

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

**WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD
 Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	ACHESON 8
Doc ID	1670290

Tops

Name	Top	Datum
Anhydrite	1650'	(+545)
Topeka	3207'	(-1012)
Heebner	3409'	(-1214)
Toronto	3430'	(-1235)
Lansing	3454'	(-1259)
Base/KC	3677'	(-1482)
Arbuckle	3759'	(-1564)
L.T.D.	3841'	(-1646)

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 2872

Date	6-29-22	Sec.	24	Twp.	10	Range	21	County	Graham	State	Ks	On Location		Finish	7:30PM
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Location PALCO S TO CCRd 3W 1/2 N

Lease	<u>TOLEU-Acheson</u>		Well No.	<u>8</u>	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Contractor	<u>DISCOVERY</u>				Charge To	<u>J.O. FARMER</u>	
Type Job	<u>SURFACE</u>						
Hole Size	<u>12 1/4</u>	T.D.	<u>223</u>				
Csg.	<u>8-8</u>	Depth			Street		
Tbg. Size		Depth			City	State	
Tool		Depth			The above was done to satisfaction and supervision of owner agent or contractor.		
Cement Left in Csg.	<u>15</u>	Shoe Joint			Cement Amount Ordered	<u>1504 @ 9/20 3-2</u>	
Meas Line		Displace	<u>13 1/4</u>				

EQUIPMENT

Pumptrk	<u>17</u>	No.		Cementer		Common	<u>120</u>
				Helper	<u>DAVID</u>	Poz. Mix	<u>30</u>
Bulktrk		No.		Driver	<u>B-F II</u>	Gel.	<u>3</u>
Bulktrk		No.		Driver		Calcium	<u>6</u>

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
<u>RAN S Jts 8-8 Act e</u>	Sand
<u>Cemt w/ sbv</u>	Handling <u>159</u>
<u>pump plug w/ 13 1/4 bbls</u>	Mileage
<u>Cemt did CIRC.</u>	

FLOAT EQUIPMENT

	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down

Pumptrk Charge SURFACE
Mileage 41

X Signature Ryan Jarsh

Thanks

Tax	
Discount	
Total Charge	

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 2916

Date	7-9-02	Sec.	24	Twp.	10	Range	21	County	Graham	State	Ks	On Location	7:15 PM	
Lease	Acheson							Well No.	8					
Contractor	Discovery #4							Owner	E/Into					
Type Job	Plug							To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Hole Size	7 7/8"							T.D.	Charge To J.O. Farmer					
Csg.								Depth	Street					
Tbg. Size	4 1/2" D.P.							Depth	3739'					
Tool								Depth	City					
Cement Left in Csg.								Shoe Joint	State					
Meas Line	Displace H ₂ O/mud							Cement Amount Ordered	305 60/40 4% Gel 1/4" Flowseal					
EQUIPMENT														
Pumptrk	16	No.	Cementer		Helper		David		Common	183				
Bulktrk	19	No.	Driver		Driver		ROSS		Poz. Mix	122				
Bulktrk	21	No.	Driver		Driver		RICK		Gel.	11				
JOB SERVICES & REMARKS														
Remarks:	3739' - 505X												Hulls	
Rat Hole	1675' - 505X												Salt	
Mouse Hole	950' - 1005X												Flowseal	53#
Centralizers	275' - 505X												Kol-Seal	
Baskets	40' - 105X w/ plug												Mud CLR 48	
D/V or Port Collar	Rathole w/ 305X												CFL-117 or CD110 CAF 38	
	Mouse hole w/ 155X												Sand	
													Handling	3/6
													Mileage	
Cement d. of Circulate													FLOAT EQUIPMENT	
													Guide Shoe	Dry hole plug
													Centralizer	
													Baskets	
													AFU Inserts	
													Float Shoe	
													Latch Down	
													Pumptrk Charge	plug
													Mileage	41
Thanks													Tax	
<i>Ryan Jacobs</i>													Discount	
<i>Ryan Jacobs</i>													Total Charge	



Discovery Drilling

P.O. Box 763 • Hays, KS 67601 • OFFICE (785) 623-2920 • CELLULAR (785) 635-1511

DRILLER'S LOG

Operator: John O. Farmer, Inc. Lic# 5135 Contractor: Discovery Drilling Co., Inc. LIC#31548
379 West Wichita Avenue - P.O. Box 352 PO Box 763
Russell, KS 67665 + 0352 Hays, KS 67601

Lease: Acheson # 8 Location: 2310 FSL - 1345 FWL
E/2 NE NW SW
Section 24/ 10S/ 21W
Graham County, KS

Loggers Total Depth: 3843' API#15- 065-24,219-00-00
Rotary Total Depth: 3840' Elevation: 2187 GL - 2195 KB
Commenced: 6/29/2022 Completed: 7/9/2022
Casing: 8 5/8" @ 223'W/150sks Status: D & A
KCC Contact: Case Morris
Plugging Info: (1st Plug @ 3739'W/50sks)(2nd Plug @ 1675'W/50sks)
(3rd Plug @ 950'W/100sks)(4th Plug @ 275'W/50sks)
5th @ 40'W/10sks)(30sks In Mouse Hole)(15sks In Rat
Hole)(Total 305sks 60/40Poz 4%Gel-1/4# FS/sk-By
Quality Oilwell Cementing)(Completed @ 7:15PM 7/9/22'

DEPTHS & FORMATIONS (All from KB)

Surface, Sand & Shale	<u>0'</u>	Shale	<u>1691'</u>
Dakota Sand	<u>912'</u>	Shale & Lime	<u>2306'</u>
Shale	<u>976'</u>	Shale	<u>2666'</u>
Cedar Hill Sand	<u>1071'</u>	Shale & Lime	<u>3038'</u>
Red Bed Shale	<u>1318'</u>	Lime & Shale	<u>3414'</u>
Anhydrite	<u>1647'</u>	RTD	<u>3840'</u>
Base Anhydrite	<u>1691'</u>		

STATE OF KANSAS)
) ss
COUNTY OF ELLIS)

Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

Thomas H. Alm

Subscribed and sworn to before me on 7-15-2022

My Commission expires: 6-28-2026

(Place stamp or seal below)

Notary Public





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer, Inc.

24-10s-21w Graham,KS

370 W Wichita Ave
Russell, KS 67665

Acheson #8

Job Ticket: 59521

DST#: 1

ATTN: Austi9n Klaus

Test Start: 2022.07.07 @ 10:30:00

GENERAL INFORMATION:

Formation: **L/KC I&J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:19:15

Time Test Ended: 16:41:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Terrance

Unit No: 66

Interval: 3598.00 ft (KB) To 3640.00 ft (KB) (TVD)

Total Depth: 3640.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2195.00 ft (KB)

2187.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8368 Inside

Press@RunDepth: 46.81 psig @ 3599.00 ft (KB)

Start Date: 2022.07.07

End Date:

2022.07.07

Start Time: 10:30:05

End Time:

16:41:14

Capacity: 8000.00 psig

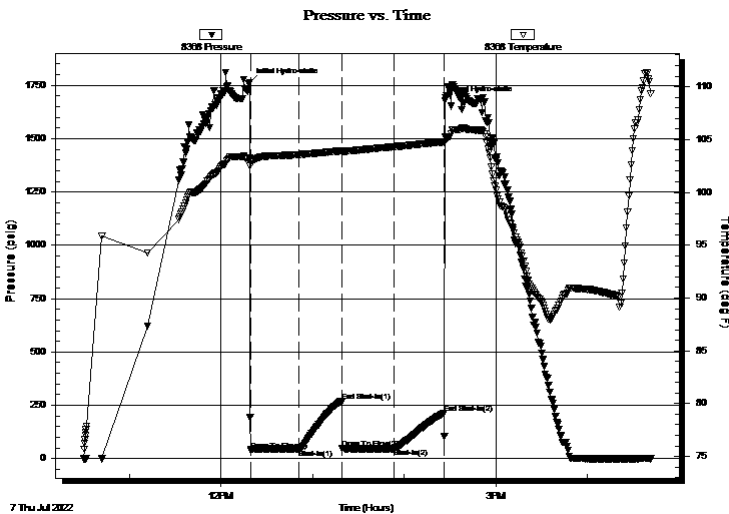
Last Calib.: 1899.12.30

Time On Btm: 2022.07.07 @ 12:18:45

Time Off Btm: 2022.07.07 @ 14:26:30

TEST COMMENT: IF-30-4 Inches died back to surface blow
IS-30-No return
FF-30-No blow
FS-30-No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1762.38	103.24	Initial Hydro-static
1	40.81	102.84	Open To Flow (1)
33	44.47	103.57	Shut-In(1)
61	267.00	103.93	End Shut-In(1)
61	45.91	103.85	Open To Flow (2)
95	46.81	104.31	Shut-In(2)
128	213.71	104.78	End Shut-In(2)
128	1679.65	105.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	osm	0.35

Gas Rates

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



DRILL STEM TEST REPORT

John O Farmer, Inc.

24-10s-21w Graham, KS

370 W Wichita Ave
Russell, KS 67665

Acheson #8

Job Ticket: 59521

DST#: 1

ATTN: Austi9n Klaus

Test Start: 2022.07.07 @ 10:30:00

GENERAL INFORMATION:

Formation: **L/KC I&J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:19:15

Time Test Ended: 16:41:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Terrance

Unit No: 66

Interval: 3598.00 ft (KB) To 3640.00 ft (KB) (TVD)

Reference Elevations: 2195.00 ft (KB)

Total Depth: 3640.00 ft (KB) (TVD)

2187.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8320 Outside

Press@RunDepth: psig @ 3599.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.07.07

End Date:

2022.07.07

Last Calib.:

1899.12.30

Start Time: 10:30:05

End Time:

16:40:59

Time On Btm:

Time Off Btm:

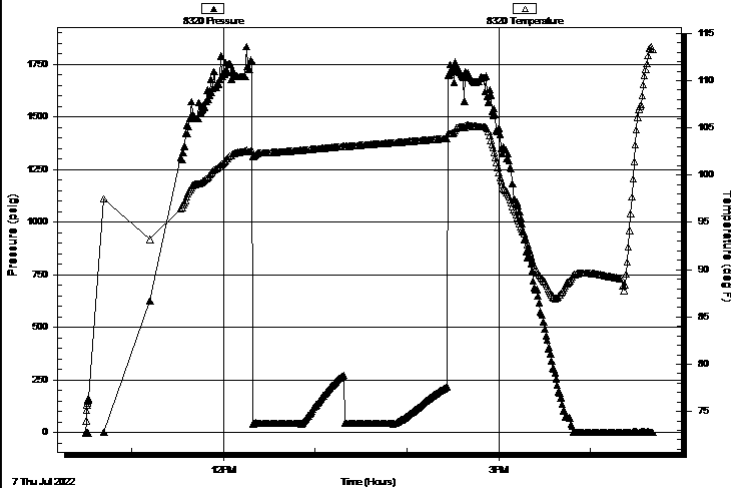
TEST COMMENT: IF-30-4 Inches died back to surface blow

IS-30-No return

FF-30-No blow

FS-30-No return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	osm	0.35

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer, Inc.

24-10s-21w Graham,KS

370 W Wichita Ave
Russell , KS 67665

Acheson #8

Job Ticket: 59521

DST#: 1

ATTN: Austi9n Klaus

Test Start: 2022.07.07 @ 10:30:00

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	osm	0.347

Total Length: 45.00 ft Total Volume: 0.347 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

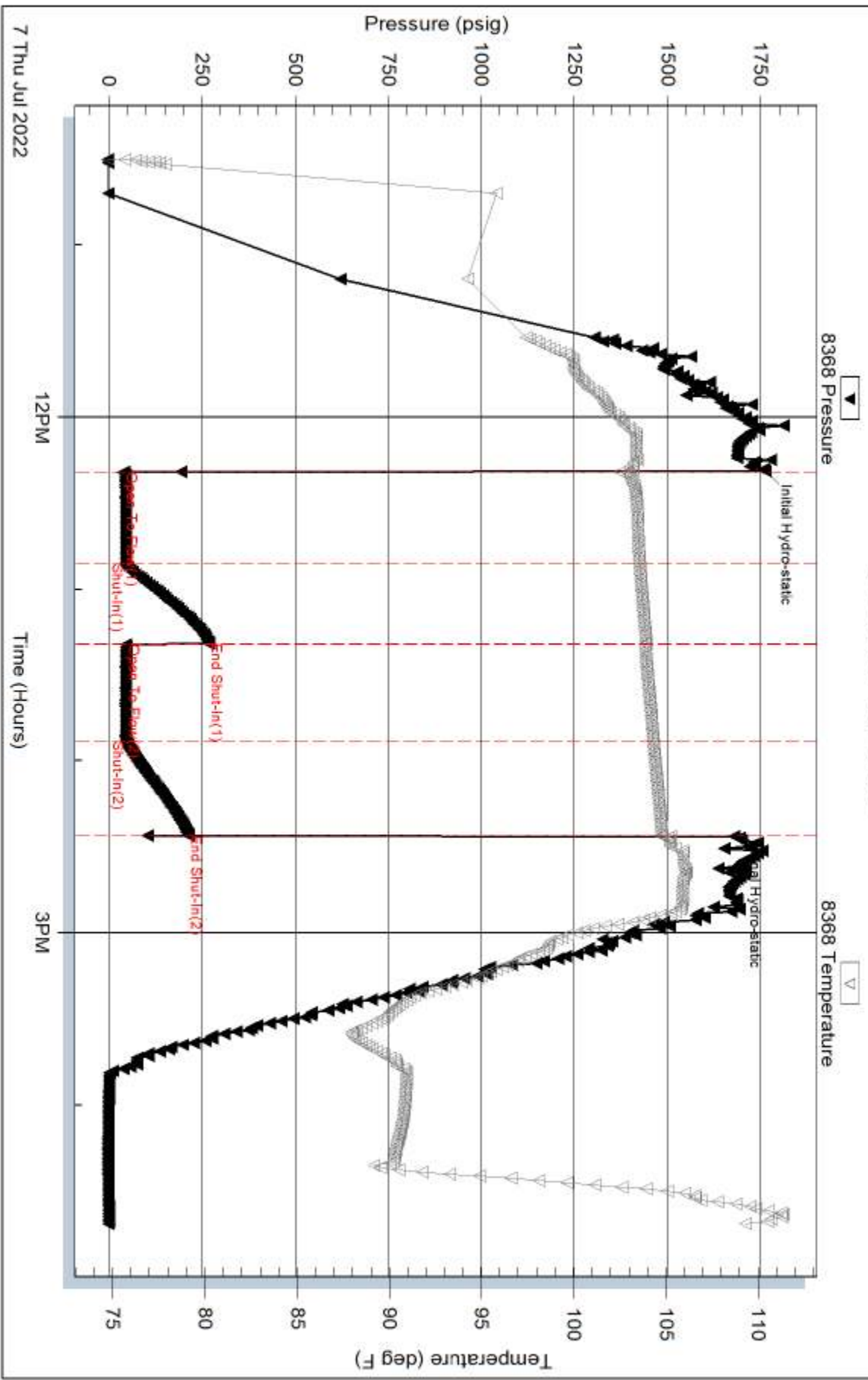
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

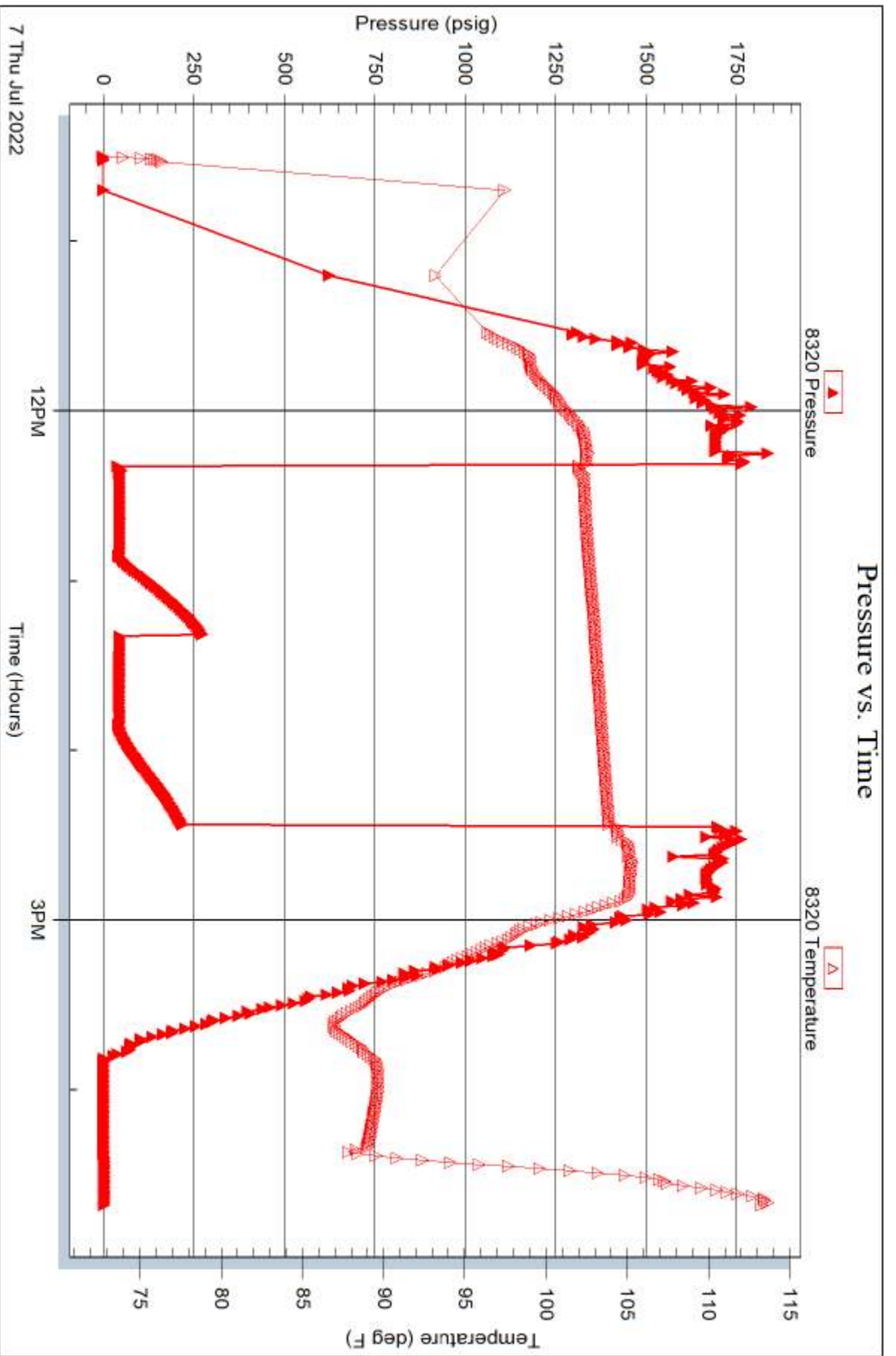


Serial #: 8320

Outside John O Farmer, Inc.

Acheson #8

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 59521

Printed: 2022.07.07 @ 17:40:29



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer, Inc.

24 10 21w

370 W Wichita Ave
Russell, KS 67665

Jolin-Acheson #8

Job Ticket: 59522

DST#: 2

ATTN: Austin Klaus

Test Start: 2022.07.08 @ 07:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:54:00

Time Test Ended: 12:49:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Terrance

Unit No: 66

Interval: 3709.00 ft (KB) To 3764.00 ft (KB) (TVD)

Reference Elevations: 2195.00 ft (KB)

Total Depth: 3640.00 ft (KB) (TVD)

2187.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8320 Outside

Press@RunDepth: 48.56 psig @ 3710.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.07.08

End Date:

2022.07.08

Last Calib.: 2022.07.08

Start Time: 07:00:05

End Time:

12:49:14

Time On Btm: 2022.07.08 @ 08:53:45

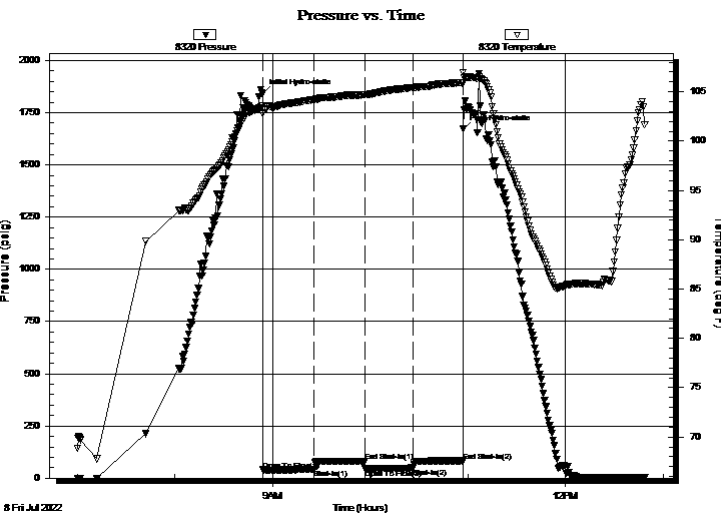
Time Off Btm: 2022.07.08 @ 10:57:15

TEST COMMENT: IF-30-2 1/2 Inches died back to 1 1/2

IS-30- No return

FF-30-Surface blow

FS-30-No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1840.27	103.62	Initial Hydro-static
1	39.56	102.80	Open To Flow (1)
32	42.67	104.23	Shut-In(1)
63	81.51	104.72	End Shut-In(1)
64	44.31	104.71	Open To Flow (2)
93	48.56	105.44	Shut-In(2)
124	83.16	105.88	End Shut-In(2)
124	1670.44	106.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	osm	0.63

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

John O Farmer, Inc.

24 10 21w

370 W Wichita Ave
Russell, KS 67665

Jolin-Acheson #8

Job Ticket: 59522

DST#: 2

ATTN: Austin Klaus

Test Start: 2022.07.08 @ 07:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:54:00

Time Test Ended: 12:49:15

Interval: 3709.00 ft (KB) To 3764.00 ft (KB) (TVD)

Total Depth: 3640.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Reset)

Tester: Terrance

Unit No: 66

Reference Elevations: 2195.00 ft (KB)

2187.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8368 Inside

Press@RunDepth: psig @ 3710.00 ft (KB)

Start Date: 2022.07.08

End Date:

2022.07.08

Start Time: 07:00:05

End Time:

12:49:29

Capacity: 8000.00 psig

Last Calib.:

2022.07.08

Time On Btm:

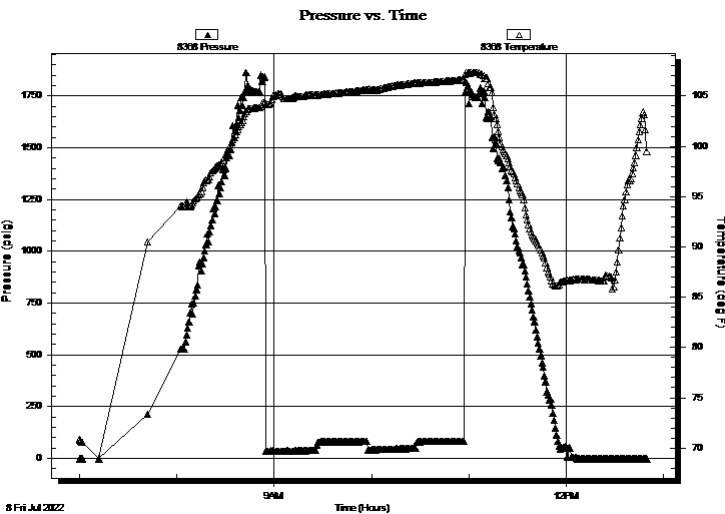
Time Off Btm:

TEST COMMENT: IF-30-2 1/2 Inches died back to 1 1/2

IS-30- No return

FF-30-Surface blow

FS-30-No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
65.00	osm	0.63

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer, Inc.

24 10 21w

370 W Wichita Ave
Russell , KS 67665

Jolin-Acheson #8

Job Ticket: 59522

DST#: 2

ATTN: Austin Klaus

Test Start: 2022.07.08 @ 07:00:00

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	osm	0.627

Total Length: 65.00 ft Total Volume: 0.627 bbl

Num Fluid Samples: 0

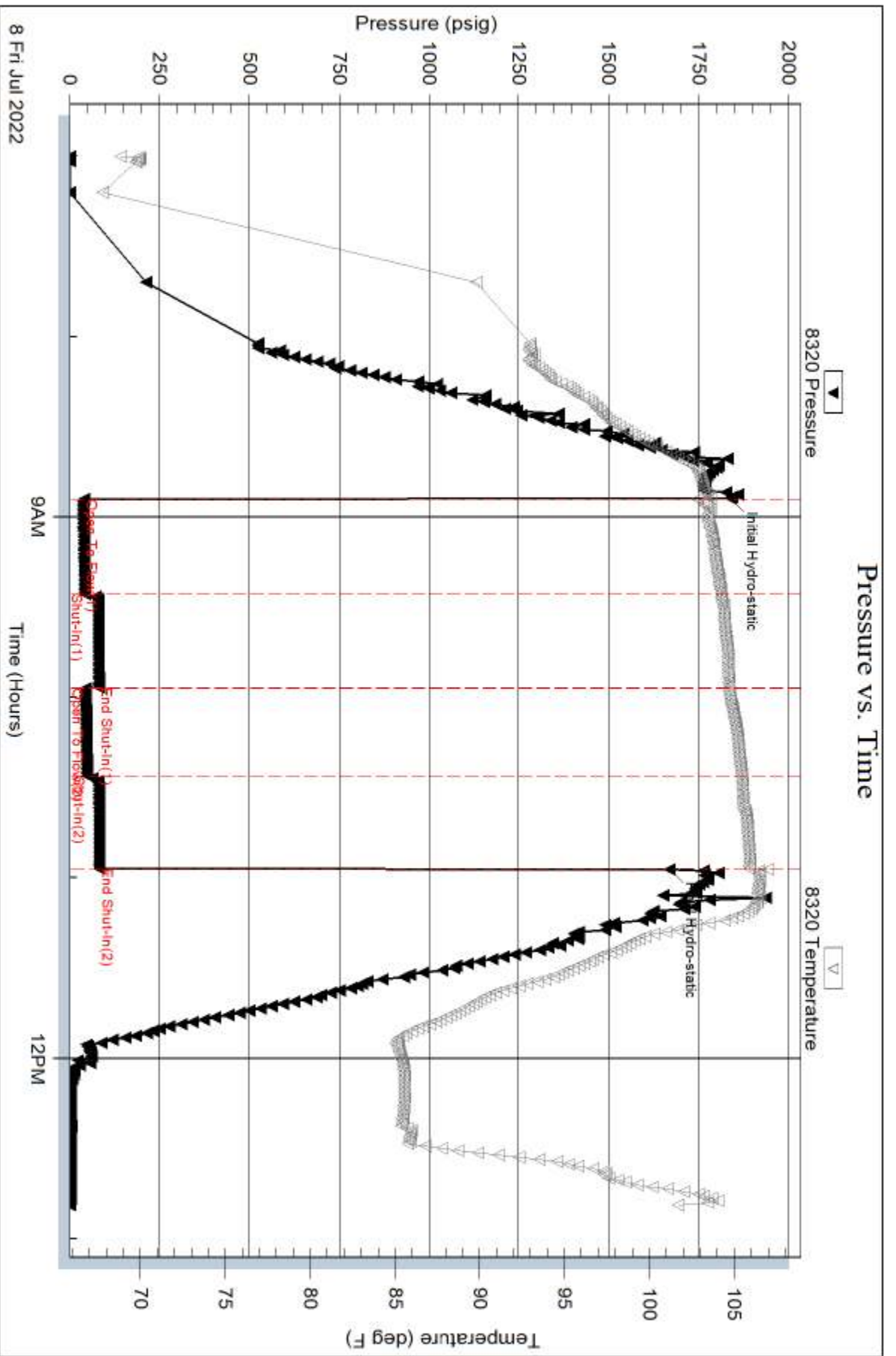
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



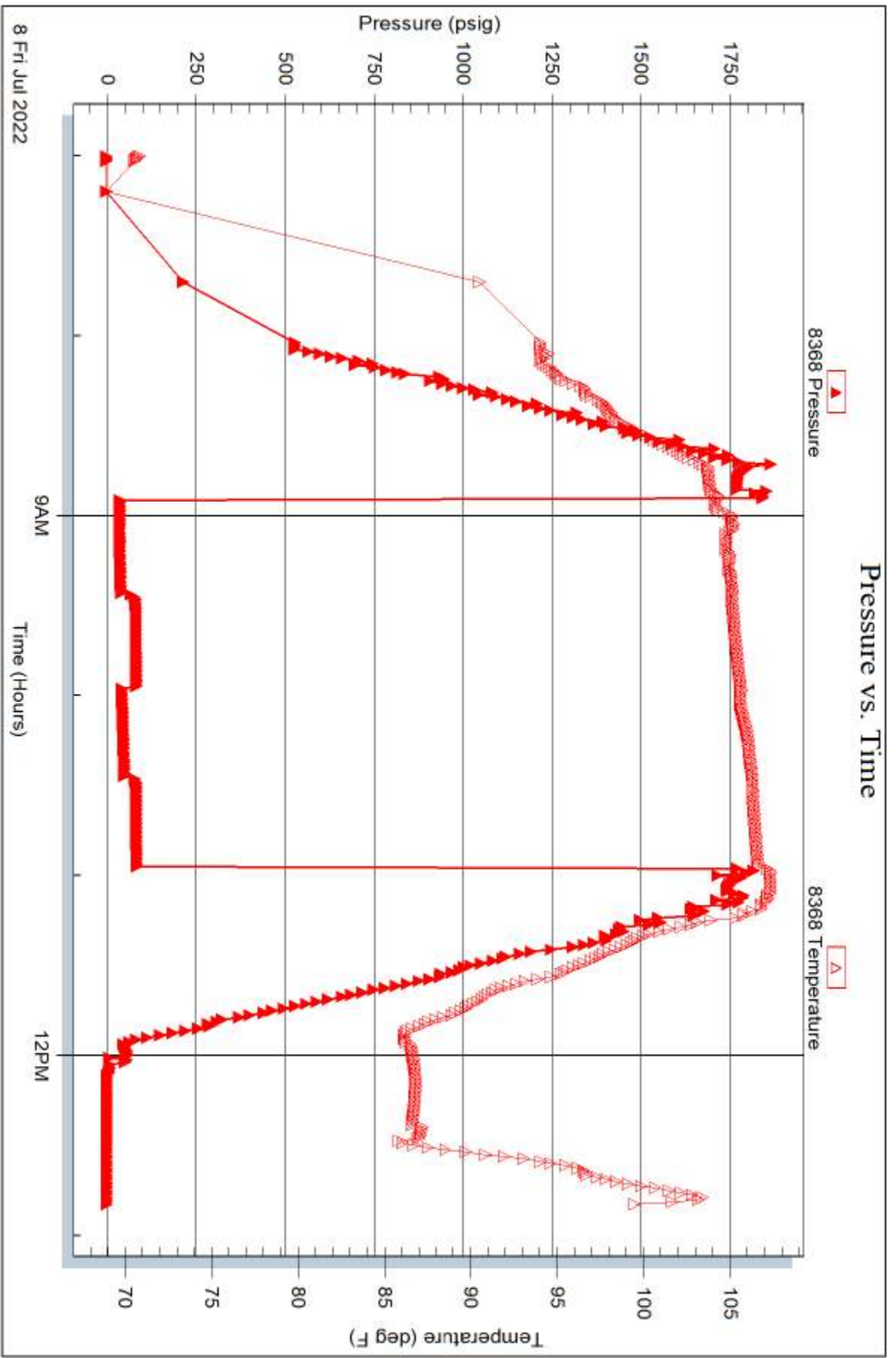
Serial #: 8368

Inside

John O Farmer, Inc.

John-Acheson #8

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 59522

Printed: 2022.07.08 @ 14:53:18



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer, Inc.

24 10 21w

370 W Wichita Ave
Russell, KS 67665

Acheson #8

Job Ticket: 59523

DST#: 3

ATTN: Austi9n Klaus

Test Start: 2022.07.09 @ 04:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:00:15

Time Test Ended: 11:00:30

Test Type: Conventional Straddle (Reset)

Tester: Terrance

Unit No: 66

Interval: 3765.00 ft (KB) To 3790.00 ft (KB) (TVD)

Reference Elevations: 2195.00 ft (KB)

Total Depth: 3640.00 ft (KB) (TVD)

2187.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8368

Inside

Press@RunDepth: 239.32 psig @ 3771.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.07.09

End Date:

2022.07.09

Last Calib.:

2022.07.09

Start Time: 04:45:05

End Time:

11:00:29

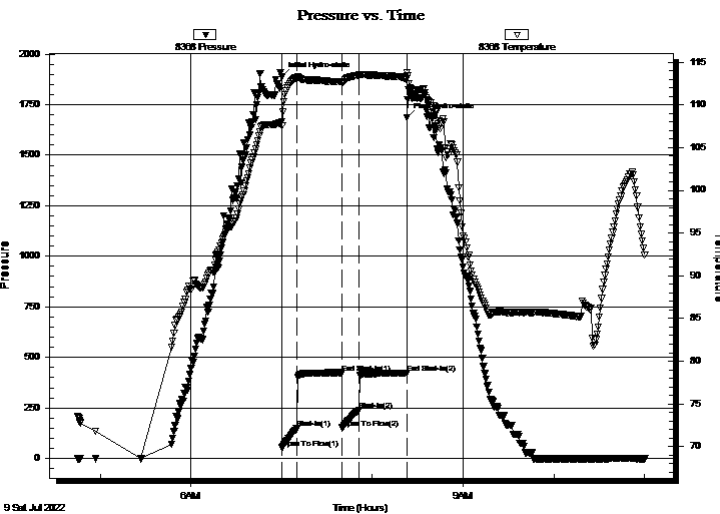
Time On Btm:

2022.07.09 @ 07:00:00

Time Off Btm:

2022.07.09 @ 08:22:45

TEST COMMENT: IF-10- Bob in 5 min
IS-30-No return
FF-10-Bob in 6 min
FS-30-No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1886.54	108.05	Initial Hydro-static
1	52.74	107.59	Open To Flow (1)
10	147.07	113.18	Shut-In(1)
40	423.53	112.68	End Shut-In(1)
40	150.98	112.59	Open To Flow (2)
51	239.32	113.47	Shut-In(2)
83	421.72	113.11	End Shut-In(2)
83	1686.86	113.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	10%OIL 40%WATER 50%MUD	0.56
60.00	20%OIL 50%WATER 30%MUD	0.84
120.00	10% OIL 40%WATER 50%MUD	1.67
310.00	100%WATER	4.33

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer, Inc.

24 10 21w

370 W Wichita Ave
Russell, KS 67665

Acheson #8

Job Ticket: 59523

DST#: 3

ATTN: Austi9n Klaus

Test Start: 2022.07.09 @ 04:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:00:15

Time Test Ended: 11:00:30

Interval: 3765.00 ft (KB) To 3790.00 ft (KB) (TVD)

Total Depth: 3640.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Test Type: Conventional Straddle (Reset)

Tester: Terrance

Unit No: 66

Reference Elevations: 2195.00 ft (KB)

2187.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8320 Outside

Press@RunDepth: psig @ 3771.00 ft (KB)

Start Date: 2022.07.09 End Date: 2022.07.09

Start Time: 04:45:05 End Time: 11:00:14

Capacity: 8000.00 psig

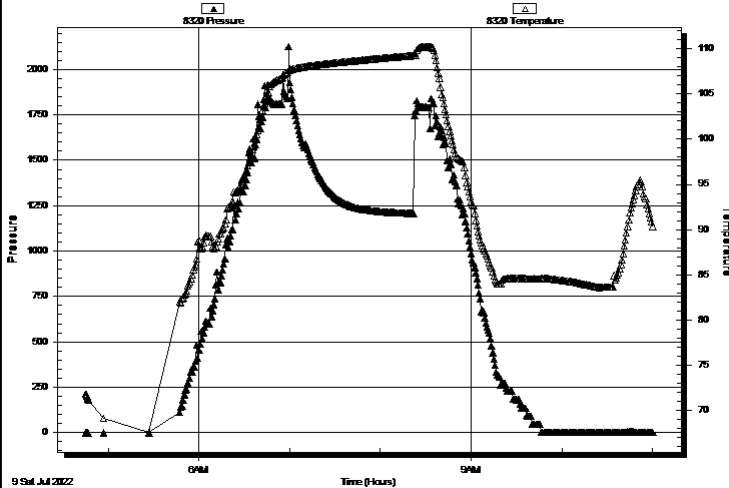
Last Calib.: 1899.12.30

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-10- Bob in 5 min
IS-30-No return
FF-10-Bob in 6 min
FS-30-No return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	10%OIL 40%WATER 50%MUD	0.56
60.00	20%OIL 50%WATER 30%MUD	0.84
120.00	10% OIL 40%WATER 50%MUD	1.67
310.00	100%WATER	4.33

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer, Inc.

370 W Wichita Ave
Russell, KS 67665

ATTN: Austi9n Klaus

24 10 21w

Acheson #8

Job Ticket: 59523

DST#: 3

Test Start: 2022.07.09 @ 04:45:00

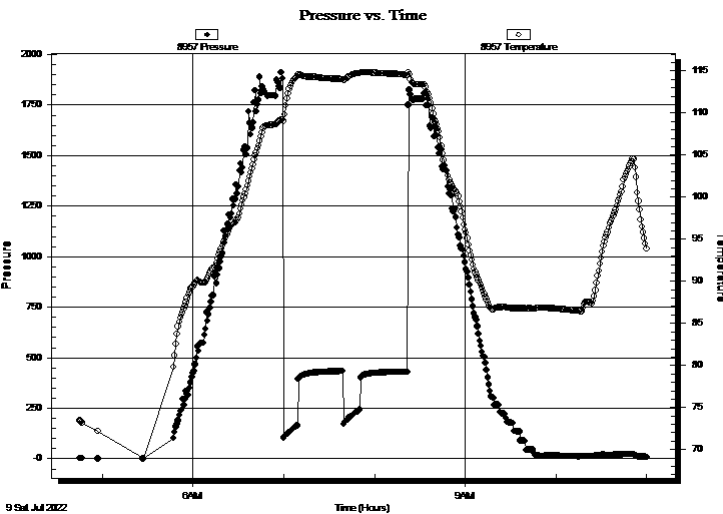
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:00:15
 Time Test Ended: 11:00:30
Interval: 3765.00 ft (KB) To 3790.00 ft (KB) (TVD)
 Total Depth: 3640.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Straddle (Reset)
 Tester: Terrance
 Unit No: 66
 Reference Elevations: 2195.00 ft (KB)
 2187.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8957

Press@RunDepth: psig @ ft (KB)
 Capacity: 8000.00 psig
 Start Date: 2022.07.09 End Date: 2022.07.09 Last Calib.: 2022.07.09
 Start Time: 04:45:01 End Time: 11:00:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF-10- Bob in 5 min
 IS-30-No return
 FF-10-Bob in 6 min
 FS-30-No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	10%OIL 40%WATER 50%MUD	0.56
60.00	20%OIL 50%WATER 30%MUD	0.84
120.00	10% OIL 40%WATER 50%MUD	1.67
310.00	100%WATER	4.33

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer, Inc.

24 10 21w

370 W Wichita Ave
Russell , KS 67665

Acheson #8

Job Ticket: 59523

DST#: 3

ATTN: Austi9n Klaus

Test Start: 2022.07.09 @ 04:45:00

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:

30000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
60.00	10%OIL 40%WATER 50%MUD	0.557
60.00	20%OIL 50%WATER 30%MUD	0.837
120.00	10% OIL 40%WATER 50%MUD	1.674
310.00	100%WATER	4.326

Total Length: 550.00 ft

Total Volume: 7.394 bbf

Num Fluid Samples: 0

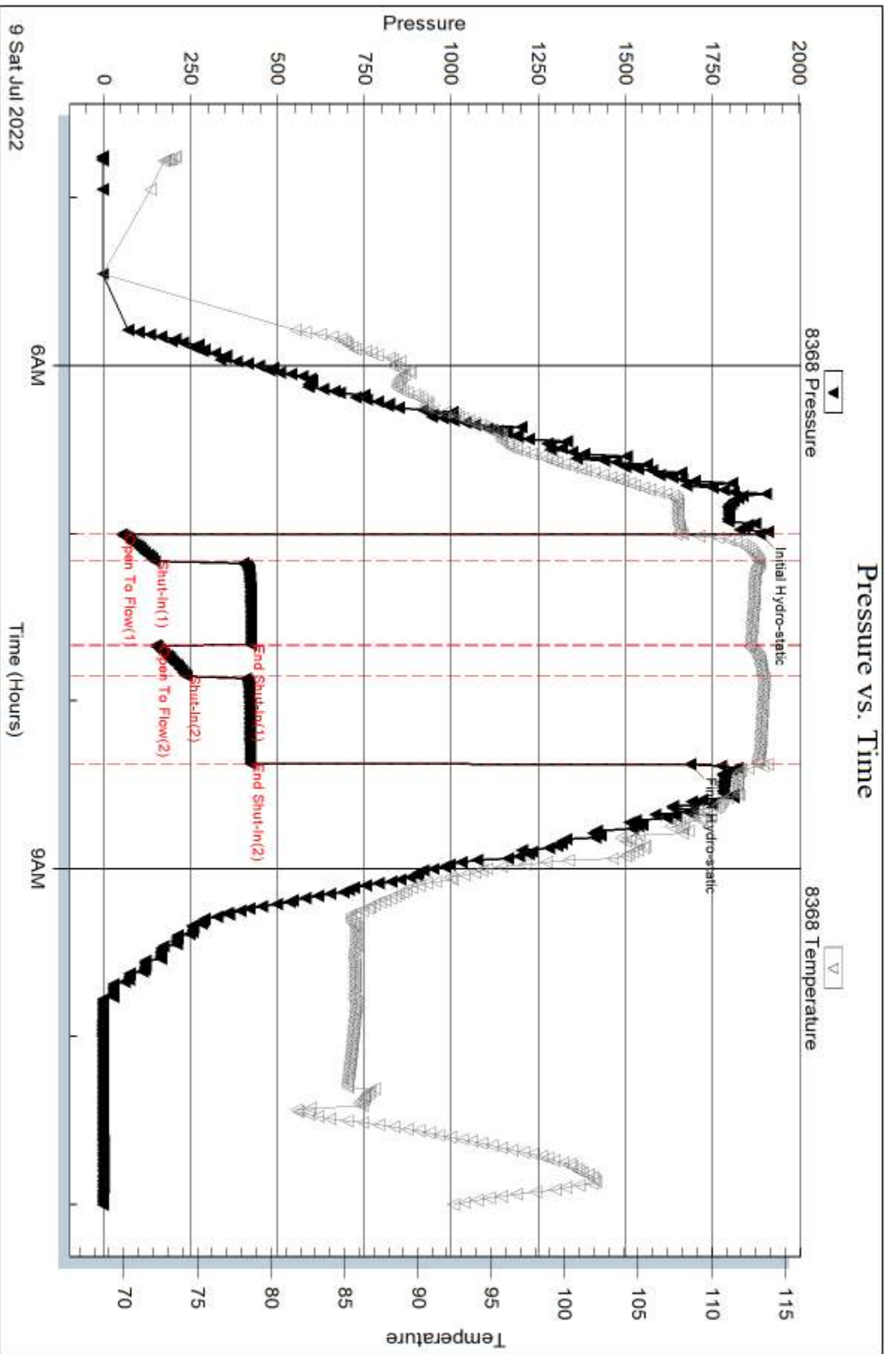
Num Gas Bombs: 0

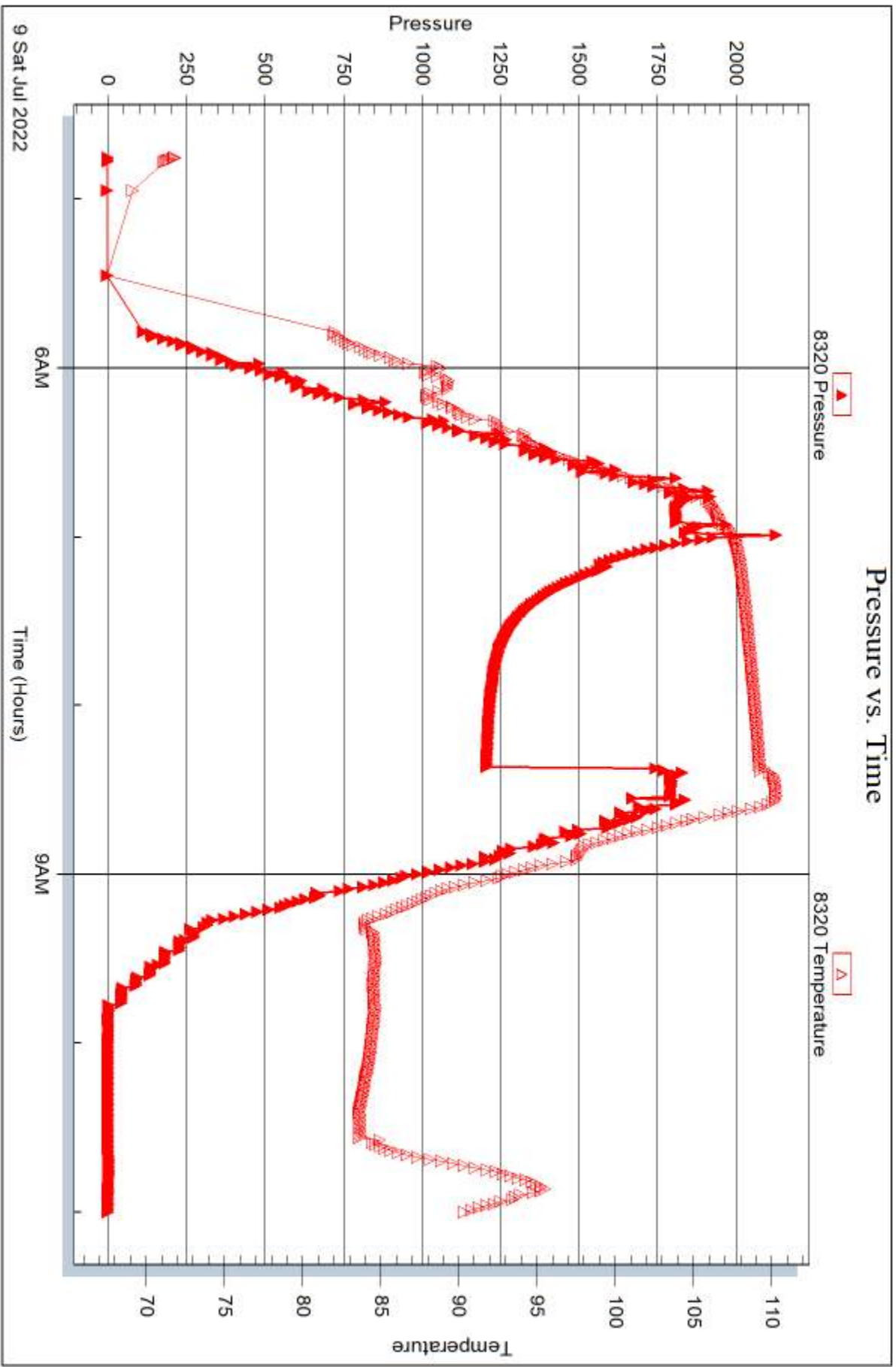
Serial #:

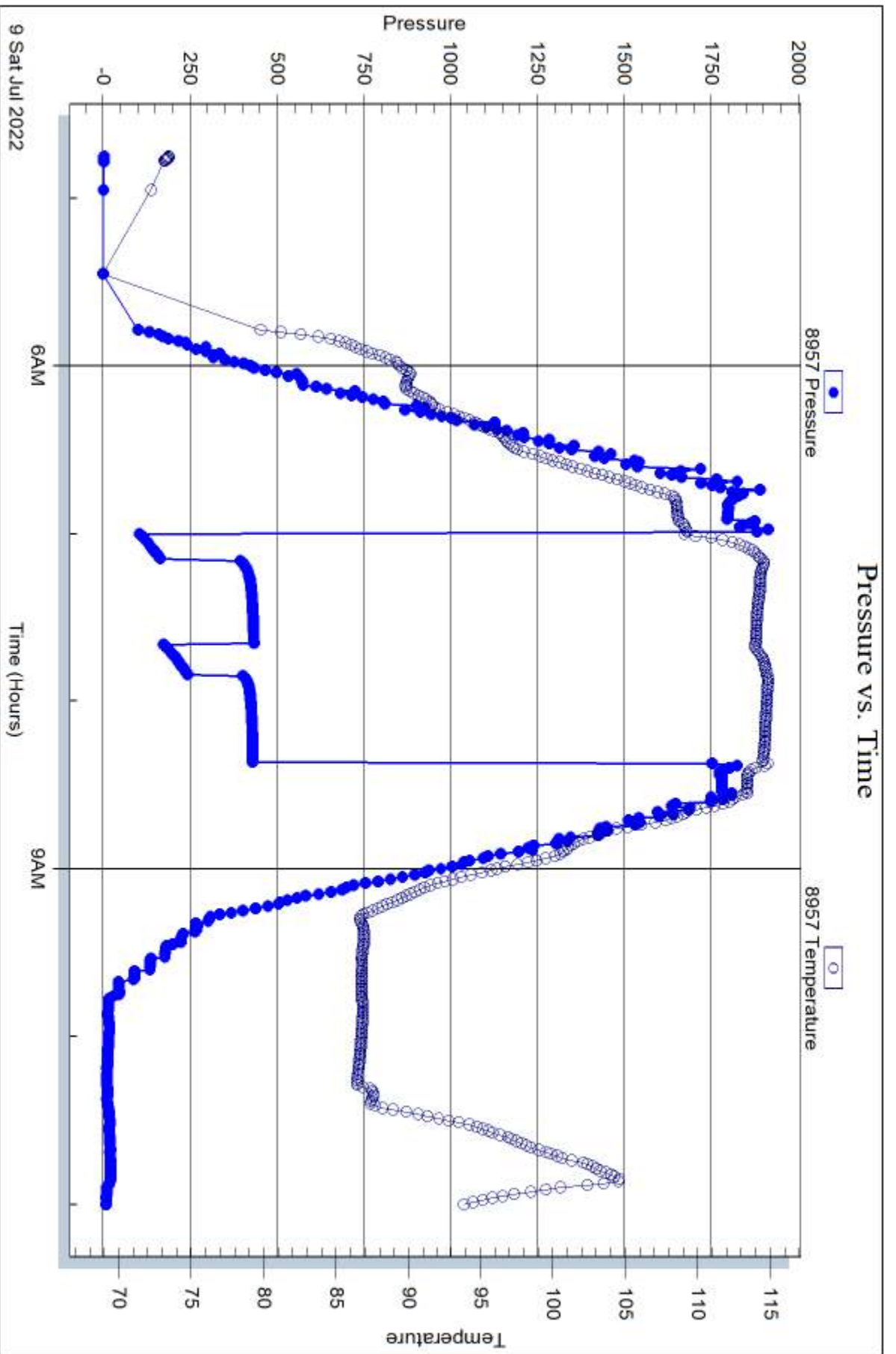
Laboratory Name:

Laboratory Location:

Recovery Comments:









AUSTIN B. KLAUS



Cell 785.650.3629
Work 785.483.3145
Ext 225

PO BOX 352
Russell, KS 67665
austin.klaus@johnofarmer.com

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

Well Name: Jolen-Acheson #8
API: 15-065-24219-0000
Location: Graham County
License Number:
Spud Date: 6/29/2022
Surface Coordinates: Section 24 - Township 10 South - Range 21 West
2,310' FSL & 1,295' FWL
Bottom Hole Coordinates: Vertical well w/ minimal deviation, same as above
Ground Elevation (ft): 2,187' **K.B. Elevation (ft):** 2,195'
Logged Interval (ft): 3,100 **To:** RTD **Total Depth (ft):** 3,840
Formation: LKC-Arbuckle
Type of Drilling Fluid: Chemical (Andy's Mud & Chemical Co.)

Region: Kansas
Drilling Completed: 7/8/2022

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

OPERATOR

Company: John O. Farmer, Inc.
Address: 370 W. Wichita Ave.
Russell, KS 67665

Comments

The Jolen-Acheson #8 well was drilled by Discovery Drilling Rig #4 (Tool Pusher: Ryan Gaschler).

The location for the Jolen-Acheson #8 was discovered via 3D seismic survey. Drill time was recorded, and rock samples were gathered and evaluated from 3,150' - 3,840'. Oil shows were encountered in the Lansing I, J, K, and Arbuckle. Structurally, the Lansing top was picked 5' low to the comparison well, Acheson #3 (SW-NE-SW). Structure thickened and the Arbuckle top was picked 8' low to the comparison well. A bottom-hole drill stem test was conducted over the Lansing I - J zones, yielding 45' Oil Spotted Mud. A second bottom-hole test was conducted over the Arbuckle 'A' section, which recovered 65' Oil Spotted Mud. Upon completion of the electric logs, a straddle test was run to evaluate the Arbuckle 'B' & 'C' sections. This test recovered 550' total fluid (see complete results below). After comprehensive evaluation of all oil shows, drill stem test results, & electric logs, the decision was made to plug and abandon the Jolen-Acheson #8 on 7/9/2022.

ROCK TYPES

Anhy
 Bent
 Brec
 Cht

Clyst
 Coal
 Congl
 Dol

Gyp
 Igne
 Lmst
 Meta

Mrlst
 Salt
 Shale
 Shcol

Shgy
 Sltst
 Ss
 Till

OTHER SYMBOLS

POROSITY
 Earthy
 Fenest
 Fracture
 Inter
 Moldic
 Organic
 Pinpoint

Vuggy

SORTING
 Well
 Moderate
 Poor

ROUNDING
 Rounded
 Subrnd
 Subang
 Angular

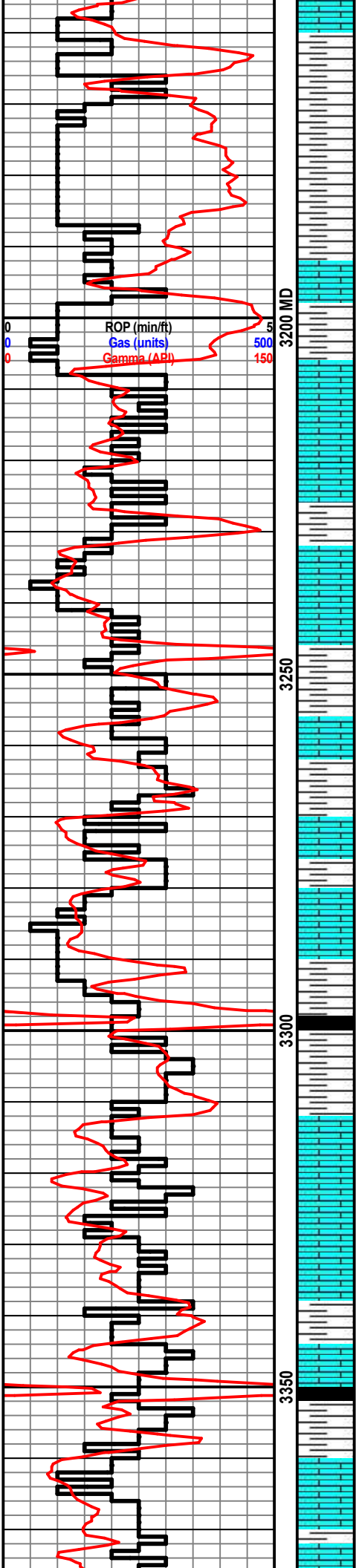
Spotted
 Ques
 Dead

EVENT
 Rft
 Sidewall

INTERVAL
 Core
 Dst

OIL SHOW
 Even

Curve Track 1	MD	Lithology	Oil Shows	Geological Descriptions	DST/Mud/Survey																											
ROP (min/ft) ——— Gas (units) - - - - - Gamma (API) ———																																
0 ROP (min/ft) 5 0 Gas (units) 500 0 Gamma (API) 150																																
6/29/2022 MIRT Spud @ 2pm				<p><i>The open-hole logging was performed by Mr. Casey Patterson with Gemini Wireline, LLC (Hays, KS). Logs included: Compensated Density Neutron, Dual Induction, and Microresistivity.</i></p> <p><i>Formation tops and datums from the open-hole logs include the following:</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Formation</th> <th>E-Log</th> <th>Datum</th> </tr> </thead> <tbody> <tr><td>Anhydrite</td><td>1650</td><td>545</td></tr> <tr><td>Topeka</td><td>3207</td><td>-1012</td></tr> <tr><td>Heebner</td><td>3409</td><td>-1214</td></tr> <tr><td>Toronto</td><td>3430</td><td>-1235</td></tr> <tr><td>Lansing</td><td>3454</td><td>-1259</td></tr> <tr><td>B/KC</td><td>3677</td><td>-1482</td></tr> <tr><td>Arbuckle</td><td>3759</td><td>-1564</td></tr> <tr><td>LTD</td><td>3841</td><td>-1646</td></tr> </tbody> </table>	Formation	E-Log	Datum	Anhydrite	1650	545	Topeka	3207	-1012	Heebner	3409	-1214	Toronto	3430	-1235	Lansing	3454	-1259	B/KC	3677	-1482	Arbuckle	3759	-1564	LTD	3841	-1646	<p>Mud Engineer: Kirk Werth</p> <p>Tester: Terry Wickham</p>
Formation	E-Log	Datum																														
Anhydrite	1650	545																														
Topeka	3207	-1012																														
Heebner	3409	-1214																														
Toronto	3430	-1235																														
Lansing	3454	-1259																														
B/KC	3677	-1482																														
Arbuckle	3759	-1564																														
LTD	3841	-1646																														
6/30/2022 692', drilling	3050																															
7/1/2022 2,430', working on torque convertor																																
7/5/2022 2,475', drilling																																
7/6/2022 3,115', drilling																																
7/7/2022 3,640', circ to clean hole																																
7/8/2022 3,764', DST #2																																
7/9/2022 3,840', DST #3																																
	3100																															
	3150																															



Sh: lt-drk gry

Ls: tan-gry, fn-sub xln, scat foss

Topeka 3208' (-1013)

Ls: tan-lt gry, fn-sub xln, mostly DNS, scat foss

Sh: lt-drk gry

Ls: off wh-tan, fn xln, foss, scat int part & int foss porosity, NSFO

Sh: lt gry

Sh: ala

Ls: tan-gry, fn-sub xln, DNS

Ls: off wh-tan, fn xln, fair int part & vuggy porosity, scat lt brn stn, SSFO when brkn, weak odor

Sh: drk gry

Ls: tan-gry, fn-sub xln, DNS, scat foss

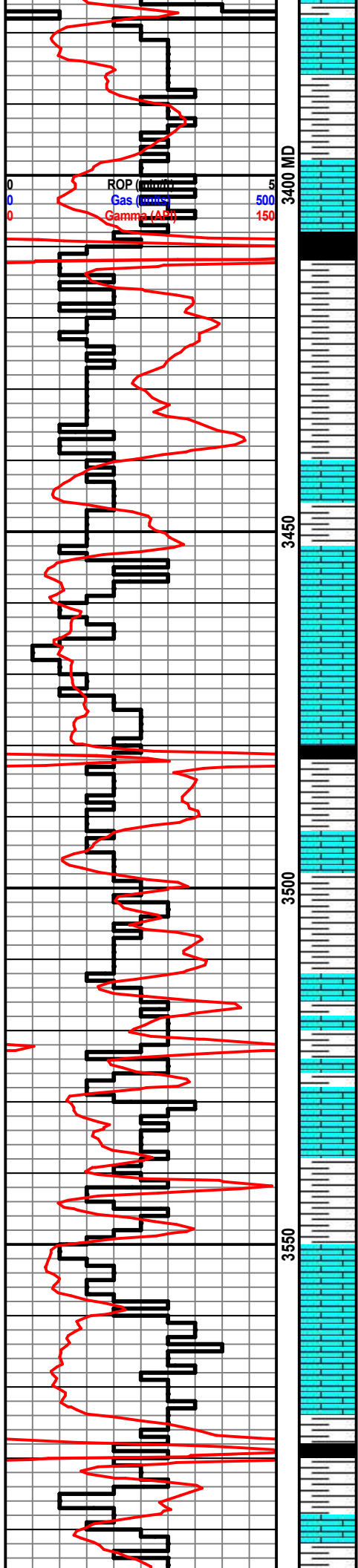
Ls: off wh-tan, fn xln, poor-fair int part porosity, scat chert

Sh: drk gry-blk

Ls: tan-lt gry, fn xln, poor int xln porosity, scat chert, chalky

Ls: tan-gry, fn-sub xln, DNS, chalky

Wt: 8.7
Vis: 48



Ls: off wh-tan, fn xln, scat int part porosity, NSFO

Sh: lt-drk gry

Heebner 3410' (-1215)

Sh: blk, carb, fissile

Sh: lt-drk gry-bm

Toronto 3439' (-1244)

Ls: off wh-tan, fn xln, poor int xln porosity, NSFO, scat pyrite

Lansing 3453' (-1258)

Ls: off wh-tan, fn-sub xln, DNS

Ls: off wh-tan, fn xln, scat foss, fair int xln & scat vuggy porosity, lt-fair oil strn in porosity, VSSFO, weak odor

Ls: off wh, fn-sub xln, DNS, no visible porosity, NSFO, chert, scat pyrite

Sh: lt-drk gry-gm

Ls: off wh-tan, fn xln, scat fair int xln porosity, lt-fair oil strn in porosity, VSSFO, weak odor

Sh: lt-drk gry

Ls: tan-lt gry, fn-sub xln, DNS, NSFO, scat chert

Sh: lt-drk gry

Ls: off wh-tan, fn xln, foss, poor int xln & few pcs fair int foss porosity, lt oil strn in porosity, weak odor

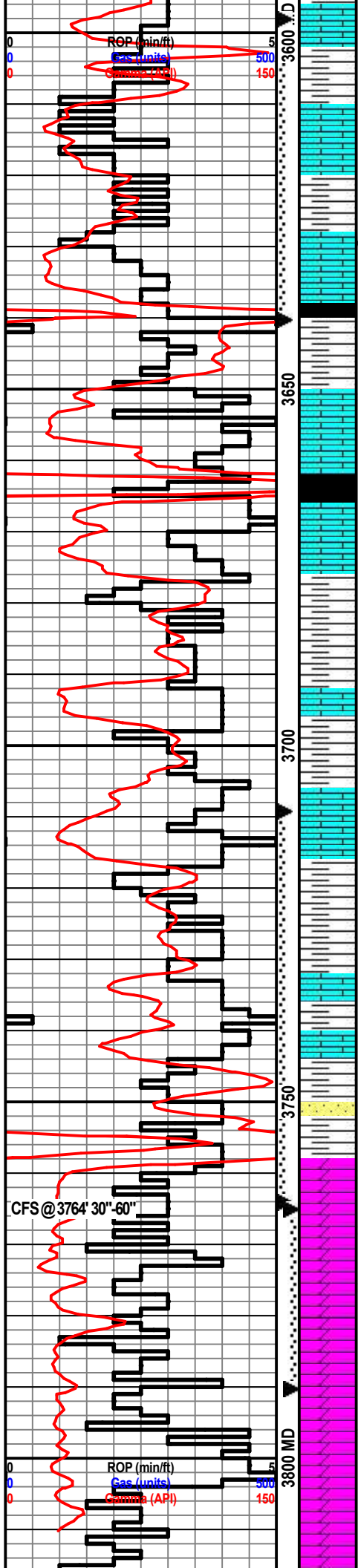
Sh: drk gry

Ls: off wh-tan, fn xln, fair int xln porosity, scat lt oil strn, VSSFO in cup, fair odor

Ls: off wh-tan, fn xln, mostly DNS, chert-off wh

Sh: drk gry-blk

Ls: tan-lt gry, fn xln, mostly DNS, chert-off wh



Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor int xln porosity, few pcs w fair int xln & int part porosity, fair oil stn, S-FSFO in cup, fair odor

Sh: lt-drk gry

Ls: off wh-tan, fn xln, scat foss, poor-fair int xln porosity, scat-fair oil stn, SSFO, fair odor

Sh: drk gry-blk

Ls: off wh-tan, fn xln, poor, few pcs fair int xln porosity, fair oil stn-sat, SSFO, weak odor

Sh: drk gry-blk

Ls: tan-lt gry, fn-sub xln, DNS, NSFO, scat chert-off wh

B/KC 3678' (-1483)

Sh: lt-drk gry-rd

Ls: tan-gry, fn-sub xln, DNS, scat chert

Marmaton 3703' (-1508)

Ls: tan-gry, fn xln, scat foss, poor int xln porosity, few rxs fair int xln porosity, NSFO, scat chert

Sh: lt gry-rd/bm

Sh: ala

Cong: lt gry, fn-sub xln, DNS, scat sh: drk gry-bm

Sh: drk gm/turq, SS: qtz, fn gm, semi md, fairly well cemented, fair int gm porosity

Arbuckle 3756' (-1561)

Dolo: tan-bm, fn-crs xln, good rhomb, good int xln porosity, good sat, S-FSFO, fair odor

Dolo: off wh-tan-bm, fn-crs xln, good rhomb, good int xln porosity, fair-good oil sat, S-FSFO, fair-good odor

Dolo: off wh-tan-bm, fn-md xln, fair rhmb, fair int xln porosity, good oil sat, SSFO, fair odor, scat sh: drk gry-bm

Dolo: off wh-tan-bm, fn-vry fn xln, fair rhmb, scat fair int xln porosity, good oil sat, S-FSFO, weak odor

Dolo: off wh-tan, fn-md xln, poor-fair int xln porosity, mostly tite rxs, fair oil sat, VSSFO, weak odor

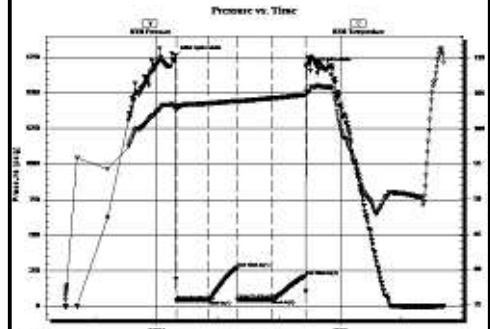
Dolo: off wh-tan-bm, fn-md xln, fair-good int xln porosity, fair oil sat, VSSFO, weak odor

30"-30"-30"-30"

IF: weak blow built to 4" & died back to surface blow
FF: no blow

Rec: 45' Oil Spotted Mud

FP: 41-44, 46-47#
SIP: 267-214#
HP: 1,762-1,680#
BHT: 105



Wt: 9

Vis: 53

Survey @ 3640': 3/4 degree

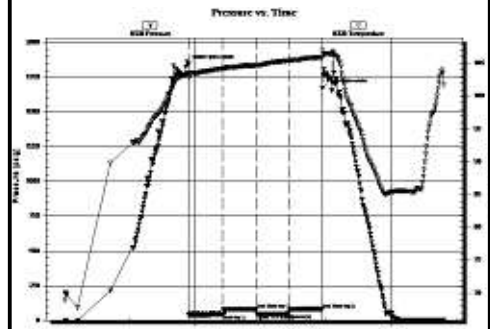
DST #2 3,709-64' (Arbuckle 'A')

30"-30"-30"-30"

IF: weak blow built to 2.5"
FF: surface blow

Rec. 65' Oil Spotted Mud

FP: 40-43, 44-49#
SIP: 82-83#
HP: 1,840-1,670#
BHT: 107



Wt: 9.3

Vis: 48

DST #3 3,765-90' (Arbuckle 'B' & 'C')

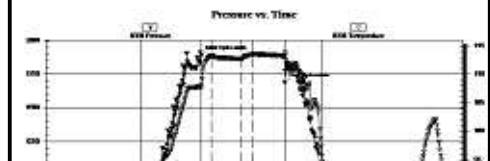
10"-30"-10"-30"

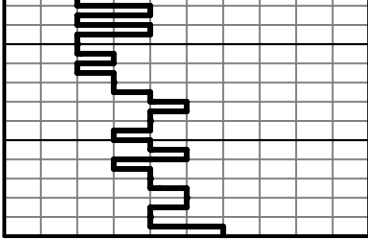
IF: Bottom of bucket in 5 minutes, no blow back on shut in
FF: Bottom of bucket in 6 minutes, no blow back on shut in

Rec: 180' Oil Cut Watery Mud (10% O, 40% W, 50% M)
60' Oil Cut Muddy Water (20% O, 30% M, 50% W)
310' Water (Chl. 30K)

FP: 53-147, 151-239#

SIP: 424-422#
HP: 1,887-1,687#
BHT: 114

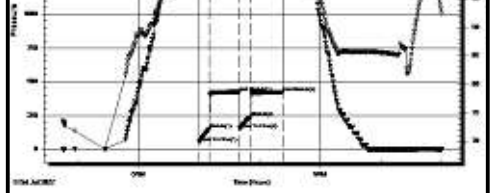




Dolo: off wh-tan, fn xln, fair int xln porosity, barren

Dolo: off wh-lt gry, fn-md xln, poor int xln porosity, mostly tite xs, barren, scat chert-off wh

Dolo: ala



Survey @ 3840': 1 degree