

# Diamond Testing

## General information Report

### General Information

Company Name L.D. DRILLING, INC.

Contact	L.D. DAVIS	Job Number	
Well Name	MILLER 'CC' #2	Representative	ROGER D. FRIEDLY
Unique Well ID	DST #1 ARBUCKLE 3,520' - 3,613'	Well Operator	L.D. DRILLING, INC.
Surface Location	SEC 8-19S-15W BARTON COUNTY, KS	Report Date	2011/01/06
Well License Number		Prepared By	ROGER D. FRIEDLY
Field	WILDCAT		
Well Type	Vertical		

Test Type	CONVENTIONAL DRILL-STEM TEST		
Formation	DAST #1 ARBUCKLE 3,520' - 3,613'		
Well Fluid Type	01 Oil	Start Test Time	16:55:00
		Final Test Time	01:18:00
Start Test Date	2011/01/05		
Final Test Date	2011/01/06		
Gauge Name	1150		
Gauge Serial Number			

### Test Results

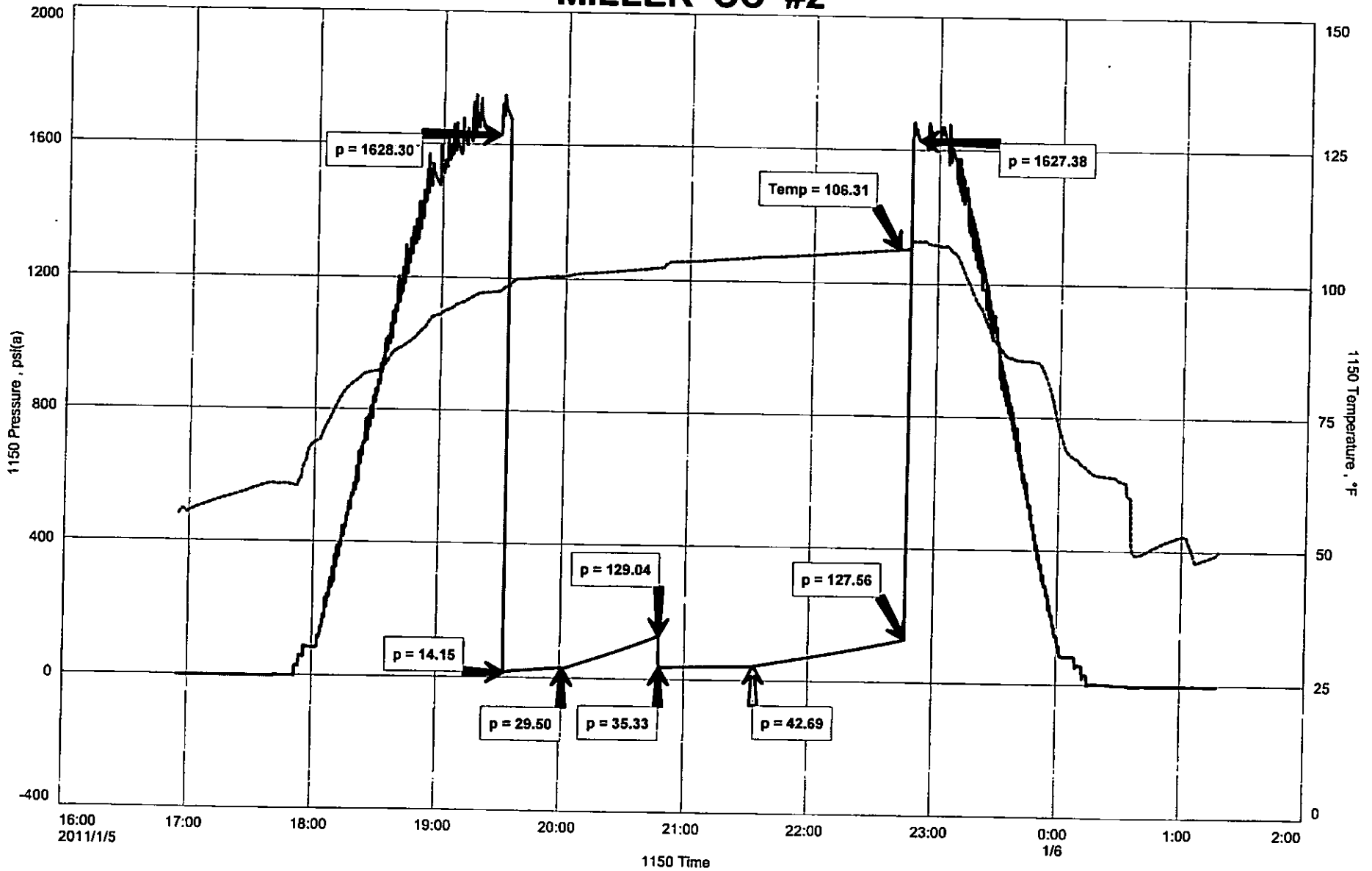
RECOVERED: 92 DM 100% MUD

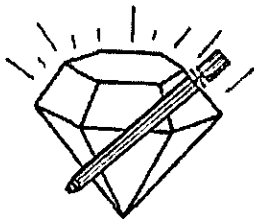
TOOL SAMPLE: 100% DM FEW OIL SPECKS

L.D. DRILLING, INC.  
DST #1 ARBUCKLE 3,520' - 3,613'  
Start Test Date: 2011/01/05  
Final Test Date: 2011/01/06

MILLER 'CC' #2  
Formation: DAST #1 ARBUCKLE 3,520' - 3,613'

### MILLER 'CC' #2





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

CLOCK ON: 16:55  
 CLOCK OFF: 01:18(1.6)

Company L.D DRILLING, INC. Lease & Well No. MILLER 'CC' #2  
 Contractor DUKE RIG #9 Charge to L.D. DRILLING, INC.  
 Elevation 1,998 KB Formation ARBUCKLE Effective Pay \_\_\_\_\_ Ft. Ticket No. \_\_\_\_\_  
 Date 1-05-11 Sec. 8 Twp. 19 S Range 15 W County BARTON State KANSAS  
 Test Approved By KIM SHOEMAKER Diamond Representative ROGER D. FRIEDLY

Formation Test No. 1 Interval Tested from 3,520 ft. to 3,613 ft. Total Depth 3,613 ft.  
 Packer Depth 3,515 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Packer Depth 3,520 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 3,501 ft. Recorder Number 1150 Cap. 5,000 P.S.I.  
 Bottom Recorder Depth (Outside) 3,610 ft. Recorder Number 3851 Cap. 5,700 P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEMICAL Viscosity 58 Drill Collar Length 174 ft. I.D. 2 1/4 in.  
 Weight 9.4 Water Loss 10.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 6,000 P.P.M. Drill Pipe Length 3,313 ft. I.D. 3 1/2 in.  
 Jars: Make BOWEN Serial Number #3 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? NO Reversed Out NO Anchor Length 93 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: WEAK 1/2" BLOW INCREASING TO 4" (NObb)  
 2nd Open: WEAK 1/2" BLOW INCREASING TO 4" (NObb)

Recovered 92 ft. of DM 100% MUD  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: <u>DIESEL IN BUCKET</u>	Insurance
<u>TOOL SAMPLE: 100% DM - FEW OIL SPECKS</u>	Total

Time Set Packer(s) 7:33 P.M. A.M. \_\_\_\_\_ P.M. \_\_\_\_\_ Time Started Off Bottom 10:33 P.M. A.M. \_\_\_\_\_ P.M. \_\_\_\_\_ Maximum Temperature 106  
 Initial Hydrostatic Pressure ..... (A) 1,628 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 14 P.S.I. to (C) 30 P.S.I.  
 Initial Closed In Period ..... Minutes 45 (D) 129 P.S.I.  
 Final Flow Period ..... Minutes 45 (E) 35 P.S.I. to (F) 43 P.S.I.  
 Final Closed In Period ..... Minutes 60 (G) 128 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1,627 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.

# Diamond Testing

## General information Report

### General Information

Company Name L.D. DRILLING, INC.

Contact	L.D. DAVIS	Job Number	
Well Name	MILLER 'CC' #2	Representative	ROGER D. FRIEDLY
Unique Well ID	DST #2 ARBUCKLE3,610' - 3,626'	Well Operator	L.D. DRILLING, INC.
Surface Location	SEC 8-19S-15W BARTON COUNTY, KS	Report Date	2011/01/06
Well License Number		Prepared By	ROGER D. FRIEDLY
Field	WILDCAT		
Well Type	Vertical		

Test Type	CONVENTIONAL DRILL-STEM TEST		
Formation	DST #2 ARBUCKLE3,610' - 3,626'		
Well Fluid Type	01 Oil	Start Test Time	06:40:00
		Final Test Time	14:34:00
Start Test Date	2011/01/16		
Final Test Date	2011/01/06		
Gauge Name	1150		
Gauge Serial Number			

### Test Results

RECOVERED: 600' GAS IN PIPE  
15' CLEAN OIL 36 GRAVITY @ 60 deg  
77' OCWM 10% OIL, 30% WTR, 60% MUD  
360' SW 100% WTR  
452' TOTAL FLUID

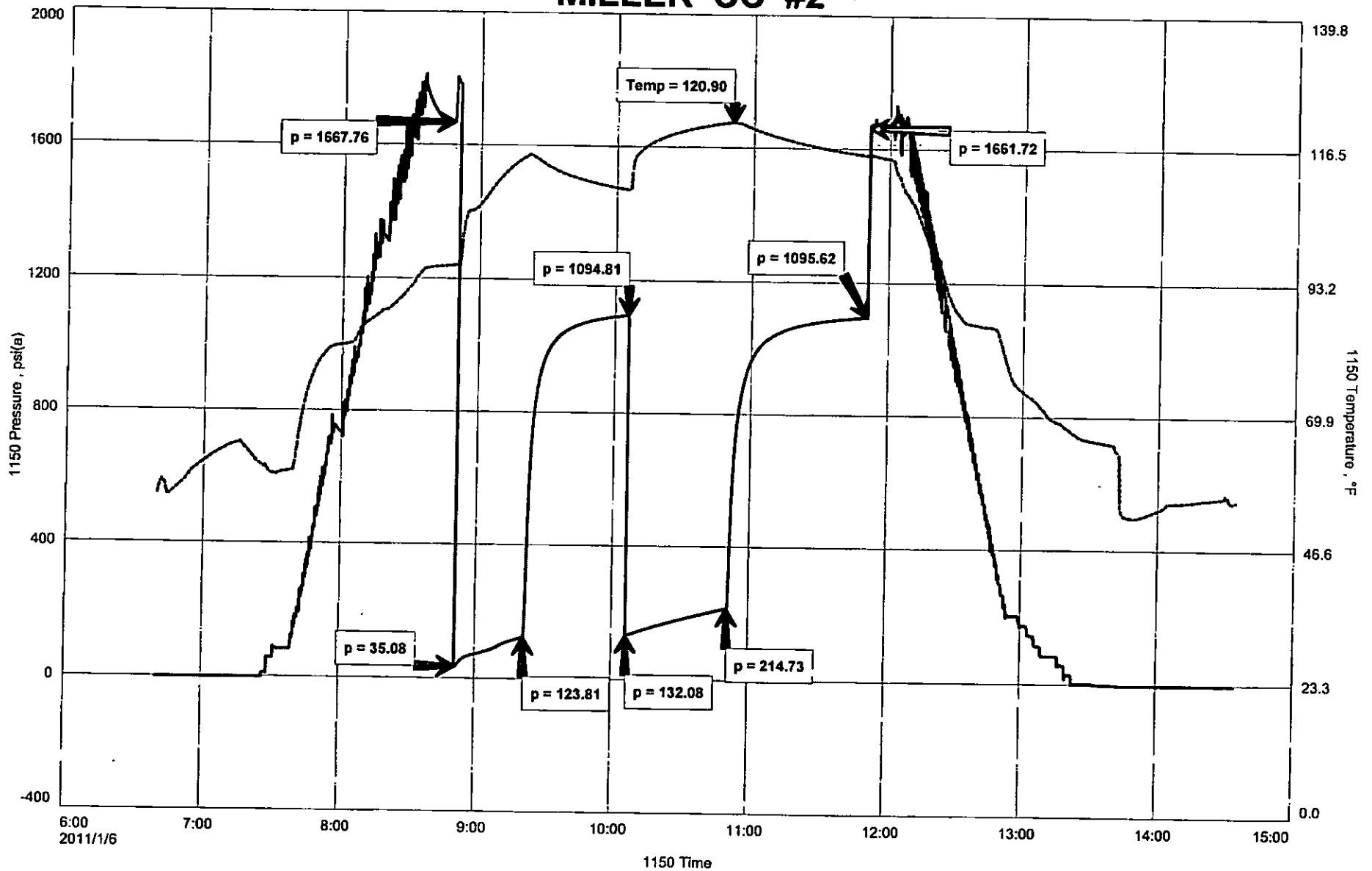
TOOL SAMPLE: 4% OIL, 96% MUD

CHLORIDES: 44,000 Ppm  
PH: 7.0  
RW: .20 @ 58 deg

L.D. DRILLING, INC.  
DST #2 ARBUCKLEIREAGAN 3,610' - 3,626'  
Start Test Date: 2011/01/16  
Final Test Date: 2011/01/06

MILLER 'CC' #2  
Formation: DST #2 ARBUCKLEIREAGAN 3,610' - 3,626'

### MILLER 'CC' #2





**DIAMOND TESTING**  
P.O. Box 157  
HOISINGTON, KANSAS 67544  
(800) 542-7313

CLOCK ON: 06:40

CLOCK OFF: 14:34

**DRILL-STEM TEST TICKET**

Company L.D. DRILLING, INC. Lease & Well No. MILLER 'CC' #2  
Contractor DUKE RIG #9 Charge to L.D. DRILLING, INC.  
Elevation 1,998 KB Formation ARBUCKLE \ REAGAN Effective Pay \_\_\_\_\_ Ft. Ticket No. \_\_\_\_\_  
Date 1-06-11 Sec. 8 Twp. 19 S Range 15 W County BARTON State KANSAS  
Test Approved By KIM SHOEMAKER Diamond Representative ROGER D. FRIEDLY

Formation Test No. 2 Interval Tested from 3,610 ft. to 3,626 ft. Total Depth 3,626 ft.  
Packer Depth 3,605 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3,610 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 3,591 ft. Recorder Number 1150 Cap. 5,000 P.S.I.  
Bottom Recorder Depth (Outside) 3,623 ft. Recorder Number 3851 Cap. 5,700 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEMICAL Viscosity 52 Drill Collar Length 174 ft. I.D. 2 1/4 in.  
Weight 9.2 Water Loss 10.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 6,000 P.P.M. Drill Pipe Length 3,402 ft. I.D. 3 1/2 in.  
Jars: Make BOWEN Serial Number #3 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? NO Reversed Out NO Anchor Length 16 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: FAIR 2" BLOW INCREASING TO BOTTOM OF BUCKET IN 4 1/4" MIN (F 2 1/2" bb)  
2nd Open: FAIR 1" BLOW INCREASING TO BOTTOM OF BUCKET IN 12 MIN (F 2" bb)

Recovered 600 ft. of GAS IN PIPE  
Recovered 15 ft. of CLEAN OIL 36 GRAVITY @ 60 deG  
Recovered 77 ft. of OCWM 10% OIL, 30% WTR, 60% MUD

Recovered <u>360</u> ft. of <u>SW 100% WTR</u>	<u>CHLORIDES 44,000 Ppm</u>	Price Job
Recovered <u>452</u> ft. of <u>TOTAL FLUID</u>	<u>PH: 7.0</u>	Other Charges
Remarks: <u>DIESEL IN BUCKET</u>		Insurance
TOOL SAMPLE: <u>4% OIL, 96% MUD</u>		Total

Time Set Packer(s) 8:51 A.M. A.M. P.M. Time Started Off Bottom 11:51 A.M. A.M. P.M. Maximum Temperature 121  
Initial Hydrostatic Pressure ..... (A) 1,688 P.S.I.  
Initial Flow Period ..... Minutes 30 (B) 35 P.S.I. to (C) 124 P.S.I.  
Initial Closed In Period ..... Minutes 45 (D) 1,095 P.S.I.  
Final Flow Period ..... Minutes 45 (E) 132 P.S.I. to (F) 215 P.S.I.  
Final Closed In Period ..... Minutes 60 (G) 1,096 P.S.I.  
Final Hydrostatic Pressure ..... (H) 1,662 P.S.I.

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