KOLAR Document ID: 1790502

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 # 4767
Name: Ritchie Exploration, Inc.
Address 1: 8100 E 22ND ST N # 700
Address 2: PO BOX 783188
City: WICHITA State: KS Zip: 67278 + 3188
Contact Person: John Goldsmith
Phone: (316) 691-9500
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Max Lovely
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 #:

04/15/2024 Spud Date or Recompletion Date
04/23/2024 Date Reached TD
04/23/2024 Completion Date or Recompletion Date

API No.: 15-137-20770-00-00
Spot Description: 76'S & 75'W of
__ - NW - SW - NE Sec. 33 Twp. 5 S. R. 22 ☐ East ☑ West
1726 Feet from ☑ North / ☐ South Line of Section
2385 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: Norton
Lease Name: MINKS-GRIFFEY UNIT Well #: 1
Field Name:
Producing Formation: LKC
Elevation: Ground: 2345 Kelly Bushing: 2353
Total Vertical Depth: 3894 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 265 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 0
feet depth to: 265 w/ 175 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 24000 ppm Fluid volume: 700 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: 08/13/2024
☐ **Confidential Release Date:** 08/13/2026
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Kelsey Cox **Date:** 08/15/2024

Page Two

Operator Name: Ritchie Exploration, Inc. Lease Name: MINKS-GRIFFEY UNIT Well #: 1

Sec. 33 Twp. 5 S. R. 22 ☐ East ☑ West County: Norton

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
Anhydrite	1975	+378
Stotler	3182	-829
Heebner	3518	-1165
Lansing	3559	-1206
Stark	3715	-1362
BKC	3749	-1396
Arbuckle	3842	-1489

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	265	Common	175	3%cc, 2%gel
Production	7.875	5.5	15.5	3888	Common	150	10%salt, 2%gel

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: 06/12/2024	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:	
		Top	Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	3558	3632

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)*
4	3558	3562			
4	3606	3610			
4	3626	3632			500 gal 15% MCA

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	Ritchie Exploration, Inc.
Well Name	MINKS-GRIFFEY UNIT 1
Doc ID	1790502

All Electric Logs Run

Dual Induction
Micro
Compensated Density
Sonic

Form	ACO1 - Well Completion
Operator	Ritchie Exploration, Inc.
Well Name	MINKS-GRIFFEY UNIT 1
Doc ID	1790502

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	265	Common	175	3%cc, 2%gel
Production	7.875	5.5	15.5	3888	Common	150	10%salt, 2%gel

FRANKS Oilfield Service

◆ 815 Main Street Victoria, KS 67671 ◆ 24 Hour Phone (785) 639-7269
◆ Office Phone (785) 639-3949 ◆ Email: franksoilfield@yahoo.com

TICKET NUMBER 1216
LOCATION Hoxie
FOREMAN Dark

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4-15-24	4767	Mintz-Griffing Unit #1	33	5	22	Norton

CUSTOMER: Ritchie Exploration, Inc.
MAILING ADDRESS: 800 E 22nd St N #700
CITY: PO BOX 783188 | STATE: KS | ZIP CODE: 67278

TRUCK #	DRIVER	TRUCK #	DRIVER
103	CK		
203	ST		

JOB TYPE Surface HOLE SIZE ____ HOLE DEPTH ____ CASING SIZE & WEIGHT 8⅝" 23#
CASING DEPTH 265' DRILL PIPE ____ TUBING ____ OTHER ____
SLURRY WEIGHT 15.2 SLURRY VOL ____ WATER gal/sk ____ CEMENT LEFT in CASING ____
DISPLACEMENT 15.9 DISPLACEMENT PSI 300 MIX PSI ____ RATE ____

REMARKS: Safety meeting & set up. Mixed cement & displaced. Had just a bit of cement to pit.
Thank you!

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
P1002	1	PUMP CHARGE Surface	$1150.00	$1150.00
Mi	52	MILEAGE	$6.50	$338.00
M002	8 tons	ton mileage delivery	$6.72 36	$6.72 36
C1000	175 sx	Class A 3% CC 2% Gel	$25.50	$4462.50
			sub total	$4,622.86
			less 5% disc.	$331.14
			sub total	$4,291.72
			SALES TAX	307.36
			ESTIMATED TOTAL	6599.08

AUTHORIZATION Dion Vasquez TITLE Pusher DATE 4-15-2024

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

SWIFT Services, Inc.

CHARGE TO: Ritchie Exploration
ADDRESS
CITY, STATE, ZIP CODE

TICKET 37207

PAGE 1 OF

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. Hays	#1	Minks - Griffey	Norton	KS		4-23-24	
2. Ness City	TICKET TYPE ☐ SERVICE ☐ SALES	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO	ORDER NO.	
3.		Duke Drilling		CT	location		
4.	WELL TYPE	WELL CATEGORY	JOB PURPOSE		WELL PERMIT NO.	WELL LOCATION	
REFERRAL LOCATION		Development	long String				
	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
575		1			MILEAGE Trk 111	70	mi			8 00	560 00
578		1			Pump Charge- long String	1	EA			1750 00	1750 00
290		1			D-Air	2	Gal			45 00	90 00
221		1			Liquid KCl	2	Gal			25 00	50 00
281		1			Mud Flush	500	Gal			2 50	1250 00
403		1			Cement Basket - 5 1/2	3	EA			350 00	1050 00
404		1			Port Collar - 5 1/2	1	EA			2600 00	2600 00
406		1			Latch Down Plug & Baffle - 5 1/2	1	EA			300 00	300 00
407		1			Insert Float Shoe w/ Autofill	1	EA			400 00	400 00
409		1			Turbolizer	6	EA			110 00	660 00

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

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

X

DATE SIGNED | TIME SIGNED ☐ A.M. ☐ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UNDECIDED	DISAGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			

ARE YOU SATISFIED WITH OUR SERVICE? ☐ YES ☐ NO

☐ CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL P.1	8710 00
P.2	7814 00
	16524 00
TAX 4%	947 21
TOTAL	17471 21

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR | APPROVAL

Thank You!

SWIFT Services, Inc.

PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 37207

CUSTOMER: Ritchie Exploration | WELL: Minks-Griffey #1 | DATE: 4-23-24 | PAGE: 2 | OF: 3

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	TIME	DESCRIPTION	QTY	U/M	QTY	U/M	UNIT PRICE	AMOUNT
325						Standard Cement	200	SK			17 50	3500 00
279						Bentonite Gel	8	SK			30 00	240 00
283						Salt	1100	LBS			25	275 00
292						Halad-322	100	LBS			9 00	900 00
277						Cal Seal	1000	LBS			1 75	1750 00
						SERVICE CHARGE Cement	CUBIC FEET 200 SK				2 00	400 00
						MILEAGE CHARGE TOTAL WEIGHT 21400 LOADED MILES 70	TON MILES 749				1 00	749 00

CONTINUATION TOTAL 7814 00

JOB LOG

SWIFT Services, Inc.

DATE 4-23-24 | PAGE NO.

CUSTOMER: Ritchie Exploration | WELL NO.: #1 | LEASE: Mint-Griffey | JOB TYPE: Long String | TICKET NO.: 37207

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	1130							On location w/ TE
								Csg - 5½ x 15.5 #
								RTS -
								Set @ 3888
								Shoe Jt - 22' insert @ 3865
								Port Collar - 1967'
								Turbolizers - 3, 5, 6, 8, 43, 45
								Baskets - 44, 59, & 72
	1300							START Running Csg
	1500							Break Circ on Btm
	1600	2	8			0		Plug Rat Hole - 30 sx
		2	4			0		Plug Mouse Hole - 20 sx
		6	12			400		Pump MudHush - 500 Gal
		6	20			400		Pump KCL spacer
								Pump Cmt - 150 sx @ 15.5 ppg
								Drop plug / WASH PTL
		7	0			400		START Disp
	1645	6	92			1000		Land Plug @ 1500 #
								Release Psi - Dry
								JOB Complete
								THANKS
								Davis, Seth & Austin

SWIFT Services, Inc.

CHARGE TO: Ritchie Exploration
ADDRESS
CITY, STATE, ZIP CODE

TICKET 37210

PAGE 1 OF

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. Hays	#1	Minks - Griffey	Norton	KS		9-26-24	
2. Ness City	TICKET TYPE ☐ SERVICE ☐ SALES	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO	ORDER NO.	
3.		Express		CT	location		
4.	WELL TYPE	WELL CATEGORY	JOB PURPOSE		WELL PERMIT NO.	WELL LOCATION	
	oil	Development	Port Collar				
REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
~~575~~ 575		1			MILEAGE Trk 111	75	mi			8 00	600 00
576D		1			Pump Charge - Port Collar	1	Ea			1750 00	1750 00
290		1			D-Air	2	Gal			45 00	90 00
275		1			Cotton Seed Hulls	2	SX			40 00	80 00
329-8		2			60/40 Pozmix 8% gel	225	SX			15 00	3375 00
581		2			Service Charge Cement	450	SX			2 00	900 00
583		2			Drayage	1362	TM			1 00	1362 00

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

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

X

DATE SIGNED | TIME SIGNED ☐ A.M. ☐ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UNDECIDED	DISAGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			

ARE YOU SATISFIED WITH OUR SERVICE? ☐ YES ☐ NO

☐ CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL	8157 00
Norton Tax	257 01
TOTAL	8414 01

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR | APPROVAL

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 4-26-24 | PAGE NO.

CUSTOMER: Ritchie Exploration | WELL NO.: # 1 | LEASE: Minks-Griffey | JOB TYPE: Port Collar | TICKET NO.: 37210

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	1000							on location
								Tbg - 2 3/8
								csg - 5 1/2
								Port Collar - 1967
						1200		Test Hooks
		3.5				300		open port Collar - Take rate
		5	0					start cmt - w/ 200 # hulls
		5	67					Circ cmt - Raise wgt
		5	72					End cmt -
		0						circ 20 sx to pit
								Close Port Collar
						1200		Test Tools - Good
								Run 5 jts
		3.5	20			300		Reverse out
								T.O.O.H w/ tbg
								Job Complete
								Thanks
								David, Seth & Austin

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

Mlnks-Griffey Unit 1

33-5s-22w Norton KS

Start Date: 2024.04.18 @ 09:54:00
End Date: 2024.04.18 @ 14:37:17
Job Ticket #: 71221 DST #: 1

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

Printed: 2024.04.24 @ 16:33:50

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71221 **DST#: 1**

Test Start: 2024.04.18 @ 09:54:00

GENERAL INFORMATION:

Formation: **Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:14:47
Time Test Ended: 14:37:17

Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J Staab
Unit No: 84

Interval: 3328.00 ft (KB) To 3372.00 ft (KB) (TVD)
Total Depth: 3372.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

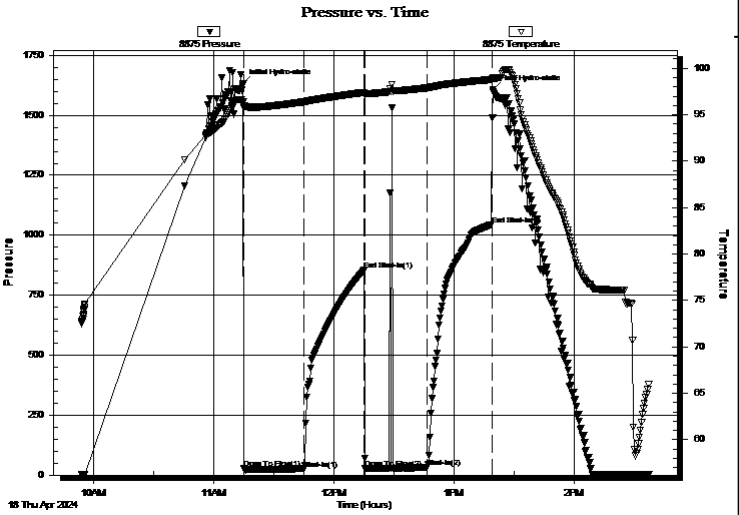
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8875 **Inside**

Press@RunDepth: 32.44 psig @ 3331.00 ft (KB)
Start Date: 2024.04.18 End Date: 2024.04.18
Start Time: 09:54:01 End Time: 14:37:17

Capacity: psig
Last Calib.: 2024.04.18
Time On Btm: 2024.04.18 @ 11:14:37
Time Off Btm: 2024.04.18 @ 13:19:17

TEST COMMENT: 30-IF-Pushed 20' Soft Fill Surface Blow died in 4 mins
30-ISI-No Return
30-FF-No Blow Flushed @ 10 mins No help
30-FSI-No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1630.76	96.37	Initial Hydro-static
1	26.59	95.77	Open To Flow (1)
31	26.12	96.39	Shut-In(1)
61	854.34	97.40	End Shut-In(1)
61	27.75	97.28	Open To Flow (2)
92	32.44	97.89	Shut-In(2)
125	1044.91	98.82	End Shut-In(2)
125	1607.96	98.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%M	0.28

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71221 **DST#: 1**

Test Start: 2024.04.18 @ 09:54:00

GENERAL INFORMATION:

Formation: **Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:14:47
Time Test Ended: 14:37:17

Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J Staab
Unit No: 84

Interval: 3328.00 ft (KB) To 3372.00 ft (KB) (TVD)
Total Depth: 3372.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

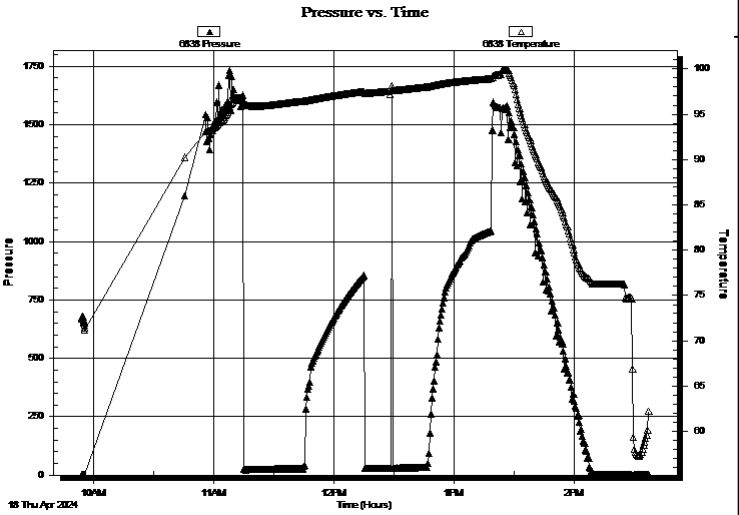
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6838 **Inside**

Press@RunDepth: psig @ 3331.00 ft (KB)
Start Date: 2024.04.18 End Date: 2024.04.18
Start Time: 09:54:01 End Time: 14:37:17

Capacity: psig
Last Calib.: 2024.04.18
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-Pushed 20' Soft Fill Surface Blow died in 4 mins
30-ISI-No Return
30-FF-No Blow Flushed @ 10 mins No help
30-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%M	0.28

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71221 **DST#: 1**

Test Start: 2024.04.18 @ 09:54:00

Tool Information

Drill Pipe:	Length:	3323.00 ft	Diameter:	3.82	inches	Volume:	47.10	bbl	
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.75	inches	Volume:	-	bbl	
Drill Collar:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	
						Total Volume:	-	bbl	

Drill Pipe Above KB:	27.00 ft
Depth to Top Packer:	3328.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	44.00 ft
Tool Length:	76.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2500.00 daN
Weight set on Packer:		25000.00 daN
Weight to Pull Loose:		50000.00 daN
Tool Chased		ft
String Weight:	Initial	42000.00 daN
	Final	42000.00 daN

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3297.00		
Shut In Tool	5.00			3302.00		
Hydraulic tool	5.00			3307.00		
Jars	5.00			3312.00		
Gap Sub	4.00			3316.00		
Safety Joint	3.00			3319.00		
Packer	5.00			3324.00	32.00	Bottom Of Top Packer
Packer	4.00			3328.00		
Stubb	1.00			3329.00		
Perforations	1.00			3330.00		
Change Over Sub	1.00			3331.00		
Recorder	0.00	6838	Inside	3331.00		
Recorder	0.00	8875	Inside	3331.00		
Drill Pipe	32.00			3363.00		
Change Over Sub	1.00			3364.00		
Perforations	5.00			3369.00		
Bullnose	3.00			3372.00	44.00	Bottom Packers & Anchor
Total Tool Length:	**76.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71221 **DST#: 1**

Test Start: 2024.04.18 @ 09:54:00

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:	5.38 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	500.00 ppm				
Filter Cake:	inches				

Recovery Information

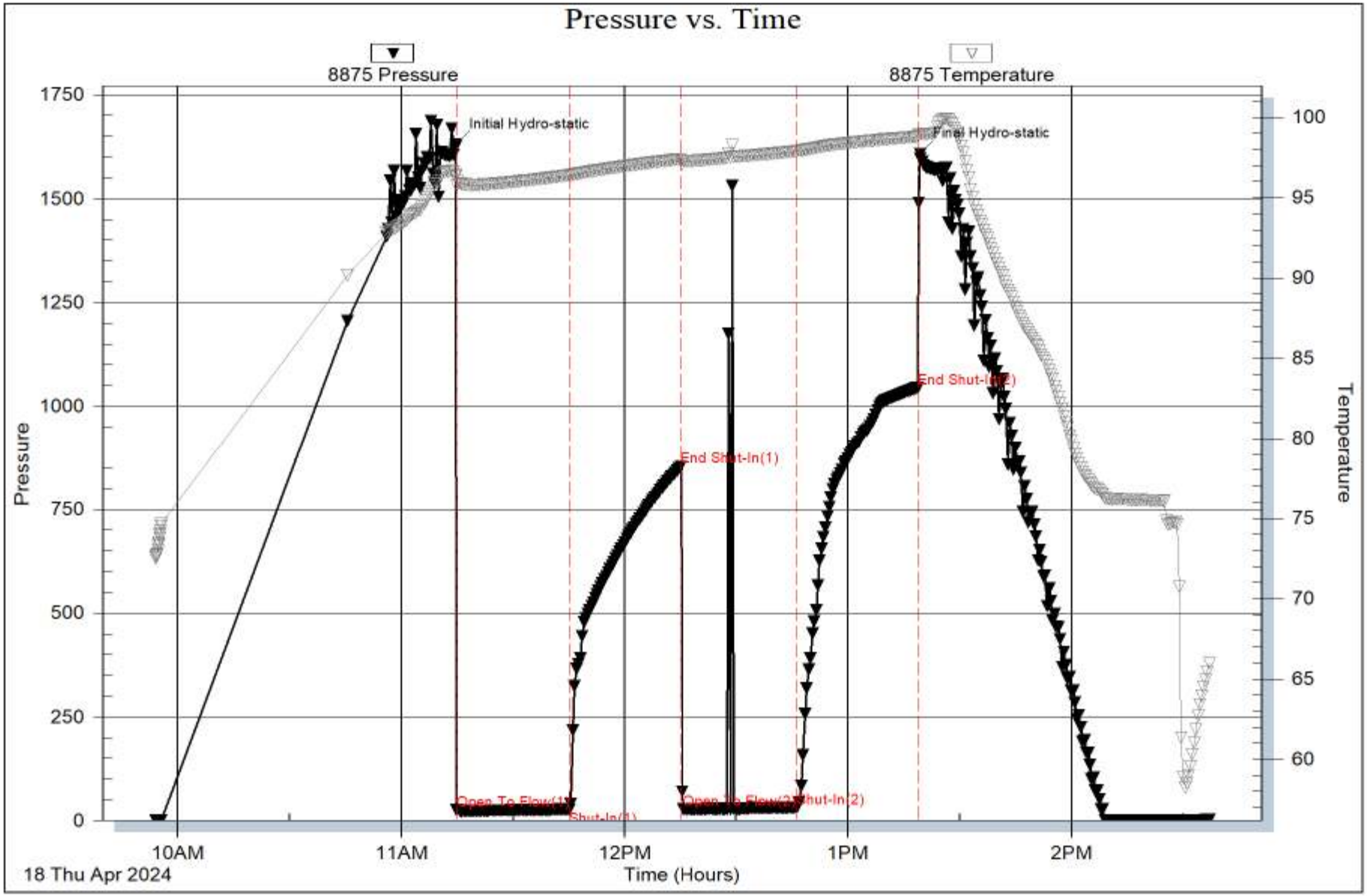
Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100%M	0.284

Total Length: 20.00 ft Total Volume: 0.284 bbl

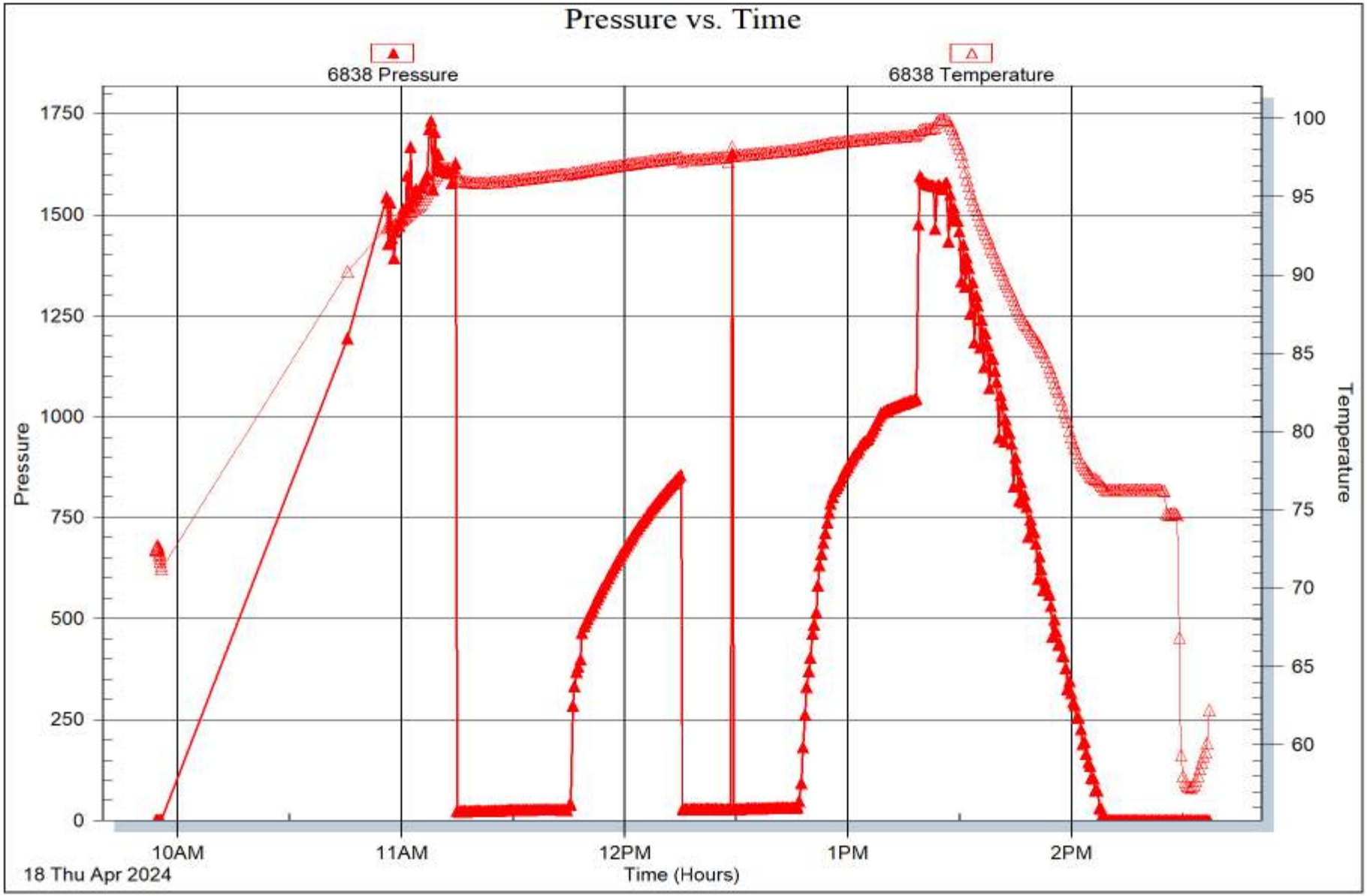
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: 2#LCM

Serial #: 8875 **Inside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 71221 Printed: 2024.04.24 @ 16:33:51

Serial #: 6838 **Inside** Ritchie Exploration Inc Mnks-Griffey Unit 1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 71221 Printed: 2024.04.24 @ 16:33:51



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

Mlnks-Griffey Unit 1

33-5s-22w Norton KS

Start Date: 2024.04.19 @ 10:19:00
End Date: 2024.04.19 @ 16:33:32
Job Ticket #: 71222 DST #: 2

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

Printed: 2024.04.24 @ 16:33:10

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71222 **DST#: 2**

Test Start: 2024.04.19 @ 10:19:00

GENERAL INFORMATION:

Formation: **LKC A-C**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:46:17
Time Test Ended: 16:33:32

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

Interval: 3552.00 ft (KB) To 3600.00 ft (KB) (TVD)
Total Depth: 3600.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

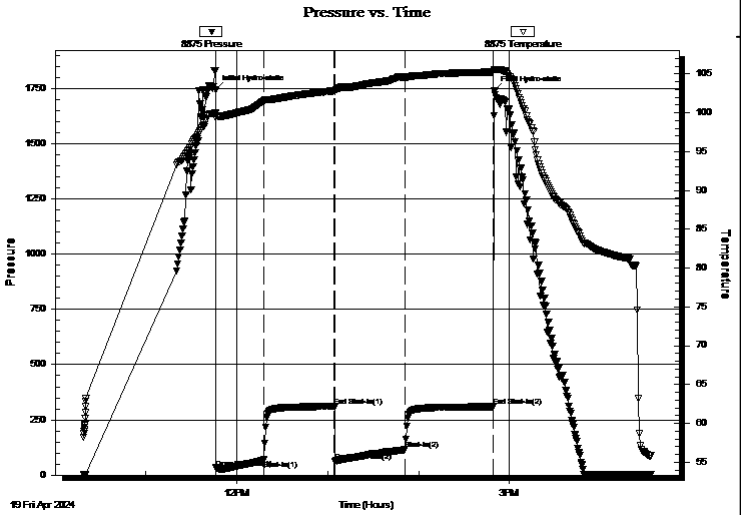
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8875 **Inside**

Press@RunDepth: 115.80 psig @ 3555.00 ft (KB)
Start Date: 2024.04.19 End Date: 2024.04.19
Start Time: 10:19:01 End Time: 16:33:32

Capacity: psig
Last Calib.: 2024.04.19
Time On Btm: 2024.04.19 @ 11:46:12
Time Off Btm: 2024.04.19 @ 14:50:07

TEST COMMENT: 30-IF-BOB 6 mins Built to 74.5"
45-ISI-Weak Surface Blow
45-FF-BOB 4 mins Built to 76.75"
60-FSI-Surface to 5"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1742.69	99.88	Initial Hydro-static
1	33.23	99.35	Open To Flow (1)
32	66.60	101.52	Shut-In(1)
78	311.50	102.80	End Shut-In(1)
79	63.62	102.80	Open To Flow (2)
126	115.80	104.49	Shut-In(2)
184	310.14	105.28	End Shut-In(2)
184	1741.35	105.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GHMCO 20%G 25%M 55%O	1.70
130.00	GO 20%G 80%O	1.84
0.00	1100 GIP 100%G	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71222 **DST#: 2**

Test Start: 2024.04.19 @ 10:19:00

GENERAL INFORMATION:

Formation: **LKC A-C**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:46:17
Time Test Ended: 16:33:32

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

Interval: 3552.00 ft (KB) To 3600.00 ft (KB) (TVD)
Total Depth: 3600.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

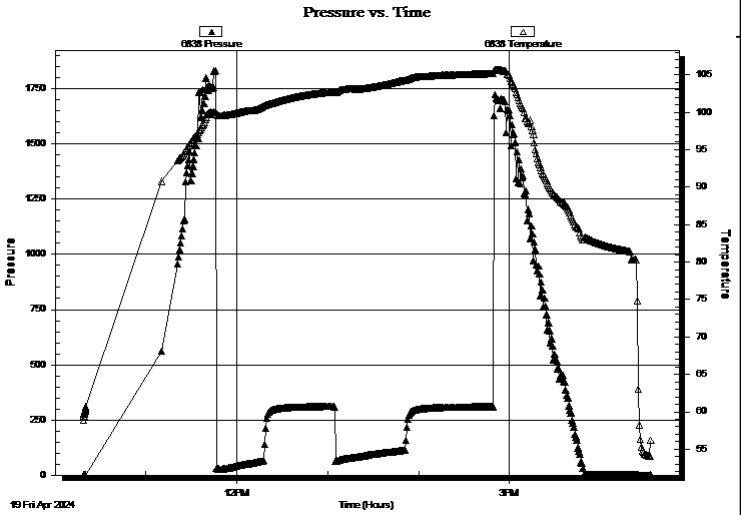
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6838 **Inside**

Press@RunDepth: psig @ 3555.00 ft (KB)
Start Date: 2024.04.19 End Date: 2024.04.19
Start Time: 10:19:01 End Time: 16:33:32

Capacity: psig
Last Calib.: 2024.04.19
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-BOB 6 mins Built to 74.5"
45-ISI-Weak Surface Blow
45-FF-BOB 4 mins Built to 76.75"
60-FSI-Surface to 5"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GHMCO 20%G 25%M 55%O	1.70
130.00	GO 20%G 80%O	1.84
0.00	1100 GIP 100%G	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71222 **DST#: 2**

Test Start: 2024.04.19 @ 10:19:00

Tool Information

Drill Pipe:	Length:	3546.00 ft	Diameter:	3.82 inches	Volume:	50.27 bbl	Tool Weight:		2500.00 daN
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.75 inches	Volume:	- bbl	Weight set on Packer:		25000.00 daN
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		48000.00 daN
					Total Volume:	- bbl	Tool Chased		ft
Drill Pipe Above KB:		26.00 ft					String Weight:	Initial	44000.00 daN
Depth to Top Packer:		3552.00 ft						Final	45000.00 daN
Depth to Bottom Packer:		ft							
Interval betw een Packers:		48.00 ft							
Tool Length:		80.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3521.00		
Shut In Tool	5.00			3526.00		
Hydraulic tool	5.00			3531.00		
Jars	5.00			3536.00		
Gap Sub	4.00			3540.00		
Safety Joint	3.00			3543.00		
Packer	5.00			3548.00	32.00	Bottom Of Top Packer
Packer	4.00			3552.00		
Stubb	1.00			3553.00		
Perforations	1.00			3554.00		
Change Over Sub	1.00			3555.00		
Recorder	0.00	6838	Inside	3555.00		
Recorder	0.00	8875	Inside	3555.00		
Drill Pipe	32.00			3587.00		
Change Over Sub	1.00			3588.00		
Perforations	9.00			3597.00		
Bullnose	3.00			3600.00	48.00	Bottom Packers & Anchor
Total Tool Length:	**80.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71222 **DST#: 2**

Test Start: 2024.04.19 @ 10:19:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	36 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.38 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1100.00 ppm				
Filter Cake:	inches				

Recovery Information

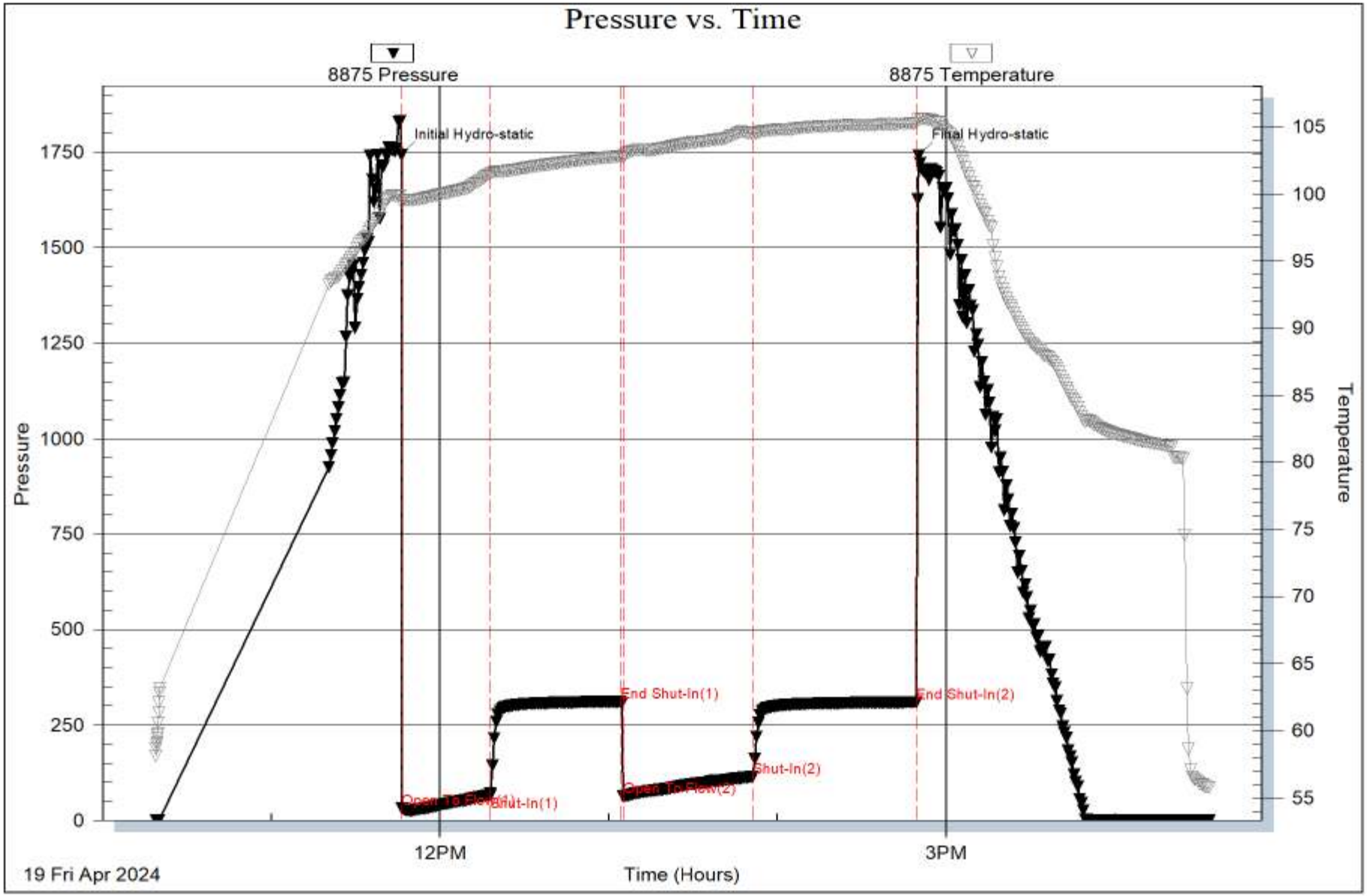
Recovery Table

Length ft	Description	Volume bbl
120.00	GHMCO 20%G 25%M 55%O	1.701
130.00	GO 20%G 80%O	1.843
0.00	1100 GIP 100%G	0.000

Total Length: 250.00 ft Total Volume: 3.544 bbl

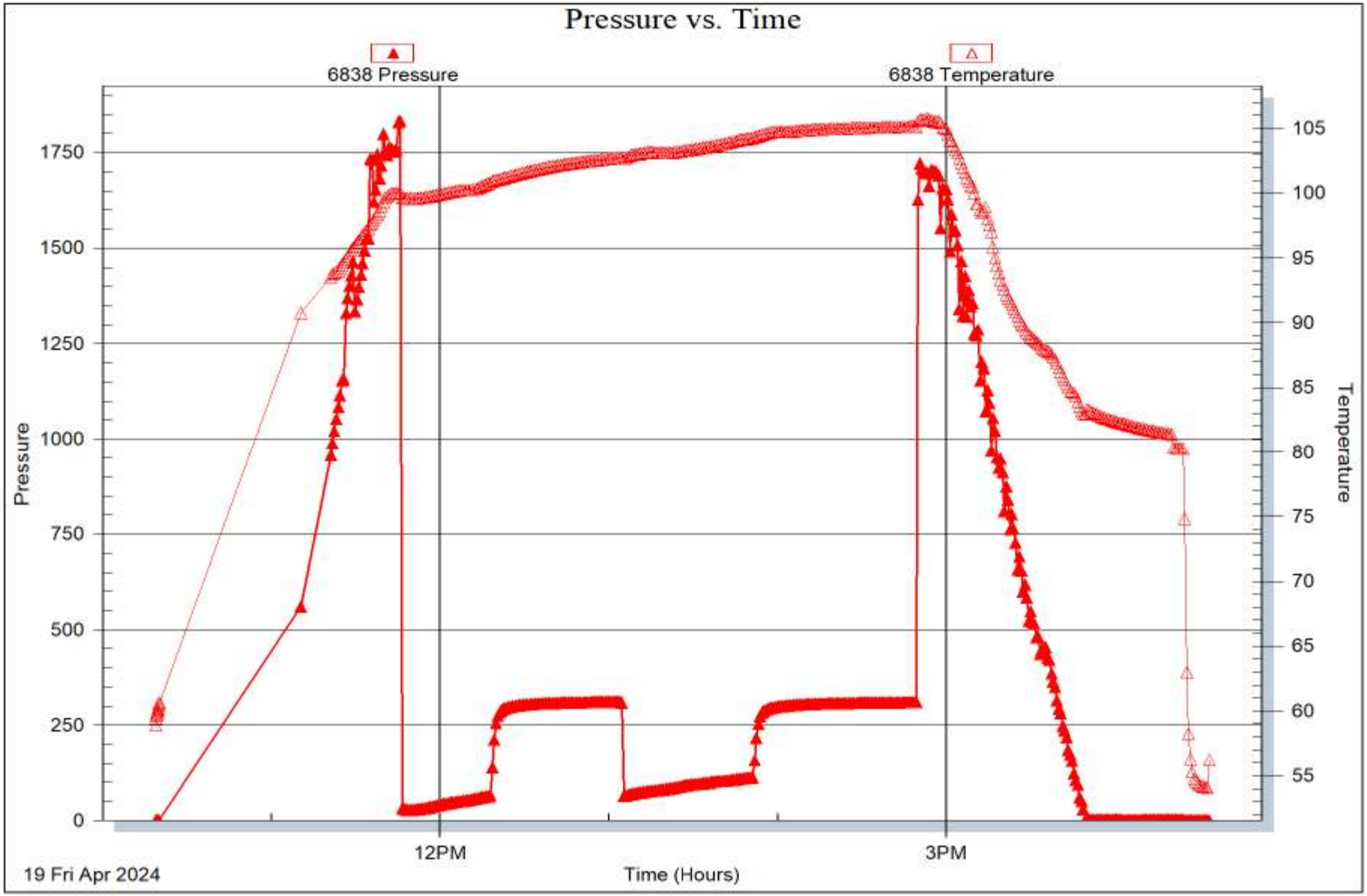
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: 4#LCM

Serial #: 8875 **Inside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 71222 Printed: 2024.04.24 @ 16:33:10

Serial #: 6838 **Inside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 71222 Printed: 2024.04.24 @ 16:33:10



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

Mlnks-Griffey Unit 1

33-5s-22w Norton KS

Start Date: 2024.04.19 @ 23:33:00
End Date: 2024.04.20 @ 06:45:27
Job Ticket #: 71223 DST #: 3

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

Printed: 2024.04.24 @ 16:32:40

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71223 **DST#: 3**

Test Start: 2024.04.19 @ 23:33:00

GENERAL INFORMATION:

Formation: **LKC D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:35:07
Time Test Ended: 06:45:27

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

Interval: 3598.00 ft (KB) To 3620.00 ft (KB) (TVD)
Total Depth: 3620.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

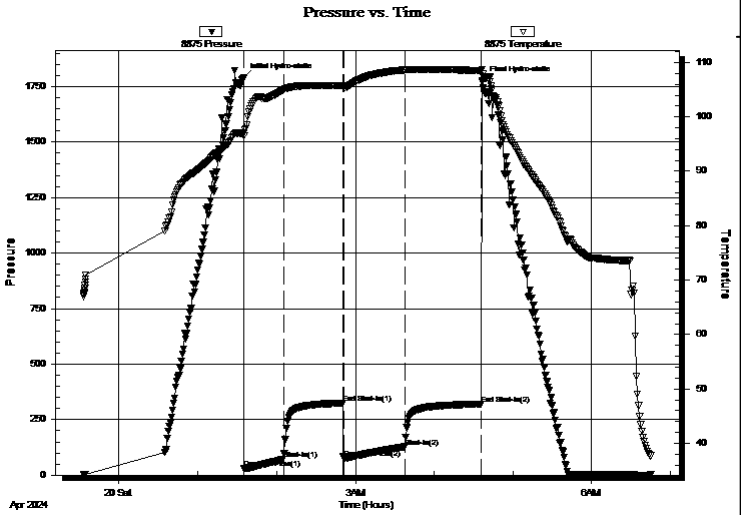
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8875 **Outside**

Press@RunDepth: 127.59 psig @ 3599.00 ft (KB)
Start Date: 2024.04.19 End Date: 2024.04.20
Start Time: 23:33:01 End Time: 06:45:26

Capacity: psig
Last Calib.: 2024.04.20
Time On Btm: 2024.04.20 @ 01:34:57
Time Off Btm: 2024.04.20 @ 04:36:52

TEST COMMENT: 30-IF-BOB 6 mins Built to 44.5"
45-ISI-Surface to 0.25"
45-FF-BOB in 6.5 mins Built to 44"
60-FSI-Surface to 3.25"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1787.91	96.98	Initial Hydro-static
1	30.44	96.49	Open To Flow (1)
31	71.13	104.96	Shut-In(1)
76	324.36	105.76	End Shut-In(1)
77	74.88	105.49	Open To Flow (2)
123	127.59	108.63	Shut-In(2)
181	320.66	108.49	End Shut-In(2)
182	1775.82	107.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	GMO 20%G 40%M 40%O	0.43
270.00	GO 10%G 90%O	3.83
0.00	660 GIP 100%G	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71223 **DST#: 3**

Test Start: 2024.04.19 @ 23:33:00

GENERAL INFORMATION:

Formation: **LKC D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:35:07
Time Test Ended: 06:45:27

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

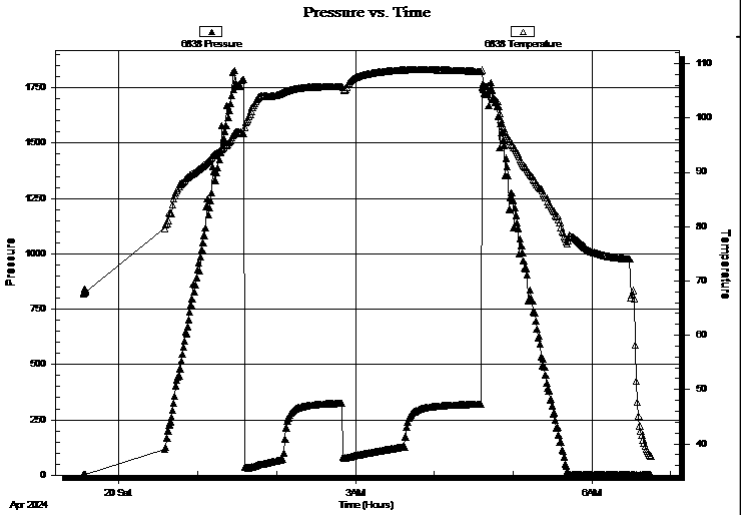
Interval: 3598.00 ft (KB) To 3620.00 ft (KB) (TVD)
Total Depth: 3620.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6838 **Inside**
Press@RunDepth: psig @ 3599.00 ft (KB)
Start Date: 2024.04.19 End Date: 2024.04.20
Start Time: 23:33:01 End Time: 06:45:26

Capacity: psig
Last Calib.: 2024.04.20
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-BOB 6 mins Built to 44.5"
45-ISI-Surface to 0.25"
45-FF-BOB in 6.5 mins Built to 44"
60-FSI-Surface to 3.25"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
30.00	GMO 20%G 40%M 40%O	0.43
270.00	GO 10%G 90%O	3.83
0.00	660 GIP 100%G	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71223 **DST#: 3**

Test Start: 2024.04.19 @ 23:33:00

Tool Information

Drill Pipe:	Length:	3579.00 ft	Diameter:	3.82	inches	Volume:	50.73	bbl	Tool Weight:	2500.00 daN
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.75	inches	Volume:	-	bbl	Weight set on Packer:	25000.00 daN
Drill Collar:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	Weight to Pull Loose:	50000.00 daN
						Total Volume:	-	bbl	Tool Chased	ft
Drill Pipe Above KB:		13.00 ft							String Weight: Initial	45000.00 daN
Depth to Top Packer:		3598.00 ft							Final	46000.00 daN
Depth to Bottom Packer:		ft								
Interval betw een Packers:		22.00 ft								
Tool Length:		54.00 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			3567.00		
Shut In Tool	5.00			3572.00		
Hydraulic tool	5.00			3577.00		
Jars	5.00			3582.00		
Gap Sub	4.00			3586.00		
Safety Joint	3.00			3589.00		
Packer	5.00			3594.00	32.00	Bottom Of Top Packer
Packer	4.00			3598.00		
Stubb	1.00			3599.00		
Recorder	0.00	6838	Inside	3599.00		
Recorder	0.00	8875	Outside	3599.00		
Perforations	18.00			3617.00		
Bullnose	3.00			3620.00	22.00	Bottom Packers & Anchor
Total Tool Length:	**54.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71223 **DST#: 3**

Test Start: 2024.04.19 @ 23:33:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	35 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1100.00 ppm				
Filter Cake:	inches				

Recovery Information

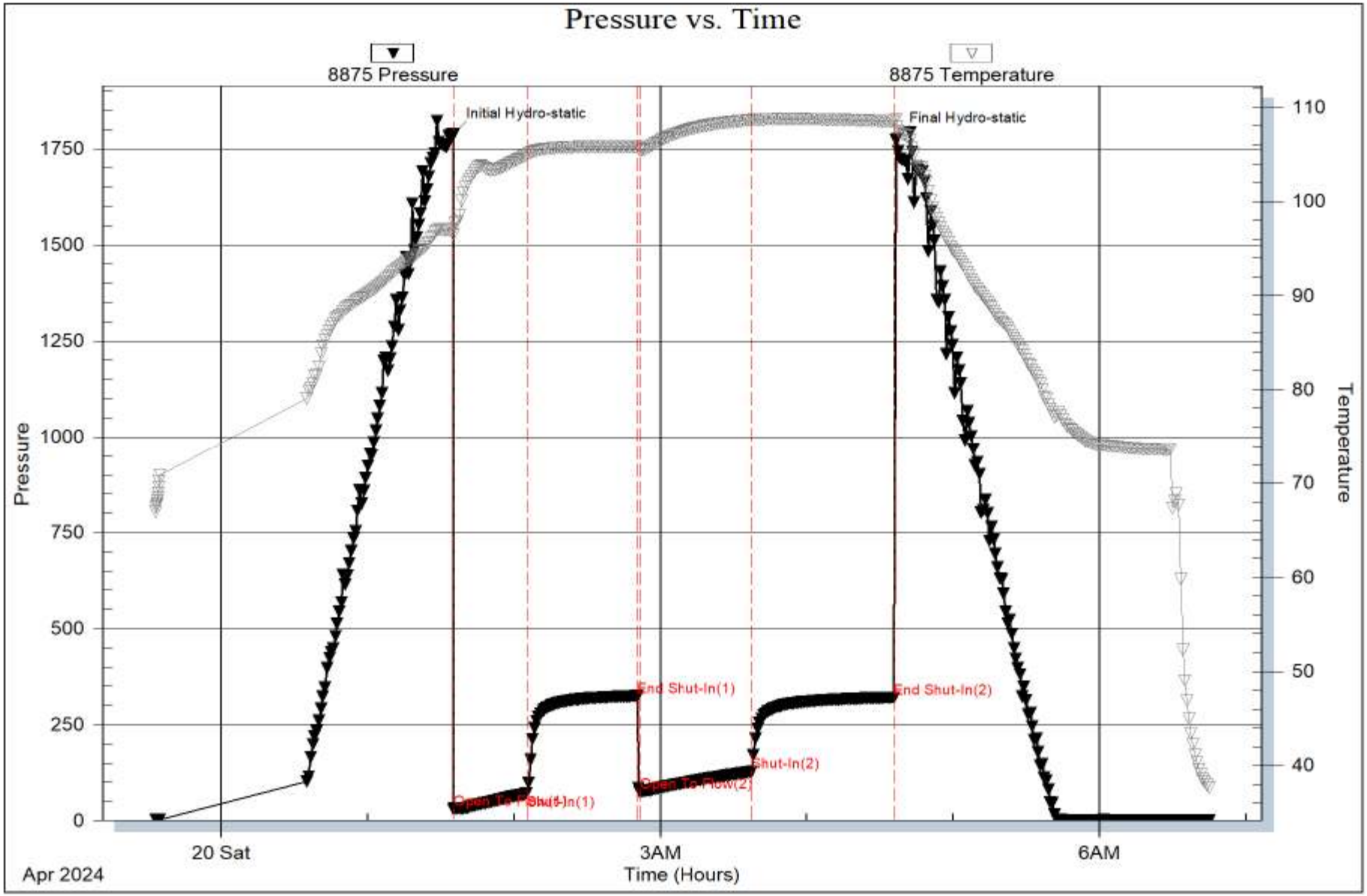
Recovery Table

Length ft	Description	Volume bbl
30.00	GMO 20%G 40%M 40%O	0.425
270.00	GO 10%G 90%O	3.827
0.00	660 GIP 100%G	0.000

Total Length: 300.00 ft Total Volume: 4.252 bbl

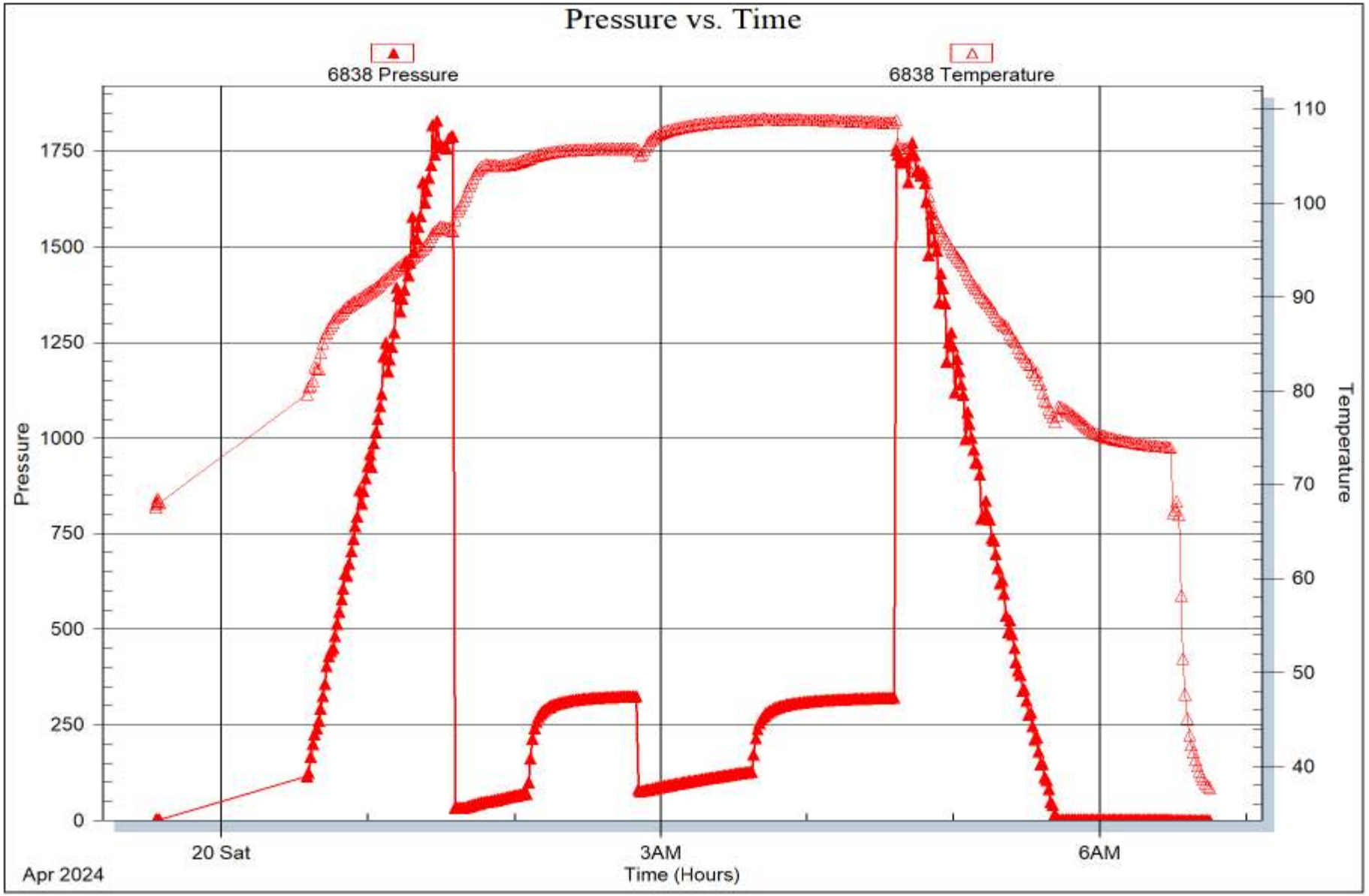
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: 4#LCM

Serial #: 8875 **Outside** Ritchie Exploration Inc Mnks-Griffey Unit 1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 71223 Printed: 2024.04.24 @ 16:32:41

Serial #: 6838 **Inside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 71223 Printed: 2024.04.24 @ 16:32:41

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

Mlnks-Griffey Unit 1

33-5s-22w Norton KS

Start Date: 2024.04.20 @ 12:53:00
End Date: 2024.04.20 @ 18:52:12
Job Ticket #: 71224 DST #: 4

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

Printed: 2024.04.24 @ 16:31:52

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71224 **DST#: 4**

Test Start: 2024.04.20 @ 12:53:00

GENERAL INFORMATION:

Formation: **LKC E-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:14:02
Time Test Ended: 18:52:12

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

Interval: 3618.00 ft (KB) To 3636.00 ft (KB) (TVD)
Total Depth: 3636.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

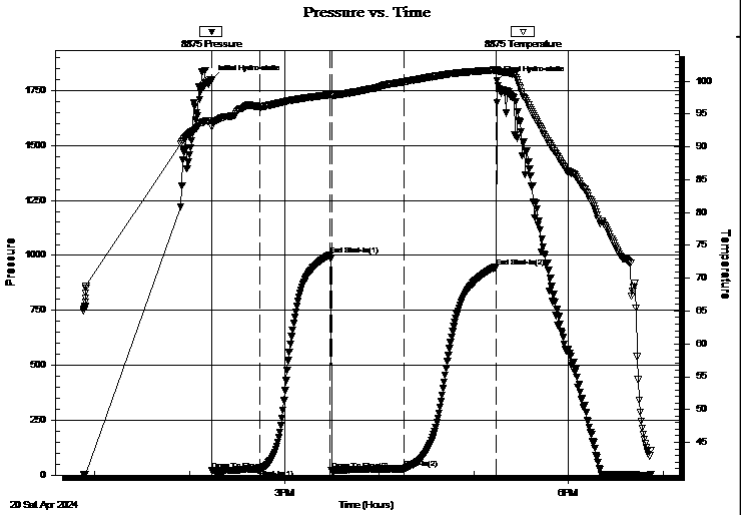
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8875 **Outside**

Press@RunDepth: 29.33 psig @ 3619.00 ft (KB)
Start Date: 2024.04.20 End Date: 2024.04.20
Start Time: 12:53:01 End Time: 18:52:11

Capacity: psig
Last Calib.: 2024.04.20
Time On Btm: 2024.04.20 @ 14:13:57
Time Off Btm: 2024.04.20 @ 17:14:42

TEST COMMENT: 30-IF-Surface to 2.75"
45-ISI-No Return
45-FF-Surface to 4"
60-FSI-No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1799.76	93.92	Initial Hydro-static
1	21.20	92.95	Open To Flow (1)
31	25.32	96.05	Shut-In(1)
75	1001.25	97.91	End Shut-In(1)
77	19.58	97.76	Open To Flow (2)
122	29.33	99.89	Shut-In(2)
181	948.63	101.70	End Shut-In(2)
181	1794.66	101.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	MO 40%M 60%O	0.28
10.00	Clean Oil 100%O	0.14
0.00	30 GIP 100%G	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71224 **DST#: 4**

Test Start: 2024.04.20 @ 12:53:00

GENERAL INFORMATION:

Formation: **LKC E-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:14:02
Time Test Ended: 18:52:12

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

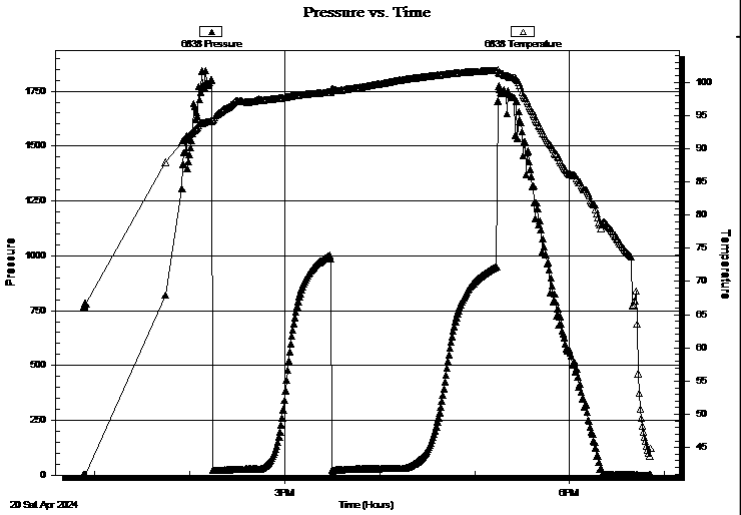
Interval: 3618.00 ft (KB) To 3636.00 ft (KB) (TVD)
Total Depth: 3636.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6838 **Inside**
Press@RunDepth: psig @ 3619.00 ft (KB)
Start Date: 2024.04.20 End Date: 2024.04.20
Start Time: 12:53:01 End Time: 18:51:32

Capacity: psig
Last Calib.: 2024.04.20
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-Surface to 2.75"
45-ISI-No Return
45-FF-Surface to 4"
60-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	MO 40%M 60%O	0.28
10.00	Clean Oil 100%O	0.14
0.00	30 GIP 100%G	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71224 **DST#: 4**

Test Start: 2024.04.20 @ 12:53:00

Tool Information

Drill Pipe:	Length:	3612.00 ft	Diameter:	3.82	inches	Volume:	51.20	bbl	Tool Weight:	2500.00 daN
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.75	inches	Volume:	-	bbl	Weight set on Packer:	25000.00 daN
Drill Collar:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	Weight to Pull Loose:	60000.00 daN
						Total Volume:	-	bbl	Tool Chased	ft
Drill Pipe Above KB:		26.00 ft							String Weight: Initial	45000.00 daN
Depth to Top Packer:		3618.00 ft							Final	45000.00 daN
Depth to Bottom Packer:		ft								
Interval betw een Packers:		18.00 ft								
Tool Length:		50.00 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			3587.00		
Shut In Tool	5.00			3592.00		
Hydraulic tool	5.00			3597.00		
Jars	5.00			3602.00		
Gap Sub	4.00			3606.00		
Safety Joint	3.00			3609.00		
Packer	5.00			3614.00	32.00	Bottom Of Top Packer
Packer	4.00			3618.00		
Stubb	1.00			3619.00		
Recorder	0.00	6838	Inside	3619.00		
Recorder	0.00	8875	Outside	3619.00		
Perforations	14.00			3633.00		
Bullnose	3.00			3636.00	18.00	Bottom Packers & Anchor
Total Tool Length:	**50.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71224 **DST#: 4**

Test Start: 2024.04.20 @ 12:53:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	36 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

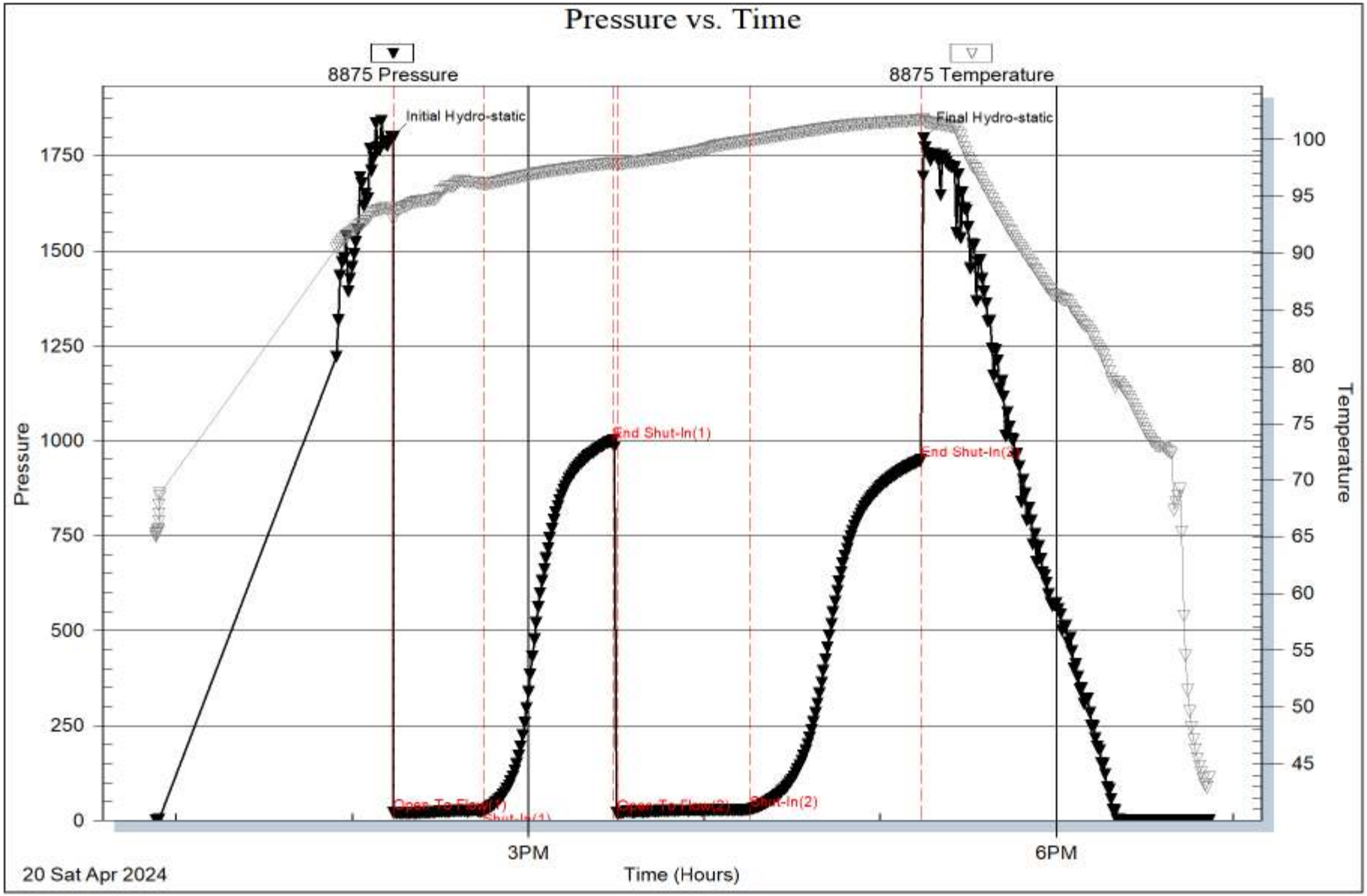
Recovery Table

Length ft	Description	Volume bbl
20.00	MO 40%M 60%O	0.284
10.00	Clean Oil 100%O	0.142
0.00	30 GIP 100%G	0.000

Total Length: 30.00 ft Total Volume: 0.426 bbl

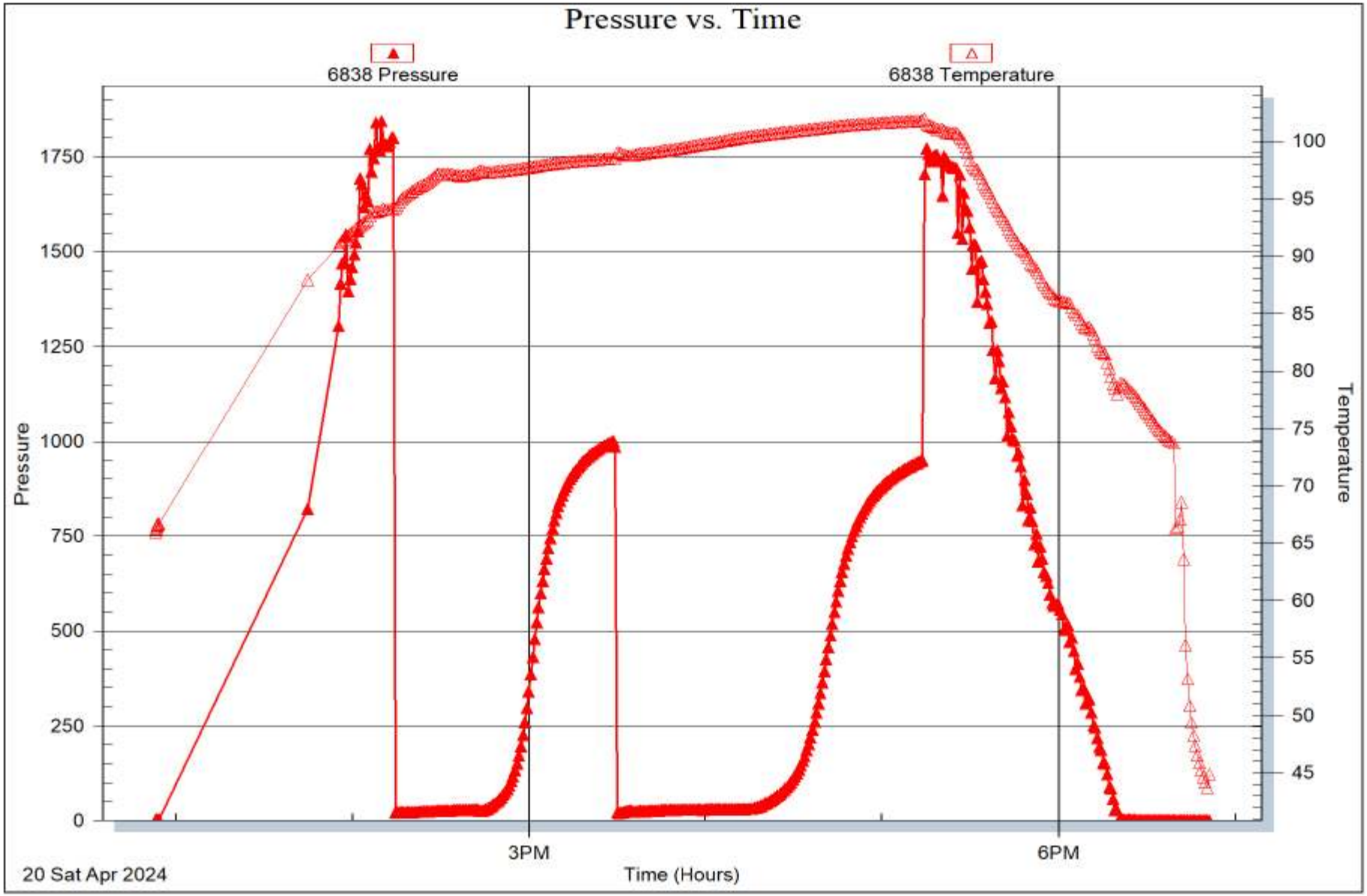
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: 3#LCM

Serial #: 8875 **Outside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 71224 Printed: 2024.04.24 @ 16:31:52

Serial #: 6838 **Inside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 71224 Printed: 2024.04.24 @ 16:31:53

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

Mlnks-Griffey Unit 1

33-5s-22w Norton KS

Start Date: 2024.04.21 @ 04:02:00
End Date: 2024.04.21 @ 10:03:52
Job Ticket #: 71225 DST #: 5

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

Printed: 2024.04.24 @ 16:31:12

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71225 **DST#: 5**

Test Start: 2024.04.21 @ 04:02:00

GENERAL INFORMATION:

Formation: **LKC H**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:08:22
Time Test Ended: 10:03:52

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

Interval: 3654.00 ft (KB) To 3690.00 ft (KB) (TVD)
Total Depth: 3690.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

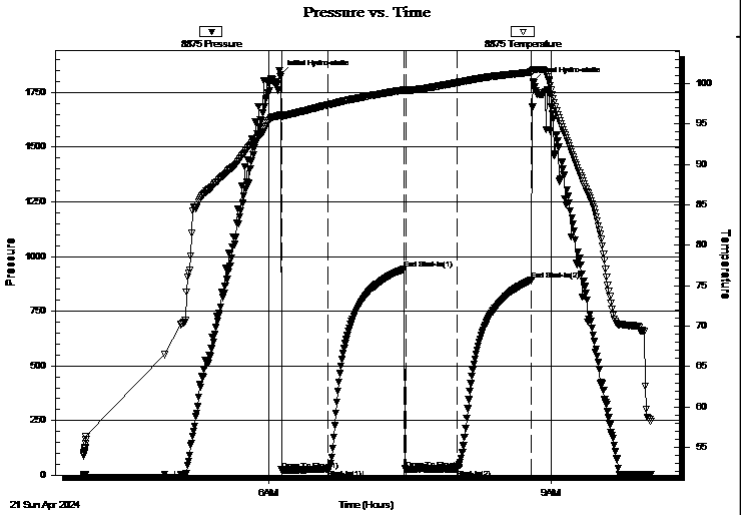
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8875 **Inside**

Press@RunDepth: 28.82 psig @ 3658.00 ft (KB)
Start Date: 2024.04.21 End Date: 2024.04.21
Start Time: 04:02:01 End Time: 10:03:52

Capacity: psig
Last Calib.: 2024.04.21
Time On Btm: 2024.04.21 @ 06:07:47
Time Off Btm: 2024.04.21 @ 08:48:41

TEST COMMENT: 30-IF-Surface to 1.75"
45-ISI-No Return
30-FF-Surface to 0.5"
45-FSI-No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1830.72	96.17	Initial Hydro-static
1	23.81	95.93	Open To Flow (1)
31	24.81	97.35	Shut-In(1)
79	942.30	99.17	End Shut-In(1)
80	27.86	99.08	Open To Flow (2)
113	28.82	100.09	Shut-In(2)
160	893.54	101.41	End Shut-In(2)
161	1799.65	101.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%M	0.28

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71225 **DST#: 5**

Test Start: 2024.04.21 @ 04:02:00

GENERAL INFORMATION:

Formation: **LKC H**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:08:22
Time Test Ended: 10:03:52

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

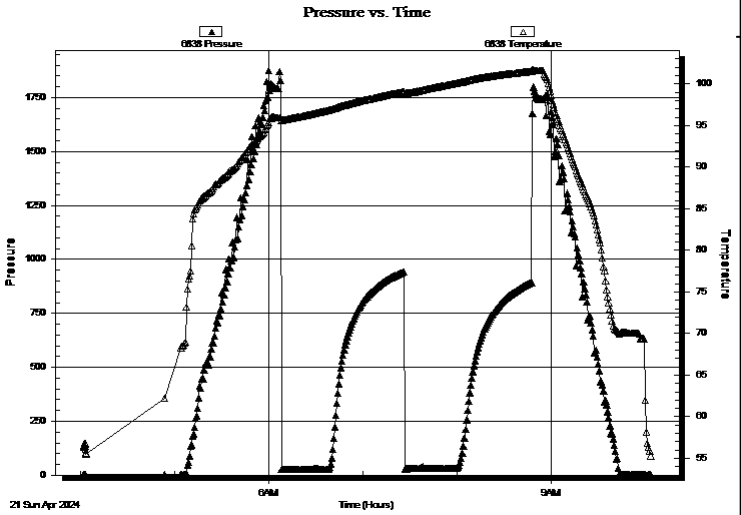
Interval: 3654.00 ft (KB) To 3690.00 ft (KB) (TVD)
Total Depth: 3690.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6838 **Inside**
Press@RunDepth: psig @ 3658.00 ft (KB)
Start Date: 2024.04.21 End Date: 2024.04.21
Start Time: 04:02:01 End Time: 10:03:52

Capacity: psig
Last Calib.: 2024.04.21
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-Surface to 1.75"
45-ISI-No Return
30-FF-Surface to 0.5"
45-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%M	0.28

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71225 **DST#: 5**

Test Start: 2024.04.21 @ 04:02:00

Tool Information

Drill Pipe:	Length:	3642.00 ft	Diameter:	3.82	inches	Volume:	51.63	bbl	
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.75	inches	Volume:	-	bbl	
Drill Collar:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	
						Total Volume:	-	bbl	

Drill Pipe Above KB:	20.00 ft
Depth to Top Packer:	3654.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	36.00 ft
Tool Length:	68.00 ft
Number of Packers:	2
Diameter:	6.75 inches

Tool Weight:		2500.00 daN
Weight set on Packer:		25000.00 daN
Weight to Pull Loose:		50000.00 daN
Tool Chased		ft
String Weight:	Initial	45000.00 daN
	Final	45000.00 daN

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3623.00		
Shut In Tool	5.00			3628.00		
Hydraulic tool	5.00			3633.00		
Jars	5.00			3638.00		
Gap Sub	4.00			3642.00		
Safety Joint	3.00			3645.00		
Packer	5.00			3650.00	32.00	Bottom Of Top Packer
Packer	4.00			3654.00		
Stubb	1.00			3655.00		
Perforations	2.00			3657.00		
Change Over Sub	1.00			3658.00		
Recorder	0.00	6838	Inside	3658.00		
Recorder	0.00	8875	Inside	3658.00		
Drill Pipe	32.00			3690.00	36.00	Bottom Packers & Anchor
Total Tool Length:	**68.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71225 **DST#: 5**

Test Start: 2024.04.21 @ 04:02:00

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:	5.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

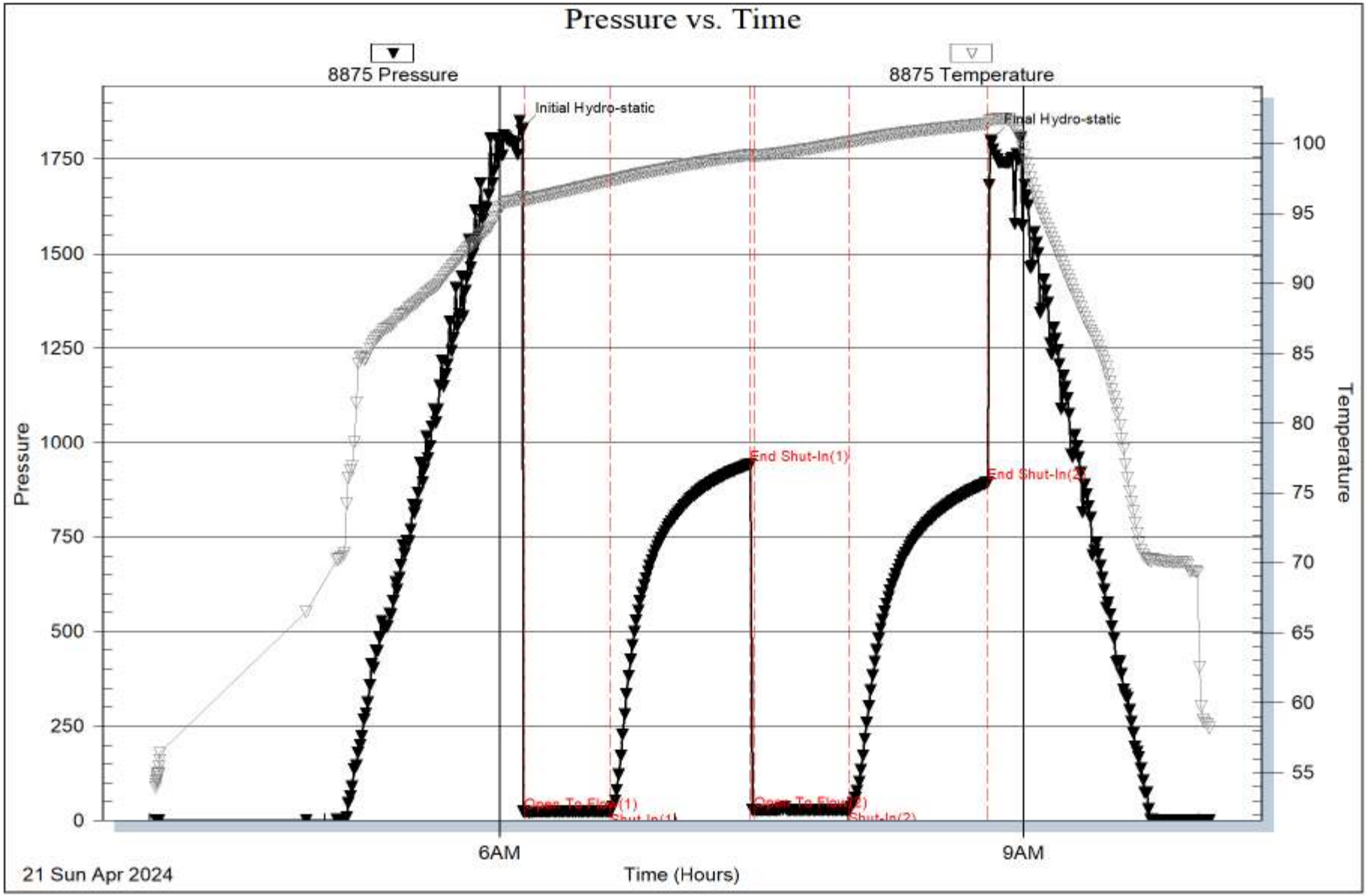
Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100%M	0.284

Total Length: 20.00 ft Total Volume: 0.284 bbl

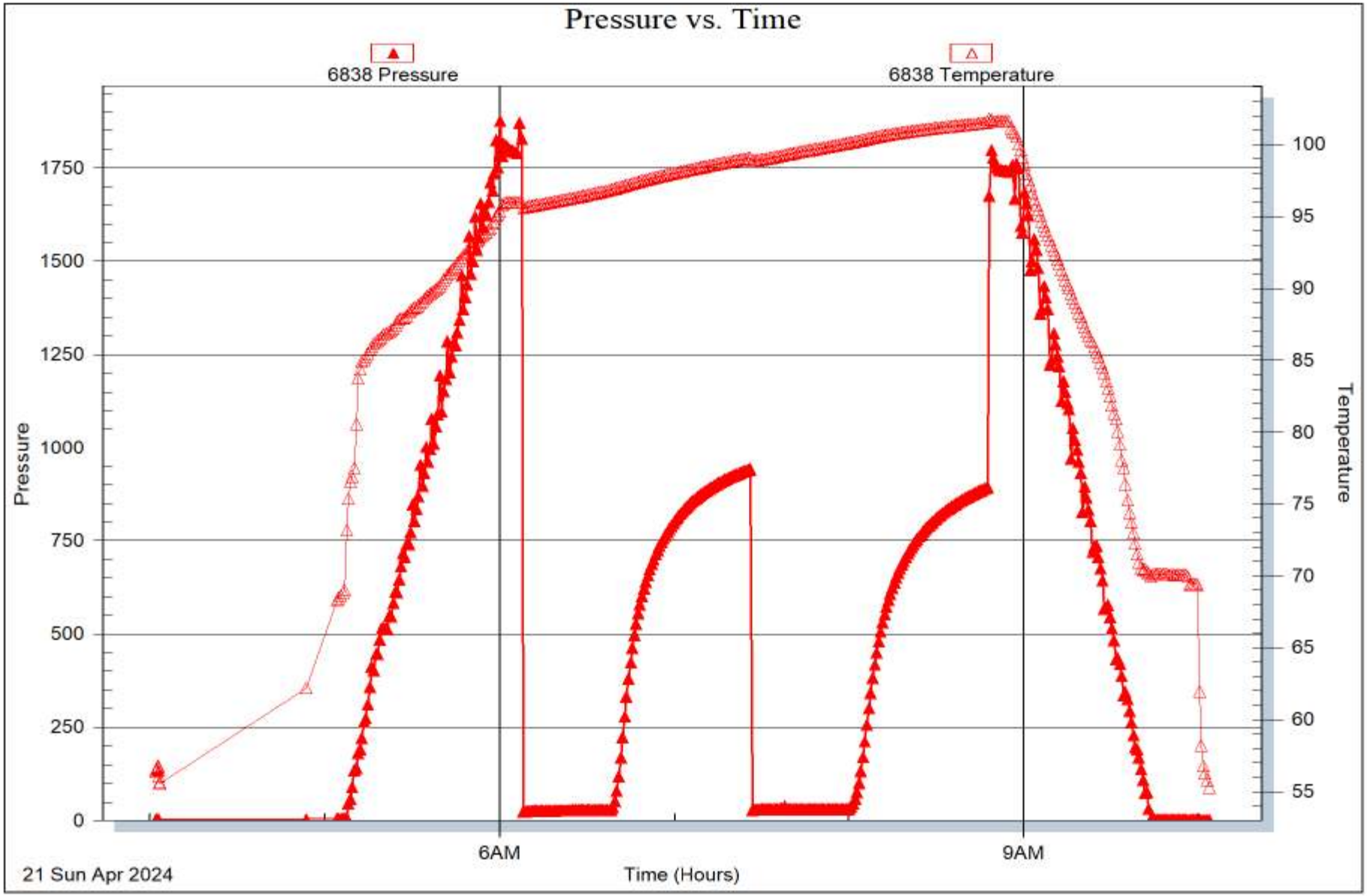
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: 3#LCM

Serial #: 8875 **Inside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 5



Trilobite Testing, Inc Ref. No: 71225 Printed: 2024.04.24 @ 16:31:13

Serial #: 6838 **Inside** Ritchie Exploration Inc Mnks-Griffey Unit 1 DST Test Number: 5



Trilobite Testing, Inc Ref. No: 71225 Printed: 2024.04.24 @ 16:31:13

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

Mlnks-Griffey Unit 1

33-5s-22w Norton KS

Start Date: 2024.04.21 @ 16:15:00
End Date: 2024.04.21 @ 21:44:52
Job Ticket #: 71774 DST #: 6

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

Printed: 2024.04.24 @ 16:26:56

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71774 **DST#: 6**

Test Start: 2024.04.21 @ 16:15:00

GENERAL INFORMATION:

Formation: **LKC I-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:49:02
Time Test Ended: 21:44:52

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

Interval: 3686.00 ft (KB) To 3715.00 ft (KB) (TVD)
Total Depth: 3715.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

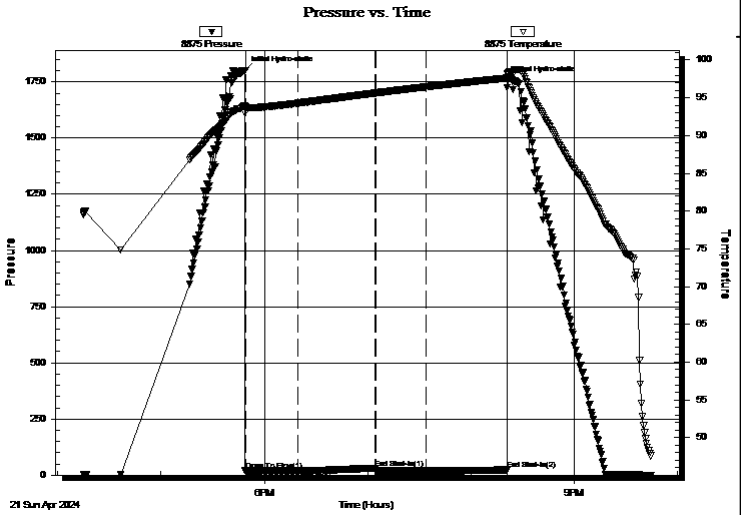
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8875 **Outside**

Press@RunDepth: 18.41 psig @ 3687.00 ft (KB)
Start Date: 2024.04.21 End Date: 2024.04.21
Start Time: 16:15:01 End Time: 21:44:52

Capacity: psig
Last Calib.: 2024.04.21
Time On Btm: 2024.04.21 @ 17:48:47
Time Off Btm: 2024.04.21 @ 20:21:32

TEST COMMENT: 30-IF-Surface to 0.5" Died back to 0.25"
45-ISI-No Return
30-FF-No Blow
45-FSI-No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1801.42	93.84	Initial Hydro-static
1	19.71	93.57	Open To Flow (1)
31	18.05	94.27	Shut-In(1)
76	31.06	95.62	End Shut-In(1)
77	19.59	95.63	Open To Flow (2)
106	18.41	96.46	Shut-In(2)
153	23.91	97.64	End Shut-In(2)
153	1756.49	98.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud 100%M	0.01

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71774 **DST#: 6**

Test Start: 2024.04.21 @ 16:15:00

GENERAL INFORMATION:

Formation: **LKC I-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:49:02
Time Test Ended: 21:44:52

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

Interval: 3686.00 ft (KB) To 3715.00 ft (KB) (TVD)
Total Depth: 3715.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

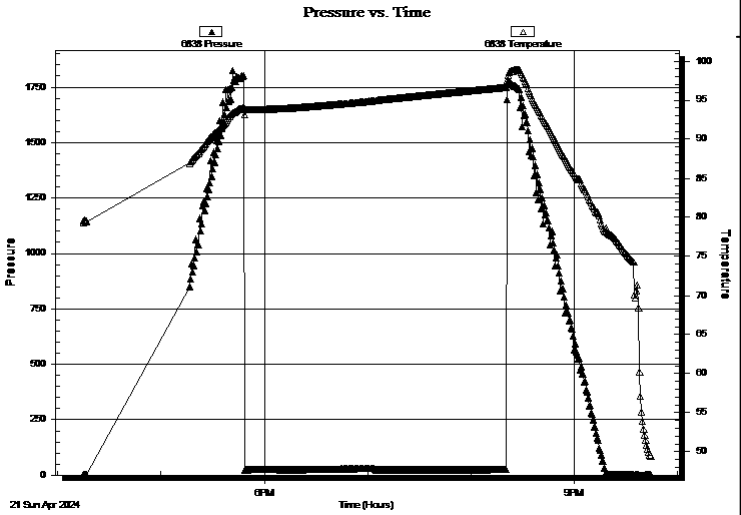
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6838 **Inside**

Press@RunDepth: psig @ 3687.00 ft (KB)
Start Date: 2024.04.21 End Date: 2024.04.21
Start Time: 16:15:01 End Time: 21:44:52

Capacity: psig
Last Calib.: 2024.04.21
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-Surface to 0.5" Died back to 0.25"
45-ISI-No Return
30-FF-No Blow
45-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud 100%M	0.01

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71774 **DST#: 6**

Test Start: 2024.04.21 @ 16:15:00

Tool Information

Drill Pipe:	Length:	3674.00 ft	Diameter:	3.82	inches	Volume:	52.08	bbl	Tool Weight:	2500.00 daN
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.75	inches	Volume:	-	bbl	Weight set on Packer:	25000.00 daN
Drill Collar:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	Weight to Pull Loose:	48000.00 daN
						Total Volume:	-	bbl	Tool Chased	ft
Drill Pipe Above KB:		20.00 ft							String Weight: Initial	45000.00 daN
Depth to Top Packer:		3686.00 ft							Final	45000.00 daN
Depth to Bottom Packer:		ft								
Interval betw een Packers:		29.00 ft								
Tool Length:		61.00 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			3655.00		
Shut In Tool	5.00			3660.00		
Hydraulic tool	5.00			3665.00		
Jars	5.00			3670.00		
Gap Sub	4.00			3674.00		
Safety Joint	3.00			3677.00		
Packer	5.00			3682.00	32.00	Bottom Of Top Packer
Packer	4.00			3686.00		
Stubb	1.00			3687.00		
Recorder	0.00	6838	Inside	3687.00		
Recorder	0.00	8875	Outside	3687.00		
Perforations	25.00			3712.00		
Bullnose	3.00			3715.00	29.00	Bottom Packers & Anchor
Total Tool Length:	**61.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71774 **DST#: 6**

Test Start: 2024.04.21 @ 16:15:00

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:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

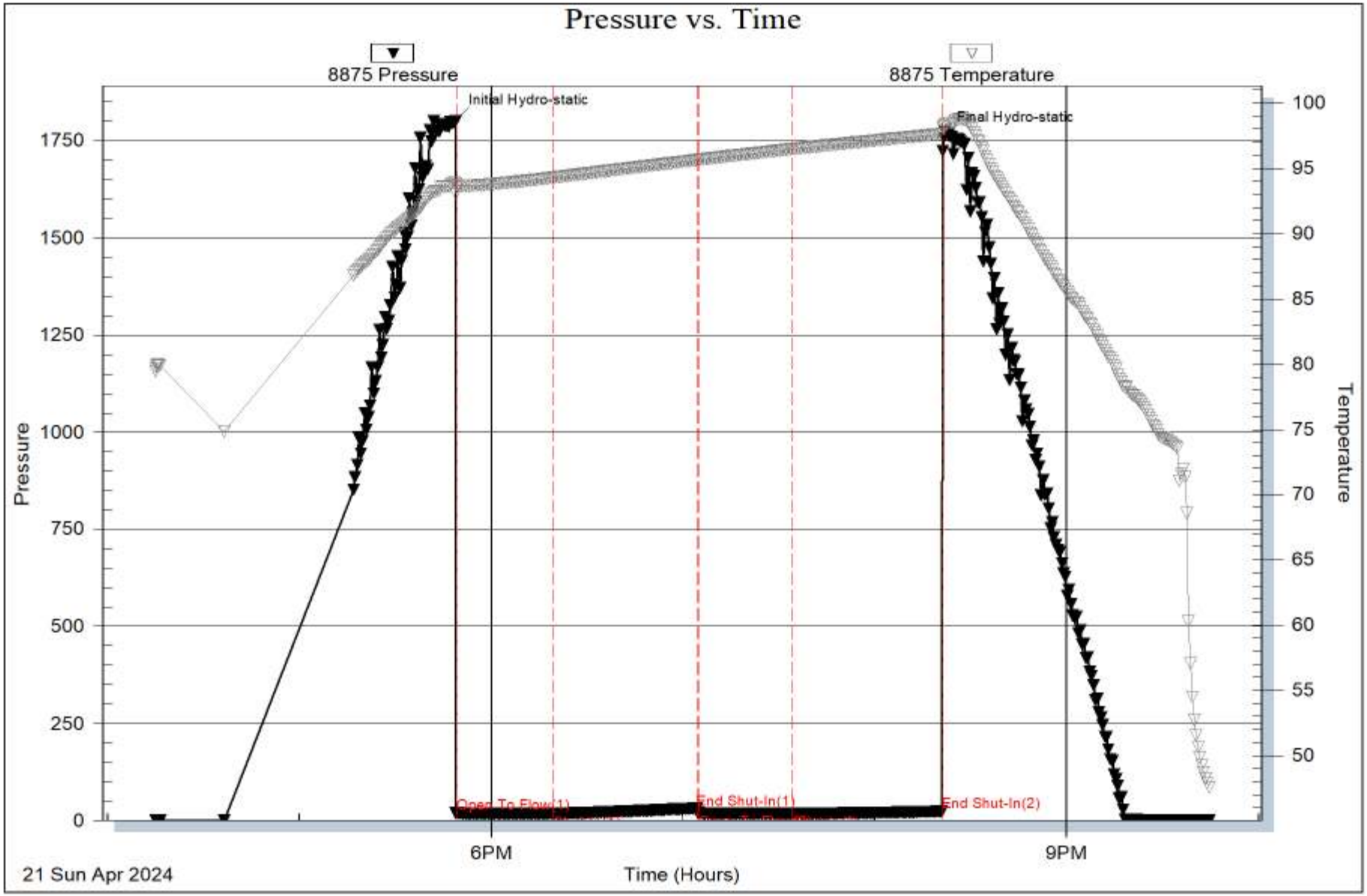
Recovery Table

Length ft	Description	Volume bbl
1.00	Mud 100%M	0.014

Total Length: 1.00 ft Total Volume: 0.014 bbl

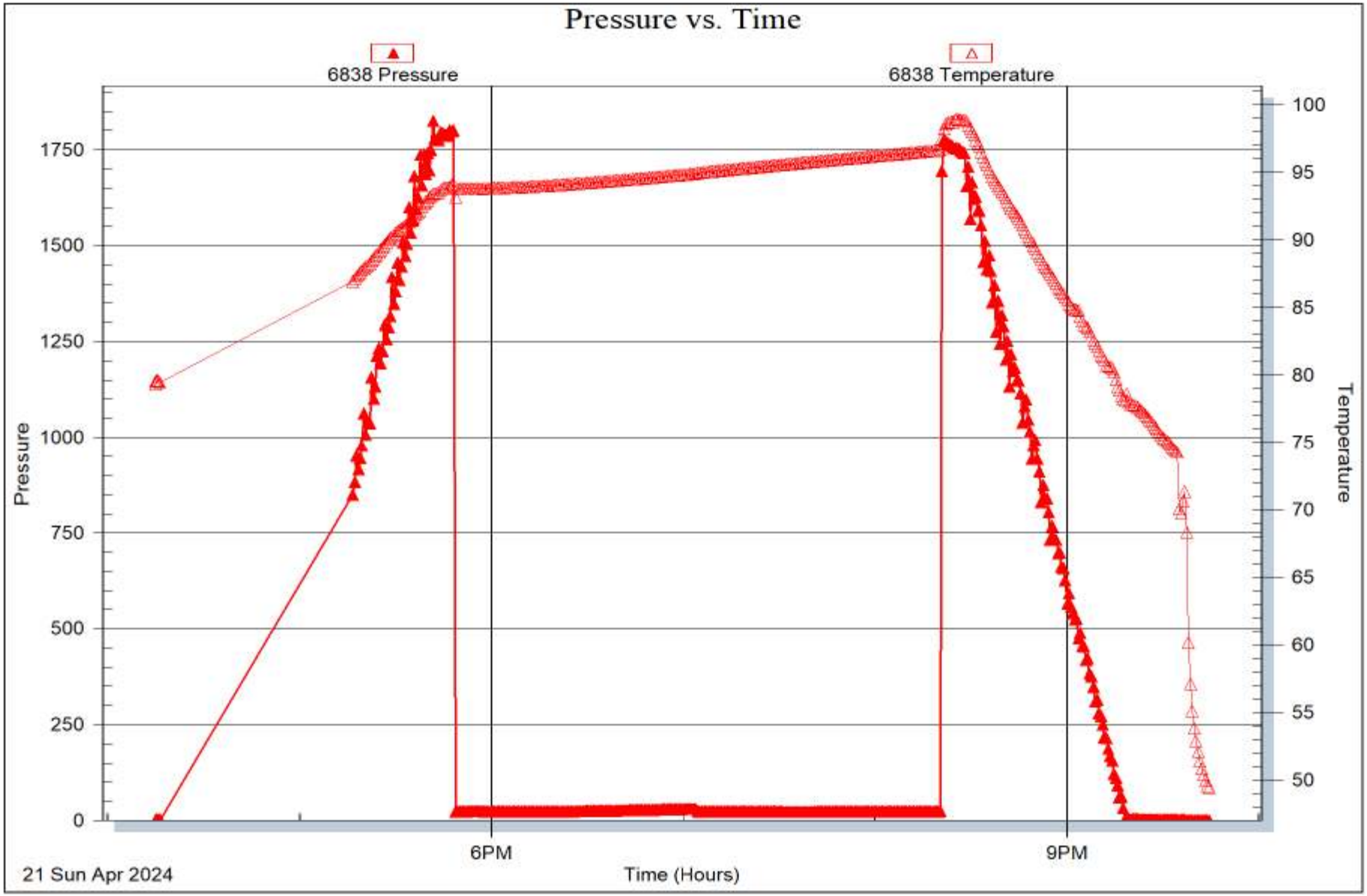
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: 3#LCM

Serial #: 8875 **Outside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 6



Trilobite Testing, Inc Ref. No: 71774 Printed: 2024.04.24 @ 16:26:57

Serial #: 6838 **Inside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 6



Trilobite Testing, Inc Ref. No: 71774 Printed: 2024.04.24 @ 16:26:57



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

Mlnks-Griffey Unit 1

33-5s-22w Norton KS

Start Date: 2024.04.22 @ 05:00:00
End Date: 2024.04.22 @ 11:10:32
Job Ticket #: 71775 DST #: 7

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

Printed: 2024.04.24 @ 16:26:20

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71775 **DST#: 7**

Test Start: 2024.04.22 @ 05:00:00

GENERAL INFORMATION:

Formation: **LKC K-L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:52:12
Time Test Ended: 11:10:32

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

Interval: 3714.00 ft (KB) To 3750.00 ft (KB) (TVD)
Total Depth: 3750.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

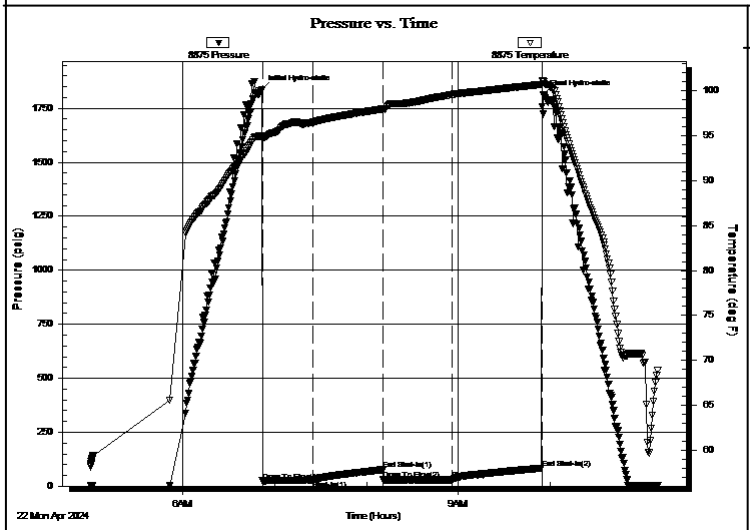
Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8875 **Outside**

Press@RunDepth: 30.85 psig @ 3715.00 ft (KB)
Start Date: 2024.04.22 End Date: 2024.04.22
Start Time: 05:00:01 End Time: 11:10:32

Capacity: psig
Last Calib.: 2024.04.22
Time On Btm: 2024.04.22 @ 06:51:37
Time Off Btm: 2024.04.22 @ 09:55:42

TEST COMMENT: 30-IF-Surface to 2.25"
45-ISI-No Return
45-FF-Surface to 0.5"
60-FSI-No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1835.61	94.83	Initial Hydro-static
1	23.91	94.67	Open To Flow (1)
34	26.77	96.44	Shut-In(1)
79	75.97	97.94	End Shut-In(1)
80	30.79	97.95	Open To Flow (2)
125	30.85	99.55	Shut-In(2)
183	83.07	100.70	End Shut-In(2)
185	1814.03	100.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%M	0.28

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71775 **DST#: 7**

Test Start: 2024.04.22 @ 05:00:00

GENERAL INFORMATION:

Formation: **LKC K-L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:52:12
Time Test Ended: 11:10:32

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 84

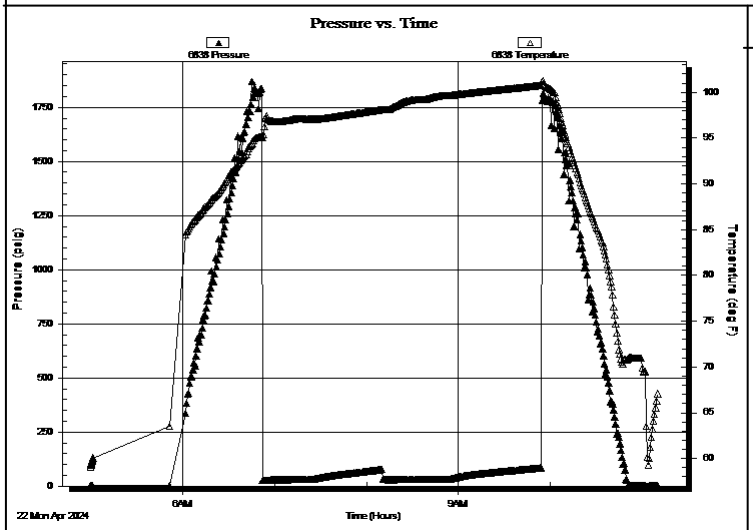
Interval: 3714.00 ft (KB) To 3750.00 ft (KB) (TVD)
Total Depth: 3750.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2353.00 ft (KB)
2345.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6838 **Inside**
Press@RunDepth: psig @ 3715.00 ft (KB)
Start Date: 2024.04.22 End Date: 2024.04.22
Start Time: 05:00:01 End Time: 11:10:32

Capacity: psig
Last Calib.: 2024.04.22
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-Surface to 2.25"
45-ISI-No Return
45-FF-Surface to 0.5"
60-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%M	0.28

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71775 **DST#: 7**

Test Start: 2024.04.22 @ 05:00:00

Tool Information

Drill Pipe:	Length:	3706.00 ft	Diameter:	3.82 inches	Volume:	52.53 bbl	Tool Weight:		2500.00 daN
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.75 inches	Volume:	- bbl	Weight set on Packer:		25000.00 daN
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		65000.00 daN
					Total Volume:	- bbl	Tool Chased		ft
Drill Pipe Above KB:		24.00 ft					String Weight:	Initial	45000.00 daN
Depth to Top Packer:		3714.00 ft						Final	45000.00 daN
Depth to Bottom Packer:		ft							
Interval betw een Packers:		36.00 ft							
Tool Length:		68.00 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			3683.00		
Shut In Tool	5.00			3688.00		
Hydraulic tool	5.00			3693.00		
Jars	5.00			3698.00		
Gap Sub	4.00			3702.00		
Safety Joint	3.00			3705.00		
Packer	5.00			3710.00	32.00	Bottom Of Top Packer
Packer	4.00			3714.00		
Stubb	1.00			3715.00		
Recorder	0.00	6838	Inside	3715.00		
Recorder	0.00	8875	Outside	3715.00		
Perforations	32.00			3747.00		
Bullnose	3.00			3750.00	36.00	Bottom Packers & Anchor
Total Tool Length:	**68.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

8100 E 22nd ST N #700
Wichita KS 67278+3188

ATTN: Max Lovely

33-5s-22w Norton KS

MInks-Griffey Unit 1

Job Ticket: 71775 **DST#: 7**

Test Start: 2024.04.22 @ 05:00:00

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:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

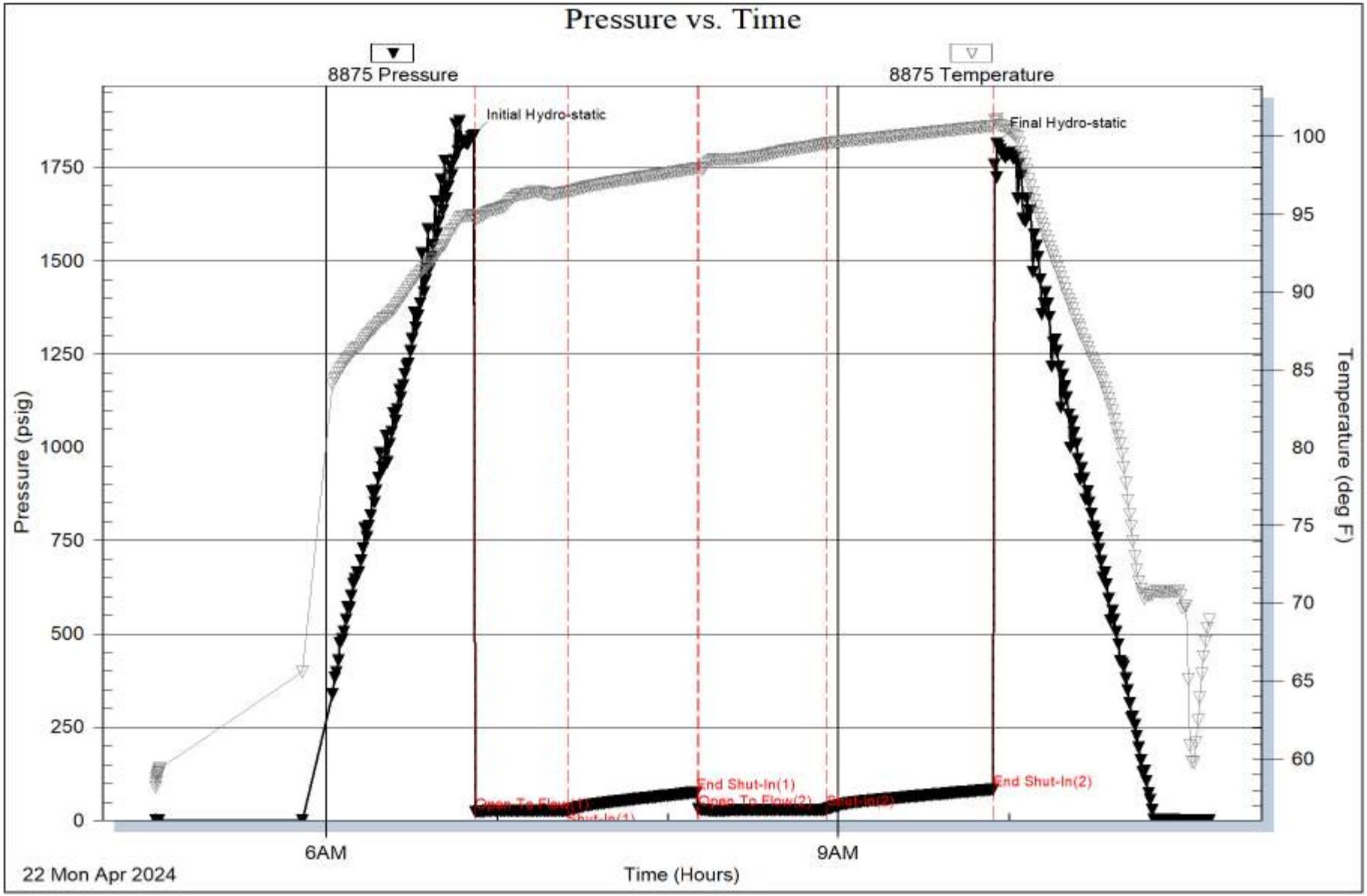
Recovery Information

Recovery Table

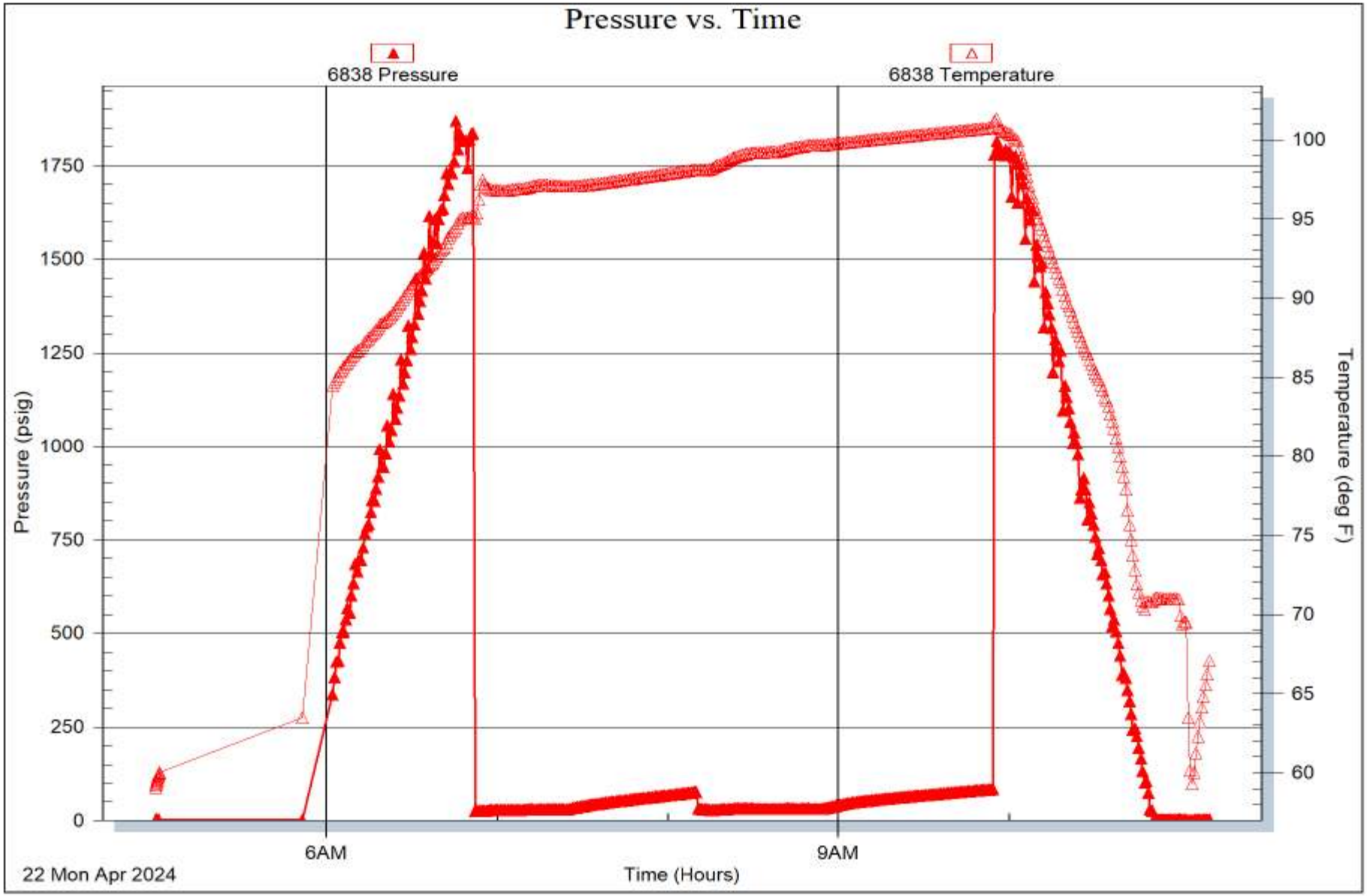
Length ft	Description	Volume bbl
20.00	Mud 100%M	0.284

Total Length: 20.00 ft Total Volume: 0.284 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: 3#LCM


Pressure vs. Time
8875 Pressure
8875 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
0
100
95
90
85
80
75
70
65
60
6AM
9AM
22 Mon Apr 2024
Time (Hours)

Serial #: 6838 **Inside** Ritchie Exploration Inc Mlnks-Griffey Unit 1 DST Test Number: 7



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 71221

Well Name & No. Minks - Triffey Unit #1 Test No. 1 Date 04/18/2024

Company Ritchie Exploration Inc Elevation 2353 KB 2345 GL

Address 8100 E 22nd St N #700 Wichita KS 67278 + 3188

Co. Rep / Geo Max Lovely Rig Duke #2

Location: Sec. 33 Twp 5s Rge. 22w Co. Norton State KS

Interval Tested 3328' - 3372' Zone Tested Topeka

Anchor Length 44' Drill Pipe Run 3323' Mud Wt. 8.8

Top Packer Depth 3323' Drill Collars Run — Vis 60

Bottom Packer Depth 3328' Wt. Pipe Run — WL 5.4

Total Depth 3372' Chlorides 500 ppm System LCM 2#

Blow Description IF- 20' Soft fill; Surface Blow died @ 4 mins

ISI - No Return

FF- No Blow; Flushed @ 10mins; No help

FSI - No Return

Rec 20'	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	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20' BHT 98° Gravity — API RW — @ — °F Chlorides — ppm

Initial Hydrostatic 1630	☒ Test 1800	☐ Ruined Shale Packer	
Initial Flow 26 to 26	☒ Jars 300	☐ Ruined Packer	
Initial Shut-In 854	☐ Circ Sub	☐ Hotel	
Final Flow 27 to 32	☐ Hourly Standby	☐ EM Tool Successful -350	
Final Shut-In 1044	☒ Mileage 110 RT 55mi 96.25 19mi 33.25	☐ Accessibility	
Final Hydrostatic 1607	☐ Sampler	☐ Gas Sample	
T- On Location 09:03	☐ Straddle	☐ Oversized Hole	
Initial Flow 30 T-Started 09:54	☐ Shale Packer	☐ Sub Total -350	
Initial Shut-In 30 T-Open 11:14	☐ Extra Packer	☐ Total 1879.50	
Final Flow 30 T-Pulled 13:14	☐ Extra Recorder	☐ Tool Loaded @	
Final Shut-In 30 T-Out 14:37	☐ Day Standby	☐ MP/DST Disc't	

Comments mileage from Oberlin

Approved By Our Representative

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. 71222

Well Name & No. Minks - Griffey Unit #1 Test No. 2 Date 04/19/2024

Company Ritchie Exploration Inc Elevation 2353 KB 2345 GL

Address 8100 E 22nd St N #700 Wichita KS 67278 + 3188

Co. Rep / Geo Max Lovely Rig Duke #2

Location: Sec. 33 Twp 5S Rge. 22W Co. Norton State KS

Interval Tested 3552' - 3600' Zone Tested LKC A-C

Anchor Length 48' Drill Pipe Run 3546' Mud Wt. 9.0

Top Packer Depth 3547' Drill Collars Run — Vis 60

Bottom Packer Depth 3552' Wt. Pipe Run — WL 5.4

Total Depth 3600' Chlorides 1100 ppm System LCM 4#

Blow Description 1F- BOB 6 mins; Built to 74½"

1SI- Weak Surface

2F- BOB 4 mins; Built to 76¾"

2SI- Surface to 5"

Rec 120'	Feet of GHMCO	20 %gas	55 %oil	%water	25 %mud	
Rec 130'	Feet of GO	20 %gas	80 %oil	%water	%mud	
Rec	Feet of 1100' GTP	100 %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 250 BHT 105° Gravity 36° API RW — @ — °F Chlorides — ppm

Initial Hydrostatic 1742	☒ Test 1800	☐ Ruined Shale Packer	
Initial Flow 33 to 66	☒ Jars 300	☐ Ruined Packer	
Initial Shut-In 311	☐ Circ Sub	☐ Hotel	
Final Flow 63 to 115	☐ Hourly Standby	☒ EM Tool Successful	
Final Shut-In 310	☒ Mileage 38R7 66.50	☐ Accessibility	
Final Hydrostatic 1741	☐ Sampler	☐ Gas Sample	
T- On Location 09:55	☐ Straddle	☐ Oversized Hole	
Initial Flow 30 T-Started 10:19	☐ Shale Packer	☐ Sub Total 0	
Initial Shut-In 45 T-Open 11:46	☐ Extra Packer	☐ Total 2166.50	
Final Flow 45 T-Pulled 14:46	☐ Extra Recorder	☐ Tool Loaded @	
Final Shut-In 60 T-Out	☐ Day Standby	☐ MP/DST Disc't	

Comments mileage from HC house

Approved By Our Representative

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. 71223

Well Name & No. Minks-Griffey Unit #1 Test No. 3 Date 04/19/2023

Company Ritchie Exploration Inc Elevation 2353 KB 2345 GL

Address 8100 E 22nd ST N #700 Wichita KS 67278 + 3188

Co. Rep / Geo Max Lovely Rig Duke #2

Location: Sec. 33 Twp 5S Rge. 22W Co. Norton State KS

Interval Tested 3598' - 3620' Zone Tested LKC D

Anchor Length 22' Drill Pipe Run 3579' Mud Wt. 9.0

Top Packer Depth 3593' Drill Collars Run — Vis 60

Bottom Packer Depth 3598' Wt. Pipe Run — WL 5.4

Total Depth 3620' Chlorides 1100 ppm System LCM 4#

Blow Description 17- BOB in 6 mins; Built to 4/4.5"
ISI- Surface to 1/4"
77- BOB in 6.5 mins; Built to 44"
FSI- Surface to 3.25"

Rec 30	Feet of GMO	20 %gas	40 %oil	%water	40 %mud	
Rec 270	Feet of GO	10 %gas	90 %oil	%water	%mud	
Rec	Feet of 660' GIP	100 %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 300' BHT 108° Gravity 35° API RW — @ — °F Chlorides — ppm

Initial Hydrostatic 1787	☒ Test 1800	☐ Ruined Shale Packer	
Initial Flow 30 to 71	☒ Jars 300	☐ Ruined Packer	
Initial Shut-In 324	☐ Circ Sub	☐ Hotel	
Final Flow 74 to 127	☐ Hourly Standby	☒ EM Tool Successful	
Final Shut-In 320	☒ Mileage 38R7 66.50	☐ Accessibility	
Final Hydrostatic 1775	☐ Sampler	☐ Gas Sample	
T- On Location 22:30	☐ Straddle	☐ Oversized Hole	
Initial Flow 30 T-Started 23:33	☐ Shale Packer	☐ Sub Total 0	
Initial Shut-In 45 T-Open 01:35	☐ Extra Packer	☐ Total 2166.50	
Final Flow 45 T-Pulled 04:35	☐ Extra Recorder	☐ Tool Loaded @	
Final Shut-In 60 T-Out	☐ Day Standby	☐ MP/DST Disc't	

Comments

Approved By Our Representative

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. 71224

Well Name & No. Minks - Griffey Unit #1 Test No. 4 Date 04/20/2024

Company Ritchie Exploration Inc Elevation 2353 KB 2345 GL

Address 8100 E 22nd S7 N #700 Wichita KS 67278 +3188

Co. Rep / Geo Max Lovely Rig Duke #2

Location: Sec. 33 Twp 5S Rge. 22w Co. Norton State KS

Interval Tested 3618' - 3636' Zone Tested LKC E-7

Anchor Length 18' Drill Pipe Run 3612' Mud Wt. 9.0

Top Packer Depth 3613' Drill Collars Run — Vis 60

Bottom Packer Depth 3618' Wt. Pipe Run — WL 5.4

Total Depth 3636' Chlorides 1000 ppm System LCM 3#

Blow Description 1D7 - Surface to 2.75"

1DSD - No Return

1T7 - Surface to 4"

1TSD - No Return

Rec 20'	Feet of MO	%gas	60 %oil	%water	40 %mud	
Rec 10	Feet of Clean Oil	%gas	100 %oil	%water	%mud	
Rec	Feet of 30' GIP	100 %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 30' BHT 101° Gravity 36° API RW — @ — °F Chlorides — ppm

Initial Hydrostatic	1799	☒ Test	1800	☐ Ruined Shale Packer	
Initial Flow	21 to 25	☒ Jars	300	☐ Ruined Packer	
Initial Shut-In	1001	☐ Circ Sub		☐ Hotel	
Final Flow	19 to 29	☐ Hourly Standby		☒ EM Tool Successful	
Final Shut-In	948	☒ Mileage	38X7 66.50	☐ Accessibility	
Final Hydrostatic	1794	☐ Sampler		☐ Gas Sample	
	T- On Location 12:31	☐ Straddle		☐ Oversized Hole	
Initial Flow 30	T-Started 12:53	☒ Shale Packer	250	☐ Sub Total	0
Initial Shut-In 45	T-Open 14:13	☐ Extra Packer		☐ Total	2416.50
Final Flow 45	T-Pulled 17:13	☐ Extra Recorder		☐ Tool Loaded @	
Final Shut-In 60	T-Out	☐ Day Standby		☐ MP/DST Disc't	

Comments

Approved By Our Representative

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. 71225

Well Name & No. Minks - Griffey Unit #1 Test No. 5 Date 04/21/2024

Company Ritchie Exploration Inc Elevation 2353 KB 2345 GL

Address 8100 E 22nd St N #700 Wichita KS 67278 +3188

Co. Rep / Geo Max Lovely Rig Duke #2

Location: Sec. 33 Twp 5S Rge. 22W Co. Norton State KS

Interval Tested 3654' - 3690' Zone Tested LKC H

Anchor Length 36' Drill Pipe Run 3642' Mud Wt. 9.0

Top Packer Depth 3649' Drill Collars Run — Vis 60

Bottom Packer Depth 3654' Wt. Pipe Run — WL 5.4

Total Depth 3690' Chlorides 1000 ppm System LCM 3#

Blow Description 2" - Surface to 1.75"
DSD - No Return
7" - Surface to 0.5"
7SD - No Return

Rec 20'	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	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20' BHT 101° Gravity — API RW — @ — °F Chlorides — ppm

Initial Hydrostatic	1830	☒ Test	1800	☐ Ruined Shale Packer	
Initial Flow	23 to 24	☒ Jars	300	☐ Ruined Packer	
Initial Shut-In	942	☐ Circ Sub		☐ Hotel	
Final Flow	27 to 28	☐ Hourly Standby		☒ EM Tool Successful	
Final Shut-In	893	☒ Mileage	3827 66.50	☐ Accessibility	
Final Hydrostatic	1799	☐ Sampler		☐ Gas Sample	
	T- On Location 03:28	☐ Straddle		☐ Oversized Hole	
Initial Flow 30	T-Started 04:02	☒ Shale Packer	N/C	☐ Sub Total	0
Initial Shut-In 45	T-Open 06:07	☐ Extra Packer		☐ Total	2166.50
Final Flow 30	T-Pulled 08:37	☐ Extra Recorder		☐ Tool Loaded	@
Final Shut-In 45	T-Out	☐ Day Standby		☐ MP/DST Disc't	

Comments

Approved By Our Representative

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. 71774

Well Name & No. Minks-Griffey Unit #1 Test No. 6 Date 04/21/2024

Company Ritchie Exploration Inc Elevation 2353 KB 2345 GL

Address 8100 E 22nd S7 N # 700 Wichita KS 67278 +3185

Co. Rep / Geo Mac Lovely Rig Duke #2

Location: Sec. 33 Twp 5S Rge. 22W Co. Norton State KS

Interval Tested 3686'-3715' Zone Tested LKC J-J

Anchor Length 29' Drill Pipe Run 3674' Mud Wt. 9.0

Top Packer Depth 3681' Drill Collars Run — Vis 58

Bottom Packer Depth 3686' Wt. Pipe Run — WL 5.4

Total Depth 3715' Chlorides 1000 ppm System LCM 3#

Blow Description IF-Surface to ½"; Died back to ¼"

ISI-No Return

FF-No Blow

FSI-No Return

Rec 1	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	Feet of	%gas	%oil	%water		%mud
Rec	Feet of	%gas	%oil	%water		%mud

Rec Total 1' BHT 97° Gravity — API RW — @ — °F Chlorides — ppm

Initial Hydrostatic 1801	☒ Test 1800	☐ Ruined Shale Packer	
Initial Flow 19 to 18	☒ Jars 300	☐ Ruined Packer	
Initial Shut-In 31	☐ Circ Sub	☐ Hotel	
Final Flow 19 to 18	☐ Hourly Standby	☒ EM Tool Successful	
Final Shut-In 23	☒ Mileage 3827 66.50	☐ Accessibility	
Final Hydrostatic 1756	☐ Sampler	☐ Gas Sample	
T- On Location 15:36	☐ Straddle	☐ Oversized Hole	
Initial Flow 30 T-Started 16:15	☐ Shale Packer	☐ Sub Total 0	
Initial Shut-In 45 T-Open 17:48	☐ Extra Packer	☐ Total 2166.50	
Final Flow 30 T-Pulled 20:18	☐ Extra Recorder	☐ Tool Loaded @	
Final Shut-In 45 T-Out	☐ Day Standby	☐ MP/DST Disc't	

Comments

Approved By Our Representative

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. 71775

Well Name & No. Minks - Griffey Unit #1 Test No. 7 Date 04/22/2024

Company Ritchie Exploration Inc Elevation 2353 KB 2345 GL

Address 8100 E 22nd St N #700 Wichita KS 67278+3188

Co. Rep / Geo Mac Lovely Rig Duke #2

Location: Sec. 33 Twp 5S Rge. 22W Co. Norton State KS

Interval Tested 3714'-3750' Zone Tested LKC K-L

Anchor Length 36' Drill Pipe Run 3706' Mud Wt. 9.0

Top Packer Depth 3709' Drill Collars Run — Vis 58

Bottom Packer Depth 3714' Wt. Pipe Run — WL 5.4

Total Depth 3750' Chlorides 1000 ppm System LCM 3#

Blow Description IF- Surface to 2.25"

ISI- No Return

FF- Surface to 0.5"

FSI- No Return

Rec 20	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	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	

Rec Total 20' BHT 100° Gravity — API RW — @ — F Chlorides — ppm

Initial Hydrostatic 1835	☒ Test 1800	☐ Ruined Shale Packer	
Initial Flow 23 to 26	☒ Jars 300	☐ Ruined Packer	
Initial Shut-In 75	☐ Circ Sub	☐ Hotel	
Final Flow 30 to 30	☐ Hourly Standby	☒ EM Tool Successful	
Final Shut-In 83	☒ Mileage 33M x2	☐ Accessibility	
Final Hydrostatic 1814	☐ Sampler 66.50 + 33.25 + 96.25	☐ Gas Sample	
T- On Location 04:20	☐ Straddle	☐ Oversized Hole	
Initial Flow 30 T-Started 05:00	☐ Shale Packer	☐ Sub Total 0	
Initial Shut-In 45 T-Open 06:53	☐ Extra Packer	☐ Total 2296	
Final Flow 45 T-Pulled 09:53	☐ Extra Recorder	☒ Tool Loaded 04/22 @ 22:50	
Final Shut-In 60 T-Out	☐ Day Standby	☐ MP/DST Disc't	

Comments

Approved By Our Representative

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.

Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Ritchie Exploration
LEASE #1 Minks-Griffey Unit
FIELD Tomanek Northwest
LOCATION 1726'FNL, 2385'FEL
SEC 33 TWSP 5 RGE 22W
COUNTY Norton STATE KS
CONTRACTOR Duke Rig #2
SPUD 4/15/24 COMP 4-23-24
RTD 3892 LTD 3894
MUD UP 3105 TYPE MUD Chem

ELEVATIONS
KB 2353
DF
GL 2345
Measurements Are All From KB

CASING
SURFACE 8⅝ @ 265'
PRODUCTION 5½"

ELECTRICAL SURVEYS
DI, MICRO, SONIC
COMP N/D,

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION A	B	C
Anhydrite	378	1974	379	369	378	381
Base Anhydrite	346	2004	349	351	347	350
Stotler	-829	3183	-830	-828	NA	-824
Topeka	-968	3320	-967	-970	-973	-961
Heebner	-1165	3516	-1163	-1165	-1167	-1155
Toronto	-1191	3540	-1187	-1190	-1192	-1180
Lansing	-1206	3557	-1204	-1207	-1209	-1197
Muncie	-1305	3658	-1305	-1305	-1308	-1297
BKC	-1396	3748	-1395	-1393	-1395	-1383
Marmaton	-1422	3776	-1423	-1420	-1422	-1411
Conglomerate	-1437	3788	-1435	-1436	-1437	-1426
Arbuckle	-1489	3842	-1489	-1483	-1517	-1475


REFERENCE WELLS FOR STRUCTURE
A Ritchie #3 Minks 33AD 330'FNL, 2310'FEL 22-10-22W
B Ritchie #1 Artha Griffey 330'FNL, 2310'FWL 33-5-22W
C Ritchie #1 Minks 33AD 2040'FSL, 850'FEL 33-5-22W

REMARKS

LEGEND

Anhydrite, Salt, Sandstone, Shale, Carb sh, Limestone, Ool.Lime, Chert, Dolomite

DRILLING TIME IN MINUTES PER FOOT
Rate of Penetration Decreases
5" 10" 15" 20" 25"



DEPTH	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
ANHYDRITE 1975 + 378			
2000 BASE ANHYDRITE 2007 + 346			
3100			
STOTLER 3182 - 829			
DEV 1°			3194' : BIT TRIP STRAP: 3194.37 BOARD: 3194.55 short .18'
3200			
	LS, GRY, VF XTLN, DNS, HRD, NO VIS Ø. NS		
3300	LS. TAN, F→M XTLN, SOFT, CHLKY, NS		
	SH. GRY		
TOPEKA 3321 - 968	LS, WHT. CRM, F XTLN, HRD, V SL BRTTL, P XTLN Ø, NS		
	SH, BURG, GRY, HRD		DST #1 3328-3372 30-30-30-30 IF: SURF BLOW, DIED FF: dead, flush, dead REC: 20'M FP: 26-26, 27-32 SIP: 854-1044 HP: 1630-1607
	LS. WHT, TAN, F XTLN, HRD, G XTLN Ø, G FLUOR SAT STNG, GSFO, LT OIL	FO N CUP LT ODOR GSFO LT OIL	
	LS, BUFF, ABUN FOSS FRAGS, F→G FOSS Ø, G Ø STNG, SCT FO/BRK, DK AMBER OIL, SOFT, G FLUOR SAT STN + FO, G ODOR SWEET ODOR	G ODOR FO N CUP SAT STN FLUOR	
	CHT. TAN, OPAQ, SHARP, NS		
	LS, WHT, VF XTLN, VW CMT'D, V HRD, MED OOLS, TITE, NS		7 AM 4-18-24 CFS @ 3372' MUD CHECK VIS: 60 WT: 8.8 CHLOR: 500 LCM: 2 FILT: 5.4
	CHT. SMOKE, FRESH, NS		
	LS. WHT, F→M XTLN, HRD. SCT FOSS + FRAGS W/N, POOR Ø NS		
	LS. WHT, CRM, F XTLN, ABUN LG FOSS, M HRD, G INT FOSS Ø, SL STRKY STNG, NSFO, ? ODOR	STRKY STNG	
3400	LS. WHT, TAN, F XTLN, M XTLS W/N MOSTLY HRD, SCT CHLK, NS		
	SH, BLK		
	CHLK, STICKY, SHLY, G ODOR, SPTY STNG	ODOR STN	
	LS. WHT, M XTLN, M HRD, GRNY TXT, G XTLN Ø, FILMY STNG, V FEW FO SPTS, NO VIS ENERGY	FILMY STN	
	LS. WHT, TAN, F→M XTLN, HRD, P XTLN Ø. NS		
	SH, RED, STICKY		DST #2 3552-3600 30-45-45-60 IF: BOB 6 MIN - 74.5" ISI: WK SURF BLO FF: BOB 4 MIN - 76.75" ISI: 5" REC: 120' GHMCO - 20% G, 55% OIL 130' GO - 20% G, 80% OIL 1100' GIP FP: 33-66, 63-115 SIP: 311-310 HP: 1742-1741
	LS. WHT, F XTLN, HRD, FEW SCT FOSS FRAGS W/N, NO APP Ø. NS		
	SH. BURG, LT GRY		
	LS. WHT, LT TAN, F XTLN, HRD, OOL + FOSS FRAGS, FAIR Ø, LT FILMY STNG, NO ODOR	FILMY STN	
	LS. WHT, VF XTLN, DNS, HRD, TITE NS		
	LS. CRM / WHT, F+M XTLN, HRD, SCT VUG + PP XTLN Ø. FILMY STN, SL FILMY OIL ON BRK, NO VIS ENERGY	FILMY STN LT ODOR	
3500	THIN ZONE, WET		
	LS, WHT, BUFF, GRY, VF XTLN, DNS, TITE, NS		DST #3 3598-3620 30-45-45-60 IF: BOB 6 MIN ISI: ¼" BB FF: BOB 6½ MIN FSI: 3¼" BB REC: 660' GIP 30' GMO - 20% G, 40% OIL 270' GO - 10% G, 90% OIL FP: 30-71, 74-127 SIP: 324-320 HP: 1787-1775
HEEBNER 3518 - 1165	SH, BLK, CARB		
	LS, BUFF, TAN, VF XTLN, DNS, HRD, FOSS, TITE, NS		
	LS, TAN, F XTLN, V HRD, FOSS, SCT CALC XTLS, NO VIS Ø. NS		
TORONTO 3544 - 1191	LS. WHT, F XTLN, M HRD, VF PP Ø, LT FILMY FLUOR STNG, NO ODOR, NSFO	FLUOR STN	
	SH, LT GRY		DST #4 3618-3636 30-45-45-60 IF: SURF ISI: NO BB FF: 4" FSI: NO BB REC: 30' GIP 20' MO - 60% OIL 10' OIL FP: 21-25, 19-29 SIP: 1001-948 HP: 1799-1794
LANSING 3559 - 1206	LS, WHT, F XTLN, HRD, S→MED OOLS, VG OOL Ø, G Ø STNG, FAIR SHO FO/BRK, FLUOR, LT ODOR, PCS VW CMT'D OOLS @ DEPTH, ? ENERGY	LT ODOR FSFO FLUOR	
	LS. CRM, TAN, GRY, F XTLN, PCS V DNS, HRD, TITE, NS		
	SH. GRN / GRY		
	SH, BURG		
	CHT, WHT, LT GRY, OPAQ, SHARP, ? FRAC'D, FLUOR STNG STRKS W/ SAT SILT STNG N CREVASSES, SFO	G ODOR FLUOR SFO	7 AM 4-19-24, DRLG @ 3592' MUD CHECK VIS: 60 WT: 9.0 CHLOR: 1,100 LCM: 4 FILT: 5.4
	LS, WHT, WEA, HRD, G VUG Ø, SCT SUB SAT STNG, SFO/BRK, BRT FLUOR FO/BRK, G ODOR	G ODOR FLUOR SFO	
3600	SH, RED, SNDY, STICKY, PCS GRY, GRN		
	LS, RED, CALC VEINS W/N, VF XTLN, DNS HRD, TITE, NS		
	LS, WHT, VF XTLN, HRD, DNS, V DULL FLUOR, NO VIS Ø, VG SFO/BRK, V LT ODOR, PCS REW W/ G VUGY Ø + GSFO/BRK	LT ODOR GSFO FLUOR	7 AM 4-20-24 DST #3 @ 3620' MUD CHECK VIS: 60 WT: 9.0 CHLOR: 1,000 LCM: 3 FILT: 5.4
	LS, WHT, F XTLN, SL BRTTL, M HRD, G VUG STNG, DULL FLUOR, FO/BRK G ODOR	FLUOR G ODOR FO	
	LS, BRN, VF XTLN CMT'D OOLS, SML OOLS, P CMT'D, G OOL Ø, GSFO TR GAS, ? ENERGY, G ODOR	GSFO G ODOR	
	LS, WHT, CRM, F XTLN, SOFT, CHLKY N PART, P Ø, NS		
	LS. GRY, VF XTLN, DNS. V HRD, TITE, NS		DST #5 3654-3690 30-45-30-45 IF: 1¾" FF: ½" REC: 20'M FP: 23-24, 27-28 SIP: 942-893 HP: 1830-1799
MUNCIE 3658 - 1305	SH, BLK		
	SH, DK GRY		
	CHLKY LS, WHT / GRY, SOFT, SL BRTTL, F XTLN, NS		
	LS, WHT, SML → MED OOL, G OOL Ø, SUB SAT STN, DULL FLUOR, FILMY OIL, G ODOR, SCT FO SPTS, AMBER OIL, TR GAS	G ODOR FILMY OIL TR GAS	
	LS. WHT, ABUN FRAGS + WEA LS, G Ø, INCR ODOR, G SAT, AMBER OIL, FSFO/BRK	G ODOR FSFO	
	LS, WHT, F XTLN, HRD, FEW SCT OIL STN'D VUGS, FSFO/BRK, LT ODOR, DK BRN OIL	LT ODOR FSFO	7 AM 4-21-24 DST #5 @ 3690' MUD CHECK VIS: 58 WT: 9.0 CHLOR: 1,000 LCM: 3 FILT: 5.4
3700	LS, CRM, F + M XTLN, BRTTL, G EVEN FLUOR STNG, V LT ODOR, V LT FO/BRK, FSFO	V LT ODOR FSFO	DST #6 3686-3715 30-45-30-45 IF: ½" → ¼" FF: NO BLOW REC: 1' MUD FP: 19-18, 19-18 SIP: 31-23 HP: 1801-1756
STARK 3715 - 1362	SH, GRY, RED		
	SH, BURG		
	LS, WHT, CRM, VF XTLN, FRAC'S W/ BLK DD FIBROUS OIL, NO ODOR	DD OIL	
HUSHPUCKNEY 3731 - 1378	SH, GRY		
	LS, WHT, VF XTLN, HRD, ABUN LG VUGS, VG OIL + GAS BLEED, HVY ODOR, ABUN OIL N CUP	HVY ODOR BLEED VG SFO SGAS	
	A.A.		
BKC 3749 - 1396	SH, GRY, BURG		7 AM 4-22-24 DST #7 @ 3750' MUD CHECK VIS: 65 WT: 9.1 CHLOR: 1,000 LCM: 3 FILT: 5.8
	SH, GRY, BURG		
	SH, GRY, BURG		DST #7 3714-3750 30-45-45-60 IF: 2.25" ISI: NO BB FF: .5" FSI: NO BB REC: 20' MUD FP: 23-26, 30-30 SIP: 75-83 HP: 1835-1814
MARMATON 3775 - 1422	LS, WHT, TAN, F XTLN, PCS SOFT, MOSTLY MED HRD, P INT XTLN Ø NS		
	SHLY LS, GRN, SOFT, FOSS LS, NS		
CONGLOMERATE 3790 - 1437	LS. WHT, GRY, M XTLN, HRD, ABUN LG FOSS, P CMT'D, F→G FOSS Ø. NS		
3800	LS. WHT, F XTLN, SL CHLKY, ABUN QTZ, MED GRNS, W RND, M HRD, NS		
	LS. GRY, VF XTLN, DNS, TITE, NS		
	SH, GRY, RED, SNDY		
	SH, RED		
ARBUCKLE 3842 - 1489	DOLO, WHT, F + M XTLN, M HRD, VP XTLN Ø, NS GRY, F XTLN, SUCR, NO VIS Ø. NS		
	DOLO. WHT, CRS XTLN, HRD, G XTLN Ø. NS		
	DOLO, TAN, LT GRY, F → M XTLN, HRD. FAIR XTLN Ø, NS		MUD-CO - GARY SCHMIDTBERGER -
	DOLO, WHT, LG XTLS, HRD, VUG Ø NS		ELI LOGGING - JEFF LEUBBERS -
	DOLO, WHT, LG + MED XTLN, V HRD, W CMT'D, GLAUC N PART, G Ø. NS		
RTD			TRILOBITE TESTING - SPENCER STAAB -
3900			