



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Grand Mesa Operating Co.
 1700 N. Waterfront PKWY BLDG 600
 Wichita KS. 67206
 ATTN: Kent Matson

23-16s-33w Scott Co. KS
Griffith # 1-23
 Job Ticket: 45829 **DST#: 5**
 Test Start: 2012.04.07 @ 12:14:00

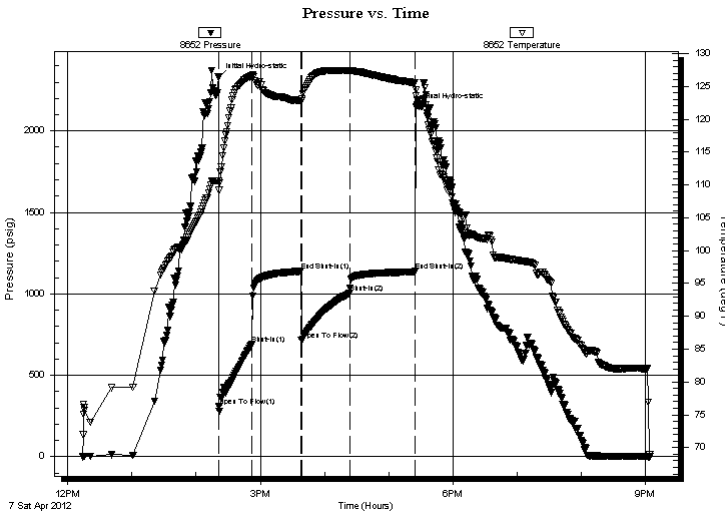
GENERAL INFORMATION:

Formation: **Atoka, Morrow, & Upp**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 14:21:25 Tester: Will MacLean
 Time Test Ended: 21:04:10 Unit No: 40
 Interval: **4595.00 ft (KB) To 4710.00 ft (KB) (TVD)** Reference Elevations: 3008.00 ft (KB)
 Total Depth: 4710.00 ft (KB) (TVD) 3003.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 8652 Inside
 Press @ Run Depth: 1003.47 psig @ 4596.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.04.07 End Date: 2012.04.07 Last Calib.: 2012.04.07
 Start Time: 12:14:00 End Time: 21:04:10 Time On Btm: 2012.04.07 @ 14:21:10
 Time Off Btm: 2012.04.07 @ 17:25:24

TEST COMMENT: IF- BOB in 1 1/2min
 IS- No Blow
 FF- BOB in 2min
 FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2327.51	110.50	Initial Hydro-static
1	309.11	109.16	Open To Flow (1)
31	690.46	126.66	Shut-In(1)
77	1138.42	122.75	End Shut-In(1)
78	714.37	122.88	Open To Flow (2)
123	1003.47	127.35	Shut-In(2)
184	1137.50	125.53	End Shut-In(2)
185	2146.17	124.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1174.00	GMCW 2%g 4%m 94%w	15.37
310.00	OGMCW 3%oil 5%g 30%m 62%w	4.35
248.00	GOWCM 5%g 5%oil 40%w 50%m	3.48
186.00	OWGCM 2%oil 5%w 8%g 85%m	2.61
206.00	GWCM 3%g 4%w 93%m	2.89

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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23-16s-33w Scott Co. KS

1700 N. Waterfront PKWY BLDG 600
Wichita KS. 67206

Griffith # 1-23

Job Ticket: 45829

DST#: 5

ATTN: Kent Matson

Test Start: 2012.04.07 @ 12:14:00

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:

48000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
1174.00	GMCW 2%g 4%m 94%w	15.366
310.00	OGMCW 3%oil 5%g 30%m 62%w	4.348
248.00	GOWCM 5%g 5%oil 40%w 50%m	3.479
186.00	OWGCM 2%oil 5%w 8%g 85%m	2.609
206.00	GWCM 3%g 4%w 93%m	2.890

Total Length: 2124.00 ft Total Volume: 28.692 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

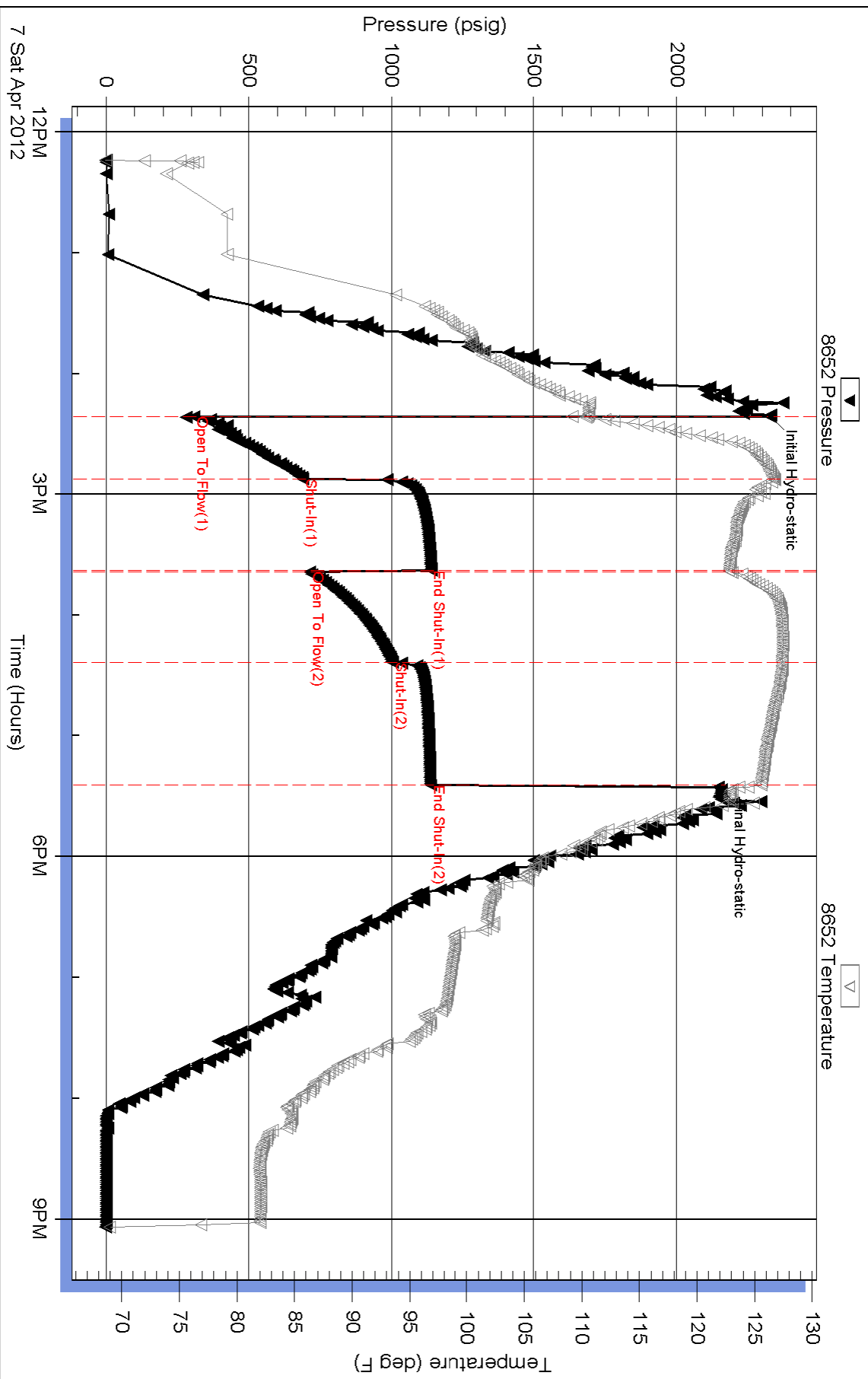
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW is .189 @ 56f = 48000

Pressure vs. Time



Serial #: 8322

Outside Grand Mesa Operating Co.

Griffith # 1-23

DST Test Number: 5

