



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

New Gulf Operating LLC.

15-12s-32w - Logan KS

6310 E 102nd ST.
Tulsa, OK. 74137

Zimmerman #1-15

ATTN: Steve Murphy

Job Ticket: 45615

DST#: 4

Test Start: 2012.03.07 @ 23:47:00

GENERAL INFORMATION:

Formation: **LKC "A-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:02:45

Time Test Ended: 08:30:30

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 4014.00 ft (KB) To 4092.00 ft (KB) (TVD)

Reference Elevations: 2985.00 ft (KB)

Total Depth: 4704.00 ft (KB) (TVD)

2975.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 6799

Press @ Run Depth: 729.69 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.07

End Date:

2012.03.08

Last Calib.:

2012.03.08

Start Time: 23:47:05

End Time:

08:30:30

Time On Btm:

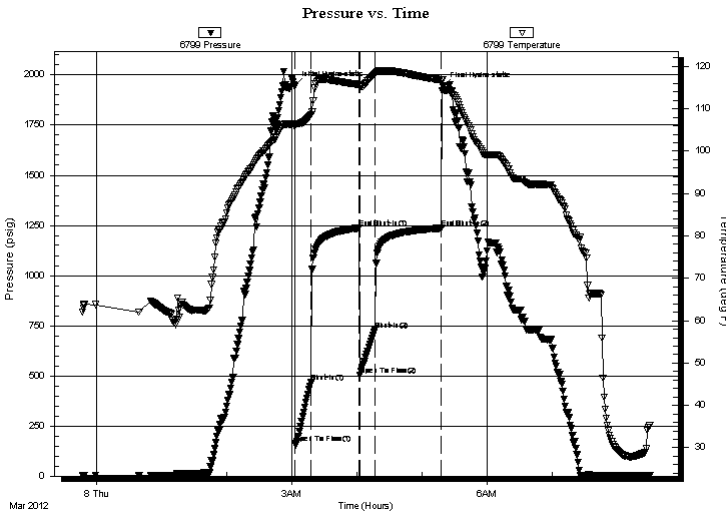
2012.03.08 @ 03:02:30

Time Off Btm:

2012.03.08 @ 05:19:30

TEST COMMENT: IF- B.o.B. in 1 1/4 min.
IS- No Return
FF- B.o.B. in 2 1/2 min.
FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1944.93	106.44	Initial Hydro-static
1	162.52	105.84	Open To Flow (1)
16	469.34	108.56	Shut-In(1)
60	1237.27	115.71	End Shut-In(1)
61	504.91	115.40	Open To Flow (2)
75	729.69	118.22	Shut-In(2)
136	1236.65	116.79	End Shut-In(2)
137	1940.25	115.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1116.00	MW 95W 5M	15.65
124.00	MW 80W 20M	1.74
310.00	Mud 100M	4.35

Gas Rates

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



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ATTN: Steve Murphy

15-12s-32w - Logan KS

Zimmerman #1-15

Job Ticket: 45615

DST#: 4

Test Start: 2012.03.07 @ 23:47:00

GENERAL INFORMATION:

Formation: **LKC "A-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:02:45

Time Test Ended: 08:30:30

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 4014.00 ft (KB) To 4092.00 ft (KB) (TVD)

Total Depth: 4704.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2985.00 ft (KB)

2975.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8648

Press @ Run Depth: psig @ ft (KB)

Start Date: 2012.03.07

End Date:

2012.03.08

Capacity: 8000.00 psig

Last Calib.:

2012.03.08

Start Time: 23:47:50

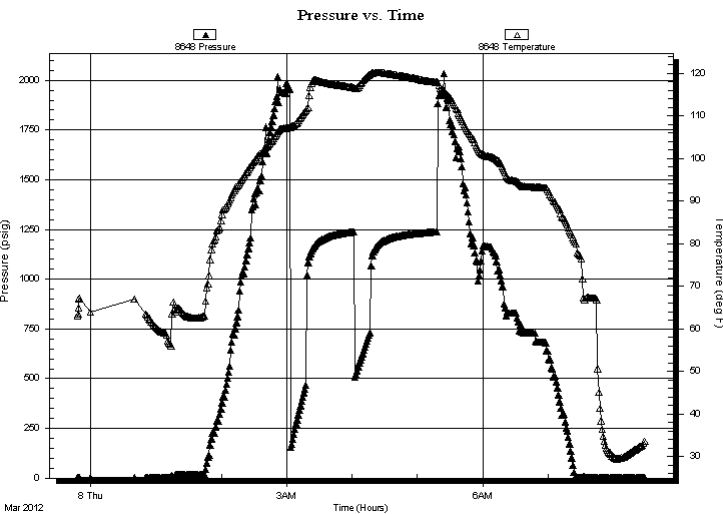
End Time:

08:29:15

Time On Btm:

Time Off Btm:

TEST COMMENT: IF- B.o.B. in 1 1/4 min.
IS- No Return
FF- B.o.B. in 2 1/2 min.
FS- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
1116.00	MW 95W 5M	15.65
124.00	MW 80W 20M	1.74
310.00	Mud 100M	4.35

Gas Rates

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



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DRILL STEM TEST REPORT

New Gulf Operating LLC.

15-12s-32w - Logan KS

6310 E 102nd ST.
Tulsa, OK. 74137

Zimmerman #1-15

ATTN: Steve Murphy

Job Ticket: 45615 **DST#: 4**

Test Start: 2012.03.07 @ 23:47:00

GENERAL INFORMATION:

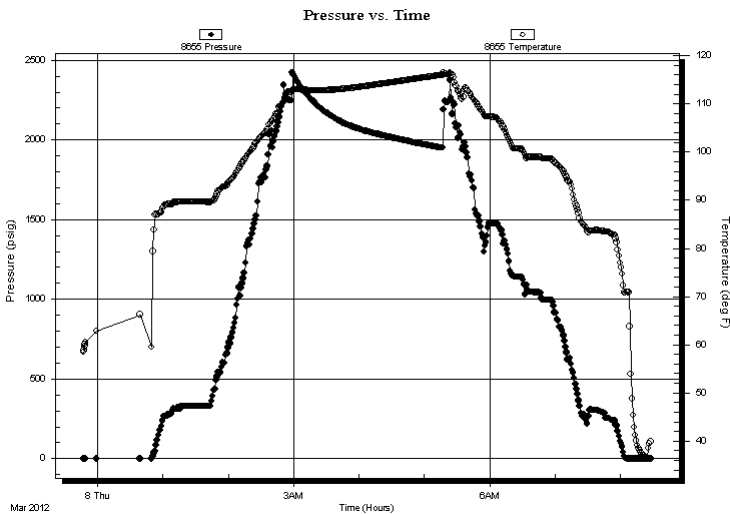
Formation: **LKC "A-D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:02:45
 Time Test Ended: 08:30:30
Interval: 4014.00 ft (KB) To 4092.00 ft (KB) (TVD)
 Total Depth: 4704.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Straddle (Initial)
 Tester: Kevin Mack
 Unit No: 43
 Reference Elevations: 2985.00 ft (KB)
 2975.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8655

Press@RunDepth: psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.07 End Date: 2012.03.08 Last Calib.: 2012.03.08
 Start Time: 23:47:05 End Time: 08:28:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF- B.o.B. in 1 1/4 min.
 IS- No Return
 FF- B.o.B. in 2 1/2 min.
 FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
1116.00	MW 95W 5M	15.65
124.00	MW 80W 20M	1.74
310.00	Mud 100M	4.35

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



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DRILL STEM TEST REPORT

FLUID SUMMARY

New Gulf Operating LLC.

15-12s-32w - Logan KS

6310 E 102nd ST.
Tulsa, OK. 74137

Zimmerman #1-15

Job Ticket: 45615

DST#: 4

ATTN: Steve Murphy

Test Start: 2012.03.07 @ 23:47:00

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:

28000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1116.00	MW 95W 5M	15.655
124.00	MW 80W 20M	1.739
310.00	Mud 100M	4.348

Total Length: 1550.00 ft Total Volume: 21.742 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .29 @ 60 deg = 28000ppm

