KOLAR Document ID: 1599515

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 # 5135
Name: Farmer, John O., Inc.
Address 1: 370 W WICHITA AVE
Address 2: PO BOX 352
City: RUSSELL State: KS Zip: 67665 + 0352
Contact Person: Marge Schulte
Phone: (785) 483-3145
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Austin Klaus
Purchaser: Coffeyville Resources

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 #:

08/05/2021 Spud Date or Recompletion Date
08/10/2021 Date Reached TD
09/23/2021 Completion Date or Recompletion Date

API No.: 15-065-24201-00-00
Spot Description: E2 SE SW NW
E2 - SE - SW - NW Sec. 25 Twp. 10 S. R. 21 ☐ East ☑ West
2310 Feet from ☑ North / ☐ South Line of Section
1215 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: Graham
Lease Name: HERROLD Well #: 11
Field Name: Cooper
Producing Formation: Arbuckle
Elevation: Ground: 2177 Kelly Bushing: 2185
Total Vertical Depth: 3828 Plug Back Total Depth: 3772
Amount of Surface Pipe Set and Cemented at: 222 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 1628 Feet
If Alternate II completion, cement circulated from: 1628
feet depth to: 0 w/ 300 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 3000 ppm Fluid volume: 400 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: 11/18/2021
☐ **Confidential Release Date:** 11/18/2023
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Deanna Garrison **Date:** 11/19/2021

Page Two

Operator Name: Farmer, John O., Inc. Lease Name: HERROLD Well #: 11

Sec. 25 Twp. 10 S. R. 21 ☐ East ☑ West County: Graham

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

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

Drill Stem Tests Taken *(Attach Additional Sheets)*	☑ Yes	☐ No	
Samples Sent to Geological Survey	☑ Yes	☐ No	
Cores Taken	☐ Yes	☑ No	
Electric Log Run	☑ Yes	☐ No	
Geologist Report / Mud Logs	☑ Yes	☐ No	

List All E. Logs Run: Attached

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

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	222	Common	150	3% C.C., 2% gel
Production	7.875	5.50	15.5	3827	SMD	130	0

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	3746-3760		67	
	3748-3754	Common	25	

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: 10/08/2021

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	16.20		48.50		

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
3769	3771

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4	3746	3760			Arbuckle "A" (squeezed off 8/21)
4	3748	3754			Arbuckle "B" (squeezed off 9/21)
4	3769	3771			Arbuckle "C"

TUBING RECORD: Size: 2.875 Set At: 3622 Packer At: 3622

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	HERROLD 11
Doc ID	1599515

All Electric Logs Run

Micro Resistivity
Compensated Density Neutron
Dual Induction
Cement Bond

Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	HERROLD 11
Doc ID	1599515

Tops

Name	Top	Datum
Anhydrite	1645'	(+540)
Topeka	3200'	(-1015)
Heebner	3402'	(-1217)
Toronto	3431'	(-1246)
Lansing	3446'	(-1261)
Base/KC	3670'	(-1485)
Arbuckle	3746'	(-1561)
L.T.D.	3827'	(-1642)

Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	HERROLD 11
Doc ID	1599515

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	222	Common	150	3% C.C., 2% gel
Production	7.875	5.50	15.5	3827	SMD	130	0

JOB LOG

SWIFT Services, Inc.

DATE 8-5-21 | PAGE NO.

CUSTOMER: JOHN O FARMER | WELL NO.: # 11 | LEASE: HERROLD | JOB TYPE: Shallow Surf. | TICKET NO.: 35187

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	@ 1530							ON LOCATION
								8 5/8 CSG
								RTD - 223
								Pipe - 221.75
	1545							START CSG
								BREAK CIRC
		5	5			300		PUMP WTR SPACER
		5	36			300		PUMP CMT - 150 SK @ 14.2 PPG
		5	13			300		DISP
	1630							SHUT IN
								CIRCULATED - 30 SK CMT
								JOB COMPLETE
								THANKS
								DAVID, ZACH & TSNAP

JOB LOG

SWIFT Services, Inc.

DATE 8-11-21 | PAGE NO.

CUSTOMER: JOHN O FARMER | WELL NO.: #11 | LEASE: Herrold | JOB TYPE: (LONG STRING) | TICKET NO.: 35192

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	730							ON LOCATION
								RTD - 3828
								CENTRALIZERS - 1, 3, 5, 7, 9, 11, 54
								BASKET - 55
								Limit Clamp - 55. 15' up
								(Port Collar) - 55 @ 1628
	930							START Running Csg
	1100							Break circ on Btm
	1130	2.5	8			0		Plug Rat Hole - 30 sx
		2.5	4			0		Plug Mouse Hole - 15 sx
		5	12			200		pump MUDFLUSH - 500 Gal
		5	20			200		Pump KCL SPACER
		4.5	32			200		(Pump - Cmt - 130 sx) EA-2 @ 15.5'
								Drop plug - Wash P/L
		6.5	0			200		START Disp
	1220	5.5	90			700		LAND Plug @ 1500 #
								Release Psi - Dry
								JOB Complete
								Thanks
								DAVID, ZACH & ISAAC

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071 Home Office P.O. Box 32 Russell, KS 67665 No. 2416

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
8-26-21	25	10	21	Graham	KS		9:30 AM

Location Church of God 5S 1E

Lease Herrold Well No. 11

Contractor APS

Type Job Portcollen

Hole Size T.D.

Csg. 5½ Depth

Tbg. Size 2⅞ Depth

Tool Depth

Cement Left in Csg. Shoe Joint

Meas Line Displace

EQUIPMENT

Pumptrk 17	No.	Cementer	Bill
		Helper	
Bulktrk	No.	Driver	CRAIG
		Driver	
Bulktrk 21	No.	Driver	DUKE
		Driver	

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Port collen

Est Circ

pump 6bl cal ahead

Cemt w/ 300sk

Cemt did circ

Close Tool Test 800# good

Wash out

Used 300 sk

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.

Charge To J.O. Farmen

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 350sk 3% 20 Qmdc 6% Cal

Common ~~Qmdc~~ 300 50/50 Qmdc ¼#

Poz. ~~Mix~~

Gel. 6

Calcium

Hulls

Salt

Flowseal ~~1000~~ 100#

Kol-Seal

Mud CLR 48

CFL-117 or CD110 CAF 38

Sand

Handling 350

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

Pumptrk Charge p/lug

Mileage 50

Tax

Discount

Total Charge

Thanks

X Signature Duane Eichman

JOB LOG

SWIFT Services, Inc.

DATE 8/31/21 | PAGE NO.

CUSTOMER: JOHN O' FARMER | WELL NO.: #11 | LEASE: Herrold | JOB TYPE: PERF SQZ | TICKET NO.: 35228

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	800							ON LOCATION
								2 7/8 x 5 1/2
								PERFS - 3746 - 60
								PKR - 3622
						500		LOAD & PRESSURE BACKSIDE
		1.25				800		TAKE INJECTION RATE
		1.25	10			800		PUMP CMT - 50 SX W/ HALAD IN 1ST 20 SX
								WASH P&L
								START DISP
			14					CATCH PSI
	910		17.5			2000		STAGE
	935							RELEASE PSI - DRY
								* 17 SX IN PERFS
		2.5	25			300		REVERSE OUT
								PULL 5 JTS
						500		PRESSURE UP & SHUT IN
								JOB COMPLETE
								THANKS
								DAVID, ZACH & ISAAC

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. 2439

Date	Sec.	Twp.	Range	County	State	On Location	Finish
9-17-24				Graham	KS		2:45pm

Location Church of God SSE 5Jn

Lease Herrold Well No. 11

Owner

Contractor ATS

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.

Type Job Squeeze ARB

Charge To JO Farmer

Hole Size T.D.

Csg. 5½ Depth

Street

Tbg. Size 2⅞ Depth

City State

Tool Depth

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. Shoe Joint

Cement Amount Ordered 100# Com

Meas Line Displace

EQUIPMENT

Pumptrk 16	No.	Cementer	Brad
		Helper	Clyde
Bulktrk	No.	Driver	
		Driver	
Bulktrk 9	No.	Driver	Doug
		Driver	

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Test plug 1500# OK

Perf SC 3748-54

Could not pump Into

Spot 25sk @ 3778

pull to 3536 Wash Clean

pull 2 Jts Press to 2000#

Used 25sx

Press to 500# Shut In

Common 25

Poz. Mix

Gel.

Calcium

Hulls

Salt

Flowseal

Kol-Seal

Mud CLR 48

CFL-117 or CD110 CAF 38

Sand

Handling 100

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

Pumptrk Charge Squeeze

Mileage 50

Tax

Discount

Total Charge

X Signature Duane Erickson

Thanks

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc.**

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Herrold #11

25-10s-21w Graham,KS

Start Date: 2021.08.09 @ 15:56:00
End Date: 2021.08.09 @ 22:17:06
Job Ticket #: 67541 DST #: 1

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

Printed: 2021.08.11 @ 15:47:30

DRILL STEM TEST REPORT

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67541 **DST#: 1**

Test Start: 2021.08.09 @ 15:56:00

GENERAL INFORMATION:

Formation: **LKC "H - K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:24:06
Time Test Ended: 22:17:06

Test Type: Conventional Bottom Hole (Initial)
Tester: James Winder
Unit No: 73

Interval: 3568.00 ft (KB) To 3660.00 ft (KB) (TVD)
Total Depth: 3660.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

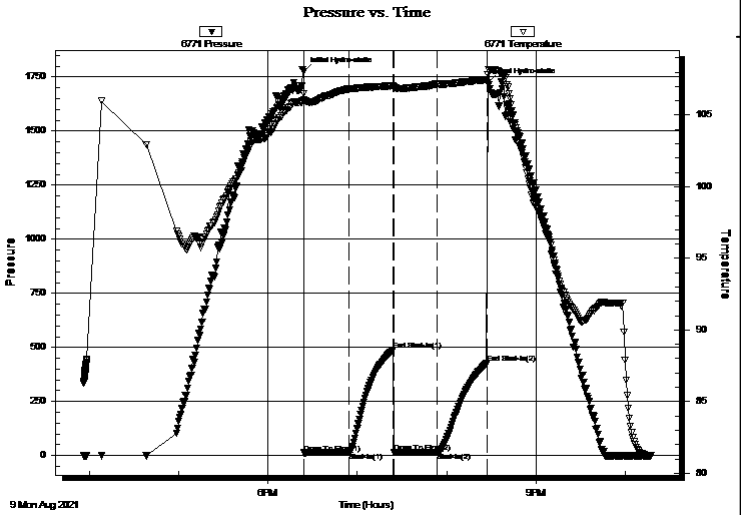
Reference Elevations: 2185.00 ft (KB)
2177.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: 16.53 psig @ 3569.00 ft (KB)
Start Date: 2021.08.09 End Date: 2021.08.09
Start Time: 15:56:01 End Time: 22:17:06

Capacity: 8000.00 psig
Last Calib.: 2021.08.09
Time On Btm: 2021.08.09 @ 18:23:51
Time Off Btm: 2021.08.09 @ 20:27:36

TEST COMMENT: 30 - IF: 1/8" Blow at open, built to and stayed at 1/4" through open
30 - ISI: No blow back
30 - FF: No blow
30 - FSI: No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1776.20	106.48	Initial Hydro-static
1	13.03	106.09	Open To Flow (1)
31	15.22	106.82	Shut-In(1)
60	486.17	107.05	End Shut-In(1)
61	15.55	106.95	Open To Flow (2)
90	16.53	107.17	Shut-In(2)
124	426.88	107.47	End Shut-In(2)
124	1723.40	107.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
8.00	Mud 100%	0.11
0.00	Oil spots in tool	0.00

Gas Rates

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

DRILL STEM TEST REPORT

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67541 **DST#: 1**

Test Start: 2021.08.09 @ 15:56:00

GENERAL INFORMATION:

Formation: **LKC "H - K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:24:06
Time Test Ended: 22:17:06

Test Type: Conventional Bottom Hole (Initial)
Tester: James Winder
Unit No: 73

Interval: 3568.00 ft (KB) To 3660.00 ft (KB) (TVD)
Total Depth: 3660.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

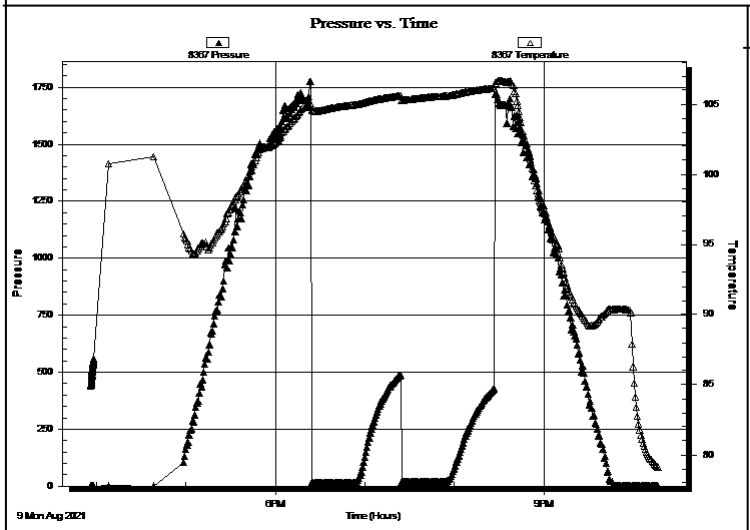
Reference Elevations: 2185.00 ft (KB)
2177.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8367 **Outside**

Press@RunDepth: psig @ 3569.00 ft (KB)
Start Date: 2021.08.09 End Date: 2021.08.09
Start Time: 15:56:01 End Time: 22:16:51

Capacity: 8000.00 psig
Last Calib.: 2021.08.09
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF: 1/8" Blow at open, built to and stayed at 1/4" through open
30 - ISI: No blow back
30 - FF: No blow
30 - FSI: No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
8.00	Mud 100%	0.11
0.00	Oil spots in tool	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67541 **DST#: 1**

Test Start: 2021.08.09 @ 15:56:00

Tool Information

Drill Pipe:	Length:	3573.00 ft	Diameter:	3.80 inches	Volume:	50.12 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.75 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		75000.00 lb
					Total Volume:	50.12 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		26.00 ft					String Weight:	Initial	55000.00 lb
Depth to Top Packer:		3568.00 ft						Final	55000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		92.00 ft							
Tool Length:		113.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3548.00		
Shut In Tool	5.00			3553.00		
Hydraulic tool	5.00			3558.00		
Packer	5.00			3563.00	21.00	Bottom Of Top Packer
Packer	5.00			3568.00		
Stubb	1.00			3569.00		
Recorder	0.00	6771	Inside	3569.00		
Recorder	0.00	8367	Outside	3569.00		
Perforations	21.00			3590.00		
Change Over Sub	1.00			3591.00		
Drill Pipe	63.00			3654.00		
Change Over Sub	1.00			3655.00		
Perforations	2.00			3657.00		
Bullnose	3.00			3660.00	92.00	Bottom Packers & Anchor
Total Tool Length:	**113.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67541 **DST#: 1**

Test Start: 2021.08.09 @ 15:56:00

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

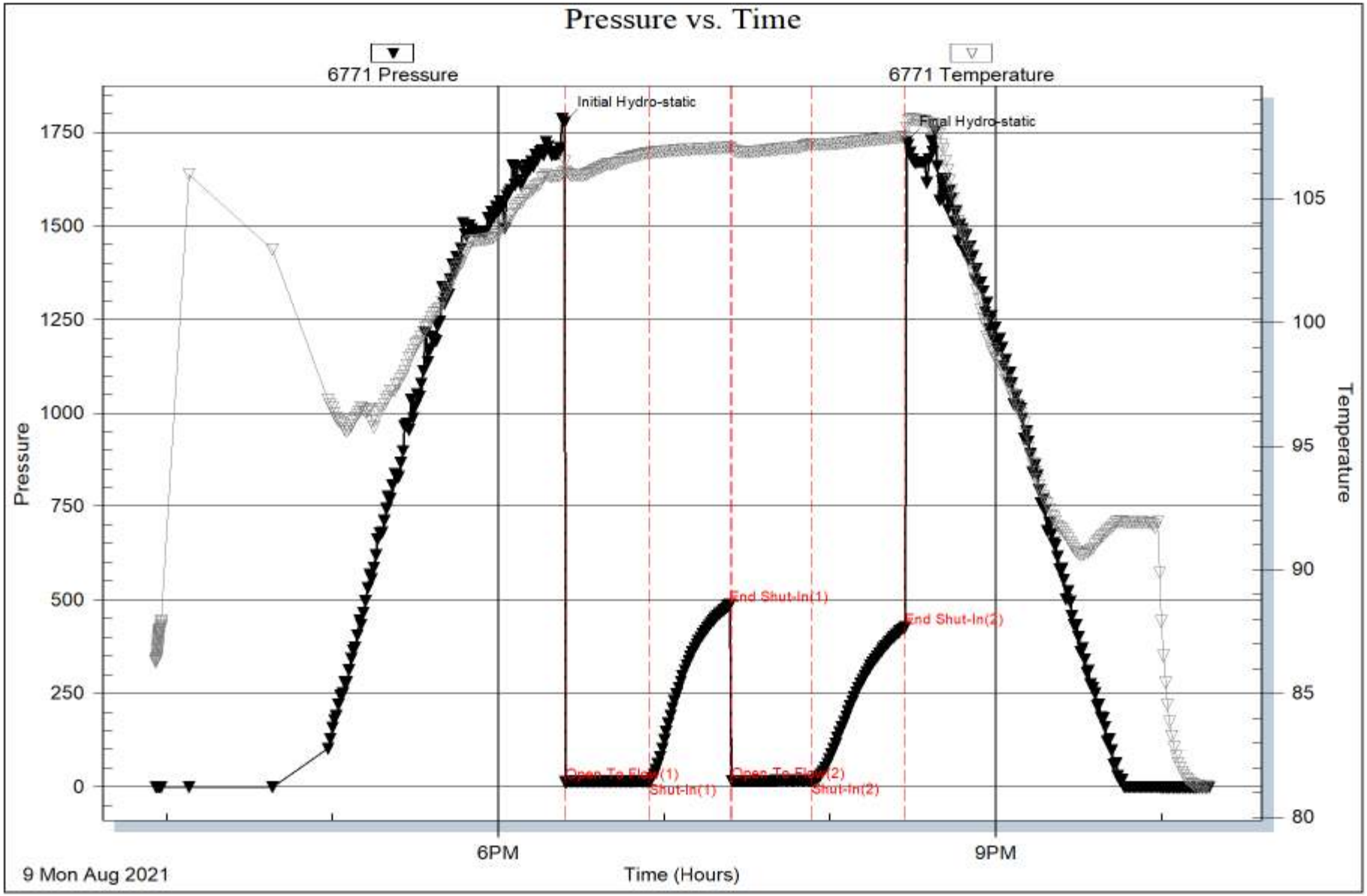
Recovery Table

Length ft	Description	Volume bbl
8.00	Mud 100%	0.112
0.00	Oil spots in tool	0.000

Total Length: 8.00 ft Total Volume: 0.112 bbl

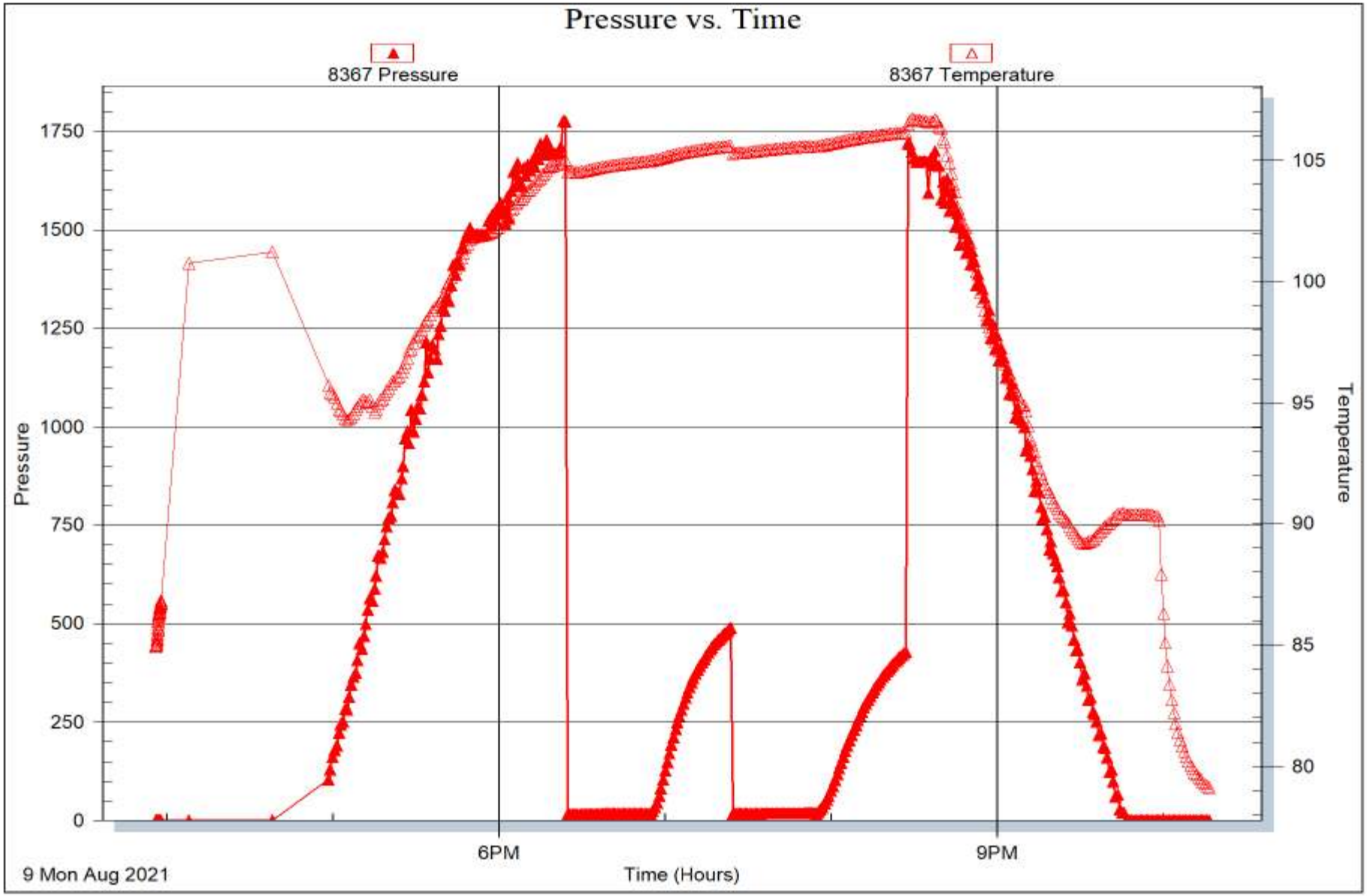
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6771 **Inside** John O Farmer Inc. Herrold #11 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 67541 Printed: 2021.08.11 @ 15:47:33

Serial #: 8367 **Outside** John O Farmer Inc. Herrold #11 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 67541 Printed: 2021.08.11 @ 15:47:33

DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc.**

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Herrold #11

25-10s-21w Graham,KS

Start Date: 2021.08.10 @ 16:53:00
End Date: 2021.08.11 @ 00:07:21
Job Ticket #: 67542 DST #: 2

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

Printed: 2021.08.11 @ 15:46:59

DRILL STEM TEST REPORT

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67542 **DST#: 2**

Test Start: 2021.08.10 @ 16:53:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:45:21
Time Test Ended: 00:07:21

Test Type: Conventional Straddle (Reset)
Tester: James Winder
Unit No: 73

Interval: 3727.00 ft (KB) To 3781.00 ft (KB) (TVD)
Total Depth: 3828.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

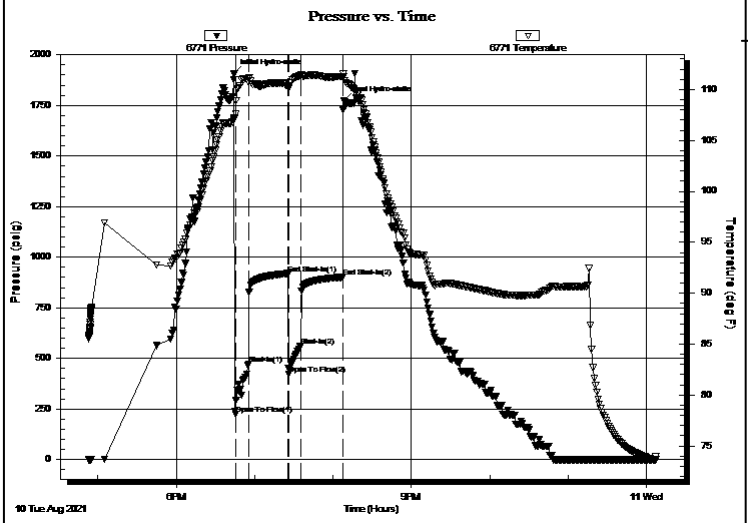
Reference Elevations: 2185.00 ft (KB)
2177.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: 562.29 psig @ 3728.00 ft (KB)
Start Date: 2021.08.10 End Date: 2021.08.11
Start Time: 16:53:01 End Time: 00:07:21

Capacity: 8000.00 psig
Last Calib.: 2021.08.11
Time On Btm: 2021.08.10 @ 18:44:21
Time Off Btm: 2021.08.10 @ 20:08:21

TEST COMMENT: 10 - IF: Blow built to BOB (11') at 1 min., built to 86 1/2"
30 - ISI: Weak surface blow back, dead by 20 min.
10 - FF: Blow built to BOB at 1 1/4 min., built to 66 3/4"
30 - FSI: Weak surface blow back, dead by end of close



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1904.94	107.18	Initial Hydro-static
1	224.10	107.58	Open To Flow (1)
11	471.34	111.02	Shut-In(1)
42	918.91	110.37	End Shut-In(1)
42	422.69	110.05	Open To Flow (2)
51	562.29	111.36	Shut-In(2)
83	901.42	111.25	End Shut-In(2)
84	1772.23	111.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	GWO 38%o, 35%g, 27%w	3.51
190.00	GWO 37%o, 32%w , 28%g, 3%m	2.67
700.00	GMWCO 49%o, 27%w , 16%g, 8%m	9.82
105.00	GMWCO 45%o, 23%w , 20%m, 12%g	1.47

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67542 **DST#: 2**

Test Start: 2021.08.10 @ 16:53:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:45:21
Time Test Ended: 00:07:21

Test Type: Conventional Straddle (Reset)
Tester: James Winder
Unit No: 73

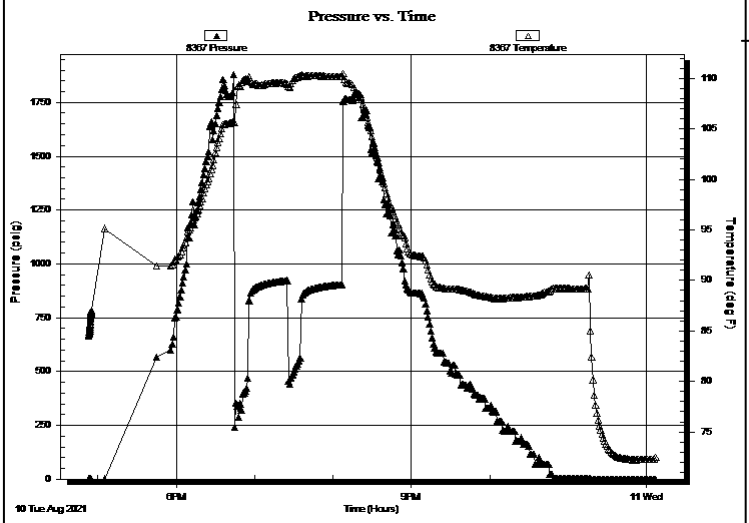
Interval: 3727.00 ft (KB) To 3781.00 ft (KB) (TVD)
Total Depth: 3828.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2185.00 ft (KB)
2177.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8367 **Outside**
Press@RunDepth: psig @ 3728.00 ft (KB)
Start Date: 2021.08.10 End Date: 2021.08.11
Start Time: 16:53:01 End Time: 00:07:06

Capacity: 8000.00 psig
Last Calib.: 2021.08.11
Time On Btm:
Time Off Btm:

TEST COMMENT: 10 - IF: Blow built to BOB (11') at 1 min., built to 86 1/2"
30 - ISI: Weak surface blow back, dead by 20 min.
10 - FF: Blow built to BOB at 1 1/4 min., built to 66 3/4"
30 - FSI: Weak surface blow back, dead by end of close



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
250.00	GWO 38%o, 35%g, 27%w	3.51
190.00	GWO 37%o, 32%w , 28%g, 3%m	2.67
700.00	GMWCO 49%o, 27%w , 16%g, 8%m	9.82
105.00	GMWCO 45%o, 23%w , 20%m, 12%g	1.47

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67542 **DST#: 2**

Test Start: 2021.08.10 @ 16:53:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:45:21
Time Test Ended: 00:07:21

Test Type: Conventional Straddle (Reset)
Tester: James Winder
Unit No: 73

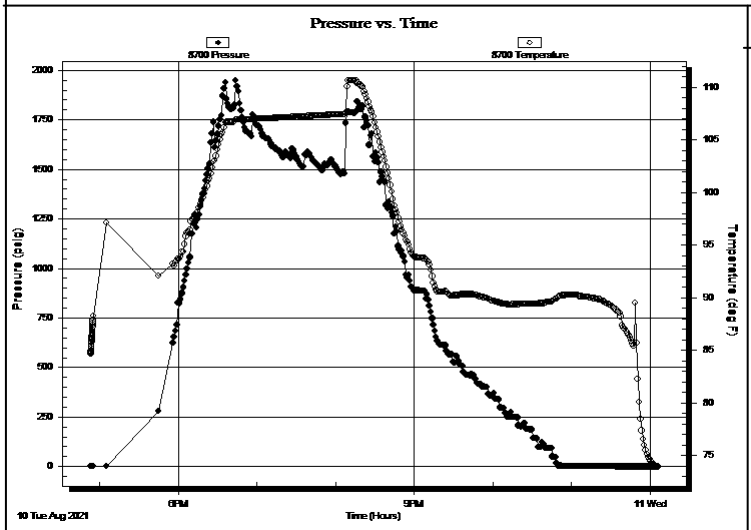
Interval: 3727.00 ft (KB) To 3781.00 ft (KB) (TVD)
Total Depth: 3828.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2185.00 ft (KB)
2177.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Inside**
Press@RunDepth: psig @ 3782.00 ft (KB)
Start Date: 2021.08.10 End Date: 2021.08.11
Start Time: 16:53:01 End Time: 00:06:36

Capacity: 8000.00 psig
Last Calib.: 2021.08.11
Time On Btm:
Time Off Btm:

TEST COMMENT: 10 - IF: Blow built to BOB (11') at 1 min., built to 86 1/2"
30 - ISI: Weak surface blow back, dead by 20 min.
10 - FF: Blow built to BOB at 1 1/4 min., built to 66 3/4"
30 - FSI: Weak surface blow back, dead by end of close



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
250.00	GWO 38%o, 35%g, 27%w	3.51
190.00	GWO 37%o, 32%w , 28%g, 3%m	2.67
700.00	GMWCO 49%o, 27%w , 16%g, 8%m	9.82
105.00	GMWCO 45%o, 23%w , 20%m, 12%g	1.47

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67542 **DST#: 2**

Test Start: 2021.08.10 @ 16:53:00

Tool Information

Drill Pipe:	Length:	3729.00 ft	Diameter:	3.80	inches	Volume:	52.31	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.75	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	
						Total Volume:	52.31	bbl	

Drill Pipe Above KB:	23.00 ft
Depth to Top Packer:	3727.00 ft
Depth to Bottom Packer:	3781.00 ft
Interval betw een Packers:	54.00 ft
Tool Length:	122.00 ft
Number of Packers:	3 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		25000.00 lb
Weight to Pull Loose:		68000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	61000.00 lb
	Final	67000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3707.00		
Shut In Tool	5.00			3712.00		
Hydraulic tool	5.00			3717.00		
Packer	5.00			3722.00	21.00	Bottom Of Top Packer
Packer	5.00			3727.00		
Stubb	1.00			3728.00		
Recorder	0.00	6771	Inside	3728.00		
Recorder	0.00	8367	Outside	3728.00		
Perforations	13.00			3741.00		
Blank Spacing	33.00			3774.00		
Perforations	2.00			3776.00		
Blank Off Sub	1.00			3777.00		
Blank Spacing	4.00			3781.00	54.00	Tool Interval
Packer	0.00			3781.00		
Packer - Shale	0.00			3781.00		
Stubb	1.00			3782.00		
Recorder	0.00	8700	Inside	3782.00		
Perforations	9.00			3791.00		
Blank Spacing	34.00			3825.00		
Bullnose	3.00			3828.00	47.00	Bottom Packers & Anchor
Total Tool Length:	**122.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer Inc.

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

25-10s-21w Graham,KS

Herrold #11

Job Ticket: 67542 **DST#: 2**

Test Start: 2021.08.10 @ 16:53:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	10.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

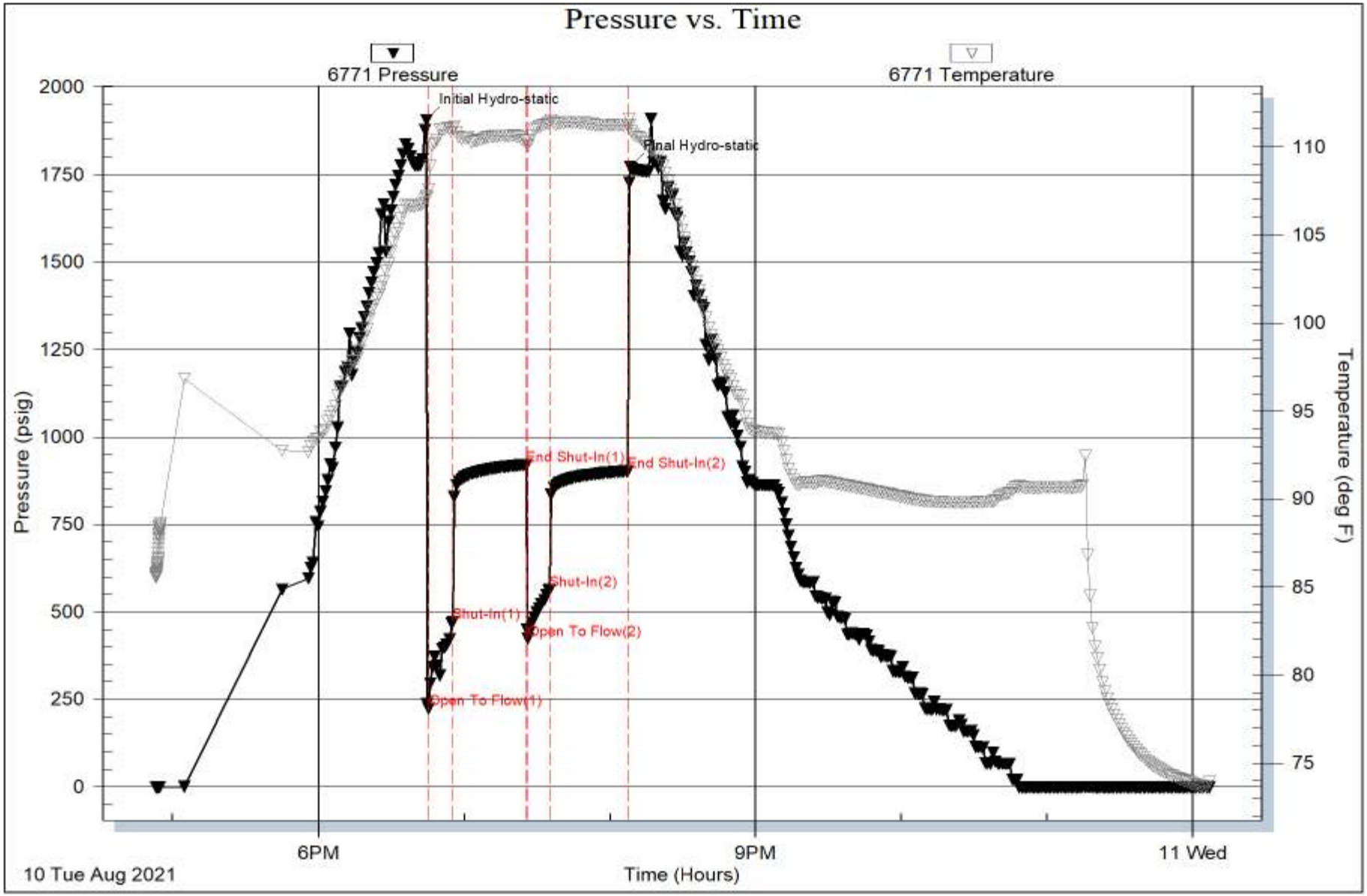
Recovery Table

Length ft	Description	Volume bbl
250.00	GWO 38%o, 35%g, 27%w	3.507
190.00	GWO 37%o, 32%w , 28%g, 3%m	2.665
700.00	GMWCO 49%o, 27%w , 16%g, 8%m	9.819
105.00	GMWCO 45%o, 23%w , 20%m, 12%g	1.473

Total Length: 1245.00 ft Total Volume: 17.464 bbl

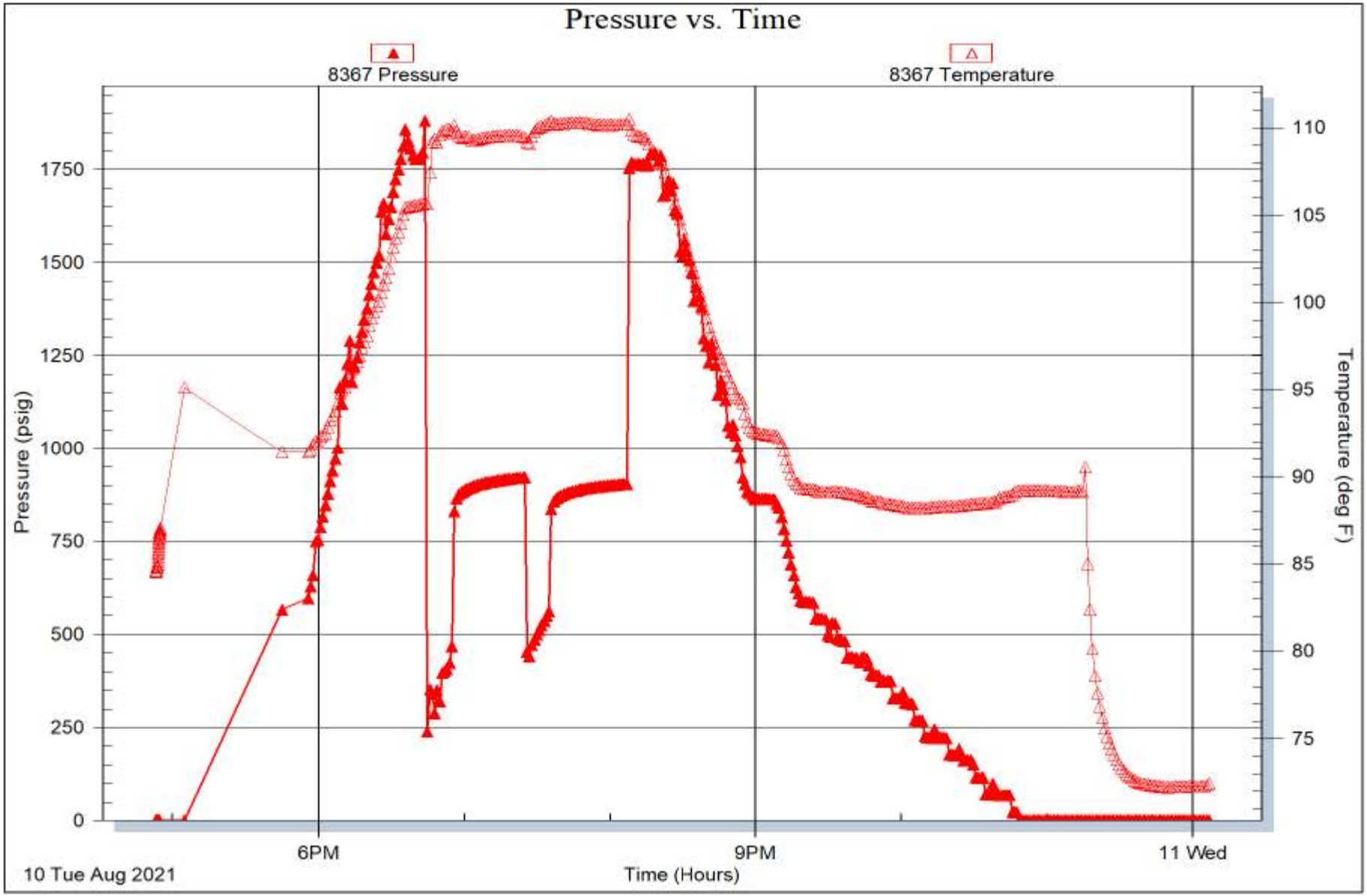
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6771 **Inside** John O Farmer Inc. Herrold #11 DST Test Number: 2



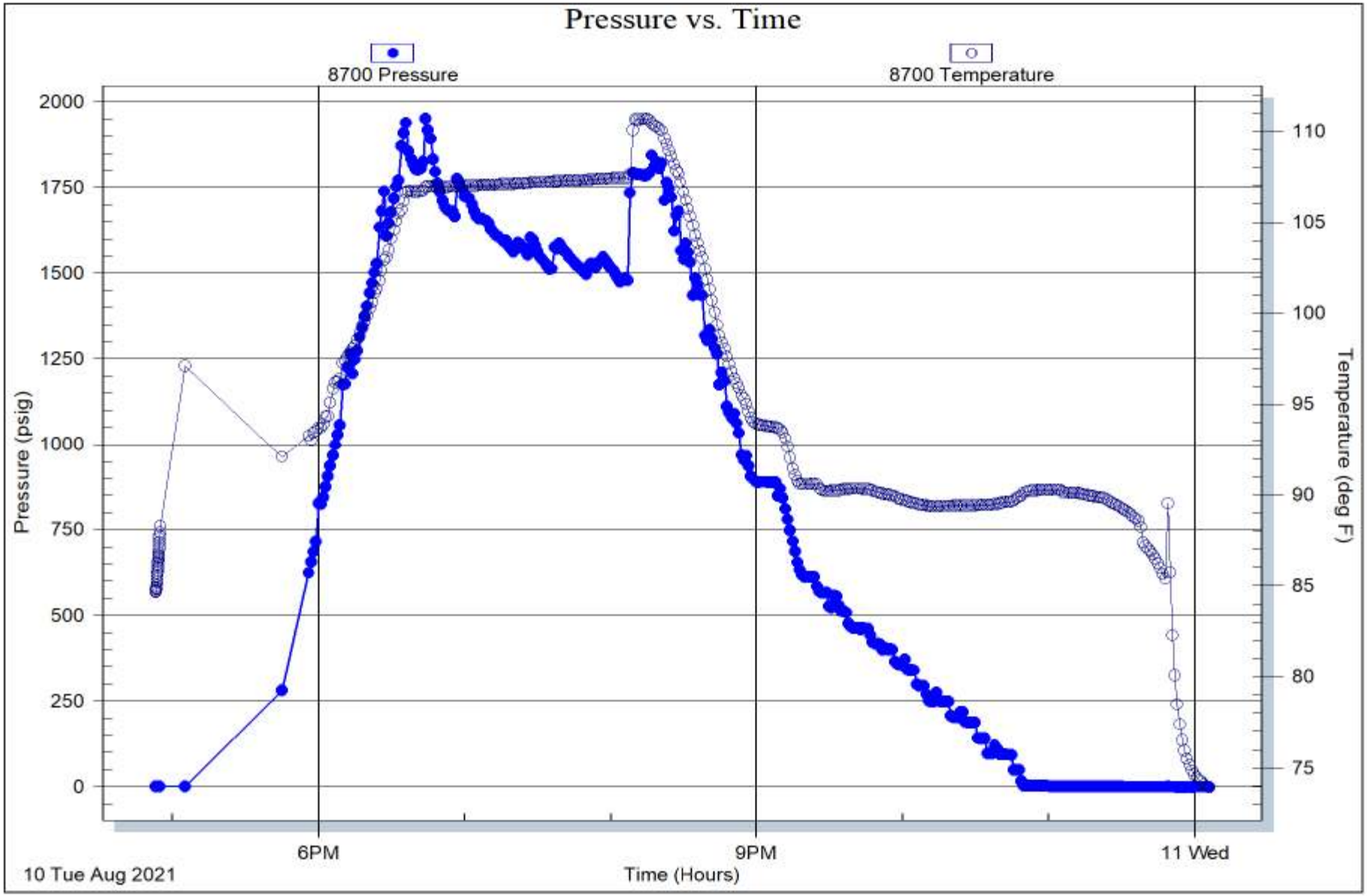
Trilobite Testing, Inc Ref. No: 67542 Printed: 2021.08.11 @ 15:47:02

Serial #: 8367 **Outside** John O Farmer Inc. Herrold #11 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 67542 Printed: 2021.08.11 @ 15:47:02

Serial #: 8700 **Inside** John O Farmer Inc. Herrold #11 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 67542 Printed: 2021.08.11 @ 15:47:02

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 67541

Well Name & No. Herrold #11 Test No. 1 Date 8-9-21

Company John O. Farmer Inc. Elevation 2185 KB 2177 GL

Address 370 W. Wichita Ave PO Box 352 Russell, KS 67665

Co. Rep / Geo. Austin Klaus Rig Discovery #4

Location: Sec. 25 Twp 10s Rge. 21w Co. Graham State KS

Interval Tested 3568-3660 Zone Tested LKC "H-K"

Anchor Length 92 Drill Pipe Run 3573 Mud Wt. 9.2

Top Packer Depth 3563 Drill Collars Run - Vis 52

Bottom Packer Depth 3568 Wt. Pipe Run - WL 8.8

Total Depth 3660 Chlorides 3000 ppm System LCM 1½

Blow Description IF: ⅛" Blow at open, built to and stayed at ¼" Through open

ISI: No blowback

FF: No blow

FSI: No blow

Rec 8	Feet of Mud	%gas	%oil	%water 100	%mud
Rec	Feet of Oil spots in tool	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 8 BHT 108 Gravity ____ API RW ____ @ ____ °F Chlorides ____ ppm

(A) Initial Hydrostatic 1776

(B) First Initial Flow 13

(C) First Final Flow 15

(D) Initial Shut-In 486

(E) Second Initial Flow 16

(F) Second Final Flow 17

(G) Final Shut-In 427

(H) Final Hydrostatic 1723

Initial Open 30

Initial Shut-In 30

Final Flow 30

Final Shut-In 30

☑ Test 1300

☐ Jars

☐ Safety Joint

☐ Circ Sub

☐ Hourly Standby

☑ Mileage 76RT 95

☐ Sampler

☐ Straddle

☐ Shale Packer

☐ Extra Packer

☐ Extra Recorder

☐ Day Standby

☐ Accessibility

Sub Total 1395

T-On Location 15:05

T-Started 15:56

T-Open 18:24

T-Pulled 20:27

T-Out 22:15

Comments

☐ EM Tool

☐ Ruined Shale Packer

☐ Ruined Packer

☐ Extra Copies

Sub Total 0

Total 1395

MP/DST Disc't

Approved By ____ Our Representative James Waldo

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 67542

Well Name & No. Herrold #11 Test No. 2 Date 8-10-21

Company John O Farmer Elevation 2185 KB 2177 GL

Address 370 Wichita Ave PO Box 352 Russell, KS 67665

Co. Rep / Geo. Austin Klaus Rig Discovery #4

Location: Sec. 25 Twp 10s Rge. 21w Co. Graham State KS

Interval Tested 3727 - 3781 Zone Tested Arbuckle

Anchor Length 54 Anchor 47' Tail Drill Pipe Run 3729 Mud Wt. 9.5

Top Packer Depth 3722 - 3727 Drill Collars Run - Vis 60

Bottom Packer Depth 3781 Wt. Pipe Run - WL 8.8

Total Depth 3828 Chlorides 3000 ppm System LCM 3½

Blow Description IF: Blow built to BOB (11") at 1 min., built to 86½"

ISI: Weak surface blowback, dead by 20 min.

FF: Blow built to BOB at 1¼ min., built to 66¾"

FSI Weak surface blow dead by end of close

Rec 105	Feet of GMWCO	12	%gas	45	%oil	23	%water	20	%mud
Rec 700	Feet of GMWCO	16	%gas	49	%oil	27	%water	8	%mud
Rec 190	Feet of GWO	28	%gas	37	%oil	32	%water	3	%mud
Rec 250	Feet of GWO	35	%gas	38	%oil	27	%water	-	%mud
Rec	Feet of		%gas		%oil		%water		%mud

Rec Total 1245 BHT 111 Gravity ____ API RW ____ @ ____ °F Chlorides ____ ppm

(A) Initial Hydrostatic 1905	☑ Test 1300	T-On Location 15:35 8/10
(B) First Initial Flow 224	☐ Jars	T-Started 16:53
(C) First Final Flow 471	☐ Safety Joint	T-Open 18:45
(D) Initial Shut-In 919	☐ Circ Sub	T-Pulled 20:07
(E) Second Initial Flow 423	☐ Hourly Standby	T-Out 00:05 8/11
(F) Second Final Flow 562	☑ Mileage 76 RT 95	Comments
(G) Final Shut-In 901	☐ Sampler	
(H) Final Hydrostatic 1772	☑ Straddle 600	☐ EM Tool
	☐ Shale Packer	☐ Ruined Shale Packer
Initial Open 10	☐ Extra Packer	☐ Ruined Packer
Initial Shut-In 30	☐ Extra Recorder	☐ Extra Copies
Final Flow 10	☐ Day Standby	Sub Total 0
Final Shut-In 30	☐ Accessibility	Total 1995
	Sub Total 1995	MP/DST Disc't

Approved By ____ Our Representative James Meeks

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:	Herrold #11		
API:	15-065-24201-00-00		
Location:	Graham County		
License Number:		Region:	Kansas
Spud Date:	8/5/2021	Drilling Completed:	8/10/2021
Surface Coordinates:	Section 25 - Township 10 South - Range 21 West 2,310' FNL & 1,215' FWL		
Bottom Hole Coordinates:	Vertical well w/ minimal deviation, same as above		
Ground Elevation (ft):	2,173	K.B. Elevation (ft):	2,181
Logged Interval (ft):	3150 To: RTD	Total Depth (ft):	3,828
Formation:	Topeka - Arbuckle		
Type of Drilling Fluid:	Chemical (Andy's Mud)		

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

OPERATOR

Company:	John O. Farmer, Inc.
Address:	P.O. Box 352 Russell, KS 67665

Comments

The Herrold #11 well was drilled by Discovery Drilling Rig #4 (Tool Pusher: Tom Alm).

The location for the Herrold #11 was discovered via 3D seismic survey. Drill time was recorded and rock samples were gathered and evaluated from 3,150'-3,828'. Oil shows were encountered in the Lansing F,I,J,K, and Arbuckle. Structurally, the Lansing top was picked 16' high to the comparison well, Herrold #1 (330' FWL & 2,310' FNL). Structure thinned and the Arbuckle top was picked 19' high to the comparison well. A bottom-hole drill stem test was conducted over the Lansing H - K zones, yiedling 8' Mud. Upon completion of electric logs, a straddle test was run to evaluate the top 35' of the Arbuckle. This test recovered 1,245' total fluid (see complete results below. After comprehensive evaluation of all oil shows, drill stem test results, & electric logs, the decision was made set 5-1/2" production casing to further evaluate the Herrold #11 on 8/11/2021.

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

OIL SHOW: Even

Spotted, Ques, Dead

INTERVAL: Core, Dst

EVENT: Rft, Sidewall

Curve Track 1

ROP (min/ft)

Gas (units)

Gamma (API)

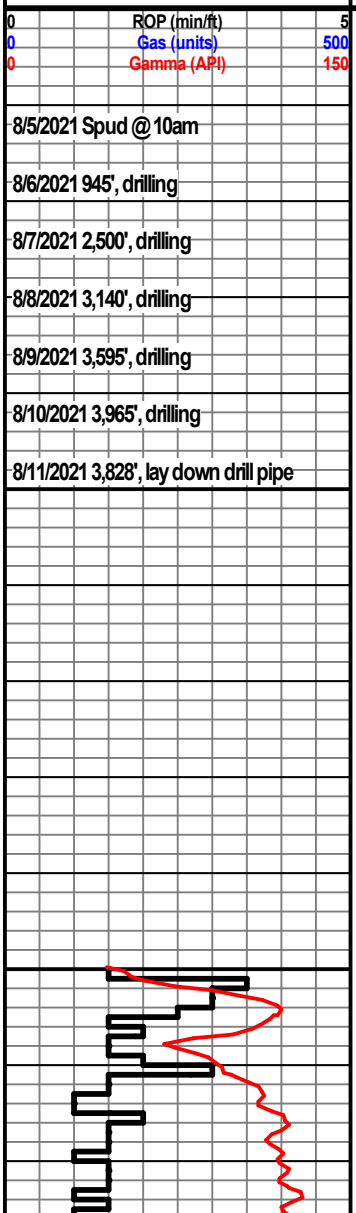
MD

Lithology

Oil Shows

Geological Descriptions

DST/Mud/Survey



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.

Formation tops and datums from the open-hole logs include the following:

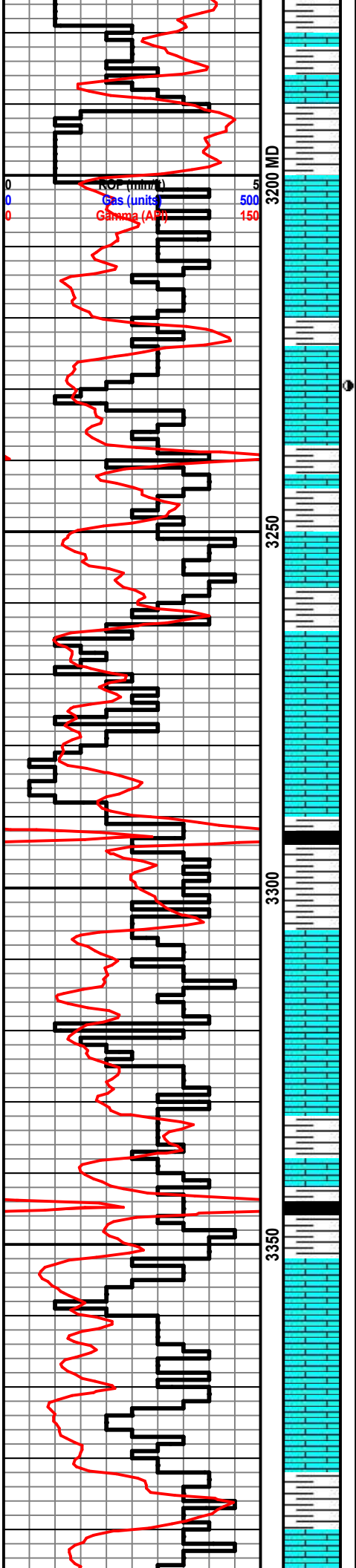
Formation	E-Log	Datum
Anhydrite	1645	540
Topeka	3200	-1015
Heebner	3402	-1217
Toronto	3431	-1246
Lansing	3446	-1261
B/KC	3670	-1485
Arbuckle	3746	-1561
LTD	3827	-1642

Sh: lt-drk gry

Sh: ala

Mud Engineer: Kirk Werth

Tester: James Winder



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

Topeka 3202' (-1017)

Ls: tan-gry, fn xln, scat foss, poor int xln porosity, NSFO

Ls: tan-gry, fn xln, scat foss, mostly DNS, scat sh, NSFO

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

Sh: lt-drk gry, scat sltst

Ls: tan-brn, fn xln, scat foss, mostly DNS, NSFO

Sh: lt-drk gry

Ls: off wh-tan-brn, fn xln, scat foss, fair int xln porosity, scat dead oil stn, fnt odor

Sh: lt-drk gry, blk

Sh: lt-drk gry-brn

Ls: off wh-tan, fn xln, mostly DNS, chalky, NSFO

Ls: ala

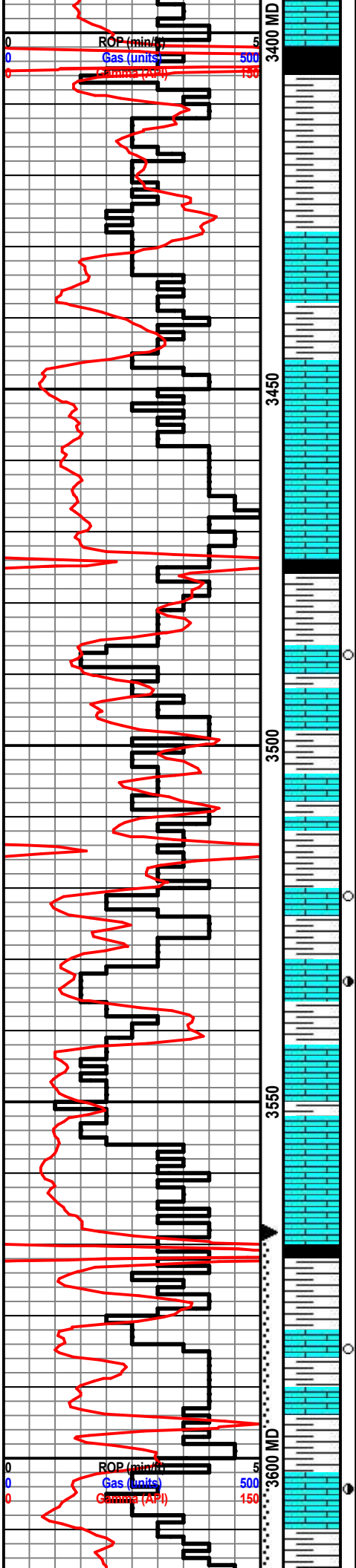
Sh: lt-drk gry, blk

Sh: lt-drk gry-brn

Ls: tan-gry-brn, fn xln, poor-fair int xln porosity, scat foss, scat oil stn, fnt odor, chalky

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

Sh: lt-drk gry



Heebner 3404' (-1219)

Sh: blk, carb, fissile

Sh: lt-drk gry, hvy gm

Toronto 3429 (-1244)

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

Sh: lt-drk gry, scat gm

Lansing 3446' (-1261)

Ls: off wh-tan, fn xln, poor, few pcs fair int xln porosity, scat dead oil stn, NSFO

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

Sh: lt-drk gry, blk

Ls: off wh-tan, fn xln, scat foss, fair int xln & scat foss porosity, scat oil stn, fnt odor, vry chalky

Sh: lt-drk gry

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

Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor-fair int xln porosity, scat edge stn, NSFO, chalky

Ls: off wh-tan, fn xln, fair int xln porosity, fair drk brn stn, SSFO, fair odor

Sh: lt-drk gry

Ls: off wh-tan, fn xln, few pcs ool, fair int xln and ool porosity, scat lt oil stn, NSFO, vry chalky

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

Sh: lt-drk gry, blk

Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor int xln porosity, scat free oil in cup, scat chert, fnt odor

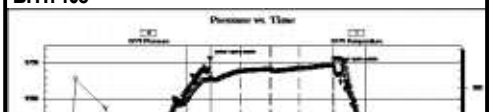
Sh: lt-drk gry

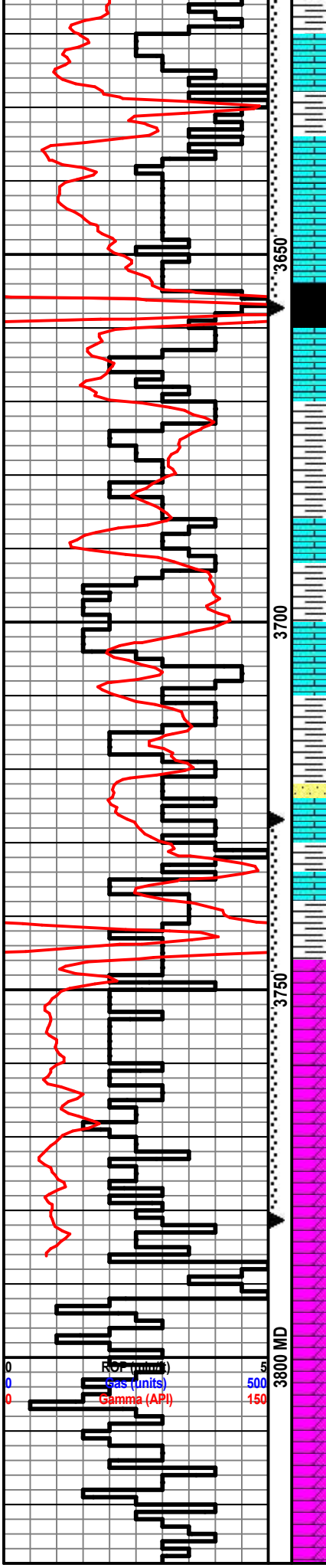
Ls: off wh-tan, fn xln, poor-fair int xln porosity, scat pp porosity, scat-fair drk brn oil stn, SSFO, sl-fair odor

Sh: lt-drk gry

DST #1 3,568-3,660' (LKC H-K)

30"-30"-30"-30"
IF: weak blow built to 1/4"
FF: no blow
Rec: 8' Mud
FP: 13-15, 16-17#
SIP: 486-427#
HP: 1,776-1,723#
BHT: 108





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

Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor-fair pp vuggy porosity, fair-good drk brn oil stn, SSFO, fair odor

Sh: lt-drk gry

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

B/KC 3673' (-1488)

Sh: lt-drk gry, brn

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

Sh: lt gry-brn, red

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

Sh: drk gry-brn, scat red

Ss: qtz, off wh, fn-md gm, sub md, fair int gm porosity, fairly well cemented, sl-fair oil sat, fair odor

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

Arbuckle 3751' (-1566)

Dolo: off wh-tan-brn, fn xln, sucrosic, fair good sucr xln porosity, good drk brn oil sat, F-GSFO, good odor

Dolo: off wh-tan, fn xln, sucrosic, fair-good surc xln porosity, good oil sat, F-GSFO, good odor

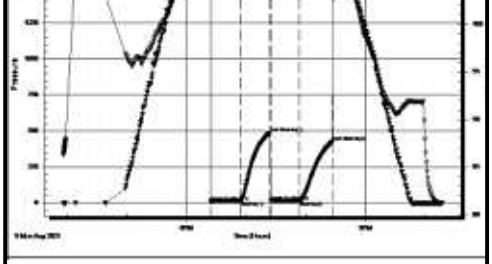
Dolo: off wh-tan, fn-md xln, fair int xln porosity, scat fair drk brn oil sat, SSFO, fair odor, scat chert-trip

Dolo: off wh-tan, fn-md xln, fair int xln porosity, fair oil sat, SSFO, fair odor, scat sh: gm, chert-trip

Dolo: off wh-tan-gry, fn xln, poor-fair int xln porosity, scat chert-off wh

Dolo: tan-gry, fn-md xln, scat int xln porosity, NSFO, chert-trip

Dolo: off wh-tan-brn, fn-md xln, poor int xln porosity, chert-off wh, scat sh: gm



DST #2 3,727-3,781' (Top 35' Arbuckle)

10"-30"-10"-30"
IF: BOB in 1 minute, weak surface blow back on shut in
FF: BOB in 1.25 minutes, weak surface blow back on shut in
Rec: 250' Gassy Water Cut Oil (27%W, 35%G, 38%O)
190' Gassy Water Cut Oil (3%M, 28%G, 32%W, 37%O)
700' Gassy Water Cut Oil (8%M, 16%G, 27%W, 49%O)
105' Gassy Water Cut Oil (12%G, 20%M, 23%W, 45%O)
FP: 224-471, 423-562#
SIP: 919-901#
HP: 1,904-1,772#
BHT: 111