



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Sam Gary Jr. & Associates Inc.

26-14-17, Ellis, KS

1515 Wynkoop STE 700
Denver CO 80202

Harlan #1-26

Job Ticket: 52035

DST#: 1

ATTN: Chris M

Test Start: 2013.03.09 @ 14:20:00

GENERAL INFORMATION:

Formation: **KC"C-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:39:00

Time Test Ended: 22:06:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett Dickinson

Unit No: 59

Interval: 3243.00 ft (KB) To 3295.00 ft (KB) (TVD)

Reference Elevations: 1969.00 ft (KB)

Total Depth: 3295.00 ft (KB) (TVD)

1961.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8319

Inside

Press @ Run Depth: 53.47 psig @ 3248.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.09

End Date:

2013.03.09

Last Calib.:

2013.03.09

Start Time:

14:20:05

End Time:

22:05:59

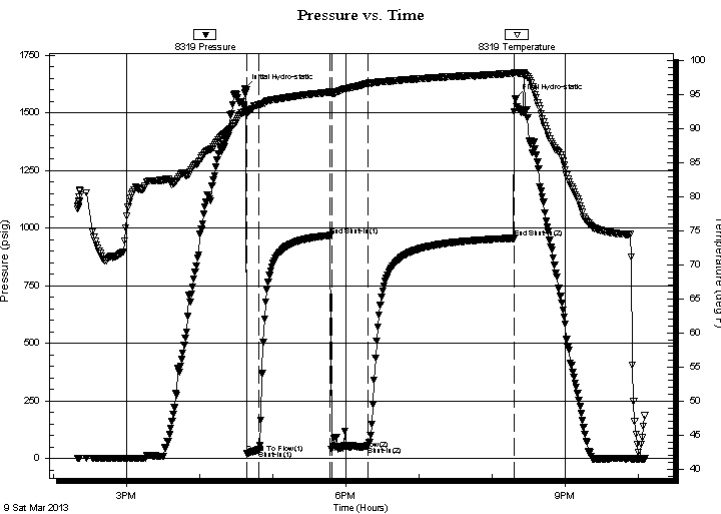
Time On Btm:

2013.03.09 @ 16:37:00

Time Off Btm:

2013.03.09 @ 20:19:30

TEST COMMENT: 10min IF-1.5in blow
60min ISI-No blow
30min FF-.25in blow
120min FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1603.79	92.50	Initial Hydro-static
2	20.13	92.37	Open To Flow (1)
12	37.24	93.49	Shut-In(1)
71	967.86	95.34	End Shut-In(1)
72	40.36	95.11	Open To Flow (2)
102	53.47	96.64	Shut-In(2)
221	955.93	98.09	End Shut-In(2)
223	1560.18	98.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Mud	0.57

Gas Rates

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



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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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Mud	0.568

Total Length: 60.00 ft Total Volume: 0.568 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Data 190psi 2000 ml mud

Pressure vs. Time

