

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)*

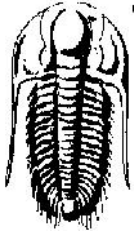
Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water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

# DRILL STEM TEST REPORT

Ritchie Exploration

**33 19s 30w Lans Ks**

PO Box 783188  
Wichita, Ks 67278

**Stucky-GrabberTrust 1**

Job Ticket: 68084

**DST#: 1**

ATTN: Kent Matson

Test Start: 2022.04.24 @ 10:02:00

## GENERAL INFORMATION:

Formation: **Marmaton B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:09:30

Time Test Ended: 17:42:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 78

Interval: **4426.00 ft (KB) To 4460.00 ft (KB) (TVD)**

Total Depth: 4460.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2915.00 ft (KB)

2904.00 ft (CF)

KB to GR/CF: 11.00 ft

**Serial #: 8874 Outside**

Press @ Run Depth: 450.39 psig @ 4427.00 ft (KB)

Start Date: 2022.04.24

End Date: 2022.04.24

Start Time: 10:02:05

End Time: 17:42:14

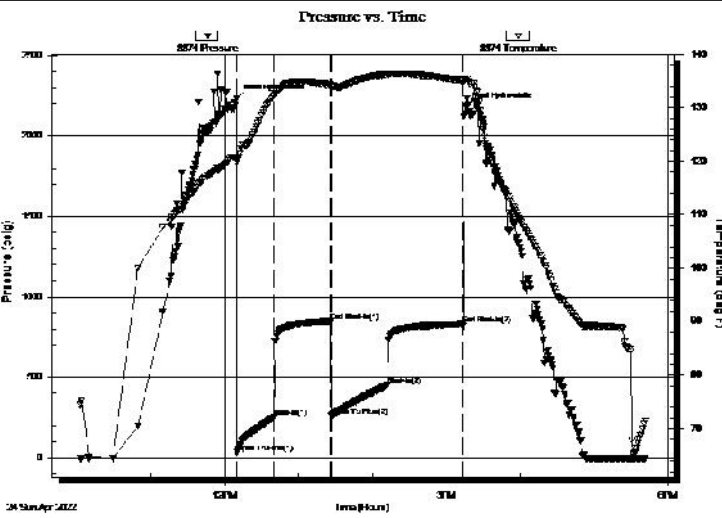
Capacity: 8000.00 psig

Last Calib.: 2022.04.24

Time On Btm: 2022.04.24 @ 12:09:15

Time Off Btm: 2022.04.24 @ 15:15:15

TEST COMMENT: 30- IF: BOB @ 7 min 32.2"  
45- IS: No return.  
45- FF: BOB @ 10 min. 38.5" blow .  
60- FSI: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2233.19	120.71	Initial Hydro-static
1	32.92	119.72	Open To Flow (1)
31	253.45	132.29	Shut-In(1)
77	847.65	134.20	End Shut-In(1)
77	261.08	133.80	Open To Flow (2)
123	450.39	136.21	Shut-In(2)
184	833.22	135.13	End Shut-In(2)
186	2181.81	135.36	Final Hydro-static

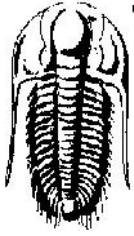
## Recovery

Length (ft)	Description	Volume (bbl)
850.00	mcw 2m 98w (oil spots in tool)	9.96

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Ritchie Exploration

**33 19s 30w Lans Ks**

PO Box 783188  
Wichita, Ks 67278

**Stucky-GraberTrust 1**

Job Ticket: 68084

**DST#: 1**

ATTN: Kent Matson

Test Start: 2022.04.24 @ 10:02:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

63000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
850.00	mcw 2m 98w (oil spots in tool)	9.965

Total Length: 850.00 ft      Total Volume: 9.965 bbf

Num Fluid Samples: 0

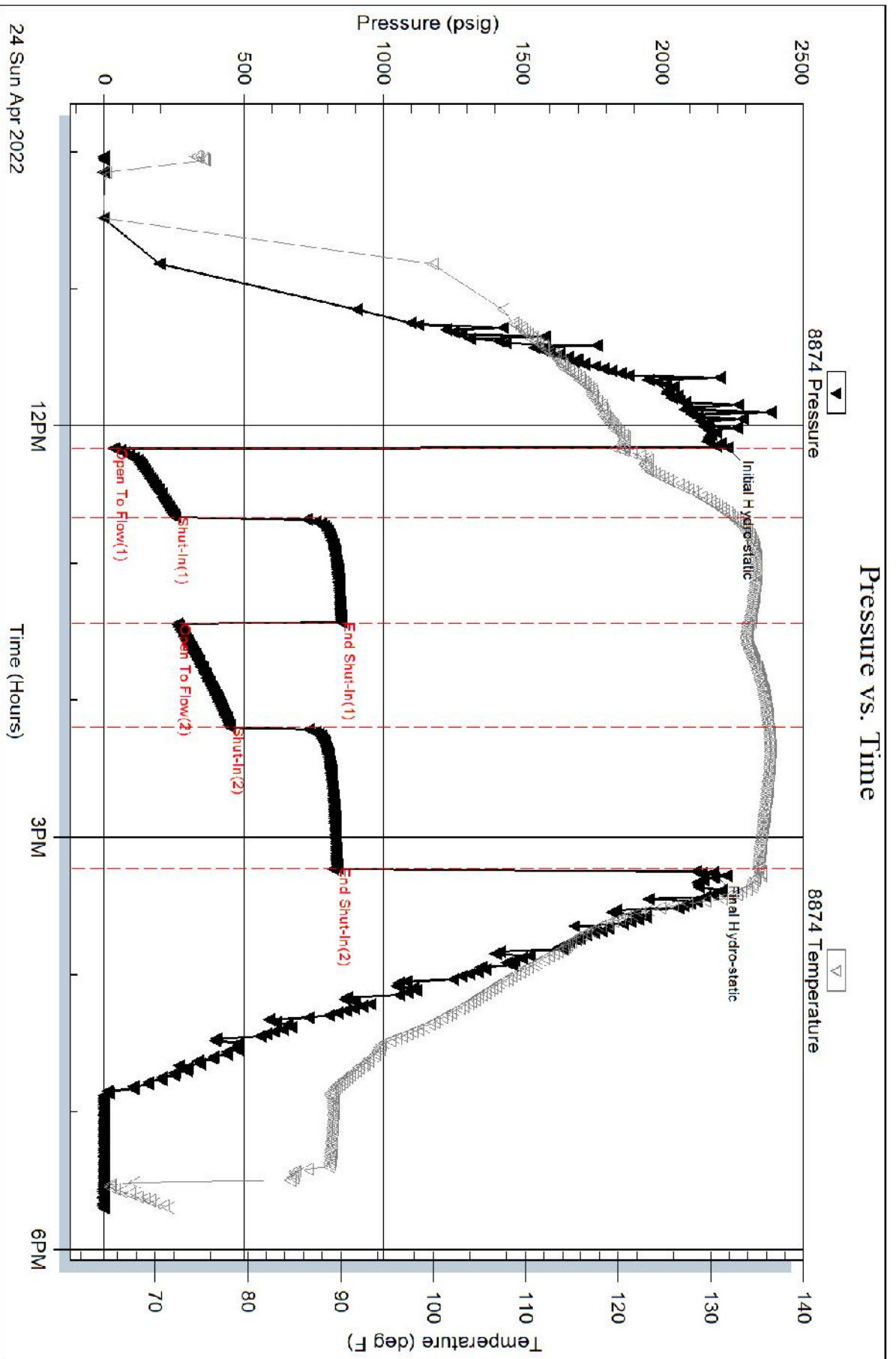
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .124 @ 74f = 63000ppm



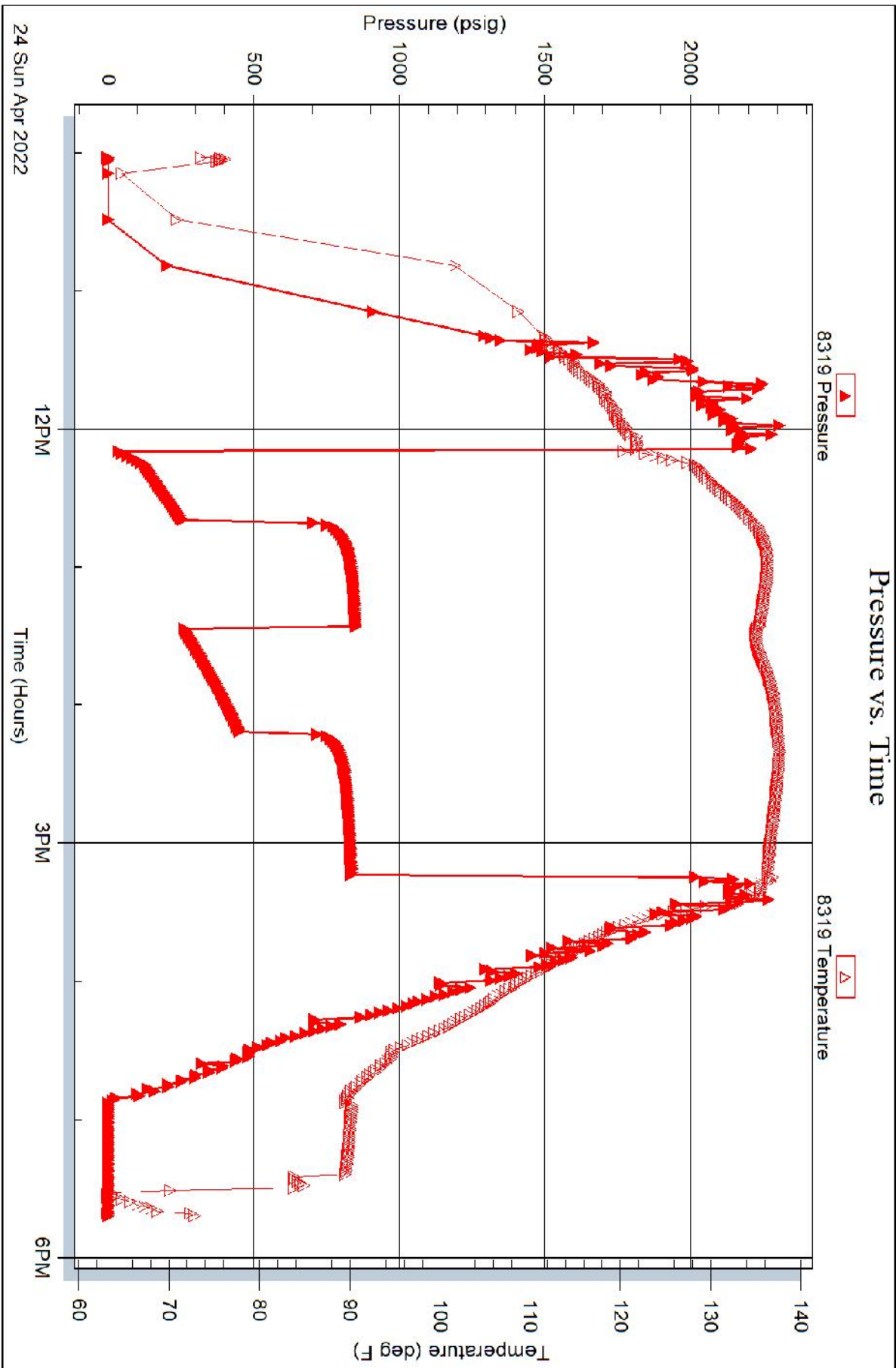
Serial #: 8319

Inside

Ritche Exploration

Stucky-GraberTrust 1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 68084

Printed: 2022.04.24 @ 19:05:44





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Ritchie Exploration

**33 19s 30w Lans Ks**

PO Box 783188  
Wichita, Ks 67278

**Stucky-GrabberTrust 1**

Job Ticket: 68086

**DST#: 2**

ATTN: Kent Matson

Test Start: 2022.04.25 @ 05:16:00

## GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:52:30

Time Test Ended: 13:18:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

**Interval: 4482.00 ft (KB) To 4500.00 ft (KB) (TVD)**

Reference Elevations: 2915.00 ft (KB)

Total Depth: 4500.00 ft (KB) (TVD)

2904.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 8874 Outside**

Press@RunDepth: 161.79 psig @ 4483.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.25

End Date:

2022.04.25

Last Calib.:

2022.04.25

Start Time: 05:16:05

End Time:

13:17:59

Time On Btm:

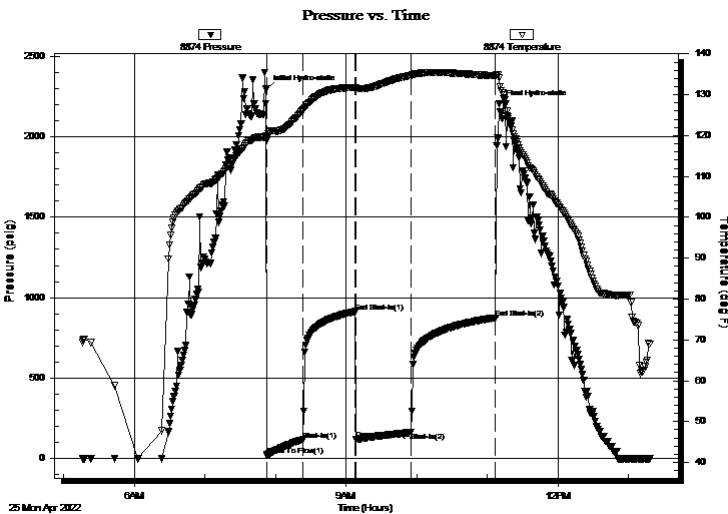
2022.04.25 @ 07:52:00

Time Off Btm:

2022.04.25 @ 11:09:45

TEST COMMENT: 30- IF: 6.3" blow .  
45- IS: No return,  
45- FF: 8.5" blow ,  
60- FS: No return,

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2297.34	120.02	Initial Hydro-static
1	18.79	118.78	Open To Flow (1)
32	114.99	126.21	Shut-In(1)
76	913.06	131.73	End Shut-In(1)
77	119.62	131.54	Open To Flow (2)
124	161.79	134.75	Shut-In(2)
195	874.91	134.62	End Shut-In(2)
198	2203.49	134.05	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
375.00	mcw 5m 95w (oil puddle on top)	3.30

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Ritchie Exploration

**33 19s 30w Lans Ks**

PO Box 783188  
Wichita, Ks 67278

**Stucky-GraberTrust 1**

Job Ticket: 68086

**DST#: 2**

ATTN: Kent Matson

Test Start: 2022.04.25 @ 05:16:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

54000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
375.00	mcw 5m 95w (oil puddle on top)	3.302

Total Length: 375.00 ft      Total Volume: 3.302 bbl

Num Fluid Samples: 0

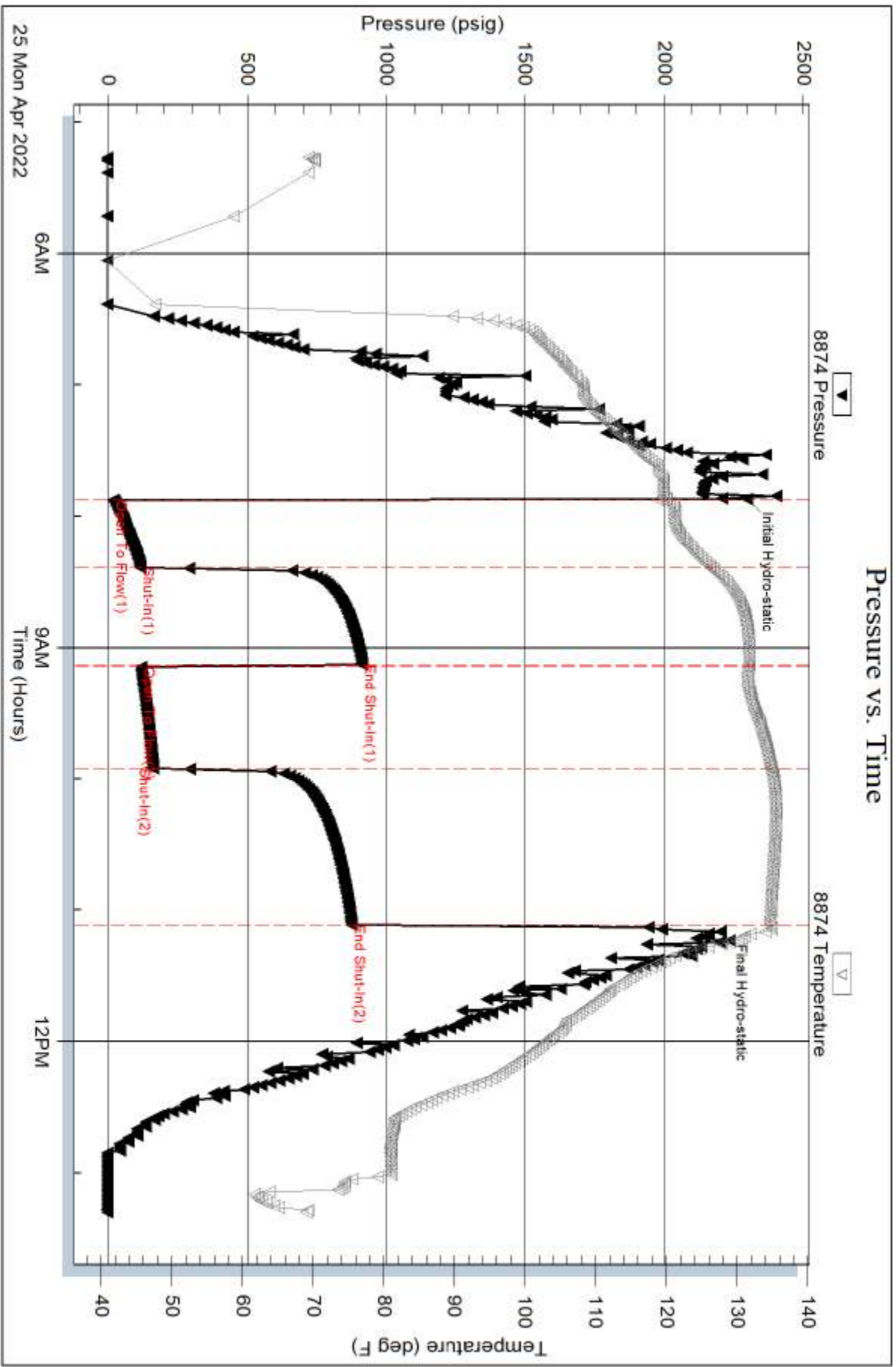
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .122 @ 77f = 54000ppm



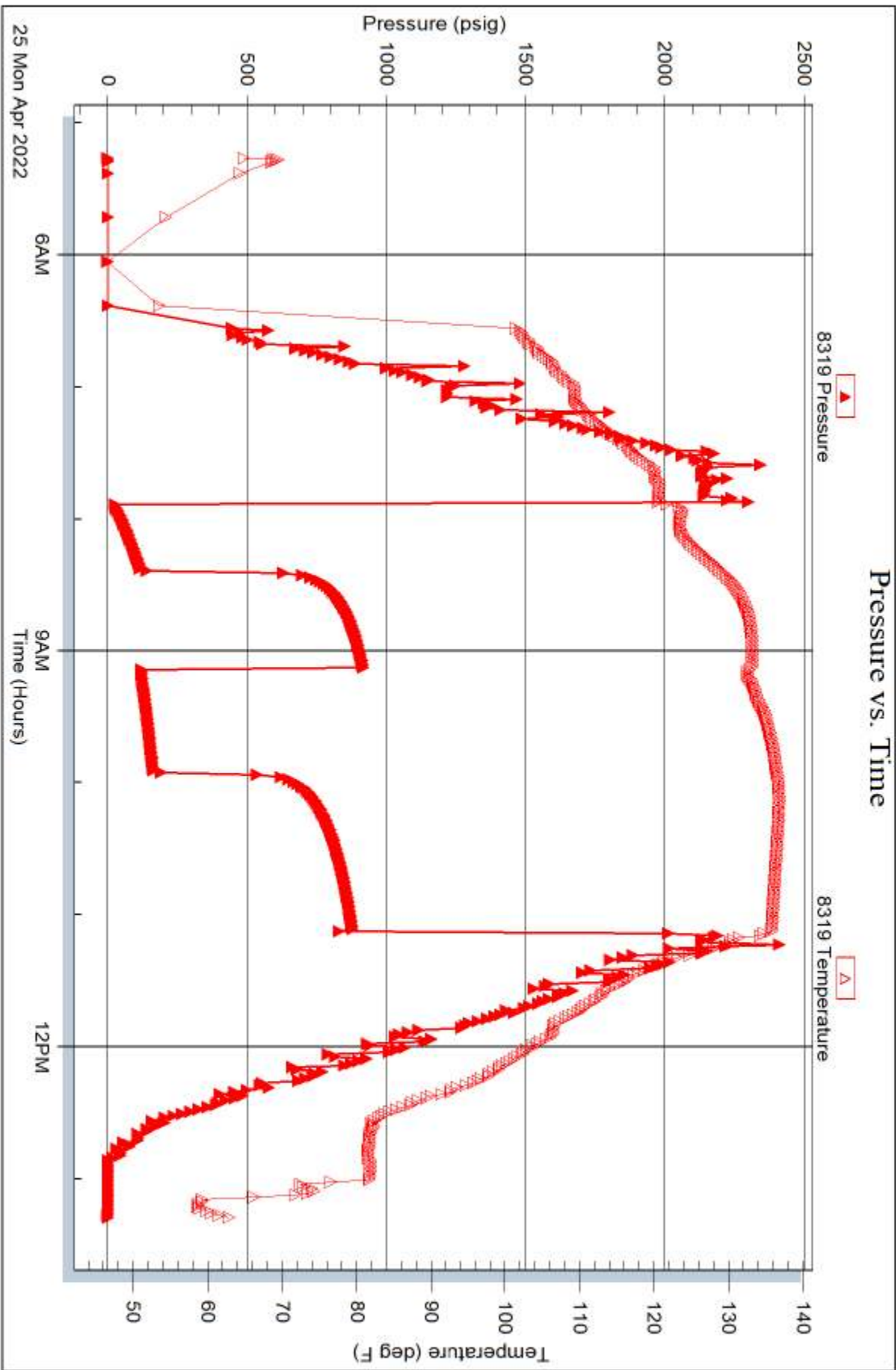
Serial #: 8319

Inside

Richie Exploration

Stucky-Graber Trust 1

DST Test Number: 2





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Ritchie Exploration

**33 19s 30w Lans Ks**

PO Box 783188  
Wichita, Ks 67278

**Stucky-GraberTrust 1**

ATTN: Kent Matson

Job Ticket: 68087

**DST#: 3**

Test Start: 2022.04.26 @ 04:58:00

## GENERAL INFORMATION:

Formation: **Myric Station- Ft Sc**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:14:00

Time Test Ended: 11:23:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

**Interval: 4509.00 ft (KB) To 4543.00 ft (KB) (TVD)**

Reference Elevations: 2915.00 ft (KB)

Total Depth: 4543.00 ft (KB) (TVD)

2904.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 8874 Outside**

Press@RunDepth: 16.70 psig @ 4510.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.26

End Date:

2022.04.26

Last Calib.:

2022.04.26

Start Time: 03:58:05

End Time:

10:23:14

Time On Btm:

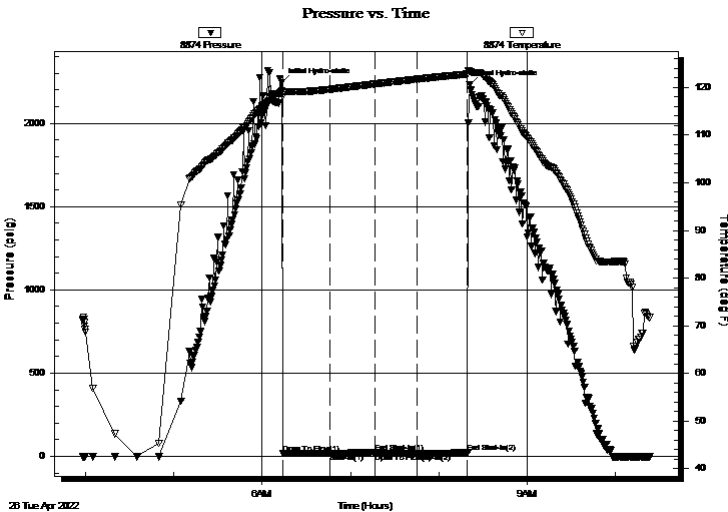
2022.04.26 @ 06:13:30

Time Off Btm:

2022.04.26 @ 08:21:00

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

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2244.72	119.36	Initial Hydro-static
1	16.43	118.07	Open To Flow (1)
33	17.31	119.57	Shut-In(1)
63	23.84	120.70	End Shut-In(1)
64	15.70	120.71	Open To Flow (2)
92	16.70	121.72	Shut-In(2)
126	21.38	122.77	End Shut-In(2)
128	2235.25	123.35	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	mud 100m (oil spots in tool)	0.01

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Ritchie Exploration

**33 19s 30w Lans Ks**

PO Box 783188  
Wichita, Ks 67278

**Stucky-GraberTrust 1**

Job Ticket: 68087

**DST#: 3**

ATTN: Kent Matson

Test Start: 2022.04.26 @ 04:58:00

## 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: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	mud 100m (oil spots in tool)	0.015

Total Length: 3.00 ft      Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

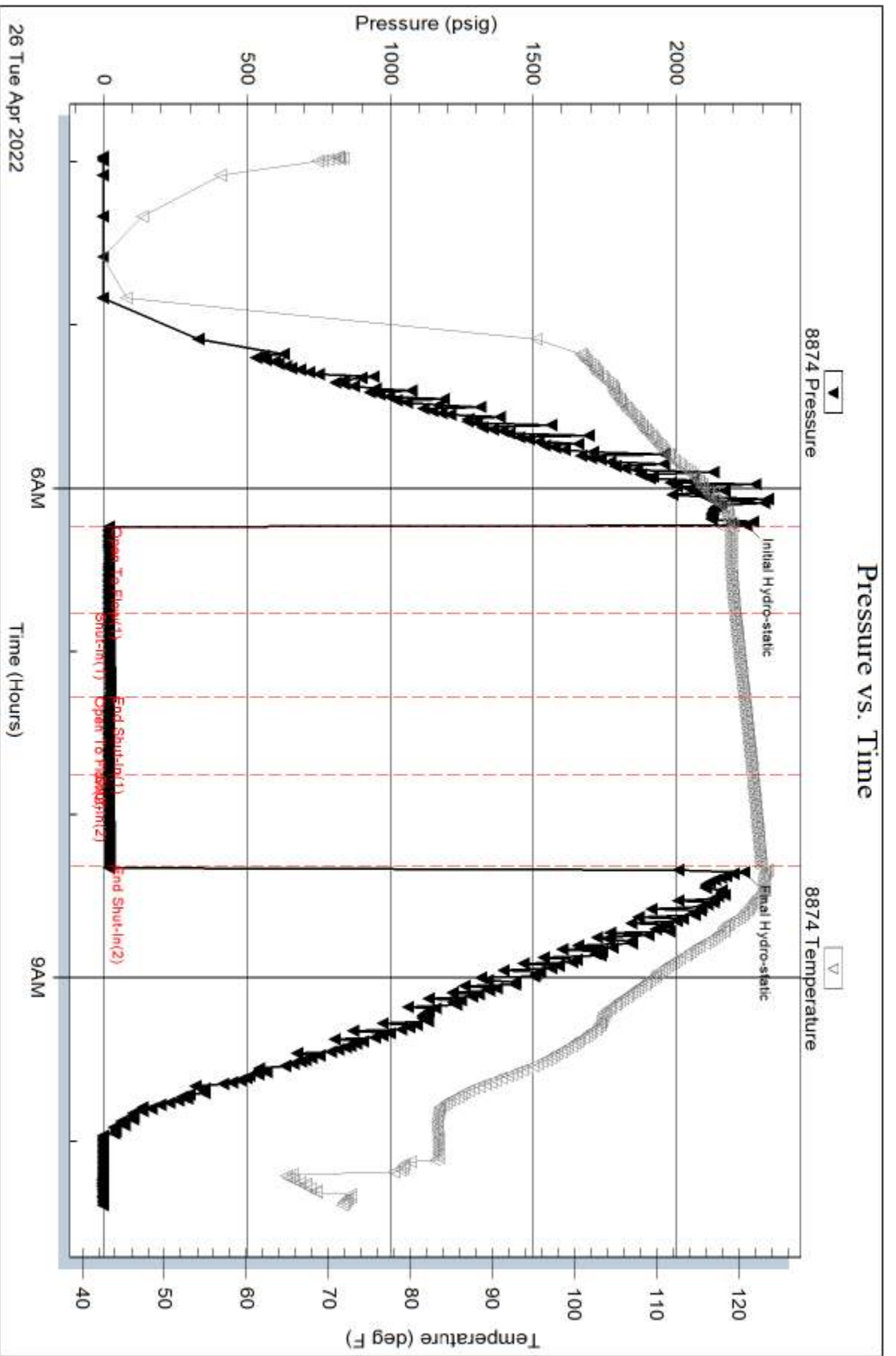
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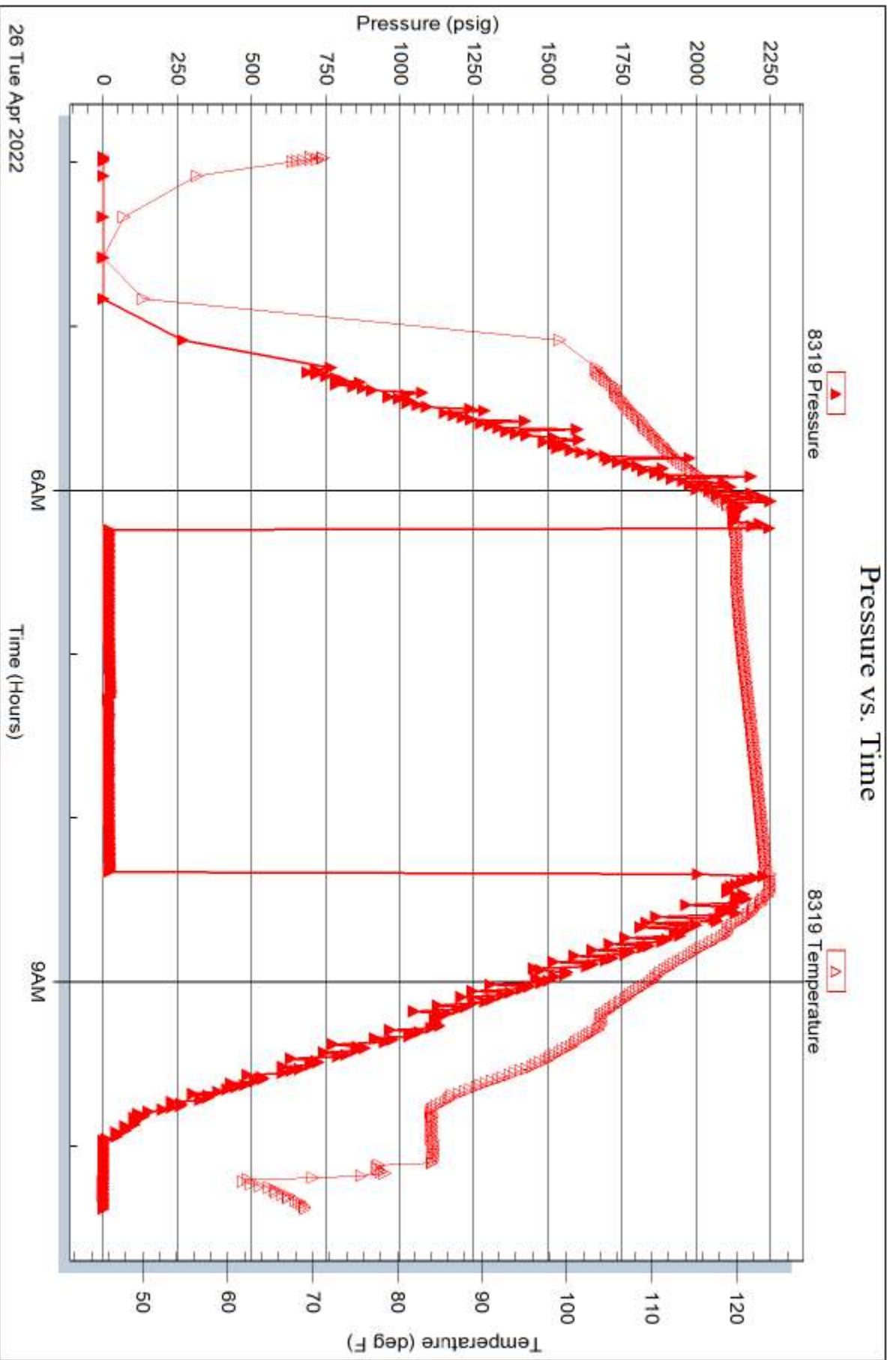
Laboratory Name:

Laboratory Location:

Recovery Comments:









**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Ritchie Exploration

**33 19s 30w Lans Ks**

PO Box 783188  
Wichita, Ks 67278

**Stucky-GraberTrust 1**

ATTN: Kent Matson

Job Ticket: 68088

**DST#: 4**

Test Start: 2022.04.27 @ 04:05:00

## GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:29:30

Time Test Ended: 10:31:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

**Interval: 4610.00 ft (KB) To 4635.00 ft (KB) (TVD)**

Reference Elevations: 2915.00 ft (KB)

Total Depth: 4635.00 ft (KB) (TVD)

2904.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 8874 Outside**

Press@RunDepth: 21.56 psig @ 4611.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.27 End Date: 2022.04.27

Last Calib.: 2022.04.27

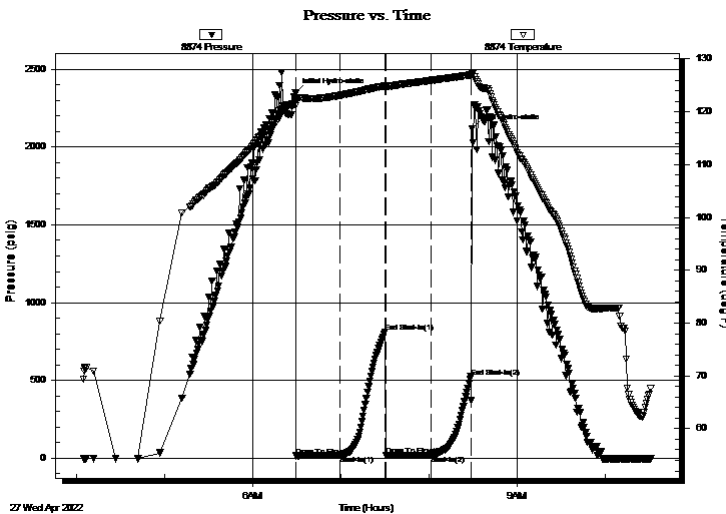
Start Time: 04:05:05 End Time: 10:30:59

Time On Btm: 2022.04.27 @ 06:29:15

Time Off Btm: 2022.04.27 @ 08:29:30

**TEST COMMENT:** IF: 0.6" blow .  
IS: No return.  
FF: No blow .  
FS: No return. 30-30-30-30

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2347.12	122.58	Initial Hydro-static
1	15.29	121.19	Open To Flow (1)
30	19.35	123.11	Shut-In(1)
61	811.87	124.93	End Shut-In(1)
62	20.60	124.70	Open To Flow (2)
92	21.56	125.95	Shut-In(2)
120	523.59	127.00	End Shut-In(2)
121	2119.18	127.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100m (oil spots )	0.05

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Ritchie Exploration

**33 19s 30w Lans Ks**

PO Box 783188  
Wichita, Ks 67278

**Stucky-GraberTrust 1**

Job Ticket: 68088

**DST#: 4**

ATTN: Kent Matson

Test Start: 2022.04.27 @ 04:05:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100m (oil spots )	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0

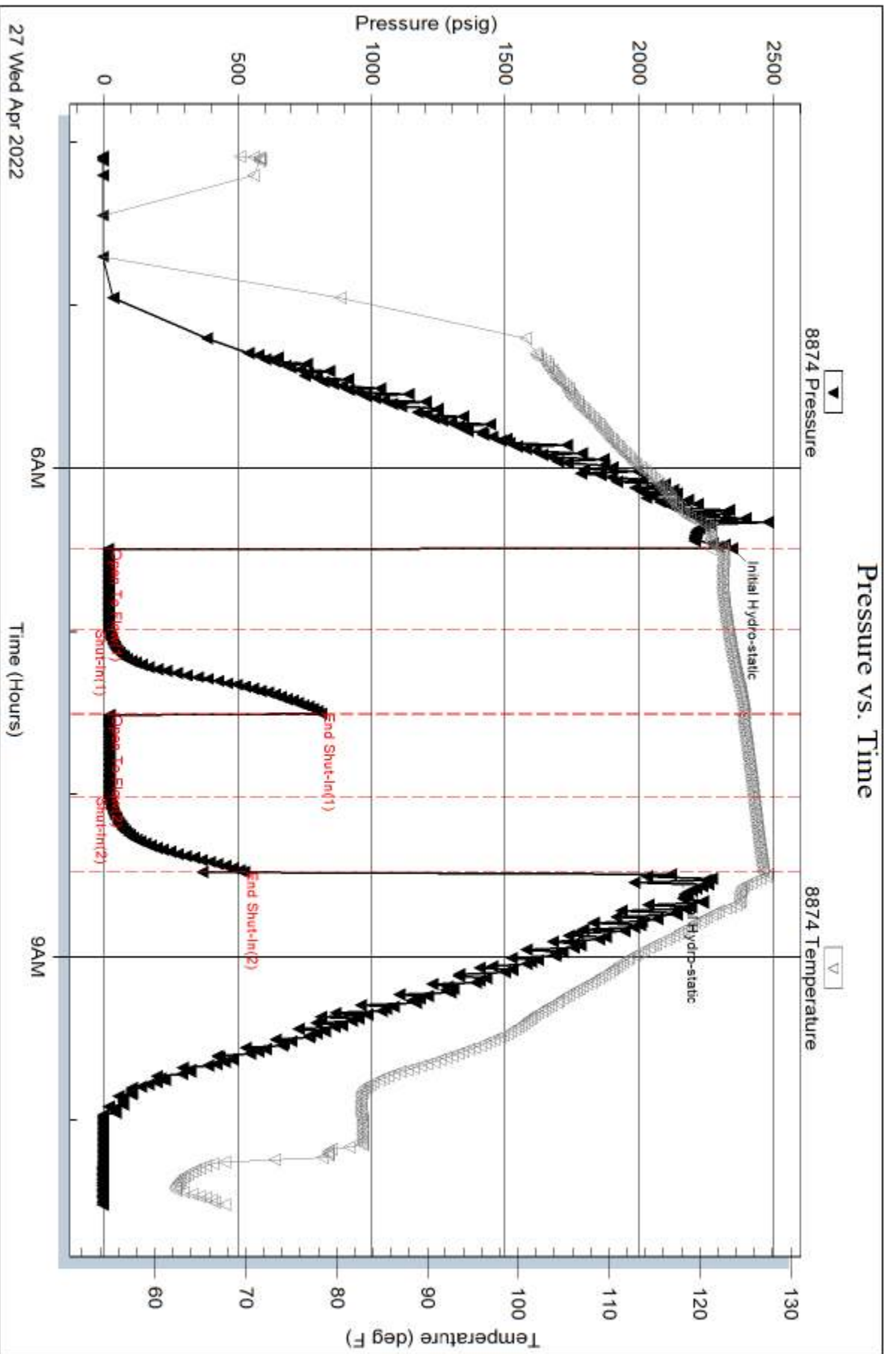
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



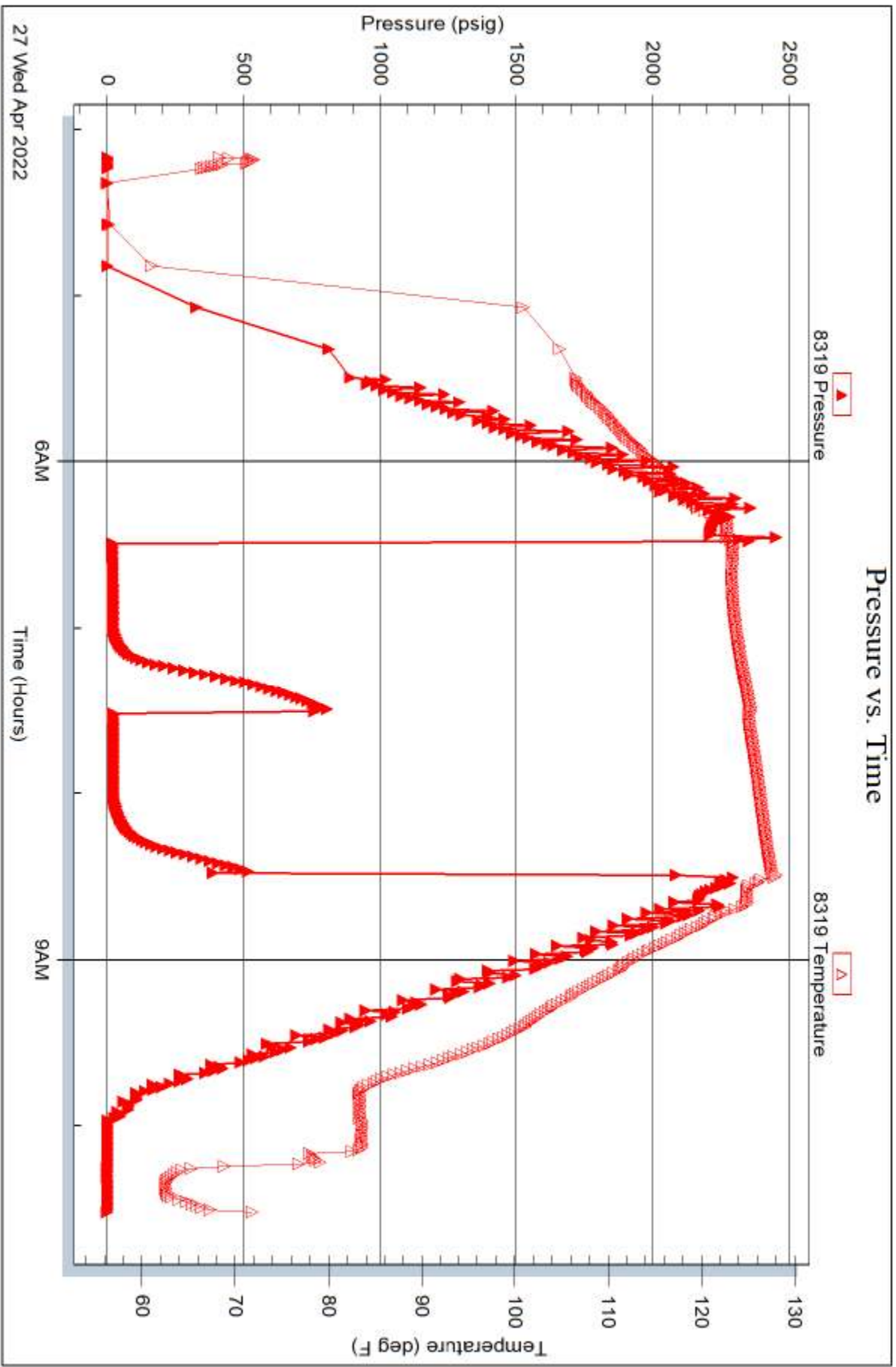
Serial #: 8319

Inside

Ritchie Exploration

Stucky-Graber Trust 1

DST Test Number: 4



27 Wed Apr 2022

6AM

Time (Hours)

9AM



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

**Well Name:** STUCKY-GRABER TRUST  
**Well Id:** #1  
**Location:** 2408' FNL, 1392' FEL, Sec 33-T19S-R30W, Lane County, Kansas  
**License Number:** API: 15-101-22668 **Region:** Lane County  
**Spud Date:** 04/18/2022 **Drilling Completed:** 04/28/2022  
**Surface Coordinates:** NAD83  
**Lat:** 38.3592557, **Long:** -100.6355067  
**Bottom Hole Vertical hole**  
**Coordinates:**  
**Ground Elevation (ft):** 2904' **K.B. Elevation (ft):** 2915'  
**Logged Interval (ft):** 3700' **To:** RTD **Total Depth (ft):** 4730'  
**Formation:** Mississippian/Spergen at RTD  
**Type of Drilling Fluid:** Chemical

Printed by MudLog from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

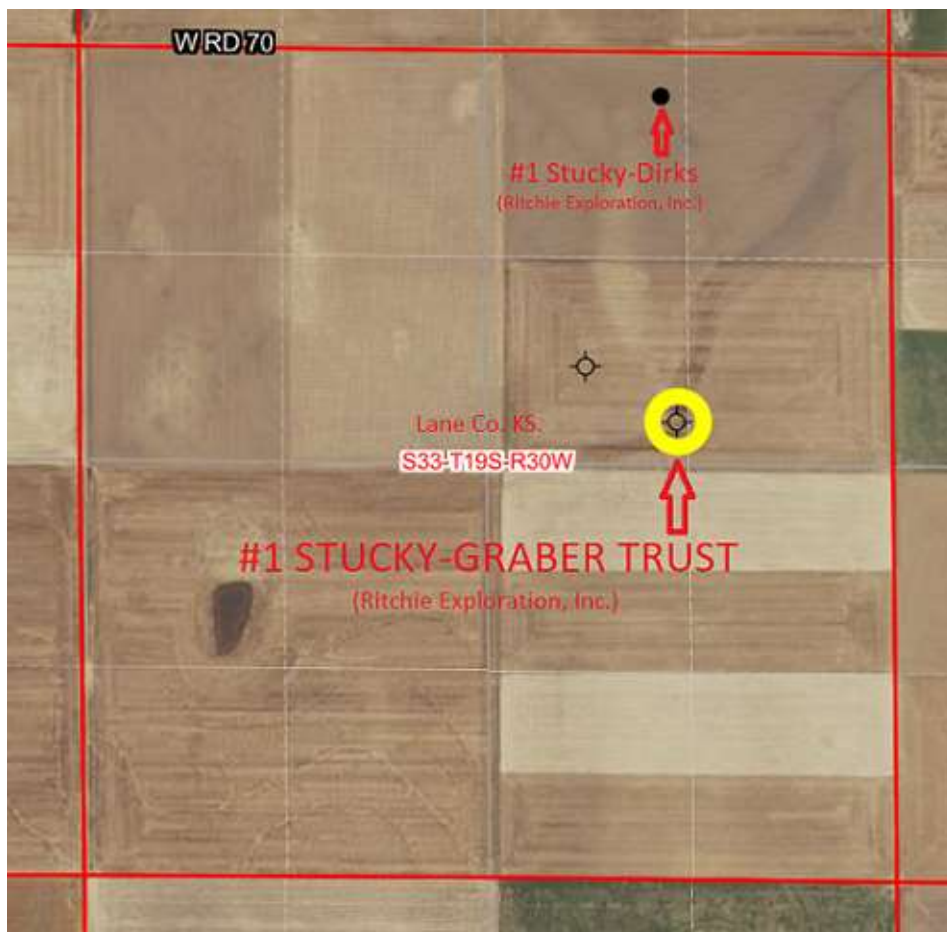
**OPERATOR**

**Company:** Ritchie Exploration, Inc.  
**Address:** 8100 E. 22nd Street N., Bldg 700  
Wichita, KS 67226  
316-691-9500

**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](mailto:kent4m@hotmail.com)





#### COMMENTS

Ritchie Exploration Company Geologist: John Goldsmith, 316-640-0236 (cell).

Contractor: Sterling Drilling Company, Rig #4.

Tool Pusher: Lanny Saloga, 620-388-4193 (cell).

Surface Casing: 8 5/8" set at 225' (KB) w/200sx cement.

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

Mud by: Mud-Co/Service Mud, Inc., Tony Maestas, 316-772-6679 (cell).

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

Logs by: ELI (DI w/GR, CND, Micro), TJ Dreiling, 785-735-7112 (office).

RTD= 4730'

LTD= 4729'

## FORMATION TOPS

FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
Stotler	3554'	-639	3550'	-635
Heebner Shale	3948'	-1033	3947'	-1032
Lansing	3994'	-1079	3992'	-1077
Muncie Creek Shale	4182'	-1267	4179'	-1264
Stark Shale	4286'	-1371	4285'	-1370
Hushpuckney Shale	4330'	-1415	4328'	-1413
Base of KC	4365'	-1450	4365'	-1450
Marmaton	4404'	-1489	4402'	-1487
Altamont	4413'	-1498	4411'	-1496
Pawnee	4490'	-1575	4488'	-1573
Myrick Station	4518'	-1603	4516'	-1601
Fort Scott	4534'	-1619	4531'	-1616
Cherokee Shale	4557'	-1642	4553'	-1638
Johnson	4601'	-1686	4595'	-1680
Mississippian	4618'	-1703	4613'	-1698
Spergen	4652'	-1737	4652'	-1737
RTD	4730'	-1815		
LTD			4729'	-1814

## 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

	Sitysh
	Sdy dolo
	Silty dolo
	Shy dolo
	Shaly ls

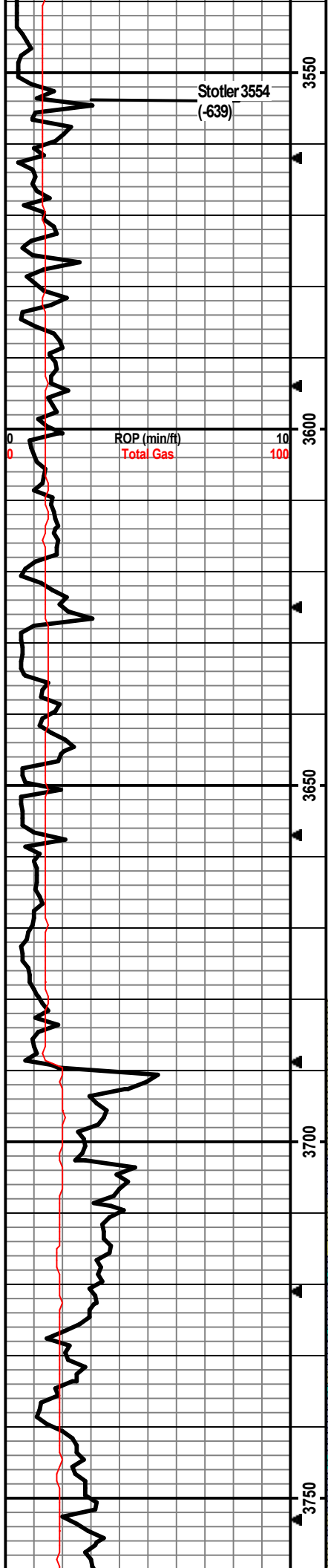
### FOSSIL

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

### MINERAL

	Ostra
	Pelec
	Pellet
	Pisolite
	Plant
	Strom
	Fuss
	Oomold
	Ferrpel
	Ferr
	Glau
	Gyp
	Hvymin
	Kaol
	Marl
	Minxl
	Nodule
	Phos
	Pyr
	Salt
	Sandy
	Silt
	Sil
	Sulphur
	Tuff
	Chlorite
	Dol
	Sand
	Sly
	Anhy
	Arggrn
	Arg
	Bent
	Bit
	Brecfrag
	Calc
	Carb
	Chtdk
	Chtlt
	Dol
	Feldspar





Geologist on location @ 3689', CTCH after bit trip, 04/21/2022.

Drill cutting samples at 10' intervals start at 3700'.

SH: lt-dk gry/green-gry/red-bm, vry silty, carb, soft-firm, no odor, ns.

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

SH: lt-dk gry/red-brn, vry silty/sndy, carb, soft-firm; Siltstn/SS: gry, vf-f, sr-wr, pred qtz, glauc, friable, no odor, ns.

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

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

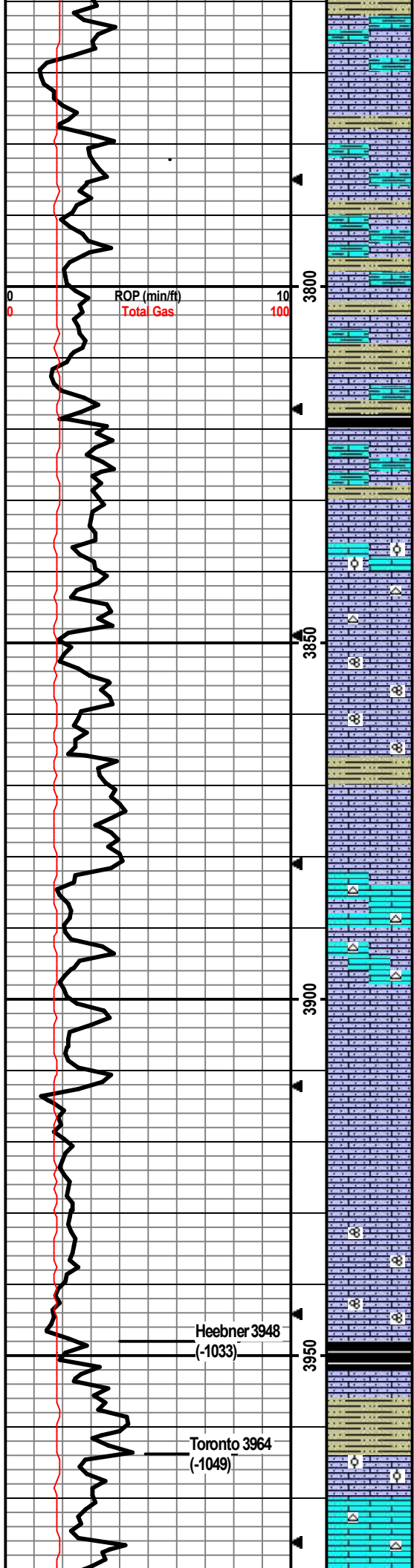
SH: m-dk gry, silty, carb, soft-firm.

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

SH: lt-m gry, vry silty, carb, soft-firm.

Bit Trip @ 3689' conn; replaced PDC bit with Tricone Button bit.

Pipe strap TOH for Bit Trip at 3689' was 0.92 short to the board.



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

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

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

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

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

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

SH: m-dk gry/blk/ldt gry-green, silty, slt carb, firm.

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

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

LS: cm/lt bm, vf-m xtal, chalky, some silty/sndy, min foss frags/min ool, no vis por, no odor, ns.

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

LS: cm/lt bm w/med bm mottling/lt gry, vf-f xtal, vry chalky, silty/sndy, foss frags/fusln, min ppt-f in-xtal por w/in fusln, no odor, ns.

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

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

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

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

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

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

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

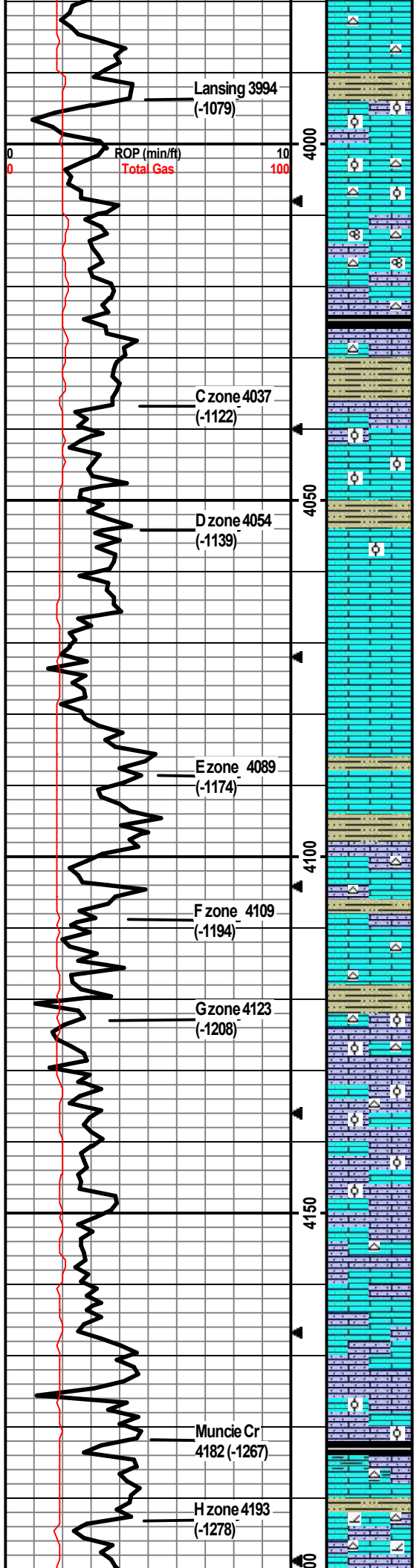
SH: m-dk gry/blk/dk bm, slt carb, some vry silty/sndy, firm, fissile.

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

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

LS: cm/lt bm, vf-m xtal, chalky, silty/sndy, foss frags/min dense ool, min ppt-vf in-xtal por, no odor, ns.

LS: wht/crm, micro-f xtal, some chalky, wht chert, foss frags, no vis por, no odor, ns.



LS: cm, micro-f xtal, some chalky, wht foss chert, min foss frags, min ppt-f in-xtal por, no odor, ns.

LS: cm/lt bm, micro-m xtal, some silty, foss frags/ool, f-crs in-xtal por w/med-crs oo-castic por, no odor, ns.

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

LS: cm/lt bm/lt gry, micro-f xtal w/some m-crs 2ndry xtals, some silty, wht chert, min foss frags/min fushn, min ppt-f in-xtal por, no odor, ns.

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

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

SH: lt-dk gry/red-bm/dk maroon, vry silty/sndy, firm.

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

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

SH: lt-dk gry, some vry silty/sndy, soft-firm; some Slstn/SS: lt gry, friable.

LS: cm, micro-f xtal, some chalky, some foss frags/min dense ool, min ppt-f por, no odor, ns.

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

LS: as above, increase in chalk, no odor, ns.

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

SH: lt-med gry, silty, slt carb, firm.

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

LS: cm/lt bm, micro-m xtal, smpl vry chalky, some silty/sndy, wht chert, foss frags/grainy, ppt-f in-xtal por, no odor, ns.

LS: cm/lt bm, micro-m xtal, smpl vry chalky, wht chert, foss frags/grainy, min ppt-vf in-xtal por, no odor, ns.

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

LS: cm, micro-m xtal, smpl vry chalky, some silty, min wht/lt gry chert, foss frags/dense ool, min ppt-f in-xtal por, no odor, ns.

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

LS: cm/lt bm, micro-m xtal w/some crs 2ndry xtals, some silty/sndy, some chalky, min wht chert, foss frags/min ool, min ppt-f in-xtal por, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal w/some crs 2ndry xtals, some silty/sndy, foss frags, min ppt-f in-xtal por, no odor, ns.

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

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

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

LS: cm/lt-med bm, micro-m xtal, some silty/sndy, some chalky, wht/lt gry chert, some dolomitic, some ppt-vf in-xtal por, no odor, ns.

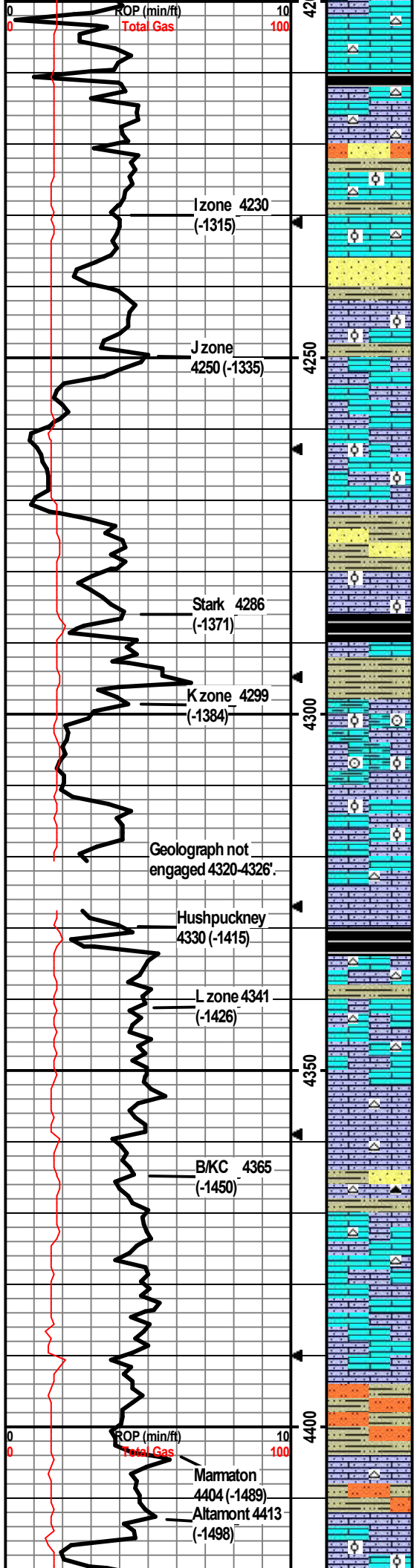
CFS @ 3990'  
Stop/30"/60"

CFS @ 4010'  
Stop/30"/60"

CFS @ 4048'  
Stop/30"/60"

CFS @ 4080'  
Stop/30"/60"

CFS @ 4120'  
Stop/30"/60"



LS: cm/lt-m bm, micro-m xtal w/some crs 2ndry xtals, some chalky, wht/lt gry chert, some ppt-f in-xtal por, no odor, ns.

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

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

SH: lt-dk gry/bm/lt gry-green, some vry silty, firm. Some gry Sltstn/SS.

LS: cm/lt-m bm, micro-m xtal w/some crs 2ndry xtals, some chalky, wht/crm/lt gry chert, min foss frags/min dense ool, no vis por, no odor, ns.

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

LS: cm/lt bm, micro-m xtal w/some crs 2ndry xtals, some chalky, some silty, foss frags/dense ool, no vis por, no odor, ns.

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

LS: cm/lt gry/lt bm, micro-m xtal, smpl vry chalky, some silty, foss frags/abund ool, m-crs/vug oo-castic por, no odor, ns.

SH: lt-dk gry/gry-green, some vry silty, carb, firm. Min SS: gry, vf-m, sr-wr, arg, friable, no odor, ns.

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

SH: blk, slt carb, platy, fissile, firm.

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

LS: cm/lt bm, micro-m xtal, smpl vry chalky, some vry silty/sndy/arg, foss frags/crin/abund ool/grainy, ppt-vf in-xtal por/m-crs oo-castic por, no odor, ns.

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

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

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

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

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

LS: wht/crm/lt-m bm/lt gry, micro-m xtal w/crs 2ndry xtals, some chalky, silty, min wht chert, foss frags, no vis por, no odor, ns.

SH: m-dk gry/blk, vry silty, carb; SS: gry, vf-f, qtz, friable.

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

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

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

SH: lt-m gry, vry silty, slt carb, soft-firm; Sltstn: lt gry, pred qtz, arg, friable, soft, no odor, ns.

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

SH: m-dk gry/red-brn, silty, carb, soft-firm. Sltstn: lt gry, vf, arg, soft.

LS: cm/lt-m bm, micro-m/min crs xtal, chalky, some silty/sndy, foss frags/dense ool/grainy, no vis por, no odor, ns.

CFS @ 4210'  
Stop/30"/60"

CFS @ 4231'  
Stop/30"/60"

CFS @ 4270'  
Stop/30"/60"

CFS @ 4320'  
Stop/30"/60"

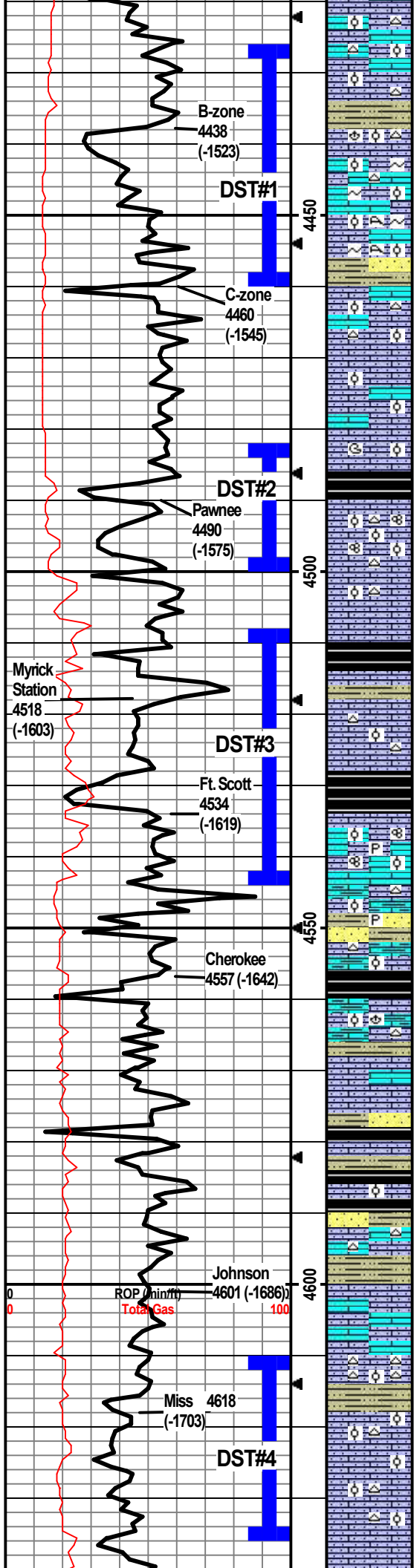
**DST1) 4426-4460  
Marmaton B-zone**

30/45/45/60  
1st Blow built to BOB in 7min; No BB.  
2nd) Blow built to BOB in 10min; no BB.  
IFP 33-253#  
ISIP 848#  
FFP 261-450#  
FSIP 833#  
HP 2233-2182#  
Recvd: 850' MCW (2%/M, 98%/W)  
w/oil spots in tool.

CFS @ 4359'  
Stop/30"/60"

**DST2) 4482-4500  
Pawnee**

30/45/45/60  
1st Blow built to 6.3"; no BB.  
2nd) Blow built to 8.5"; no BB.  
IFP 19-115#  
ISIP 913#  
FFP 120-162#  
FSIP 875#  
HP 2297-2203#  
Recvd: 375' MCW (5%/M, 95%/W)  
w/oil puddle on top.



LS: cm/lt-m brn/lt gry, micro-m/w some crs xtal, some chalky, silty, wht chert, foss frags/dense ool/grainy, no vis por, no odor.

CFS @ 4430'  
Stop/30"/60"

SH: lt-dk gry, vry silty, carb, soft-firm  
LS: cm/lt brn, micro-m, some vry chalky, some silty/sndy, wht chert, foss frags/brac/dense ool, min ppt-f in-xtal/med oo-castic por, 10 pcs sfo, dul yel flor, gd odor, sfo.

LS: cm/lt brn, micro-m xtal, chalky, some silty/sndy, glauc, min wht chert, foss frags/ool, min ppt-f in-xtal por, 2 pcs w/sfo, dul yel fluor, slit odor, ssfo.

LS: cm/lt-m brn, micro-m xtal, some chalky, some silty/sndy, glauc, foss frags/ool/coral, med columnar por in coral lattic, 1 pce w/sfo assume from above, no odor, ns.

LS: cm/lt brn/lt gry, micro-crs xtal, some silty, chalky, wht/lt gry chert, foss frags/ool, no vis por, no odor, ns.  
SH: lt-dk gry/red-brn/maroon w/mustard yel mottling, some vry silty/sndy, soft-firm. Min SS: gry, pred qtz, fm, sr-wr, arg, firm, friable, no odor, ns.

CFS @ 4460'  
Stop/30"/60"

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

CFS @ 4480'  
Stop/30"/60"

LS: wht/cm/lt-m brn, micro-m xtal, some silty/sndy, some chalky, foss frags/ool/cephal, no vis por, no odor, ns.  
SH: m-dk gry/blk, silty, carb, soft-firm, fissile.

LS: wht/cm/lt-m brn/lt gry-brn, micro-m xtal, some silty/sndy, some chalky, wht/dk gry chert, foss frags/fusln/ool, 7 pcs w/vf-f in-xtal/in-ool por, dul yel flor, slit cup odor, sfo.

CFS @ 4500'  
Stop/30"/60"

LS: cm/lt-m brn/lt-m gry, micro-m xtal, silty/sndy, min wht/lt brn chert, foss frags/min dense ool, no vis por, no odor, ns. Flood of SH: varied color, some vry silty, slit carb, LS nodules, firm-hard.

SH: lt-dk gry/blk/lt gry-green, some vry silty, carb, firm, fissile. Stlstrn: lt-m gry, vf-f, arg, carb, hard, some friable, no odor, ns.

LS: cm/lt-m brn, micro-m xtal, some chalky, some silty, wht/lt gry chert, foss frags/min ool, 15 pcs w/staining wfo on break, ppt-f in-xtal por, brite yel fluor, no odor, sfo. 5 pcs show in 30min smpl.

CFS @ 4528'  
Stop/30"/60"

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

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

CFS @ 4543'  
Stop/30"/60"

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

**DST3) 4509-4543  
Myrick St and Ft  
Scott**

30/30/30/30  
1st) Blow built to 0.5"; no BB.  
2nd) No blow; no BB.  
IFP 16-17#  
ISIP 24#  
FFP 16-17#  
FSIP 21#  
HP 2245-2235#  
Recvd: 3' Mud (100%M) w/oil spots in tool.

SH: m-dk gry/blk/lt gry-green, some vry silty, some pyritic, carb, soft-firm, fissile. SS: lt-m gry, fm, sr-wr, arg, some pyritic, soft-friable/hard. LS: lt-dk brn, micro-m xtal, silty/sndy/arg/chalky, min lt brn chert, foss frags/ool, no vis por, no odor, ns.

CFS @ 4578'  
Stop/30"/60"

LS: cm/lt-m brn, lt-m gry, micro-m xtal, some silty/sndy/arg/chalky, min lt brn chert, foss frags/brac/min dense ool, 4 pcs w/sfo w/ppt-f in-xtal por, dul yel fluor, no odor, ssfo.

LS: cm/lt-dk brn/lt gry, micro-m xtal, some chalky/silty, foss frags, 3 pcs w/sfo w/ppt-f por, dul yel flor, no odor, ssfo.

SH: m-dk gry/blk, some vry silty, carb, firm. Min SS: lt gry/lt brn, vf-f, pred qtz, arg, hard, friable, no odor, ns.

SH: lt-dk gry/blk, vry silty, carb, soft-firm.  
LS: wht/cm/lt-m brn/lt gry, micro-m xtal, some chalky/silty, foss frags/min dense ool, no vis por, no odor, ns.  
SH: lt-dk gry/blk, some vry silty, carb, soft-firm. Min SS: gry, vf-f, sr-wr, pred qtz, glauc, friable, no odor, ns.

**DST4) 4610-4635  
Upper  
Mississippian**

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

LS: lt-m brn/lt-m gry, micro-m xtal, some chalky, some silty, min foss frags, 9 pcs w/staining, no fluor w/dul yel cut, ppt in-xtal por, slit odor, sfo.

SH: m-dk gry, greasy, firm.  
LS: cm/lt-m brn, micro-m xtal, silty/sndy, chalky, abund wht/lt brn/lt-m gry chert, foss frags/ool, 17 pcs sfo, some blk tar oil, no fluor, yel cut, ppt-vf in-xtal por, sev pcs chert w/ppt-f/frac por, slit odor, sfo.

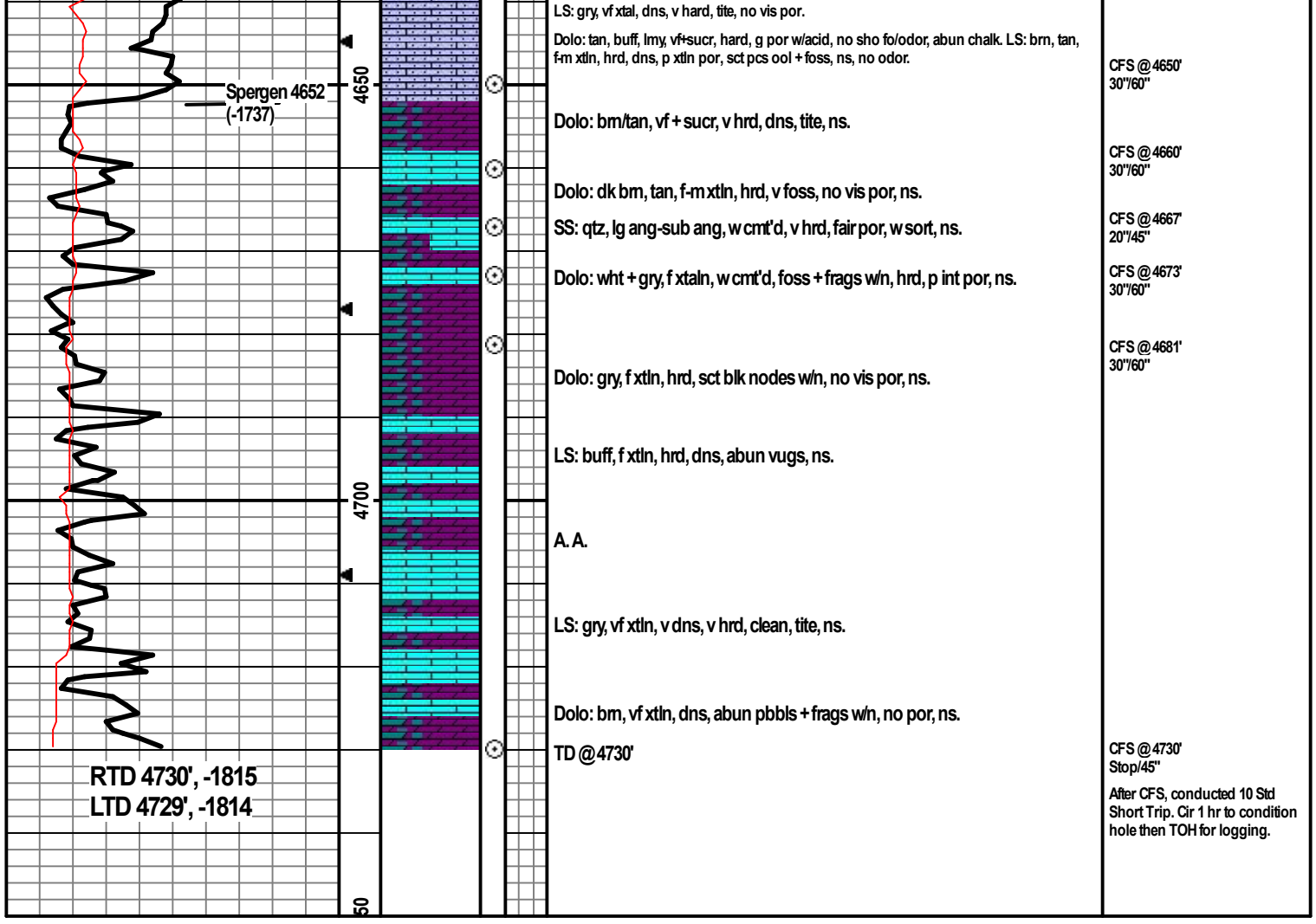
LS: cm/lt brn, micro-m xtal, chalky, silty/sndy, abund wht/lt gry foss/ool chert, foss frags w/abund ool, 13 pcs w/staining and sfo on crush, some blk tar, ppt in-xtal/frac por, no fluor but yel cut, slit odor, 2 SS clusters wfo on break, sfo.

From 4635' to TD,  
rock cutting sample  
analyses and  
descriptions were  
conducted by Max  
Lovely.

LS: wht, fm xtaln, soft, chiky, sct pcs ool + foss, fair sct poro, ns.

CFS @ 4635'  
Stop/30"/60"







# RITCHIE

EXPLORATION, INC.  
Wichita, Kansas

## #1 Stucky-Graber Trust

2,408' FNL & 1,392' FEL

98' S & 78' W of S/2 S/2 NE Section 33-19S-30W

Lane County, Kansas

API# 15-101-22668-0000

Elevation: GL: 2,904', KB: 2,915'

Sample Tops			Ref. Well
Anhydrite	2229	+686	+4
B/Anhydrite	2249	+666	+1
Stotler	3552	-637	+5
Heebner	3948	-1033	+8
Toronto	3964	-1049	+8
Lansing	3994	-1079	+6
Muncie	4174	-1259	+13
Stark	4286	-1371	+14
Hushpuckney	4326	-1411	+14
BKC	4365	-1450	+15
Marmaton	4404	-1489	+12
Altamont	4413	-1498	+12
Pawnee	4490	-1575	+13
Myrick	4518	-1603	+12
Ft Scott	4534	-1619	+11
Cherokee	4557	-1642	+9
Johnson	4601	-1686	+8
Mississippian	4624	-1709	+7
Spergen	4652	-1737	+13
RTD	4730	-1815	









**CEMENT TREATMENT REPORT**

Customer: Ritchie Exploraton	Well: Stucky-Graber #1	Ticket: WP 2730
City, State: Oakley KS	County: Lane KS	Date: 4/28/2022
Field Rep: Lanny	S-T-R: 33-19S-30W	Service: PTA

Downhole Information	
Hole Size:	7.875 in
Hole Depth:	4730 ft
Casing Size:	8 5/8 in
Casing Depth:	ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	bbls

Calculated Slurry - Lead	
Blend:	H-Plug
Weight:	13.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.42 ft <sup>3</sup> / sx
Annular Bbls / Ft.:	0.0406 bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	73.3 bbls
Total Sacks:	290 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft <sup>3</sup> / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	BBLs	TOTAL BBLs	REMARKS
5:44 PM			-	-	Arrived on location
5:54 PM				-	Safety meeting
6:04 PM				-	Rigged up
7:11 PM	4.0	300.0	5.0	5.0	Water ahead
7:13 PM	6.0	400.0	12.6	17.6	Mixed 50 sacks cement 13.8 ppg @ 2250'
7:17 PM	4.0	300.0	5.0	22.6	Begin displacement
7:20 PM				22.6	Pump mud with rig pump for 1:45 minutes
7:52 PM	4.0	250.0	5.0	27.6	Water ahead
7:54 PM	3.7	200.0	20.2	47.8	Mixed 80 sacks cement 13.8 ppg @ 1530'
7:59 PM	4.0	150.0	13.0	60.8	Begin displacement
8:40 PM	4.0	200.0	5.0		Water ahead
8:42 PM	5.0	300.0	12.6		Mixed 50 sacks cement 13.8 ppg @ 760'
8:46 PM	3.8	150.0	6.0		Begin displacement
9:12 PM	4.0	200.0	5.0		Water ahead
9:13 PM	4.0	200.0	10.1		Mixed 40 sacks cement 13.8 ppg @ 270'
9:16 PM	3.0	125.0	0.5		Begin displacement
9:34 PM	3.7	150.0	5.0		Mixed 20 sacks cement 13.8 ppg with wooden plug @ top 60'
9:50 PM	3.4	150.0	7.5		Mixed 30 sacks cement 13.8 ppg for rat hole plug
9:57 PM	3.3	200.0	5.0		Mixed 20 sacks cement 13.8 ppg for mouse hole plug
9:59 PM					Plug down
10:02 PM					Wash up and rigged down
10:24 PM					Left location

CREW		UNIT	SUMMARY		
Cementer:	John	64	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Jose V	208	4.0 bpm	218 psi	118 bbls
Bulk #1:	Kale	165-530			
Bulk #2:					