

Confidentiality Requested:

☒ Yes ☐ NoKANSAS 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 # 7311
 Name: Shakespeare Oil Co., Inc.
 Address 1: 202 W MAIN ST
 Address 2: _____
 City: SALEM State: IL Zip: 62881 + 1519
 Contact Person: Don Williams
 Phone: (618) 548-1585
 CONTRACTOR: License # 5929
 Name: Duke Drilling Co., Inc.
 Wellsite Geologist: Kent Matson
 Purchaser: N/A

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 #: _____

07/03/2024 07/11/2024 07/12/2024
 Spud Date or Date Reached TD Completion Date or
 Recompletion Date Recompletion Date

API No.: 15-203-20391-00-00

Spot Description: _____

NE - SW-SW-SW Sec. 27 Twp. 16 S. R. 35 ☐ East ☒ West
595 Feet from ☐ North / ☒ South Line of Section
335 Feet from ☐ East / ☒ West Line of Section

Footages Calculated from Nearest Outside Section Corner:

☐ NE ☐ NW ☐ SE ☒ SWGPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84County: WichitaLease Name: WELLS Well #: 1-27

Field Name: _____

Producing Formation: NAElevation: Ground: 3198 Kelly Bushing: 3207Total Vertical Depth: 4836 Plug Back Total Depth: _____Amount of Surface Pipe Set and Cemented at: 236 FeetMultiple 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: 6500 ppm Fluid volume: 2500 bblsDewatering method used: Evaporated

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: 07/31/2024
☐ Confidential Release Date: 07/31/2026
☒ Wireline Log Received ☒ Drill Stem Tests Received
☒ Geologist Report / Mud Logs Received
☐ UIC Distribution
 ALT ☐ I ☒ II ☐ III Approved by: Kelsey Cox Date: 07/31/2024

Operator Name: Shakespeare Oil Co., Inc. Lease Name: WELLS Well #: 1-27
 Sec. 27 Twp. 16 S. R. 35 ☐ East ☒ West County: Wichita

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 (Attach Additional Sheets)	☒ Yes ☐ No	☒ Log	Formation (Top), Depth and Datum	☐ Sample
Samples Sent to Geological Survey	☒ Yes ☐ No	Name Attached	Top Attached	Datum Attached
Cores Taken	☐ Yes ☒ No			
Electric Log Run	☒ Yes ☐ No			
Geologist Report / Mud Logs	☒ Yes ☐ No			
List All E. Logs Run:				
Attached				

CASING RECORD ☒ New ☐ 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
Surface	12.25	8.625	23	236	Class A	170	2% gel, 3% cc

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate				
☐ Protect Casing	-			
☐ Plug Back TD				
☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (Explain) _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease (If vented, Submit ACO-18.)	METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. (Submit ACO-5) ☐ Commingled (Submit ACO-4)			PRODUCTION INTERVAL: Top Bottom	

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record (Amount and Kind of Material Used)
TUBING RECORD: Size: Set At: Packer At:					

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	WELLS 1-27
Doc ID	1788801

All Electric Logs Run

Neutron/Density
Dual Induction
Microlog
Sonic

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	WELLS 1-27
Doc ID	1788801

Tops

Name	Top	Datum
Base Anhydrite	2505	+702
Heebner	3994	-787
Lansing	4040	-833
Muncie Creek	4209	-1002
Stark Shale	4305	-1098
Hushpuckney	4351	-1144
Marmaton	4454	-1247
Pawnee	4529	-1322
L. Cherokee Shale	4611	-1404
Mississippian	4804	-1597

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	WELLS 1-27
Doc ID	1788801

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	236	Class A	170	2% gel, 3% cc



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300

Invoice

DATE	INVOICE #
7/3/2024	37083

BILL TO
Shakespeare Oil Company, Inc 202 West Main Street Salem, IL 62881

RECEIVED
JUL 11 2024

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-27	Wells	Wichita	Duke Drlg	Oil	Development	Surface Pipe	Gideon
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				80	Miles	8.00	640.00
576D-S	Pump Charge - <u>Shallow Surface (< 500 Ft.)</u>				1	Job	1,250.00	1,250.00
325	Standard Cement				170	Sacks	17.50	2,975.00T
279	Bentonite Gel				6	Sack(s)	30.00	180.00T
278	Calcium Chloride				8	Sack(s)	55.00	440.00T
290	D-Air				2	Gallon(s)	45.00	90.00T
276	Flocele				50	Lb(s)	4.00	200.00T
581D	Service Charge Cement				170	Sacks	2.00	340.00
583D	Drayage				668	Ton Miles	1.00	668.00
	Subtotal							6,783.00
	Sales Tax Wichita County						8.50%	330.23
We Appreciate Your Business!						Total	DW \$7,113.23	



Services, Inc.

CHARGE TO:

Shakespeare Oil

ADDRESS

CITY, STATE, ZIP CODE

TICKET

37083

PAGE 1 OF 1

SERVICE LOCATIONS

1. Ness City, KS

WELL/PROJECT NO.

1-27

LEASE

Wells

COUNTY/PARISH

Michita

STATE

KS

CITY

DATE

7/13/2009

OWNER

2. Ticket Type

3. Service

4. Well Type

5. Referral Location

6. Invoice Instructions

7. Well Category

8. Job Purpose

9. Rig Name/No.

10. Shipped Via

11. Delivered To

12. Well Permit No.

13. Well Location

14. Order No.

15. Price

16. Amount

17. Description

18. Quantity

19. Unit

20. Price

21. Amount

22. Quantity

23. Unit

24. Price

25. Amount

26. Quantity

27. Unit

28. Price

29. Amount

30. Quantity

31. Unit

32. Price

33. Amount

34. Quantity

35. Unit

36. Price

37. Amount

38. Quantity

39. Unit

40. Price

41. Amount

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

X

DATE SIGNED

7/13/2009

TIME SIGNED

7:15

BY A.M. P.M.

Customer Acceptance of Materials and Services

Swift Operator

Approval

REMIT PAYMENT TO:

SWIFT SERVICES, INC.

P.O. BOX 466

NESS CITY, KS 67560

785-798-2300

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

WE UNDERSTOOD AND MET YOUR NEEDS?

OUR SERVICE WAS PERFORMED WITHOUT DELAY?

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?

ARE YOU SATISFIED WITH OUR SERVICE?

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL

1

6783

TOTAL

1113

93

Thank You!

SWIFT



Services, Inc.

P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

DATE	INVOICE #
7/12/2024	37276

BILL TO

Shakespeare Oil Company, Inc
202 West Main Street
Salem, IL 62881

RECEIVED
JUL 22 2024

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-27	Wells	Wichita	Duke Drlg	Oil	Development	PTA	Jonathan
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				80	Miles	8.00	640.00
576D-P	Pump Charge - PTA				1	Job	1,250.00	1,250.00
290	D-Air				6	Gallon(s)	45.00	270.00T
328-4	60/40 Pozmix (4% Gel)				280	Sacks	14.00	3,920.00T
276	Flocele				70	Lb(s)	4.00	280.00T
581D	Service Charge Cement				280	Sacks	2.00	560.00
583D	Drayage				940	Ton Miles	1.00	940.00
	Subtotal							7,860.00
	Sales Tax Wichita County						8.50%	379.95
We Appreciate Your Business!							Total	\$8,239.95

DW



Services, Inc.

CHARGE TO: Shakespeare Oil

ADDRESS

CITY, STATE, ZIP CODE

TICKET 37276

PAGE 1 OF 1

SERVICE LOCATIONS

WELL/PROJECT NO.

LEASE

COUNTY/PARISH

STATE CITY

DATE

OWNER

1. Hays, KS

TICKET TYPE

CONTRACTOR

Wells

Wichita

KS

07/12/24

Same

2. Ness City, KS

☒ SERVICE

Duke Drilling

Development

Plug To Abandon

CT

Location

WELL LOCATION

3. Oil

WELL TYPE

WELL CATEGORY

JOB PURPOSE

WELL PERMIT NO.

WELL LOCATION

4. Drilling

INVOICE INSTRUCTIONS

DESCRIPTION

QTY. U/M

QTY. U/M

UNIT PRICE

AMOUNT

PRICE REFERENCE

SECONDARY REFERENCE/ PART NUMBER

LOC ACCT DF

QTY. U/M

QTY. U/M

UNIT PRICE

AMOUNT

575

1

MILEAGE # 110

80 mi

1 EA

1250.00

1250.00

576P

1

Pump Charge - PTA

6 gal

45.00

270.00

290

1

D-Air

1 EA

1250.00

1250.00

328-4

2

100/410 Pozmix (49% Gel)

280 SKS

70 lbs

14.00

3,420.00

276

2

Fluoride

70 lbs

4.00

280.00

581

2

Service Charge Cement

280 SKS

2.00

560.00

583

2

Drayage

940 T/M

1.00

940.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

X

DATE SIGNED

TIME SIGNED

A.M. P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.

P.O. BOX 466

NESS CITY, KS 67560

785-798-2300

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES

The customer hereby acknowledges receipt of the materials and services listed on this ticket.

ARE YOU SATISFIED WITH OUR SERVICE?

YES NO

TOTAL

8939.95

TAX

379.95

SWIFT OPERATOR

[Signature]

APPROVAL

Thank You!

SWIFT Services, Inc.

07/12/24

1

CUSTOMER
Shakespeare Bill

1-27

^EWells

OB TYPE
PTA

37274

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	2015							On location, set up trucks.
	2045							1 st Plug - 2500'
		4	10				600	Pump Water ahead
		4	13				600	Pump 50 SKS Cement
		4	3				400	Pump water behind
		8	20				400	Use Rig to Pump Mud
	2130							2 nd Plug - 1560'
		4	10				500	Pump Water ahead
		4	21				500	Pump 80 SKS Cement
		4	10				400	Pump water behind
	2215							3 rd Plug - 660'
		4	5					Pump water ahead
		4	13					Pump 50 SKS cement
		4	3					Pump water behind
	2245							4 th Plug - 300'
		4	5					Pump water ahead
		4	13					Pump 50 SKS Cement
		4	2					Pump wtr behind
	2305							5 th Plug - 60'
		1	5					Top off w/ 20 SKS
		2	8					Plug Rathole w/ 30 SKS
	2315							Wash up
								Back up
	2330							Job Complete
								Thanks Jon, Justin & Austin



DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co, Inc.**

202 W Main St
Salem, IL 62881

ATTN: Kent Matson

Wells #1-27

27-16s-35w Wichita,KS

Start Date: 2024.07.08 @ 17:20:00

End Date: 2024.07.09 @ 00:26:30

Job Ticket #: 71847 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2024.07.16 @ 12:36:17



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc.

27-16s-35w Wichita, KS

202 W Main St
Salem, IL 62881

Wells #1-27

Job Ticket: 71847

DST#: 1

ATTN: Kent Matson

Test Start: 2024.07.08 @ 17:20:00

GENERAL INFORMATION:

Formation: **LKC I-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:52:30

Time Test Ended: 00:26:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 78

Interval: **4240.00 ft (KB) To 4290.00 ft (KB) (TVD)**

Reference Elevations: 3207.00 ft (KB)

Total Depth: 4290.00 ft (KB) (TVD)

3198.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

Serial #: **8319** Inside

Press@RunDepth: 68.72 psig @ 4241.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2024.07.08

End Date:

2024.07.09

Last Calib.: 2024.07.09

Start Time: 17:20:05

End Time:

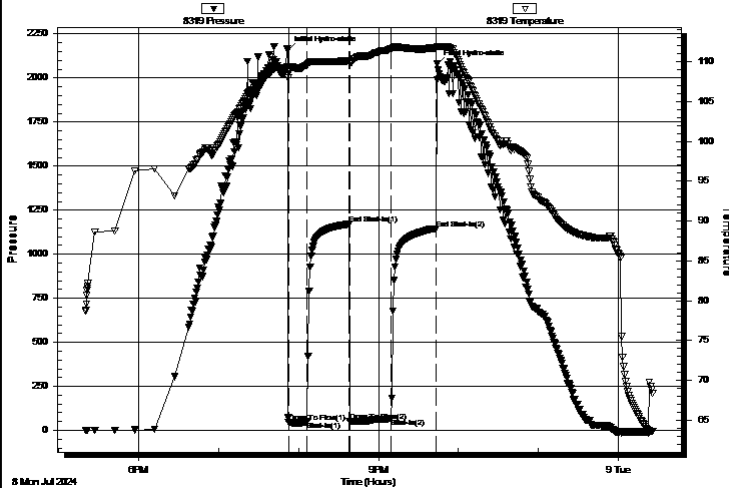
00:26:29

Time On Btm: 2024.07.08 @ 19:52:00

Time Off Btm: 2024.07.08 @ 21:44:15

TEST COMMENT: IF: 1 1/2" blow .
IS: No return.
FF: 1 3/4" blow .
FS: No return, 15-30-30-30

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2154.87	109.31	Initial Hydro-static
1	44.77	108.83	Open To Flow (1)
15	50.54	109.55	Shut-In(1)
46	1171.44	110.10	End Shut-In(1)
47	50.09	109.79	Open To Flow (2)
78	68.72	111.62	Shut-In(2)
111	1145.22	111.68	End Shut-In(2)
113	2078.29	111.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100m (oil spots on top)	0.91

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc.

27-16s-35w Wichita, KS

202 W Main St
Salem, IL 62881

Wells #1-27

Job Ticket: 71847

DST#: 1

ATTN: Kent Matson

Test Start: 2024.07.08 @ 17:20:00

GENERAL INFORMATION:

Formation: LKC I-J

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:52:30

Time Test Ended: 00:26:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 78

Interval: 4240.00 ft (KB) To 4290.00 ft (KB) (TVD)

Total Depth: 4290.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3207.00 ft (KB)

3198.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 8874 Outside

Press@RunDepth: psig @ 4241.00 ft (KB)

Start Date: 2024.07.08

End Date:

2024.07.09

Start Time: 17:20:05

End Time:

00:26:29

Capacity: 8000.00 psig

Last Calib.:

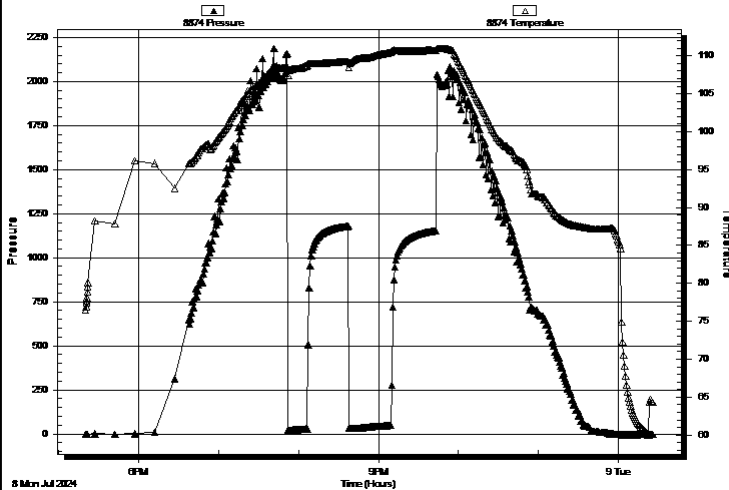
2024.07.09

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 1 1/2" blow .
IS: No return.
FF: 1 3/4" blow .
FS: No return, 15-30-30-30

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
-------------	-----------------	--------------	------------

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100m (oil spots on top)	0.91

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Shakespeare Oil Co, Inc.

27-16s-35w Wichita,KS

202 W Main St
Salem, IL 62881

Wells #1-27

Job Ticket: 71847

DST#: 1

ATTN: Kent Matson

Test Start: 2024.07.08 @ 17:20:00

Tool Information

Drill Pipe:	Length:	4242.00 ft	Diameter:	3.80 inches	Volume:	59.50 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:	60000.00 lb
					Total Volume:	59.50 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	32.00 ft					String Weight: Initial	48000.00 lb	
Depth to Top Packer:	4240.00 ft					Final	48000.00 lb	
Depth to Bottom Packer:	ft							
Interval between Packers:	50.00 ft							
Tool Length:	80.00 ft							
Number of Packers:	2		Diameter:	6.75 inches				
Tool Comments:								

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Change Over Sub	1.00			4211.00	
Shut In Tool	5.00			4216.00	
Hydraulic tool	5.00			4221.00	
Jars	5.00			4226.00	
EM Tool	3.00			4229.00	
Safety Joint	2.00			4231.00	
Packer	5.00			4236.00	30.00 Bottom Of Top Packer
Packer	4.00			4240.00	
Stubb	1.00			4241.00	
Recorder	0.00	8319	Inside	4241.00	
Recorder	0.00	8874	Outside	4241.00	
Perforations	13.00			4254.00	
Change Over Sub	1.00			4255.00	
Drill Pipe	31.00			4286.00	
Change Over Sub	1.00			4287.00	
Bullnose	3.00			4290.00	50.00 Bottom Packers & Anchor
Total Tool Length:	80.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc.

27-16s-35w Wichita,KS

202 W Main St
Salem, IL 62881

Wells #1-27

Job Ticket: 71847

DST#: 1

ATTN: Kent Matson

Test Start: 2024.07.08 @ 17:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 7.98 in³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

0 deg API

0 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud 100m (oil spots on top)	0.912

Total Length: 65.00 ft

Total Volume: 0.912 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8319

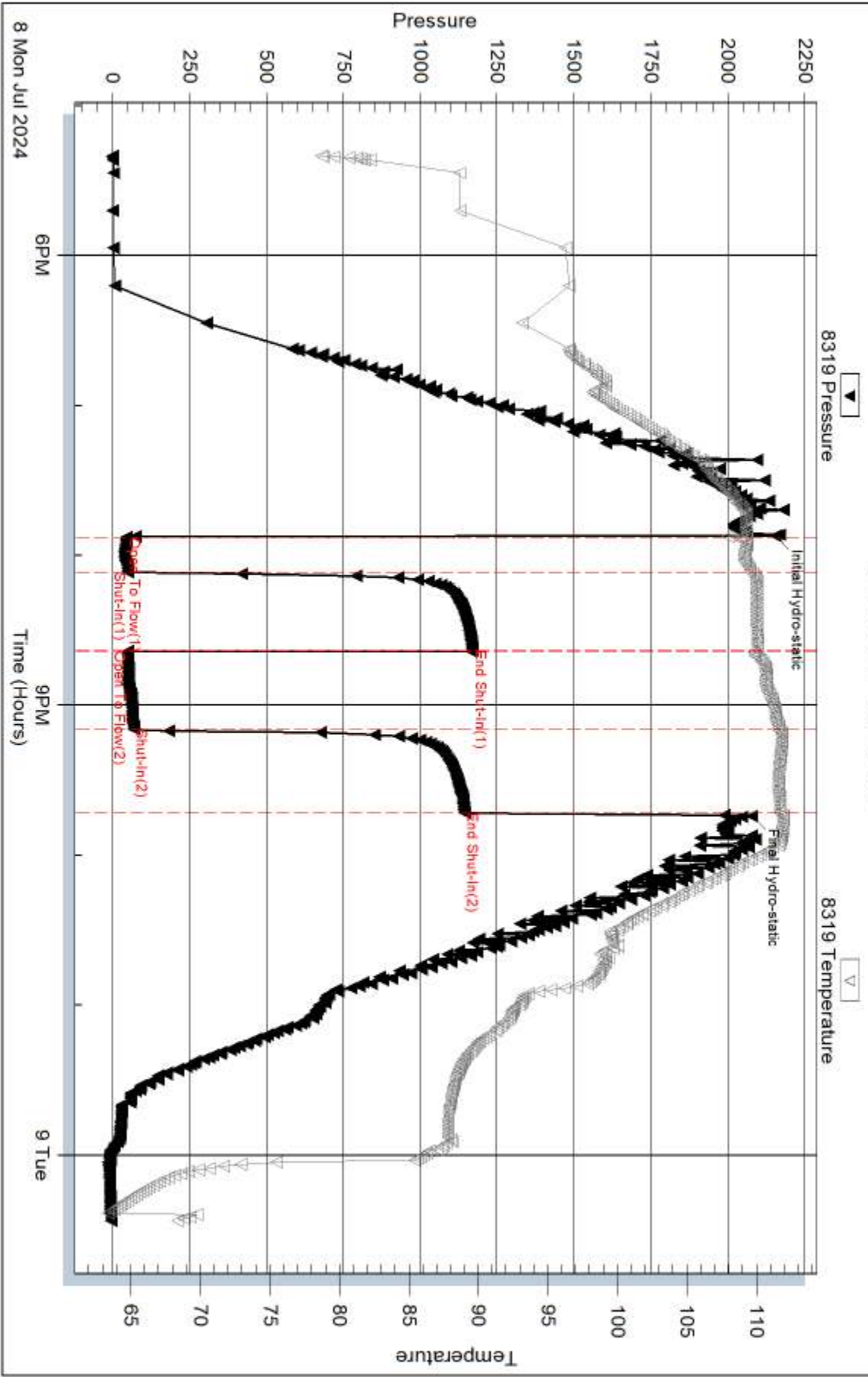
Inside

Shakespeare Oil Co., Inc.

Wells #1-27

DST Test Number: 1

Pressure vs. Time

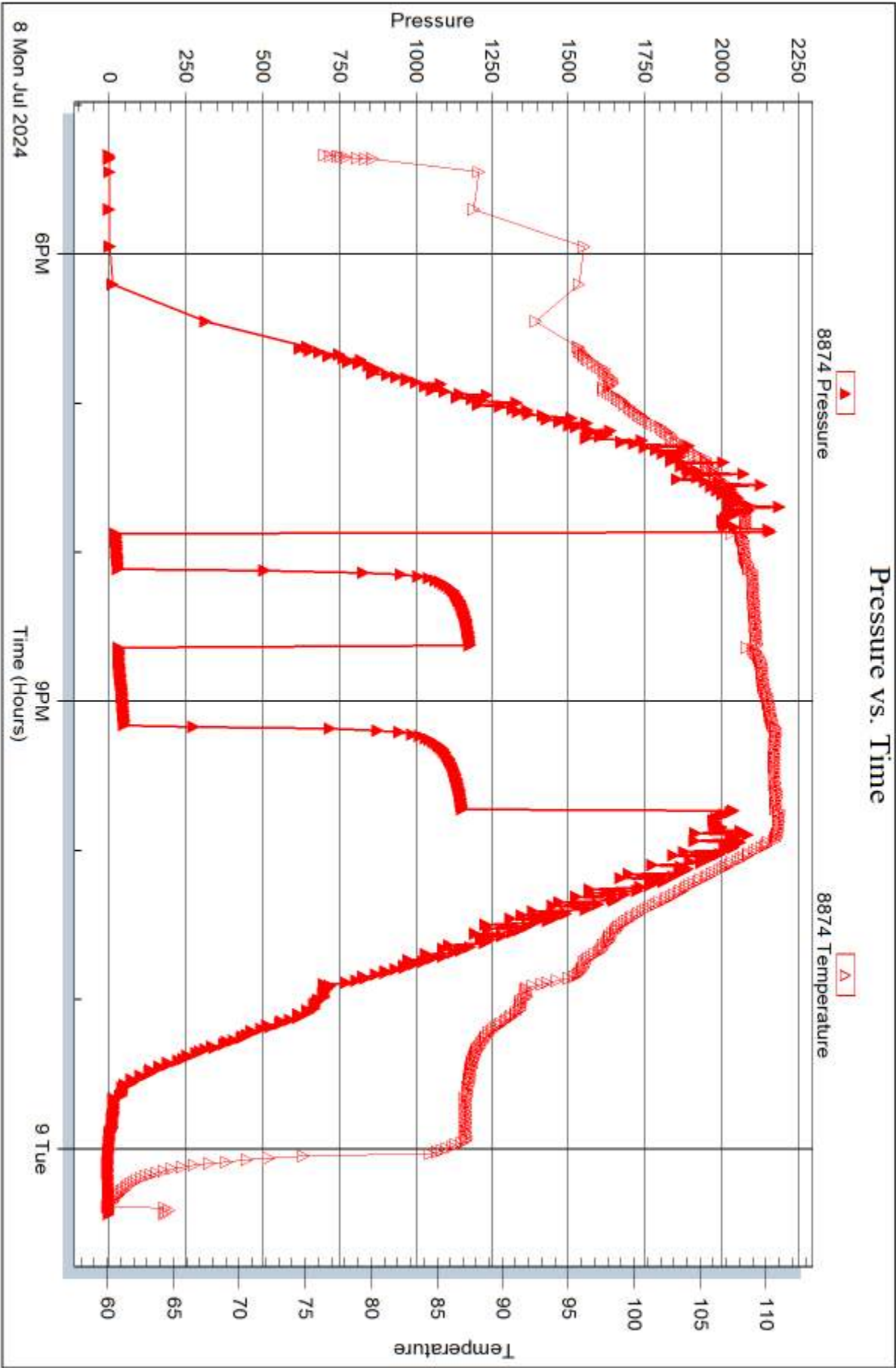


Serial #: 8874

Outside Shakespeare Oil Co, Inc.

Wells #1-27

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Shakespeare Oil Co, Inc.**

202 W main St
Salem, IL 62881

ATTN: Kent Matson

Wells #1-27

27-16s-35w Wichita,KS

Start Date: 2024.07.10 @ 06:32:00

End Date: 2024.07.10 @ 13:07:45

Job Ticket #: 71848 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2024.07.16 @ 12:35:16

Shakespeare Oil Co, Inc.

27-16s-35w Wichita,KS

Wells #1-27

DST # 2

Marmaton A-C

2024.07.10



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc.

27-16s-35w Wichita, KS

202 W main St
Salem, IL 62881

Wells #1-27

Job Ticket: 71848

DST#: 2

ATTN: Kent Matson

Test Start: 2024.07.10 @ 06:32:00

GENERAL INFORMATION:

Formation: **Marmaton A-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:56:15

Time Test Ended: 13:07:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: **4466.00 ft (KB) To 4510.00 ft (KB) (TVD)**

Total Depth: 4510.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3207.00 ft (KB)

3198.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: **8874** Outside

Press@RunDepth: 86.27 psig @ 4467.00 ft (KB)

Start Date: 2024.07.10

End Date:

2024.07.10

Start Time: 06:32:05

End Time:

13:07:44

Capacity: 8000.00 psig

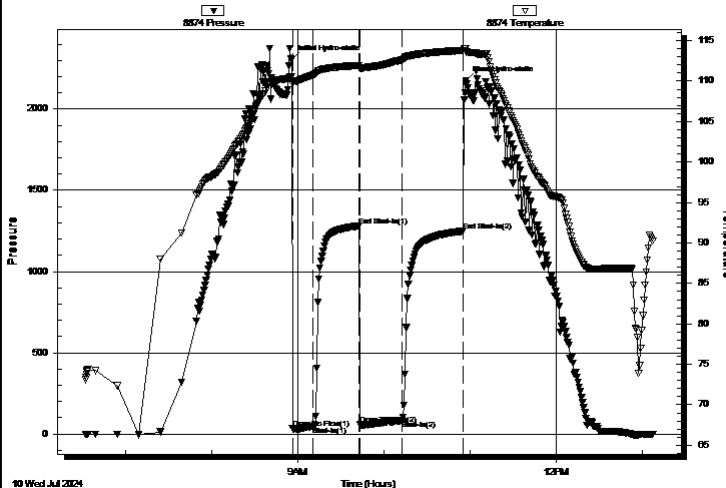
Last Calib.: 2024.07.10

Time On Btm: 2024.07.10 @ 08:55:45

Time Off Btm: 2024.07.10 @ 10:57:15

TEST COMMENT: IF: 3 3/4" blow .
IS: No return.
FF: 4 3/4" blow .
FS: No return. 15 30 30 40

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2302.30	110.56	Initial Hydro-static
1	34.70	109.71	Open To Flow (1)
15	47.73	110.75	Shut-In(1)
47	1280.67	111.95	End Shut-In(1)
48	56.53	111.59	Open To Flow (2)
77	86.27	112.64	Shut-In(2)
120	1249.35	113.80	End Shut-In(2)
122	2175.74	113.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	gocm 5g 15o 80m	1.82

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



Test Start: 2024.07.10 @ 06:32:00

KB to GR/CF: 9.00 ft



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Shakespeare Oil Co, Inc.

27-16s-35w Wichita,KS

202 W main St
Salem, IL 62881

Wells #1-27

Job Ticket: 71848

DST#: 2

ATTN: Kent Matson

Test Start: 2024.07.10 @ 06:32:00

Tool Information

Drill Pipe:	Length:	4458.00 ft	Diameter:	3.80 inches	Volume:	62.53 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:	60000.00 lb
					Total Volume:	62.53 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		22.00 ft					String Weight: Initial	48000.00 lb
Depth to Top Packer:		4466.00 ft					Final	49000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		44.00 ft						
Tool Length:		74.00 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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Change Over Sub	1.00		4437.00	
Shut In Tool	5.00		4442.00	
Hydraulic tool	5.00		4447.00	
Jars	5.00		4452.00	
EM Tool	3.00		4455.00	
Safety Joint	2.00		4457.00	
Packer	5.00		4462.00	30.00 Bottom Of Top Packer
Packer	4.00		4466.00	
Stubb	1.00		4467.00	
Recorder	0.00	8319 Inside	4467.00	
Recorder	0.00	8874 Outside	4467.00	
Perforations	7.00		4474.00	
Change Over Sub	1.00		4475.00	
Drill Pipe	31.00		4506.00	
Change Over Sub	1.00		4507.00	
Bullnose	3.00		4510.00	44.00 Bottom Packers & Anchor
Total Tool Length:	74.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc.

27-16s-35w Wichita,KS

202 W main St
Salem, IL 62881

Wells #1-27

Job Ticket: 71848

DST#: 2

ATTN: Kent Matson

Test Start: 2024.07.10 @ 06:32:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 7.98 in³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

0 deg API

0 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
130.00	gocm 5g 15o 80m	1.824

Total Length: 130.00 ft

Total Volume: 1.824 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

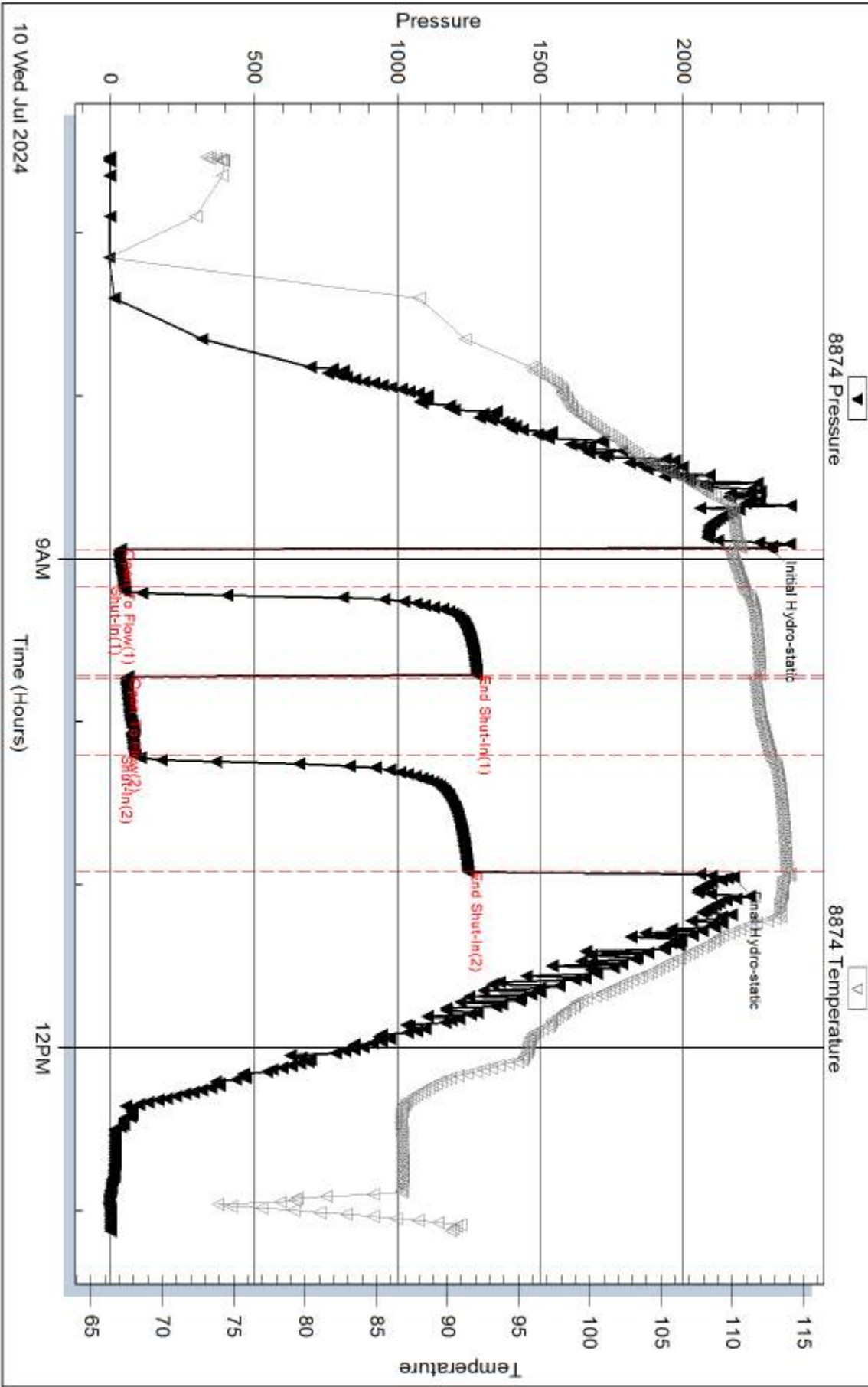
Serial #: 8874

Outside Shakespeare Oil Co, Inc.

Wells #1-27

DST Test Number: 2

Pressure vs. Time



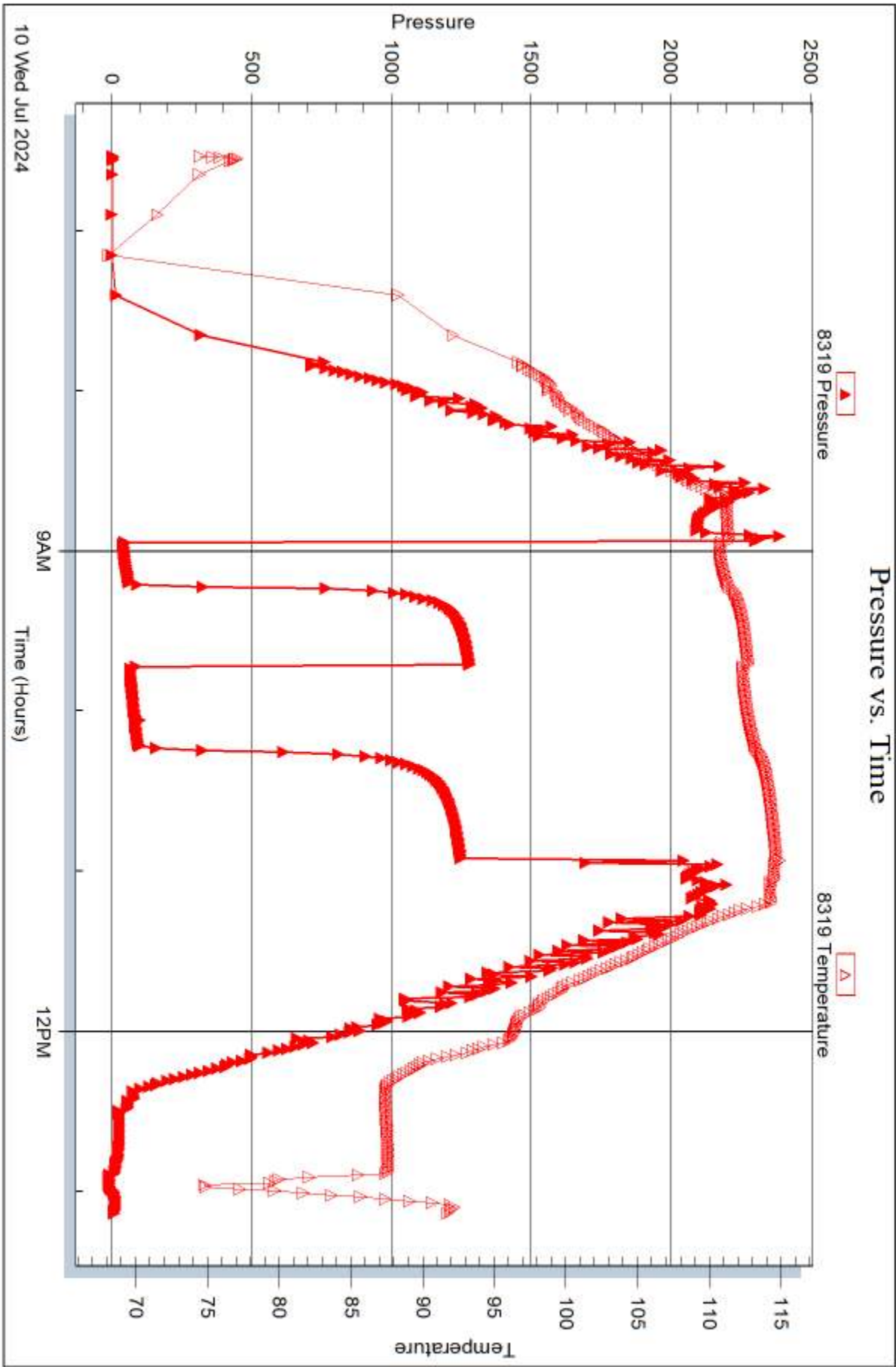
Serial #: 8319

Inside

Shakespeare Oil Co., Inc.

Wells #1-27

DST Test Number: 2





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 71847

Well Name & No. Wells #1-27 Test No. 1 Date 07/08/2024
Company Shakespeare Oil Co Elevation 3207 KB 3198 GL
Address Salem IL
Co. Rep / Geo Kent Matson Rig Duke #4
Location: Sec. 27 Twp 16S Rge. 35W Co. Wichita State KS

Interval Tested 4240 4290 Zone Tested Lansing F-J
Anchor Length 50 Drill Pipe Run 4242 Mud Wt. 9.1
Top Packer Depth 4235 Drill Collars Run — Vis 58
Bottom Packer Depth 4240 Wt. Pipe Run — WL 8.0
Total Depth 4290 Chlorides 3000 ppm System LCM 3#

Blow Description IF 1 1/2" blow
ISI No return.
FF 1 3/4" blow
FSL No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>mud</u>			<u>100</u>	
	<u>oil spots on top</u>				

Rec Total 65 BHT 112 Gravity — API RW — @ — °F Chlorides — ppm
Initial Hydrostatic 2154 ☒ Test 1950 ☐ Ruined Shale Packer
Initial Flow 44 to 50 ☒ Jars 300 ☐ Ruined Packer
Initial Shut-In 1171 ☐ Circ Sub ☐ Hotel
Final Flow 50 to 68 ☐ Hourly Standby ☒ EM Tool Successful yes
Final Shut-In 1145 ☒ Mileage 62 RT 108.50 ☐ Accessibility
Final Hydrostatic 2078 ☐ Sampler ☐ Gas Sample
T-On Location 1630 ☐ Straddle ☐ Oversized Hole
Initial Flow 15 T-Started 1720 ☐ Shale Packer ☐ Sub Total 0
Initial Shut-In 20 T-Open 19.53 ☐ Extra Packer ☐ Total 2358.50
Final Flow 30 T-Pulled 2140 ☐ Extra Recorder ☐ Tool Loaded @
Final Shut-In 30 T-Out 0026 07/09 ☐ Day Standby ☐ MP/DST Disc't

Comments

Approved By _____ Our Representative [Signature]

TriLOBITE TESTING Inc. shall not be liable for damage of any kind of property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 71848

Well Name & No. Wells #1-27 Test No. 2 Date 07/10/2024
 Company Shakespeare Oil Co, Inc Elevation _____ KB _____ GL _____
 Address Salem IL
 Co. Rep / Geo Kent Matson Rig Duke 4
 Location: Sec. 27 Twp 16s Rge. 35w Co. Wichita State Ks

Interval Tested 4466-4510 Zone Tested Marathon A-C
 Anchor Length 44' Drill Pipe Run 4458 Mud Wt. 9.1
 Top Packer Depth 4461 Drill Collars Run — Vis 56
 Bottom Packer Depth 4466 Wt. Pipe Run — WL 8.0
 Total Depth 4510 Chlorides 3600 ppm System LCM 34

Blow Description IF 3 3/4" blow
ISI No return.
FF 4 3/4" blow
FSI No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>130</u>	<u>60cm</u>	<u>5</u>	<u>15</u>	<u>80</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 130 BHT 114 Gravity — API RW — @ — F Chlorides — ppm

Initial Hydrostatic 2302 ☒ Test 1950 ☒ Ruined Shale Packer

Initial Flow 34 to 47 ☒ Jars 300 ☐ Ruined Packer

Initial Shut-In 1280 ☐ Circ Sub ☐ Hotel

Final Flow 56 to 96 ☐ Hourly Standby ☒ EM Tool Successful yes

Final Shut-In 1249 ☒ Mileage 108.50 + 108.50 ☐ Accessibility

Final Hydrostatic 2175 ☐ Sampler ☐ Gas Sample

T-On Location 0430 ☐ Straddle ☐ Oversized Hole

Initial Flow 15 T-Started 0632 ☒ Shale Packer 250 ☐ Sub Total 133.33 + 1600

Initial Shut-In 30 T-Open 0857 ☐ Extra Packer ☐ Total 4450.33

Final Flow 30 T-Pulled 1055 ☐ Extra Recorder ☒ Tool Loaded 1530 @ 07/12

Final Shut-In 40 T-Out 1308 ☒ Day Standby 1d 4h 2d 2.25h ☐ MP/DST Disc't

Comments _____

Approved By _____ Our Representative [Signature]

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

Well Name: WELLS
Well Id: #1-27
Location: 595' FSL, 335' FWL, SW/4 Sec 27-T16S-R35W, Wichita County, Kansas
License Number: API: 15-203-20391 **Region:** Wichita County
Spud Date: 07/03/2024 **Drilling Completed:** 07/12/2024
Surface Coordinates: NAD83
Lat: 38.628960; **Long:** -101.182551
Bottom Hole Vertical hole
Coordinates:
Ground Elevation (ft): 3198' **K.B. Elevation (ft):** 3207'
Logged Interval (ft): 3700' **To:** RTD **Total Depth (ft):** 4836'
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: SHAKESPEARE OIL COMPANY, INC.
Address: 202 West Main Street
Salem, IL 62881
618-548-1585

WELLSITE GEOLOGIST

Name: Kent R. Matson
Company: Matson Geological Services, LLC
Address: 33300 W. 15th Street S.
Garden Plain, Kansas 67050
316-644-1975; kent4m@hotmail.com



COMMENTS

Shakespeare Oil Company, Inc., Geologist: Toby Eck, 316-305-0572 (cell).

Contractor: Duke Drilling Company, Inc.: Rig #4.

Tool Pusher: Hector Torres, 620-682-3927 (cell).

Surface Casing: 8 5/8" set at 236' (KB) w/170sx cement.

Production Casing: Based on field observations of drill cuttings, DST results and electric log evaluation, production casing was not installed and the well was plugged and abandoned.

Mud by: Mud-Co/Service Mud, Inc.; Reid Atkins, 785-694-3741 (cell), Gary Schmidtberger, 785-259-2757 (cell).

DST's by: Trilobite Testing, Bradley Walter (Walt), 785-623-1407 (cell).

Logs by: ELI Wireline (DI w/GR, CND, Micro, Sonic), Jeff Luebbbers, 785-735-7112 (office).

RTD= 4836'

LTD= 4838'

FORMATION TOPS

FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
Heebner Shale	3995'	-788	3994'	-787
Lansing	4040'	-833	4040'	-833
Muncie Creek Shale	4210'	-1003	4209'	-1002
Stark Shale	4303'	-1096	4305'	-1098
Hushpuckney Shale	4350'	-1143	4351'	-1144
Base of KC	4393'	-1186	4393'	-1186
Marmaton	4481'	-1274	4483'	-1276
Pawnee	4527'	-1320	4529'	-1322
Myrick Station	4566'	-1359	4568'	-1361
Fort Scott	4584'	-1377	4584'	-1377
Cherokee Shale	4611'	-1404	4611'	-1404
Johnson	4672'	-1465	4670	-1463
Morrow	4743'	-1536	4745'	-1538
Mississippian	4803'	-1596	4804'	-1597
RTD	4836'	-1629		
LTD			4838'	-1631

ROCK TYPES

LITHOLOGY

	Anhy
	Cht
	Coal
	Congl
	Dol
	Gyp
	Lmst
	Salt
	Shale
	Shcol
	Shgy
	Sltst
	Ss
	Carb sh
	Dol
	Dtd
	Gry sh
	Sandy lms
	Shale
	Sltstn
	Shlyslts



Siltsh
Sdy dolo
Silty dolo
Shy dolo
Shaly ls

FOSSIL



Algae
Amph
Belm
Bioclst
Brach
Bryozoa
Cephal
Coral
Crin
Echin
Fish
Foram
Fossil
Gastro
Oolite



Ostra
Pelec
Pellet
Pisolite
Plant
Strom
Fuss
Oomold



MINERAL



Anhy
Arggrn
Arg
Bent
Bit
Breclrag
Calc
Carb
Chtdk
Chtlt
Dol
Feldspar



Ferrpel
Ferr
Glau
Gyp
Hvymin
Kaol
Marl
Minxl
Nodule
Phos
Pyr
Salt
Sandy
Silt
Sil
Sulphur
Tuff
Chlorite
Dol
Sand
Silty

Rate of Penetration (ROP) ROP (min/ft)		DEPTH	Lithology	CFS Point	Oil Shows	Geological Descriptions	Remarks
0	ROP (min/ft)	10	34			Morning Report Depth/Activity (7:00 am) 07/03/2024: MIRU, spud @ 01:45pm. 07/04: Set surface casing @ 236' KB. 07/05: Drilling @ 2312'. 07/06: Bit Trip @ 3684'. 07/07: Drilling @ 3997'. 07/08: Short Trip @ 4230'. 07/09: CFS @ 4330'. 07/10: TIH w/tool for DST #2 @ 4510'. 07/11: CFS @ 4622'. 07/12: CTCH after Short Trip. Reached 4836' TD @ 04:52am. Electric logged.	Mud-Co/Service Mud Inc. Check #1 @ 0' 07/03/24, predrilling instructions. Mud-Co/Service Mud Inc. Check #2 @ 2325' 07/05/24 06:30am wt vis pH chl 9.7 29 7 61000 Filt LCM n/c 2
			3500			Anhydrite: Drill Time (ROP) Top @ 2485' (+722), Base @ 2504' (+703). E-Log Top @ 2486' (+721), Base @ 2506' (+701). ROP Data begins @ 3500' on 07/05/2024. Recorded from drillers geolograph record, and geologist's auto-reader switch on geolograph.	Displaced drilling mud @ 3528'. Bit Trip @ 3684' conn; PDC bit was replaced with a Tricone bit. Pipe strap TOH for Bit Trip @ 3684' was 1.33' long to the board.
			3550				Mud-Co/Service Mud Inc. Check #3 @ 3684' 07/06/24 07:00am wt vis pH chl 8.8 61 11 4000 Filt LCM 7.2 4
			3550				Mud-Co/Service Mud Inc. Check #4 @ 4026' 07/07/24 08:10am wt vis pH chl 9.0 68 11 4100 Filt LCM 6.4 4
			3600				Mud-Co/Service Mud Inc. Check #5 @ 4262' 07/08/24 10:30am wt vis pH chl 9.1 68 11 5000 Filt LCM 8.0 3
			3600				Mud-Co/Service Mud Inc. Check #6 @ 4338' 07/09/24 08:00am wt vis pH chl 9.2 67 10 6200 Filt LCM 9.6 2
			3600				Mud-Co/Service Mud Inc. Check #7 @ 4510' 07/10/24 07:30am wt vis pH chl 9.2 63 10.5 5600 Filt LCM 6.0 2
			3600				Mud-Co/Service Mud Inc. Check #8 @ 4622' 07/11/24 07:15am wt vis pH chl 9.4 50 10.5 5600 Filt LCM 5.8 2
			3600				Mud-Co/Service Mud Inc. Check #9 @ 4836' 07/12/24 07:15am wt vis pH chl

Survey Record

Deg @ Ft

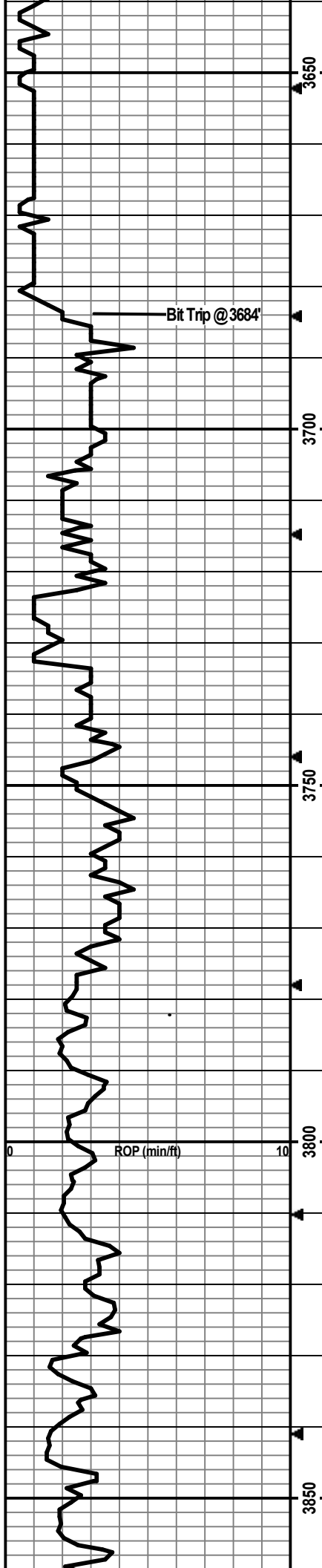
0.50 @ 236'

0.50 @ 2062'

0.75 @ 3684'

0.50 @ 4290'

0.75 @ 4836'



Geologist on location @ 3754', 07/06/2024.

Formation tops and lithologies have been adjusted to correlate to the electric log.

Oil Shows indicator: Left Block 0-10 tray pcs w/show, Middle Block 10-20 tray pcs w/show, Right Block 20+ tray pcs w/show.

NOTE: RED TEXT INDICATES THE PRESENCE OF OIL.

Drill cutting samples at 10' intervals start at 3800'.

SH: lt-dk gry, some vry silty/sndy, carb, soft-firm.

LS: wht/cm/lt bm/lt gry, micro-m xtal, some vry silty/sndy/arg, chalky, foss frags, no vis por, no odor, ns.

SH: lt-dk gry/dk bm/red-bm, some vry silty/sndy, carb, soft-firm.

LS: cm/lt bm/lt-dk gry/dk gry ool, vf-m xtal, vry silty/sndy/arg, chalky, foss frags/dense dk gry ool, no vis por, no odor, ns.

SH: lt-dk gry, some vry silty/sndy, carb, soft-firm. SS: lt gry/lt bm, vf-f, sr-wr, arg, carb matrix, friable, no odor, ns.

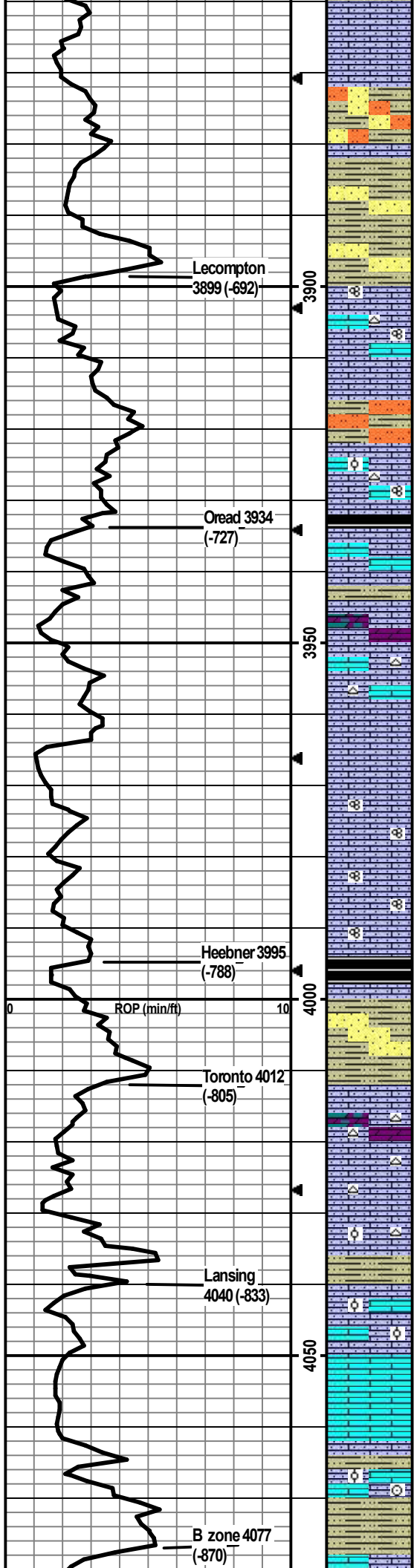
LS: cm/lt bm/lt-dk gry, vf-m xtal, vry silty/sndy/arg, chalky, foss frags, no vis por, no odor, ns.

LS: cm/lt bm, vf-m xtal, chalky, vry silty/sndy, foss frags, vf-f in-xtal por, no odor, ns.

LS: cm/lt bm/lt gry, vf-m xtal, chalky, vry silty/sndy, wht tripolitic chert, foss frags, vf-f in-xtal por, no odor, ns.

LS: same as above, no odor, ns.

SH: m-dk gry, some silty, carb, soft-firm.



LS: cm/lt bm, vf-f xtal, vry silty/sndy, chalky, foss frags/fusln, vf-f in-xtal por, no odor, ns.
SH: lt-dk gry/dk bm, vry silty/sndy, carb, soft.

SH: lt-dk gry/blk, vry silty/sndy, carb, soft-firm. Some Sltstn/SS, lt gry, vf-f, sr-wr, arg, carb, friable, no odor, ns.

LS: cm/lt-m bm/lt-m gry-bm, vf-m, silty/sndy/arg, chalky, foss frags, vf-f in-xtal por, no odor, ns.
SH: lt-dk gry/green-gry/lt-m red-bm, vry silty/sndy, carb, soft-firm. SS: lt-m red-bm, vf-f, sr-wr, arg, carb, friable, no odor, ns.

LS: cm/lt gry-bm, vf-m xtal, some silty/sndy, chalky, min wht chert, foss frags/fusln, some vf-f in-xtal por, no odor, ns.

LS: cm/lt bm, vf-m xtal, silty/sndy, chalky, foss frags, vf-f in-xtal por, no odor, ns.
SH: lt-dk gry/dk red-bm, vry silty/sndy, carb, soft-firm. Sltstn: lt gry/lt bm, vf, arg, carb, friable, no odor, ns.

LS: cm/lt bm/lt gry, vf-m xtal, some silty/sndy, chalky, min wht chert, foss frags/min dense fn ool/fusln, vf-f in-xtal por, no odor, ns.

LS: cm/min lt bm/min lt gry, vf-m xtal, some silty, some chalky, foss frags, some vf-f in-xtal por, no odor, ns.

LS: cm/lt bm/lt gry, vf-m xtal, chalky, silty/sndy, some dolomitic, foss frags, vf-f in-xtal por, no odor, ns.

LS: cm/lt bm, micro-m xtal, chalky, some silty/sndy, cm chert, foss frags/fusln, some vf-f in-xtal por, no odor, ns.

LS: cm/lt bm/lt gry, vf-m xtal, some chalky, silty/sndy, foss frags, vf-f in-xtal por, no odor, ns.

LS: cm/lt gry/dk gry inclus, vf-m xtal, vry silty/sndy, chalky, foss frags/fusln, vf-f in-xtal w/med in-fusln por, no odor, ns.

LS: cm/lt bm/min lt gry, vf-m xtal w/min crs, vry silty/sndy, chalky, foss frags/fusln, mostly no vis por w/min med in-fusln por, no odor, ns.

SH: dk gry/blk, carb, firm, fissile.

SH: lt-dk gry/blk, some vry silty, carb, soft-firm. SS: lt gry/lt red-bm, vf-f, arg, carb matrix, friable, no odor, ns.

LS: wht/cm/lt bm, vf-m xtal, min chalky, silty/sndy, wht/cm chert, some dolomitic, foss frags, min vf-f in-xtal por, no odor, ns.

LS: wht/cm/lt bm, vf-m xtal, chalky, silty/sndy, wht/cm foss chert, foss frags, min vf-f in-xtal por, no odor, ns.

LS: cm/lt bm/lt gry-bm, vf-m xtal, chalky, mostly silty/sndy, wht/cm chert, foss frags/ool, some vf-f in-xtal por, no odor, ns.

SH: m-dk gry/red-bm, some vry silty, carb, soft-firm.

LS: wht/cm/lt bm, micro-m xtal, mostly silty/sndy, foss frags/ool, some vf-f in-xtal/in-ool por, no odor, ns.

LS: cm/min dk bm SH filled frac, micro-m xtal, foss frags, no vis por, no odor, ns.

LS: cm/min lt bm/min lt gry-bm, micro-m xtal/some 2ndry xtal, min chalky, min silty/sndy, min foss frags/ool/crin, min vf-m in-xtal por, no odor, ns.

SH: m-dk gry/m-dk red-bm, some silty, carb, soft-firm. Min SS: red-bm, vf-f, arg, carb, friable, no odor, ns.

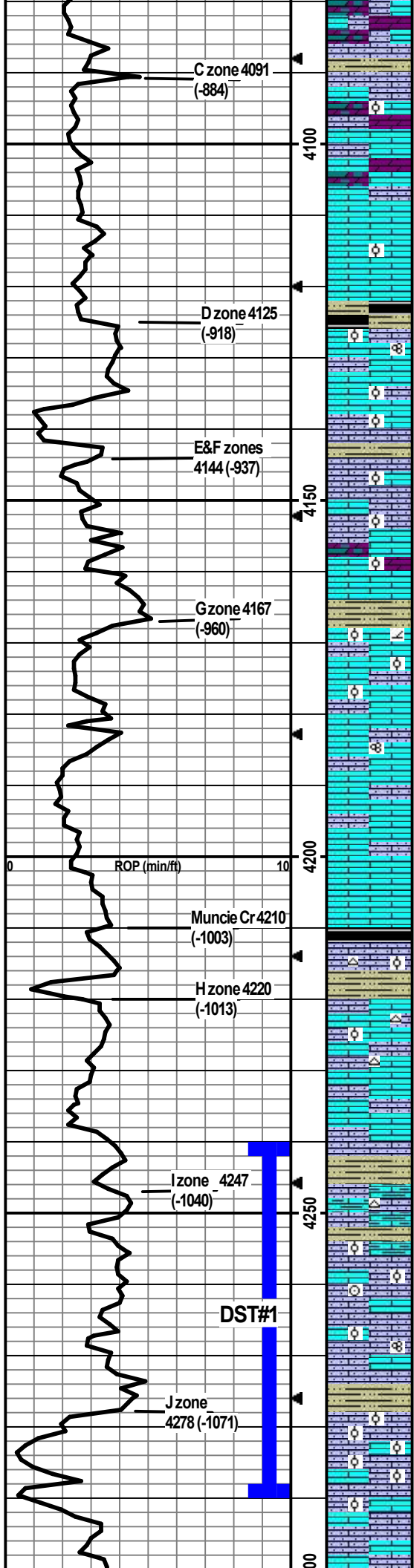
LS: wht/cm/lt bm, vf-m xtal, min chalky, min silty/sndy, wht/cm chert, some dolomitic, foss frags, min vf-f in-xtal por, no odor, ns.

CFS @ 38983'
Stop/30"/60"

CFS @ 3940'
Stop/30"/60"

CFS @ 4030'
Stop/30"/60"

CFS @ 4050'
Stop/30"/60"



C zone 4091
(-884)

4100

D zone 4125
(-918)

4150

E&F zones
4144 (-937)

G zone 4167
(-960)

4200

Muncie Cr 4210
(-1003)

H zone 4220
(-1013)

4250

I zone 4247
(-1040)

DST#1

J zone 4278
(-1071)

4300

LS: wht/cmt, vf-m xtal, min chalky, min silty/sndy, silty/sucrosic cm dolo, min foss frags, mostly vf-f w/min med dolo in-xtal por, no odor, ns.

LS: cm, micro-m xtal/some 2ndry xtals, some chalky, min silty/sndy, min dolo, min foss frags/fn dense ool, min vf-m in-xtal por, no odor, ns.

LS: cm/min lt gry, vf-m xtal/some 2ndry xtals, some chalky, some sndy/grainy, some slt dolo, min foss frags, some vf in-xtal por, no odor, ns.

LS: cm/min lt gry, vf-m xtal/some 2ndry xtals, some chalky, foss frags/fn densit ool, no vis por, no odor, ns.

SH: dk gry/blk, slt silty, carb, firm.

LS: cm/lt brn/lt gry, micro-m xtal, min silty/sndy, some chalky, foss frags/min fusn/min dense fn ool, min vf-f in-xtal por, no odor, ns.

LS: cm/lt brn/min lt gry/med gry inclus, micro-m xtal, some chalky, some silty/sndy, foss frags/min dense ool, 6 pcs w/sfo, ppt-m in-xtal por, dul yel fluor, slt odor, sfo. Few pcs in 60min w/thick oil.

LS: cm/lt brn/lt gry, vf-m xtal, some chalky, some silty/sndy, foss frags/dense ool, some vf-f in-xtal por, no odor, ns.

LS: cm/min lt brn/min lt gry, vf-m xtal, some chalky, some silty/sndy, foss frags/min dense ool, some vf-f in-xtal por, 1 pcs w/staining w/ppt-vf in-xtal por, crush cut, no odor, slt sfo.

LS: wht/cm/min lt brn, vf-f xtal, some chalky, some dolomitic, min foss frags/min ool, some vf-f in-xtal por, no odor, ns.

LS: wht/cm, vf-m xtal, some chalky, some dolomitic, min foss frags/ool, min ppt-vf in-xtal por, no odor, ns.

LS: wht/cm/min lt gry, micro-m xtal, some silty/sndy, foss frags/ool, some vf-f in-xtal w/min m-crs ool-castic por, no odor, ns.

LS: wht/cm/min lt gry, micro-m xtal, some silty/sndy, some chalky, min foss frags/fusln, min vf-m in-xtal por, no odor, ns.

LS: wht/cm/lt gry, micro-m xtal, some chalky, some silty/sndy, min vf-crs in-xtal por, no odor, ns.

LS: cm/lt gry, micro-m xtal, some chalky, no vis por, no odor, ns.

SH: lt-dk gry/green-gry, some silty, carb, soft-firm.

LS: cm/lt brn/lt gry/lt dk gry inclus, micro-m xtal, chalky, some silty, cm chert, foss frags/ool, some vf-f in-xtal por, no odor, ns.

LS: cm/lt brn/lt gry, micro-m xtal, some chalky, some silty/sndy, wht/cm chert, foss frags/min ool, min vf-f in-xtal por, no odor, ns.

LS: cm/lt brn/lt gry, micro-m xtal, some chalky, some silty, foss frags, no vis por, no odor, ns.

SH: lt-dk gry/blk/min dk brn, some vry silty, carb, soft-firm.

LS: cm/lt brn, micro-m xtal, some chalky, some silty/arg, min wht chert, foss frags, 2 pcs w/sfo, vf-f in-xtal por, no fluor, no odor, slt sfo.

LS: cm/lt brn/lt gry, micro-m xtal, chalky, some silty/arg, foss frags/ool, no vis por, no odor, ns.

LS: cm/lt brn, micro-m xtal, chalky, some silty/sndy, foss frags/ool/crin/fusln, no vis por, no odor, ns.

SH: lt-dk gry/blk/lt dk brn/gry-green, some vry silty, carb, soft-firm.

LS: cm/lt brn/lt gry, micro-m xtal, silty/sndy, chalky, foss frags/ool, no vis por, no odor, ns.

LS: cm/min lt brn/min lt gry, micro-m xtal, some silty, chalky, abund ool, 11 pcs w/mostly staining w/some fo, crs-vug oo-castic por, dul yel fluor, stg odor, sfo.

LS: wht/cm/lt brn/gry mottling, micro-m xtal, some chalky, some silty, foss frags/ool, min crs oo-castic por, no odor, ns.

CFS @ 4085'
Stop/30"/60"

CFS @ 4100'
Stop/30"/60"

CFS @ 4138'
Stop/30"/60"

CFS @ 4155'
Stop/30"/60"

Did 18 std Short Trip at 4230', then CTCH 1 Hr. before DST #1.

CFS @ 4230'
Stop/30"/60"

DST1) 4240-4290

Lansing I and

J-zones

15/30/30/30

1st) Blow built to 1.5"; No BB.

2nd) Blow built to 1.75"; No BB.

IFP 45-55#

ISIP 1171#

FFP 50-69#

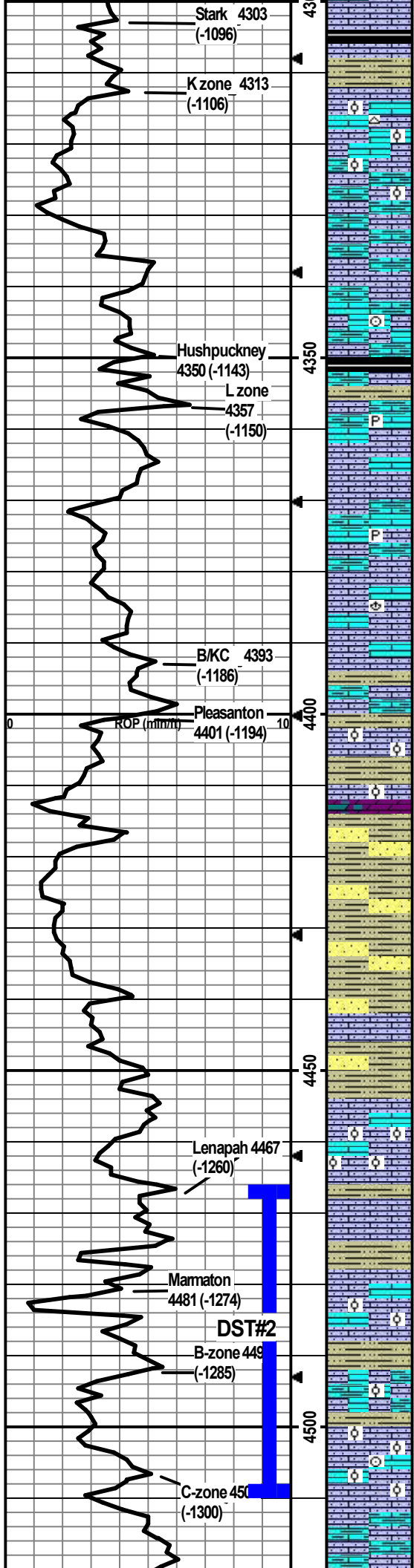
FSIP 1145#

HP 2155-2078#

Recvd: 65' Mud w/oil spots (100%/M).

CFS @ 4270'
Stop/30"/60"

CFS @ 4290'
Stop/30"/60"



SH: lt-dk gry/blk/red-bm/gry-green, some vry silty/sndy, slt carb, soft-firm.

LS: wht/cml/lt gry, micro-m xtal, some arg/silty, chalky, min wht chert, foss frags/ool, no vis por, no odor, ns.

LS: wht/cml/lt bm/lt gry, vf-m xtal, some silty/sndy/arg, smpl vry chalky, foss frags/ool, vf-m in-xtal por/crs-vug oo-castic por, no odor, ns.

LS: wht/cml/lt gry, micro-m xtal, smpl vry chalky, silty/sndy/arg, foss frags, no vis por, no odor, ns.

LS: cm/lt bm/gry mottling, micro-m w/crs 2ndry xtal, some silty/sndy/arg, some chalky, foss frags/crin, no vis por, no odor, ns.

SH: blk, slt silty, slt carb, firm.

LS: wht/cml/lt-m bm/gry mottling, vf-m xtal, some silty/arg, chalky, min pyrite, foss frags, no vis por, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal, some vry silty/sndy, chalky, foss frags, no vis por, no odor, ns.

LS: cm/lt-dk bm/gry mottling/dk bm mottling, micro-m xtal, vry chalky, some silty/sndy/arg, min pyrite, foss frags, no vis por, no odor, ns.

LS: wht/cml/lt bm/lt gry, vf-m xtal, some vry sndy, chalky, foss frags/brac, no vis por, no odor, ns. (SH flood).

LS: cm/lt bm/lt gry, some very silty/arg, vry chalky, foss frags, no vis por, no odor, ns. (SH flood).

LS: cm/lt-dk bm/lt-m gry-bm/gry inclus, micro-m xtal, chalky, silty/sndy/arg, foss frags/ool, no vis por, no odor, ns.

SH: m-dk gry/bm, vry silty, carb, soft.

LS: wht/cml/lt gry/lt bm, vf-m xtal, vry sndy, chalky, foss frags/ool, no vis por, no odor, ns.
DOL: lt bm/lt gry/dk gry inclus, vf-f, sndy, sucrosic, vf-m in-xtal por, no odor, ns.

SH: lt-dk gry/dk maroon/red-bm, some silty, slt carb, some pyritic, soft-firm.
SS: lt gry/lt bm, vf-f, sr-wr, pred qtz, arg, some pyritic, friable, no odor, ns.

Cont. SH/SS as above, no odor, ns.

SH: lt-dk gry, vry silty/sndy, carb, soft. SS: lt gry, vf-f, sr-wr, pred qtz, arg, friable, no odor, ns.

SH: lt-dk gry/gry-green/red-bm, some vry silty/sndy, carb, soft-firm.

LS: wht/cml/lt gry, micro-m xtal, some silty/sndy, some vry chalky, foss frags/abund ool, no vis por, no odor, ns.

SH: lt-dk gry, vry silty, carb, soft.

LS: wht/cml/lt bm, micro-m xtal, some silty/sndy, chalky, foss frags/ool, some vf-f in-xtal por, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal, some vry silty/sndy/arg, smpl vry chalky, foss frags/ool, no vis por, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal, smpl vry chalky, some silty/sndy, foss frags/min crin/abund ool, 19 pcs w/sfo, vf-m in-ool por, dul yel fluor, slt odor, sfo.

LS: cm/lt-m bm/lt-m bm-gry, some vry silty/sndy/arg, some chalky, foss frags, no vis por, no odor, ns. (1 ool pce w/sfo assume from above). (Smpl SH flood).

CFS @ 4330'
Stop/30"/60"

CFS @ 4380'
Stop/30"/60"

Did 9 std Short Trip
at 4510', then
CTCH 1 Hr. before
DST#2.

DST2) 4466-4510
Marmaton A, B and
C-zones

15/30/30/40
1st) Blow built to 3.75"; No
BB.
2nd) Blow built to 4.75"; No
BB.
IFP 35-48#
ISIP 1281#
FFP 57-86#
FSIP 1249#
HP 2302-2176#
Recvd: 130' GOM (5%G,
15%Q, 80%M).

CFS @ 4490'
Stop/30"/60"

CFS @ 4497'
Stop/30"/60"

CFS @ 4510'
Stop/30"/60"

Cleaned screen on

Pawnee 4527
(-1320)

Myrick Station
4566 (-1359)

Ft. Scott 4584
(-1377)

Cherokee
4611 (-1404)

Johnson 4672
(-1465)

SH: dk gry/blk, slt carb, firm.

LS: cm/lt bm, micro-m xtal, some silty/arg, some chalky, foss frags/min dense ool/min coral, no vis por, no odor, 1 pcs w/staining, fo on break, yel stream cut, slt sfo. (Cont SH flood).

LS: cm/lt-m bm/min lt-dk gry, micro-m xtal, some silty/arg, chalky, foss min frags/crin/ool, 3 pcs w/sfo w/f-crs in-xtal/in-ool por, no fluor, no odor, slt sfo. (Cont SH flood).

LS: cm/lt bm, micro-m xtal, some chalky, wht/cm/lt bm foss chert, foss frags/fusln, no vis por, no odor, ns.

LS: cm/lt-m bm/lt-m gry, micro-m xtal, some silty/sndy/arg, chalky, wht/cm/gry/bm foss chert, foss frags/min crin, no vis por, no odor, ns.

SH: dk gry/blk, some silty, slt carb, fissile, firm.

LS: cm/lt-m bm/lt-m gry, micro-crs xtal, some silty/arg, chalky, wht/lt-m gry/lt-m bm foss chert, foss frags/ool/fusln/brac, no vis por, no odor, ns.

LS: cm/lt-m bm/lt gry, micro-m xtal, some chalky, some silty/sndy/arg, wht/lt-m bm/cm/gry foss/ool chert, foss frags/abund ool, no vis por, no odor, ns.

SH: lt-dk gry/blk, some silty, slt carb, soft-firm.

LS: cm/lt-m bm/lt-m gry, micro-m xtal, chalky, some silty/arg, wht/lt gry/lt bm foss chert, min pyrite, foss frags/ool, no vis por, no odor, ns.

LS: cm/lt bm/lt-m gry, micro-m xtal, some vry silty/arg, chalky, wht/cm/bm foss chert, foss frags/fusln, no vis por, no odor, ns.

LS: same as above, no odor, ns.

SH: m-dk gry/blk/dk bm mottling, silty, some pyrite, carb, soft-firm.

LS: wht/cm/lt-dk bm/lt-dk gry-bm, micro-m xtal, some silty/arg, chalky, min wht/cm chert, foss frags/crin/fusln/ool, no vis por, no odor, ns.

SH: lt-dk gry/blk, some silty, slt carb, firm.

LS: cm/lt-m bm/lt-m gry, micro-m xtal, min silty/arg, min chalky, min bm chert, foss frags, no vis por, no odor, ns.

SH: m-dk gry/blk, some vry silty, carb, soft-firm.

LS: cm/lt-dk bm/lt-m gry, micro-m xtal, some vry silty/arg, chalky, foss frags/ool, no vis por, no odor, ns.

SH: lt-dk gry/dk brn/gry-green, some vry silty, carb, soft-firm.

LS: cm/lt-m gry-bm, micro-m xtal, some vry silty/sndy/arg, bm chert, foss frags/coral, no vis por, no odor, ns.

LS: cm/lt-dk bm, micro-m xtal, some chalky, some vry silty/arg, min brn chert, foss frags/ool/brac, no vis por, no odor, ns.

SH: lt-dk gry/green/brn, some vry silty, carb, soft-firm. Min Sltstn: lt red-brn, vf, arg, carb, friable, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal, chalky, some silty, lt-m bm foss chert, foss frags/fusln, no vis por, no odor, ns.

SH: lt-dk gry, some silty, carb, soft-firm. Min SS: gry, vf, sr-wr, arg/carb matrix, glauc, friable, no odor, ns.

LS: cm/lt-dk bm, micro-m xtal, some chalky, some silty/arg, abund dk bm/dk gry chert, foss frags, no vis por, no odor, ns.

LS: cm/lt-m bm/lt-dk gry, micro-m xtal, chalky, some silty/arg, some bm chert, foss frags, no vis por, no odor, ns.

LS: cm/lt bm/min lt gry, micro-m xtal, some chalky, some silty/arg, min cm/bm chert, foss frags, no vis por, no odor, ns.

LS: cm/lt-m bm/min lt gry, micro-m xtal, some chalky, min silty, lt-dk bm chert, foss frags, no vis por, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal, some chalky, min m-dk bm chert, foss frags, no vis por, no odor, ns.

LS: cm/lt bm/lt-dk gry/dk gry w/wht mottling, micro-m xtal, some chalky, some silty/sndy/arg, wht/bm/blue-gry foss chert, foss frags/coral/fusln, no vis por, no odor, ns.

LS: wht/cm/lt-dk gry/lt-dk gry-bm, micro-m xtal, some chalky, some silty/arg/sndy, bm/blue-gry chert, foss frags/min ool/fusln, no vis por, no odor, ns.

mud pump at 4530.

Samples
unreliable, SH
flood.

CFS @ 4540'
Stop/30"/60"

CFS @ 4578'
Stop/30"/60"

CFS @ 4590'
Stop/30"/60"

CFS @ 4622'
Stop/30"/60"

CFS @ 4681'
Stop/30"/60"

CFS @ 4730'
Stop/30"/60"

