

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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

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

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

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

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

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

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

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

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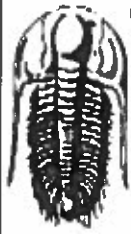
Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Russell Oil, Inc.
Well Name	HOCKERSMITH A 15-1
Doc ID	1590541

Tops

Name	Top	Datum
Anhydrite	2582	+481
B/Anhydrite	2611	+452
Heebner	4032	-969
Toronto	4051	-988
Lansing	4071	-1008
Stark Shale	4285	-1222
B/KC	4344	-1281
Marmaton	4371	-1308
Pawnee	4478	-1415
Cherokee	4565	-1502
Mississippian	4654	-1591
RTD	4710	-1647
LTD	4713	-1650



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Russel Oil, Inc.
PO Box 8050
Edmond, Ok 73083
ATTN: Kit Noah

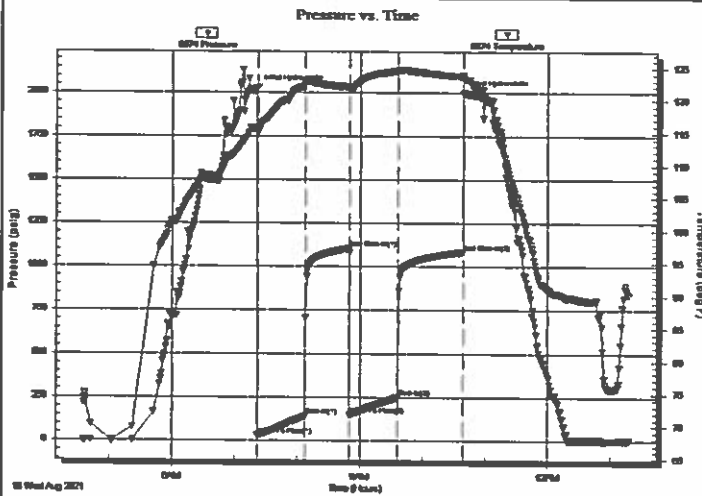
15 11s 32w Logan, Ks
Hockersmith A 15-1
Job Ticket: 66952 DST#: 1
Test Start: 2021.08.18 @ 04:35:00

GENERAL INFORMATION:

Formation: LKC E-F
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:21:45
Time Test Ended: 13:18:15
Test Type: Conventional Bottom Hole (Initial)
Tester: Bradley Walter
Unit No: 78
Interval: 4134.00 ft (KB) To 4166.00 ft (KB) (TVD)
Reference Elevations: 3063.00 ft (KB)
Total Depth: 4166.00 ft (KB) (TVD)
3053.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good
KB to GR/CF: 10.00 ft

Serial #: 8874 Inside
Press@RunDepth: 249.12 psig @ 4135.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2021.08.18 End Date: 2021.08.18 Last Calib.: 2021.08.18
Start Time: 04:35:05 End Time: 13:18:15 Time On Btm: 2021.08.18 @ 07:21:30
Time Off Btm: 2021.08.18 @ 10:38:45

TEST COMMENT: 45- IF: BOB @ 27 min- 13.7" blow.
45- IS: No return.
45- FF: BOB @ 36 min, built to 11"
60- FS: No return



PRESSURE SUMMARY

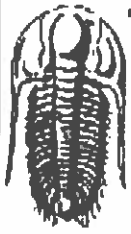
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2024.61	115.85	Initial Hydro-static
1	26.11	115.05	Open To Flow (1)
46	140.00	122.41	Shut-In(1)
88	1106.58	122.02	End Shut-In(1)
89	149.03	121.62	Open To Flow (2)
135	249.12	124.53	Shut-In(2)
197	1085.09	123.71	End Shut-In(2)
198	1995.05	123.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
430.00	mcw 5m 95w (oil spots)	6.03
0.00	small puddle of oil top	0.00

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Russell Oil, Inc.
 PO Box 8050
 Edmond, Ok 73083
 ATTN: Kit Noah

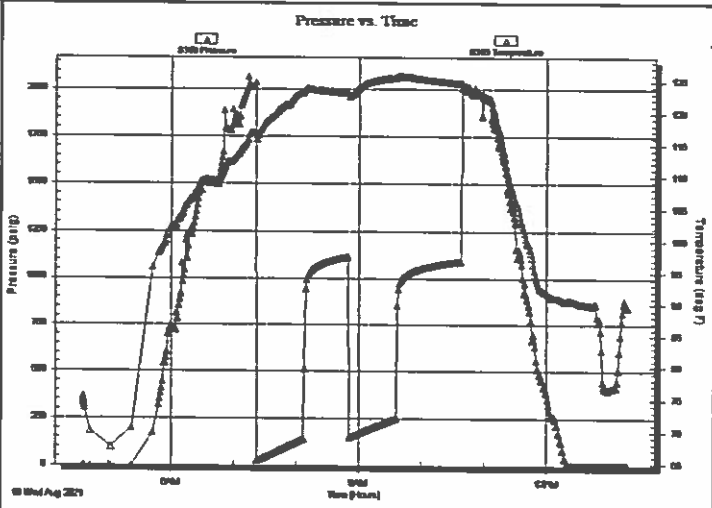
15 11s 32w Logan, Ks
 Hockersmith A 15-1
 Job Ticket: 66952 DST#: 1
 Test Start: 2021.08.18 @ 04:35:00

GENERAL INFORMATION:

Formation: LKC E-F
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:21:45
 Time Test Ended: 13:18:15
 Interval: 4134.00 ft (KB) To 4166.00 ft (KB) (TVD)
 Total Depth: 4166.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Bradley Walter
 Unit No: 78
 Reference Elevations: 3063.00 ft (KB)
 3053.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8319 Outside
 Press@RunDepth: psig @ 4135.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2021.08.18 End Date: 2021.08.18 Last Calib.: 1899.12.30
 Start Time: 04:35:05 End Time: 13:18:15 Time On Btm:
 Time Off Btm:

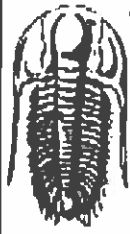
TEST COMMENT: 45- IF: BOB @ 27 min- 13.7" blow
 45- IST: No return
 45- FF: BOB @ 36 min, built to 11"
 60- FSt: No return



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

Recovery		
Length (ft)	Description	Volume (bbl)
430.00	mcw 5m 95w (oil spots)	6.03
0.00	small puddle of oil top	0.00

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil, Inc.
PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

15 11s 32w Logan, Ks
Hockersmith A 15-1
Job Ticket: 66952 DST#: 1
Test Start: 2021.08.18 @ 04:35:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 39000 ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.20 in ³	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
430.00	mcw 5m 95w (oil spots)	6.032
0.00	small puddle of oil top	0.000

Total Length: 430.00 ft Total Volume: 6.032 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: rw is .156 @ 81f = 39000ppm

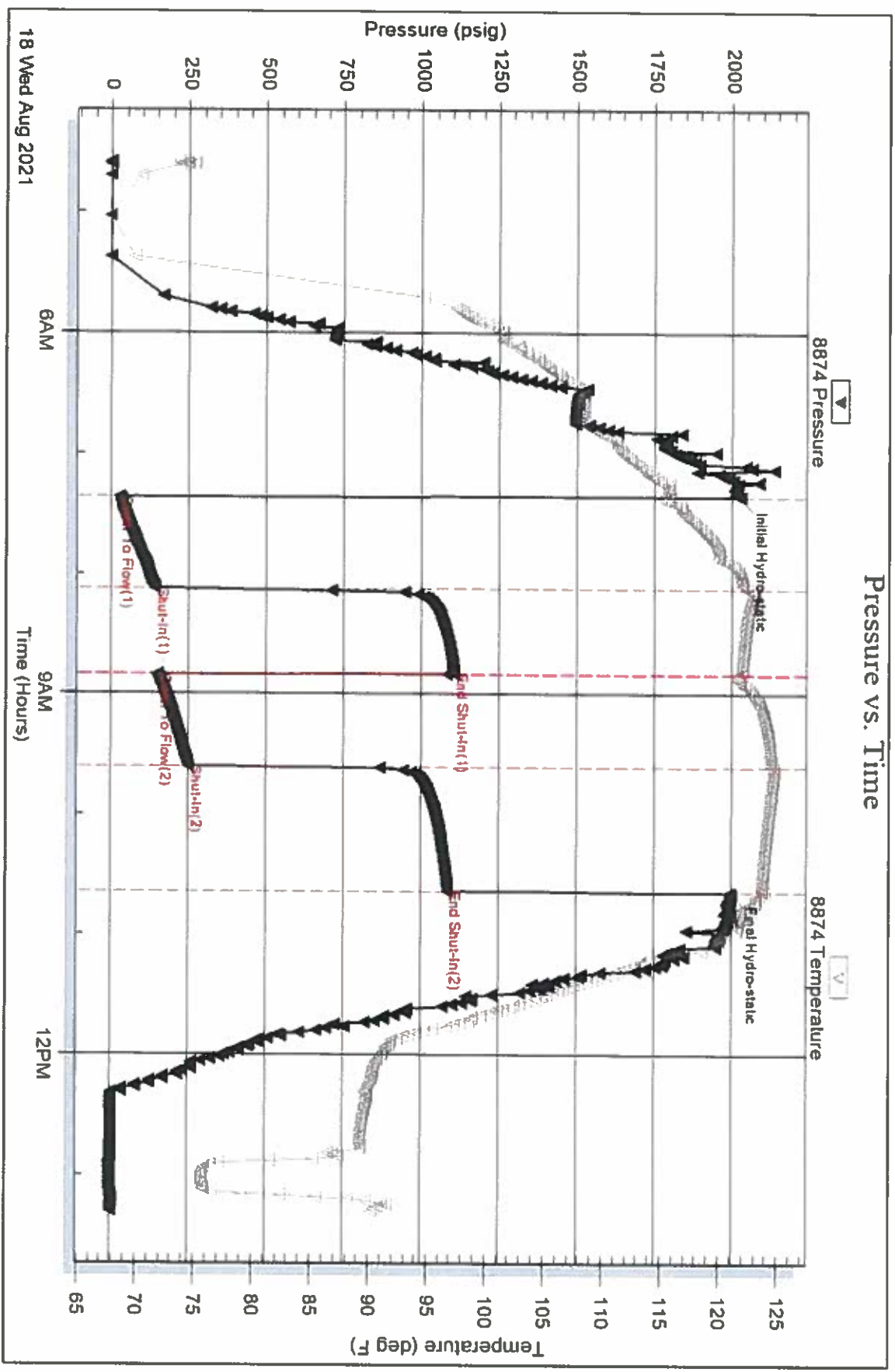
Serial #: 8874

Inside

Russell Oil, Inc.

Hockersmith A 15-1

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 66992

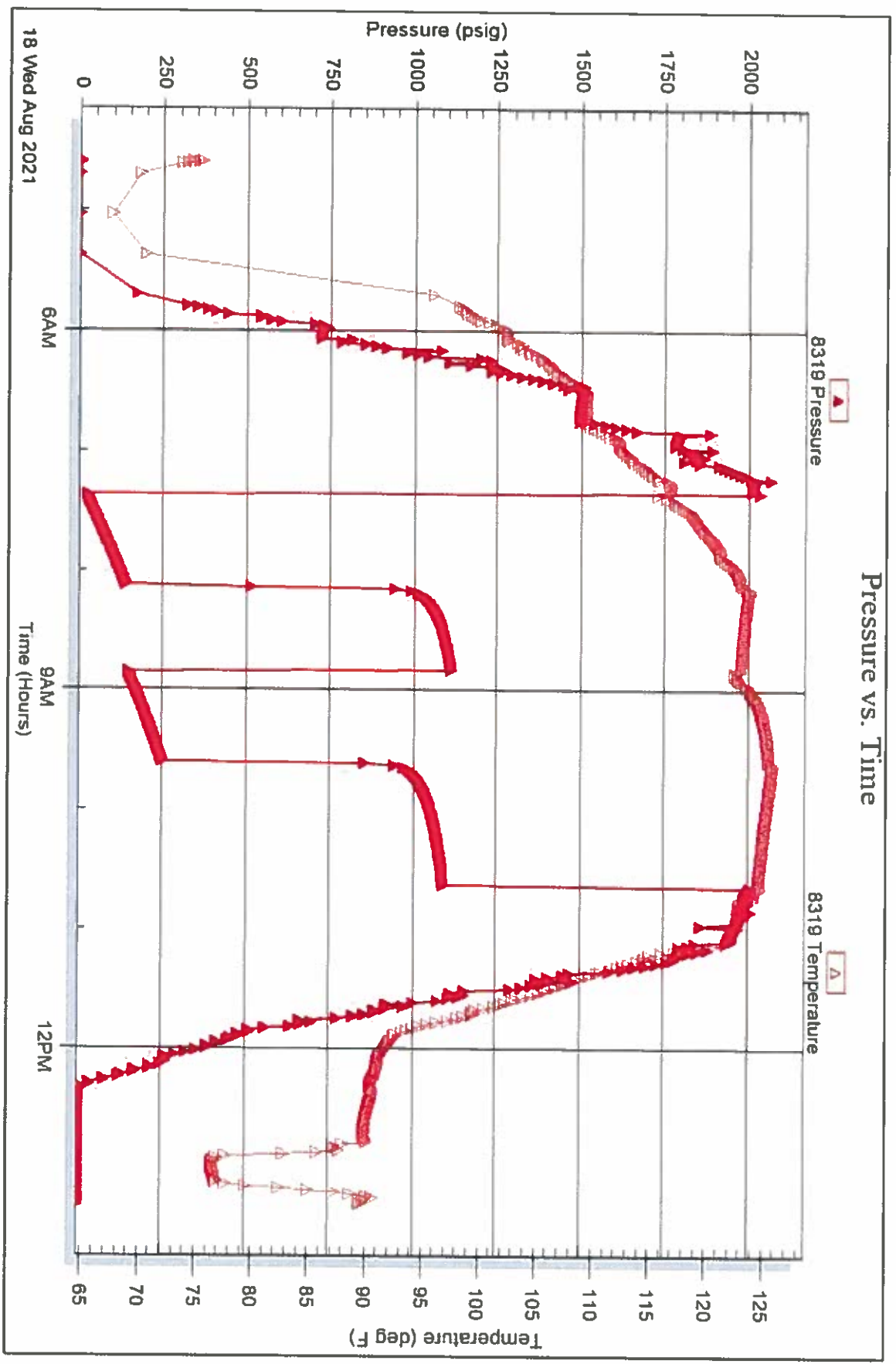
Printed: 2021.08.18 @ 13:59:52

Serial #: 8319

Outside Russell Oil, Inc.

Hockersmith A 15-1

DST Test Number: 1





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Russell Oil, Inc.
PO Box 8050
Edmond, Ok 73083
ATTN: Kit Noah

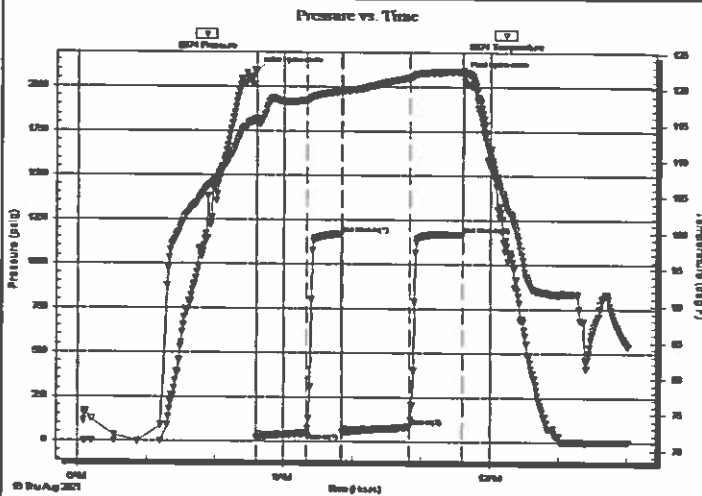
15 11s 32w Logan, Ks
Hockersmith A 15-1
Job Ticket: 66953 DST#: 2
Test Start: 2021.08.19 @ 06.05.00

GENERAL INFORMATION:

Formation: LKC I-J
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:36:00
Time Test Ended: 14:01:00
Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 78
Interval: 4238.00 ft (KB) To 4290.00 ft (KB) (TVD)
Reference Elevations: 3063.00 ft (KB)
Total Depth: 4238.00 ft (KB) (TVD) 3053.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 8874 Inside
Press@RunDepth: 83.93 psig @ 4239.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2021.08.19 End Date: 2021.08.19 Last Calib.: 2021.08.19
Start Time: 06:05:05 End Time: 14:00:59 Time On Btm: 2021.08.19 @ 08:35:45
Time Off Btm: 2021.08.19 @ 11:36:45

TEST COMMENT: 45- IF: 5.3" blow
30- IS: No return.
60- FF: BOB @ 34 min. 17" blow
45- FS: 0.65" return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2087.44	115.84	Initial Hydro-static
1	19.89	115.03	Open To Flow (1)
44	46.73	118.39	Shut-In(1)
75	1168.95	119.62	End Shut-In(1)
75	51.11	119.36	Open To Flow (2)
134	83.93	121.55	Shut-In(2)
180	1167.93	122.35	End Shut-In(2)
181	2063.01	122.56	Final Hydro-static

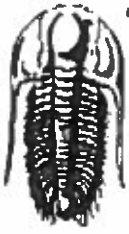
Recovery

Length (ft)	Description	Volume (bbl)
60.00	mcw 50m 50w (oil spots)	0.84
30.00	gow cm 20g 5o20w 55m	0.42
50.00	oil 100o	0.70
0.00	300' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil, Inc.

15 11s 32w Logan, Ks

PO Box 8050
Edmond, Ok 73083

Hockersmith A 15-1

Job Ticket: 66953

DST#: 2

ATTN: Kitl Noah

Test Start: 2021.08.19 @ 06:05:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

31000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	mcw 50m 50w (oil spots)	0.842
30.00	gow cm 20g 5o20w 55m	0.421
50.00	oil 100o	0.701
0.00	300' GIP	0.000

Total Length: 140.00 ft

Total Volume: 1.964 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .201 @ 77f = 31000ppm

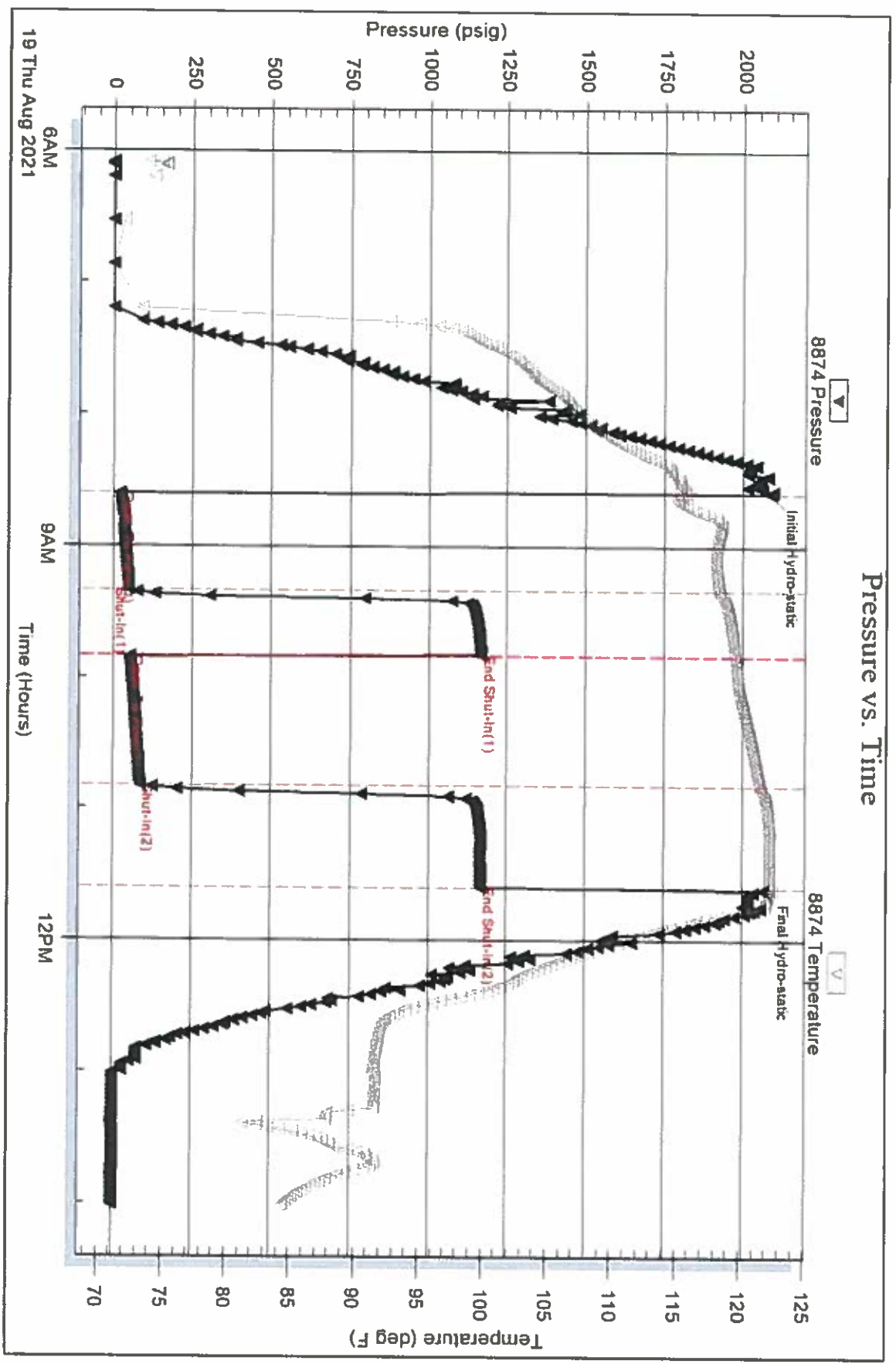
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Inside

Russell Oil, Inc.

Hockersmith A 15-1

DST Test Number 2



Trouble Testing, Inc

Ref. No: 66953

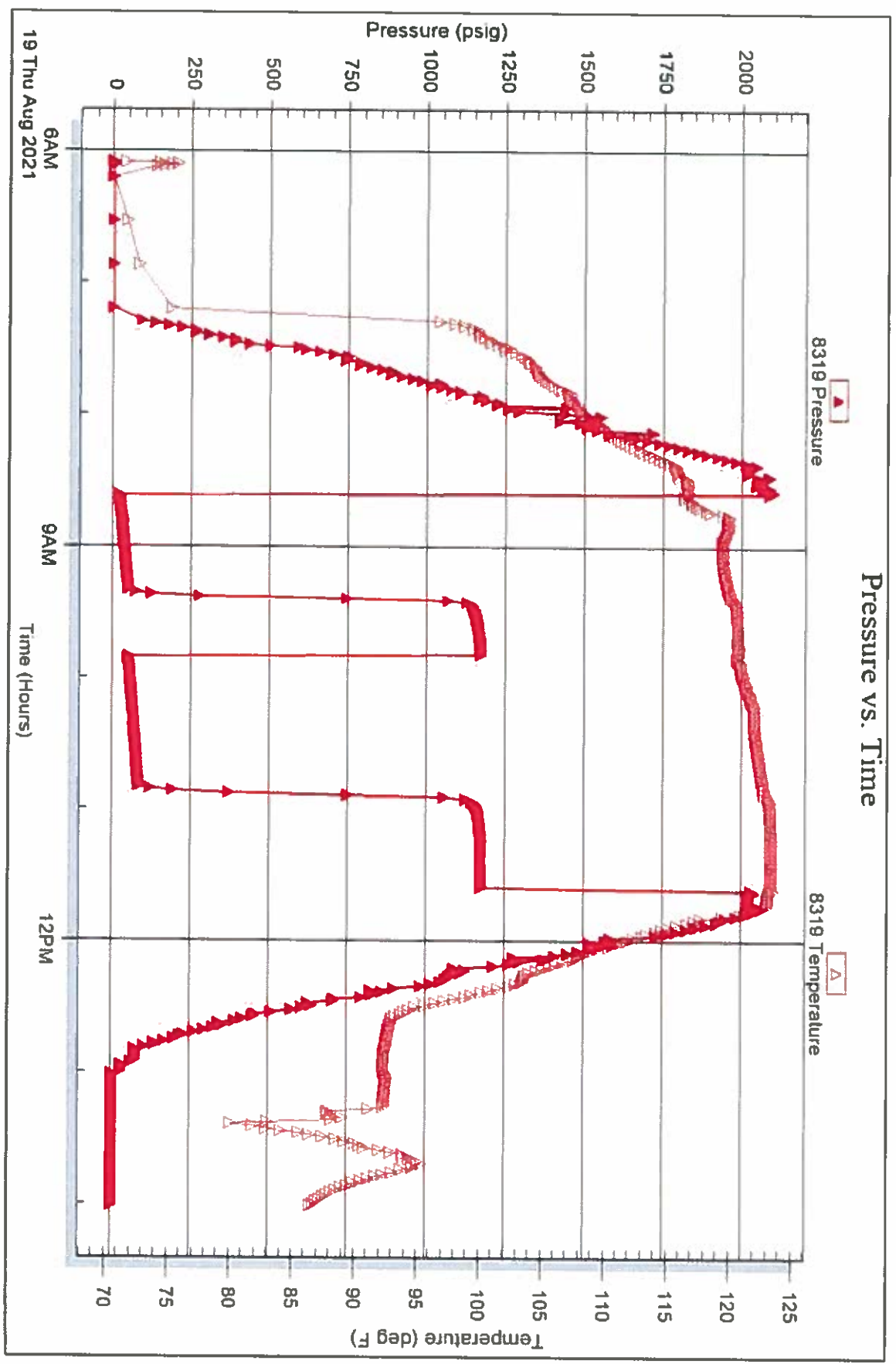
Printed 2021 08 19 @ 15 07 18

Serial #: 8319

Outside Russell Oil, Inc.

Hockersmith A 15-1

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 66953

Printed: 2021.08.19 @ 15:07:18



**TRIBOLITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russell Oil, Inc.
PO Box 8050
Edmond, Ok 73083
ATTN: Kitt Noah

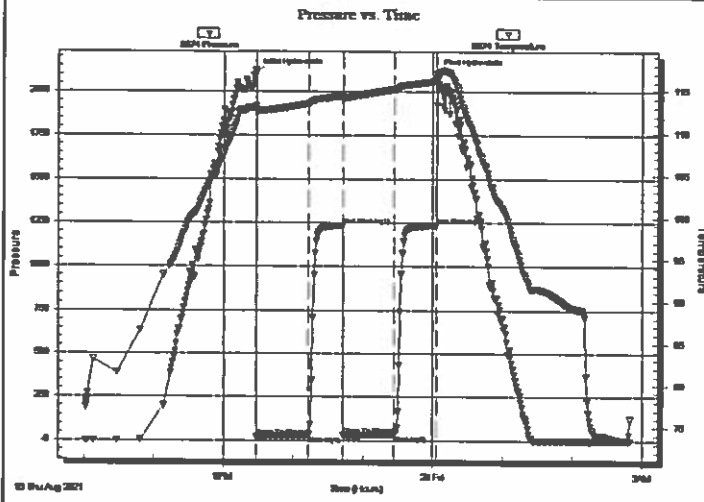
15 11s 32w Logan, Ks
Hockersmith A 15-1
Job Ticket: 66954 DST#: 3
Test Start: 2021.08.19 @ 19:01:00

GENERAL INFORMATION:

Formation: LKC- H
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:28:45
Time Test Ended: 02:50:15
Interval: 4200.00 ft (KB) To 4236.00 ft (KB) (TVD)
Total Depth: 4290.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Straddle (Reset)
Tester: Bradley Walter
Unit No: 78
Reference Elevations: 3063.00 ft (KB)
3053.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8874 Inside
Press@RunDepth: 33.64 psig @ 4201.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2021.08.19 End Date: 2021.08.20 Last Calib.: 2021.08.20
Start Time: 19:01:05 End Time: 02:50:14 Time On Btm: 2021.08.19 @ 21:28:30
Time Off Btm: 2021.08.20 @ 00:04:15

TEST COMMENT: 45- IF: 1.4" blow.
30- IS: No return.
45- FF: 0.4" blow.
30- FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2105.11	113.17	Initial Hydro-static
1	22.04	112.39	Open To Flow (1)
45	27.02	113.48	Shut-In(1)
74	1234.03	114.46	End Shut-In(1)
75	29.89	114.13	Open To Flow (2)
119	33.64	115.18	Shut-In(2)
155	1234.28	116.17	End Shut-In(2)
156	2102.70	116.46	Final Hydro-static

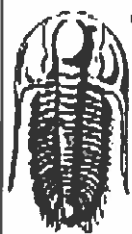
Recovery

Length (ft)	Description	Volume (bbl)
25.00	w cm 30m 70w (oil spots)	0.35

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil, Inc.
PO Box 8050
Edmond, Ok 73083

ATTN: Kit Noah

15 11s 32w Logan, Ks
Hockersmith A 15-1
Job Ticket: 66954 DST#: 3
Test Start: 2021.08.19 @ 19:01:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Saffinity:	27000 ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2500.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	w cm 30m 70w (oil spots)	0.351

Total Length: 25.00 ft Total Volume: 0.351 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: rw is .253 @ 71F= 27000ppm

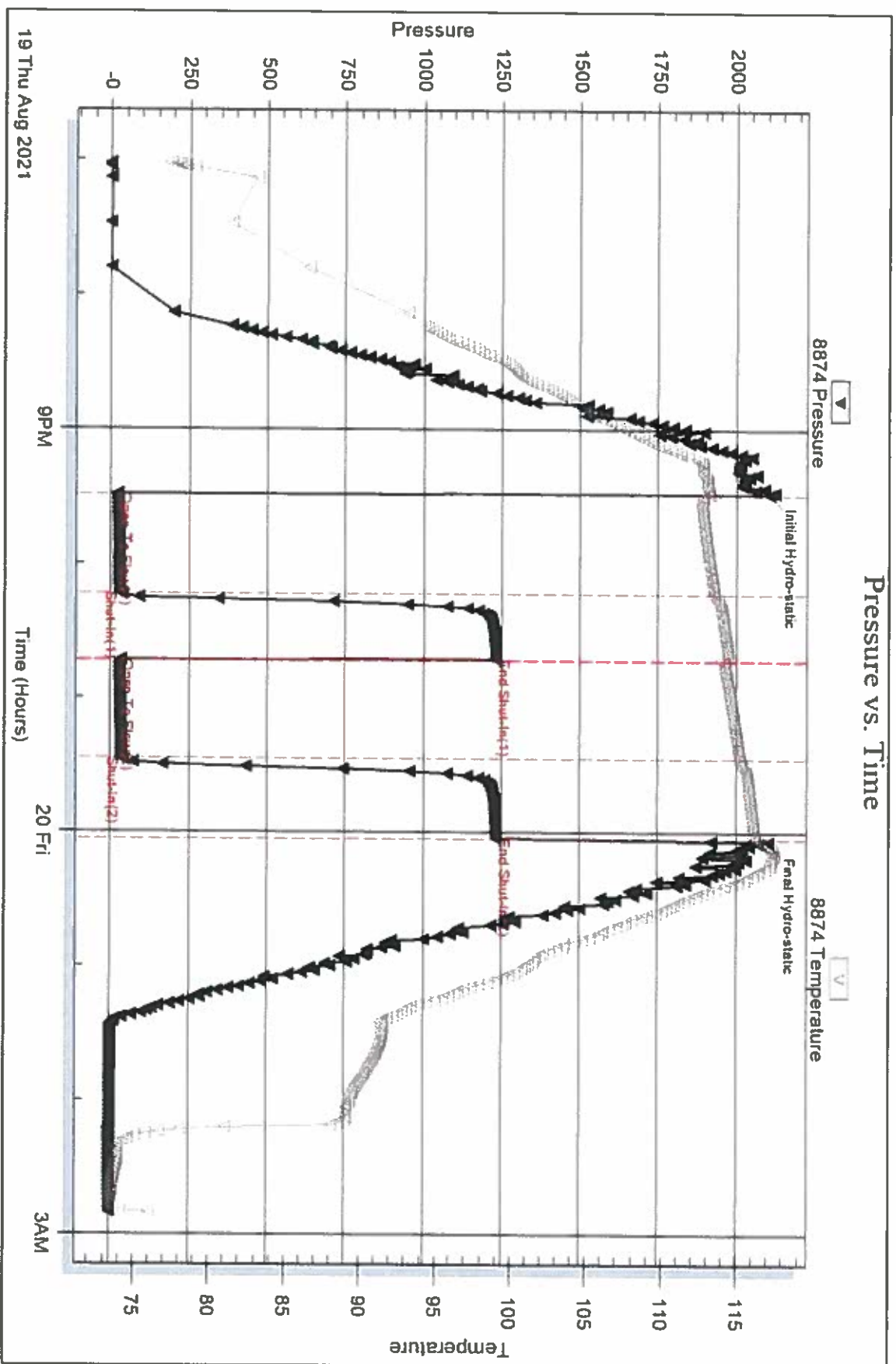
Serial #: 8874

Inside

Russell Oil, Inc.

Hockersmith A 15-1

DST Test Number: 3



Tribble Testing, Inc

Ref. No: 66954

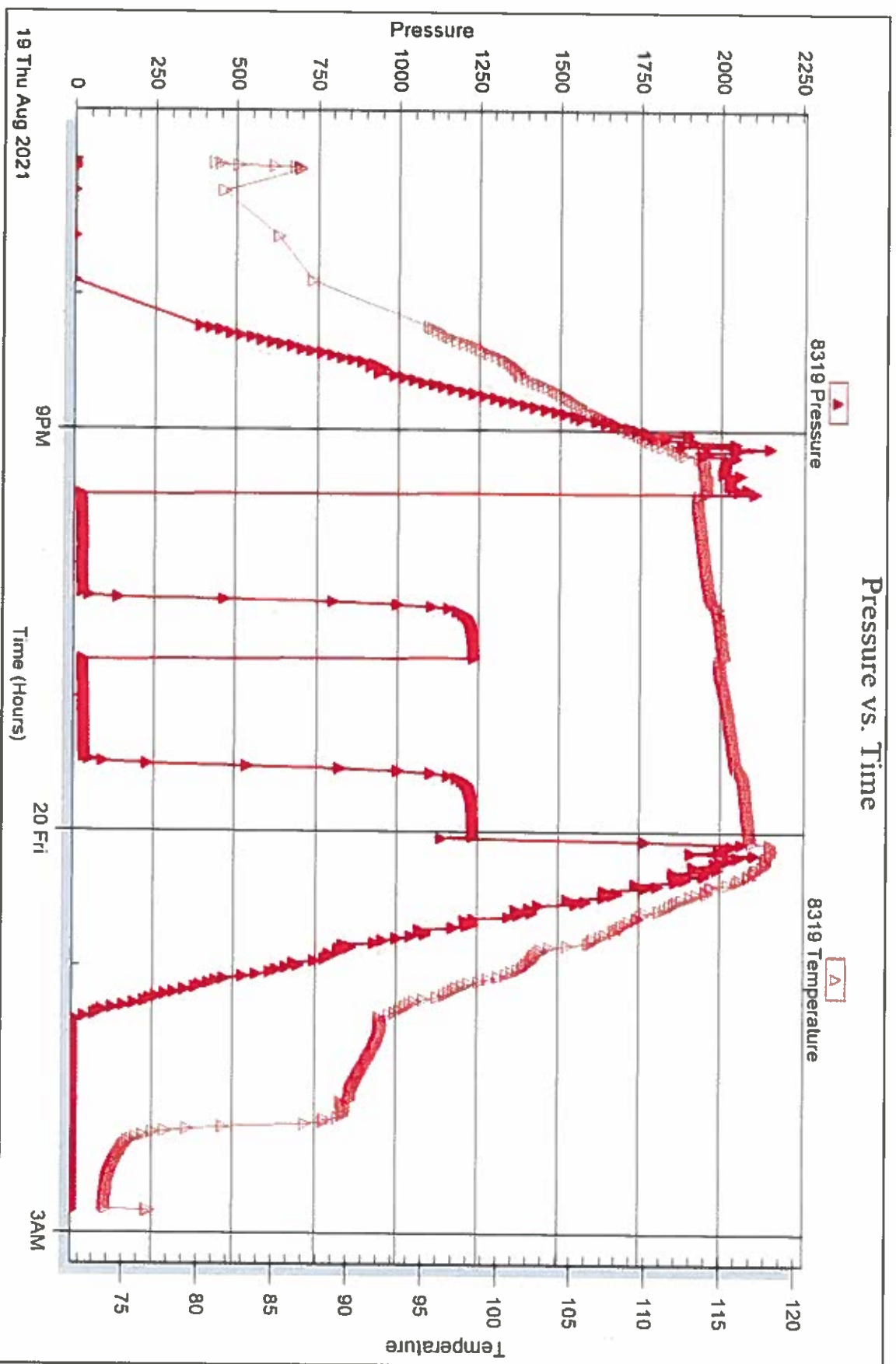
Printed 2021 08 20 @ 06 58 16

Serial #: 8319

Outside Russell Oil, Inc.

Hockersmith A 15-1

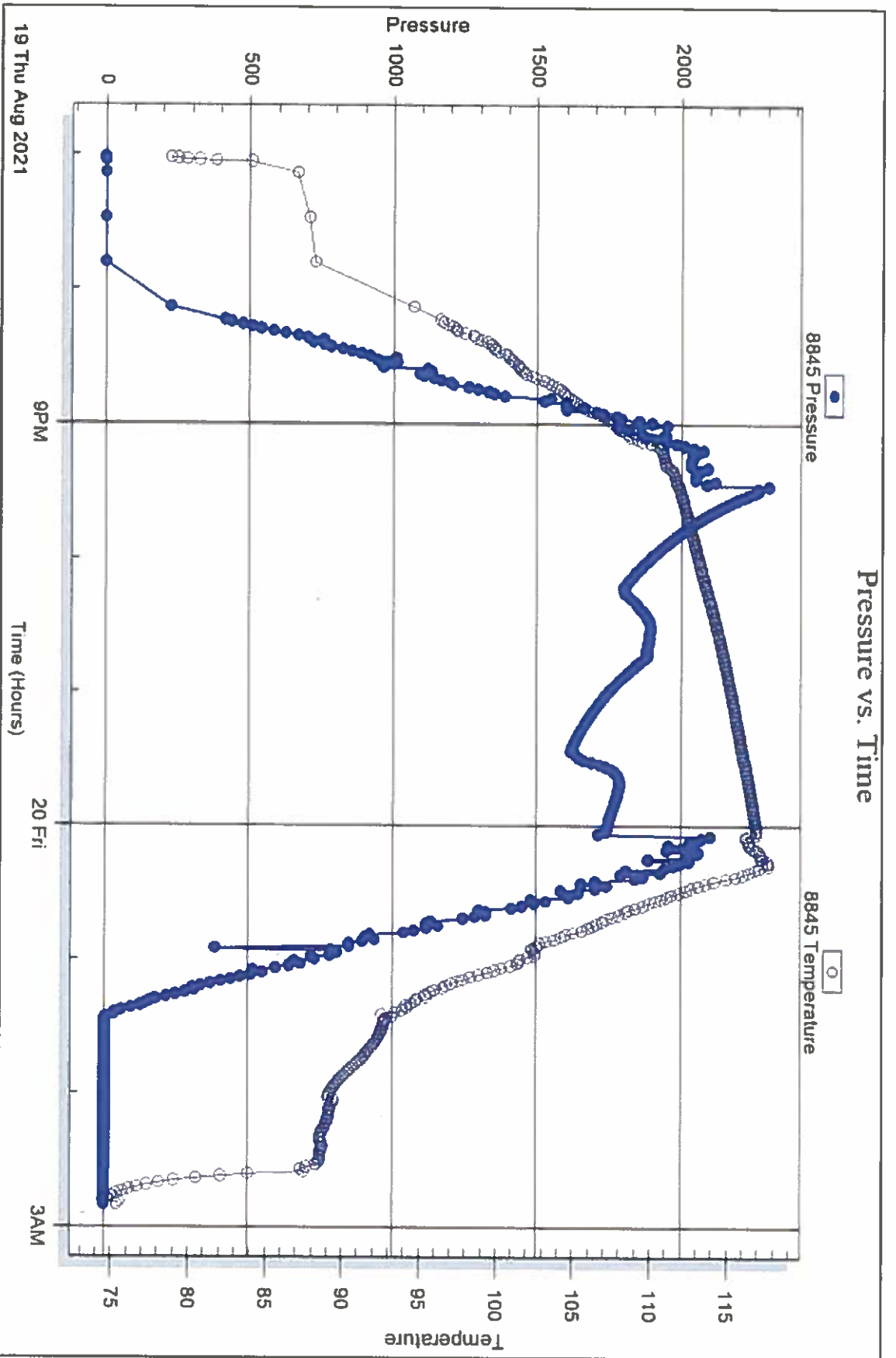
DST Test Number 3

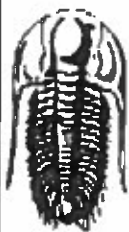


Triobite Testing, Inc

Ref. No: 66954

Printed 2021.08.20 @ 06:58:16





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Russell Oil, Inc.
PO Box 8050
Edmond, Ok 73083
ATTN: Kit Noah

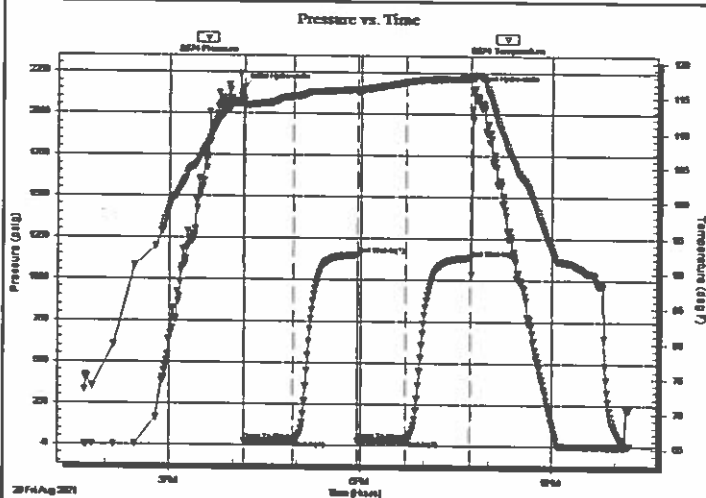
15 11s 32w Logan, Ks
Hockersmith A 15-1
Job Ticket: 66955 DST#: 4
Test Start: 2021.08.20 @ 13:40:00

GENERAL INFORMATION:

Formation: **Lansing K-L**
 Deviated: **No Whipstock** ft (KB)
 Test Type: **Conventional Bottom Hole (Reset)**
 Time Tool Opened: **16:10:15**
 Tester: **Bradley Walter**
 Time Test Ended: **22:13:00**
 Unit No: **78**
 Interval: **4285.00 ft (KB) To 4350.00 ft (KB) (TVD)**
 Reference Elevations: **3063.00 ft (KB)**
 Total Depth: **4350.00 ft (KB) (TVD)**
3053.00 ft (CF)
 Hole Diameter: **7.88 inches** Hole Condition: **Good**
 KB to GR/CF: **10.00 ft**

Serial #: 8874 **Inside**
 Press@RunDepth: **31.95 psig @ 4286.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2021.08.20** End Date: **2021.08.20** Last Calib.: **2021.08.20**
 Start Time: **13:40:05** End Time: **22:13:00** Time On Btm: **2021.08.20 @ 16:09:45**
 Time Off Btm: **2021.08.20 @ 19:46:30**

TEST COMMENT: 45- IF: 0.9" blow.
 60- IS: No return.
 45- FF: 0.4" blow.
 60- FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2156.38	114.42	Initial Hydro-static
1	21.50	113.57	Open To Flow (1)
47	25.09	115.11	Shut-In(1)
107	1149.58	116.14	End Shut-In(1)
108	27.14	115.70	Open To Flow (2)
153	31.95	117.26	Shut-In(2)
214	1135.11	117.89	End Shut-In(2)
217	2148.16	117.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud 100m (oil spots)	0.28

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil, Inc.
PO Box 8050
Edmond, Ok 73083
ATTN: Kitt Noah

15 11s 32w Logan, Ks
Hockersmith A 15-1
Job Ticket: 66955 DST#: 4
Test Start: 2021.08.20 @ 13:40:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3300.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

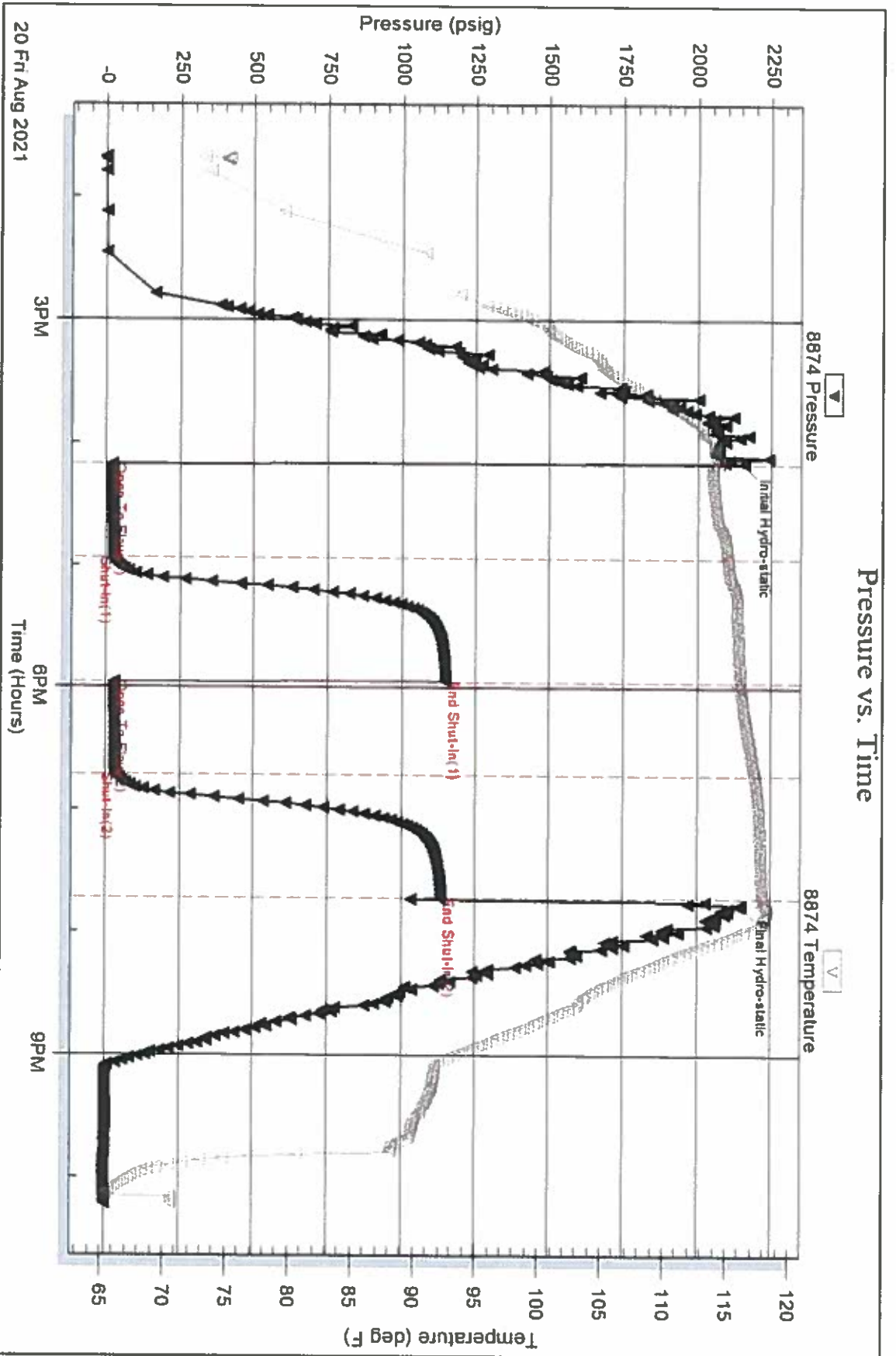
Length ft	Description	Volume bbl
20.00	mud 100m (oil spots)	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

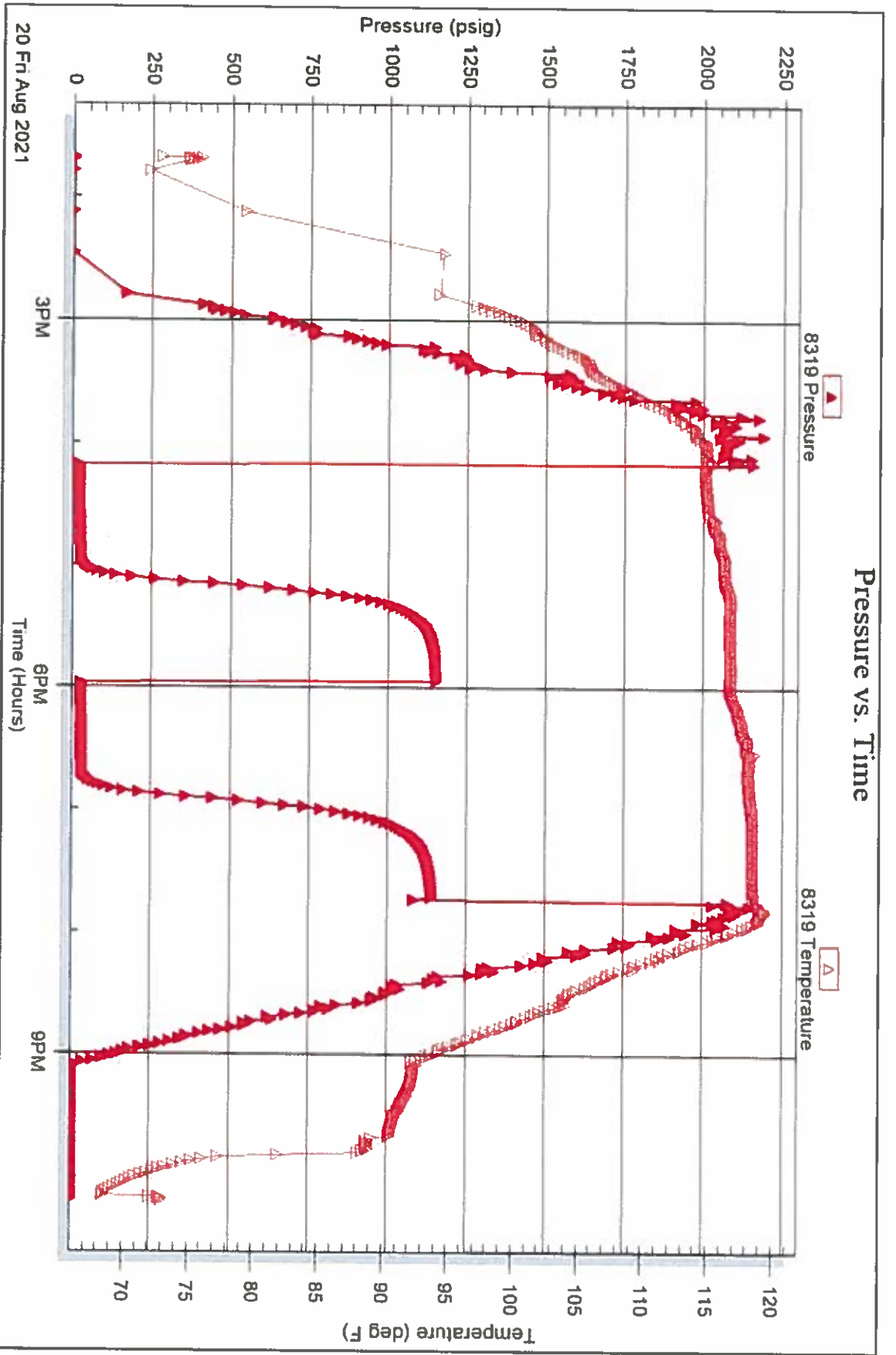


Serial #: 8319

Outside Russell Oil, Inc.

Hookersmith A 15-1

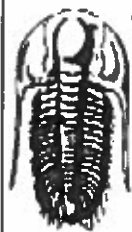
DST Test Number 4



Triprobe Testing, Inc

Ref. No: 669955

Printed: 2021.08.21 @ 03:36:59



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Russell Oil, Inc.
PO Box 8050
Edmond, Ok 73083
ATTN: Kitt Noah

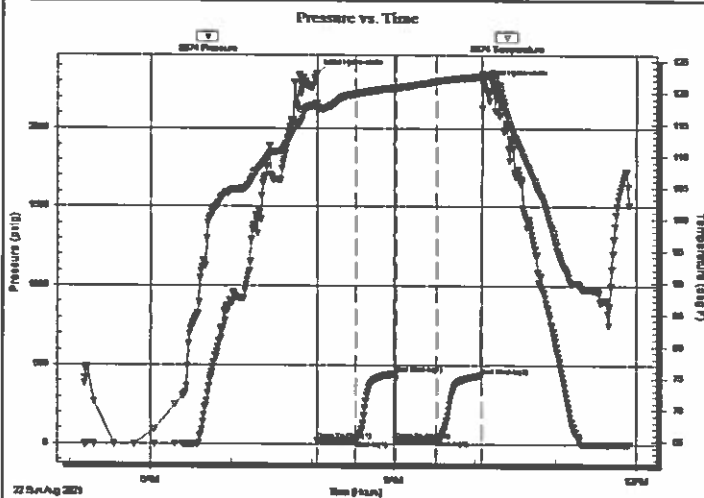
15 11s 32w Logan, Ks
Hockersmith A 15-1
Job Ticket: 66956 DST#: 5
Test Start: 2021.08.22 @ 05:11:00

GENERAL INFORMATION:

Formation: **Johnson Zone**
 Deviated: **No Whipstock:** ft (KB)
 Time Tool Opened: 08:03:15
 Time Test Ended: 11:54:15
 Interval: **4585.00 ft (KB) To 4626.00 ft (KB) (TVD)**
 Total Depth: **4626.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**
 Test Type: **Conventional Bottom Hole (Reset)**
 Tester: **Bradley Walter**
 Unit No: **78**
 Reference Elevations: **3063.00 ft (KB)**
3053.00 ft (CF)
 KB to GR/CF: **10.00 ft**

Serial #: 8874 Inside
 Press@RunDepth: **27.47 psig @ 4586.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2021.08.22** End Date: **2021.08.22** Last Calib.: **2021.08.22**
 Start Time: **05:11:05** End Time: **11:54:14** Time On Btm: **2021.08.22 @ 08:03:00**
 Time Off Btm: **2021.08.22 @ 10:05:45**

TEST COMMENT: 30- IF: 1" blow .
 30- IS: No return.
 30- FF: 0.3" blow .
 30- FS: No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2349.06	118.39	Initial Hydro-static
1	21.52	117.01	Open To Flow (1)
29	25.57	119.81	Shut-In(1)
59	446.53	120.79	End Shut-In(1)
59	26.05	120.66	Open To Flow (2)
89	27.47	121.85	Shut-In(2)
122	435.07	122.65	End Shut-In(2)
123	2291.96	123.05	Final Hydro-static

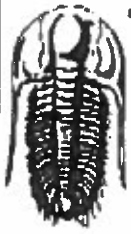
Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud 100m (oil spots)	0.21

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil, Inc.

15 11s 32w Logan, Ks

PO Box 8050
Edmond, Ok 73083

Hockersmith A 15-1

Job Ticket: 66956

DST#: 5

ATTN: Kit Noah

Test Start: 2021.08.22 @ 05:11:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3300.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
15.00	mud 100m (oil spots)	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

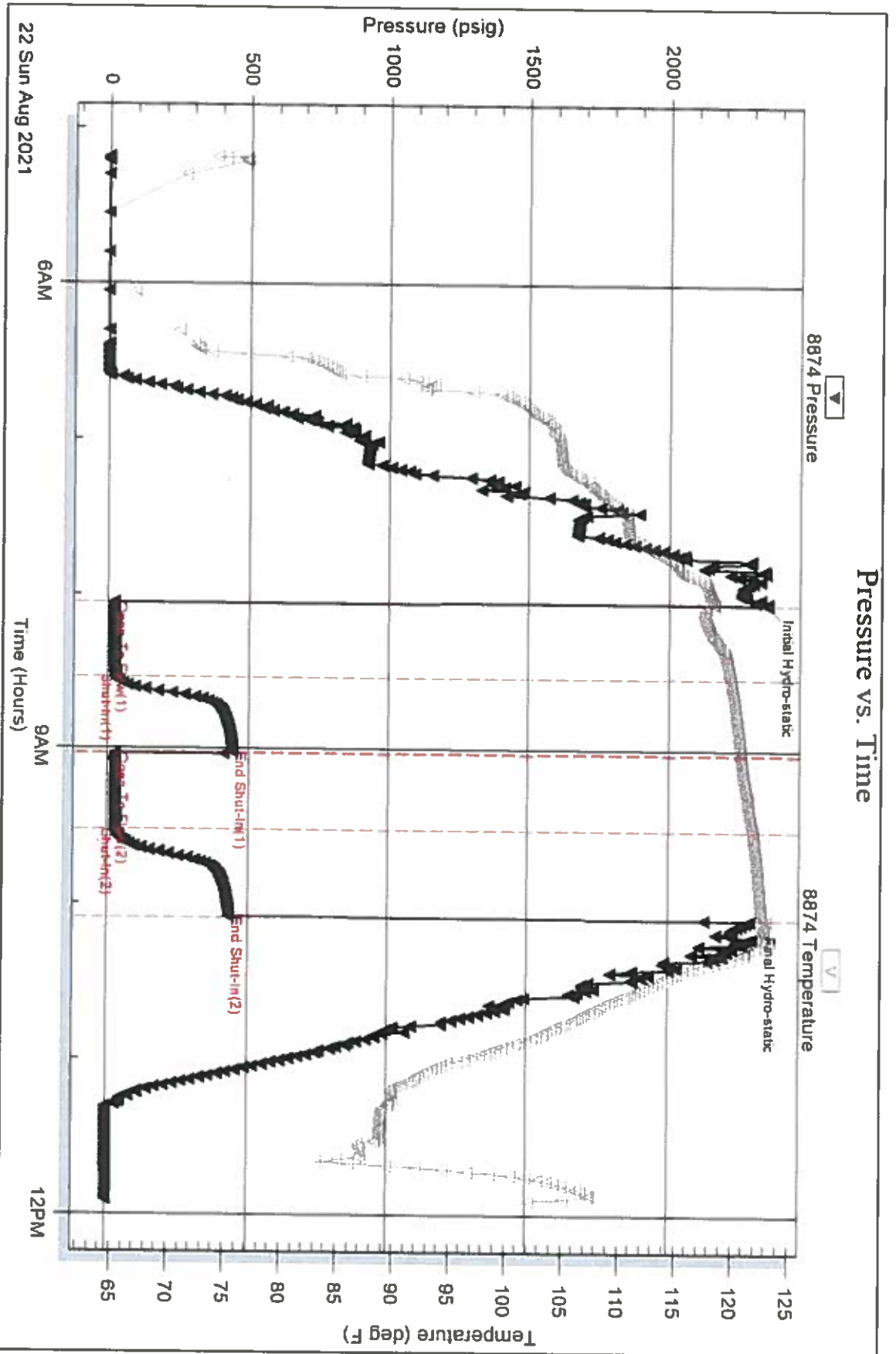
Serial #: 8874

Inside

Russell Oil, Inc.

Hockersmith A 15-1

DST Test Number: 5



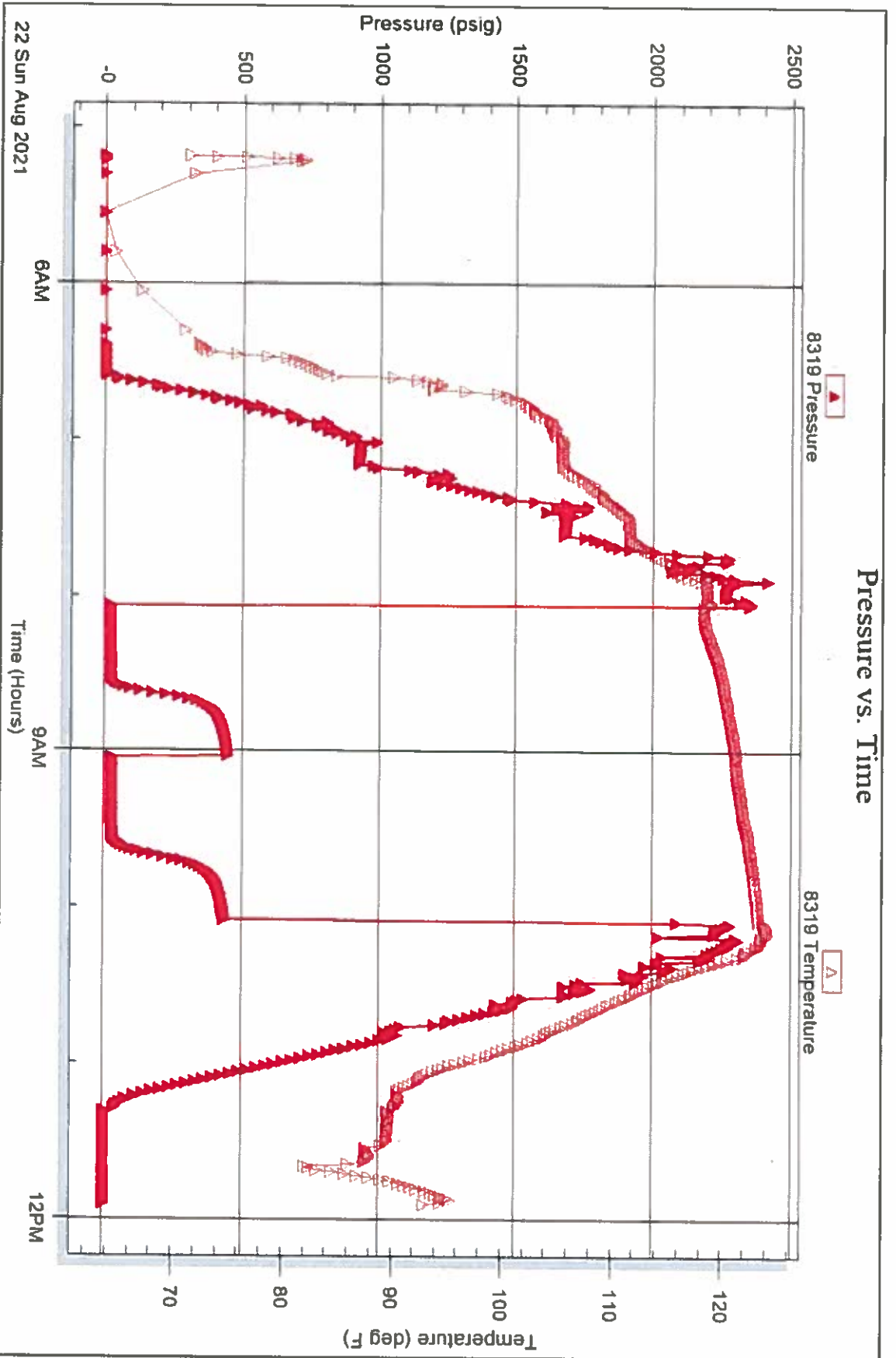
Serial #: 8319

Outside

Russell Oil, Inc.

Hockersmith A 15-1

DST Test Number 5



KITT NOAH

PETROLEUM GEOLOGIST

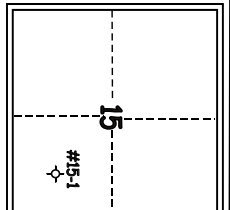
Kansas License #229



GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

ELEVATION:
KB: **3063**
GL: **3053**
MEASURED FROM:
KB



#15-109-21, 624

OPERATOR: **Russell Oil, Inc.**
LEASE: **Hockersmith "A" WELL NO: #15-1**
LOCATION: **1184'FS & 1220'FE**
SEC: **15** TWP: **11S** RNG: **32W**
COUNTY: **Logan** STATE: **Kansas**

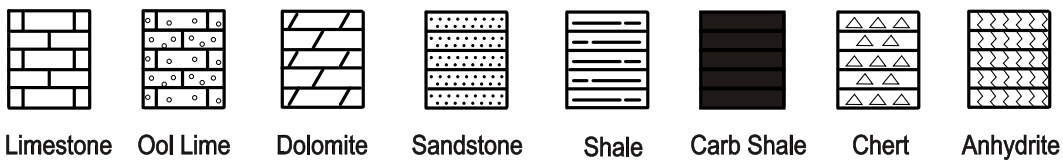
CASING RECORD:
SURFACE: **8 5/8" set at 312' w/220 sx.**
PRODUCTION: **None**
DV TOOL: _____

FORMATION	TOP	LOG	DATUM
Anhydrite	2582 (+481)		
B/Anhydrite	2611 (+452)		
Heebner	4032 (-969)		
Toronto	4051 (-988)		
Lansing	4071 (-1008)		
Stark	4285 (-1222)		
B/KC	4344 (-1281)		
Marmaton	4371 (-1308)		
Pawnee	4478 (-1415)		
Cherokee	4565 (-1502)		
Mississippian	4654 (-1591)		
RTD	4710 (-1647)		
LTD	4713 (-1650)		

CONTRACTOR: **Southwind Drilling Rig #8**
COMM: **8-13-2021** COMPL: **8-23-2021**
RTD: **4710** LTD: **4713**
SAMPLES SAVED FROM: **3700 to TD**
DRILLING TIME SAVED FROM: **3700 to TD**
SAMPLES EXAMINED FROM: **3700 to TD**
GEOLOGICAL SUPERVISION FROM: **3700 to TD**
MUD UP: **3490** MUD TYPE: **chemical**
Mudco - Reid Atkins
DRILL STEM TESTS TAKEN: **5**
Triobite - Bradley Walters

SURVEYS: **Midwest Wireline**
Dual Compensated Porosity
Dual Induction
Microlog

LEGEND



DEPTH	DRILLING TIME IN MINUTES PER FOOT Rate of penetration increases	SAMPLE DESCRIPTIONS	REMARKS
	5" 10" 15" 20"		
		Anhydrite	EL 2582 (+481)

Anhydrite ^{conn}

EL 2582 (+481)

2600

B/Anhydrite ^{conn}

EL 2611 (+452)

3700

Sh, lt gry
LS, crm fn xln sli fossil pr
poro mstly dense NSNO

Sh, gry & green

LS, crm fn xln fossil & ool
pr interpart poro NSNO

Sh, gry & maroon

Geolograph not working

LS, crm fn xln fossil & ool pr-fr
interpart poro; barren NSNO

LS, crm-gry fn xln v. fossil & ool
pr-fr interpart poro NSNO

Sh, lt gry

LS, crm fn xln v. fossil pr-fr
interpart poro barren NSNO
abun pieces fluffy wht chalk

Sh, lt gry

Sh, gry, green, maroon

LS, crm-gry fn xln fossil & ool
pr interpart poro NSNO abun
mushy wht chalk

LS, crm-tan fn xln sli fossil
pr visible poro dense NSNO

3800

Topeka

Sh, dk gry & maroon

EL 3810 (-747)

LS, crm fn xln fossil & ool pr
interpart poro blocky NSNO

3800

Topeka

EL 3810 (-747)

LS,crm-tan fn xln sli fossil
pr visible poro dense NSNO

Sh, dk gry & maroon

LS,crm fn xln fossil & ool pr
interpart poro blocky NSNO

conn
Sh, gry & green

LS,crm-gry fn xln sli fossil pr
intpart poro subchalky NSNO

LS,crm-gry fn xln sli fossil pr
intpart poro NSNO sc tan chert

LS,crm AA

conn
LS,crm-wht fn xln fossil pr
interpart poro NSNO; chalky

Sh, lt gry & maroon

LS,crm-wht fn xln fossil pr
interpart poro chalky NSNO

conn
LS,crm fn xln fossil pr interpart
NSNO sc pieces wht & clr chert

LS,crm-tan AA

3900

LS,crm-tan fn xln fossil pr
visible poro NSNO;

conn
Sh, blk carbonaceous

Sh, gry, green, maroon

LS,crm fn xln sli fossil; pr
interpart poro NSNO abun
pieces wht chalk

conn
LS,crm fn xln fossil & ool; pr
interpart poro NSNO
Sh, gry, green, maroon

LS,crm-gry fn xln fossil & ool
pr interpart poro NSNO

Sh, gry, green, maroon

conn
LS,crm-gry fn xln fossil fr
interpart poro; chalky NSNO

Sh, blk carbonaceous

LS,crm fn xln ool pr-fr
interpart poro NSNO

LS,AA

4000

Sh, lt. gry & green

conn
LS,crm fn xln fossil pr interpart

4000

interpart poro NSNO
LS,AA
Sh, lt. gry & green
LS,crm fn xln fossil pr interpart poro NSNO chalky
LS,crm fn xln fossil pr interpart poro NSNO abun wht chalk

Heebner

Sh, blk carbonaceous
Sh, gry, green, maroon

EL 4032 (-969)

Toronto

Sh, AA
LS,crm fn xln sli fossil pr interpart poro; dense; NSNO

EL 4051 (-988)

Wiper Trip at 4060'
35 stands

Lansing

Sh, gry, green, maroon
LS,crm fn xln fossil & v. ool; pr-fr interpart poro; iso vug poro; barren NSNO
LS,crm fn xln sli fossil pr interpart poro NSNO

EL 4071 (-1008)

4100

LS, AA
Sh, dk gry, green, maroon
LS,wht fn xln v. ool; iso fr pinpoint poro; fr amt med brwn spty-subsat str; SSFO; pp bds FO on brk; no odor; yellow fluor; milky cut

"C"

"D"

LS,crm-wht fn xln fossil; dense; 1-2 pieces dk spotty edge str; NSFO no odor; flood wht & tan chert

"E"

"F"

LS,AA
Sh, blk carbonaceous
LS,crm-tan fn xln fossil; dolo; fr pp poro; iso fr vug poro; gd amt med brwn rich sat str; S-F SFO; fr-gd gassy odor; bright fluor
LS,crm fn xln ool; v. lg vug poro; dolo; fr amt lt-med brwn spty-subsat sn; S-F SFO; fr odor; sli gassy odor; yellow fluor; milky cut

"G"

Sh, abun dk gry, green, maroon
LS,wht fn xln v. fossil; oolitic; iso vug poro; barren NSNO

LS,wht fn xln sli fossil; pr vis poro; NSNO sm wht chalk; sc pieces wht chert

LS,crm-gry-tan fn xln sli fossil; pr vis poro; NSNO sc wht chert

4200

Muncie Crk

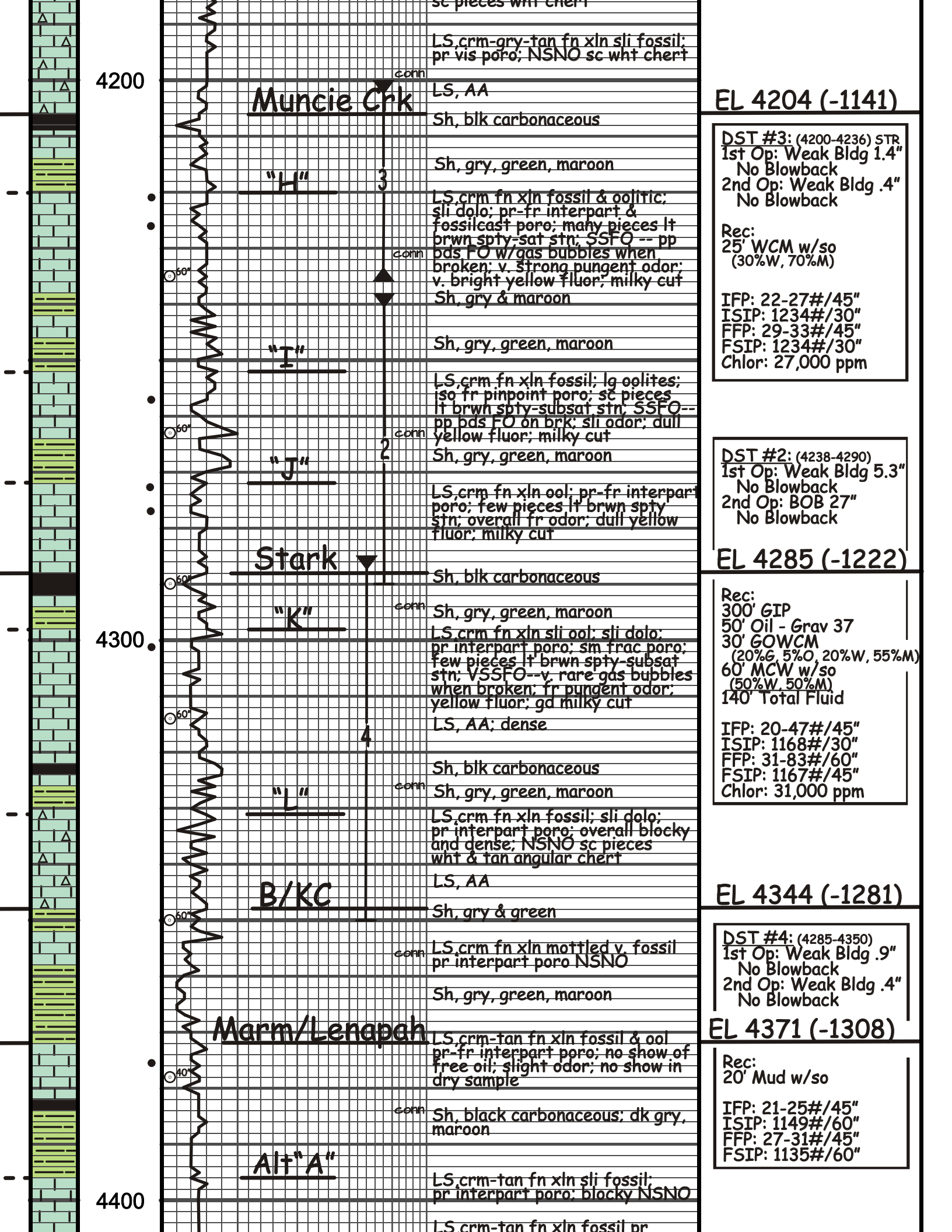
LS, AA
Sh, blk carbonaceous

EL 4204 (-1141)

DST #1: (4134-4166)
1st Op: BOB 27"
No Blowback
2nd Op: BOB 36"
No Blowback
Rec:
430' MCW w/so
(95%W, 5%M)
IFP: 26-140#/45"
ISIP: 1106#/45"
FFP: 149-249#/45"
FSIP: 1085#/60"
Chlor: 29,000 ppm

Pipe Strap at 4166'
.56 Long to Board

DST #2: (4166-4198)



4400

Alt "A"

LS,crm-tan fn xln sli fossil;
pr interpart poro; blocky NSNO

LS,crm-tan fn xln fossil pr
interpart poro dense; NSNO

LS,AA

Alt "B"

conn

Sh, gry, green, maroon
LS,tan fn xln sli ooc pr visible
poro; dense NSNO

LS,crm-fn xln sli fossil pr
interpart poro; NSNO

Sh, gry, green, maroon

Alt "C"

conn

LS,crm-tan fn xln fossil pr
interpart poro; NSNO

LS,crm-gry fn xln sli fossil; pr
visible poro; dense; NSNO; abun
tan chert

Pawnee

Sh, blk carbonaceous

EL 4478 (-1415)

conn

LS,wht fn xln sli fossil pr visible
poro; v. dense NSNO sc pieces
clr angular chert

LS,crm fn xln fossil; pr visible
poro NSNO; sc pieces clr angular
chert

4500

LS: AA

Myrick Sta

Sh, blk carbonaceous

EL 4511 (-1448)

conn

LS,crm-tan-brwn fn xln fossil
pr visible poro NSNO

LS,crm-gry fn xln fossil iso
pinpoint poro; pr interpart poro
abun translucent blue chert

Fort Scott

Sh, blk carbonaceous

EL 4537 (-1474)

conn

LS,crm-tan fn xln sli fossil; iso
pr interpart poro; iso vug poro;
NSFO; fleeting odor; sc pieces
gray & wht chert

LS,crm-tan-brwn fn xln fossil;
rare fossilcast poro; overall
dense NSNO; abun tan chert

Cherokee

LS,AA

EL 4565 (-1502)

Sh, blk carbonaceous

LS,crm-tan fn xln fossil pr
interpart poro NSNO

Bit Trip 4584'

conn

LS,crm fn xln pr vis poro; NSNO

Sh, blk carbonaceous

Sh, blk carbonaceous

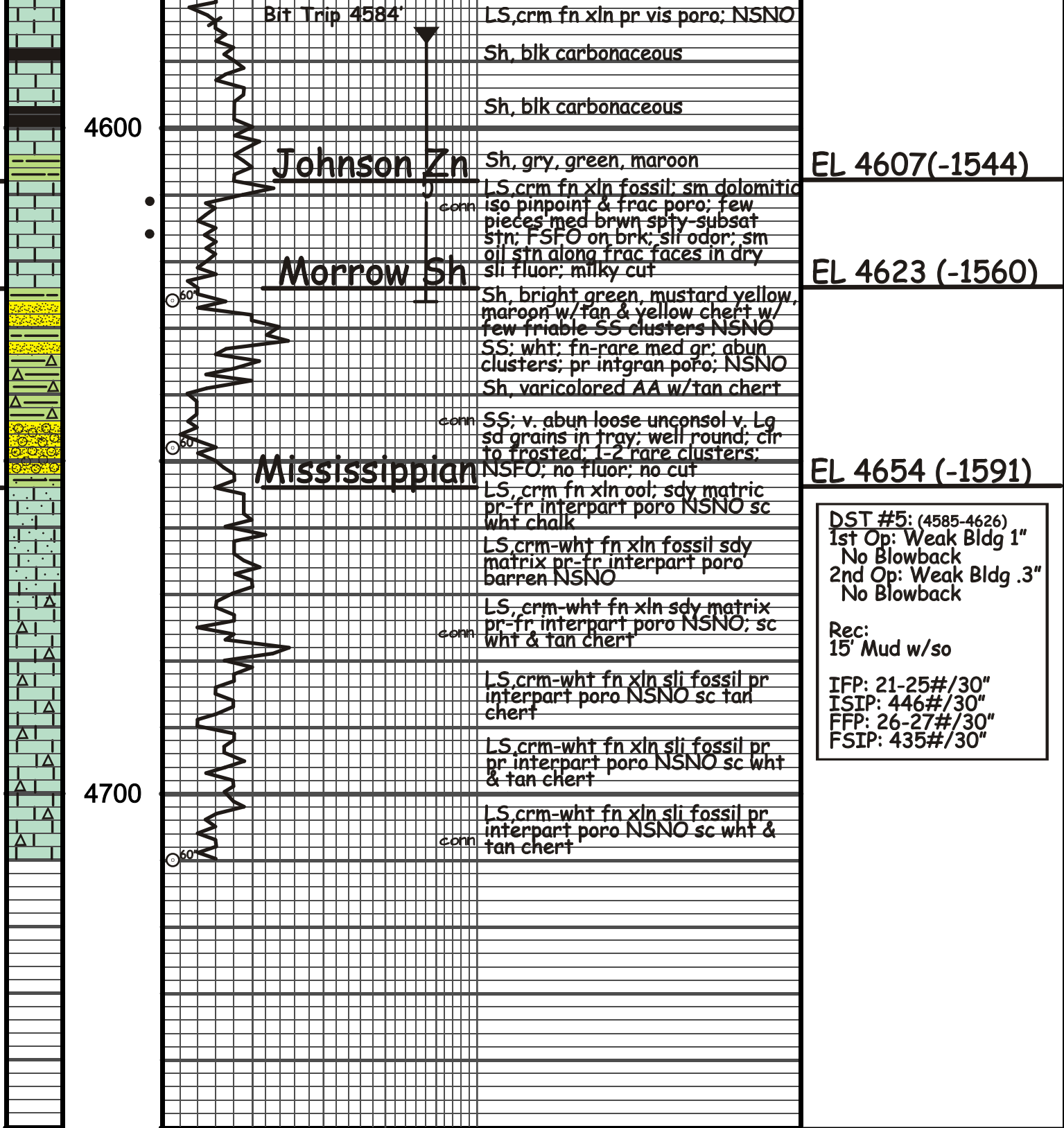
4600

Johnson Zn

Sh, gry, green, maroon

EL 4607(-1544)

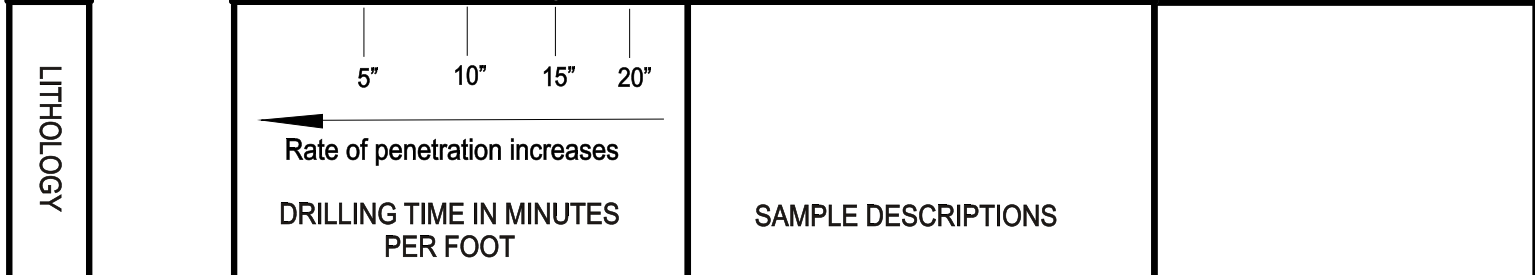
LS,crm fn xln fossil; sm dolomitica



DST #5: (4585-4626)
 1st Op: Weak Bldg 1"
 No Blowback
 2nd Op: Weak Bldg .3"
 No Blowback

Rec:
 15' Mud w/so

IFP: 21-25#/30"
 ISIP: 446#/30"
 FFP: 26-27#/30"
 FSIP: 435#/30"



OPERATOR: Russell Oil, Inc. LOCATION: 1184'FS & 1220'FE ELEVATION: KB 3063

LEASE: Hockersmith "A" WELL NO: #15-1 SEC: 15 TWP: 11S RNG: 32W



HURRICANE SERVICES INC

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

Customer:
RUSSELL OIL, INC.
PO BOX 8050
EDMOND, OK 73083

Invoice Date: 8/13/2021
Invoice #: 0354778
Lease Name: Hockersmith A
Well #: 15-1 (New)
County:
Job Number: WP1723
District: Oakley

Date/Description	HRS/QTY	Rate	Total
8.5/8" Surface	0.000	0.000	0.00
H-325	220.000	17.600	3,872.00
Light Eq Mileage	5.000	1.760	8.80
Heavy Eq Mileage	5.000	3.520	17.60
Ton Mileage-Minimum	1.000	264.000	264.00
Depth Charge 0'-500'	1.000	880.000	880.00

Total 5,042.40

TERMS: Net 30 days. Interest may be charged on past due invoice at rate of 1 1/2% 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!



Customer: RUSSELL OIL		Lease & Well #: HOCKERSMITH A 16-1		Date: 8/13/2021	
Service District: OAKLEY KS		County & State: LOGAN		Leads 5076: 15-115-32W	
Job Type: 8 & 8 SURFACE		<input checked="" type="checkbox"/> PROD	<input type="checkbox"/> IWJ	<input type="checkbox"/> SWD	Leads 5076: 15-115-32W
Equipment #		New Well? <input checked="" type="checkbox"/> YES <input type="checkbox"/> No		Ticket #: WP1723	
Job Safety Analysis - A Discussion of Hazards & Safety Procedures					
Operator	Director	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
VAP	SCOTTY	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
206	J POLLEY	<input checked="" type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations
206	MIKE P	<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations
		<input checked="" type="checkbox"/> Hearing Protection	<input checked="" type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	
Comments					
Product/Service Code					
Description		Unit of Measure	Quantity	Net Amount	
CP015	H-325	sack	220.00		\$3,872.00
M018	Light Equipment Mileage	mi	8.00		\$8.80
M010	Heavy Equipment Mileage	mi	8.00		\$17.60
M025	Ton Mileage - Minimum	each	1.00		\$264.00
D010	Depth Charge 0'-500'	job	1.00		\$880.00
Customer Section: On the following scale (1-10) how likely would you rate Hurricane Services Inc.?				Gross: Net: \$8,042.40	
Based on this job, how likely is it you would recommend HSI to a colleague? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely				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. Total: \$ 8,042.40	
				HSI Representative: SCOTTY	

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 1/2% 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 effect 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 from 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 information in determining taxable services.

X _____ **CUSTOMER AUTHORIZATION SIGNATURE**

