



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Deutsch Oil Co
8100 E 22nd St N Bldg 600
Wichita KS 67226
ATTN: Keith Reavis

32 2s 35w Rawlins KS
VPR Unit 1-32
Job Ticket: 64163 **DST#: 1**
Test Start: 2018.01.15 @ 06:44:00

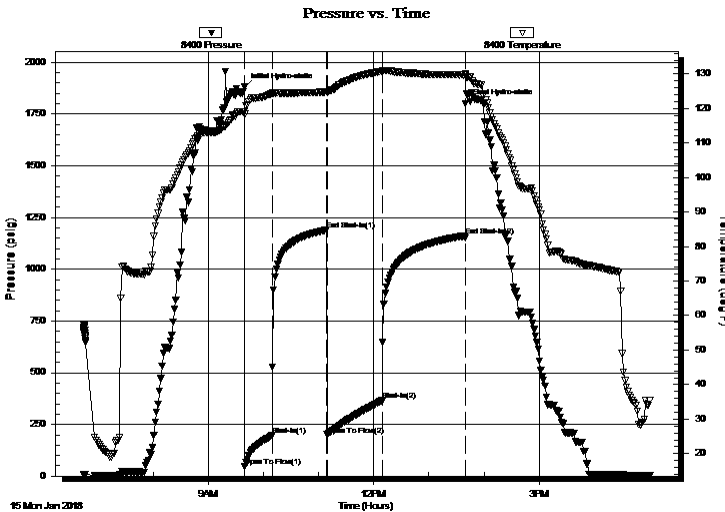
GENERAL INFORMATION:

Formation: **Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:39:31
Time Test Ended: 17:02:00
Interval: **3834.00 ft (KB) To 3933.00 ft (KB) (TVD)**
Total Depth: 3933.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Jim Svaty
Unit No: 69
Reference Elevations: 3155.00 ft (KB)
3150.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8400 Outside
Press@RunDepth: 364.70 psig @ 3835.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2018.01.15 End Date: 2018.01.15 Last Calib.: 2018.01.15
Start Time: 06:44:01 End Time: 17:01:31 Time On Btm: 2018.01.15 @ 09:39:16
Time Off Btm: 2018.01.15 @ 13:39:46

TEST COMMENT: 30-IFP- BOB in 9min.
60-ISIP- No Blow
60-FFP- BOB in 12min.
90-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1879.25	119.12	Initial Hydro-static
1	46.11	118.35	Open To Flow (1)
30	198.43	124.38	Shut-In(1)
90	1188.78	124.88	End Shut-In(1)
90	199.85	124.55	Open To Flow (2)
150	364.70	130.79	Shut-In(2)
240	1160.92	129.75	End Shut-In(2)
241	1798.87	129.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
429.00	MCW 5% _m 95% _w	4.37
310.00	OWCM 5% _o 35% _w 60% _m	4.35
50.00	OWCM 10% _o 20% _w 70% _m	0.70

Gas Rates

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



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FLUID SUMMARY

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Wichita KS 67226

VPR Unit 1-32

Job Ticket: 64163

DST#: 1

ATTN: Keith Reavis

Test Start: 2018.01.15 @ 06:44:00

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:

125000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: 6.40 ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 4.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
429.00	MCW 5% _m 95% _w	4.369
310.00	OWCM 5% _o 35% _w 60% _m	4.348
50.00	OWCM 10% _o 20% _w 70% _m	0.701

Total Length: 789.00 ft Total Volume: 9.418 bbl

Num Fluid Samples: 0

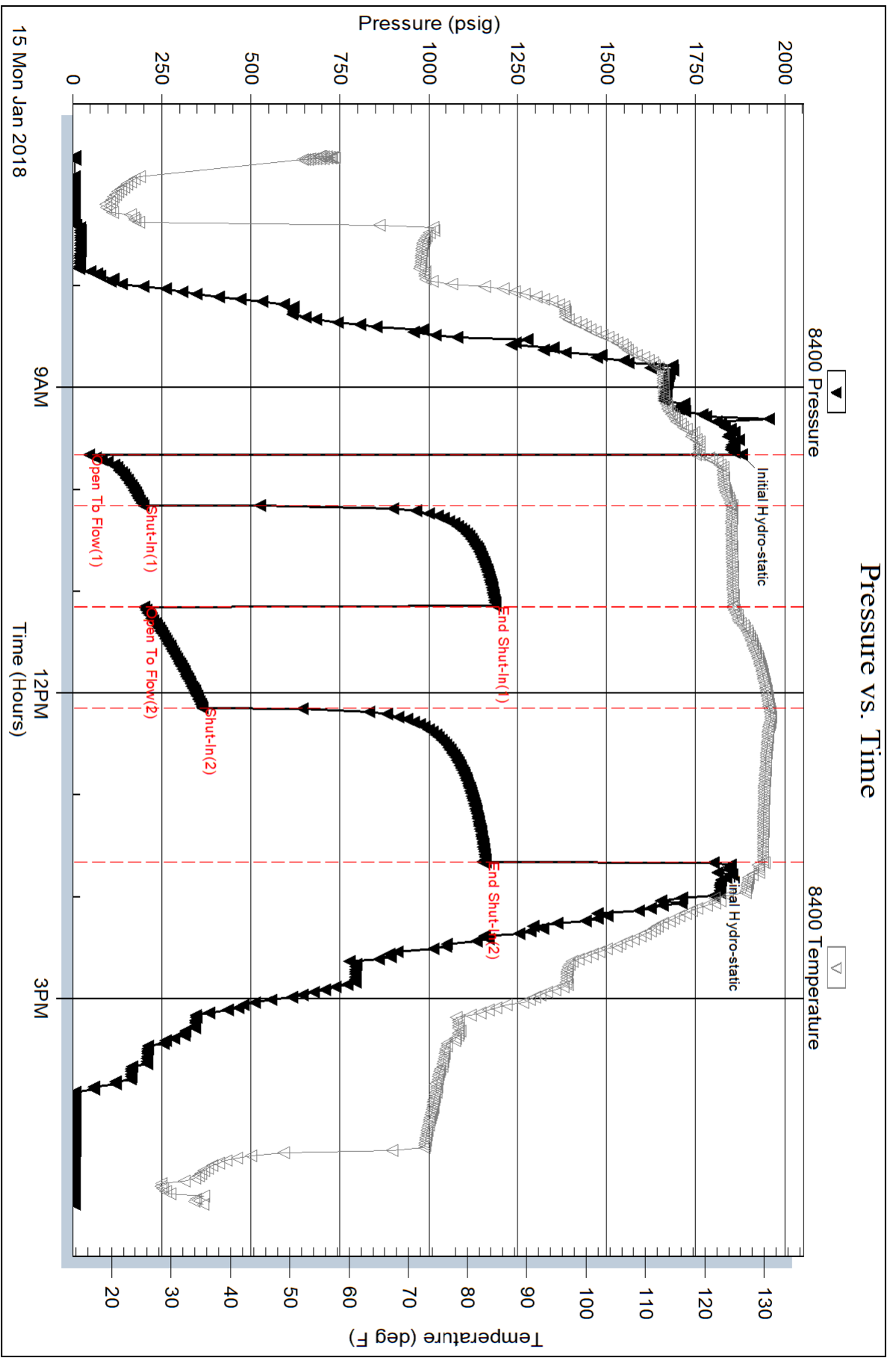
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW- .249 @ 11



Serial #: 6668

Inside

Deutsch Oil Co

VPR Unit 1-32

DST Test Number: 1

