



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

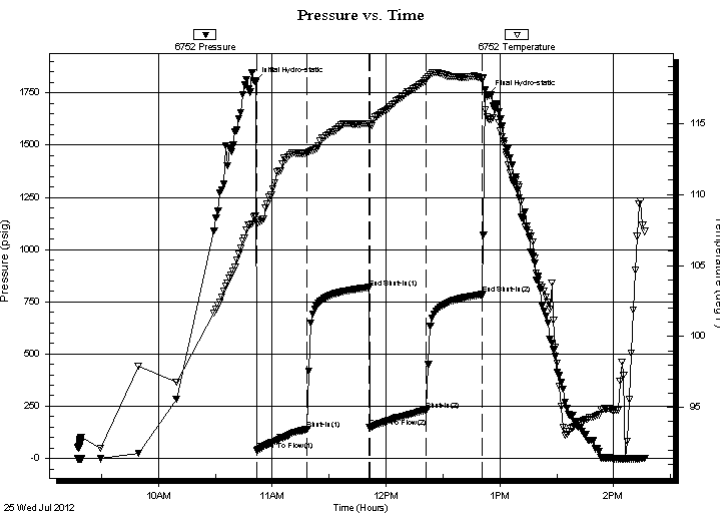
24-13-20 Ellis, Ks
Johnston #1
Job Ticket: 49277 **DST#: 3**
Test Start: 2012.07.25 @ 09:17:21

GENERAL INFORMATION:

Formation: **LKC "H-L"**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 10:51:51 Tester: Brian Fairbank
Time Test Ended: 14:16:51 Unit No: 41
Interval: 3562.00 ft (KB) To 3640.00 ft (KB) (TVD) Reference Elevations: 2118.00 ft (KB)
Total Depth: 3640.00 ft (KB) (TVD) 2113.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 6752 Inside
Press @ Run Depth: 232.40 psig @ 3568.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.07.25 End Date: 2012.07.25 Last Calib.: 2012.07.25
Start Time: 09:17:22 End Time: 14:16:51 Time On Btm: 2012.07.25 @ 10:50:51
Time Off Btm: 2012.07.25 @ 12:53:51

TEST COMMENT: IFP - BOB 19 min
ISI - no blow back
FFP - BOB 25 min
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1806.28	108.45	Initial Hydro-static
1	37.59	108.17	Open To Flow (1)
28	140.58	112.89	Shut-In(1)
60	817.94	115.00	End Shut-In(1)
61	147.34	114.83	Open To Flow (2)
91	232.40	118.13	Shut-In(2)
120	784.87	118.15	End Shut-In(2)
123	1741.14	115.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
375.00	SGOCMW 30%G, 5%O, 35%W, 30%M	1.84
90.00	VSGOCM 17%G, 3%O, 80%M	0.44

* 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:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	21000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 9000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
375.00	SGOCMW 30%G, 5%O, 35%W, 30%M	1.844
90.00	VSGOCM 17%G, 3%O, 80%M	0.443

Total Length: 465.00 ft Total Volume: 2.287 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial #: 6752

Inside

Double D

Johnston #1

DST Test Number: 3

Pressure vs. Time

