

Confidentiality Requested:

Yes  No

**KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

**Form must be Typed**

**Form must be Signed**

**All blanks must be Filled**

**WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

New Well  Re-Entry  Workover

Oil  WSW  SWD

Gas  DH  EOR

OG  GSW

CM (Coal Bed Methane)

Cathodic  Other (Core, Expl., etc.): \_\_\_\_\_

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

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

Deepening  Re-perf.  Conv. to EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE  NW  SE  SW

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

Datum:  NAD27  NAD83  WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

*(Data must be collected from the Reserve Pit)*

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

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

Submitted Electronically

**KCC Office Use ONLY**

Confidentiality Requested

Date: \_\_\_\_\_

Confidential Release Date: \_\_\_\_\_

Wireline Log Received  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

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

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	--	------------------------------------

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--









**CEMENT TREATMENT REPORT**

Customer: American Warrior  
 City, State: Seward Kansas  
 Field Rep: Kevin Wiles

Well: Hall 1-21  
 County: Stafford Kansas  
 S-T-R: 21-21s-13w

Ticket: wp 3291  
 Date: 8/29/2022k  
 Service: Production casing

**Downhole Information**

Hole Size: 7 7/8 in  
 Hole Depth: 3986 ft  
 Casing Size: 5 1/2 in  
 Casing Depth: 3760 ft  
 Tubing / Liner: in  
 Depth: ft  
 Tool / Packer: ft  
 Tool Depth: ft  
 Displacement: 88.0 bbbls

**Calculated Slurry - Lead**

Blend: H-Long  
 Weight: 15.0 ppg  
 Water / Sx: 6.0 gal / sx  
 Yield: 1.42 ft<sup>3</sup> / sx  
 Annular Bbls / Ft.: bbs / ft.  
 Depth: ft  
 Annular Volume: 0.0 bbbls  
 Excess:  
 Total Slurry: 75.8 bbbls  
 Total Sacks: 300 sx

**Calculated Slurry - Tail**

Blend: H-Long  
 Weight: 15 ppg  
 Water / Sx: 6.0 gal / sx  
 Yield: 1.42 ft<sup>3</sup> / sx  
 Annular Bbls / Ft.: bbs / ft.  
 Depth: ft  
 Annular Volume: 0 bbbls  
 Excess:  
 Total Slurry: 12.6 bbbls  
 Total Sacks: 50 sx

**STAGE TOTAL**  
 BBLs  
 REMARKS

TIME	RATE	PSI	TOTAL BBLs	REMARKS
5:15 PM	-	-	-	on location job and safety
5:30 PM	-	-	-	spot trucks and rig up
	-	-	-	basket joint 2
	-	-	-	turbolizers 1 3 5 7 9 11 13 15 17 19
7:00 PM	-	-	-	start casing in the hole
8:50 PM	-	-	-	casing on bottom and circulate
	-	-	-	
9:05 PM	2.0	-	12.0	plug rat hole 30 sacks plug mouse hole 20 sacks
9:15 PM				start cement down hole
5.0	250.0	61.0	61.0	mix 300 sacks cement
9:40 PM				cement in and shut down
				wash pump and lines
				release plug
9:50 PM				start displacement
5.5	180.0	20.0		
5.5	340.0	40.0		
5.5	480.0	50.0		
5.5	620.0	60.0		
5.5	700.0	70.0		
3.0	700.0	80.0		
3.0	700.0	88.0		
10:15 PM				plug down
				took pressure from 700 to 1500
				release pressure and the plug held

CREW		UNIT	
Cementer:	M Brungardt	916	
Pump Operator:	A Clifton	179/521	
Bulk #1:	F Conteras	523/533	
Bulk #2:			

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.5 bpm	467 psi	569 bbbls





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc.  
 Po Box 399  
 Garden City, Ks. 67849  
 ATTN: Jim Muskgrove

**21-21S-13W Stafford Co**

**Hall 1-21**

Job Ticket: 69537

**DST#: 1**

Test Start: 2022.08.27 @ 18:11:22

## GENERAL INFORMATION:

Formation: **Lansing H-L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:03:32

Time Test Ended: 00:48:12

Test Type: Conventional Bottom Hole (Initial)

Tester: Eric Burgess

Unit No: 80

**Interval: 3438.00 ft (KB) To 3562.00 ft (KB) (TVD)**

Reference Elevations: 1900.00 ft (KB)

Total Depth: 3562.00 ft (KB) (TVD)

1887.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

**Serial #: 8369 Outside**

Press@RunDepth: 514.95 psig @ 3444.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.27 End Date: 2022.08.28

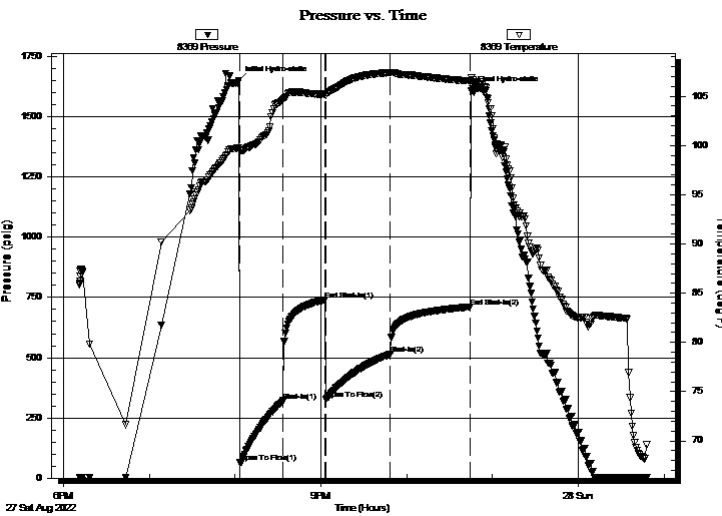
Last Calib.: 2022.08.28

Start Time: 18:11:23 End Time: 00:48:12

Time On Btm: 2022.08.27 @ 20:02:42

Time Off Btm: 2022.08.27 @ 22:45:12

**TEST COMMENT:** IF:Strong Building Blow built 82.81" (30)  
 IS:No Blow Back (30)  
 FF:Strong Building Blow built 55.38" (45)  
 FS:No Blow Back (60)



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1649.74	99.80	Initial Hydro-static
1	64.19	99.41	Open To Flow (1)
31	321.40	104.64	Shut-In(1)
60	739.77	105.17	End Shut-In(1)
61	328.70	105.04	Open To Flow (2)
106	514.95	107.40	Shut-In(2)
162	710.80	106.56	End Shut-In(2)
163	1606.98	106.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
441.00	W 100%W	6.45
252.00	GVSOMCW 5%G 5%O 75%W 15%M	3.69
252.00	GVSOMCW 10%G 5%O 45%W 40%M	3.69
126.00	GOSWCM 5%G 15%W 80%M	1.84

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc.

**21-21S-13W Stafford Co**

Po Box 399  
Garden City, Ks. 67849

**Hall 1-21**

Job Ticket: 69537

**DST#: 1**

ATTN: Jim Muskgrove

Test Start: 2022.08.27 @ 18:11:22

## 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:

35000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
441.00	W 100%W	6.449
252.00	GVSOMCW 5%G 5%O 75%W 15%M	3.685
252.00	GVSOMCW 10%G 5%O 45%W 40%M	3.685
126.00	GOSWCM 5%G 15%W 80%M	1.843

Total Length: 1071.00 ft

Total Volume: 15.662 bbl

Num Fluid Samples: 0

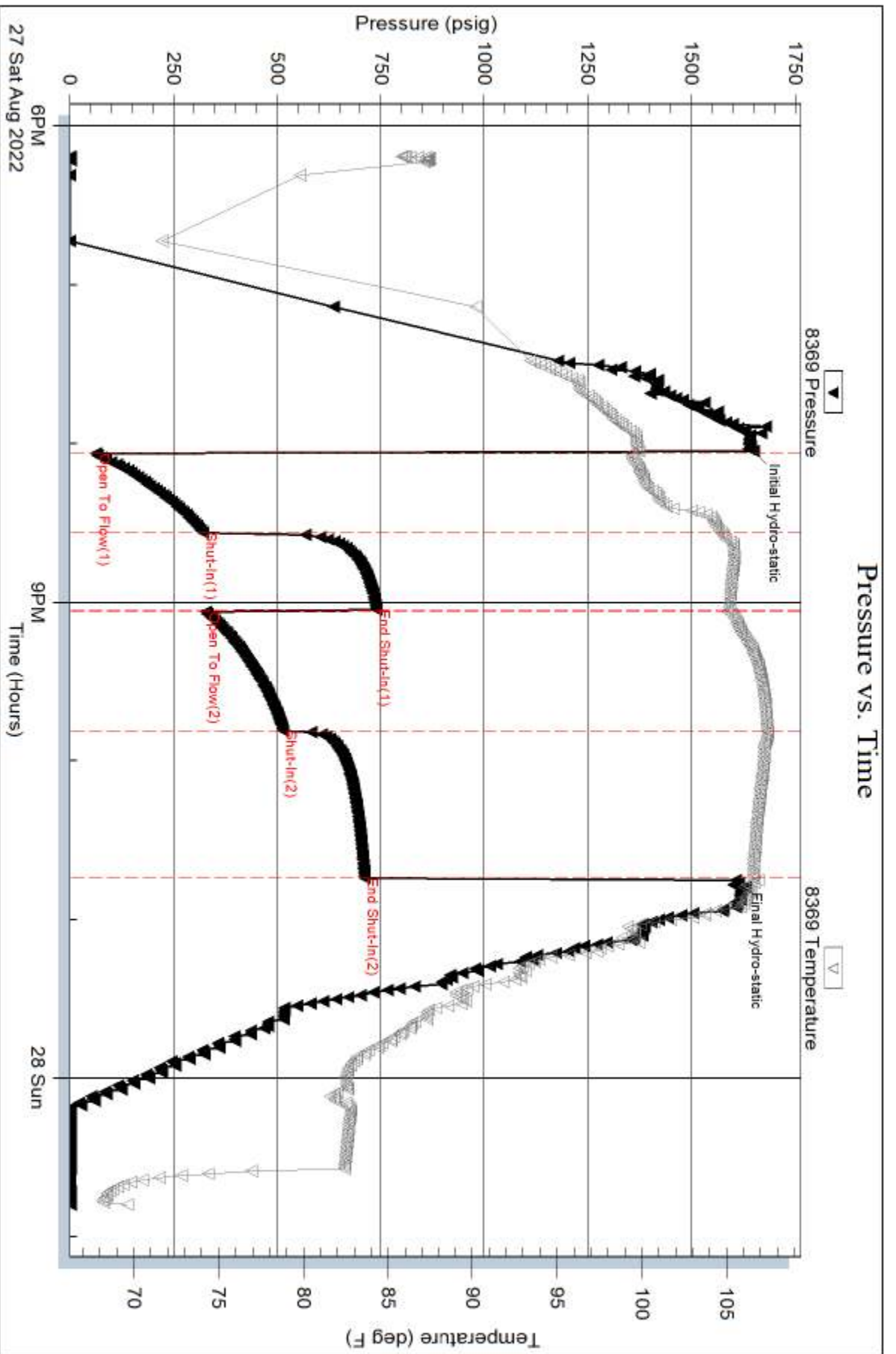
Num Gas Bombs: 0

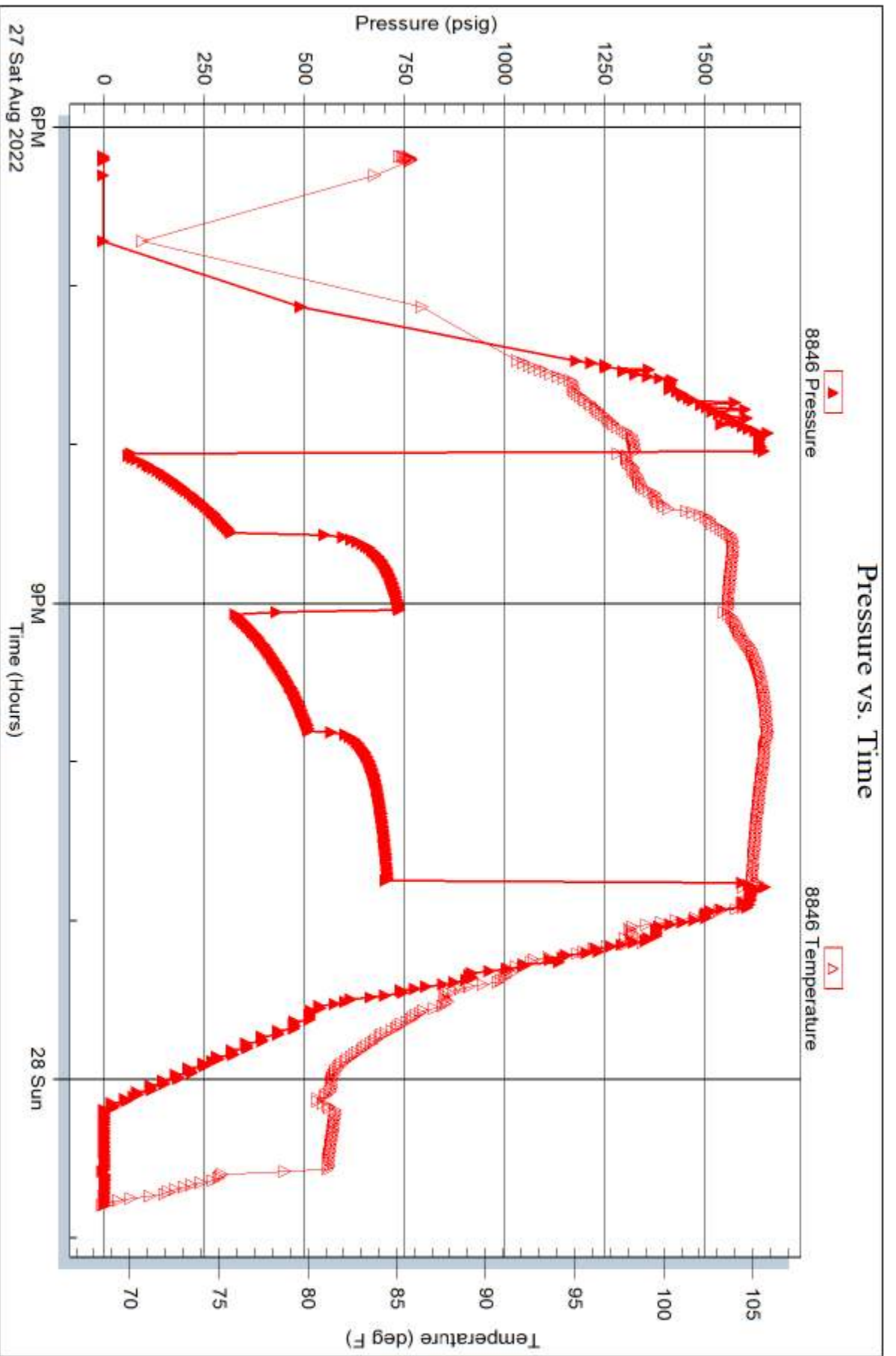
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

PO Box 399  
Garden City, KS 67849

ATTN: Jim Musgrove

**Hall #1-21**

**21-21S-13W Stafford,KS**

Start Date: 2022.08.27 @ 18:11:22

End Date: 2022.08.28 @ 00:48:12

Job Ticket #: 69537                      DST #: 1

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

Printed: 2022.08.31 @ 11:53:05



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc.  
PO Box 399  
Garden City, KS 67849  
ATTN: Jim Musgrove

**21-21S-13W Stafford,KS**

**Hall #1-21**

Job Ticket: 69537

**DST#: 1**

Test Start: 2022.08.27 @ 18:11:22

## GENERAL INFORMATION:

Formation: **LKC H - L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:03:32

Time Test Ended: 00:48:12

Test Type: Conventional Bottom Hole (Initial)

Tester: Eric Burgess

Unit No: 80

**Interval: 3438.00 ft (KB) To 3562.00 ft (KB) (TVD)**

Reference Elevations: 1900.00 ft (KB)

Total Depth: 3562.00 ft (KB) (TVD)

1887.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

**Serial #: 8369**

**Outside**

Press@RunDepth: 514.95 psig @ 3444.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.27

End Date:

2022.08.28

Last Calib.:

2022.08.28

Start Time: 18:11:23

End Time:

00:48:12

Time On Btm:

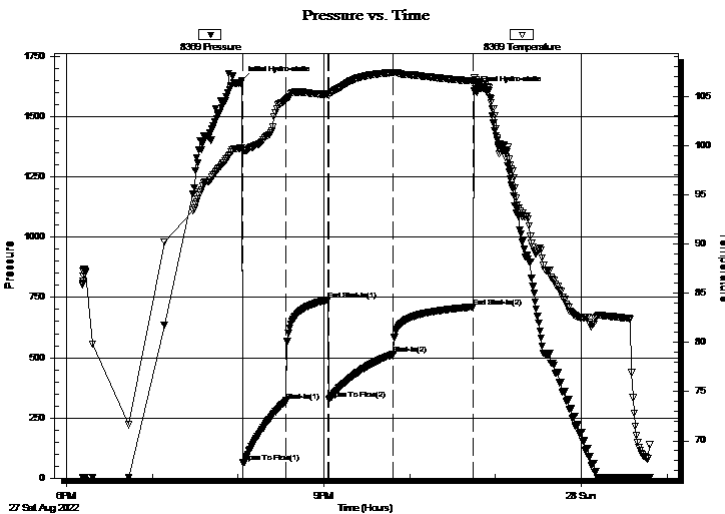
2022.08.27 @ 20:02:42

Time Off Btm:

2022.08.27 @ 22:45:12

**TEST COMMENT:** IF:Strong Building Blow built 82.81" (30)  
IS:No Blow Back (30)  
FF:Strong Building Blow built 55.38" (45)  
FS:No Blow Back (60)

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1649.74	99.80	Initial Hydro-static
1	64.19	99.41	Open To Flow (1)
31	321.40	104.64	Shut-In(1)
60	739.77	105.17	End Shut-In(1)
61	328.70	105.04	Open To Flow (2)
106	514.95	107.40	Shut-In(2)
162	710.80	106.56	End Shut-In(2)
163	1606.98	106.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
441.00	W 100%W	6.45
252.00	GVSOMCW 5%G 5%O 75%W 15%M	3.69
252.00	GVSOMCW 10%G 5%O 45%W 40%M	3.69
126.00	GOSWCM 5%G 15%W 80%M	1.84

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc.

**21-21S-13W Stafford,KS**

PO Box 399  
Garden City, KS 67849

**Hall #1-21**

Job Ticket: 69537

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2022.08.27 @ 18:11:22

## Tool Information

Drill Pipe:	Length: 3436.00 ft	Diameter: 3.88 inches	Volume: 50.25 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 24000.00 lb
			<u>Total Volume: 50.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3438.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	124.00 ft			
Tool Length:	150.00 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			3413.00	
Shut In Tool	5.00			3418.00	
Hydraulic tool	5.00			3423.00	
Em Tool	3.00			3426.00	
Safety Joint	3.00			3429.00	
Packer	4.00			3433.00	26.00 Bottom Of Top Packer
Packer	5.00			3438.00	
Stubb	1.00			3439.00	
Perforations	4.00			3443.00	
Change Over Sub	1.00			3444.00	
Recorder	0.00	8369	Outside	3444.00	
Recorder	0.00	8846	Outside	3444.00	
Blank Spacing	94.00			3538.00	
Change Over Sub	1.00			3539.00	
Perforations	20.00			3559.00	
Bullnose	3.00			3562.00	124.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>150.00</b>				





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

American Warrior Inc.

**21-21S-13W Stafford,KS**

PO Box 399  
Garden City, KS 67849

**Hall #1-21**

Job Ticket: 69537

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2022.08.27 @ 18:11:22

### 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:

35000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
441.00	W 100%W	6.449
252.00	GVSOMCW 5%G 5%O 75%W 15%M	3.685
252.00	GVSOMCW 10%G 5%O 45%W 40%M	3.685
126.00	GOSWCM 5%G 15%W 80%M	1.843

Total Length: 1071.00 ft

Total Volume: 15.662 bbl

Num Fluid Samples: 0

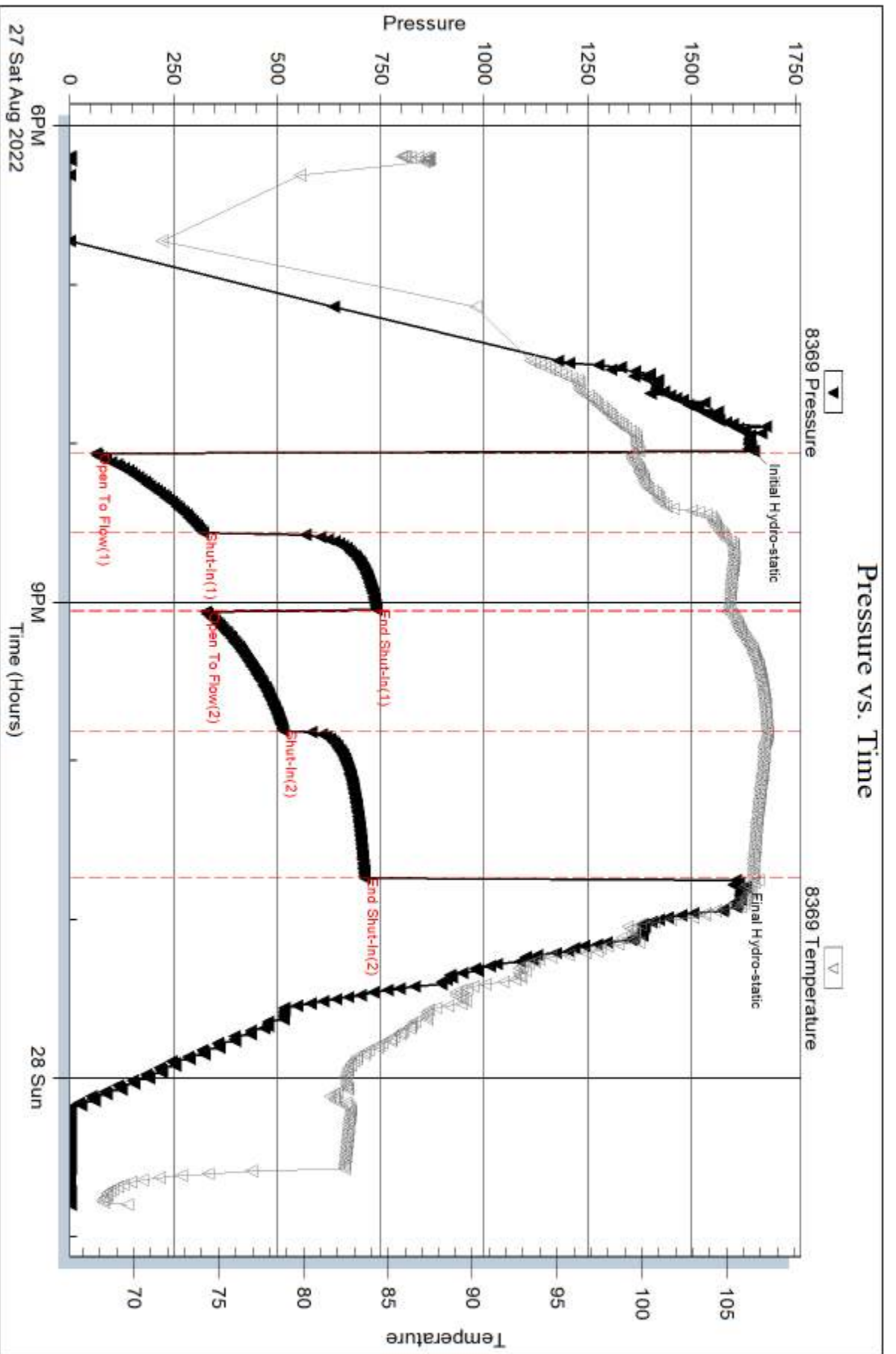
Num Gas Bombs: 0

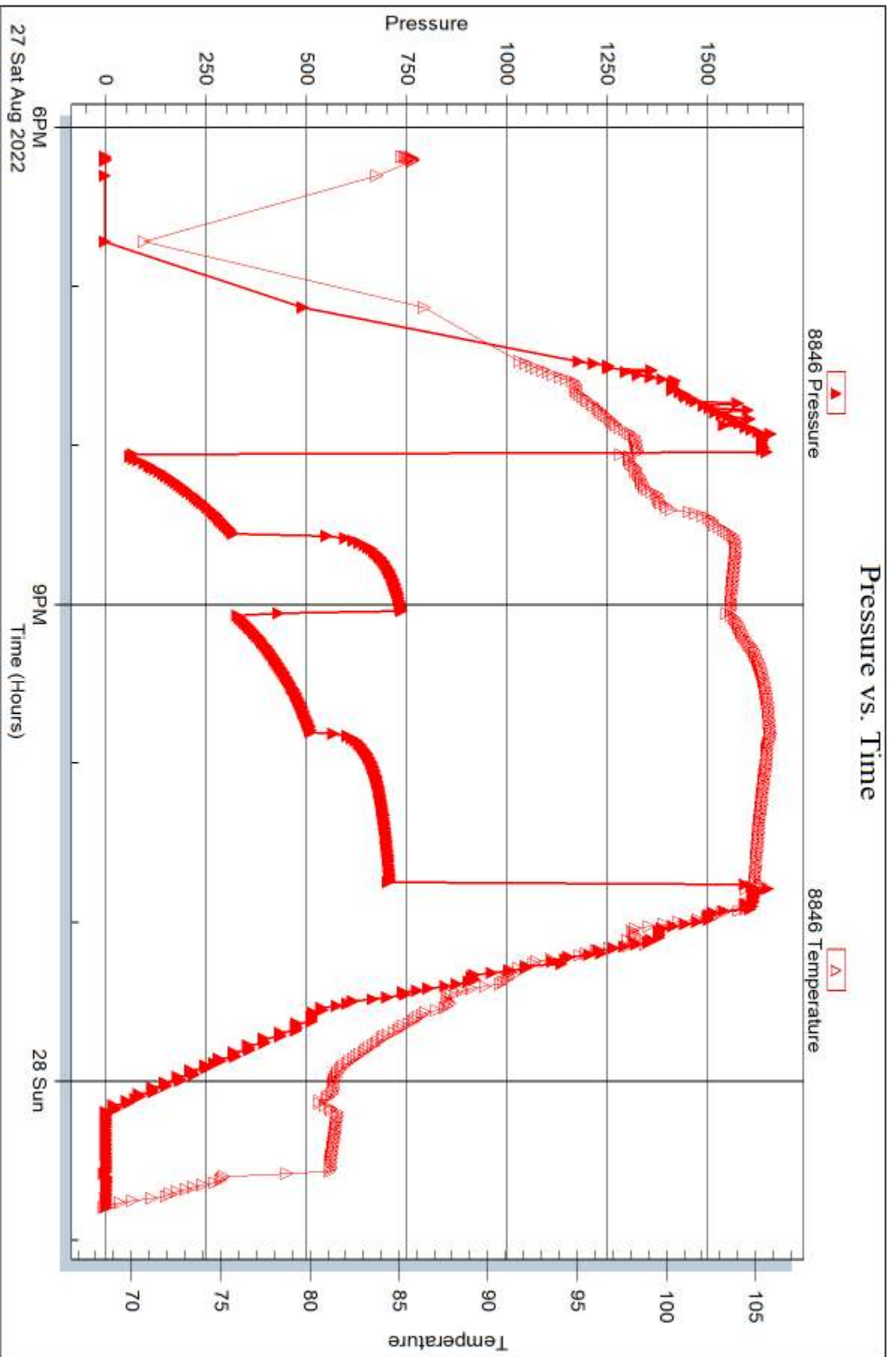
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

PO Box 399  
Garden City, KS 67849

ATTN: Jim Musgrove

**Hall #1-21**

**21-21S-13W Stafford,KS**

Start Date: 2022.08.28 @ 15:28:58

End Date: 2022.08.28 @ 21:07:37

Job Ticket #: 69538                      DST #: 2

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

Printed: 2022.08.31 @ 11:52:23



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc.  
 PO Box 399  
 Garden City, KS 67849  
 ATTN: Jim Musgrove

**21-21S-13W Stafford,KS**

**Hall #1-21**

Job Ticket: 69538

**DST#: 2**

Test Start: 2022.08.28 @ 15:28:58

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 16:56:28  
 Time Test Ended: 21:07:37  
 Interval: **3611.00 ft (KB) To 3691.00 ft (KB) (TVD)**  
 Total Depth: 3562.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Eric Burgess  
 Unit No: 80  
 Reference Elevations: 1900.00 ft (KB)  
 1887.00 ft (CF)  
 KB to GR/CF: 13.00 ft

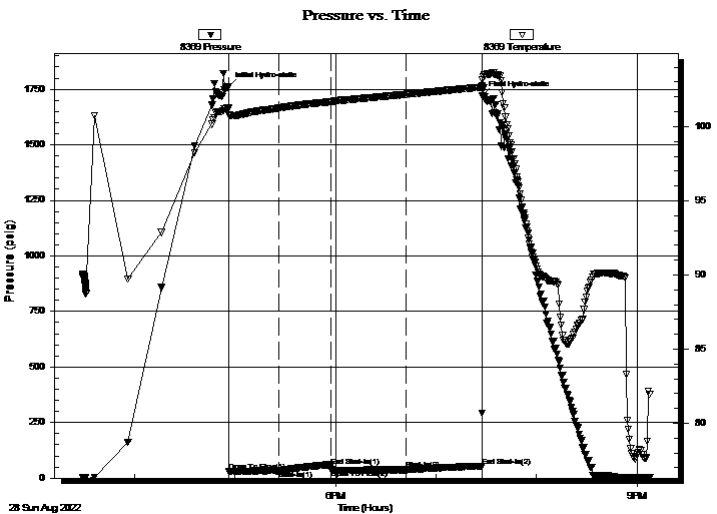
**Serial #: 8369**

**Outside**

Press@RunDepth: 37.82 psig @ 3625.00 ft (KB)  
 Start Date: 2022.08.28 End Date: 2022.08.28  
 Start Time: 15:28:59 End Time: 21:07:38  
 Capacity: 8000.00 psig  
 Last Calib.: 2022.08.28  
 Time On Btm: 2022.08.28 @ 16:55:58  
 Time Off Btm: 2022.08.28 @ 19:27:48

**TEST COMMENT:** IF:Weak Building Blow built 1.75" in bucket (30)  
 IS:No Blow Back (30)  
 FF:Weak Blow built .50" (45)  
 FS:No Blow Back (45)

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.58	101.25	Initial Hydro-static
1	28.84	100.82	Open To Flow (1)
31	33.71	101.25	Shut-In(1)
62	55.35	101.67	End Shut-In(1)
62	37.60	101.67	Open To Flow (2)
107	37.82	102.18	Shut-In(2)
152	54.56	102.66	End Shut-In(2)
152	1719.91	103.19	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
31.00	GOCM 5%G 10%O 85%M	0.45

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc.

**21-21S-13W Stafford,KS**

PO Box 399  
Garden City, KS 67849

**Hall #1-21**

Job Ticket: 69538

**DST#: 2**

ATTN: Jim Musgrove

Test Start: 2022.08.28 @ 15:28:58

## Tool Information

Drill Pipe:	Length: 3595.00 ft	Diameter: 3.88 inches	Volume: 52.57 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 24000.00 lb
			<u>Total Volume: 52.57 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3611.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.00 ft			
Tool Length:	106.00 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			3586.00	
Shut In Tool	5.00			3591.00	
Hydraulic tool	5.00			3596.00	
Em Tool	3.00			3599.00	
Safety Joint	3.00			3602.00	
Packer	4.00			3606.00	26.00 Bottom Of Top Packer
Packer	5.00			3611.00	
Stubb	1.00			3612.00	
Perforations	12.00			3624.00	
Change Over Sub	1.00			3625.00	
Recorder	0.00	8369	Outside	3625.00	
Recorder	0.00	8846	Outside	3625.00	
Blank Spacing	31.00			3656.00	
Change Over Sub	1.00			3657.00	
Perforations	31.00			3688.00	
Bullnose	3.00			3691.00	80.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>106.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

American Warrior Inc.

**21-21S-13W Stafford,KS**

PO Box 399  
Garden City, KS 67849

**Hall #1-21**

Job Ticket: 69538

**DST#: 2**

ATTN: Jim Musgrove

Test Start: 2022.08.28 @ 15:28:58

### 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: 50.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 8500.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
31.00	GOCM 5%G 10%O 85%M	0.453

Total Length: 31.00 ft      Total Volume: 0.453 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

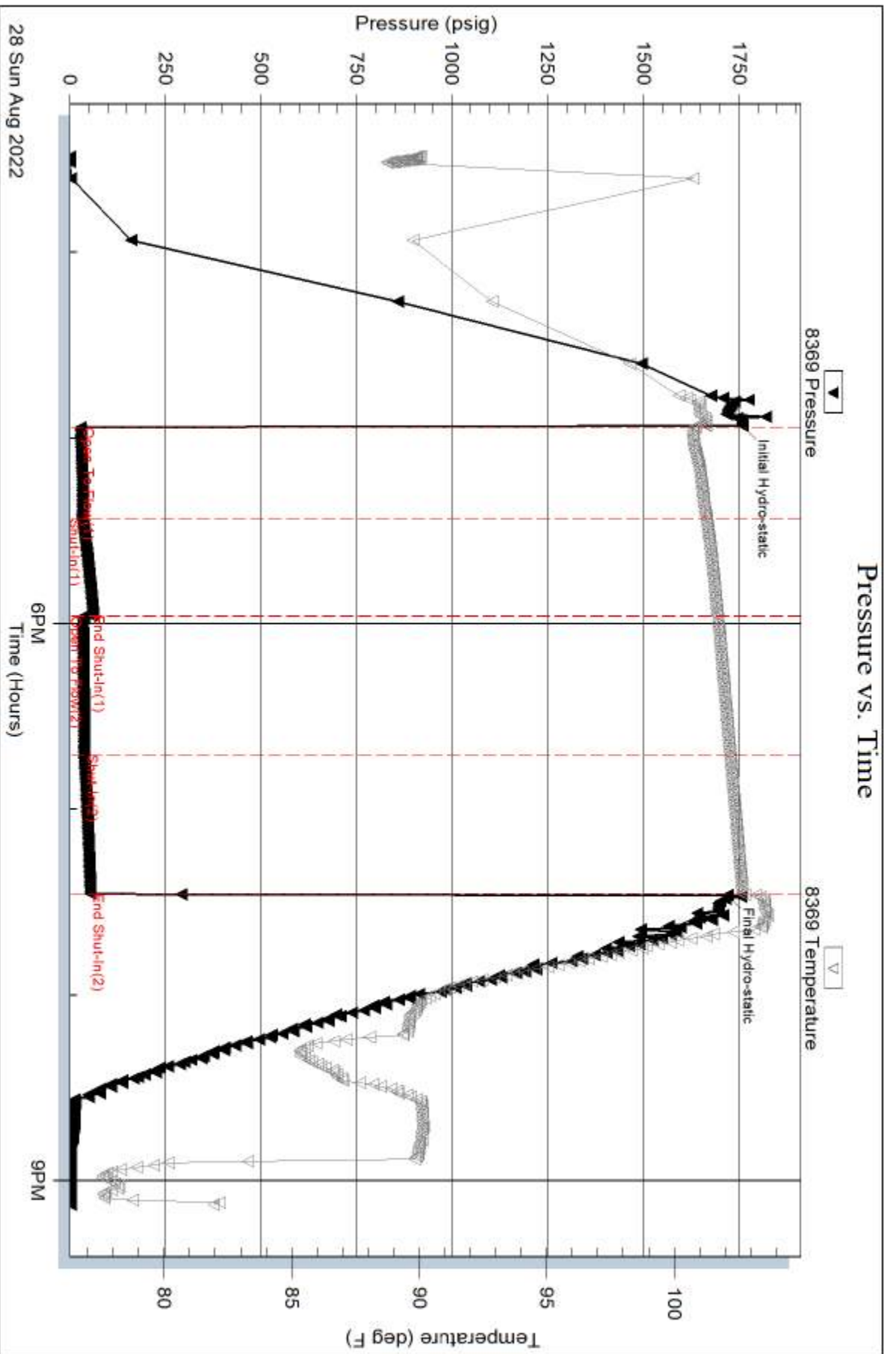
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



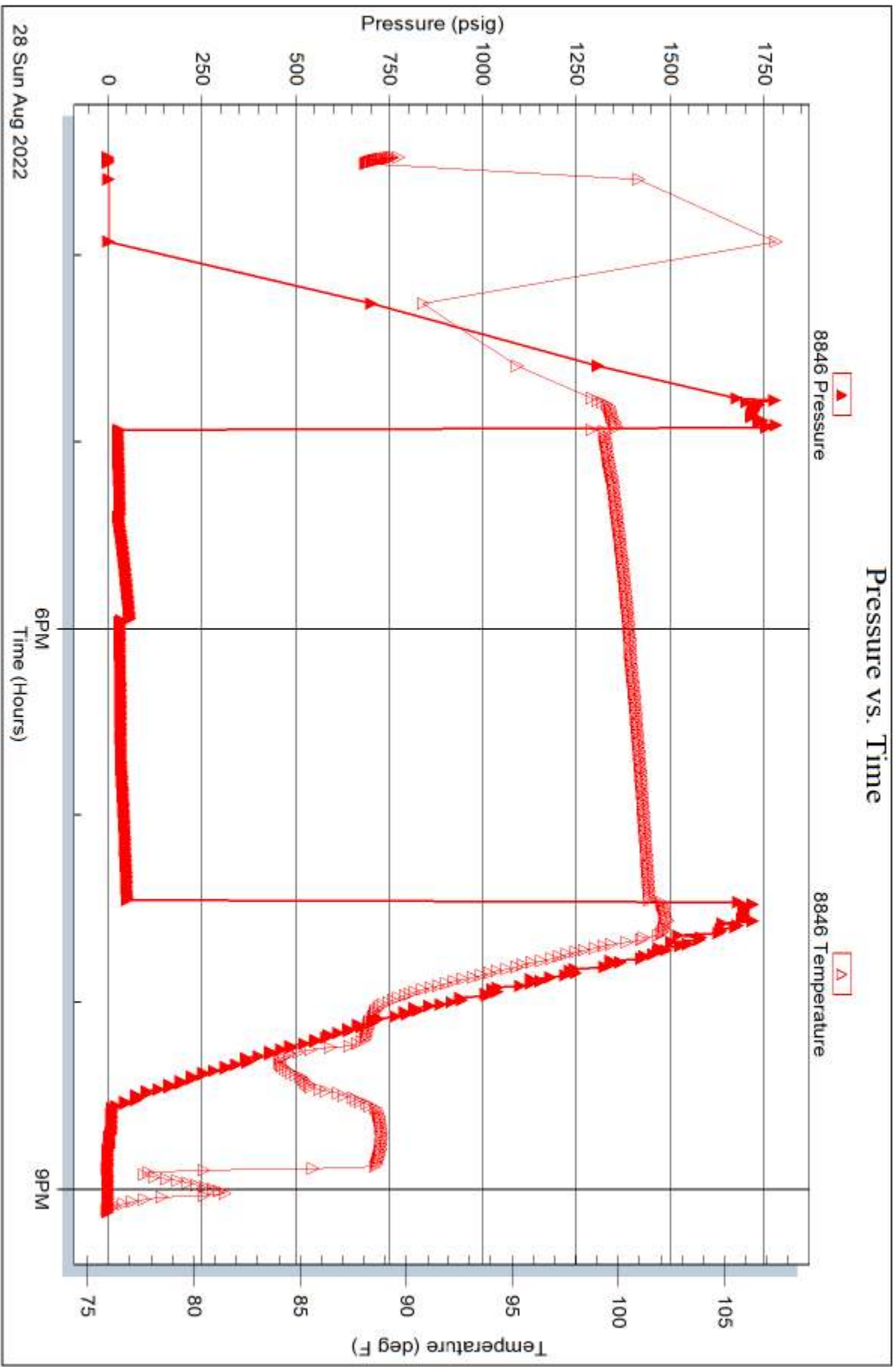


Serial #: 8846

Outside American Warrior Inc.

Hall #1-21

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 69538

Printed: 2022.08.31 @ 11:52:25



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 69537

Well Name & No. Hell 1-21 Test No. 1 Date 8/27/22  
 Company American Warrior Elevation 1900 KB 1887 GL  
 Address Po Box 379 Garden City, KS. 67846  
 Co. Rep / Geo. Jim Muskrove Rig DUKE 7  
 Location: Sec. 21 Twp 21S Rge. 13W Co. Stafford State KS

Interval Tested 3438' - 3562 Zone Tested Lansing H-L  
 Anchor Length 124' Drill Pipe Run 5436 Mud Wt. 9.0  
 Top Packer Depth 3430' Drill Collars Run Ø Vis 45  
 Bottom Packer Depth 3434' Wt. Pipe Run Ø WL 8.8  
 Total Depth 3562' Chlorides 6,000 ppm System LCM 2

Blow Description IF: Strong Building Blow built 82.81" (30)  
ISI: no Blow Back (30)  
FF: Strong Building Blow built 55.38" (45)  
FSE: No Blow Back (60)

Rec	Feet of	%gas	%oil	%water	%mud
126	GOSWCM	5	15	80	
252	GVSOMCW	10	45	40	
252	GVSOMCW	5	75	15	
441	W		100		

Rec Total 1071 BHT 107 Gravity \_\_\_\_\_ API RW .22 @ 64 °F Chlorides 35,000 ppm

- (A) Initial Hydrostatic 1650
- (B) First Initial Flow 64
- (C) First Final Flow 321
- (D) Initial Shut-In 740
- (E) Second Initial Flow 329
- (F) Second Final Flow 515
- (G) Final Shut-In 711
- (H) Final Hydrostatic 1607

- Test 1800
- Jars \_\_\_\_\_
- Safety Joint \_\_\_\_\_
- Circ Sub \_\_\_\_\_
- Hourly Standby \_\_\_\_\_
- Mileage 72 108
- Sampler \_\_\_\_\_
- Straddle \_\_\_\_\_
- Shale Packer \_\_\_\_\_
- Extra Packer \_\_\_\_\_
- Extra Recorder \_\_\_\_\_
- Day Standby \_\_\_\_\_
- Accessibility \_\_\_\_\_
- Sub Total 1908

- T-On Location 1650
- T-Started 1811
- T-Open 2009
- T-Pulled 2255
- T-Out 0048

- Comments \_\_\_\_\_
- EM Tool \_\_\_\_\_
- Ruined Shale Packer \_\_\_\_\_
- Ruined Packer \_\_\_\_\_
- Extra Copies \_\_\_\_\_
- Sub Total 0
- Total 1908

Initial Open 30  
 Initial Shut-In 30  
 Final Flow 45  
 Final Shut-In 60

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

Our Representative [Signature]

MP/DST Disc't \_\_\_\_\_

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. **69538**

Well Name & No. Hall 1-21 Test No. 2 Date 8/28/22  
 Company American Warrior Inc. Elevation 1900 KB 1367 GL  
 Address Po box 399 Gardner city, KS. 67846  
 Co. Rep / Geo. Jim Musgrave Rig Duke 7  
 Location: Sec. 21 Twp 21S Rge. 13W Co. Stefford State KS

Interval Tested 3611 - 3691' Zone Tested Arbuckle  
 Anchor Length 80' Drill Pipe Run 3895 Mud Wt. 8.9  
 Top Packer Depth 3603' Drill Collars Run 0 Vls 50  
 Bottom Packer Depth 3607' Wt. Pipe Run 0 WL 8.8  
 Total Depth 3691' Chlorides 0500 ppm System LCM 2

Blow Description IF: Weak Building flow built 1.75" in bucket (30)  
ISI: no blow back (30)  
FF: Weak Blow .50" in bucket (45)  
FST: No blow back (45)

Rec	Feet of	%gas	%oil	%water	%mud
31	60CM	5	10		85
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 31 BHT 103 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1761  Test 1800 T-On Location 1500  
 (B) First Initial Flow 29  Jars \_\_\_\_\_ T-Started 1528  
 (C) First Final Flow 34  Safety Joint \_\_\_\_\_ T-Open 1701  
 (D) Initial Shut-In 55  Circ Sub \_\_\_\_\_ T-Pulled 1935  
 (E) Second Initial Flow 38  Hourly Standby \_\_\_\_\_ T-Out 2107  
 (F) Second Final Flow 38  Mileage 72 108 Comments \_\_\_\_\_  
 (G) Final Shut-In 55  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1720  Straddle \_\_\_\_\_  EM Tool \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Sub Total 0  
 Accessibility \_\_\_\_\_ Total 1908  
 Sub Total 1908 MP/DST Disc't \_\_\_\_\_

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.

**OPERATOR**

Company: American Warrior Inc.  
 Address: PO Box 399  
 Garden City, KS 67846-0399

Contact Geologist: Kevin Timson  
 Contact Phone Nbr: 620-275-2963  
 Well Name: Hall #1-21  
 Location: 21-21s-13w SE-NE-NW-NE  
 API: 15-185-24115-00-00  
 Pool:  
 State: Kansas

Field: Shaeffer-RothGarn  
 Country: USA

**Scale 1:240 Imperial**

Well Name: Hall #1-21  
 Surface Location: 21-21s-13w SE-NE-NW-NE  
 Bottom Location:  
 API: 15-185-24115-00-00  
 License Number: 4058  
 Spud Date: 8/23/2022 Time: 12:00 AM  
 Region: Stafford  
 Drilling Completed: 8/29/2022 Time: 12:00 AM  
 Surface Coordinates: 602' FNL & 1337' FEL  
 Bottom Hole Coordinates:  
 Ground Elevation: 1887.00ft  
 K.B. Elevation: 1900.00ft  
 Logged Interval: 3100.00ft To: 3986.00ft  
 Total Depth: 3986.00ft  
 Formation: Arbuckle  
 Drilling Fluid Type: Chemical/Fresh Water Gel

**CASING SUMMARY**

	Surface	Intermediate	Main		
Bit Size					
Hole Size					
	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8 5/8 in	352 ft			
Int Casing					
Prod Casing	5 1/2 in	3760 ft	Disposal		

**CASING SEQUENCE**

Type	Hole Size	Casing Size	At
	0.00 in	0.00	0.00 ft

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude:  
 Latitude:  
 N/S Co-ord: 602' FNL  
 E/W Co-ord: 1337' FEL

**LOGGED BY**

Company: James C Musgrove Petroleum LLC  
 Address: 212 Main Street/PO Box 215  
 Claflin, KS 67525

Phone Nbr: 620-588-4250 620-786-0839  
 Logged By: KLG #307

Name: James C Musgrove

**CONTRACTOR**

Contractor:	Duke Drilling		
Rig #:	1		
Rig Type:	mud rotary		
Spud Date:	8/23/2022	Time:	12:00 AM
TD Date:	8/29/2022	Time:	12:00 AM
Rig Release:		Time:	

**ELEVATIONS**

K.B. Elevation:	1900.00ft	Ground Elevation:	1887.00ft
K.B. to Ground:	13.00ft		

**NOTES**

REMARKS:


5 1/2' disposal casing was set and cemented on the American Warrior Inc., Hall # 1-21.

Respectfully Submitted,

James C. Musgrove  
Petroleum Geologist

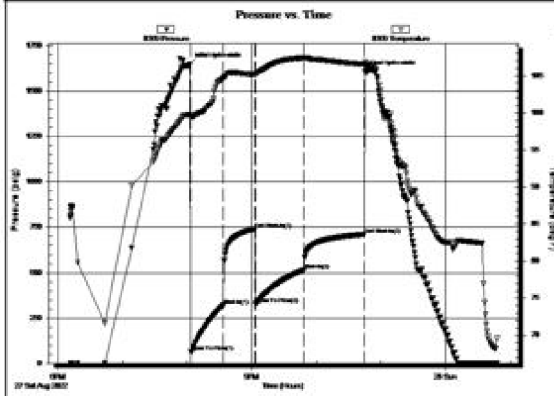
**well comparison sheet**

Formation	HALL #1-21 AMERICAN WARRIOR INC. SE-NE-NW-NE 21-21s-13w				SAMUEL #A-1 LD DRILLING 21-21s-13w				HOFFMAN A #6 PETROLEUM INC. NE-NW-NE 21-21s-13w			
	1900 KB		1892 KB		Relationship		1893 KB		1900 KB		1892 KB	
	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Anhydrite			760	1140	751	1141		-1				
Base Anhydrite												
Heebner			3196	-1296	3196	-1304		8	3184	-1291		-5
Brown Lime			3321	-1421	3321	-1429		8	3314	-1421		0
Lansing			3335	-1435	3334	-1442		7	3326	-1433		-2
Base Kansas City			3558	-1658	3557	-1665		7				
Viola			3582	-1682	3591	-1699		17	3573	-1680		-2
Simpson Shale			3623	-1723	3640	-1748		25				
Arbuckle			3680	-1780	3695	-1803		23	3658	-1765		-15
Rotary Total Depth			3986	-2086	3737	-1845		-241	3705	-1812		-274
Log Total Depth			3978	-2078	3737	-1845		-233	3705	-1812		-266

	<b>DRILL STEM TEST REPORT</b>	
	American Warrior Inc.	<b>21-21S-13W Stafford Co</b>
Po Box 399 Garden City, Ks. 67849	<b>Hall 1-21</b>	Job Ticket: 69537 <b>DST#: 1</b>
ATTN: Jim Muskgrove		Test Start: 2022.08.27 @ 18:11:22
<b>GENERAL INFORMATION:</b>		
Formation: <b>Lansing H-L</b>		Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock	ft (KB)	Tester: Eric Burgess
Time Tool Opened: 20:03:32		Unit No: 80
Time Test Ended: 00:48:12		Reference Elevations: 1900.00 ft (KB)
Interval: <b>3438.00 ft (KB) To 3562.00 ft (KB) (TVD)</b>		1887.00 ft (CF)
Total Depth: 3562.00 ft (KB) (TVD)		KB to GRVCF: 13.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair	
<b>Serial #: 8369</b>	<b>Outside</b>	
Press@RunDepth: 514.95 psig @ 3444.00 ft (KB)	Capacity: 8000.00 psig	
Start Date: 2022.08.27	End Date: 2022.08.28	Last Calib.: 2022.08.28

Start Time: 18:11:22 End Time: 00:48:12 Time On Btm: 2022.08.27 @ 20:02:42  
 Time Off Btm: 2022.08.27 @ 22:45:12

TEST COMMENT: IF:Strong Building Blow built 82.81" (30)  
 IS:No Blow Back (30)  
 FF:Strong Building Blow built 55.36" (45)  
 FS:No Blow Back (60)



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1649.74	99.80	Initial Hydro-static
1	84.19	99.41	Open To Flow (1)
31	321.40	104.64	Shut-In(1)
60	739.77	105.17	End Shut-In(1)
61	328.70	105.04	Open To Flow (2)
106	514.95	107.40	Shut-In(2)
162	710.80	106.56	End Shut-In(2)
163	1606.98	106.86	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
441.00	W 100%W	6.45
252.00	GVSONMCW 5%G 5%O 75%W 15%M	3.69
252.00	GVSONMCW 10%G 5%O 45%W 40%M	3.69
126.00	GOSWCM 5%G 15%W 80%M	1.84

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

Trilobite Testing, Inc Ref. No: 69537 Printed: 2022.08.28 @ 01:32:40

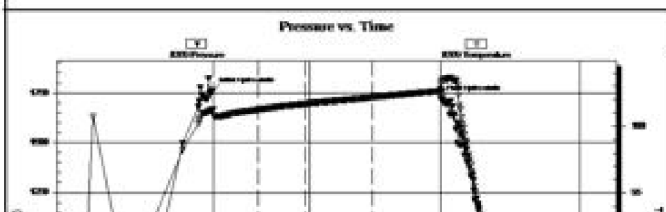


**DRILL STEM TEST REPORT**  
 American Warrior Inc. **21-21S-13W Stafford Co**  
 Po Box 399 **Hall 1-21**  
 Garden City, Ks. 67849 **Job Ticket: 69538 DST#: 2**  
 ATTN: Jim Muskgrove **Test Start: 2022.08.28 @ 15:28:58**

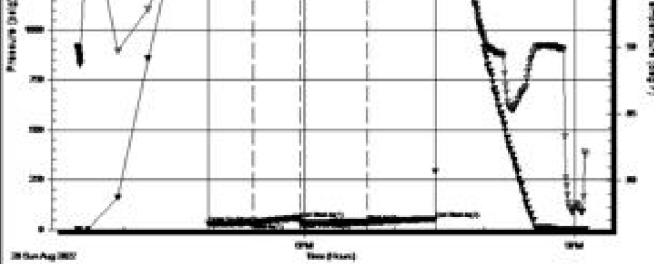
**GENERAL INFORMATION:**  
 Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 16:56:28 Tester: Eric Burgess  
 Time Test Ended: 21:07:37 Unit No: 80  
 Interval: 3611.00 ft (KB) To 3691.00 ft (KB) (TVD) Reference Elevations: 1900.00 ft (KB)  
 Total Depth: 3562.00 ft (KB) (TVD) 1887.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

**Serial #: 8369 Outside**  
 Press@RunDepth: 37.82 psig @ 3625.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2022.08.28 End Date: 2022.08.28 Last Calib.: 2022.08.28  
 Start Time: 15:28:58 End Time: 21:07:37 Time On Btm: 2022.08.28 @ 16:55:58  
 Time Off Btm: 2022.08.28 @ 19:27:48

TEST COMMENT: IF:Weak Building Blow built 1.75" in bucket (30)  
 IS:No Blow Back (30)  
 FF:Weak Blow built .50" (45)  
 FS:No Blow Back (45)



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.58	101.25	Initial Hydro-static
1	28.84	100.82	Open To Flow (1)
31	33.71	101.25	Shut-In(1)
62	55.35	101.67	End Shut-In(1)



62	37.60	101.67	Open To Flow (2)
107	37.82	102.18	Shut-In(2)
152	54.56	102.66	End Shut-In(2)
152	1719.91	103.19	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
31.00	GOCM 5%G 10%O 85%M	0.45

**Gas Rates**

Choke (inches)	Pressure (psig)	Gas Rate (Mcfd)

\* Recovery from multiple tests

Tribotite Testing, Inc.

Ref. No: 69538

Printed: 2022.08.28 @ 21:25:51

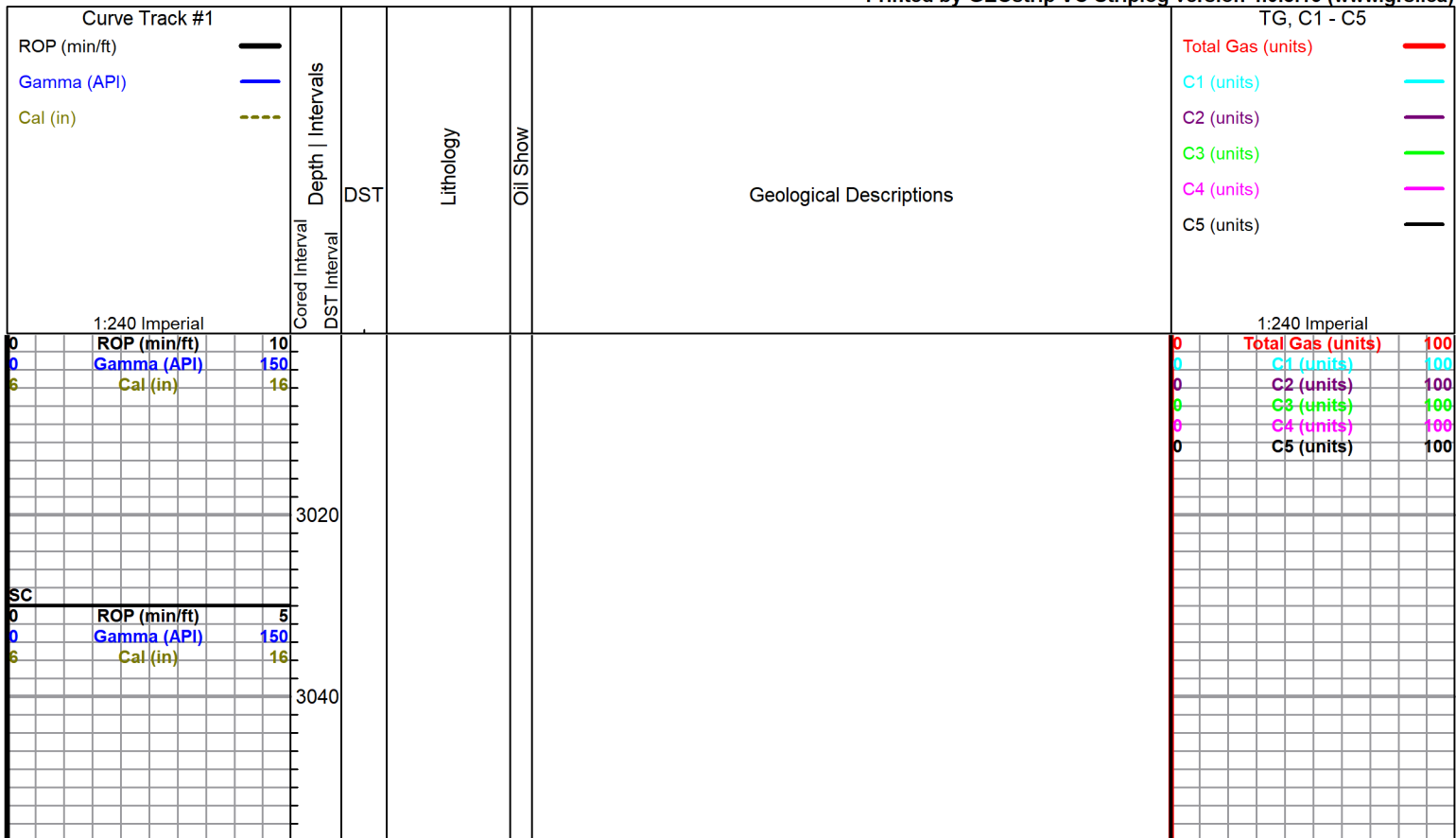
**ROCK TYPES**

Cht	shale, grn	shale, red	Slst
Dolprim	shale, gry	Shcol	
Lmst fw7>	Carbon Sh	Ss	

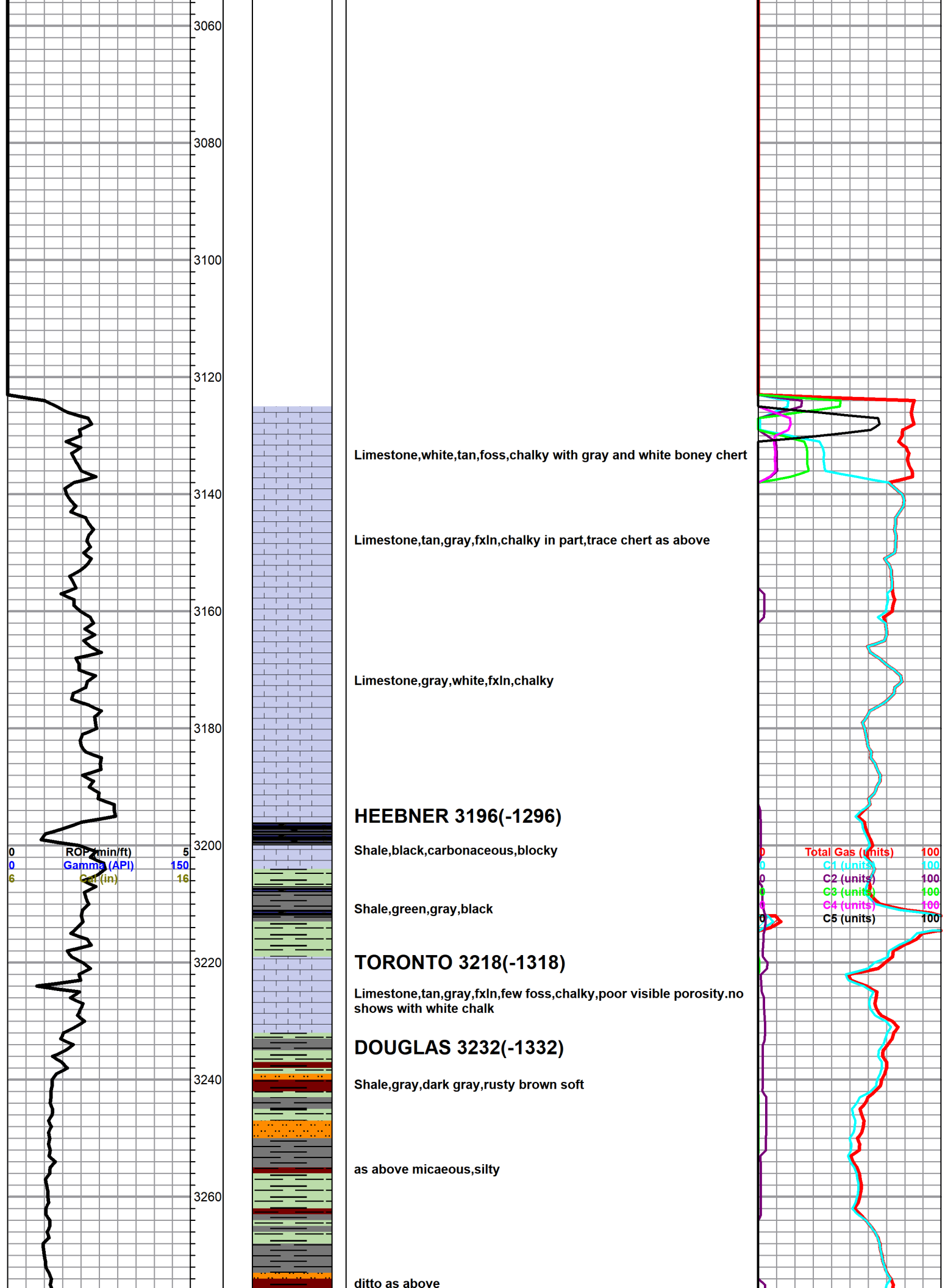
**OTHER SYMBOLS**

<b>Oil Show</b>	<b>DST</b>
● Good Show	■ DST Int
● Fair Show	■ DST alt
○ Poor Show	■ Core
○ Spotted or Trace	tail pipe
○ Questionable Stn	
D Dead Oil Stn	
■ Fluorescence	
* Gas	

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)







3060

3080

3100

3120

Limestone, white, tan, foss, chalky with gray and white boney chert

3140

Limestone, tan, gray, fxln, chalky in part, trace chert as above

3160

Limestone, gray, white, fxln, chalky

3180

**HEEBNER 3196(-1296)**

Shale, black, carbonaceous, blocky

0 ROP (min/ft) 5

0 Gamma (API) 150

6 Cn (in) 16

Shale, green, gray, black

**TORONTO 3218(-1318)**

Limestone, tan, gray, fxln, few foss, chalky, poor visible porosity, no shows with white chalk

**DOUGLAS 3232(-1332)**

Shale, gray, dark gray, rusty brown soft

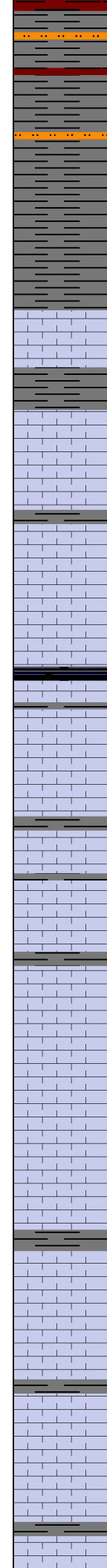
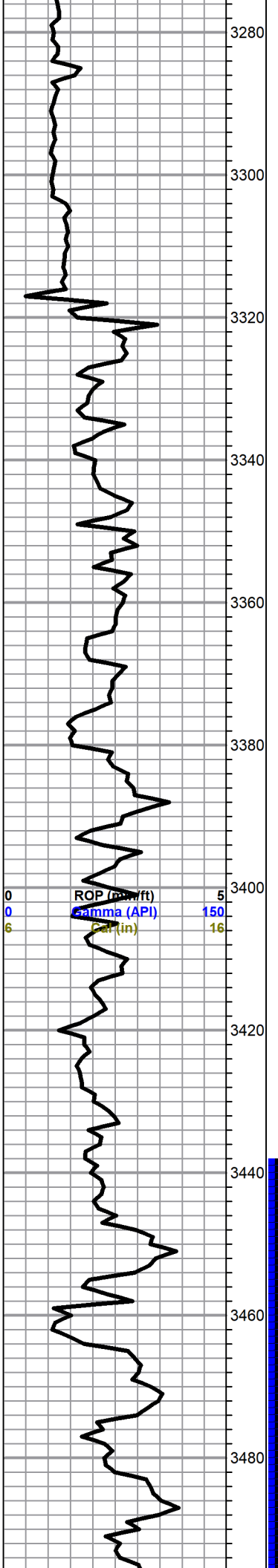
3240

as above micaeous, silty

3260

ditto as above

Total Gas (units) 100  
 C1 (units) 100  
 C2 (units) 100  
 C3 (units) 100  
 C4 (units) 100  
 C5 (units) 100



as above

**BROWN LIME 3321(-1421)**

Limestone,tan,brown,fxln,slightly cherty,dense

Shale,gray,dary gray,soft

**LANSING 3334(-1434)**

Limestone,white,gray,foss,chalky in part,spotted brown stain,no free oil and no odor

Limestone,white,gray,fxln,foss in part,chalky(junk samples)

Limestone,white,gray,fxln,few medium xln,foss,chalky,poor visible porosity

Limestone,white,gray,oolitic/foss,scattered porosity,gray to brown and black stain,trace of free oil and questionable odor

Limestone,gray,oolitic,chalky(dense)

Limestone,gray,foss. in part,chalky,poorly developed porosity,trace black tarry stain,no free oil and no odor

Limestone,white,gray,foss(bioclastic),poor porosity,no shows

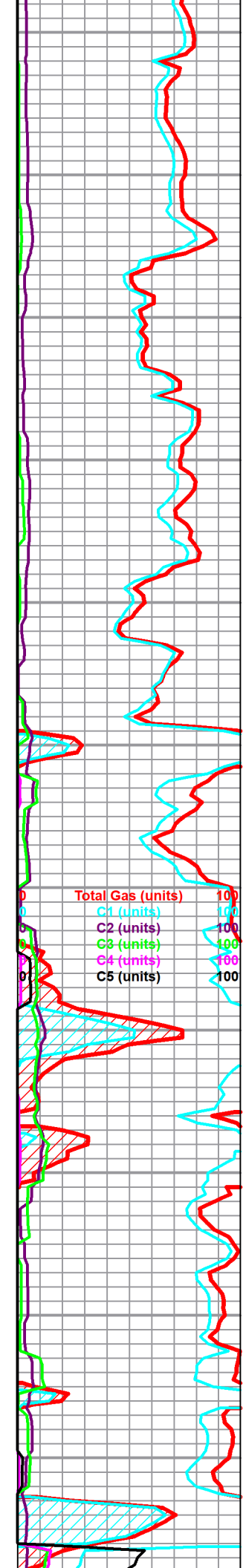
Limestone,gray,dark gray,foss, dense

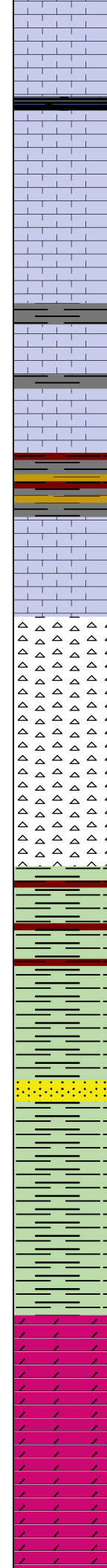
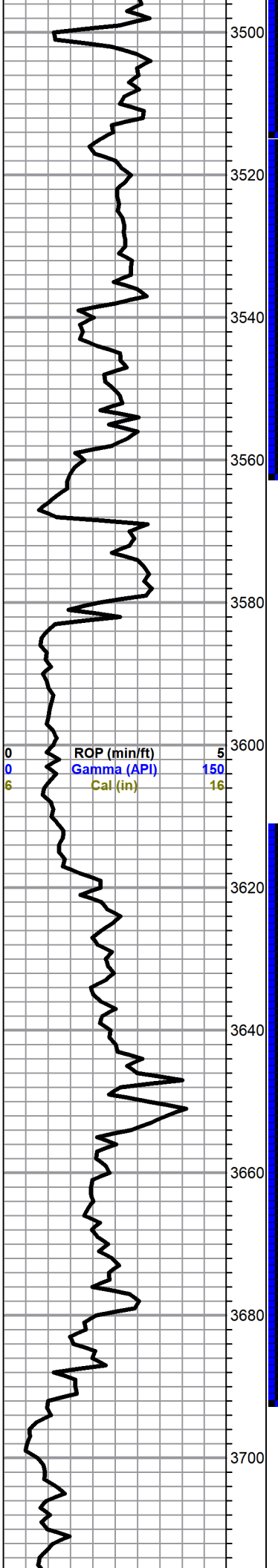
as above

Limestone,white,oomoldic,fair oomoldic porosity,trace spotty brown stain,show of free oil and no odor

Limestone,white,cream,oolitic,fxln,scattered intercrystalline to fine vuggy type porosity,dark brown stain,show of free oil and faint odor

DST#1 3438-3562





Limestone,white,oomdic,chalky,black stain,no free oil and no odor

Limestone,tan,gray,fxln,oolitic/bioclastic,fair pinpoint porosity,fair brown to dark brown stain and saturation,show of free oil and faint odor.

Limestone,white,oolitic,chalky,no show

Limestone,tan,white,oolitic,chalky,few cherty,brown and black stain,no free oil and no odor

**BASE KANSAS CITY 3559(-1659)**

varied colored shales

Limestone,white,tan,fxln,few foss,sandy,black and brown stain,no free oil and no odor

**VIOLA 3582(-1682)**

Chert,white,tan,yellow,boney and opaque,trace brown edge staining,no free oil and no odor

Chert as above

**SIMPSON 3618**

Shale,gray,rusty brown,green

increase green maroon sub-waxy shales

DST #2 3611-3691

sand,white,quartzitic,very fined grained,trace black stain,no free oil and no odor

Shale,green,army green

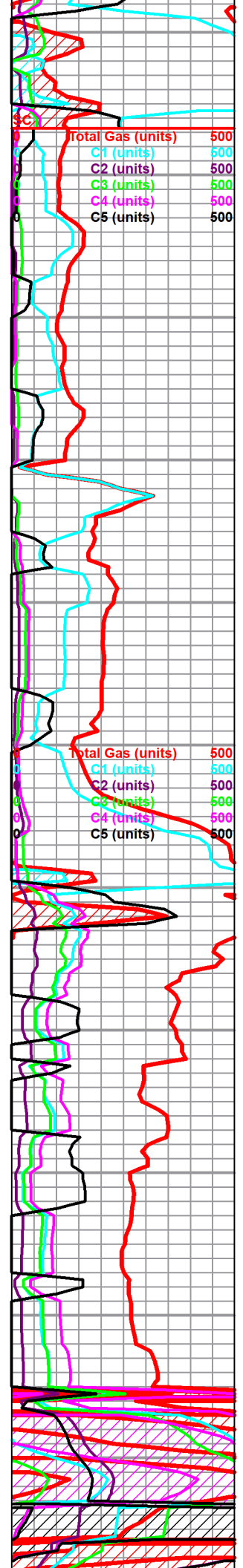
as above,soft

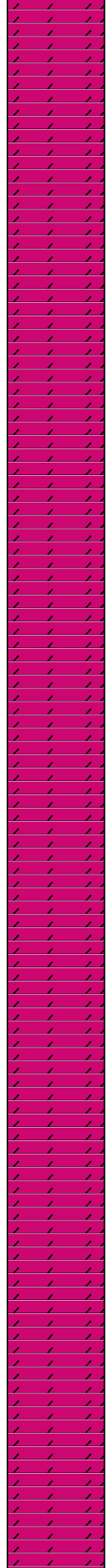
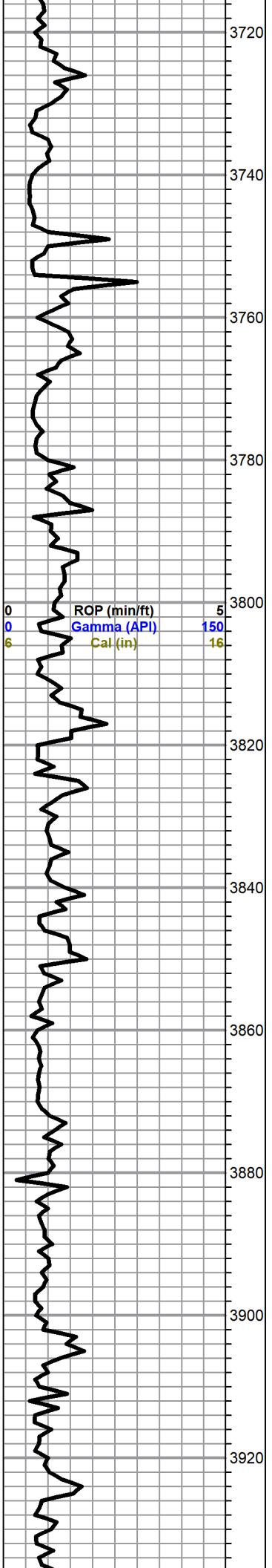
**ARBUCKLE 3679(-1779)**

Dolomite,tan,fine and medium crystalline,few sucrosic,cherty in part,poor to fair porosity,golden brown stain,show of free oil and fair odor

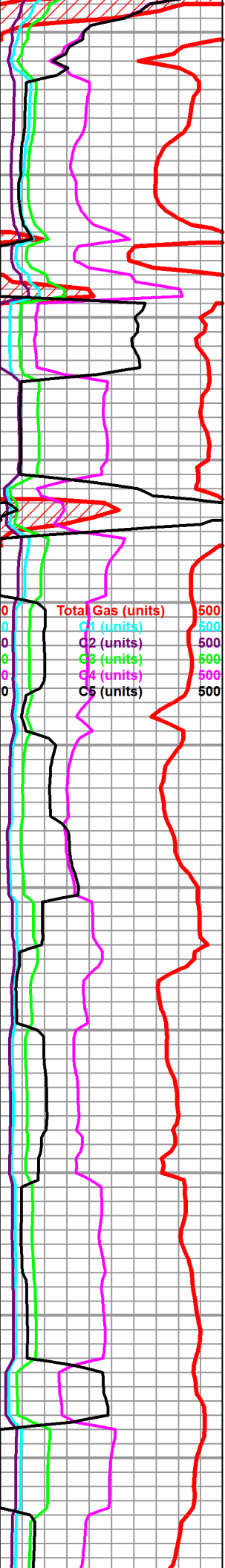
REMARKS AFTER DST#2 ,A PDC BIT WAS USED TO DRILL TO ROTARY TOTAL DEPTH,30' WET AND DRY CONNECTION SAMPLE WERE CAUGHT

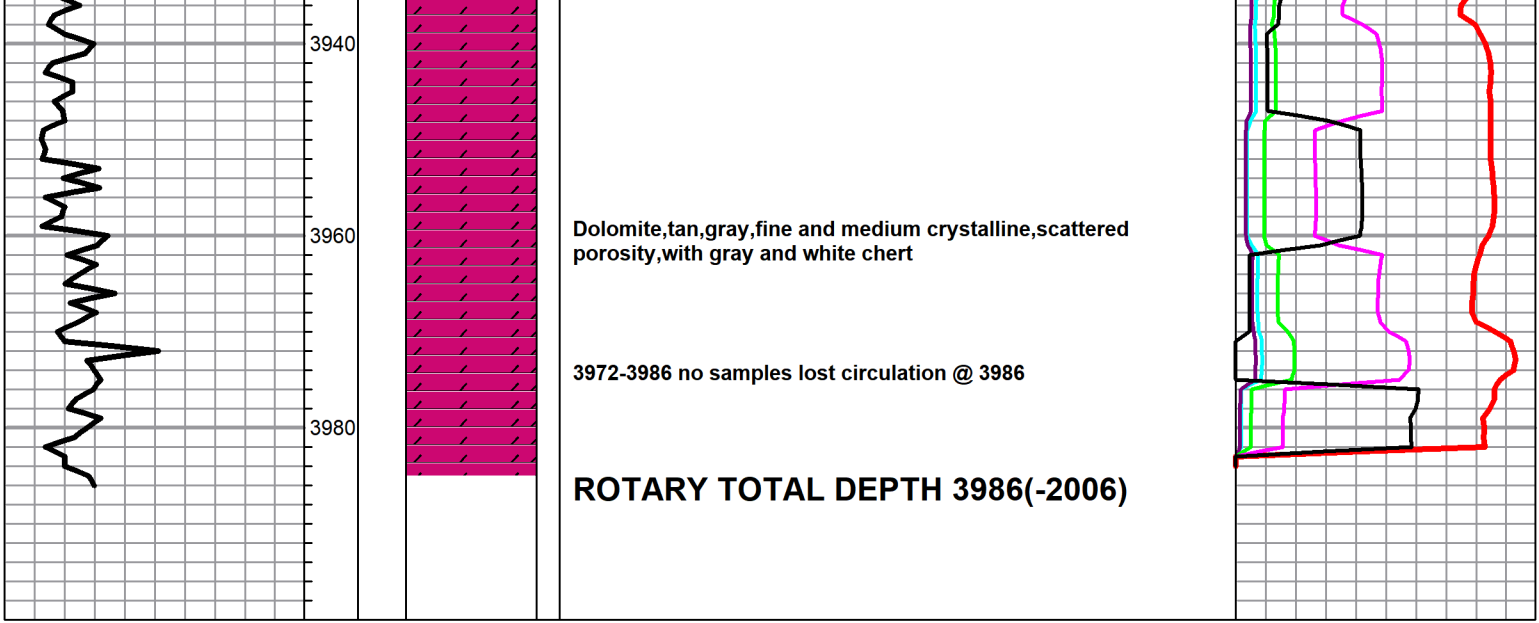
abuntant uphole caving





Dolomite, tan, fxl, sucrosic in part, scattered porosity, brown and dark brown stain, show of free and fair odor  
  
 Dolomite, as above, with medium and coarse crystalline, brown stain and saturation, show of free oil and faint odor, trace white chert  
  
 as above  
  
 Dolomite, white, cream, oomoldic, fine oomoldic porosity, with chert, tan, white oolitic  
  
 Dolomite, tan, white, gray, fine and medium crystalline, fair intercrystalline porosity, with white, Chert  
  
 Dolomite, as above, fair to good intercrystalline porosity  
  
 Dolomite, as above, with chalky luster  
  
 Dolomite, white, gray, tan, fine and medium crystalline, sucrosic in part, few cherty, fair porosity with white chert  
  
 Dolomite, as above, finely crystalline, fair pinpoint to fine vuggy type porosity,





Dolomite, tan, gray, fine and medium crystalline, scattered porosity, with gray and white chert

3972-3986 no samples lost circulation @ 3986

**ROTARY TOTAL DEPTH 3986(-2006)**