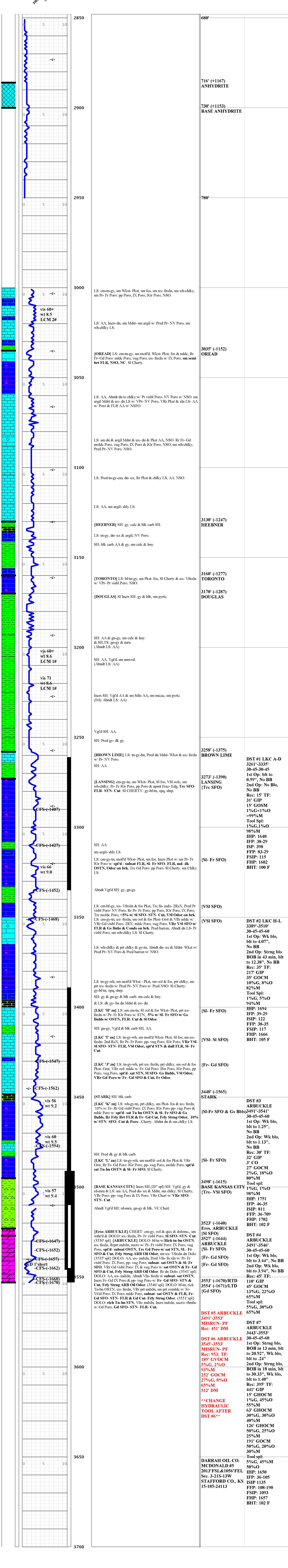

ROGER L. MARTIN

INDEPENDENT PETROLEUM GEOLOGIST 316-250-6970

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

[illegible][illegible]



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68663

DST#: 1

Test Start: 2022.08.15 @ 11:10:40

GENERAL INFORMATION:

Formation: **Lansing A-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:10:40

Time Test Ended: 17:28:10

Test Type: Conventional Bottom Hole (Initial)

Tester: Matt Smith

Unit No: 68

Interval: 3261.00 ft (KB) To 3335.00 ft (KB) (TVD)

Reference Elevations: 1886.00 ft (KB)

Total Depth: 3335.00 ft (KB) (TVD)

1876.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8788 Inside

Press@RunDepth: 29.24 psig @ 3262.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.15

End Date:

2022.08.15

Last Calib.: 2022.08.15

Start Time: 11:10:45

End Time:

17:28:09

Time On Btm: 2022.08.15 @ 13:08:25

Time Off Btm: 2022.08.15 @ 15:45:10

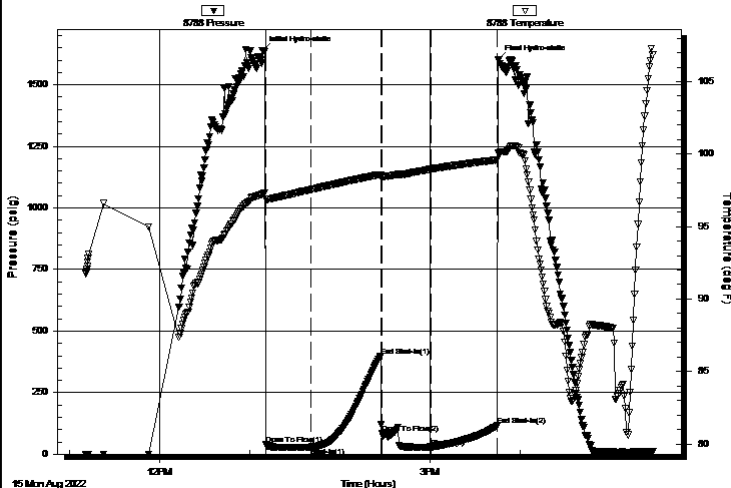
TEST COMMENT: IF: Weak Blow . Built to .59". (30)

IS: No Blow . (45)

FF: No Blow . (30)

FS: No Blow . (45)

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1640.17	97.25	Initial Hydro-static
3	38.01	96.88	Open To Flow (1)
33	28.66	97.55	Shut-In (1)
79	398.11	98.59	End Shut-In (1)
80	82.86	98.48	Open To Flow (2)
112	29.24	98.96	Shut-In (2)
156	115.48	99.59	End Shut-In (2)
157	1602.48	100.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	GOSM 1%g <1%o >99%m	0.21
0.00	TS GVSOCM 1%g 1%o 98%m	0.00
0.00	31' GIP	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68663

DST#: 1

Test Start: 2022.08.15 @ 11:10:40

GENERAL INFORMATION:

Formation: **Lansing A-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:10:40

Time Test Ended: 17:28:10

Test Type: Conventional Bottom Hole (Initial)

Tester: Matt Smith

Unit No: 68

Interval: 3261.00 ft (KB) To 3335.00 ft (KB) (TVD)

Total Depth: 3335.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1886.00 ft (KB)

1876.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8737 Outside

Press@RunDepth: psig @ 3262.00 ft (KB)

Start Date: 2022.08.15

End Date:

2022.08.15

Start Time: 11:10:15

End Time:

17:27:39

Capacity: 8000.00 psig

Last Calib.:

2022.08.15

Time On Btm:

Time Off Btm:

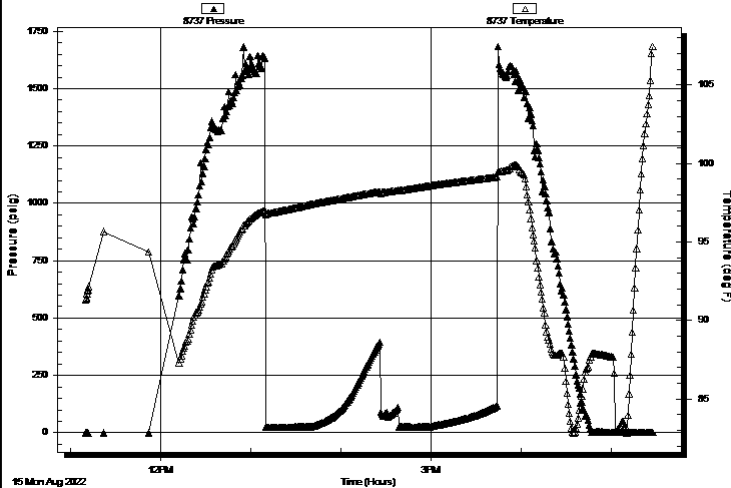
TEST COMMENT: IF: Weak Blow . Built to .59". (30)

IS: No Blow . (45)

FF: No Blow . (30)

FS: No Blow . (45)

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	GOSM 1%g <1%o >99%m	0.21
0.00	TS GVSOCM 1%g 1%o 98%m	0.00
0.00	31' GIP	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Company LLC

3-21s-13w Stafford Ks

125 N Market Suite 1425
Wichita, Ks. 67202

McDonald 5

Job Ticket: 68663

DST#: 1

ATTN: Roger Martin

Test Start: 2022.08.15 @ 11:10:40

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 66.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

deg API

ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	GOSM 1%g <1%o >99%m	0.210
0.00	TS GVSOCM 1%g 1%o 98%m	0.000
0.00	31' GIP	0.000

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: None

Laboratory Name:

Laboratory Location:

Recovery Comments: 31 Feet of Gas in Pipe.

Tool Sample GVSOCM 1%g 1%o 98%m

Serial #: 8788

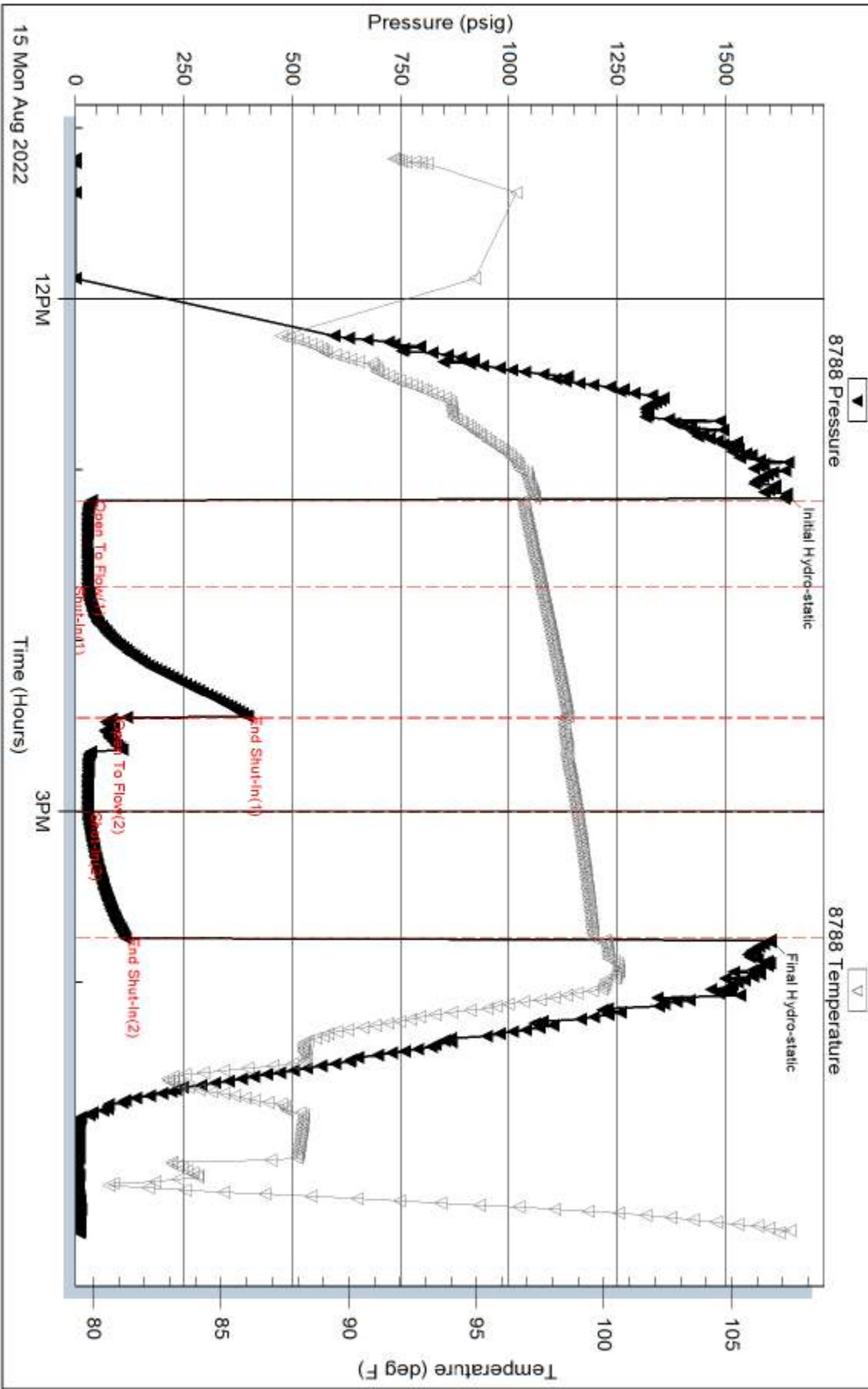
Inside

Darrah Oil Company LLC

McDonald 5

DST Test Number: 1

Pressure vs. Time



Serial #: 8737

Outside Darrah Oil Company LLC

McDonald 5

DST Test Number: 1





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68664

DST#: 2

Test Start: 2022.08.16 @ 14:31:35

GENERAL INFORMATION:

Formation: **KC H-L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:12:50

Time Test Ended: 21:09:05

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3389.00 ft (KB) To 2510.00 ft (KB) (TVD)

Total Depth: 3510.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1886.00 ft (KB)

1876.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8788 Inside

Press@RunDepth: 34.96 psig @ 3390.00 ft (KB)

Start Date: 2022.08.16

End Date:

2022.08.16

Start Time: 14:31:40

End Time:

21:09:04

Capacity: 8000.00 psig

Last Calib.: 2022.08.16

Time On Btm: 2022.08.16 @ 16:09:05

Time Off Btm: 2022.08.16 @ 19:20:20

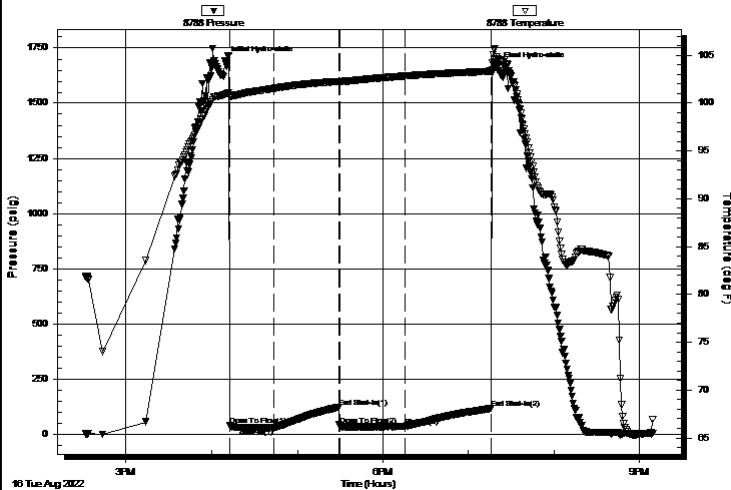
TEST COMMENT: IF: Weak Blow . Built to 4.07". (30)

IS: No Blow . (45)

FF: Strong Blow . B.O.B. in 43 mins. Built to 12.38". (45)

FS: No Blow . (60)

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1693.71	100.91	Initial Hydro-static
4	38.60	100.67	Open To Flow (1)
35	29.15	101.53	Shut-In(1)
80	121.83	102.27	End Shut-In(1)
81	37.84	102.24	Open To Flow (2)
127	34.96	102.84	Shut-In(2)
187	117.12	103.33	End Shut-In(2)
192	1665.85	104.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	GOCM 10%g 8%o 82%m	0.49
0.00	TS GVSOCM 1%g 5%o 94%m	0.00
0.00	217' GIP 100%g	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68664

DST#: 2

Test Start: 2022.08.16 @ 14:31:35

GENERAL INFORMATION:

Formation: **KC H-L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:12:50

Time Test Ended: 21:09:05

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3389.00 ft (KB) To 2510.00 ft (KB) (TVD)

Total Depth: 3510.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1886.00 ft (KB)

1876.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8737 Outside

Press@RunDepth: psig @ 3390.00 ft (KB)

Start Date: 2022.08.16

End Date:

2022.08.16

Start Time: 14:32:01

End Time:

21:09:25

Capacity: 8000.00 psig

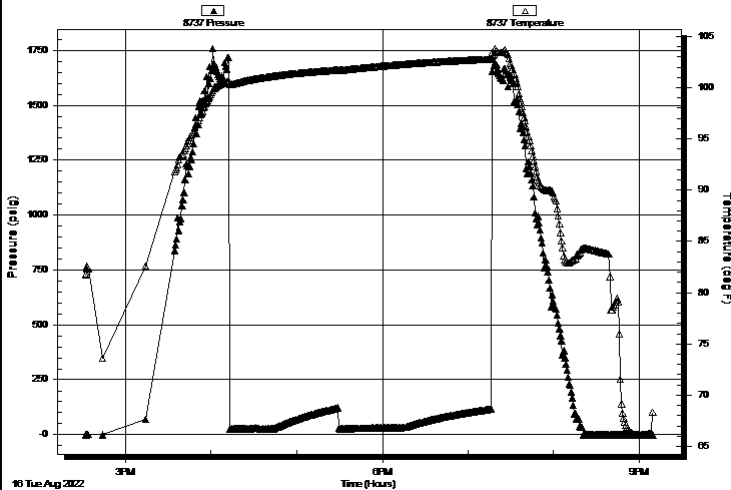
Last Calib.: 2022.08.16

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Weak Blow . Built to 4.07". (30)
IS: No Blow . (45)
FF: Strong Blow . B.O.B. in 43 mins. Built to 12.38". (45)
FS: No Blow . (60)

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	GOCM 10%g 8%o 82%m	0.49
0.00	TS GVSOCM 1%g 5%o 94%m	0.00
0.00	217' GIP 100%g	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Company LLC

3-21s-13w Stafford Ks

125 N Market Suite 1425
Wichita, Ks. 67202

McDonald 5

Job Ticket: 68664

DST#: 2

ATTN: Roger Martin

Test Start: 2022.08.16 @ 14:31:35

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 57.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	GOCM 10%g 8%o 82%m	0.491
0.00	TS GVSOCM 1%g 5%o 94%m	0.000
0.00	217' GIP 100%g	0.000

Total Length: 35.00 ft Total Volume: 0.491 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: None

Laboratory Name:

Laboratory Location:

Recovery Comments: 217 Feet of Gas in Pipe.

Serial #: 8788

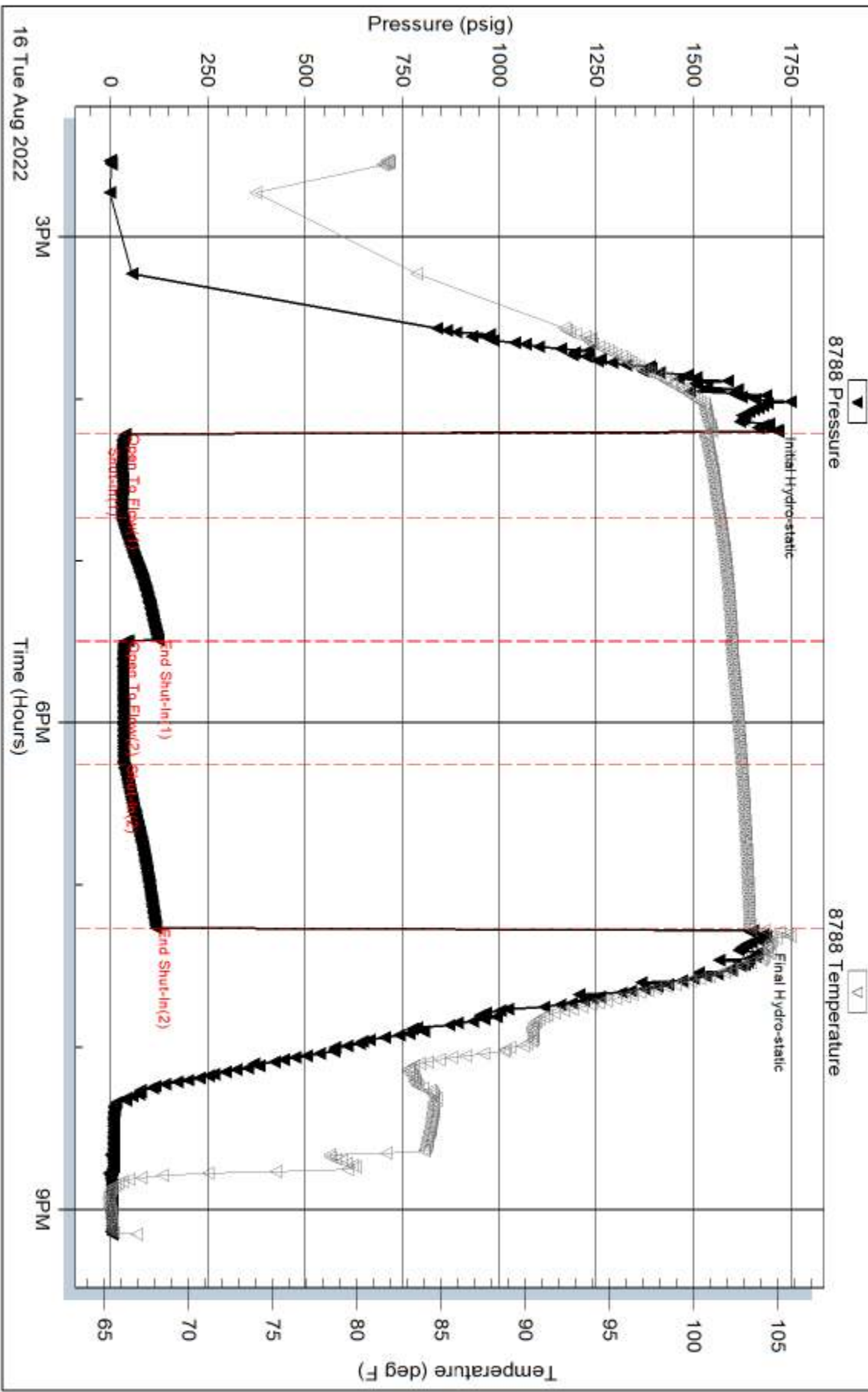
Inside

Darrah Oil Company LLC

McDonald 5

DST Test Number: 2

Pressure vs. Time

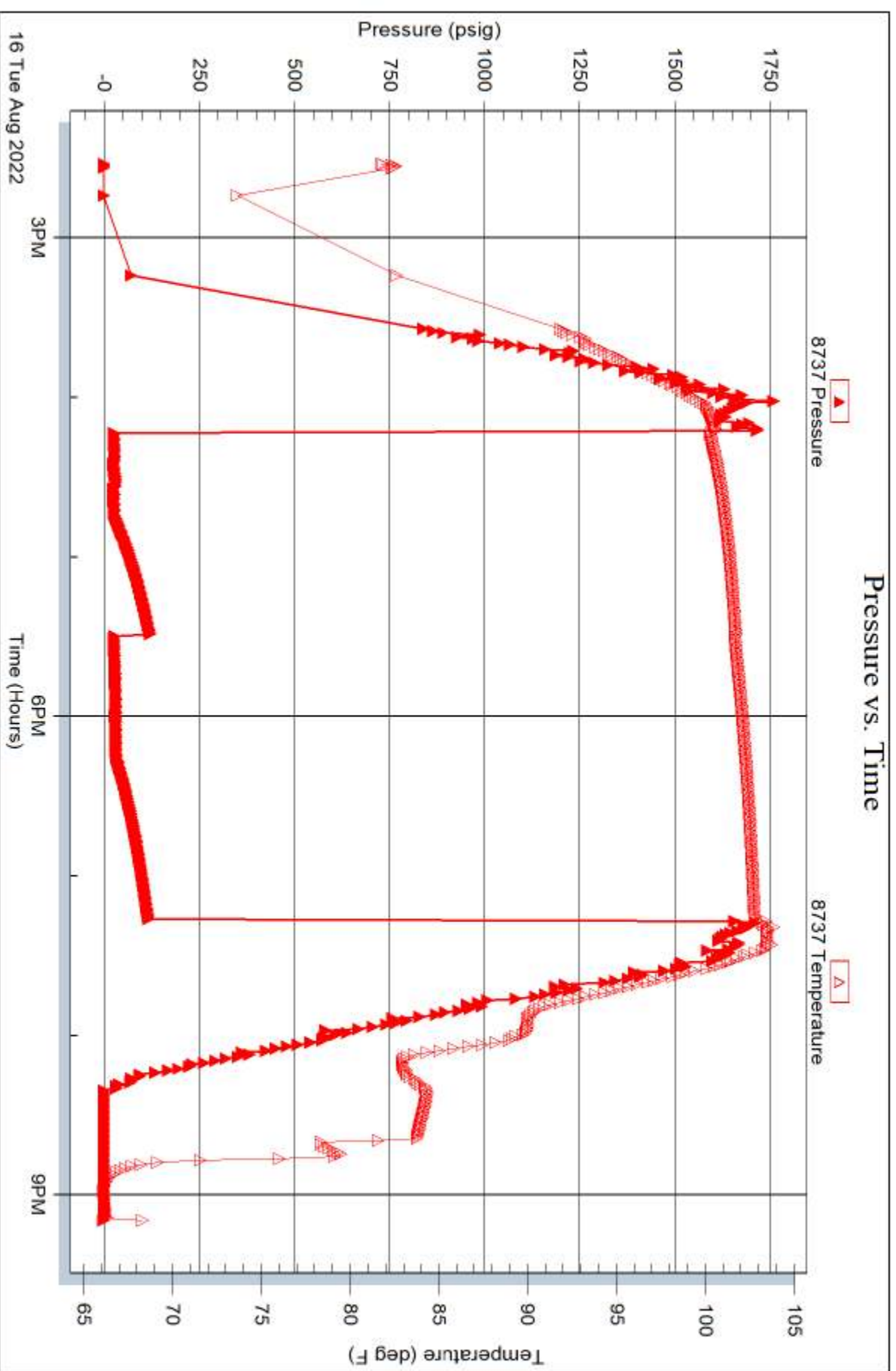


Serial #: 8737

Outside Darrah Oil Company LLC

McDonald 5

DST Test Number: 2





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald #5

Job Ticket: 68665

DST#: 3

Test Start: 2022.08.17 @ 07:32:19

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:28:19

Time Test Ended: 14:10:49

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3491.00 ft (KB) To 3541.00 ft (KB) (TVD)

Reference Elevations: 1886.00 ft (KB)

Total Depth: 3541.00 ft (KB) (TVD)

1876.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8788 Inside

Press@RunDepth: 35.66 psig @ 3492.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.17

End Date:

2022.08.17

Last Calib.: 2022.08.17

Start Time: 07:32:24

End Time:

14:10:48

Time On Btm: 2022.08.17 @ 09:27:49

Time Off Btm: 2022.08.17 @ 12:35:19

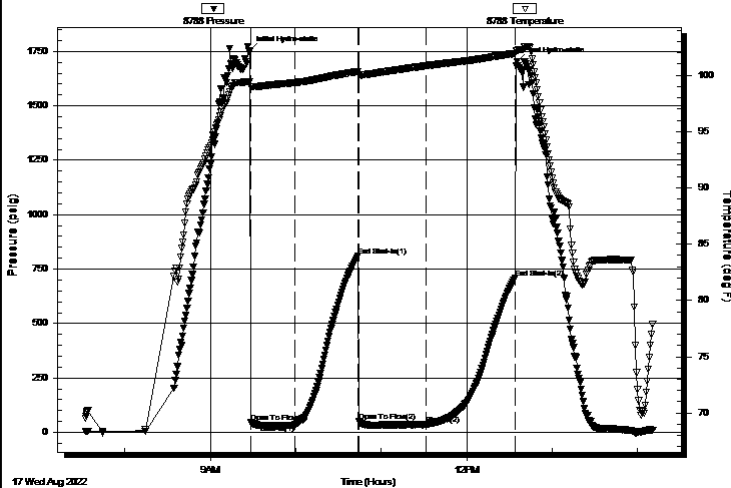
TEST COMMENT: IF: Weak Blow . Built to 1 1/4", in the Bucket. (30)

IS: No Blow . (45)

FF: Weak Blow . Built to 1.13". (45)

FS: No Blow . (60)

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1751.18	99.43	Initial Hydro-static
1	46.46	98.97	Open To Flow (1)
32	34.53	99.34	Shut-In(1)
76	810.84	100.31	End Shut-In(1)
77	49.15	100.03	Open To Flow (2)
124	35.66	100.83	Shut-In(2)
186	708.54	101.93	End Shut-In(2)
188	1702.22	102.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
27.00	GOCM 2%g 18%o 80%m	0.38
3.00	CO 100%o	0.04
0.00	32' GIP 100%g	0.00
0.00	TS GVSOCM 1%g 1%o 98%m	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald #5

Job Ticket: 68665

DST#: 3

Test Start: 2022.08.17 @ 07:32:19

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:28:19

Time Test Ended: 14:10:49

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3491.00 ft (KB) To 3541.00 ft (KB) (TVD)

Reference Elevations: 1886.00 ft (KB)

Total Depth: 3541.00 ft (KB) (TVD)

1876.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8737 Outside

Press@RunDepth: psig @ 3492.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.17

End Date:

2022.08.17

Last Calib.:

2022.08.17

Start Time: 07:32:53

End Time:

14:11:32

Time On Btm:

Time Off Btm:

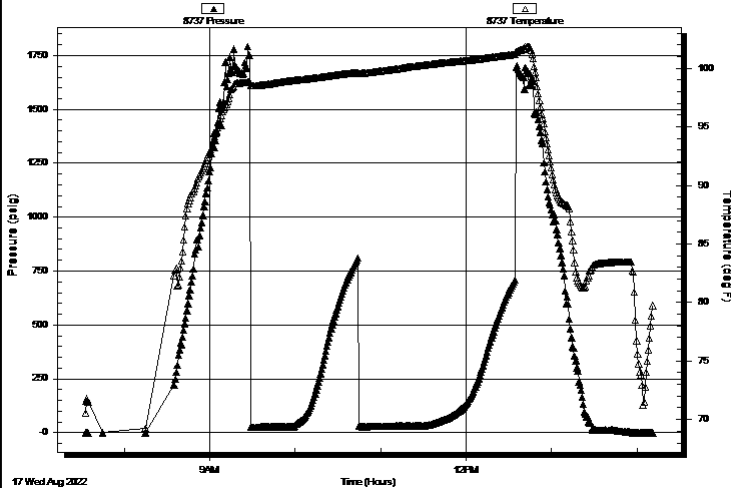
TEST COMMENT: IF: Weak Blow . Built to 1 1/4", in the Bucket. (30)

IS: No Blow . (45)

FF: Weak Blow . Built to 1.13". (45)

FS: No Blow . (60)

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
27.00	GOCM 2%g 18%o 80%m	0.38
3.00	CO 100%o	0.04
0.00	32' GIP 100%g	0.00
0.00	TS GVSOCM 1%g 1%o 98%m	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Company LLC

3-21s-13w Stafford Ks

125 N Market Suite 1425
Wichita, Ks. 67202

McDonald #5

Job Ticket: 68665

DST#: 3

ATTN: Roger Martin

Test Start: 2022.08.17 @ 07:32:19

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
27.00	GOCM 2%g 18%o 80%m	0.379
3.00	CO 100%o	0.042
0.00	32' GIP 100%g	0.000
0.00	TS GVSOCM 1%g 1%o 98%m	0.000

Total Length: 30.00 ft

Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: None

Laboratory Name:

Laboratory Location:

Recovery Comments: 32 Feet of Gas In Pipe.

Tool Sample GVSOCM 1%g 1%o 98%m

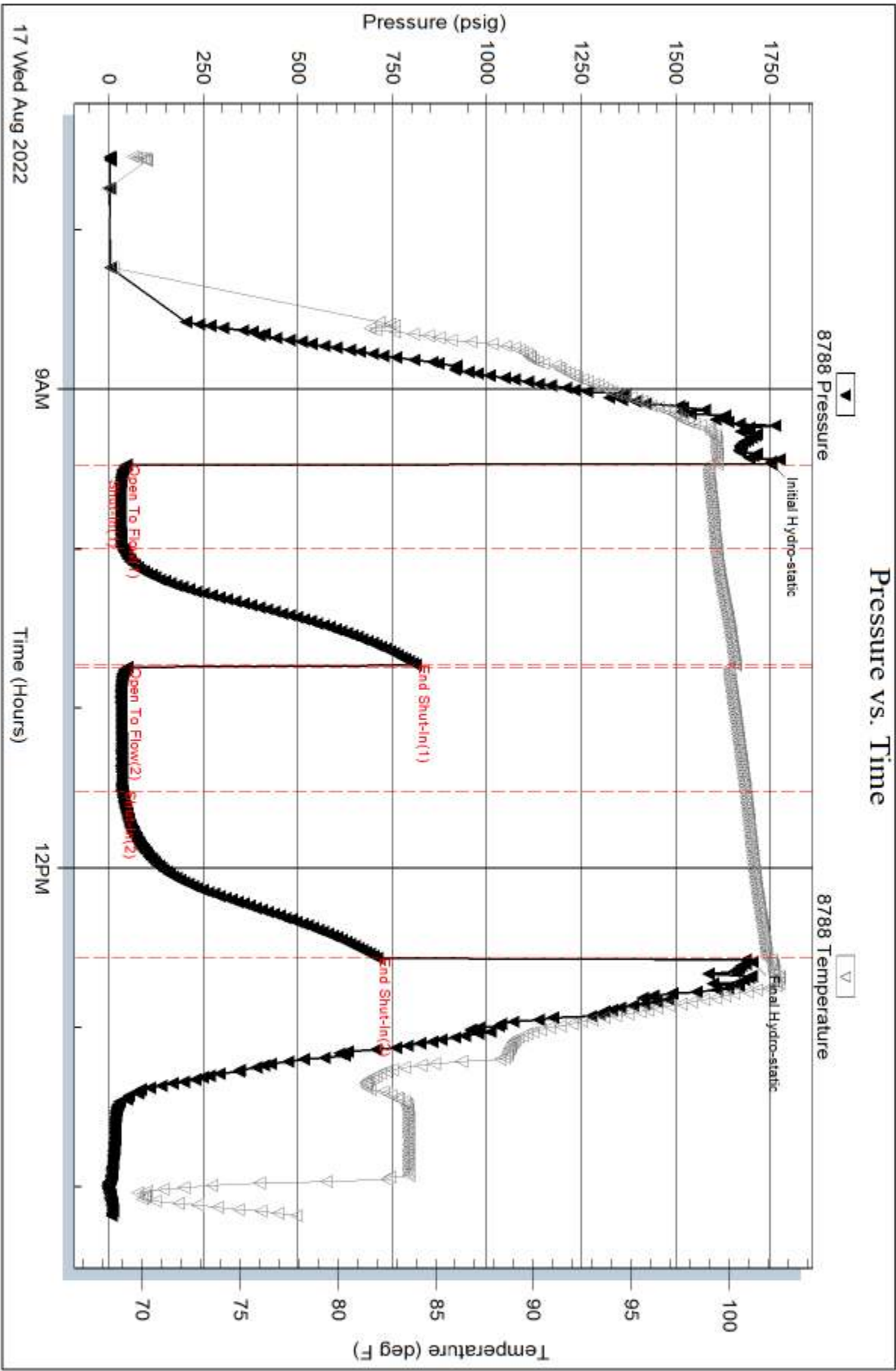
Serial #: 8788

Inside

Darrah Oil Company LLC

McDonald #5

DST Test Number: 3

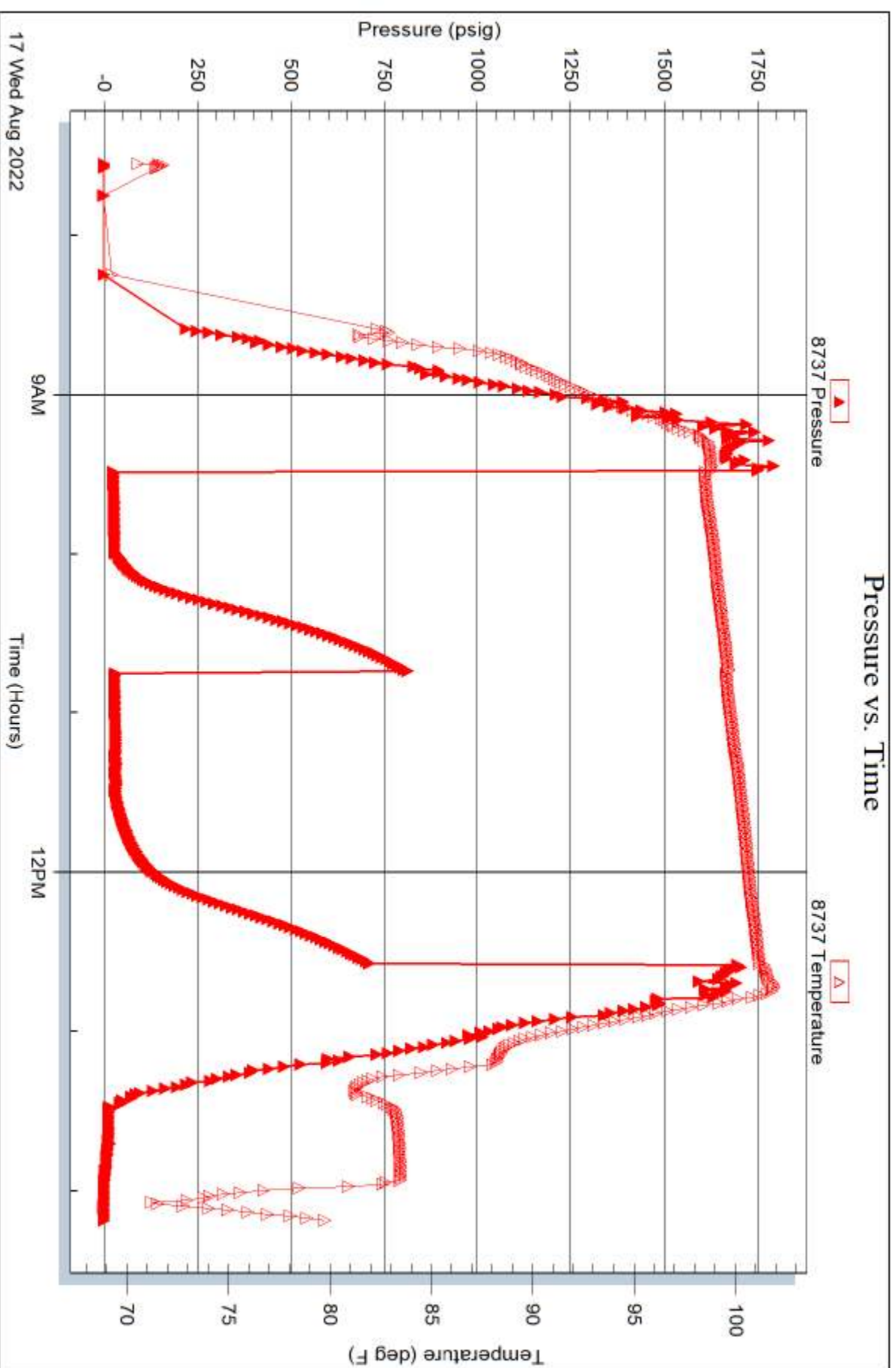


Serial #: 8737

Outside Darrah Oil Company LLC

McDonald #5

DST Test Number: 3





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68667

DST#: 4

Test Start: 2022.08.17 @ 21:36:44

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:32:29

Time Test Ended: 04:06:44

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3491.00 ft (KB) To 3546.00 ft (KB) (TVD)

Reference Elevations: 1886.00 ft (KB)

Total Depth: 3546.00 ft (KB) (TVD)

1876.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8788 Inside

Press@RunDepth: 47.70 psig @ 3492.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.17

End Date:

2022.08.18

Last Calib.: 2022.08.18

Start Time: 21:36:49

End Time:

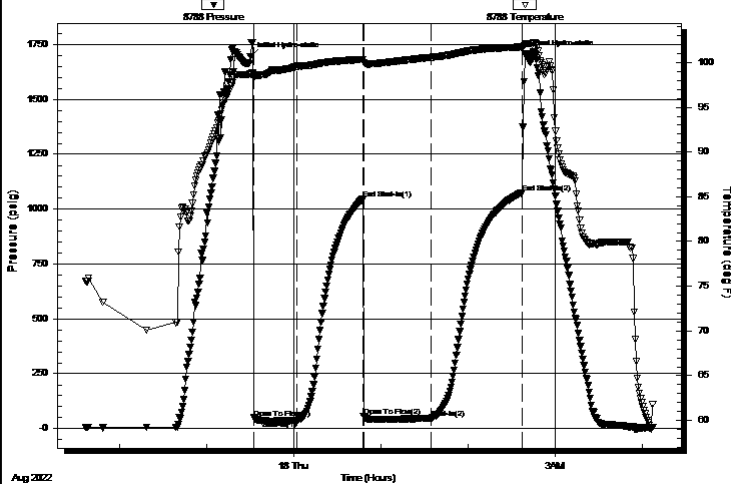
04:06:43

Time On Btm: 2022.08.17 @ 23:29:59

Time Off Btm: 2022.08.18 @ 02:39:44

TEST COMMENT: IF: Weak Blow . Built to 3.44". (30)
IS: No Blow . (45)
FF: Weak Blow . Built to 3.94". (45)
FS: No Blow . (60)

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1694.52	98.71	Initial Hydro-static
3	48.48	98.44	Open To Flow (1)
33	36.75	99.58	Shut-In(1)
78	1046.94	100.34	End Shut-In(1)
78	54.94	99.96	Open To Flow (2)
125	47.70	100.58	Shut-In(2)
187	1075.82	101.74	End Shut-In(2)
190	1706.64	102.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	GOCM 13%g 22%o 65%m	0.63
0.00	110' GIP 100%g	0.00
0.00	Tool Sample- GOCM 5%g 30%o 65%m	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68667

DST#: 4

Test Start: 2022.08.17 @ 21:36:44

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:32:29

Time Test Ended: 04:06:44

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3491.00 ft (KB) To 3546.00 ft (KB) (TVD)

Reference Elevations: 1886.00 ft (KB)

Total Depth: 3546.00 ft (KB) (TVD)

1876.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8737 Outside

Press@RunDepth: psig @ 3492.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.17

End Date:

2022.08.18

Last Calib.:

2022.08.18

Start Time: 21:36:16

End Time:

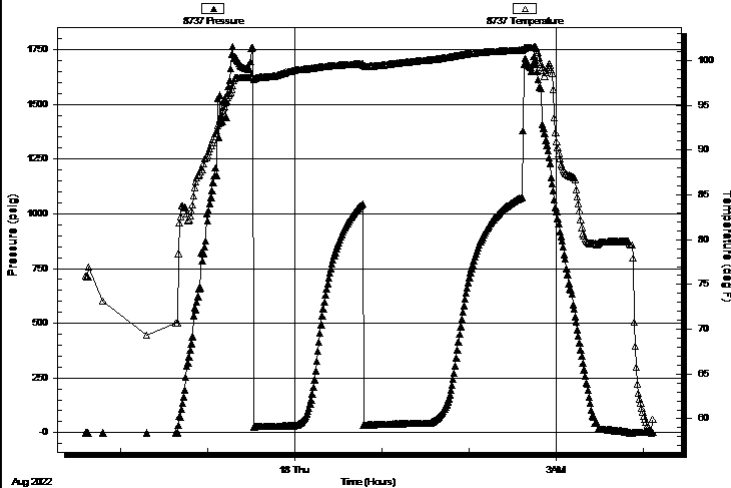
04:06:10

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Weak Blow , Built to 3.44". (30)
IS: No Blow . (45)
FF: Weak Blow . Built to 3.94". (45)
FS: No Blow . (60)

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	GOCM 13%g 22%o 65%m	0.63
0.00	110' GIP 100%g	0.00
0.00	Tool Sample- GOCM 5%g 30%o 65%m	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Company LLC

3-21s-13w Stafford Ks

125 N Market Suite 1425
Wichita, Ks. 67202

McDonald 5

Job Ticket: 68667

DST#: 4

ATTN: Roger Martin

Test Start: 2022.08.17 @ 21:36:44

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 63.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	GOCM 13%g 22%o 65%m	0.631
0.00	110' GIP 100%g	0.000
0.00	Tool Sample- GOCM 5%g 30%o 65%m	0.000

Total Length: 45.00 ft Total Volume: 0.631 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: None

Laboratory Name:

Laboratory Location:

Recovery Comments: 110 Feet of Gas in Pipe.

TS 5%g 30%o 65%m

Serial #: 8788

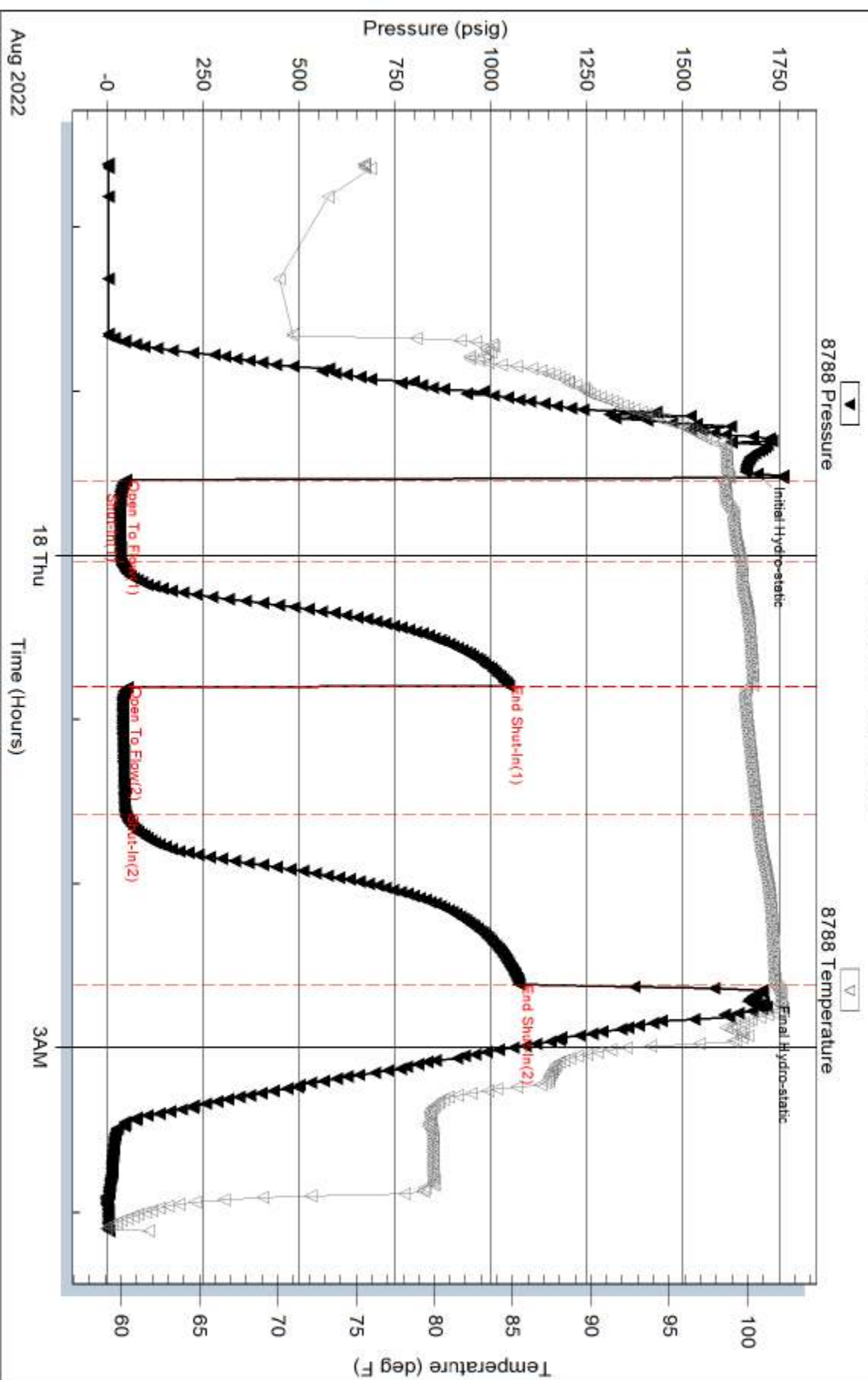
Inside

Darrah Oil Company LLC

McDonald 5

DST Test Number: 4

Pressure vs. Time

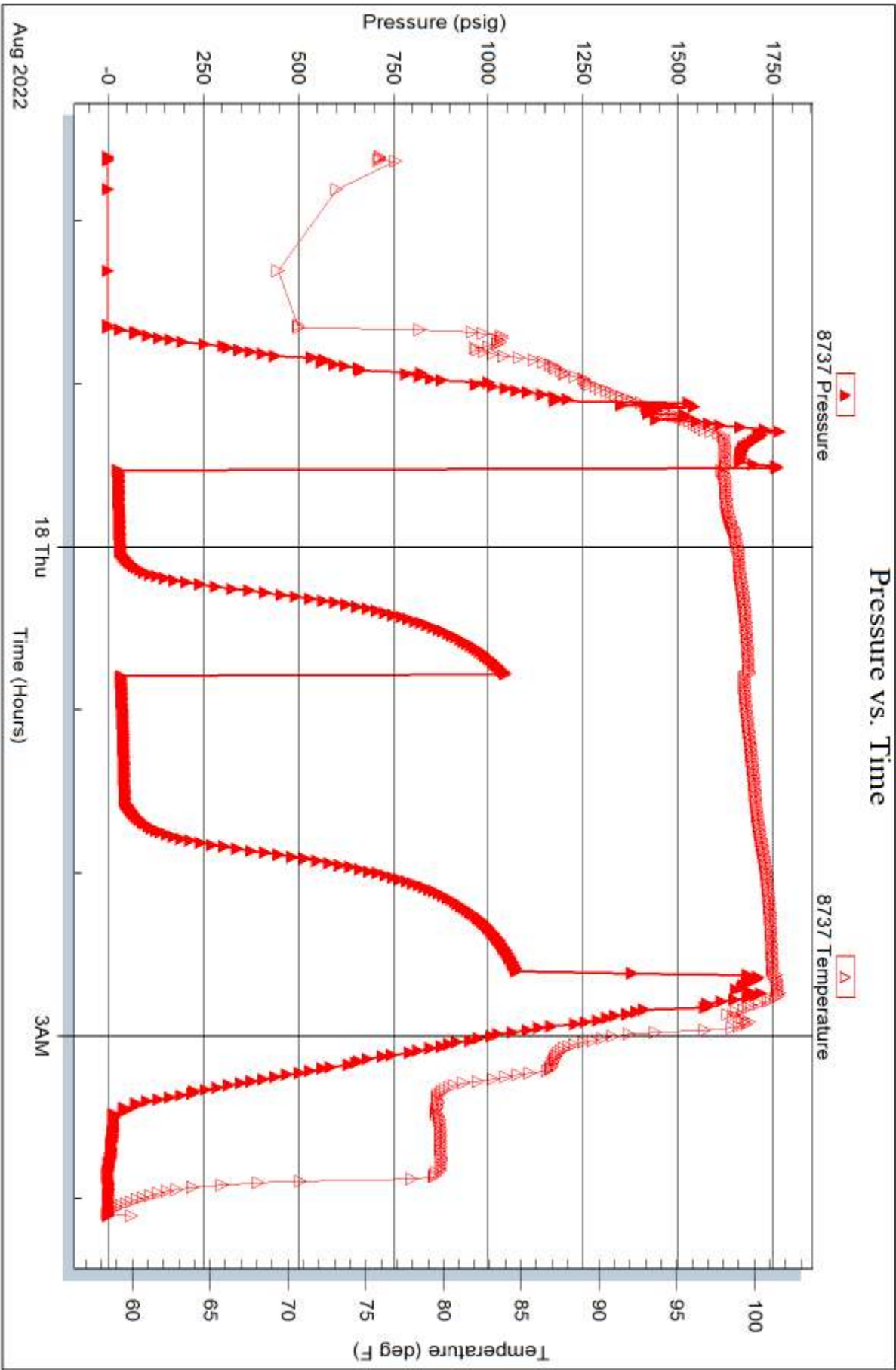


Serial #: 8737

Outside Darrah Oil Company LLC

McDonald 5

DST Test Number: 4





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68668

DST#: 5

Test Start: 2022.08.18 @ 13:38:30

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:06:45

Time Test Ended: 17:59:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3491.00 ft (KB) To 3553.00 ft (KB) (TVD)

Total Depth: 3553.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1886.00 ft (KB)

1876.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8788 Inside

Press@RunDepth: psig @ 3492.00 ft (KB)

Start Date: 2022.08.18

End Date:

2022.08.18

Start Time: 13:38:35

End Time:

17:59:14

Capacity: 8000.00 psig

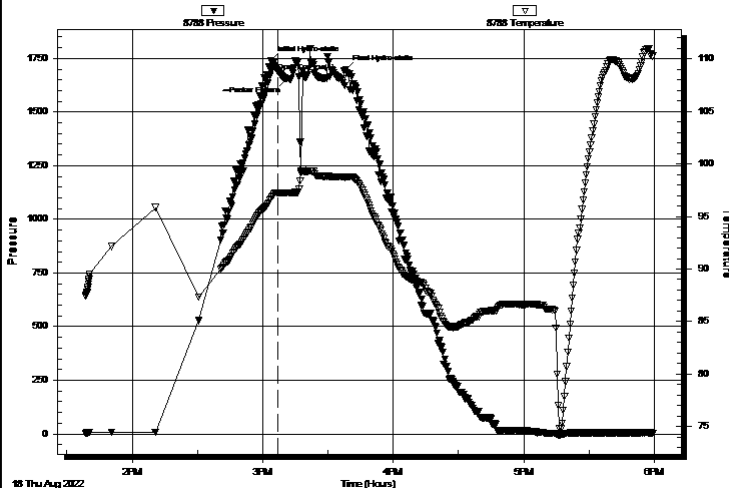
Last Calib.: 2022.08.18

Time On Btm: 2022.08.18 @ 15:03:45

Time Off Btm: 2022.08.18 @ 15:38:15

TEST COMMENT: IF: Packer Failure

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1741.14	96.64	Initial Hydro-static
3	1690.36	97.26	Open To Flow (1)
8	1655.40	97.24	--Packer Failure
35	1696.15	98.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
451.00	DM	6.33

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68668

DST#: 5

Test Start: 2022.08.18 @ 13:38:30

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:06:45

Time Test Ended: 17:59:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3491.00 ft (KB) To 3553.00 ft (KB) (TVD)

Reference Elevations: 1886.00 ft (KB)

Total Depth: 3553.00 ft (KB) (TVD)

1876.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8737 Outside

Press@RunDepth: psig @ 3492.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.18

End Date:

2022.08.18

Last Calib.:

2022.08.18

Start Time: 13:39:01

End Time:

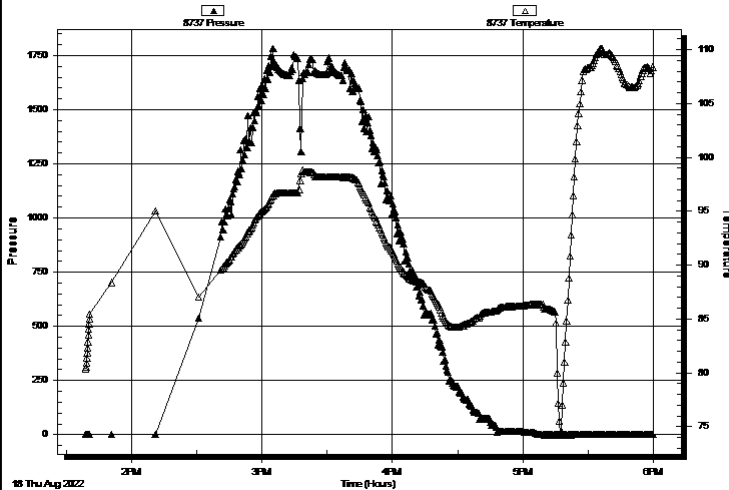
17:59:55

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Packer Failure

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
451.00	DM	6.33

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Company LLC

3-21s-13w Stafford Ks

125 N Market Suite 1425
Wichita, Ks. 67202

McDonald 5

Job Ticket: 68668

DST#: 5

ATTN: Roger Martin

Test Start: 2022.08.18 @ 13:38:30

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 56.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
451.00	DM	6.326

Total Length: 451.00 ft

Total Volume: 6.326 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8788

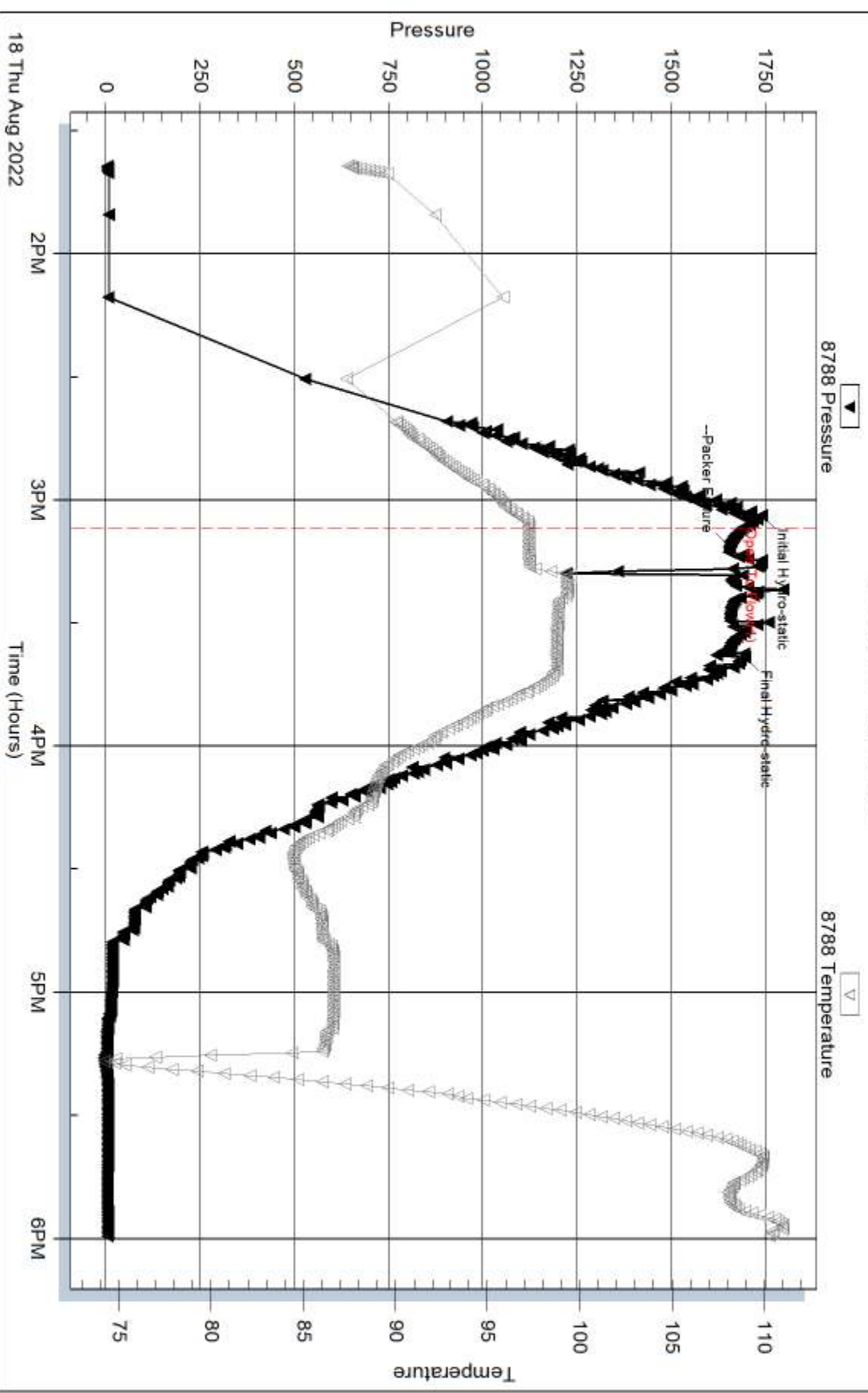
Inside

Darrah Oil Company LLC

McDonald 5

DST Test Number: 5

Pressure vs. Time

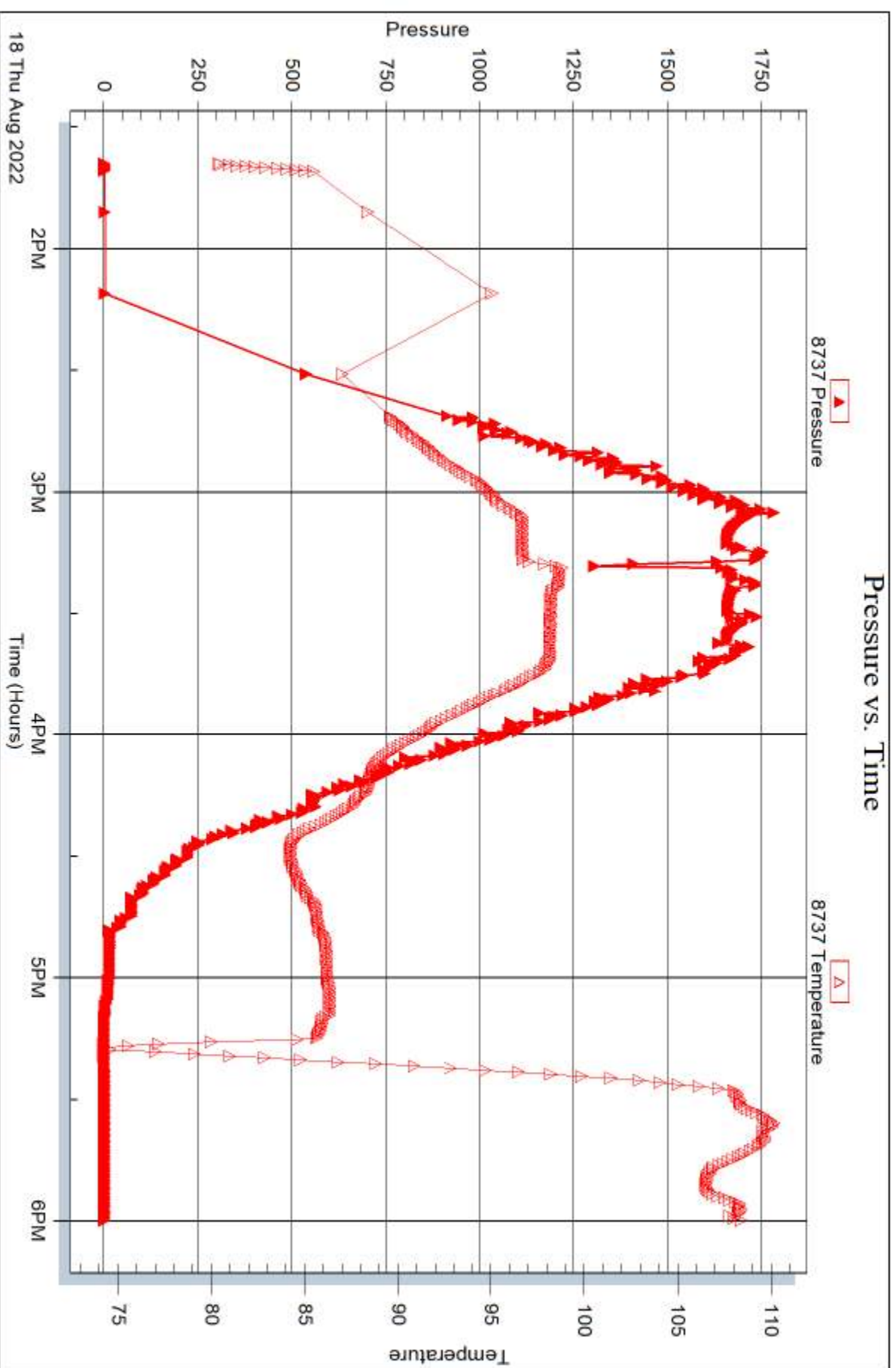


Serial #: 8737

Outside Darrah Oil Company LLC

McDonald 5

DST Test Number: 5





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68670

DST#: 7

Test Start: 2022.08.19 @ 09:14:58

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:48:28

Time Test Ended: 16:07:43

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3443.00 ft (KB) To 3553.00 ft (KB) (TVD)

Total Depth: 3553.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1886.00 ft (KB)

1876.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8788 Inside

Press@RunDepth: 189.79 psig @ 3444.00 ft (KB)

Start Date: 2022.08.19

End Date: 2022.08.19

Start Time: 09:15:03

End Time: 16:07:42

Capacity: 8000.00 psig

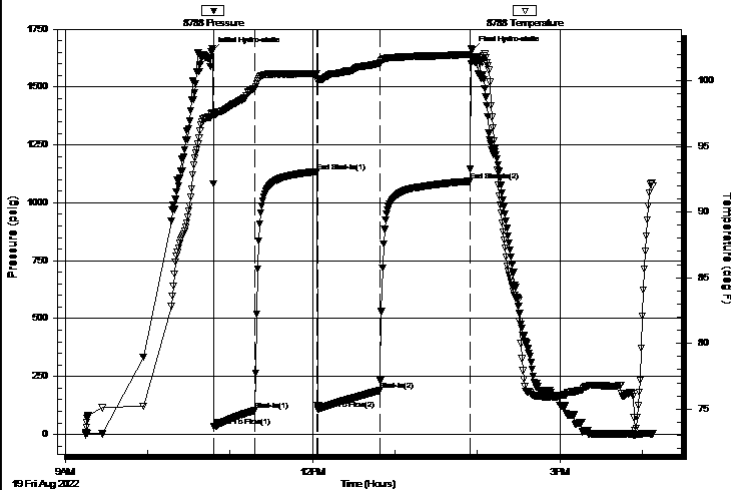
Last Calib.: 2022.08.19

Time On Btm: 2022.08.19 @ 10:46:28

Time Off Btm: 2022.08.19 @ 13:56:13

TEST COMMENT: IF: Strong Blow . B.O.B. in 13 mins. Built to 20.92 (30)
IS: Weak Blow . Built to .24". (45)
FF: Strong Blow . B.O.B. in 18 mins. Built to 30.33". (45)
FS: Weak Blow . Built to 1.40". (60)

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.68	97.45	Initial Hydro-static
2	36.26	97.31	Open To Flow (1)
32	104.75	99.40	Shut-In(1)
77	1134.53	100.56	End Shut-In(1)
78	107.64	100.16	Open To Flow (2)
123	189.79	101.31	Shut-In(2)
188	1093.33	101.99	End Shut-In(2)
190	1656.99	102.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
191.00	GOCM 50%g 20%o 30%m	2.68
126.00	GHOCM 50%g 25%o 25%m	1.77
63.00	GHOCM 30%g 30%o 40%m	0.88
15.00	GHOCM 1%g 45%o 55%m	0.21
0.00	441' GIP 100%g	0.00
0.00	TS GMCHO 5%g 45%m 50%o	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68670

DST#: 7

Test Start: 2022.08.19 @ 09:14:58

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:48:28

Time Test Ended: 16:07:43

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3443.00 ft (KB) To 3553.00 ft (KB) (TVD)

Total Depth: 3553.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1886.00 ft (KB)

1876.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8737 Outside

Press@RunDepth: psig @ 3444.00 ft (KB)

Start Date: 2022.08.19 End Date: 2022.08.19

Start Time: 09:15:01 End Time: 16:07:40

Capacity: 8000.00 psig

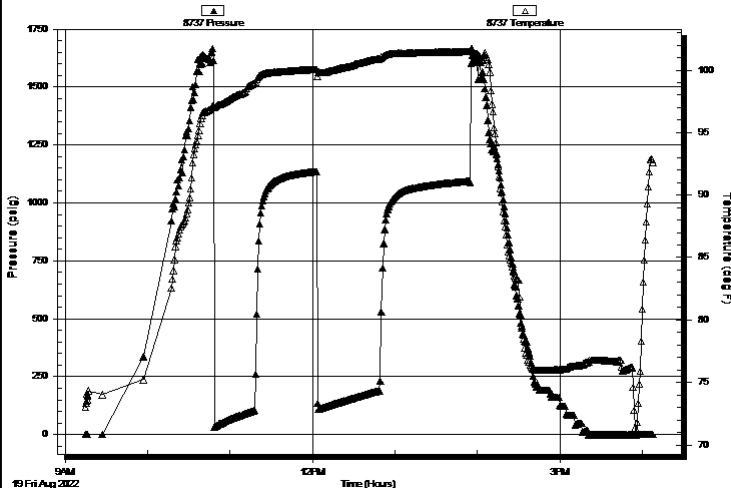
Last Calib.: 2022.08.19

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Strong Blow . B.O.B. in 13 mins. Built to 20.92 (30)
IS: Weak Blow . Built to .24". (45)
FF: Strong Blow . B.O.B. in 18 mins. Built to 30.33". (45)
FS: Weak Blow . Built to 1.40". (60)

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
191.00	GOCM 50%g 20%o 30%m	2.68
126.00	GHOCM 50%g 25%o 25%m	1.77
63.00	GHOCM 30%g 30%o 40%m	0.88
15.00	GHOCM 1%g 45%o 55%m	0.21
0.00	441' GIP 100%g	0.00
0.00	TS GMCHO 5%g 45%m 50%o	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Company LLC

3-21s-13w Stafford Ks

125 N Market Suite 1425
Wichita, Ks. 67202

McDonald 5

Job Ticket: 68670

DST#: 7

ATTN: Roger Martin

Test Start: 2022.08.19 @ 09:14:58

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 56.00 sec/qt

Water Loss: 19.99 in³

Resistivity: ohm.m

Salinity: 11000.00 ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

deg API

Water Salinity: 11000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
191.00	GOCM 50%g 20%o 30%m	2.679
126.00	GHOCM 50%g 25%o 25%m	1.767
63.00	GHOCM 30%g 30%o 40%m	0.884
15.00	GHOCM 1%g 45%o 55%m	0.210
0.00	441' GIP 100%g	0.000
0.00	TS GMCHO 5%g 45%m 50%o	0.000

Total Length: 395.00 ft

Total Volume: 5.540 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: None

Laboratory Name:

Laboratory Location:

Recovery Comments: 441 Feet of Gas in Pipe.

Tool Sample GMCHO 5%g 45%m 50%o

Serial #: 8788

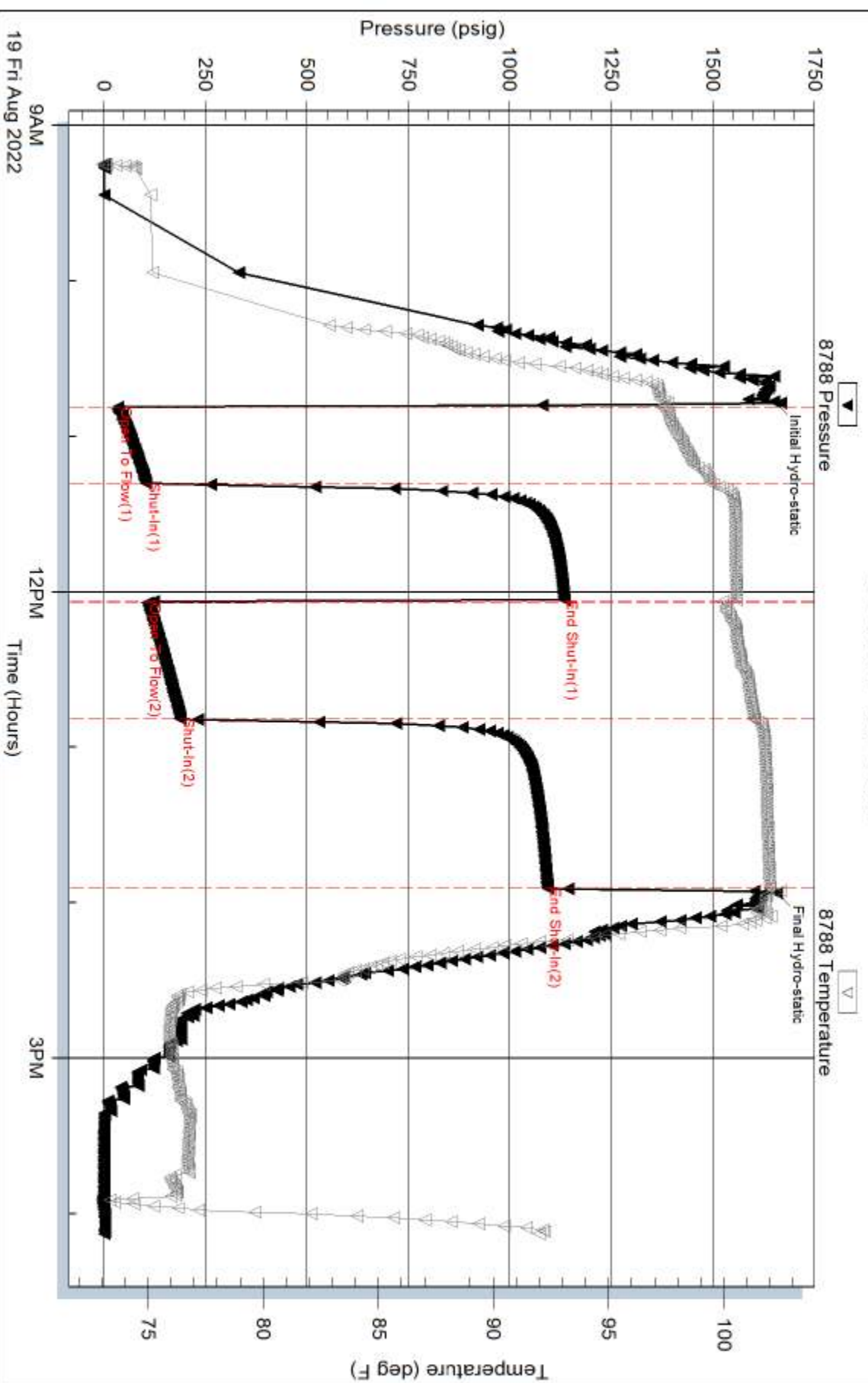
Inside

Darrah Oil Company LLC

McDonald 5

DST Test Number: 7

Pressure vs. Time



Serial #: 8737

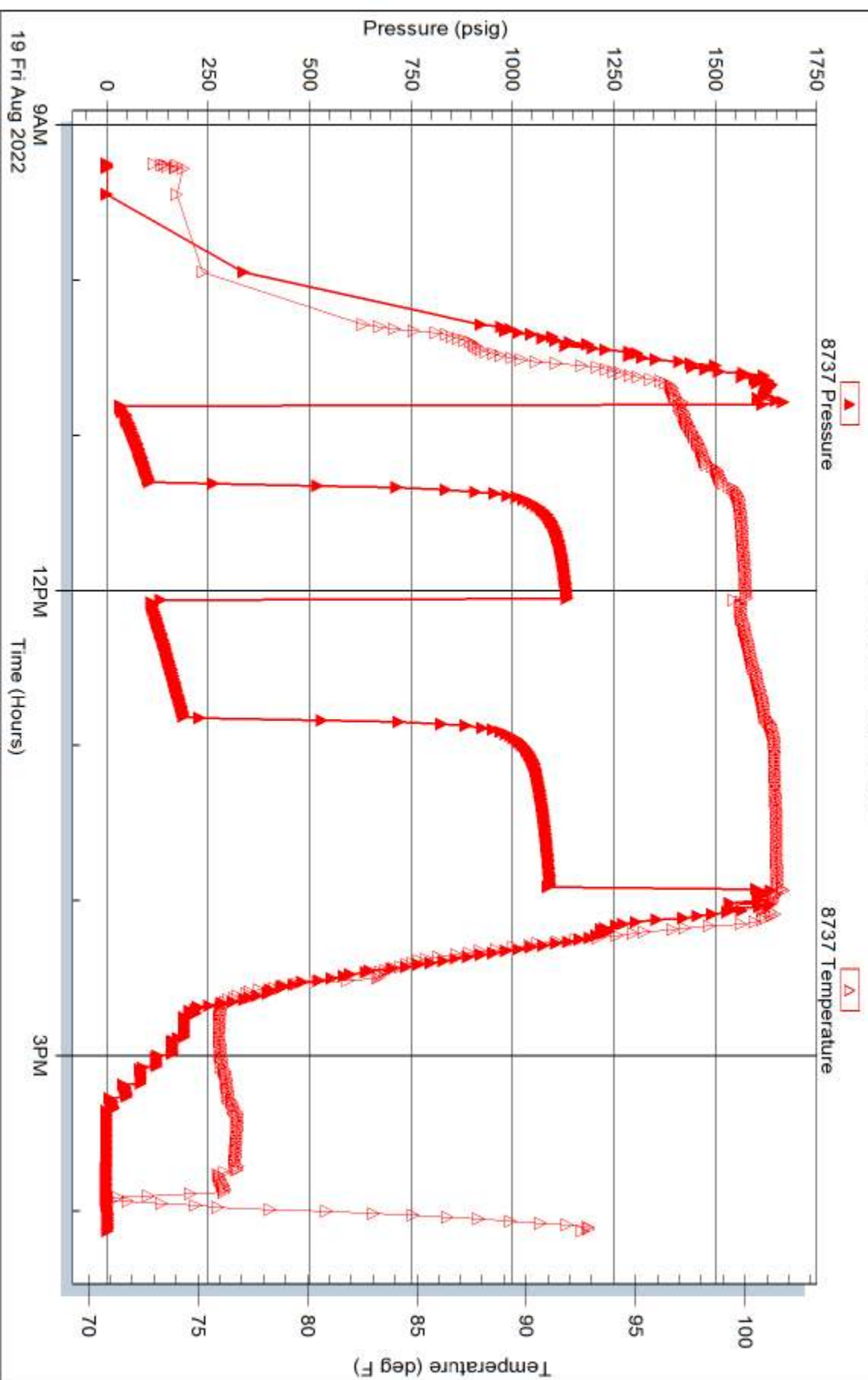
Outside

Darrah Oil Company LLC

McDonald 5

DST Test Number: 7

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68669

DST#: 6

Test Start: 2022.08.19 @ 03:13:41

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 07:11:41

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3545.00 ft (KB) To 3553.00 ft (KB) (TVD)

Reference Elevations: 1886.00 ft (KB)

Total Depth: 3553.00 ft (KB) (TVD)

1876.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8788 Inside

Press@RunDepth: psig @ 3546.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.19

End Date:

2022.08.19

Last Calib.: 2022.08.19

Start Time: 03:13:46

End Time:

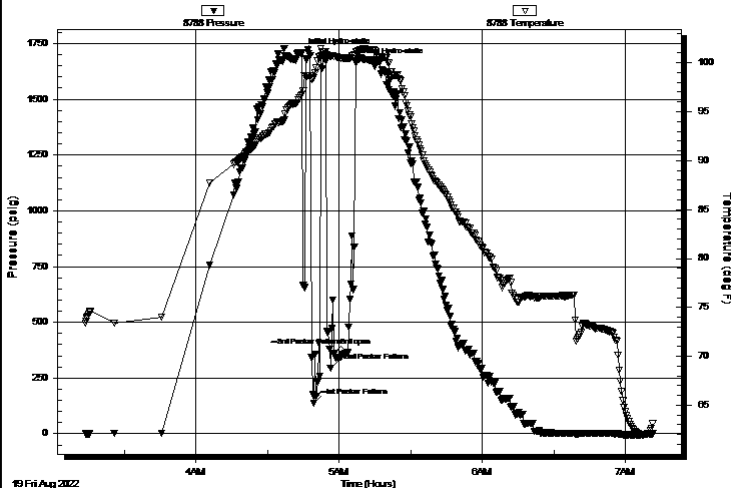
07:11:41

Time On Btm: 2022.08.19 @ 04:44:26

Time Off Btm: 2022.08.19 @ 05:06:56

TEST COMMENT: IF: Packer Failure.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1707.37	96.72	Initial Hydro-static
5	135.80	98.51	--1st Packer Failure
12	295.20	100.63	--2nd Packer Failure
14	361.86	100.62	3rd open
20	363.00	100.40	--3rd Packer Failure
23	1663.66	101.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
189.00	GVSOCM 5%g 2%o 93%m	2.65
252.00	GOCM 27%g 8%o 65%m	3.53
512.00	DM	7.18

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Darrah Oil Company LLC

125 N Market Suite 1425
Wichita, Ks. 67202

ATTN: Roger Martin

3-21s-13w Stafford Ks

McDonald 5

Job Ticket: 68669

DST#: 6

Test Start: 2022.08.19 @ 03:13:41

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 07:11:41

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3545.00 ft (KB) To 3553.00 ft (KB) (TVD)

Reference Elevations: 1886.00 ft (KB)

Total Depth: 3553.00 ft (KB) (TVD)

1876.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8737 Outside

Press@RunDepth: psig @ 3546.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.19

End Date:

2022.08.19

Last Calib.:

2022.08.19

Start Time: 03:13:43

End Time:

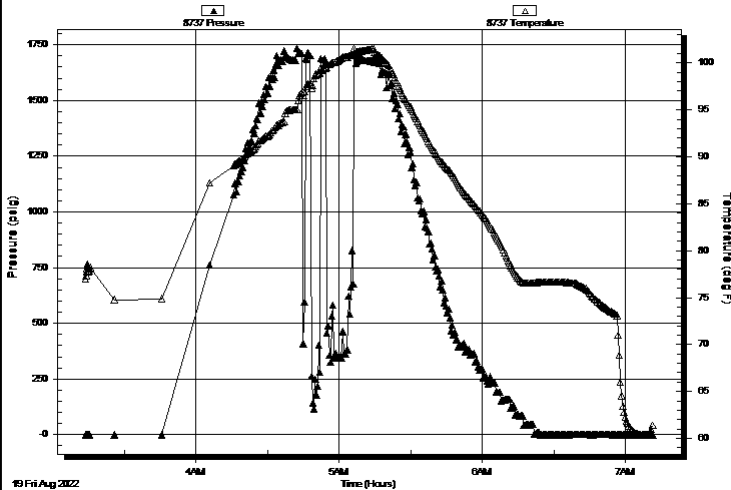
07:11:38

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Packer Failure.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
189.00	GVSOCM 5%g 2%o 93%m	2.65
252.00	GOCM 27%g 8%o 65%m	3.53
512.00	DM	7.18

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Darrah Oil Company LLC

3-21s-13w Stafford Ks

125 N Market Suite 1425
Wichita, Ks. 67202

McDonald 5

Job Ticket: 68669

DST#: 6

ATTN: Roger Martin

Test Start: 2022.08.19 @ 03:13:41

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 56.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
189.00	GVSOCM 5%g 2%o 93%m	2.651
252.00	GOCM 27%g 8%o 65%m	3.535
512.00	DM	7.182

Total Length: 953.00 ft

Total Volume: 13.368 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: None

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8788

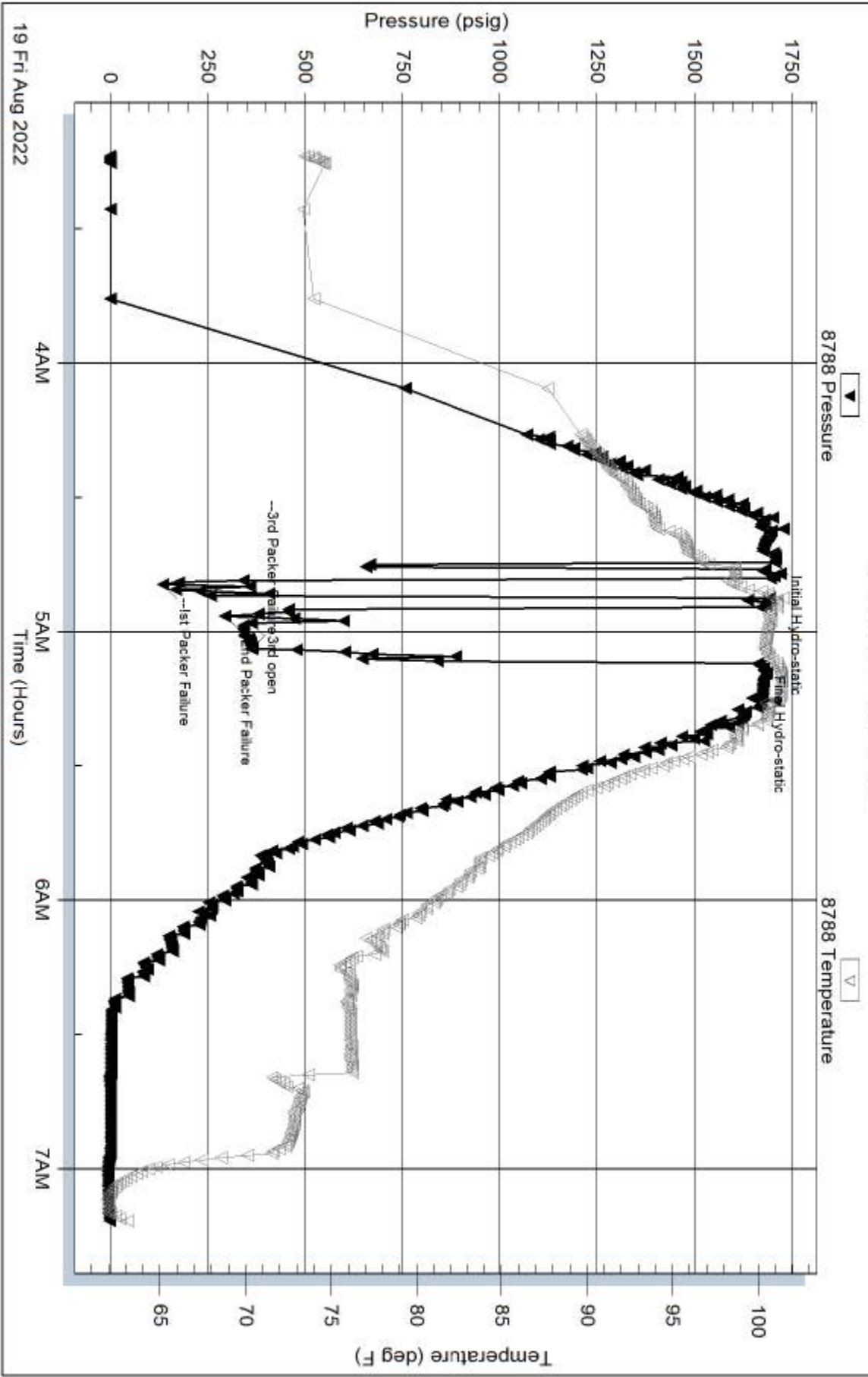
Inside

Darrah Oil Company LLC

McDonald 5

DST Test Number: 6

Pressure vs. Time



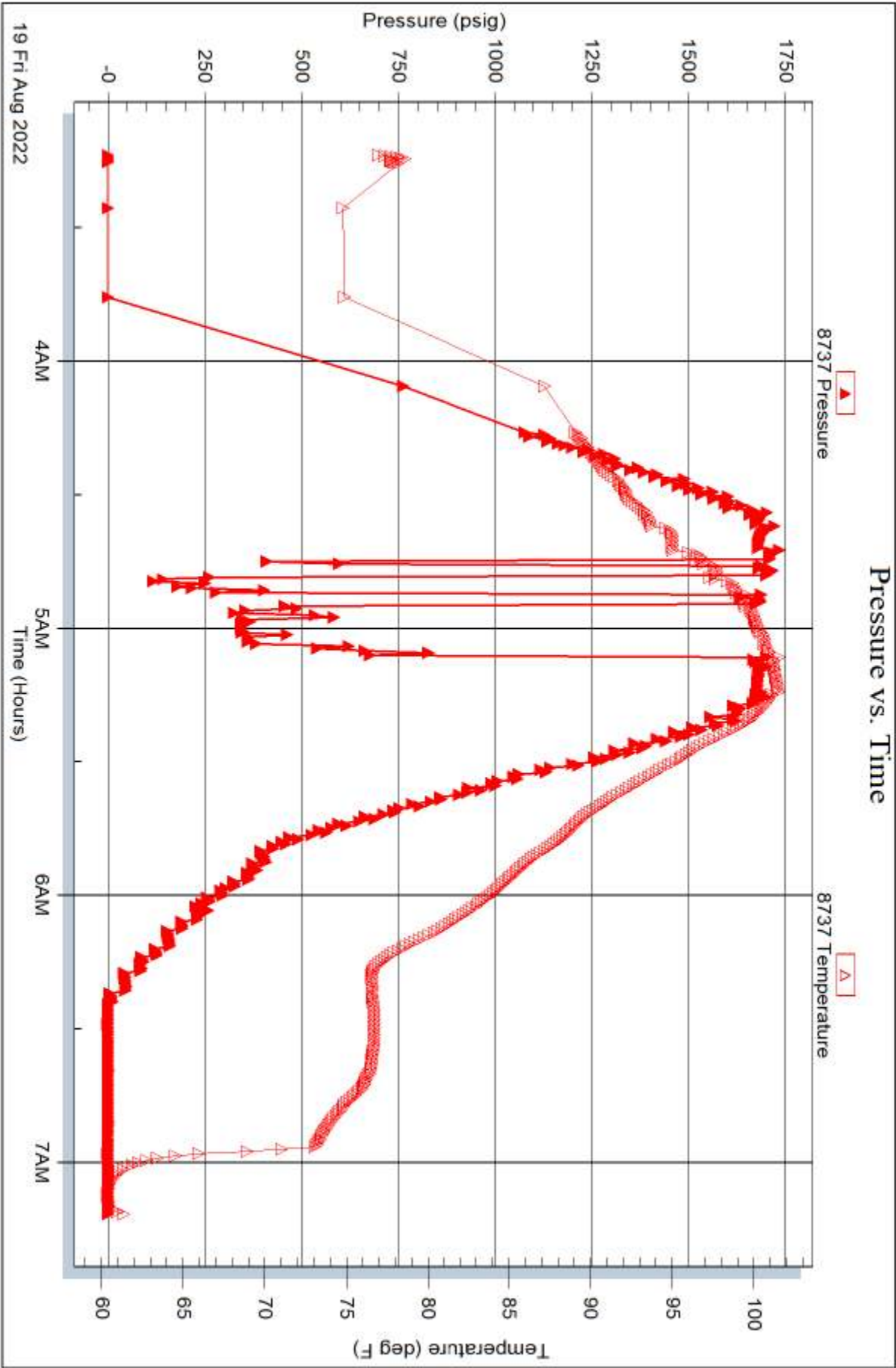
Serial #: 8737

Outside

Darrah Oil Company LLC

McDonald 5

DST Test Number: 6



SIZE: **5 1/2 x 14 #** RECEIVED ON CAR OR TRUCK NO. FROM DATE SENT
 SENT TO **Darrah-McDonald 5** ON CAR OR TRUCK NO. DATE SENT
 TRANSFER OR ORDER NO. WEIGHT GRADE THREAD COUPLING CONDITION
☐ NEW ☐ FAIR
☐ GOOD ☐ JUNK

	INCH		INCH		INCH		INCH		INCH	
	FEET	INCHES	FEET	INCHES	FEET	INCHES	FEET	INCHES	FEET	INCHES
1	21	28	42	46	43	—	42	88	40	81
2	42	51	42	48	42	49	42	45	43	39
3	41	36	42	46	42	50	42	44	41	97
4	42	47	42	90	43	63	42	46	42	48
5	42	93	42	50	42	50	43	03	40	08
6	42	48	42	48	40	76	42	52	20	96
7	42	25	42	57	42	51	42	45	22	96
8	42	47	40	39	42	46	42	49		
9	42	91	42	48	42	46	42	45		
10	42	53	42	50	42	48	42	60		
11	42	50	43	13	42	45	42	50		
12	42	40	42	47	42	50	42	47		
13	42	50	40	61	42	50	42	48		
14	42	49	42	51	42	45	42	54		
15	42	28	42	50	42	64	42	48		
16	42	49	42	39	42	49	42	49		
17	42	47	42	69	42	48	42	48		
18	43	47	42	52	42	48	42	49		
19	42	60	42	46	42	45	42	04		
20	42	48	42	49	42	65	41	84		
TOT	828	87	846	99	849	87	849	58	3605	00

TOTALS	PIECES	FEET	INCHES	REMARKS
COL NO. 1		828	87	
COL NO. 2		846	99	
COL NO. 3		849	87	
COL NO. 4		849	58	
COL NO. 5		229	69	
TOTALS THIS PAGE		3605	00	

Land jst 13.6

3618.6

- 43.63

- 43.39

3531.58

Csg set ~20' off btm ~3532' KB Insert @ ~3511

PRINTED IN U.S.A.

Acid Stage No.

Date 8/20/2022 District GB F.O. No. 60652

Company DARRAH OIL

Well Name & No. MCDONALD #5

Location

County STAFFORD

Field

State KS

Casing: Size 5 1/2 Type & Wt. 14# Set at _____ ft.

Formation: _____ Perf. _____ to _____

Formation: _____ Perf. _____ to _____

Formation: _____ Perf. _____ to _____

Liner:	Size	Type & Wt.	Top at	ft.	Bottom at	ft.
--------	------	------------	--------	-----	-----------	-----

Cemented: Yes ▼ Perforated from _____ ft. to _____ ft.

Tubing: Size & Wt. _____ Swung at _____ ft.

Perforated from _____ ft. to _____ ft.

Open Hole Size	T.D.	ft.	P.B. to	ft.
----------------	------	-----	---------	-----

Type Treatment:	Amt.	Type Fluid	Sand Size	Pounds of Sand
-----------------	------	------------	-----------	----------------

[illegible]

Bbl./Gal.

Bbl./Gal.

Bbl./Gal.

Flush	Bbl./Gal.
-------	-----------

Treated from _____ ft. to _____ ft. No. ft. 0

from _____ ft. to _____ ft. No. ft. 0

from _____ ft. to _____ ft. No ft. 0

Actual Volume of Oil / Water to Load Hole: Bbl./Gal.

Pump Trucks.	No. Used:	Std.	320	Sp.	Twin
--------------	-----------	------	-----	-----	------

Auxiliary Equipment	327
---------------------	-----

Personnel GREG CLARENCE JOE

Auxiliary Tools

Plugging or Sealing Materials: Type

Gals. Ib

Company Representative

ROGER MARTIN

Treater

GREG C.

TIME	PRESSURES		Total Fluid Pumped	REMARKS
a.m./p.m.	Tubing	Casing		
				ON LOCATION
				Pipe Total: 3532 Insert 3511
				Cent! 2, 4, 6, 10, 15
				Basket 3
				Circulate for 1 hour
				Pump Mud Flush - 500 Gal's
				Plug R.H. with 30 Sk's
				plug M.H. with 20 Sk's
				Mix 175 Sk's
				Raise Pump & trace out
				Displace with 85.7 Sk's @ 1500 #
				Plug down @ 4:15
4:30				Job Complete
				Thank You!!!