



**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: 64166 **DST#: 4**
Test Start: 2018.01.18 @ 10:55:00

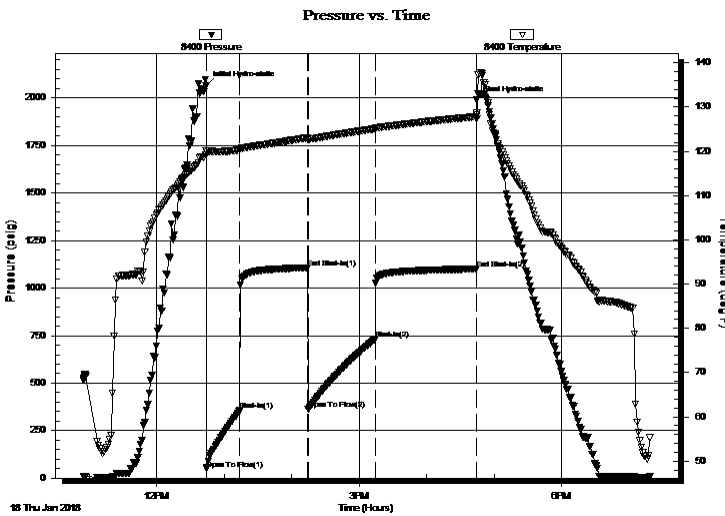
GENERAL INFORMATION:

Formation: **LKC " G "**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:44:01
Time Test Ended: 19:19:00
Interval: **4144.00 ft (KB) To 4192.00 ft (KB) (TVD)**
Total Depth: 4192.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
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: 730.53 psig @ 4154.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2018.01.18 End Date: 2018.01.18 Last Calib.: 2018.01.18
Start Time: 10:55:01 End Time: 19:18:31 Time On Btm: 2018.01.18 @ 12:43:46
Time Off Btm: 2018.01.18 @ 16:44:16

TEST COMMENT: 30-IFP- BOB in 4min.
60-ISIP- No Blow
60-FFP- BOB in 5min.
90-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2065.86	119.98	Initial Hydro-static
1	48.90	119.24	Open To Flow (1)
31	355.10	120.30	Shut-In(1)
91	1106.27	123.04	End Shut-In(1)
91	361.14	122.84	Open To Flow (2)
151	730.53	125.07	Shut-In(2)
241	1100.50	127.83	End Shut-In(2)
241	1988.53	128.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1575.00	MCW 5%w 95%w	20.44

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

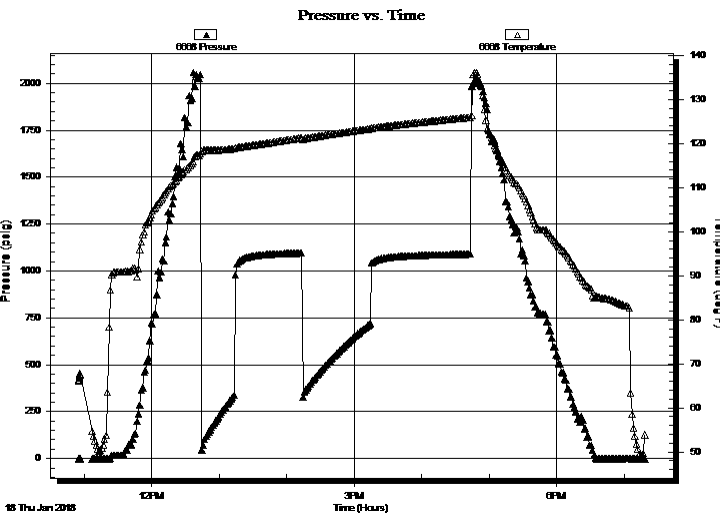
32 2s 35w Rawlins KS
VPR Unit 1-32
 Job Ticket: 64166 **DST#: 4**
 Test Start: 2018.01.18 @ 10:55:00

GENERAL INFORMATION:

Formation: **LKC " G "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:44:01
 Time Test Ended: 19:19:00
 Interval: **4144.00 ft (KB) To 4192.00 ft (KB) (TVD)**
 Total Depth: 4192.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jim Svaty
 Unit No: 69
 Reference Elevations: 3155.00 ft (KB)
 3150.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6668 Inside
 Press@RunDepth: psig @ 4154.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.01.18 End Date: 2018.01.18 Last Calib.: 2018.01.18
 Start Time: 10:55:01 End Time: 19:18:46 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IFP- BOB in 4min.
 60-ISIP- No Blow
 60-FFP- BOB in 5min.
 90-FSIP- No Blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1575.00	MCW 5% m 95% w	20.44

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Deutsch Oil Co

32 2s 35w Rawlins KS

8100 E 22nd St N Bldg 600
Wichita KS 67226

VPR Unit 1-32

Job Ticket: 64166

DST#: 4

ATTN: Keith Reavis

Test Start: 2018.01.18 @ 10:55:00

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:

34000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: 6.40 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 3.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
1575.00	MCW 5% _m 95% _w	20.444

Total Length: 1575.00 ft Total Volume: 20.444 bbl

Num Fluid Samples: 0

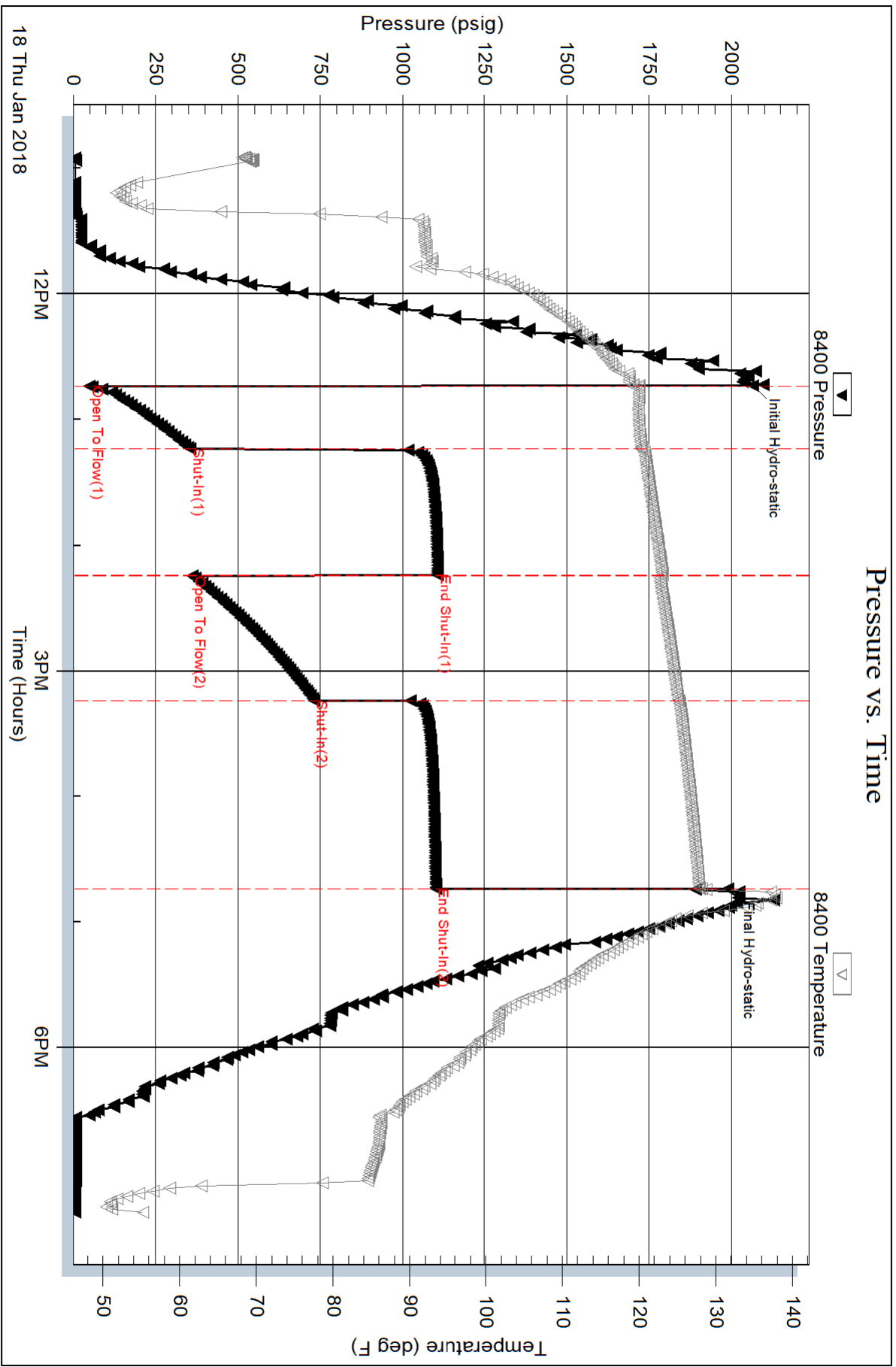
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .265 @ 55



Serial #: 6668

Inside

Deutsch Oil Co

VPR Unit 1-32

DST Test Number: 4

