



## DRILL STEM TEST REPORT

Prepared For: **Stratakan Expl. Inc.**

204 W. Mill St.  
Plainville KS. 67663

ATTN: Jason Alm

### **Andrews #22-1**

#### **22-22s-13w Stafford KS**

Start Date: 2016.05.18 @ 06:33:25

End Date: 2016.05.18 @ 10:59:10

Job Ticket #: 57949                      DST #: 1

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

Printed: 2016.05.23 @ 15:07:27

Stratakan Expl. Inc. 22-22s-13w Stafford KS Andrews #22-1 DST # 1 LKC "B - F" 2016.05.18



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Stratakan Expl. Inc.  
204 W. Mill St.  
Plainville KS. 67663  
ATTN: Jason Alm

**22-22s-13w Stafford KS**

**Andrews #22-1**

Job Ticket: 57949

**DST#: 1**

Test Start: 2016.05.18 @ 06:33:25

## GENERAL INFORMATION:

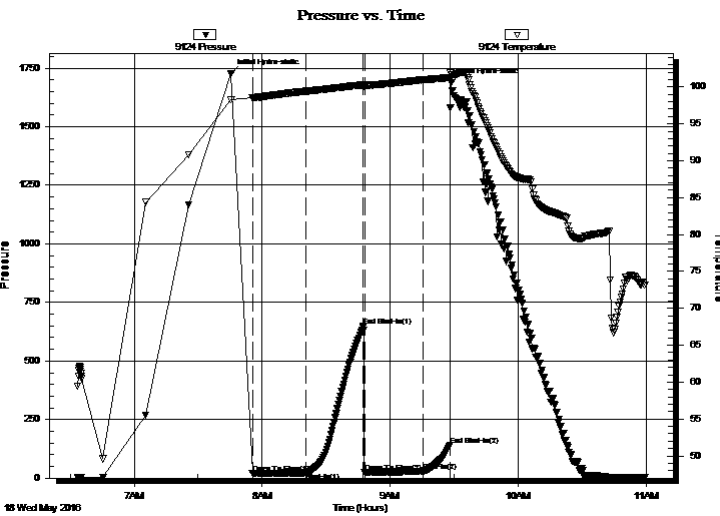
Formation: **LKC "B - F"**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 07:55:25  
 Tester: Gary Pevoteaux  
 Time Test Ended: 10:59:10  
 Unit No: 80  
 Interval: **3430.00 ft (KB) To 3485.00 ft (KB) (TVD)**  
 Reference Elevations: 1895.00 ft (KB)  
 Total Depth: 3485.00 ft (KB) (TVD)  
 1890.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Fair  
 KB to GR/CF: 5.00 ft

## Serial #: 9124

**Outside**

Press@RunDepth: 28.29 psig @ 3431.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2016.05.18 End Date: 2016.05.18 Last Calib.: 2016.05.18  
 Start Time: 06:33:30 End Time: 10:59:09 Time On Btm: 2016.05.18 @ 07:45:25  
 Time Off Btm: 2016.05.18 @ 09:28:40

TEST COMMENT: IF:Weak blow . 1/4 - 1/2".  
 IS:No blow .  
 FF:Very weak blow . (surface)  
 FS:No blow .



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1728.16	98.25	Initial Hydro-static
10	19.66	98.50	Open To Flow (1)
35	23.06	99.41	Shut-In(1)
62	647.20	100.29	End Shut-In(1)
63	24.53	100.11	Open To Flow (2)
90	28.29	100.97	Shut-In(2)
103	140.64	101.27	End Shut-In(2)
104	1689.53	101.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	Drig. mud	0.05

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 57949

**DST#: 1**

ATTN: Jason Alm

Test Start: 2016.05.18 @ 06:33:25

## Tool Information

Drill Pipe:	Length: 3302.00 ft	Diameter: 3.80 inches	Volume: 46.32 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 46.91 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3430.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	75.00 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			3411.00	
Shut In Tool	5.00			3416.00	
Hydraulic tool	5.00			3421.00	
Packer	4.00			3425.00	20.00 Bottom Of Top Packer
Packer	5.00			3430.00	
Stubb	1.00			3431.00	
Recorder	0.00	9124	Outside	3431.00	
Recorder	0.00	6798	Inside	3431.00	
Perforations	6.00			3437.00	
Blank Spacing	32.00			3469.00	
Perforations	11.00			3480.00	
Bullnose	5.00			3485.00	55.00 Bottom Packers & Anchor

**Total Tool Length: 75.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 57949

**DST#: 1**

ATTN: Jason Alm

Test Start: 2016.05.18 @ 06:33:25

## 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:

5000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Drig. mud	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0

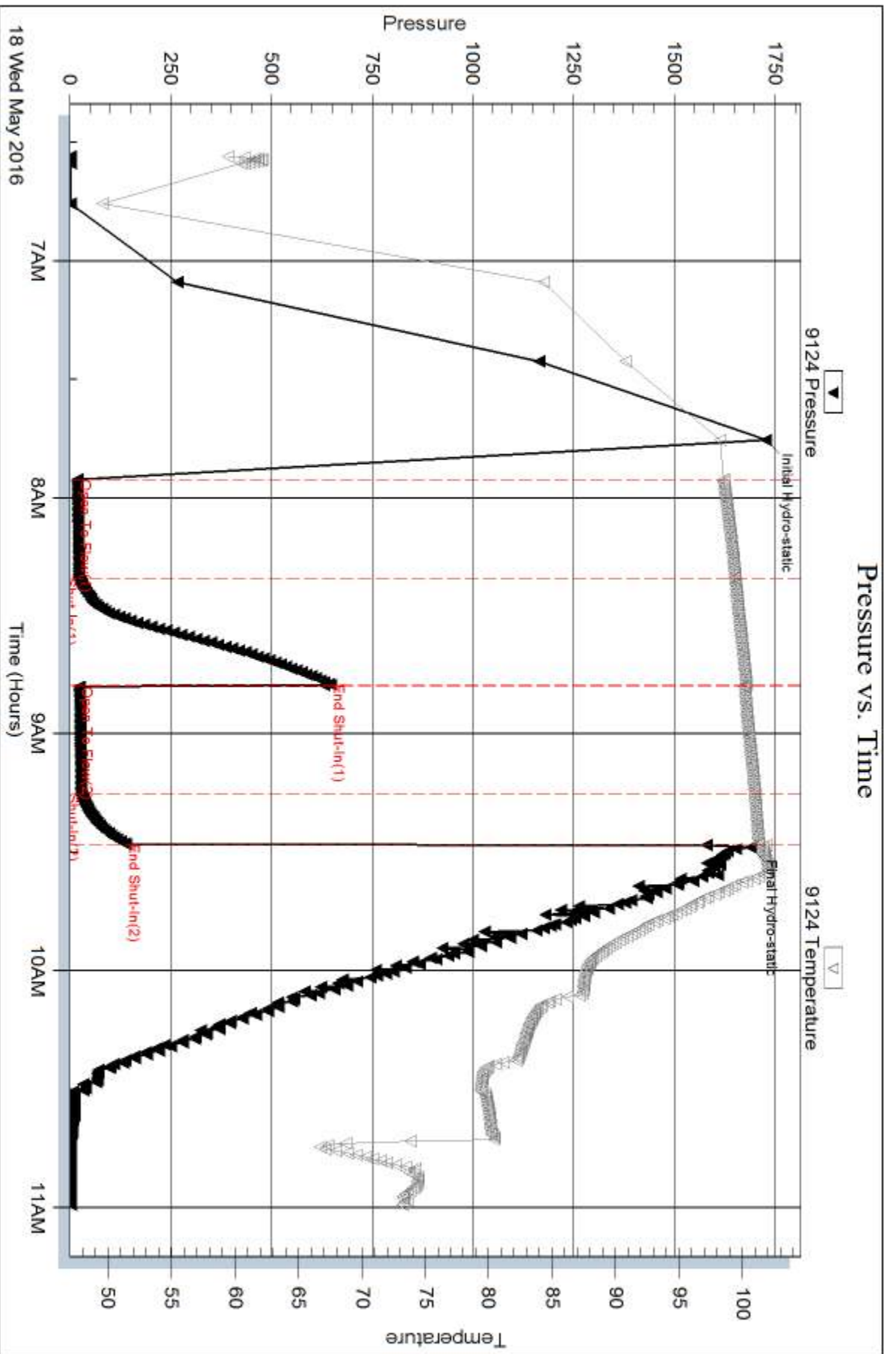
Num Gas Bombs: 0

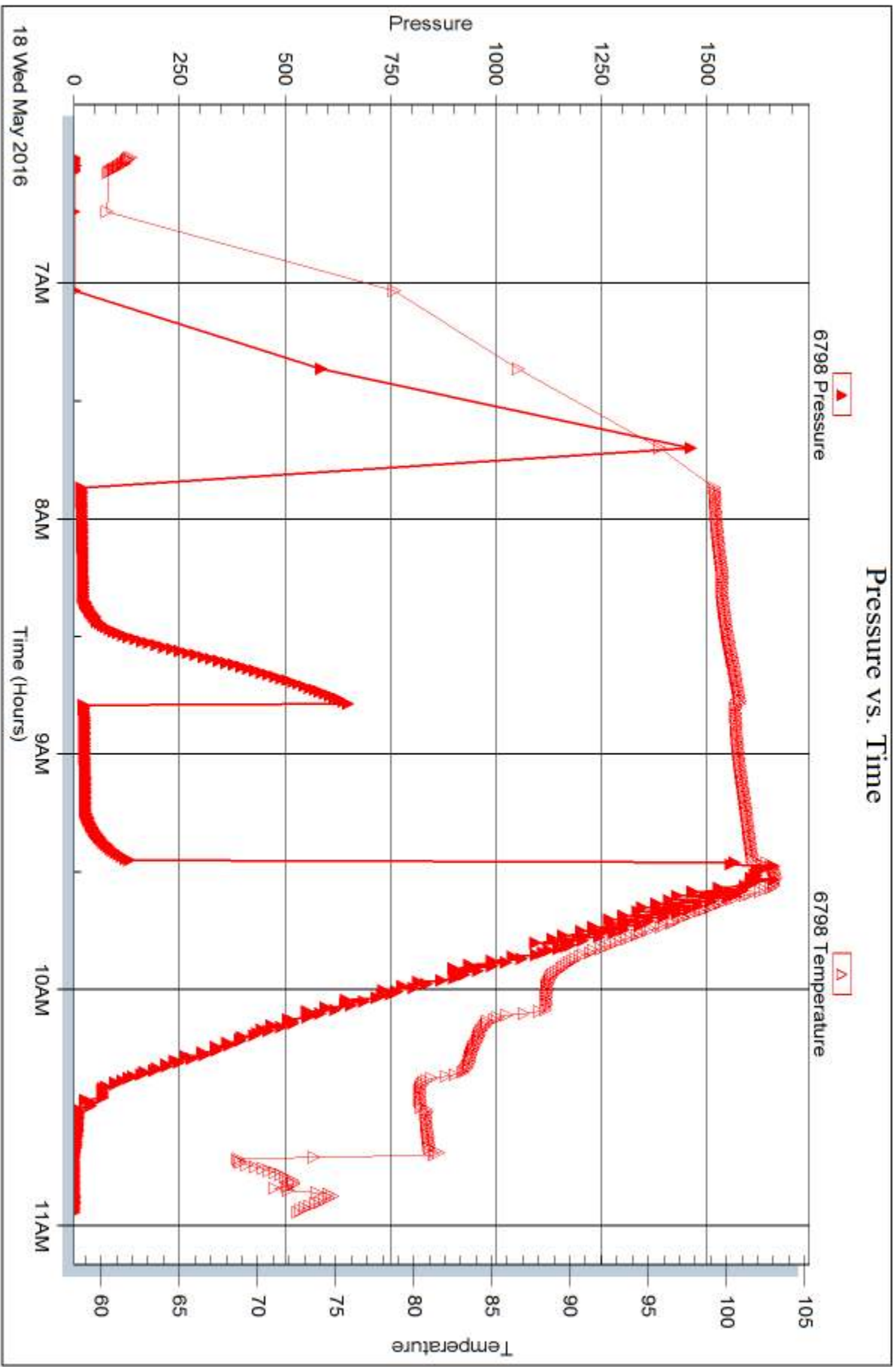
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Stratakan Expl. Inc.**

204 W. Mill St.  
Plainville KS. 67663

ATTN: Jason Alm

### **Andrews #22-1**

#### **22-22s-13w Stafford KS**

Start Date: 2016.05.18 @ 20:24:20

End Date: 2016.05.19 @ 01:36:05

Job Ticket #: 57950                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2016.05.23 @ 15:07:04

Stratakan Expl. Inc. 22-22s-13w Stafford KS Andrews #22-1 DST # 2 LKC "I - K" 2016.05.18





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Stratakan Expl. Inc.  
 204 W. Mill St.  
 Plainville KS. 67663  
 ATTN: Jason Alm

**22-22s-13w Stafford KS**

**Andrews #22-1**

Job Ticket: 57950

**DST#: 2**

Test Start: 2016.05.18 @ 20:24:20

## GENERAL INFORMATION:

Formation: **LKC "I - K"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:52:05  
 Time Test Ended: 01:36:05  
 Interval: **3541.00 ft (KB) To 3605.00 ft (KB) (TVD)**  
 Total Depth: 3605.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Gary Pevoteaux  
 Unit No: 80  
 Reference Elevations: 1895.00 ft (KB)  
 1890.00 ft (CF)  
 KB to GR/CF: 5.00 ft

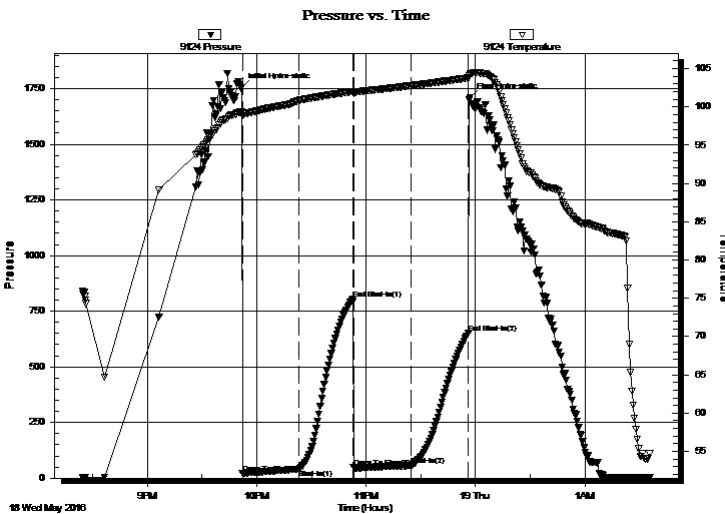
**Serial #: 9124**

**Outside**

Press@RunDepth: 56.77 psig @ 3542.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2016.05.18 End Date: 2016.05.19 Last Calib.: 2016.05.19  
 Start Time: 20:24:25 End Time: 01:36:04 Time On Btm: 2016.05.18 @ 21:51:35  
 Time Off Btm: 2016.05.18 @ 23:57:05

TEST COMMENT: IF:Weak blow . 1/2 - 1".  
 IS:No blow .  
 FF:Weak blow . 1/2 - 3/4".  
 FS:No blow .

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1755.78	99.36	Initial Hydro-static
1	20.39	98.90	Open To Flow (1)
32	41.33	100.84	Shut-In(1)
61	805.09	102.01	End Shut-In(1)
62	47.85	101.79	Open To Flow (2)
93	56.77	102.78	Shut-In(2)
125	653.00	103.78	End Shut-In(2)
126	1710.58	104.22	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	Heavy mud	0.32

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 57950

**DST#: 2**

ATTN: Jason Alm

Test Start: 2016.05.18 @ 20:24:20

## Tool Information

Drill Pipe:	Length: 3430.00 ft	Diameter: 3.80 inches	Volume: 48.11 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 73000.00 lb
			<u>Total Volume: 48.70 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3541.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	84.00 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			3522.00	
Shut In Tool	5.00			3527.00	
Hydraulic tool	5.00			3532.00	
Packer	4.00			3536.00	20.00 Bottom Of Top Packer
Packer	5.00			3541.00	
Stubb	1.00			3542.00	
Recorder	0.00	9124	Outside	3542.00	
Recorder	0.00	6798	Inside	3542.00	
Perforations	6.00			3548.00	
Blank Spacing	32.00			3580.00	
Perforations	20.00			3600.00	
Bullnose	5.00			3605.00	64.00 Bottom Packers & Anchor

**Total Tool Length: 84.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 57950

**DST#: 2**

ATTN: Jason Alm

Test Start: 2016.05.18 @ 20:24:20

## 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:

5000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Heavy mud	0.320

Total Length: 65.00 ft      Total Volume: 0.320 bbl

Num Fluid Samples: 0

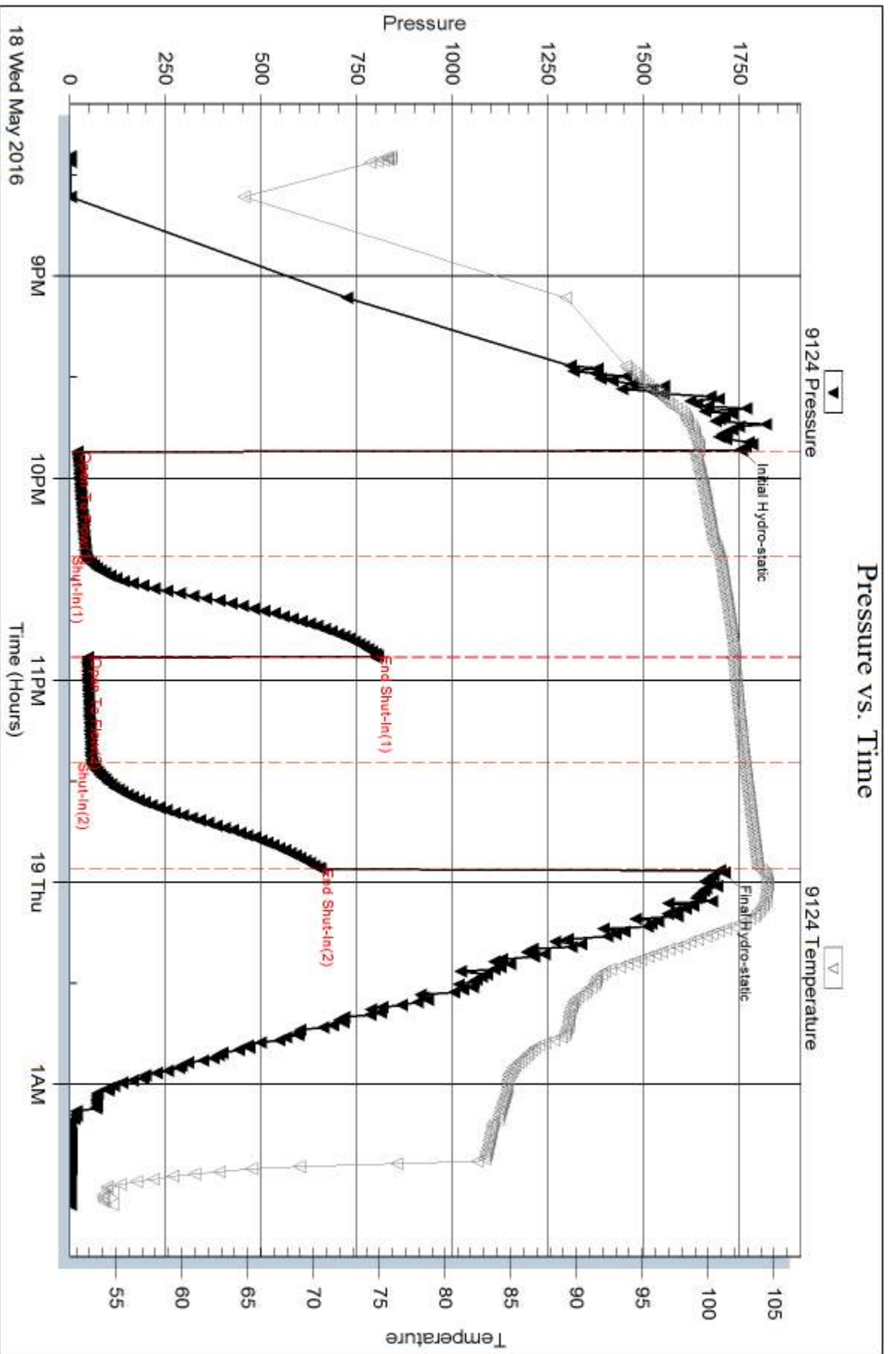
Num Gas Bombs: 0

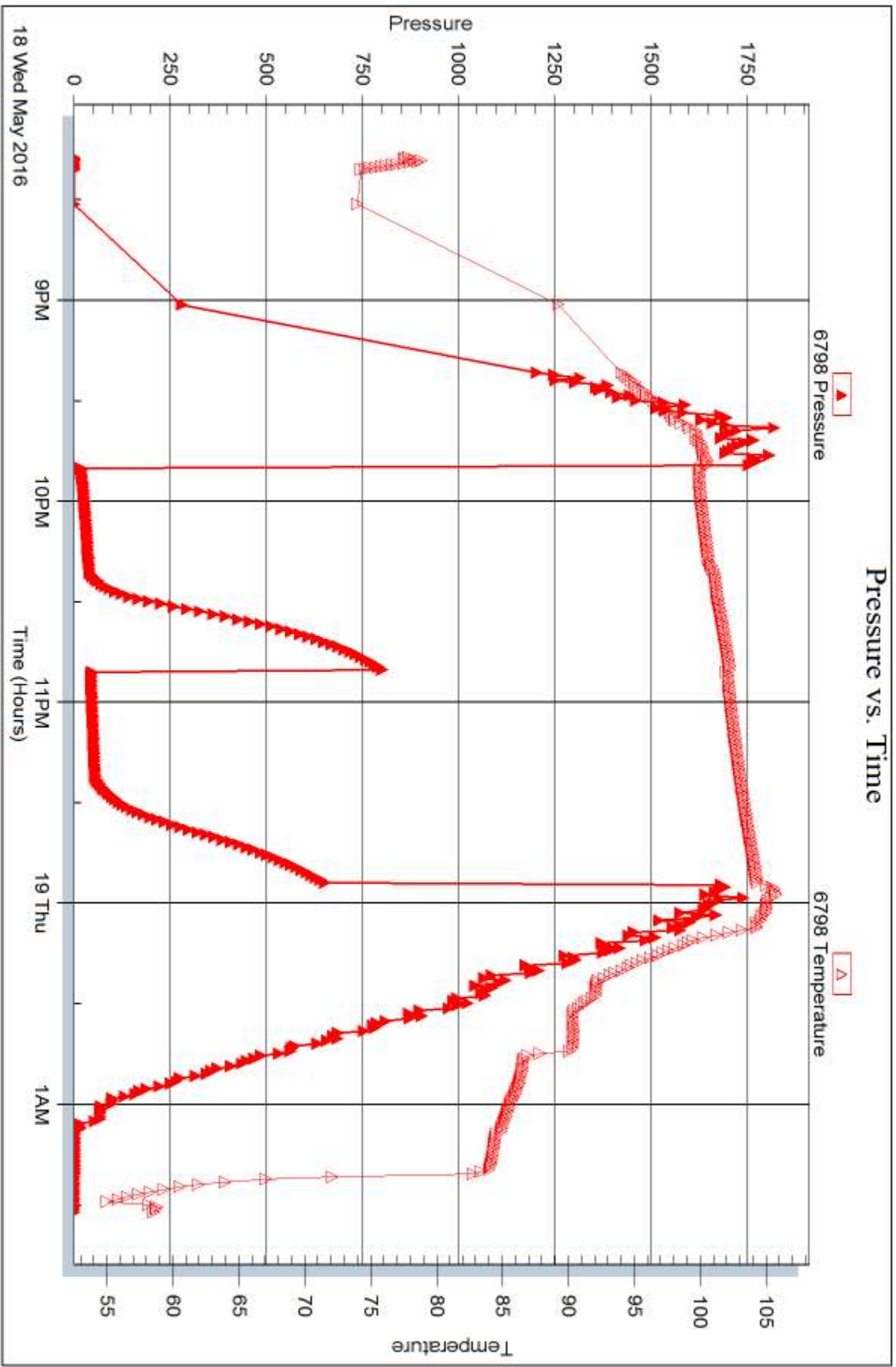
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Stratakan Expl. Inc.**

204 W. Mill St.  
Plainville KS. 67663

ATTN: Jason Alm

### **Andrews #22-1**

#### **22-22s-13w Stafford KS**

Start Date: 2016.05.19 @ 14:21:46

End Date: 2016.05.19 @ 20:16:31

Job Ticket #: 63076                      DST #: 3

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

Printed: 2016.05.23 @ 15:06:38



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Stratakan Expl. Inc.  
 204 W. Mill St.  
 Plainville KS. 67663  
 ATTN: Jason Alm

**22-22s-13w Stafford KS**

**Andrews #22-1**

Job Ticket: 63076

**DST#: 3**

Test Start: 2016.05.19 @ 14:21:46

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 15:32:31  
 Time Test Ended: 20:16:31  
 Interval: **3627.00 ft (KB) To 3740.00 ft (KB) (TVD)**  
 Total Depth: 3740.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Gary Pevoteaux  
 Unit No: 80  
 Reference Elevations: 1895.00 ft (KB)  
 1890.00 ft (CF)  
 KB to GR/CF: 5.00 ft

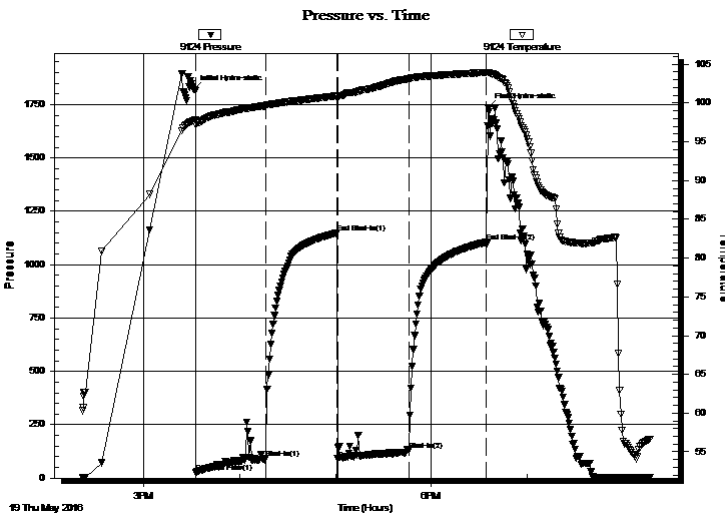
**Serial #: 9124**

**Outside**

Press@RunDepth: 131.09 psig @ 3628.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2016.05.19 End Date: 2016.05.19 Last Calib.: 2016.05.19  
 Start Time: 14:21:51 End Time: 20:16:30 Time On Btm: 2016.05.19 @ 15:31:31  
 Time Off Btm: 2016.05.19 @ 18:35:46

TEST COMMENT: IF:Fair blow . Increase to 6".  
 IS:No blow .  
 FF:Weak to fair blow . 1 - 4".  
 FS:No blow .

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1820.09	97.74	Initial Hydro-static
1	26.57	97.15	Open To Flow (1)
45	94.18	99.66	Shut-In(1)
90	1148.20	100.91	End Shut-In(1)
90	90.04	100.62	Open To Flow (2)
135	131.09	103.13	Shut-In(2)
183	1105.40	103.96	End Shut-In(2)
185	1734.00	103.90	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
100.00	WM 26%w 74%m	0.49
100.00	WM 15%w 85%m	1.22

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 63076

**DST#: 3**

ATTN: Jason Alm

Test Start: 2016.05.19 @ 14:21:46

## Tool Information

Drill Pipe:	Length: 3493.00 ft	Diameter: 3.80 inches	Volume: 49.00 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 49.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3627.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	113.00 ft			
Tool Length:	133.00 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			3608.00	
Shut In Tool	5.00			3613.00	
Hydraulic tool	5.00			3618.00	
Packer	4.00			3622.00	20.00 Bottom Of Top Packer
Packer	5.00			3627.00	
Stubb	1.00			3628.00	
Recorder	0.00	9124	Outside	3628.00	
Recorder	0.00	6798	Inside	3628.00	
Perforations	6.00			3634.00	
Blank Spacing	95.00			3729.00	
Perforations	6.00			3735.00	
Bullnose	5.00			3740.00	113.00 Bottom Packers & Anchor

**Total Tool Length: 133.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 63076

**DST#: 3**

ATTN: Jason Alm

Test Start: 2016.05.19 @ 14:21:46

## 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:

41000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	WM 26%w 74%m	0.492
100.00	WM 15%w 85%m	1.221

Total Length: 200.00 ft      Total Volume: 1.713 bbl

Num Fluid Samples: 0

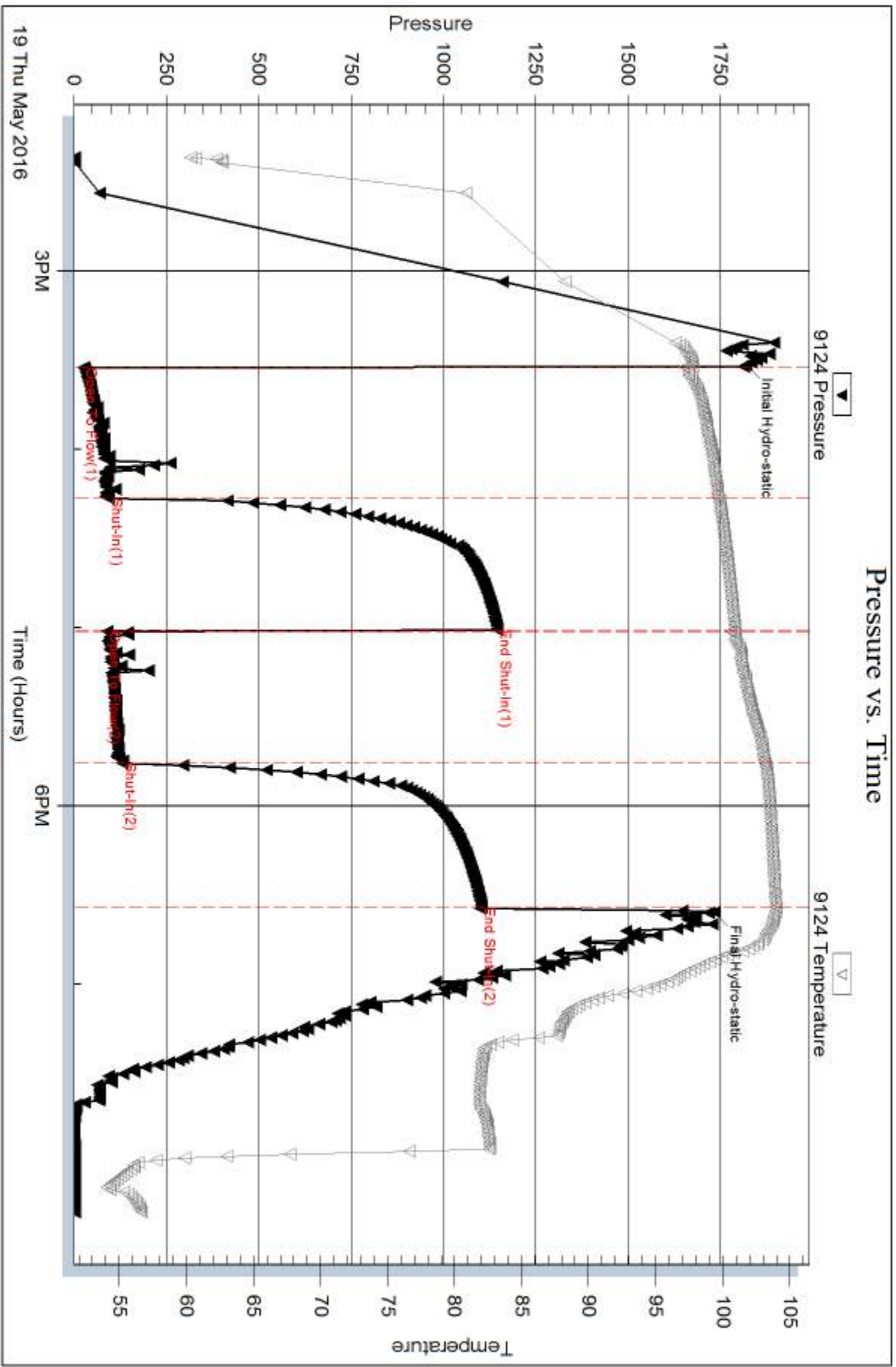
Num Gas Bombs: 0

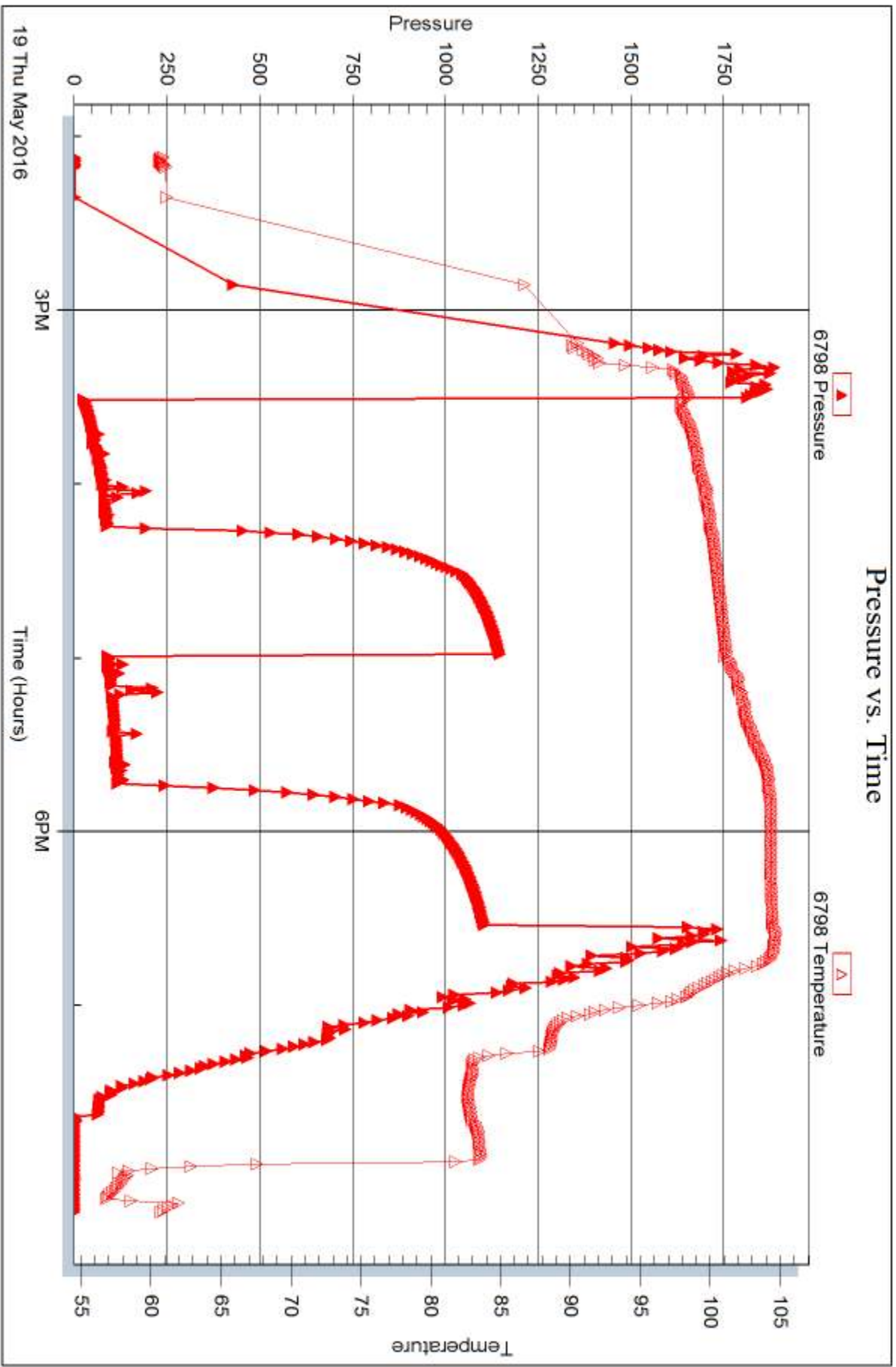
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .12 @ 67deg







## DRILL STEM TEST REPORT

Prepared For: **Stratakan Expl. Inc.**

204 W. Mill St.  
Plainville KS. 67663

ATTN: Jason Alm

### **Andrews #22-1**

#### **22-22s-13w Stafford KS**

Start Date: 2016.05.20 @ 03:58:39

End Date: 2016.05.20 @ 10:24:54

Job Ticket #: 63077                      DST #: 4

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

Printed: 2016.05.23 @ 15:06:03

Stratakan Expl. Inc. 22-22s-13w Stafford KS Andrews #22-1 DST # 4 Simpson Sand 2016.05.20



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Stratakan Expl. Inc.  
 204 W. Mill St.  
 Plainville KS. 67663  
 ATTN: Jason Alm

**22-22s-13w Stafford KS**

**Andrews #22-1**

Job Ticket: 63077

**DST#: 4**

Test Start: 2016.05.20 @ 03:58:39

## GENERAL INFORMATION:

Formation: **Simpson Sand**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:34:09  
 Time Test Ended: 10:24:54  
 Interval: **3728.00 ft (KB) To 3790.00 ft (KB) (TVD)**  
 Total Depth: 3790.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Gary Pevoteaux  
 Unit No: 80  
 Reference Elevations: 1895.00 ft (KB)  
 1890.00 ft (CF)  
 KB to GR/CF: 5.00 ft

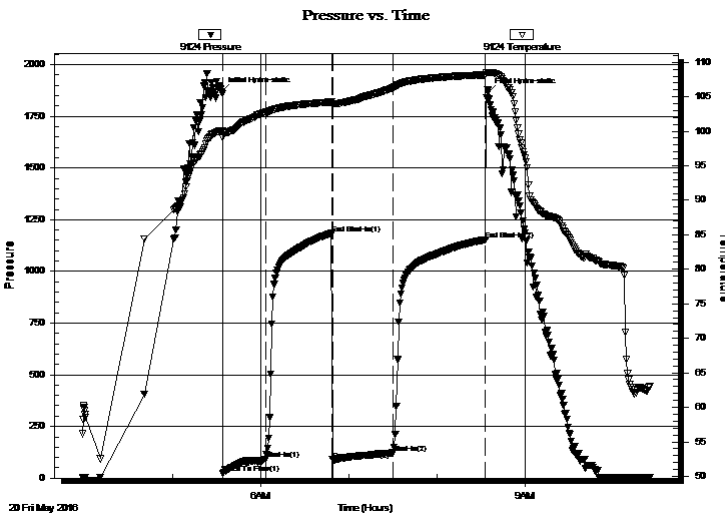
## Serial #: 9124

**Outside**

Press@RunDepth: 121.97 psig @ 3729.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2016.05.20 End Date: 2016.05.20 Last Calib.: 2016.05.20  
 Start Time: 03:58:44 End Time: 10:24:53 Time On Btm: 2016.05.20 @ 05:33:09  
 Time Off Btm: 2016.05.20 @ 08:34:54

TEST COMMENT: IF:Fair to strong blow . B.O.B. in 28 mins.  
 IS:Weak blow . 1/2".  
 FF:Strong blow . B.O.B. in 16 mins.  
 FS:Weak blow . 1 - 3".

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1867.40	100.06	Initial Hydro-static
1	22.84	99.08	Open To Flow (1)
30	89.84	102.71	Shut-In(1)
75	1183.34	104.24	End Shut-In(1)
76	88.06	104.03	Open To Flow (2)
118	121.97	106.35	Shut-In(2)
180	1153.38	108.17	End Shut-In(2)
182	1863.68	108.50	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	GOCM 51%g 24%o 25%m	0.59
145.00	GMCO 20%g 25%m 55%o	2.03
0.00	450 ft.of GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 63077

**DST#: 4**

ATTN: Jason Alm

Test Start: 2016.05.20 @ 03:58:39

## Tool Information

Drill Pipe:	Length: 3620.00 ft	Diameter: 3.80 inches	Volume: 50.78 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 23000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 51.37 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3728.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	82.00 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			3709.00	
Shut In Tool	5.00			3714.00	
Hydraulic tool	5.00			3719.00	
Packer	4.00			3723.00	20.00 Bottom Of Top Packer
Packer	5.00			3728.00	
Stubb	1.00			3729.00	
Recorder	0.00	9124	Outside	3729.00	
Recorder	0.00	6798	Inside	3729.00	
Perforations	6.00			3735.00	
Blank Spacing	32.00			3767.00	
Perforations	18.00			3785.00	
Bullnose	5.00			3790.00	62.00 Bottom Packers & Anchor

**Total Tool Length: 82.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 63077

**DST#: 4**

ATTN: Jason Alm

Test Start: 2016.05.20 @ 03:58:39

## 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:

9000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GOCM 51%g 24%o 25%m	0.590
145.00	GMCO 20%g 25%m 55%o	2.034
0.00	450 ft.of GIP	0.000

Total Length: 265.00 ft

Total Volume: 2.624 bbl

Num Fluid Samples: 0

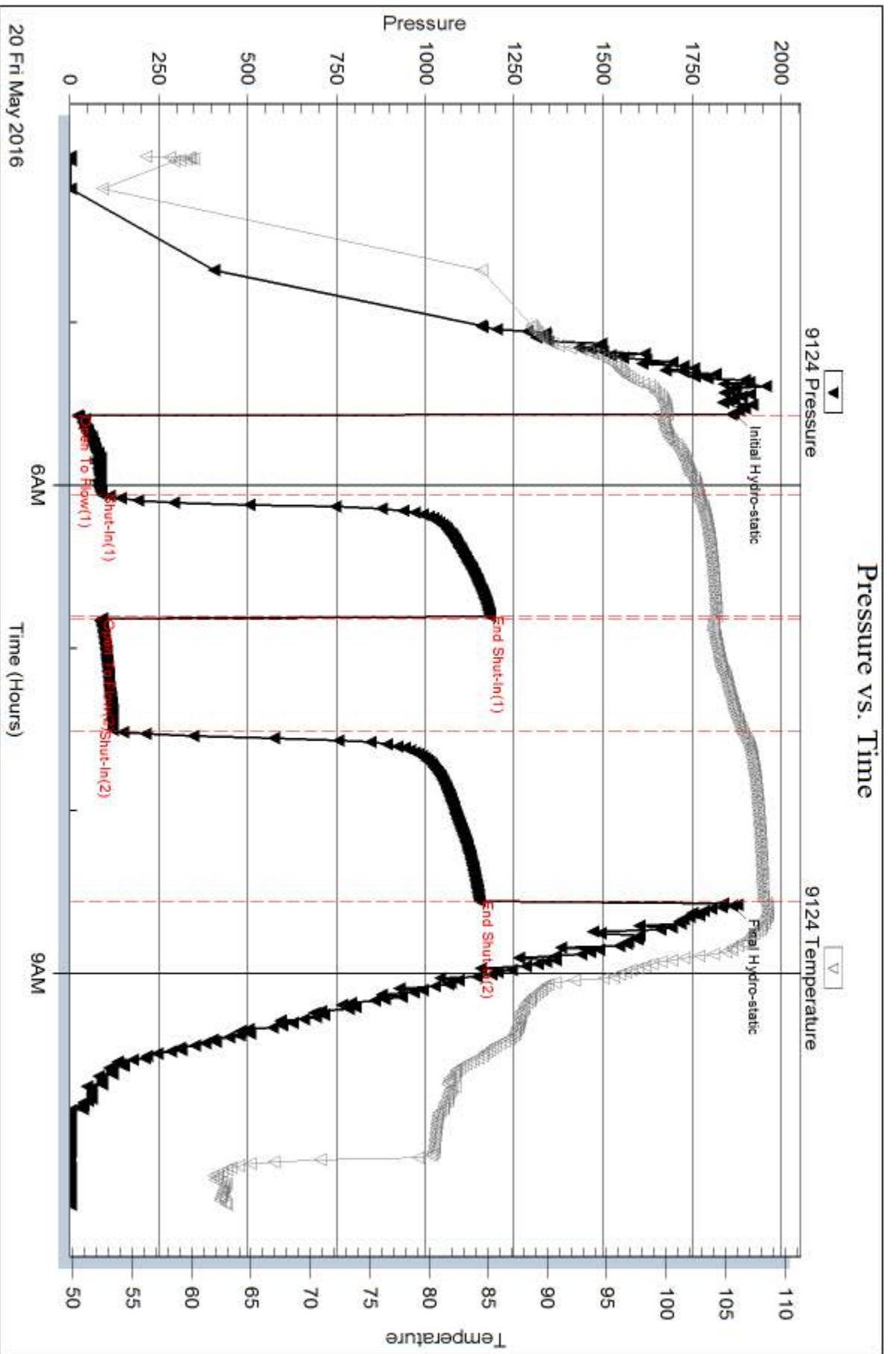
Num Gas Bombs: 0

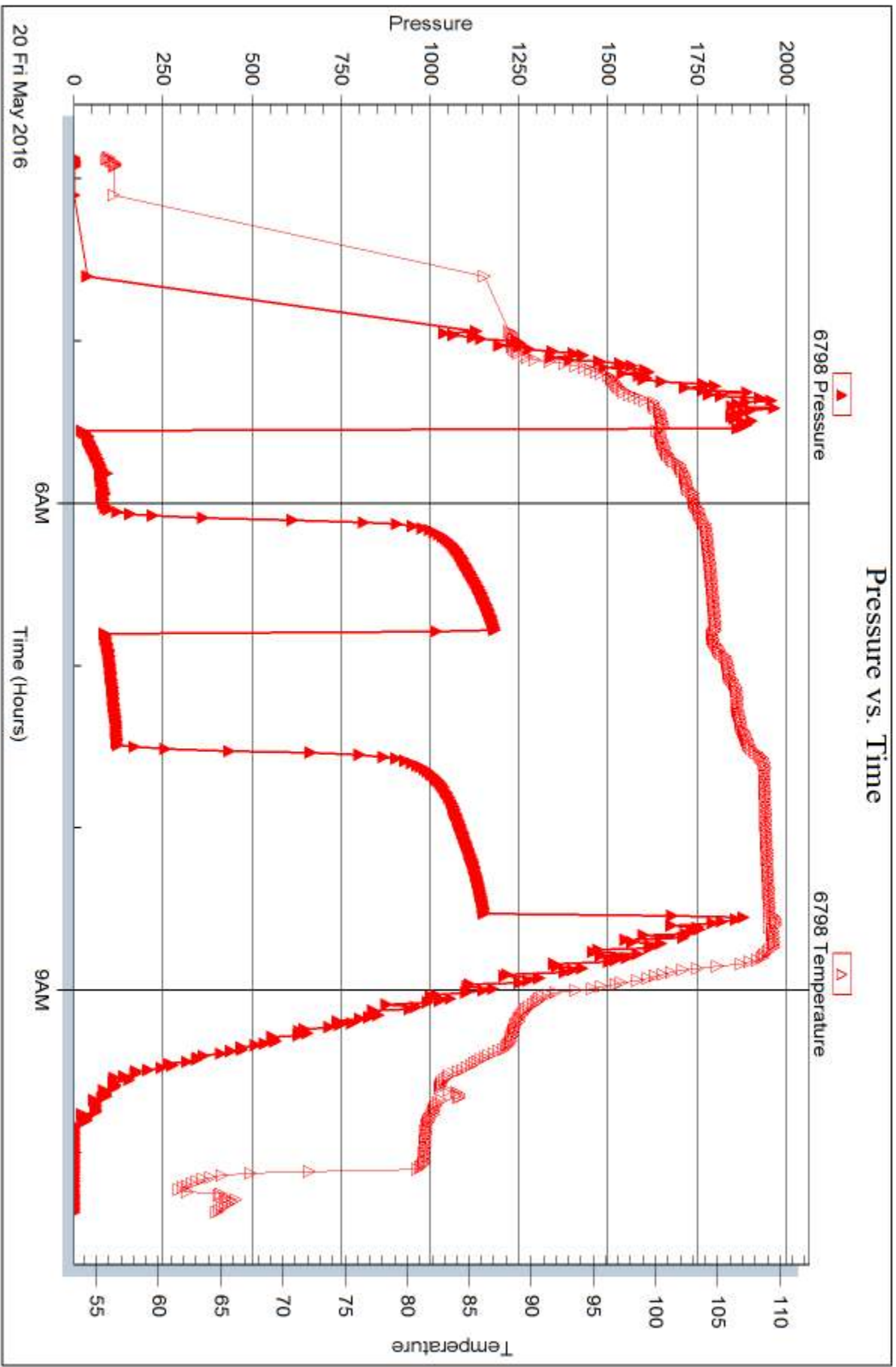
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Stratakan Expl. Inc.**

204 W. Mill St.  
Plainville KS. 67663

ATTN: Jason Alm

### **Andrews #22-1**

#### **22-22s-13w Stafford KS**

Start Date: 2016.05.20 @ 16:35:02

End Date: 2016.05.20 @ 23:58:02

Job Ticket #: 63078                      DST #: 5

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

Printed: 2016.05.23 @ 15:05:19



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Stratakan Expl. Inc.  
 204 W. Mill St.  
 Plainville KS. 67663  
 ATTN: Jason Alm

**22-22s-13w Stafford KS**

**Andrews #22-1**

Job Ticket: 63078

**DST#: 5**

Test Start: 2016.05.20 @ 16:35:02

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:03:47  
 Time Test Ended: 23:58:02  
 Interval: **3809.00 ft (KB) To 3817.00 ft (KB) (TVD)**  
 Total Depth: 3817.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Gary Pevoteaux  
 Unit No: 80  
 Reference Elevations: 1895.00 ft (KB)  
 1890.00 ft (CF)  
 KB to GR/CF: 5.00 ft

## Serial #: 9124

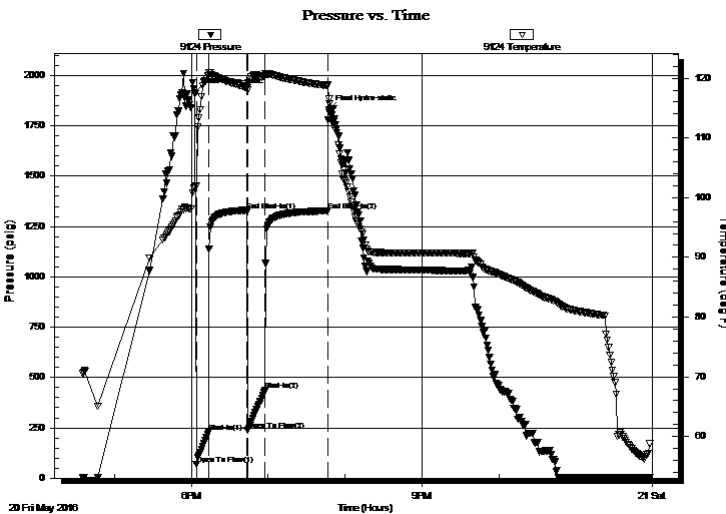
**Outside**

Press@RunDepth: 434.70 psig @ 3810.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2016.05.20 End Date: 2016.05.20 Last Calib.: 2016.05.21  
 Start Time: 16:35:07 End Time: 23:58:01 Time On Btm: 2016.05.20 @ 18:02:32  
 Time Off Btm: 2016.05.20 @ 19:47:32

TEST COMMENT: IF: Strong blow . B.O.B. in 3 mins.  
 IS: No blow .  
 FF: Strong blow . B.O.B. in 3 - 4 mins.  
 FS: No blow .

## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1916.49	101.83	Initial Hydro-static
2	67.79	101.98	Open To Flow (1)
11	229.43	120.45	Shut-In(1)
41	1325.68	118.43	End Shut-In(1)
42	236.17	118.00	Open To Flow (2)
55	434.70	120.38	Shut-In(2)
104	1327.42	118.78	End Shut-In(2)
105	1829.83	116.52	Final Hydro-static



## Recovery

Length (ft)	Description	Volume (bbl)
365.00	SW	4.03
125.00	OCW 20%o 80%w	1.75
380.00	G&WCO 20%g 25%w 55%o	5.33
100.00	Clean oil	1.40
0.00	90 ft.of GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 63078

**DST#: 5**

ATTN: Jason Alm

Test Start: 2016.05.20 @ 16:35:02

## Tool Information

Drill Pipe:	Length: 3684.00 ft	Diameter: 3.80 inches	Volume: 51.68 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: 52.27 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3809.00 ft			Final 60500.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	28.00 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			3790.00	
Shut In Tool	5.00			3795.00	
Hydraulic tool	5.00			3800.00	
Packer	4.00			3804.00	20.00 Bottom Of Top Packer
Packer	5.00			3809.00	
Stubb	1.00			3810.00	
Recorder	0.00	9124	Outside	3810.00	
Recorder	0.00	6798	Inside	3810.00	
Perforations	2.00			3812.00	
Bullnose	5.00			3817.00	8.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>28.00</b>				





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Stratakan Expl. Inc.

**22-22s-13w Stafford KS**

204 W. Mill St.  
Plainville KS. 67663

**Andrews #22-1**

Job Ticket: 63078

**DST#: 5**

ATTN: Jason Alm

Test Start: 2016.05.20 @ 16:35:02

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

21.6 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

33000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
365.00	SW	4.027
125.00	OCW 20%o 80%w	1.753
380.00	G&WCO 20%g 25%w 55%o	5.330
100.00	Clean oil	1.403
0.00	90 ft.of GIP	0.000

Total Length: 970.00 ft      Total Volume: 12.513 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

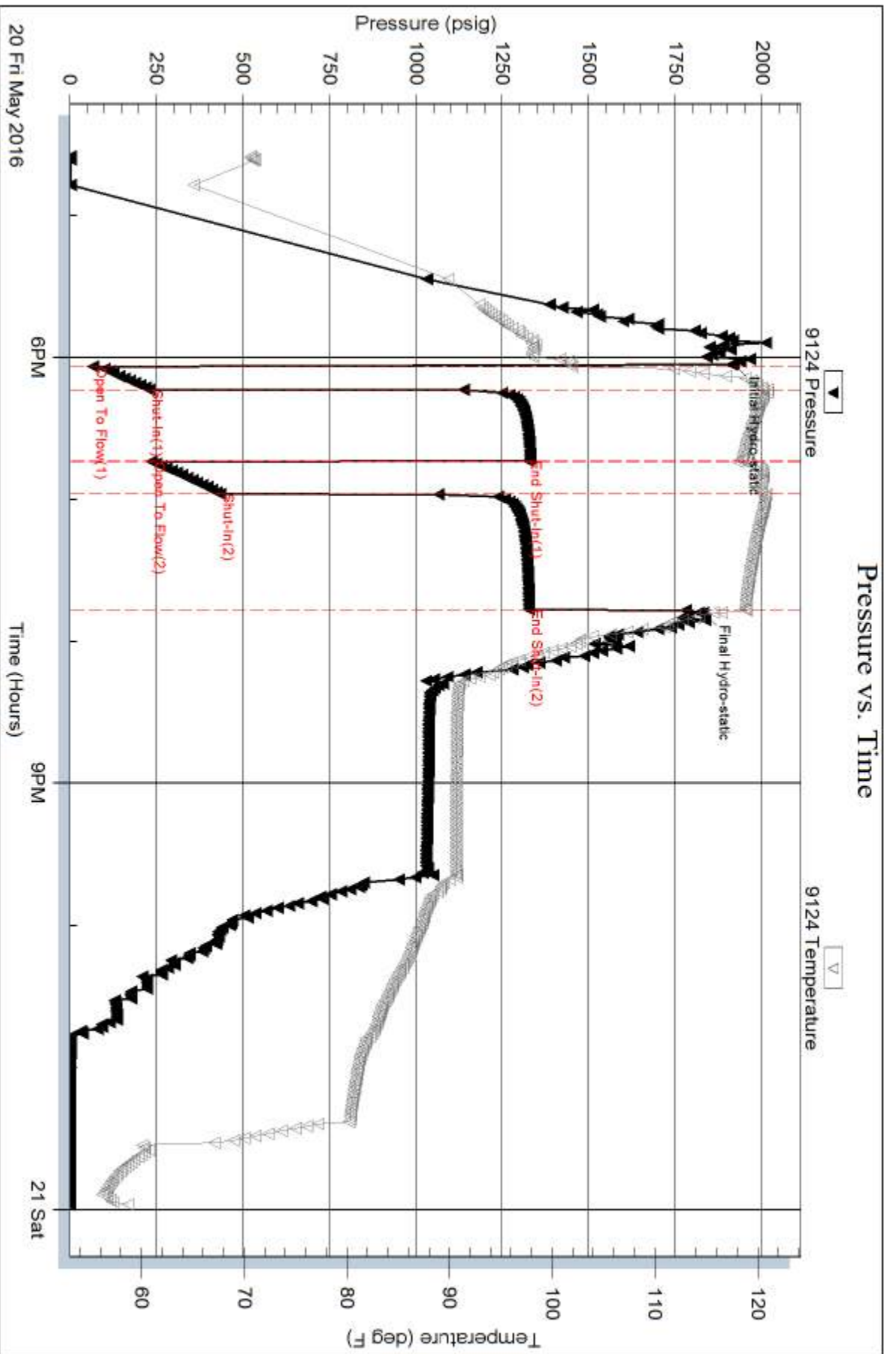
Recovery Comments: Rw .21ohms@70deg

Serial #: 9124

Outside Stratakan Expl. Inc.

Andrew's #22-1

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 63078

Printed: 2016.05.23 @ 15:05:20

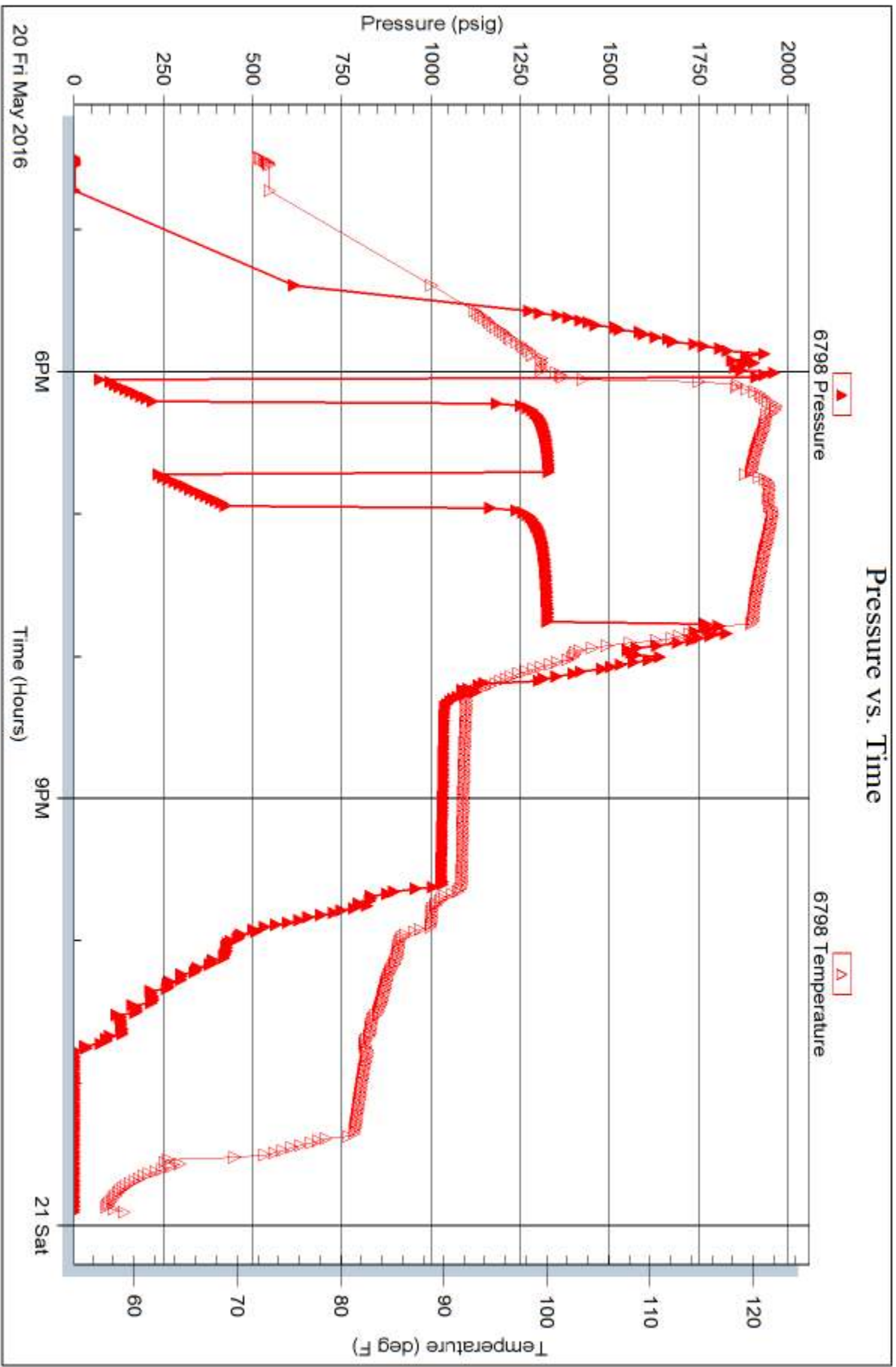
Serial #: 6798

Inside

Stratakan Expl. Inc.

Andrew's #22-1

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 63078

Printed: 2016.05.23 @ 15:05:21



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 57949

4/10

Well Name & No. ANDREWS #22-1 Test No. 1 Date 5-18-2016  
 Company STRATAKAN EXPL. INC. Elevation 1895 KB 1890 GL  
 Address 204 W. MILL ST. RAINVILLE KS. 67663  
 Co. Rep / Geo. JASON ARM Rig WW DRILG. #4  
 Location: Sec. 22 Twp. 22<sup>S</sup> Rge. 13<sup>W</sup> Co. STAFFORD State KS.

Interval Tested 3430 - 3485 Zone Tested LKC "B-F"  
 Anchor Length 55' Drill Pipe Run 3302' Mud Wt: 9.1  
 Top Packer Depth 3425' Drill Collars Run 120' Vis 50  
 Bottom Packer Depth 3430' Wt. Pipe Run 0 WL 8.0cc  
 Total Depth 3485' Chlorides 5,000 ppm System LCM 2<sup>ST</sup>  
 Blow Description IF: weak blow. 1/4-1/2". ISI. No. below.

FF: Very weak blow. (surface) FSI. No. below.

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Dry Mud</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 10 BHT 101° Gravity N/A API RW N.C. @ ~ ° F Chlorides 5,000 ppm  
 (A) Initial Hydrostatic 1728  Test 1050 T-On Location 0425  
 (B) First Initial Flow 20  Jars \_\_\_\_\_ T-Started 0633  
 (C) First Final Flow 23  Safety Joint \_\_\_\_\_ T-Open 0755  
 (D) Initial Shut-In 647  Circ Sub \_\_\_\_\_ T-Pulled 0950  
 (E) Second Initial Flow 25  Hourly Standby \_\_\_\_\_ T-Out 1059  
 (F) Second Final Flow 28  Mileage (66) 49.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 141  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1690  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 30  Day Standby \_\_\_\_\_ Total 1099.50  
 Final Flow 25  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 10 Sub Total 1099.50

Approved By \_\_\_\_\_

Our Representative Jason Armstrong

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. 57950

Well Name & No. ANDREWS # 22-1 Test No. 2 Date 5-18-16  
 Company STRATAKAN EXPL. INC. Elevation 1895 KB 1890 GL  
 Address 204 W. MILL ST. PLAINVILLE KS. 67663  
 Co. Rep / Geo. JASON ALM Rig WW DRUG #4  
 Location: Sec. 22 Twp. 22 Rge. 13<sup>W</sup> Co. STAFFORD State Ks.

Interval Tested 3541-3605' Zone Tested LKC "I-K"  
 Anchor Length 64' Drill Pipe Run 3430' Mud Wt. 9.1  
 Top Packer Depth 3536' Drill Collars Run 120' Vis 50  
 Bottom Packer Depth 3541' Wt. Pipe Run 0 WL 8.0 cc  
 Total Depth 3605' Chlorides 5,000 ppm System LCM 2<sup>th</sup>  
 Blow Description IF: Weak blow 1/2-1", ISI: No blow.

FF: Weak blow 1/2-3/4" FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>Heavy mud</u>				

Rec Total 65 BHT 104° Gravity N/A API RW N.C. @ ~ °F Chlorides 5,000 ppm

(A) Initial Hydrostatic 1756  Test 1050 T-On Location 2005  
 (B) First Initial Flow 20  Jars \_\_\_\_\_ T-Started 2024  
 (C) First Final Flow 41  Safety Joint \_\_\_\_\_ T-Open 2152  
 (D) Initial Shut-In 805  Circ Sub \_\_\_\_\_ T-Pulled 2358  
 (E) Second Initial Flow 48  Hourly Standby \_\_\_\_\_ T-Out 0136  
 (F) Second Final Flow 57  Mileage 66 49.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 653  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1711  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 30  Day Standby \_\_\_\_\_ Total 1099.50  
 Final Flow 30  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 30 Sub Total 1099.50

Approved By \_\_\_\_\_ Our Representative Cony Davatony  
 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. 63076

Well Name & No. ANDREWS #221 Test No. 3 Date 5-19-16  
 Company STRATAKAN EXPL. INC. Elevation 1895 KB 1890 GL  
 Address 201 W. Mill St. Plainville Ks. 67663  
 Co. Rep / Geo. JASON ALM Rig WW DRG. #4  
 Location: Sec. 22 Twp. 22<sup>S</sup> Rge. 13<sup>W</sup> Co. STAFFORD State KS.

Interval Tested 3627 - 3740' Zone Tested VIOLA  
 Anchor Length 113' Drill Pipe Run 3493' Mud Wt. 9.0  
 Top Packer Depth 3622' Drill Collars Run 120' Vis 54  
 Bottom Packer Depth 3627' Wt. Pipe Run 0 WL 10.4cc  
 Total Depth 3740' Chlorides 9,000 ppm System LCM 1<sup>st</sup>  
 Blow Description IF: Fair blow. Increase to 6". ISI: No blow

FF: Wash to fair blow. 1-4". FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>100</u>	<u>WM</u>		<u>15</u>	<u>85</u>	
<u>100</u>	<u>WM</u>		<u>26</u>	<u>74</u>	

Rec Total 200 BHT 104° Gravity N/A API RW .12@ 67° F Chlorides 41,000 ppm  
 (A) Initial Hydrostatic 1820  Test 1050 T-On Location 1345  
 (B) First Initial Flow 27  Jars \_\_\_\_\_ T-Started 1421  
 (C) First Final Flow 94  Safety Joint \_\_\_\_\_ T-Open 1532  
 (D) Initial Shut-In 1148  Circ Sub \_\_\_\_\_ T-Pulled 1835  
 (E) Second Initial Flow 90  Hourly Standby \_\_\_\_\_ T-Out 2016  
 (F) Second Final Flow 131  Mileage 60 49.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1105  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1734  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Initial Open 45  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 45  
 Sub Total 0  
 Total 1099.50  
 MP/DST Disc't \_\_\_\_\_  
 Sub Total 1099.50

Approved By \_\_\_\_\_

Our Representative Cory Piotrowski

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. 63077

Well Name & No. ANDREWS # 22-1 Test No. 4 Date 5-20-16  
 Company STRATAKAN EXPL. INC. Elevation 1895 KB 1890 GL  
 Address 204 W. MILL ST. PAINEVILLE KS. 67663  
 Co. Rep / Geo. JASON ALM Rig WW DRIG. #4  
 Location: Sec. 22 Twp. 22 S Rge. 13 W Co. STAFFORD State KS.

Interval Tested 3728 - 3790' Zone Tested SIMPSON SD.  
 Anchor Length 62' Drill Pipe Run 3620' Mud Wt. 9.0  
 Top Packer Depth 3723' Drill Collars Run 120' Vis 53  
 Bottom Packer Depth 3728' Wt. Pipe Run 0 WL 10.4cc  
 Total Depth 3790' Chlorides 9,000 ppm System LCM 1-2#

Blow Description IF: Fair to strong blow, B.O.B. in 28 mins.  
ISI: Weak blow, 1/2"  
FF: Strong blow, B.O.B. in 16 mins. FSI: Weak blow, 1-3"

Rec	Feet of	%gas	%oil	%water	%mud
450	Gas in pipe				
145	GMC0	20	55	25	
120	GOCM	51	24	25	

Rec Total 205 Fluid BHT 108° Gravity N/A API RW N.C. @ ← °F Chlorides 9,000 ppm

(A) Initial Hydrostatic <u>1867</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>0349</u>
(B) First Initial Flow <u>23</u>	<input type="checkbox"/> Jars	T-Started <u>0358</u>
(C) First Final Flow <u>90</u>	<input type="checkbox"/> Safety Joint	T-Open <u>0534</u>
(D) Initial Shut-In <u>1183</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0835</u>
(E) Second Initial Flow <u>88</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1024</u>
(F) Second Final Flow <u>122</u>	<input checked="" type="checkbox"/> Mileage <u>49.50</u>	Comments
(G) Final Shut-In <u>1153</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1864</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1099.50</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1099.50</u>	

Approved By \_\_\_\_\_ Our Representative [Signature]  
 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. 63078

Well Name & No. ANDREWS # 22-1 Test No. 5 Date 5-20-16  
 Company STRATAKAN EXPL. INC. Elevation 1895 KB 1890 GL  
 Address 204 W. MILL ST. PLAINVILLE KS. 67663  
 Co. Rep / Geo. JASON ALM Rig WW DRILL #4  
 Location: Sec. 22 Twp. 22S Rge. 13W Co. STAFFORD State Ks.

Interval Tested 3809-3817' Zone Tested ARBUCKLE  
 Anchor Length 8' Drill Pipe Run 3684' Mud Wt. 9.1  
 Top Packer Depth 3804' Drill Collars Run 120' Vis 52  
 Bottom Packer Depth 3809' Wt. Pipe Run 0 WL 10.4 cc  
 Total Depth 3817' Chlorides 9,000 ppm System LCM 2th  
 Blow Description IF: Strong blow. B.O.B. in 3 mins. IST: No blow.

FF: Strong blow. B.O.B. in 3-4 mins. FST: No blow

Rec	Feet of	%gas	%oil	%water	%mud
90	GIP				
100	Clean oil				
380	G&WCO	20	55	25	
125	OCW	20	80		
365	SW				

Rec Total 970 Fluid BHT 1190 Gravity 21.6 API RW 21 @ 70 °F Chlorides 33000 ppm

(A) Initial Hydrostatic 1916  Test 1050 T-On Location 1609  
 (B) First Initial Flow 68  Jars 1635  
 (C) First Final Flow 229  Safety Joint 1803  
 (D) Initial Shut-In 1326  Circ Sub 1945  
 (E) Second Initial Flow 234  Hourly Standby 2358  
 (F) Second Final Flow 435  Mileage 66.5 49.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1327  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1830  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 10  
 Initial Shut-In 30  
 Final Flow 15  
 Final Shut-In 45

Sub Total 1099.5.0 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Cory P. [Signature]  
 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.