



P. O. BOX 793  
GREAT BEND, KANSAS

WESTERN TESTING CO., INC.  
FORMATION TESTING  
TICKET 23383

Formation Missouri Elevation 15821 KB Eff. Pay — Ft.

District Drilling Co. Inc. Date 2/5/78 Customer Order No. —  
 COMPANY NAME Chief-B&B Drilling, Inc.  
 ADDRESS 905 Century Plaza, Wichita, Ks  
 LEASE AND WELL NO. Bergman #2 COUNTY Kingman STATE Kans Sec. 34 Twp. 30S Rge. 7 W  
 Mail Inv. To Same as above Address — No. Copies Requested 5  
 Mail Charts To Same as above Address — No. Copies Requested 5

Formation Test No. #1 O.K.  Misrun  Interval Tested From 4327' to 4336' Total Depth 4336'  
 Size Main Hole 7 7/8" Rat Hole — Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No  
 Top Packer Depth 4322' Ft. Size 6 3/4" Bottom Packer Depth 4327' Ft. Size 6 3/4"  
 Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth — Ft. Size —  
 Tool Size 5500 Tool Joint Size 4 1/2 FH Anchor Length 9 Ft. Size 5500 Surface Choke Size 3 1/2 In. Bottom Choke Size 3 1/2 In.  
 RECORDERS Depth 4328 Ft. Clock No. 8476 Depth 4331 Ft. Clock No. 4763  
 Top Maker Kusten Cap. 4200 No. 1563 Inside — Bottom Maker Kusten Cap. 3150 No. 1565 Inside —  
 Below Straddle: Depth — Rec. No. — Clock No. — Outside — Depth — Ft. Rec. No. — Clock No. — Outside —  
 Time Set Packer 1:28 AM  
 Tool Open I.F.P. From 1:30 AM to 2:00 AM Hr. 30 Min. From (B) 86 P.S.I. To (C) 86 P.S.I.  
 Tool Closed I.C.I.P. From 2:00 AM to 2:30 AM Hr. 30 Min. (D) 740 P.S.I.  
 Tool Open F.F.P. From 2:30 AM to 3:00 AM Hr. 30 Min. From (E) 75 P.S.I. To (F) 86 P.S.I.  
 Tool Closed F.C.I.P. From 3:00 AM to 3:30 AM Hr. 30 Min. (G) 644 P.S.I.  
 Initial Hydrostatic Pressure (A) 2150 P.S.I. Final Hydrostatic Pressure (H) 2252 P.S.I. Maximum Temp. 132°

INFORMATION

BLOW Strong blow throughout flow periods test  
 Did Well Flow  Yes  No Recovery Total Ft. 30' Mud 125' Very Slightly  
Oil + Gas cut mud 15' Watery mud  
 Reversed Out  Yes  No Mud Type Starch Viscosity 43 Weight 9.9 Water Loss 16.4 cc. Chlorides 16,000 ppm  
 EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint — Jars: Size — In. Make — Ser. No. —  
 Dual Packers yes Did Packers Hold? yes Did Tool Plug? No Where? —  
 DRILLING CONTRACTOR B&B Drilling #2 Length Drill Pipe 4120 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 x H In.  
 Length Weight Pipe 185 ft. I.D. Weight Pipe 2.7 In. Tool Joint Size 4 1/2 x H In. Length Drill Collars — ft. I.D. Drill Collars — In.  
 Tool Joint Size — In. Length D.S.T. Tool 31 ft.  
 Remarks Slid Tool 10' to bottom

INVOICE SECTION

Open Hole Test	\$ <u>440.00</u>
Straddle Test	\$
Jars	\$
Selective Zone	\$
Safety Joint	\$
Misrun	\$
Evaluation	\$
Packer	\$
Circ. Sub.	\$
Total	\$ <u>440.00</u>

COMPANY TERMS

Western Testing Co., Inc., shall not be liable for damage 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 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 10% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Ziel G. Lohar Western Representative Vernon Wondra  
 Signature of Customer or his Authorized Representative Operator's Time Jim Wondra Hrs.

WESTERN TESTING CO., INC.

Pressure Data

are 2-5-78 Test Ticket No. 23383  
 Recorder No. 1563 Capacity 4200 Location 4328 Ft.  
 Clock No. 8476 Elevation 15821 KB Well Temperature 132 °F

Point	Pressure	Open Tool	Time Given	Time Computed
Initial Hydrostatic Mud	<u>2286</u> P.S.I.		<u>1:28 A M</u>	
First Initial Flow Pressure	<u>114</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
First Final Flow Pressure	<u>86</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
Initial Closed-in Pressure	<u>798</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
Second Initial Flow Pressure	<u>107</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
Second Final Flow Pressure	<u>97</u> P.S.I.			
Final Closed-in Pressure	<u>657</u> P.S.I.			
Final Hydrostatic Mud	<u>2252</u> P.S.I.			

PRESSURE BREAKDOWN

Point Inches	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In			
	Breakdown: <u>4</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>16</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.			
	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1	<u>114</u>	0	<u>86</u>	0	<u>107</u>	0	<u>97</u>
2	<u>107</u>	3	<u>125</u>	3	<u>91</u>	3	<u>142</u>
3	<u>88</u>	6	<u>188</u>	6	<u>92</u>	6	<u>200</u>
4	<u>88</u>	9	<u>265</u>	9	<u>92</u>	9	<u>259</u>
5	<u>88</u>	12	<u>349</u>	12	<u>92</u>	12	<u>319</u>
6	<u>88</u>	15	<u>435</u>	15	<u>97</u>	15	<u>375</u>
7	<u>86</u>	18	<u>515</u>	18	<u>97</u>	18	<u>438</u>
8		21	<u>598</u>	<del>21</del>		21	<u>498</u>
9		24	<u>679</u>	24		24	<u>555</u>
10		27	<u>751</u>	27		27	<u>613</u>
11		30	<u>798</u>	30		30	<u>657</u>
12		<del>33</del>		33		<del>33</del>	
13		36		36		36	
14		39		39		39	
15		42		42		42	
16		45		45		45	
17		48		48		48	
18		51		51		51	
19		54		54		54	
20		57		57		57	
		60		60		60	



Home Office: Wichita, Kansas 67201  
 P. O. Box 1599 (316) 838-0601

Company Chief Drilling Co., Inc. Lease & Well No. Bergman #2  
B & B Drilling, Inc.  
 Elevation 15821 Kelly Bush. Formation Mississippi Effective Pay - Ft. Ticket No. 23383  
 Date 2-5-78 Sec. 34 Twp. 30S Range 7W County Kingman State Kansas  
 Test Approved by Bill G. Lahar Western Representative Vernon Wondra  
 Formation Test No. 1 O.K.  Misrun  Interval Tested From 4327' to 4336' Total Depth 4336'  
 Size Main Hole 7-7/8 Rat Hole  Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No  
 Top Packer Depth 4322 Ft. Size 6-3/4 Bottom Packer Depth 4327 Ft. Size 6-3/4  
 Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth - Ft. Size -  
 Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 9 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.  
 RECORDERS Depth 4328 Ft. Clock No. 8476 Depth 4331 Ft. Clock No. 4763  
 Top Make Kuster Cap. 4200 No. 1563 <sup>Inside</sup> ~~Outside~~ Bottom Make Kuster Cap. 3150 No. 1565 <sup>Inside</sup> ~~Outside~~  
 Below Straddle: Depth - Rec. No. - Clock No. - <sup>Inside</sup> ~~Outside~~ Depth - Ft. Rec. No. - Clock No. - <sup>Inside</sup> ~~Outside~~  
 Time Set Packer 1:28 A M  
 Tool Open I.F.P. From 1:30 M. to 2:00 M. - Hr. 30 Min. From (B) 114 P.S.I. To (C) 86 P.S.I.  
 Tool Closed I.C.I.P. From 2:00 M. to 2:30 M. - Hr. 30 Min (D) 798 P.S.I.  
 Tool Open F.F.P. From 2:30 M. to 3:00 M. - Hr. 30 Min. From (E) 107 P.S.I. To (F) 97 P.S.I.  
 Tool Closed F.C.I.P. From 3:00 M. to 3:30 M. - Hr. 30 Min. (G) 657 P.S.I.  
 Initial Hydrostatic Pressure (A) 2286 P.S.I. Final Hydrostatic Pressure (H) 2252 P.S.I. Maximum Temp. 132<sup>o</sup>

**INFORMATION**

BLOW Strong blow throughout test.  
 Did Well Flow  Yes  No Recovery Total Ft. 30' Mud 125' Very Slightly Oil & Gas Cut Mud  
15' Watery Mud  
 Reversed Out.  Yes  No Mud Type Starch Viscosity 43 Weight 9.9 Water Loss 16.4 cc. Chlorides 16,000 P.P.M.  
 EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint  Jars: Size - In. Make - Ser. No. -  
 Dual Packer  Yes Did Packers Hold?  Yes Did Tool Plug?  No Where? -  
 DRILLING CONTRACTOR B & B Drlg. #2 Length Drill Pipe? 4120 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.  
 Length Weight Pipe 185 Ft. I.D. Weight Pipe 2.7 In. Tool Joint Size 4 1/2 XH In. Length Drill Collars - Ft. I.D. Drill Collars - In.  
 Tool Joint Size - In. Length D.S.T. Tool 31 Ft.

Remarks:

Slid tool 10' to bottom



TKF# 23383

I.

