



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: **SHIELDS1DST1**

TIME ON: 18:44 2/23  
TIME OFF: 03:24 2/24

Company LD Drilling, Inc. Lease & Well No. Shields #1-5  
Contractor LD Drilling, Inc. Charge to LD Drilling, Inc.  
Elevation 3547' KB Formation L/KC "H-K" Effective Pay \_\_\_\_\_ Ft. Ticket No. F469  
Date 2/24/17 Sec. 5 Twp. \_\_\_\_\_ 6 S Range \_\_\_\_\_ 38 W County Sherman State KANSAS  
Test Approved By Kim Shoemaker Diamond Representative Jake Fahrenbruch

Formation Test No. 1 Interval Tested from 4493 ft. to 4620 ft. Total Depth 4620 ft.  
Packer Depth 4488 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Packer Depth 4493 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 4499 ft. Recorder Number 5951 Cap. 5000 P.S.I.  
Bottom Recorder Depth (Outside) 4500 ft. Recorder Number 5586 Cap. 5000 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEMICAL Viscosity 53 (1# LCM) Drill Collar Length 0 ft. I.D. 2 1/4 in.  
Weight 9.4 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 4,000 P.P.M. Drill Pipe Length 4,465 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number #5 J&J Test Tool Length 28 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? ----- Reversed Out ----- Anchor Length 127 ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 32' perf in anchor Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

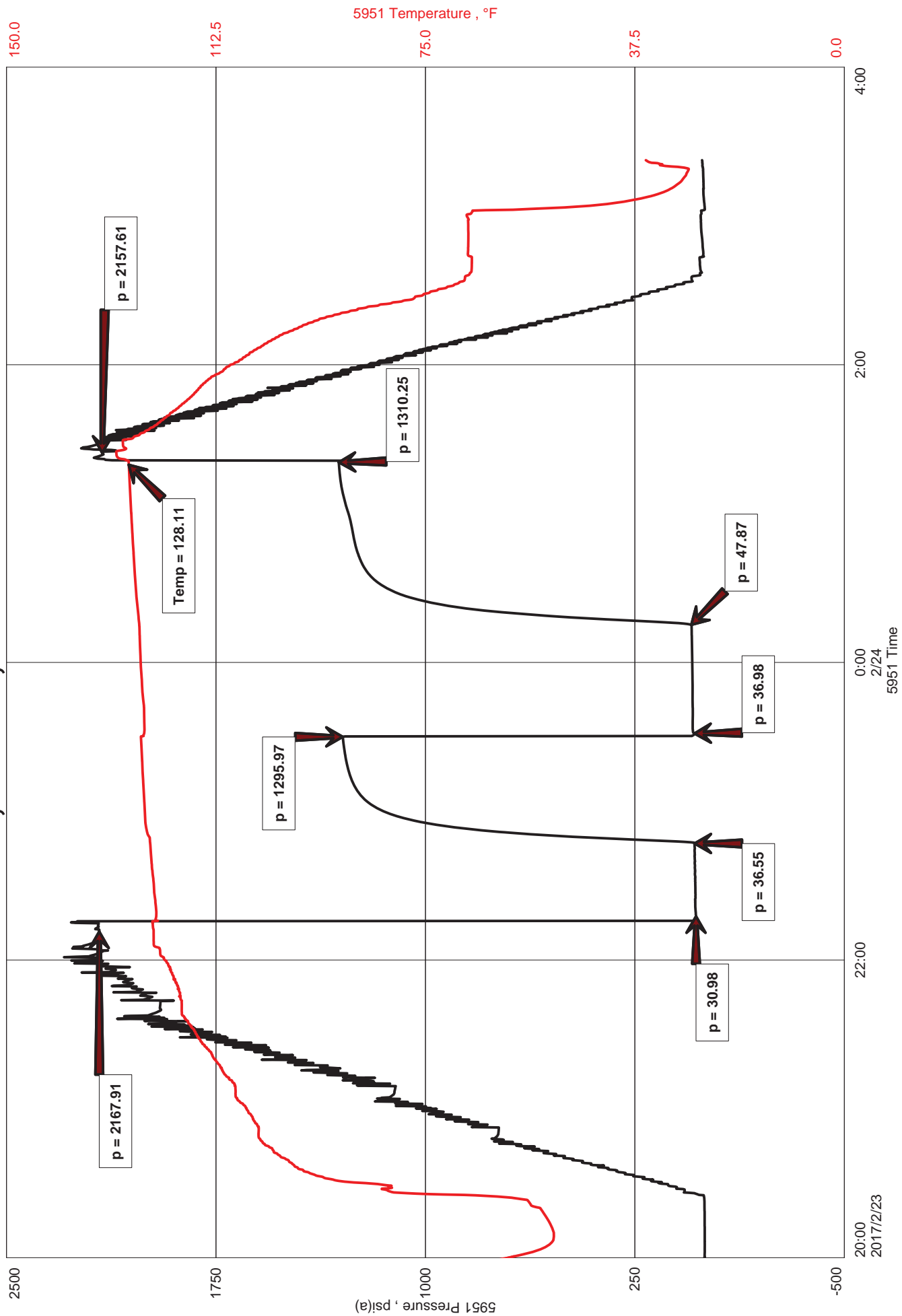
Blow: 1st Open: Blow increased to 2.25". No blowback.  
2nd Open: Blow increased to 1.75". No blowback.

Recovered <u>50</u> ft. of <u>Drlg Mud</u> <u>100%</u> mud	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
	Total

Time Set Packer(s) 10:15 PM A.M. P.M. Time Started Off Bottom 1:15 AM A.M. P.M. Maximum Temperature 128 F  
Initial Hydrostatic Pressure..... (A) 2168 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 31 P.S.I. to (C) 37 P.S.I.  
Initial Closed In Period..... Minutes 45 (D) 1296 P.S.I.  
Final Flow Period..... Minutes 45 (E) 37 P.S.I. to (F) 48 P.S.I.  
Final Closed In Period..... Minutes 60 (G) 1310 P.S.I.  
Final Hydrostatic Pressure..... (H) 2158 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.

# SHIELDS #1-5, DST #1, L/KC "H-K" 4493'-4620'





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**DRILL-STEM TEST TICKET**  
FILE: SHIELDS1DST1

ON LOCATION:	<u>16:30</u>
START RECORDERS:	<u>18:44 2-23</u>
STOP RECORDERS:	<u>08:24 2-24</u>

Company LD Drilling Inc Lease & Well No. Shields #1-5  
Contractor LD Drilling Inc Charge to LD Drilling  
Elevation 3547' KB Formation L/KC "A-K" Effective Pay --- Ft. Ticket No. F469  
Date 2-24-17 Sec. 5 Twp. 6S Range 38N County Sherman State KS  
Test Approved By Kim Shoemaker Diamond Representative JAKE FAHRENBRUCH

Formation Test No. 1 Interval Tested from 4493 ft. to 4620 ft. Total Depth 4620 ft.  
Packer Depth 4488 ft. Size 6 3/4 in. Packer depth --- ft. Size 6 3/4 in.  
Packer Depth 4493 ft. Size 6 3/4 in. Packer depth --- ft. Size 6 3/4 in.

Depth of Selective Zone Set ---  
Top Recorder Depth (Inside) 4499 ft. Recorder Number 5957 Cap. 5000 P.S.I.  
Bottom Recorder Depth (Outside) 4520 ft. Recorder Number 5586 Cap. 5000 P.S.I.  
Below Straddle Recorder Depth --- ft. Recorder Number --- Cap. --- P.S.I.

Mud Type Chemical Viscosity 53 (1#CCM) Drill Collar Length --- ft. I.D. 2 1/4 in.  
Weight 9.4 Water Loss 9.6 cc. Weight Pipe Length --- ft. I.D. 2 7/8 in.  
Chlorides 4200 P.P.M. Drill Pipe Length 4465 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number #5 JJS Test Tool Length 28 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? --- Reversed Out --- Anchor Length 127 ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 x 4 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Blow increased to 2 1/4". No blowback.  
2nd Open: Blow increased to 1 3/4". No blowback.

Recovered 50 ft. of Drilling Mud 100% mud  
Recovered --- ft. of ---  
Recovered --- ft. of ---  
Recovered --- ft. of ---

Recovered <u>---</u> ft. of <u>---</u>	Price Job
Recovered <u>---</u> ft. of <u>---</u>	Other Charges
Remarks: <u>J &amp; S Int.</u>	
	<u>436 MRT (HOES)</u>
	Total

Time Set Packer(s) 10:15 A.M. Time Started Off Bottom 1:15 A.M. Maximum Temperature 128°F

Initial Hydrostatic Pressure..... (A) 2168 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 31 P.S.I. to (C) 37 P.S.I.  
Initial Closed In Period..... Minutes 45 (D) 1296 P.S.I.  
Final Flow Period..... Minutes 45 (E) 37 P.S.I. to (F) 48 P.S.I.  
Final Closed In Period..... Minutes 60 (G) 1310 P.S.I.  
Final Hydrostatic Pressure..... (H) 2158 P.S.I.

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# DIAMOND TESTING GENERAL REPORT

**Jake Fahrenbruch, Tester**

Cell: (620) 282-8977 / Office: (800) 542-7313



## TEST INFORMATION

<b>Well Name</b>	Shields #1-5
<b>Company Name</b>	LD Drilling, Inc.
<b>Formation</b>	DST #1, L/KC "H-K" 4493'-4620'
<b>Test Type</b>	Bottom-Hole w/Jars & Safety Joint
<b>Surface Location</b>	Sec 5-6s-38w-Sherman Co.-KS
<b>KB Elevation (SL)</b>	3547.000
<b>Gauge Name</b>	5951
<b>Start Test Date</b>	2017/02/23
<b>Start Test Time</b>	18:44:00
<b>Final Test Date</b>	2017/02/24
<b>Final Test Time</b>	03:24:00
<b>Job Number</b>	F469
<b>Contact</b>	Marilyn Davis
<b>Site Contact</b>	Kim Shoemaker

## TEST RESULTS

Initial flow, blow increased to 2.25". No blowback.  
Final flow, blow increased to 1.75". No blowback.

Recovered 50' of drilling mud, 100% mud.

## SHIELDS #1-5, DST #1, L/KC "H-K" 4493'-4620'

