



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Culbreath Oil & Gas Co, Inc
 3801 S.Yale Ave.
 Tulsa, Oklahoma 74135
 ATTN: Steve Murphy

3 11s 32w Logan, Ks
Boyd #2-3
 Job Ticket: 61805 **DST#: 2**
 Test Start: 2015.07.19 @ 12:36:00

GENERAL INFORMATION:

Formation: **LKC E**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:34:00
 Time Test Ended: 20:04:30
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bradley Walter
 Unit No: 69
 Interval: **4116.00 ft (KB) To 4142.00 ft (KB) (TVD)**
 Total Depth: 4142.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Reference Elevations: 3035.00 ft (KB)
 3030.00 ft (CF)
 KB to GR/CF: 5.00 ft

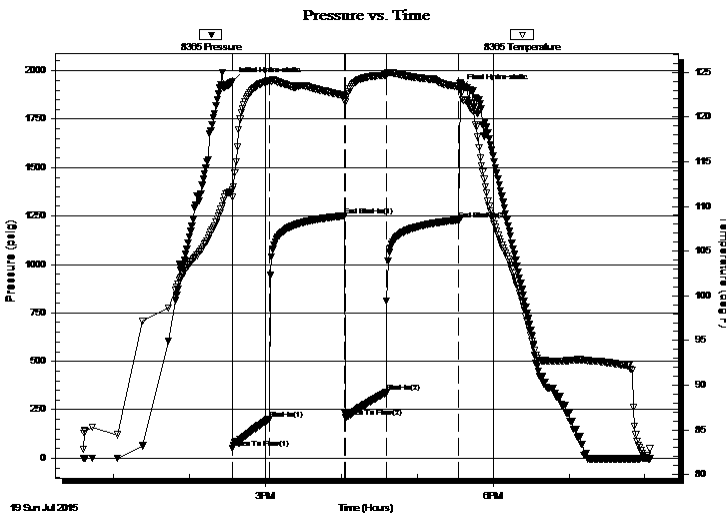
Serial #: 8365

Inside

Press @ Run Depth: 338.65 psig @ 4117.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.07.19 End Date: 2015.07.19 Last Calib.: 2015.07.19
 Start Time: 12:36:05 End Time: 20:04:29 Time On Btm: 2015.07.19 @ 14:33:45
 Time Off Btm: 2015.07.19 @ 17:34:00

TEST COMMENT: IF: BOB @ 5 min.
 IS: 7" return.
 FF: BOB @ 1 min.
 FS: BOB return @ 10 min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1943.04	111.88	Initial Hydro-static
1	50.88	111.01	Open To Flow (1)
29	201.78	124.05	Shut-In(1)
89	1251.01	122.38	End Shut-In(1)
90	211.96	121.95	Open To Flow (2)
122	338.65	124.69	Shut-In(2)
179	1229.84	123.43	End Shut-In(2)
181	1909.01	123.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
310.00	mcw 5m 95w	3.27
120.00	gow cm 20g 20o 20w 40m	1.68
380.00	go 40g 60o	5.33
0.00	1140 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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3801 S.Yale Ave.
Tulsa, Oklahoma 74135

Boyd #2-3

Job Ticket: 61805

DST#: 2

ATTN: Steve Murphy

Test Start: 2015.07.19 @ 12:36:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

42000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
310.00	mcw 5m 95w	3.274
120.00	gow cm 20g 20o 20w 40m	1.683
380.00	go 40g 60o	5.330
0.00	1140 GIP	0.000

Total Length: 810.00 ft Total Volume: 10.287 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is 160 @ 83 = 42,000ppm

