KOLAR Document ID: 1644863

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 # 35615
Name: Darrah Oil Company, LLC
Address 1: 125 N MARKET SUITE 1425
Address 2:
City: WICHITA State: KS Zip: 67202 + 1720
Contact Person: Cristina Goodrich
Phone: (316) 219-3390
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Seth Evenson
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 #:

1/26/2022 Spud Date or Recompletion Date
2/3/2022 Date Reached TD
4/19/2022 Completion Date or Recompletion Date

API No.: 15-009-26325-00-00
Spot Description:
SE - NE - NW - NE Sec. 25 Twp. 20 S. R. 14 ☐ East ☑ West
579 Feet from ☑ North / ☐ South Line of Section
1579 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: Barton
Lease Name: PANNING 25 A Well #: #1
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 1893 Kelly Bushing: 1904
Total Vertical Depth: 3560 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 285 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: 4800 ppm Fluid volume: 450 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: 05/25/2022
☐ **Confidential Release Date:** 05/24/2024
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** David Befort **Date:** 05/25/2022

Operator Name: Darrah Oil Company, LLC Lease Name: PANNING 25 A Well #: #1

Sec. 25 Twp. 20 S. R. 14 ☐ East ☑ West County: Barton

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:

Dual Comp Porosity
Dual Induction
Microresistivity

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

Name	Top	Datum
Anhydrite	803	1101
Heebner	3152	-1248
Lansing	3272	-1368
Arbuckle	3521	-1617

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	32	285	60/40 poz	400	2%cc
Production	7.875	5.5	17	3530	h-long	150	-

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: 5/24/2022

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*

METHOD OF COMPLETION: ☑ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*

PRODUCTION INTERVAL:

Top	Bottom
3530	3560

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)*
2	3275	3281			
2	3316	3319			

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	Darrah Oil Company, LLC
Well Name	PANNING 25 A #1
Doc ID	1644863

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	32	285	60/40 poz	400	2%cc
Production	7.875	5.5	17	3530	h-long	150	-

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Panning 25A 1

Job Ticket: 67847 **DST#: 1**

Test Start: 2022.01.30 @ 10:47:00

GENERAL INFORMATION:

Formation: **Lansing**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 14:06:17
Time Test Ended: 20:40:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3265.00 ft (KB) To 3350.00 ft (KB) (TVD)
Total Depth: 3350.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

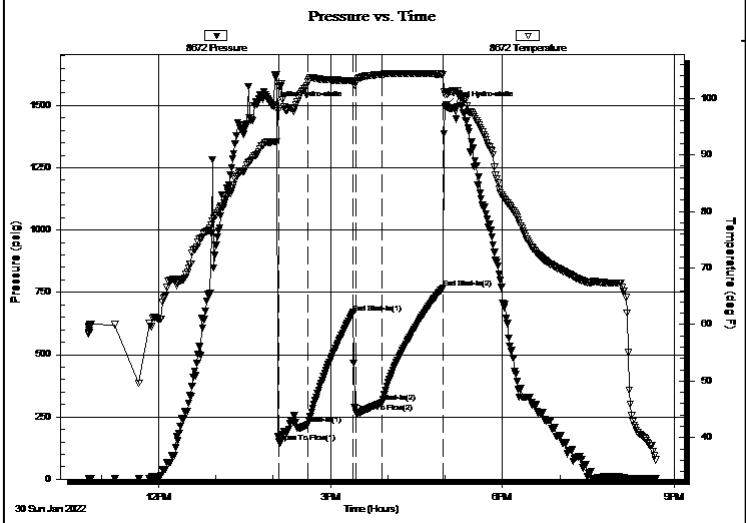
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 308.04 psig @ 3267.00 ft (KB)
Start Date: 2022.01.30 End Date: 2022.01.30
Start Time: 10:47:01 End Time: 20:40:47

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2022.01.30 @ 14:00:17
Time Off Btm: 2022.01.30 @ 17:00:47

TEST COMMENT: IF: 30 min., strong building blow , BOB 1.5 min., 96 inches
ISI: 45 min., blow back ASAO, 8.3 inches
FF: 30 min., strong building blow , BOB 1 min., 79 inches
FSI: 60 min., blow back ASAO, 22 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1497.92	92.30	Initial Hydro-static
7	149.80	102.00	Open To Flow (1)
37	219.53	102.97	Shut-In(1)
84	669.02	103.06	End Shut-In(1)
87	267.32	102.85	Open To Flow (2)
114	308.04	104.20	Shut-In(2)
178	766.73	104.22	End Shut-In(2)
181	1500.98	100.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	gasy w atery muddy oil 5%G45%O20%W	1.75 M
516.00	gassy oil 20%G, 80%O	7.24

Gas Rates

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

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Panning 25A 1

Job Ticket: 67847 **DST#: 1**

Test Start: 2022.01.30 @ 10:47:00

GENERAL INFORMATION:

Formation: **Lansing**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 14:06:17
Time Test Ended: 20:40:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3265.00 ft (KB) To 3350.00 ft (KB) (TVD)
Total Depth: 3350.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

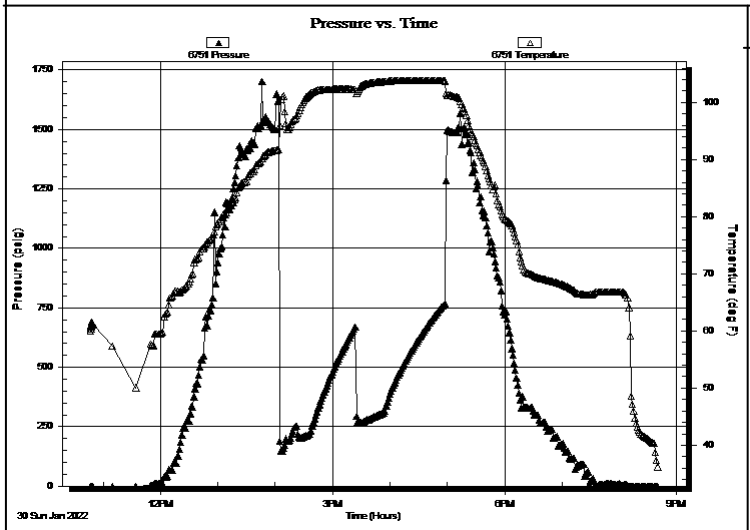
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6751

Press@RunDepth: psig @ ft (KB)
Start Date: 2022.01.30 End Date: 2022.01.30
Start Time: 10:47:01 End Time: 20:40:47

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

TEST COMMENT: IF: 30 min., strong building blow , BOB 1.5 min., 96 inches
ISI: 45 min., blow back ASAO, 8.3 inches
FF: 30 min., strong building blow , BOB 1 min., 79 inches
FSI: 60 min., blow back ASAO, 22 inches



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
240.00	gasy w atery muddy oil 5%G45%O20%W	1.75 M
516.00	gassy oil 20%G, 80%O	7.24

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Panning 25A 1

Job Ticket: 67847 **DST#: 1**

Test Start: 2022.01.30 @ 10:47:00

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

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	gasy w atery muddy oil 5%G45%O20%W30%	1.754
516.00	gassy oil 20%G, 80%O	7.238

Total Length: 756.00 ft Total Volume: 8.992 bbl

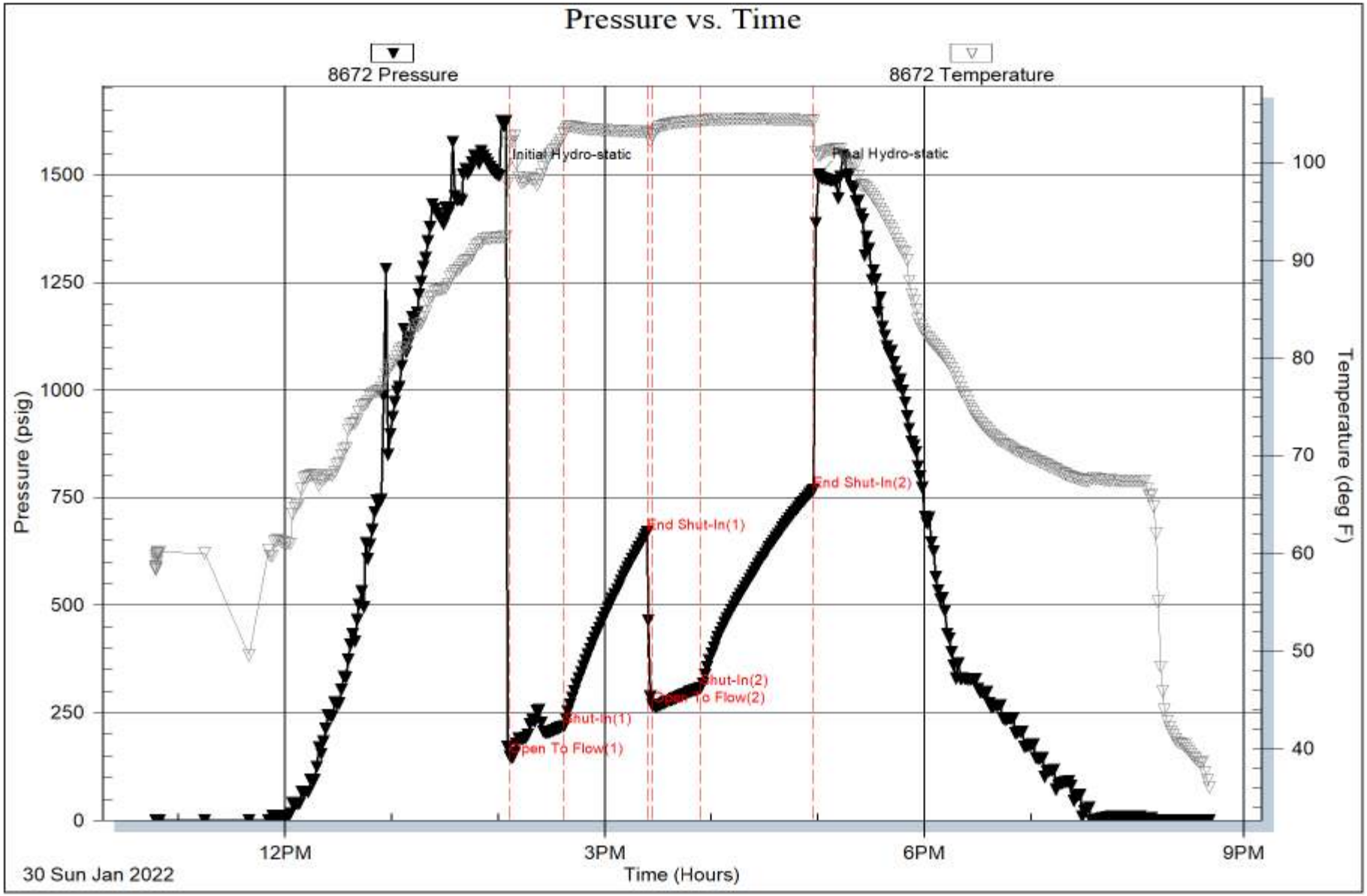
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: API couldn't be obtained, I w ill try w hen I come back out.

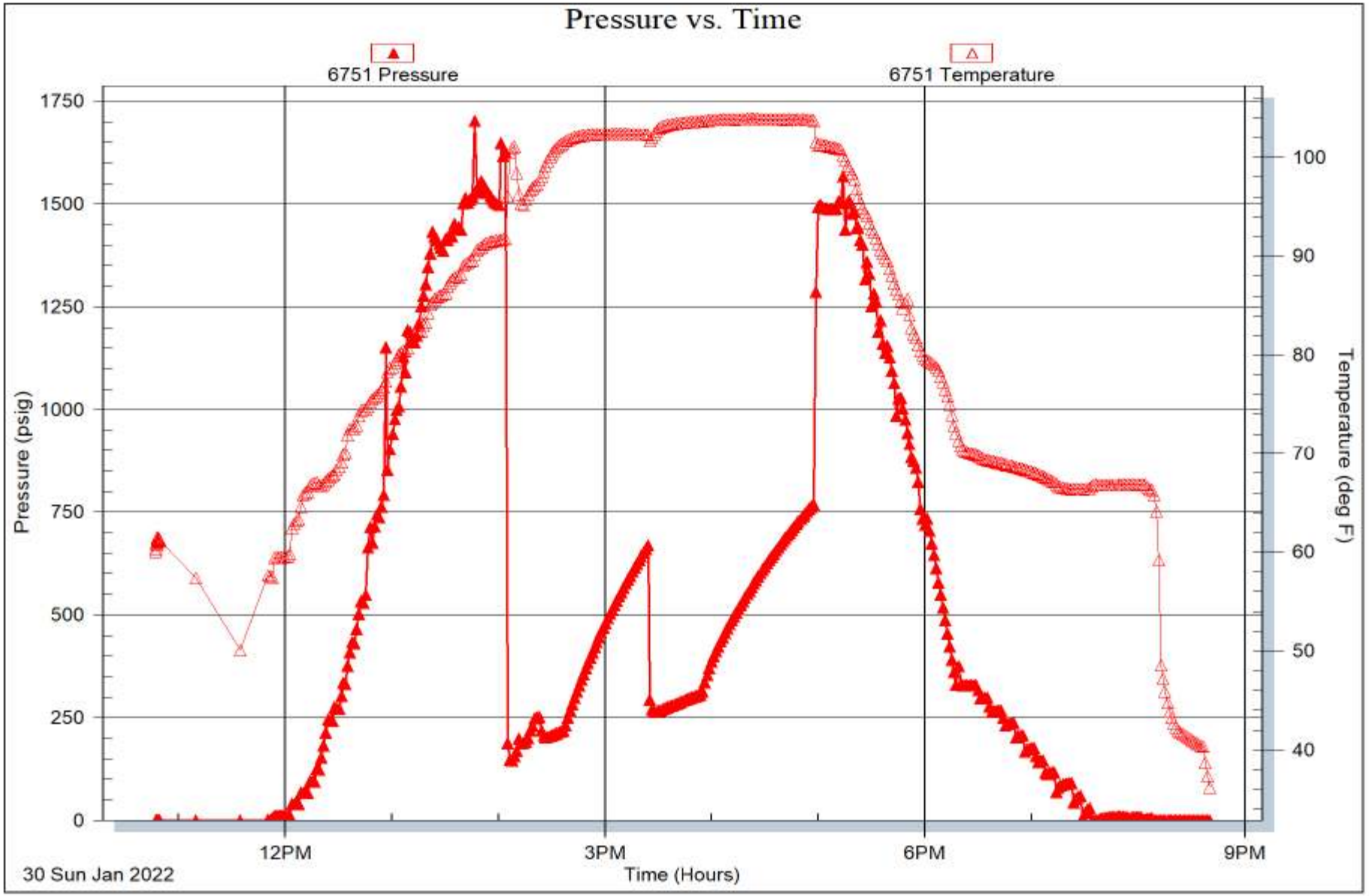
315' GIP

Serial #: 8672 **Inside** Darrah Oil Co, LLC Panning 25A 1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 67847 Printed: 2022.01.30 @ 22:15:10

Serial #: 6751 | Darrah Oil Co, LLC | Panning 25A 1 | DST Test Number: 1



Trilobite Testing, Inc | Ref. No: 67847 | Printed: 2022.01.30 @ 22:15:11

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67848 **DST#: 2**

Test Start: 2022.01.31 @ 18:08:00

GENERAL INFORMATION:

Formation: **LKC**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 21:39:02
Time Test Ended: 03:39:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3378.00 ft (KB) To 3515.00 ft (KB) (TVD)
Total Depth: 3515.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

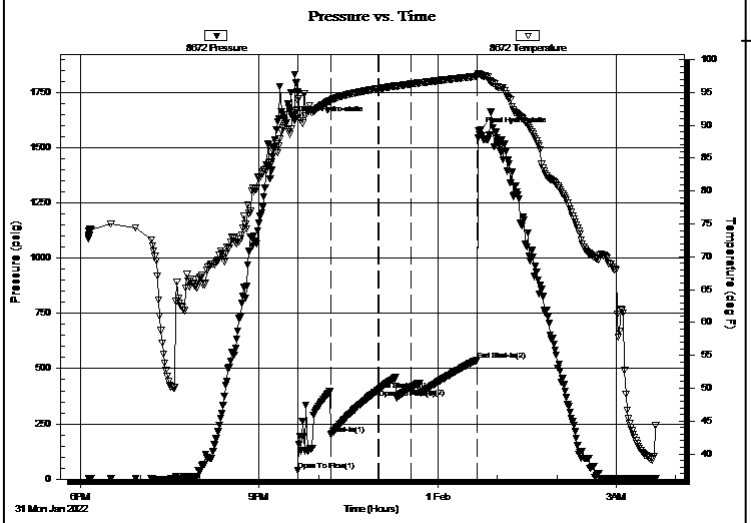
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 412.94 psig @ 3380.00 ft (KB)
Start Date: 2022.01.31 End Date: 2022.02.01
Start Time: 18:08:01 End Time: 03:39:47

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2022.01.31 @ 21:35:32
Time Off Btm: 2022.02.01 @ 00:41:32

TEST COMMENT: IF: 30 min., BOB 9.5 min., strong building blow , 14 inches
ISI: 45 min., no blow back
FF: 30 min., w eak surface blow , died 5 min.
FSI: 60 min., no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1624.01	91.64	Initial Hydro-static
4	40.39	93.74	Open To Flow (1)
37	201.75	93.78	Shut-In(1)
85	402.52	95.56	End Shut-In(1)
86	407.24	95.58	Open To Flow (2)
118	412.94	96.26	Shut-In(2)
185	540.54	97.49	End Shut-In(2)
186	1574.62	97.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
200.00	100%M	1.19

Gas Rates

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

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67848 **DST#: 2**

Test Start: 2022.01.31 @ 18:08:00

GENERAL INFORMATION:

Formation: **LKC**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 21:39:02
Time Test Ended: 03:39:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3378.00 ft (KB) To 3515.00 ft (KB) (TVD)
Total Depth: 3515.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

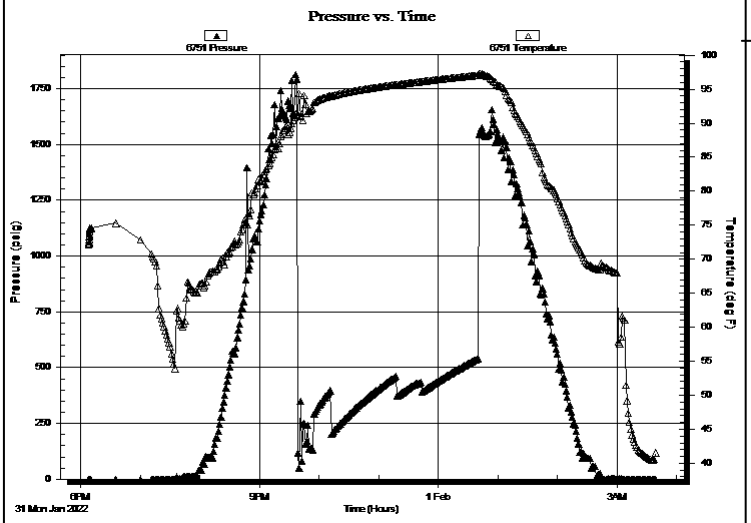
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6751

Press@RunDepth: psig @ ft (KB)
Start Date: 2022.01.31 End Date: 2022.02.01
Start Time: 18:08:01 End Time: 03:39:47

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

TEST COMMENT: IF: 30 min., BOB 9.5 min., strong building blow , 14 inches
ISI: 45 min., no blow back
FF: 30 min., w eak surface blow , died 5 min.
FSI: 60 min., no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
200.00	100%M	1.19

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67848 **DST#: 2**

Test Start: 2022.01.31 @ 18:08:00

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

Recovery Information

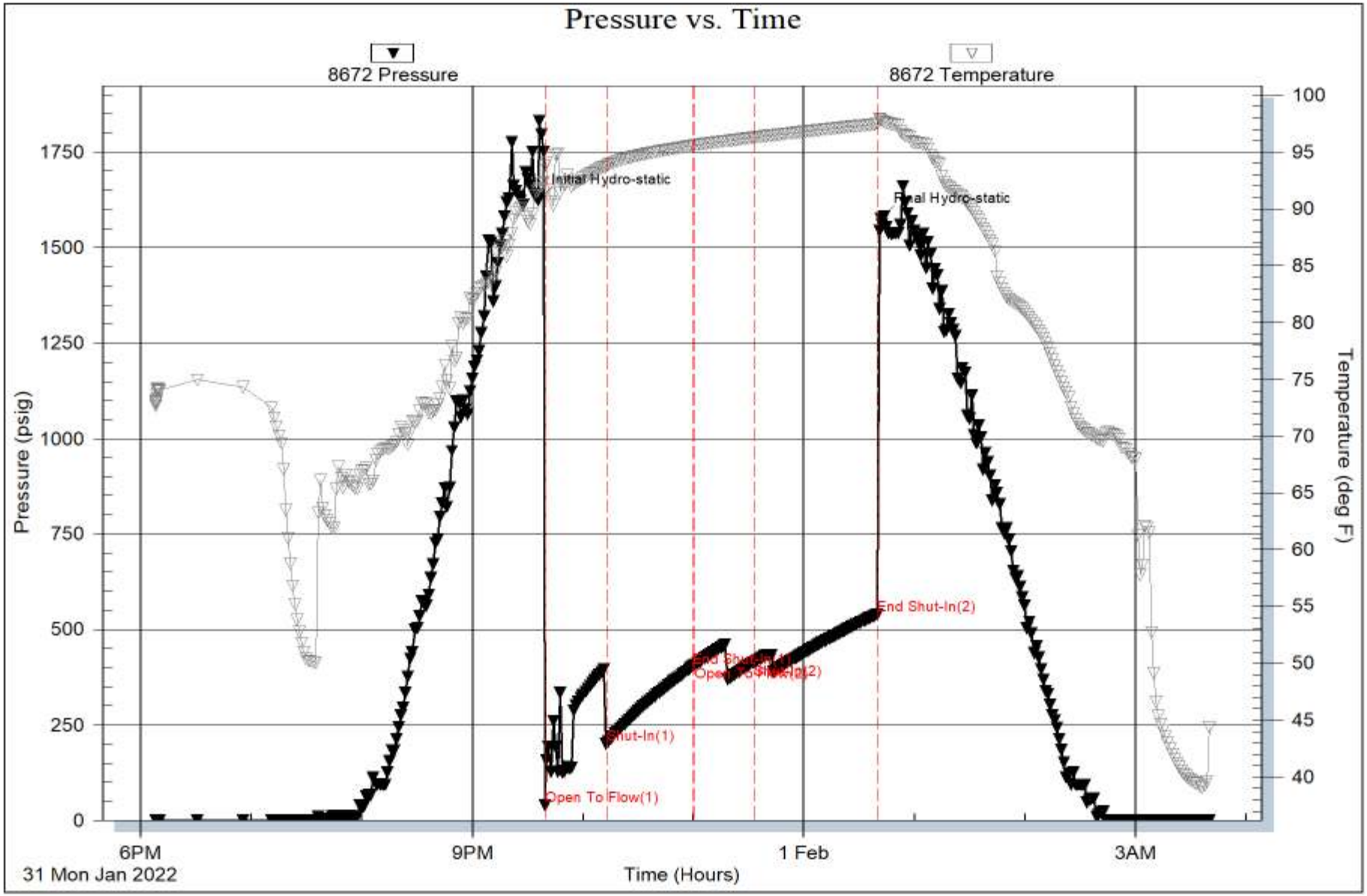
Recovery Table

Length ft	Description	Volume bbl
200.00	100%M	1.193

Total Length: 200.00 ft Total Volume: 1.193 bbl

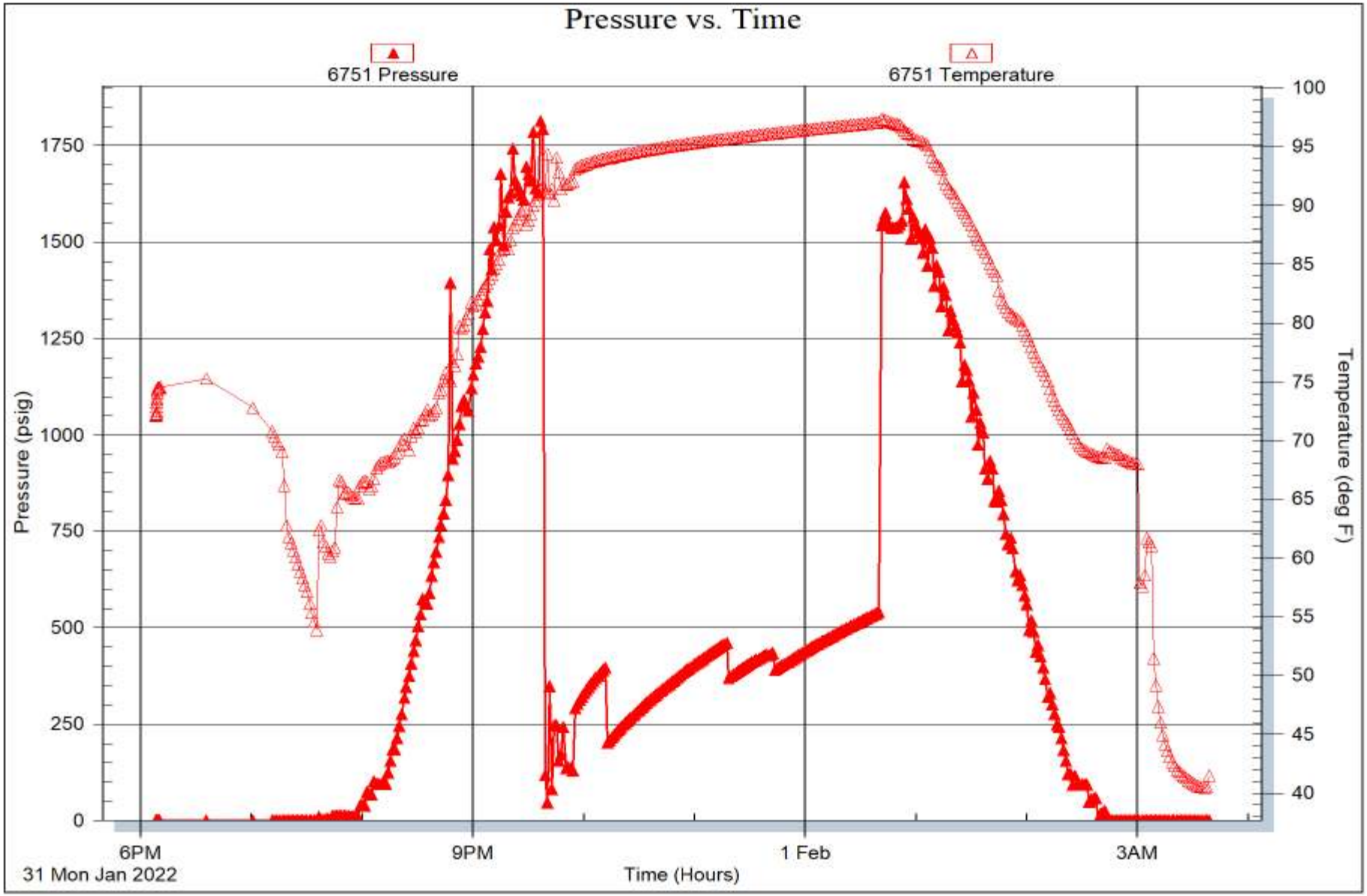
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8672 **Inside** Darrah Oil Co, LLC Planning 25A DST Test Number: 2



Trilobite Testing, Inc Ref. No: 67848 Printed: 2022.02.01 @ 07:02:58

Serial #: 6751 | Darrah Oil Co, LLC | Planning 25A | DST Test Number: 2



Trilobite Testing, Inc | Ref. No: 67848 | Printed: 2022.02.01 @ 07:02:58

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 3494-3545 **DST#: 3**

Test Start: 2022.02.01 @ 14:37:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 18:10:32
Time Test Ended: 23:01:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3494.00 ft (KB) To 3545.00 ft (KB) (TVD)
Total Depth: 3545.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

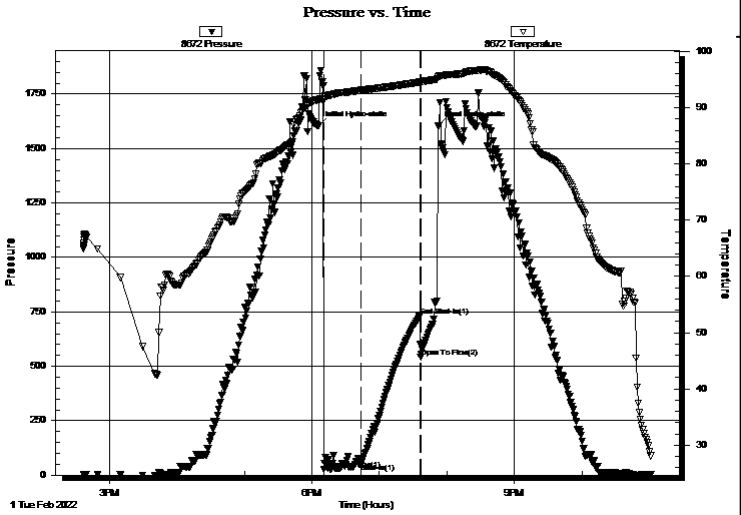
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 52.58 psig @ 3496.00 ft (KB)
Start Date: 2022.02.01 End Date: 2022.02.01
Start Time: 14:37:01 End Time: 23:01:02

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2022.02.01 @ 18:06:02
Time Off Btm: 2022.02.01 @ 19:52:02

TEST COMMENT: IF: 30 min., weak surface blow, 1.3 inches
ISI: 45 min. no blow back
FF: 15 min, tool plugged, flushed, pulled



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.20	91.50	Initial Hydro-static
5	26.55	91.36	Open To Flow (1)
38	52.58	93.13	Shut-In(1)
90	729.52	94.53	End Shut-In(1)
91	541.62	94.56	Open To Flow (2)
106	1604.29	95.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	oil spotted mud	0.02

Gas Rates

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

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 3494-3545 **DST#: 3**

Test Start: 2022.02.01 @ 14:37:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 18:10:32
Time Test Ended: 23:01:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3494.00 ft (KB) To 3545.00 ft (KB) (TVD)
Total Depth: 3545.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

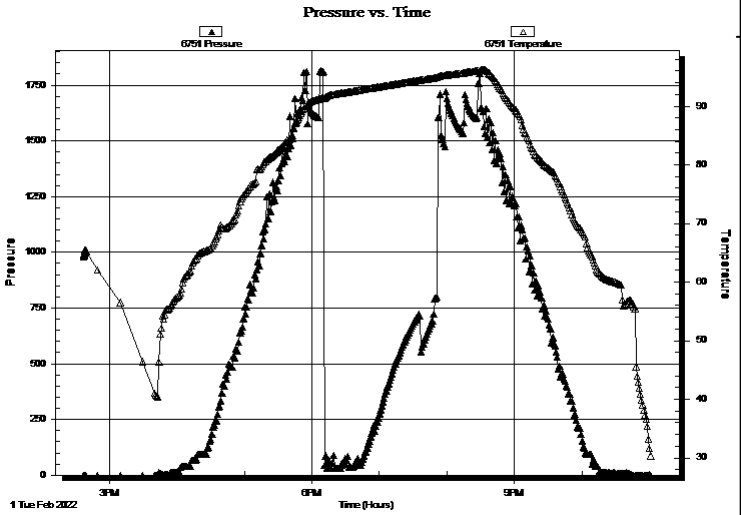
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6751

Press@RunDepth: psig @ ft (KB)
Start Date: 2022.02.01 End Date: 2022.02.01
Start Time: 14:37:01 End Time: 23:01:02

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

TEST COMMENT: IF: 30 min., weak surface blow, 1.3 inches
ISI: 45 min. no blow back
FF: 15 min, tool plugged, flushed, pulled



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	oil spotted mud	0.02

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 3494-3545 **DST#: 3**

Test Start: 2022.02.01 @ 14:37:00

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

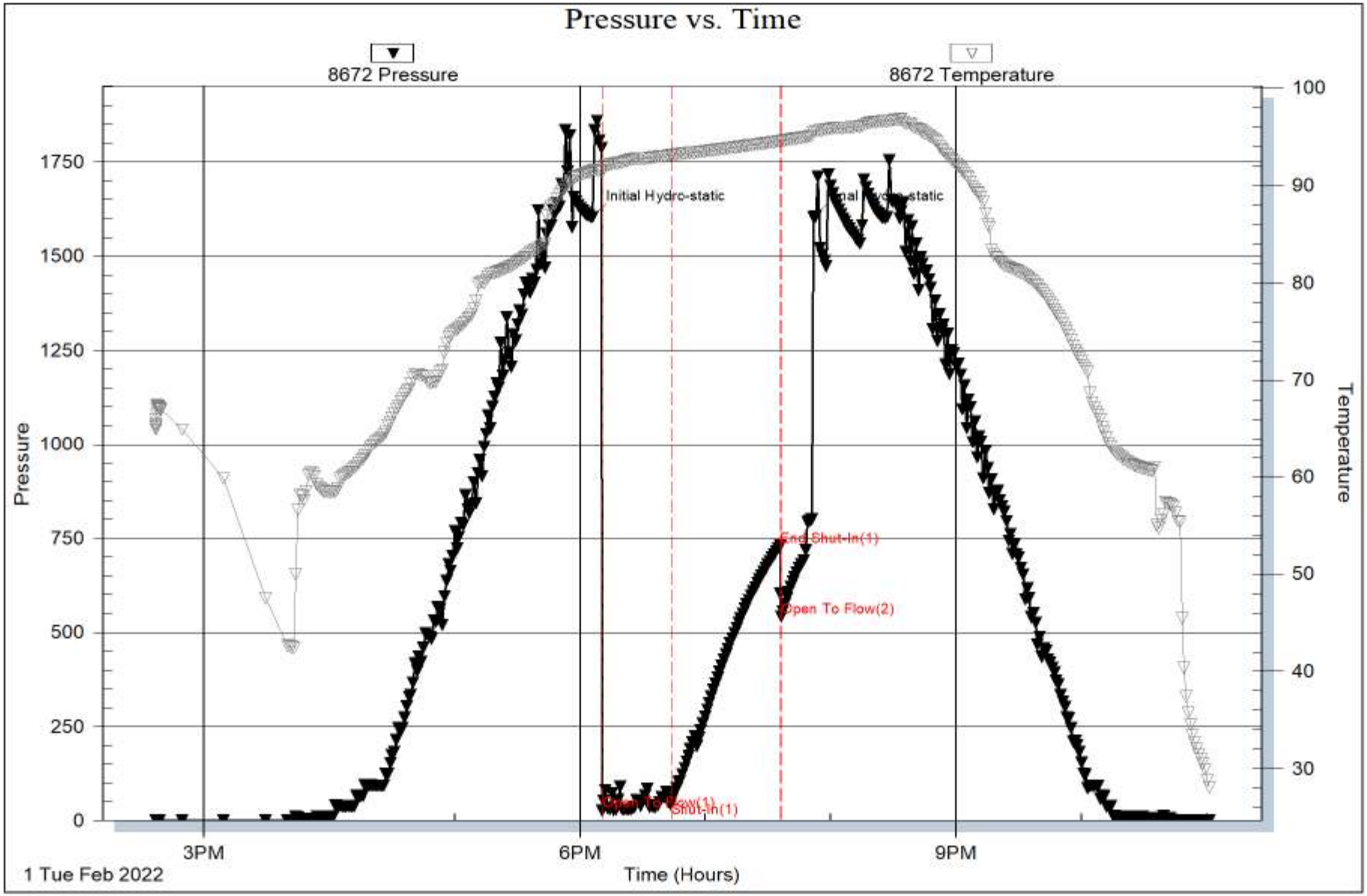
Recovery Information

Recovery Table

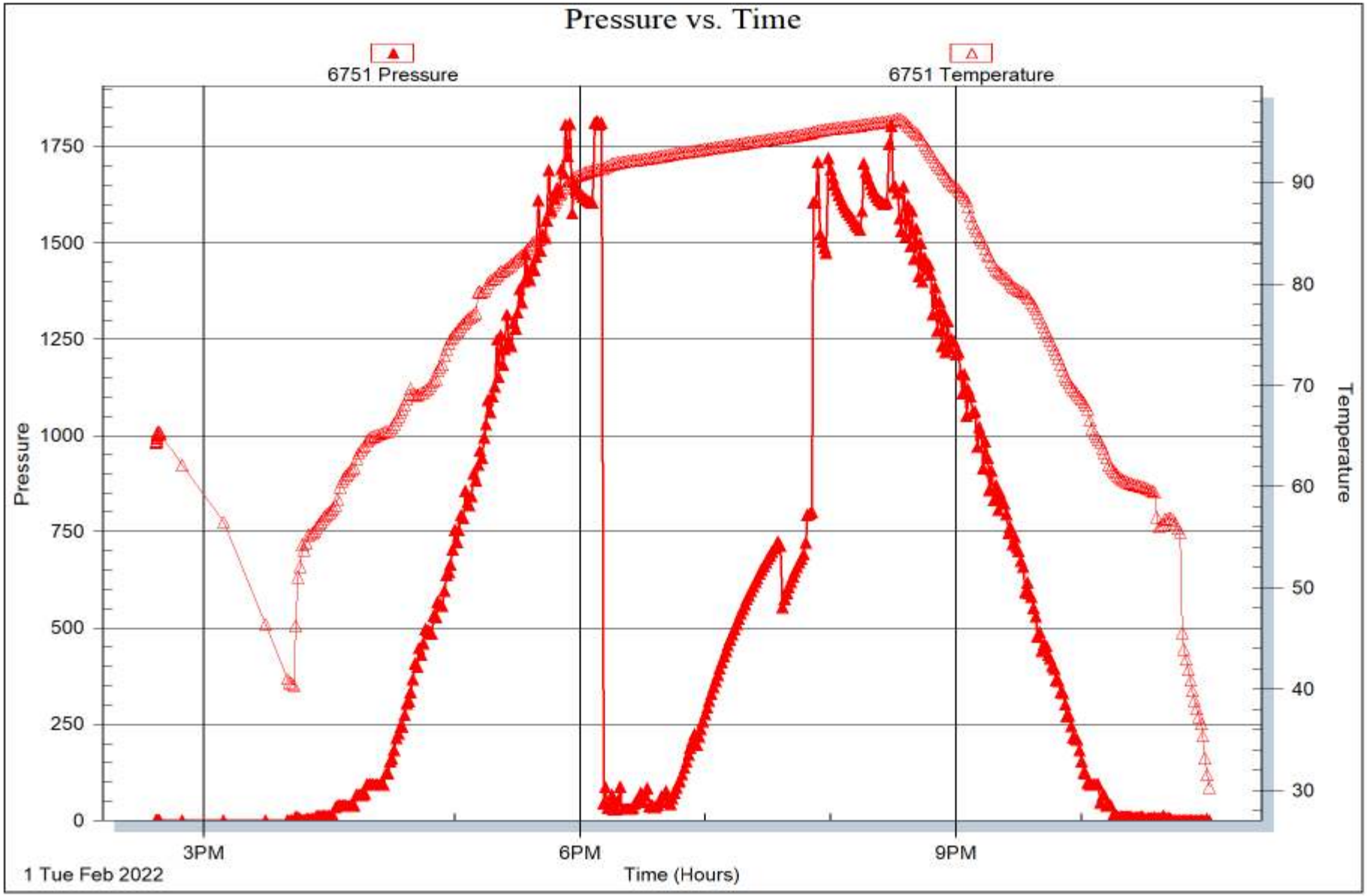
Length ft	Description	Volume bbl
5.00	oil spotted mud	0.025

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:


Pressure vs. Time
8672 Pressure
8672 Temperature
Initial Hydro-static
End Shut-In(1)
Open To Flow(2)
Pressure
Temperature
Time (Hours)
1 Tue Feb 2022
3PM
6PM
9PM
0
250
500
750
1000
1250
1500
1750
30
40
50
60
70
80
90
100

Serial #: 6751 | Darrah Oil Co, LLC | Planning 25A | DST Test Number: 3



Trilobite Testing, Inc | Ref. No: 3494-3545 | Printed: 2022.02.02 @ 07:24:51

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 3494-3545 **DST#: 3**

Test Start: 2022.02.01 @ 14:37:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 18:10:32
Time Test Ended: 23:01:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3494.00 ft (KB) To 3545.00 ft (KB) (TVD)
Total Depth: 3545.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

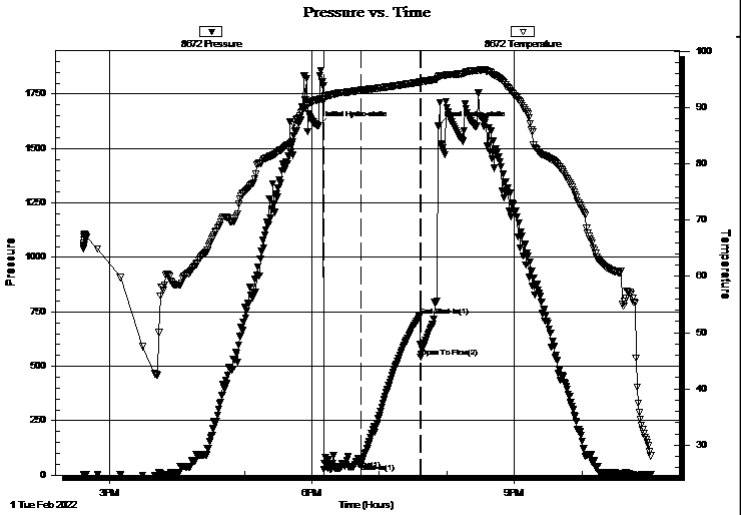
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 52.58 psig @ 3496.00 ft (KB)
Start Date: 2022.02.01 End Date: 2022.02.01
Start Time: 14:37:01 End Time: 23:01:02

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2022.02.01 @ 18:06:02
Time Off Btm: 2022.02.01 @ 19:52:02

TEST COMMENT: IF: 30 min., weak surface blow, 1.3 inches
ISI: 45 min. no blow back
FF: 15 min, tool plugged, flushed, pulled



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.20	91.50	Initial Hydro-static
5	26.55	91.36	Open To Flow (1)
38	52.58	93.13	Shut-In(1)
90	729.52	94.53	End Shut-In(1)
91	541.62	94.56	Open To Flow (2)
106	1604.29	95.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	oil spotted mud	0.02

Gas Rates

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

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 3494-3545 **DST#: 3**

Test Start: 2022.02.01 @ 14:37:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 18:10:32
Time Test Ended: 23:01:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3494.00 ft (KB) To 3545.00 ft (KB) (TVD)
Total Depth: 3545.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

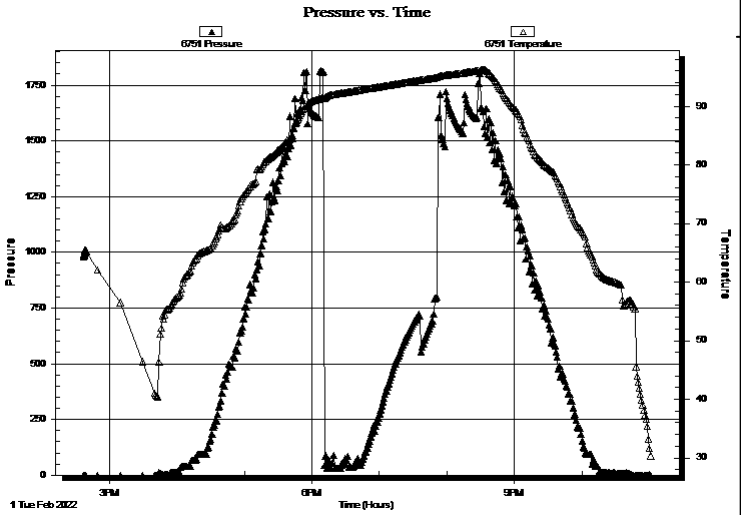
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6751

Press@RunDepth: psig @ ft (KB)
Start Date: 2022.02.01 End Date: 2022.02.01
Start Time: 14:37:01 End Time: 23:01:02

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

TEST COMMENT: IF: 30 min., weak surface blow, 1.3 inches
ISI: 45 min. no blow back
FF: 15 min, tool plugged, flushed, pulled



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	oil spotted mud	0.02

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 3494-3545 **DST#: 3**

Test Start: 2022.02.01 @ 14:37:00

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

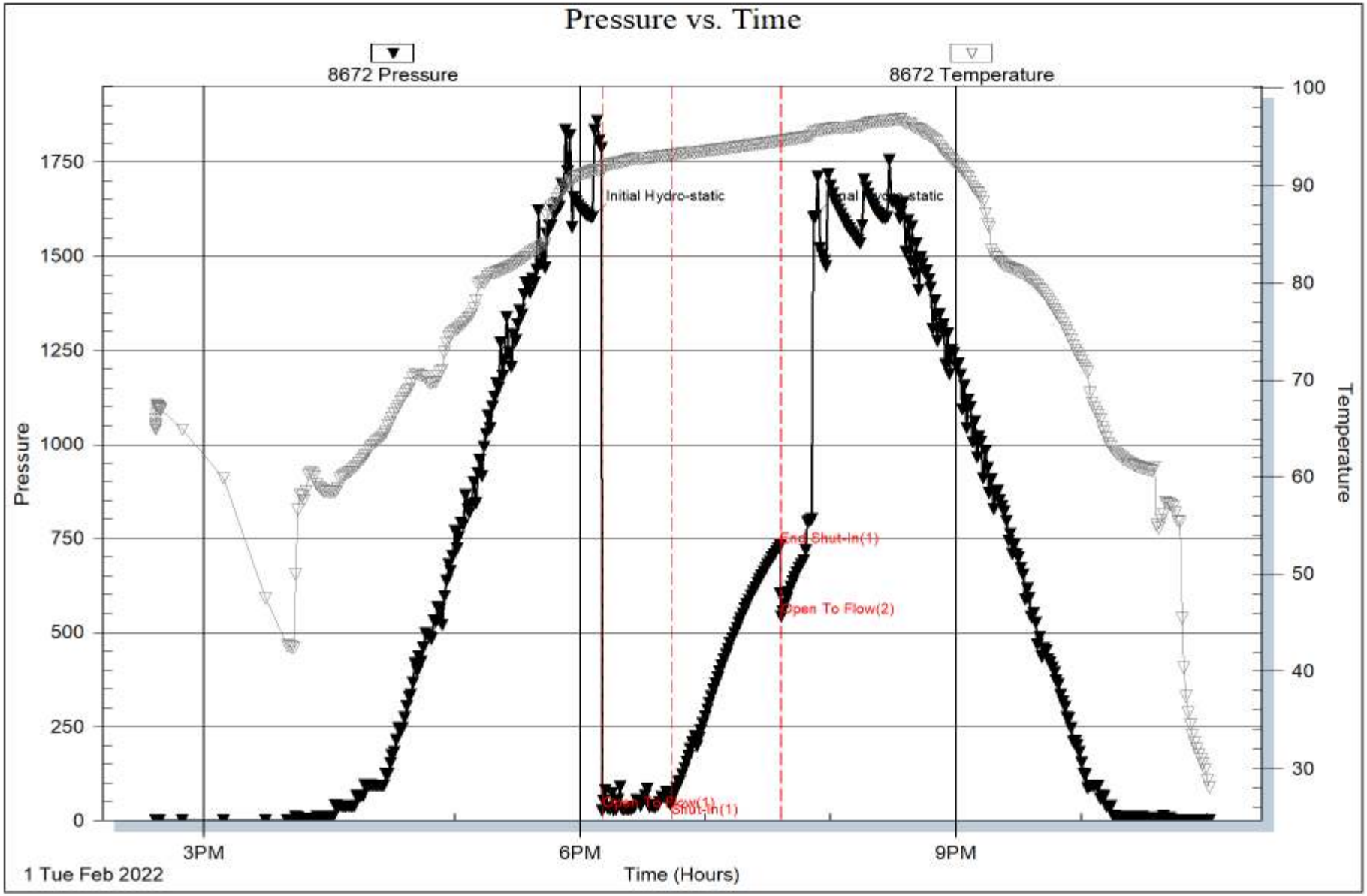
Recovery Information

Recovery Table

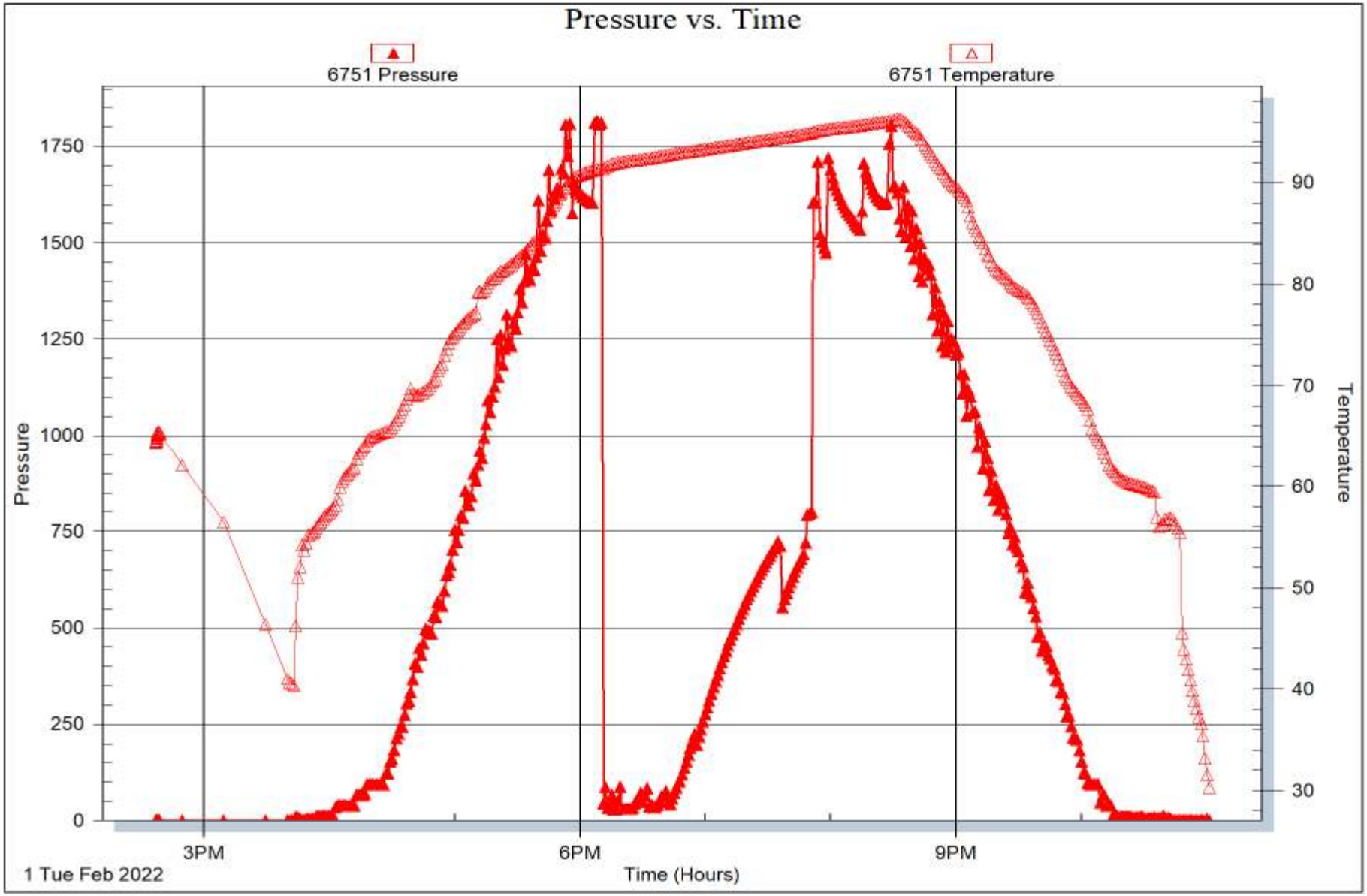
Length ft	Description	Volume bbl
5.00	oil spotted mud	0.025

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:


Pressure vs. Time
8672 Pressure
8672 Temperature
Initial Hydro-static
End Shut-In(1)
Open To Flow(2)
Pressure
Temperature
Time (Hours)
1 Tue Feb 2022
3PM
6PM
9PM
0
250
500
750
1000
1250
1500
1750
30
40
50
60
70
80
90
100

Serial #: 6751 | Darrah Oil Co, LLC | Planning 25A | DST Test Number: 3



Trilobite Testing, Inc | Ref. No: 3494-3545 | Printed: 2022.02.02 @ 07:24:51

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67850 **DST#: 4**

Test Start: 2022.02.02 @ 10:33:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 14:10:02
Time Test Ended: 20:38:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3494.00 ft (KB) To 3550.00 ft (KB) (TVD)
Total Depth: 3550.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

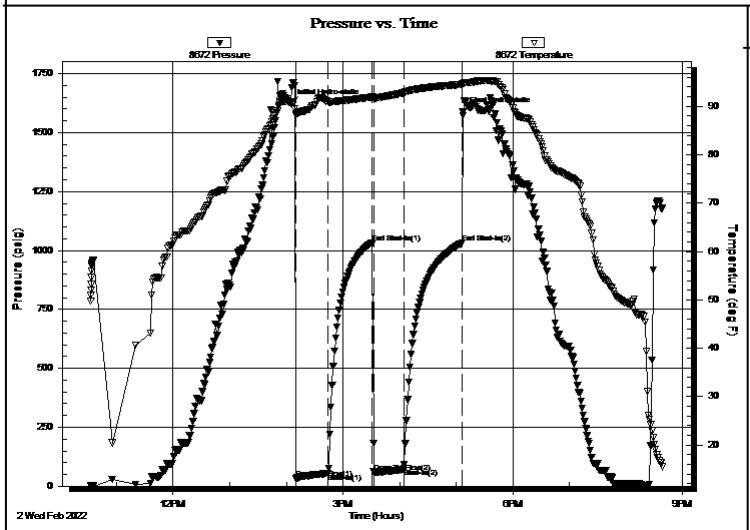
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 75.46 psig @ 3496.00 ft (KB)
Start Date: 2022.02.02 End Date: 2022.02.02
Start Time: 10:33:01 End Time: 20:38:47

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2022.02.02 @ 14:05:02
Time Off Btm: 2022.02.02 @ 17:06:47

TEST COMMENT: IF: 30 min., fair building blow , 5.25 inches
ISI: 45 min., no blow back
FF: 30 min., fair building blow , 3.3 inches
FSI: 60 min., no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1622.37	90.85	Initial Hydro-static
6	32.47	88.42	Open To Flow (1)
40	53.67	90.87	Shut-In(1)
86	1030.68	91.86	End Shut-In(1)
88	60.54	91.62	Open To Flow (2)
120	75.46	92.80	Shut-In(2)
182	1033.11	94.53	End Shut-In(2)
182	1587.16	94.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
87.00	gassy oil 5%G 95%O	0.43
60.00	HOCM 30%O,70%M	0.30

Gas Rates

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

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67850 **DST#: 4**

Test Start: 2022.02.02 @ 10:33:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 14:10:02
Time Test Ended: 20:38:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3494.00 ft (KB) To 3550.00 ft (KB) (TVD)
Total Depth: 3550.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

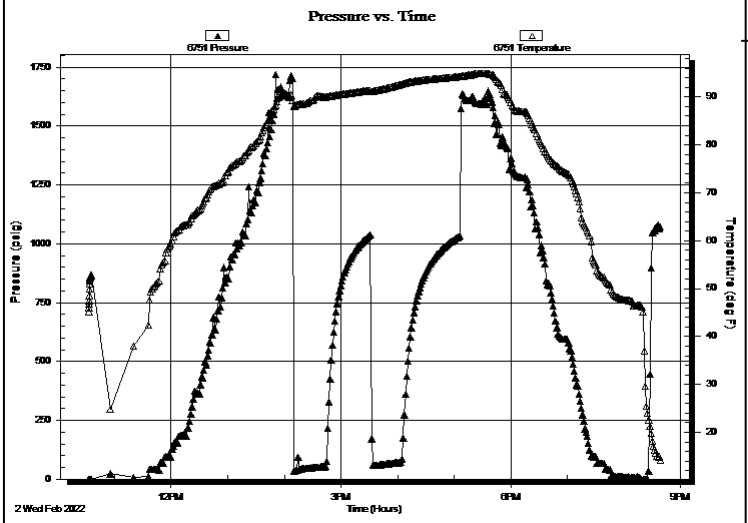
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6751

Press@RunDepth: psig @ ft (KB)
Start Date: 2022.02.02 End Date: 2022.02.02
Start Time: 10:33:01 End Time: 20:38:47

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

TEST COMMENT: IF: 30 min., fair building blow , 5.25 inches
ISI: 45 min., no blow back
FF: 30 min., fair building blow , 3.3 inches
FSI: 60 min., no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
87.00	gassy oil 5%G 95%O	0.43
60.00	HOCM 30%O,70%M	0.30

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67850 **DST#: 4**

Test Start: 2022.02.02 @ 10:33:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	25 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	11000 ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
87.00	gassy oil 5%G 95%O	0.428
60.00	HOCM 30%O,70%M	0.295

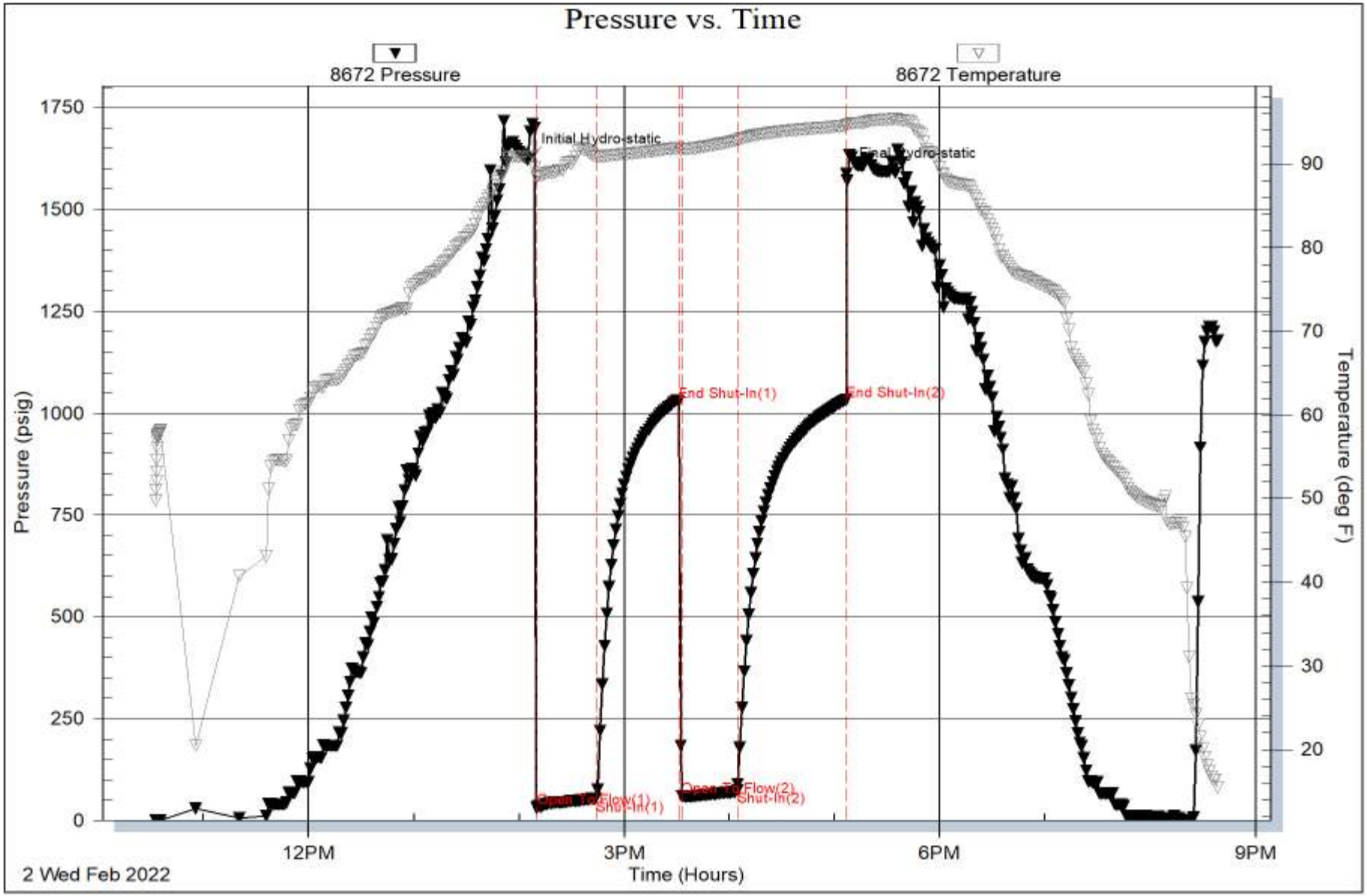
Total Length: 147.00 ft Total Volume: 0.723 bbl

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

Laboratory Name: Laboratory Location:

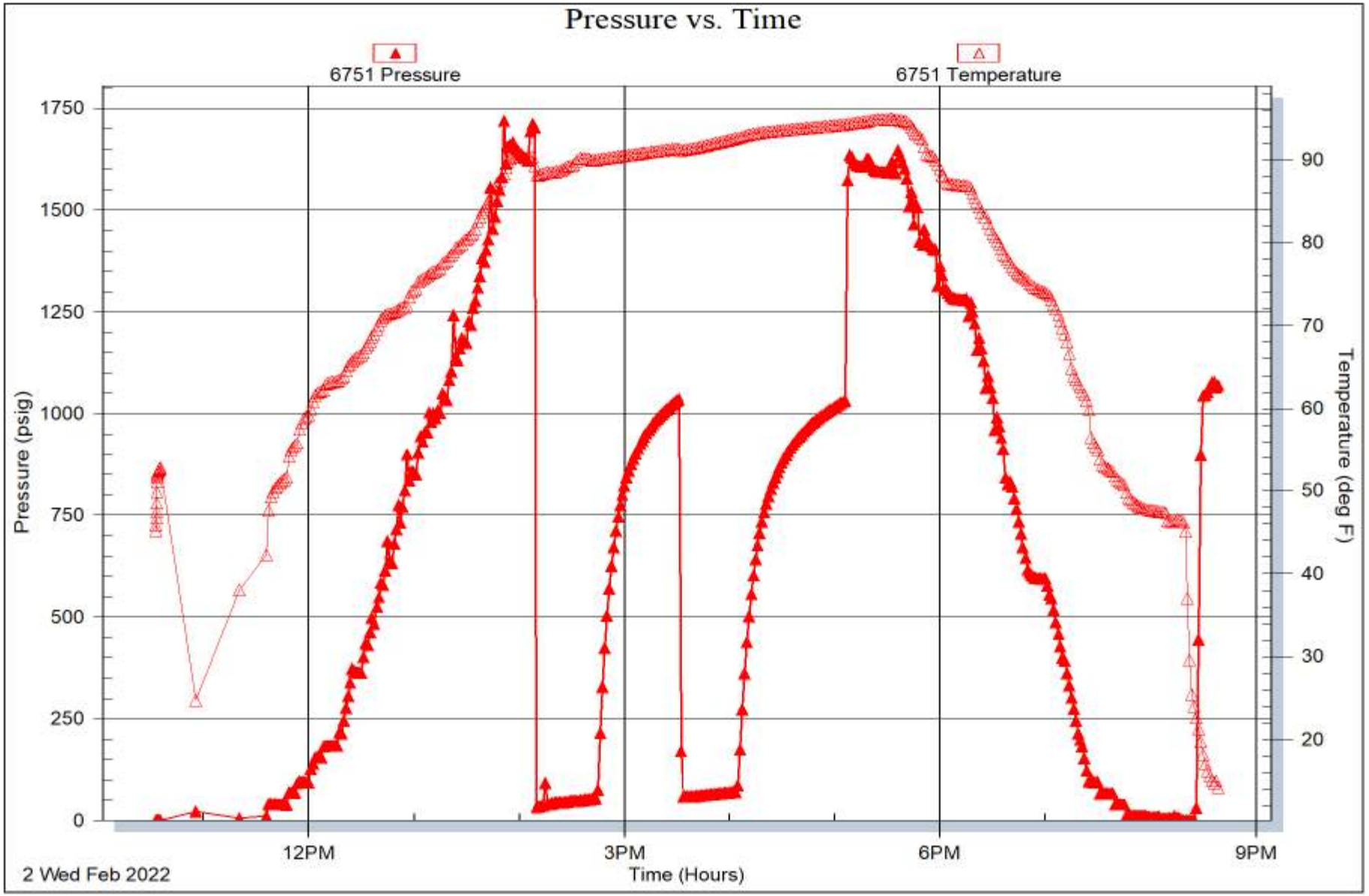
Recovery Comments: RW=1.44@28F=11,000ppm
API=25@60F=25

Serial #: 8672 **Inside** Darrah Oil Co, LLC Planning 25A DST Test Number: 4



Trilobite Testing, Inc Ref. No: 67850 Printed: 2022.02.03 @ 07:43:23

Serial #: 6751 | Darrah Oil Co, LLC | Planning 25A | DST Test Number: 4



Trilobite Testing, Inc | Ref. No: 67850 | Printed: 2022.02.03 @ 07:43:23

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67876 **DST#: 5**

Test Start: 2022.02.03 @ 18:08:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 20:53:02
Time Test Ended: 01:42:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3494.00 ft (KB) To 3560.00 ft (KB) (TVD)
Total Depth: 3560.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

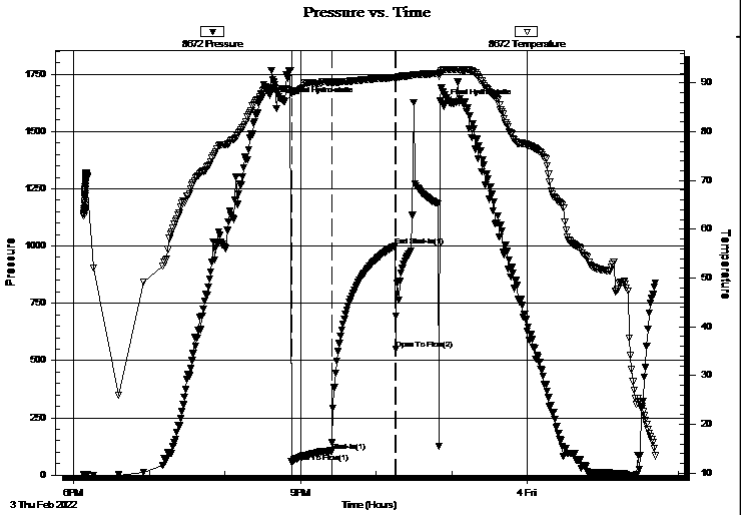
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 105.83 psig @ 3496.00 ft (KB)
Start Date: 2022.02.03 End Date: 2022.02.04
Start Time: 18:08:01 End Time: 01:42:02

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2022.02.03 @ 20:47:32
Time Off Btm: 2022.02.03 @ 22:53:32

TEST COMMENT: IF: 30 min., fair building blow , 8.4 inches
ISI: 45 min., no blow back
FF: 30 min., tool plugged, flushed, pulled test



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1630.49	88.78	Initial Hydro-static
6	57.08	88.09	Open To Flow (1)
38	105.83	90.14	Shut-In(1)
88	1001.29	91.09	End Shut-In(1)
88	549.80	90.96	Open To Flow (2)
126	1622.06	92.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
205.00	SOCM 10%O, 90%M	1.26

Gas Rates

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

DRILL STEM TEST REPORT

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67876 **DST#: 5**

Test Start: 2022.02.03 @ 18:08:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1905.00 ft (KB)
Time Tool Opened: 20:53:02
Time Test Ended: 01:42:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3494.00 ft (KB) To 3560.00 ft (KB) (TVD)
Total Depth: 3560.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

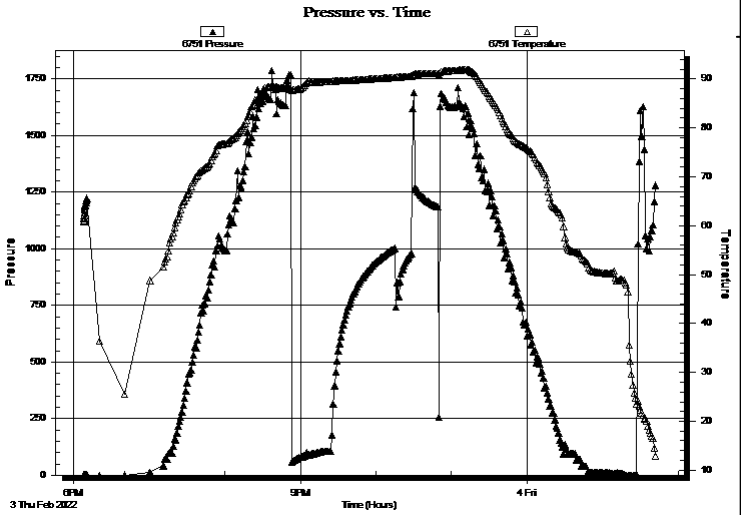
Reference Elevations: 1905.00 ft (KB)
1894.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6751

Press@RunDepth: psig @ ft (KB)
Start Date: 2022.02.03 End Date: 2022.02.04
Start Time: 18:08:01 End Time: 01:42:02

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

TEST COMMENT: IF: 30 min., fair building blow , 8.4 inches
ISI: 45 min., no blow back
FF: 30 min., tool plugged, flushed, pulled test



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
205.00	SOCM 10%O, 90%M	1.26

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Co, LLC

125 N Market Suite 1425
Wichita, KS 67202

ATTN: Seth Evenson

25/20/14

Planning 25A

Job Ticket: 67876 **DST#: 5**

Test Start: 2022.02.03 @ 18:08:00

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

Recovery Information

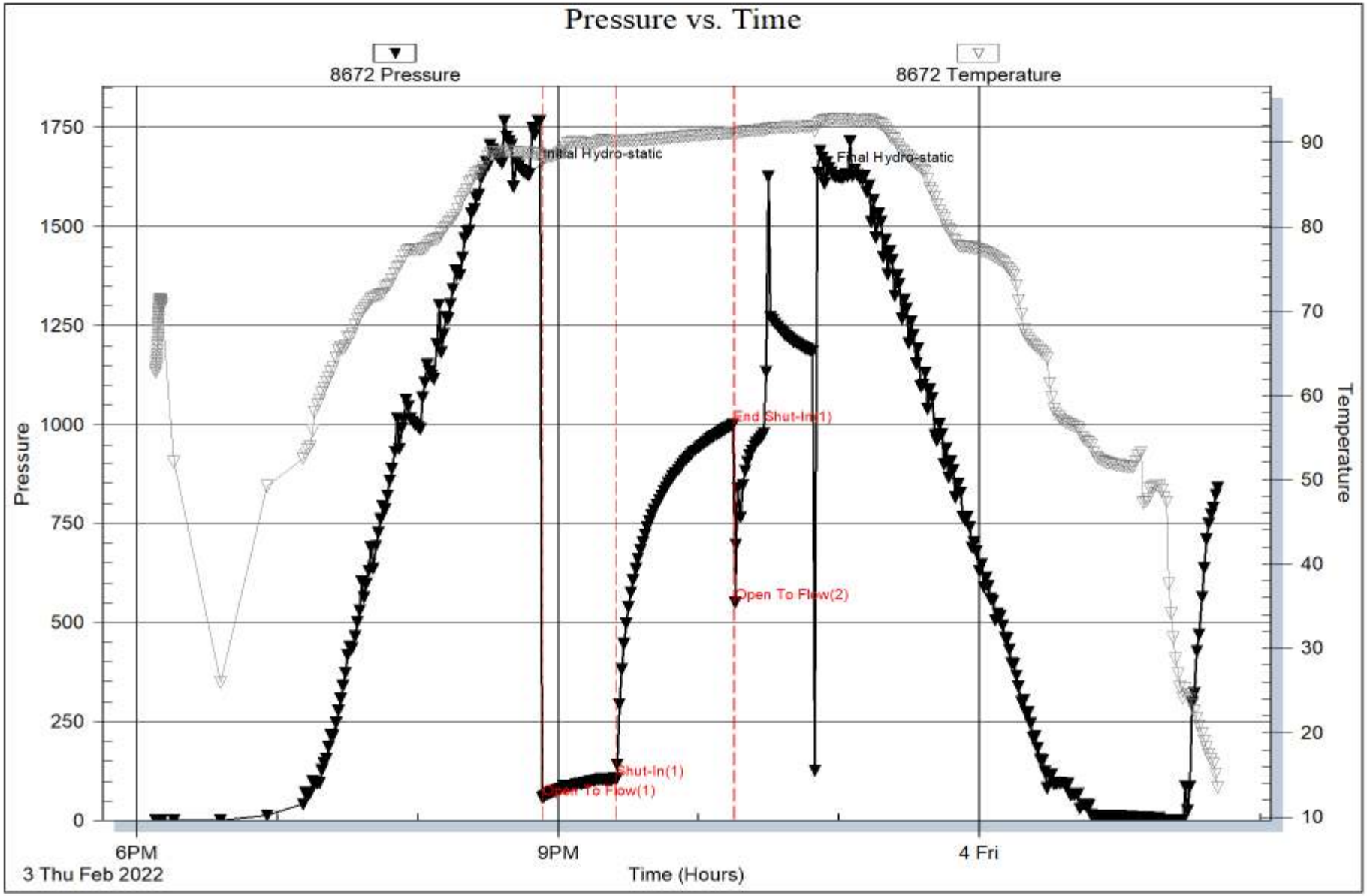
Recovery Table

Length ft	Description	Volume bbl
205.00	SOCM 10%O, 90%M	1.263

Total Length: 205.00 ft Total Volume: 1.263 bbl

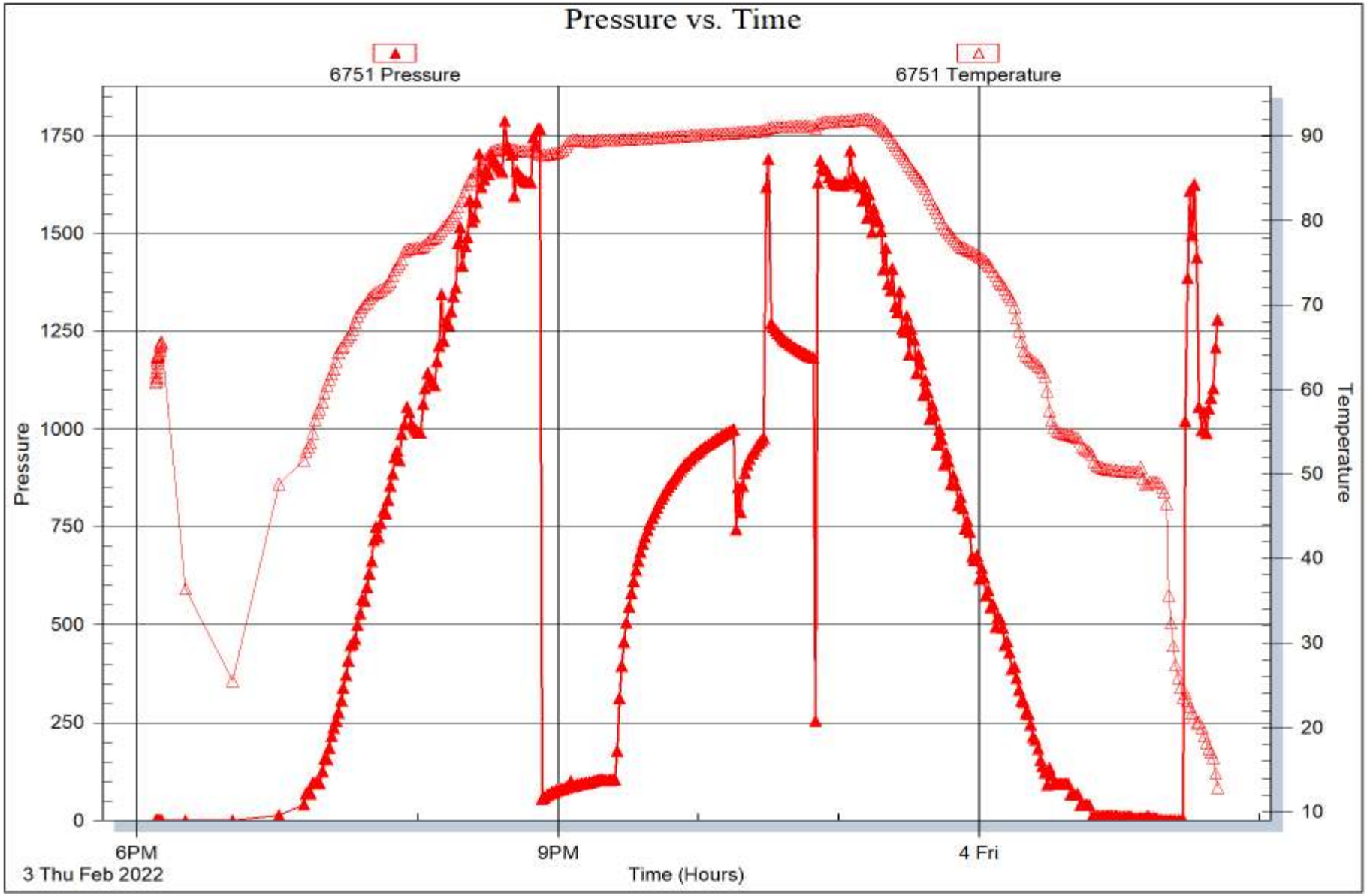
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8672 **Inside** Darrah Oil Co, LLC Planning 25A DST Test Number: 5



Trilobite Testing, Inc Ref. No: 67876 Printed: 2022.02.04 @ 07:31:57

Serial #: 6751 | Darrah Oil Co, LLC | Planning 25A | DST Test Number: 5



Trilobite Testing, Inc | Ref. No: 67876 | Printed: 2022.02.04 @ 07:31:57

CEMENT TREATMENT REPORT

Customer:	Darrah Oil	Well:	Panning 25 A-1	Ticket:	wp2332
City, State:	Great Bend Kanas	County:	Barton Kansas	Date:	1/26/2022
Field Rep:	Jesus Vargas	S-T-R:	25-20s-14w	Service:	Surface

Downhole Information	
Hole Size:	12 1/4 in
Hole Depth:	295 ft
Casing Size:	8 5/8 in
Casing Depth:	295 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	17 bbls bbls

Calculated Slurry - Lead	
Blend:	60/40 2 & 3
Weight:	14.8 ppg
Water / Sx:	5.2 gal / sx
Yield:	1.21 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	86.6 bbls
Total Sacks:	400 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
7:00 PM			-	-	on location job and safety
7:15 PM				-	spot trucks and rig up
8:45 PM				-	start casing in the hole
10:45 PM				-	on bottom and circulate
10:55 PM				-	start cement
	5.0	250.0	5.0	5.0	fresh water
	5.0	250.0		86.0	mix 400 sacks cement
11:20 PM					shut down pump
11:22 PM	3.0	200.0		-	start displacement
11:30 PM	3.0	200.0	17.0	17.0	displacement in and close in the well
				17.0	cement did circulate.....5bbls to the pit

CREW		UNIT
Cementer:	M Brungardt	916
Pump Operator:	B Brockmen	179/521
Bulk #1:	B Whitfeild	181/533
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.0 bpm	225 psi	22 bbls

ftv: 15-2021/01/25
mplv: 249-2022/01/24

HURRICANE SERVICES INC

Remit To: Hurricane Services, Inc.
250 N. Water, Suite 200
Wichita, KS 67202
316-303-9515

Customer:

DARRAH OIL
C/O JOHN JAY DARRAH JR
PO BOX 2786
WICHITA, KS 67201-2786

Invoice Date:	2/4/2022
Invoice #:	0358679
Lease Name:	Panning 25 A
Well #:	1 (New)
County:	Barton, Ks
Job Number:	WP2377
District:	Pratt

Date/Description	HRS/QTY	Rate	Total
Production Casing	0.000	0.000	0.00
H-Long	150.000	25.760	3,864.00
H-Plug	50.000	11.960	598.00
5 1/2" Floatshoe-Flapper AFU	1.000	345.000	345.00
5 1/2" LD Plug & Baffle	1.000	322.000	322.00
5 1/2" Turbolizers	5.000	115.000	575.00
Mud flush	500.000	0.920	460.00
Liquid KCL Substitute 2	1.000	18.400	18.40
Light Eq Mileage	50.000	1.840	92.00
Heavy Eq Mileage	100.000	3.680	368.00
Ton Mileage	458.000	1.380	632.04
Cement Blending & Mixing	200.000	1.288	257.60
Depth Charge 3001'-4000'	1.000	2,070.000	2,070.00
Cement Plug Container	1.000	230.000	230.00
Cement Pump-Hourly Service	3.000	161.000	483.00
Cement Data Acquisition	1.000	230.000	230.00
Service Supervisor	1.000	275.000	275.00

Total 10,820.04

TERMS: Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

SALES TAX: Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

WE APPRECIATE YOUR BUSINESS!

Hurricane Services, Inc.
250 N. Water St., Suite #200
Wichita, KS 67202

Customer	Darrah Oil	Lease & Well #	Panning 25 A-1			Date	2/4/2022
Service District	Pratt Kansas	County & State	Barton Kansas	Legals S/T/R	25-20s-14w	Job #	
Job Type	production casing	☑ PROD ☐ INJ ☐ SWD		New Well?	☑ YES ☐ No	Ticket #	wp 2377

Equipment #	Driver
916	M Brungardt
523/522	R Osborn
523/534	B Whitfeild

Job Safety Analysis - A Discussion of Hazards & Safety Procedures

☑ Hard hat	☑ Gloves	☐ Lockout/Tagout	☐ Warning Signs & Flagging
☑ H2S Monitor	☑ Eye Protection	☐ Required Permits	☐ Fall Protection
☑ Safety Footwear	☐ Respiratory Protection	☐ Slip/Trip/Fall Hazards	☐ Specific Job Sequence/Expectations
☑ FRC/Protective Clothing	☐ Additional Chemical/Acid PPE	☑ Overhead Hazards	☑ Muster Point/Medical Locations
☐ Hearing Protection	☑ Fire Extinguisher	☑ Additional concerns or issues noted below	

Comments

Barton stafford county line north to warren brothers 3 1/2 west south into

Product/ Service Code	Description	Unit of Measure	Quantity			Net Amount
cp030	H-Long	sack	150.00			$3,864.00
cp055	H-Plug	sack	50.00			$598.00
fe145	5 1/2" Float Shoe - AFU Flapper Type	ea	1.00			$345.00
fe170	5 1/2" Latch Down Plug & Baffle	ea	1.00			$322.00
fe135	5 1/2 Turbolizer	ea	5.00			$575.00
cp170	Mud Flush	gal	500.00			$460.00
af056	Liquid KCL Substitute 2	gal	1.00			$18.40
m015	Light Equipment Mileage	mi	50.00			$92.00
m010	Heavy Equipment Mileage	mi	100.00			$368.00
m020	Ton Mileage	tm	458.00			$632.04
c060	Cement Blending & Mixing Service	sack	200.00			$257.60
d014		job	1.00			$2,070.00
c050	Cement Plug Container	job	1.00			$230.00
c025	Cement Pump - Hourly Service	hr	3.00			$483.00
c035	Cement Data Acquisition		1.00			$230.00
r061	Service Supervisor	day	1.00			$275.00

Customer Section: On the following scale how would you rate Hurricane Services Inc.?

Based on this job, how likely is it you would recommend HSI to a colleague?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely

				Net:	$10,820.04
	Total Taxable	$ -	Tax Rate:		
State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.				Sale Tax:	$ -
				Total:	$ 10,820.04

HSI Representative:

TERMS: Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 ½% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. DISCLAIMER NOTICE: Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results fom the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well informaiton in determining taxable services.

X _____ **CUSTOMER AUTHORIZATION SIGNATURE**

ftv: 15-2021/01/25
mplv: 251-2022/01/27

CEMENT TREATMENT REPORT

Customer:	Darrah Oil	**Well:**	Panning 25 A-1	**Ticket:**	wp 2377
City, State:	Great Bend Kansas	**County:**	Barton Kansas	**Date:**	2/4/2022
Field Rep:	Cooper Seely	**S-T-R:**	25-20s-14w	**Service:**	production casing

Downhole Information	
Hole Size:	7 7/8 in
Hole Depth:	3600 ft
Casing Size:	5 1/2 in
Casing Depth:	3533 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	bbls

Calculated Slurry - Lead	
Blend:	H long
Weight:	15.0 ppg
Water / Sx:	6.0 gal / sx
Yield:	1.42 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	37.9 bbls
Total Sacks:	150 sx

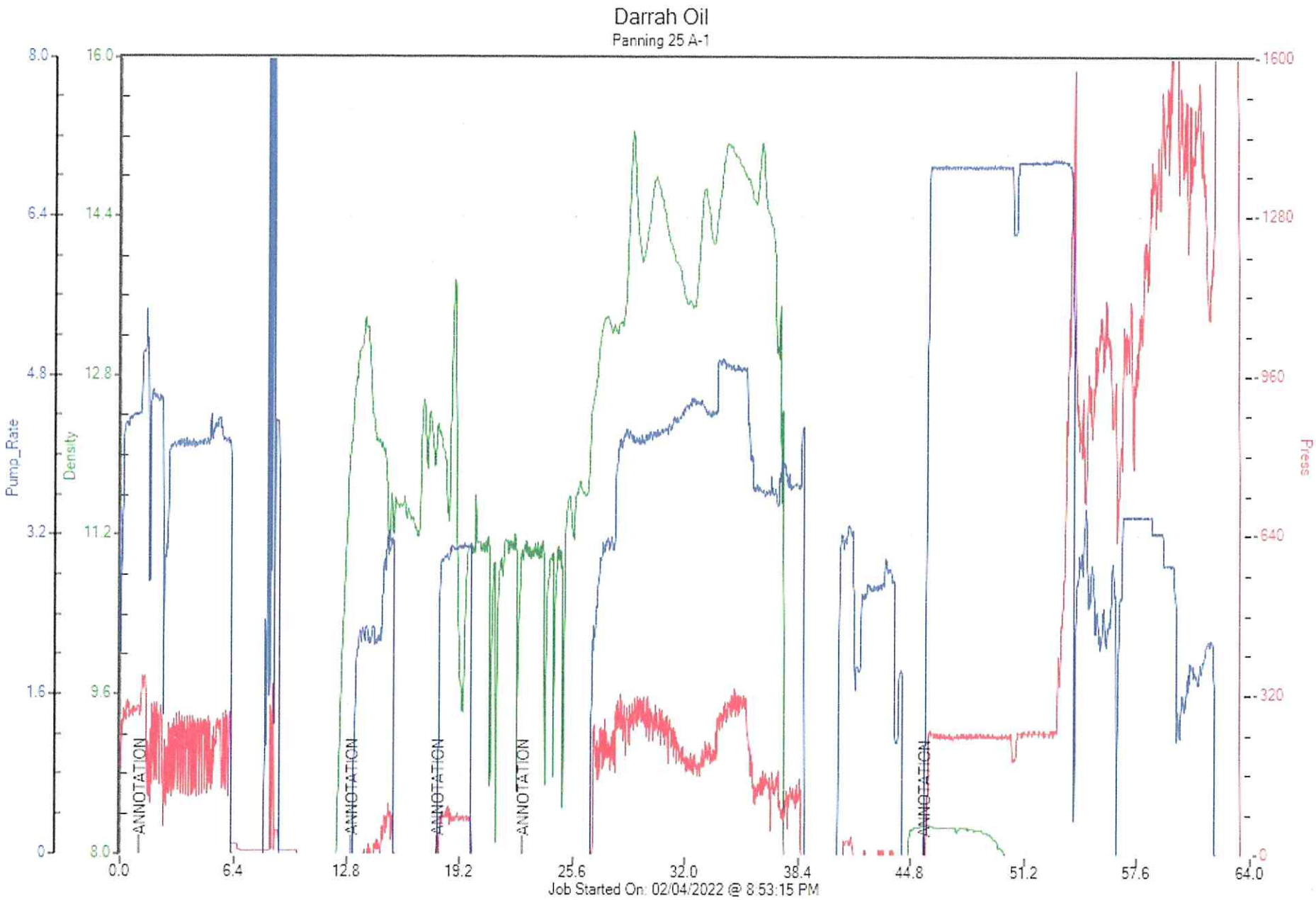
Calculated Slurry - Tail	
Blend:	H plug
Weight:	13.7 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.43 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	12.7 bbls
Total Sacks:	50 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
12:30 PM			-	-	on location job and safety
12:45 PM				-	spot trucks and rig up
				-	centralizers 1,3,5,7,9
5:00 PM				-	start casing
7:05 PM				-	on botoom and circulate
7:55 PM				-	start mud flush
	5.0	350.0	2.0	2.0	5 fresh
	5.0	350.0	12.0	14.0	12 mud flush
	5.0	350.0	5.0	19.0	5 fresh
8:10 AM	2.0	-	12.7		plug rat and mouse.....rat hole 30 sacks.....mouse hole 20 sacks
8:25 PM				-	start cement
	4.0	300.0	37.9		mix 150 sacks
8:35 PM					cement in and shut down
					wash pump and lines
8:45 PM					start displacement
	7.0	250.0	30.0		
	7.0	250.0	40.0		
	7.0	250.0	60.0		
	7.0	400.0	70.0		
	3.0	1,500.0	77.0		
	3.0	1,000.0	80.0		
	3.0	1,200.0	83.0		
9:00 PM					plug down 1200 psi to 1800 psi
					plug did hold

	CREW	UNIT
Cementer:	M Brungardt	916
Pump Operator:	R Osborn	523/522
Bulk #1:	B Whitfeild	523/534
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.8 bpm	517 psi	510 bbls

ftv: 15-2021/01/25
mplv: 251-2022/01/27


Darrah Oil
Panning 25 A-1
Pump_Rate
Density
Press
8.0
6.4
4.8
3.2
1.6
0
16.0
14.4
12.8
11.2
9.6
8.0
1600
1280
960
640
320
0
0.0
6.4
12.8
19.2
25.6
32.0
38.4
44.8
51.2
57.6
64.0
ANNOTATION
ANNOTATION
ANNOTATION
ANNOTATION
ANNOTATION
Job Started On: 02/04/2022 @ 8:53:15 PM

Scale 1:240 Imperial

Well Name:	Panning 25 A #1		
Surface Location:	SE/NE/NW/NE Sec 25 T20S R14W		
Bottom Location:			
API:	15-009-26325		
License Number:			
Spud Date:	1/26/2022	Time:	12:02 AM
Region:	Barton County		
Drilling Completed:	2/2/2022	Time:	12:00 AM
Surface Coordinates:			
Bottom Hole Coordinates:			
Ground Elevation:	1893.00ft		
K.B. Elevation:	1904.00ft		
Logged Interval:	2800.00ft	To:	3550.00ft
Total Depth:	3550.00ft		
Formation:	Lansing-KC		
Drilling Fluid Type:	Chemical Mud		

OPERATOR

Company:	Darrah Oil Co. LLC		
Address:	125 N. Market Suite #1015 Wichita, Kansas 67202		
Contact Geologist:	Seth Evenson		
Contact Phone Nbr:	(620) 953-2066		
Well Name:	Panning 25 A #1		
Location:	SE/NE/NW/NE Sec 25 T20S R14W		
API:	15-009-26325		
Pool:		Field:	Pritchard
State:	Kansas	Country:	United States

LOGGED BY

Company:	Darrah Oil Co. LLC		
Address:	125 N. Market Suite #1015 Wchita, Kansas 67202		
Phone Nbr:	(620) 953-2066		
Logged By:	Geologist	Name:	Seth Evenson

CONTRACTOR

Contractor:	Murfin Drilling		
Rig #:	22		
Rig Type:	Standard Double		
Spud Date:	1/26/2022	Time:	12:02 AM
TD Date:	2/2/2022	Time:	12:00 AM
Rig Release:	2/5/2022	Time:	12:00 AM

ELEVATIONS

K.B. Elevation:	1904.00ft	Ground Elevation:	1893.00ft
K.B. to Ground:	11.00ft		

ROCK TYPES

Coal, Congl, Dolsec, Lmst fw<7, Lmst fw7>, Shgy, Shcol

OTHER SYMBOLS

OIL SHOWS
- Even Stn
- Spotted Stn 50 - 75 %
- Spotted Stn 25 - 50 %
- Spotted Stn 1 - 25 %
- Questionable Stn
- D Dead Oil Stn
- Fluorescence

INTERVALS
- Core
- DST

Fluorescence

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)

Curve Track #01

ROP (min/ft)

1:240 Imperial

0 ROP (min/ft) 10

Depth | Intervals

Cored Interval

DST Interval

Oil Shows

Interpreted Lithology

Geological Descriptions

Comment

Vertical Comment 1

2800

2850

2900

2780'-2800': Mix of shale, gry, red/brwn, etc. Also much lms, crm-lt gry, vfn xtln, dns, tite. Some silty shale.

2800'-20': Lms, crm-lt gry, vfn xtln, med-hrd res, tite, vpr-no vis poro. Much shale, gry, red/brwn, blk.

2820'-40': Shale, gry, red/brwn, blk. Also some lms as abv.

2840'-60': Shale, gry, drk gry, blk, red/brwn. Some lms, crm-lt gry, tite.

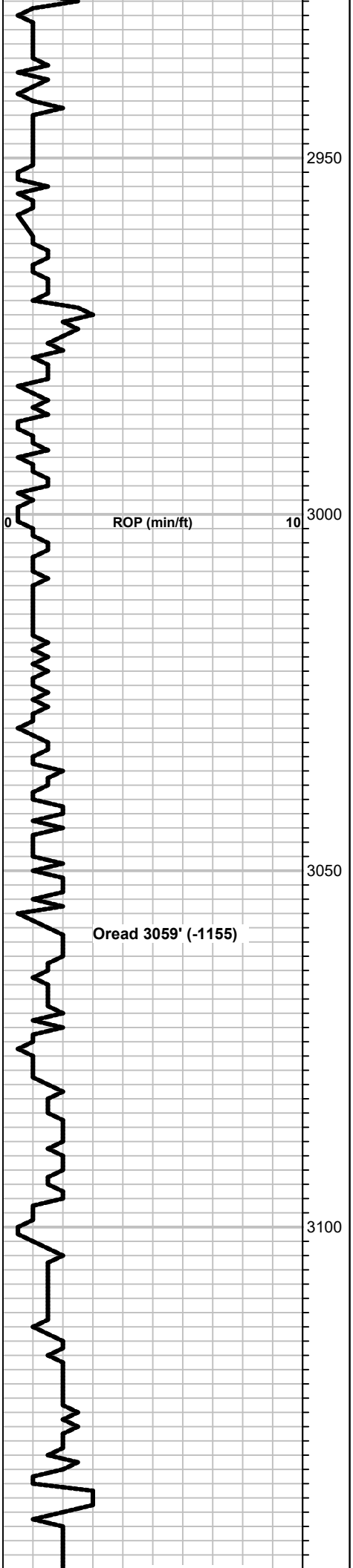
2860'-80': Shale, gry, blk, fissile, some red/brwn earthy. Some lms, crm-gry-tan, tite, no vis poro.

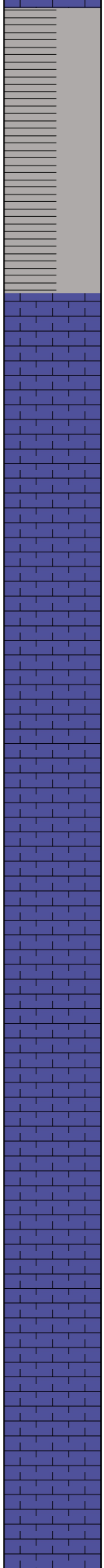
2880'-2900': Lms, crm-tan, micro-vfn xtln, mst vpr-no vis poro, NS. Also, much gry shale, some sli silty.

2900'-20': Lms, gry-crm, micro-vfn xtln, med-hrd res, no vis poro. Some blk carb shale, fissile, & gry platy shale.

Samples from 2800' to 3000' are of questionable quality

Samples from 2800' to 3000' are of questionable quality





2920'-40': Mix of lms & shale. Lms, crm-tan-gry, micro-vfn xtln, mst no vis poro, NS. Much shale, gry, platy to some fissile.

2940'-60': Lms, gry, vfn xtln, sli foss, some off-wht sli chlky, all no vis poro. Much gry platy shale, and some maroon shale.

2960'-80': Lms, gry-crm, micro-vfn xtln, med res, no vis poro. Some shale, gry-blk.

2980'-3000': Lms, gry-crm, micro-vfn xtln, trc foss, vpr-no vis poro. Much shale, gry & blk, etc. Trc xtln pyrt.

3000'-20': Lms, tan-crm, some gry, vfn-fn xtln, some foss (fus), mst vpr-no vis poro, NS. Much shale, gry, blk, maroon, & red/brwn.

3020'-40': Lms, tan-crm, some gry, micro-vfn xtln, med-hrd res, sli foss, vpr-no vis poro. NS. Much shale, gry, platy.

3040'-50': Lms, crm-gry, micro-vfn xtln, mst hrd res, dns, tite. A few pcs lms, crm, w/gd lv drk brwn-blk stn in fractures, vry pr poro. VSSFO, sli oily lstr, no odr.

3050'-60': Lms, crm-gry, vfn xtln, sli shaley to some sli chlky, hrd res, vpr-no vis poro, foss. NS.

3060'-70': Lms, gry-crm, vfn xtln, hrd res, tite, dns, trc foss, no vis poro. 1 pc tan lms, w/gd lv stky blk oil on fract edge, probably slough.

3070'-80': Lms, lt gry-tan, micro-fn xtln, med-hrd res, mst vpr-no vis poro, NS.

3080'-90': Lms, crm-tan-gry, vfn xtln, med-hrd res, many sli chlky, all no vis poro.

3090'-3100': Lms, gry-lt gry-tan, micro-vfn xtln, hrd res, mst few-no allchms, vpr-no vis poro. Trc shaley lms/lmy shale. Some shale, gry, maroon, trc gry silty.

3100'-10': Lms, chlky, off-wht, sft-med res, many pcs tan lms, micro-fn xtln, hrd res, all vpr-no vis poro. Some shale gry-drk gry, trc blk & grn.

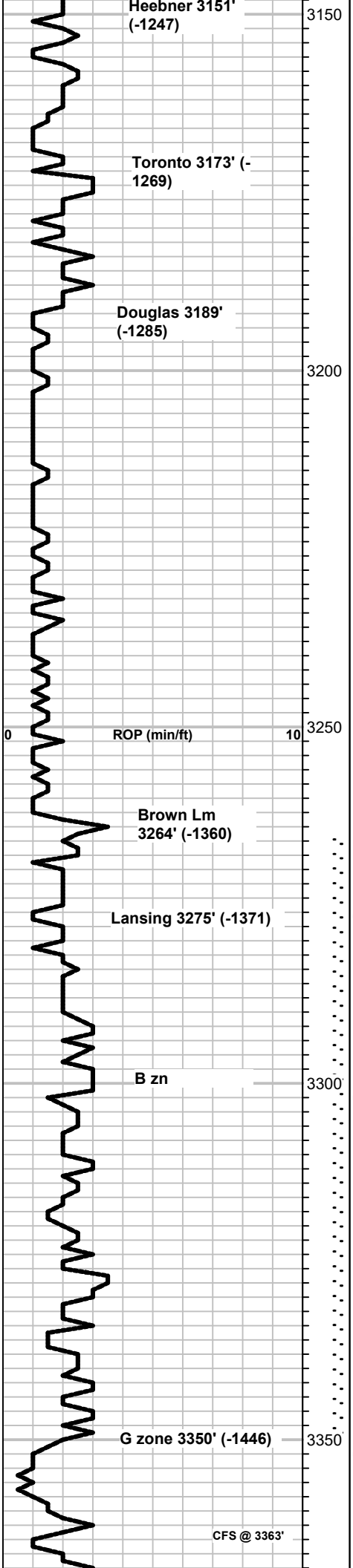
3110'-20': Shaley lms to lmy shale, micro xtln, sft-med res, non-allcjmcl, no vis poro. Also much lms, tan, tite, as abv. A few pcs chrt, gry, shrp & frsh. Some shale, gry, maroon.

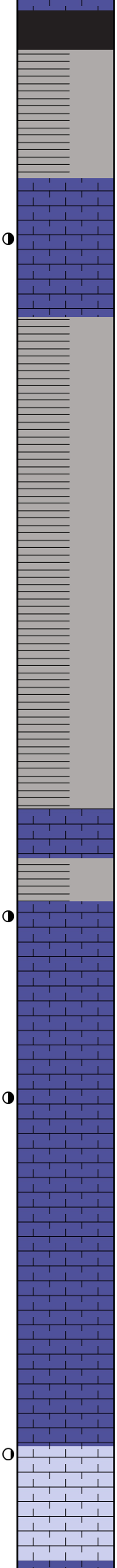
3120'-30': Lms, gry-tan, micro-vfn xtln, mst hrd res, few-no allchms, vpr-no vis poro. Trc chrt, bone, shrp. Some drk gry & maroon shale.

3130'-40': Lms, tan, micro-vfn xtln, sft-med res, some, chlky, non-allchmcl, no vis poro.

3140'-50': Lms, tan, sli chlky, med res & lt gry, micro xtln, hrd res,

Samples from 2800' to 3000' are of questionable quality





all non-allchmcl, no vis poro.

3150'-60': Lms, gry-tan, micro-vfn xtln, med-hrd res, non-allchmcl, no vis poro.

3160'-70': Lms, tan, some brwn, micro-vfn xtln, med-mst hrd res, non-allchmcl, no vis poro. Trc blk carb shale.

3170'-80': Shale, gry, maroon, blk carb, trc lt grn. Mstly lms, tan, tite, as abv. A couple pcs lms, off-wht, micro-xtln, med res, w/rare scat lv stn in pnpnt poro, pr poro, fr oily lstr.

3180'-90': Lms, crm-tan, sli chlky, sft, & much gry, mealy lms, hrd res, all no vis poro. A few pcs lms, crm to off-wht, micro -xtln, med-hrd res, w/sprs, scat, gd lv blk stn in rare vugs, pr vugular, & pr-no intr-xtln poro, fr oily lstr, NSFO. Some shale, gry, maroon, trc blk carb.

3190'-3200': Lms, mstly gry, vfn xtln, trc foss, no vis poro. Some lms, wht to off-wht, chlky, med res, w/fr-gd scat lv blk stn in vugs. VSSFO on brk, fr oily lstr on brk, pr intr-vugular poro & pr-fr vugular poro. No odr.

3200'-10': Lms, gry to off-wht, mst tite. Some off-wht, chlky, w/rare scart stn in rare shallow surfc vugs, mstly pr poro, SSFO, blk stky oil on brk, sli odr.

3210'-20': Lms, crm-tan, micro-vfn xtln, chlky, vuggy, pr-fr poro, scat fr-gd lv stn in vugs, some asphltc stn, fr oily lstr, VSSFO, poss oil drplts in cup, vry sli odr.

3220'-30': Lms, crm-lt gry, micro-vfn xtln, some sli chlky,mst tite, no vis poro. A few pcs w/rare hvy blk stn in scat rare vugs, vpr poro. Increase in shale, gry & grnish gry.

3230'-40': Shale, gry, lt gry, trc red/brwn & blk shale. Much lms tite.

3240'-50': Shale, gry, maroon, trc shaly lms. Much lms, tan, vfn xtln, med res, a few pcs w/lt lv scat stn, NSFO. Mst tite, no shw.

3250'-60': Silty shale & Siltstone, gry, platy. Also some shale as abv.

3260'-70': Shale, gry, some silty shale.

3270'-80': Shale, gry. Some lms, crm to tan, dns, tite, trc foss.

3280'-90': Shale, gry, trc maroon, some silty gry shale. Some, crm-tan, tite dns lms, as abv.

3290'-3300': Lms, crm to gry, vfn xtln, brtl-med res, pr-fr pnpnt and scat vugular poro, gd even lv stn, & fr sat, sli oily lstr on brk, NSFO, dull yell fluor, gd odr.

3300'-10': Lms, crm-lt gry, vfn xtln, med res, scat shallow vugs & pnpnt poro, mstly pr poro, scat lv blk to trc asphltc stn in pnpt & rare vugs, NSFO, sli odr.

3310'-20': Lms, crm-tan-gry, vfn-fn xtln, med-hrd res, mst no vis poro, non-ooltc. A few pcs ooltc lms, w/rare scat stn in pnpt intr-olltc poro, pr poro, NSFO, sli odr. Mstly tite, NS.

3320'-30': Lms, crm-lt gry, vfn xtln, hrd res, mstly tite. A few pcs w/rare scat vugs & hvy blk asphltc stn in vugs. Increase in gry shale.

3330'-40': Lms, crm-gry, vfn-fn xtln, med-hrd res, mstly vpr-no vis poro, trc foss. Much shale, gry, maroon, trc blk carb.

3340'-50': Lms, crm, tan, gry, micro-fn xtln, med-hrd res, mstly vpr-no vis poro, NS.

3350'-60': Lms, tan, some gry, micro-vfn xtln, hrd res, tite, mst no vis poro. A few pcs w/gd lv blk stn in edges & fracts, probably slough.

3360'-70': Lms, tan-gry, vfn xtln, med-hrd res, some, dns, tite, non-allchmcl. Many pcs lms, crm, oomldc vugular, w/gd vugular poro. A few pcs w/scat sprs

Short sample 3315': Lms, crm to tan, abndtly ooltc, wk to fr scat lv brwn stn in intr-ooltc poro, wk sat, pr-fr poro, trc FO, sli odr. Mstly crm lms, non-ooltc, tite, dns.

3315' CFS 15 min: Lms, tan-crm, micro-vfn xtln, abndtly ool, med-hrd res, scat fr lv brwn stn in intr-ool vugs, mstly pr-fr poro, some non-ooltc, w/scat stn in fract. SSFO on brk, gd odr. Mst pcs tite, NS.

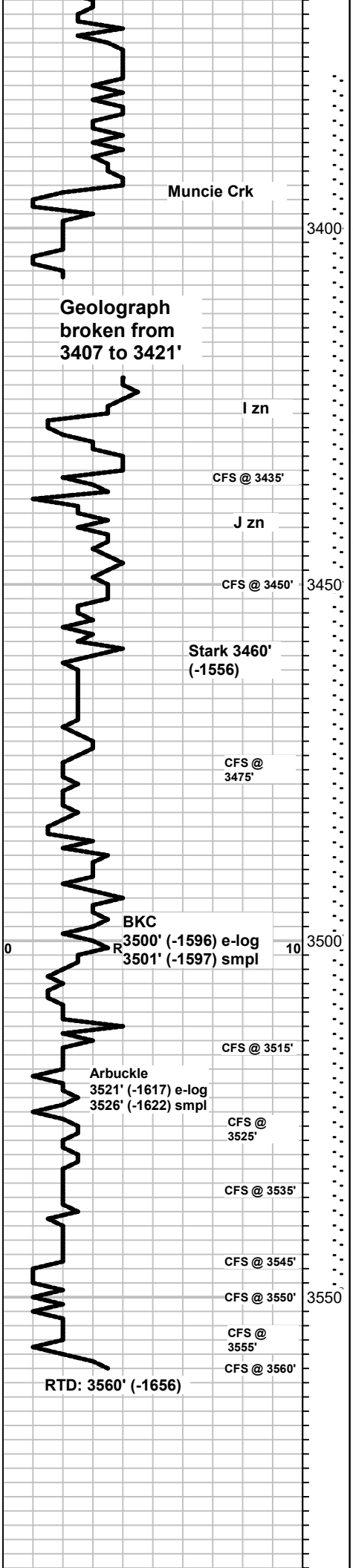
3315' CFS 30 min: Lms, crm to off-wht, vfn xtln, some ooltc, mst non-ooltc, med res, pr poro, w/scat lt brn to blk lv stn in rare pnpnt vugs, trc FO, fr odr. Mst pcs lms, lt gry, mealy, tite.

3350' CFS 15 min: Lms, crm to gry, micro-vfn xtln, hrd res, some, sli chlky, trc foss, mstly non-allchmcl, tite, vpr-no vis poro. Much gry shale.

3350' CFS 30 min: Lms, crm to gry, micro-vfn xtln, med-hrd res, vpr-no vis poro. Shale as abv.

3363' CFS 15 min: Lms, crm, oomldc vugular, vfn xtln, med-hrd res, fr vugular & pr intr-xtln poro, a few pcs w/gd scat lv blk stn in vugs, NSFO, wk odr, mst pcs barren. Wk shw overall.

3363' CFS 30 min: Lms, crm, vfn xtln, oomldc vugular, med res, gd vugular poro, pr-fr intr-xtln poro, 90%



lv blk stn in vugs, SSFO, gssy FO on brk, vry sli odr. Mst pcs barren.

3370'-80': Lms, crm-lt gry, micro-vfn xtln, med-hrd res, dns, tite, mst non-allchmcl, no vis poro.

3380'-90': Lms, crm-tan, some lt gry, vfn xtln, med res, tite, dns, non-allchmcl, no vis poro.

3390'-3400': Lms, crm-lt gry, micro-vfn xtln, med-hrd res, tite, dns, mst non-allchmcl, trc w/foss, no vis poro.

3400'-10': Lms, gry, vfn xtln, hrd res, mst non-allchmcl, dns, tite. Also, much crm-tan lms, as abv. Some shale, gry, maroon.

3410'-20': Lms, off-wht to crm, ooltc, omldc vugular in part, med-hrd res, some pcs chlky, w/abndt dead blk stn in oomldc vugs. A few pcs, crm-lt gry, vuggy in part, pr-fr vugular & pr intr-xtln poro, w/fr-gd lv stn in scat oomldc vugs, gd oily lstr on brk, NSFO, sli odr.

3420'-30': Lms, crm-tan, some lt gry, micro-vfn xtln, hrd res, mst non-allchmcl, no vis poro. 1 pc wht ooltc lms, w/fr lv stn in, scat intr-ooltc poro, pr poro, NSFO. Poss new zone.

3430'-40': Lms,crm-tan some lt gry, micro-vfn xtln, hrd res, mst non-allchmcl, tite, no vis poro.

3440'-50': Lms, crm-tan, micro-vfn xtln, med-hrd res, mst non-allchmcl, tite, no vis poro. A few pcs w/scat lv stn in rare scat vugs, pr poro, wk shw. Poss slough.

3450'-60': Lms, tan-crm, micro-vfn xtln, med-hrd res, tite, mstly non-allchmcl, no vis poro. A few pcs gry chrty lms. Increase in shale, gry, trc blk.

3460'-70': Lms, crm-tan, micro xtln, med-hrd res, a few ooltic, mst vpr-no vis poro. Increase in shale, gry, maroon, drk gry.

3470'-80': Lms, crm-tan-gry, micro-vfn xtln, hrd res, tite, mstly non-allchmcl, no vis poro.

3480'-90': Lms, lt gry-tan, some crm, micro-vfn xtln, hrd res, a few sft chlky, all few-no allchms, vpr-no vis poro. Also shale, gry, maroon, etc.

3490'-3500': Lms, crm-gry, micro-vfn xtln, hrd res, tite, mst non-allchmcl, a few pcs abndtly ooltc, all vpr-no vis poro.

3500'-10': Lms, crm-lt gry, micro-vfn xtln, med-hrd res, mstly non-allchmcl, several pcs sli conglmrtc, all vpr-no vis poro.

3510'-20': Shale, gry, maroon, prpl, grn, some mottled conglmrtc shale.

3520'-30': Shale, vari-colored as abv, some mottled conglmrtc shale, sli sndy. A few pcs lms ooltc, non-vugular, hrd, tite. A few pcs conglmrtc lms. Trc chrt, red/orng, shrp, sli weathrd.

3530'-40': Dolo, brwn-tan, fn xtln, some vfn, mst med res, a few hrd silicified, mst fr-gd intr-xtln poro, rare scat vugs, some scat lv stn in vugs, mst fr-gd sat, fr oily lstr, SSFO w/trc gas, gd even yell fluor, sli odr. A few pcs ooltc dolo, hrd, tite.

3540'-50': Dolo, crm-tan-gry, fn-med xtln, mst med-hrd res, a few med rhmbc xtln, brtl, w/fr-gd intr-xtln poro. Mst pr-fr intr-xtln poro, fr-gd sat, a few pcs w/wk sat, scat spty lv stn in mst.

3450'-60': Dolo, wht, med rhmbc xtln, med res, pr intr-xtln poro, abndt dead blk asphltic stn in intr-xtln poro, no lv stn, no sat. Some pcs gry, fn-med xtln, fr poro, w/vgd lv stn in intr-xtln poro, & vry gd-full sat, gd odr probable slough.

3550' CFS 30 min: Dolo, brwn, vfn-fn xtln, med-hrd res, w/fr-gd sat mst pcs, fr-gd scat spty lv blk stn in intr-xtln & occ vugs, pr-fr intr-xtln poro, wk-gd oily lstr, fr odr. Some pcs dolo, off-wht, vfn xtln, sli chlky, med-hrd res, pr vis poro, wk-no sat, no stn.

3555' CFS 20 min: Dolo, gry, vfn xtln, hrd res, pr vis poro, mst pcs appear unsat. 1 pc w/fr sat, spty lv stn in pnpnt intr-xtln poro, fr oily lstr on brk, sli odr. Poor quality sample, mstly shale.

barren. Some pcs w/scat gd lv blk stn in vugs, pr sat, SSFO on brk, sli odr.

3420' CFS 15 min: Mstly lms, crm-tan, vfn xtln, tite, dns,non-allchmcl. Some pcs part oomldc vugular lms, w/abndt dead blk stn in vugs, a few pcs w/lv stn in vugs. 1 pc hrd oomldc lms, sli chlky,pr intr-xtln poro, w/SSFO- bleeding gsy FO. Mst tite, NS.

3420' CFS 30 min: Lms, crm-lt gry, micro-vfn xtln, hrd res, tite, dns, mst non-allchmcl, no vis poro.

Short sample @ 3435': Mstly lms, crm-lt gry, micro-vfn xtln, med-hrd res, dns, tite, mst non-allchmcl. A few pcs lms, lt gry, ooltc to oomldc in prt, fn xtln, hrd res, w/scat lv brwn stn in pr-fr vugular poro, fr sat, fr oil lstr, VSSGFO on brk, sli odr.

3435' CFS 15 min: Lms, crm-tan, micro-vfn xtln, hrd res, mst non-allchmcl, tite, no vis poro. A few pcs, w/rare oomldc vugs,spty lv stn in vugs. Some blk carb shale.

3435' CFS 30 min: Lms, tan-lt gry, micro-vfn xtln, hrd res, some ooltc, mst non-allchmcl, tite, vpr-no vis poro. Much shale, gry, grn & maroon. Poss increase in tan oomldc lms, barren,fr-gd vugular poro.

3450' CFS 15 min: Lms, crm, crypto-micro xtln, med-hrd res, mst non-allchmcl, tite, no vis poro. A few pcs barren oomldc vugular lms, gd poro. A few pcs w/vry rare scat lv stn in rare vugs. pr poro, NSFO.

3450' CFS 30 min: Lms, crm-tan, micro-vfn xln, hrd res, tite, mst non-allchmcl, no vis poro.

3475' CFS 15 min: Lms, tan-gry, micro xtln, hrd res, mst non-allchmcl, a few pcs tan ooltc, all no vis poro. A couple pcs w/vry rare scat stn in vry rare vugs, vpr poro, vry wk shw, poss slough.

3475' CFS 30 min: Lms, crm-lt gry, micro xtln, hrd res, mst non-allchmcl, no vis poro. Some shale, gry & maroon

3515' CFS 15 min: Lms, crm-lt gry, micro xtln, med-hrd res, mst non-allchmcl, some sli shaley, all no vis poro. Several pcs xtln pyrt. A few pcs gry & grn shale.

3515' CFS 30 min: Lms, conglmrtc, lt grnisn/gry, micro xtln, hrd res. Mstly, lms crm-lt gry, micro xtln, med-hrd res, no vis poro.

3525' CFS 15 min: Shale, grn, maroon, gry, some mottled conglmrtc shale, sli

3600

3650

3700

3555' CFS 40 min: Dolo, crm, micro-xtln, vry hrd res, ooltc, vpr poro, a couple pcs w/trc lt brn stn in vry rare pnpnt poro. Also, dolo, brwn, fn xtln, hrd res, pr vis poro, mst appear unsat to wk sat, rare spty lv stn. A few pcs fn-med rhmbc xtln, w/gd-vgd stn, fully sat, fr-gd poro, probable slough.

3560' CFS 20 min: Dolo, tan-lt gry, vfn-fn xtln, hrd-vhrd res, pr-fr scat vugular poro (1pc poss ommldc vugs), fr scat lv blk stn, fr sat, SSFO, sli gsy oil on brk, dull yell even fluor, fr odr. 1 pc wht dolo, w/scat dead stn as abv. Lots of shale, poor quality sample.

3560' CFS 40 min: Dolo, off-wht, fn-med rhmbc xtln, med-hrd res, w/abndt dead blk asphltc stn in intr-xtln poro. Some ooltc dolo, gry, fn xtln, med-hrd res, a few w/scat oomldc vugs, fr vugular poro, gd lv blk stn in vugs, fr-gd sat, dull yell fluor mst pcs pr-fr intr-xtln poro, fr odr.

shdy. Also, pyrt, trc sli pyrtc SS, trc red chrt, shrp & frsh.

3525' CFS 30 min: Shale, grn, gry, maroon, blk, mottled conglmrtc. Trc sli pyrtc SS.

3535' CFS 15 min: Dolo, brwn, fn xtln, med res, gd scat stn in rare vugs, pr poro, fr sat, gd even yell fluor, fr oily lstr, SSFO on brk, sli odr. A few pcs brwn/gry sucrosic dolo, vfn xtln, sft/crmbly, fr-gd intr-xtln poro, fr sat, gd even yell fluor.

3535' CFS 30 min: Dolo, brwn,vfn xtln, sucrosic, sft/crmbly, gd intr-xtln poro, gd even sat, gd oily lstr on brk, 1 pc suc approx 50% sat. A few pcs med res vfn xtln dolo, no suc, w/rare scat vugs, pr intr-xtln poro, VSSFO, fr-gd sat. Mst pcs fr-gd sat, fr-gd even yell fluor, vry sli odr.

3545' CFS 15 min: Dolo, brwn to gry, vfn-fn xtln, some, sft-med res, w/fr-gd intr-xtln poro, w/fr sat. Mst hrd, tite. Some, mstly tite pcs appear to have pr-no sat. Sli odr.

3545' CFS 30 min: Dolo, lt gry-crm, vfn-fn xtln, some hrd tite, silicified, some suc, sli clay matrix, appear unsat. Many pcs brwn-tan dolo, fn xtln, med-hrd res, some fr-gd intr-xtln poro, some tite, these pcs have fr sat, w/lv spty stn.

3550' CFS 15 min: Dolo, lt gry, med rhmbc xtln, fr intr-xtln poro, gd sat, gd scat lv blk stn in intr-xtln poro, NSFO, fr even yell wht fluor, sli-fr odr, Some pcs brwn-crm dolo, vfn-fn xtln w/wk-fr sat, some appear unsat, w/even fluor, pr poro,