

Confidentiality Requested:

☒ Yes ☐ NoKANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASEOPERATOR: License # 5144Name: Mull Drilling Company, Inc.Address 1: 1700 N WATERFRONT PKWY BLDG 1200

Address 2: _____

City: WICHITA State: KS Zip: 67206 + 6637Contact Person: Dustin DammePhone: (316) 264-6366CONTRACTOR: License # 35589Name: Lighthouse Drilling, LLCWellsite Geologist: Roger MartinPurchaser: Plains Marketing

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 #: _____05/17/2024 05/24/2024 06/19/2024Spud Date or
Recompletion Date Date Reached TD Completion Date or
Recompletion DateAPI No.: 15-111-20568-00-00

Spot Description: _____

NW SE SE SW Sec. 31 Twp. 16 S. R. 10 ☒ East ☐ West335 Feet from ☐ North / ☒ South Line of Section1994 Feet from ☐ East / ☒ West Line of Section

Footages Calculated from Nearest Outside Section Corner:

☐ NE ☐ NW ☐ SE ☒ SWGPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84County: LyonLease Name: PETERSON TRUST Well #: 9-31

Field Name: _____

Producing Formation: ViolaElevation: Ground: 1333 Kelly Bushing: 1345Total Vertical Depth: 3200 Plug Back Total Depth: _____Amount of Surface Pipe Set and Cemented at: 210 FeetMultiple Stage Cementing Collar Used? ☐ Yes ☒ No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 500 ppm Fluid volume: 1000 bblsDewatering method used: Evaporated

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

☐ Confidentiality RequestedDate: 09/12/2024☐ Confidential Release Date: 09/12/2026☒ Wireline Log Received ☒ Drill Stem Tests Received☒ Geologist Report / Mud Logs Received☐ UIC DistributionALT ☒ I ☐ II ☐ III Approved by: Kelsey Cox Date: 09/16/2024

Operator Name: Mull Drilling Company, Inc. Lease Name: PETERSON TRUST Well #: 9-31
 Sec. 31 Twp. 16 S. R. 10 ☒ East ☐ West County: Lyon

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 ☒ Yes ☐ No <i>(Attach Additional Sheets)</i> 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 Attached Top Attached Datum Attached
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CASING RECORD ☒ New ☐ Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	210	Class A	125	3% calcz, 2% gel
Production	7.875	5.5	14	3199	60/40 Poz	315	8% gel, 2# phenoseal
Production	7.875	5.5	14	3199	thick set	125	5#Kol-Seal, 2# phenoseal

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: <u>07/02/2024</u>		Producing Method: ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain) _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: ☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled <i>(Submit ACO-5) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top <u>2990</u> Bottom <u>2996</u>
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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>
4	2990	2996			
TUBING RECORD: Size: <u>2.875</u> Set At: <u>3017</u> Packer At:					

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	PETERSON TRUST 9-31
Doc ID	1791759

All Electric Logs Run

CDL/CNL/PE
DIL
MEL
SONIC

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	PETERSON TRUST 9-31
Doc ID	1791759

Tops

Name	Top	Datum
Lansing	1554	-209
Cherokee	2085	-740
Mississippi	2428	-1083
Kinderhook	2749	-1404
Hunton	2889	-1544
Maquoketa	2920	-1575
Viola	2990	-1645
Simpson Dolomite	3070	-1725
Simpson Sand	3096	-1751
Arbuckle	3144	-1799

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	PETERSON TRUST 9-31
Doc ID	1791759

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	210	Class A	125	3% calcz, 2% gel
Production	7.875	5.5	14	3199	60/40 Poz	315	8% gel, 2# phenoseal
Production	7.875	5.5	14	3199	thick set	125	5#Kol-Seal, 2# phenoseal

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

CEMENT TREATMENT REPORT



Customer	Mull Drilling Company, Inc	Lease & Well #	Peterson Trust #9-31			Date	5/24/2024	
Service District	Eureka	County & State	Lyon, Ks	Legals S/T/R		Job #		
Job Type	Longstring	☒ PROD ☐ INJ ☐ SWD	New Well?	☒ YES ☐ No	Ticket #	EP13515		
Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures						
1004	Kevin M	☒ Hard hat	☒ Gloves	☐ Lockout/Tagout	☐ Warning Signs & Flagging			
1201	Alan M	☒ H2S Monitor	☒ Eye Protection	☐ Required Permits	☐ Fall Protection			
1213	Dan B	☒ Safety Footwear	☐ Respiratory Protection	☒ Slip/Trip/Fall Hazards	☒ Specific Job Sequence/Expectations			
1212	Cooper R	☒ FRC/Protective Clothing	☐ Additional Chemical/Acid PPE	☒ Overhead Hazards	☒ Muster Point/Medical Locations			
1210	Wes C	☐ Hearing Protection	☒ Fire Extinguisher	☐ Additional concerns or issues noted below				
Comments								
MDC 1540: Longstring, 5 1/2" 14# casing set @ 3202' w/ 42.54' SJ = 3' above KB. Turbo centralizers ran on #1,2,3,4,5,6,7,8,9,10. Standard centralizers on #31. Basket ran on top of #32. Lead cement 315sx 60/40 Pozmix w/ chemicals, Tail cement 125sx Thick Set Cement w/ chemicals								
Product/ Service Code	Description	Unit of Measure	Quantity					Net Amount
D014	Depth Charge: 3001'-4000'	job	1.00					\$2,250.00
M010	Heavy Equipment Mileage	mi	70.00					\$280.00
M015	Light Equipment Mileage	mi	70.00					\$140.00
CP070	60/40 Pozmix Cement A (315sx lead cement) (20sx RH 15sx MH)	sack	350.00					\$5,600.00
CP095	Bentonite Gel 8%	lb	2,410.00					\$1,084.50
CP125	Pheno seal 2#/sx	lb	700.00					\$1,225.00
CP062	H842 Thic k Set Cement	sack	125.00					\$3,437.50
CP110	Kol Seal 5#/sx	lb	625.00					\$468.75
CP125	Pheno seal 2#/sx	lb	250.00					\$437.50
CP131	Cement Fluid Loss 1/4%	lb	30.00					\$300.00
M020	Ton Mileage	tm	1,710.00					\$2,565.00
FE140	5 1/2" Guide Shoe	ea	1.00					\$250.00
FE147	5 1/2" Float Collar - AFU Flapper Type	ea	1.00					\$400.00
FE170	5 1/2" Latch Down Plug & Baffle	ea	1.00					\$350.00
FE125	5 1/2" Centralizer	ea	1.00					\$60.00
FE135	Turbolizer Centralizers	ea	10.00					\$1,250.00
FE130	5 1/2" Cement Basket	ea	1.00					\$300.00
AF055	KCL (in first 40bbl of displacement water)	gal	2.00					\$60.00
R061	Service Supervisor	day	1.00					\$275.00
Customer Section: On the following scale how would you rate Hurricane Services Inc.?							Net:	\$20,733.25
				Total Taxable	\$ -	Tax Rate:		
Based on this job, how likely is it you would recommend HSI to a colleague?				State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.			Sale Tax:	\$ -
##### 1 2 3 4 5 6 7 8 9 10 H (wpd) (in)							Total:	\$ 20,733.25
				HSI Representative: Thank You Kevin McCoy				

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Witnessed By Jerry Roane

CUSTOMER AUTHORIZATION SIGNATURE

[illegible]



DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206

ATTN: Roger Martin

Peterson Trust #9-31

31-16S-10E Lyon,KS

Start Date: 2024.05.20 @ 19:45:00

End Date: 2024.05.21 @ 05:05:02

Job Ticket #: 71018 DST #: 1

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

Printed: 2024.05.28 @ 09:29:28



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71018

DST#: 1

Test Start: 2024.05.20 @ 19:45:00

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:10:47

Time Test Ended: 05:05:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 72

Interval: **2990.00 ft (KB) To 2995.00 ft (KB) (TVD)**

Reference Elevations: 1345.00 ft (KB)

Total Depth: 2995.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: **8322** Inside

Press@RunDepth: 148.57 psig @ 2991.00 ft (KB)

Capacity: psig

Start Date: 2024.05.20

End Date:

2024.05.21

Last Calib.: 2024.05.21

Start Time: 19:45:01

End Time:

05:05:02

Time On Btm: 2024.05.20 @ 22:09:47

Time Off Btm: 2024.05.21 @ 02:17:02

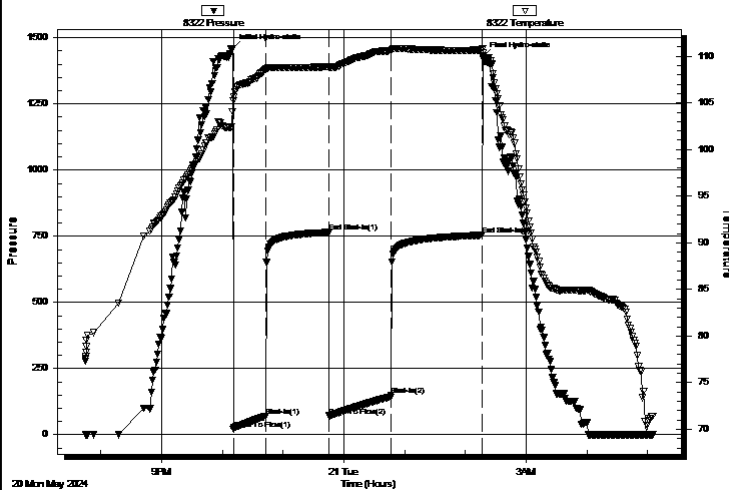
TEST COMMENT: IF: Fair Blow , Built to 7.03"

IS: No Blow Back

FF: Fair Blow , Built to 8.7"

FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1459.77	104.05	Initial Hydro-static
1	21.18	105.25	Open To Flow (1)
33	69.75	108.56	Shut-In(1)
96	765.57	108.85	End Shut-In(1)
96	71.69	108.76	Open To Flow (2)
157	148.57	110.66	Shut-In(2)
247	754.52	110.65	End Shut-In(2)
248	1430.33	110.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MCO 40%M 60%O	0.30
244.00	Oil	1.20

Gas Rates

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

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71018

DST#: 1

Test Start: 2024.05.20 @ 19:45:00

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:10:47

Time Test Ended: 05:05:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 72

Interval: 2990.00 ft (KB) To 2995.00 ft (KB) (TVD)

Reference Elevations: 1345.00 ft (KB)

Total Depth: 2995.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 8159 Outside

Press@RunDepth: psig @ 2991.00 ft (KB)

Capacity: psig

Start Date: 2024.05.20

End Date:

2024.05.21

Last Calib.:

2024.05.21

Start Time: 19:45:01

End Time:

05:05:02

Time On Btm:

Time Off Btm:

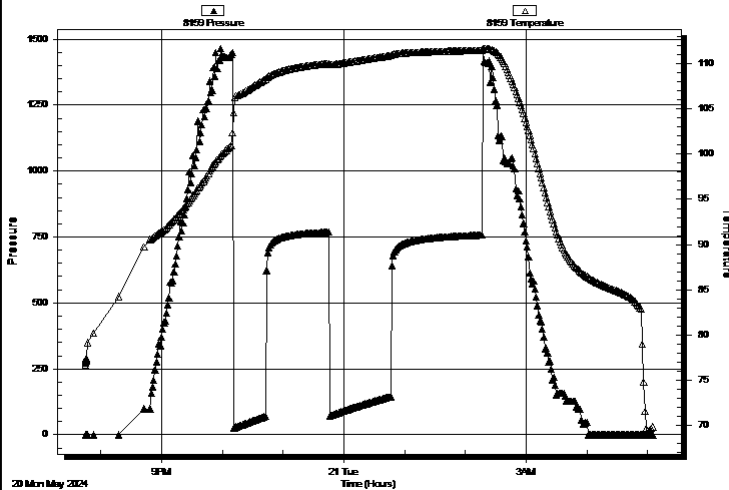
TEST COMMENT: IF: Fair Blow , Built to 7.03"

IS: No Blow Back

FF: Fair Blow , Built to 8.7"

FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
60.00	MCO 40%M 60%O	0.30
244.00	Oil	1.20

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

31-16S-10E Lyon, KS

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

Peterson Trust #9-31

Job Ticket: 71018

DST#: 1

Test Start: 2024.05.20 @ 19:45:00

Tool Information

Drill Pipe:	Length: 2666.00 ft	Diameter: 3.80 inches	Volume: 37.40 bbl	Tool Weight: 2100.00 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: 304.00 ft	Diameter: 2.25 inches	Volume: 1.50 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume:	38.90 bbl	Tool Chased ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	2990.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	5.00 ft			
Tool Length:	34.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			2966.00	
Hydraulic tool	5.00			2971.00	
Jars	5.00			2976.00	
EM Tool	3.00			2979.00	
Safety Joint	2.00			2981.00	
Packer	5.00			2986.00	29.00 Bottom Of Top Packer
Packer	4.00			2990.00	
Stubb	1.00			2991.00	
Recorder	0.00	8322	Inside	2991.00	
Recorder	0.00	8159	Outside	2991.00	
Perforations	1.00			2992.00	
Bullnose	3.00			2995.00	5.00 Bottom Packers & Anchor

Total Tool Length: 34.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

31-16S-10E Lyon, KS

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

Peterson Trust #9-31

Job Ticket: 71018

DST#: 1

Test Start: 2024.05.20 @ 19:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 8.79 in³

Resistivity: ohm.m

Salinity: 1100.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

27.4 deg API

Water Salinity:

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MCO 40%M 60%O	0.295
244.00	Oil	1.200

Total Length: 304.00 ft

Total Volume: 1.495 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity was 28.6 @ 72 degrees

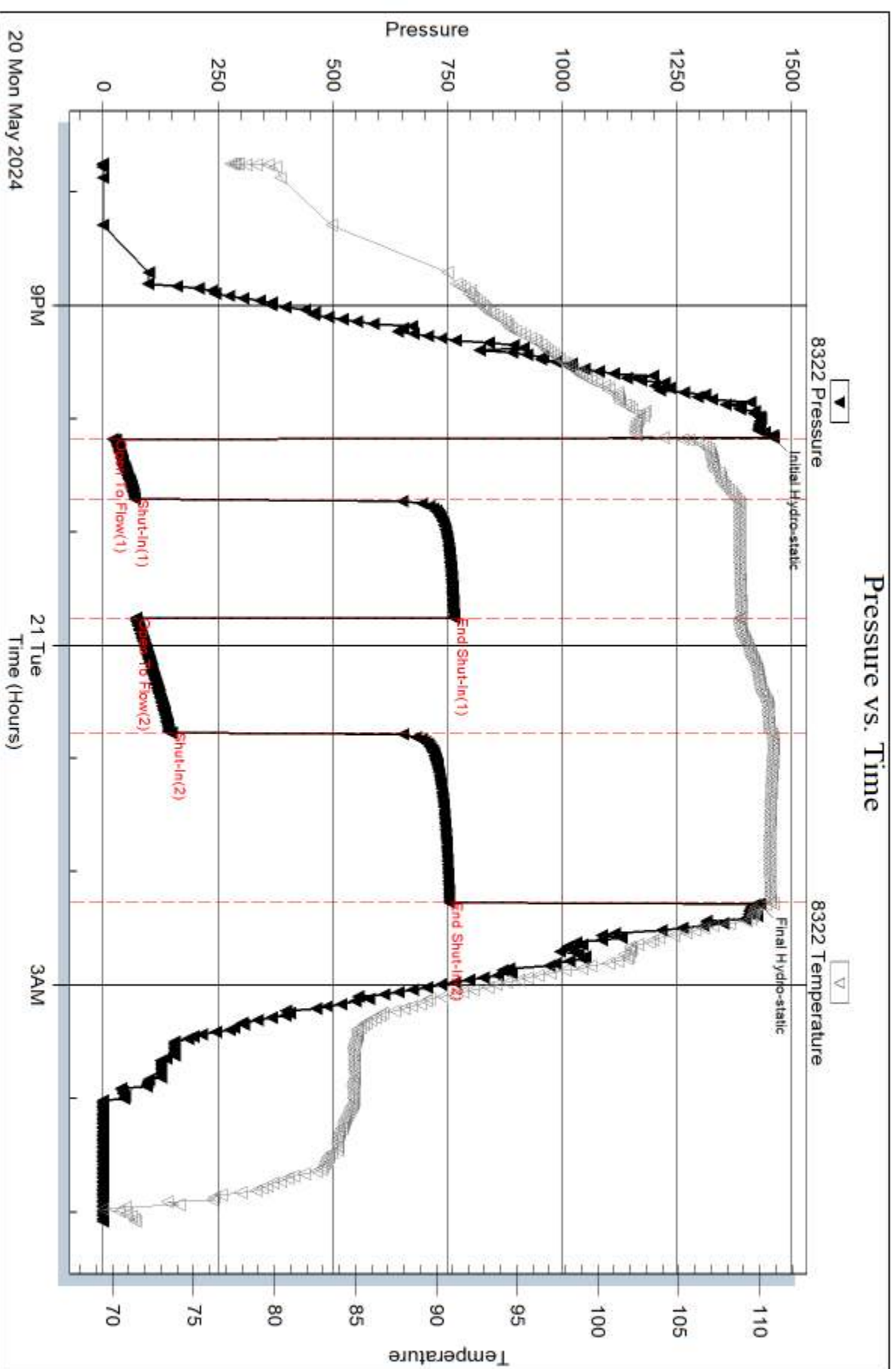
Serial #: 8322

Inside

Mull Drilling Co

Peterson Trust #9-31

DST Test Number: 1

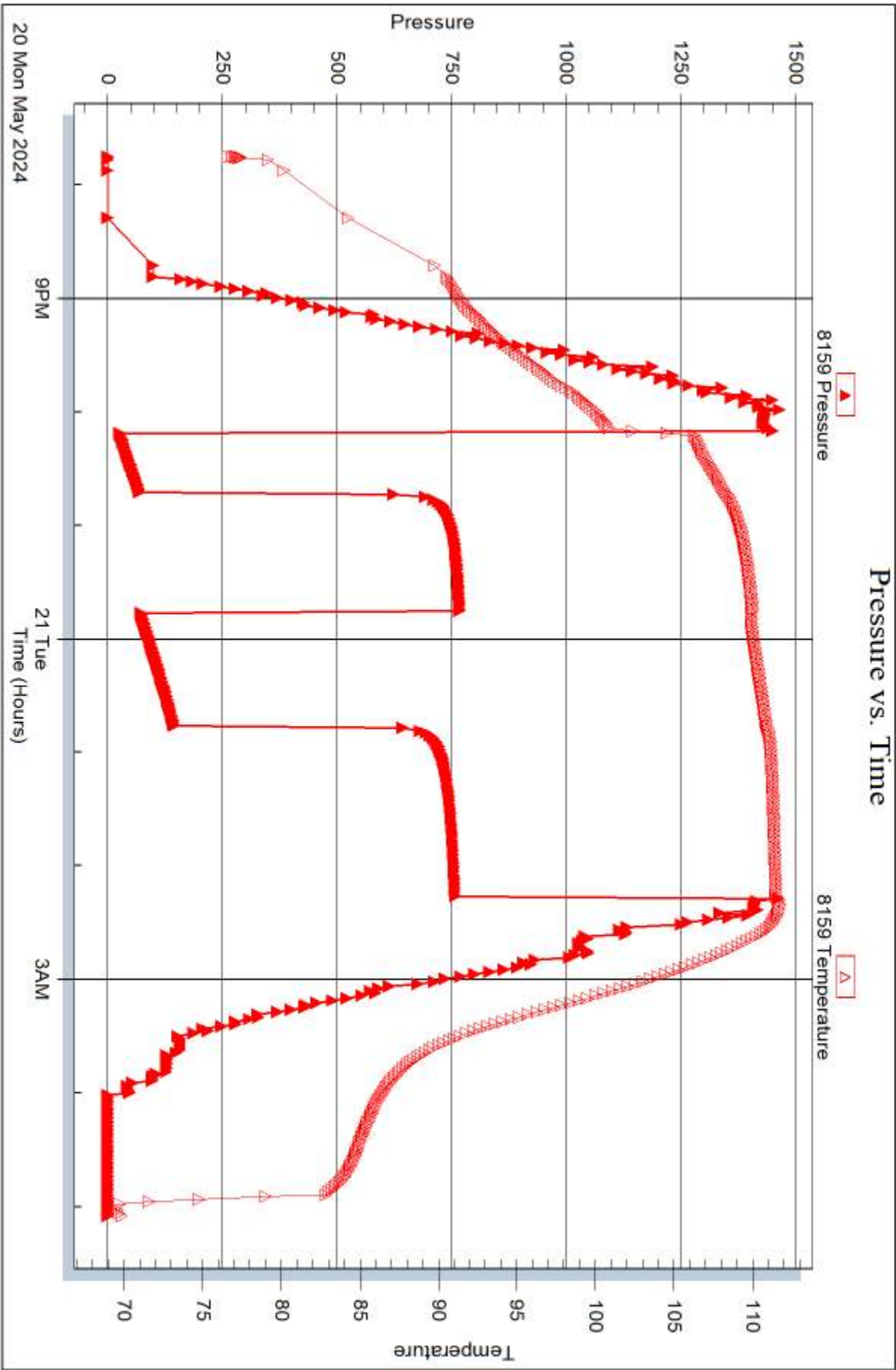


Serial #: 8159

Outside Mall Drilling Co

Peterson Trust #9-31

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206

ATTN: Roger Martin

Peterson Trust #9-31

31-16S-10E Lyon,KS

Start Date: 2024.05.21 @ 12:21:00

End Date: 2024.05.21 @ 21:25:02

Job Ticket #: 71019 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2024.05.28 @ 09:27:51



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkw y
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71019

DST#: 2

Test Start: 2024.05.21 @ 12:21:00

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:48:47

Time Test Ended: 21:25:02

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 72

Interval: **2990.00 ft (KB) To 3000.00 ft (KB) (TVD)**

Total Depth: 3000.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1345.00 ft (KB)

1333.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: **8322** Inside

Press@RunDepth: 169.59 psig @ 2996.00 ft (KB)

Start Date: 2024.05.21

End Date:

2024.05.21

Start Time: 12:21:01

End Time:

21:25:02

Capacity: psig

Last Calib.: 2024.05.21

Time On Btm: 2024.05.21 @ 14:47:47

Time Off Btm: 2024.05.21 @ 18:52:32

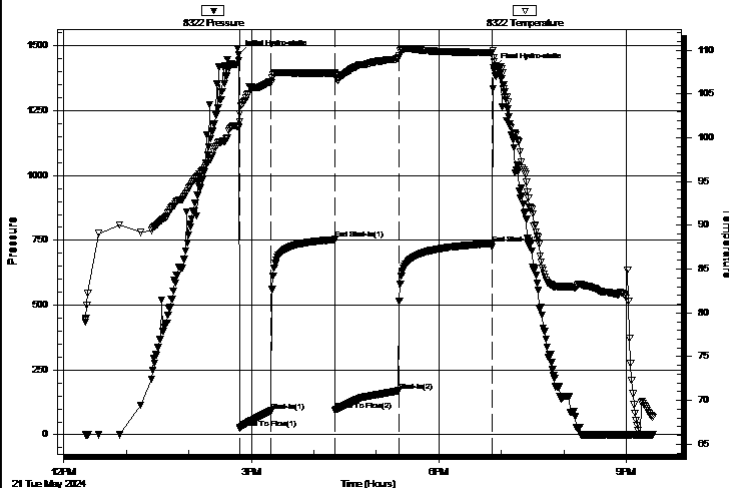
TEST COMMENT: IF: Fair Blow , Built to 6.92"

IS: No Blow Back

FF: Fair Blow , BOB in 44 minutes, Built to 15.93"

FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1465.38	101.13	Initial Hydro-static
1	25.87	101.86	Open To Flow (1)
32	92.26	106.32	Shut-In(1)
93	753.46	107.37	End Shut-In(1)
93	95.98	107.17	Open To Flow (2)
154	169.59	109.11	Shut-In(2)
243	737.54	109.74	End Shut-In(2)
245	1416.30	109.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MWCO 28%M 30%W 42%O	0.30
306.00	Oil	2.07
0.00	Tool Sample WMCO 5%W 5%M 90%O	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71019

DST#: 2

Test Start: 2024.05.21 @ 12:21:00

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:48:47

Time Test Ended: 21:25:02

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 72

Interval: **2990.00 ft (KB) To 3000.00 ft (KB) (TVD)**

Reference Elevations: 1345.00 ft (KB)

Total Depth: 3000.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: **8159** Outside

Press@RunDepth: psig @ 2996.00 ft (KB)

Capacity: psig

Start Date: 2024.05.21

End Date:

2024.05.21

Last Calib.:

2024.05.21

Start Time: 12:21:01

End Time:

21:25:02

Time On Btm:

Time Off Btm:

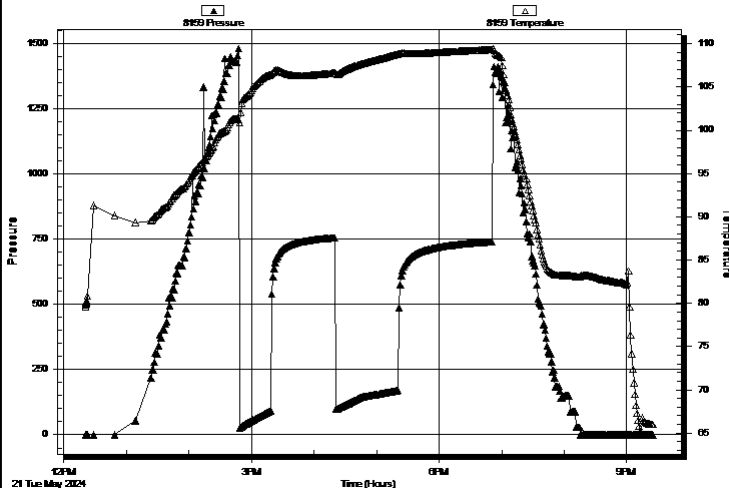
TEST COMMENT: IF: Fair Blow , Built to 6.92"

IS: No Blow Back

FF: Fair Blow , BOB in 44 minutes, Built to 15.93"

FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
60.00	MWCO 28%M 30%W 42%O	0.30
306.00	Oil	2.07
0.00	Tool Sample WMCO 5%W 5%M 90%O	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

31-16S-10E Lyon, KS

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

Peterson Trust #9-31

Job Ticket: 71019

DST#: 2

Test Start: 2024.05.21 @ 12:21:00

Tool Information

Drill Pipe:	Length: 2666.00 ft	Diameter: 3.80 inches	Volume: 37.40 bbl	Tool Weight: 2100.00 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: 304.00 ft	Diameter: 2.25 inches	Volume: 1.50 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume:	38.90 bbl	Tool Chased ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	2990.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	39.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			2966.00	
Hydraulic tool	5.00			2971.00	
Jars	5.00			2976.00	
EM Tool	3.00			2979.00	
Safety Joint	2.00			2981.00	
Packer	5.00			2986.00	29.00 Bottom Of Top Packer
Packer	4.00			2990.00	
Stubb	1.00			2991.00	
Handling Sub	5.00			2996.00	
Recorder	0.00	8322	Inside	2996.00	
Recorder	0.00	8159	Outside	2996.00	
Perforations	1.00			2997.00	
Bullnose	3.00			3000.00	10.00 Bottom Packers & Anchor

Total Tool Length: 39.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

31-16S-10E Lyon, KS

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

Peterson Trust #9-31

Job Ticket: 71019

DST#: 2

Test Start: 2024.05.21 @ 12:21:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 8.79 in³
Resistivity: ohm.m
Salinity: 800.00 ppm
Filter Cake: 0.02 inches

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

Oil API: 27.6 deg API
Water Salinity: 9000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MWCO 28%M 30%W 42%O	0.295
306.00	Oil	2.070
0.00	Tool Sample WMCO 5%W 5%M 90%O	0.000

Total Length: 366.00 ft Total Volume: 2.365 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity was 29 @ 74 degrees
RW was .61 @ 80 degrees

Serial #: 8322

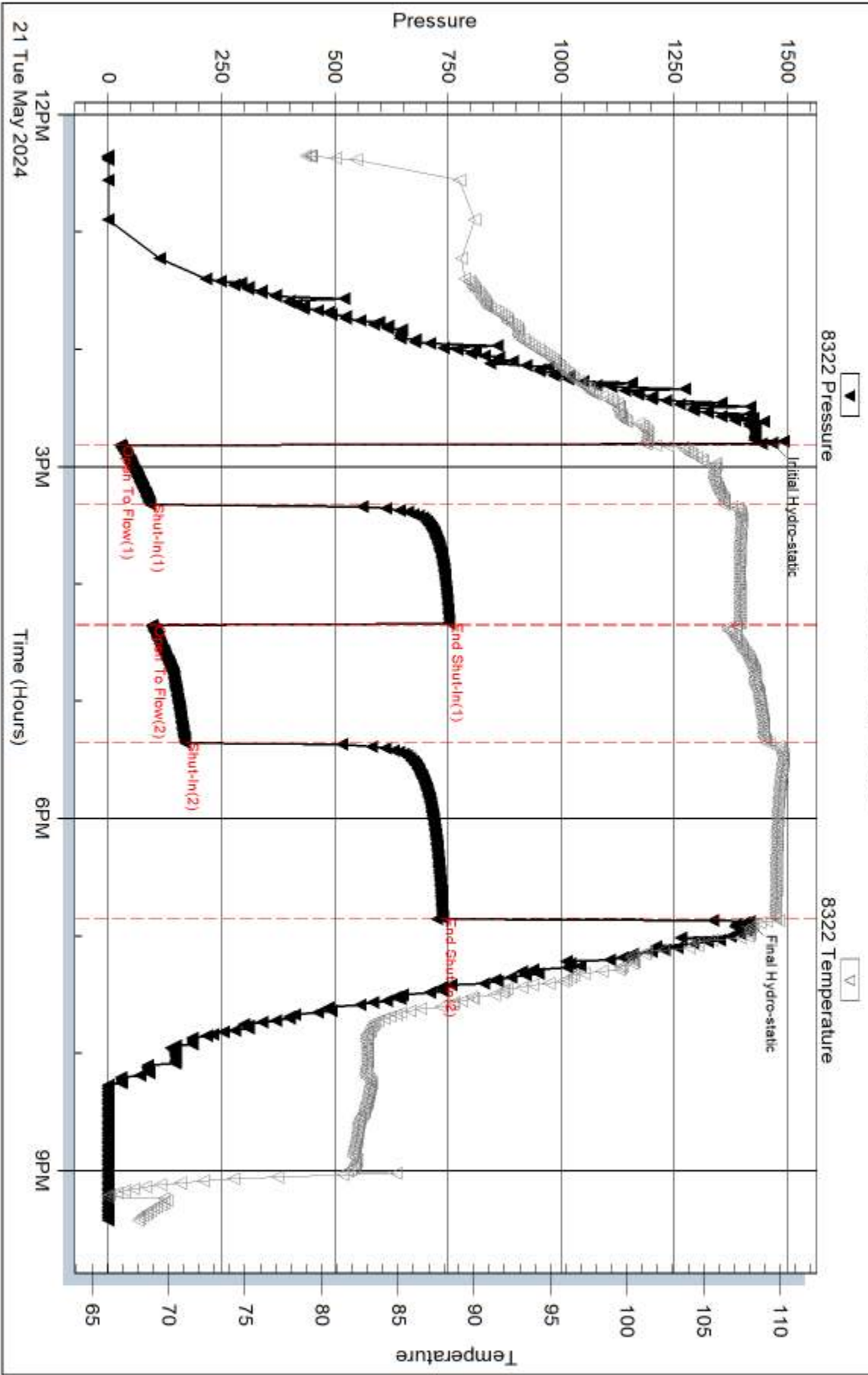
Inside

Mull Drilling Co

Peterson Trust #9-31

DST Test Number: 2

Pressure vs. Time

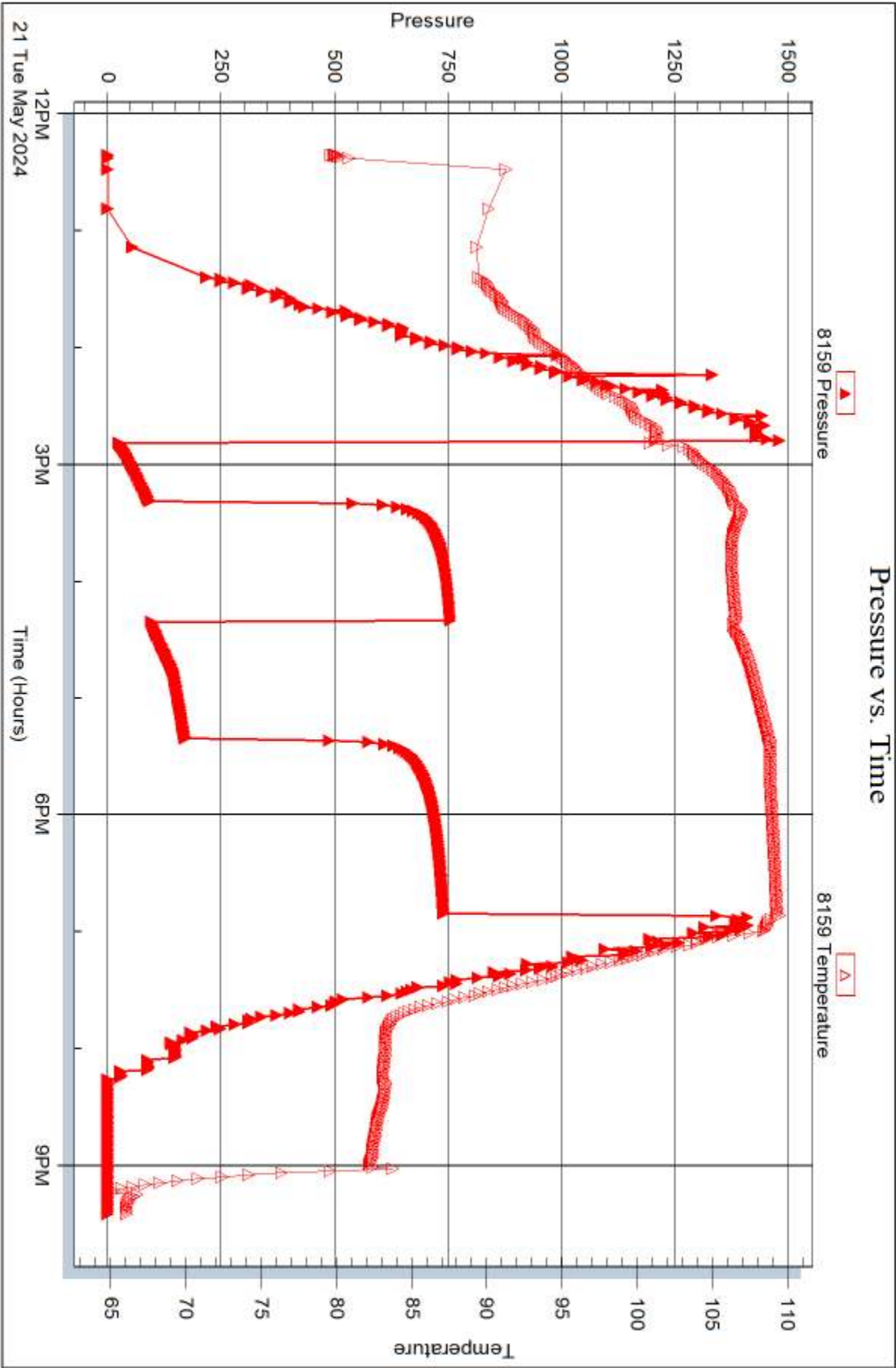


Serial #: 8159

Outside Mall Drilling Co

Peterson Trust #9-31

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206

ATTN: Roger Martin

Peterson Trust #9-31

31-16S-10E Lyon,KS

Start Date: 2024.05.23 @ 03:22:00

End Date: 2024.05.23 @ 11:44:02

Job Ticket #: 71020 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2024.05.28 @ 09:22:05



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71020

DST#: 3

Test Start: 2024.05.23 @ 03:22:00

GENERAL INFORMATION:

Formation: **Lower Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:42:17

Time Test Ended: 11:44:02

Test Type: Conventional Straddle (Reset)

Tester: Leal Cason

Unit No: 72

Interval: **3019.00 ft (KB) To 3030.00 ft (KB) (TVD)**

Reference Elevations: 1345.00 ft (KB)

Total Depth: 3200.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: **8322** Inside

Press@RunDepth: 39.70 psig @ 3025.00 ft (KB)

Capacity: psig

Start Date: 2024.05.23

End Date:

2024.05.23

Last Calib.:

2024.05.23

Start Time: 03:22:01

End Time:

11:44:02

Time On Btm:

2024.05.23 @ 05:40:32

Time Off Btm:

2024.05.23 @ 09:46:17

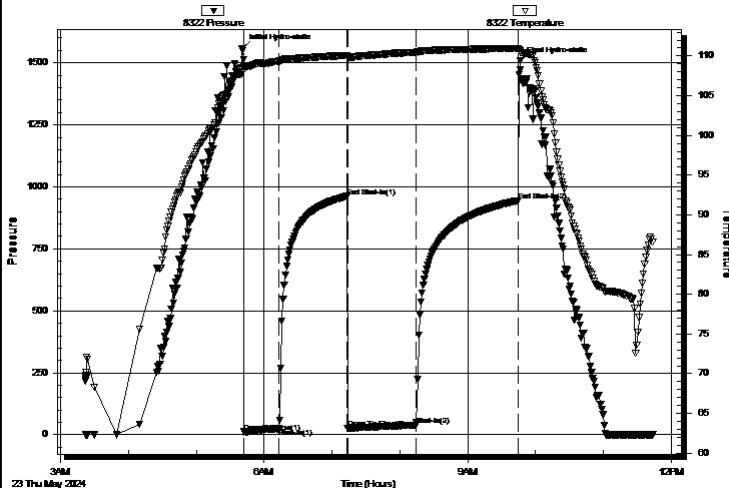
TEST COMMENT: IF: Weak 1.44" Blow

IS: No Blow Back

FF: No Blow

FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1558.24	108.51	Initial Hydro-static
2	11.85	108.65	Open To Flow (1)
33	24.99	109.35	Shut-In(1)
93	961.36	110.04	End Shut-In(1)
94	26.35	109.86	Open To Flow (2)
154	39.70	110.44	Shut-In(2)
245	944.89	110.94	End Shut-In(2)
246	1506.96	110.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	MOCW 8%M 10%O 82%W	0.07
0.00	Tool Sample MOCW 20%O 20%M 60%W	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71020

DST#: 3

Test Start: 2024.05.23 @ 03:22:00

GENERAL INFORMATION:

Formation: **Lower Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:42:17

Time Test Ended: 11:44:02

Test Type: Conventional Straddle (Reset)

Tester: Leal Cason

Unit No: 72

Interval: **3019.00 ft (KB) To 3030.00 ft (KB) (TVD)**

Reference Elevations: 1345.00 ft (KB)

Total Depth: 3200.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 6755 Below (Straddle)

Press@RunDepth: psig @ 3037.00 ft (KB)

Capacity: psig

Start Date: 2024.05.23

End Date:

2024.05.23

Last Calib.:

2024.05.23

Start Time: 03:22:01

End Time:

11:42:02

Time On Btm:

Time Off Btm:

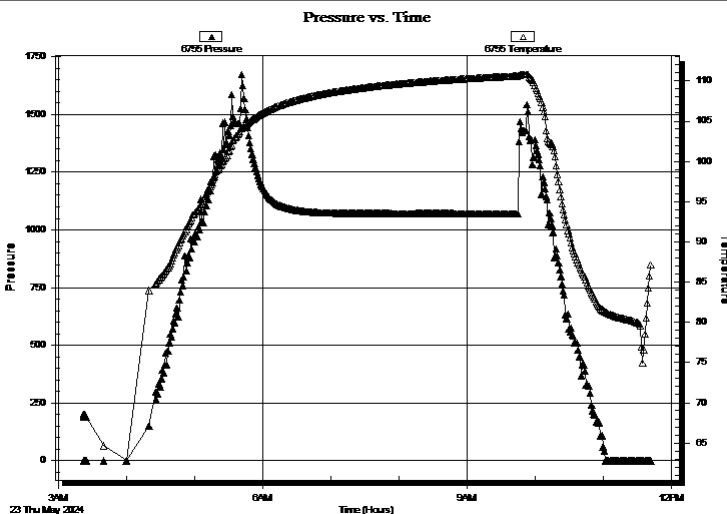
TEST COMMENT: IF: Weak 1.44" Blow

IS: No Blow Back

FF: No Blow

FS: No Blow Back

PRESSURE SUMMARY



Time
(Min.)

Pressure
(psig)

Temp
(deg F)

Annotation

Recovery

Length (ft)	Description	Volume (bbl)
15.00	MOCW 8%M 10%O 82%W	0.07
0.00	Tool Sample MOCW 20%O 20%M 60%W	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71020

DST#: 3

Test Start: 2024.05.23 @ 03:22:00

GENERAL INFORMATION:

Formation: **Lower Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:42:17

Time Test Ended: 11:44:02

Test Type: Conventional Straddle (Reset)

Tester: Leal Cason

Unit No: 72

Interval: **3019.00 ft (KB) To 3030.00 ft (KB) (TVD)**

Reference Elevations: 1345.00 ft (KB)

Total Depth: 3200.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: **8159** Outside

Press@RunDepth: psig @ 3025.00 ft (KB)

Capacity: psig

Start Date: 2024.05.23

End Date:

2024.05.23

Last Calib.:

2024.05.23

Start Time: 03:22:01

End Time:

11:44:02

Time On Btm:

Time Off Btm:

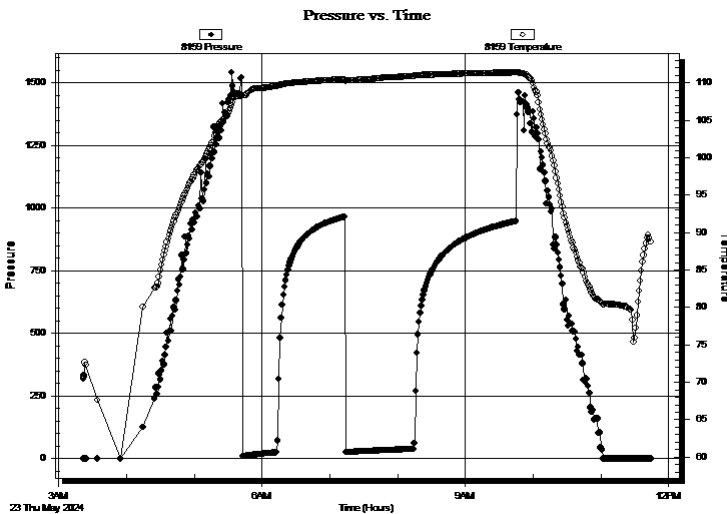
TEST COMMENT: IF: Weak 1.44" Blow

IS: No Blow Back

FF: No Blow

FS: No Blow Back

PRESSURE SUMMARY



Time
(Min.)

Pressure
(psig)

Temp
(deg F)

Annotation

Recovery

Length (ft)	Description	Volume (bbl)
15.00	MOCW 8%M 10%O 82%W	0.07
0.00	Tool Sample MOCW 20%O 20%M 60%W	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

31-16S-10E Lyon, KS

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

Peterson Trust #9-31

Job Ticket: 71020

DST#: 3

Test Start: 2024.05.23 @ 03:22:00

Tool Information

Drill Pipe:	Length: 2698.00 ft	Diameter: 3.80 inches	Volume: 37.85 bbl	Tool Weight: 2100.00 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: 304.00 ft	Diameter: 2.25 inches	Volume: 1.50 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume:	39.35 bbl	Tool Chased ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3019.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	3030.00 ft			
Interval between Packers:	11.00 ft			
Tool Length:	210.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments: Successful Straddle

Tool Description

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

Shut In Tool	5.00			2995.00	
Hydraulic tool	5.00			3000.00	
Jars	5.00			3005.00	
EM Tool	3.00			3008.00	
Safety Joint	2.00			3010.00	
Packer	5.00			3015.00	29.00 Bottom Of Top Packer
Packer	4.00			3019.00	
Stubb	1.00			3020.00	
Handling Sub	5.00			3025.00	
Recorder	0.00	8322	Inside	3025.00	
Recorder	0.00	8159	Outside	3025.00	
Perforations	1.00			3026.00	
Blank Off Sub	1.00			3027.00	
Blank Spacing	3.00			3030.00	11.00 Tool Interval
Packer	3.00			3033.00	
perforations	3.00			3036.00	
Change Over Sub	1.00			3037.00	
Recorder	0.00	6755	Below	3037.00	
Drill Pipe	159.00			3196.00	
Change Over Sub	1.00			3197.00	
Bullnose	3.00			3200.00	170.00 Bottom Packers & Anchor

Total Tool Length: 210.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

31-16S-10E Lyon, KS

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

Peterson Trust #9-31

Job Ticket: 71020

DST#: 3

Test Start: 2024.05.23 @ 03:22:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 8.79 in³

Resistivity: ohm.m

Salinity: 1000.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

9100 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	MOCW 8%M 10%O 82%W	0.074
0.00	Tool Sample MOCW 20%O 20%M 60%W	0.000

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

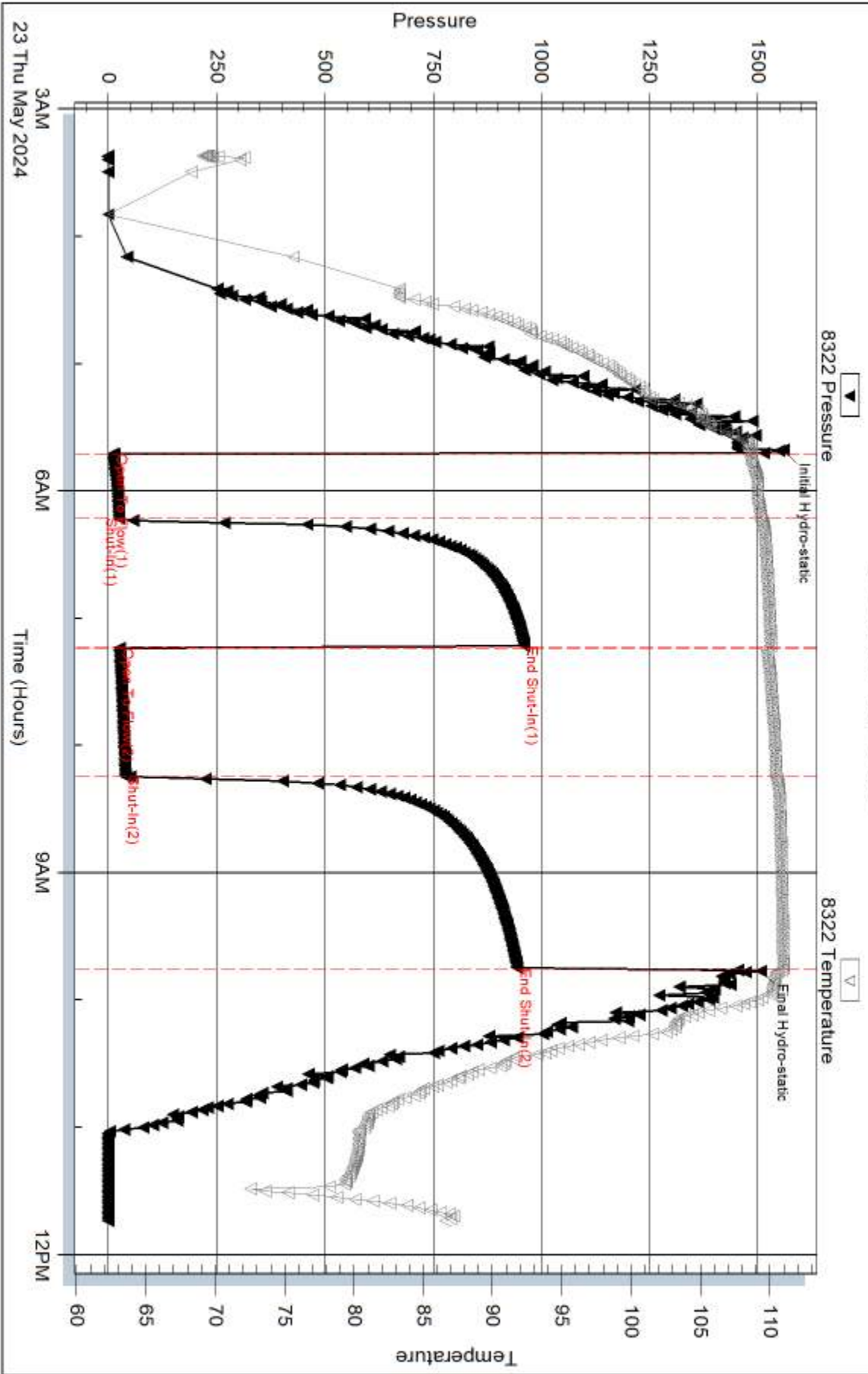
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW was .55 @ 85 degrees

Pressure vs. Time

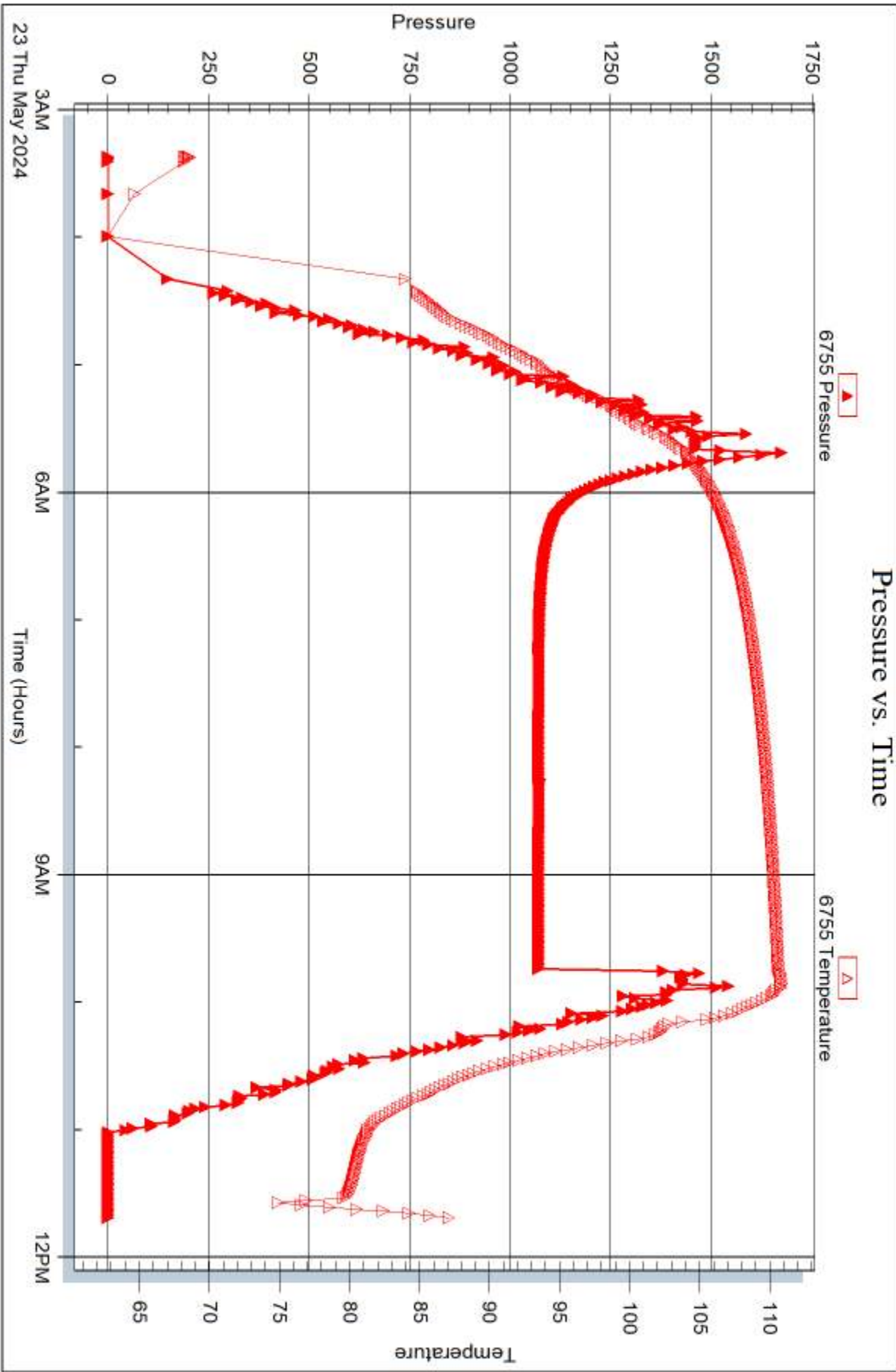


Serial #: 6755

Below (Straddling) Co

Peterson Trust #9-31

DST Test Number: 3

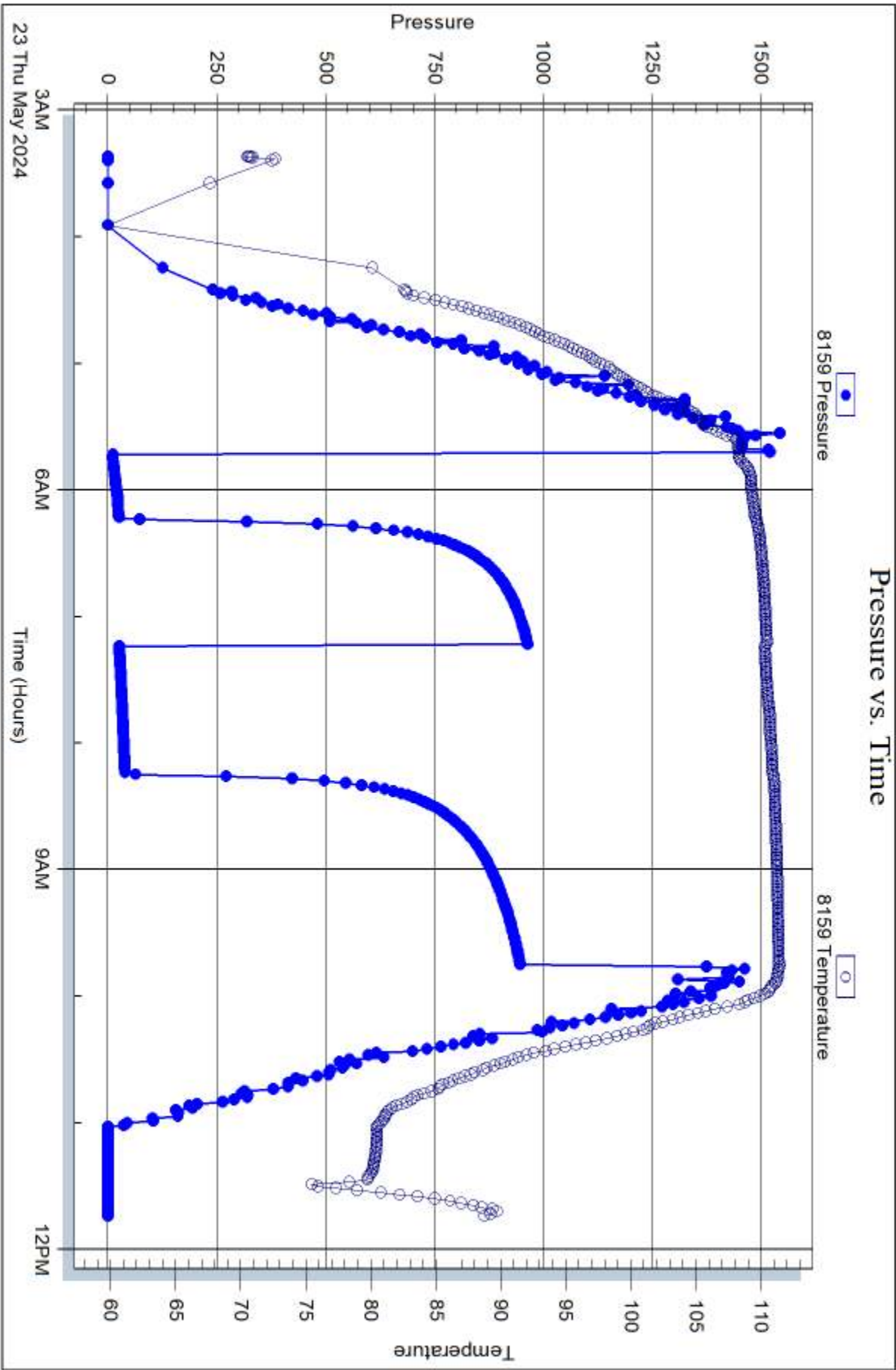


Serial #: 8159

Outside Mall Drilling Co

Peterson Trust #9-31

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206

ATTN: Roger Martin

Peterson Trust #9-31

31-16S-10E Lyon,KS

Start Date: 2024.05.23 @ 11:55:00

End Date: 2024.05.23 @ 20:51:02

Job Ticket #: 71021 DST #: 4

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

Printed: 2024.05.28 @ 09:20:14



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71021

DST#: 4

Test Start: 2024.05.23 @ 11:55:00

GENERAL INFORMATION:

Formation: **Simpson Dolomite**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:01:02

Time Test Ended: 20:51:02

Test Type: Conventional Straddle (Reset)

Tester: Leal Cason

Unit No: 72

Interval: **3065.00 ft (KB) To 3080.00 ft (KB) (TVD)**

Reference Elevations: 1345.00 ft (KB)

Total Depth: 3200.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: **8322** Inside

Press@RunDepth: 209.71 psig @ 3076.00 ft (KB)

Capacity: psig

Start Date: 2024.05.23

End Date:

2024.05.23

Last Calib.:

2024.05.23

Start Time: 11:55:01

End Time:

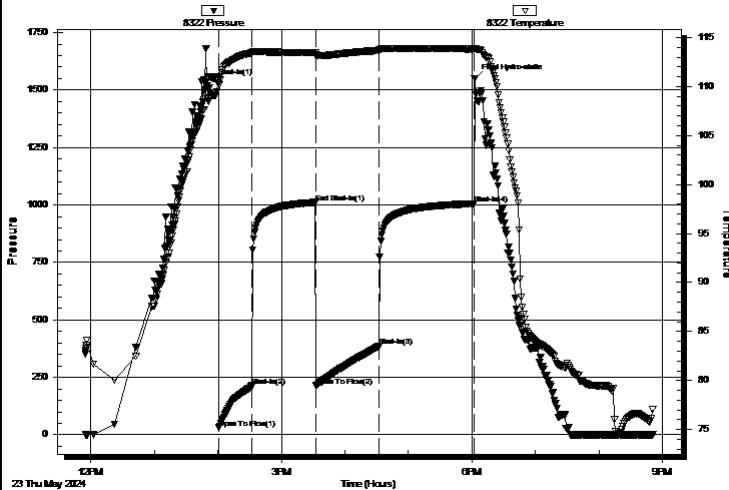
20:51:02

Time On Btm:

Time Off Btm: 2024.05.23 @ 18:02:47

TEST COMMENT: IF: Strong Blow , BOB in 9 minutes, Built to 16.83"
IS: No Blow Back
FF: Strong Blow , BOB in 10 minutes, Built to 36.62"
FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1558.88	110.61	Shut-In(1)
1	29.77	110.28	Open To Flow (1)
32	209.71	113.40	Shut-In(2)
92	1011.21	113.41	End Shut-In(1)
93	213.44	113.13	Open To Flow (2)
152	385.17	113.71	Shut-In(3)
242	1006.31	113.86	Shut-In(4)
243	1550.34	113.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
778.00	Water	8.14
126.00	OSMCW 2%O 6%M 92%O	1.77
30.00	SOMCW 6%O 40%M 54%W	0.42
0.00	Tool Sample SOSMCW -1% O 6% M + 93	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71021

DST#: 4

Test Start: 2024.05.23 @ 11:55:00

GENERAL INFORMATION:

Formation: **Simpson Dolomite**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:01:02

Time Test Ended: 20:51:02

Test Type: Conventional Straddle (Reset)

Tester: Leal Cason

Unit No: 72

Interval: **3065.00 ft (KB) To 3080.00 ft (KB) (TVD)**

Reference Elevations: 1345.00 ft (KB)

Total Depth: 3200.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: **8159** Outside

Press@RunDepth: psig @ 3076.00 ft (KB)

Capacity: psig

Start Date: 2024.05.23

End Date:

2024.05.23

Last Calib.:

2024.05.23

Start Time: 11:55:01

End Time:

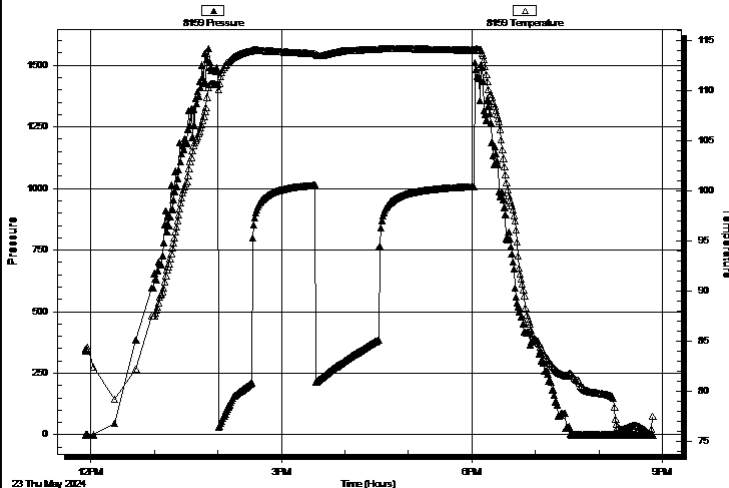
20:51:02

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 9 minutes, Built to 16.83"
IS: No Blow Back
FF: Strong Blow , BOB in 10 minutes, Built to 36.62"
FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
778.00	Water	8.14
126.00	OSMCW 2%O 6%M 92%O	1.77
30.00	SOMCW 6%O 40%M 54%W	0.42
0.00	Tool Sample SOSMCW -1% O 6% M + 93'0.00	

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

31-16S-10E Lyon, KS

Peterson Trust #9-31

Job Ticket: 71021

DST#: 4

Test Start: 2024.05.23 @ 11:55:00

GENERAL INFORMATION:

Formation: **Simpson Dolomite**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:01:02

Time Test Ended: 20:51:02

Test Type: Conventional Straddle (Reset)

Tester: Leal Cason

Unit No: 72

Interval: **3065.00 ft (KB) To 3080.00 ft (KB) (TVD)**

Reference Elevations: 1345.00 ft (KB)

Total Depth: 3200.00 ft (KB) (TVD)

1333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 6755 Below (Straddle)

Press@RunDepth: psig @ 3101.00 ft (KB)

Capacity: psig

Start Date: 2024.05.23

End Date:

2024.05.23

Last Calib.:

2024.05.23

Start Time: 11:55:01

End Time:

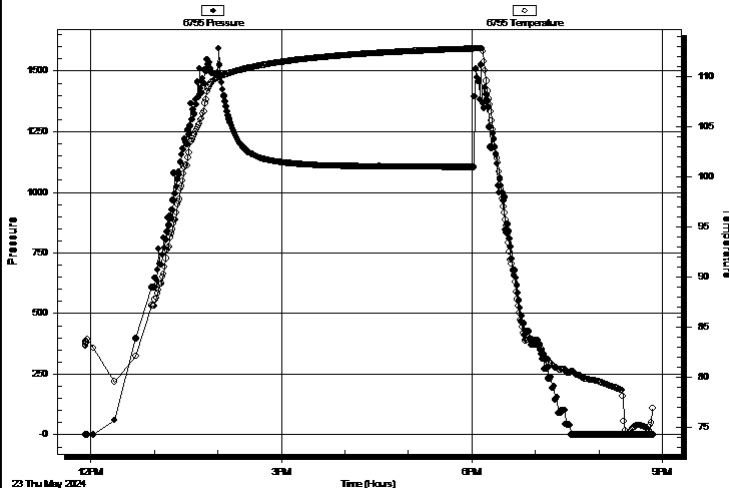
20:51:02

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 9 minutes, Built to 16.83"
IS: No Blow Back
FF: Strong Blow , BOB in 10 minutes, Built to 36.62"
FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
778.00	Water	8.14
126.00	OSMCW 2%O 6%M 92%O	1.77
30.00	SOMCW 6%O 40%M 54%W	0.42
0.00	Tool Sample SOSMCW -1% O 6% M + 93'0.00	

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

31-16S-10E Lyon, KS

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

Peterson Trust #9-31

Job Ticket: 71021

DST#: 4

Test Start: 2024.05.23 @ 11:55:00

Tool Information

Drill Pipe:	Length: 2763.00 ft	Diameter: 3.80 inches	Volume: 38.76 bbl	Tool Weight: 2100.00 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: 304.00 ft	Diameter: 2.25 inches	Volume: 1.50 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 40.26 bbl		Tool Chased ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3065.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	3080.00 ft			
Interval between Packers:	15.00 ft			
Tool Length:	164.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3041.00	
Hydraulic tool	5.00			3046.00	
Jars	5.00			3051.00	
EM Tool	3.00			3054.00	
Safety Joint	2.00			3056.00	
Packer	5.00			3061.00	29.00 Bottom Of Top Packer
Packer	4.00			3065.00	
Stubb	1.00			3066.00	
Perforations	5.00			3071.00	
Handling Sub	5.00			3076.00	
Recorder	0.00	8322	Inside	3076.00	
Recorder	0.00	8159	Outside	3076.00	
Blank Off Sub	1.00			3077.00	
Blank Spacing	3.00			3080.00	15.00 Tool Interval
Packer	3.00			3083.00	
perforations	17.00			3100.00	
Change Over Sub	1.00			3101.00	
Recorder	0.00	6755	Below	3101.00	
Drill Pipe	95.00			3196.00	
Change Over Sub	1.00			3197.00	
Bullnose	3.00			3200.00	120.00 Bottom Packers & Anchor

Total Tool Length: 164.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

31-16S-10E Lyon, KS

1700 N Waterfront Pkwy
Bldg 1200
Wichita, KS 67206
ATTN: Roger Martin

Peterson Trust #9-31

Job Ticket: 71021

DST#: 4

Test Start: 2024.05.23 @ 11:55:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 8.79 in³

Resistivity: ohm.m

Salinity: 1000.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity: 7664 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
778.00	Water	8.144
126.00	OSMCW 2%O 6%M 92%O	1.767
30.00	SOMCW 6%O 40%M 54%W	0.421
0.00	Tool Sample SOMCW -1% O 6% M + 93%W	0.000

Total Length: 934.00 ft Total Volume: 10.332 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW was .69 @ 79 degrees

Serial #: 8322

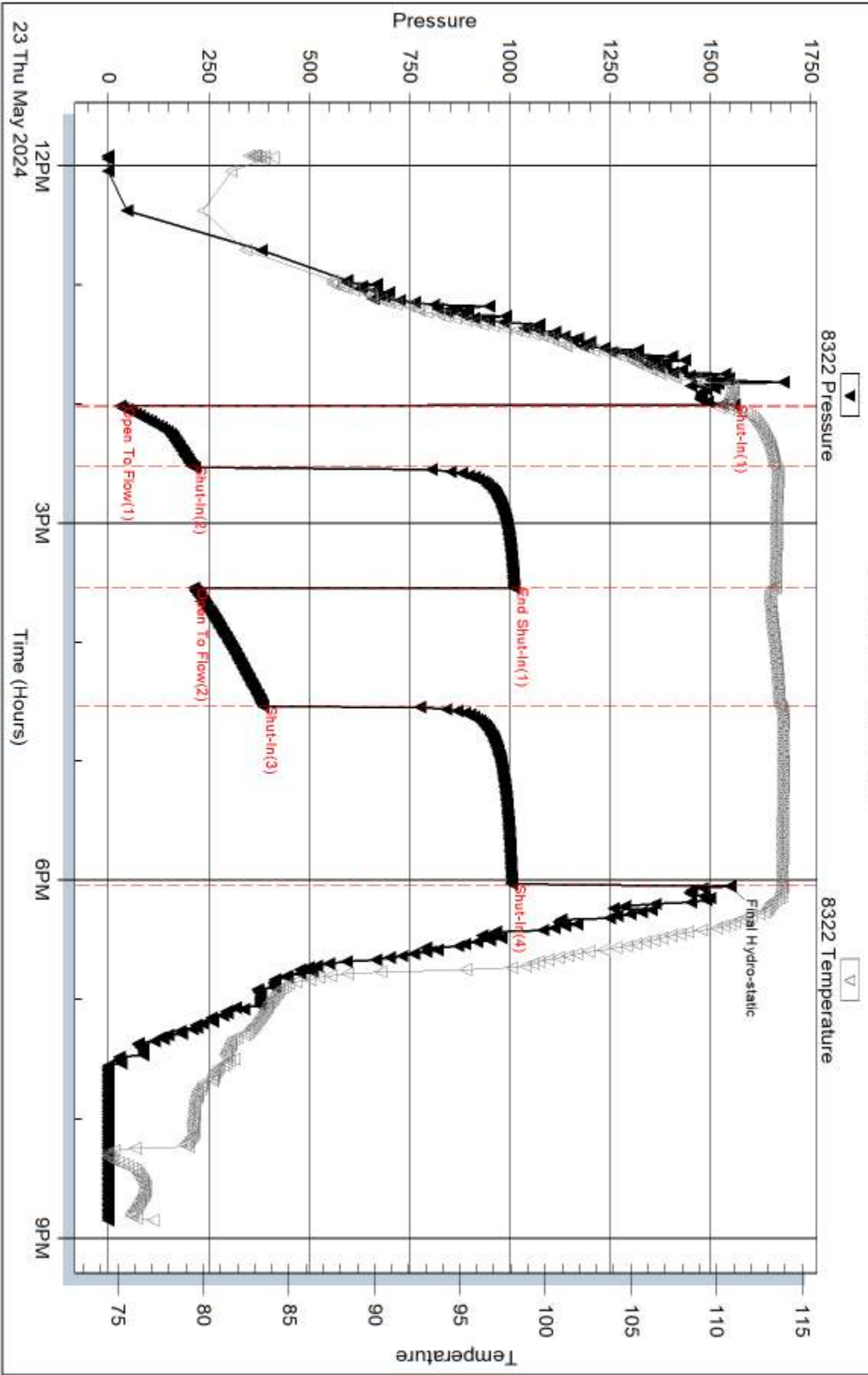
Inside

Mull Drilling Co

Peterson Trust #9-31

DST Test Number: 4

Pressure vs. Time

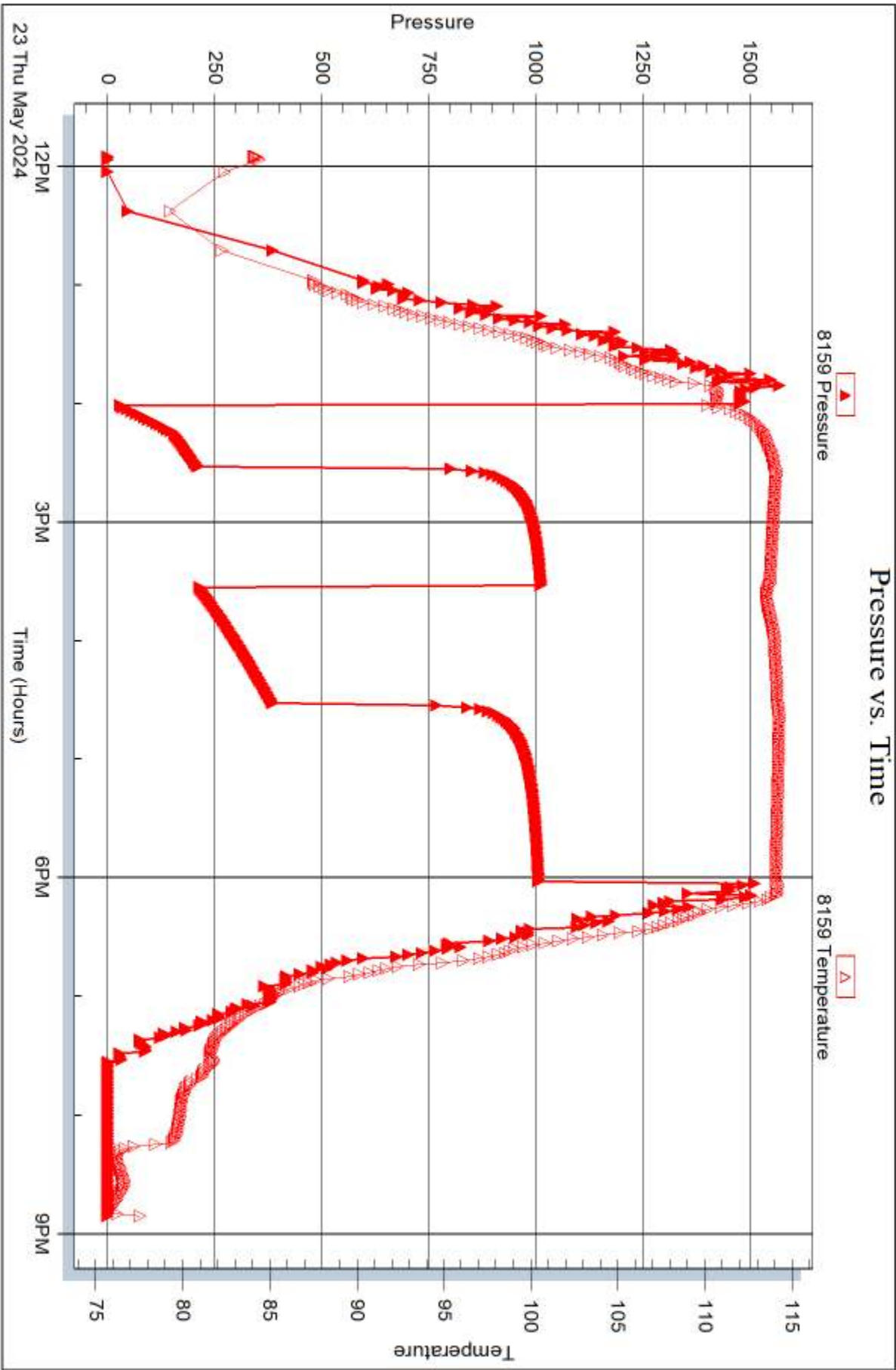


Serial #: 8159

Outside Mall Drilling Co

Peterson Trust #9-31

DST Test Number: 4

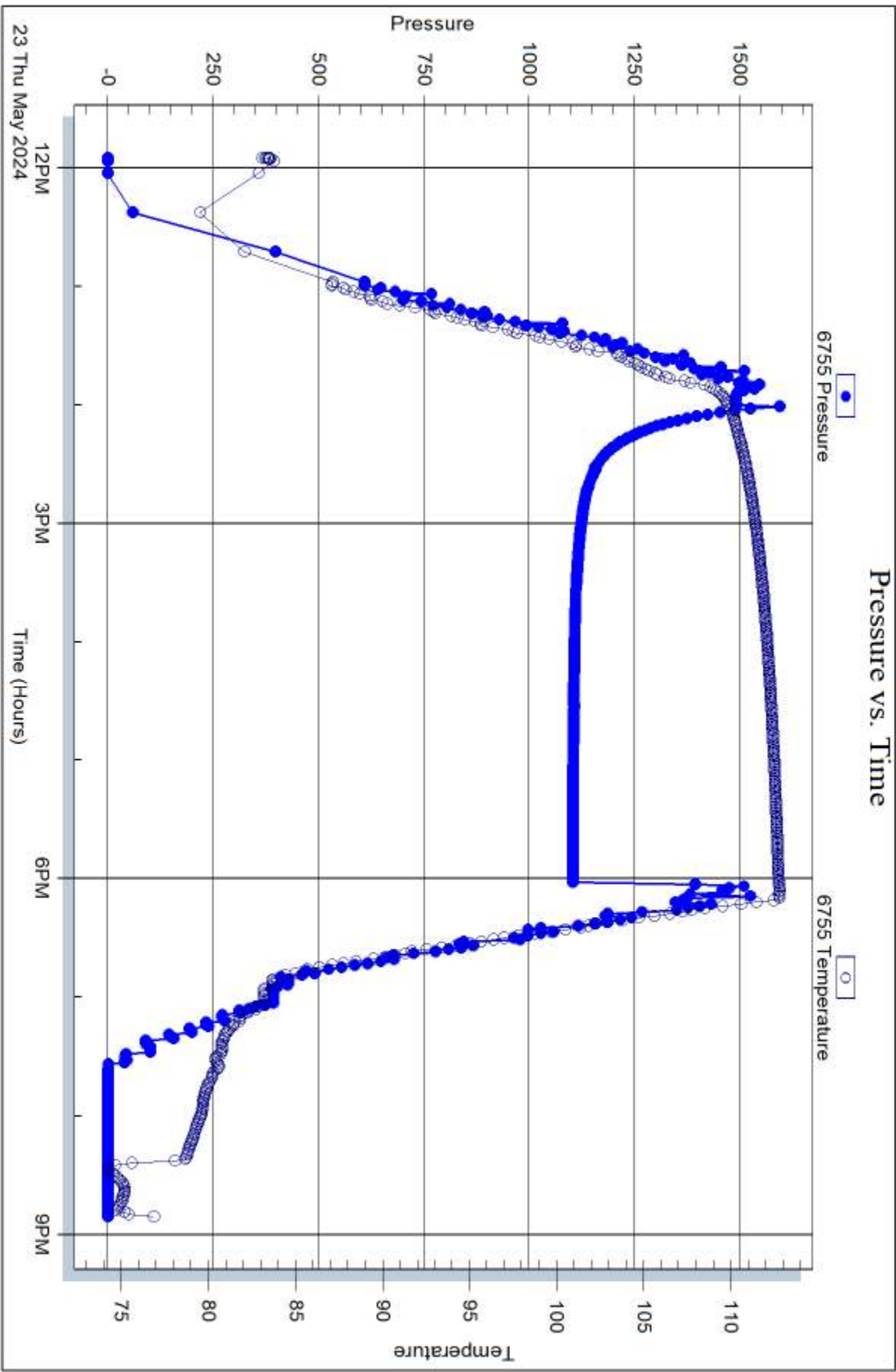


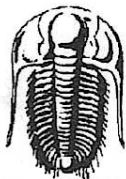
Serial #: 6755

Below (Straddling) Co

Peterson Trust #9-31

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 71018

Well Name & No. Peterson Trust 9-31 Test No. 1 Date 05/20/24
Company Mull Drilling Co Elevation 1345 KB 1333 GL
Address 1700 N. Waterfront PKWY Bldg 1200 Wichita, KS 67206
Co. Rep / Geo Roger Martin Rig Lighthouse 1
Location: Sec. 31 Twp 16S Rge. 10 E Co. Lyon State KS

Interval Tested 2990 - 2995 Zone Tested Viola
Anchor Length 5 Drill Pipe Run 2666 Mud Wt. 9.6
Top Packer Depth 2985 Drill Collars Run 304 Vis 46
Bottom Packer Depth 2990 Wt. Pipe Run 0 WL 8.8
Total Depth 2995 Chlorides 1100 ppm System LCM 2

Blow Description IF: Fair Blow, Built to 7.03"

FSF: NO BLOW BACK

FF: Fair BLOW, Built to 8.7"

FSF: NO BLOW BACK

Rec <u>244</u>	Feet of <u>oil</u>	%gas <u>100</u>	%oil	%water	%mud
Rec <u>60</u>	Feet of <u>MCO</u>	%gas <u>60</u>	%oil	%water <u>40</u>	%mud
Rec <u>Tool</u>	Feet of <u>MCO</u>	%gas <u>90</u>	%oil	%water <u>10</u>	%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 304 BHT 110 Gravity 27.4 API RW N/C @ N/C *F Chlorides ppm

Initial Hydrostatic 1459 ☒ Test 1800 ☐ Ruined Shale Packer

Initial Flow 21 to 70 ☒ Jars 300 ☐ Ruined Packer

Initial Shut-In 765 ☐ Circ Sub ☒ Hotel

Final Flow 72 to 148 ☐ Hourly Standby ☐ EM Tool Successful -350

Final Shut-In 754 ☒ Mileage (330) 150mi 262.50 ☐ Accessibility

Final Hydrostatic 1430 ☐ Sampler 20mi 35 ☐ Gas Sample

T-On Location 16:45 ☐ Straddle ☐ Oversized Hole

Initial Flow 30 T-Started 19:45 ☒ Shale Packer X2 500 ☐ Sub Total -350

Initial Shut-In 60 T-Open 22:10 ☐ Extra Packer ☐ Total 2547.50

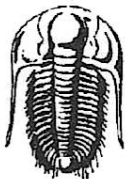
Final Flow 60 T-Pulled 02:16 ☐ Extra Recorder ☐ Tool Loaded @

Final Shut-In 90 T-Out 05:05 ☐ Day Standby ☐ MP/DST Disc't

Comments

Approved By Roger Martin Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 71019

Well Name & No. Peterson Trust 9-31 Test No. 2 Date 05/21/24
 Company Mull Drilling Co Elevation 1345 KB 1333 GL
 Address 1700 N. Waterfront Pkwy Bldg 1200 Wichita, KS 67206
 Co. Rep / Geo Roger Martin Rig Lighthouse 1
 Location: Sec. 31 Twp 16S Rge. 10E Co. Lyon State KS

Interval Tested 2990 - 3000 Zone Tested Viola
 Anchor Length 10 Drill Pipe Run 2666 Mud Wt. 9.1
 Top Packer Depth 2985 Drill Collars Run 304 Vis 48
 Bottom Packer Depth 2990 Wt. Pipe Run 0 WL 8.8
 Total Depth 3000 Chlorides 800 ppm System • LCM 3

Blow Description IF: Fair Blow, Built to 6.92"

IST: NO Blow Back

FF: Fair Blow, BOB in 44 minutes, Built to 15.93"

FST: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>306</u>	<u>Oil</u>		<u>100</u>		
<u>80</u>	<u>MWCO</u>	<u>42</u>	<u>30</u>	<u>28</u>	
<u>Tool</u>	<u>WMCO</u>	<u>90</u>	<u>5</u>	<u>5</u>	

Rec Total 364 BHT 110 Gravity 27.6 API RW .61 @ 80 °F Chlorides 9000 ppm

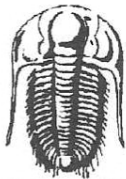
Initial Hydrostatic 1465 ☒ Test 1800 ☐ Ruined Shale Packer
 Initial Flow 26 to 92 ☒ Jars 300 ☐ Ruined Packer
 Initial Shut-In 753 ☐ Circ Sub ☒ Hotel
 Final Flow 96 to 169 ☐ Hourly Standby ☐ EM Tool Successful
 Final Shut-In 737 ☒ Mileage (40) FROM HOTEL ☐ Accessibility
 Final Hydrostatic 1416 ☐ Sampler 70 ☐ Gas Sample

T- On Location 11:45 ☐ Straddle ☐ Oversized Hole
 Initial Flow 30 T-Started 12:21 ☒ Shale Packer X2 500 ☐ Sub Total 0
 Initial Shut-In 60 T-Open 14:48 ☐ Extra Packer ☐ Total 2670
 Final Flow 60 T-Pulled 18:50 ☐ Extra Recorder ☐ Tool Loaded @
 Final Shut-In 90 T-Out 21:25 ☐ Day Standby ☐ MP/DST Disc't

Comments _____

Approved By Roger Martin Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 71020

Well Name & No. Peterson Trust 9-31 Test No. 3 Date 05/23/24
 Company Mull Drilling CO Elevation 1345 KB 1333 GL
 Address 1700 N. Waterfront Pkwy Bldg 1200 Wichita, KS 67206
 Co. Rep / Geo Roger Martin Rig Lighthouse 1
 Location: Sec. 31 Twp 16S Rge. 10E Co. Lyon State KS

Interval Tested 3019 - 3030 Zone Tested Lower Viola
 Anchor Length 11 Drill Pipe Run 2698 Mud Wt. 9.25
 Top Packer Depth 3014 Drill Collars Run 304 Vis 48
 Bottom Packer Depth 3030 Wt. Pipe Run 0 WL 8.8
 Total Depth 3200 Chlorides 1000 ppm System LCM 3

Blow Description IF: weak 1.44" Blow

ISI: NO Blow Back

EF: NO Blow

FSI: NO Blow Back

Rec <u>15</u>	Feet of <u>MOCW</u>	%gas	<u>10</u> %oil	<u>82</u> %water	<u>8</u> %mud
Rec <u>TOOL</u>	Feet of <u>MOCW</u>	%gas	<u>20</u> %oil	<u>60</u> %water	<u>20</u> %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 15 BHT 111 Gravity N/C API RW 55 @ 85 °F Chlorides 9100 ppm

Initial Hydrostatic 1558 ☒ Test 1800 ☐ Ruined Shale Packer

Initial Flow 12 to 25 ☒ Jars 300 ☐ Ruined Packer

Initial Shut-In 961 ☐ Circ Sub ☒ Hotel

Final Flow 26 to 40 ☐ Hourly Standby ☐ EM Tool Successful

Final Shut-In 945 ☒ Mileage (40) From MOCW ☐ Accessibility

Final Hydrostatic 1507 ☐ Sampler 35 ☐ Gas Sample

T- On Location 02:45 ☒ Straddle 800 ☐ Oversized Hole

Initial Flow 30 T-Started 03:22 ☒ Shale Packer X2 500 ☐ Sub Total 0

Initial Shut-In 60 T-Open 05:47 ☐ Extra Packer ☐ Total 3435

Final Flow 60 T-Pulled 09:45 ☐ Extra Recorder ☐ Tool Loaded @

Final Shut-In 90 T-Out 11:44 ☐ Day Standby ☐ MP/DST Disc't

Comments

Approved By Roger Martin Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 71021

Well Name & No. Peterson Trust 9-31 Test No. 4 Date 05/21/24
Company Mull Drilling Co Elevation 1345 KB 1333 GL
Address 1700 N. Waterfront Pkwy Bldg 1200 Wichita, KS 67206
Co. Rep / Geo Roger Martin Rig Lighthouse 1
Location: Sec. 31 Twp 18S Rge. 10 E Co. Lyon State KS

Interval Tested 3065 - 3080 Zone Tested Simpson Dolomite
Anchor Length 15 Drill Pipe Run 2763 Mud Wt. 9.25
Top Packer Depth 3060 Drill Collars Run 304 Vis 48
Bottom Packer Depth ~~3060~~ 3080 Wt. Pipe Run 0 WL 8.8
Total Depth ~~3060~~ 3200 Chlorides 1000 ppm System LCM 3

Blow Description IF: Strong Blow, BOB in 9 minutes, Built to 16.83"
ISI: NO Blow Back
FF: Strong Blow, BOB in 10 minutes, Built to 36.62"
FST: NO Blow Back

Rec <u>30</u>	Feet of <u>50 MCW</u>	%gas <u>6</u>	%oil <u>54</u>	%water <u>410</u>	%mud
Rec <u>126</u>	Feet of <u>~~60~~ 05 MCW</u>	%gas <u>2</u>	%oil <u>92</u>	%water <u>6</u>	%mud
Rec <u>778</u>	Feet of <u>Water</u>	%gas	%oil <u>100</u>	%water	%mud
Rec <u>TOOL</u>	Feet of <u>505 MCW</u>	%gas <u>-1</u>	%oil <u>+93</u>	%water <u>6</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 934 BHT 113 Gravity N/C API RW .69 @ 79 °F Chlorides 7664 ppm

Initial Hydrostatic 1559 ☒ Test 1800 ☐ Ruined Shale Packer
Initial Flow 30 to 210 ☒ Jars 300 ☐ Ruined Packer
Initial Shut-In 1011 ☐ Circ Sub ☐ Hotel
Final Flow 213 to 385 ☐ Hourly Standby ☐ EM Tool Successful
Final Shut-In 1006 ☒ Mileage Stayed @ Rig ☐ Accessibility
Final Hydrostatic 1550 ☐ Sampler 262.50 ☐ Gas Sample
T-On Location 11:30 ☒ Straddle 800 ☐ Oversized Hole
Initial Flow 30 T-Started 11:55 ☒ Shale Packer X2 500 ☐ Sub Total 0
Initial Shut-In 60 T-Open 14:01 ☐ Extra Packer ☐ Total 3662.50
Final Flow 60 T-Pulled 17:02 ☐ Extra Recorder ☐ Tool Loaded @
Final Shut-In 90 T-Out 20:51 ☐ Day Standby ☐ MP/DST Disc't

Comments

Approved By Roger Martin Our Representative [Signature]

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