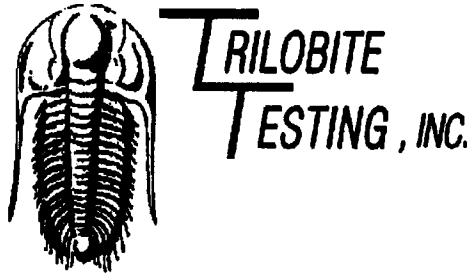


15-195-22630

8-12s-2lw



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Paul Gunzelman

8/12/21 Trego KS

Kohl A 1-8

Kohl Unit 1-8

Start Date: 2009.10.06 @ 01:59:03

End Date: 2009.10.06 @ 10:30:12

Job Ticket #: 30881 DST #: 1

RECEIVED

JAN 06 2010

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Murfin Drilling Co, Inc.

Kohl A 1-8

8/12/21 Trego KS

DST # 1

Toronto-Lans G

2009.10.06



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 30881

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2009.10.06 @ 01:59:03

GENERAL INFORMATION:

Formation: **Toronto-Lans G**

Deviated: **No Whipstock** ft (KB)

Time Tool Opened: 04:33:22

Time Test Ended: 10:30:12

Test Type: **Conventional Bottom Hole**

Tester: **Chris Hagman**

Unit No: **34**

Interval: **3580.00 ft (KB) To 3738.00 ft (KB) (TVD)**

Total Depth: **3738.00 ft (KB) (TVD)**

Hole Diameter: **7.78 inches** Hole Condition: **Good**

Reference Elevations: **2309.00 ft (KB)**

2304.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 6753 Inside

Press@RunDepth: **104.58 psig @ 3582.00 ft (KB)**

Start Date: **2009.10.06**

End Date:

2009.10.06

Capacity: **8000.00 psig**

Last Calib.: **2009.10.06**

Start Time: **01:59:03**

End Time:

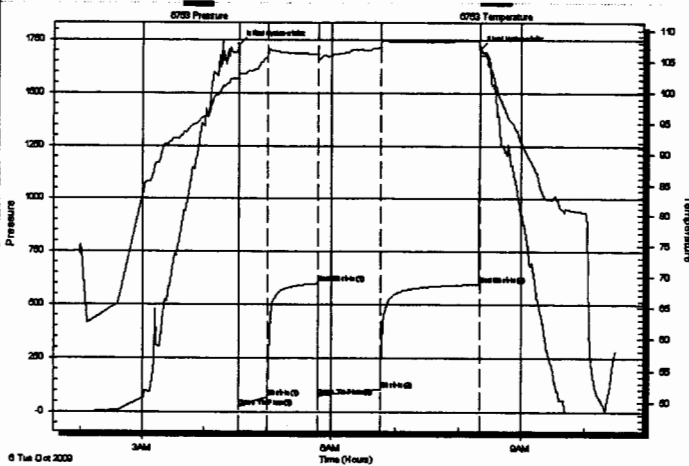
10:30:12

Time On Btrr: **2009.10.06 @ 04:32:52**

Time Off Btrr: **2009.10.06 @ 08:20:12**

TEST COMMENT: IF: 4 inches in 30 min., fair building blow
IS: No blow back
FF: 6 inches in 60 min., fair building blow
FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1730.40	102.50	Initial Hydro-static
1	22.49	103.36	Open To Flow (1)
28	67.94	105.62	Shut-In (1)
75	596.71	106.16	End Shut-In (1)
75	73.33	105.14	Open To Flow (2)
133	104.58	107.26	Shut-In (2)
227	593.76	108.30	End Shut-In (2)
228	1703.50	105.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	gassy oily mud 10%G,10%O,80%M	0.30
120.00	oily mud 5%O,95%M	1.13

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 30881

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2009.10.06 @ 01:59:03

Tool Information

Drill Pipe:	Length: 3461.00 ft	Diameter: 3.80 inches	Volume: 48.55 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 49.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3580.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	158.00 ft			
Tool Length:	186.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3553.00	
Shut In Tool	5.00			3558.00	
Hydraulic tool	5.00			3563.00	
Jars	5.00			3568.00	
Safety Joint	3.00			3571.00	
Packer	5.00			3576.00	28.00 Bottom Of Top Packer
Packer	4.00			3580.00	
Stubb	1.00			3581.00	
Perforations	1.00			3582.00	
Recorder	0.00	8374	Inside	3582.00	
Recorder	0.00	6753	Inside	3582.00	
Perforations	27.00			3609.00	
Change Over Sub	1.00			3610.00	
Drill Pipe	124.00			3734.00	
Change Over Sub	1.00			3735.00	
Bullnose	3.00			3738.00	158.00 Bottom Packers & Anchor
Total Tool Length:	186.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 30881

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2009.10.06 @ 01:59:03

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:

9800 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	gassy oily mud 10%G,10%O,80%M	0.295
120.00	oily mud 5%O,95%M	1.128

Total Length: 180.00 ft Total Volume: 1.423 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW=.780@56F=9800ppm

DST Test Number: 1

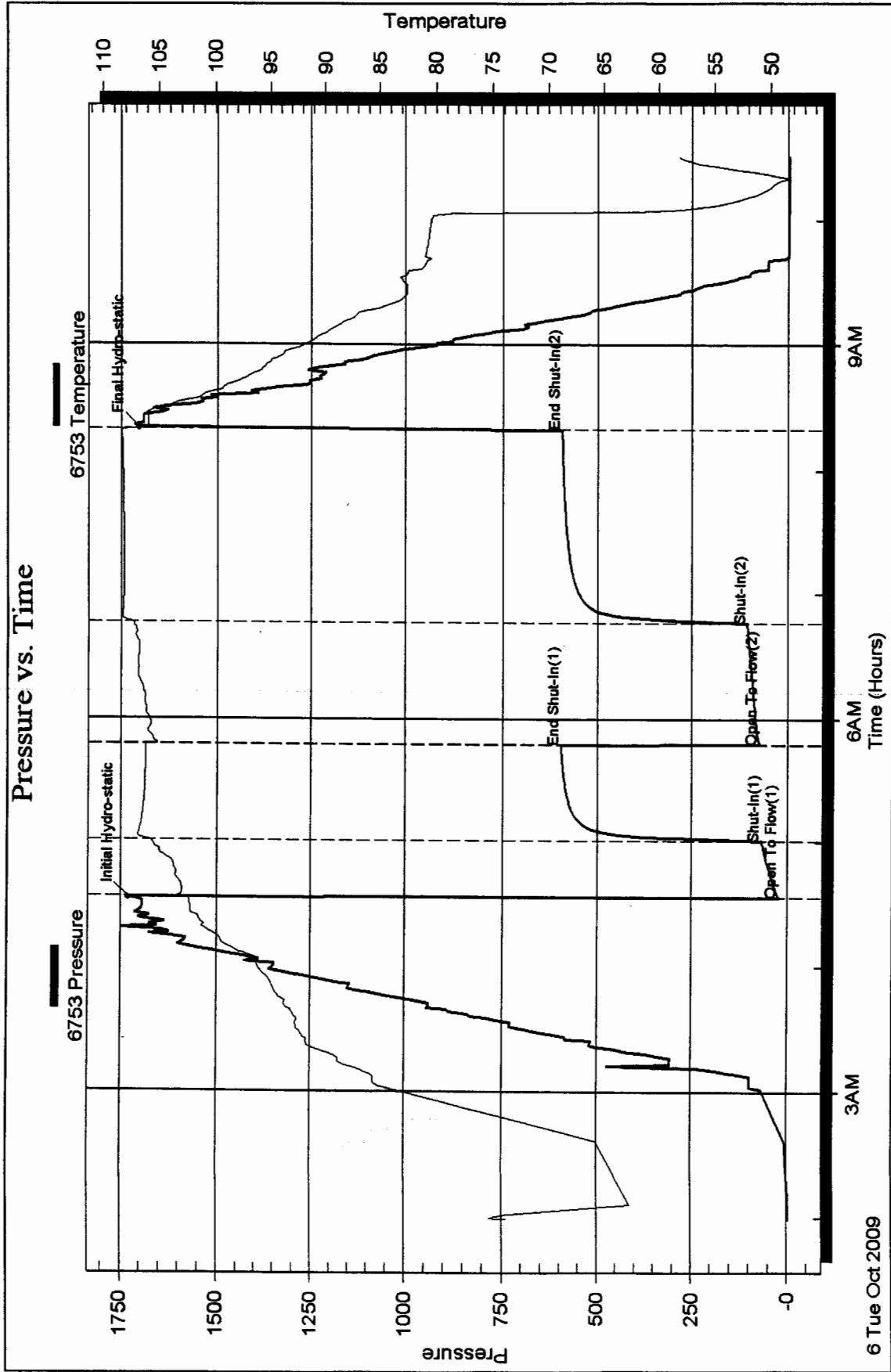
8/12/21 Trego KS

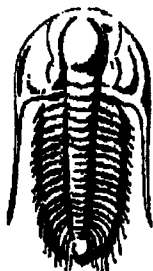
Murfin Drilling Co, Inc.

Inside

Serial #: 6753

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Paul Gunzelman

8/12/21 Trego KS

Kohl A 1-8

Start Date: 2009.10.07 @ 14:27:56

End Date: 2009.10.07 @ 21:28:56

Job Ticket #: 36582 DST #: 2

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

RECEIVED
JAN 06 2010
KCC WICHITA



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 36582

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2009.10.07 @ 14:27:56

GENERAL INFORMATION:

Formation: **LKC "H-L"**

Deviated: **No Whipstock** ft (KB)

Time Tool Opened: 16:17:56

Time Test Ended: 21:28:56

Test Type: **Conventional Bottom Hole**

Tester: **Kyle Kinderknecht**

Unit No: **47**

Interval: **3732.00 ft (KB) To 3842.00 ft (KB) (TVD)**

Total Depth: **3842.00 ft (KB) (TVD)**

Hole Diameter: **7.78 inches** Hole Condition: **Good**

Reference Elevations: **2309.00 ft (KB)**

2304.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8319 Inside

Press@RunDepth: **29.82 psig @ 3739.00 ft (KB)**

Start Date: **2009.10.07**

End Date:

2009.10.07

Capacity: **7000.00 psig**

Last Calib.: **2009.10.07**

Start Time: **14:28:01**

End Time:

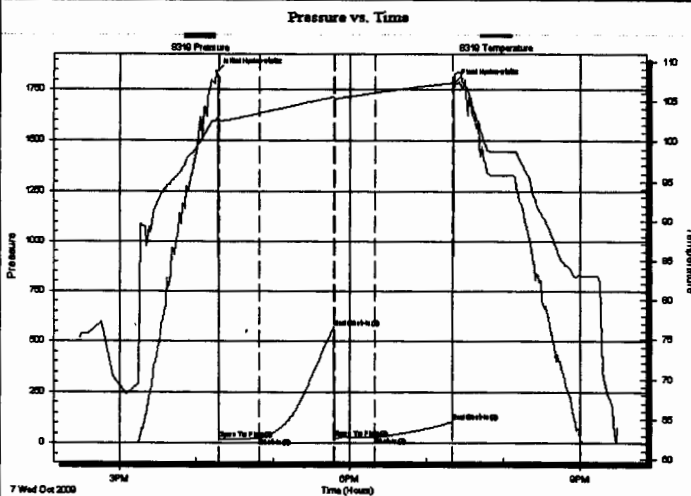
21:28:55

Time On Btm: **2009.10.07 @ 16:15:56**

Time Off Btm: **2009.10.07 @ 19:21:26**

TEST COMMENT: **IF 1 1/2"**

FF Weak died 2 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1838.59	102.61	Initial Hydro-static
2	17.87	102.53	Open To Flow (1)
33	23.06	103.43	Shut-In (1)
92	570.75	105.50	End Shut-In (1)
92	26.36	105.33	Open To Flow (2)
123	29.82	106.02	Shut-In (2)
185	105.91	107.30	End Shut-In (2)
186	1787.35	107.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	SitOCM 5%O 95%M	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 36582

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2009.10.07 @ 14:27:56

Tool Information

Drill Pipe:	Length: 3592.00 ft	Diameter: 3.80 inches	Volume: 50.39 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 62000.00 lb
		Total Volume:	50.99 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3732.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	110.00 ft			
Tool Length:	133.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3710.00	
Shut In Tool	5.00			3715.00	
Hydraulic tool	5.00			3720.00	
Safety Joint	3.00			3723.00	
Packer	4.00			3727.00	23.00 Bottom Of Top Packer
Packer	5.00			3732.00	
Stubb	1.00			3733.00	
Perforations	5.00			3738.00	
Change Over Sub	1.00			3739.00	
Recorder	0.00	8319	inside	3739.00	
Recorder	0.00	8369	inside	3739.00	
Blank Spacing	93.00			3832.00	
Change Over Sub	1.00			3833.00	
Perforations	6.00			3839.00	
Bullnose	3.00			3842.00	110.00 Bottom Packers & Anchor

Total Tool Length: 133.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 36582

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2009.10.07 @ 14:27:56

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	SITOCM 5%O 95%M	0.074

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

DST Test Number: 2

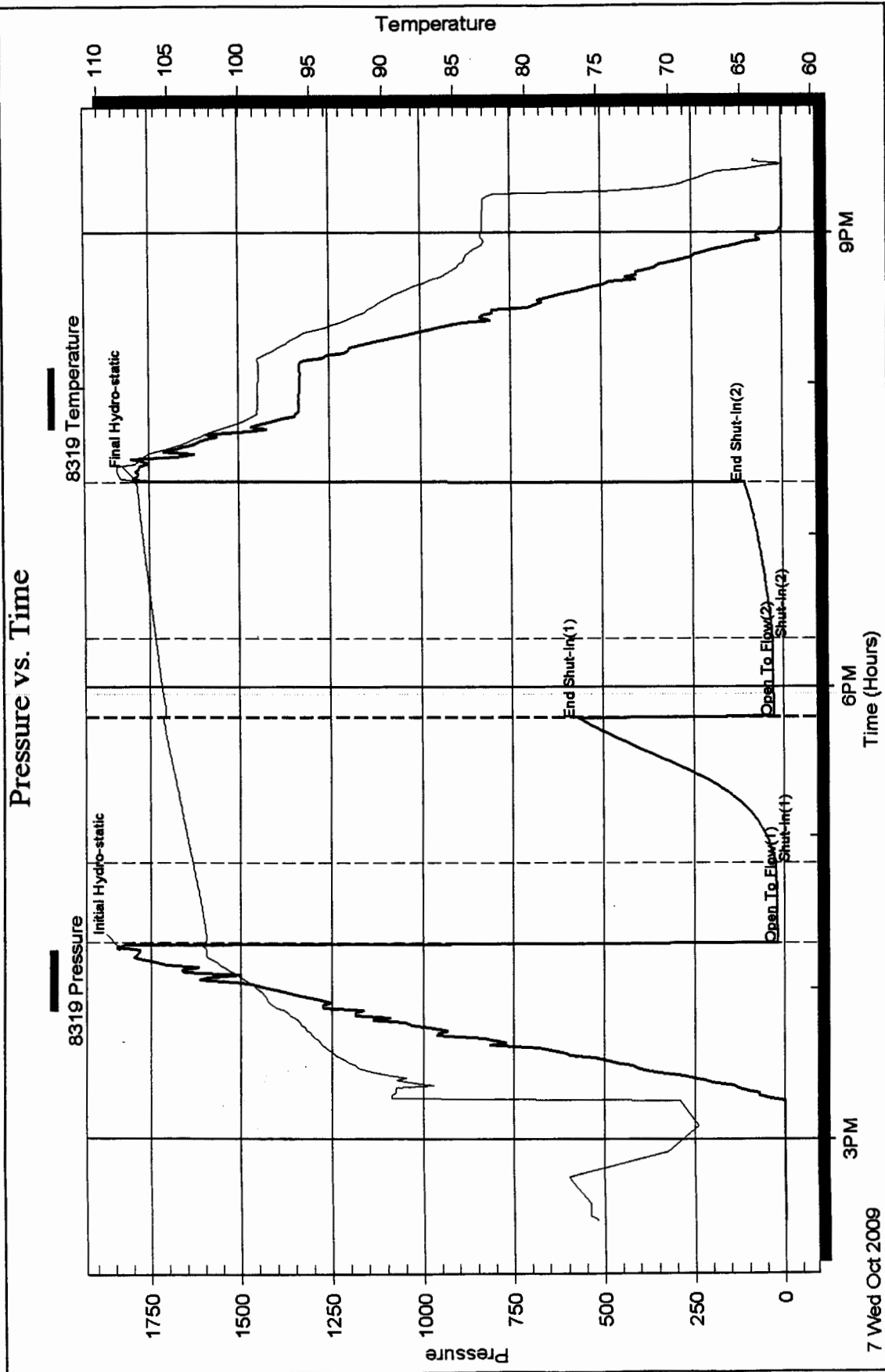
8/12/21 Trego KS

Murfin Drilling Co, Inc.

Inside

Serial #: 8319

Pressure vs. Time



7 Wed Oct 2009

9 PM

6 PM

3 PM

Time (Hours)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Paul Gunzelman

8/12/21 Trego KS

Kohl A 1-8

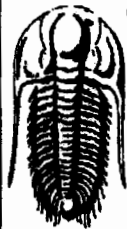
Start Date: 2009.10.08 @ 08:55:17

End Date: 2009.10.08 @ 16:04:47

Job Ticket #: 36583 DST #: 3

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

**RECEIVED
JAN 06 2010
KCC WICHITA**



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Paul Gunzelman

Kohl A 1-8

8/12/21 Trego KS

Job Ticket: 36583

DST#: 3

Test Start: 2009.10.08 @ 08:55:17

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:01:17

Time Test Ended: 16:04:47

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 47

Interval: **3920.00 ft (KB) To 3947.00 ft (KB) (TVD)**

Total Depth: 3947.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Good

Reference Elevations: 2309.00 ft (KB)

2304.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: **8319**

Inside

Press@RunDepth: 20.27 psig @ 3926.00 ft (KB)

Start Date: 2009.10.08

End Date:

2009.10.08

Start Time: 08:55:22

End Time:

16:04:46

Capacity: 7000.00 psig

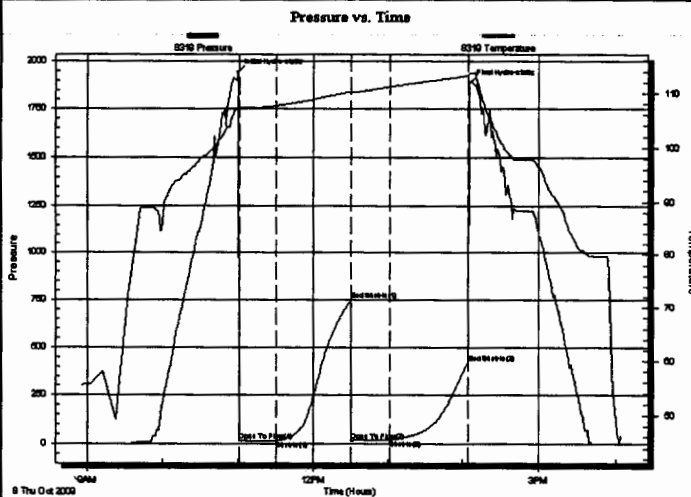
Last Calib.: 2009.10.08

Time On Btrr: 2009.10.08 @ 10:59:47

Time Off Btrr: 2009.10.08 @ 14:05:17

TEST COMMENT: IF 1 1/2"

FF No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1939.11	106.88	Initial Hydro-static
2	15.75	107.19	Open To Flow (1)
31	16.38	107.65	Shut-In(1)
91	750.41	110.26	End Shut-In(1)
91	17.69	109.87	Open To Flow(2)
122	20.27	111.15	Shut-In(2)
185	420.18	113.24	End Shut-In(2)
186	1883.31	113.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	SitOCM 5%M 95%M	0.05

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 36583

DST#: 3

ATTN: Paul Gunzelman

Test Start: 2009.10.08 @ 08:55:17

Tool Information

Drill Pipe:	Length: 3781.00 ft	Diameter: 3.80 inches	Volume: 53.04 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume:	53.64 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3920.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3898.00	
Shut In Tool	5.00			3903.00	
Hydraulic tool	5.00			3908.00	
Safety Joint	3.00			3911.00	
Packer	4.00			3915.00	23.00 Bottom Of Top Packer
Packer	5.00			3920.00	
Stubb	1.00			3921.00	
Perforations	5.00			3926.00	
Recorder	0.00	8319	Inside	3926.00	
Recorder	0.00	8369	Inside	3926.00	
Perforations	18.00			3944.00	
Bullnose	3.00			3947.00	27.00 Bottom Packers & Anchor

Total Tool Length: 50.00



**TRIOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 36583

DST#: 3

ATTN: Paul Gunzelman

Test Start: 2009.10.08 @ 08:55:17

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	StOCM 5%M 95%M	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8319

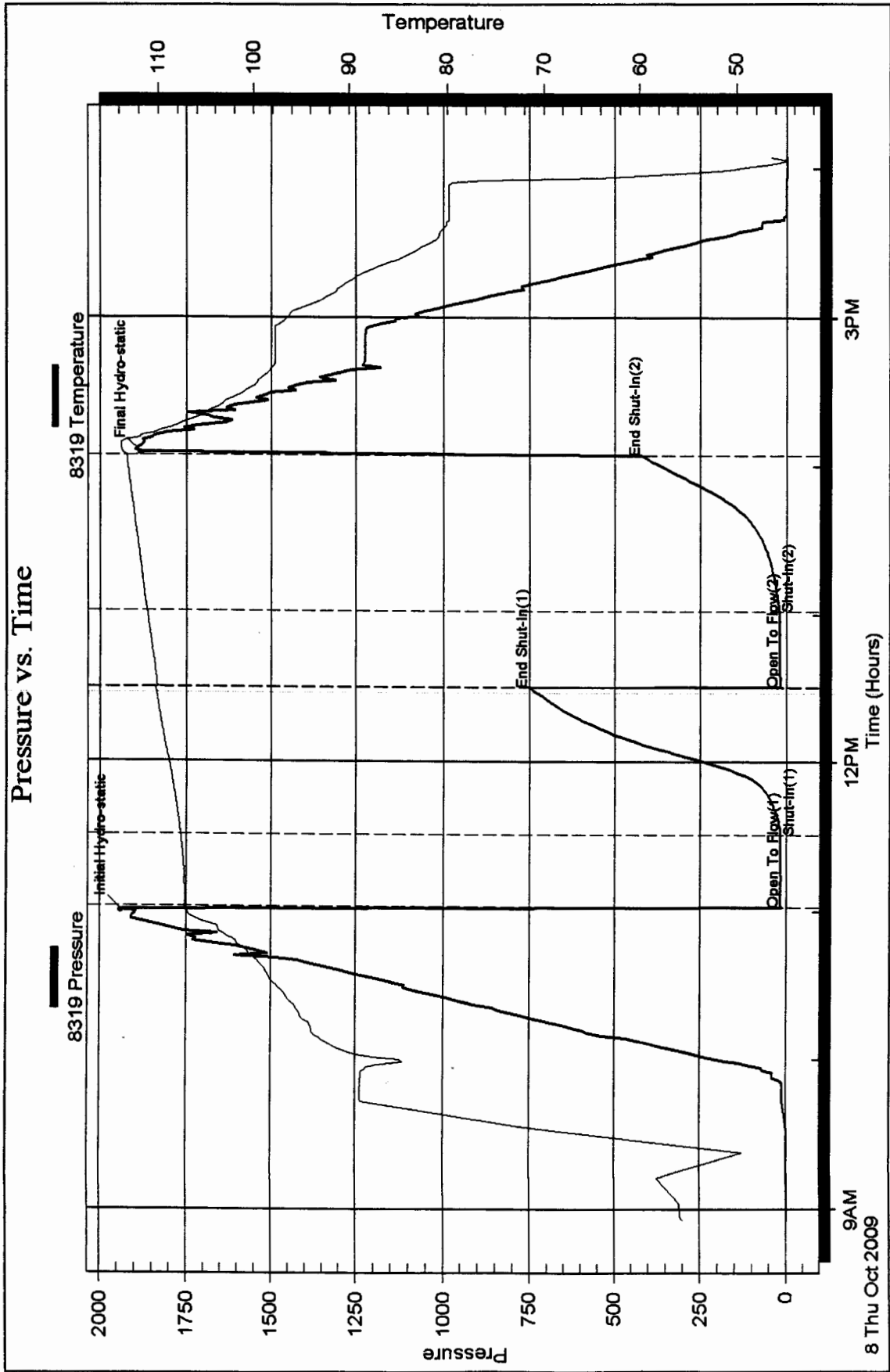
Inside

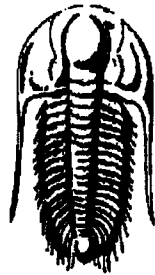
Murfin Drilling Co, Inc.

8/12/21 Trego KS

DST Test Number: 3

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, Inc.**

250 N Water STE 300
Wichita, KS 67202

ATTN: Paul Gunzelman

8/12/21 Trego KS

Kohl A 1-8

Start Date: 2009.10.09 @ 03:10:54

End Date: 2009.10.09 @ 11:28:54

Job Ticket #: 36584 DST #: 4

RECEIVED

JAN 06 2010

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc.

250 N Water STE 300
Wichita, KS 67202

ATTN: Paul Gunzelman

Kohl A 1-8

8/12/21 Trego KS

Job Ticket: 36584

DST#: 4

Test Start: 2009.10.09 @ 03:10:54

GENERAL INFORMATION:

Formation: **Arb**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 04:57:54

Time Test Ended: 11:28:54

Test Type: **Conventional Bottom Hole**

Tester: **Kyle Kinderknecht**

Unit No: **47**

Interval: **3950.00 ft (KB) To 4032.00 ft (KB) (TVD)**

Total Depth: **4032.00 ft (KB) (TVD)**

Hole Diameter: **7.78 inches** Hole Condition: **Good**

Reference Elevations: **2309.00 ft (KB)**

2304.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8319 **Inside**

Press@RunDepth: **283.89 psig @ 3957.00 ft (KB)**

Start Date: **2009.10.09**

End Date:

2009.10.09

Capacity: **7000.00 psig**

Last Calib.: **2009.10.09**

Start Time: **03:10:59**

End Time:

11:28:53

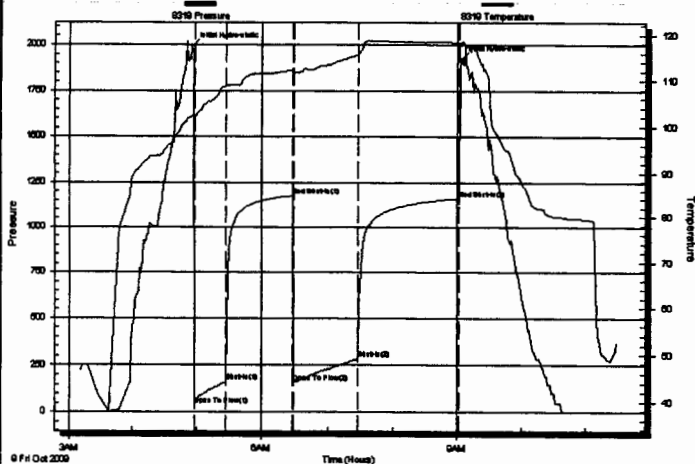
Time On Btrm: **2009.10.09 @ 04:55:54**

Time Off Btrm: **2009.10.09 @ 09:03:24**

TEST COMMENT: **IF BOB 12 min**

FF BOB 15 min

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1990.36	102.23	Initial Hydro-static
2	36.06	102.20	Open To Flow (1)
32	161.31	108.78	Shut-In(1)
92	1175.49	112.22	End Shut-In(1)
93	160.59	111.88	Open To Flow(2)
152	283.89	115.65	Shut-In(2)
246	1159.64	118.37	End Shut-In(2)
248	1920.37	117.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
375.00	Mdy Wtr 20%W 80%M	4.16
65.00	SltOWCM 5%O 10%W 85%M	0.91
200.00	SltOWCM 5%O 5%W 90%M	2.81
15.00	Clean Heavy Oil	0.21
0.00	30' GP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wchita, KS 67202

8/12/21 Trego KS

Job Ticket: 36584

DST#: 4

ATTN: Paul Gunzelman

Test Start: 2009.10.09 @ 03:10:54

Tool Information

Drill Pipe:	Length: 3809.00 ft	Diameter: 3.80 inches	Volume: 53.43 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 62000.00 lb
		Total Volume: 54.03 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3950.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 ft			
Tool Length:	105.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3928.00	
Shut In Tool	5.00			3933.00	
Hydraulic tool	5.00			3938.00	
Safety Joint	3.00			3941.00	
Packer	4.00			3945.00	23.00 Bottom Of Top Packer
Packer	5.00			3950.00	
Stubb	1.00			3951.00	
Perforations	5.00			3956.00	
Change Over Sub	1.00			3957.00	
Recorder	0.00	8319	Inside	3957.00	
Recorder	0.00	8369	Inside	3957.00	
Blank Spacing	63.00			4020.00	
Change Over Sub	1.00			4021.00	
Perforations	8.00			4029.00	
Bullnose	3.00			4032.00	82.00 Bottom Packers & Anchor

Total Tool Length: 105.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc.

Kohl A 1-8

250 N Water STE 300
Wichita, KS 67202

8/12/21 Trego KS

Job Ticket: 36584

DST#: 4

ATTN: Paul Gunzelman

Test Start: 2009.10.09 @ 03:10:54

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: 26000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
375.00	Mdy Wtr 20%W 80%M	4.158
65.00	SltOWCM 5%O 10%W 85%M	0.912
200.00	SltOWCM 5%O 5%W 90%M	2.805
15.00	Clean Heavy Oil	0.210
0.00	30' GP	0.000

Total Length: 655.00 ft Total Volume: 8.085 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .31 @ 63 deg.

Serial #: 8319

Inside

Murfin Drilling Co. Inc.

8/12/21 Trego KS

DST Test Number: 4

Pressure vs. Time

