

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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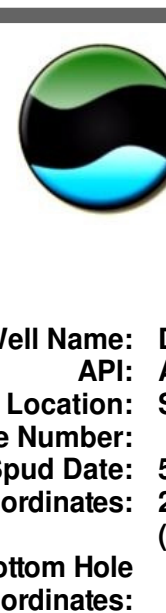
Form	ACO1 - Well Completion
Operator	Edison Operating Company LLC
Well Name	DORAN UNIT 1-16
Doc ID	1575843

All Electric Logs Run

DUCP
DUAL INDUCTION
MICRO
SONIC







EDISON OPERATING COMPANY, LLC

Scale 1:240 (5"=100') Imperial Measured Depth Log

Well Name: Doran Unit #1-16
API: #15-185-24081-0000
Location: Section 16-T245-R14W Stafford Co., Kansas
License Number: 276 FSL & 787 FEL
Spud Date: 5/19/2021
Surface Coordinates: (3-D Location)
Bottom Hole Coordinates:
Ground Elevation (ft): 1977' K.B. Elevation (ft): 1986'
Logged Interval (ft): 3200' To: 4420' Water Based (ft): LTD - 4420'
Formation: Arbuckle
Type of Drilling Fluid: Chemical Gel/Polymer Free Water Deep

OPERATOR

Edison Operating Company, LLC
Address: 8100 E. 22nd St. N.
Building 1900
Wichita, KS 67226

GEOLOGIST

Name: Derek W. Patterson
Company: Edison Operating Company, LLC
Address: 8100 E. 22nd St. N.
Building 1900
Wichita, KS 67226

REMARKS

After review of the geologic log, DST results, and the open hole electric logs for the Doran Unit #1-16, it was decided upon by operator to run 5 1/2" production casing for further evaluation to be led well.
Note: DST #2 and DST #3 intervals have been shifted 2' deeper to correspond to the electric log tops.
The well samples were saved and submitted to the Well Sample Library in Wichita, KS.

Respectfully Submitted,
Derek W. Patterson

GENERAL INFORMATION

Table with 3 columns: Service Companies, Drilling Fluid, Logging Company. Includes details for Southwind Drilling, Enginert's, and Eagle Wireline.

Deviation Survey table showing depth and survey measurements.

Table with 3 columns: Depth, Pipe Strap, Pipe Strap. Shows measurements at 4296' depth.

Bit Record table with columns: Bit #, Size, Make, Type, Serial Number, Depth In, Depth Out, Feet, Hours.

5.20.2021 Ran 3 joints of new S&S 5.5" surface casing, tallying 555', set @ 367' K.B. Cemented w/ 150 sacks A-CON, 3 cc 1/4# fluid, filled in w/ 200 sacks A, 2 cc 1/8# floccul. Plug down @ 0530 hrs 5/20.21. By Hurricane Services Inc.

5.29.2021 Ran 99 joints of new S&S L/S 1 7/8" 5 1/2" production casing, tallying 4415.78', set @ 4412' K.B. Cemented w/ 55 sacks B-CON scavenger cement followed w/ 175 sacks H-LOGG. Cement did circulate. Plug rationale w/ 30 sacks H-PLUG. Plug down @ 1645 hrs 5/29.21. By Hurricane Services Inc.

DAILY DRILLING REPORT

5.24.2021 3530' Geologist, Derek W. Patterson on location @ 2145 hrs 5.23.2021. Drilling and connections upper Pennsylvania beds, Tortoise, Topeka, and Heebner. ...

5.25.2021 3820' Drilling and connections Heebner, Tortoise, Douglas, and into Brown Line. Conduct 15 stand drilling @ 3684'. Resumptions drilling and connections Brown Line and into Lansing-Kansas City. ...

5.26.2021 4126' Conduct DST #1, test successful. TH with bit. CTCH, resume drilling following DST #1. Drilling and connections Lansing-Kansas City, CFS @ 3967' (LKC F). ...

5.27.2021 4221' Drilling and connections Mississippi and into Viola. CFS @ 4200' (Vi). WBS warrant test. Cemented w/ 55 sacks B-CON scavenger cement followed w/ 175 sacks H-LOGG. ...

5.28.2021 4296' Drilling and connections Viola, Simpson, and into Arbuckle. CFS @ 4289' (Arb). CFS @ 4296' (Arb). WBS warrant test. CTCH, TOH for DST #3. Conduct DST #3, test successful. TH with bit. ...

5.29.2021 RTD - 4420' TH with bit, resume drilling following DST #3. Drilling and connections Arbuckle ahead to RTD of 4420'. Koggers, conduct open hole logging operations. Orders received to run 5 1/2" production casing for further evaluation of the Doran Unit #1-16. ...

WELL COMPARISON SHEET

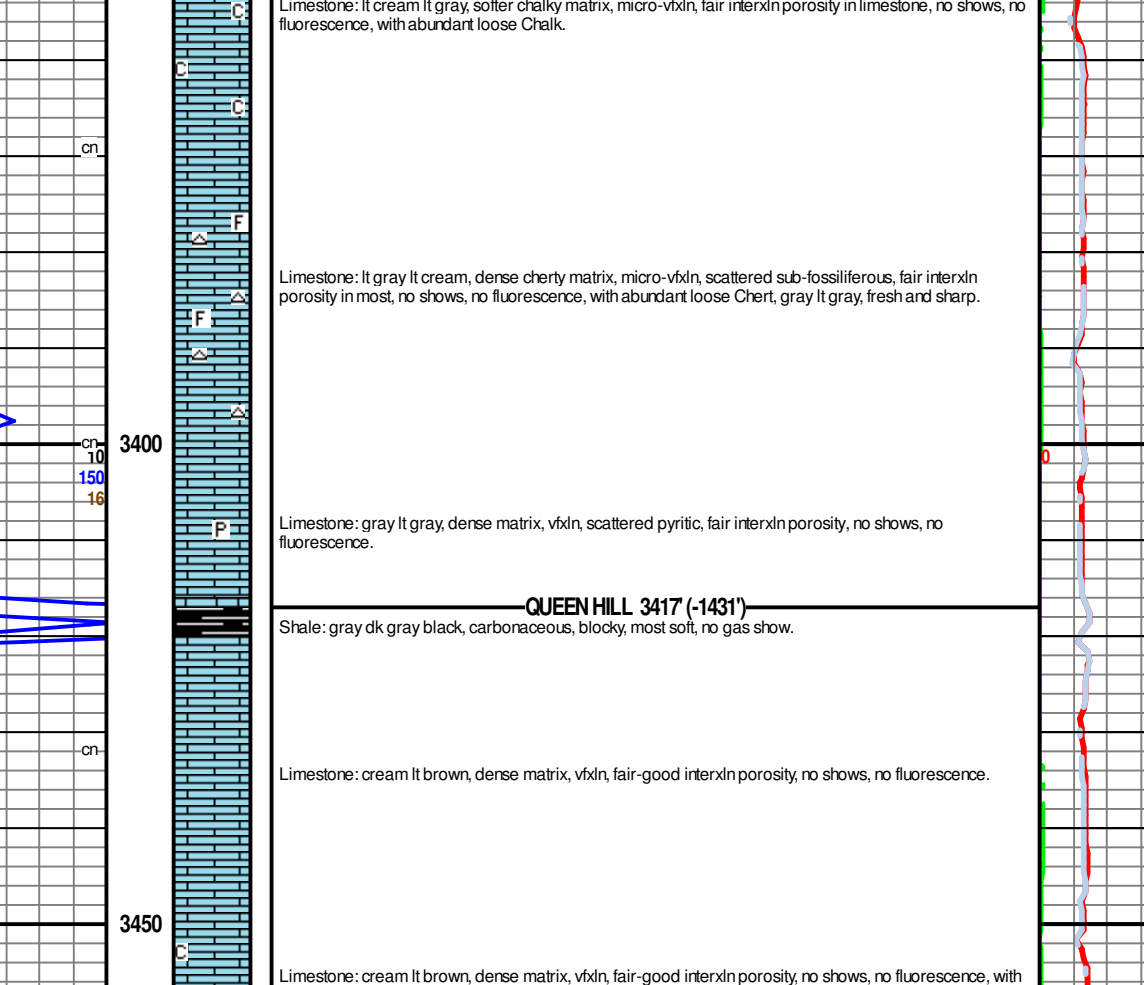
Table comparing well logs for Doran Unit #1-16 against other wells. Columns include Log ID, Log Name, Log Type, and Log Dates.

DRILL STEM TEST REPORT

Edison Operating Company LLC
16-245-14w Stafford
Doran Unit #1-16
Job Ticket: 01467
ATTN: Derek Patterson
Test Start: 2021.05.25 @ 03:24.00

GENERAL INFORMATION: Formation Kansas City, Deviated No, Whiptock, Time Total Opened 09:33.20, Interval: 3796.00 ft (KB) To: 3820.00 ft (KB) (TVD), Hole Diameter: 7.88 inches-Hole Condition: Fair.

TEST COMMENT: 1st Opening 15 minutes in eak surface flow. 2nd Shut-H 20 Minutes no flow pulled the tool after 20 minutes.



Recovery table with columns: Length (ft), Decision, Value (sec).

Gas Rates table with columns: Core (inches), Pressure (psi), Gas Rate (mM/d).

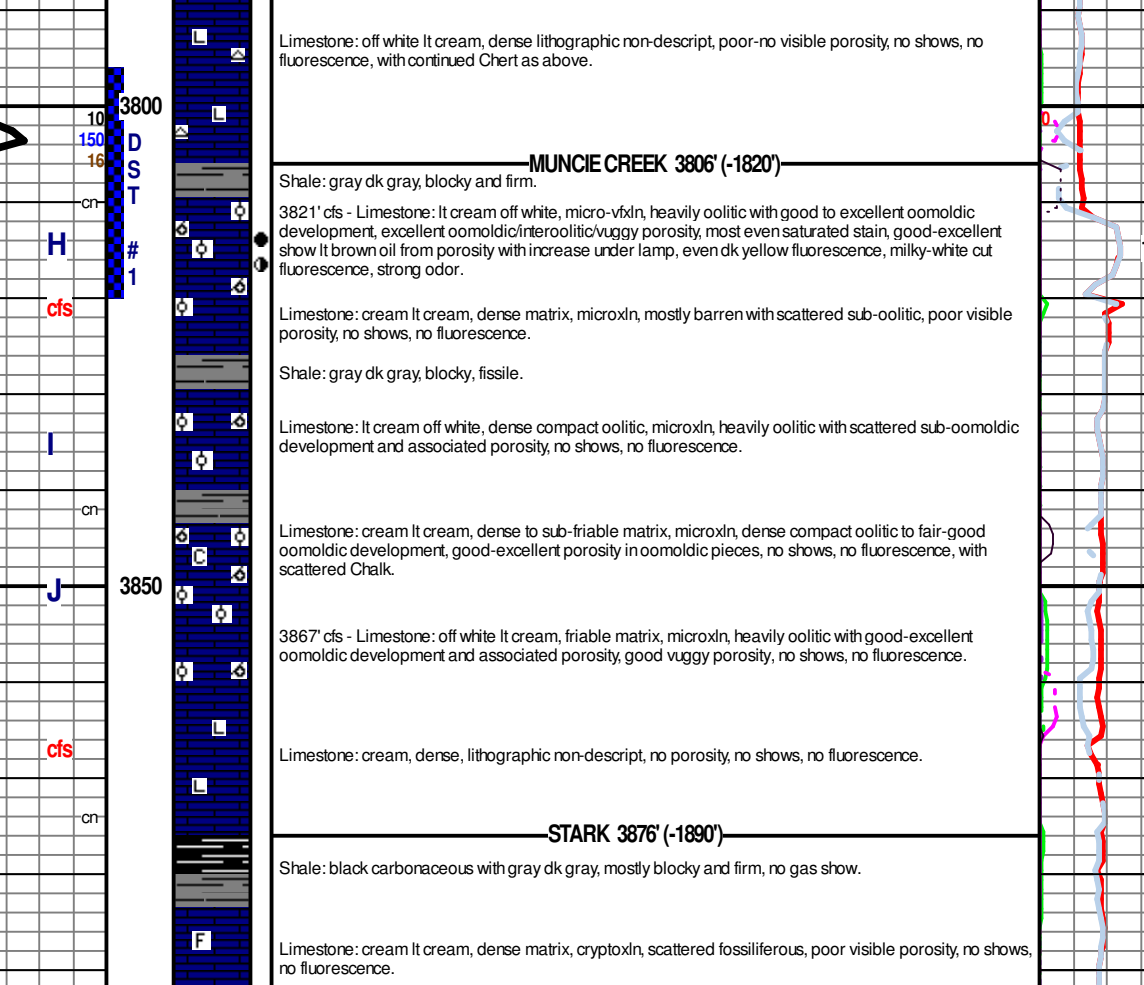
Eagle Testers Ref: No. 01467 Printed: 2021.05.25 @ 09:58.33

DRILL STEM TEST REPORT

Edison Operating Company LLC
16-245-14w Stafford
Doran Unit #1-16
Job Ticket: 01468
ATTN: Derek Patterson
Test Start: 2021.05.26 @ 16:31.00

GENERAL INFORMATION: Formation Viola, Deviated No, Whiptock, Time Total Opened 18:52.00, Interval: 4168.00 ft (KB) To: 4200.00 ft (KB) (TVD), Hole Diameter: 7.88 inches-Hole Condition: Fair.

TEST COMMENT: 1st opening 10 minutes fall blow built to the bottom of a five gallon bucket in 10 minutes. 2nd opening 45 minutes fall blow built to the bottom of a gallon bucket in 9 minutes.



Recovery table with columns: Length (ft), Decision, Value (sec).

Gas Rates table with columns: Core (inches), Pressure (psi), Gas Rate (mM/d).

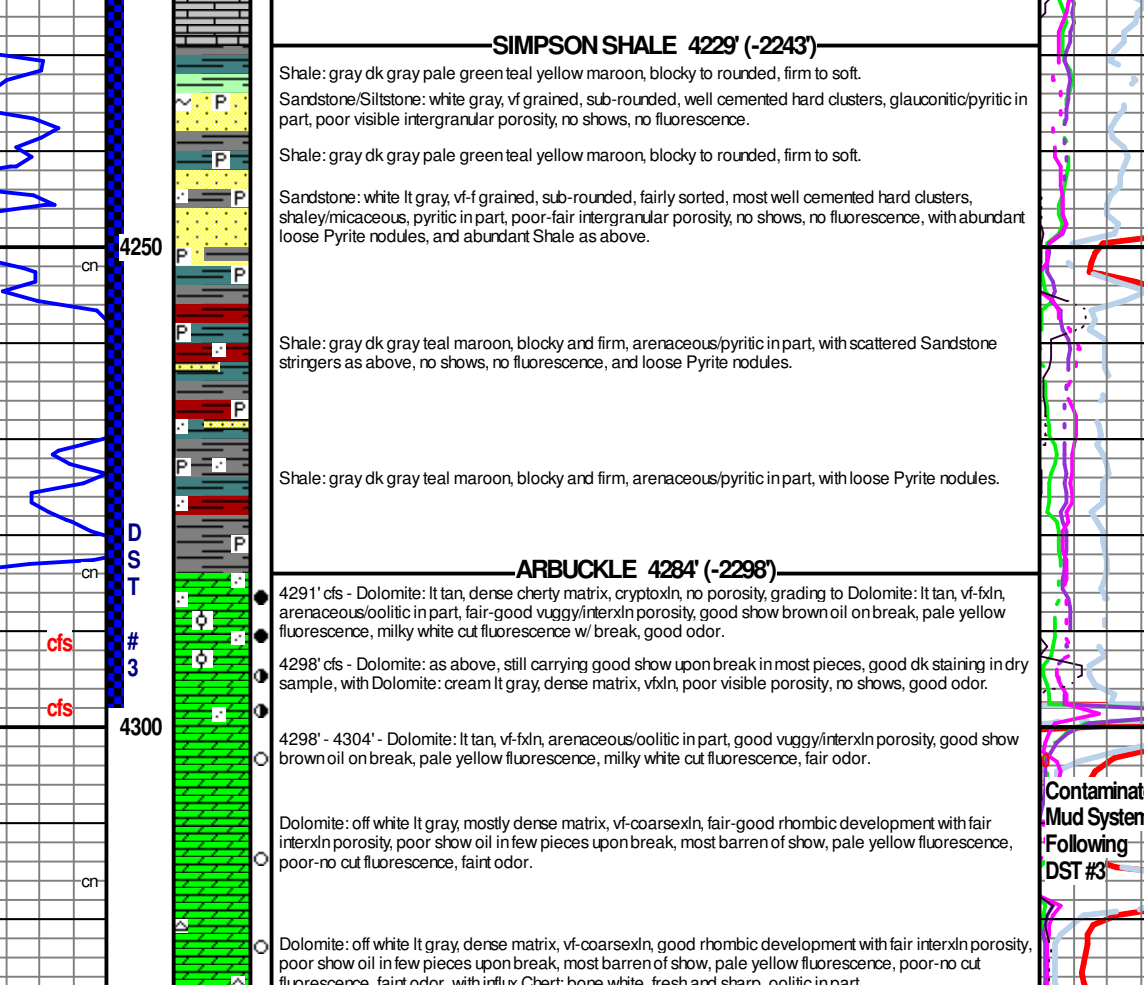
Eagle Testers Ref: No. 01468 Printed: 2021.05.27 @ 01:15.51

DRILL STEM TEST REPORT

Edison Operating Company LLC
16-245-14w Stafford
Doran Unit #1-16
Job Ticket: 01469
ATTN: Derek Patterson
Test Start: 2021.05.27 @ 04:17.32

GENERAL INFORMATION: Formation Arbuckle, Deviated No, Whiptock, Time Total Opened 00:00.00, Interval: 4216.00 ft (KB) To: 4296.00 ft (KB) (TVD), Hole Diameter: 7.88 inches-Hole Condition: Fair.

TEST COMMENT: 1st Opening 10 minutes good blow built to the bottom of a 55 gallon bucket in 1 minute. 2nd opening 45 minutes Good blow built to the bottom of a 55 gallon bucket in 1 minute.



Recovery table with columns: Length (ft), Decision, Value (sec).

Gas Rates table with columns: Core (inches), Pressure (psi), Gas Rate (mM/d).

Eagle Testers Ref: No. 01469 Printed: 2021.05.28 @ 04:47.32

ROCK TYPES, FOSSIL, MINERAL, STRINGER, LITHOLOGY

- List of rock types: Sand, Silt, Shale, etc. and other geological terms.

Engineering Data

Table of engineering data including ROP (MPH), Gamma (API), and Caliper (inches).

Geological Descriptions

Detailed geological descriptions for various layers: Replaced Mud System 2075, Start of Wet Day Samples, KING HILL 3165 (1329'), QUEEN HILL 3471 (1431'), HEEBNER 3625 (1530'), TORONTO 3545 (1500'), DOUGLAS 3564 (1578'), BROWN LIME 3667 (1681'), LANSING-KANSAS CITY 3669 (1702'), MARIACON 3663 (1777'), MUNCIE CREEK 3606 (1820'), HUSHUCKNEY 3910 (1824'), STARK 3876 (1807'), BASE KANSAS CITY 3947 (1963'), MARIACON 3663 (1977'), ARBUCKLE 4284 (2266'), LTRDRT 4020 (2430').

Respectfully Submitted, Derek W. Patterson

Orders Received to Run 5 1/2" Production Casing for Further Evaluation
Respectfully Submitted, Derek W. Patterson





## DRILL STEM TEST REPORT

Prepared For: **Edison Operating Company LLC**

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

ATTN: Derek Patterson

### **Doran Unit #1-16**

### **16-24s-14w Stafford**

Start Date: 2021.05.25 @ 03:24:00

End Date: 2021.05.25 @ 09:32:00

Job Ticket #: 01467                      DST #: 1

Eagle Testers  
1309 Patton Road    Great Bend, Kansas 67530  
620-791-7394

Printed: 2021.05.25 @ 09:56:03



# DRILL STEM TEST REPORT

Edison Operating Company LLC

16-24s-14w Stafford

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

Doran Unit #1-16

Job Ticket: 01467

DST#: 1

ATTN: Derek Patterson

Test Start: 2021.05.25 @ 03:24:00

## GENERAL INFORMATION:

Formation: **Kansas City "H"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:33:00

Time Test Ended: 09:32:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 1

Interval: **3796.00 ft (KB) To 3820.00 ft (KB) (TVD)**

Reference Elevations: 1986.00 ft (KB)

Total Depth: 3820.00 ft (KB) (TVD)

1977.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 9119

Inside

Press@RunDepth: 46.69 psig @ 3816.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2021.05.25 End Date: 2021.05.25

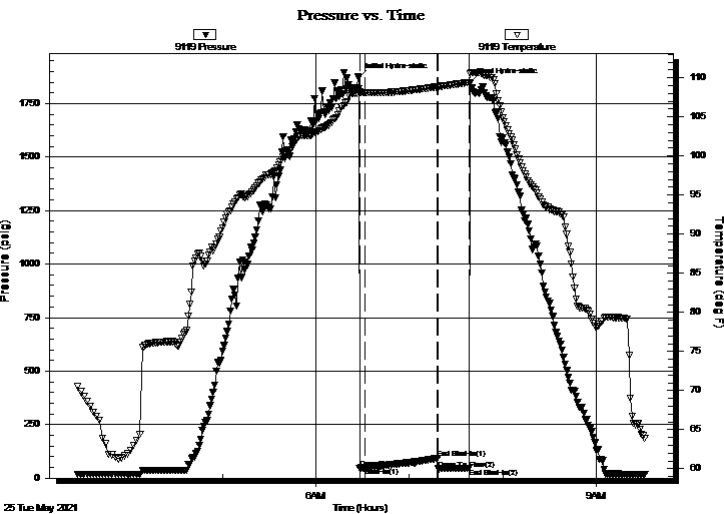
Last Calib.: 2021.05.25

Start Time: 03:24:00 End Time: 09:31:30

Time On Btm: 2021.05.25 @ 06:27:30

Time Off Btm: 2021.05.25 @ 07:39:00

TEST COMMENT: 1st Opening 05very w eak surface blow  
1st Shut- In 45 Minutes  
2nd Shut-In 20 Minutes no blow pulled the tool after 20 minutes



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1872.25	108.61	Initial Hydro-static
1	44.93	108.15	Open To Flow (1)
4	49.84	108.10	Shut-In(1)
51	93.03	108.85	End Shut-In(1)
51	43.24	108.86	Open To Flow (2)
71	46.69	109.41	End Shut-In(2)
72	1846.11	110.50	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	drilling mud show between the tools	0.14

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)







# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Edison Operating Company LLC

**16-24s-14w Stafford**

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

**Doran Unit #1-16**

Job Ticket: 01467

**DST#: 1**

ATTN: Derek Patterson

Test Start: 2021.05.25 @ 03:24:00

## Tool Information

Drill Pipe:	Length: 3791.00 ft	Diameter: 3.80 inches	Volume: 53.18 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 53.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3796.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	52.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3773.00	
Hydraulic tool	5.00			3778.00	
Jars	6.00			3784.00	
Safety Joint	2.00		Fluid	3786.00	
Top Packer	5.00			3791.00	
Packer	5.00			3796.00	28.00 Bottom Of Top Packer
Anchor	19.00			3815.00	
Recorder	1.00	9119	Inside	3816.00	
Recorder	1.00	91398	Outside	3817.00	
Bullnose	3.00			3820.00	24.00 Anchor Tool
<b>Total Tool Length:</b>	<b>52.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Edison Operating Company LLC

**16-24s-14w Stafford**

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

**Doran Unit #1-16**

Job Ticket: 01467

**DST#: 1**

ATTN: Derek Patterson

Test Start: 2021.05.25 @ 03:24:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	drilling mud show betw een the tools	0.140

Total Length: 10.00 ft      Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

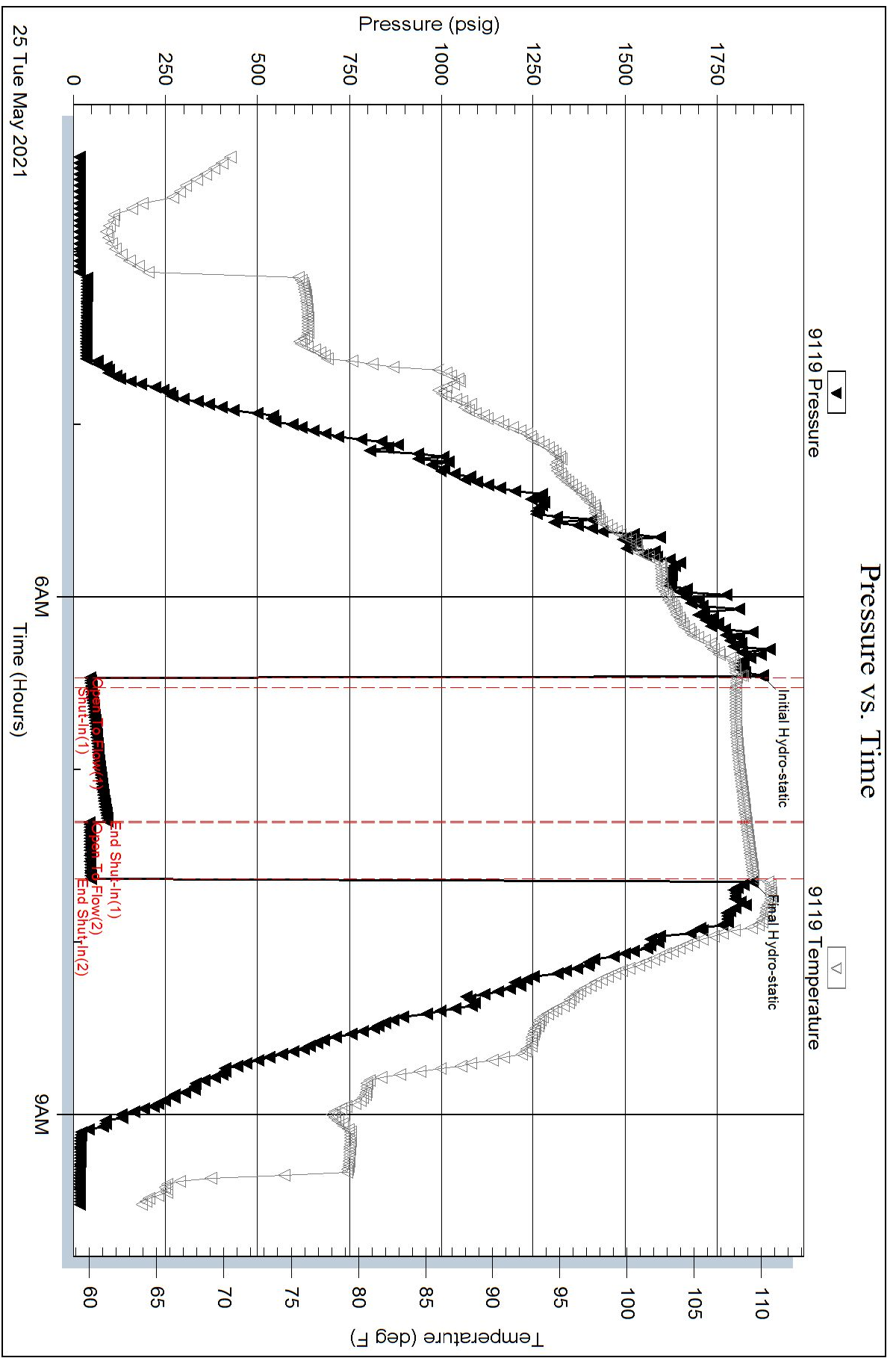
Serial #:

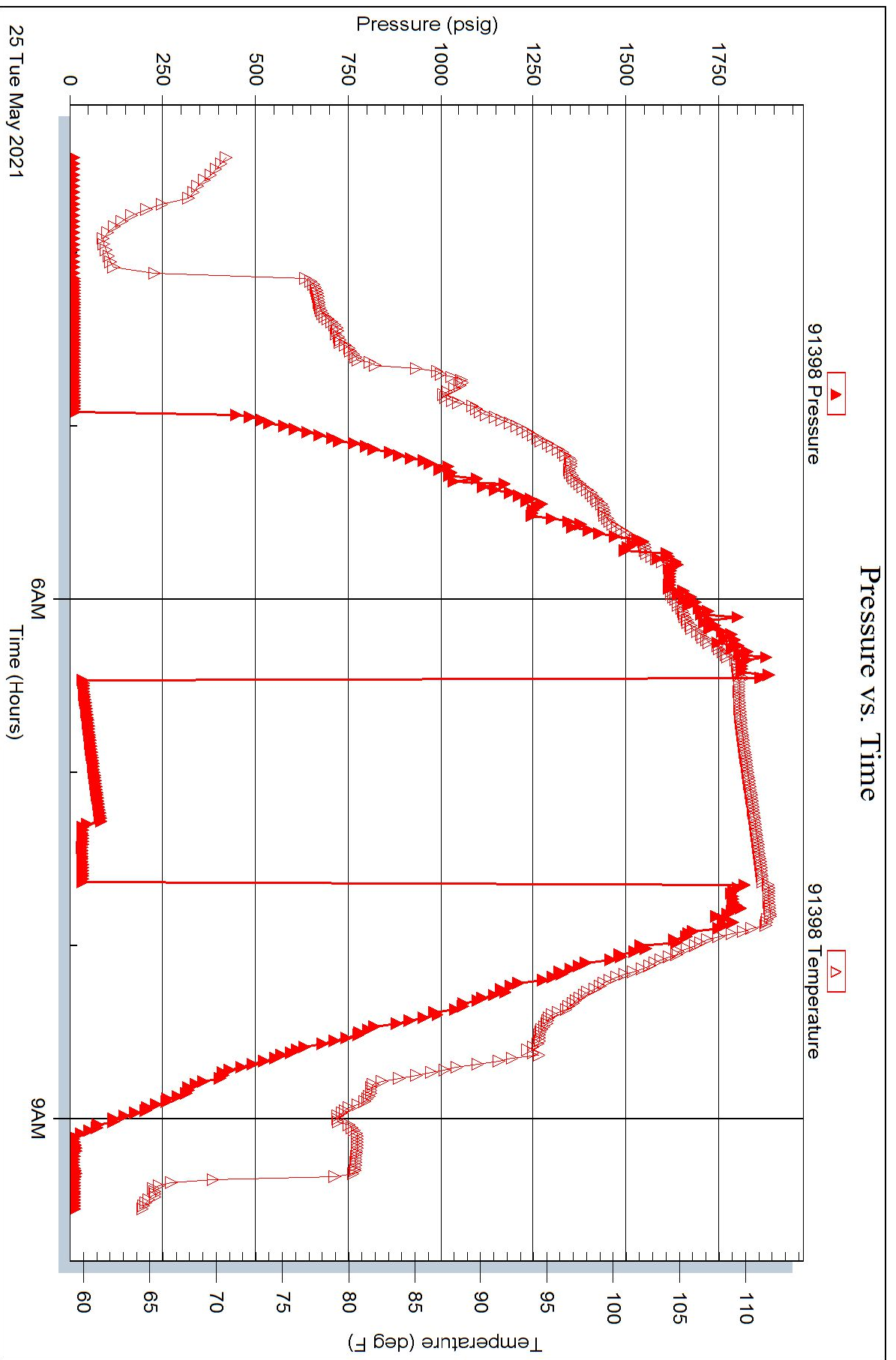
Laboratory Name:

Laboratory Location:

Recovery Comments:











## DRILL STEM TEST REPORT

Prepared For: **Edison Operating Company LLC**

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

ATTN: Derek Patterson

### **Doran Unit #1-16**

### **16-24s-14w Stafford**

Start Date: 2021.05.26 @ 16:31:00

End Date: 2021.05.26 @ 00:50:00

Job Ticket #: 01468                      DST #: 2

Eagle Testers  
1309 Patton Road    Great Bend, Kansas 67530  
620-791-7394

Printed: 2021.05.27 @ 01:15:51



# DRILL STEM TEST REPORT

Edison Operating Company LLC

16-24s-14w Stafford

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

Doran Unit #1-16

Job Ticket: 01468

DST#: 2

ATTN: Derek Patterson

Test Start: 2021.05.26 @ 16:31:00

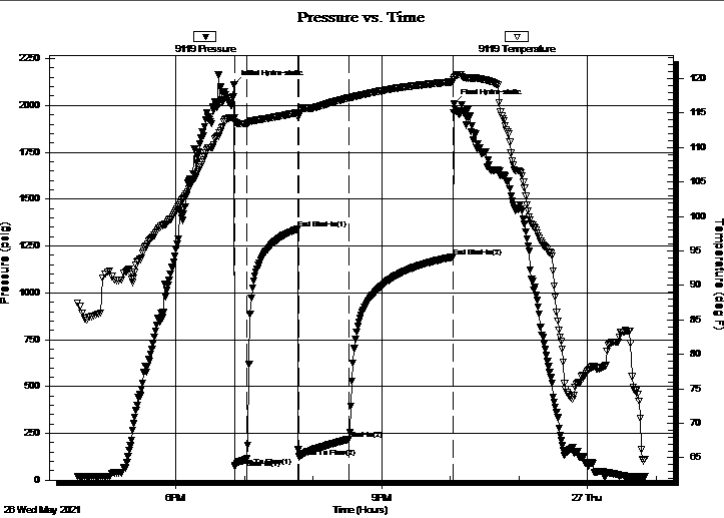
## GENERAL INFORMATION:

Formation: **viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 18:52:00 Tester: Gene Budig  
 Time Test Ended: 00:50:00 Unit No: 1  
 Interval: **4166.00 ft (KB) To 4200.00 ft (KB) (TVD)** Reference Elevations: 1986.00 ft (KB)  
 Total Depth: 4200.00 ft (KB) (TVD) 1977.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 9.00 ft

## Serial #: 9119

Press@RunDepth: 1191.24 psig @ ft (KB) Capacity: psig  
 Start Date: 2021.05.26 End Date: 2021.05.27 Last Calib.: 1899.12.30  
 Start Time: 16:31:00 End Time: 00:50:00 Time On Btm: 2021.05.26 @ 18:51:00  
 Time Off Btm: 2021.05.26 @ 22:03:30

TEST COMMENT: 1st opening 10 Minutes fair blow built to the bottom of a five gallon bucket in 10 minutes  
 1st Shut-In 45 Minutes weak surface blow back  
 2nd opening 45 Minutes fair blow built to the bottom of a 5 gallon bucket in 9 minutes  
 2nd Shut-In 90 <Minutes weak surface blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2109.70	114.27	Initial Hydro-static
1	72.42	113.68	Open To Flow (1)
11	113.12	113.47	Shut-In(1)
56	1340.15	115.02	End Shut-In(1)
57	124.65	114.64	Open To Flow (2)
101	218.60	117.18	Shut-In(2)
192	1191.24	119.51	End Shut-In(2)
193	2007.71	120.11	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	600 feet of gas in the pipe	0.00
10.00	Clean slightly gas cut oil	0.05
60.00	Slightly oil and gas cut mud	0.40
0.00	10%Gas 10% Oil 80% Mud	0.00
60.00	Slightly muddy w ater 95% Water 5% Muc	0.84
0.00	chlorides 48000	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





# DRILL STEM TEST REPORT

Edison Operating Company LLC

16-24s-14w Stafford

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

Doran Unit #1-16

Job Ticket: 01468

DST#: 2

ATTN: Derek Patterson

Test Start: 2021.05.26 @ 16:31:00

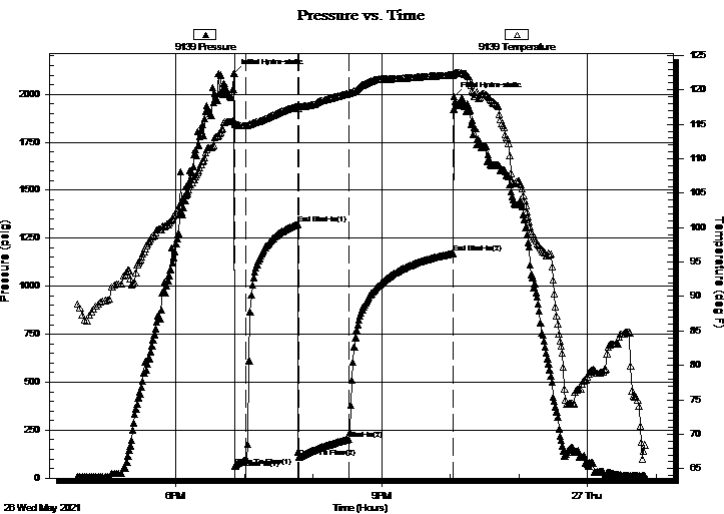
## GENERAL INFORMATION:

Formation: **viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 18:52:00  
 Tester: Gene Budig  
 Time Test Ended: 00:50:00  
 Unit No: 1  
 Interval: **4166.00 ft (KB) To 4200.00 ft (KB) (TVD)**  
 Reference Elevations: 1986.00 ft (KB)  
 Total Depth: 4200.00 ft (KB) (TVD)  
 1977.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 9.00 ft

## Serial #: 9139

Press@RunDepth: 1171.60 psig @ ft (KB) Capacity: psig  
 Start Date: 2021.05.26 End Date: 2021.05.27 Last Calib.: 1899.12.30  
 Start Time: 16:31:00 End Time: 00:50:00 Time On Btm: 2021.05.26 @ 18:51:00  
 Time Off Btm: 2021.05.26 @ 22:03:30

TEST COMMENT: 1st opening 10 Minutes fair blow built to the bottom of a five gallon bucket in 10 minutes  
 1st Shut-In 45 Minutes weak surface blow back  
 2nd opening 45 Minutes fair blow built to the bottom of a 5 gallon bucket in 9 minutes  
 2nd Shut-In 90 <Minutes weak surface blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2109.46	115.52	Initial Hydro-static
1	60.02	115.04	Open To Flow (1)
10	96.84	114.79	Shut-In(1)
56	1322.88	117.57	End Shut-In(1)
57	107.97	117.53	Open To Flow (2)
101	203.82	119.49	Shut-In(2)
192	1171.60	122.15	End Shut-In(2)
193	1987.14	122.40	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	600 feet of gas in the pipe	0.00
10.00	Clean slightly gas cut oil	0.05
60.00	Slightly oil and gas cut mud	0.40
0.00	10%Gas 10% Oil 80% Mud	0.00
60.00	Slightly muddy w ater 95% Water 5% Muc	0.84
0.00	chlorides 48000	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Edison Operating Company LLC

**16-24s-14w Stafford**

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

**Doran Unit #1-16**

Job Ticket: 01468

**DST#: 2**

ATTN: Derek Patterson

Test Start: 2021.05.26 @ 16:31:00

## Tool Information

Drill Pipe:	Length: 4107.00 ft	Diameter: 3.80 inches	Volume: 57.61 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.86 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 58.00 ft	Diameter: 2.25 inches	Volume: 0.29 bbl	Weight to Pull Loose: 6400.00 lb
			<u>Total Volume: 57.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	4166.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4143.00	
Hydraulic tool	5.00			4148.00	
Jars	6.00			4154.00	
Safety Joint	2.00		Fluid	4156.00	
Top Packer	5.00			4161.00	
Packer	5.00			4166.00	28.00 Bottom Of Top Packer
Anchor	29.00			4195.00	
Recorder	1.00	9119	Inside	4196.00	
Recorder	1.00	9139	Outside	4197.00	
Bullnose	3.00			4200.00	34.00 Anchor Tool
<b>Total Tool Length:</b>	<b>62.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Edison Operating Company LLC

**16-24s-14w Stafford**

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

**Doran Unit #1-16**

Job Ticket: 01468

**DST#: 2**

ATTN: Derek Patterson

Test Start: 2021.05.26 @ 16:31:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 46.00 sec/qt  
Water Loss: 10.80 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 5000.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	600 feet of gas in the pipe	0.000
10.00	Clean slightly gas cut oil	0.049
60.00	Slightly oil and gas cut mud	0.404
0.00	10%Gas 10% Oil 80% Mud	0.000
60.00	Slightly muddy w ater 95% Water 5% Mud	0.842
0.00	chlorides 48000	0.000

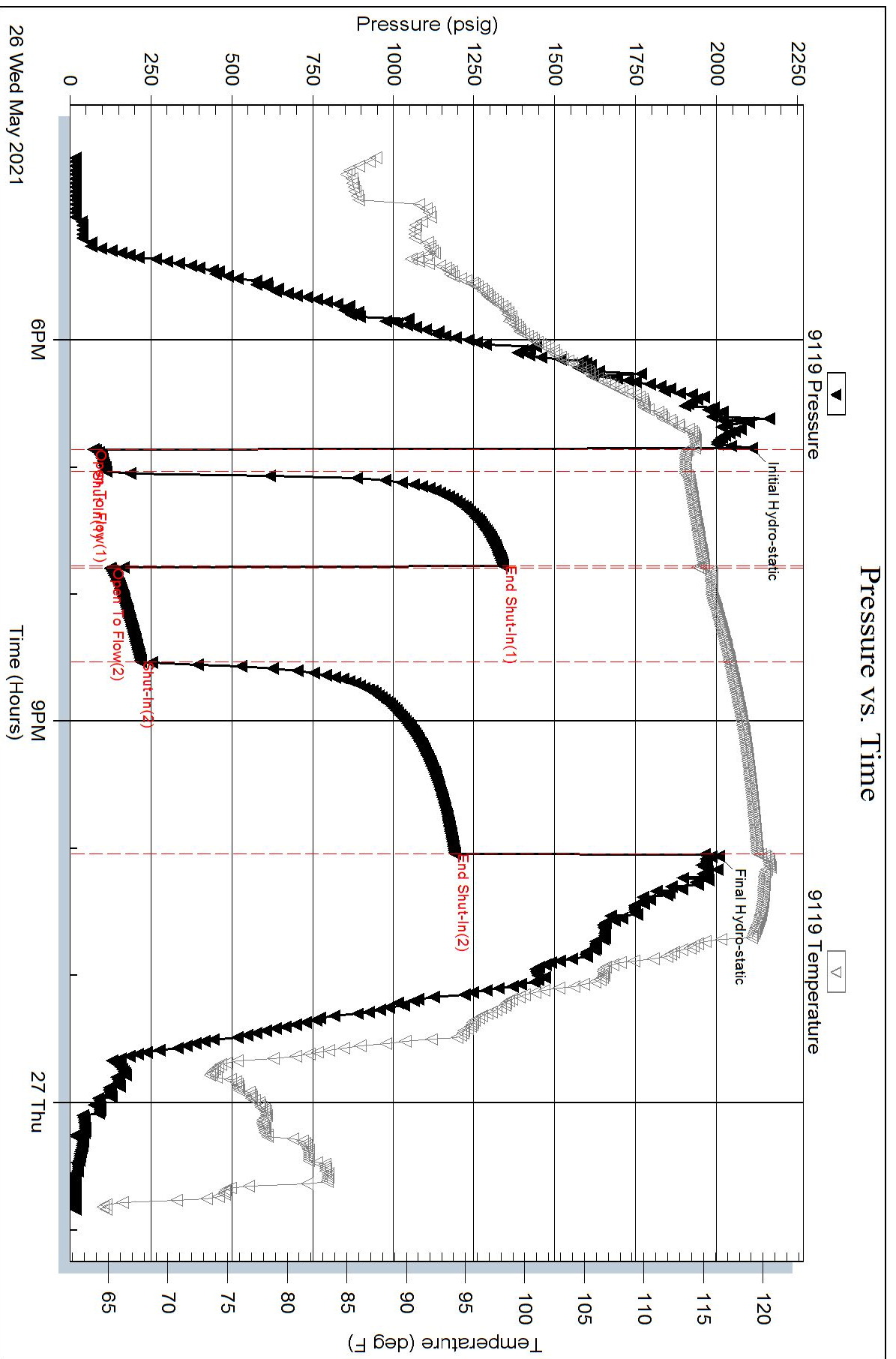
Total Length: 130.00 ft      Total Volume: 1.295 bbl

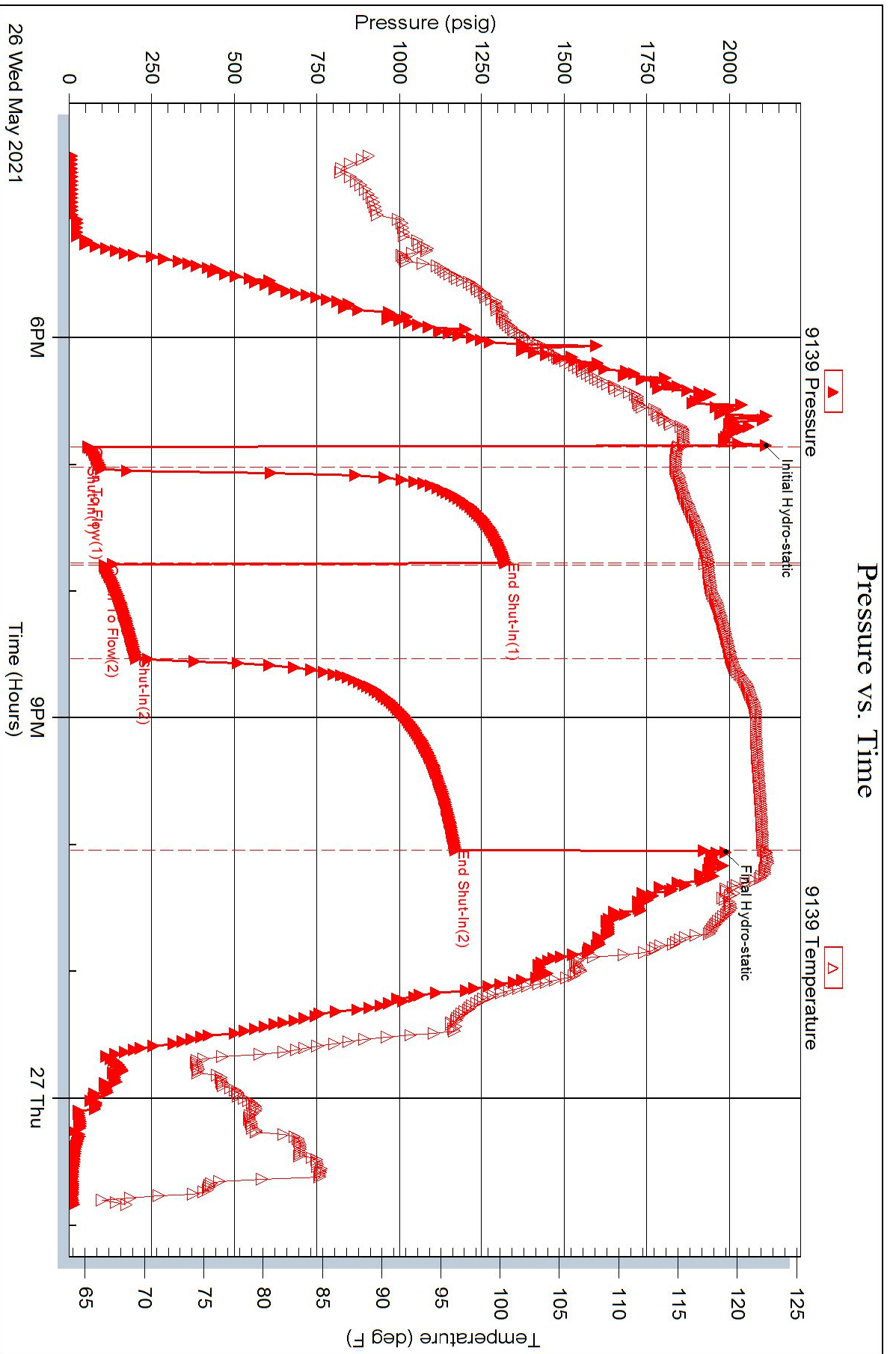
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:









## DRILL STEM TEST REPORT

Prepared For: **Edison Operating Company LLC**

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

ATTN: Derek Patterson

### **Doran Unit #1-16**

#### **16-24s-14w Stafford**

Start Date: 2021.05.27 @ 16:31:00

End Date: 2021.05.27 @ 00:00:00

Job Ticket #: 01469                      DST #: 3

Eagle Testers  
1309 Patton Road    Great Bend, Kansas 67530  
620-791-7394

Printed: 2021.05.28 @ 04:47:32





# DRILL STEM TEST REPORT

Edison Operating Company LLC

16-24s-14w Stafford

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

Doran Unit #1-16

Job Ticket: 01469

DST#: 3

ATTN: Derek Patterson

Test Start: 2021.05.27 @ 16:31:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:48:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No:

Interval: **4216.00 ft (KB) To 4296.00 ft (KB) (TVD)**

Reference Elevations: 1986.00 ft (KB)

Total Depth: 4296.00 ft (KB) (TVD)

1977.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

## Serial #: 9119

Press@RunDepth: 1538.97 psig @ ft (KB)

Capacity: psig

Start Date: 2021.05.27

End Date:

2021.05.28

Last Calib.:

1899.12.30

Start Time: 16:31:00

End Time:

03:09:30

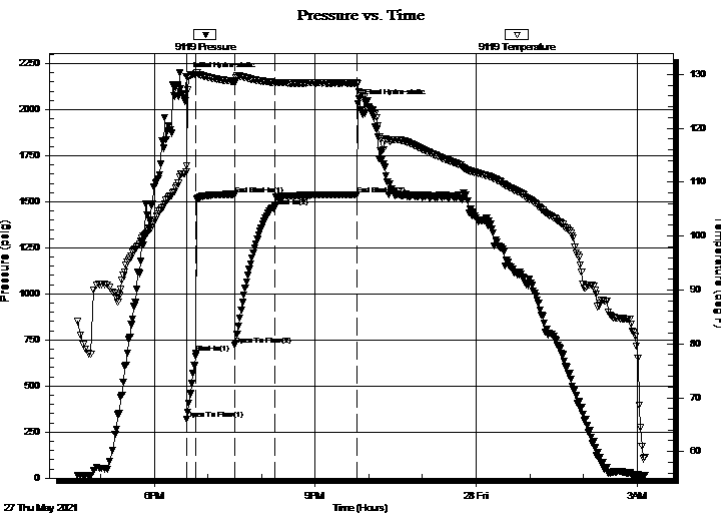
Time On Btm:

2021.05.27 @ 18:35:30

Time Off Btm:

2021.05.27 @ 21:47:30

TEST COMMENT: 1st Opening 10 Minutes good blow built to the bottom of a 56 gallon bucket in 1 Minute  
1st Shut-In 45 Minutes no blow back  
2nd Opening 45 Minutes Good blow built to the bottom of a 5 gallon bucket in 1 minute  
2nd Shut-In 90 Minutes no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2177.71	111.92	Initial Hydro-static
1	318.48	113.04	Open To Flow (1)
11	678.11	130.00	Shut-In(1)
54	1540.61	128.74	End Shut-In(1)
55	722.14	128.41	Open To Flow (2)
100	1475.19	128.56	Shut-In(2)
191	1538.97	128.40	End Shut-In(2)
192	2034.12	128.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
40.00	Clean Oil	0.56
180.00	slightly oiol and gas cut muddy w ater	2.52
0.00	5%Gas 10%oil 40%Mud 45%Water	0.00
180.00	Slightly oil cut muddy w ater	2.52
0.00	15%Oil 5% mudm80%Water	0.00
180.00	Slightly oil cut muddy w ater	2.52

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



# DRILL STEM TEST REPORT

Edison Operating Company LLC

16-24s-14w Stafford

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

Doran Unit #1-16

Job Ticket: 01469

DST#: 3

ATTN: Derek Patterson

Test Start: 2021.05.27 @ 16:31:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:48:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No:

Interval: **4216.00 ft (KB) To 4296.00 ft (KB) (TVD)**

Reference Elevations: 1986.00 ft (KB)

Total Depth: 4296.00 ft (KB) (TVD)

1977.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

## Serial #: 9139

Press@RunDepth: 1513.06 psig @ ft (KB)

Capacity: psig

Start Date: 2021.05.27

End Date:

2021.05.28

Last Calib.:

1899.12.30

Start Time: 16:31:00

End Time:

04:22:00

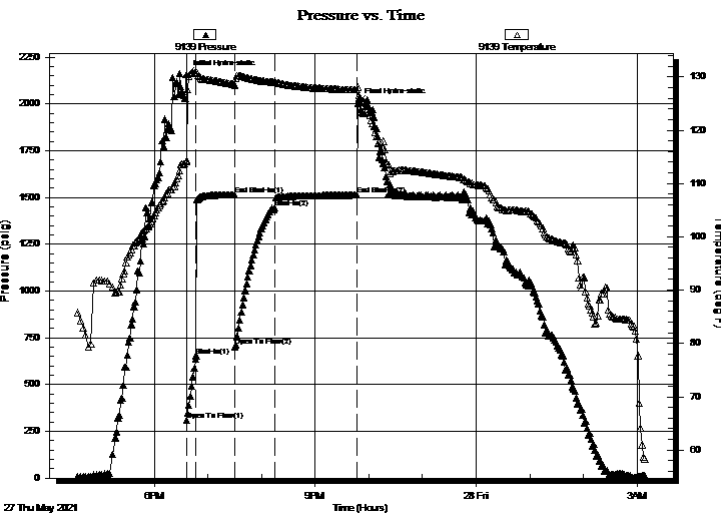
Time On Btm:

2021.05.27 @ 18:35:30

Time Off Btm:

2021.05.27 @ 21:47:30

TEST COMMENT: 1st Opening 10 Minutes good blow built to the bottom of a 56 gallon bucket in 1 Minute  
1st Shut-In 45 Minutes no blow back  
2nd Opening 45 Minutes Good blow built to the bottom of a 5 gallon bucket in 1 minute  
2nd Shut-In 90 Minutes no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2156.25	114.04	Initial Hydro-static
1	311.18	114.35	Open To Flow (1)
11	654.46	130.67	Shut-In(1)
54	1515.63	128.54	End Shut-In(1)
55	703.76	128.29	Open To Flow (2)
99	1446.41	128.99	Shut-In(2)
191	1513.06	127.57	End Shut-In(2)
192	2005.34	128.07	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
40.00	Clean Oil	0.56
180.00	slightly oiol and gas cut muddy w ater	2.52
0.00	5%Gas 10%oil 40%Mud 45%Water	0.00
180.00	Slightly oil cut muddy w ater	2.52
0.00	15%Oil 5% mudm80%Water	0.00
180.00	Slightly oil cut muddy w ater	2.52

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Edison Operating Company LLC

**16-24s-14w Stafford**

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

**Doran Unit #1-16**

Job Ticket: 01469

**DST#: 3**

ATTN: Derek Patterson

Test Start: 2021.05.27 @ 16:31:00

## Tool Information

Drill Pipe:	Length: 4204.00 ft	Diameter: 3.80 inches	Volume: 58.97 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 56000.00 lb
			Total Volume: 58.97 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.04 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	4216.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.24 ft			
Tool Length:	108.24 ft			
Number of Packers:	2	Diameter:	6.75 inches	

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			4193.00	
Hydraulic tool	5.00			4198.00	
Jars	6.00			4204.00	
Safety Joint	2.00		Fluid	4206.00	
Top Packer	5.00			4211.00	
Packer	5.00			4216.00	28.00 Bottom Of Top Packer
Change Over Sub	0.75			4216.75	
Drill Pipe	63.74			4280.49	
Change Over Sub	0.75			4281.24	
Anchor	10.00			4291.24	
Recorder	1.00	9119	Inside	4292.24	
Recorder	1.00	9139	Outside	4293.24	
Bullnose	3.00			4296.24	80.24 Anchor Tool

**Total Tool Length: 108.24**





# DRILL STEM TEST REPORT

## FLUID SUMMARY

Edison Operating Company LLC

16-24s-14w Stafford

8100 E.22nd street North building 1900  
Wichita, Kansas 67226

Doran Unit #1-16

Job Ticket: 01469

DST#: 3

ATTN: Derek Patterson

Test Start: 2021.05.27 @ 16:31:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 55.00 sec/qt  
Water Loss: 10.80 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 7000.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	Clean Oil	0.561
180.00	slightly oiol and gas cut muddy w ater	2.525
0.00	5%Gas 10%oil 40%Mud 45%Water	0.000
180.00	Slightly oil cut muddy w ater	2.525
0.00	15%Oil 5% mudm80%Water	0.000
180.00	Slightly oil cut muddy w ater	2.525
0.00	10%Oil 5%Mud 85%w ATER	0.000
180.00	SLIGHTLY OIL CUT MUDDY WATER	2.525
0.00	5%Oil 5%Mud 90%Water	0.000
2800.00	Water 3%Mud 97%Water	39.277
0.00	Chlorides 38000	0.000

Total Length: 3560.00 ft Total Volume: 49.938 bbl

Num Fluid Samples: 0

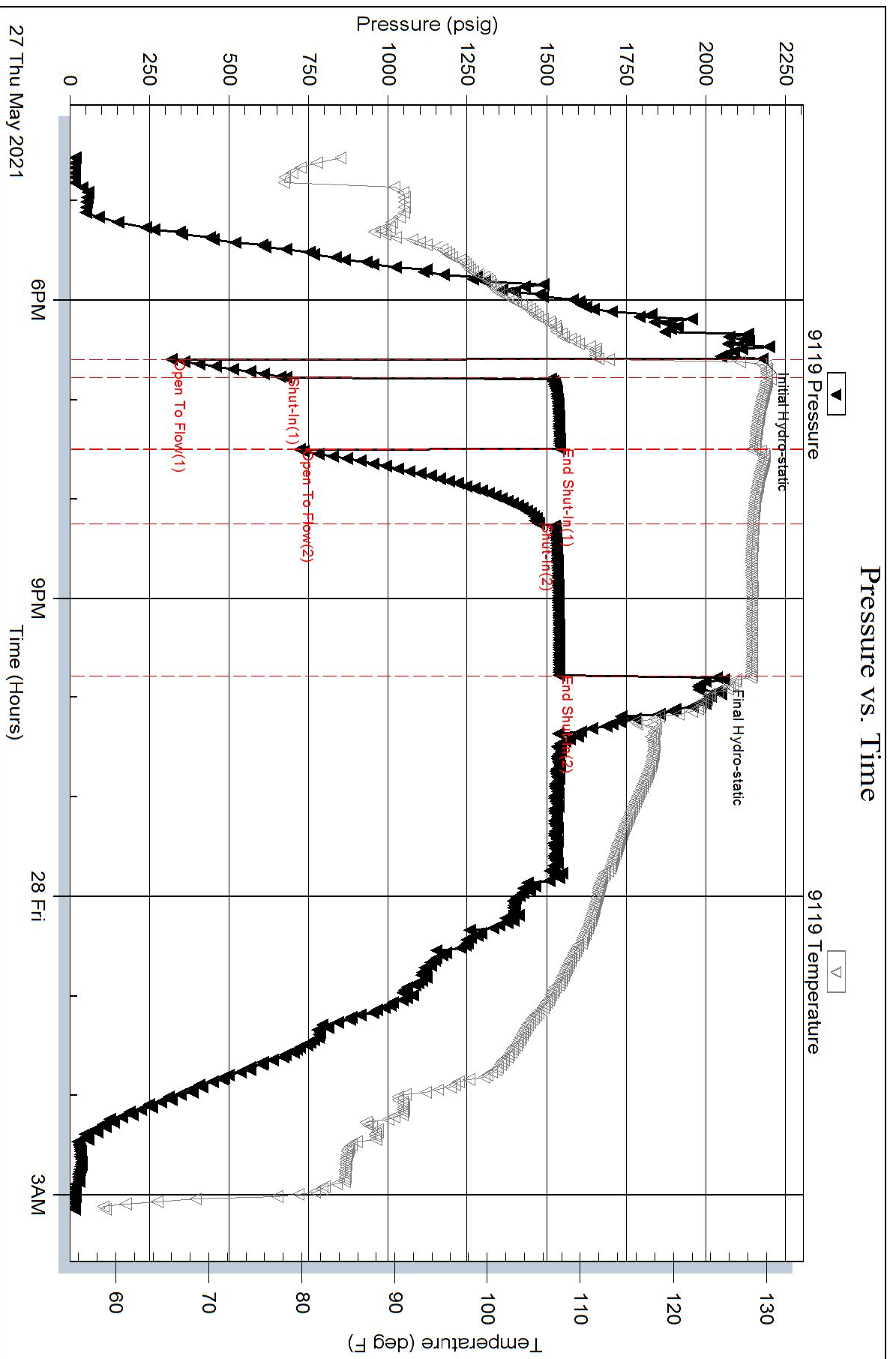
Num Gas Bombs: 0

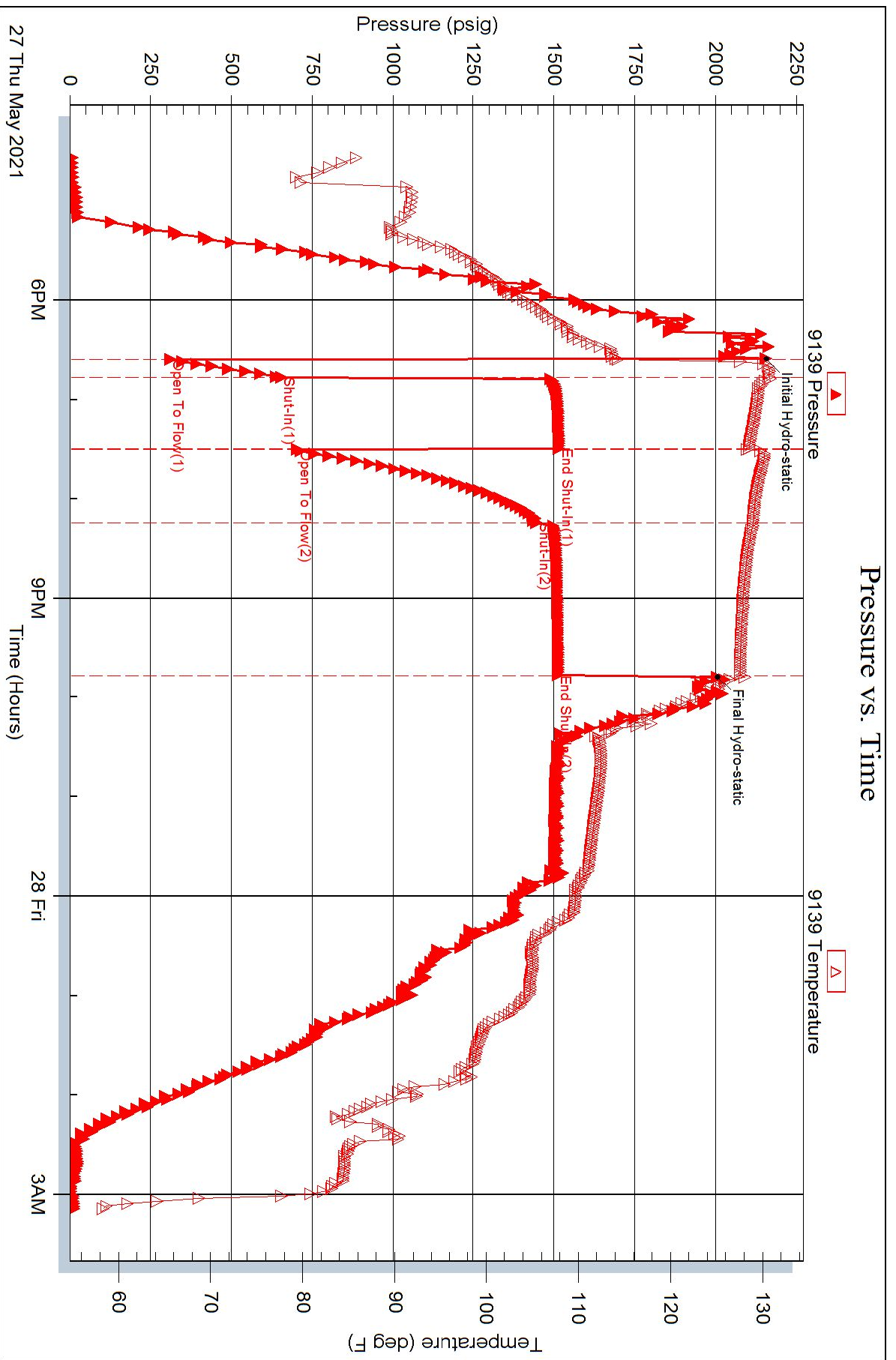
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







**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: 5/19/2021  
Invoice #: 0353106  
Lease Name: Doran Unit  
Well #: 1-16 (New)  
County: Stafford, Ks  
Job Number: WP1408  
District: Pratt

Date/Description	HRS/QTY	Rate	Total
Surface	0.000	0.000	0.00
A-Con	150.000	18.480	2,772.00
Cement Class A	200.000	14.960	2,992.00
Calcium Chloride	376.000	0.660	248.16
Cello Flake	49.000	1.540	75.46
Wooden plug 8 5/8"	1.000	132.000	132.00
Light Eq Mileage	25.000	1.760	44.00
Heavy Eq Mileage	25.000	3.520	88.00
Ton Mileage	411.000	1.320	542.52
Cement Pump Service	1.000	660.000	660.00
Cement Plug Container	1.000	220.000	220.00

*CEMENT FOR 8 5/8" CSW  
9208*

**Total** 7,774.14

**TERMS:** Net 30 days. Interest may be charged on past due invoice at rate of 1 1/2% 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!**





Customer	Edison Operating Company LLC	Lease & Well #	Doran Unit 1-16	Date	5/19/2021
Service District	Pratt Kansas	County & State	Stafford Kansas	Legals S/T/R	16 24s 14w
Job Type	Surface	<input checked="" type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> SWD	New Well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> No	Job #
Equipment #	Driver	Ticket #			

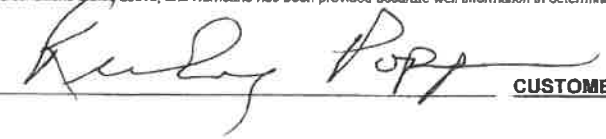
Job Safety Analysis - A Discussion of Hazards & Safety Procedures					
916	M Brungardt	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
176/521	G Mclamore	<input checked="" type="checkbox"/> H2S Monitor	<input type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
181/532	J Travino	<input checked="" type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input checked="" type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations
		<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input checked="" type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations
		<input type="checkbox"/> Hearing Protection	<input checked="" type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	
<b>Comments</b>					

Product/Service Code	Description	Unit of Measure	Quantity	Net Amount
cp026	A-Con	sack	150.00	\$2,772.00
cp010	Class A Cement	sack	200.00	\$2,992.00
cp100	Calcium Chloride	lb	376.00	\$248.16
cp120	Cello-flake	lb	49.00	\$75.46
te290	8 5/8" Wooden Plug	ea	1.00	\$132.00
m015	Light Equipment Mileage	mi	25.00	\$44.00
m010	Heavy Equipment Mileage	mi	25.00	\$88.00
m020	Ton Mileage	tm	411.00	\$542.52
c010	Cement Pump Service	ea	1.00	\$660.00
c050	Cement Plug Container	job	1.00	\$220.00

Customer Section: On the following scale how would you rate Hurricane Services Inc.?				Net:	\$7,774.14
Based on this job, how likely is it you would recommend HSI to a colleague?				Total Taxable \$	-
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				Tax Rate:	
Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely				State tax laws deem certain products and services used on new wells to be sales tax exempt.	Sale Tax:
				Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.	\$
				Total:	\$ 7,774.14

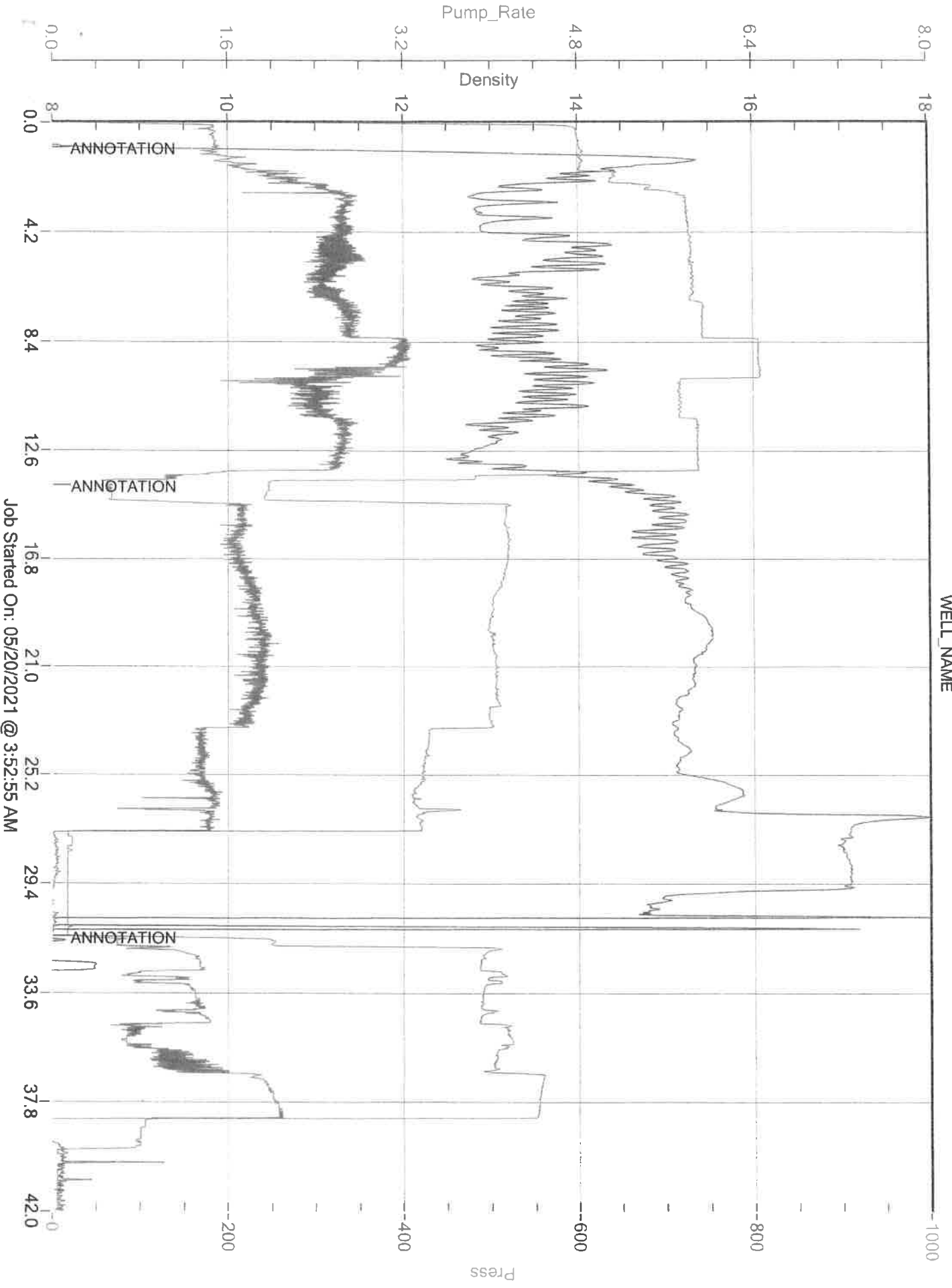
HSI Representative: *Mark Brungardt*

**TERMS:** Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

X  CUSTOMER AUTHORIZATION SIGNATURE



Edison  
WELL\_NAME



Job Started On: 05/20/2021 @ 3:52:55 AM



# 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: 6/6/2021  
Invoice #: 0353217  
Lease Name: Doran Unit  
Well #: 1-16 (New)  
County: Stafford, Ks  
Job Number: WP1438  
District: Pratt

Date/Description	HRS/QTY	Rate	Total
5/29/2021 Longstring	0.000	0.000	0.00
H-Long	175.000	24.640	4,312.00
H-Plug	75.000	11.440	858.00
KOL Seal	372.000	0.660	245.52
Cello Flake	63.000	1.540	97.02
5 1/2" Floatshoe-Flapper AFU	1.000	330.000	330.00
5 1/2" LD Plug & Baffle	1.000	308.000	308.00
5 1/2" Turbolizers	11.000	70.400	774.40
Light Eq Mileage	25.000	1.760	44.00
Heavy Eq Mileage	25.000	3.520	88.00
Cement Pump Service	1.000	1,320.000	1,320.00
Cement Plug Container	1.000	220.000	220.00
Cement Data Acquisition	1.000	220.000	220.00
Ton Mileage	285.000	1.320	376.20

**Total** 9,193.14

**TERMS:** Net 30 days. Interest may be charged on past due invoice at rate of 1 1/2% 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!**






Customer	Edison Operating Company LLC	Lease & Well #	Doran Unit 1=16	Date	5/29/2021
Service District	Pratt Kansas	County & State	Stafford Kansas	Legals S/T/R	16-24s-14w
Job Type	Long string	<input checked="" type="checkbox"/> PROD	<input type="checkbox"/> INJ	<input type="checkbox"/> SWD	New Well? <input checked="" type="checkbox"/> YES <input type="checkbox"/> No
Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures			
916	M Brungardt	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
176/521	K Ilesaty	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
181/532	R Gilley	<input checked="" type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input checked="" type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations
		<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input checked="" type="checkbox"/> Overhead Hazards	<input checked="" type="checkbox"/> Muster Point/Medical Locations
		<input type="checkbox"/> Hearing Protection	<input checked="" type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	
<b>Comments</b>					

Product/ Service Code	Description	Unit of Measure	Quantity	Net Amount
cp030	H-Long	sack	175.00	\$4,312.00
cp055	H-Plug	sack	75.00	\$858.00
cp110	Kol Seal	lb	372.00	\$245.52
cp120	Cello-flake	lb	63.00	\$97.02
fc145	5 1/2" Float Shoe - AFU Flapper Type	ea	1.00	\$330.00
fc170	5 1/2" Latch Down Plug & Baffle	ea	1.00	\$308.00
fc135	5 1/2" Turboizer	ea	11.00	\$774.40
mi015	Light Equipment Mileage	mi	25.00	\$44.00
mi010	heavy equipment mileage	mi	35.00	\$88.00
ec015	Cement Pump Service	ea	1.00	\$1,320.00
ec030	Cement Plug Container	job	1.00	\$220.00
ec035	Cement Data Acquisition	job	1.00	\$220.00
mi020	Ton Mileage	tm	255.00	\$376.20

Customer Section: On the following scale how would you rate Hurricane Services Inc.?

Total Taxable		\$ -	Tax Rate:	Net:	\$9,193.14
Based on this job, how likely is it you would recommend HSI to a colleague?				Sale Tax:	\$ -
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unlikely	1	2	3	4	5
	6	7	8	9	10
					Extremely Likely
				Total:	\$ 9,193.14
HSI Representative: <i>Mark Brungardt</i>					

**TERMS:** Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

x  **CUSTOMER AUTHORIZATION SIGNATURE**



**CEMENT TREATMENT REPORT**

Customer: Edison Operating Company LLC	Well: Doran Unit 1=16	Ticket: wp 1438
City, State: ST John Kansas	County: Stafford Kansas	Date: 5/29/2021
Field Rep: Rick Popp	S-T-R: 16-24s-14w	Service: Long string

Downhole Information	
Hole Size:	7 7/8 In
Hole Depth:	4420 ft
Casing Size:	5 1/2 In
Casing Depth:	4415 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	bbbls

Calculated Slurry - Lead	
Blend:	H-plug
Weight:	13.4 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.43 ft <sup>3</sup> / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	15.0 bbls
Total Sacks:	60 sx

Calculated Slurry - Tail	
Blend:	H-long
Weight:	15 ppg
Water / Sx:	6.0 gal / sx
Yield:	1.42 ft <sup>3</sup> / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	44.2 bbls
Total Sacks:	175 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
11:00 AM			-	-	on location job and safety
				-	spot trucks and rig up
				-	
				-	centralizers on 1,2,3,4,5,12,13,14,15,16,17
12:00p				-	start casing in the hole
2:40 PM				-	pipe on bottom and drop the ball
2:43 PM				-	rig up to circulate
				-	
2:45 PM				-	start circulating
				-	
3:50 PM				-	switch over to go down hole
3:55 PM			6.0		plug rat hole 20 sacks
4:00 PM					start cement down hole
	6.5	300.0	14.0		mix 55 sacks scavenger
	6.5	300.0	44.2		mix 175 sacks tail
4:20 PM					cement in
					wash pump and lines
4:25 PM					start displacement
	6.5	220.0	45.0		
	3.0	580.0	90.0		
4:45 PM		1,000.0	101.0		land plug .....went from 1000psi to 1500psi
					plug did hold

CREW		UNIT	SUMMARY		
Cementer:	M brungardt	916	Average Rate	Average Pressure	Total Fluid
Pump Operator:	K lesaly	176/521	5.6 bpm	480 psi	300 bbls
Bulk #1:	R Gilley	181/532			
Bulk #2:					

