

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

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 <i>(Attach Additional Sheets)</i>	☐ Yes	☐ No	☐ Log	Formation (Top), Depth and Datum	☐ Sample
Samples Sent to Geological Survey	☐ Yes	☐ No	Name	Top	Datum
Cores Taken	☐ Yes	☐ No			
Electric Log Run	☐ Yes	☐ No			
Geologist Report / Mud Logs	☐ Yes	☐ No			
List All E. Logs Run:					

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

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:		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 <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. ☐ Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom	

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)

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	SOUCIE KRISS UNIT 1-14
Doc ID	1474878

All Electric Logs Run

DIL
DUCP
MEL
BHCS

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	SOUCIE KRISS UNIT 1-14
Doc ID	1474878

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	12.250	8.625	23	307	Class A	250	3% CC, 3% gel

MDCI
Soucie Kriss Unit #1-14
2275' FSL 2860' FEL
Sec. 14-T10S-R34W
3217' KB

Formation	Sample Top	Datum	Ref	Log Tops	Datum	Ref
Anhydrite	2742	+475	-15	2736	+481	-9
B/Anhydrite	2769	+448	-14	2765	+452	-10
Topeka	3906	-689	-17	3902	-685	-13
Heebner	4121	-904	-19	4116	-899	-14
Lansing	4161	-944	-17	4158	-941	-14
Stark	4394	-1177	-21	4388	-1171	-15
BKC	4447	-1230	-18	4444	-1227	-15
Marm	4498	-1281	-20	4485	-1268	-7
Ft Scott	4588	-1371	-20	4582	-1365	-14
Oakley	4665	-1448	-16	4664	-1447	-15
Johnson Zn	4709	-1492	-17	4708	-1491	-16
Mississippi	4795	-1578	-19	4789	-1572	-13
RTD	4895					
LTD				4895		

Robert D. Hendrix
Petroleum Geologist

GEOLOGISTS REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY
Murfin Drilling Company Inc.

LEASE
Soucie Kriss Unit #1-14

FIELD
Jimmy Northeast

LOCATION
2275 fsi & 2860' fei

SEC
14 TWPSP 10 ROE 34w

COUNTY
Thomas STATE Kansas

CONTRACTOR
MDCI (WW Drilling) Rig #112

SPUD
8/19/19 COMP 8/28/2019

RTD
4895' LTD 4895'

MUD UP
3393' TYPE MUD Chemical

SAMPLES SAVED FROM
3790' TO TD

DRILLING TIME KEPT FROM
3790' TO TD

SAMPLES EXAMINED FROM
3790' TO TD

GEOLOGICAL SUPERVISION FROM
3670'

GEOLOGIST ON WELL
Robert D. Hendrix

FORMATION TOPS
ELECTRIC LOG

Sample

Formation

Topoka

Heebner Shale

Lansing

Stark Shale

BKC

Ft Scott

Oakley

ELEVATIONS

KB 3217'

DF

GL 3209'

Measurements Are All From Kelly Bushing

CASING

CONDUCTOR

SURFACE 8-5/8" at 307'

PRODUCTION

ELECTRICAL

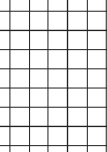
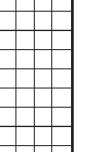
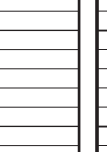
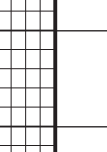
Microlog, Some, Pioneer Wireline

Dual comp por, dual induction

AP# 15-193-21052

REMARKS:

LEGEND



Anhydrite 2742 (+475)

Base Anhydrite 2769 (+448)

Geologist on location 3670' at 2:45 pm 8/23/2019

8:00am, 8/23/2019

Topeka 3906 (-689)

wt 8.8, vis. 68, lcm 2# Morgan Mud, Cade Lines

Heebner 4121 (-904)

Lansing 4161 (-944)

8:00am, 8/24/2019

Muncie Creek 4307 (-1090)

wt 9.1, vis. 61, lcm 1.5# Morgan Mud, Cade Lines

DST #1
4295-4368
30-60-60-90
1st open: blow built to 2 1/2" then died back to 1/4"
2nd open: blow built to 2" no returns
Rec:
150' osmcw 3/27/60
hydro: 2237-2158 psi
lf: 29-60 psi
fr: 65-110 psi
sip: 1201-1183 psi
bht: 122° F
chl: 40,000 ppm

8:00am, 8/25/2019

Morgan Mud, Cade Lines

Stark 4394 (-1177)

BKC 4447 (-1230)

8:00am, 8/26/2019

Morgan Mud, Cade Lines

Ft Scott 4588 (-1371)

wt 9.2, vis. 64, lcm 1.5# Morgan Mud, Cade Lines

DST #2
4684-4736
30-60-30-60
1st open: wk blow built to 1/2" then died back to 1/4"
2nd open: no blow
Rec:
5' osm 4/96
hydro: 2475-2389 psi
lf: 29-29 psi
fr: 35-35 psi
sip: 135-67 psi
bht: 124° F

8:00am, 8/27/2019

Morgan Mud, Cade Lines

Oakley 4665 (-1448)

Johnson Zone 4709 (-1492)

8:00am, 8/28/2019

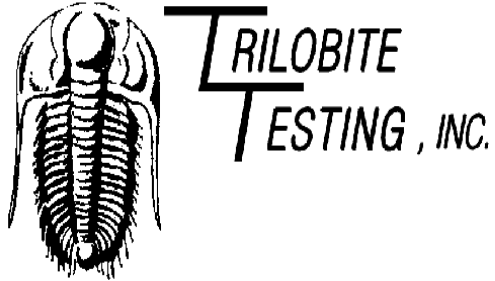
Morgan Mud, Cade Lines

Mississippian 4795 (-1578)

RTD 4895 (-1678)

8:00am, 8/28/2019

Geologist off location at 5:15pm, 8/28/2019



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

Soucie Kriss #1-14

14-10-34W Thomas, KS

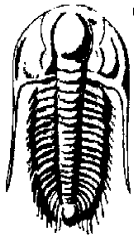
Start Date: 2019.08.25 @ 00:23:00

End Date: 2019.08.25 @ 09:40:49

Job Ticket #: 64375 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.08.28 @ 08:36:27



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

14-10-34W Thomas, KS

Soucie Kriss #1-14

Job Ticket: 64375

DST#: 1

Test Start: 2019.08.25 @ 00:23:00

GENERAL INFORMATION:

Formation: **LKC "H-I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:18:30

Time Test Ended: 09:40:49

Test Type: Conventional Bottom Hole (Initial)

Tester: Martine Salinas

Unit No: 82

Interval: 4295.00 ft (KB) To 4368.00 ft (KB) (TVD)

Total Depth: 4368.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3217.00 ft (KB)

3209.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8734 Outside

Press@RunDepth: 109.58 psig @ 4296.00 ft (KB)

Start Date: 2019.08.25

End Date:

2019.08.25

Start Time: 00:23:01

End Time:

09:40:49

Capacity: 8000.00 psig

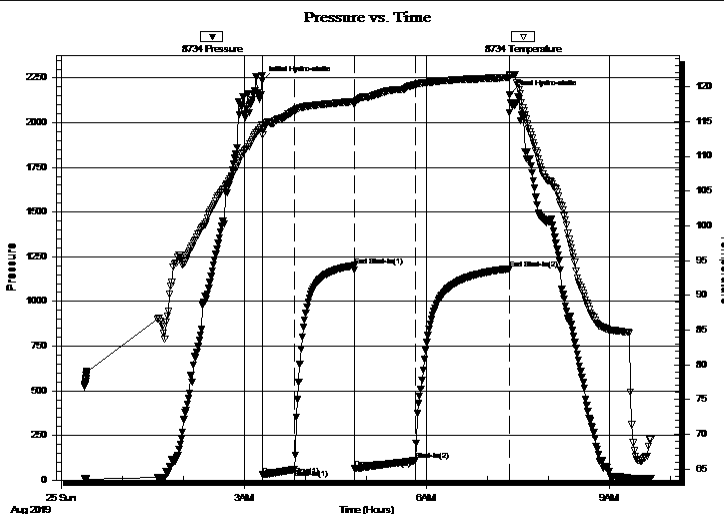
Last Calib.: 2019.08.25

Time On Btm: 2019.08.25 @ 03:18:20

Time Off Btm: 2019.08.25 @ 07:21:39

TEST COMMENT: 30-IF-Surface blow built to 2 1/2"
60-ISI-No blow back
60-FF-Weak s.blow @ 3 mins built to 2"
90-FSI-No blow back

PRESSURE SUMMARY



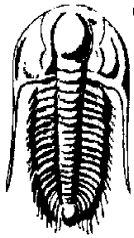
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2237.29	114.44	Initial Hydro-static
1	28.75	113.10	Open To Flow (1)
32	59.56	116.57	Shut-In(1)
91	1201.26	117.89	End Shut-In(1)
91	64.61	117.46	Open To Flow (2)
151	109.58	120.28	Shut-In(2)
243	1182.77	121.33	End Shut-In(2)
244	2158.10	121.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	OSWCM 3%O, 37%W, 60%M	0.74

Gas Rates

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

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

14-10-34W Thomas, KS

Soucie Kriss #1-14

Job Ticket: 64375

DST#: 1

Test Start: 2019.08.25 @ 00:23:00

GENERAL INFORMATION:

Formation: **LKC "H-I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:18:30

Time Test Ended: 09:40:49

Test Type: Conventional Bottom Hole (Initial)

Tester: Martine Salinas

Unit No: 82

Interval: 4295.00 ft (KB) To 4368.00 ft (KB) (TVD)

Total Depth: 4368.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3217.00 ft (KB)

3209.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8959 Inside

Press@RunDepth: psig @ 4296.00 ft (KB)

Start Date: 2019.08.25

End Date:

2019.08.25

Start Time: 00:23:01

End Time:

09:40:40

Capacity: 8000.00 psig

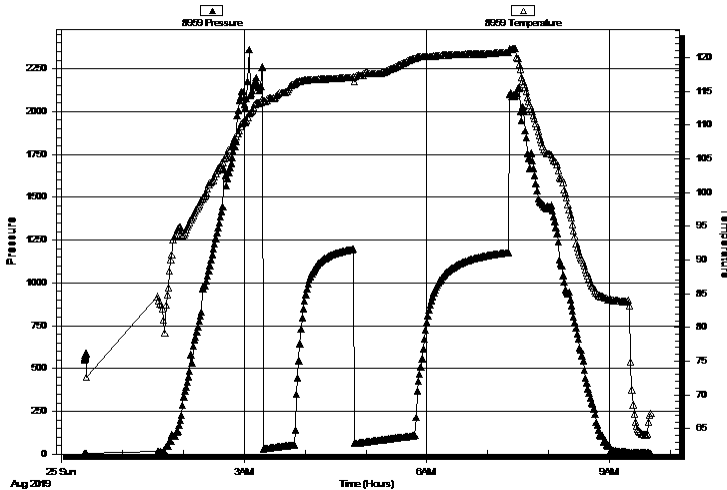
Last Calib.: 2019.08.25

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IF-Surface blow built to 2 1/2"
60-ISI-No blow back
60-FF-Weak s.blow @ 3 mins built to 2"
90-FSI-No blow back

Pressure vs. Time



PRESSURE SUMMARY

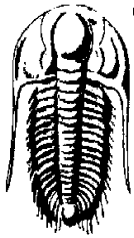
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Recovery

Length (ft)	Description	Volume (bbl)
150.00	OSWCM 3%O, 37%W, 60%M	0.74

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

14-10-34W Thomas, KS

250 N. Water STE 300
Wichita, KS 67202

Soucie Kriss #1-14

Job Ticket: 64375

DST#: 1

ATTN: Robert Hendrix

Test Start: 2019.08.25 @ 00:23:00

Tool Information

Drill Pipe:	Length: 4105.00 ft	Diameter: 3.80 inches	Volume: 57.58 bbl	Tool Weight: 2500.00 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 72000.00 lb
			Total Volume: 58.49 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4295.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	73.00 ft			
Tool Length:	101.00 ft			
Number of Packers:	2	Diameter:	6.75 inches	

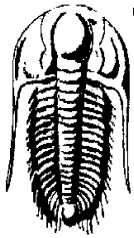
Tool Comments: Pulled 18K over STWT coming off bottom

Tool Description

Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00		4272.00	
Hydraulic tool	5.00	1113	4277.00	
Jars	5.00	01-07	4282.00	
Safety Joint	3.00	-001	4285.00	
Packer	5.00		4290.00	28.00 Bottom Of Top Packer
Packer	5.00		4295.00	
Stubb	1.00		4296.00	
Recorder	0.00	8959 Inside	4296.00	
Recorder	0.00	8734 Outside	4296.00	
Perforations	34.00		4330.00	
Change Over Sub	1.00		4331.00	
Drill Pipe	31.00		4362.00	
Change Over Sub	1.00		4363.00	
Bullnose	5.00		4368.00	73.00 Bottom Packers & Anchor

Total Tool Length: 101.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

14-10-34W Thomas, KS

250 N. Water STE 300
Wichita, KS 67202

Soucie Kriss #1-14

Job Ticket: 64375

DST#: 1

ATTN: Robert Hendrix

Test Start: 2019.08.25 @ 00:23:00

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:

40000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	OSWCM 3%O, 37%W, 60%M	0.738

Total Length: 150.00 ft

Total Volume: 0.738 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

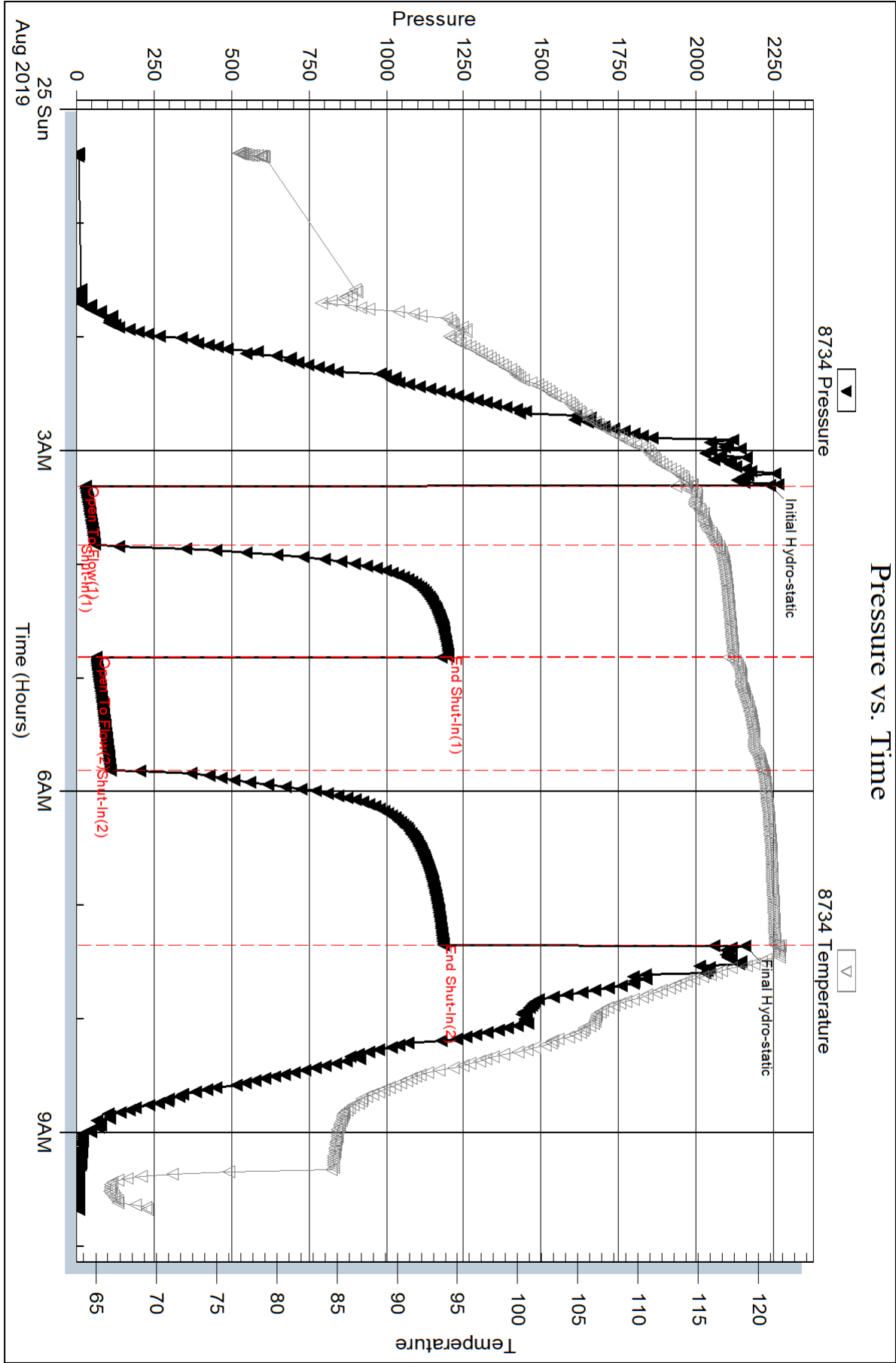
Recovery Comments: RW= .197 @ 68.5 degs = 40,000PPM

Serial #: 8734

Outside Murfin Drilling Co Inc

Soucie Kriss #1-14

DST Test Number: 1



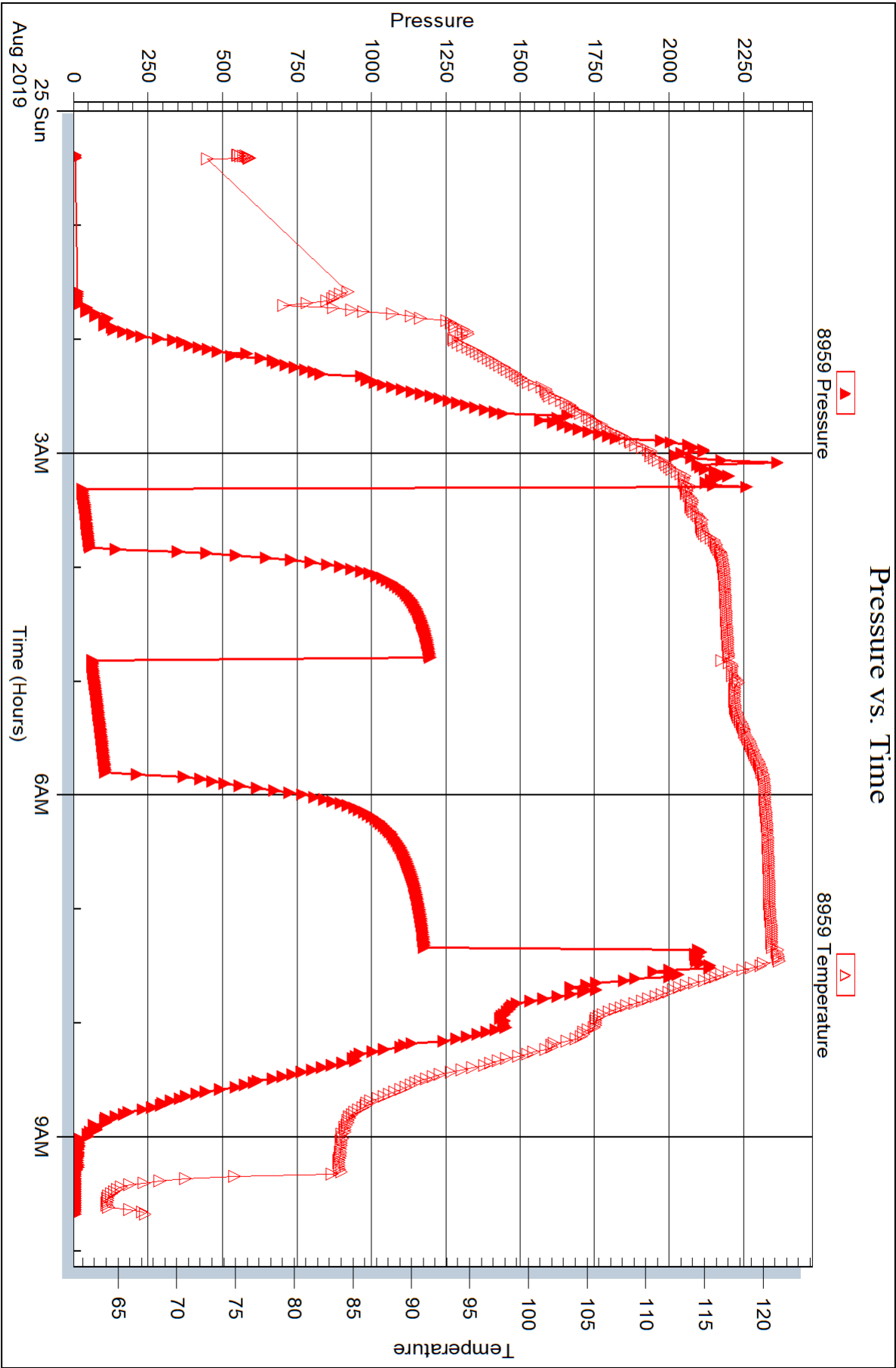
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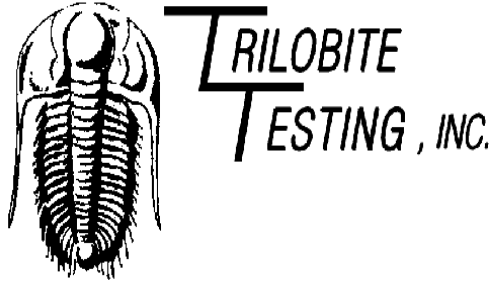
Inside

Murfin Drilling Co Inc

Soucie Kriss #1-14

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

Soucie Kriss #1-14

14-10-34W Thomas, KS

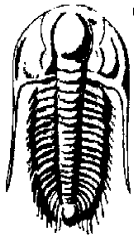
Start Date: 2019.08.27 @ 08:34:00

End Date: 2019.08.27 @ 16:16:30

Job Ticket #: 65551 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.08.28 @ 08:35:55



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

14-10-34W Thomas, KS

Soucie Kriss #1-14

Job Ticket: 65551

DST#: 2

Test Start: 2019.08.27 @ 08:34:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:55:00

Time Test Ended: 16:16:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 82

Interval: 4684.00 ft (KB) To 4736.00 ft (KB) (TVD)

Total Depth: 4736.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3217.00 ft (KB)

3209.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8734 Outside

Press@RunDepth: 34.78 psig @ 4685.00 ft (KB)

Start Date: 2019.08.27

End Date:

2019.08.27

Start Time: 08:34:01

End Time:

16:16:30

Capacity: 8000.00 psig

Last Calib.: 2019.08.27

Time On Btm: 2019.08.27 @ 10:54:50

Time Off Btm: 2019.08.27 @ 13:58:09

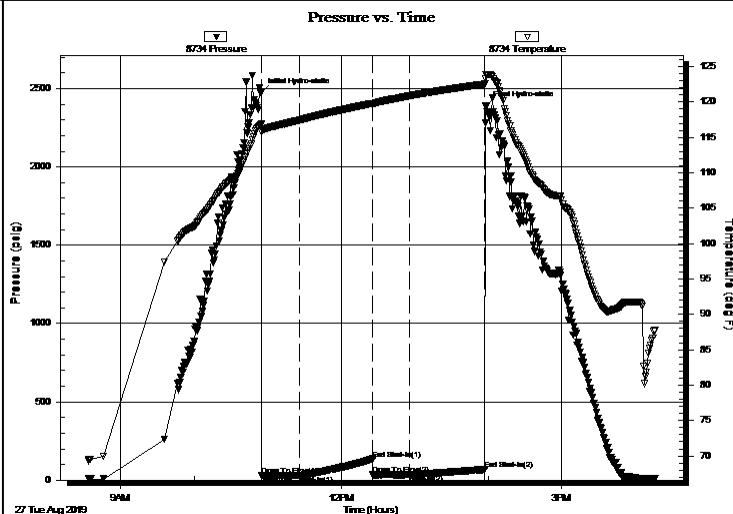
TEST COMMENT: 30-IF-Surface blow built to 1/2" @ 13 mins & decreased to 1/4"

60-ISI-No blow back

30-FF-No blow

60-FSI-No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2475.29	116.86	Initial Hydro-static
1	29.29	115.75	Open To Flow (1)
32	28.95	117.44	Shut-In(1)
91	135.19	119.80	End Shut-In(1)
92	34.65	119.76	Open To Flow (2)
122	34.78	120.87	Shut-In(2)
183	67.40	122.52	End Shut-In(2)
184	2388.84	123.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 4%O, 96%M	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



Murfin Drilling Co Inc

ATTN: Robert Hendrix

Soucie Kriss #1-14

Job Ticket: 65551

DST#: 2

Test Start: 2019.08.27 @ 08:34:00

Formation: **Johnson**

Time Tool Opened: 10:55:00

Time Test Ended: 16:16:30

Tester: Martine Salinas

Unit No: 82

Reference Elevations: 3217.00 ft (KB)

3209.00 ft (CF)

KB to GR/CF: 8.00 ft

Press@RunDepth: psig @ 4685.00 ft (KB)

Start Date: 2019.08.27 End Date: 2019.08.27

Start Time: 08:34:01 End Time: 16:16:20

Capacity: 8000.00 psig

Last Calib.: 2019.08.27

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IF-Surface blow built to 1/2" @ 13 mins & decreased to 1/4"

60-ISI-No blow back

30-FF-No blow

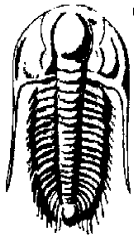
60-FSI-No blow back



Recovery

Gas Rates

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

14-10-34W Thomas, KS

250 N. Water STE 300
Wichita, KS 67202

Soucie Kriss #1-14

Job Ticket: 65551

DST#: 2

ATTN: Robert Hendrix

Test Start: 2019.08.27 @ 08:34:00

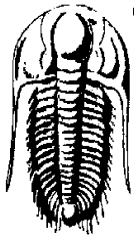
Tool Information

Drill Pipe:	Length: 4481.00 ft	Diameter: 3.80 inches	Volume: 62.86 bbl	Tool Weight: 2500.00 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: 63.77 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4684.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4661.00	
Hydraulic tool	5.00	1113		4666.00	
Jars	5.00	01-07		4671.00	
Safety Joint	3.00	-001		4674.00	
Packer	5.00			4679.00	28.00 Bottom Of Top Packer
Packer	5.00			4684.00	
Stubb	1.00			4685.00	
Recorder	0.00	8959	Inside	4685.00	
Recorder	0.00	8734	Outside	4685.00	
Perforations	13.00			4698.00	
Change Over Sub	1.00			4699.00	
Drill Pipe	31.00			4730.00	
Change Over Sub	1.00			4731.00	
Bullnose	5.00			4736.00	52.00 Bottom Packers & Anchor

Total Tool Length: 80.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

14-10-34W Thomas, KS

250 N. Water STE 300
Wichita, KS 67202

Soucie Kriss #1-14

Job Ticket: 65551

DST#: 2

ATTN: Robert Hendrix

Test Start: 2019.08.27 @ 08:34:00

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: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OSM 4%O, 96%M	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

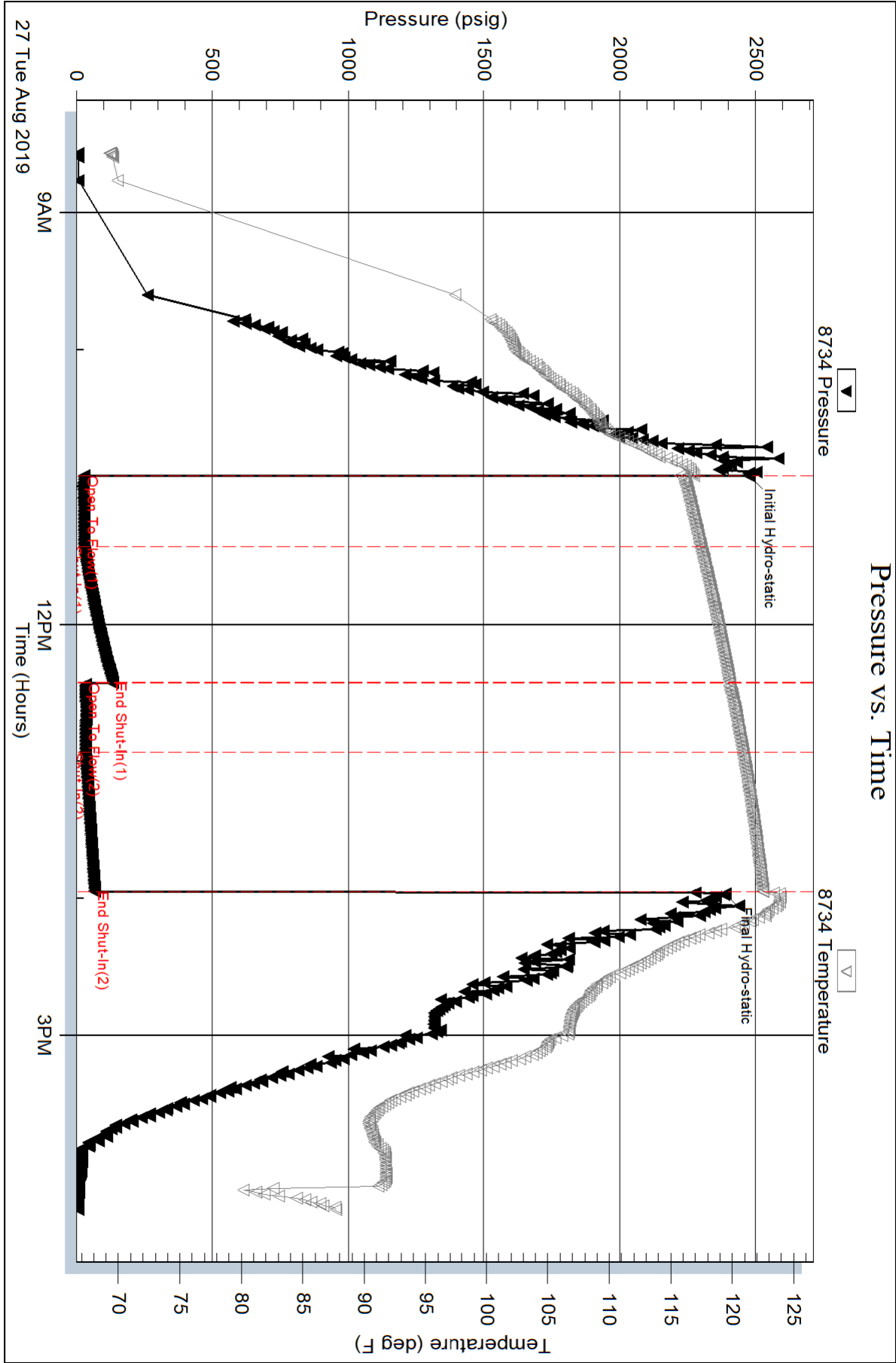
Recovery Comments:

Serial #: 8734

Outside Murfin Drilling Co Inc

Source Kriss #1-14

DST Test Number: 2



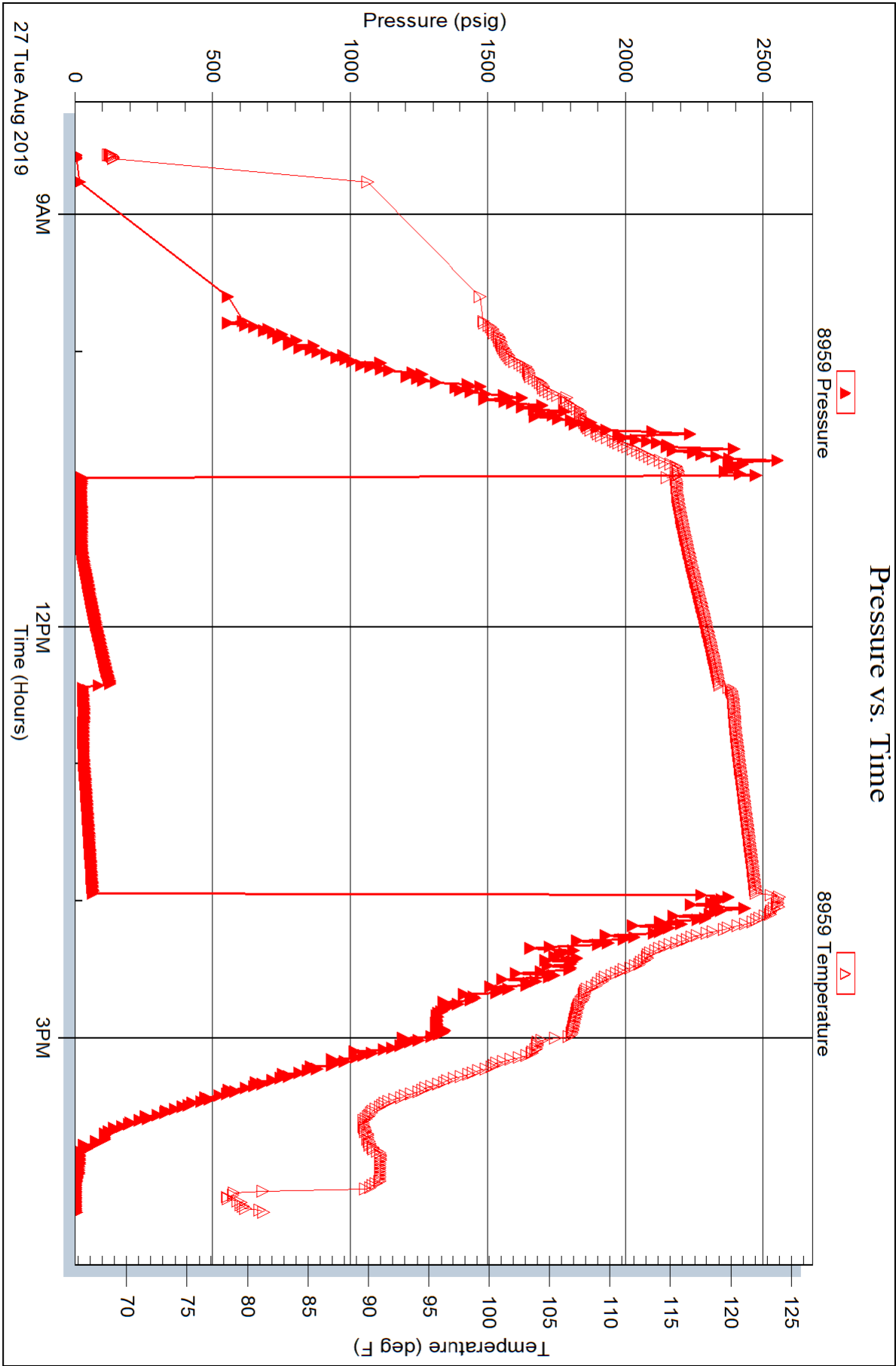
Serial #: 8959

Inside

Murfin Drilling Co Inc

Soucie Kriss #1-14

DST Test Number: 2





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64375**

Well Name & No. Soucie Kris Unit #1-14 Test No. 1 Date 8-24-19
 Company Murfin Drilling Co Inc Elevation 3217 KB 3205 GL
 Address 250 N. Water STE 300, Wichita, KS 67202
 Co. Rep / Geo. Robert Hendrix Rig WW #112
 Location: Sec. 14 Twp 10 Rge. 34W Co. Thomas State KS

Interval Tested 4295 - 4368 Zone Tested Lansing "H-I"
 Anchor Length 73' Drill Pipe Run 4105 Mud Wt. 9.2
 Top Packer Depth 4290 Drill Collars Run 186 Vis 60
 Bottom Packer Depth 4295 Wt. Pipe Run — WL 8.0
 Total Depth 4368 Chlorides 5200 ppm System LCM 2H

Blow Description IF - S. blow built to 2 1/2"
ISF - No blowback
FF - Weak S. blow @ 3 min built to 2"
FSI - No blowback

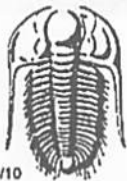
Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>0.5 INCM</u>	<u>3</u>	<u>37</u>	<u>60</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 150 BHT 122 Gravity — API RW .197 @ 68.5 °F Chlorides 40,000 ppm

(A) Initial Hydrostatic <u>2237</u>	☒ Test <u>1300</u>	T-On Location <u>22:00</u>
(B) First Initial Flow <u>29</u>	☒ Jars <u>250</u>	T-Started <u>00:23</u>
(C) First Final Flow <u>60</u>	☒ Safety Joint <u>75</u>	T-Open <u>03:18</u>
(D) Initial Shut-In <u>1201</u>	☐ Circ Sub	T-Pulled <u>07:18</u>
(E) Second Initial Flow <u>65</u>	☐ Hourly Standby	T-Out <u>09:41</u>
(F) Second Final Flow <u>110</u>	☒ Mileage <u>134 RT.</u> 134	Comments <u>Pulled 18K over STWT</u>
(G) Final Shut-In <u>1183</u>	☐ Sampler	<u>Coming off bottom.</u>
(H) Final Hydrostatic <u>2158</u>	☐ Straddle	

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Shale Packer
Initial Shut-In <u>60</u>	☐ Extra Packer	☐ Ruined Packer
Final Flow <u>60</u>	☐ Extra Recorder	☐ Extra Copies
Final Shut-In <u>90</u>	☐ Day Standby	Sub Total <u>0</u>
	☐ Accessibility	Total <u>1759</u>
	Sub Total <u>1759</u>	MP/DST Disc't

Approved By RT 8.1/19 Our Representative Mark Johnson
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 65551

Well Name & No. Sourie Kriss Unit #1-14 Test No. 2 Date 8-27-19
 Company Murfin Drilling Co Inc. Elevation 3217 KB 3209 GL
 Address 250 N. Water, STE 300, Wichita, KS 67202
 Co. Rep / Geo. Robert Hendrix Rig WIN # 112
 Location: Sec. 14 Twp 10 Rge 34W. Co. Thomas State KS.

Interval Tested 4684-4736 Zone Tested Johnson Zone.
 Anchor Length 52' Drill Pipe Run 4481 Mud Wt. 9.3
 Top Packer Depth 4679 Drill Collars Run 186 Vis 62
 Bottom Packer Depth 4684 Wt. Pipe Run — WL 8.4
 Total Depth 4736 Chlorides 6100 ppm System LCM 2#

Blow Description IF-S blow built to 1/2" @ 13 mins & decreased to 1/4"

ISI - No blowback

FF - No blow

FSI - No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>25M</u>	<u>4</u>		<u>96</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 124 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2475

(B) First Initial Flow 29

(C) First Final Flow 29

(D) Initial Shut-In 135

(E) Second Initial Flow 35

(F) Second Final Flow 35

(G) Final Shut-In 67

(H) Final Hydrostatic 2389

☒ Test 1300

☒ Jars 250

☒ Safety Joint 75

☐ Circ Sub —

☐ Hourly Standby —

☒ Mileage 134 RT. 134

☐ Sampler —

☐ Straddle —

☐ Shale Packer —

☐ Extra Packer —

☐ Extra Recorder —

☒ Day Standby 1.5d 7.25h

☐ Accessibility —

Sub Total 1759

T-On Location 07:10

T-Started 08:34

T-Open 10:55

T-Pulled 13:55

T-Out 16:16

Comments Tools loaded @ 17:00

☐ EM Tool —

☐ Ruined Shale Packer —

☐ Ruined Packer —

☐ Extra Copies —

Sub Total 316.67

Total 2075.67

MP/DST Disc't —

Initial Open 30

Initial Shut-In 60

Final Flow 30

Final Shut-In 60

Approved By RLD-M

Our Representative Mateo Salinas

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



CEMENT TREATMENT REPORT

Customer:	Murfin Drilling Co	Well:	Soucie Kriss Unit #1-14	Ticket:	ICT2304
City, State:	Wichita, KS	County:	Thomas, KS	Date:	8/28/2019
Field Rep:	Calvin Pfannestell	S-T-R:	Sec 14 - T10S - R34W	Service:	PTA

Downhole Information	
Hole Size:	7 7/8 in
Hole Depth:	4895 ft
Casing Size:	8 5/8 in
Casing Depth:	307 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Depth:	ft
Displacement:	bbbls

Calculated Slurry	
Weight:	13.8 # / sx
Water / Sk:	6.90 gal / sx
Yield:	1.43 ft ³ / sx
Bbls / Ft.:	
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	240 sx

Product	% / #	#
Class A	60.00	13536
Poz	40.00	7104
Gel	4.00	826
CaCl		
Gypsum		
Metso		
Kol Seal		
Flo Seal	1/4	52
Salt (bww)		

TIME	RATE	PSI	BBLs	REMARKS	Total
					21,517

17:00				Called for Job	
20:30				Depart Oakley yard	
21:00				Arrive on locn. Rig RIH w/ DP to 2756'	
21:10				JSA, discuss moving on, spotting & rigging up equip	
21:16				Move on, spot & rig-up equipment	
21:50				Rig-up complete. Wait on rig	
22:00				DP @ 2756'. Rig fill & condition hole	
22:30				Make-up to DP	
				Plug #1 2756' - 2644'	
22:33	4.0	300.0	5.0	Pump water ahead	
22:35	4.0	300.0	12.7	Mix & pump 50sx @ 13.8ppg. Y - 1.43cuf/sk, MR - 6.9g/sk	
22:39	2.0	250.0	2.0	Pump water behind	
22:42	7.5		34.1	Rig displ w/ WBM	
22:48				Rig TOH w/ DP	
				Plug #2 1708' - 1285'	
23:40	4.0	200.0	5.0	Pump water ahead	
23:42	4.0	270.0	25.5	Mix & pump 100sx @ 13.8ppg. Y - 1.43cuf/sk, MR - 6.9g/sk	
23:49	5.2	180.0	17.7	Displ w/ H2O	
23:53				Shutdown	
23:55				Rig TOH w/ DP	
				Plug #3 357' - 164'	
1:05	4.0	190.0	12.7	Mix & pump 50sx @ 13.8ppg. Y - 1.43cuf/sk, MR - 6.9g/sk	
1:10	3.7	140.0	2.7	Displ w/ H2O	
1:11				Shutdown	
1:13				Rig TOH w/ DP, L/D Kelly & Rathole	
2:07	2.5	90.0	7.6	Plug rathole w/ 13.8ppg cement	
2:11				Shutdown	
2:15	2.5	100.0	3.0	Plug surface w/ 13.8ppg cement	
2:20				Shutdown	
2:25				Wash-up pumps & lines	
2:45				JSA, discuss rigging down & racking up equipment	
2:50				Rig down & rack up equipment	
3:00				Rig down complete	
3:05				Depart locn	
				Thanks for calling Hurricane Svcs Inc.	

CREW		UNIT	SUMMARY		
Cementor:	Josh Mosler	230	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Kale Ochs	242	3.94545 bpm	202 psi	128 bbls
Bulk #1:	Scott Green	74			
Bulk #2:					