



## DRILL STEM TEST REPORT

Prepared For: **Te-Pe Oil and Gas**

PO Box 522  
Canton, KS 67428-0522

ATTN: Terry Brandy/Doug Da

**13-21S-4E Marion,KS**

**Cedar Springs Trust #2**

Start Date: 2019.12.04 @ 22:25:00

End Date: 2019.12.05 @ 04:47:50

Job Ticket #: 65417                      DST #: 2

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

Printed: 2019.12.05 @ 13:42:05



**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Te-Pe Oil and Gas  
 PO Box 522  
 Canton, KS 67428-0522

**Cedar Springs Trust #2**

**13-21S-4E Marion, KS**

Job Ticket: 65417

**DST#: 2**

Test Start: 2019.12.04 @ 22:25:00

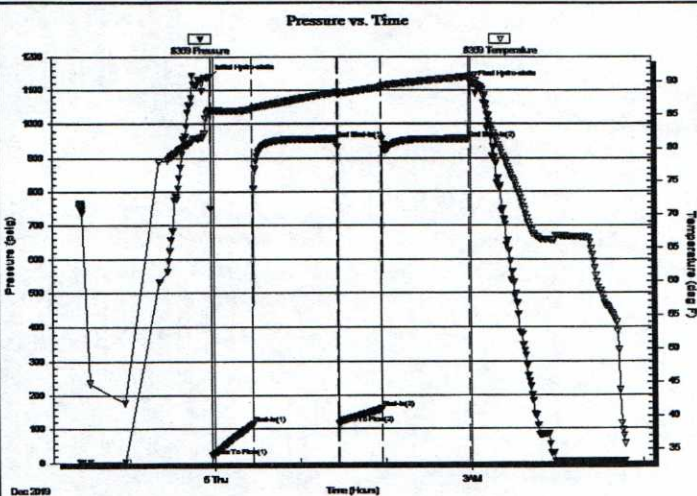
ATTN: Terry Brandy/Doug Da

### GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:57:50  
 Time Test Ended: 04:47:50  
 Interval: **2330.00 ft (KB) To 2334.00 ft (KB) (TVD)**  
 Total Depth: 2334.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jimmy Ricketts  
 Unit No: 80  
 Reference Elevations: 1296.00 ft (KB)  
 1288.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8369 Outside**  
 Press@RunDepth: 159.98 psig @ 2331.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.12.04 End Date: 2019.12.05 Last Calib.: 1899.12.30  
 Start Time: 22:25:01 End Time: 04:47:50 Time On Btm: 2019.12.04 @ 23:57:20  
 Time Off Btm: 2019.12.05 @ 03:01:50

TEST COMMENT: IF - Weak blow building to strong blow 23 minutes into initial flow period. Continuing to build to 15 inches.  
 FF - Weak blow building to strong blow 29 minutes into final flow period.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1137.92	85.66	Initial Hydro-static
1	20.37	85.38	Open To Flow (1)
30	114.49	85.76	Shut-In(1)
89	957.21	88.30	End Shut-In(1)
90	115.44	87.93	Open To Flow (2)
120	159.98	89.06	Shut-In(2)
182	957.27	90.67	End Shut-In(2)
185	1118.06	90.96	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
300.00	Tr OSMCW Tr O 90% W & 10% M	1.98
20.00	VSOCM 2% O & 98% M	0.28

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
<i>Viola DST #2</i>			





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Te-Pe Oil and Gas

**Cedar Springs Trust #2**

PO Box 522  
Canton, KS 67428-0522

**13-21S-4E Marion, KS**

Job Ticket: 65417

**DST#: 2**

ATTN: Terry Brandy/Doug Da

Test Start: 2019.12.04 @ 22:25:00

### Tool Information

Drill Pipe:	Length: 2079.00 ft	Diameter: 3.80 inches	Volume: 29.16 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 69000.00 lb
		<u>Total Volume:</u>	<u>30.36 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	2330.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	4.00 ft			
Tool Length:	32.00 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			2303.00	
Shut In Tool	5.00			2308.00	
Hydraulic tool	5.00			2313.00	
Jars	5.00			2318.00	
Safety Joint	3.00			2321.00	
Packer	5.00			2326.00	28.00 Bottom Of Top Packer
Packer	4.00			2330.00	
Stubb	1.00			2331.00	
Recorder	0.00	8369	Outside	2331.00	
Recorder	0.00	8846	Inside	2331.00	
Perforations	1.00			2332.00	
Perforations	2.00			2334.00	4.00 Bottom Packers & Anchor

**Total Tool Length: 32.00**



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

FLUID SUMMARY

Te-Pe Oil and Gas  
PO Box 522  
Canton, KS 67428-0522  
ATTN: Terry Brandy/Doug Da

Cedar Springs Trust #2  
13-21S-4E Marion, KS  
Job Ticket: 65417      DST#: 2  
Test Start: 2019.12.04 @ 22:25:00

### Mud and Cushion Information

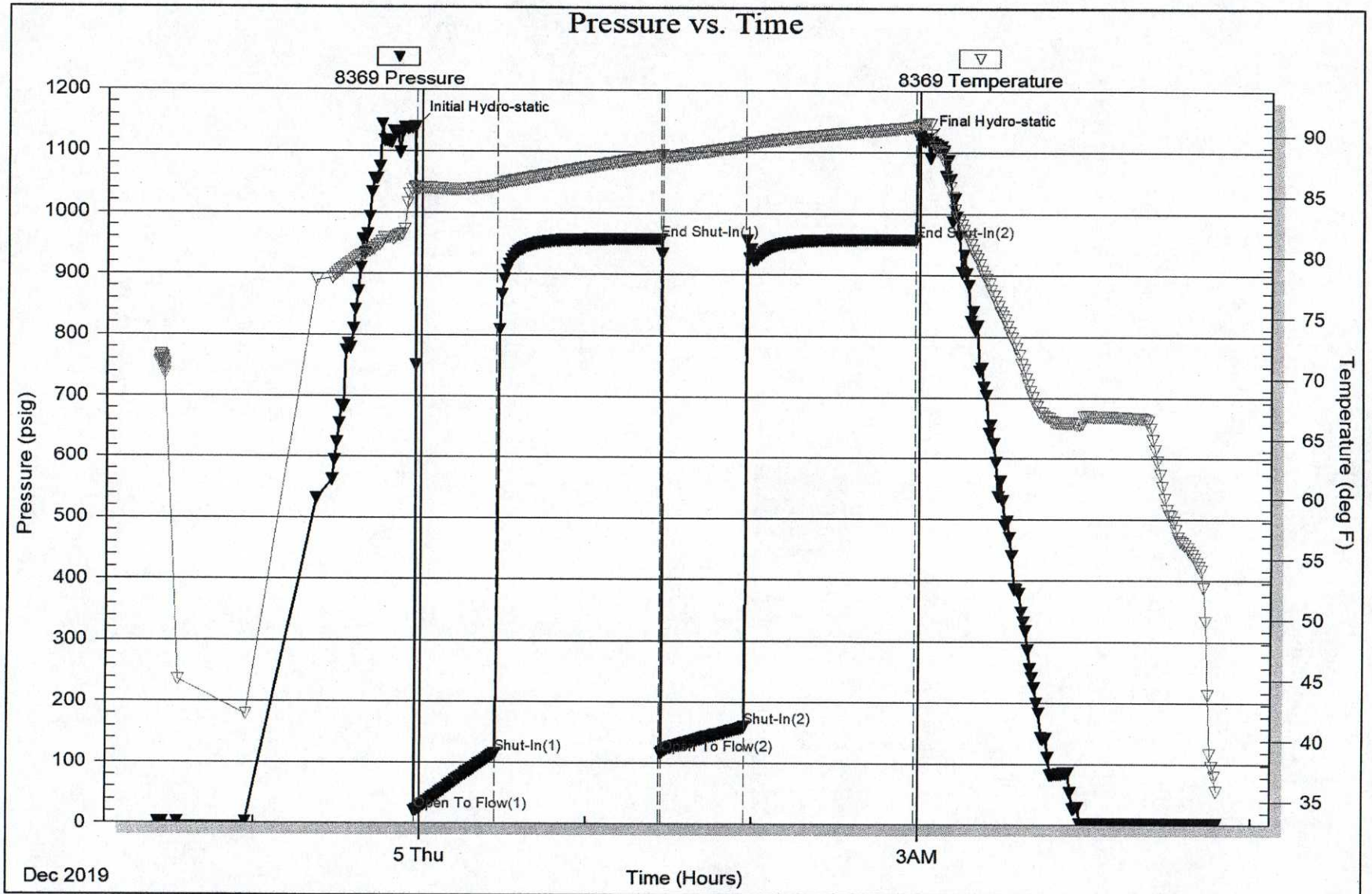
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	5600 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.18 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1100.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
300.00	Tr OSMCW Tr O 90% W & 10% M	1.976
20.00	VSOCM 2% O & 98% M	0.281

Total Length: 320.00 ft      Total Volume: 2.257 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:



Serial #: 8846

Inside Te-Pe Oil and Gas

13-21S-4E Marion, KS

DST Test Number: 2

