

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)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Edison Operating Company LLC
Well Name	KARL 1-11
Doc ID	1716771

All Electric Logs Run

DUCP
Dual Induction
Micro
Sonic



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

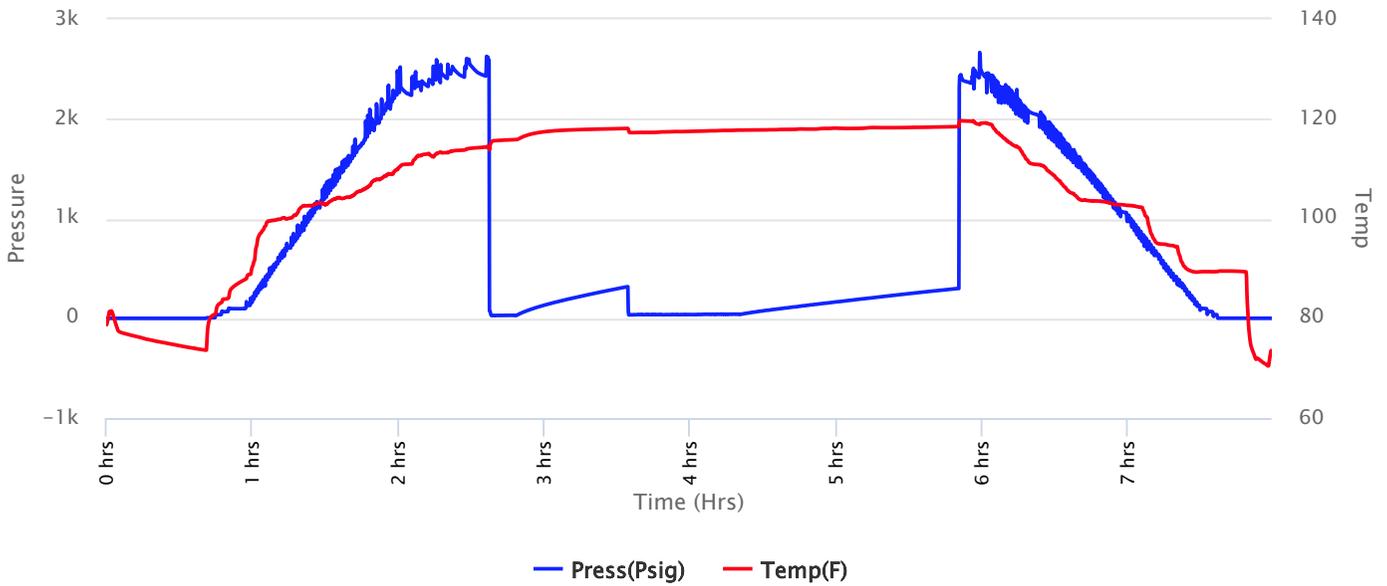
DATE
 May
25
 2023

DST #1 **Formation: Mississippi** **Test Interval: 4970 - 5027'** **Total Depth: 5027'**
 Time On: 00:55 05/25 Time Off: 08:40 05/25
 Time On Bottom: 03:27 05/25 Time Off Bottom: 06:37 05/25

Electronic Volume Estimate:
 732'

<u>1st Open</u> Minutes: 10	<u>1st Close</u> Minutes: 45	<u>2nd Open</u> Minutes: 45	<u>2nd Close</u> Minutes: 90
Current Reading: 22.8" at 10 min	Current Reading: 0" at 45 min	Current Reading: 26.8" at 45 min	Current Reading: 0" at 90 min
Max Reading: 22.8"	Max Reading: 0"	Max Reading: 26.8"	Max Reading: 0"

Inside Recorder





Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
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DATE
 May
25
 2023

DST #1 **Formation: Mississippi** **Test Interval: 4970 - 5027'** **Total Depth: 5027'**
 Time On: 00:55 05/25 Time Off: 08:40 05/25
 Time On Bottom: 03:27 05/25 Time Off Bottom: 06:37 05/25

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
862	7.76648402	G	100	0	0	0
20	0.1096	M	0	0	0	100

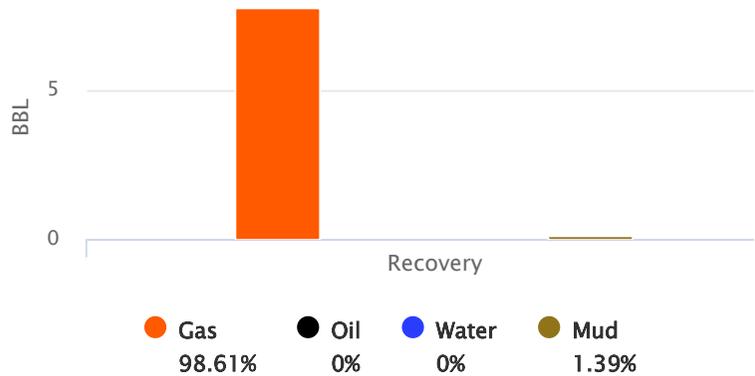
Total Recovered: 882 ft

Total Barrels Recovered: 7.87608402

Reversed Out
 NO

Initial Hydrostatic Pressure	2582	PSI
Initial Flow	28 to 30	PSI
Initial Closed in Pressure	316	PSI
Final Flow Pressure	37 to 41	PSI
Final Closed in Pressure	301	PSI
Final Hydrostatic Pressure	2370	PSI
Temperature	119	°F
Pressure Change Initial Close / Final Close	5.0	%

Recovery at a glance



GIP cubic foot volume: 43.60492



**Company: Edison Operating
Company, LLC
Lease: Karl #1-11**

SEC: 11 TWN: 31S RNG: 18W
County: COMANCHE
State: Kansas
Drilling Contractor: Sterling Drilling
Company - Rig 5
Elevation: 2119 GL
Field Name: Alford
Pool: Infield
Job Number: 669
API #: 15-033-21798

Operation:

Uploading recovery &
pressures

DATE

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25
2023

DST #1

**Formation:
Mississippi**

**Test Interval: 4970 - Total Depth: 5027'
5027'**

Time On: 00:55 05/25

Time Off: 08:40 05/25

Time On Bottom: 03:27 05/25 Time Off Bottom: 06:37 05/25

BUCKET MEASUREMENT:

1st Open: BoB 2 minute 30 seconds

1st Close: No blowback

2nd Open: BoB 1 minute

2nd Close: No blowback

REMARKS:

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



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

DATE
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DST #1 **Formation: Mississippi** **Test Interval: 4970 - 5027'** **Total Depth: 5027'**
 Time On: 00:55 05/25 Time Off: 08:40 05/25
 Time On Bottom: 03:27 05/25 Time Off Bottom: 06:37 05/25

Down Hole Makeup

Heads Up: 25.73 FT	Packer 1: 4965 FT
Drill Pipe: 4717.58 FT <i>ID-3 1/4</i>	Packer 2: 4970 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4954.42 FT
Collars: 245.58 FT <i>ID-2 3/8</i>	Bottom Recorder: 5025 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: 57	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 20 FT <i>4 1/2-FH</i>	
Change Over: .5 FT	
Drill Pipe: (in anchor): 32 FT <i>ID-3 1/4</i>	
Change Over: .5 FT	
Perforations: (below): 3 FT <i>4 1/2-FH</i>	



**Company: Edison Operating
Company, LLC**
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
County: COMANCHE
State: Kansas
Drilling Contractor: Sterling Drilling
Company - Rig 5
Elevation: 2119 GL
Field Name: Alford
Pool: Infield
Job Number: 669
API #: 15-033-21798

Operation:

Uploading recovery &
pressures

DATE

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2023

DST #1

**Formation:
Mississippi**

**Test Interval: 4970 -
5027'**

Total Depth: 5027'

Time On: 00:55 05/25

Time Off: 08:40 05/25

Time On Bottom: 03:27 05/25

Time Off Bottom: 06:37 05/25

Mud Properties

Mud Type: Chem

Weight: 9.4

Viscosity: 53

Filtrate: 8.8

Chlorides: 3900 ppm



**Company: Edison Operating
Company, LLC
Lease: Karl #1-11**

SEC: 11 TWN: 31S RNG: 18W
County: COMANCHE
State: Kansas
Drilling Contractor: Sterling Drilling
Company - Rig 5
Elevation: 2119 GL
Field Name: Alford
Pool: Infield
Job Number: 669
API #: 15-033-21798

Operation:
Uploading recovery &
pressures

DATE
May
25
2023

DST #1 **Formation:** **Test Interval: 4970 -** **Total Depth: 5027'**
Mississippi **5027'**
Time On: 00:55 05/25 Time Off: 08:40 05/25
Time On Bottom: 03:27 05/25 Time Off Bottom: 06:37 05/25

Gas Volume Report

1st Open

2nd Open

Time	Orifice	PSI	MCF/D
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Time	Orifice	PSI	MCF/D
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Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

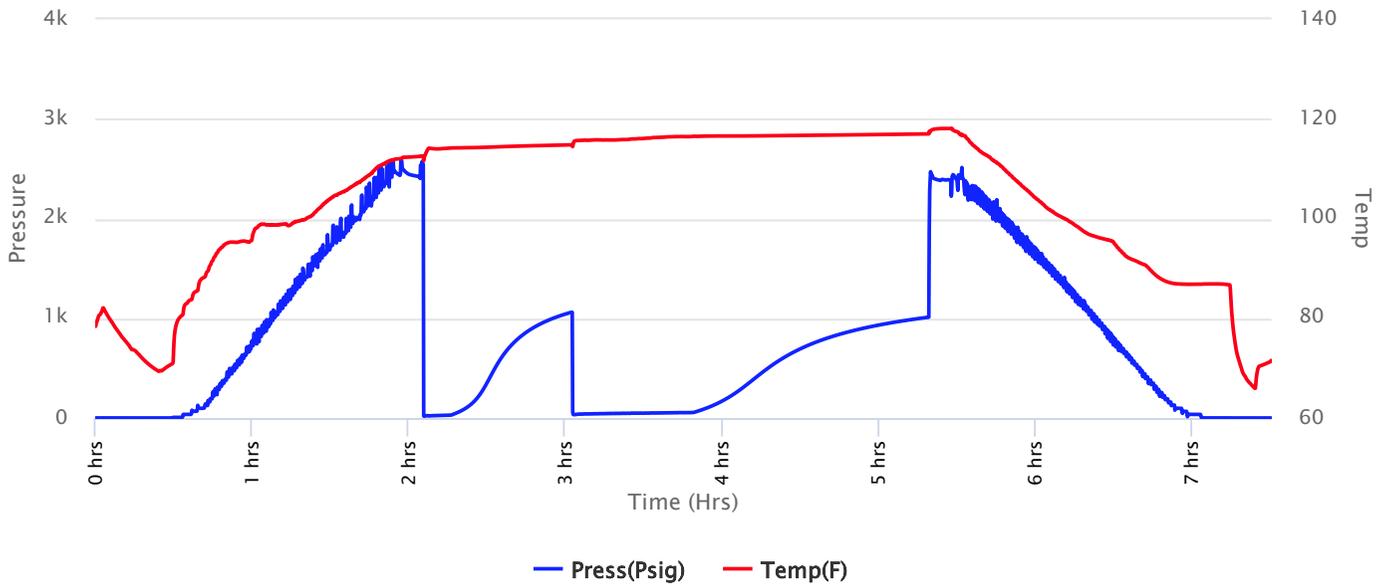
DATE
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DST #2 **Formation: Mississippian** **Test Interval: 5036 - 5074'** **Total Depth: 5074'**
 Time On: 20:15 05/25 Time Off: 03:33 05/26
 Time On Bottom: 22:17 05/25 Time Off Bottom: 01:27 05/26

Electronic Volume Estimate:
 261'

<u>1st Open</u> Minutes: 10	<u>1st Close</u> Minutes: 45	<u>2nd Open</u> Minutes: 45	<u>2nd Close</u> Minutes: 90
Current Reading: 3.0" at 10 min Max Reading: 3.0"	Current Reading: 0" at 45 min Max Reading: 0"	Current Reading: 9.3" at 45 min Max Reading: 9.3"	Current Reading: 0" at 90 min Max Reading: 0"

Inside Recorder





Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

DATE
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25
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DST #2 **Formation: Mississippian** **Test Interval: 5036 - 5074'** **Total Depth: 5074'**
 Time On: 20:15 05/25 Time Off: 03:33 05/26
 Time On Bottom: 22:17 05/25 Time Off Bottom: 01:27 05/26

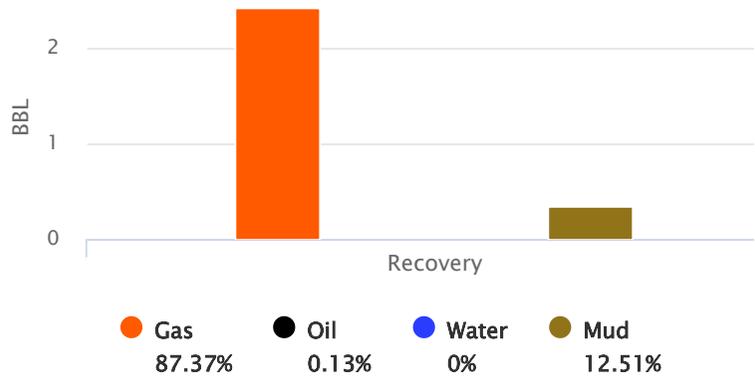
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
308	2.42578735	G	100	0	0	0
64	0.35072	SLOCM	0	1	0	99

Total Recovered: 372 ft
 Total Barrels Recovered: 2.77650735

Reversed Out
 NO

Initial Hydrostatic Pressure	2542	PSI
Initial Flow	22 to 30	PSI
Initial Closed in Pressure	1061	PSI
Final Flow Pressure	37 to 56	PSI
Final Closed in Pressure	1010	PSI
Final Hydrostatic Pressure	2402	PSI
Temperature	117	°F
Pressure Change Initial Close / Final Close	4.8	%

Recovery at a glance



GIP cubic foot volume: 13.61958



**Company: Edison Operating
Company, LLC**
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
County: COMANCHE
State: Kansas
Drilling Contractor: Sterling Drilling
Company - Rig 5
Elevation: 2119 GL
Field Name: Alford
Pool: Infield
Job Number: 669
API #: 15-033-21798

Operation:

Uploading recovery &
pressures

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DST #2

**Formation:
Mississippian**

**Test Interval: 5036 - Total Depth: 5074'
5074'**

Time On: 20:15 05/25

Time Off: 03:33 05/26

Time On Bottom: 22:17 05/25 Time Off Bottom: 01:27 05/26

BUCKET MEASUREMENT:

1st Open: WSB built to 3.0 inches in 10 minutes

1st Close: No blowback

2nd Open: WSB built to 9.3 inches in 45 minutes

2nd Close: No blowback

REMARKS:

Tool Sample: 0% Gas 10% Oil 12% Water 78% Mud



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

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DST #2 **Formation: Mississippian** **Test Interval: 5036 - 5074'** **Total Depth: 5074'**
 Time On: 20:15 05/25 Time Off: 03:33 05/26
 Time On Bottom: 22:17 05/25 Time Off Bottom: 01:27 05/26

Down Hole Makeup

Heads Up: 24.8 FT	Packer 1: 5031 FT
Drill Pipe: 4810.58 FT <i>ID-3 1/4</i>	Packer 2: 5036 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 5020.42 FT
Collars: 217.65 FT <i>ID-2 3/8</i>	Bottom Recorder: 5038 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: 38	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): FT <i>4 1/2-FH</i>	
Change Over: FT	
Drill Pipe: (in anchor): FT <i>ID-3 1/4</i>	
Change Over: FT	
Perforations: (below): 37 FT <i>4 1/2-FH</i>	



**Company: Edison Operating
Company, LLC**
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
County: COMANCHE
State: Kansas
Drilling Contractor: Sterling Drilling
Company - Rig 5
Elevation: 2119 GL
Field Name: Alford
Pool: Infield
Job Number: 669
API #: 15-033-21798

Operation:

Uploading recovery &
pressures

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DST #2

**Formation:
Mississippian**

**Test Interval: 5036 -
5074'**

Total Depth: 5074'

Time On: 20:15 05/25

Time Off: 03:33 05/26

Time On Bottom: 22:17 05/25

Time Off Bottom: 01:27 05/26

Mud Properties

Mud Type: Chem

Weight: 9.4

Viscosity: 48

Filtrate: 9.2

Chlorides: 4100 ppm



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

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DST #2 **Formation: Mississippian** **Test Interval: 5036 - 5074'** **Total Depth: 5074'**
 Time On: 20:15 05/25 Time Off: 03:33 05/26
 Time On Bottom: 22:17 05/25 Time Off Bottom: 01:27 05/26

Gas Volume Report

1st Open

2nd Open

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



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

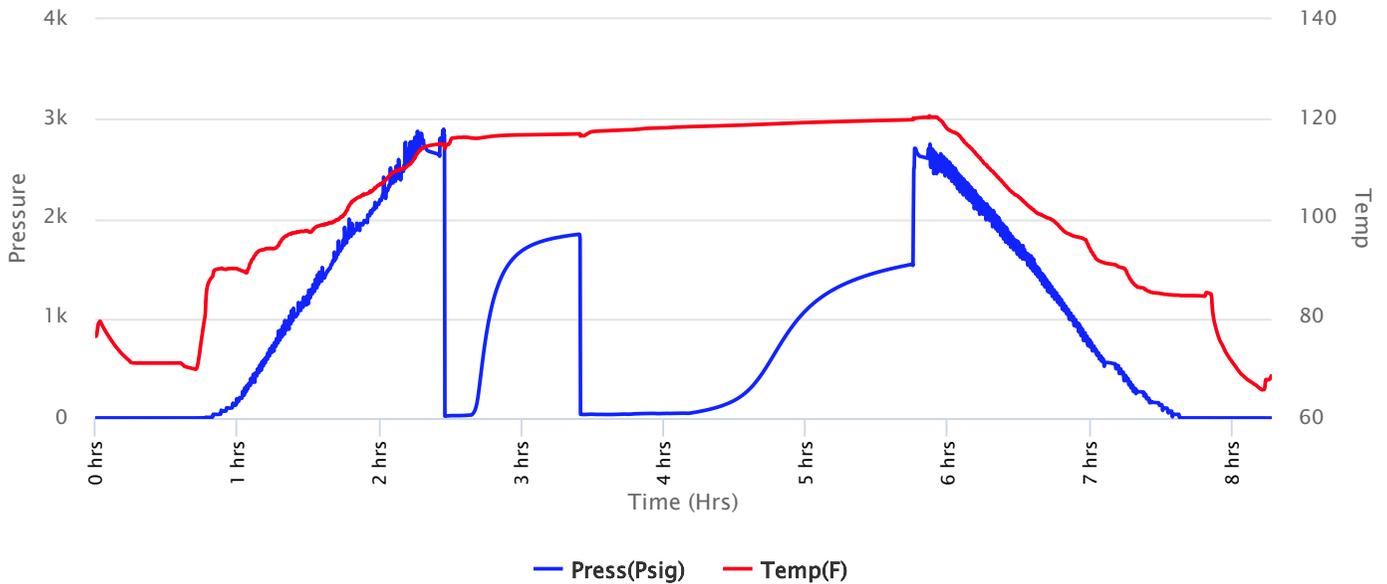
DATE
 May
28
 2023

DST #4 **Formation: Viola** **Test Interval: 5364 - 5422'** **Total Depth: 5422'**
 Time On: 00:03 05/28 Time Off: 08:05 05/28
 Time On Bottom: 02:26 05/28 Time Off Bottom: 05:36 05/28

Electronic Volume Estimate:
 26'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 10	Minutes: 45	Minutes: 45	Minutes: 90
Current Reading: 1.0" at 10 min	Current Reading: 0" at 45 min	Current Reading: 0" at 45 min	Current Reading: 0" at 90 min
Max Reading: 1.0"	Max Reading: 0"	Max Reading: 0"	Max Reading: 0"

Inside Recorder





Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

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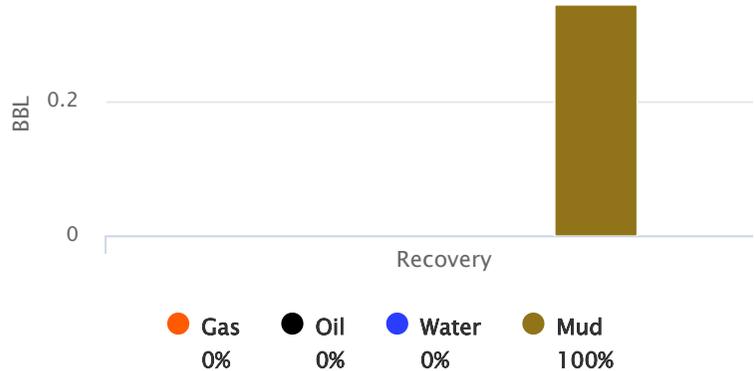
DST #4 **Formation: Viola** **Test Interval: 5364 - 5422'** **Total Depth: 5422'**
 Time On: 00:03 05/28 Time Off: 08:05 05/28
 Time On Bottom: 02:26 05/28 Time Off Bottom: 05:36 05/28

<u>Recovered</u>		<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
<u>Foot</u>	<u>BBLs</u>					
63	0.34524	M	0	0	0	100

Total Recovered: 63 ft
 Total Barrels Recovered: 0.34524

Reversed Out
 NO

Recovery at a glance



Initial Hydrostatic Pressure	2839	PSI
Initial Flow	19 to 31	PSI
Initial Closed in Pressure	1844	PSI
Final Flow Pressure	38 to 49	PSI
Final Closed in Pressure	1544	PSI
Final Hydrostatic Pressure	2706	PSI
Temperature	120	°F
Pressure Change Initial Close / Final Close	16.3	%

GIP cubic foot volume: 0



**Company: Edison Operating
Company, LLC**
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
County: COMANCHE
State: Kansas
Drilling Contractor: Sterling Drilling
Company - Rig 5
Elevation: 2119 GL
Field Name: Alford
Pool: Infield
Job Number: 669
API #: 15-033-21798

Operation:

Uploading recovery &
pressures

DATE

May
28
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DST #4	Formation: Viola	Test Interval: 5364 - 5422'	Total Depth: 5422'
	Time On: 00:03 05/28	Time Off: 08:05 05/28	
	Time On Bottom: 02:26 05/28	Time Off Bottom: 05:36 05/28	

BUCKET MEASUREMENT:

1st Open: WSB built to 1.0 inch in 10 minutes

1st Close: No blowback

2nd Open: No blow

2nd Close: No blowback

REMARKS:

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



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

DATE
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DST #4 **Formation: Viola** **Test Interval: 5364 - 5422'** **Total Depth: 5422'**
 Time On: 00:03 05/28 Time Off: 08:05 05/28
 Time On Bottom: 02:26 05/28 Time Off Bottom: 05:36 05/28

Down Hole Makeup

Heads Up: 15.8 FT	Packer 1: 5359 FT
Drill Pipe: 5129.58 FT <i>ID-3 1/4</i>	Packer 2: 5364 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 5348.42 FT
Collars: 217.65 FT <i>ID-2 3/8</i>	Bottom Recorder: 5420 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: 58	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 22 FT <i>4 1/2-FH</i>	
Change Over: .5 FT	
Drill Pipe: (in anchor): 31 FT <i>ID-3 1/4</i>	
Change Over: .5 FT	
Perforations: (below): 3 FT <i>4 1/2-FH</i>	



**Company: Edison Operating
Company, LLC**
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
County: COMANCHE
State: Kansas
Drilling Contractor: Sterling Drilling
Company - Rig 5
Elevation: 2119 GL
Field Name: Alford
Pool: Infield
Job Number: 669
API #: 15-033-21798

Operation:

Uploading recovery &
pressures

DATE

May
28
2023

DST #4 **Formation: Viola** **Test Interval: 5364 -**
5422' **Total Depth: 5422'**
Time On: 00:03 05/28 Time Off: 08:05 05/28
Time On Bottom: 02:26 05/28 Time Off Bottom: 05:36 05/28

Mud Properties

Mud Type: Chem

Weight: 9.4

Viscosity: 52

Filtrate: 9.2

Chlorides: 5100 ppm



**Company: Edison Operating
Company, LLC
Lease: Karl #1-11**

SEC: 11 TWN: 31S RNG: 18W
County: COMANCHE
State: Kansas
Drilling Contractor: Sterling Drilling
Company - Rig 5
Elevation: 2119 GL
Field Name: Alford
Pool: Infield
Job Number: 669
API #: 15-033-21798

Operation:
Uploading recovery &
pressures

DATE
May
28
2023

DST #4 Formation: Viola Test Interval: 5364 - Total Depth: 5422'
5422'
Time On: 00:03 05/28 Time Off: 08:05 05/28
Time On Bottom: 02:26 05/28 Time Off Bottom: 05:36 05/28

Gas Volume Report

1st Open

2nd Open

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

Time	Orifice	PSI	MCF/D
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CEMENT TREATMENT REPORT

Customer: EDISON OPERATING CO.	Well: KARL 1-11	Ticket: WP 4339
City, State:	County: COMANCHE, KS.	Date: 5/29/2023
Field Rep:	S-T-R: 11-31S-18W	Service: PTA

Downhole Information	
Hole Size:	7 7/8 in
Hole Depth:	ft
DRILL PIPE Size:	4 1/2 in
Casing Depth:	ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	bbls

Calculated Slurry - Lead	
Blend:	H-PLUG A
Weight:	13.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.43 ft³ / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	170 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft³ / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
9:50AM			-	-	ON LOCATION- SPOT EQUIPMENT
					1st PLUG @ 1050'
1:10PM	4.0	150.0	3.0	3.0	H2o AHEAD
1:11PM	4.0	140.0	12.7	15.7	MIX 50 SKS CMENT @ 13.8 PPG
1:17PM	4.0	140.0	9.5	25.2	DISPLACEMENT
				25.2	
				25.2	2nd PLUG @ 300'
1:50PM	4.0	100.0	3.0	28.2	H2o AHEAD
1:51PM	4.0	100.0	12.7	40.9	MIX 50 SKS CMENT @ 13.8 PPG
1:56PM	4.0	75.0	0.5	41.4	DISPLACEMENT
				41.4	
					3rd PLUG @ 60'
2:05PM	4.0	50.0	5.0		MIX CEMENT TO SURFACE
2:18PM	3.0		7.0		RATHOLE= 30 SKS
2:25PM	3.0		5.0		MOUSEHOLE= 20 SKS
2:30PM					WASH UP PUMP AND LINES
3:00PM					JOB CCOMPLETE,
					THANKS- KEVEN AND CREW

CREW		UNIT	SUMMARY		
Cementer:	LESLEY	936	Average Rate	Average Pressure	Total Fluid
Pump Operator:	CLIFTON	179-521	3.8 bpm	108 psi	58 bbls
Bulk #1:	WHITFIELD	181-526			
Bulk #2:					



HURRICANE SERVICES INC

Remit To: Hurricane Services, Inc.
250 N. Water, Suite 200
Wichita, KS 67202
316-303-9515

Customer:
EDISON OPERATING CO LLC
8100 E 22ND ST N
BUILDING 1900
WICHITA, KS 67226

Invoice Date: 5/20/2023
Invoice #: 0368625
Lease Name: Karl
Well #: 1-11 (New)
County: Comanche, Ks
Job Number: WP4289
District: Pratt

Date/Description	HRS/QTY	Rate	Total
Surface	0.000	0.000	0.00
H-CON	250.000	25.000	6,250.00
Cement Class A	200.000	20.000	4,000.00
Calcium Chloride	1,081.000	0.750	810.75
Cello Flake	115.000	1.750	201.25
Guide Shoe Reg 8 5/8"	1.000	600.000	600.00
8 5/8" Alum Baffle plate SI	1.000	150.000	150.00
8 5/8" Top rubber plug	1.000	175.000	175.00
8 5/8" Cementing basket	1.000	500.000	500.00
Light Eq Mileage	50.000	2.000	100.00
Heavy Eq Mileage	100.000	4.000	400.00
Ton Mileage	1,058.000	1.500	1,587.00
Cement Blending & Mixing	450.000	1.400	630.00
Depth Charge 501'-1000'	1.000	1,250.000	1,250.00
Cement Data Acquisition	1.000	250.000	250.00
Cement Plug Container	1.000	250.000	250.00
Service Supervisor	1.000	275.000	275.00

*Cement For 8 5/8" CSN
9232*

4/6/15

Total 17,429.00

TERMS: Net 30 days. Interest may be charged on past due invoice at rate of 1 1/4% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

SALES TAX: Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

WE APPRECIATE YOUR BUSINESS!



CEMENT TREATMENT REPORT

Customer: Edison Operating Company	Well: Karl 1-11	Ticket: WP 4289
City, State:	County: Comanche, Ks.	Date: 5/20/2023
Field Rep:	S-T-R: 11-31s-18w	Service: Surface

Downhole Information	
Hole Size:	12 1/4 In
Hole Depth:	1012 ft
Casing Size:	8 5/8 In
Casing Depth:	897 ft
Tubing / Liner:	In
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	48.0 bbls

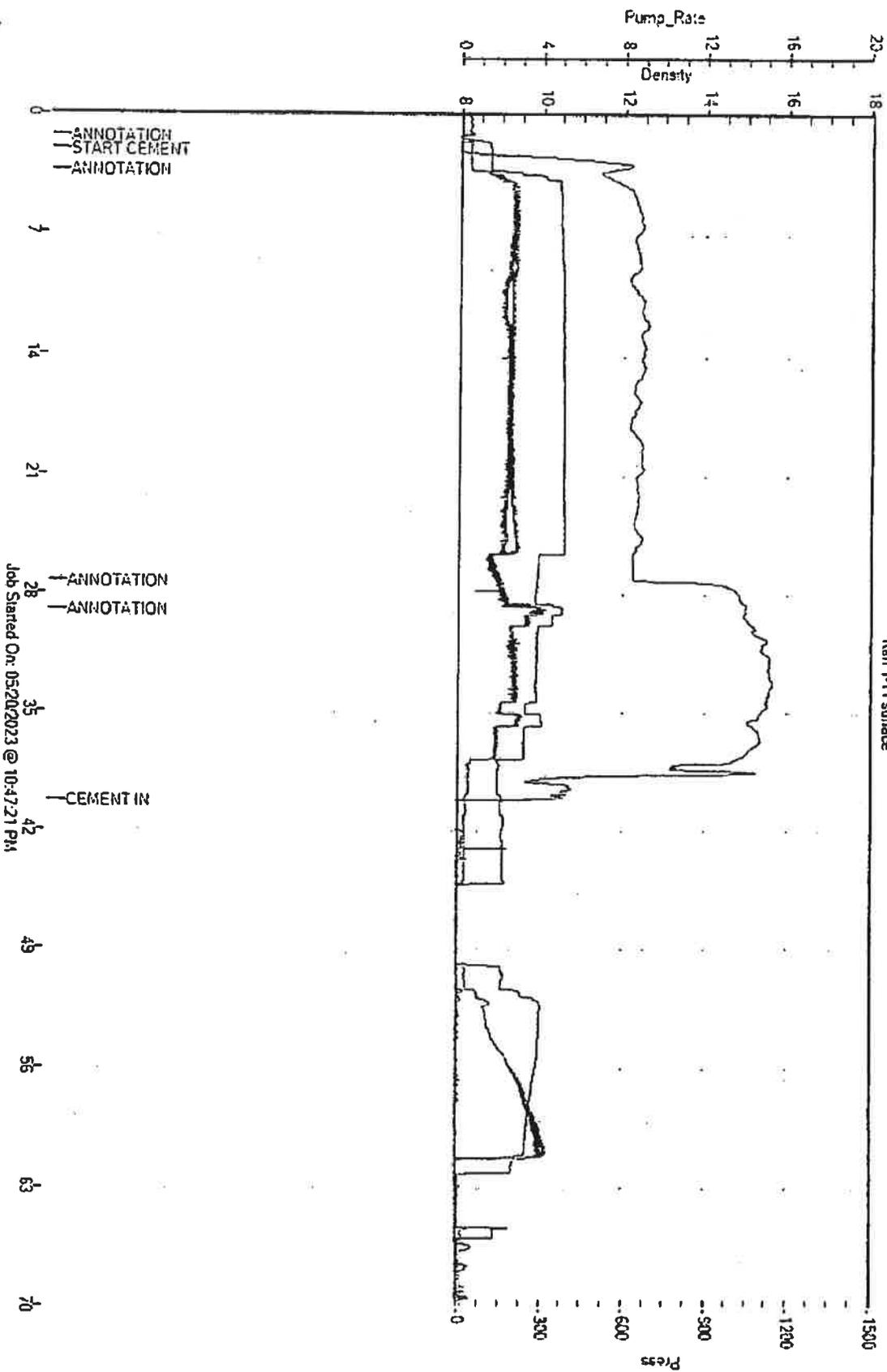
Calculated Slurry - Lead	
Blend:	H-Con + 3% CC
Weight:	12.4 ppg
Water / Sx:	12.6 gal / sx
Yield:	2.23 ft ³ / sx
Annular Bbls / Ft.:	bbls / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	100.0 bbls
Total Sacks:	250 sx

Calculated Slurry - Tail	
Blend:	Class A + 2% CC
Weight:	15.6 ppg
Water / Sx:	5.2 gal / sx
Yield:	1.20 ft ³ / sx
Annular Bbls / Ft.:	bbls / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	42.7 bbls
Total Sacks:	200 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
7:00 PM					on location, job & safety
7:15 PM					spot trucks and rig up
					basket on jt. 15
10:15 PM					start casing in the hole
11:50 PM					casing on bottom and circulate
12:00 AM					start cement
	5.0	200.0	100.0	100.0	mix 250 sacks lead
	5.0	200.0	43.0	143.0	mix 200 sacks tail
12:40 AM					cement in and shut down
					release the plug
12:45 AM					start displacement
	3.0	200.0	48.0		
1:00 AM					plug down
					circulated 20 bbls to the pit

CREW		UNIT	SUMMARY		
Cementer:	M. Brungardt	916	Average Rate	Average Pressure	Total Fluid
Pump Operator:	A. Cilron	179-521	4.3 bpm	200 psi	191 bbls
Bulk #1:	B. Whitfield	182-534			
Bulk #2:					

Edison Operating
Karl 1-11 surface



GENERAL INFORMATION

Service Companies

Drilling Contractor: Sterling Drilling - Rig #4
Tool Pusher: Lanny Saloga/Juan Chavez
Daylight Driller: Ivan Chavez
Evening Driller: Jose Munoz
Morning Driller: Jorge Guterrez

Gas Detector: Rig Provided
Engineer: n/a
Unit: n/a

Operational By: Surface

Drilling Fluid: Mud-Co/Service Mud Inc.
Engineers: Brad Bortz
Justin Whiting

Logging Company: Eli Wireline
Engineer: Jeff Luebbers
Logs Ran: DI, CDNL, Micro, Sonic

Testing Company: Diamond Testing Inc.
Tester: Everett Urban

Deviation Survey

Depth	Survey
1300'	0.1°
3402'	0.2°
5500'	1.0°

Pipe Strap

Depth	Pipe Strap
4900'	0.59' Short to Board

Bit Record

Bit #	Size	Make	Type	Serial Number	Depth In	Depth Out	Feet	Hours
1	12 1/4	JZ	HA-417	7051139	0	1112	1112	12.75
2	7 7/8	New Orvil	W-516 PDC	20518	1112	4900	3788	59
2	7 7/8	JZ	H27	-	4900	5500	600	36

Surface Casing

5.20.2023 Ran 21 joints of new 23# 8 5/8" surface casing, tallying 885.32', set @ 898' KB.
Cemented w/ 250 sacks H-CON, 3% cc 1/4# floccell, tailed in w/ 200 sacks A, 2% cc 1/4# floccell.
Cement did circulate, w/ 35 sacks to pit.
Plug down @ 0100 hrs 5.20.23. By Hurricane Services Inc.

Well Plugging Info

5.29.2023 Plugged well w/ heavy mud to 1,050', then 1st 50 sack plug @ 1,050, 2nd 50 sack plug @ 300',
3rd 20 sack plug @ 60'. Plugged Rathole w/ 30 sacks and Mousehole w/ 20 sacks.
170 total sacks for plugging job using 60/40 Poz, 4% Gel.
Job completed @ 1430 hrs 5.29.23. By Hurricane Services Inc.

DAILY DRILLING REPORT

Date	0700 Hrs Depth	Previous 24 Hours of Operations
5.23.2023	4256'	Drilling and connections upper beds. Geologist Derek W. Patterson on location @ 2030 hrs 5.22.23. Drilling and connections upper Pennsylvanian beds, Topeka, Heebner, and into Douglas. Drilling and connections Douglas. Made 1090' over past 24 hrs. WOB: 14-16k RPM: 95+ PP: 950 SPM: 65 DMC: \$2,005.35 CMC: \$14,872.18
5.24.2023	4900'	Drilling and connections Douglas. CFS @ 4390' (Douglas). Resume drilling and connections Douglas, Brown Lime, and into Lansing-Kansas City. Drilling and connections Lansing-Kansas City, Base Kansas City, and into Marmaton. Drilling and connections Marmaton, Altamont, and Pawnee. Stop @ 4900' for bit trip. CTCH, conduct 15 stand short trip, CTCH. TOH for bit trip. Made 644' over past 24 hrs. WOB: 14-16k RPM: 95+ PP: 1140 SPM: 65 DMC: \$3,774.42 CMC: \$18,646.60
5.25.2023	5027'	Conduct bit trip @ 4900'. CTCH, resume drilling and connections following bit trip 1145 hrs 5.24.23. Drilling and connections Pawnee, Fort Scott, Cherokee, and into Mississippian. CFS @ 5027' (Miss). Shows warrant test. CTCH, TOH for DST #1. Rig up Diamond Testing. TIH with tool. Conduct DST #1. Made 127' over past 24 hrs. WOB: 14-16k RPM: 95+ PP: 1150 SPM: 65 DMC: \$3,376.51 CMC: \$22,023.11
5.26.2023	5074'	Conduct DST #1, test successful. TIH with bit, CTCH, resume drilling and connections following DST #1 1255 hrs 5.25.23. Drilling and connections Mississippian. CFS @ 5074' (Miss). Resume drilling and connections Mississippian. CFS @ 5074' (Miss). Shows warrant test. TOH for DST #2. TIH with tool. Conduct DST #2, test successful. TIH with bit, CTCH. Made 47' over past 24 hrs. WOB: 40k RPM: 60 PP: 1100 SPM: 65 DMC: \$1,784.61 CMC: \$23,807.72
5.27.2023	5422'	CTCH. Resume drilling and connections following DST #2 0720 hrs 5.26.23. Drilling and connections Mississppian, Kinderhook, and into Viola. CFS @ 5422' (Viola) Made 348' over past 24 hrs. WOB: 40k RPM: 60 PP: 1100 SPM: 65 DMC: \$1,920.45 CMC: \$25,728.17
5.28.2023	5422'	CFS @ 5422' (Viola). Shows warrant test. Conduct 10 stand short trip, CTCH, TOH for DST #3. DST #3 misrun due to tool opening prematurely. TOH with tool. TIH with bit, CTCH, TOH for DST #4. Conduct DST #4. Made 0' over past 24 hrs. WOB: 40k RPM: 60 PP: 1100 SPM: 65 DMC: \$608.24 CMC: \$26,336.41
5.29.2023	RTD - 5500' LTD - 5498'	Conduct DST #4, test successful. TIH with bit, CTCH. Resume drilling and connections following DST #4 1330 hrs 5.28.23. Drilling Viola. CFS @ 5440' (Viola). Resume drilling and connections Viola ahead to RTD of 5500'. RTD reached 1940 hrs 5.28.23. CTCH, drop survey, TOH for open hole logs. Rig up Eli Wireline. Conduct open hole logging operations. Orders received to Plug & Abandon the Karl #1-11 as a dry hole. Geologist Derek W. Patterson off location @ 0540 hrs 5.29.23. Made 78' over past 24 hrs. WOB: 40k RPM: 60 PP: 1100 SPM: 65 DMC: \$104.02 CMC: \$26,440.43

WELL COMPARISON SHEET

Formation	Drilling Well				Comparison Well				Comparison Well				Comparison Well			
	Edison Operating - Karl #1-11 Sec. 11 - T31S - R18W 472' FNL & 1050' FWL 2124 GL 2135 KB				NOVY (Brown) - Toothaker #2 Sec. 2 - T31W - R18W SE SW				Bird Energy - Boisseau #1-11 Sec. 11 - T31S - R18W NW NE				Anadarko - Uhl 'A' #1 Sec. 11 - T31S - R18W 1980' FNL & 1830' FWL			
	Sample	Sub-Sea	Log	Sub-Sea	Oil/Gas - Miss 2174 KB		Structural Relationship		Gas - Douglas 2107 KB		Structural Relationship		Gas - Miss 2133 GL		Structural Relationship	
Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	
Heebner	4191	-2056	4188	-2053	4228	-2054	-2	1	4166	-2059	3	6	4196	-2063	7	10
Toronto	4208	-2073	4205	-2070	4247	-2073	0	3	4178	-2071	-2	1	4212	-2079	6	9
Douglas	4222	-2087	4218	-2083	4260	-2086	-1	3	4192	-2085	-2	2	4228	-2095	8	12
Brown Lime	4357	-2222	4354	-2219	4392	-2218	-4	-1	4332	-2225	3	6	4363	-2230	8	11
Lansing-Kansas City	4372	-2237	4368	-2233	4407	-2233	-4	0	4347	-2240	3	7	4377	-2244	7	11
LKC 'B'	4400	-2265	4397	-2262	4437	-2263	-2	1	4374	-2267	2	5	4407	-2274	9	12
LKC 'D'	4432	-2297	4428	-2293	4470	-2296	-1	3	4407	-2300	3	7	4440	-2307	10	14
LKC 'F'	4472	-2337	4468	-2333	4510	-2336	-1	3	4447	-2340	3	7	4478	-2345	8	12
LKC 'G'	4486	-2351	4485	-2350	4528	-2354	3	4	4464	-2357	6	7	4498	-2365	14	15
Muncie Creek	4541	-2406	4537	-2402	4580	-2406	0	4	4519	-2412	6	10	4548	-2415	9	13
LKC 'H'	4546	-2411	4542	-2407	4586	-2412	1	5	4524	-2417	6	10	4553	-2420	9	13
LKC 'I'	4571	-2436	4567	-2432	4609	-2435	-1	3	4550	-2443	7	11	4579	-2446	10	14
LKC 'J'	4596	-2461	4592	-2457	4635	-2461	0	4	4576	-2469	8	12	4606	-2473	12	16
Stark	4639	-2504	4636	-2501	4676	-2502	-2	1	4618	-2511	7	10	4647	-2514	10	13
LKC 'K'	4641	-2506	4638	-2503	4680	-2506	0	3	4621	-2514	8	11	4650	-2517	11	14
Hushpuckney	4690	-2555	4687	-2552	4727	-2553	-2	1	4669	-2562	7	10	4699	-2566	11	14
LKC 'L'	4700	-2565	4697	-2562	4742	-2568	3	6	4686	-2579	14	17	4716	-2583	18	21
Base Kansas City	4790	-2655	4786	-2651	4827	-2653	-2	2	4769	-2662	7	11	4799	-2666	11	15
Marmaton	4804	-2669	4801	-2666	4840	-2666	-3	0	4783	-2676	7	10	4820	-2687	18	21
Altamont	4858	-2723	4854	-2719	4892	-2718	-5	-1	4836	-2729	6	10	4870	-2737	14	18
Pawnee	4895	-2760	4892	-2757	4930	-2756	-4	-1	4875	-2768	8	11	4906	-2773	13	16
Fort Scott	4926	-2791	4924	-2789	4962	-2788	-3	-1	4906	-2799	8	10	4940	-2807	16	18
Cherokee	4932	-2797	4932	-2797	4969	-2795	-2	-2	4914	-2807	10	10	4947	-2814	17	17
Mississippian	4990	-2855	4988	-2853	5026	-2852	-3	-1	4978	-2871	16	18	5000	-2867	12	14
Kinderhook	5376	-3241	5372	-3237												
Viola	5410	-3275	5412	-3277												
Total Depth	5500	-3365	5498	-3363	5059	-2885	-480	-478	5050	-2943	-422	-420	5195	-3062	-303	-301

Geolog Curves Shifted 3' Shallow
DST Intervals Shifted 3' Shallow

Miss: 5027-5059 (-2853)-(-2885)
IP: 8 BOPD/19 MCFGD

Douglas: 4228-4231 (-2121)-(-2324)
Douglas: 4237-4239 (-2130)-(-2132)
IP: 160 MCFGD

Miss: 5008-5012 (-2875)-(-2879)
Miss: 5014-5023 (-2881)-(-2890)
IP: 755 MCFGD



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

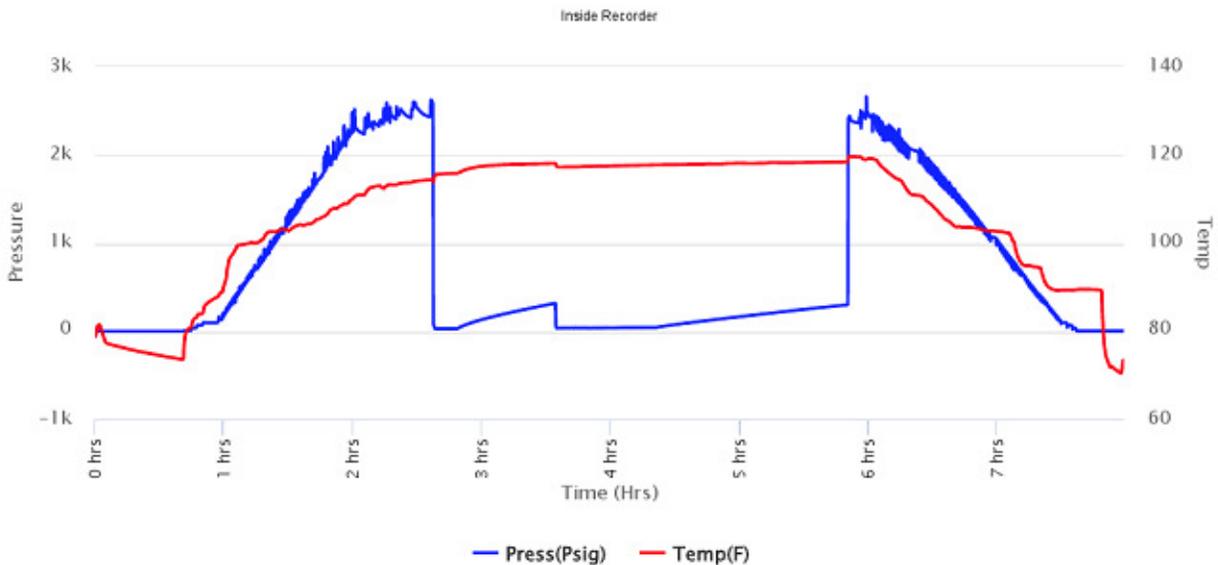
Operation:
 Uploading recovery & pressures

DATE
 May
25
 2023

DST #1 **Formation: Mississippi** **Test Interval: 4970 - 5027'** **Total Depth: 5027'**
 Time On: 00:55 05/25 Time Off: 08:40 05/25
 Time On Bottom: 03:27 05/25 Time Off Bottom: 06:37 05/25

Adjusted: 4967-5024'

Electronic Volume Estimate:	1st Open Minutes: 10	1st Close Minutes: 45	2nd Open Minutes: 45	2nd Close Minutes: 90
732'	Current Reading: 22.8" at 10 min	Current Reading: 0" at 45 min	Current Reading: 26.8" at 45 min	Current Reading: 0" at 90 min
	Max Reading: 22.8"	Max Reading: 0"	Max Reading: 26.8"	Max Reading: 0"



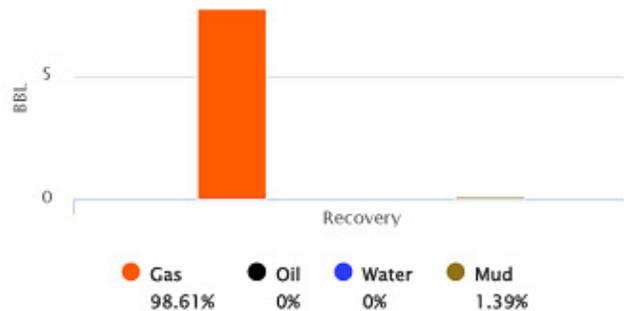
<u>Recovered</u>		<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
<u>Foot</u>	<u>BBLs</u>					
862	7.76648402	G	100	0	0	0
20	0.1096	M	0	0	0	100

Total Recovered: 882 ft
 Total Barrels Recovered: 7.87608402

Reversed Out
 NO

Initial Hydrostatic Pressure	2582	PSI
Initial Flow	28 to 30	PSI
Initial Closed in Pressure	316	PSI
Final Flow Pressure	37 to 41	PSI
Final Closed in Pressure	301	PSI
Final Hydrostatic Pressure	2370	PSI
Temperature	119	°F
Pressure Change Initial Close / Final Close	5.0	%

Recovery at a glance



GIP cubic foot volume: 43.60492



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

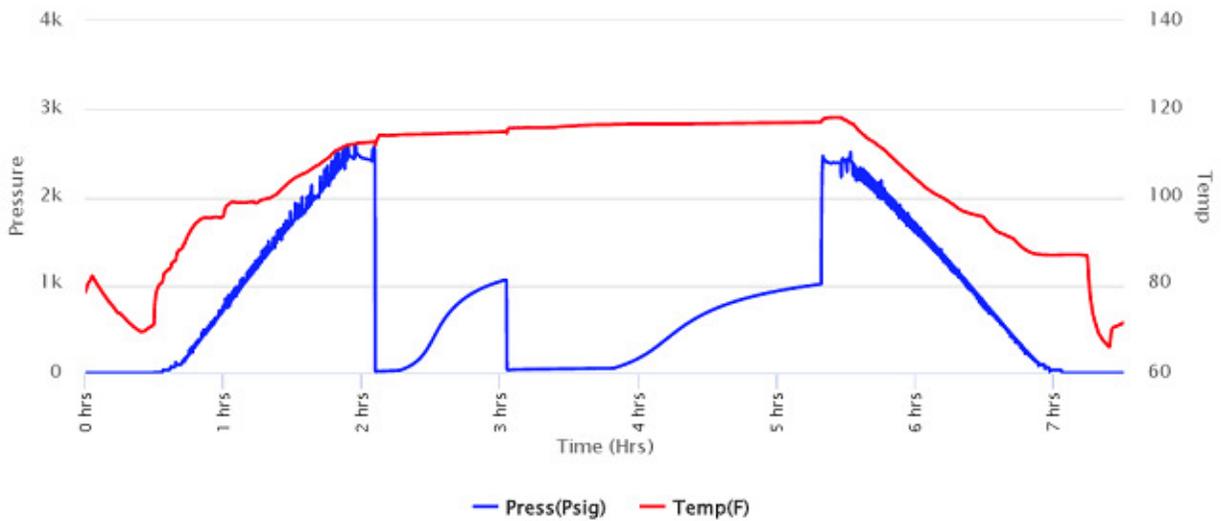
Operation:
 Uploading recovery & pressures

DATE
 May
25
 2023

DST #2 **Formation: Mississippian** **Adjusted: 5033-5071'** **Test Interval: 5036 - 5074'** **Total Depth: 5074'**
 Time On: 20:15 05/25 Time Off: 03:33 05/26
 Time On Bottom: 22:17 05/25 Time Off Bottom: 01:27 05/26

Electronic Volume Estimate:	1st Open Minutes: 10	1st Close Minutes: 45	2nd Open Minutes: 45	2nd Close Minutes: 90
261'	Current Reading: 3.0" at 10 min	Current Reading: 0" at 45 min	Current Reading: 9.3" at 45 min	Current Reading: 0" at 90 min
	Max Reading: 3.0"	Max Reading: 0"	Max Reading: 9.3"	Max Reading: 0"

Inside Recorder



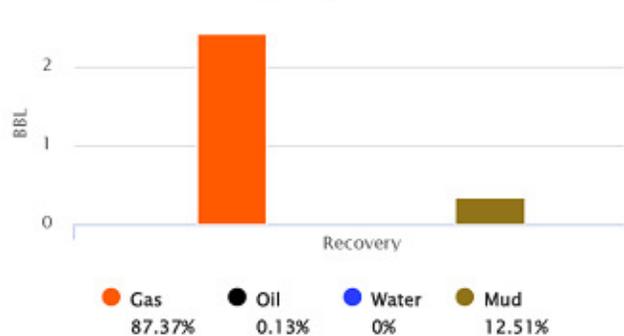
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
308	2.42578735	G	100	0	0	0
64	0.35072	SLOCM	0	1	0	99

Total Recovered: 372 ft
 Total Barrels Recovered: 2.77650735

Reversed Out
 NO

Initial Hydrostatic Pressure	2542	PSI
Initial Flow	22 to 30	PSI
Initial Closed in Pressure	1061	PSI
Final Flow Pressure	37 to 56	PSI
Final Closed in Pressure	1010	PSI
Final Hydrostatic Pressure	2402	PSI
Temperature	117	°F
Pressure Change Initial Close / Final Close	4.8	%

Recovery at a glance



GIP cubic foot volume: 13.61958



Company: Edison Operating Company, LLC
Lease: Karl #1-11

SEC: 11 TWN: 31S RNG: 18W
 County: COMANCHE
 State: Kansas
 Drilling Contractor: Sterling Drilling Company - Rig 5
 Elevation: 2119 GL
 Field Name: Alford
 Pool: Infield
 Job Number: 669
 API #: 15-033-21798

Operation:
 Uploading recovery & pressures

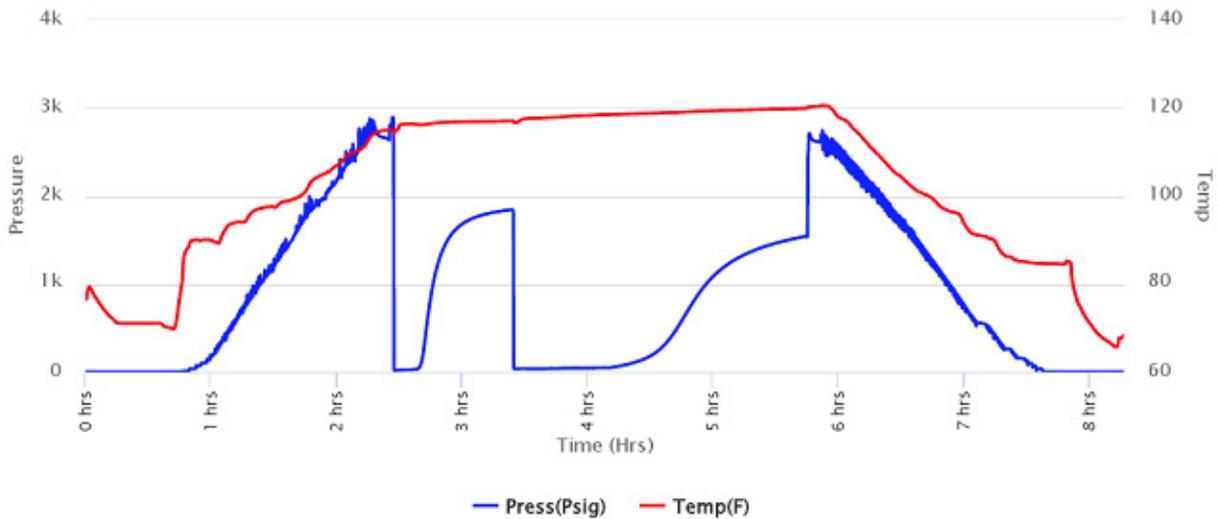
DATE
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28
 2023

Adjusted: 5361-5419'

DST #4 **Formation: Viola** **Test Interval: 5364 - 5422'** **Total Depth: 5422'**
 Time On: 00:03 05/28 Time Off: 08:05 05/28
 Time On Bottom: 02:26 05/28 Time Off Bottom: 05:36 05/28

Electronic Volume Estimate:	1st Open	1st Close	2nd Open	2nd Close
26'	Minutes: 10	Minutes: 45	Minutes: 45	Minutes: 90
	Current Reading:	Current Reading:	Current Reading:	Current Reading:
	1.0" at 10 min	0" at 45 min	0" at 45 min	0" at 90 min
	Max Reading: 1.0"	Max Reading: 0"	Max Reading: 0"	Max Reading: 0"

Inside Recorder

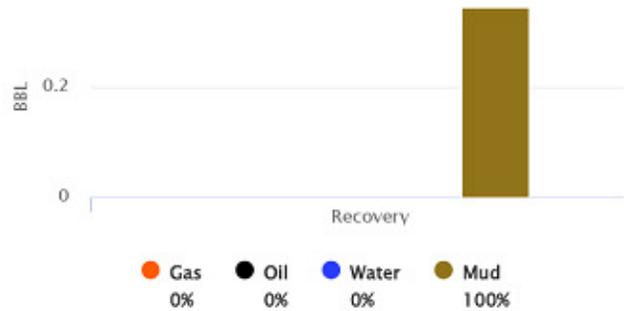


Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
63	0.34524	M	0	0	0	100

Total Recovered: 63 ft
 Total Barrels Recovered: 0.34524

Reversed Out
 NO

Recovery at a glance



Initial Hydrostatic Pressure	2839	PSI
Initial Flow	19 to 31	PSI
Initial Closed in Pressure	1844	PSI
Final Flow Pressure	38 to 49	PSI
Final Closed in Pressure	1544	PSI
Final Hydrostatic Pressure	2706	PSI
Temperature	120	°F
Pressure Change Initial Close / Final Close	16.3	%

GIP cubic foot volume: 0

ROCK TYPES

LITHOLOGY

- Cht brown
- Cht multi
- Cht white
- Congl
- Dol1
- Dol2
- Dol3
- Dol4
- Igneous
- Lmst1
- Lmst2
- Lmst3
- Lmst4
- Lmst5
- Meta
- Sandylms
- Sh brown
- Sh carbonaceous
- Sh gray
- Sh green
- Sh red
- Sh teal
- Sh white
- Sh yellow

- Siltstn
- Ss
- Dtd
- Pipesymbol

FOSSIL

- Oomoldic
- Bioclst
- Crin
- Fossil
- Oolite

MINERAL

- Silty
- Sand
- Dol
- Chlorite
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Glau
- Hvymin

- Minxl
- Nodule
- Pyr
- Sandy
- Silt
- Sil
- Sulphur

STRINGER

- Lmst2
- Sh
- Sandylms
- Lms1
- Gryslt
- Lmst3
- Sh gray
- Dol
- Dol1
- Carbsh
- Dol
- Lmst
- Sltstrg
- Ssstrg

TEXTURE

- Chalky
- Cryxln
- Earthy
- Lithogr
- Microxln

OIL SHOW

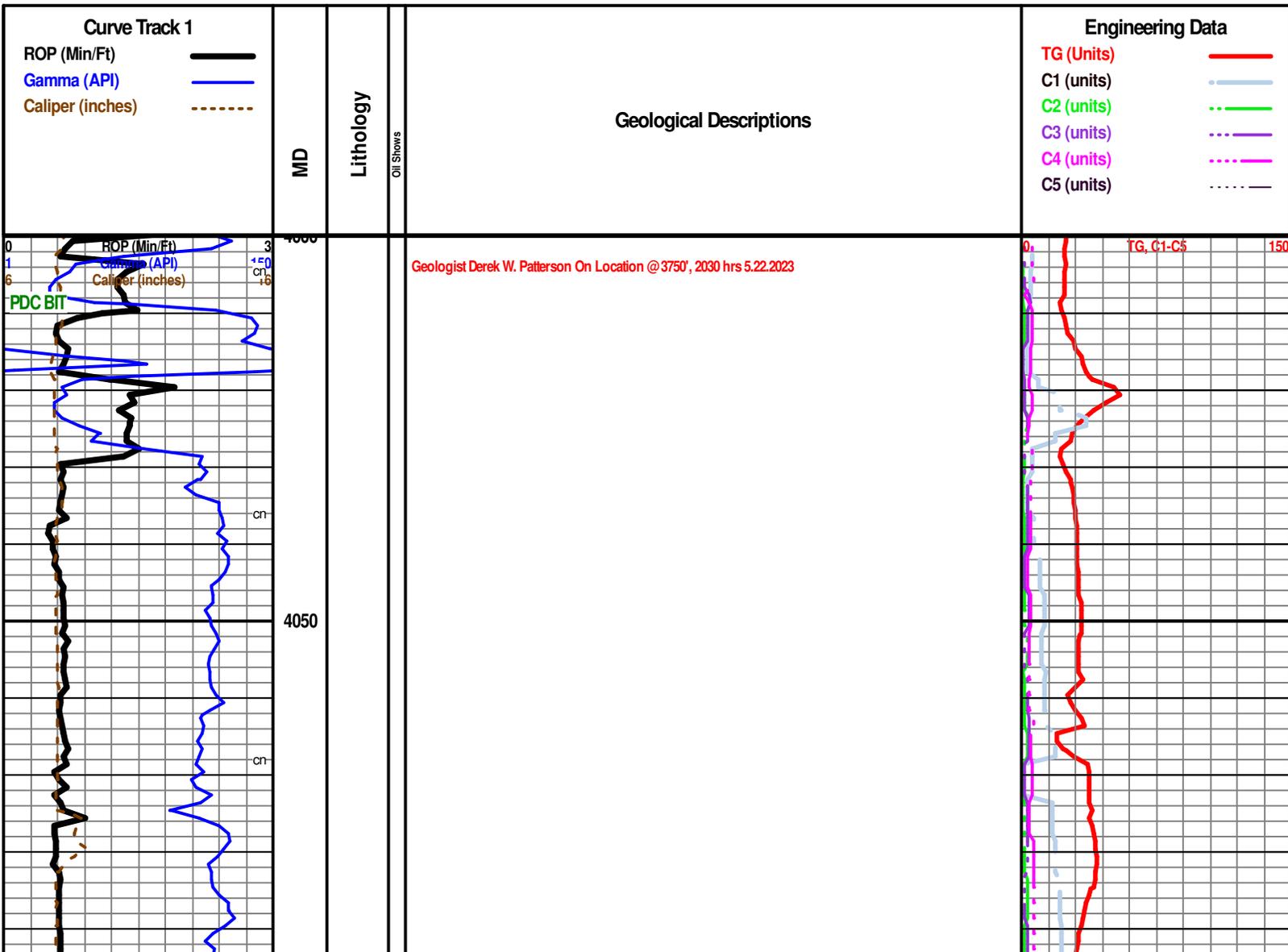
- Gas show
- Even
- Spotted
- Poor
- Dead

INTERVAL

- Dst1
- Dst2
- Dst3
- Core
- Tail pipe

EVENT

- Open hole



Start 20' Wet & Dry Samples

Shale: gray lt gray, mostly rounded and soft, micaceous.

Limestone: off white lt cream tan, vixln, fossiliferous in part, poor interxln porosity, no shows, no fluorescence.

Shale: gray dk gray lt gray, mostly soft and rounded, some firmer and silty in part.

Limestone: off white lt cream tan, vixln, fossiliferous in part, some scattered softer chalky material, overall poor interxln porosity, no shows, no fluorescence.

Shale: gray dk gray, blocky to rounded, soft.

Shale: black, carbonaceous, blocky and dense, poor gas show.

HEEBNER 4188' (-2053')

Shale: black, carbonaceous, blocky and dense, poor gas show.

Shale Kick

Shale: gray dk gray, blocky to rounded, soft.

TORONTO 4205' (-2070')

Limestone: off white lt cream, vixln, fossiliferous in part, some scattered softer chalky material, overall poor interxln porosity, no shows, no fluorescence.

DOUGLAS 4218' (-2083')

Shale: gray dk gray pale green, blocky to rounded, most firm, micaceous to silty.

Shale: gray dk gray pale green, blocky to rounded, most firm, micaceous to silty.

Shale: gray dk gray pale green, blocky to rounded, most firm, micaceous to silty.

4287' cfs 0"/20" - Trace Sandstone: clear sub-rounded poorly developed clusters, vf-fgrained in part, most very shaley/poorly cemented, heavily micaceous/silty, fair intergranular porosity, no shows, no fluorescence, no odor.

Shale: gray dk gray, blocky to rounded, most firm, micaceous to silty.

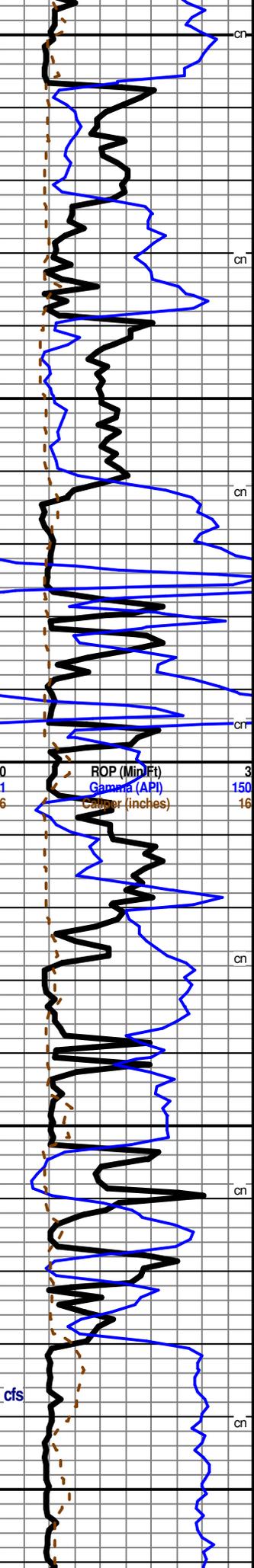
4287' cfs 40"/60" - Scattered Sandstone as above dropping out, transitioning to Shale: gray dk gray, trace dk red, blocky to rounded, soft to waxy.

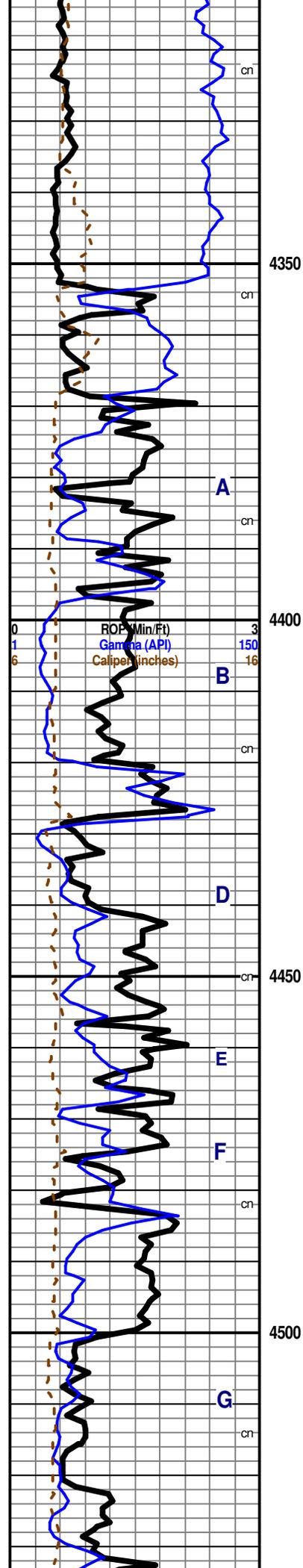
Shale: gray lt gray some scattered dk red, most very soft and rounded.

Shale: gray lt gray some scattered dk red, most very soft and rounded.

TG, C1-C5 150

MudCo Mud Ck @ 4290' 0745 hrs 5.23.23 Vis: 48 Wt: 9.3 PV: 16 YP: 15 WL: 7.21 Cake: 1/32nd pH: 11.01 Chl: 4.350 ppm Cal: 4 Solids: 6.9 LCM: 2#





Shale: gray dk gray some lt gray, dense to soft and rounded.

Shale: gray dk gray some lt gray, dense to soft and rounded.

BROWN LIME 4354' (-2219')

Limestone: tan cream, dense matrix, microxln, barren, no shows, no fluorescence.

Shale: gray dk gray, blocky to rounded, abundant dense and firm, heavily micaceous.

LANSING-KANSAS CITY 4368' (-2233')

Limestone: tan cream, dense matrix, micro-vxln, scattered oolitic, most barren, poor visible porosity, no shows, no fluorescence.

Limestone: lt cream lt tan, vxln, oolitic to heavily oolitic, scattered good-excellent oomoldic development and associated porosity, no shows, no fluorescence, no cut, no odor.

Limestone: lt cream lt gray, dense matrix, vxln, fossiliferous in part, poor visible porosity, no shows, no fluorescence.

Shale: gray dk gray, rounded, soft.

Limestone: lt cream lt gray, dense matrix, vxln, fossiliferous in part, poor visible porosity, no shows, no fluorescence.

TG, C1-C5

150

Limestone: white off white, softer friable matrix, vf-fxln, fair-good interxln porosity, siliceous, no shows, no fluorescence.

Shale: gray dk gray, dense.

Limestone: cream lt tan, sub-friable matrix, vxln, scattered vuggy porosity, no shows, no fluorescence.

Limestone: lt cream lt tan, dense matrix, micro-vxln, poor-no visible porosity, no shows, no fluorescence.

Shale: gray dk gray, rounded, soft.

Limestone: gray cream tan, dense matrix, micro-vxln, barren, no scattered poor interxln porosity, no shows, no fluorescence.

Shale: gray dk gray, rounded, soft.

Limestone: gray cream tan, dense matrix, micro-vxln, barren, no scattered poor interxln porosity, no shows, no fluorescence.

Shale: gray dk gray, softer and rounded, with interbedded Limestone.

Limestone: cream lt cream, dense matrix, microxln, no visible porosity, no shows, no fluorescence, with scattered Chert: gray cream, translucent, fresh and sharp.

Limestone: cream lt cream, dense matrix, micro-vxln, poor interxln visible porosity, no shows, no fluorescence, with scattered Chert: gray cream, translucent, fresh and sharp.

Limestone: cream lt cream, dense matrix, micro-vxln, poor interxln visible porosity, no shows, no fluorescence, with scattered Chert: gray cream, translucent, fresh and sharp.

MUNCIE CREEK 4537' (-2402')

Shale: black carbonaceous, with gray dk gray, blocky and dense.

Limestone: cream tan brown, friable matrix, oolitic with abundant oomoldic, good oomoldic porosity, no shows, bright lt yellow fluorescence, no cut fluorescence, no odor.

Limestone: cream tan, dense matrix, microxl, most barren, no visible porosity, no shows, no fluorescence.

Shale: gray dk gray, rounded, soft.

Limestone: cream lt cream, dense matrix, microxl, poor visible porosity, no shows, no fluorescence, with Chert: cream gray, spiculitic in part, fresh and sharp.

Limestone: cream lt cream, dense matrix, microxl, poor visible porosity, no shows, no fluorescence, with Chert: cream gray, spiculitic in part, fresh and sharp.

Shale: gray dk gray, rounded, soft.

Limestone: cream tan, dense matrix, vxl, chalky in part, fair visible porosity, no shows, no fluorescence.

Limestone: cream tan, sub-friable matrix, scattered oolitic/oomoldic, good oomoldic porosity, no shows, no fluorescence.

Limestone: cream tan, dense matrix, vxl, chalky in part, fair visible porosity, no shows, no fluorescence.

Shale: gray dk gray, rounded, soft.

Limestone: cream tan, dense matrix, vxl, no visible porosity, no shows, no fluorescence.

STARK 4636' (-2501')

Shale: black carbonaceous, with gray dk gray, rounded and dense.

Limestone: off white lt gray, dense matrix, micro-vxl, barren, no visible porosity, no shows, no fluorescence, with some scattered Chert: gray, translucent, fresh and sharp.

Limestone: off white lt gray, dense matrix, micro-vxl, barren, no visible porosity, no shows, no fluorescence, with some scattered Chert: gray, translucent, fresh and sharp.

HUSHPUCKNEY 4687' (-2552')

Shale: black carbonaceous, blocky and dense, no gas show.

Shale: gray dk gray, some carbonaceous in part, mostly dense, blocky to rounded.

Limestone: gray lt gray lt cream, dense matrix, micro-vxl, barren, no visible porosity, no shows, no fluorescence, with some scattered Chert: gray, translucent, fresh and sharp.

Limestone: gray lt gray lt cream, dense matrix, micro-vxl, barren, no visible porosity, no shows, no fluorescence, with some scattered Chert: gray, translucent, fresh and sharp.

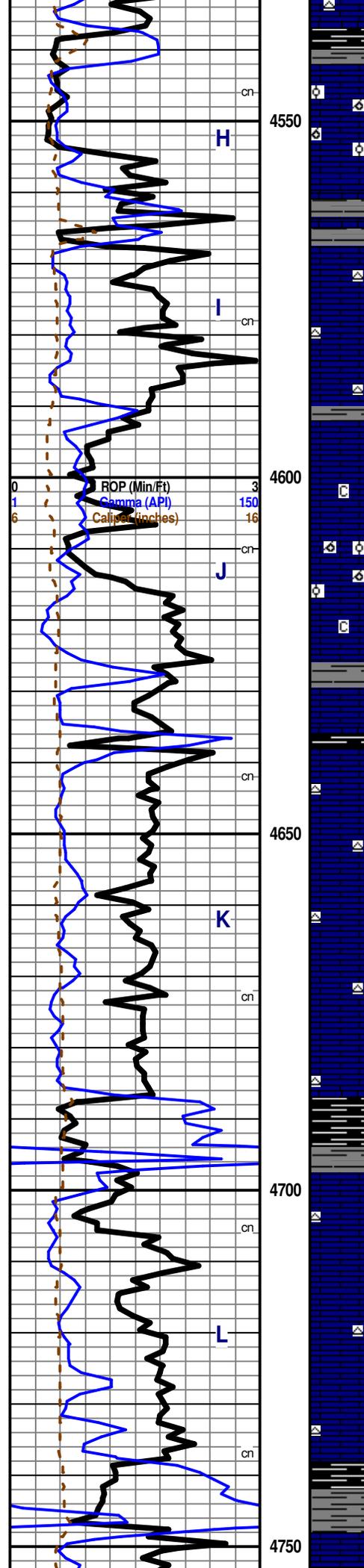
Limestone: off white lt gray, dense matrix, micro-vxl, barren, no visible porosity, no shows, no fluorescence, with some scattered Chert: gray, translucent, fresh and sharp.

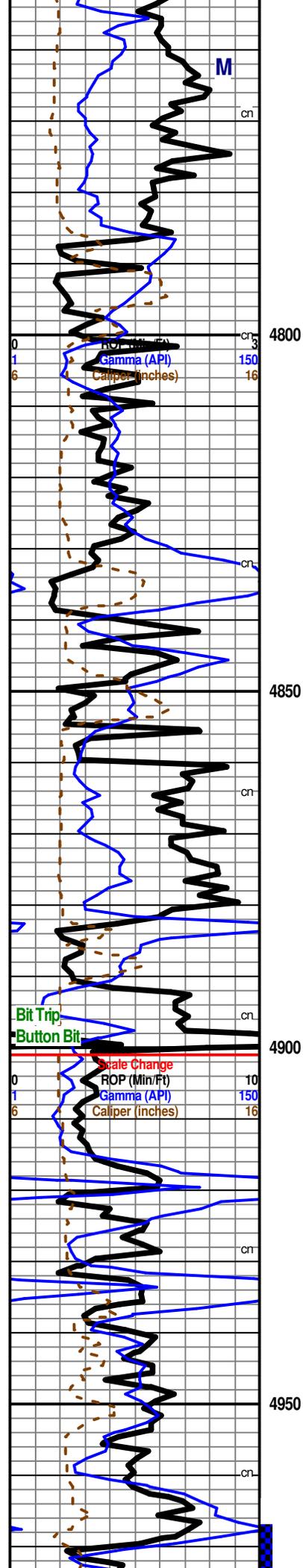
Shale: black carbonaceous, blocky and dense, no gas show.

Shale: gray dk gray, some carbonaceous in part, mostly dense, blocky to rounded.

TG, C1-C5 150

Shale Kick





Limestone: lt cream lt gray, dense matrix, vf-microxl, no visible porosity, no shows, no fluorescence.

Limestone: gray dk gray cream, dense matrix, microxl to lithographic non-descript, no visible porosity, no shows, no fluorescence.

BASE KANSAS CITY 4786' (-2651')

Shale: gray dk gray pale green, dense and blocky.

MARMATON 4801' (-2666')

Limestone: cream lt cream, mostly dense matrix, vfxln, fossiliferous in part, poor visible porosity, no shows, poor dull mineral fluorescence, with scattered Chert: tan gray, opaque, fresh and sharp to slightly rounded.

Limestone: cream lt cream, mostly dense matrix, vfxln, fossiliferous in part, poor visible porosity, no shows, poor dull mineral fluorescence, with scattered Chert: tan gray, opaque, fresh and sharp to slightly rounded.

Shale: gray dk gray, black carbonaceous, blocky to rounded, most firm.

Shale: gray dk gray, blocky to rounded, most firm, with interbedded Limestone.

ALTAMONT 4854' (-2719)

Limestone: lt cream lt tan, sub-friable matrix, vfxln, compact oolitic with abundant good-excellent oomoldic development and associated porosity, few pieces with slight lt brown oil show upon break, some minor staining in porosity, overall poor show in sample, even lt yellow fluorescence, very poor cut fluorescence, no odor.

Limestone: lt cream off white, dense matrix, microxl, barren, no visible porosity, no shows, no fluorescence, with scattered Chert.

Shale: black carbonaceous, with gray dk gray, blocky to rounded, dense to softer and waxy.

PAWNEE 4892' (-2757)

Limestone: lt cream off white, dense matrix, microxl, barren, no visible porosity, no shows, no fluorescence.

Start 10' Wet & Dry Samples

Limestone: lt cream off white, softer chalky matrix, vfxln, most fossiliferous, fair interxl porosity, no shows, no fluorescence, with scattered Chert: gray white, opaque, fossiliferous in part, fresh and sharp.

Shale: black carbonaceous, with gray dk gray, blocky to rounded, dense.

FORT SCOTT 4924' (-2789)

Limestone: cream, dense matrix, microxl, no porosity, no shows, no fluorescence.

CHEROKEE 4932' (-2797)

Shale: black dk gray carbonaceous, most rounded, firm to softer.

Limestone: cream tan, dense matrix, microxl, fossiliferous in part, no porosity, no shows, no fluorescence.

Shale: gray dk gray pale green, blocky to rounded, most firm and dense, with Limestone stringers as above.

Limestone: cream tan, dense matrix, microxl, fossiliferous in part, no porosity, no shows, no fluorescence, with some scattered Chert.

Shale: gray dk gray pale green, blocky to rounded, most firm and dense, with Limestone stringers and Chert as above.

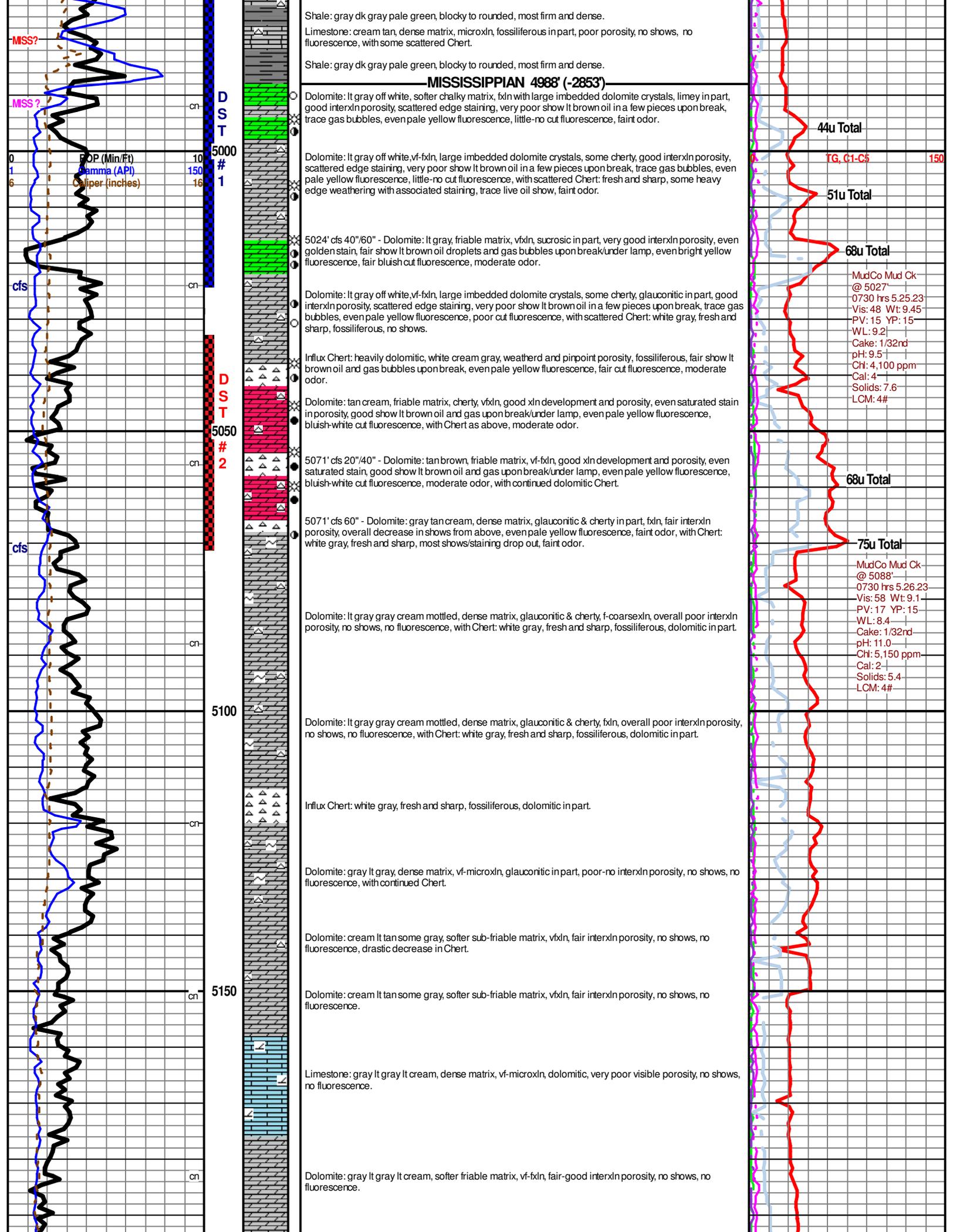
Limestone: cream tan, dense matrix, microxl, fossiliferous in part, poor porosity, no shows, no fluorescence, with some scattered Chert.

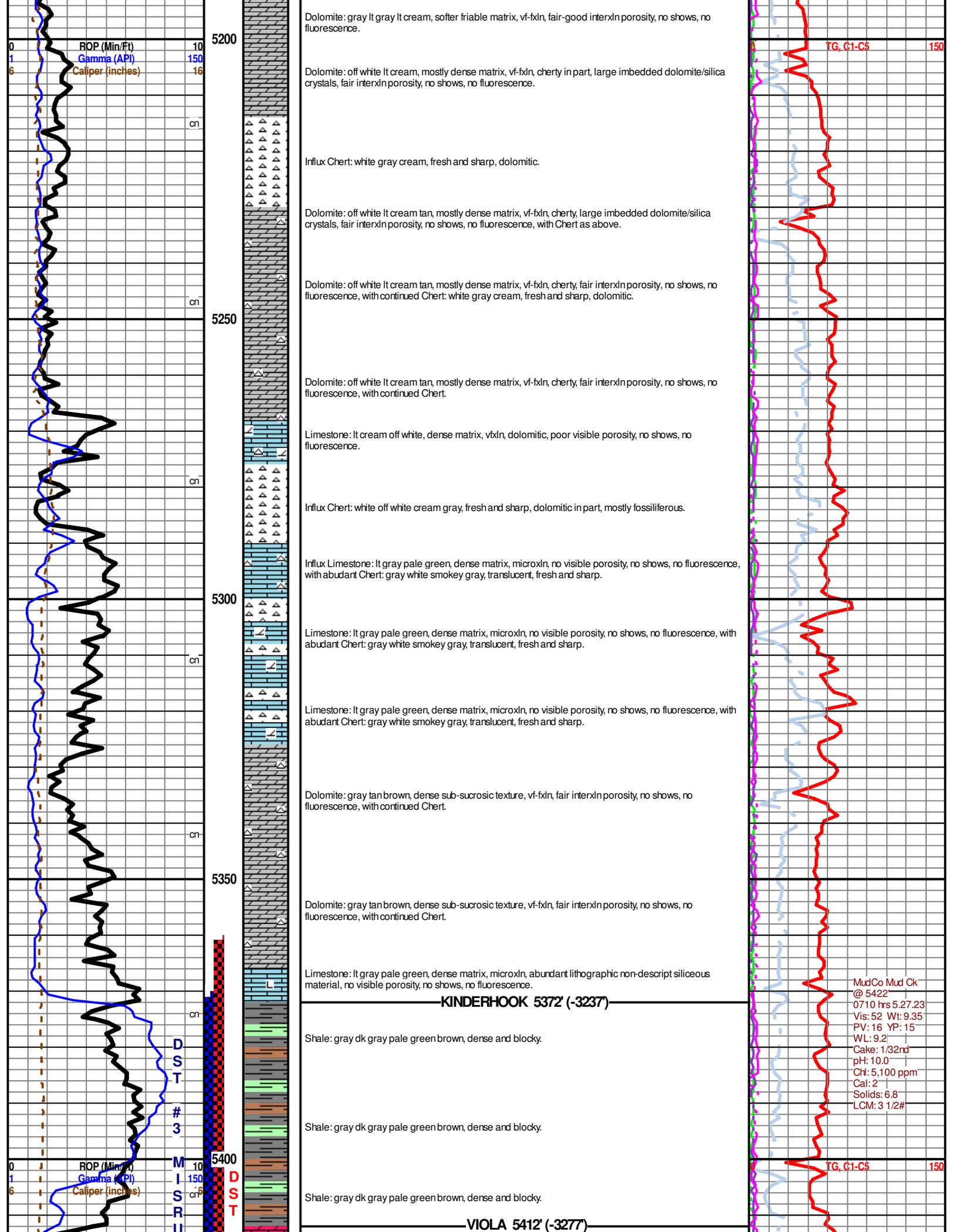
TG, C1-C5 150

65u Total
Shale Kick

58u Total
Recycle?

MudCo Mud Ck
@ 4900'
0745 hrs 5.24.23
Vis: 53 Wt: 9.4
PV: 16 YP: 17
WL: 8.8
Cake: 1/32nd
pH: 9.0
Ch: 6,800 ppm
Cal: 4
Solids: 7.6
LCM: 3 1/2#





5200

ROP (Min/Ft) 10
Gamma (API) 150
Caliper (inches) 16

TG, C1-C5

150

Dolomite: gray lt gray lt cream, softer friable matrix, vf-fxl, fair-good interxl porosity, no shows, no fluorescence.

Dolomite: off white lt cream, mostly dense matrix, vf-fxl, cherty in part, large imbedded dolomite/silica crystals, fair interxl porosity, no shows, no fluorescence.

Influx Chert: white gray cream, fresh and sharp, dolomitic.

Dolomite: off white lt cream tan, mostly dense matrix, vf-fxl, cherty, large imbedded dolomite/silica crystals, fair interxl porosity, no shows, no fluorescence, with Chert as above.

Dolomite: off white lt cream tan, mostly dense matrix, vf-fxl, cherty, fair interxl porosity, no shows, no fluorescence, with continued Chert: white gray cream, fresh and sharp, dolomitic.

5250

Dolomite: off white lt cream tan, mostly dense matrix, vf-fxl, cherty, fair interxl porosity, no shows, no fluorescence, with continued Chert.

Limestone: lt cream off white, dense matrix, vfxl, dolomitic, poor visible porosity, no shows, no fluorescence.

Influx Chert: white off white cream gray, fresh and sharp, dolomitic in part, mostly fossiliferous.

Influx Limestone: lt gray pale green, dense matrix, microxl, no visible porosity, no shows, no fluorescence, with abundant Chert: gray white smokey gray, translucent, fresh and sharp.

5300

Limestone: lt gray pale green, dense matrix, microxl, no visible porosity, no shows, no fluorescence, with abundant Chert: gray white smokey gray, translucent, fresh and sharp.

Limestone: lt gray pale green, dense matrix, microxl, no visible porosity, no shows, no fluorescence, with abundant Chert: gray white smokey gray, translucent, fresh and sharp.

Dolomite: gray tan brown, dense sub-sucrosic texture, vf-fxl, fair interxl porosity, no shows, no fluorescence, with continued Chert.

5350

Dolomite: gray tan brown, dense sub-sucrosic texture, vf-fxl, fair interxl porosity, no shows, no fluorescence, with continued Chert.

Limestone: lt gray pale green, dense matrix, microxl, abundant lithographic non-descript siliceous material, no visible porosity, no shows, no fluorescence.

KINDERHOOK 5372' (-3237)

Shale: gray dk gray pale green brown, dense and blocky.

Shale: gray dk gray pale green brown, dense and blocky.

5400

ROP (Min/Ft) M 10
Gamma (API) I 150
Caliper (inches) S 6

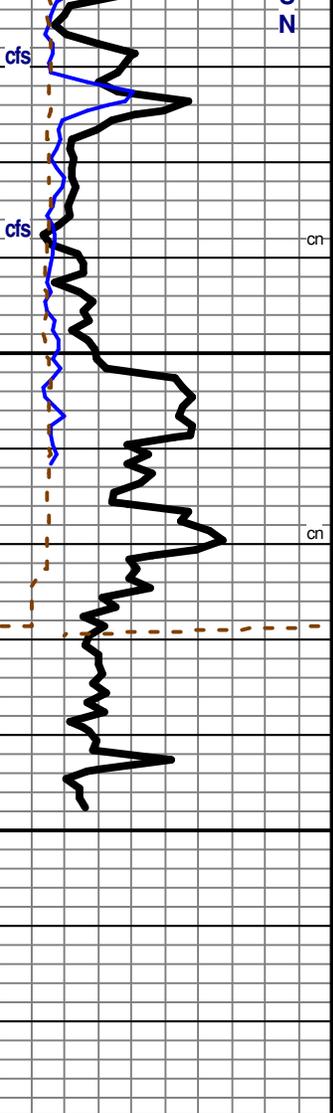
TG, C1-C5

150

Shale: gray dk gray pale green brown, dense and blocky.

VIOLA 5412' (-3277)

MudCo	Mud Ck
@ 5422	
0710 hrs	5.27.23
Vis: 52	Wt: 9.35
PV: 16	YP: 15
WL: 9.2	
Cake: 1/32nd	
pH: 10.0	
Chl: 5,100 ppm	
Cal: 2	
Solids: 6.8	
LCM: 3 1/2#	



5419' cfs 40"/60" - Dolomite: off white lt cream lt gray, upper part dense and tight grading to sub-friable matrix, fxl, very good rhombic development and porosity, some vuggy porosity, most even saturated stain, good-excellent show golden brown oil upon break/under lamp, free oil in tray, even bright lt yellow fluorescence, bluish-white cut fluorescence, strong odor.

5437' cfs - Dolomite: cream tan, mostly dense matrix, vf-microxl, poor xln development and associated porosity, some pyrite inclusions, no shows, no fluorescence, no odor.

5437' cfs 40"/60" - Dolomite: off white lt cream, sub-friable chalky matrix, vf-fxl, fair-good rhombic development and associated porosity, much of sample pyritic, no shows, dull mineral fluorescence, no cut fluorescence, no odor, with large influx of loose soft Chalk, and Chert: white, opaque to translucent, fresh and sharp, no shows.

Dolomite: off white lt cream, sub-friable chalky matrix, vf-fxl, fair-good rhombic development and associated porosity, much of sample pyritic, no shows, dull mineral fluorescence, no cut fluorescence, no odor, with large influx of loose soft Chalk, and Chert: white, opaque to translucent, fresh and sharp, no shows.

Dolomite: lt tan lt gray, dense matrix, vf-microxl, poor visible porosity, no shows, little-no mineral fluorescence, no cut fluorescence, no odor, with continued Chert, some Shale.

Dolomite: off white lt cream, mostly dense matrix, vf-fxl, fair rhombic development, poor interxln porosity, pyritic in part, no shows, dull mineral fluorescence, no cut fluorescence, no odor, with Chert: white, opaque to translucent, fresh and sharp, no shows, Shale drops out.

Dolomite: lt tan lt gray, dense matrix, vf-microxl, poor visible porosity, no shows, little-no mineral fluorescence, no cut fluorescence, no odor, with continued Chert.

Dolomite: lt gray lt tan, dense to sub-friable matrix, fxl, fair-good rhombic development with associated porosity, no shows, little-no fluorescence, no cut fluorescence, no odor, with Chert: white gray lt cream, speckled to spiculitic, opaque to translucent, most fresh and sharp with scattered dolomitic/weathered, no shows.

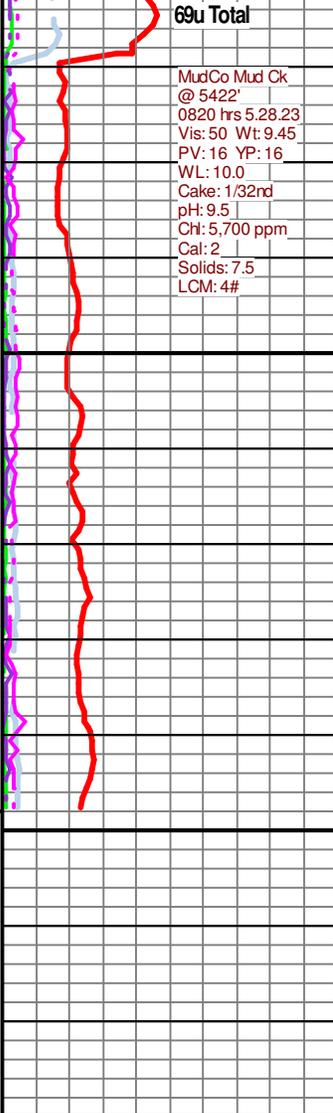
Dolomite and Chert as above, no shows, no fluorescence, no odor.

LTD 5498' (-3363')
 RTD 5500' (-3365')

Orders Received to Plug & Abandon As A Dry Hole

Geologist Derek W. Patterson Off Location, 0540 hrs 5.29.2023

Respectfully Submitted,
Derek W. Patterson



MudCo Mud Ck
 @ 5422'
 0820 hrs 5.28.23
 Vis: 50 Wt: 9.45
 PV: 16 YP: 16
 WL: 10.0
 Cake: 1/32nd
 pH: 9.5
 Ch: 5,700 ppm
 Cal: 2
 Solids: 7.5
 LCM: 4#