



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

Nº

1284

P. O. BOX 1599 PHONE (316) 262-5861 WICHITA, KANSAS 67201

Elevation ? Formation Miss Eff. Pay Ft.

District G.T. Bend Date 6-23-83 Customer Order No.

COMPANY NAME F.H. Wood Jr. ADDRESS 301 Farm + Bank Bldg. Wichita, KS, 67202 LEASE AND WELL NO. BEAR #2 COUNTY HARPER STATE KS. Sec. 20 Twp. 31 Rge. 8W Mail Invoice To #2 BEAR No. Copies Requested 5 Co. Name SAME Address Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 4395 1/2 ft. to 4402 1/2 ft. Total Depth 4402 1/2 ft. Packer Depth 4390 1/2 ft. Size 6 3/8 in. Packer Depth 4395 1/2 ft. Size 6 3/8 in. Packer Depth - ft. Size - in. Depth of Selective Zone Set - Top Recorder Depth (Inside) 4384 ft. Recorder Number 1560 Cap. 4500 Bottom Recorder Depth (Outside) 4397 ft. Recorder Number 3085 Cap. 4500 Below Saddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor RAW delg rig Mud Type Chemical Viscosity 44 Weight 9.2 Water Loss 20 cc. Chlorides 17,000 P.P.M. Jars: Make - Serial Number - Did Well Flow? NO Reversed Out NO Drill Collar Length - I. D. - in. Weight Pipe Length 300 I. D. 2.7 in. Drill Pipe Length 4071 1/2 I. D. 3.8 in. Test Tool Length 27 ft. Tool Size 5 1/2 in. Anchor Length 7 ft. Size 5 1/2 in. Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in. Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: IF - Strong Blow throughout gas to surface in 13 min FF - gas to surface Recovered 30 ft. of thin mud Recovered 60 ft. of slightly oil cut muddy water 5% oil 30% mud 60% water Recovered - ft. of 5% gas Recovered - ft. of 68,300 CFAD Chlorides 38,000 P.P.M. Sample Jars used 2 Remarks:

Time On Location 1:30 AM P.M. Time Pick Up Tool 3:20 AM P.M. Time Off Location 1:30 AM P.M. Time Set Packer(s) 5:10 AM P.M. Time Started Off Bottom 8:10 AM P.M. Maximum Temperature 120 Initial Hydrostatic Pressure (A) 2186 P.S.I. Initial Flow Period 30 Minutes (B) 34 P.S.I. to (C) 34 P.S.I. Initial Closed In Period 45 Minutes (D) 1353 P.S.I. Final Flow Period 60 Minutes (E) 46 P.S.I. to (F) 46 P.S.I. Final Closed In Period 45 Minutes (G) 1274 P.S.I. Final Hydrostatic Pressure (H) 2163 P.S.I.

COMPANY TERMS Western Testing Co., Inc. 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, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made. All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount. Test Approved By: Signature of Customer or his authorized representative E.H. Wood Jr. Western Representative: Ray Schwager

FIELD INVOICE Table with items: Open Hole Test \$595.00, Misrun \$, Straddle Test \$, Jars \$, Selective Zone \$, Safety Joint \$, Standby \$, Evaluation \$, Extra Packer \$, Circ. Sub. \$, Mileage \$, Fluid Sampler \$, Extra Charts \$, Insurance \$, Telecopier \$, TOTAL \$595.00



No. ~~4206~~ 3501

GAS FLOW REPORT

Date 8-23-83 Ticket 1284 Company E.H. WOOD
 Well Name and No. BEAR # 2 Dst No. 1 Interval Tested 4395¹/₂ - 4402¹/₂
 County HARPER State Ks. Sec. 20 Twp. 31⁵ Rg. 7^W

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
<i>gas to surface in 13 min.</i>					
PRE FLOW					
		<i>inches of H₂O</i>			
17	12	"	3/4"		49,300 CFPD
27	12	"	3/4"		49,300 CFPD

JH.

SECOND FLOW					
		<i>inches of H₂O</i>			
2	30	"	1"		141,000 CFPD
12	8	"	1"		73,100 CFPD
22	7	"	1"		68,300 CFPD
32	7	"	1"		68,300 CFPD
42	7	"	1"		68,300 CFPD
48	7	"	1"		68,300 CFPD

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____

Authorized by _____

WESTERN TESTING CO., INC.

Pressure Data

Date 6-23

Test Ticket No. 1284

Recorder No. 1560

Capacity 4500

Location 4384 Ft.

Clock No. _____ Elevation _____

Well Temperature 120 °F

Point	Pressure	P.S.I.
A Initial Hydrostatic Mud	<u>2135</u>	P.S.I.
B First Initial Flow Pressure	<u>46</u>	P.S.I.
C First Final Flow Pressure	<u>46</u>	P.S.I.
D Initial Closed-in Pressure	<u>1357</u>	P.S.I.
E Second Initial Flow Pressure	<u>56</u>	P.S.I.
F Second Final Flow Pressure	<u>64</u>	P.S.I.
G Final Closed-in Pressure	<u>1288</u>	P.S.I.
H Final Hydrostatic Mud	<u>2128</u>	P.S.I.

	Time Given	Time Computed
Open Tool	<u>5:10 P</u>	<u>M</u>
First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
Initial Closed-in Pressure	<u>45</u> Mins.	<u>48</u> Mins.
Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 17 Inc.
of 3 mins. and a
final inc. of 0 Min.

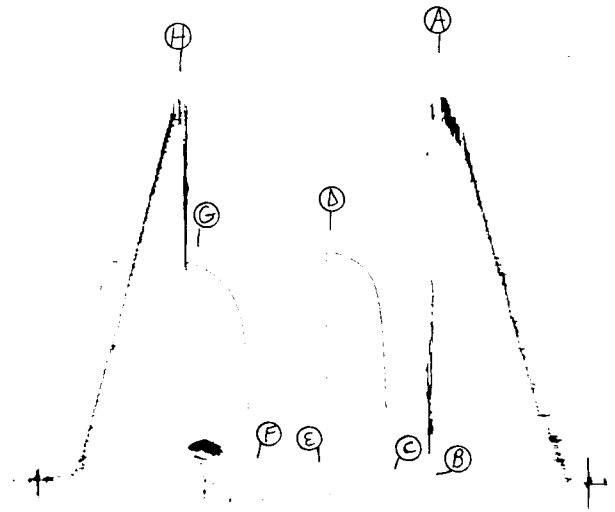
Second Flow Pressure
Breakdown: 13 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 16 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>46</u>	<u>0</u>	<u>46</u>	<u>0</u>	<u>56</u>	<u>0</u>	<u>64</u>
P 2 <u>5</u>		<u>3</u>	<u>545</u>	<u>5</u>		<u>3</u>	<u>757</u>
P 3 <u>10</u>		<u>6</u>	<u>842</u>	<u>10</u>		<u>6</u>	<u>934</u>
P 4 <u>15</u>		<u>9</u>	<u>1054</u>	<u>15</u>	<u>56</u>	<u>9</u>	<u>1031</u>
P 5 <u>20</u>		<u>12</u>	<u>1160</u>	<u>20</u>	<u>57</u>	<u>12</u>	<u>1087</u>
P 6 <u>25</u>		<u>15</u>	<u>1212</u>	<u>25</u>	<u>58</u>	<u>15</u>	<u>1130</u>
P 7 <u>30</u>	<u>46</u>	<u>18</u>	<u>1247</u>	<u>30</u>	<u>59</u>	<u>18</u>	<u>1161</u>
P 8 <u>35</u>		<u>21</u>	<u>1272</u>	<u>35</u>	<u>60</u>	<u>21</u>	<u>1186</u>
P 9 <u>40</u>		<u>24</u>	<u>1291</u>	<u>40</u>	<u>61</u>	<u>24</u>	<u>1207</u>
P10 <u>45</u>		<u>27</u>	<u>1305</u>	<u>45</u>	<u>62</u>	<u>27</u>	<u>1225</u>
P11 <u>50</u>		<u>30</u>	<u>1317</u>	<u>50</u>	<u>63</u>	<u>30</u>	<u>1240</u>
P12 <u>55</u>		<u>33</u>	<u>1328</u>	<u>55</u>	<u>64</u>	<u>33</u>	<u>1254</u>
P13 <u>60</u>		<u>36</u>	<u>1338</u>	<u>60</u>	<u>64</u>	<u>36</u>	<u>1265</u>
P14		<u>39</u>	<u>1344</u>	<u>65</u>		<u>39</u>	<u>1274</u>
P15		<u>42</u>	<u>1349</u>	<u>70</u>		<u>42</u>	<u>1282</u>
P16		<u>45</u>	<u>1354</u>	<u>75</u>		<u>45</u>	<u>1288</u>
P17		<u>48</u>	<u>1357</u>	<u>80</u>		<u>48</u>	
P18		<u>51</u>		<u>85</u>		<u>51</u>	
P19		<u>54</u>		<u>90</u>		<u>54</u>	
P20		<u>57</u>				<u>57</u>	
		<u>60</u>				<u>60</u>	

TKT # 1284

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WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 6/23/83 TICKET #1284
CUSTOMER: E H WOOD JR. LEASE: BEAR
WELL: 2 TEST: 1 GEOLOGIST: E H WOOD JR.
ELEVATION (KB): 0 FORMATION: MISSISSIPPI
SECTION: 20 TOWNSHIP: 31S
RANGE: 8W COUNTY: HARPER STATE: KANSAS
GAUGE SN #1560 RANGE: 4500 CLOCK: 12

INTERVAL TEST FROM: 4395 1/2 FT TO: 4402 1/2 FT TOTAL DEPTH: 4402 1/2 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4390 1/2 FT SIZE: 6 5/8 IN PACKER DEPTH: 4395 1/2 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: KAW DRLG
MUD TYPE: CHEMICAL VISCOSITY: 44
WEIGHT: 9.2 WATER LOSS (CC): 20.0
CHLORIDES (P.P.M.): 17000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: FT I.D.: IN
WEIGHT PIPE LENGTH: 300 FT I.D.: 2.7 IN
DRILL PIPE LENGTH: 4071 1/2 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 24 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 7 FT SIZE: 5 1/2 IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: INITIAL FLOW PERIOD STRONG BLOW THROUGHOUT.
GAS TO SURFACE IN 13 MINUTES.
FINAL FLOW PERIOD GAS TO SURFACE.
SEE ATTACHED GAS SHEET.

RECOVERED: 30 FT OF: THIN MUD
RECOVERED: 60 FT OF: SLIGHTLY OIL CUT MUDDY WATER
RECOVERED: FT OF: 5% OIL; 30% MUD; 60% WATER; 5% GAS
RECOVERED: FT OF: CHLORIDES 38000 PPM
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 5:10 PM TIME STARTED OFF BOTTOM: 8:10 PM
WELL TEMPERATURE: 120 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2135 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 46 PSI TO (C) 46 PSI
INITIAL CLOSED IN PERIOD MIN: 48 (D) 1357 PSI
FINAL FLOW PERIOD MIN: 60 (E) 56 PSI TO (F) 64 PSI
FINAL CLOSED IN PERIOD MIN: 45 (G) 1288 PSI
FINAL HYDROSTATIC PRESSURE (H) 2128 PSI

