



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

GRAND MESA OPERATING  
 1700 N WATERFRONT PKWY BLDG 600  
 WICHITA KS 67206  
 ATTN: KENT MATSON

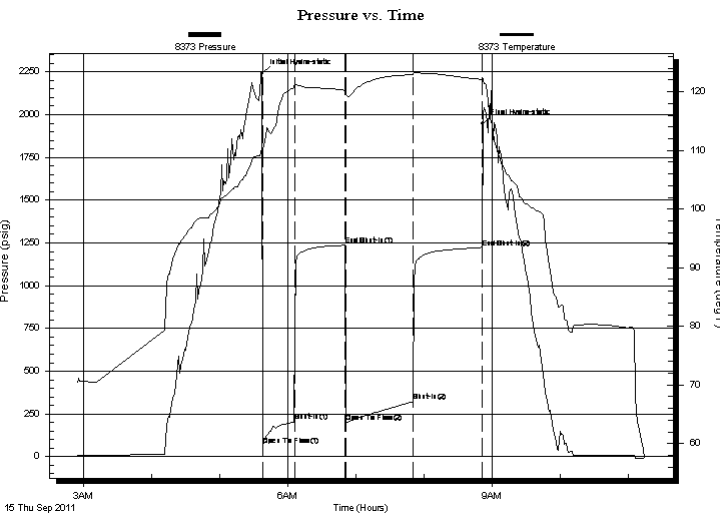
**DBY # 2-16**  
**16-16S-33W SCOTT**  
 Job Ticket: 43698 **DST#: 4**  
 Test Start: 2011.09.15 @ 02:55:00

## GENERAL INFORMATION:

Formation: **KC "L"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:37:45  
 Time Test Ended: 11:14:45  
 Interval: **4288.00 ft (KB) To 4317.00 ft (KB) (TVD)**  
 Total Depth: 4317.00 ft (KB) (TVD)  
 Hole Diameter: 6.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: RANDY WILLIAMS  
 Unit No: 35  
 Reference Elevations: 3048.00 ft (KB)  
 3037.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8373 Inside**  
 Press @ Run Depth: 322.45 psig @ 4289.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2011.09.15 End Date: 2011.09.15 Last Calib.: 2011.09.15  
 Start Time: 02:55:05 End Time: 11:14:44 Time On Btm: 2011.09.15 @ 05:37:30  
 Time Off Btm: 2011.09.15 @ 08:51:30

**TEST COMMENT:** IF- FBB, BUILT TO BOTTOM BUCKET IN 17 MINS  
 IS- NBB  
 FF- FBB, BUILT TO BOTTOM BUCKET IN 21 MINS  
 FS- NBB



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2239.90	110.88	Initial Hydro-static
1	66.69	109.56	Open To Flow (1)
29	205.80	120.81	Shut-In(1)
73	1236.62	120.25	End Shut-In(1)
74	201.94	119.66	Open To Flow (2)
133	322.45	122.95	Shut-In(2)
194	1223.56	122.11	End Shut-In(2)
194	1947.03	122.25	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
420.00	SGOMCW, 5% G, 15% O, 50% W, 30% M	3.75
240.00	GOWCM, 10% G, 20% O, 20% W, 50% M	3.37
15.00	CLEAN O&G, 10% G, 90% OIL	0.21
0.00	45 GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

GRAND MESA OPERATING

**DBY # 2-16**

1700 N WATERFRONT PKWY BLDG 600  
WICHITA KS 67206

**16-16S-33W SCOTT**

Job Ticket: 43698

**DST#: 4**

ATTN: KENT MATSON

Test Start: 2011.09.15 @ 02:55:00

## 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:

23000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8600.00 ppm

Filter Cake: 4.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
420.00	SGOMCW, 5% G, 15% O, 50% W,30% M	3.751
240.00	GOWCM, 10% G, 20% O, 20% W, 50% M	3.367
15.00	CLEAN O& G, 10% G, 90% OIL	0.210
0.00	45 GIP	0.000

Total Length: 675.00 ft      Total Volume: 7.328 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: WATER= .426 @ 49F = 23000

API= 28 @ 60 F

