



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Culbreath Oil & Gas Co, Inc

3 11s 32w Logan, Ks

3801 S.Yale Ave.
Tulsa, Oklahoma 74135

Boyd #2-3

Job Ticket: 61804

DST#: 1

ATTN: Steve Murphy

Test Start: 2015.07.18 @ 18:12:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:36:15

Time Test Ended: 02:14:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 69

Interval: 4014.00 ft (KB) To 4054.00 ft (KB) (TVD)

Reference Elevations: 3035.00 ft (KB)

Total Depth: 4054.00 ft (KB) (TVD)

3030.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8365 Inside

Press @ Run Depth: 793.88 psig @ 4015.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.07.18

End Date:

2015.07.19

Last Calib.:

2015.07.19

Start Time: 18:12:05

End Time:

02:14:44

Time On Btm:

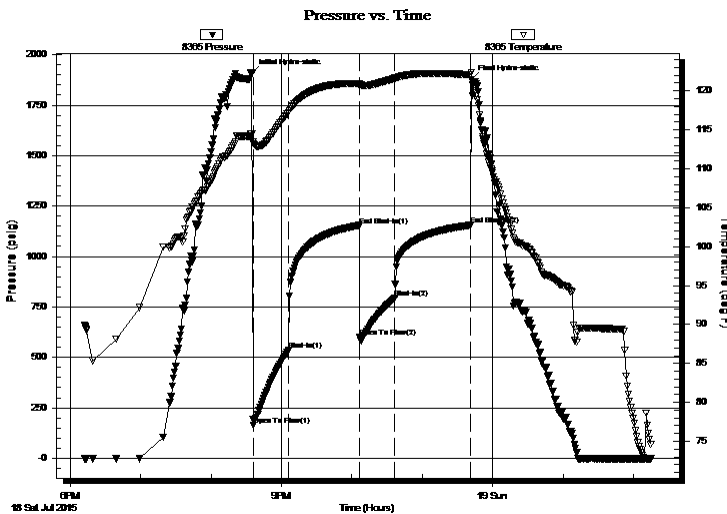
2015.07.18 @ 20:34:45

Time Off Btm:

2015.07.18 @ 23:41:45

TEST COMMENT: IF: BOB @ 1 min.
IS: No return.
FF: BOB @ 2 min.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1907.25	114.48	Initial Hydro-static
2	164.00	113.21	Open To Flow (1)
32	535.10	117.24	Shut-In(1)
92	1153.40	120.98	End Shut-In(1)
92	600.67	120.70	Open To Flow (2)
122	793.88	121.59	Shut-In(2)
186	1154.76	122.07	End Shut-In(2)
187	1877.62	122.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1215.00	mcw 2m 98w (w/ oil specs)	15.97
410.00	socw 5o 95w	5.75
5.00	oil 100o	0.07

Gas Rates

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



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FLUID SUMMARY

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Tulsa, Oklahoma 74135

Boyd #2-3

Job Ticket: 61804

DST#: 1

ATTN: Steve Murphy

Test Start: 2015.07.18 @ 18:12:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

17 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

65000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 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 bbl
1215.00	mcw 2m 98w (w / oil specs)	15.968
410.00	socw 5o 95w	5.751
5.00	oil 100o	0.070

Total Length: 1630.00 ft Total Volume: 21.789 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .18 @ 70 = 65000ppm

