

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 FilledWELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASEOPERATOR: License # 30717Name: Downing-Nelson Oil Co IncAddress 1: PO BOX 1019

Address 2: _____

City: HAYS State: KS Zip: 67601 + 1019Contact Person: Alan DowningPhone: (785) 621-2610CONTRACTOR: License # 5929Name: Duke Drilling Co., Inc.Wellsite Geologist: Marc Downin

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 #: _____04/24/2022 05/04/2022 07/07/2022Spud Date or
Recompletion Date Date Reached TD Completion Date or
Recompletion DateAPI No.: 15-153-21282-00-00

Spot Description: _____

NW-NE-SW-SW Sec. 17 Twp. 5 S. R. 36 ☐ East ☒ West1182 Feet from ☐ North / ☒ South Line of Section667 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: RawlinsLease Name: KRAMER B UNIT Well #: 1-17Field Name: CharleneProducing Formation: Cherokee LimeElevation: Ground: 3314 Kelly Bushing: 3325Total Vertical Depth: 4850 Plug Back Total Depth: _____Amount of Surface Pipe Set and Cemented at: 480 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: 8000 ppm Fluid volume: 400 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: 07/14/2022☐ Confidential Release Date: 07/13/2024☒ Wireline Log Received ☒ Drill Stem Tests Received☒ Geologist Report / Mud Logs Received☐ UIC DistributionALT ☒ I ☐ II ☐ III Approved by: David Befort Date: 07/15/2022

Operator Name: Downing-Nelson Oil Co Inc Lease Name: KRAMER B UNIT Well #: 1-17
 Sec. 17 Twp. 5 S. R. 36 ☐ East ☒ West County: Rawlins

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☒ 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: Micro Dual Induction Compensated Density Neutron	☒ Log Formation (Top), Depth and Datum ☐ Sample <table style="width: 100%;"> <tr> <td style="width: 33%;">Name Attached</td> <td style="width: 33%;">Top Attached</td> <td style="width: 33%;">Datum Attached</td> </tr> </table>	Name Attached	Top Attached	Datum Attached
Name Attached	Top Attached	Datum Attached		

CASING RECORD ☒ New ☐ Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	480	Class A	350	-
Production	7.875	5.5	14	4909	H Long	200	-

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>07/13/2022</u>		Producing Method: ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other <i>(Explain)</i> _____			
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)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top <u>4668</u> Bottom <u>4674</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	4668	4674			500 gallons 15% Mud, 500 gallons 15% NE
					1500 gallons 20% NE
TUBING RECORD: Size: <u>2.3750</u> Set At: <u>4845</u> Packer At: <u> </u>					

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	KRAMER B UNIT 1-17
Doc ID	1650329

Tops

Name	Top	Datum
Top Anhydrite	3032'	+293
Base Anhydrite	3068'	+257
Foraker	3712'	-387
Topeka	3994'	-669
Heebner	4158'	-833
LKC	4210'	-885
Stark	4409'	-1084
BKC	4465'	-1140
Marmaton	4474'	-1149
Pawnee	4588'	-1263
Cherokee Shale	4664'	-1339
Morrow	4812'	-1487
Mississippi	4859'	-1534

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	KRAMER B UNIT 1-17
Doc ID	1650329

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	24	480	Class A	350	-
Production	7.875	5.5	14	4909	H Long	200	-

TREATMENT REPORT

Customer: Downing Nelson

Well: **Kramer B Unit #1-17**

Ticket: WP 2717

City, State: Oakley KS

County: Rawlins KS

Date: 4/24/2022

Field Rep: Emilio

S-T-R: 17-5S-36W

Service:	Surface
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Downhole Information

Hole Size:	12.25 in
Hole Depth:	485 ft
Casing Size:	8 5/8 in
Casing Depth:	481 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	29.5 bbl

Calculated Slurry - Lead

Blend:	H-325
Weight:	14.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.41 ft³ / sx
Annular Bbls / Ft.:	0.0735 bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	87.8 bbls
Total Sacks:	350 sx

Calculated Slurry - Tail

Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft³ / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

STAGE	TOTAL
1	100
2	200
3	300
4	400
5	500
6	600
7	700
8	800
9	900
10	1000

Total Sacks

TIME	RATE	PSI	BBLs	BBLs	REMARKS
3:32 PM			-	-	Arrived on location
3:42 PM				-	Safety meeting
3:52 PM				-	Rigged up
6:18 PM				-	Casing on bottom
6:25 PM				-	Circulated mud
6:34 PM	4.0	200.0	5.0	5.0	Water ahead
6:37 PM	5.5	300.0	87.8	92.8	Mixed cement @ 14.8 ppg
7:05 PM	4.8	250.0	29.5	122.3	Begin displacement
7:12 PM		200.0		122.3	Plug down and shut in with 5 bbls circulated to pit
7:14 PM				122.3	Wash up and rigged down
7:32 PM				122.3	Left location

CREW

Cementor:	John
Pump Operator:	Jose V
Bulk #1:	Kale
Bulk #2:	

UNIT

64
208
194-235

SUMMARY

Average Rate	Average Pressure	Total Fluid
4.8 bpm	238 psi	122 bbls





DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Company**

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Kramer B Unit #1-17

17-5S-36W Rawlins, KS

Start Date: 2022.04.30 @ 20:40:00

End Date: 2022.05.01 @ 04:49:00

Job Ticket #: 68756 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2022.05.05 @ 14:56:59



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68756

DST#: 1

ATTN: Marc Dow ning

Test Start: 2022.04.30 @ 20:40:00

GENERAL INFORMATION:

Formation: **LKC J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:50:45

Time Test Ended: 04:49:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Nathan Aneas

Unit No: 71

Interval: 4363.00 ft (KB) To 4415.00 ft (KB) (TVD)

Total Depth: 4415.00 ft (KB) (TVD)

Hole Diameter: 7.87 inches Hole Condition: Fair

Reference Elevations: 3325.00 ft (KB)

3314.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8353 Inside

Press@RunDepth: 68.15 psig @ 4364.00 ft (KB)

Start Date: 2022.04.30

End Date:

2022.05.01

Start Time: 20:40:01

End Time:

04:49:00

Capacity: 8000.00 psig

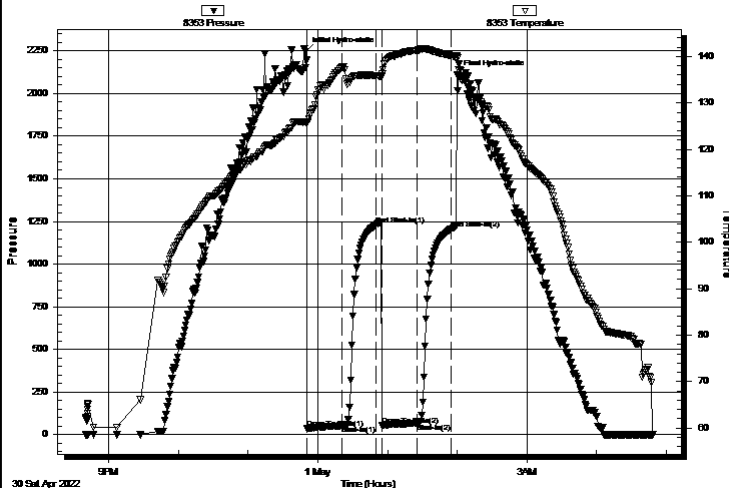
Last Calib.: 2022.05.01

Time On Btm: 2022.04.30 @ 23:49:45

Time Off Btm: 2022.05.01 @ 01:59:45

TEST COMMENT: 30:IF- Weak surface blow , built to 1/2 inch in 10 min, final blow is 3/4 inch
30:IS- No blow back
30:FF- Weak surface blow in 22 min, built to 1/4 inch, final blow is 1/4 inch
30:FS- No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2247.55	125.90	Initial Hydro-static
1	34.99	125.80	Open To Flow (1)
31	52.01	137.54	Shut-In(1)
61	1229.86	135.85	End Shut-In(1)
66	56.84	136.18	Open To Flow (2)
96	68.15	141.31	Shut-In(2)
126	1205.90	140.17	End Shut-In(2)
130	2112.57	140.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	WM 75%M 25%W Spots of oil	0.39

Gas Rates

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

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68756

DST#: 1

ATTN: Marc Dow ning

Test Start: 2022.04.30 @ 20:40:00

GENERAL INFORMATION:

Formation: **LKC J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:50:45

Time Test Ended: 04:49:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Nathan Aneas

Unit No: 71

Interval: 4363.00 ft (KB) To 4415.00 ft (KB) (TVD)

Total Depth: 4415.00 ft (KB) (TVD)

Hole Diameter: 7.87 inches Hole Condition: Fair

Reference Elevations: 3325.00 ft (KB)

3314.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8676 Outside

Press@RunDepth: psig @ 4364.00 ft (KB)

Start Date: 2022.04.30

End Date:

2022.05.01

Start Time: 20:40:01

End Time:

04:49:15

Capacity: 8000.00 psig

Last Calib.:

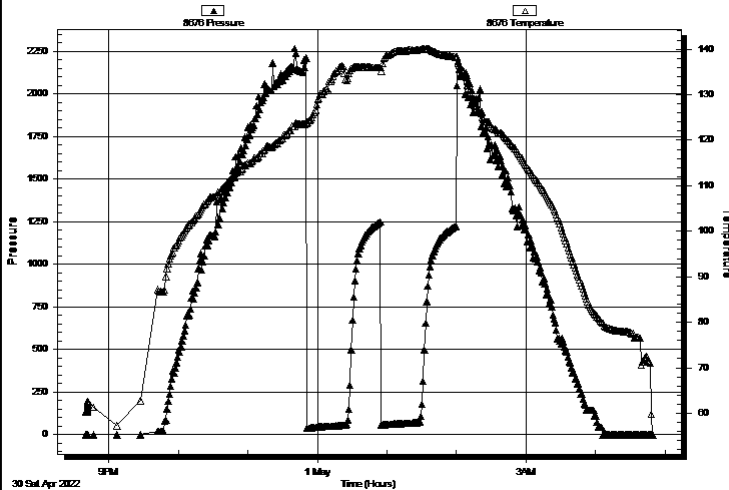
2022.05.01

Time On Btm:

Time Off Btm:

TEST COMMENT: 30:IF- Weak surface blow , built to 1/2 inch in 10 min, final blow is 3/4 inch
30:IS- No blow back
30:FF- Weak surface blow in 22 min, built to 1/4 inch, final blow is 1/4 inch
30: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)
80.00	WM 75%M 25%W Spots of oil	0.39

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68756

DST#: 1

ATTN: Marc Dow ning

Test Start: 2022.04.30 @ 20:40:00

Tool Information

Drill Pipe:	Length: 4104.00 ft	Diameter: 3.80 inches	Volume: 57.57 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 235.00 ft	Diameter: 2.25 inches	Volume: 1.16 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume:	- bbl	Tool Chased ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4363.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	52.00 ft			
Tool Length:	84.00 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			4336.00	
Hydraulic tool	5.00			4341.00	
Jars	5.00			4346.00	
EM Tool	4.00			4350.00	
Safety Joint	3.00			4353.00	
Packer	5.00			4358.00	32.00 Bottom Of Top Packer
Packer	5.00			4363.00	
Stubb	1.00			4364.00	
Recorder	0.00	8353	Inside	4364.00	
Recorder	0.00	8676	Outside	4364.00	
Perforations	15.00			4379.00	
Change Over Sub	1.00			4380.00	
Blank Spacing	31.00			4411.00	
Change Over Sub	1.00			4412.00	
Bullnose	3.00			4415.00	52.00 Bottom Packers & Anchor

Total Tool Length: 84.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68756

DST#: 1

ATTN: Marc Dow ning

Test Start: 2022.04.30 @ 20:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 7.98 in³

Resistivity: 0.76 ohm.m

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity: 18000 ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
80.00	WM 75%M 25%W Spots of oil	0.393

Total Length: 80.00 ft

Total Volume: 0.393 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8353

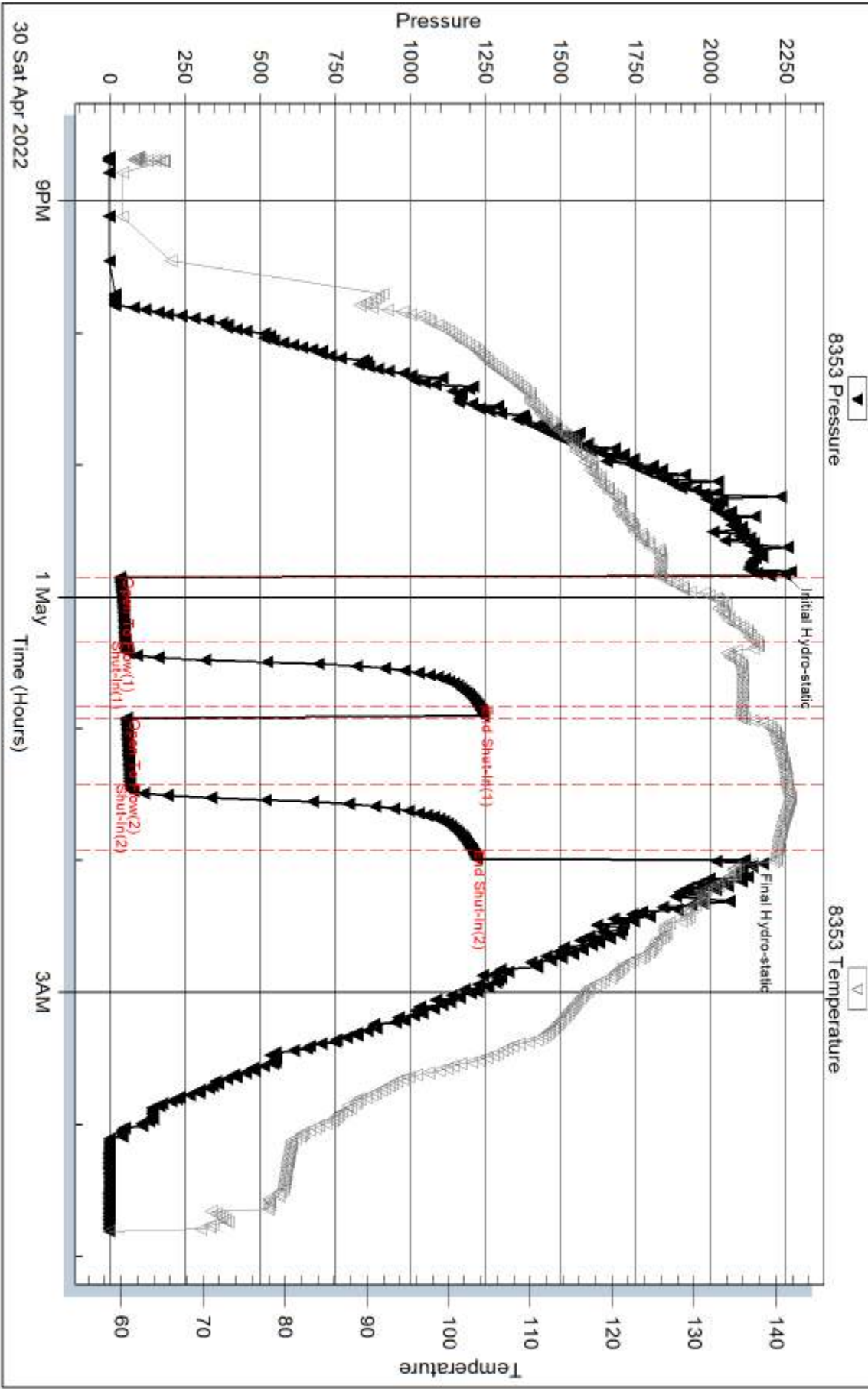
Inside

Dow n/g-Nelson Oil Company

Kramer B Unit #1-17

DST Test Number: 1

Pressure vs. Time



Serial #: 8676

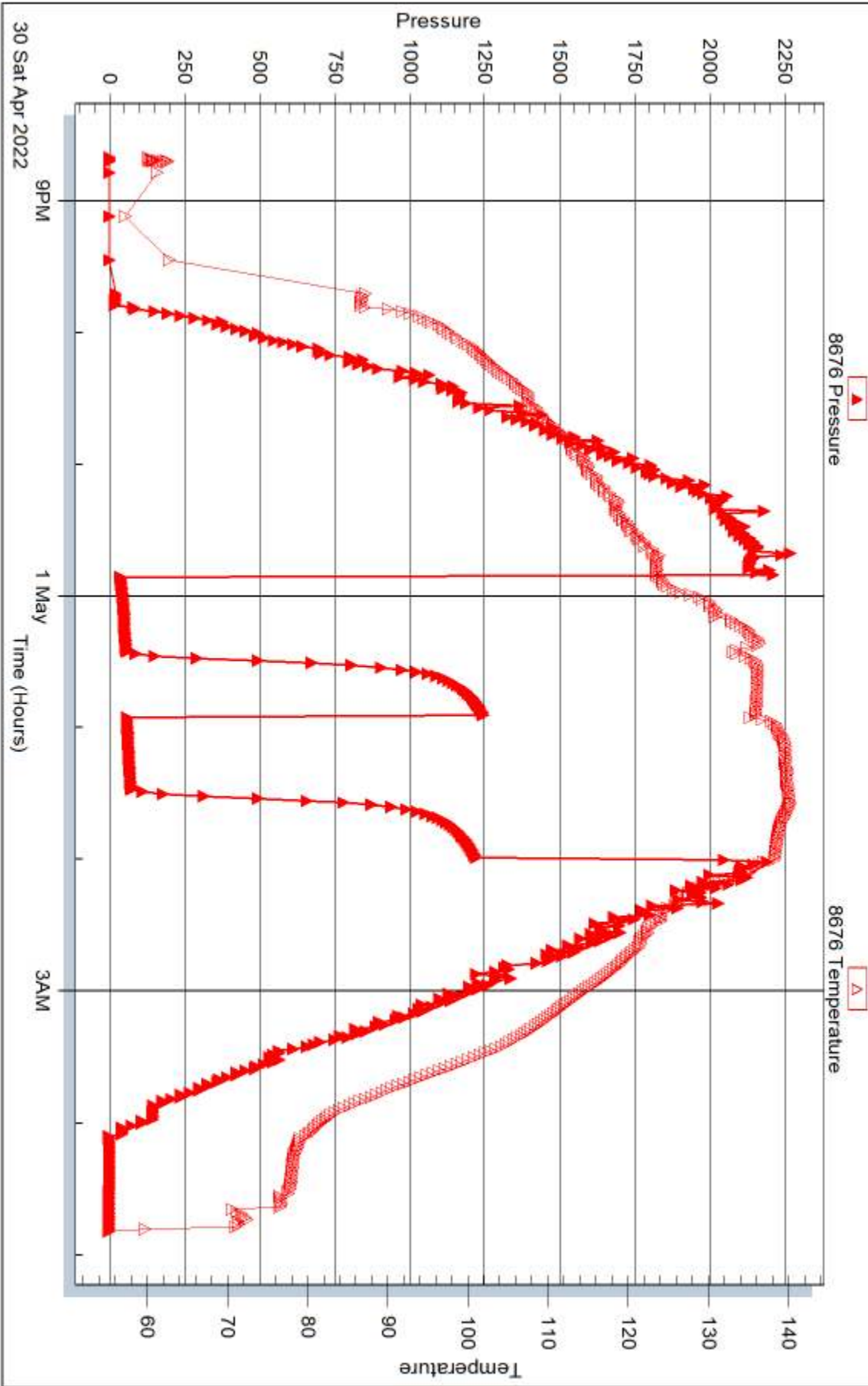
Outside

Dow nung-Nelson Oil Company

Kramer B Unit #1-17

DST Test Number: 1

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Company**

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Kramer B Unit #1-17

17-5S-36W Rawlins, KS

Start Date: 2022.05.02 @ 08:40:00

End Date: 2022.05.02 @ 16:55:15

Job Ticket #: 68757 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2022.05.05 @ 14:56:29



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68757

DST#: 2

ATTN: Marc Dow ning

Test Start: 2022.05.02 @ 08:40:00

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:52:00

Time Test Ended: 16:55:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Nathan Aneas

Unit No: 71

Interval: 4560.00 ft (KB) To 4604.00 ft (KB) (TVD)

Total Depth: 4604.00 ft (KB) (TVD)

Hole Diameter: 7.87 inches Hole Condition: Fair

Reference Elevations: 3325.00 ft (KB)

3314.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8353 Inside

Press@RunDepth: 18.34 psig @ 4561.00 ft (KB)

Start Date: 2022.05.02

End Date:

2022.05.02

Start Time: 08:40:01

End Time:

16:55:15

Capacity: 8000.00 psig

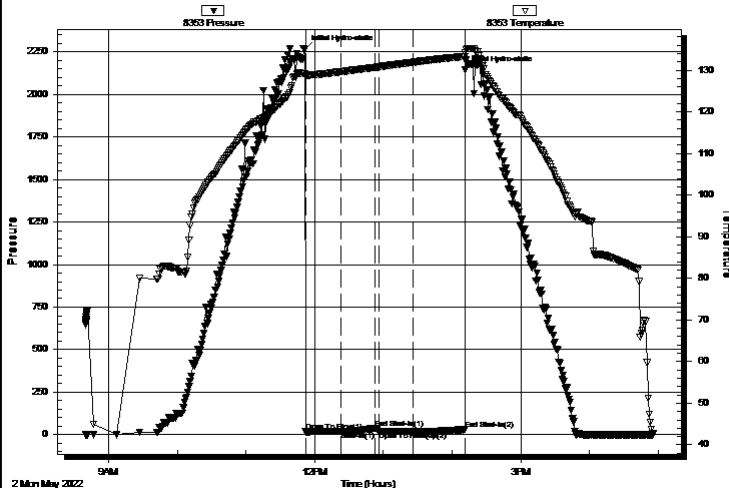
Last Calib.: 2022.05.02

Time On Btm: 2022.05.02 @ 11:51:15

Time Off Btm: 2022.05.02 @ 14:11:30

TEST COMMENT: 30:IF- Weak surface blow , built to 1/4 inch in 10 min, final blow died
30:IS- No blow back
30:FF- No blow (Turned tool, then flushed tool to make sure no plugging going on)
30:FS- No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2263.97	129.09	Initial Hydro-static
1	17.10	128.73	Open To Flow (1)
32	17.81	129.59	Shut-In(1)
62	37.40	130.66	End Shut-In(1)
65	17.25	130.77	Open To Flow (2)
95	18.34	131.87	Shut-In(2)
140	30.39	133.30	End Shut-In(2)
141	2143.27	134.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%M	0.02

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

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68757

DST#: 2

ATTN: Marc Dow ning

Test Start: 2022.05.02 @ 08:40:00

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:52:00

Time Test Ended: 16:55:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Nathan Aneas

Unit No: 71

Interval: 4560.00 ft (KB) To 4604.00 ft (KB) (TVD)

Total Depth: 4604.00 ft (KB) (TVD)

Hole Diameter: 7.87 inches Hole Condition: Fair

Reference Elevations: 3325.00 ft (KB)

3314.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8676 Outside

Press@RunDepth: psig @ 4561.00 ft (KB)

Start Date: 2022.05.02

End Date:

2022.05.02

Start Time: 08:40:01

End Time:

16:55:30

Capacity: 8000.00 psig

Last Calib.:

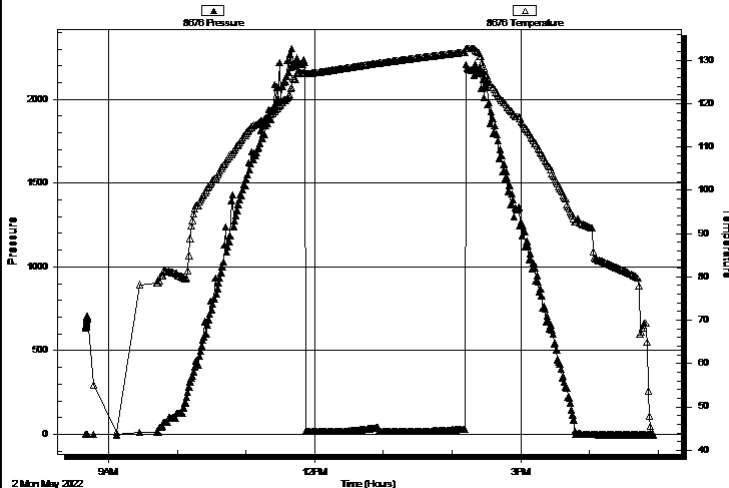
2022.05.02

Time On Btm:

Time Off Btm:

TEST COMMENT: 30:IF- Weak surface blow , built to 1/4 inch in 10 min, final blow died
30:IS- No blow back
30:FF- No blow (Turned tool, then flushed tool to make sure no plugging going on)
30: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)
5.00	Mud 100%M	0.02

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

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68757

DST#: 2

ATTN: Marc Dow ning

Test Start: 2022.05.02 @ 08:40:00

Tool Information

Drill Pipe:	Length:	4324.00 ft	Diameter:	3.80 inches	Volume:	60.65 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	235.00 ft	Diameter:	2.25 inches	Volume:	1.16 bbl	Weight to Pull Loose:	70000.00 lb
					Total Volume:	61.81 bbl	Tool Chased	ft
Drill Pipe Above KB:		31.00 ft					String Weight: Initial	68000.00 lb
Depth to Top Packer:		4560.00 ft					Final	68000.00 lb
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 Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4533.00	
Hydraulic tool	5.00			4538.00	
Jars	5.00			4543.00	
EM Tool	4.00			4547.00	
Safety Joint	3.00			4550.00	
Packer	5.00			4555.00	32.00 Bottom Of Top Packer
Packer	5.00			4560.00	
Stubb	1.00			4561.00	
Recorder	0.00	8353	Inside	4561.00	
Recorder	0.00	8676	Outside	4561.00	
Perforations	40.00			4601.00	
Bullnose	3.00			4604.00	44.00 Bottom Packers & Anchor

Total Tool Length: 76.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68757

DST#: 2

ATTN: Marc Dow ning

Test Start: 2022.05.02 @ 08:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 8.78 in³

Resistivity: ohm.m

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100%M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8353

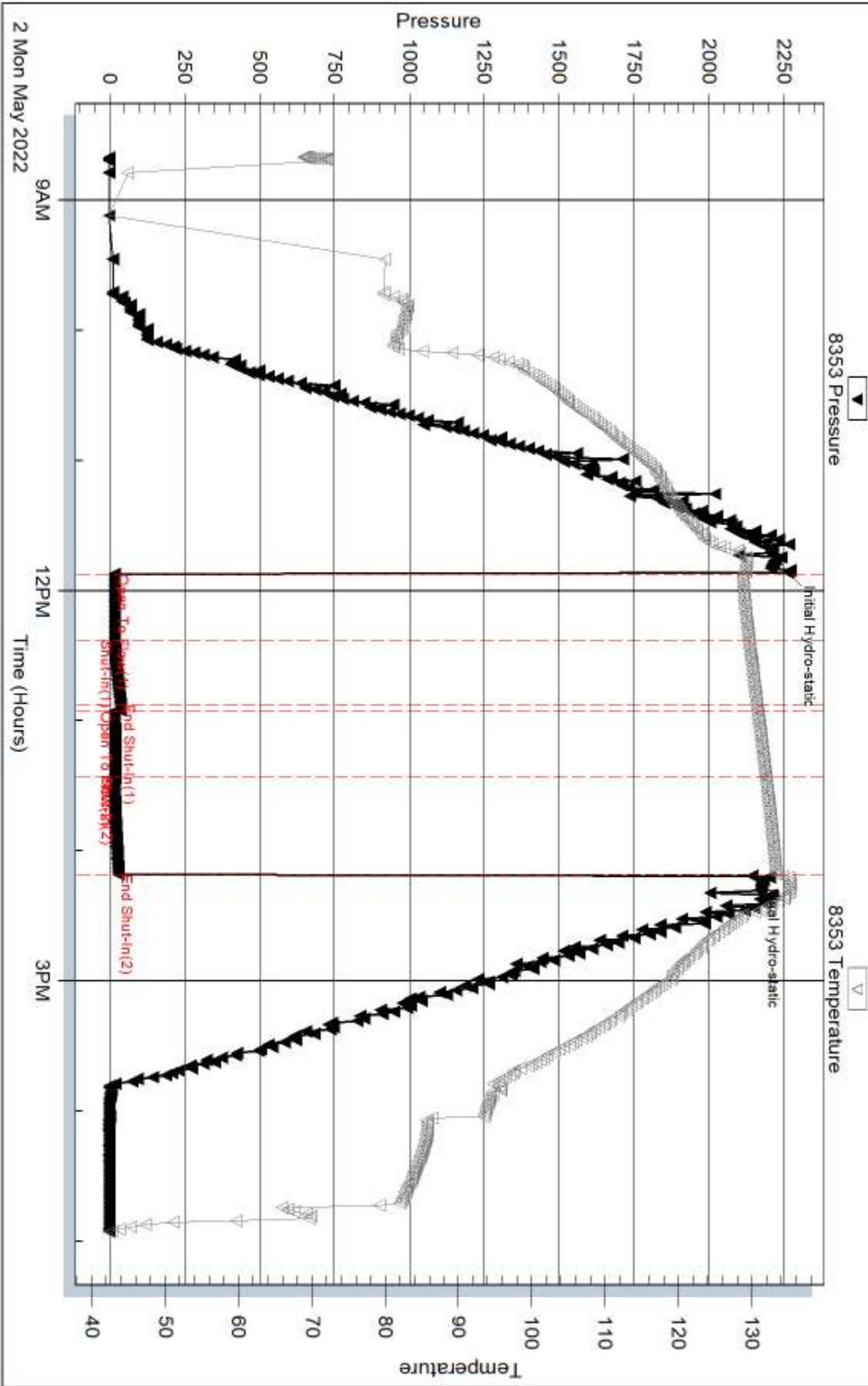
Inside

Downing-Nelson Oil Company

Kramer B Unit #1-17

DST Test Number: 2

Pressure vs. Time



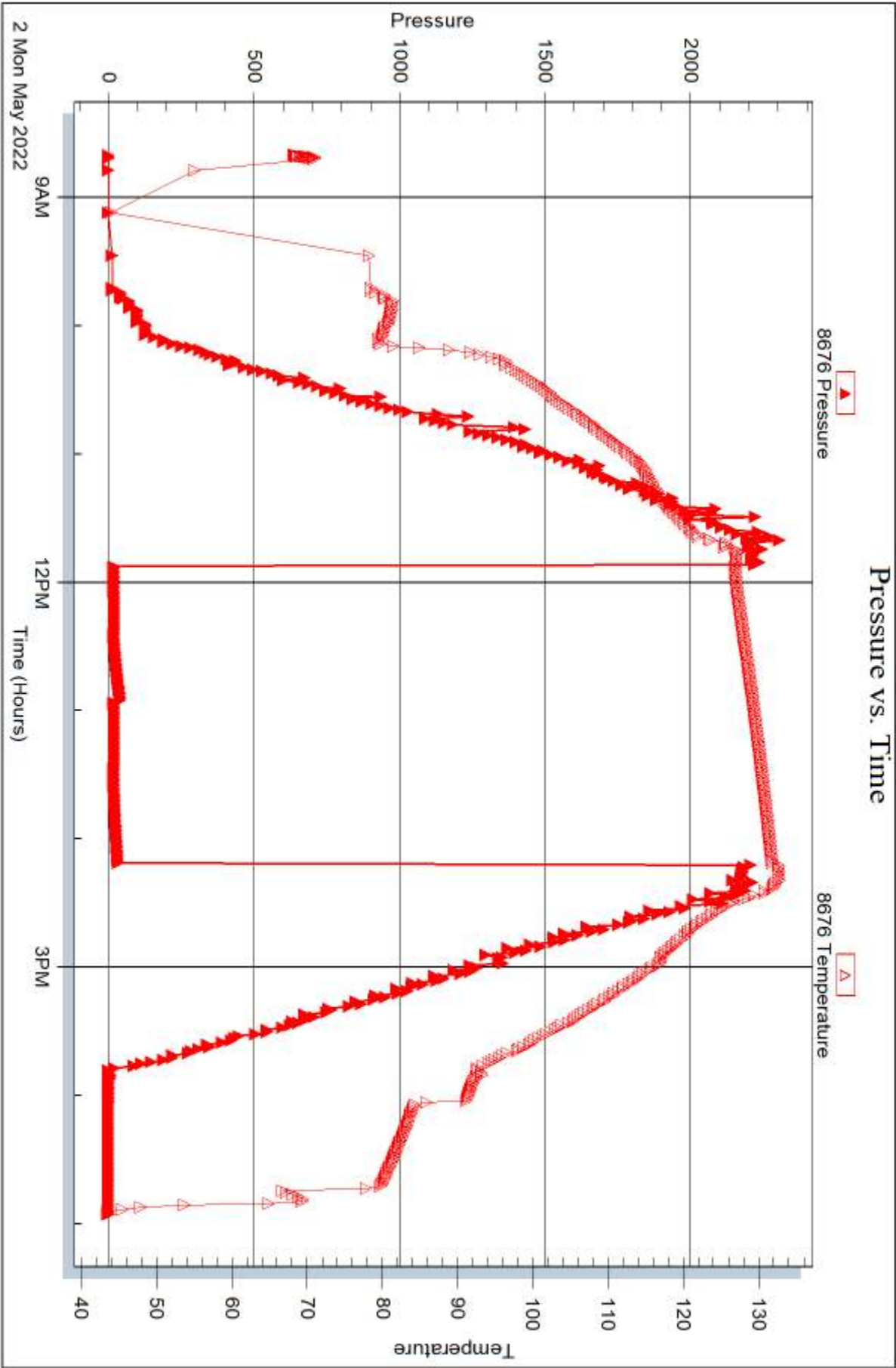
Serial #: 8676

Outside

Dow nign-Nelson Oil Company

Kramer B Unit #1-17

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Company**

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Kramer B Unit #1-17

17-5S-36W Rawlins, KS

Start Date: 2022.05.03 @ 07:40:00

End Date: 2022.05.03 @ 16:19:30

Job Ticket #: 68758 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2022.05.05 @ 14:55:13



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68758

DST#: 3

ATTN: Marc Dow ning

Test Start: 2022.05.03 @ 07:40:00

GENERAL INFORMATION:

Formation: **Cherokee Lime**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:49:00

Time Test Ended: 16:19:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Nathan Aneas

Unit No: 71

Interval: 4656.00 ft (KB) To 4684.00 ft (KB) (TVD)

Total Depth: 4684.00 ft (KB) (TVD)

Hole Diameter: 7.87 inches Hole Condition: Fair

Reference Elevations: 3325.00 ft (KB)

3314.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8353 Inside

Press@RunDepth: 55.62 psig @ 4657.00 ft (KB)

Start Date: 2022.05.03

End Date:

2022.05.03

Start Time: 07:40:01

End Time:

16:19:30

Capacity: 8000.00 psig

Last Calib.: 2022.05.03

Time On Btm: 2022.05.03 @ 10:48:15

Time Off Btm: 2022.05.03 @ 13:25:00

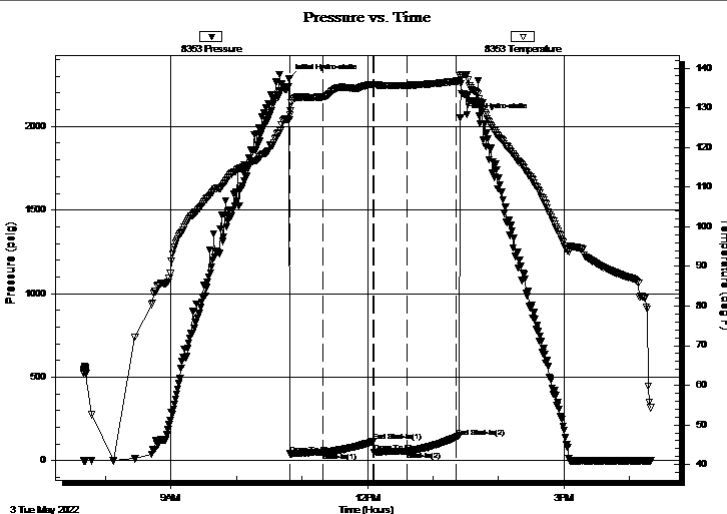
TEST COMMENT: 30:IF- Fair surface blow , built to 2 1/2 inches in 5 min, final blow is 6 1/4 inches

45:IS- No blow back

30:FF- Weak surface blow , built to 1 inch in 10 min, final blow is 1 3/4 inches

45:FS- No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2287.23	126.99	Initial Hydro-static
1	40.23	128.12	Open To Flow (1)
31	49.70	132.76	Shut-In(1)
77	113.58	135.83	End Shut-In(1)
78	50.10	135.84	Open To Flow (2)
108	55.62	135.63	Shut-In(2)
153	141.34	136.68	End Shut-In(2)
157	2052.29	137.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
116.00	SGOCM 50% M 40% O 10% G	0.57

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

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68758

DST#: 3

ATTN: Marc Dow ning

Test Start: 2022.05.03 @ 07:40:00

GENERAL INFORMATION:

Formation: **Cherokee Lime**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:49:00

Time Test Ended: 16:19:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Nathan Aneas

Unit No: 71

Interval: **4656.00 ft (KB) To 4684.00 ft (KB) (TVD)**

Total Depth: 4684.00 ft (KB) (TVD)

Hole Diameter: 7.87 inches Hole Condition: Fair

Reference Elevations: 3325.00 ft (KB)

3314.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8676 Outside

Press@RunDepth: psig @ 4657.00 ft (KB)

Start Date: 2022.05.03

End Date:

2022.05.03

Start Time: 07:40:01

End Time:

16:19:30

Capacity: 8000.00 psig

Last Calib.: 2022.05.03

Time On Btm:

Time Off Btm:

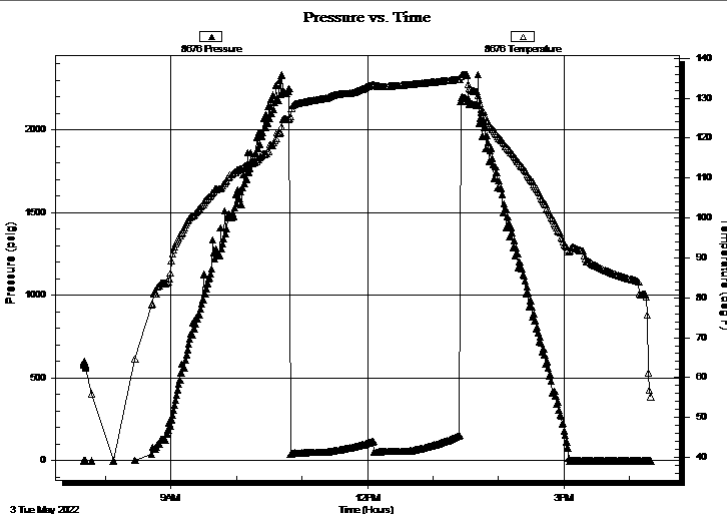
TEST COMMENT: 30:IF- Fair surface blow , built to 2 1/2 inches in 5 min, final blow is 6 1/4 inches

45:IS- No blow back

30:FF- Weak surface blow , built to 1 inch in 10 min, final blow is 1 3/4 inches

45:FS- No blow back

PRESSURE SUMMARY



Time
(Min.)

Pressure
(psig)

Temp
(deg F)

Annotation

Recovery

Length (ft)	Description	Volume (bbl)
116.00	SGOCM 50%M 40%O 10%G	0.57

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

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68758

DST#: 3

ATTN: Marc Dow ning

Test Start: 2022.05.03 @ 07:40:00

Tool Information

Drill Pipe:	Length: 4417.00 ft	Diameter: 3.80 inches	Volume: 61.96 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 235.00 ft	Diameter: 2.25 inches	Volume: 1.16 bbl	Weight to Pull Loose:	72000.00 lb
		Total Volume:	- bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	70000.00 lb
Depth to Top Packer:	4656.00 ft			Final	70000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	28.00 ft				
Tool Length:	60.00 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			4629.00	
Hydraulic tool	5.00			4634.00	
Jars	5.00			4639.00	
EM Tool	4.00			4643.00	
Safety Joint	3.00			4646.00	
Packer	5.00			4651.00	32.00 Bottom Of Top Packer
Packer	5.00			4656.00	
Stubb	1.00			4657.00	
Recorder	0.00	8353	Inside	4657.00	
Recorder	0.00	8676	Outside	4657.00	
Perforations	24.00			4681.00	
Bullnose	3.00			4684.00	28.00 Bottom Packers & Anchor

Total Tool Length: 60.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Company

17-5S-36W Rawlins, KS

PO Box 1019
Hays, KS 67601

Kramer B Unit #1-17

Job Ticket: 68758

DST#: 3

ATTN: Marc Dow ning

Test Start: 2022.05.03 @ 07:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 7.98 in³

Resistivity: ohm.m

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
116.00	SGOCM 50%M 40%O 10%G	0.570

Total Length: 116.00 ft

Total Volume: 0.570 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8353

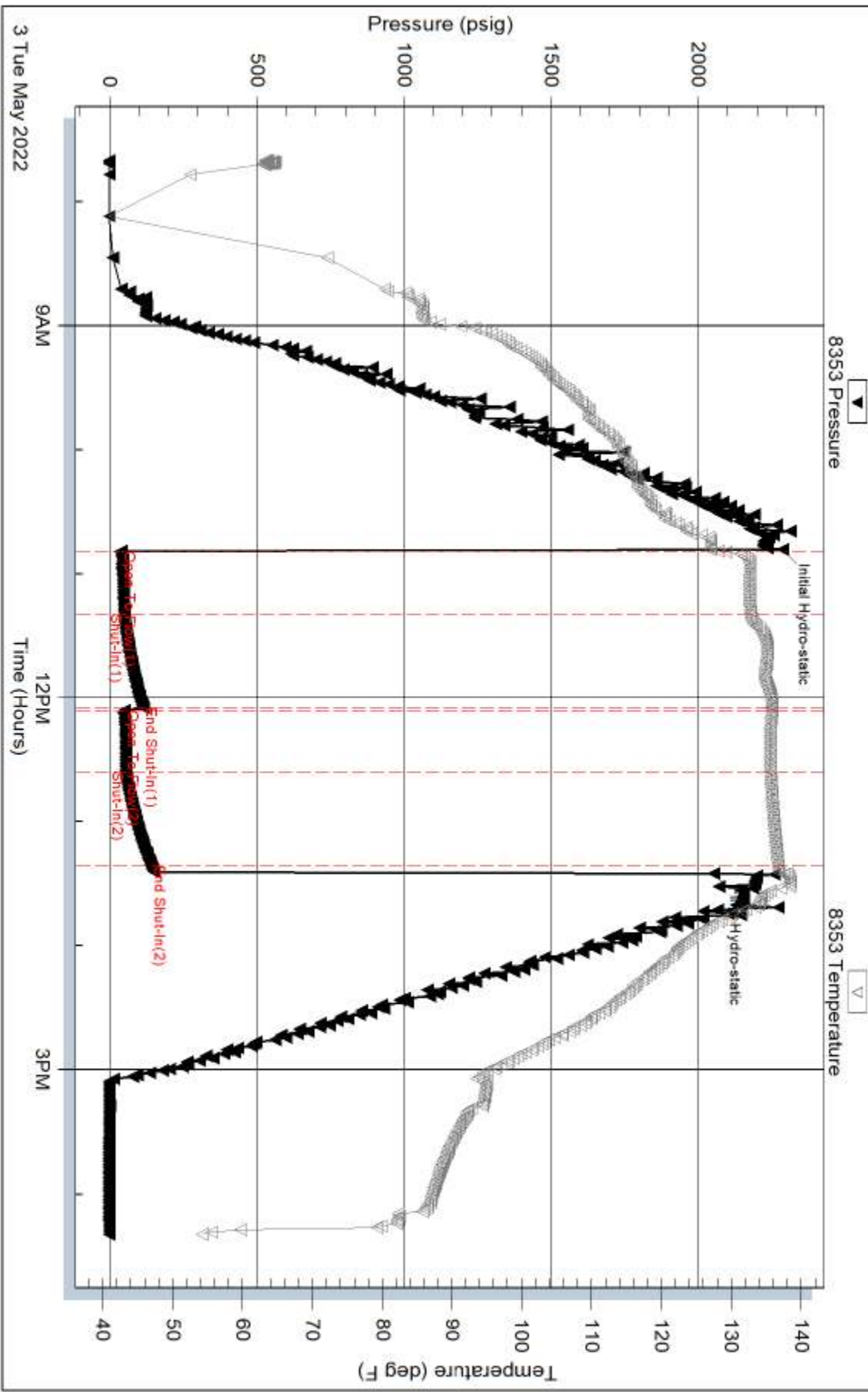
Inside

Dow nung-Nelson Oil Company

Kramer B Unit #1-17

DST Test Number: 3

Pressure vs. Time

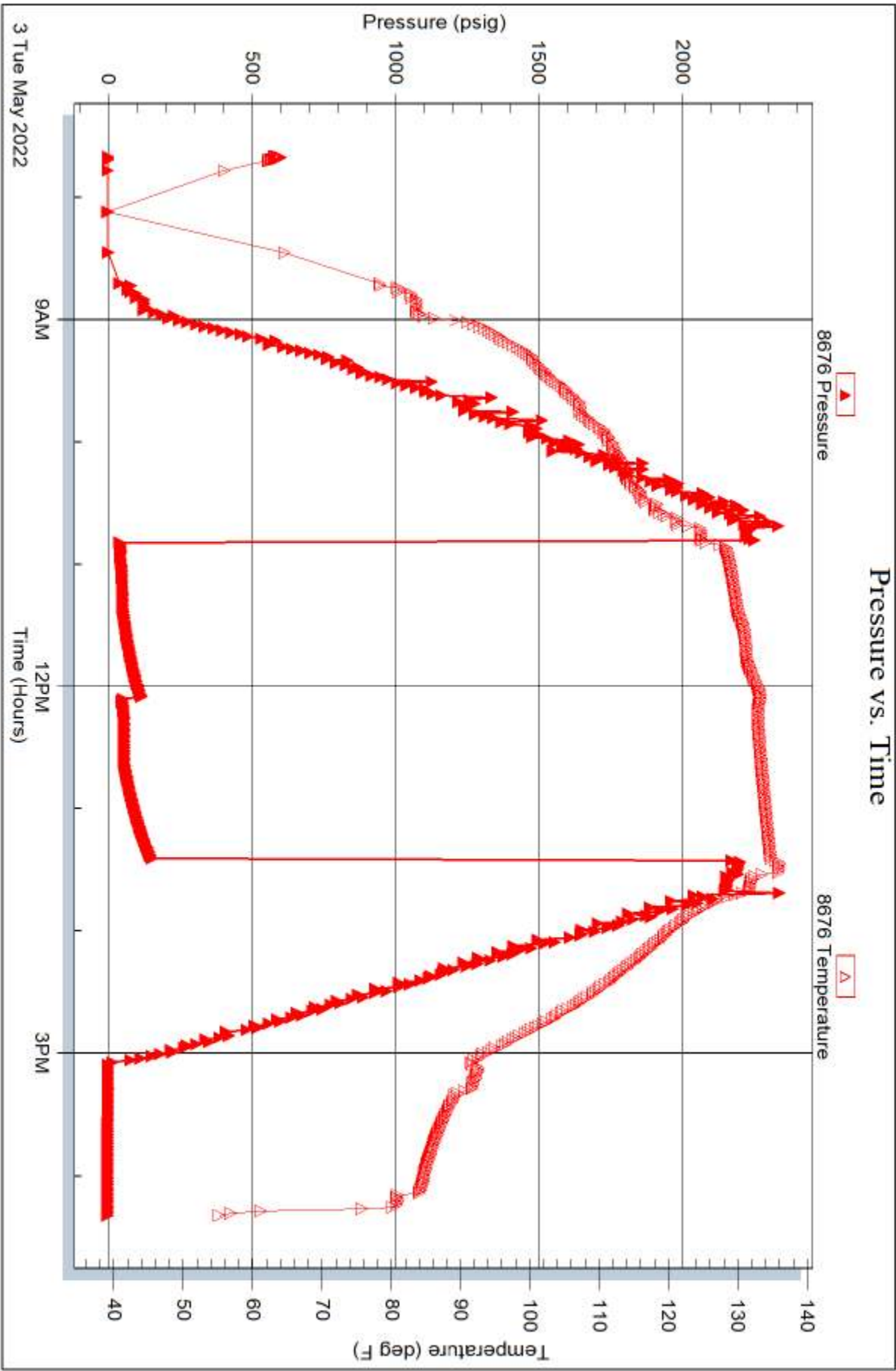


Serial #: 8676

Outside Dow nign-Nelson Oil Company

Kramer B Unit #1-17

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **68756**

Well Name & No. Kramer B Unit #1-17 Test No. 1 Date 4/30/22
 Company Dowling-Nelson Oil Company Inc Elevation 3325 KB 33323314 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Marc Downing Rig Duke #5
 Location: Sec. 17 Twp 5S Rge. 36W Co. Rawlins State KS

Interval Tested 4363-4415 Zone Tested LKC J
 Anchor Length 52' Drill Pipe Run 4104 Mud Wt. 9.2
 Top Packer Depth 4358 Drill Collars Run 235 Vis 49
 Bottom Packer Depth 4363 Wt. Pipe Run 8 WL 8
 Total Depth 4415 Chlorides 800 ppm System LCM 5#

Blow Description IF- Weak surface blow, built to 1/2 inch in 10 min, Final blow is 3/4 inch

ISI- No blow back

FF- Weak surface blow in 22 min, built to 1/4 inch, Final blow is 1/4 inch

FSI- No blow back

Rec	Feet of	WM	Spots of oil	%gas	%oil	%water	%mud
80					25	75	

Rec Total 80 BHT 140 Gravity — API RW 763 @ 45 °F Chlorides 18,000 ppm

(A) Initial Hydrostatic <u>2248</u>	☒ Test <u>1950</u>	T-On Location <u>18:00</u>
(B) First Initial Flow <u>35</u>	☒ Jars <u>300</u>	T-Started <u>20:40</u>
(C) First Final Flow <u>52</u>	☒ Safety Joint	T-Open <u>23:50</u>
(D) Initial Shut-In <u>1230</u>	☒ Circ Sub	T-Pulled <u>01:53</u>
(E) Second Initial Flow <u>57</u>	☐ Hourly Standby	T-Out <u>04:45</u>
(F) Second Final Flow <u>68</u>	☒ Mileage <u>116 RT</u> 174	Comments
(G) Final Shut-In <u>1206</u>	☐ Sampler	
(H) Final Hydrostatic <u>2113</u>	☐ Straddle	

Initial Open <u>30</u>	☐ Shale Packer	☒ EM Tool
Initial Shut-In <u>30</u>	☐ Extra Packer	☐ Ruined Shale Packer
Final Flow <u>30</u>	☐ Extra Recorder	☐ Ruined Packer
Final Shut-In <u>30</u>	☐ Day Standby	☐ Extra Copies
	☐ Accessibility	Sub Total <u>0</u>
	Sub Total <u>2424</u>	Total <u>2424</u>

Approved By _____ Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **68757**

Well Name & No. Kramer B Unit #1-17 Test No. 2 Date 5/2/22
Company Downing-Nelson Oil Company Inc Elevation 3325 KB 3314 GL
Address P.O. Box 1019 Hays, KS 67601
Co. Rep / Geo. Marc Downing Rig Duke #5
Location: Sec. 17 Twp 5S Rge. 36W Co. Rawlins State KS

Interval Tested 4560-4604 Zone Tested Pawnee
Anchor Length 44' Drill Pipe Run 4324 Mud Wt. 9.2
Top Packer Depth 4555 Drill Collars Run 235 Vis 49
Bottom Packer Depth 4560 Wt. Pipe Run _____ WL 8.8
Total Depth 4604 Chlorides 1000 ppm System LCM 6#

Blow Description IF-Weak surface blow, built to 1/4 inch in 10 min, Final blow died
ISI- No blow back

FF- No blow (Turned tool, then flushed tool to make sure no plugging going on)

FSI- No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud</u>				<u>100</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 133 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2264

(B) First Initial Flow 17

(C) First Final Flow 18

(D) Initial Shut-In 37

(E) Second Initial Flow 17

(F) Second Final Flow 18

(G) Final Shut-In 30

(H) Final Hydrostatic 2143

Initial Open 30

Initial Shut-In 30

Final Flow 30

Final Shut-In 30

☒ Test 1950

☒ Jars 300

☒ Safety Joint _____

☒ Circ Sub _____

☐ Hourly Standby _____

☒ Mileage 116 RT 174

☐ Sampler _____

☐ Straddle _____

☐ Shale Packer _____

☐ Extra Packer _____

☐ Extra Recorder _____

☐ Day Standby _____

☐ Accessibility _____

Sub Total 2424

T-On Location 06:45

T-Started 08:40

T-Open 11:52

T-Pulled 14:12

T-Out 17:00

Comments _____

☒ EM Tool _____

☐ Ruined Shale Packer _____

☐ Ruined Packer _____

☐ Extra Copies _____

Sub Total 0

Total 2424

MP/DST Disc't _____

Our Representative _____

Approved By _____

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TRIBOLITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **68758**

Well Name & No. Kramer B Unit #1-17 Test No. 3 Date 5/3/22
 Company Downing-Nelson Oil Company Inc Elevation 3325 KB 3314 GL
 Address PO Box 1019 Hays, KS 67601
 Co. Rep / Geo. Marc Downing Rig Duke #5
 Location: Sec. 17 Twp 5S Rge. 36W Co. Rawlins State KS

Interval Tested 4656-4684 Zone Tested Cherokee Lime
 Anchor Length 28' Drill Pipe Run 4417 Mud Wt. 9.1
 Top Packer Depth 4651 Drill Collars Run 235 Vis 52
 Bottom Packer Depth 4656 Wt. Pipe Run 8 WL 8
 Total Depth 4684 Chlorides 1000 ppm System LCM 6#

Blow Description IF - Fair Surface blow, built to 2 1/2 inches in 5 min, Final blow is 6 1/4 inches

ISI - No blow back

EF - Weak surface blow, built to 1 inch in 10 min, Final blow is 1 3/4 inch

FSI - No blow back

Rec <u>116</u>	Feet of <u>SG10CM</u>	10% gas	40% oil	% water	50% 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 116 BHT 136 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2287 ☒ Test 1950
 (B) First Initial Flow 40 ☒ Jars 300
 (C) First Final Flow 50 ☒ Safety Joint
 (D) Initial Shut-In 114 ☒ Circ Sub
 (E) Second Initial Flow 50 ☐ Hourly Standby
 (F) Second Final Flow 55 ☒ Mileage 116 RT 174+174
 (G) Final Shut-In 141 ☐ Sampler
 (H) Final Hydrostatic 2052 ☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility

T-On Location 06:30
 T-Started 07:40
 T-Open 10:49
 T-Pulled 13:22
 T-Out 16:15

Comments Picked up tools @ 19:15 on 5/4/22

Initial Open 30
 Initial Shut-In 45
 Final Flow 30
 Final Shut-In 45

Sub Total 2598

☒ EM Tool
☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
 Sub Total 0
 Total 2598

MP/DST Disc't

Approved By

Our Representative

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

