KOLAR Document ID: 1650285

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 # 30606
Name: Murfin Drilling Co., Inc.
Address 1: 250 N WATER STE 300
Address 2:
City: WICHITA State: KS Zip: 67202 + 1216
Contact Person: Rich Pancake
Phone: (316) 267-3241
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Wes Hansen
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 #:

04/28/2022 Spud Date or Recompletion Date
05/06/2022 Date Reached TD
05/06/2022 Completion Date or Recompletion Date

API No.: 15-153-21288-00-00
Spot Description:
__ - __ - NE - SW Sec. 10 Twp. 1 S. R. 32 ☐ East ☑ West
1980 Feet from ☐ North / ☑ South Line of Section
1980 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Rawlins
Lease Name: WEBER Well #: 1-10
Field Name:
Producing Formation: NA
Elevation: Ground: 2926 Kelly Bushing: 2931
Total Vertical Depth: 4200 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 350 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: 1200 ppm Fluid volume: 400 bbls
Dewatering 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: 07/05/2022
☐ **Confidential Release Date:** 07/04/2024
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** David Befort **Date:** 07/05/2022

Operator Name: Murfin Drilling Co., Inc. Lease Name: WEBER Well #: 1-10

Sec. 10 Twp. 1 S. R. 32 ☐ East ☑ West County: Rawlins

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
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☑ Sample

Name	Top	Datum
see attached	see attached	see 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	12.250	8.625	23	350	H-325	300	

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

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	WEBER 1-10
Doc ID	1650285

All Electric Logs Run

BHCS
BHV
DIL
DUCP
MEL

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	WEBER 1-10
Doc ID	1650285

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	12.250	8.625	23	350	H-325	300	

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

Weber #1-10

10-1s-32w Rawlins, KS

Start Date: 2022.05.02 @ 04:59:00
End Date: 2022.05.02 @ 14:52:30
Job Ticket #: 68173 DST #: 1

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

Printed: 2022.05.05 @ 16:51:36

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68173 **DST#: 1**

Test Start: 2022.05.02 @ 04:59:00

GENERAL INFORMATION:

Formation: **Oread**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:39:15
Time Test Ended: 14:52:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Day
Unit No: 70

Interval: 3804.00 ft (KB) To 3850.00 ft (KB) (TVD)
Total Depth: 3850.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

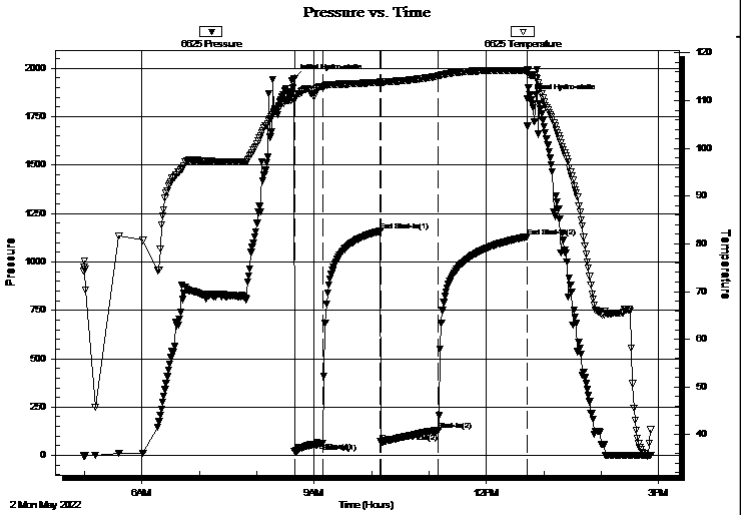
Reference Elevations: 2931.00 ft (KB)
2926.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6625 **Inside**

Press@RunDepth: 128.59 psig @ 3805.00 ft (KB)
Start Date: 2022.05.02 End Date: 2022.05.02
Start Time: 04:59:05 End Time: 14:52:30

Capacity: 8000.00 psig
Last Calib.: 2022.05.02
Time On Btm: 2022.05.02 @ 08:39:00
Time Off Btm: 2022.05.02 @ 12:43:00

TEST COMMENT: IF-30- Built to 4 1/4"
SI1-60- No return
FF-60- Built to 5"
SI2-90- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1946.16	110.47	Initial Hydro-static
1	20.97	110.29	Open To Flow (1)
31	65.23	112.89	Shut-In(1)
90	1159.50	113.85	End Shut-In(1)
91	70.06	113.51	Open To Flow (2)
151	128.59	115.12	Shut-In(2)
244	1130.42	116.37	End Shut-In(2)
244	1844.03	116.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
117.00	MCW 5% mud 95% w ater	0.58
143.00	MW 45% mud 55% w ater	0.92

Gas Rates

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

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68173 **DST#: 1**

Test Start: 2022.05.02 @ 04:59:00

GENERAL INFORMATION:

Formation: **Oread**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:39:15
Time Test Ended: 14:52:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Day
Unit No: 70

Interval: 3804.00 ft (KB) To 3850.00 ft (KB) (TVD)
Total Depth: 3850.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

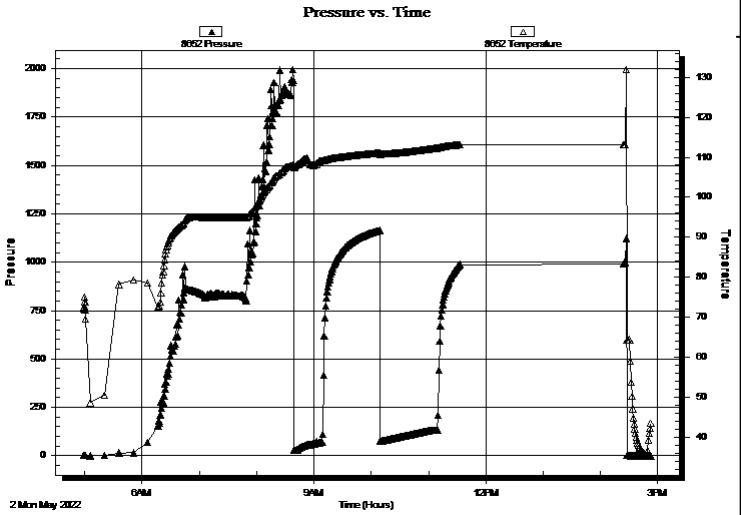
Reference Elevations: 2931.00 ft (KB)
2926.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8652 **Outside**

Press@RunDepth: psig @ 3805.00 ft (KB)
Start Date: 2022.05.02 End Date: 2022.05.02
Start Time: 04:59:05 End Time: 14:52:30

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-30- Built to 4 1/4"
SI1-60- No return
FF-60- Built to 5"
SI2-90- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
117.00	MCW 5% mud 95% w ater	0.58
143.00	MW 45% mud 55% w ater	0.92

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68173 **DST#: 1**

Test Start: 2022.05.02 @ 04:59:00

Tool Information

Drill Pipe:	Length:	3549.00 ft	Diameter:	3.80 inches	Volume:	49.78 bbl	Tool Weight:		2900.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.75 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	236.00 ft	Diameter:	2.25 inches	Volume:	1.16 bbl	Weight to Pull Loose:		78000.00 lb
					Total Volume:	50.94 bbl	Tool Chased		ft
Drill Pipe Above KB:		12.00 ft					String Weight:	Initial	70000.00 lb
Depth to Top Packer:		3804.00 ft						Final	72000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		46.00 ft							
Tool Length:		77.00 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			3774.00		
shut In Tool	5.00			3779.00		
hydraulic tool	5.00			3784.00		
Jars	5.00			3789.00		
EM Tool	3.00			3792.00		
Safety Joint	3.00			3795.00		
Packer	5.00			3800.00	31.00	Bottom Of Top Packer
Packer	4.00			3804.00		
Stubb	1.00			3805.00		
Recorder	0.00	6625	Inside	3805.00		
Recorder	0.00	8652	Outside	3805.00		
perforations	5.00			3810.00		
change Over Sub	1.00			3811.00		
drill Pipe	32.00			3843.00		
change Over Sub	1.00			3844.00		
perforations	3.00			3847.00		
Bullnose	3.00			3850.00	46.00	Bottom Packers & Anchor
Total Tool Length:	**77.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68173 **DST#: 1**

Test Start: 2022.05.02 @ 04:59:00

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:	95000 ppm
Viscosity:	72.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	700.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
117.00	MCW 5% mud 95% w ater	0.575
143.00	MW 45% mud 55% w ater	0.922

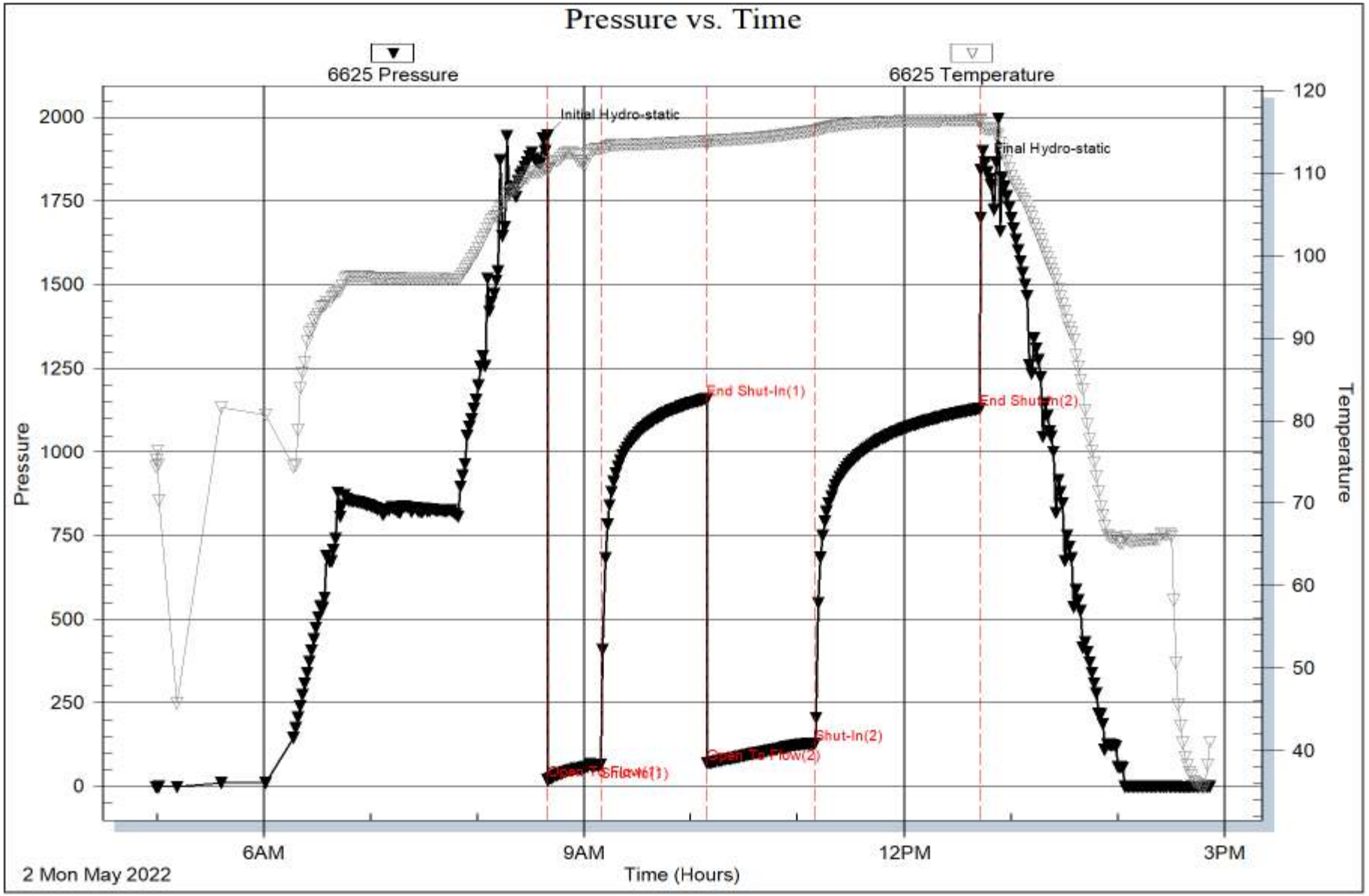
Total Length: 260.00 ft Total Volume: 1.497 bbl

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

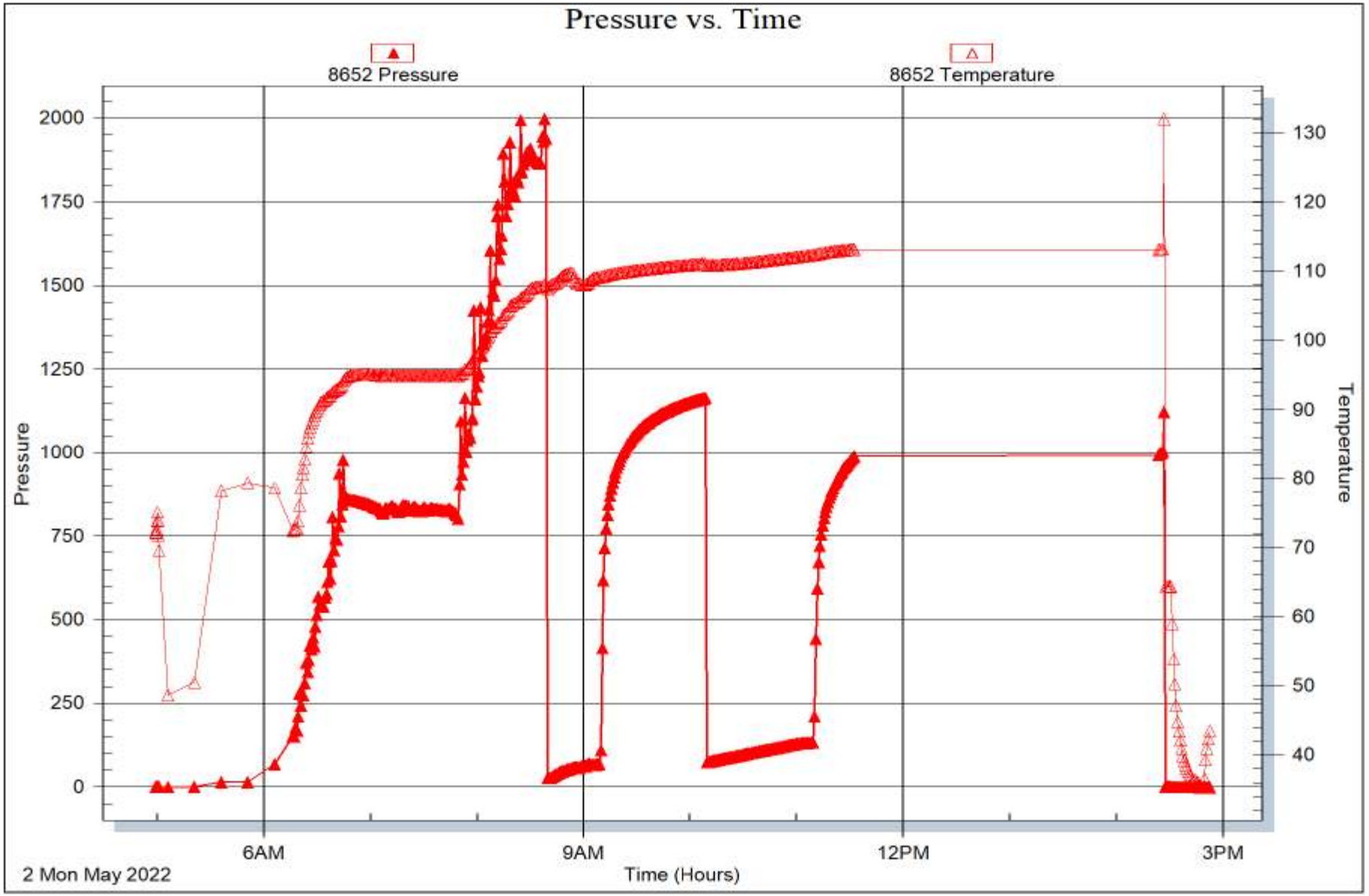
Laboratory Name: Laboratory Location:

Recovery Comments: 4# LCM

Serial #: 6625 **Inside** Murfin Drilling Company Inc. Weber #1-10 DST Test Number: 1



Serial #: 8652 **Outside** Murfin Drilling Company Inc. Weber #1-10 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 68173 Printed: 2022.05.05 @ 16:51:38

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

Weber #1-10

10-1s-32w Rawlins, KS

Start Date: 2022.05.03 @ 16:31:00
End Date: 2022.05.03 @ 23:36:45
Job Ticket #: 68174 DST #: 2

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

Printed: 2022.05.05 @ 16:51:09

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68174 **DST#: 2**

Test Start: 2022.05.03 @ 16:31:00

GENERAL INFORMATION:

Formation: **LKC D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:27:00
Time Test Ended: 23:36:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Dustin Day
Unit No: 70

Interval: 3886.00 ft (KB) To 3940.00 ft (KB) (TVD)
Total Depth: 3940.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

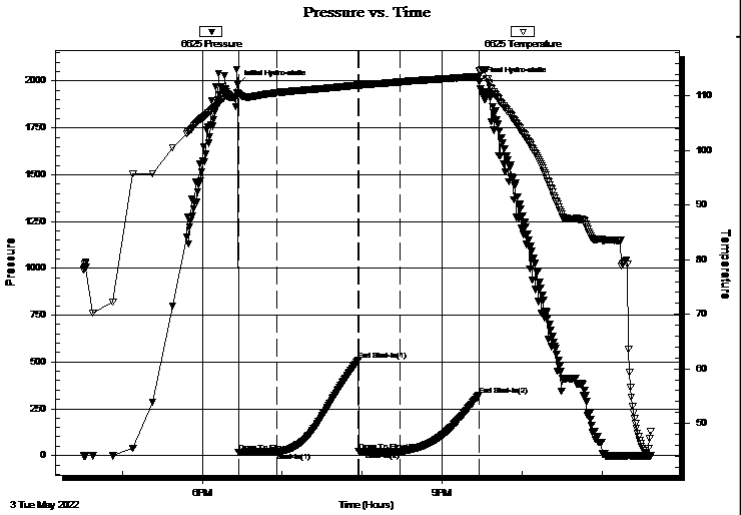
Reference Elevations: 2931.00 ft (KB)
2926.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6625 **Inside**

Press@RunDepth: 21.34 psig @ 3887.00 ft (KB)
Start Date: 2022.05.03 End Date: 2022.05.03
Start Time: 16:31:05 End Time: 23:36:44

Capacity: 8000.00 psig
Last Calib.: 2022.05.03
Time On Btm: 2022.05.03 @ 18:26:45
Time Off Btm: 2022.05.03 @ 21:28:00

TEST COMMENT: IF-30- Weak surface blow
SI1-60- No return
FF-30- No blow
SI2-60- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1983.12	110.69	Initial Hydro-static
1	19.04	110.42	Open To Flow (1)
30	19.69	110.61	Shut-In(1)
91	509.28	111.99	End Shut-In(1)
91	21.16	111.96	Open To Flow (2)
122	21.34	112.58	Shut-In(2)
181	321.15	113.61	End Shut-In(2)
182	1998.55	114.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%	0.02

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68174 **DST#: 2**

Test Start: 2022.05.03 @ 16:31:00

GENERAL INFORMATION:

Formation: **LKC D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:27:00
Time Test Ended: 23:36:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Dustin Day
Unit No: 70

Interval: 3886.00 ft (KB) To 3940.00 ft (KB) (TVD)
Total Depth: 3940.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

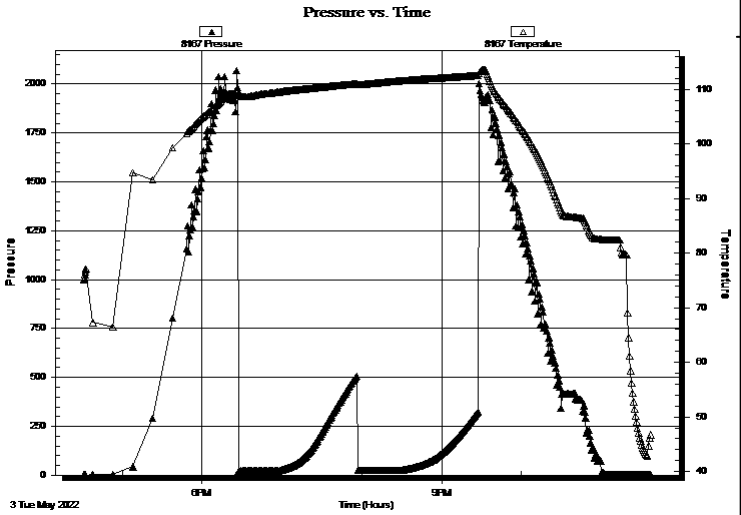
Reference Elevations: 2931.00 ft (KB)
2926.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8167 **Outside**

Press@RunDepth: psig @ 3887.00 ft (KB)
Start Date: 2022.05.03 End Date: 2022.05.03
Start Time: 16:31:05 End Time: 23:36:59

Capacity: 8000.00 psig
Last Calib.: 2022.05.03
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-30- Weak surface blow
SI1-60- No return
FF-30- No blow
SI2-60- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%	0.02

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68174 **DST#: 2**

Test Start: 2022.05.03 @ 16:31:00

Tool Information

Drill Pipe:	Length:	3645.00 ft	Diameter:	3.80 inches	Volume:	51.13 bbl	Tool Weight:		2900.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.75 inches	Volume:	0.00 bbl	Weight set on Packer:		26000.00 lb
Drill Collar:	Length:	236.00 ft	Diameter:	2.25 inches	Volume:	1.16 bbl	Weight to Pull Loose:		84000.00 lb
					Total Volume:	52.29 bbl	Tool Chased		ft
Drill Pipe Above KB:		26.00 ft					String Weight:	Initial	74000.00 lb
Depth to Top Packer:		3886.00 ft						Final	74000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		54.00 ft							
Tool Length:		85.00 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			3856.00		
shut In Tool	5.00			3861.00		
hydraulic tool	5.00			3866.00		
Jars	5.00			3871.00		
EM Tool	3.00			3874.00		
Safety Joint	3.00			3877.00		
Packer	5.00			3882.00	31.00	Bottom Of Top Packer
Packer	4.00			3886.00		
Stubb	1.00			3887.00		
Recorder	0.00	6625	Inside	3887.00		
Recorder	0.00	8167	Outside	3887.00		
perforations	13.00			3900.00		
change Over Sub	1.00			3901.00		
drill Pipe	32.00			3933.00		
change Over Sub	1.00			3934.00		
perforations	3.00			3937.00		
Bullnose	3.00			3940.00	54.00	Bottom Packers & Anchor
Total Tool Length:	**85.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68174 **DST#: 2**

Test Start: 2022.05.03 @ 16:31:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1100.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%	0.025

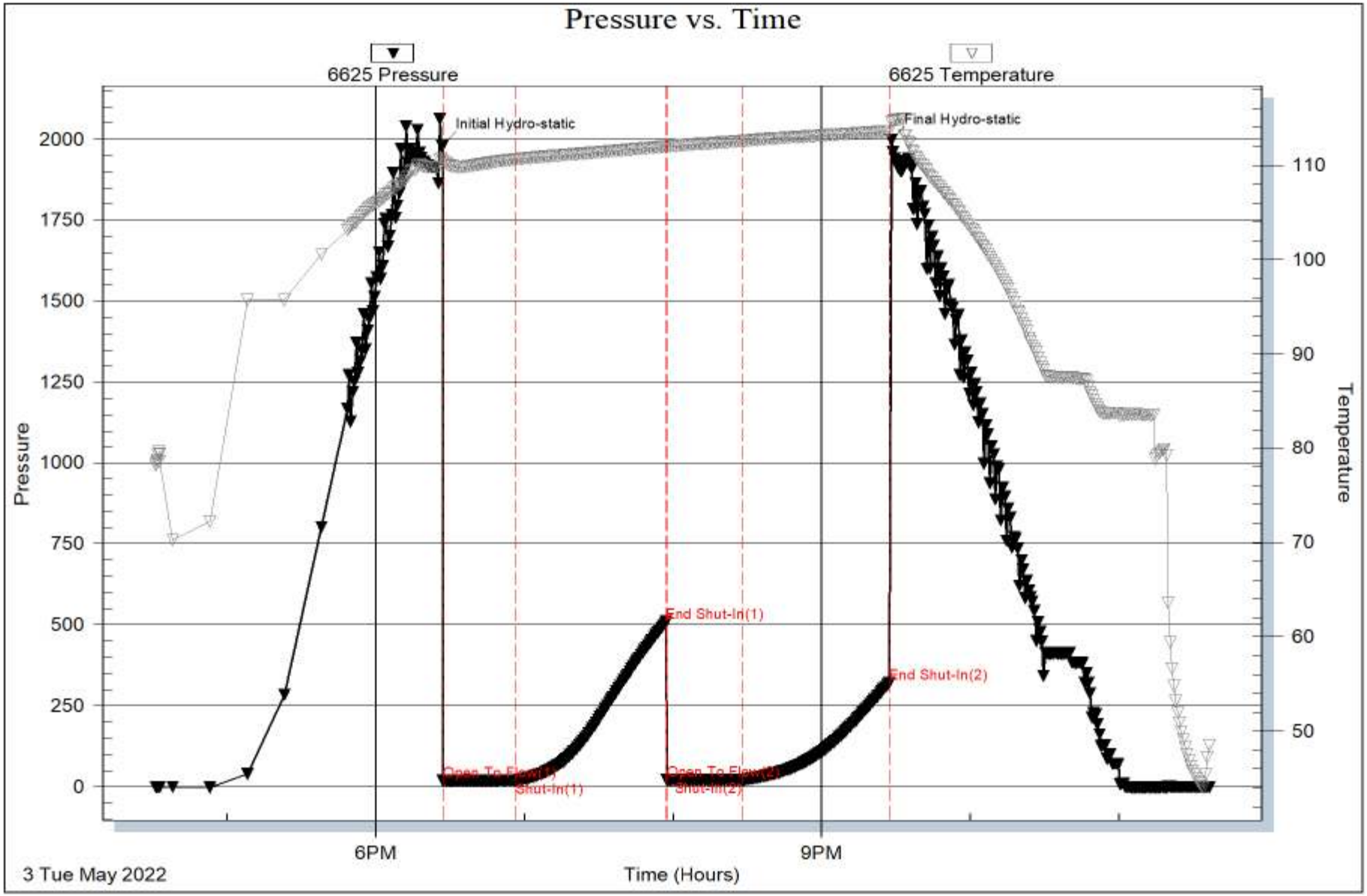
Total Length: 5.00 ft Total Volume: 0.025 bbl

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

Laboratory Name: Laboratory Location:

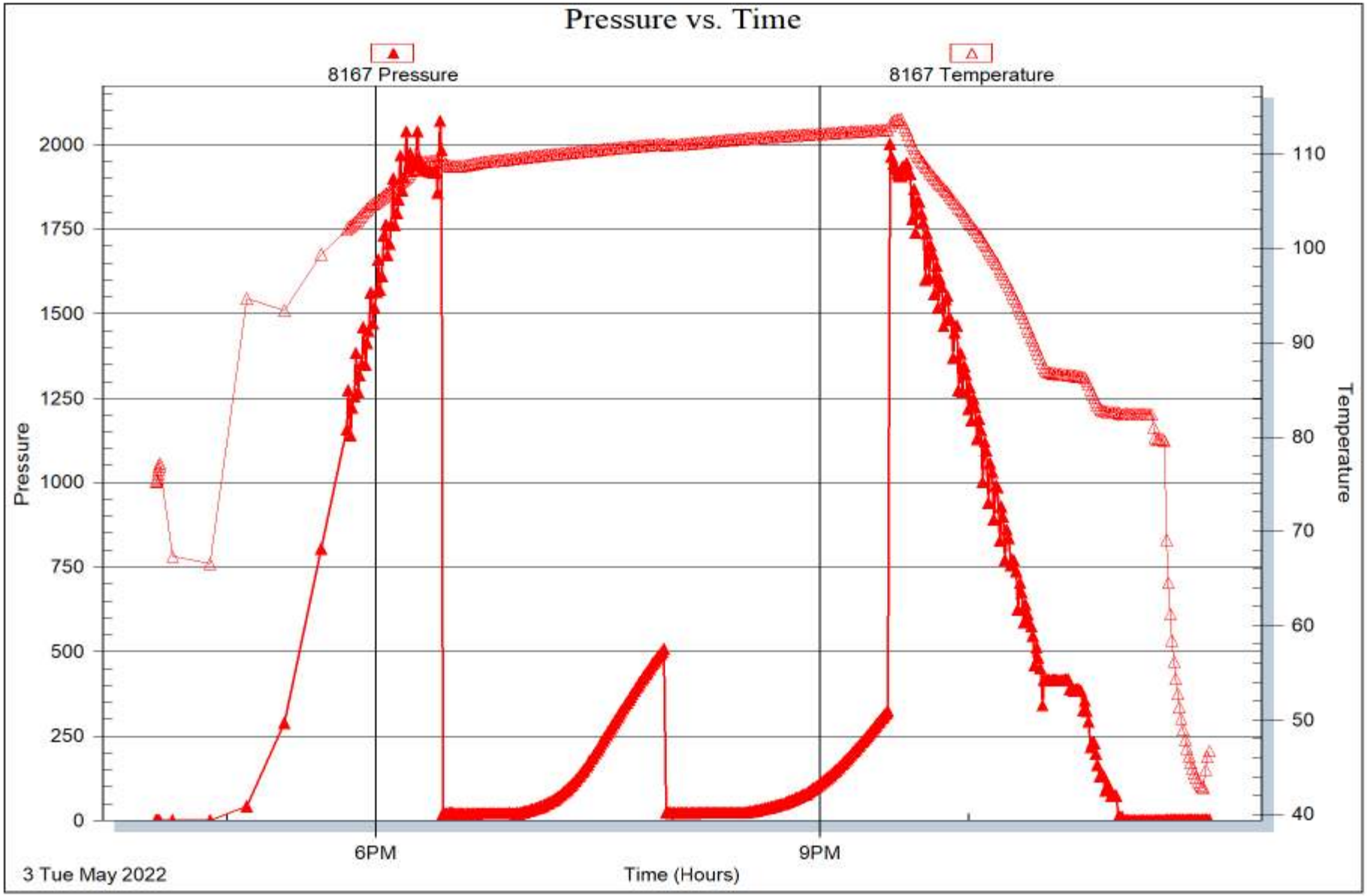
Recovery Comments: 4# LCM

Serial #: 6625 **Inside** Murfin Drilling Company Inc. Weber #1-10 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 68174 Printed: 2022.05.05 @ 16:51:10

Serial #: 8167 **Outside** Murfin Drilling Company Inc. Weber #1-10 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 68174 Printed: 2022.05.05 @ 16:51:10

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

Weber #1-10

10-1s-32w Rawlins, KS

Start Date: 2022.05.04 @ 18:16:00
End Date: 2022.05.05 @ 01:47:00
Job Ticket #: 68175 DST #: 3

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

Printed: 2022.05.05 @ 15:26:37

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68175 **DST#: 3**

Test Start: 2022.05.04 @ 18:16:00

GENERAL INFORMATION:

Formation: **LKC H - J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:03:15
Time Test Ended: 01:47:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Dustin Day
Unit No: 70

Interval: 3980.00 ft (KB) To 4080.00 ft (KB) (TVD)
Total Depth: 4080.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

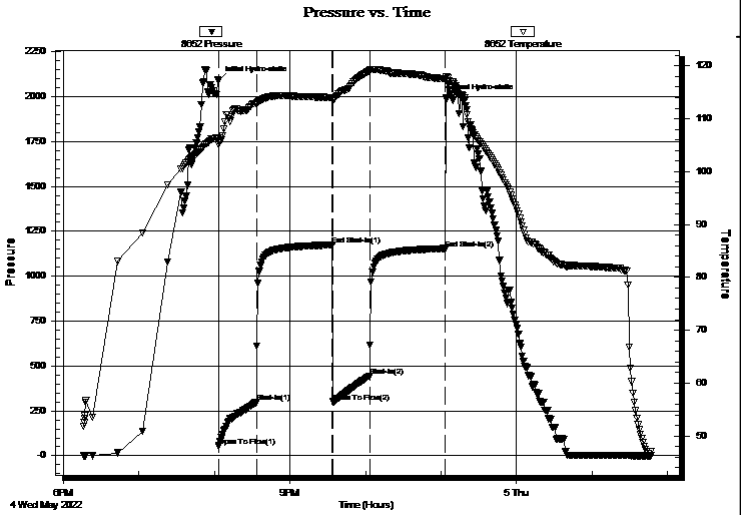
Reference Elevations: 2931.00 ft (KB)
2926.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8652 **Outside**

Press@RunDepth: 444.92 psig @ 3981.00 ft (KB)
Start Date: 2022.05.04 End Date: 2022.05.05
Start Time: 18:16:05 End Time: 01:46:59

Capacity: 8000.00 psig
Last Calib.: 2022.05.05
Time On Btm: 2022.05.04 @ 20:03:00
Time Off Btm: 2022.05.04 @ 23:04:15

TEST COMMENT: IF-30- BOB 7 min 15 sec, Built to 43 1/4"
SI1-60- No return
FF-30- BOB in 9 1/2 min, built to 38 1/2"
SI2-60- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2091.94	106.45	Initial Hydro-static
1	51.28	105.08	Open To Flow (1)
31	298.31	112.83	Shut-In(1)
91	1174.38	113.98	End Shut-In(1)
91	300.55	113.68	Open To Flow (2)
121	444.92	119.07	Shut-In(2)
181	1154.39	117.60	End Shut-In(2)
182	1987.31	117.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
425.00	MCW 10% mud 90% w ater	3.81
127.00	MW 50% mud 50% w ater	1.78
316.00	WCM 10% w ater 90% mud	4.43
84.00	mud 100%	1.18

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68175 **DST#: 3**

Test Start: 2022.05.04 @ 18:16:00

GENERAL INFORMATION:

Formation: **LKC H - J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:03:15
Time Test Ended: 01:47:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Dustin Day
Unit No: 70

Interval: 3980.00 ft (KB) To 4080.00 ft (KB) (TVD)
Total Depth: 4080.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

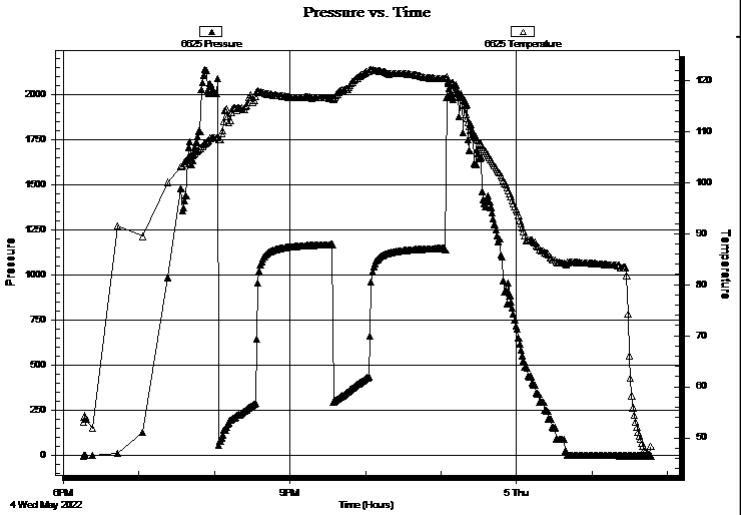
Reference Elevations: 2931.00 ft (KB)
2926.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6625 **Inside**

Press@RunDepth: psig @ 3981.00 ft (KB)
Start Date: 2022.05.04 End Date: 2022.05.05
Start Time: 18:16:05 End Time: 01:46:59

Capacity: 8000.00 psig
Last Calib.: 2022.05.05
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-30- BOB 7 min 15 sec, Built to 43 1/4"
SI1-60- No return
FF-30- BOB in 9 1/2 min, built to 38 1/2"
SI2-60- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
425.00	MCW 10% mud 90% w ater	3.81
127.00	MW 50% mud 50% w ater	1.78
316.00	WCM 10% w ater 90% mud	4.43
84.00	mud 100%	1.18

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68175 **DST#: 3**

Test Start: 2022.05.04 @ 18:16:00

Tool Information

Drill Pipe:	Length:	3740.00 ft	Diameter:	3.80 inches	Volume:	52.46 bbl	Tool Weight:		2900.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.75 inches	Volume:	0.00 bbl	Weight set on Packer:		26000.00 lb
Drill Collar:	Length:	236.00 ft	Diameter:	2.25 inches	Volume:	1.16 bbl	Weight to Pull Loose:		86000.00 lb
					Total Volume:	53.62 bbl	Tool Chased		ft
Drill Pipe Above KB:		27.00 ft					String Weight:	Initial	75000.00 lb
Depth to Top Packer:		3980.00 ft						Final	79000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		100.00 ft							
Tool Length:		131.00 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			3950.00		
shut In Tool	5.00			3955.00		
hydraulic tool	5.00			3960.00		
Jars	5.00			3965.00		
EM Tool	3.00			3968.00		
Safety Joint	3.00			3971.00		
Packer	5.00			3976.00	31.00	Bottom Of Top Packer
Packer	4.00			3980.00		
Stubb	1.00			3981.00		
Recorder	0.00	6625	Inside	3981.00		
Recorder	0.00	8652	Outside	3981.00		
perforations	28.00			4009.00		
change Over Sub	1.00			4010.00		
drill Pipe	63.00			4073.00		
change Over Sub	1.00			4074.00		
perforations	3.00			4077.00		
Bullnose	3.00			4080.00	100.00	Bottom Packers & Anchor
Total Tool Length:	**131.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Wes Hansen

10-1s-32w Rawlins, KS

Weber #1-10

Job Ticket: 68175 **DST#: 3**

Test Start: 2022.05.04 @ 18:16:00

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:	75000 ppm
Viscosity:	64.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
425.00	MCW 10% mud 90% w ater	3.812
127.00	MW 50% mud 50% w ater	1.781
316.00	WCM 10% w ater 90% mud	4.433
84.00	mud 100%	1.178

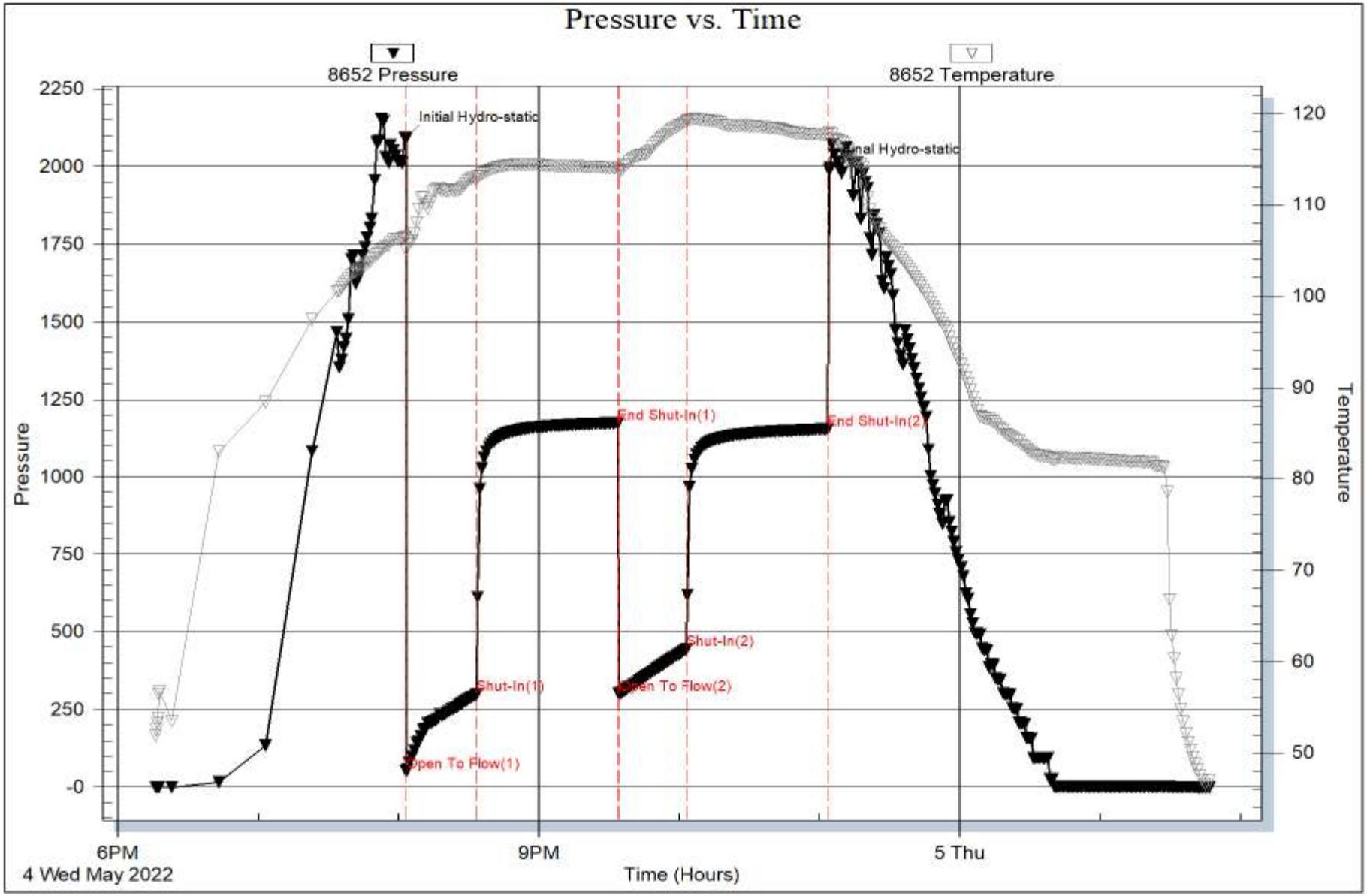
Total Length: 952.00 ft Total Volume: 11.204 bbl

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

Laboratory Name: Laboratory Location:

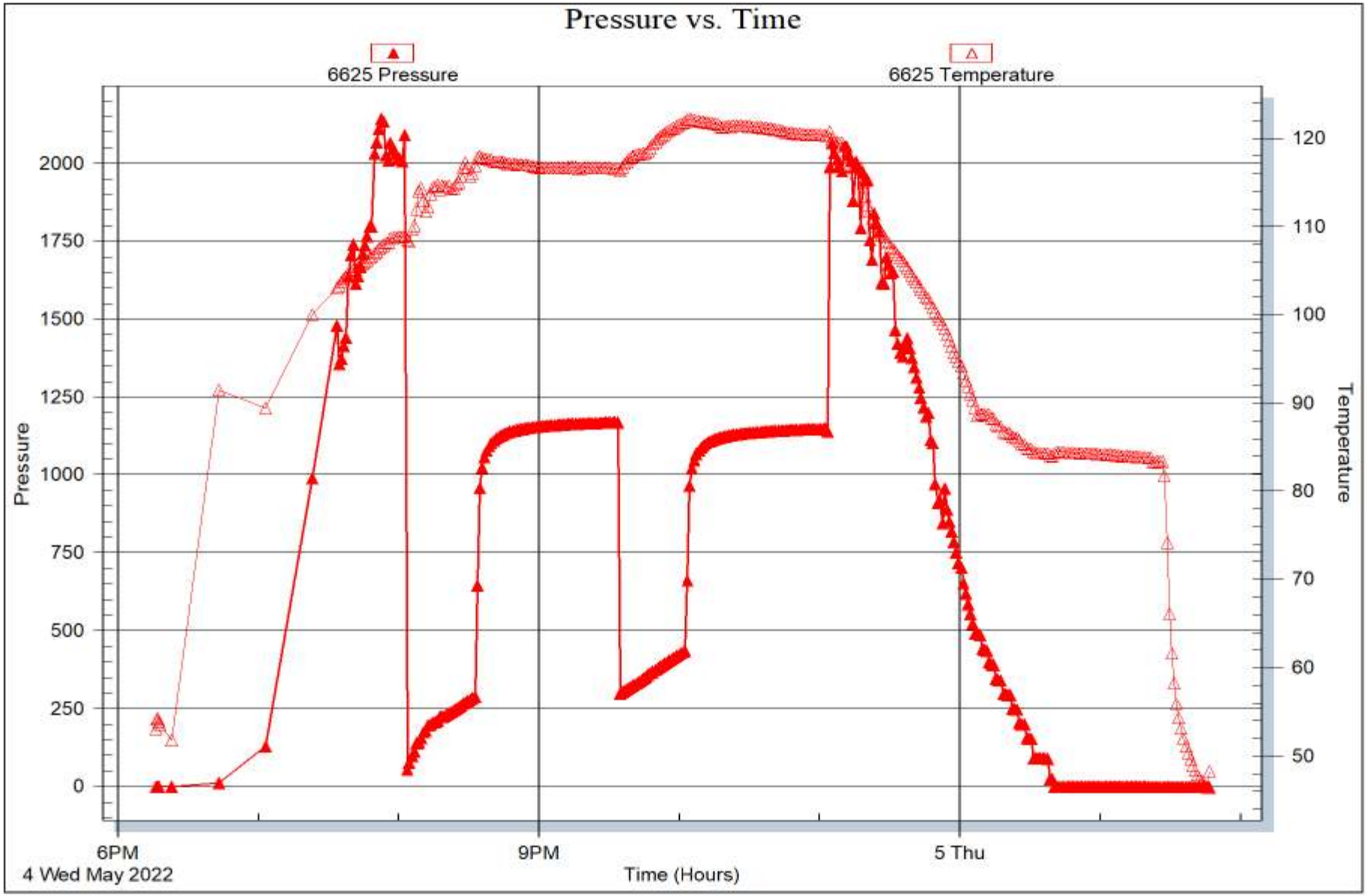
Recovery Comments: 4# LCM

Serial #: 8652 **Outside** Murfin Drilling Company Inc. Weber #1-10 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 68175 Printed: 2022.05.05 @ 15:26:39

Serial #: 6625 **Inside** Murfin Drilling Company Inc. Weber #1-10 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 68175 Printed: 2022.05.05 @ 15:26:40

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 68173

Well Name & No. ~~Murfin Drilling Co Inc~~ Weber #HO Test No. 1 Date 5/2/22

Company Murfin Drilling Co Inc Elevation 2931 KB 2926 GL

Address 250 N Water STE 300 Wichita, KS 67202

Co. Rep / Geo. Wes Hansen Rig Murfin Rig #7

Location: Sec. 10 Twp 1 Rge. 32 Co. Rawlins State KS

Interval Tested 3804-3850 Zone Tested Dread

Anchor Length 46 Drill Pipe Run 3549 Mud Wt. 8.8

Top Packer Depth 3799 Drill Collars Run 236 Vis 72

Bottom Packer Depth 3804 Wt. Pipe Run Ø WL 5.6

Total Depth 3850 Chlorides 700 ppm System LCM 4#

Blow Description IF- Built to 4¼"

SI7- No return

FF- Built to 5"

SI2- No return

Rec	117	Feet of	MCW	%gas		%oil	95	%water	5 %mud
Rec	143	Feet of	MW	%gas		%oil	55	%water	45 %mud
Rec		Feet of		%gas		%oil		%water	%mud
Rec		Feet of		%gas		%oil		%water	%mud
Rec		Feet of		%gas		%oil		%water	%mud

Rec Total 260 BHT 116 Gravity _____ API RW .15 @ 39 °F Chlorides 95000 ppm

(A) Initial Hydrostatic	1946	☒ Test	1800	T-On Location	03:40
(B) First Initial Flow	21	☒ Jars	300	T-Started	04:59
(C) First Final Flow	65	☒ Safety Joint		T-Open	08:41
(D) Initial Shut-In	1160	☒ Circ Sub	N/A	T-Pulled	12:41
(E) Second Initial Flow	70	☒ Hourly Standby		T-Out	14:52
(F) Second Final Flow	129	☒ Mileage	64 96	Comments	They waited 1 hr for me, the tripping was slow, test was long
(G) Final Shut-In	1130	☐ Sampler			
(H) Final Hydrostatic	1844	☐ Straddle		☒ EM Tool	B#30
		☐ Shale Packer		☐ Ruined Shale Packer	
Initial Open	30	☐ Extra Packer		☐ Ruined Packer	
Initial Shut-In	60	☐ Extra Recorder		☐ Extra Copies	
Final Flow	60	☐ Day Standby		Sub Total	0
Final Shut-In	90	☐ Accessibility		Total	2196
		Sub Total	2196	MP/DST Disc't	

Approved By _____ Our Representative Dustin Dy

Trilobite Testing Inc. shall not be liable for damaged of any kind of the 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

4/10

Test Ticket

NO. 68174

Well Name & No. Weber #1-10 Test No. 2 Date 5/3/22

Company Murfin Drilling Co Inc Elevation 1931 KB 2926 GL

Address 250 N Water STE 300 Wichita, KS 67202

Co. Rep / Geo. Wes Hansen Rig Murfin Rig #7

Location: Sec. 10 Twp 1 Rge. 32 Co. Rawlins State KS

Interval Tested 3886-3940 Zone Tested LKC D

Anchor Length 54 Drill Pipe Run 3645 Mud Wt. 9.2

Top Packer Depth 3881 Drill Collars Run 236 Vis 60

Bottom Packer Depth 3886 Wt. Pipe Run ∅ WL 6.0

Total Depth 3940 Chlorides 1100 ppm System LCM 4#

Blow Description IF- Weak surface blow

SI1-No return

FF- No blow

SI2-No return

Rec 5	Feet of Mud	%gas	%oil	%water	100	%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 5 BHT 114 Gravity ____ API RW ____ @ ____ °F Chlorides ____ ppm

(A) Initial Hydrostatic 1983

(B) First Initial Flow 19

(C) First Final Flow 20

(D) Initial Shut-In 509

(E) Second Initial Flow 21

(F) Second Final Flow 21

(G) Final Shut-In 321

(H) Final Hydrostatic 1999

Initial Open 30

Initial Shut-In 60

Final Flow 30

Final Shut-In 60

- [x] Test 1800
- [x] Jars 300
- [x] Safety Joint
- [x] Circ Sub N/A
- [ ] Hourly Standby
- [x] Mileage 64 .96
- [ ] Sampler
- [ ] Straddle
- [ ] Shale Packer
- [ ] Extra Packer
- [ ] Extra Recorder
- [ ] Day Standby
- [ ] Accessibility

Sub Total 2196

T-On Location 15:30

T-Started 16:31

T-Open 18:27

T-Pulled 21:27

T-Out 23:37

Comments

- [x] EM Tool 8#30
- [ ] Ruined Shale Packer
- [ ] Ruined Packer
- [ ] Extra Copies

Sub Total 0

Total 2196

MP/DST Disc't

Approved By ____ Our Representative DWH DY

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 68175

Well Name & No. Weber #1-10 Test No. 3 Date 5/4/22

Company Murfin Drilling Company Inc Elevation 2931 KB 2926 GL

Address 250 N Water STE 300 Wichita, KS 67202

Co. Rep / Geo. Wes Hansen Rig Murfin Rig #7

Location: Sec. 10 Twp 1 Rge. 32 Co. Rawlins State KS

Interval Tested 3980 - 4080 Zone Tested LKC H-J

Anchor Length 100 Drill Pipe Run 3740 Mud Wt. 9.2

Top Packer Depth 3975 Drill Collars Run 236 Vis 64

Bottom Packer Depth 3980 Wt. Pipe Run Ø WL 6.4

Total Depth 4080 Chlorides 1000 ppm System LCM 4#

Blow Description IF- BOB 7min 15 sec. built to 43 1/4"

SI- No return

FF- BOB 9 1/2 min. built to 38 1/2"

SI- No return

Rec 425	Feet of MCW	%gas	%oil 90	%water 10	%mud	
Rec 127	Feet of MW	%gas	%oil 50	%water 50	%mud	
Rec 316	Feet of WCM	%gas	%oil 10	%water 90	%mud	
Rec 84'	Feet of Mud	%gas	%oil	%water 100	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	

Rec Total 952' BHT 117 Gravity ____ API RW .16 @ 46 °F Chlorides 75000 ppm

(A) Initial Hydrostatic 2092	☒ Test 1950	T-On Location 17:40	
(B) First Initial Flow 51	☒ Jars 300	T-Started 18:16	
(C) First Final Flow 298	☒ Safety Joint	T-Open 20:03	
(D) Initial Shut-In 1174	☒ Circ Sub N/A	T-Pulled 23:03	
(E) Second Initial Flow 301	☐ Hourly Standby	T-Out 01:47	
(F) Second Final Flow 445	☒ Mileage 64 96	Comments	
(G) Final Shut-In 1154	☐ Sampler		
(H) Final Hydrostatic 1987	☐ Straddle	☒ EM Tool -350	
	☐ Shale Packer	☐ 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 -350	
Final Shut-In 60	☐ Accessibility	Total 1996	
	Sub Total 2346	MR/DST Disc't	

Approved By ____ Our Representative Duane D

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CEMENT TREATMENT REPORT

Customer:	Murfin Drilling	**Well:**	Weber # 1-10	**Ticket:**	WP 2734
City, State:	Oakley KS	**County:**	Rawlins KS	**Date:**	4/28/2022
Field Rep:	ARTURO	**S-T-R:**	10-1S-32W	**Service:**	Surface

Downhole Information	
Hole Size:	12.25 in
Hole Depth:	350 ft
Casing Size:	8 5/8 in
Casing Depth:	350 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	21.0 bbls

Calculated Slurry - Lead	
Blend:	H-325
Weight:	14.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.41 ft^3 / sx
Annular Bbls / Ft.:	0.0735 bbs / ft.
Depth:	350 ft
Annular Volume:	25.7 bbls
Excess:	
Total Slurry:	75.3 bbls
Total Sacks:	300 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
200P			-	-	GOT TO LOCATION
205P				-	SAFETY MEETING
210P				-	RIGGED UP TRUCKS
240P				-	CIRCULATED HOLE WITH RIG PUMP
245P	3.0	40.0	5.0	5.0	PUMPED H2O AHEAD
247P		230.0	75.3	80.3	PUMPED 300 SKS OF H- 325 @ 350 FT
302P	6.0	190.0	21.0	101.3	DISPLACED WITH H2O
306P				101.3	PLUG DOWN WITH 5 BBL TO PIT
310P				101.3	WASHED UP PUMP TRUCK
330P				101.3	RIGGED DOWN TRUCKS
345P				101.3	OFF LOCATION

CREW		UNIT
Cementer:	Jimmie	180/520
Pump Operator:	Josh	194/235
Bulk #1:		
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.5 bpm	153 psi	101 bbls

ftv: 15-2021/01/25
mplv: 260-2022/03/30

CEMENT TREATMENT REPORT

Customer:	Murfin Drilling	**Well:**	Weber 1-10	**Ticket:**	wp 2760
City, State:	Atwood Kansas	**County:**	Rawlins kansas	**Date:**	5/6/2022
Field Rep:	Artero	**S-T-R:**	10-1s-32w	**Service:**	PTA

Downhole Information	
Hole Size:	7 7/8 in
Hole Depth:	2750 ft
Casing Size:	in
Casing Depth:	ft
Tubing / Liner:	In
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	32.0 bbls

Calculated Slurry - Lead	
Blend:	H-Plug
Weight:	13.8 ppg
Water / Sx:	6.8 gal / sx
Yield:	1.43 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	64.9 bbls
Total Sacks:	255 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
12:45 AM			-	-	on location job and safety
1:00 AM				-	spot trucks and rig up
				-	
				-	1st plug 50 sacks at 2750
1:45 AM				-	start cement
	3.0		5.0	5.0	fresh water
	3.0		12.7	17.7	mix 50 sacks cement
	5.0		3.0	20.7	fresh water
			30.0	50.7	mud
2:10 AM					plug in
				-	2nd plug 100 sacks at 2077
2:35 AM					start cement
	3.0	400.0	5.0		fresh water
	3.0	400.0	25.4		mix 100 sacks cement
	5.0	200.0	20.0		displacement
2:45 AM					plug in
					3rd plug 50 sacks at 400
3:50 AM					start cement
	4.0	200.0	5.0		fresh water
	4.0	200.0	12.7		mix 50 sacks cement
	4.0	200.0	2.0		displacement
3:55 AM					plug in
5:00 AM	2.0	-	2.5		40 ft,,,,,mix 10 sacks
	2.0	-	7.6		rat hole mix 30 sacks
	2.0		3.8		mouse hole mix 15 sacks

	CREW	UNIT
Cementer:	M Brungardt	916
Pump Operator:	J Pauly	208
Bulk #1:	Jose	180/254
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
3.3 bpm	200 psi	135 bbls

ftv: 15-2021/01/25
mplv: 260-2022/03/30

DRILLING REPORT - LOG TOPS - Weber 1-10

	MDCI Weber #1-10 1980' FSL 1980' FWL Sec. 10-1S-32W 2931' KB					
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref
Anhydrite	2725	+206	-2	2725	+206	-2
B/Anhydrite	2762	+169	+1	2764	+167	-1
Topeka	3680	-749	-1	3680	-749	-1
Oread	3825	-894	flat	3824	-893	+1
Lansing	3870	-939	flat	3870	-939	flat
Stark	4073	-1142	flat	4073	-1142	flat
Mound City	N/A	---	---	4120	-1189	+11
Marmaton	N/A	---	---	4185	-1254	-5
Ft Scott	DNP	---	---	DNP	---	---
RTD	4200					
LTD				4202		

WESLEY D. HANSEN Consulting Petroleum Geologist

212 N. Market, Suite 257, Wichita, KS 67202

Cellular 316.772.6188
whansen4651@sbcglobal.net

KGS
AAPG #799479
Kansas License #418

MURFIN DRILLING COMPANY, INC.
WICHITA, KANSAS

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

Well Name:	Murfin Drilling Company, Inc. #1-10 Weber		
API:	15-153-21288		
Location:	1980' FSL, 1980' FWL of Sec. 10-1S-32W		
License Number:	30606	Region:	Rawlins County, KS
Spud Date:	4-28-2022	Drilling Completed:	5-5-2022
Surface Coordinates:	1980' FSL, 1980' FWL of Sec. 10-1S-32W		
Bottom Hole Coordinates:	Vertical hole		
Ground Elevation (ft):	2926'	K.B. Elevation (ft):	2931'
Logged Interval (ft):	3580' To: RTD	Total Depth (ft):	4200'
Formation:	Marmaton at RTD		
Type of Drilling Fluid:	Chemical - displaced at 3264'-3305'		

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 7
Pusher: Arturo Cabezas

Surface Casing: 8 5/8" set at 350' w/300sx
Production Casing: P&A

Mud by: Morgan Mud - Dave Lines was the engineer.

DST's by: Trilobite - Dustin Day was the tester.

Logs by: Midwest Wireline: DIL, CNL/CDL, MEL, BHCS; Justin Hendrickson was the engineer

Deviation Surveys: 1/4 deg. @ 350'; 3/4 deg. @ 1173'; 1/4 deg. @ 3455'; 1/4 deg. @ 3850'; 3/4 deg. @ 4200'

BIT RECORD

Bit #	Size	MFG	Type	Depth Out	Footage Cut	Hours on Bit
1	12 1/4"	Smith	X21CR	350'	350'	3
2	7 7/8"	Smith	MDi516	3455'	3105'	30 3/4
3	7 7/8"	Smith	184VPS	4200'	745'	40

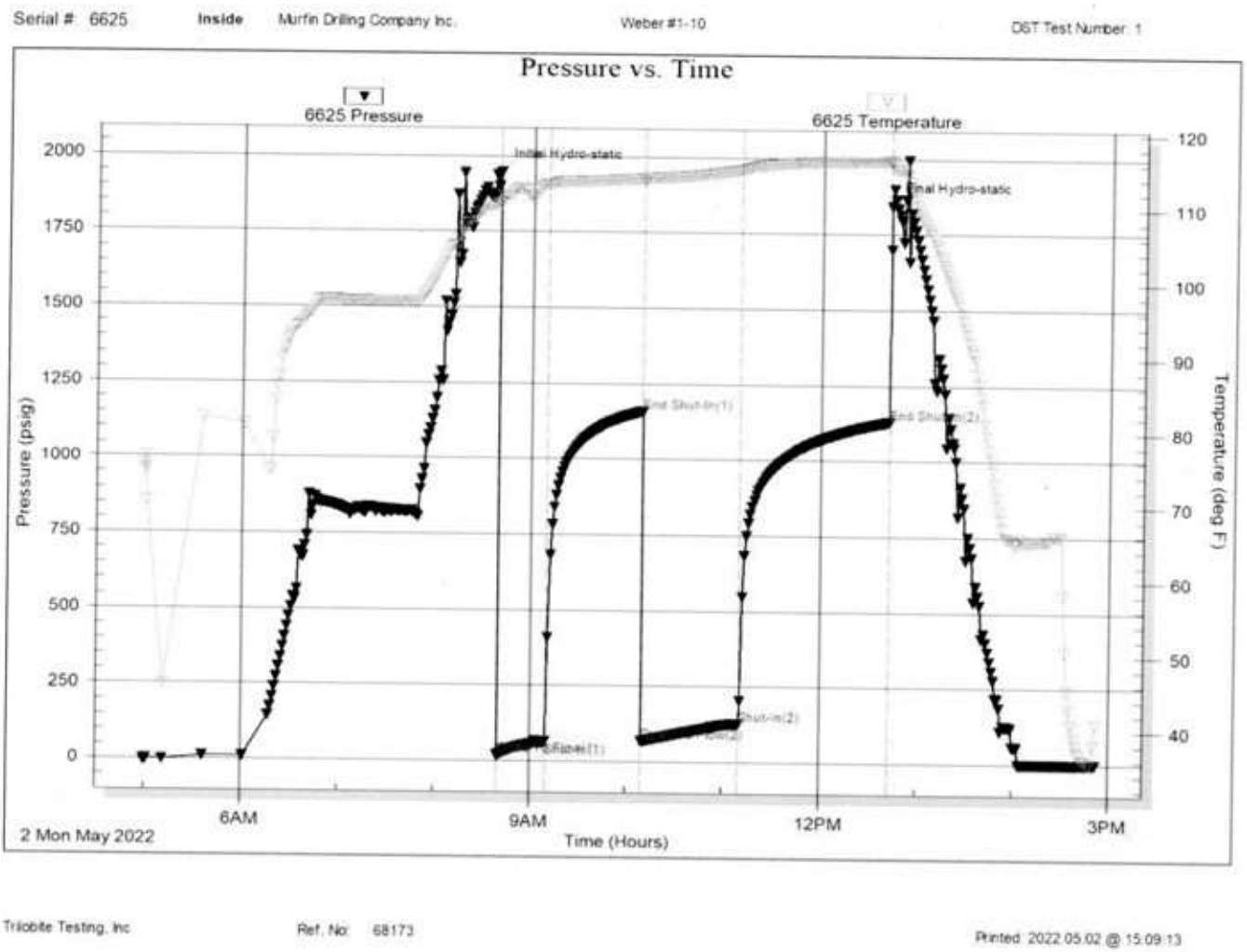
FORMATION TOPS AND STRUCTURAL COMPARISON

FORMATION	SAMPLE TOPS Depth	Datum	LOG TOPS Depth	Datum	COMPARISON WELL MDCI Maher #1-15 660' FNL, 2100' FEL Sec. 15-1S-32W 2986' KB
	2931' KB		2931' KB		
Anhydrite	2725'	+206	2725'	+206	+208
B/Anhydrite	2762'	+169	2764'	+167	+168
Topeka	3680'	-749	3680'	-749	-748
Oread	3825'	-894	3824'	-893	-894
Lansing	3870'	-939	3870'	-939	-939
Stark Shale	4073'	-1142	4073'	-1142	-1142
Mound City	NC		4120'	-1189	-1200
RTD	4200'	-1269			-1339
LTD			4202'	-1271	-1337

DRILL STEM TESTS

DST No. 1 Oread
Interval: 3804'-3850'
Times: 30-60-60-90
Recovery: 117' MCW (5m, 95w); 143' MCW (45m, 55w); chl. 95,000
FP: 21-65/70-129 SIP: 1160-1130
HP: 1946-1844 BHT: 116 deg. F

IFP: blow built to 4.25 inchs
ISIP: no return blow
FFP: blow built to 5 inches
FSIP: no return blow

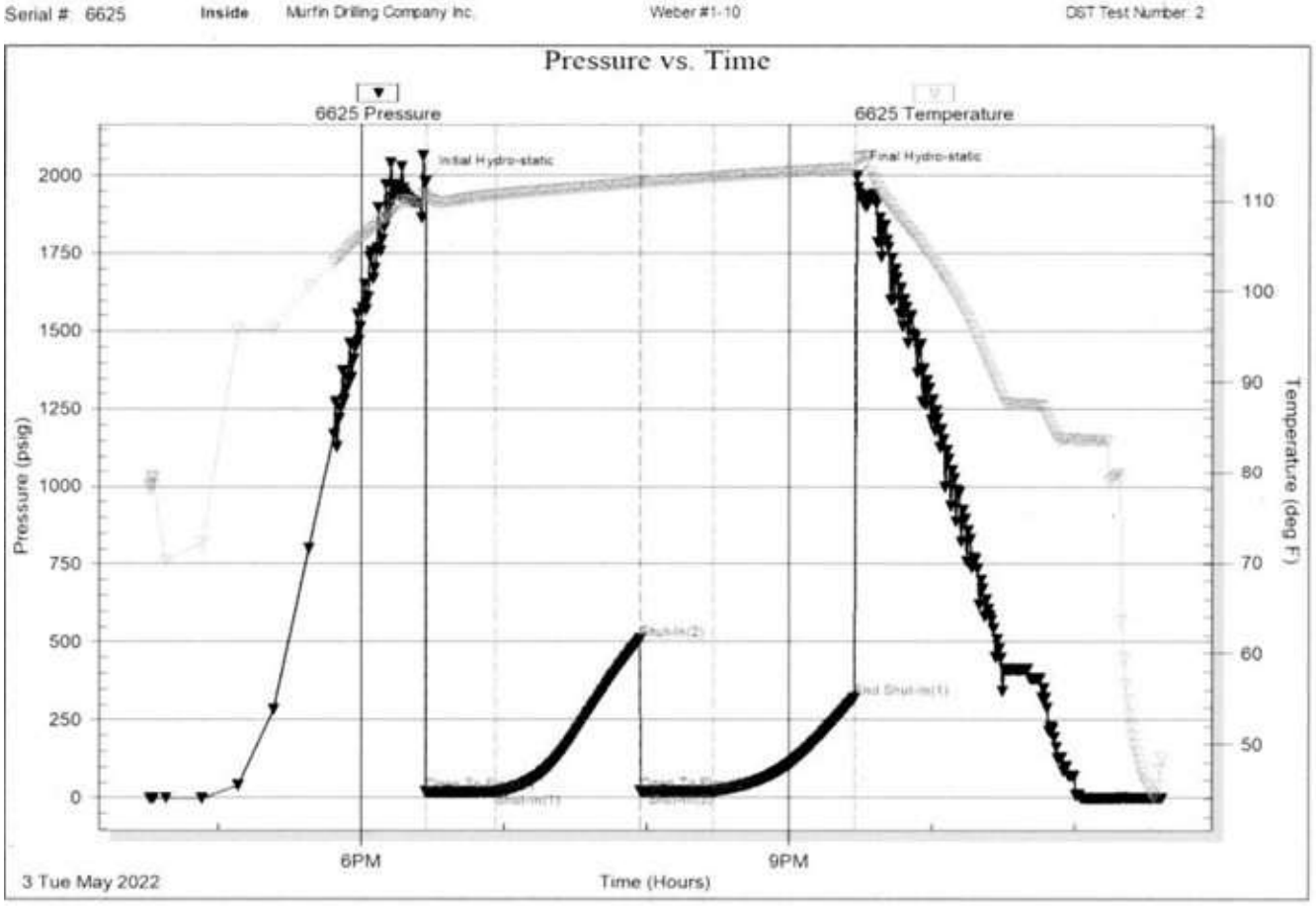


Trilobite Testing, Inc
Ref. No: 68173
Printed: 2022.05.02 @ 15:09:13

DRILL STEM TESTS

DST No. 2 Lansing "D"
Interval: 3886'-3940'
Times: 30-60-30-60
Recovery: 5' mud
FP: 19-20/21-21 SIP: 509-321
HP: 1983-1999 BHT: 114 deg. F

IFP: weak surface blow
ISIP: no return blow
FFP: no blow
FSIP: no return blow

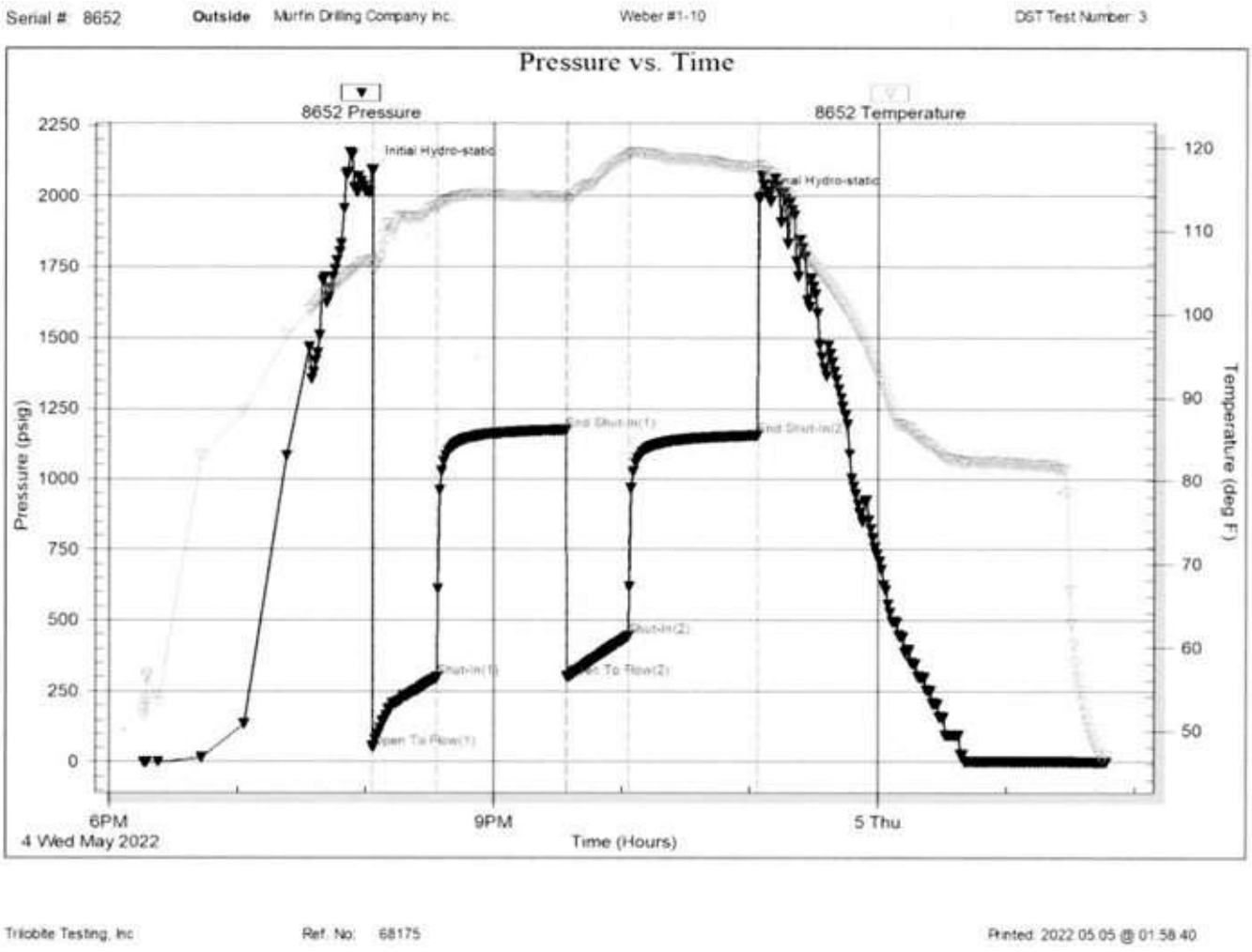


Trilobite Testing, Inc
Ref. No: 68174
Printed: 2022.05.03 @ 23:46:10

DRILL STEM TESTS

DST No. 3 Lansing "H" & "J"
Interval: 3980'-4080'
Times: 30-60-30-60
Recovery: 425' MCW (10m, 90w); 127' MW (50m, 50w); 316' WCM (10w, 90m); 84' mud; total fluid 952', chl. 75,000
FP: 51-298/301-445 SIP: 1174-1154
HP: 2092-1987 BHT: 117 deg. F

IFP: blow built to 43.25 inches
ISIP: no return blow
FFP: blow built to 38.5 inches
FSIP: no return blow



ROCK TYPES

- Congl
- Igne
- Anhy
- Cht
- Coal
- Congl
- Gyp
- Lmst
- Salt
- Shale
- Shcol
- Siltstone
- red sst
- Sst
- Carb sh
- Dol
- Dtd
- Grayshale
- Sandylms
- Redshale
- Greenshale
- Sltstn
- Shlyslts
- Sndy/siltyshale
- Silty dolo
- Shy dolo
- Shaly ls
- Dolomite

ACCESSORIES

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
- Brecfrag
- 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
- Slty

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- red shale
- green shale
- Sltstn

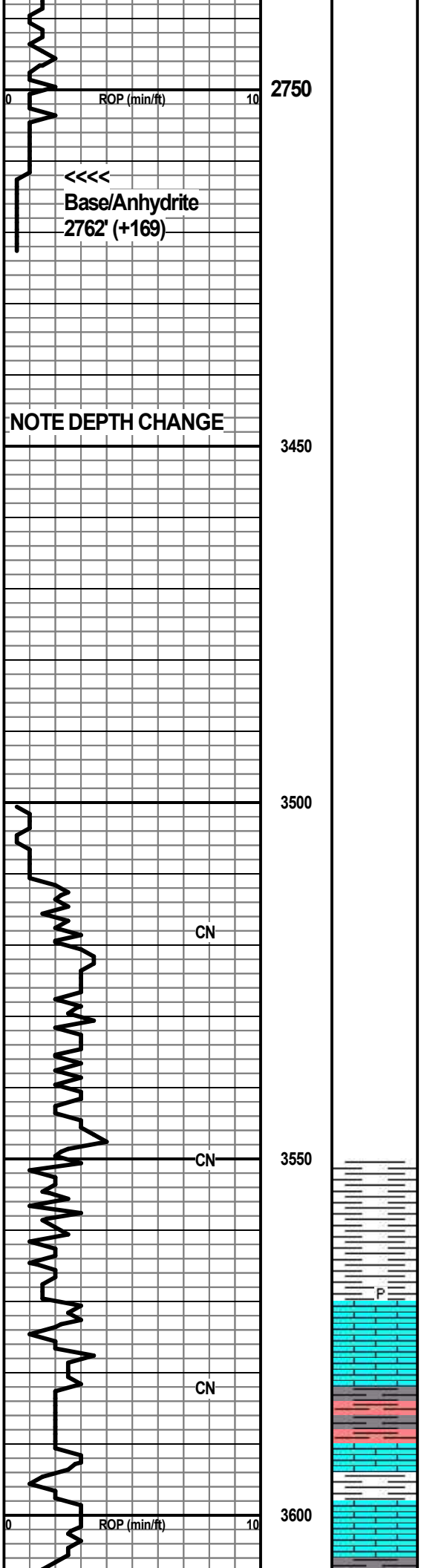
OTHER SYMBOLS

INTERVALS
- Core
- Dst
- Dst

EVENTS
- Rft
- Dst top & bottom

OIL SHOWS
- Even
- Spotted
- Quest.
- Trace
- Dead
- Gas show

Curve Track 1 ROP (min/ft)	MD	Lithology	Oil Shows	Geological Descriptions	Remarks
0 ROP (min/ft) 10 2700 <<<< Anhydrite 2725' (+206)					**Morning Depth & Activity** 4-26-22 MIRT 4-27 Repairs 4-28 Spud at 8:30 AM, set surface, DO at 11:00 PM 4-29 Drlg. @1150' 4-30 Drlg. @2550' 5-1 Drlg. @3614' 5-2 DST No. 1 at 3850' 5-3 3871' - Shut down for location conditions; post DST No. 1 5-4 Drlg. @3990' post DST No. 2 5-5 Drlg. @4116' post DST No. 3 5-6 RTD @4200', logging complete, P&A Anhydrite 2725' (+206)



Sh: lt to med gray, red-brn

Ls: mix tan, lt gray fn granular; tan vf-cryptoxln and offwhite dense, subchalky; scatt. pyrite and sandy pyrite

Sh: mushy lt gray and mushy lt red

pred. Sh: red, red-brn firm to soft; lt to med gray; Ls: tan, offwhite dense

Ls: good influx offwhite, lt gray mic-vfxln dense and lt gray vf-cryptoxln; some sl mottled lt brn granular, NVP, N.S.

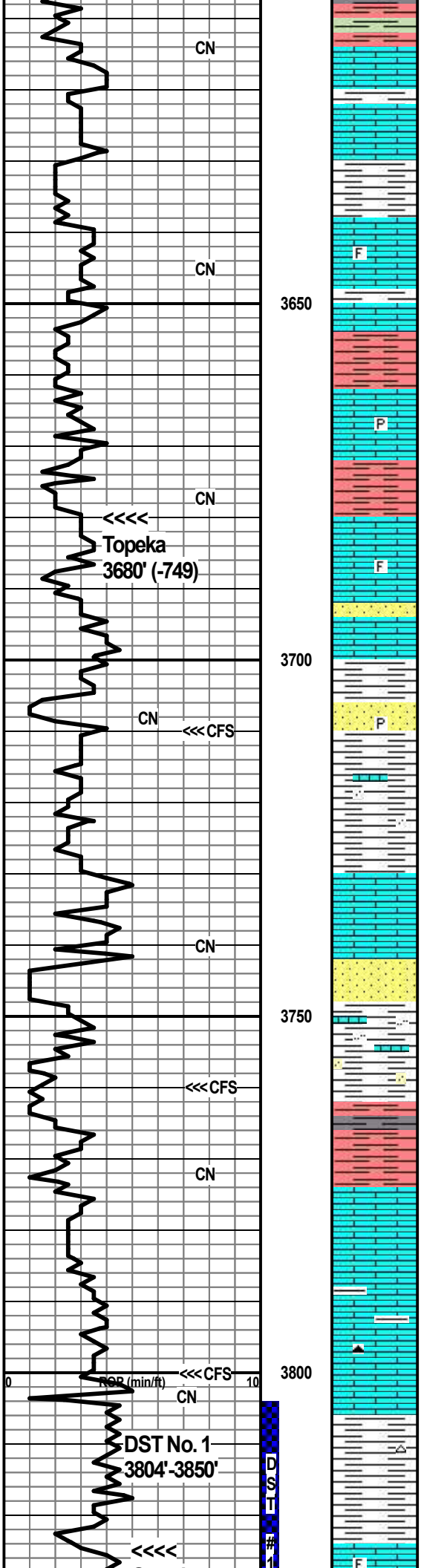
Base/Anhydrite 2762' (+169)

Call point reached at 1:50 PM 4-30-22

bit trip at 3455'
Geologist on location at 8:00 PM
4-30-22

string wt 106 WOB 34K RPM 80
SPM 60 PP 800#

Start 10' samples at 3580'



Sh: good influx lt to med red, pred. soft mushy; other lt gray, gray-green

predom. shales AA; Ls: tan, lt gray, offwhite mic-vfxln dense

Ls and Sh mix AA

Ls: offwhite, lt gray, tan micxln to fn granular, poor-NVP, foss. IP, N.S.

Ls: mix AAwith more lt brn granular, some brn cryptoxln; Sh: influx red, red-brn firm to soft, mushy

Sh: flood mushy red

Ls: mix tan, lt brn fn granular, some pnpt por.; lt gray vf-cryptoxln and offwhite micxln, subchalky to chalky; occ pyrite

Sh: red, red-brn pred. firm

Ls: tan, offwhite fn granular, some poor pnpt por., N.S.; lt gray pred. cryptoxln and offwhite subchalky to chalky

Ls: tan, offwhite fn granular with some inter-particle por., foss. IP, N.S.; Sst: some lt gray vfg, sl calcareous

Ls: mottled red/brn granular, shaly; influx Sh: red, red-brn silty IP;some Sst: offwhite, lt gray vfg

Sst: tan, offwhite, lt gray with red tint vfg, pyritic IP; Sh: red firm to soft; occ red-maroon, lt gray, gray-green

Sh: red-brn, red firm, sandy IP with Sst AA; some lt gray cryptoxln Ls

Ls: mix lt gray, tan vf-cryptoxln, NVP; some tan granular with some inter-particle por., N.S.; common white subchalky to chalky

Ls: mix AA, abund. chalky; Sh: red, red-brn firm to soft, vf sandy IP; Sst: lt yellow vfg soft, lt red vfg

Sh: red, red-brn vfg sandy and silty IP; Ls: some tan, lt gray vf-cryptoxln

Sh: flood mushy red, some dark gray

Ls: mix offwhite, lt gray cryptoxln; with abund. offwhite subchalky to chalky; some tan fn granular, poor-NVP, N.S.

Ls: mix AA, N.S.; sl incr. lt to med gray shale

Ls: predom. tan, offwhite, lt gray vf-cryptoxln; less chalky; occ dark opq chert

Ls: offwhite, lt gray, tan mic-vfxln dense; some lt gray vf-cryptoxln and white chalky; petroliferous odor

Sh: dark gray to black with petroliferous odor; Ls mix AA, with occwhite opq chert

Ls: tan, lt gray granular, foss. IPwith scatt. vug and inter-particle por., with sl odor, sl sfo, thick dark brn to black

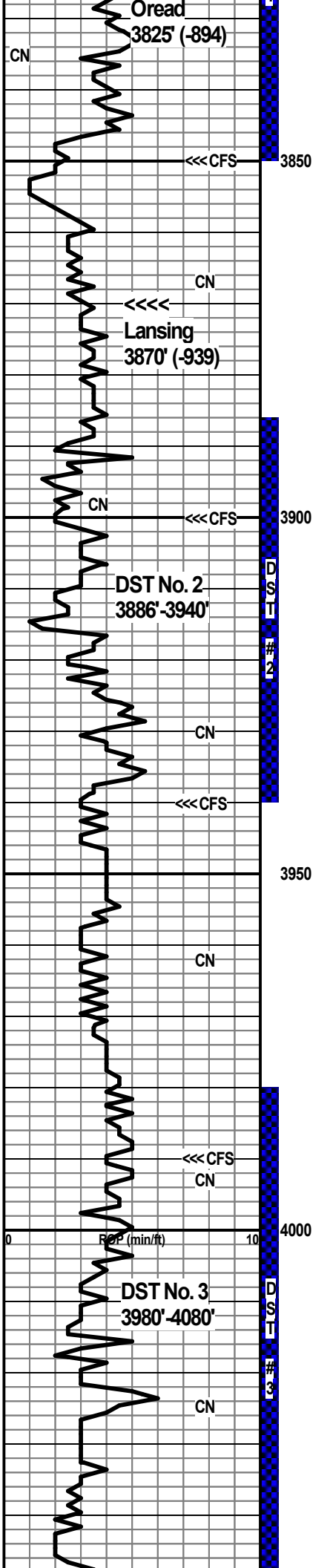
7:00 AM at 3614' on 5-1-22

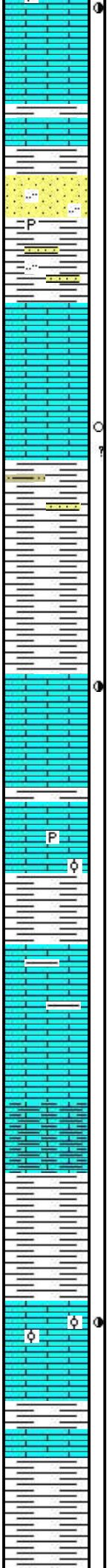
Morgan Mud Check at 3620'
7:30 AM on 5-1-2022
wt vis wl pH chl
8.8 72 5.6 12.0 700
PV YP GelS lcm solids
22 23 15/34 4# 3.5%

Topeka 3680' (-749)

DST No. 1 Oread
Interval: 3804'-3850'
Times: 30-60-60-90
IFP: blow built to 4.25 inchs
ISIP: no return blow
FFP: blow built to 5 inches
FSIP: no return blow
Recovery: 117' MCW (5m, 95w); 143' MCW (45m, 55w); chl. 95,000
FP: 21-65/70-129 SIP: 1160-1130
HP: 1946-1844 BHT: 116 deg. F

Oread 3825' (-894)





spotty oliy stain, dull even fluor.

Ls: flood tan, lt brn, lt gray cryptoxln and offwhite, tan mic-vfxln dense, occ subchalky, N.S.

Sh: red, red-brn, med gray; Ls: various cryptoxln and dense AA

Sst: offwhite, lt gray vfg silty and micac.

Sh: red, red-brn firm to soft, silty IP; various med to dark gray; scatt. Sst lt gray fg, pyritic IP

Ls: tan, lt brn, lt gray cryptoxln; lesser offwhite subchalky, N.S.

Ls: tan, lt brn, some gray-brn cryptoxln, NVP; more offwhite mic-vfxln dense, N.S.

Sh: red, red-brn, some red-maroon and gray, gray-green; Ls: various AAwith one chip tan fn granular with patchy inter-particle por., sl-fair sfo (slough?); scatt. gray, offwhite Siltst and vfg gray shaly Sst

Sh: red firm to mushy, scatt. gray fg shaly Sst

30' spl - Ls: many chips tan, lt brn fn granular with some poor-fair inter-particle por., some small vug. and pnpt por. with good sfo on break, some bleeding oil and gas, pnpt to subsat. stain no odor; Sh: common AA

Ls: pred. offwhite, lt gray vf-cryptoxln, NVP

Ls: tan, lt gray cryptoxln and offwhite mic-vfxln subchalky to chalky; Sh: red, red-brn silty IP; sl influx pale brn mushy

Sh: abund. red, red-brn, red-maroon; lt -med gray, pyritic IP; Ls; some tan granular, sl oolitic IP, NVP, N.S.

Sh: red, red-brn firm to soft; lt to med gray, gray-green

Sh: mix AA; Ls: pred. offwhite, lt gray mic-vfxln dense; one chip tan fnxln with some pnpt por. with lt stain, nfo (slough?)

Ls: flood lt gray mic-vfxln dense, shaly IP

Ls: shaly dense AA; lesser offwhite mic-vfxln dense and gray vf-cryptoxln, NVP, N.S.

Sh: flood lt to med gray mushy; other various gray firm; with Ls: influx offwhite micxln subchalky to chalky and tan, lt gray vfxln dense

Sh: lt to med gray, red, red-brn firm; some mushy pale gray

Sh: influx pale gray mushy; others AA; one chip Ls: tan fnxln with pnpt por. with spotty dark black stain, vsl show residual oil

Ls: 4-5 chips lt brn oolitic with pred. spar matrix, poor to NVP, vsl sfo, some black stain in vuggy por.

Ls: flood offwhite, tan mic-vfxln dense, subchalky and tan, lt gray vf-cryptoxln, NVP, N.S.

Sh: mushy pale gray and mushy lt red, pale green; Ls: mix tan, lt gray AA; more tan, offwhite mic-vfxln dense

Sh: flood mushy lt red

Sh: flood red, red-brn, brn, med to dark gray, gray-green,

Morgan Mud Check at 3850'
8:00 AM on 5-2-2022
wt vis wl pH chl
9.1 62 6.0 11.5 700
PV YP GelS lcm solids
19 21 13/28 6# 5.7%

7:00 AM at 3850' on 5-2-22

Rig operations were shut down at 3871' at 6:55 PM on 5-2-22 until the conditions leading to the location and on the location improve.

Lansing 3870' (-939)

7:00 AM at 3871' on 5-3-22

Drilling was resumed at 7:35 AM on 5-3-22

DST No. 2 Lansing "D"
Interval: 3886'-3940'
Times: 30-60-30-60
IFP: weak surface blow
ISIP: no return blow
FFP: no blow
FSIP: no return blow
Recovery: 5' mud
FP: 19-20/21-21 SIP: 509-321
HP: 1983-1999 BHT: 114 deg. F

string wt 116K WOB 38K RPM 80
SPM 60 PP 800#

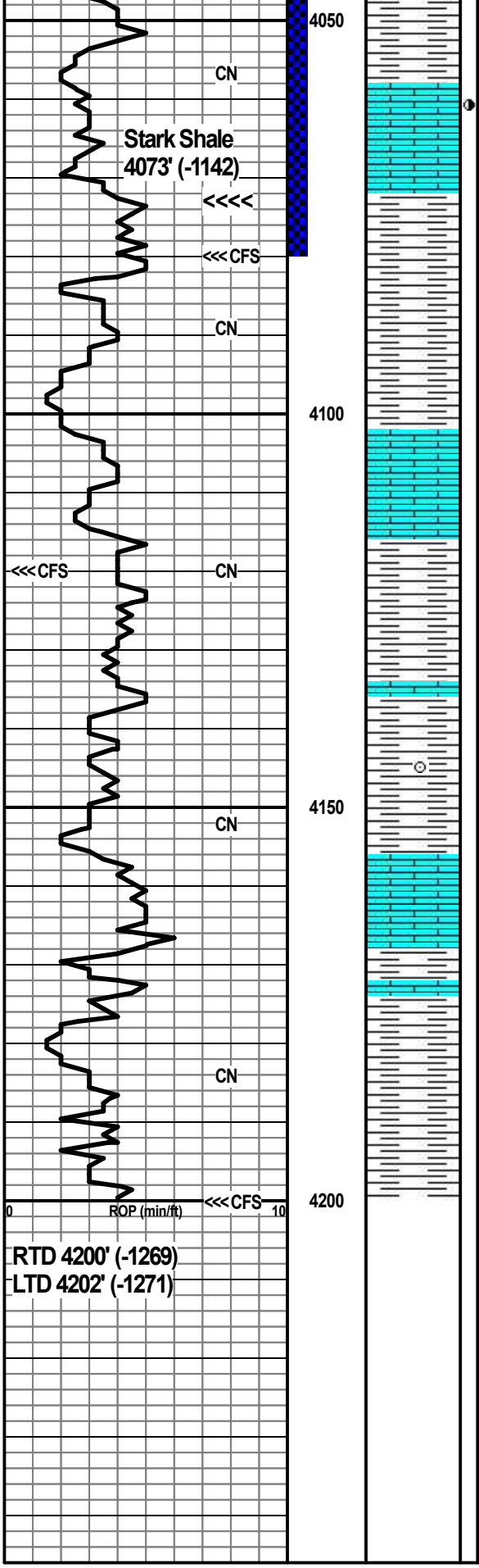
wt 9.2 vis 59 lcm 4#

Morgan Mud Check at 3940'
1:15 PM on 5-3-2022
wt vis wl pH chl
9.2 60 6.0 11.5 1100
PV YP GelS lcm solids
18 20 13/29 4# 6.4%

7:00 AM at 3990' on 5-4-2022

Morgan Mud Check at 4002'
7:55 AM on 5-4-2022
wt vis wl pH chl
9.2 64 6.4 11.0 1000
PV YP GelS lcm solids
19 20 14/33 4# 6.4%

DST No. 3 Lansing "H" & "J"
Interval: 3980'-4080'
Times: 30-60-30-60
IFP: blow built to 43.25 inches
ISIP: no return blow
FFP: blow built to 38.5 inches
FSIP: no return blow
Recovery: 425' MCW (10m, 90w); 127' MW (50m,



mottled red/gray splintery

Ls: abund. offwhite, tan granular to cryptoxln with gen. poor inter-particle and some vuggy, and edge por.; with dark brn to black stain, vsl odor, trace-nfo

Ls: lt gray, tan cryptoxln to sl granular, poor-NVP, N.S.; abund. offwhite, tan mic-vfxln dense

Sh: red-brn, red-maroon, med gray

Sh: red, red-brn, lesser lt to med gray; some Ls: offwhite, tan mic-vfxln dense; some pale gray shaly Siltst

Sh: very pred. red-brn, red-maroon, red

Sh: mix AA, some mushy lt red

Sh: AA, new brn and purplish gray; Ls: sl influx white chalky and tan mic-vfxln dense, N.S.

Ls: flood offwhite, tan mic-vfxln subchalky to chalky; lt gray, tan granular lP and vf-cryptoxln lP, NVP, N.S.; Sh: red, red-brn, lt-med gray, some mushy lt gray

Sh: red-brn, red-maroon, lt to med gray, occ brn

Sh: new mushy pale gray and mushy pale red; Ls: some lt gray, brn cryptoxln and mottled red/brn granular, shaly

Sh: mix AA; Ls: tan granular, NVP and offwhite, tan mic-vfxln dense; trace crinoid fragments

Ls: influx lt gray, tan vfxln dense; offwhite, tan mic-vfxln; Sh: mix AA; with pale gray mushy; sl influx med gray

Ls: mix AAwith some tan, offwhite granular, NVP; Sh: mix AA; some pale gray and offwhite mushy

Sh: flood pale gray, pale red mushy

Sh: red, red-brn, gray pred. firm; thin Ls's

Sh: various red, red-brn, with gray, brn, gray-green; occ foss. fragments; occ red silty shale; minor Ls

Because of the lack of any commercial shows of oil, as evidenced by samples, DST resuts and open hole log evaluations, the #1-10 Weber was plugged as a dry hole.

Respectfully submitted,

Wesley D. Hansen
Petroleum Geologist
Kansas License No. 418

50w); 316' WCM (10w, 90m); 84' mud; total fluid 952', chl. 75,000
FP: 51-298/301-445 SIP: 1174-1154
HP: 2092-1987 BHT: 117 deg. F

Stark Shale 4073' (-1142)

7:00 AM at 4116' on 5-5-2022

Morgan Mud Check at 4121'
7:50 AM on 5-5-2022

wt	vis	wl	pH	chl
9.4	76	6.8	10.5	1200

PV	YP	GelS	lcm	solids
21	27	16/40	3#	7.8%

Pipe strap at RTD
strap 4216.38'
board 4215.92' 0.46 long to board

RTD reached at 12:52 PM on 5-5-2022
CFS 45" - short trip - CTCH 1 hour
drop survey - strap out for loggers