



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Outlaw Well Service
 1408 West 42nd
 Hays KS 67601
 ATTN: Steve Reed

20-8-19, Rooks, KS
Lowry #5-13
 Job Ticket: 64863 **DST#: 2**
 Test Start: 2015.10.25 @ 03:10:00

GENERAL INFORMATION:

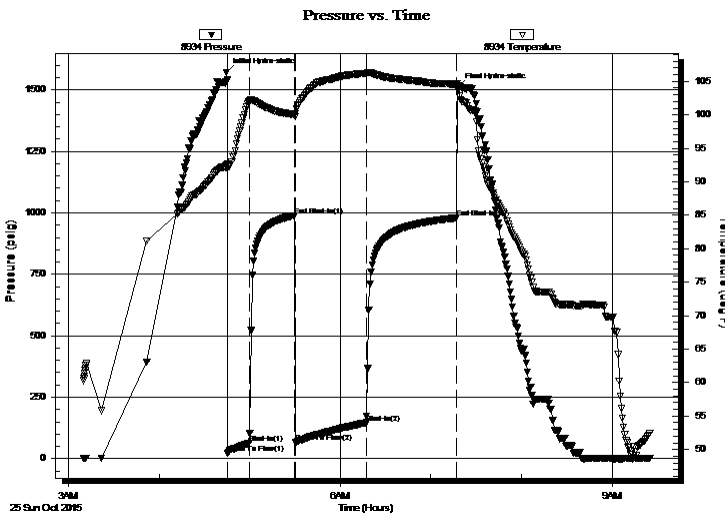
Formation: **KC "C"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:45:30
 Time Test Ended: 09:25:00
 Interval: **3228.00 ft (KB) To 3250.00 ft (KB) (TVD)**
 Total Depth: 3250.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 2009.00 ft (KB)
 2001.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8934 Outside

Press @ Run Depth: 145.86 psig @ 3229.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.10.25 End Date: 2015.10.25 Last Calib.: 2015.10.25
 Start Time: 03:10:05 End Time: 09:24:59 Time On Btm: 2015.10.25 @ 04:44:45
 Time Off Btm: 2015.10.25 @ 07:18:00

TEST COMMENT: IF-BOB in 12min
 IS-1/8in blow
 FF-BOB in 13min
 FS-1/4in blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1571.44	92.47	Initial Hydro-static
1	21.05	91.96	Open To Flow (1)
15	63.21	101.92	Shut-In(1)
45	988.66	100.03	End Shut-In(1)
46	67.24	100.13	Open To Flow (2)
93	145.86	106.21	Shut-In(2)
153	979.27	104.53	End Shut-In(2)
154	1507.65	104.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	MCW 90%W 10%M	2.25
60.00	GWOCM 5%G 10%O 10%W 75%M	0.84
50.00	GO 15%G 85%O	0.70
0.00	120ft 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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DST#: 2

ATTN: Steve Reed

Test Start: 2015.10.25 @ 03:10:00

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:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
180.00	MCW 90%W 10%M	2.252
60.00	GWOCM 5%G 10%O 10%W 75%M	0.842
50.00	GO 15%G 85%O	0.701
0.00	120ft GIP	0.000

Total Length: 290.00 ft

Total Volume: 3.795 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

