



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N° 13487

P. O. BOX 1599 WICHITA, KANSAS 67201 PHONE (316) 262-5861 Elevation Formation Eff. Pay Ft.

District Pratt Date 5/25/87 Customer Order No.
COMPANY NAME W.L. Kirkman, Inc & J.B.G.D., Inc

ADDRESS
LEASE AND WELL NO. Holland "L" #1 COUNTY Pratt STATE Ks Sec. 11 Twp. 28 Rge. 12

Mail Invoice To Same Bull to: Judy Briggeman Gas Detector Co. Name Address P.O. Box 180 Pratt No. Copies Requested 5

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. Interval Tested From 4354 ft. to 4361 ft. Total Depth 4361 ft.
Packer Depth 4349 ft. Size 6 7/8 in. Packer Depth - ft. Size - in.
Packer Depth 4354 ft. Size 6 7/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set
Top Recorder Depth (Inside) 4334 ft. Recorder Number 3086 Cap. 4500
Bottom Recorder Depth (Outside) 4356 ft. Recorder Number 13552 Cap. 4050
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Red Tiger Rig #6 Drill Collar Length - I. D. - in.
Mud Type Starch Viscosity 42 Weight Pipe Length - I. D. - in.
Weight 9.3 Water Loss 10.0 cc. Drill Pipe Length 4321 I. D. 3.8 in.
Chlorides 20,000 P.P.M. Test Tool Length 33 ft. Tool Size 5 1/2 OD in.
Jars: Make WTC Serial Number 408 Anchor Length 7 ft. Size 5 1/2 OD in.
Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Weak increased to strong blow on first flow
Strong blow throughout second flow

Recovered 20 ft. of Gas Cut Mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 9:30 A.M. Time Pick Up Tool 11:00 A.M. Time Off Location A.M.
Time Set Packer(s) 12:40 A.M. Time Started Off Bottom 2:40 A.M. Maximum Temperature 122°
Initial Hydrostatic Pressure (A) 2199 P.S.I.
Initial Flow Period Minutes 30 (B) 11 P.S.I. to (C) 11 P.S.I.
Initial Closed In Period Minutes 30 (D) 213 P.S.I.
Final Flow Period Minutes 30 (E) 11 P.S.I. to (F) 11 P.S.I.
Final Closed In Period Minutes 30 (G) 153 P.S.I.
Final Hydrostatic Pressure (H) 2176 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 Ron Talwell Signature of Customer or his authorized representative
Western Representative Jim Woods Thank You

FIELD INVOICE

Open Hole Test \$ 450
Misrun \$
Straddle Test \$
Jars \$ 150
Selective Zone \$
Safety Joint \$ 30
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$

Handwritten number 2276

WESTERN TESTING CO., INC.

Pressure Data

Date 5-25-87 Recorder No. 3086 Capacity 4500 Location \_\_\_\_\_ Ft. \_\_\_\_\_  
 Test Ticket No. 13487  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature 122 °F

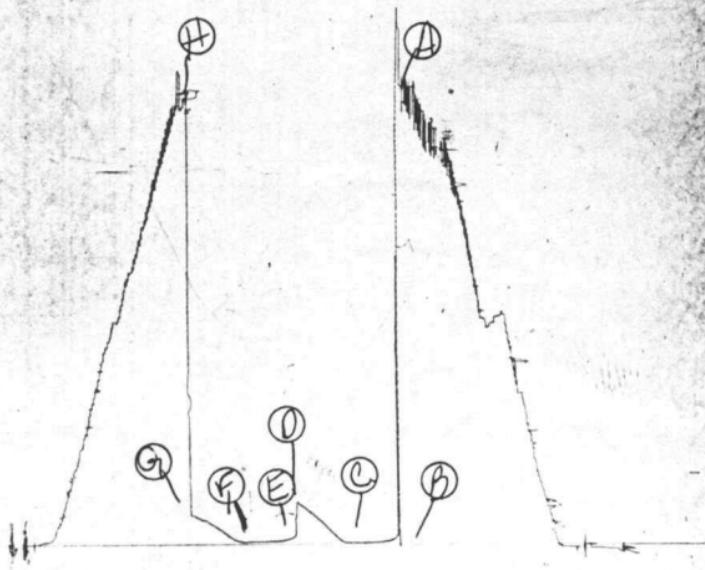
Point	Pressure	P.S.I.	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<del>224</del> <u>221</u>	P.S.I.		<u>12:40A</u>	M
B First Initial Flow Pressure	<u>26</u>	P.S.I.	First Flow Pressure	<u>30</u> Mins	<u>30</u> Mins.
C First Final Flow Pressure	<u>26</u>	P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>224</u>	P.S.I.	Second Flow Pressure	<u>30</u> Mins	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>30</u>	P.S.I.	Final Closed-in Pressure	<u>30</u> Mins	<u>20</u> Mins.
F Second Final Flow Pressure	<u>30</u>	P.S.I.			
G Final Closed-in Pressure	<u>159</u>	P.S.I.			
H Final Hydrostatic Mud	<u>2194</u>	P.S.I.			

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In			
	Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: _____ Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: _____ 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.
P 1 0	<u>26</u>	0	<u>26</u>	0	<u>30</u>	0	<u>30</u>
P 2 5	}	3	<u>32</u>	5	}	3	<u>31</u>
P 3 10		6	<u>54</u>	10		6	<u>39</u>
P 4 15		9	<u>75</u>	15		9	<u>56</u>
P 5 20		12	<u>99</u>	20		12	<u>73</u>
P 6 25		15	<u>127</u>	25		15	<u>91</u>
P 7 30	<u>26</u>	18	<u>147</u>	30	<u>30</u>	18	<u>107</u>
P 8 35		21	<u>171</u>	35		21	<u>121</u>
P 9 40		24	<u>186</u>	40		24	<u>135</u>
P10 45		27	<u>205</u>	45		27	<u>145</u>
P11 50		30	<u>224</u>	50		30	<u>159</u>
P12 55		33		55		33	
P13 60		36		60		36	
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

TK#13489

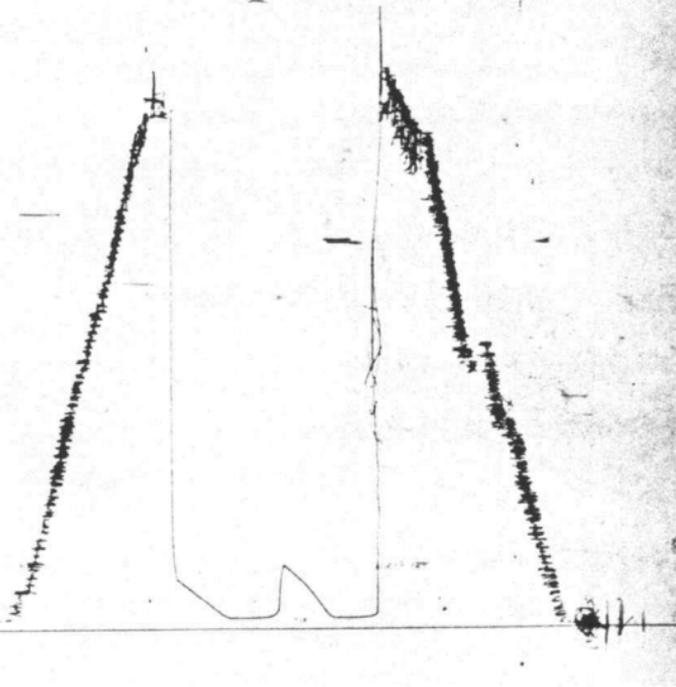
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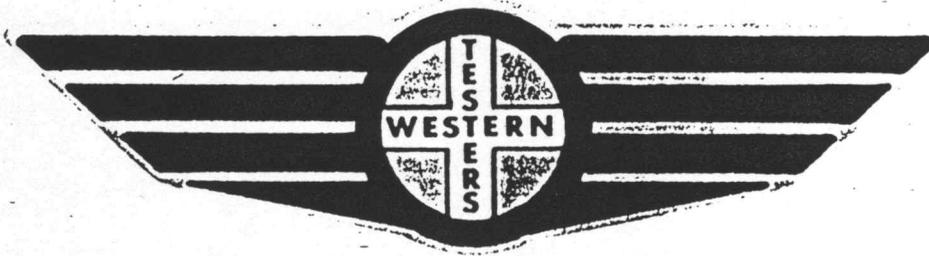
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# FORMATION TEST REPORT



Home Office:--

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY JBGD, INC. & W L KIRKMAN LEASE & WELL NO. HILLARD "L" #1 SEC. 11 TWP. 28S RGE. 12W TEST NO. 1 DATE 5/25/87

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 5-25-87 TICKET : 13487  
CUSTOMER : JBGD INC. & W.L. KIRKMAN INC. LEASE : HILLARD 'L'  
WELL : #1 TEST: 1 GEOLOGIST : R. FALWELL  
ELEVATION : - FORMATION : -  
SECTION : 11 TOWNSHIP : 28S  
RANGE : 12W COUNTY : PRATT STATE : KANSAS  
GAUGE SN# : 3086 RANGE : 4500 CLOCK : 12

INTERVAL FROM : 4354 TO : 4361 TOTAL DEPTH : 4361  
DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 4349 SIZE : 6.63  
PACKER DEPTH : 4354 SIZE : 6.63  
PACKER DEPTH : SIZE :  
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG #6  
MUD TYPE : STARCH VISCOSITY : 42  
WEIGHT : 9.3 WATER LOSS (CC) : 10.0  
CHLORIDES (PPM) : 20000  
JARS-MAKE : WTC SERIAL NUMBER : 408  
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00  
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
DRILL PIPE LENGTH : 4321 FT I.D. inch : 3.80  
TEST TOOL LENGTH : 33 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 7 FT ANCHOR SIZE : 5.50  
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75  
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5 FH

BLOW COMMENT #1 : INITIAL FLOW-WEAK BLOW INCREASED TO STRONG.  
BLOW COMMENT #2 : FINAL FLOW-STRONG BLOW THROUGHOUT.  
BLOW COMMENT #3 :  
BLOW COMMENT #4 :

RECOVERED : 20 FT OF: GAS CUT MUD

Total Barrels Fluid = 0.28  
Total Fluid Prod Rate = 6.73 BFPD  
Indicated Wtr Rate = 0.67 BWPD

REMARK 1 :  
REMARK 2 :  
REMARK 3 :  
REMARK 4 :

SET PACKER(S) :	12:40 AM	TIME STARTED OFF BOTTOM :	2:40 AM
WELL TEMPERATURE :	122		
INITIAL HYDROSTATIC PRESSURE		(A)	2221
INITIAL FLOW PERIOD MIN:	30	(B)	26 PSI TO (C) : 26
INITIAL CLOSED IN PERIOD MIN:	30	(D)	224
FINAL FLOW PERIOD MIN:	30	(E)	30 PSI TO (F) : 30
FINAL CLOSED IN PERIOD MIN:	30	(G)	159
FINAL HYDROSTATIC PRESSURE		(H)	2194

WESTERN TESTING CO. INC.  
WICHITA - KANSAS

Pressure Transient Report

COMPANY : JBGD INC. & W.L. KIRKMAN INC.  
RIG : PRATT-KANSAS  
FIELD : HILLARD 'L'  
WELL : #1  
DATE : 5-25-87  
GAUGE NO : 3086

OPERATIONAL COMMENTS

COMPANY : JBGD INC. & W.L. KIRKMAN INC.

FIELD : HILLARD 'L'

WELL : #1

JOB # : 13487

GAUGE # : 3086

DEPTH : 4361

DATE : 25/ 5/87

TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	12:40: 0	0.000	26.000	122.00	0.000
2	12:44:59	0.083	26.000	122.00	0.000
3	12:50: 0	0.167	26.000	122.00	0.000
4	12:55: 0	0.250	26.000	122.00	0.000
5	12:59:59	0.333	26.000	122.00	0.000
6	13: 5: 0	0.417	26.000	122.00	0.000
7	13:10: 0	0.500	26.000	122.00	0.000
8	13:13: 0	0.550	32.000	122.00	6.000
9	13:16: 0	0.600	54.000	122.00	22.000
10	13:19: 0	0.650	75.000	122.00	21.000
11	13:22: 0	0.700	99.000	122.00	24.000
12	13:25: 0	0.750	127.000	122.00	28.000
13	13:28: 0	0.800	147.000	122.00	20.000
14	13:31: 0	0.850	171.000	122.00	24.000
15	13:34: 0	0.900	186.000	122.00	15.000
16	13:37: 0	0.950	205.000	122.00	19.000
17	13:40: 0	1.000	224.000	122.00	19.000
18	13:41: 0	1.017	30.000	122.00	-194.000
19	13:44:59	1.083	30.000	122.00	0.000
20	13:50: 0	1.167	30.000	122.00	0.000
21	13:55: 0	1.250	30.000	122.00	0.000
22	13:59:59	1.333	30.000	122.00	0.000
23	14: 5: 0	1.417	30.000	122.00	0.000
24	14:10: 0	1.500	30.000	122.00	0.000
25	14:13: 0	1.550	31.000	122.00	1.000
26	14:16: 0	1.600	39.000	122.00	8.000
27	14:19: 0	1.650	56.000	122.00	17.000
28	14:22: 0	1.700	73.000	122.00	17.000
29	14:25: 0	1.750	91.000	122.00	18.000
30	14:28: 0	1.800	107.000	122.00	16.000
31	14:31: 0	1.850	121.000	122.00	14.000
32	14:34: 0	1.900	135.000	122.00	14.000
33	14:37: 0	1.950	145.000	122.00	10.000
34	14:40: 0	2.000	159.000	122.00	14.000

WESTERN TESTING CO. INC.