



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Double D
133 E. 12th
Hays, Ks 67601
ATTN: Al Downing

24-13-20 Ellis, Ks
Johnston #1
Job Ticket: 49278 **DST#: 4**
Test Start: 2012.07.25 @ 22:57:18

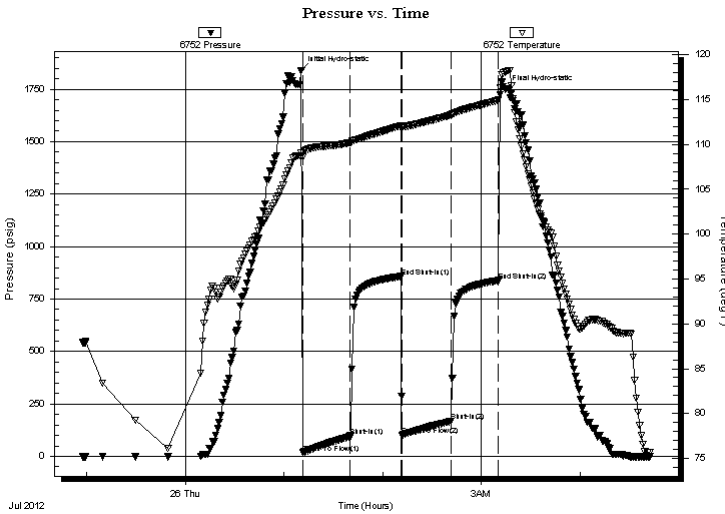
GENERAL INFORMATION:

Formation: **LKC "K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:11:18
Time Test Ended: 04:42:18
Interval: **3633.00 ft (KB) To 3663.00 ft (KB) (TVD)**
Total Depth: 3663.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Brian Fairbank
Unit No: 41
Reference Elevations: 2118.00 ft (KB)
2113.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6752 Inside
Press @ Run Depth: 166.67 psig @ 3640.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.07.25 End Date: 2012.07.26 Last Calib.: 2012.07.26
Start Time: 22:57:19 End Time: 04:42:18 Time On Btm: 2012.07.26 @ 01:10:18
Time Off Btm: 2012.07.26 @ 03:14:18

TEST COMMENT: IFP - BOB 25 min
ISI - sur blow back - died 6 min
FFP - BOB 27 min
FSI - 1/4" blow back - died 21 min

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1839.80	109.05	Initial Hydro-static
1	16.55	108.59	Open To Flow (1)
30	94.40	110.18	Shut-In(1)
61	857.07	112.09	End Shut-In(1)
62	101.80	111.99	Open To Flow (2)
91	166.67	113.26	Shut-In(2)
120	838.02	114.92	End Shut-In(2)
124	1750.40	118.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
335.00	MW 95%W, 5%M	1.65
5.00	FREE OIL 95%O, 5%M	0.02
0.00	60' GIP	0.00

* Recovery from multiple tests

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: 38 deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity: 54000 ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.39 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 8000.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
335.00	MW 95%W, 5%M	1.647
5.00	FREE OIL 95%O, 5%M	0.025
0.00	60' GIP	0.000

Total Length: 340.00 ft Total Volume: 1.672 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

