lithographic with poor visible porosity, trace oomoldic with fair oomold porosity, barren, no show, fluor., or odor

**Stoss 2-24 DST #1.JPG**

3270' 20" LS, mostly cream to gray, lithographic with poor visible porosity and barren, with some very scattered chips with slightly vuggy porosity and scattered very light stain as well as slight to fair show gas bubbles in porosity, upon break chips have S-FSFO (very light golden brown droplets) and slight to fair show gas bubbles, some very scattered fluor., good odor

3270' 40" mostly same as above, with shows and odor slightly decreasing, found one small chip re-crystallized and very friable with very light golden brown stain and SSFO upon break, very scattered fluor., on chips with shows

LS, cream to gray with some scattered brown, micro-crypto xln, mostly lithographic and dense with poor visible porosity, some scattered cream oomoldic with poor oomold porosity, barren, no show or odor

As above, with influx brown LS, micro-xln and very dense with no visible porosity, no show or odor

LS, cream with some scattered gray, micro-xln, some fossiliferous, some lithographic, mostly poor visible porosity, some scattered chips cream oolitic, poor visible porosity, with some very scattered wet black to flaky dead black gilsonitic inter-oolite stain, upon break VSSFO (1-2 droplets) in few chips, no fluor., poor fleeting odor

Mostly same as above, with slight influx in oolitic with mostly poor dead black gilsonitic stain, few very scattered chips gray to brown and dense with scattered fair visible pinpoint porosity and stain in porosity only, NSFO upon break, slow cut with dull fluor., poor odor in cup

3342' 30" LS, cream to gray, micro-xln, mostly lithographic with poor visible porosity, some very scattered chips with gilsonitic stain, few very small chips with fair pinpoint to very slightly vuggy porosity and stain in porosity only, upon break NSFO, no fluor., poor fleeting odor

3342' 60" Mostly same as above, few chips brown, micro-xln, lithographic and very dense with very scattered small vugs and stain in vugs only, most too dense to break, when agitated slight show gas bubbles from porosity, NSFO, no fluor., or odor

LS, mostly cream with some gray and brown, micro-xln, mostly lithographic with poor visible porosity, no show or odor

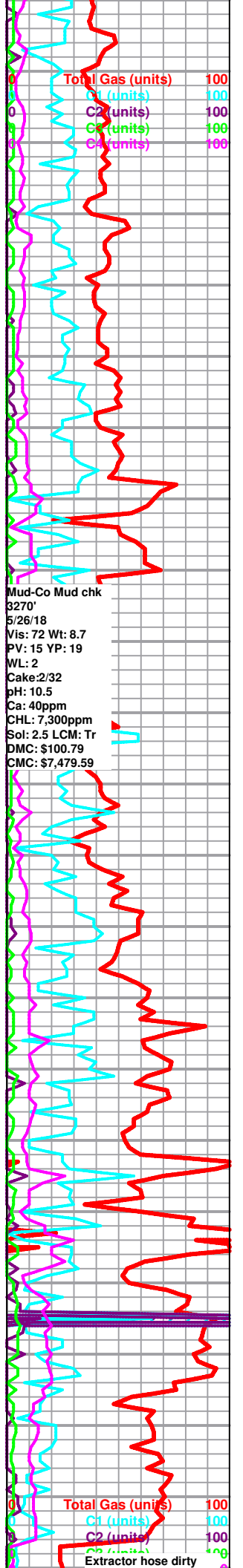
3373' 20" LS, mostly cream to light gray and brown, micro-xln, lithographic to fossiliferous with poor visible porosity, few very scattered chips with re-crystallized edges with scattered stain, upon break S-FSFO and some very scattered fair visible inter-xln porosity with very scattered stain, slow weak cut with dull fluor., fair fleeting odor in cup

3373' 40" LS, mostly cream to white with some scattered gray and brown, micro-xln, lithographic to slightly fossiliferous with poor visible porosity, with influx gray and red shale, no show or odor

3393' 30 & 60" Cream to gray LS with abundant gray red and green shale as well as scattered white to tan and translucent chert, some oolitic, with red clay and slightly chalky, no show or odor, red wash

3406' 30 & 60" Conglomerate as above, no show or odor

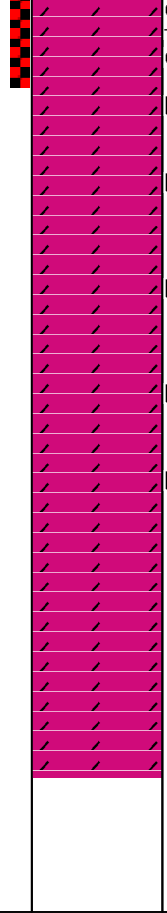
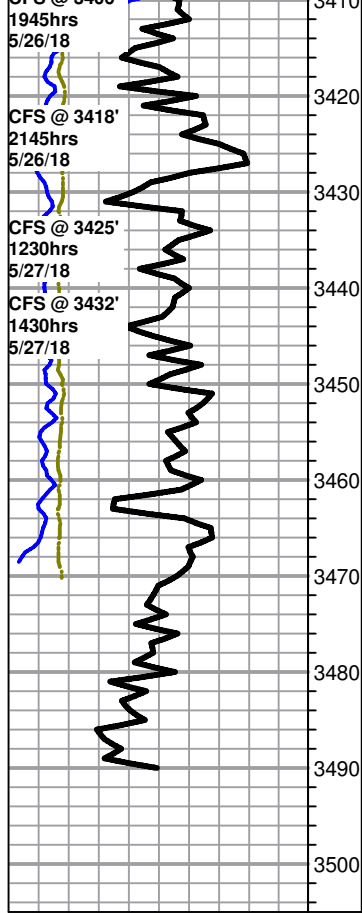
**Stoss 2-24 DST #2.JPG**



**Arbuckle 3408 (-1499)**

Total Gas (units) 100  
 C1 (units) 100  
 C2 (units) 100  
 C3 (units) 100  
 C4 (units) 100  
 Extractor hose dirty





● 3418' 30" Conglomerate as above, with some scattered dolomite, f-med xln, white to light brown, most good rhombic with fair to good visible inter-xln porosity and scattered stain/free oil and gas bubbles slowly bleeding out and pooling on surface, most friable to fairly friable, few chips fairly dense, upon break most chips have good show free oil and fair show gas bubbles, when left under lamp some chips become saturated with brown stain, good strong odor

● 3418' 60" Influx dolomite, still carrying shows as above, also with slight influx white, sub-sucrosic and dense with poor visible porosity, barren, good strong odor

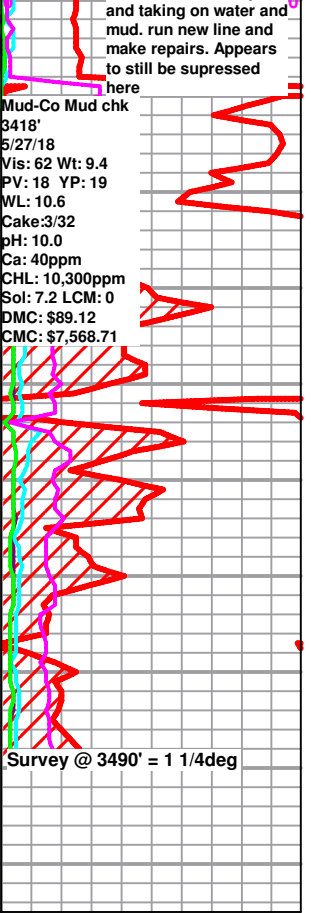
● 3425' 30 & 60" Dolomite, white, micro-xln with some scattered med-xln, mostly sub-rhombic to sub-sucrosic and fairly dense with mostly poor visible porosity, most with scattered gilsonitic stain, some barren, SSFO upon break in some chips, poor odor

● 3432' 30 & 60" Dolomite, white, micro-med xln, mostly sub-rhombic with poor visible porosity, some scattered fair porosity, most chips with scattered gilsonitic stain and fairly friable, with some sub-sucrosic and dense, NSFO upon break, fair fleeting odor in cup. 60" slight influx sub-rhombic to rhombic with fair porosity and gilsonitic stain

● ~3440' Dolomite, white, med-xln, sub-rhombic with some scattered rhombic, some with fair porosity, most with scattered gilsonitic stain, NSFO upon break, with influx white, sub-sucrosic and dense with poor visible porosity, barren, poor fleeting odor

● ~3450-3470' Dolomite, white, micro-xln with some scattered med-xln, mostly sub-sucrosic and dense with poor visible porosity, barren, some very scattered med-xln with gilsonitic stain as above, no show, poor fleeting odor

● ~3470-3490' Dolomite, white, micro-xln with some very scattered med xln, mostly sub-sucrosic and dense with poor visible porosity, barren, no odor



**Rotary TD 3490' @ 1755hrs 5/27/18**  
**Eli Wireline Services Logging TD @ 3492'**  
**Complete Logging Operations @ 2355hrs 5/27/18**  
**Geologist Jeremy Schwartz off location @ 0030hrs 5/28/17**



**Company: Shelby Resources  
LLC  
Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
County: BARTON  
State: Kansas  
Drilling Contractor: Sterling Drilling  
Company - Rig 5  
Elevation: 1898 EGL  
Field Name: District 65  
Pool: WILDCAT  
Job Number: 159

**DATE**  
May  
**26**  
2018

**DST #1**      **Formation: Lansing  
F**      **Test Interval: 3216 -  
3270'**      **Total Depth: 3270'**  
Time On: 00:26 05/26      Time Off: 06:46 05/26  
Time On Bottom: 02:52 05/26      Time Off Bottom: 04:27 05/26

Recovered

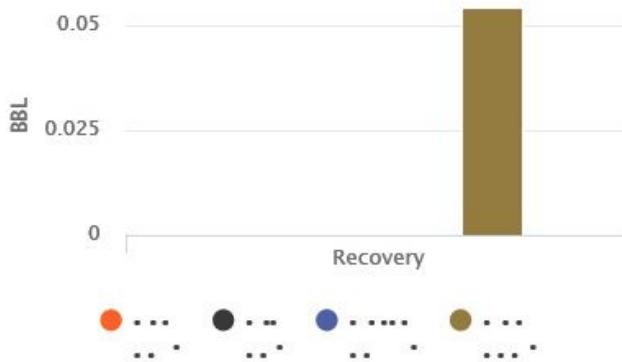
| Foot | BBLs   |
|------|--------|
| 10   | 0.0548 |

| Description of Fluid | Gas % | Oil % | Water % | Mud % |
|----------------------|-------|-------|---------|-------|
| SLOCM                | 0     | 1     | 0       | 99    |

Total Recovered: 10 ft  
Total Barrels Recovered: 0.0548

Reversed Out  
NO

**Recovery at a glance**



|                                                    |           |            |
|----------------------------------------------------|-----------|------------|
| Initial Hydrostatic Pressure                       | 1559      | PSI        |
| Initial Flow                                       | 11 to 15  | PSI        |
| <b>Initial Closed in Pressure</b>                  | <b>77</b> | <b>PSI</b> |
| Final Flow Pressure                                | 16 to 34  | PSI        |
| <b>Final Closed in Pressure</b>                    | <b>0</b>  | <b>PSI</b> |
| Final Hydrostatic Pressure                         | 1550      | PSI        |
| Temperature                                        | 113       | °F         |
| <br>Pressure Change Initial<br>Close / Final Close | <br>100.0 | <br>%      |



**Company: Shelby Resources LLC**  
**Lease: Stoss #2-24**

SEC: 24 TWN: 18S RNG: 14W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: Sterling Drilling Company - Rig 5  
 Elevation: 1898 EGL  
 Field Name: District 65  
 Pool: WILDCAT  
 Job Number: 159

**DATE**  
 May  
**27**  
 2018

**DST #2    Formation: Arbuckle    Test Interval: 3375 - 3418'    Total Depth: 3418'**

Time On: 00:45 05/27    Time Off: 08:38 05/27  
 Time On Bottom: 02:52 05/27    Time Off Bottom: 06:22 05/27

Recovered

| Foot | BBLs       | Description of Fluid | Gas % | Oil % | Water % | Mud % |
|------|------------|----------------------|-------|-------|---------|-------|
| 1197 | 12.282417  | G                    | 100   | 0     | 0       | 0     |
| 414  | 3.51842559 | O                    | 0     | 100   | 0       | 0     |
| 62   | 0.33976    | SLGCSLWCSLMCO        | 10    | 60    | 11      | 19    |

Total Recovered: 1673 ft  
 Total Barrels Recovered:  
 16.14060259

**Reversed Out**  
**NO**

|                                             |             |            |
|---------------------------------------------|-------------|------------|
| Initial Hydrostatic Pressure                | 1694        | PSI        |
| Initial Flow                                | 28 to 93    | PSI        |
| <b>Initial Closed in Pressure</b>           | <b>1019</b> | <b>PSI</b> |
| Final Flow Pressure                         | 109 to 184  | PSI        |
| <b>Final Closed in Pressure</b>             | <b>938</b>  | <b>PSI</b> |
| Final Hydrostatic Pressure                  | 1657        | PSI        |
| Temperature                                 | 118         | °F         |
| Pressure Change Initial Close / Final Close | 8.0         | %          |

**Recovery at a glance**

