

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	Murfin Drilling Co., Inc.
Well Name	HENDRICKS 1-5
Doc ID	1663210

All Electric Logs Run

DIL
DUCP
MEL
BHCS

DRILLING REPORT - LOG TOPS - HENDRICKS 1-5

MDCI Hendricks #1-5 1980 FNL 1300 FEL Sec. 5-T4S-R38W 3518' KB
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Formation	Sample top	Datum	Ref	Log Top	Datum	Ref
Anhydrite	3310	+208	+11	3319	+199	+2
B/Anhydrite	3343	+175	+14	3352	+166	+5
Topeka	4184	-666	+5	4187	-669	+2
Oread	4322	-804	+13	4332	-814	+3
Lansing	4397	-879	+8	4402	-884	+3
Stark	4623	-1105	+4	4622	-1104	+5
Mound City	4684	-1166	+4	4680	-1162	+8
Ft. Scott	4807	-1289	+6	4808	-1290	+5
Oakley	4883	-1365	+14	4886	-1368	+11
Miss	5132	-1614	+9	5137	-1619	+4
RTD	5250					
LTD				5254		



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

Hendricks #1-5

5-4s-38w Cheyenne,KS

Start Date: 2022.08.24 @ 02:33:00

End Date: 2022.08.24 @ 10:47:02

Job Ticket #: 68922 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.08.30 @ 15:29:27



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne, KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68922

DST#: 1

ATTN: Wes Hansen

Test Start: 2022.08.24 @ 02:33:00

GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:05:32

Time Test Ended: 10:47:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 69

Interval: 4290.00 ft (KB) To 4330.00 ft (KB) (TVD)

Reference Elevations: 3518.00 ft (KB)

Total Depth: 4330.00 ft (KB) (TVD)

3513.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8672

Inside

Press@RunDepth: 21.24 psig @ 4292.00 ft (KB)

Capacity: psig

Start Date: 2022.08.24

End Date:

2022.08.24

Last Calib.:

2022.08.24

Start Time: 02:33:01

End Time:

10:47:02

Time On Btm:

2022.08.24 @ 06:02:32

Time Off Btm:

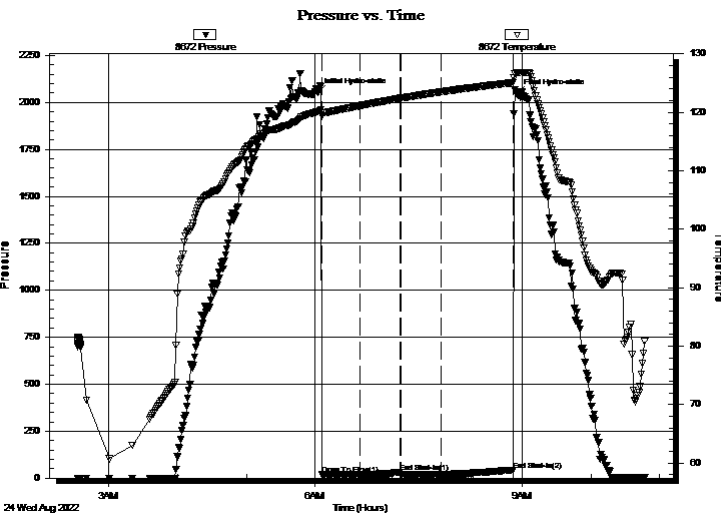
2022.08.24 @ 08:55:17

TEST COMMENT: IF: 30 min., weak surface blow, died 10 min.

IS: 30 min., no blow back

FF: 30 min., no blow

FS: 60 min., no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2052.18	120.16	Initial Hydro-static
3	19.23	119.33	Open To Flow (1)
37	19.72	121.13	Shut-In(1)
72	31.22	122.40	End Shut-In(1)
72	20.19	122.43	Open To Flow (2)
107	21.24	123.51	Shut-In(2)
170	40.57	125.13	End Shut-In(2)
173	2045.11	126.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	100%M	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68922

DST#: 1

ATTN: Wes Hansen

Test Start: 2022.08.24 @ 02:33:00

Tool Information

Drill Pipe:	Length: 4037.00 ft	Diameter: 3.80 inches	Volume: 56.63 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: 243.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 57.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4290.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	70.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4265.00	
Hydraulic tool	5.00			4270.00	
Isolator Sub	3.00			4273.00	
Jars	5.00			4278.00	
Safety Joint	3.00			4281.00	
Packer	5.00			4286.00	30.00 Bottom Of Top Packer
Packer	4.00			4290.00	
Stubb	1.00			4291.00	
Perforations	1.00			4292.00	
Recorder	0.00	8672	Inside	4292.00	
Recorder	0.00	6751	Outside	4292.00	
Pickup sub perf	5.00			4297.00	
Perforations	30.00			4327.00	
Bullnose	3.00			4330.00	40.00 Bottom Packers & Anchor

Total Tool Length: 70.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68922

DST#: 1

ATTN: Wes Hansen

Test Start: 2022.08.24 @ 02:33:00

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: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	100%M	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

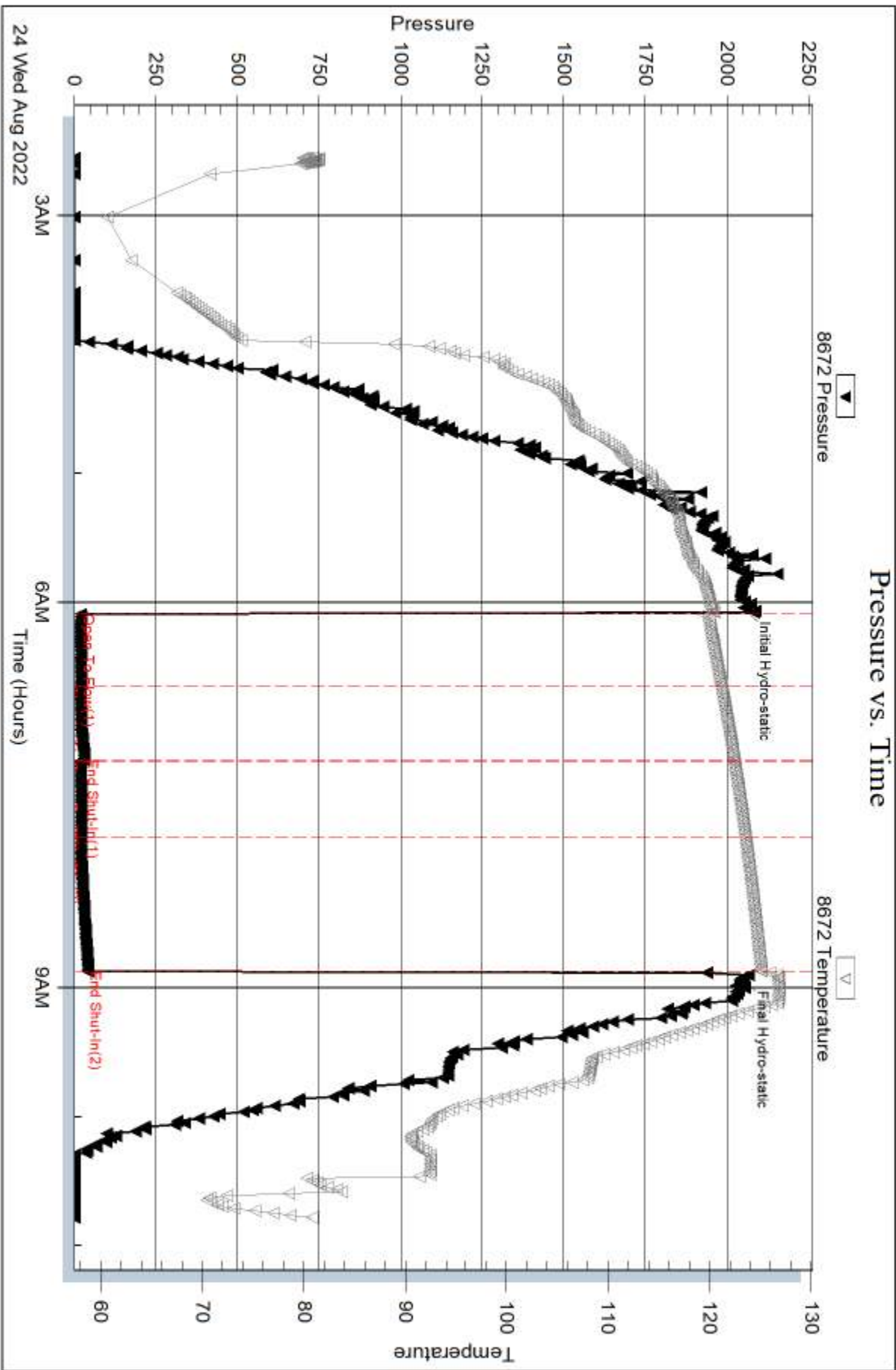
Serial #: 8672

Inside

Marfin Drilling Co., Inc.

Hendricks #1-5

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 68922

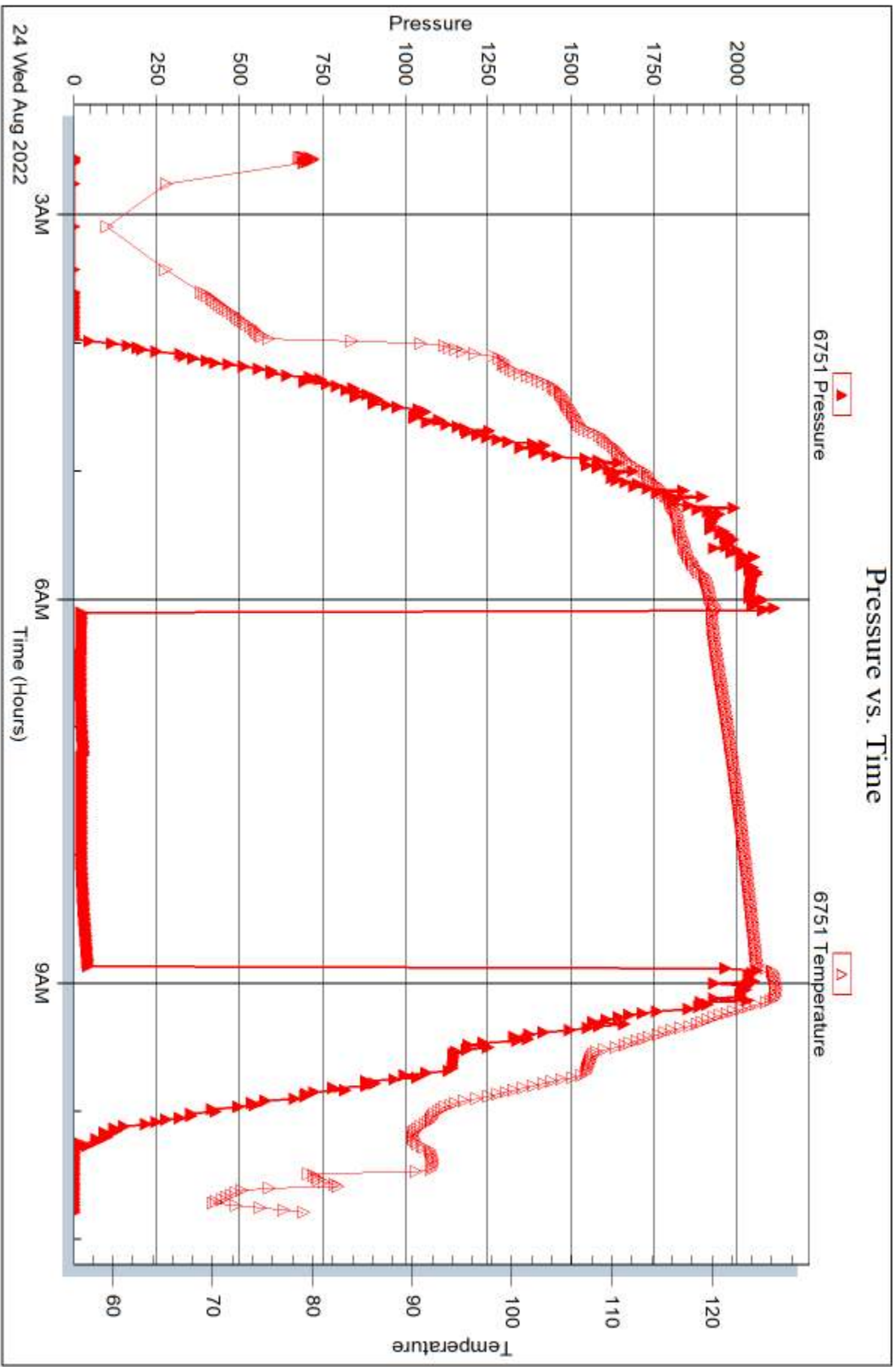
Printed: 2022.08.30 @ 15:29:28

Serial #: 6751

Outside Marfin Drilling Co., Inc.

Hendricks #1-5

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

Hendricks #1-5

5-4s-38w Cheyenne,KS

Start Date: 2022.08.26 @ 17:41:00

End Date: 2022.08.27 @ 01:47:02

Job Ticket #: 68923 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.08.30 @ 15:22:35



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
250 N Water STE 300
Wichita, KS 67202
ATTN: Wes Hansen

5-4s-38w Cheyenne,KS

Hendricks #1-5

Job Ticket: 68923

DST#: 2

Test Start: 2022.08.26 @ 17:41:00

GENERAL INFORMATION:

Formation: **Lansing H-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:07:02

Time Test Ended: 01:47:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 69

Interval: 4530.00 ft (KB) To 4610.00 ft (KB) (TVD)

Total Depth: 4610.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3518.00 ft (KB)

3513.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8672 Inside

Press@RunDepth: 52.23 psig @ 4533.00 ft (KB)

Start Date: 2022.08.26

End Date:

2022.08.27

Start Time: 17:41:01

End Time:

01:47:02

Capacity: psig

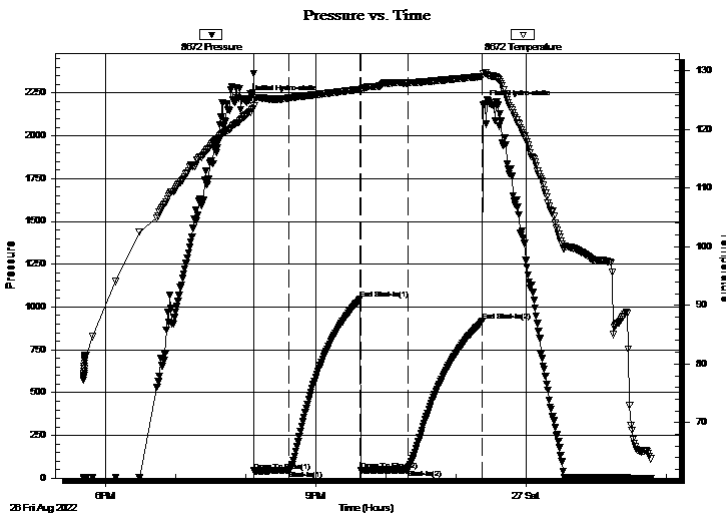
Last Calib.: 1899.12.30

Time On Btm: 2022.08.26 @ 20:02:32

Time Off Btm: 2022.08.26 @ 23:23:32

TEST COMMENT: IF: 30 min., chased tool 8', no blow
IS: 60 min., no blow back
FF: 30 min., no blow
FS: 60 min., no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2209.02	122.82	Initial Hydro-static
5	42.17	123.99	Open To Flow (1)
35	44.87	125.37	Shut-In(1)
96	1046.91	126.84	End Shut-In(1)
97	46.64	126.65	Open To Flow (2)
136	52.23	127.94	Shut-In(2)
200	917.26	129.07	End Shut-In(2)
201	2180.54	129.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	100%M	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68923

DST#: 2

ATTN: Wes Hansen

Test Start: 2022.08.26 @ 17:41:00

Tool Information

Drill Pipe:	Length: 4325.00 ft	Diameter: 3.80 inches	Volume: 60.67 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: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose:	100000.0 lb
			<u>Total Volume: 61.56 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial	74000.00 lb
Depth to Top Packer:	4530.00 ft			Final	74000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	80.00 ft				
Tool Length:	110.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4505.00	
Hydraulic tool	5.00			4510.00	
Isolator Sub	3.00			4513.00	
Jars	5.00			4518.00	
Safety Joint	3.00			4521.00	
Packer	5.00			4526.00	30.00 Bottom Of Top Packer
Packer	4.00			4530.00	
Stubb	1.00			4531.00	
Perforations	2.00			4533.00	
Recorder	0.00	8672	Inside	4533.00	
Recorder	0.00	6751	Outside	4533.00	
Pickup sub perf	5.00			4538.00	
Perforations	3.00			4541.00	
Change Over Sub	1.00			4542.00	
Drill Pipe	64.00			4606.00	
Change Over Sub	1.00			4607.00	
Bullnose	3.00			4610.00	80.00 Bottom Packers & Anchor
Total Tool Length:	110.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68923

DST#: 2

ATTN: Wes Hansen

Test Start: 2022.08.26 @ 17:41:00

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: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100%M	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

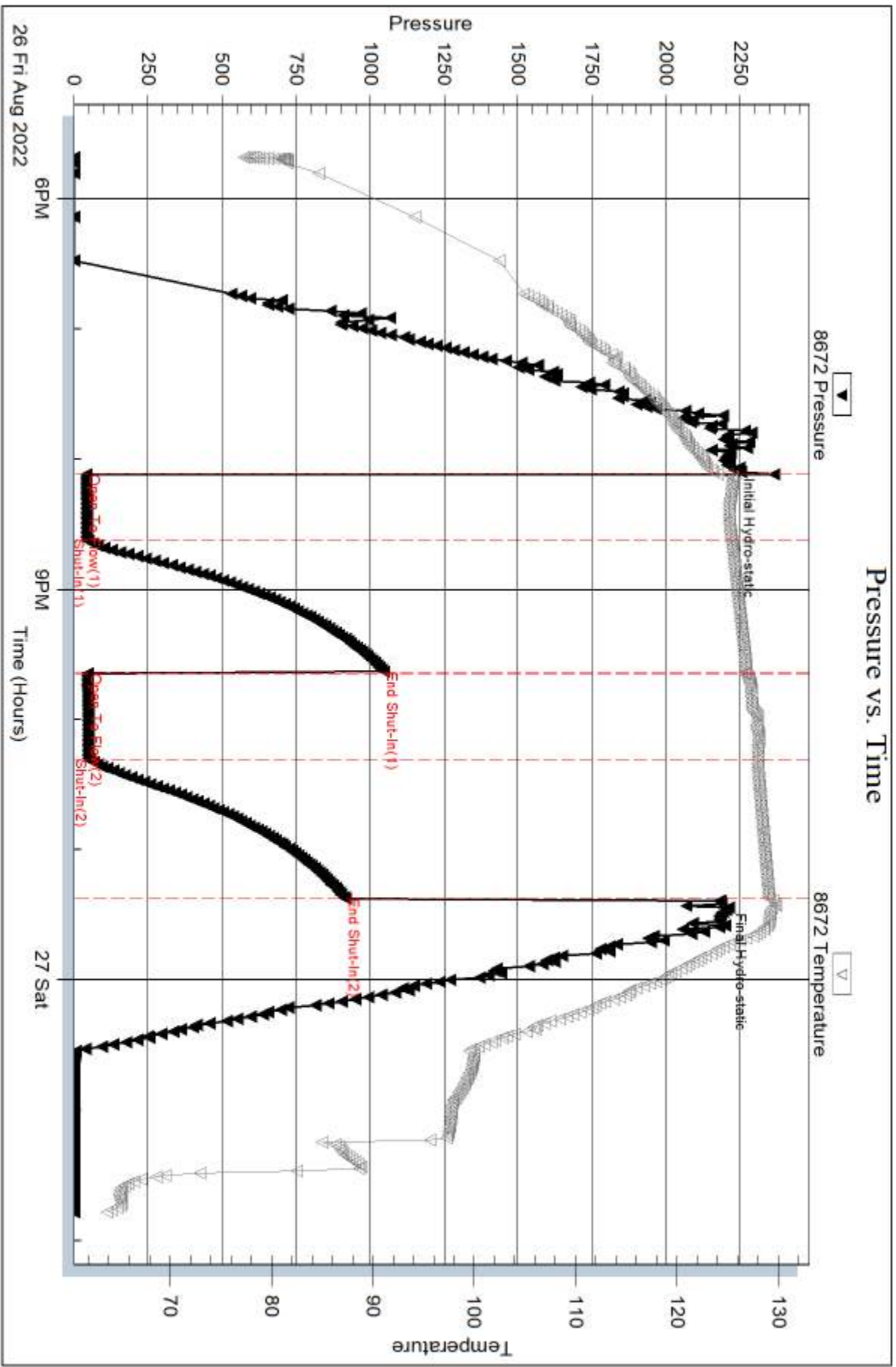
Serial #: 8672

Inside

Marfin Drilling Co., Inc.

Hendricks #1-5

DST Test Number: 2

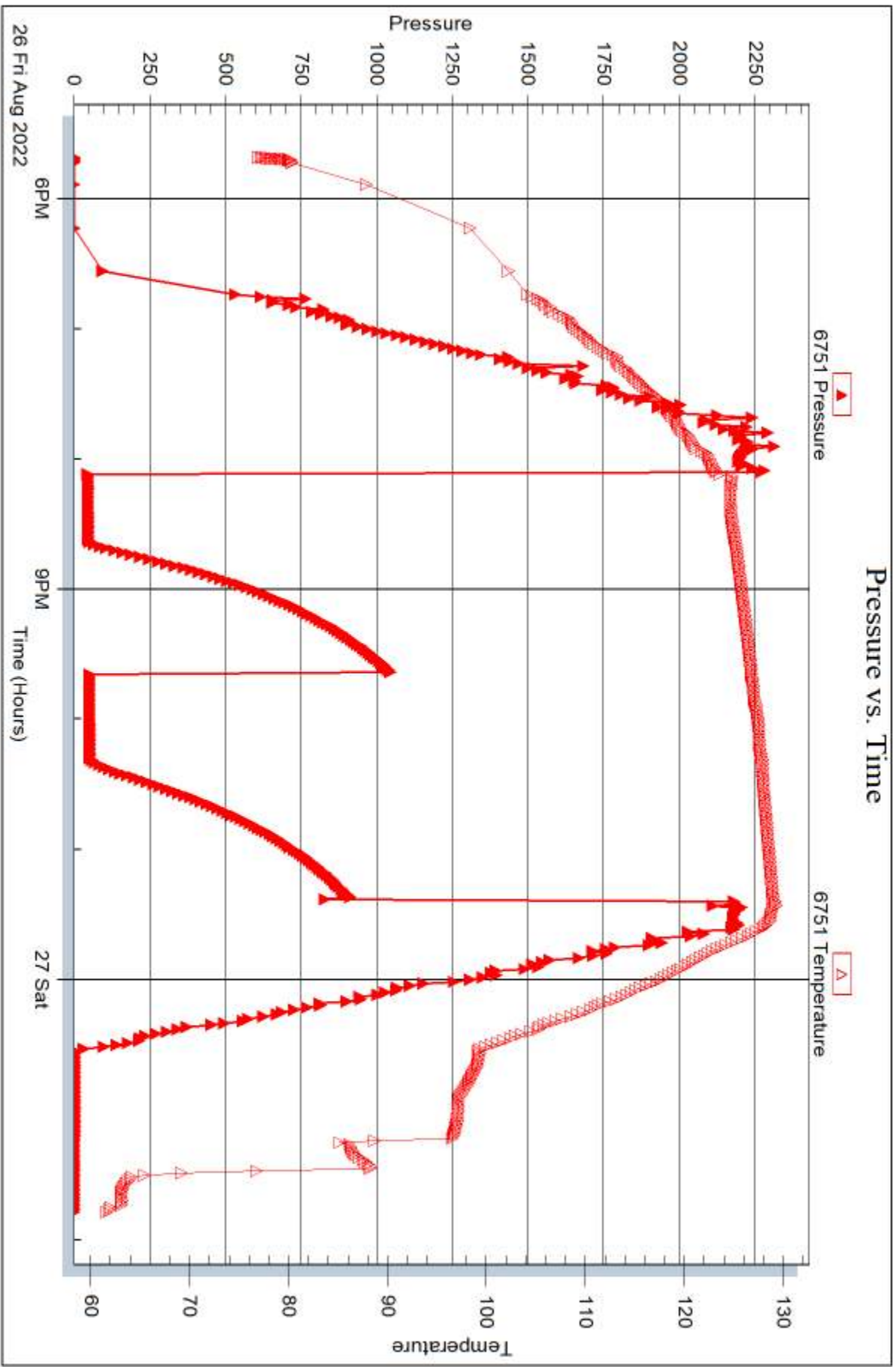


Serial #: 6751

Outside Marfin Drilling Co., Inc.

Hendricks #1-5

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 68923

Printed: 2022.08.30 @ 15:22:36



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

Hendricks #1-5

5-4s-38w Cheyenne,KS

Start Date: 2022.08.26 @ 17:24:00

End Date: 2022.08.27 @ 01:50:51

Job Ticket #: 68985 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2022.08.30 @ 15:16:14



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68985

DST#: 3

ATTN: Wes Hansen

Test Start: 2022.08.26 @ 17:24:00

Tool Information

Drill Pipe:	Length: 4419.00 ft	Diameter: 3.80 inches	Volume: 61.99 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:	25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose:	95000.00 lb
			<u>Total Volume: 62.88 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	75000.00 lb
Depth to Top Packer:	4622.00 ft			Final	76000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	43.00 ft				
Tool Length:	76.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: tried to flush tool at 10 min. on IF. Lost partial packer seat and mud dropped at least 30'.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4590.00	
Shut In Tool	5.00			4595.00	
Hydraulic tool	5.00			4600.00	
Jars	5.00			4605.00	
EM Tool	4.00			4609.00	
Safety Joint	3.00			4612.00	
Packer	5.00			4617.00	33.00 Bottom Of Top Packer
Packer	5.00			4622.00	
Packer - Shale	0.00			4622.00	
Stubb	1.00			4623.00	
Recorder	0.00	6771	Inside	4623.00	
Recorder	0.00	8700	Outside	4623.00	
Perforations	5.00			4628.00	
Blank Spacing	33.00			4661.00	
Perforations	1.00			4662.00	
Bullnose	3.00			4665.00	43.00 Bottom Packers & Anchor
Total Tool Length:	76.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68985

DST#: 3

ATTN: Wes Hansen

Test Start: 2022.08.26 @ 17:24:00

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: 86.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	Mud w /trace oil 100%m	0.885
45.00	Mud 100%	0.631

Total Length: 225.00 ft Total Volume: 1.516 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

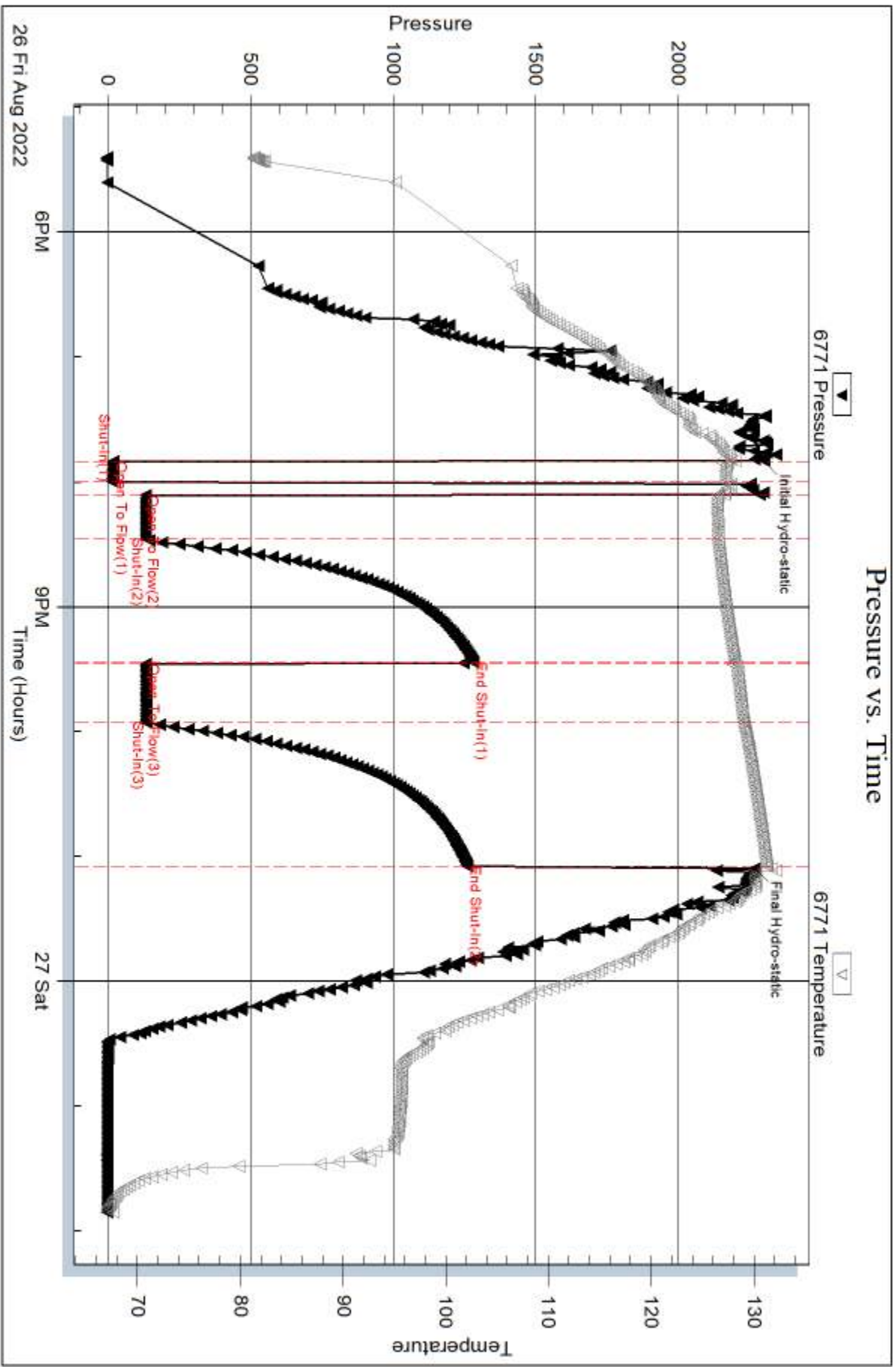
Serial #: 6771

Inside

Marfin Drilling Co., Inc.

Hendricks #1-5

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 68985

Printed: 2022.08.30 @ 15:16:14



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

Hendricks #1-5

5-4s-38w Cheyenne,KS

Start Date: 2022.08.28 @ 12:07:00

End Date: 2022.08.28 @ 19:25:06

Job Ticket #: 68986 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2022.08.30 @ 15:13:18

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

Hendricks #1-5

DST # 4

Ft. Scott - Cella

2022.08.28



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne, KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68986

DST#: 4

ATTN: Wes Hansen

Test Start: 2022.08.28 @ 12:07:00

GENERAL INFORMATION:

Formation: **Ft. Scott - Celia**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:12:36

Time Test Ended: 19:25:06

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 73

Interval: 4790.00 ft (KB) To 4940.00 ft (KB) (TVD)

Reference Elevations: 3518.00 ft (KB)

Total Depth: 4940.00 ft (KB) (TVD)

3513.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6771 Inside

Press@RunDepth: 26.72 psig @ 4791.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.28

End Date: 2022.08.28

Last Calib.: 2022.08.28

Start Time: 12:07:01

End Time: 19:25:06

Time On Btm: 2022.08.28 @ 14:12:21

Time Off Btm: 2022.08.28 @ 17:16:51

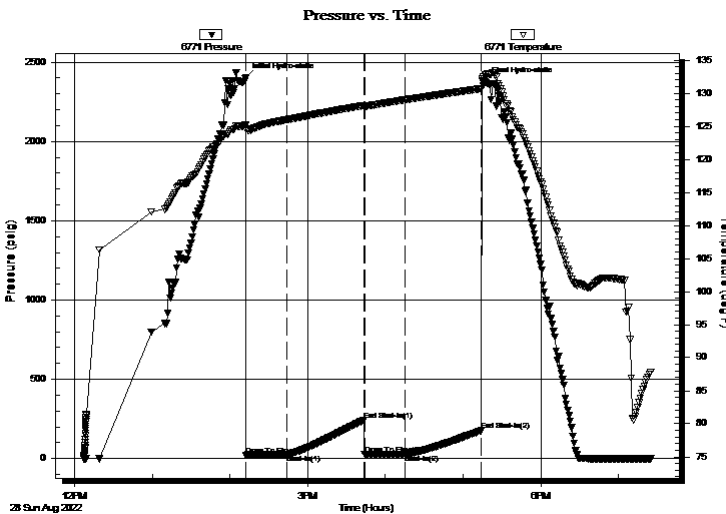
TEST COMMENT: 30 - IF: 1/8" Blow at open, died back, dead by 24 min.

60 - IS: No blow

30 - FF: No blow

60 - FS: No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2399.58	125.11	Initial Hydro-static
1	22.08	124.64	Open To Flow (1)
32	24.60	125.98	Shut-In(1)
91	242.54	128.14	End Shut-In(1)
92	25.29	128.09	Open To Flow (2)
123	26.72	129.00	Shut-In(2)
182	175.62	130.68	End Shut-In(2)
185	2375.58	132.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud w /trace oil 100%m	0.15

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68986

DST#: 4

ATTN: Wes Hansen

Test Start: 2022.08.28 @ 12:07:00

Tool Information

Drill Pipe:	Length: 4605.00 ft	Diameter: 3.80 inches	Volume: 64.60 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: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 110000.0 lb
			<u>Total Volume: 65.49 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4790.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	150.00 ft			
Tool Length:	183.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4758.00	
Shut In Tool	5.00			4763.00	
Hydraulic tool	5.00			4768.00	
Jars	5.00			4773.00	
EM Tool	4.00			4777.00	
Safety Joint	3.00			4780.00	
Packer	5.00			4785.00	33.00 Bottom Of Top Packer
Packer	5.00			4790.00	
Stubb	1.00			4791.00	
Recorder	0.00	6771	Inside	4791.00	
Recorder	0.00	8367	Outside	4791.00	
Perforations	17.00			4808.00	
Blank Spacing	127.00			4935.00	
Perforations	2.00			4937.00	
Bullnose	3.00			4940.00	150.00 Bottom Packers & Anchor

Total Tool Length: 183.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

5-4s-38w Cheyenne,KS

250 N Water STE 300
Wichita, KS 67202

Hendricks #1-5

Job Ticket: 68986

DST#: 4

ATTN: Wes Hansen

Test Start: 2022.08.28 @ 12:07:00

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: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud w /trace oil 100%m	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

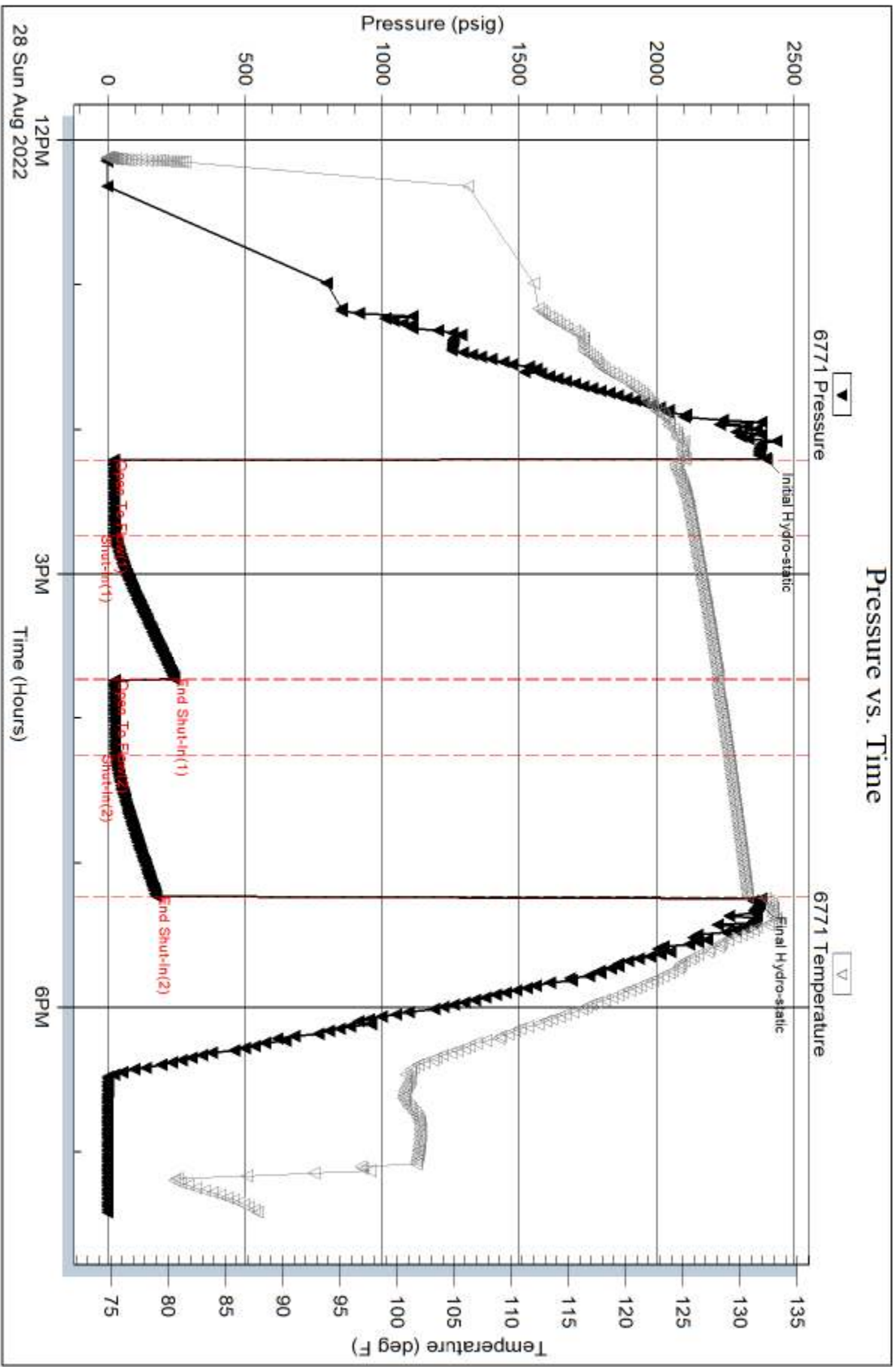
Recovery Comments:

Serial #: 6771

Inside Marfin Drilling Co., Inc.

Hendricks #1-5

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 68986

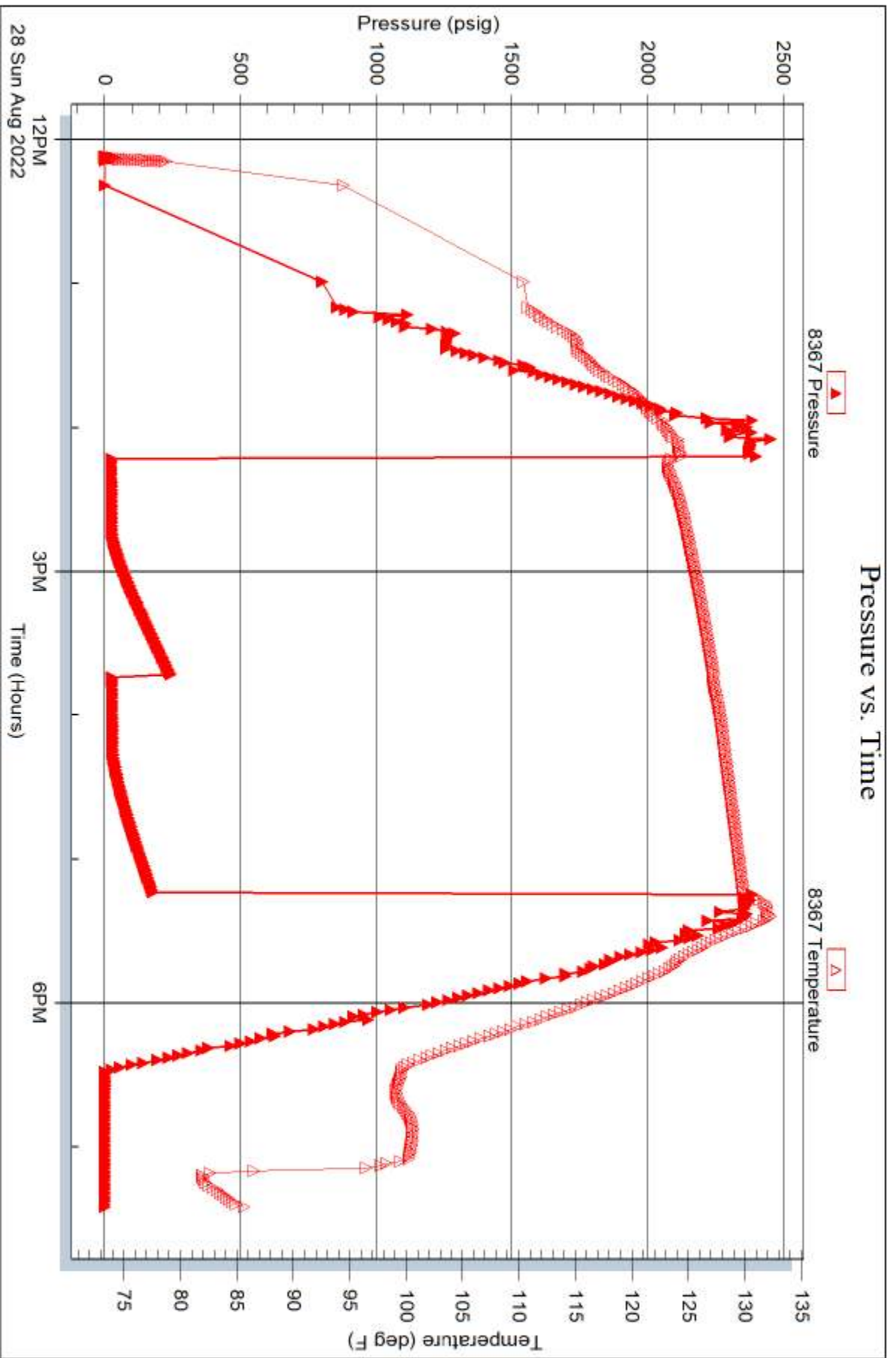
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Serial #: 8367

Outside Marfin Drilling Co., Inc.

Hendricks #1-5

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 68986

Printed: 2022.08.30 @ 15:13:19



TRIBOLITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **68922**

Well Name & No. Hendricks 1-S Test No. 1 Date 8-24-72
 Company Murfin Drilling Co., Inc. Elevation ~~3518~~ 3513 KB 3513 GL
 Address 250 W Water Sts 300 Wichita, KS 67202
 Co. Rep / Geo. Wes Hansen Rig Murfin #110
 Location: Sec. S Twp 4 Rge. 3E Co. Chayenne State KS

Interval Tested 4290-4330 Zone Tested 0 read
 Anchor Length 40' Drill Pipe Run 4037 Mud Wt. 8.9
 Top Packer Depth 4285 Drill Collars Run 243 Vis 62
 Bottom Packer Depth 4290 Wt. Pipe Run N.A. WL 6.0
 Total Depth 4330 Chlorides 600 ppm System LCM 2nd

Blow Description IF: 30 min, weak surface blow, died 10 min.
ISB: 30 min, no blow back
FF: 30 min, no blow
FSB: 60 min, no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>mud</u>			<u>100</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 Total 2 BHT 125 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2052 Test conv. 1950 T-On Location 0145
 (B) First Initial Flow 19 Jars 300 T-Started 0230
 (C) First Final Flow 20 Safety Joint _____ T-Open 0610
 (D) Initial Shut-In 31 Circ Sub _____ T-Pulled 0840
 (E) Second Initial Flow 20 Hourly Standby _____ T-Out 1030
 (F) Second Final Flow 21 Mileage x 120 (Oberlin) Comments bats @ 0230
 (G) Final Shut-In 41 Sampler 180 EM @ 0235
 (H) Final Hydrostatic 2045 Straddle _____ EM Tool good

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 30 Ruined Packer _____
 Final Flow 30 Extra Recorder _____
 Final Shut-In 60 Day Standby _____
 Accessibility _____ Sub Total 0
 Sub Total 2680 Total 2680
 MP/DST Disc't _____

Approved By _____ Our Representative Chris Hansen

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **68923**

Well Name & No. Hendricks 1-5 Test No. 2 Date 8-25-22
 Company Murfin Drilling Co., Inc. Elevation 3518 KB 3513 GL
 Address 250 N Water STE 300 Wichita, KS 67202
 Co. Rep / Geo. Wes Hansen Rig Murfin 110
 Location: Sec. S Twp 4 Rge. 38 Co. Cherokee State KS

Interval Tested 4530-4610 Zone Tested Lansing A-J
 Anchor Length 80' Drill Pipe Run 4325 Mud Wt. 9.1
 Top Packer Depth 4525 Drill Collars Run 180 Vis 62
 Bottom Packer Depth 4530 Wt. Pipe Run N.A. WL 6.4
 Total Depth 4610 Chlorides 600 ppm System LCM 3rd

Blow Description IP: 30 min., chased tool 8', no blow
IS: 60 min., no blow back
FP: 30 min., no blow
FS: 60 min., no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>mud</u>			<u>100</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

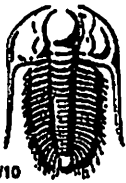
Rec Total 20 BHT 129 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2209 Test conv. 1950 T-On Location 1730
 (B) First Initial Flow 42 Jars 300 T-Started 1745
 (C) First Final Flow 45 Safety Joint _____ T-Open 2010
 (D) Initial Shut-In 1047 Circ Sub _____ T-Pulled 2310
 (E) Second Initial Flow 47 Hourly Standby _____ T-Out _____
 (F) Second Final Flow 52 Mileage X 60 120rt 180 Comments butse 1741
 (G) Final Shut-In 917 Sampler _____ Motel
 (H) Final Hydrostatic 2181 Straddle _____ EM Tool good
 Shale Packer X 1.0 250 Ruined Shale Packer _____

Initial Open 30 Extra Packer _____ Ruined Packer _____
 Initial Shut-In 60 Extra Recorder _____ Extra Copies _____
 Final Flow 30 Day Standby _____ Sub Total 0
 Final Shut-In 60 Accessibility _____ Total 26680
 Sub Total 2680 MP/DST Disc't _____

Approved By _____ Our Representative Chris Hagman

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 68985

Well Name & No. Hendricks #1-5 Test No. 3 Date 8-26-22
 Company Murfin Drilling Co. Inc Elevation 3518 KB 3513 GL
 Address 250 N. Water STE 300 Wichita, KS 67202
 Co. Rep / Geo. Wes Hansen Rig Murfin #110
 Location: Sec. 5 Twp 4s Rge. 38w Co. Cheyenne State KS

Interval Tested 4622-4665 Zone Tested Lans. "K"
 Anchor Length 43 Drill Pipe Run 4419 Mud Wt. 9.1
 Top Packer Depth 4617 Drill Collars Run 180 Vis 86
 Bottom Packer Depth 4622 (shale) Wt. Pipe Run - WL 6.0
 Total Depth 4665 Chlorides 600 ppm System LCM 4
 Blow Description IF: weak surface blow, dead at 5 min., tried to flush tool, No blow
ISI: No blow
FF: No blow
FSI: No blow

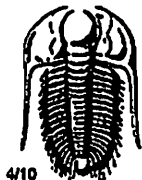
Rec	Feet of	%gas	%oil	%water	%mud
<u>45</u>	<u>Mud</u>			<u>100</u>	
<u>180</u>	<u>Mud w/trace oil</u>	<u>trace</u>		<u>100</u>	

Rec Total 225 BHT 131 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2303 Test 1950
 (B) First Initial Flow Pre Flush 19 / 132 Post flush Jars 300
 (C) First Final Flow 16 / 133 Safety Joint _____
 (D) Initial Shut-In 1285 Circ Sub _____
 (E) Second Initial Flow 133 Hourly Standby _____
 (F) Second Final Flow 135 Mileage 120 RT 180
 (G) Final Shut-In 1263 Sampler _____
 (H) Final Hydrostatic 2270 Straddle _____
 Shale Packer 250
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

T-On Location 15:50 8/26
 T-Started 17:24
 T-Open 19:50
 T-Pulled 23:04
 T-Out 1:40 8/27
 Comments Had to work tool
lost 15' to bottom
lost at least 30' of mud
when trying to flush tool
 EM Tool _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 2680
 MP/DST Disc't _____
 Sub Total 2680

Approved By Wesley Hansen Our Representative James Nink
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 68986

Well Name & No. Hendricks #1-5 Test No. 4 Date 8-28-22
 Company Murfin Drilling Co Inc Elevation 3518 KB 3573 GL
 Address 250 N. Water STE 300 Wichita, KS 67202
 Co. Rep / Geo. Wes Hansen Rig Murfin #110
 Location: Sec. 5 Twp 4s Rge. 38w Co. Cheyenne State KS

Interval Tested 4790 - 4940 Zone Tested Ft Scott - Celia
 Anchor Length 150 Drill Pipe Run 4605 Mud Wt. 9.1
 Top Packer Depth 4785 Drill Collars Run 180 Vls 61
 Bottom Packer Depth 4790 Wt. Pipe Run - WL 6.4
 Total Depth 4940 Chlorides 600 ppm System LCM 2

Blow Description IF: 1/8" Blow at open, died back, dead by 24 min.
ISI: No blow
FF: No blow
FSI: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>Mud w/trace oil</u>	<u>trace</u>	<u>0</u>	<u>100</u>	<u>0</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 Total 30 BHT 131 Gravity 1950 API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 2400 Test 1950
 (B) First Initial Flow 22 Jars 300
 (C) First Final Flow 25 Safety Joint
 (D) Initial Shut-In 243 Circ Sub
 (E) Second Initial Flow 25 Hourly Standby
 (F) Second Final Flow 27 Mileage 120RT 180
 (G) Final Shut-In 176 Sampler
 (H) Final Hydrostatic 2376 Straddle

T-On Location 11:25
 T-Started 12:07
 T-Open 14:12
 T-Pulled 17:13
 T-Out 19:20
 Comments _____

Initial Open 30 EM Tool
 Initial Shut-In 60 Ruined Shale Packer
 Final Flow 30 Ruined Packer
 Final Shut-In 60 Extra Copies
 Sub Total 325
 Total 2755
 MP/DST-Disc't _____
 Sub Total 2430

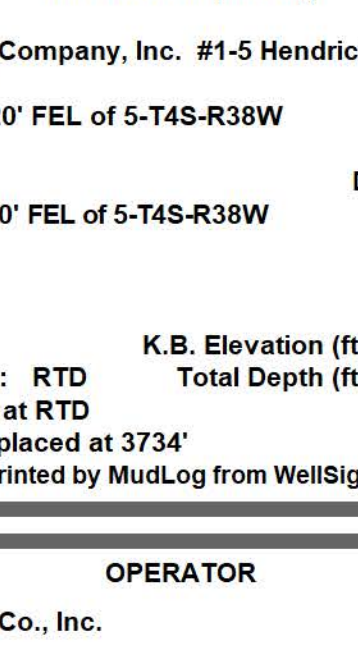
Approved By Wesley Hansen Our Representative James Winters

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WESLEY D. HANSEN Consulting Petroleum Geologist
 212 N. Market, Suite 257, Wichita, KS 67202
 Cellular 316.772.6188
 wansend461@cbglobal.net

KAGS #799479
 APG #799479



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

Well Name: Murfin Drilling Company, Inc. #1-5 Hendricks
Location: AP: 15-023-21580
AP#: 1980' FNL, 1320 FEL of 5-T4S-R38W
License Number: 30606
Spud Date: 8-19-2022
Surface Coordinates: 1980' FNL, 1320 FEL of 5-T4S-R38W
Region: Cheyenne County, KS
Completed: 8-30-2022

Bottom Hole Coordinates: Vertical hole
Ground Elevation (ft): 3513' To: RTD K.B. Elevation (ft): 3518'
Logged Interval (ft): 4070' to RTD Total Depth (ft): 5250'
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical - disp head at 3734'

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

OPERATOR

Company: Murfin Drilling Co., Inc.
Address: 250 N. Water Suite 300
 Wichita, KS 67202

GEOLOGIST

Name: Wesley D. Hansen
Company: Wesley D. Hansen - Consulting Petroleum Geologist
Address: 212 N. Market, Suite 257
 Wichita, KS 67202
 Cellular: 316-772-6188

COMMENTS

Contractor: Murfin Drilling Co., Inc. Rig #110
Pusher: Ricky Hilgers
Surface Casing: 8 5/8" set at 387 w/375sx
Production Casing: P&A
Mud by: Morgan Mud - Dave Lines was the engineer.
DST's by: Triobite - Chris Hagman and James Winder were the testers.
Logs by: Midwest Wireline: DL, CNJ/CDL, MEL BHCS; Dan Schmidt was the engineer
Deviation Surveys: 3/4 deg. @387'; 3/4 deg. @4016'; 3/4 deg. @ 5250'

BIT RECORD

Bit #	Size	MFG	Type	Depth Out	Footage Cut	Hours on Bit
1	12 1/4"	Smith	tooth	387'	307'	3 1/4
2	7 7/8"	Smith	POC	4016'	3629'	60 1/2
3	7 7/8"	Smith	F271	5250'	1621'	71 1/2

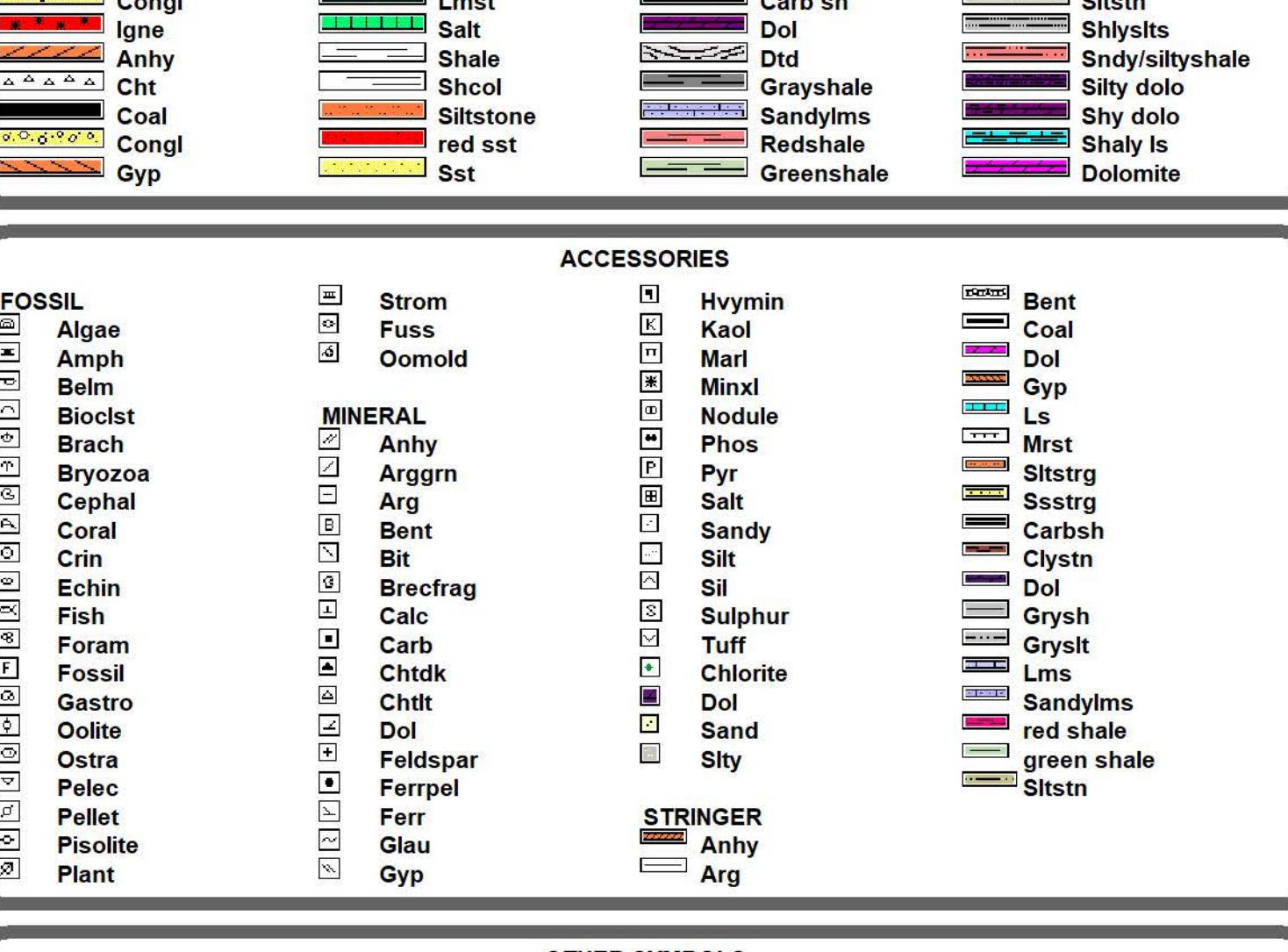
FORMATION TOPS AND STRUCTURAL COMPARISON

FORMATION	SAMPLE TOPS		LOG TOPS		COMPARISON WELL	
	Depth	Datum	Depth	Datum	Abercrombie #1 Harris NW 1/4 NE 4S-43-38W	5177' KB
	3518'	KB	3518'	KB		
Anhydrite	3317'	+201	3320'	+198	+197	
B/Anhydrite	3350'	+168	3352'	+166	+161	
Opoka	4184'	-666	4187'	-669	-671	
Treka	4328'	-810	4332'	-814	-823	
Heebner	4346'	-828	4348'	-830	-839	
Lansing	4401'	-883	4402'	-884	-887	
Stark Shale	4823'	-1105	4822'	-1104	-1109	
Mound City	4684'	-1166	4680'	-1162	-1170	
Fort Scott	4810'	-1292	4808'	-1290	-1295	
Oakley	4882'	-1364	4886'	-1368	-1379	
Mississippian	5132'	-1614	5137'	-1619	-1623	
RTD	5250'	-1732				
LTD			5254'	-1736		

DRILL STEM TESTS

DST No. 1 Oread
 Interval: 4297-4337'
 Times: 30:30-30:60
 Recovery: 2' mud
 FP: 1925-2045 SIP: 31-41
 HP: 2052-2045 BHT: 131 deg. F

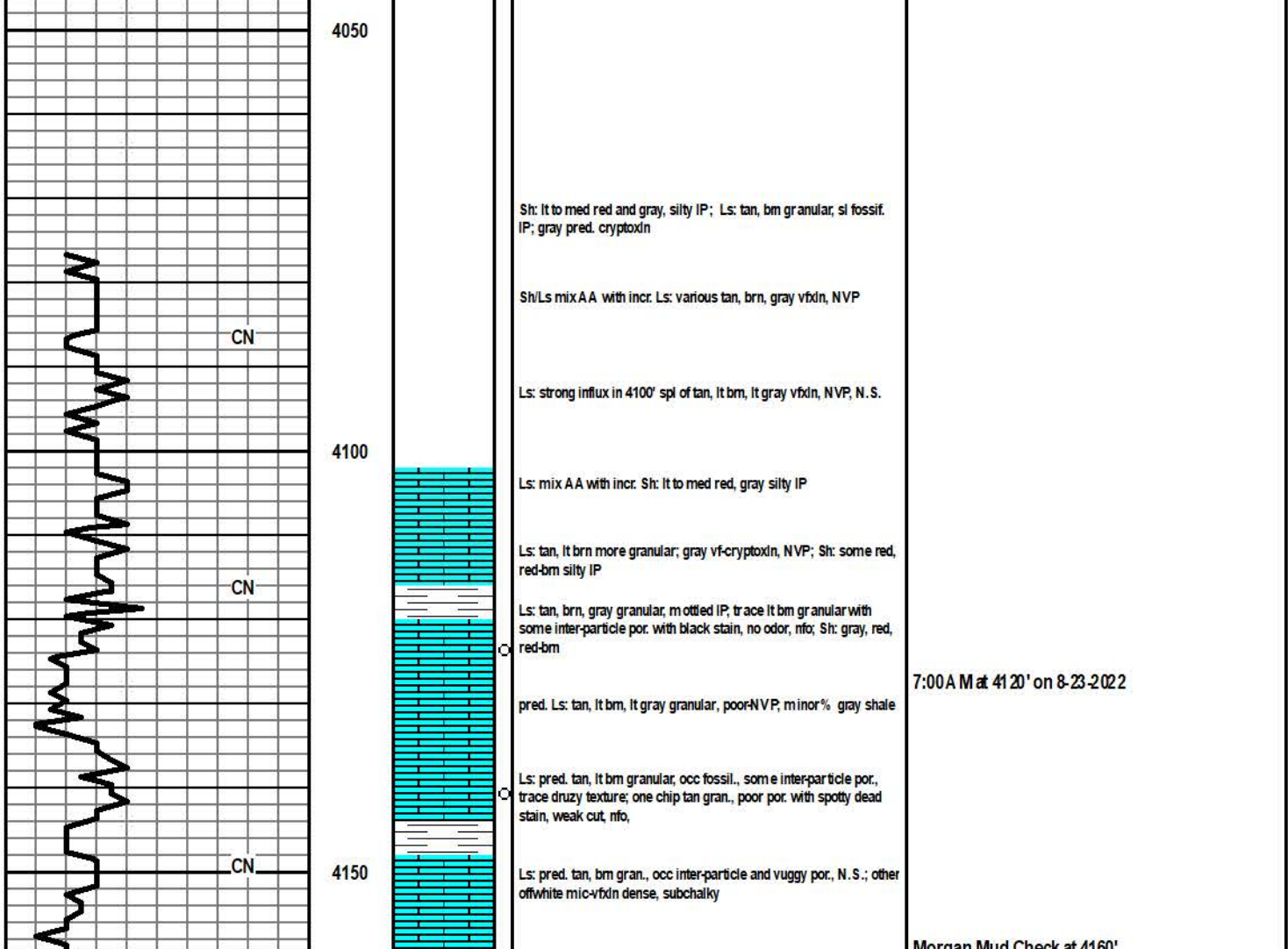
IFP: weak surface blow, died in 10 minutes
ISIP: no return blow
FFP: no return blow
FSP: no return blow



DRILL STEM TESTS

DST No. 2 Lansing "H" - "J"
 Interval: 4530-4610'
 Times: 30:30-30:60
 Recovery: 20' mud
 FP: 4245/47-52 SIP: 1047-917
 HP: 2209-2181 BHT: 129 deg. F

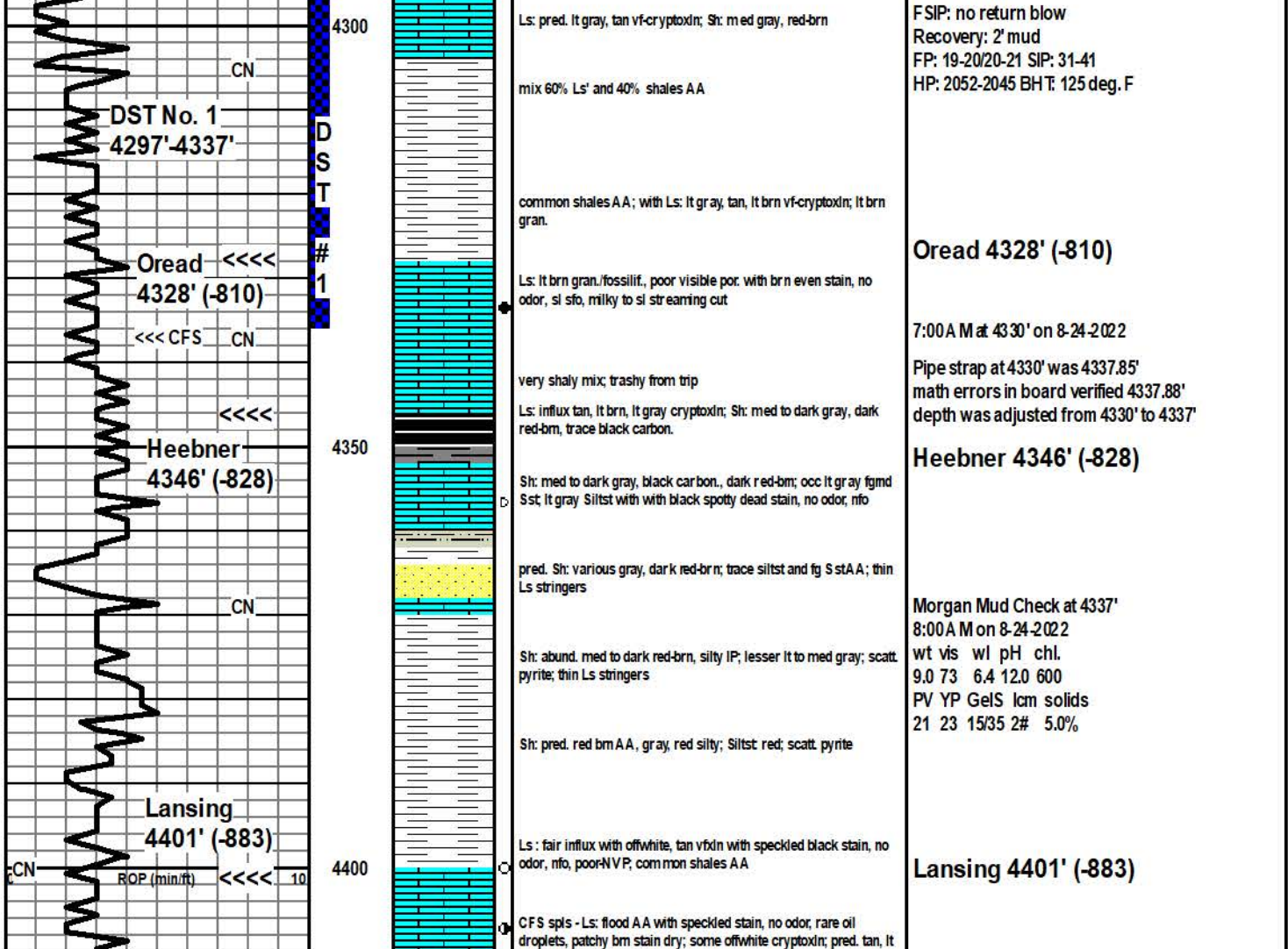
IFP: chased tool 8', bled off, no blow
ISIP: no return blow
FFP: no return blow
FSP: no return blow



DRILL STEM TESTS

DST No. 3 Lansing-Kansas City "K"
 Interval: 4622-4665'
 Times: 30:30-30:60
 Recovery: 45' mud; 180' mud w/race oil
 FP: 132-133 post flush; 133-135
 SIP: 1285-1283
 HP: 2303-2270 BHT: 131 deg. F

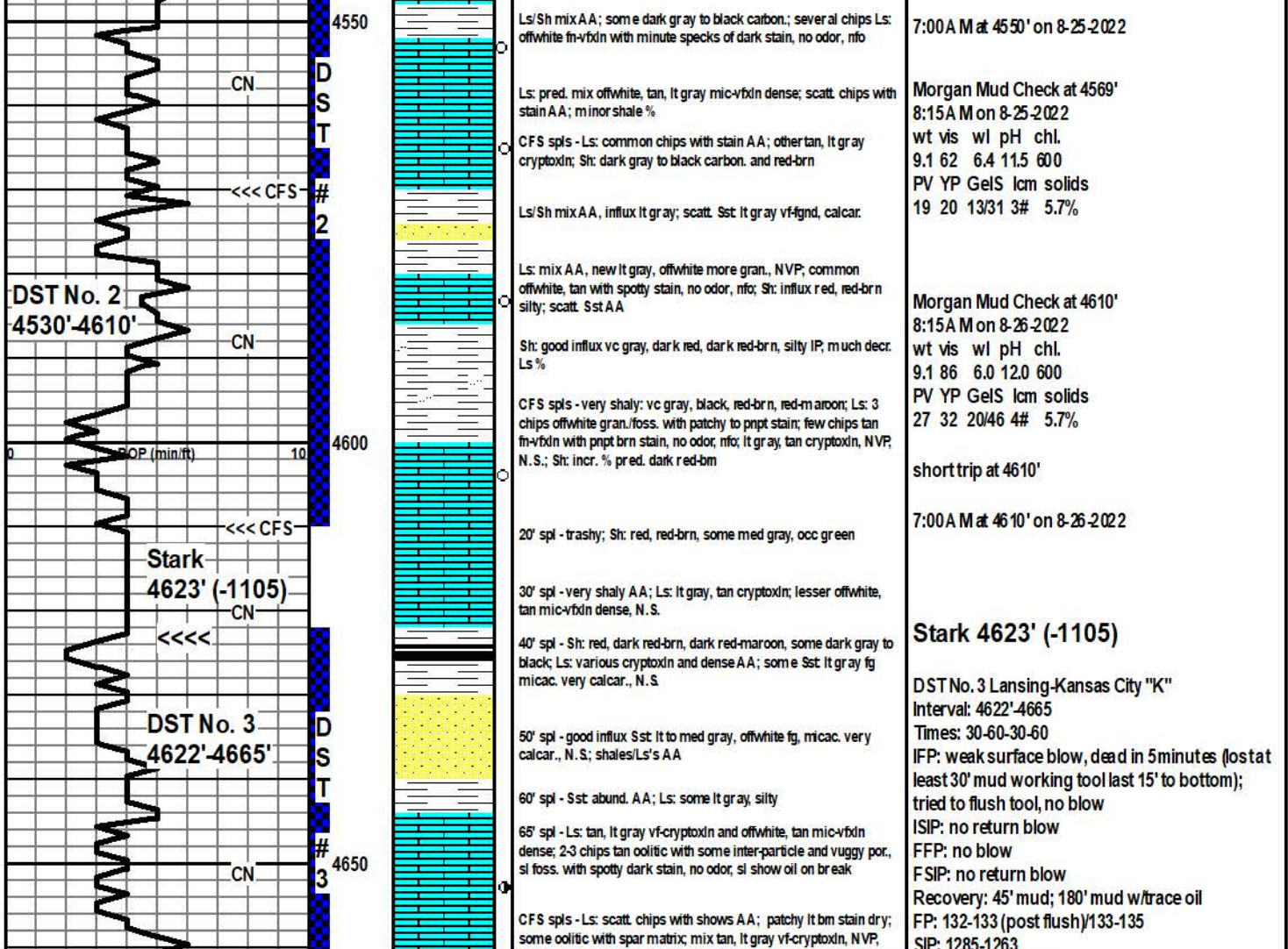
IFP: weak surface blow, died in 5 minutes
 (lost) to 30' mud working tool lost 15' to bottom
 (bottom); tried to flush tool, no blow
ISIP: no return blow
FFP: no return blow
FSP: no return blow



DRILL STEM TESTS

DST No. 4 Fort Scott - Celia
 Interval: 4790-4940'
 Times: 30:30-30:60
 Recovery: 30' mud with trace oil
 FP: 22-25/25-27 SP: 243-176
 HP: 2400-2376 BHT: 131 deg. F

IFP: 1/8" blow, died back to surface blow,
 died in 24 minutes
ISIP: no return blow
FFP: no return blow
FSP: no return blow



ROCK TYPES

Congl	Lmst	Carb sh	Silstn
Igne	Salt	Dol	Silty shale
Anhy	Shale	Dtd	Silty dol
Cht	Shale	Grayshale	Sandy shale
Coal	Siltstone	Sandylms	Shaly ls
Congl	red stn	Redshale	Dolomite
	Sst	Greenshale	

ACCESSORIES

Strom	Hymn	Bent
Fuss	Kaol	Coal
Oomold	Mrl	Dol
	Mnrl	Gyp
	Nodule	Ls
	Phos	Sststrg
	Pyr	Sststrg
	Salt	Carbsh
	Sandy	Clystrn
	Silt	Dol
	Sil	Grysth
	Sulph	Grysth
	Tuff	Sststrg
	Chert	Sststrg
	Dol	Sandylms
	Sand	red shale
	Sily	green shale
	STRINGER	Silstn
	Anhy	
	Arg	

OTHER SYMBOLS

Core	Oil Shows	Trace
Dst	Even	Dead
	Spotted	Gas show
	Quest	

Respectfully submitted,
Wesley D. Hansen
 Petroleum Geologist



CEMENT TREATMENT REPORT

Customer:	Murfin Drilling Co	Well:	Hendricks # 1-5	Ticket:	WP-3298
City, State:	Birdcity KS	County:	Cheyenne KS	Date:	8/30/2022
Field Rep:	Ricky	S-T-R:	5-4S-38W	Service:	PTA

Downhole Information	
Hole Size:	7 7/8 in
Hole Depth:	5250 ft
Casing Size:	in
Casing Depth:	ft
Tubing / Liner:	in
Depth:	ft
Tool / Packers:	
Tool Depth:	ft
Displacement:	68.5 bbls

Calculated Slurry - Lead	
Blend:	H-Pug
Weight:	13.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.42 ft ³ / sx
Annular Bbls / Ft.:	0.0735 bbs / ft.
Depth:	5250 ft
Annular Volume:	385.9 bbls
Excess:	
Total Slurry:	60.6 bbls
Total Sacks:	240 sx

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

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
5:15a			-	-	Arrival
5:20a				-	Safety meeting
5:25a				-	Rig up
7:20a	5.0	300.0	5.0	5.0	H2O ahead
7:23a	5.0	400.0	12.6	17.6	Mixed 50 sks of H-plug @ 13.8 ppg @ 3350'
7:26a	4.0	290.0	43.0	60.6	Displaced H2O
7:29a		200.0			Displaced mud with rig for 2.5 minutes
7:34a				60.6	Pull pipe to 2300'
7:56a	4.1	110.0	5.0	65.6	H2O ahead
8:00a	4.8	370.0	25.2	90.8	Mixed 100 sks of H-plug @ 13.8 ppg @ 2300'
8:06a	4.0	190.0	23.8	114.6	Displaced H2O
8:11a				114.6	Pull pipe to 425'
9:03a	4.6	160.0	5.0		H2O ahead
9:05a	4.2	200.0	12.6		Mixed 50 sks of H-plug @ 13.8 ppg @ 425'
9:09a	3.0	120.0	1.6		Displaced H2O
9:14a					Pull pipe to surface
9:46a	3.0	110.0	2.5		Mixed 10 sks of H-plug @ 13.8 ppg @ 40'
9:55a	3.0	110.0	12.6		Mixed 30 sks of H-plug @ 13.8 ppg @ Rat hole
10:00a					Plug down
10:03a					Wash up
10:12a					Rig down
10:30a					Depart location

UNIT		SUMMARY		
78		Average Rate	Average Pressure	Total Fluid
230		4.1 bpm	213 psi	149 bbls
194-235				

CREW	
Cementer:	Jesse
Pump Operator:	Michael
Bulk #1:	Tyler
Bulk #2:	