



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

IA Operating, Inc  
9915 W 21st STE B  
Wichita, KS 67205  
ATTN: Steve Reed

**Sec. 13-10s-21w Graham, KS**  
**Beiker Trust #13-1**  
Job Ticket: 60990 **DST#: 1**  
Test Start: 2014.12.06 @ 16:21:00

## GENERAL INFORMATION:

Formation: **LKC "A-F"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 19:49:00  
Time Test Ended: 00:21:30  
Interval: **3543.00 ft (KB) To 3620.00 ft (KB) (TVD)**  
Total Depth: 3620.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Phillip Gage  
Unit No: 62  
Reference Elevations: 2261.00 ft (KB)  
2253.00 ft (CF)  
KB to GR/CF: 8.00 ft

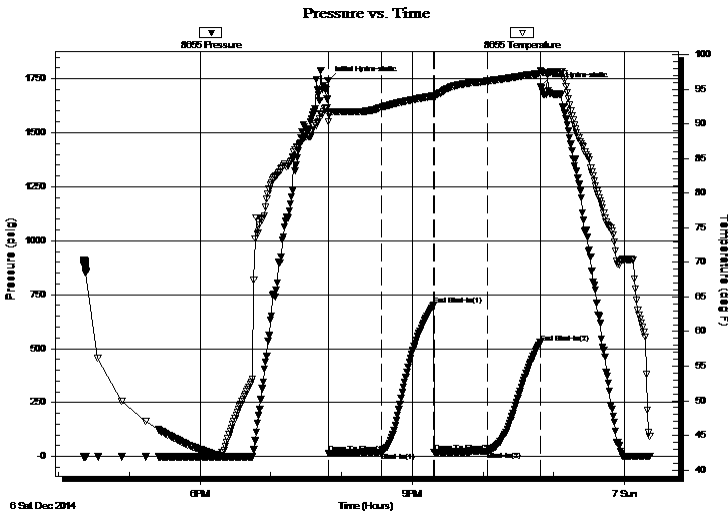
## Serial #: 8655

Outside

Press @ Run Depth: 22.79 psig @ 3544.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.12.06 End Date: 2014.12.07 Last Calib.: 2014.12.07  
Start Time: 16:21:01 End Time: 00:21:30 Time On Btm: 2014.12.06 @ 19:48:30  
Time Off Btm: 2014.12.06 @ 22:49:00

TEST COMMENT: 45-IF-Built to 1"  
45-ISI- No Return  
45-FF-Built to 1/4"  
45-FSI-No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1740.16	91.41	Initial Hydro-static
1	14.04	90.30	Open To Flow (1)
45	19.32	92.37	Shut-In(1)
90	699.93	94.03	End Shut-In(1)
90	19.06	93.66	Open To Flow (2)
135	22.79	96.14	Shut-In(2)
180	527.26	97.28	End Shut-In(2)
181	1715.02	97.70	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	M, w ith oil spots, 100%m	0.11

## Gas Rates

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



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**FLUID SUMMARY**

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## 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: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 2.50 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	M, w ith oil spots, 100% <i>m</i>	0.110

Total Length: 15.00 ft      Total Volume: 0.110 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

