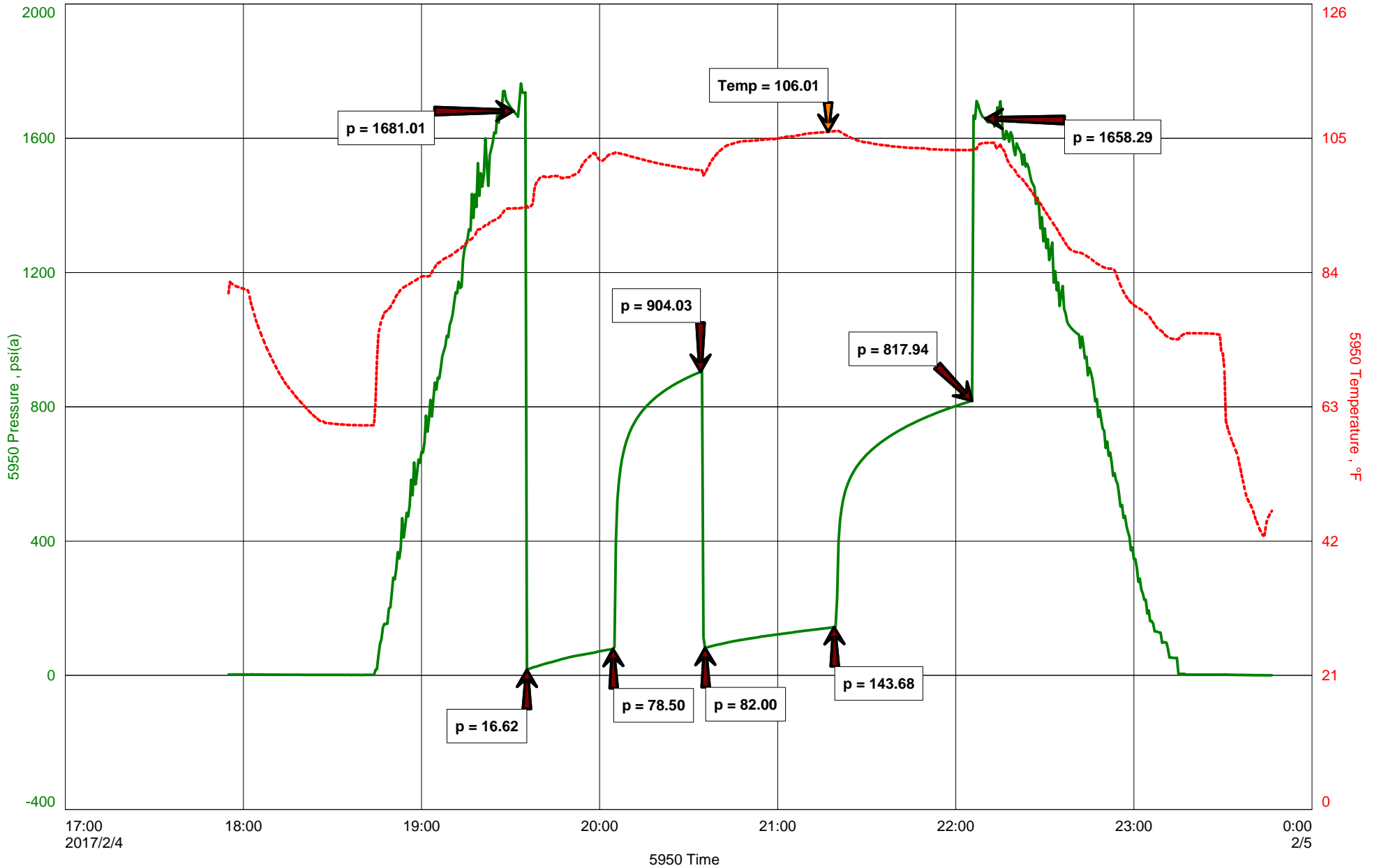


# Herrman #2





**Hoisington, Kansas**

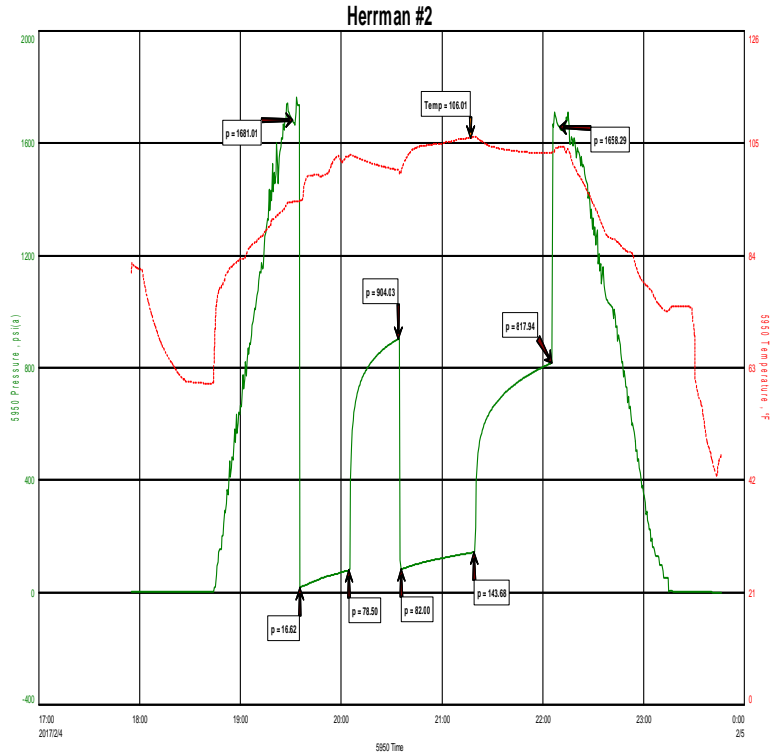
**Michael Carroll**  
**620-617-0368**  
**carroll.dtlc@gmail.com**

**General Information**

**Company Name** H&D Exploration LLC

<b>Contact</b>	<b>Mitch Driscoll</b>
<b>Well Name</b>	<b>Herrman #2</b>
<b>Unique Well ID</b>	<b>Dst #3 Arbuckle 3421-3471'</b>
<b>Surface Location</b>	<b>Sec 8-19s-13w Barton County</b>
<b>Field</b>	<b>Walnut Creek</b>
<b>Well Type</b>	<b>Vertical</b>
<b>Test Type</b>	<b>Drill Stem Test</b>
<b>Well Operator</b>	<b>H&amp;D Exploration LLC</b>

<b>Formation</b>	<b>Dst #3 Arbuckle 3421-3471'</b>
<b>Well Fluid Type</b>	<b>06 Water</b>
<b>Test Purpose</b>	<b>Initial Test</b>
<b>Start Test Date</b>	<b>2017/02/04</b>
<b>Start Test Time</b>	<b>17:55:00</b>
<b>Final Test Time</b>	<b>23:48:00</b>
<b>Job Number</b>	<b>P0159</b>
<b>Report Date</b>	<b>2017/02/04</b>
<b>Prepared By</b>	<b>Michael Carroll</b>



**TEST RECOVERY**

**Remarks** Recovery: 280' OSMW 53%W 47%M >1%Oil

**Total Fluid:** 280'

**Tool Sample:** 76%W 24%M

**Chlorides:** 22000 PPM  
**RW .32 @ 60 Degrees**  
**PH 7**



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: HERRMAN#2DST#3

TIME ON: 1755  
TIME OFF: 2348

Company H&D EXPLORATION LLC Lease & Well No. HERRMAN #2  
Contractor SOUTHWIND DRILLING RIG 3 Charge to H&D EXPLORATION LLC  
Elevation 1856 SUR Formation ARBUCKLE Effective Pay \_\_\_\_\_ Ft. Ticket No. P0159  
Date 2-4-17 Sec. 8 Twp. \_\_\_\_\_ 19 S Range \_\_\_\_\_ 13 W County BARTON State KANSAS  
Test Approved By JIM MUSGROVE Diamond Representative Michael Carroll

Formation Test No. 3 Interval Tested from 3421 ft. to 3471 ft. Total Depth 3471 ft.  
Packer Depth 3416 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Packer Depth 3421 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 3409 ft. Recorder Number 5950 Cap. 5000 P.S.I.  
Bottom Recorder Depth (Outside) 3457 ft. Recorder Number 0230 Cap. 5000 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type Chem Viscosity 53 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
Weight 9.3 Water Loss 5.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 6000 P.P.M. Drill Pipe Length 3396 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number NA Test Tool Length 25 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? NO Reversed Out NO Anchor Length 50(19A) ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 1/2" BLOW-BUILT TO BOB IN 20 MINUTES **NOBB**  
2nd Open: WSB-BUILT TO BOB IN 30 MINUTES **NOBB**

Recovered 280 ft. of OSMW 53%W 47%M >1%OIL CHLORIDES 22000 PPM  
Recovered 280 ft. of TOTAL FLUID RW .32 @ 60 DEGREES  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_ PH 7

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Recovered _____ ft. of _____	Insurance
Remarks: <u>TOOL SAMPLE:76%W 24%M</u>	Total

Time Set Packer(s) 7:33 P.M. A.M. P.M. Time Started Off Bottom 10:03 P.M. A.M. P.M. Maximum Temperature 106

Initial Hydrostatic Pressure..... (A) 1681 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 17 P.S.I. to (C) 79 P.S.I.  
Initial Closed In Period..... Minutes 30 (D) 904 P.S.I.  
Final Flow Period..... Minutes 45 (E) 82 P.S.I. to (F) 144 P.S.I.  
Final Closed In Period..... Minutes 45 (G) 818 P.S.I.  
Final Hydrostatic Pressure..... (H) 1658 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.