



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N° 13494

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

5013 District Date 6/10/87 Customer Order No.
COMPANY NAME W.L. Rinkman J.B.C.D. Inc
ADDRESS Bill to: Judy Briggeman Pratt, Ks
LEASE AND WELL NO. Rosenbaum "D" #1 COUNTY Pratt STATE Ks Sec. 15 Twp 28S Rge. 12W
Mail Invoice To Same Co. Name Address Rosenbaum D-1 No. Copies Requested 5
Mail Charts To Same Address No. Copies Requested 5

Formation Test No. Interval Tested From 4040 ft. to 4063 ft. Total Depth 4063 ft.
Packer Depth 4035 ft. Size 6 3/8 in. Packer Depth - ft. Size - in.
Packer Depth 4040 ft. Size 6 3/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4053 ft. Recorder Number 3086 Cap. 4500
Bottom Recorder Depth (Outside) 4056 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 34 Weight Pipe Length - I. D. - in.
Weight 9.3 Water Loss 16.0 cc. Drill Pipe Length 4011 I. D. 3.8 in.
Chlorides 17,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.
Jars: Make WTC Serial Number 408 Anchor Length 23 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 blow throughout first flow
No blow on second flow
Recovered 30 ft. of Drills Mud
Recovered - ft. of
Recovered - ft. of
Recovered - ft. of
Recovered - ft. of
Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 5:00 A.M. P.M. Time Pick Up Tool 9:00 A.M. P.M. Time Off Location 3:00 A.M. P.M.
Time Set Packer(s) 10:45 A.M. P.M. Time Started Off Bottom 12:45 A.M. P.M. Maximum Temperature 119°
Initial Hydrostatic Pressure (A) 2096 P.S.I.
Initial Flow Period Minutes 30 (B) 35 P.S.I. to (C) 35 P.S.I.
Initial Closed In Period Minutes 30 (D) 367 P.S.I.
Final Flow Period Minutes 30 (E) 59 P.S.I. to (F) 59 P.S.I.
Final Closed In Period Minutes 30 (G) 71 P.S.I.
Final Hydrostatic Pressure (H) 2073 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 Wondra Thank You

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

2226

WESTERN TESTING CO., INC.

Pressure Data

Date 6-10-87 Test Ticket No. 13494
 Recorder No. 3086 Capacity 4500 Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature 119 °F

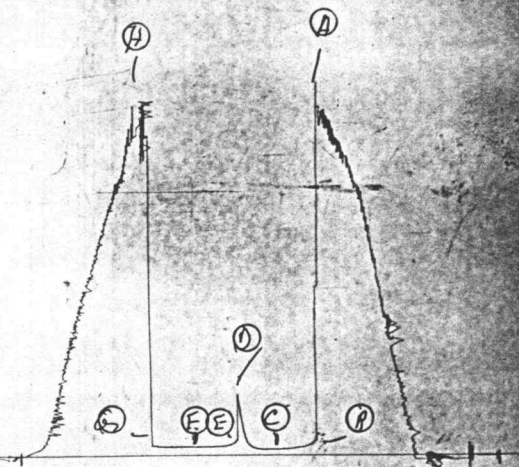
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2077</u> P.S.I.	Open Tool	<u>10:45</u> M	
B First Initial Flow Pressure	72 <u>92</u> P.S.I.	First Flow Pressure	<u>30</u> Mins	<u>30</u> Mins.
C First Final Flow Pressure	<u>65</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>397</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>80</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins	<u>30</u> Mins.
F Second Final Flow Pressure	<u>80</u> P.S.I.			
G Final Closed-in Pressure	<u>85</u> P.S.I.			
H Final Hydrostatic Mud	<u>2077</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	92 <u>92</u>	0	<u>65</u>	0	<u>80</u>	0	<u>80</u>
P 2 5	<u>92</u>	3		5		3	
P 3 10	<u>80</u>	6	<u>65</u>	10		6	
P 4 15	<u>73</u>	9	<u>65</u>	15		9	
P 5 20	<u>68</u>	12	<u>65</u>	20		12	
P 6 25	<u>65</u>	15	<u>70</u>	25		15	
P 7 30	<u>65</u>	18	<u>80</u>	30	<u>80</u>	18	<u>80</u>
P 8 35		21	<u>116</u>	35		21	<u>80</u>
P 9 40		24	<u>193</u>	40		24	<u>80</u>
P10 45		27	<u>318</u>	45		27	<u>82</u>
P11 50		30	<u>397</u>	50		30	<u>85</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	

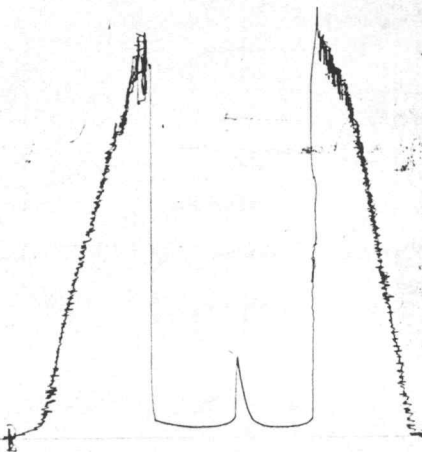
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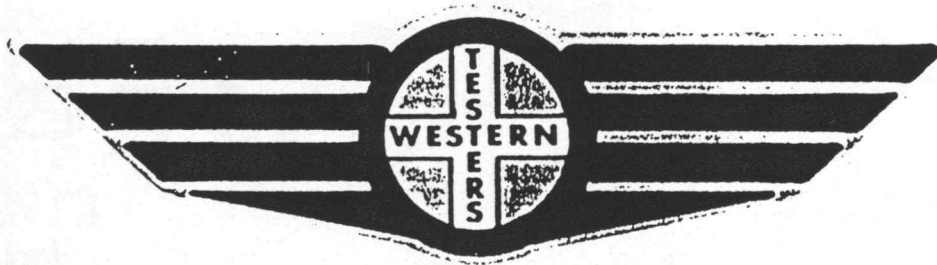


AT 13494

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 6-10-87 TICKET : 13494
CUSTOMER : W.L. KIRKMAN INC. & JBGD INC. LEASE : ROSENBAUM 'D'
WELL : #1 TEST: 1 GEOLOGIST : R. FALWELL
ELEVATION : - FORMATION : -
SECTION : 15 TOWNSHIP : 28S
RANGE : 12W COUNTY : PRATT STATE : KANSAS
GAUGE SN# : 3086 RANGE : 4500 CLOCK : 12

INTERVAL FROM : 4040 TO : 4063 TOTAL DEPTH : 4063
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4035 SIZE : 6.63
PACKER DEPTH : 4040 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG #6
MUD TYPE : STARCH VISCOSITY : 34
WEIGHT : 9.3 WATER LOSS (CC) : 16.0
CHLORIDES (PPM) : 17000
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 : 4011 FT I.D. inch : 3.80
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 23 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 : WEAK BLOW THROUGHOUT THE INITIAL FLOW.
BLOW COMMENT #2 : NO BLOW ON THE FINAL FLOW.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 30 FT OF: DRILLING MUD.

Total Barrels Fluid = 0.42
Total Fluid Prod Rate = 10.10 BFPD
Indicated Wtr Rate = 1.01 BWPD

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

SET PACKER(S) :	10:45 PM	TIME STARTED OFF BOTTOM :	12:45 AM
WELL TEMPERATURE :	119		
INITIAL HYDROSTATIC PRESSURE		(A)	2077
INITIAL FLOW PERIOD MIN:	30	(B)	92 PSI TO (C) : 65
INITIAL CLOSED IN PERIOD MIN:	30	(D)	397
FINAL FLOW PERIOD MIN:	30	(E)	80 PSI TO (F) : 80
FINAL CLOSED IN PERIOD MIN:	30	(G)	85
FINAL HYDROSTATIC PRESSURE		(H)	2077

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : W.L. KIRKMAN INC. & JBGD INC.
RIG : PRATT-KANSAS
FIELD : ROSENBAUM 'D'
WELL : #1
DATE : 6-10-87
GAUGE NO : 3086

OPERATIONAL COMMENTS

COMPANY : W.L. KIRKMAN INC. & JBGD INC.
 WELL : #1
 GAUGE # : 3086
 DATE : 10/ 6/87

FIELD : ROSENBAUM 'D'
 JOB # : 13494
 DEPTH : 4063
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	10:45: 0	0.000	92.000	119.00	0.000
2	10:49:59	0.083	92.000	119.00	0.000
3	10:55: 0	0.167	80.000	119.00	-12.000
4	11: 0: 0	0.250	73.000	119.00	-7.000
5	11: 4:59	0.333	68.000	119.00	-5.000
6	11:10: 0	0.417	65.000	119.00	-3.000
7	11:15: 0	0.500	65.000	119.00	0.000
8	11:18: 0	0.550	65.000	119.00	0.000
9	11:21: 0	0.600	65.000	119.00	0.000
10	11:24: 0	0.650	65.000	119.00	0.000
11	11:27: 0	0.700	65.000	119.00	0.000
12	11:30: 0	0.750	70.000	119.00	5.000
13	11:33: 0	0.800	80.000	119.00	10.000
14	11:36: 0	0.850	116.000	119.00	36.000
15	11:39: 0	0.900	193.000	119.00	77.000
16	11:42: 0	0.950	318.000	119.00	125.000
17	11:45: 0	1.000	397.000	119.00	79.000
18	11:46: 0	1.017	80.000	119.00	-317.000
19	11:49:59	1.083	80.000	119.00	0.000
20	11:55: 0	1.167	80.000	119.00	0.000
21	12: 0: 0	1.250	80.000	119.00	0.000
22	12: 4:59	1.333	80.000	119.00	0.000
23	12:10: 0	1.417	80.000	119.00	0.000
24	12:15: 0	1.500	80.000	119.00	0.000
25	12:18: 0	1.550	80.000	119.00	0.000
26	12:21: 0	1.600	80.000	119.00	0.000
27	12:24: 0	1.650	80.000	119.00	0.000
28	12:27: 0	1.700	80.000	119.00	0.000
29	12:30: 0	1.750	80.000	119.00	0.000
30	12:33: 0	1.800	80.000	119.00	0.000
31	12:36: 0	1.850	80.000	119.00	0.000
32	12:39: 0	1.900	80.000	119.00	0.000
33	12:42: 0	1.950	82.000	119.00	2.000
34	12:45: 0	2.000	85.000	119.00	3.000

WESTERN TESTING CO. INC.



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N° 13495

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

Elevation Formation 1887 K.B Eff. Pay Ft.

District Pratt Date 6/12/87 Customer Order No.

COMPANY NAME W.L. Kirkman & J.B.G.D Inc

ADDRESS Bill to: J.B.G.D

LEASE AND WELL NO. Rosenbaum #1 COUNTY Pratt STATE KS Sec. 15 Twp. 28S Rge. 12W

Mail Invoice To Same Co. Name Rosenbaum D-1 No. Copies Requested 5

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 2 Interval Tested From 4391 ft. to 4400 ft. Total Depth 4400 ft.

Packer Depth 4386 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 4391 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4392 ft. Recorder Number 3086 Cap. 4500

Bottom Recorder Depth (Outside) 4395 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 37 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 16.0 cc. Drill Pipe Length 4362 I. D. 3.8 in.

Chlorides 17,000 P.P.M. Test Tool Length 29 ft. Tool Size 5/8 OD in.

Jars: Make WJC Serial Number 408 Anchor Length 9 ft. Size 5/8 OD in.

Did Well Flow? No Reversed Out 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: Strong blow throughout flow periods

Recovered 540 ft. of Gas in Pipe

Recovered 210 ft. of Oil Cut Muddy Water (2070 oil) (5070 water)

Recovered 180 ft. of Sl. Oil Cut Water (370 oil)

Recovered 1620 ft. of Gassy Salt Water (scum of oil)

Chlorides - P.P.M. Sample Jars used - Remarks: 47.48

Time On Location 7:00 A.M. P.M. Time Pick Up Tool 8:00 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 9:20 A.M. P.M. Time Started Off Bottom 11:20 A.M. P.M. Maximum Temperature 122°

Initial Hydrostatic Pressure (A) 2210 P.S.I.

Initial Flow Period Minutes 30 (B) 390 P.S.I. to (C) 799 P.S.I.

Initial Closed In Period Minutes 30 (D) 951 P.S.I.

Final Flow Period Minutes 30 (E) 927 P.S.I. to (F) 951 P.S.I.

Final Closed In Period Minutes 30 (G) 951 P.S.I.

Final Hydrostatic Pressure (H) 2187 P.S.I.

COMPANY TERMS

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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 Wondra Thank You

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$450), Misrun (\$), Straddle Test (\$), Jars (\$450), Selective Zone (\$), Safety Joint (\$325), Standby (\$), Evaluation (\$), Extra Packer (\$), Circ. Sub. (\$), Mileage (\$), Fluid Sampler (\$), Extra Charts (\$), Insurance (\$), Telecopier (\$), TOTAL (\$).

2276

WESTERN TESTING CO., INC.

Pressure Data

Date 6-12-87 Recorder No. 3086 Capacity 4500 Location _____ Ft. _____
 Test Ticket No. 13495
 Clock No. _____ Elevation _____ Well Temperature 122 °F

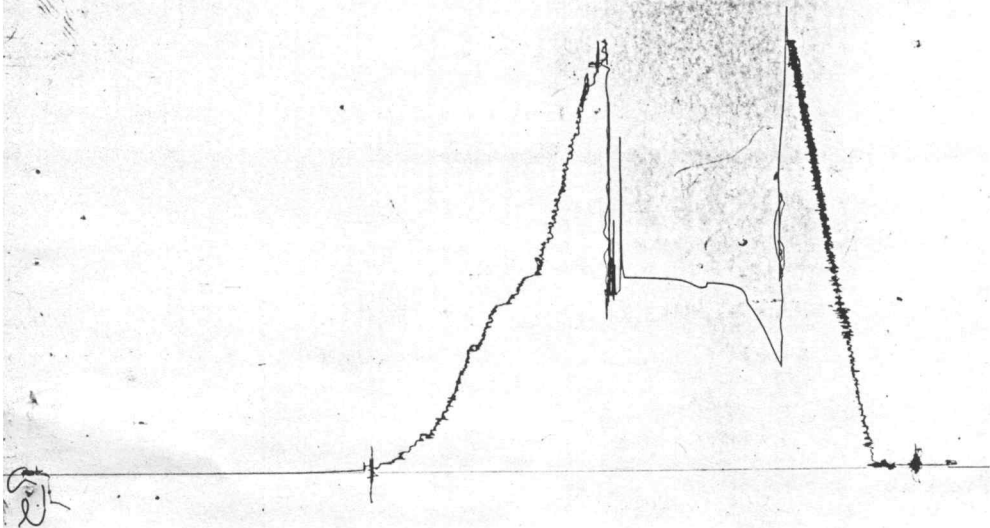
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2235</u> P.S.I.	Open Tool	<u>9:20</u> M	
B First Initial Flow Pressure	<u>414</u> P.S.I.	First Flow Pressure	<u>30</u> Mins	<u>30</u> Mins
C First Final Flow Pressure	<u>828</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins	<u>30</u> Mins
D Initial Closed-in Pressure	<u>965</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins	<u>30</u> Mins
E Second Initial Flow Pressure	<u>951</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins	<u>30</u> Mins
F Second Final Flow Pressure	<u>974</u> P.S.I.			
G Final Closed-in Pressure	<u>974</u> P.S.I.			
H Final Hydrostatic Mud	<u>2191</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.
	Point Minutes	Point Minutes	Point Minutes	Point Minutes
P 1 0	<u>414</u>	<u>0</u>	<u>0</u>	<u>974</u>
P 2 5	<u>415</u>	<u>3</u>	<u>5</u>	
P 3 10	<u>514</u>	<u>6</u>	<u>10</u>	
P 4 15	<u>618</u>	<u>9</u>	<u>15</u>	
P 5 20	<u>706</u>	<u>12</u>	<u>20</u>	
P 6 25	<u>794</u>	<u>15</u>	<u>25</u>	
P 7 30	<u>828</u>	<u>18</u>	<u>30</u>	
P 8 35		<u>21</u>	<u>35</u>	
P 9 40		<u>24</u>	<u>40</u>	
P10 45		<u>27</u>	<u>45</u>	
P11 50		<u>30</u>	<u>50</u>	<u>974</u>
P12 55		<u>33</u>	<u>55</u>	
P13 60		<u>36</u>	<u>60</u>	
P14 65		<u>39</u>	<u>65</u>	
P15 70		<u>42</u>	<u>70</u>	
P16 75		<u>45</u>	<u>75</u>	
P17 80		<u>48</u>	<u>80</u>	
P18 85		<u>51</u>	<u>85</u>	
P19 90		<u>54</u>	<u>90</u>	
P20 95		<u>57</u>	<u>95</u>	
100		<u>60</u>	<u>100</u>	

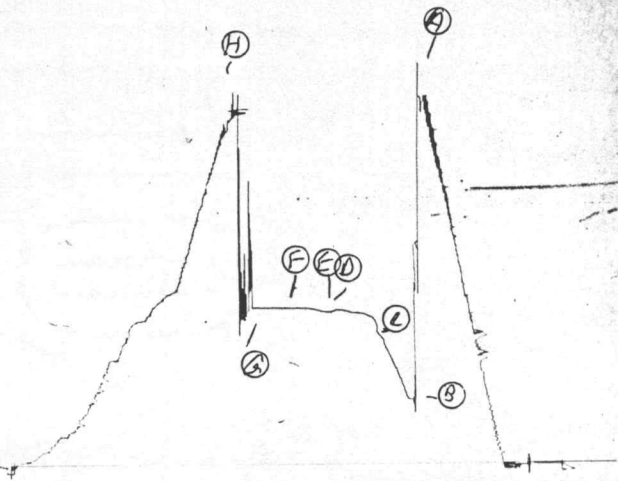
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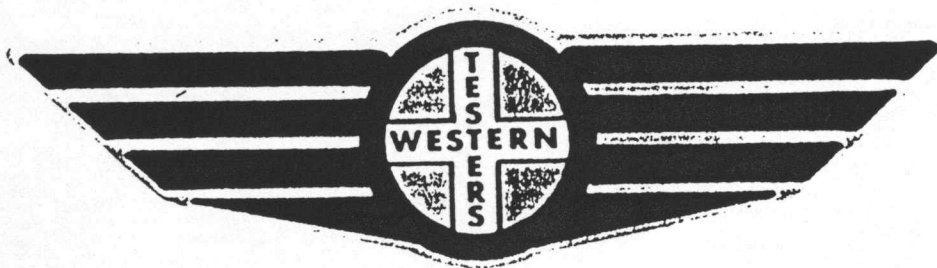
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FORMATION TEST REPORT



Home Office:

P.O. Box 1599

Wichita, Kansas 67201

Phone (316) 262-5861

COMPANY W L KIRKMAN, INC. & JBGD, INC. LEASE & WELL NO. ROSENBAUM D-1 SEC. 15 TWP. 28S RGE. 12W TEST NO. 2 DATE 6/12/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 6-12-87 TICKET : 13495
CUSTOMER : W.L. KIRKMAN INC. & JBGD INC. LEASE : ROSENBAUM 'D'
WELL : #1 TEST: 2 GEOLOGIST : R. FALWELL
ELEVATION : 1887 KB FORMATION : -
SECTION : 15 TOWNSHIP : 28S
RANGE : 12W COUNTY : PRATT STATE : KANSAS
GAUGE SN# : 3086 RANGE : 4500 CLOCK : 12

INTERVAL FROM : 4391 TO : 4400 TOTAL DEPTH : 4400
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4386 SIZE : 6.63
PACKER DEPTH : 4391 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG #6
MUD TYPE : STARCH VISCOSITY : 37
WEIGHT : 9.2 WATER LOSS (CC) : 16.0
CHLORIDES (PPM) : 17000
JARS-MAKE : WTC SERIAL NUMBER : 408
DID WELL FLOW ? : NO REVERSED OUT ? :

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 4362 FT I.D. inch : 3.80
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 9 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 : STRONG BLOW THROUGHOUT BOTH FLOW PERIODS.
BLOW COMMENT #2 :
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 210 FT OF: OIL CUT MUDDY WATER
20% OIL-50% WATER
RECOVERED : 180 FT OF: SLIGHTLY OIL CUT WATER (3% OIL)
RECOVERED : 1620 FT OF: GASSY SALT WATER (SCUM OF OIL)

Total Barrels Fluid = 28.19
Total Fluid Prod Rate = 676.63 BFPD
Indicated Oil Rate = 15.96 BOPD
Indicated Wtr Rate = 638.25 BWPD

REMARK 1 :
REMARK 2 : RECOVERED 540 FEET OF GAS ABOVE FLUID.
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 9:20 PM TIME STARTED OFF BOTTOM : 11:20 PM
WELL TEMPERATURE : 122
INITIAL HYDROSTATIC PRESSURE (A) 2235
INITIAL FLOW PERIOD MIN: 30 (B) 414 PSI TO (C) : 828
INITIAL CLOSED IN PERIOD MIN: 30 (D) 965
FINAL FLOW PERIOD MIN: 30 (E) 951 PSI TO (F) : 974
FINAL CLOSED IN PERIOD MIN: 30 (G) 974
FINAL HYDROSTATIC PRESSURE (H) 2191

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : W.L. KIRKMAN INC. & JBGD INC.
RIG : PRATT-KANSAS
FIELD : ROSENBAUM 'D'
WELL : #1
DATE : 6-12-87
GAUGE NO : 3086

OPERATIONAL COMMENTS

RECOVERED 540 FEET OF GAS ABOVE FLUID.

COMPANY : W.L. KIRKMAN INC. & JBGD INC.
WELL : #1
GAUGE # : 3086
DATE : 12/ 6/87

FIELD : ROSENBAUM 'D'
JOB # : 13495
DEPTH : .4400
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P $P_i - P_{(i-1)}$
1	9:20: 0	0.000	414.000	122.00	0.000
2	9:24:59	0.083	415.000	122.00	1.000
3	9:30: 0	0.167	514.000	122.00	99.000
4	9:35: 0	0.250	618.000	122.00	104.000
5	9:39:59	0.333	706.000	122.00	88.000
6	9:45: 0	0.417	794.000	122.00	88.000
7	9:50: 0	0.500	828.000	122.00	34.000
8	9:53: 0	0.550	913.000	122.00	85.000
9	9:56: 0	0.600	928.000	122.00	15.000
10	9:59: 0	0.650	936.000	122.00	8.000
11	10: 2: 0	0.700	942.000	122.00	6.000
12	10: 5: 0	0.750	945.000	122.00	3.000
13	10: 8: 0	0.800	948.000	122.00	3.000
14	10:11: 0	0.850	955.000	122.00	7.000
15	10:14: 0	0.900	957.000	122.00	2.000
16	10:17: 0	0.950	963.000	122.00	6.000
17	10:20: 0	1.000	965.000	122.00	2.000
18	10:21: 0	1.017	951.000	122.00	-14.000
19	10:24:59	1.083	951.000	122.00	0.000
20	10:30: 0	1.167	958.000	122.00	7.000
21	10:35: 0	1.250	967.000	122.00	9.000
22	10:39:59	1.333	972.000	122.00	5.000
23	10:45: 0	1.417	974.000	122.00	2.000
24	10:50: 0	1.500	974.000	122.00	0.000
25	10:53: 0	1.550	974.000	122.00	0.000
26	10:56: 0	1.600	974.000	122.00	0.000
27	10:59: 0	1.650	974.000	122.00	0.000
28	11: 2: 0	1.700	974.000	122.00	0.000
29	11: 5: 0	1.750	974.000	122.00	0.000
30	11: 8: 0	1.800	974.000	122.00	0.000
31	11:11: 0	1.850	974.000	122.00	0.000
32	11:14: 0	1.900	974.000	122.00	0.000
33	11:17: 0	1.950	974.000	122.00	0.000
34	11:20: 0	2.000	974.000	122.00	0.000

WESTERN TESTING CO. INC.

WESTERN TESTING CO. INC.
WICHITA - KANSAS

WELL TEST ANALYSIS REPORT
HORNER METHOD
SHUTIN No. 1

COMPANY. W.L. KIRKMAN INC. & JBGD INC.
DATE 6-12-87
FIELD. ROSENBAUM 'D'
WELL #1
AREA PRATT-KANSAS
JOB NUMBER 13495
GAUGE NUMBER . . . 3086
GAUGE DEPTH. . . . 4400
ZONE TESTED. . . . 4391-4400

PHASE : OIL FUNCTION : PRESSURE

=====I=N=P=U=T====D=A=T=A====S=U=M=M=A=R=Y=====

THICKNESS.	H	9.0000E+00	Feet
POROSITY	POR	1.0000E-01	Frac
VISCOSITY.	U	1.2000E+00	Cp
FORMATION VOLUME FACTOR.	B	4.0000E-01	Rb/stb
TOTAL COMPRESSIBILITY.	Ct	5.0000E-07	Psi ⁻¹
WELLBORE RADIUS.	Rw	7.8000E-01	Feet
DRAINAGE RADIUS.	Re	8.0000E+02	Feet
RESERVOIR TEMPERATURE.	T	1.2200E+02	Deg F
GRAVITY OF FLUID	G	2.6000E+01	
PVT EVALUATION PRESSURE.	P	0.0000E+00	Psig
PRESSURE AT SHUT-IN.	Pwf	8.2800E+02	Psig
FINAL RECORDED PRESSURE.	Ps	9.7400E+02	Psig
PRODUCTION RATE.	Q	6.7663E+02	Bbl/day
TOTAL FLOW TIME.	T	5.0000E-01	Hours

=====R=E=G=R=E=S=S=I=O=N====R=E=S=U=L=T=S=====

LEAST SQUARE RESULTS OVER THE INTERVAL :
FROM 2.8 TO 2

SLOPE OF THE LINE.	1.3539E+02	psi/cycle
FALSE PRESSURE, PSTAR.	1.0060E+03	psi
PRESSURE AT 1 HOUR	9.8220E+02	psi

=====A=N=A=L=Y=S=I=S====R=E=S=U=L=T=S=====

TRANSMISSIBILITY.	Kh/u	3.2505E+02	md-ft/cp
FLOW CAPACITY.	Kh	3.9006E+02	md-ft
PERMEABILITY to PHASE.	K	4.3340E+01	md
DAMAGE RATIO	Dr	1.9999E-01	
RADIUS OF INVESTIGATION.	Rinv	6.1724E+02	ft
SKIN FACTOR.	S	-4.8682E+00	
AVERAGE PRESSURE	Pbar	9.7101E+02	psig
DIMENSIONLESS TIME	Tda	4.7423E-02	
MATTHEWS-BRONS-HAZEBROEK	PDmbh	5.9593E-01	

COMPANY: W.L. KIRKMAN, INC. & JBGD INC.
FIELD : ROSENBAUM D.

LOCATION: #1 PRATT-KANSAS

PROCESSED: 10-23-1987
ENGINEER: LARRY KING

TEST DATE: 6-12-87
GAUGE NUM: 3086
EVENT ID : SHUT-IN 2
USER CMNT: DST #2
Horner T : .5 hrs

Pwf : 974
Pstar : 973.9999
P1hr : 973.9999
Slope : 2.496839E-04

Pressure . Psig

Job No. 13495
WESTERN TESTING CO. INC.
Horner Ratio, (T+dt) / dt
RES-TRAN

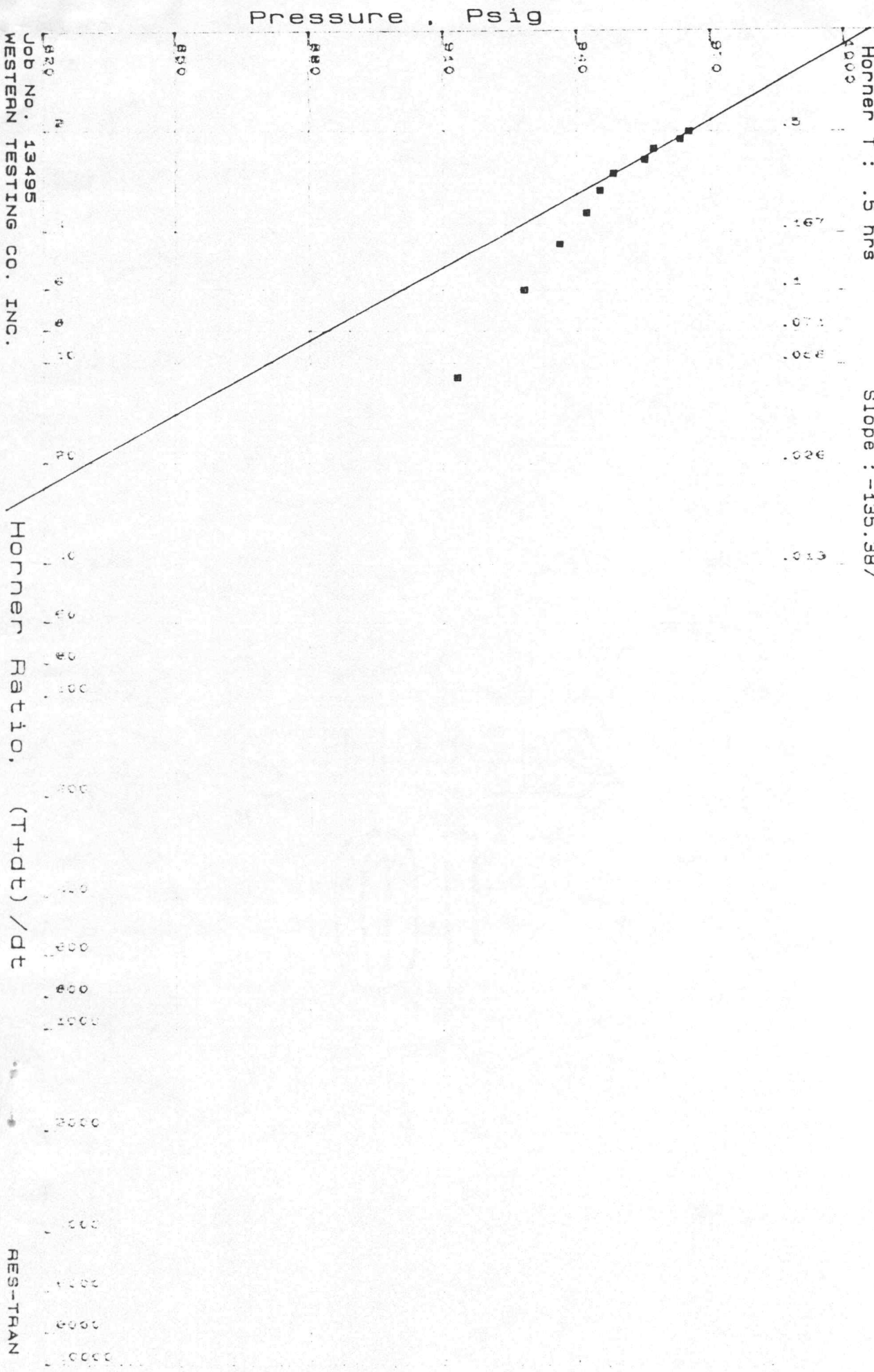
COMPANY: WILE KIRKMAN, INC. & JBGD INC.
 FIELD: ROSENBAUM D.

WELL #1
 LOCATION: PRATT-KANSAS

PROCESSED: 10-23-1987
 ENGINEER: LARRY KING

1039
 TEST DATE: 6-12-87
 GAUGE NUM: 3086
 EVENT ID: SHUT-IN 1
 USER CMNT: DST #2
 Horner T: .5 hrs

Pwf : 828
 Pstar : 1006.042
 P1hr : 982.202
 Slope : -135.387



Horner Ratio, (T+dt) / dt

RES-TRAN

Job No. 13495
 WESTERN TESTING CO. INC.