

TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Deutsch Oil Co.

28-21s-13w Stafford Ks.

8100 E.22nd St. N.
Wichita Ks.67226

Morrison A#2

Job Ticket: 49734

DST#: 1

ATTN: Eldon Schierling

Test Start: 2012.11.14 @ 01:54:23

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:37:53

Time Test Ended: 10:29:23

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 3645.00 ft (KB) To 3721.00 ft (KB) (TVD)

Total Depth: 3721.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1896.00 ft (KB)

1886.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8352 Inside

Press@RunDepth: 98.07 psig @ 3646.00 ft (KB)

Start Date: 2012.11.14

End Date:

2012.11.14

Start Time: 01:54:28

End Time:

10:29:23

Capacity: 8000.00 psig

Last Calib.: 2012.11.14

Time On Btm: 2012.11.14 @ 04:35:53

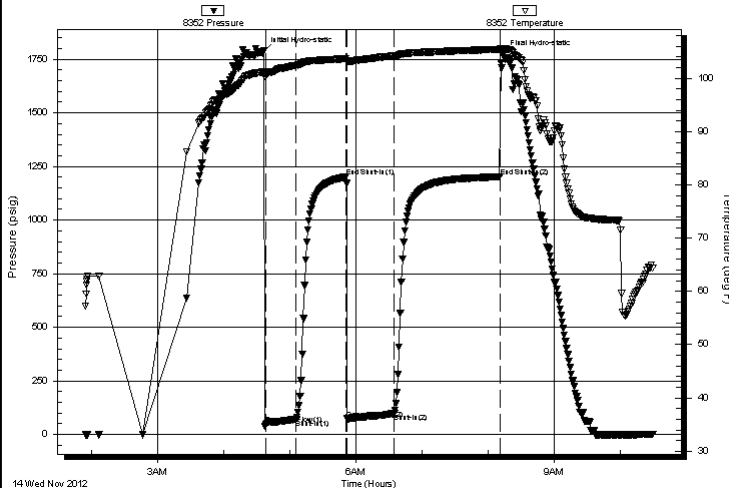
Time Off Btm: 2012.11.14 @ 08:13:08

TEST COMMENT: IF: Fair to strong blow . B.O.B. in 24 mins. Comment: 18-20 ft. of hard fill on btm. Slid approx. 15 ft. for first 18 mins. of IFP.

ISI: No blow .

FF: Strong blow . B.O.B. in 21 mins.

Pressure vs. Time



PRESSURE SUMMARY

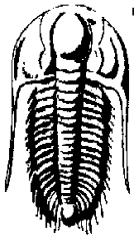
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1787.58	101.21	Initial Hydro-static
2	45.19	100.66	Open To Flow (1)
30	70.76	102.39	Shut-In(1)
75	1201.27	103.69	End Shut-In(1)
76	72.92	103.30	Open To Flow (2)
119	98.07	104.17	Shut-In(2)
215	1201.14	105.46	End Shut-In(2)
218	1770.12	105.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	425 ft. of GIP	0.00
45.00	CGO 20%g 80%o	0.63
80.00	GOCM 8%g 15%o 77%m	1.12
60.00	GOCM 35%g 27%o 38%m	0.84

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Deutsch Oil Co.

28-21s-13w Stafford Ks.

8100 E.22nd St. N.
Wichita Ks.67226

Morrison A#2

Job Ticket: 49734

DST#: 1

ATTN: Eldon Schierling

Test Start: 2012.11.14 @ 01:54:23

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 7.99 in³

Resistivity: 0.00 ohm.m

Salinity: 6900.00 ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

37.7 deg API

6900 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	425 ft.of GIP	0.000
45.00	CGO 20%g 80%o	0.631
80.00	GOCM 8%g 15%o 77%m	1.122
60.00	GOCM 35%g 27%o 38%m	0.842

Total Length: 185.00 ft

Total Volume: 2.595 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8352

Inside

Deutsch Oil Co.

Morrison A#2

DST Test Number: 1

