



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 7964

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

Elevation 2841 K.B. Formation K.C. Eff. Pay Ft.

District Wakeeney Date 4-16-85 Customer Order No.

COMPANY NAME Pickrell Drilling Company

ADDRESS 110 N. Market Suite 205 Wichita Ks.

LEASE AND WELL NO. Riley F-#1 COUNTY Lane STATE Ks Sec. 18 Twp. 18S Rge. 29W

Mail Invoice To #1-F Riley same No. Copies Requested 5

Mail Charts To same No. Copies Requested 5

Formation Test No. 1 Interval Tested From 4125 ft. to 4160 ft. Total Depth 4160 ft.

Packer Depth 4120 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4125 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4146 ft. Recorder Number 6234 Cap. 4500

Bottom Recorder Depth (Outside) 4149 ft. Recorder Number 4376 Cap. 4000

Below Saddle Recorder Depth Recorder Number Cap.

Drilling Contractor Pickrell #10 Drill Collar Length 180 I. D. 2.5 in.

Mud Type chem Viscosity 47 Weight Pipe Length I. D. in.

Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 3925 I. D. 3.6 in.

Chlorides 4,000 P.P.M. Test Tool Length 20 ft. Tool Size 5/2 in.

Jars: Make Serial Number Anchor Length 35 ft. Size 5/2 in.

Did Well Flow? 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 X.H. in.

Blow: F.F.P. Very Weak Dead IN 15 min.

F.F.P. No Blow

Recovered 2 ft. of mud with oil spots

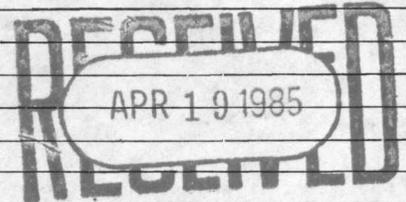
Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used 1 Remarks: Flush tool F.F.P.



Time On Location 1:00 A.M. P.M. Time Pick Up Tool 3:00 A.M. P.M. Time Off Location 7:00 A.M. P.M.

Time Set Packer(s) 4:00 A.M. P.M. Time Started Off Bottom 5:10 A.M. P.M. Maximum Temperature 115°

Initial Hydrostatic Pressure (A) 2051 P.S.I.

Initial Flow Period Minutes 30 (B) 34 P.S.I. to (C) 34 P.S.I.

Initial Closed In Period Minutes 30 (D) 45 P.S.I.

Final Flow Period Minutes 10 (E) 22 P.S.I. to (F) 22 P.S.I.

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

Final Hydrostatic Pressure (H) 2029 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] Signature of Customer or his authorized representative

Western Representative [Signature] 1135

FIELD INVOICE

Table with 2 columns: Item and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTING CO., INC.

Pressure Data

Date: 4-16-85 Test Ticket No. 7964
 Recorder No. 6234 Capacity 4500 Location _____ Ft
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	P.S.I.	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2029</u>	P.S.I.	Open Tool		M
B. First Initial Flow Pressure	<u>30</u>	P.S.I.	First Flow Pressure	<u>30</u> Mins.	Mins.
C. First Final Flow Pressure	<u>30</u>	P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	Mins.
D. Initial Closed-in Pressure	<u>39</u>	P.S.I.	Second Flow Pressure	<u>10</u> Mins.	Mins.
E. Second Initial Flow Pressure	<u>28</u>	P.S.I.	Final Closed-in Pressure	_____ Mins.	Mins.
F. Second Final Flow Pressure	<u>28</u>	P.S.I.			
G. Final Closed-in Pressure	_____	P.S.I.			
H. Final Hydrostatic Mud	<u>2011</u>	P.S.I.			

** flushed tool*

PRESSURE BREAKDOWN

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

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

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

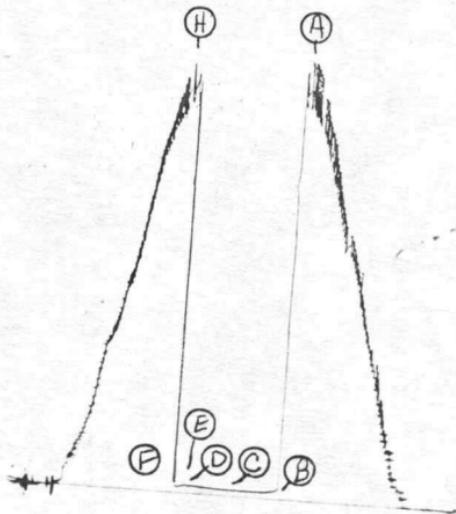
Final Shut-In
 Breakdown: _____ Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>30</u>	0	<u>30</u>	0	<u>28</u>	0	
P 2 5		3		5	<u>28</u>	3	
P 3 10		6		10		6	
P 4 15		9		15		9	
P 5 20		12		20		12	
P 6 25		15	<u>30</u>	25		15	
P 7 30	<u>30</u>	18	<u>30</u>	30		18	
P 8 35		21	<u>33</u>	35		21	
P 9 40		24	<u>35</u>	40		24	
P10 45		27	<u>37</u>	45		27	
P11 50		30	<u>39</u>	50		30	
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	

6234
DST1

TKT # 7964

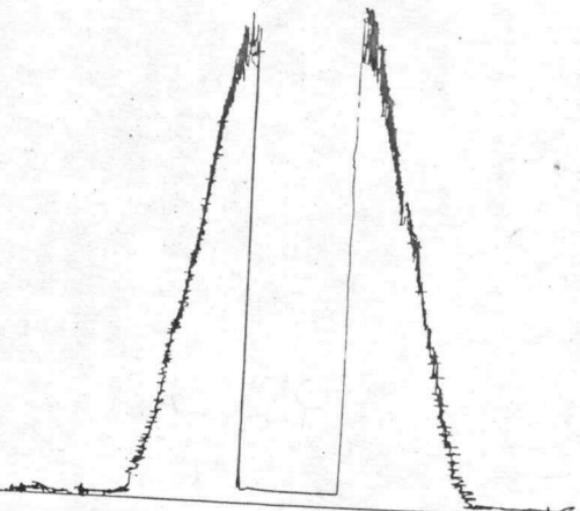
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4376
DST 1

TKT # 7964

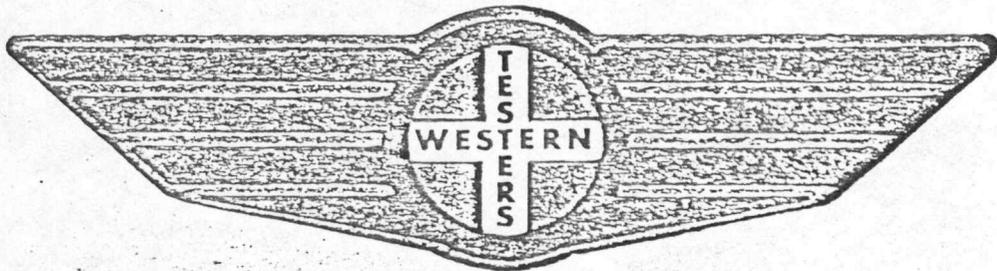
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

pany PICKRELL DRILLING COMPANY Lease & Well No. #1 "P" RILEY Sec. 18 Twp. 18S Rge. 29W Test No. 1 Date 4/16/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-16-85
CUSTOMER: PICKRELL DRILLING COMPANY
WELL: 1 TEST: 1
ELEVATION (KB): 2841 FORMATION: KANSAS CITY
SECTION: 18 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #6234 RANGE: 4500 CLOCK: 12

TICKET #7964
LEASE: "F" RILEY
GEOLOGIST: L. RICHARDSON

INTERVAL TEST FROM: 4125 FT TO: 4160 FT TOTAL DEPTH: 4160 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4120 FT SIZE: 6 3/4 IN PAKER DEPTH: 4125 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRLG. #10
MUD TYPE: CHEMICAL VISCOSITY: 47
WEIGHT: 9.4 WATER LOSS (CC): 12.4
CHLORIDES (P.P.M.): 4000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3925 FT I.D.: 3.6 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 35 FT SIZE: 5 1/2 OD 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 VERY WEAK;
DIED IN 15 MINUTES.
FINAL FLOW PERIOD NO BLOW.

RECOVERED: 2 FT OF: MUD WITH OIL SPOTS.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: FLUSHED TOOL; FINAL FLOW.

TIME SET PACKER(S): 4:00 PM TIME STARTED OFF BOTTOM: 5:10 PM
WELL TEMPERATURE: 115 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2029 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 30 PSI TO (C) 30 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 39 PSI
FINAL FLOW PERIOD MIN: 5 (E) 28 PSI TO (F) 28 PSI
FINAL CLOSED IN PERIOD MIN: 0 (G) 0 PSI
FINAL HYDROSTATIC PRESSURE (H) 2011 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO. 7965 OK

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

Elevation 2841 K.B. Formation K.C. Eff. Pay _____ Ft.

District Wakeeney Date 4-7-85 Customer Order No. _____

COMPANY NAME Pickrell Drilling Company

ADDRESS 110 N. market Suite 205 Wichita Ks.

LEASE AND WELL NO. Riley "F" #1 COUNTY Lane STATE Ks Sec. 18 Twp. 18S Rge. 29W

Mail Invoice To #1-"F" Riley same No. Copies Requested 5
Co. Name _____ Address _____

Mail Charts To same No. Copies Requested 5
Address _____

Formation Test No. 2 Interval Tested From 4167 ft. to 4195 ft. Total Depth 4195 ft.

Packer Depth 4162 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 4167 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4183 ft. Recorder Number 6234 Cap. 4500

Bottom Recorder Depth (Outside) 4186 ft. Recorder Number 4376 Cap. 4000

Below Saddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Pickrell #10 Drill Collar Length 180 I. D. 2.5 in.

Mud Type chem Viscosity 47 Weight Pipe Length _____ I. D. _____ in.

Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 3967 I. D. 3.6 in.

Chlorides 4,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make _____ Serial Number _____ Anchor Length 28 ft. Size 5 1/2 in.

Did Well Flow? _____ Reversed Out _____ 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 X.H. in.

Blow F.F.P. Weak Building to 1 Inch IN Bucket
F.F.P. No Blow

Recovered 65 ft. of muddy water 85% mud 15% water

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Chlorides 15,000 P.P.M. Sample Jars used 1 Remarks: Flush tool F.F.P.

Time On Location 2:30 A.M. Time Pick Up Tool 3:00 P.M. Time Off Location 10:00 A.M.

Time Set Packer(s) 4:15 A.M. Time Started Off Bottom 7:15 P.M. Maximum Temperature 1160

Initial Hydrostatic Pressure _____ (A) 2085 P.S.I.

Initial Flow Period _____ Minutes 30 (B) 45 P.S.I. to (C) 57 P.S.I.

Initial Closed In Period _____ Minutes 60 (D) 1166 P.S.I.

Final Flow Period _____ Minutes 30 (E) 57 P.S.I. to (F) 57 P.S.I.

Final Closed In Period _____ Minutes 60 (G) 1121 P.S.I.

Final Hydrostatic Pressure _____ (H) 2062 P.S.I.

COMPANY TERMS

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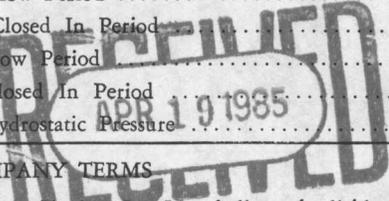
All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature]
Signature of Customer or his authorized representative

Western Representative Kent Klitzke 1135

FIELD INVOICE

Open Hole Test	\$ <u>1595</u>
Misrun	\$ _____
Straddle Test	\$ _____
Jars	\$ _____
Selective Zone	\$ _____
Safety Joint	\$ _____
Standby	\$ _____
Evaluation	\$ _____
Extra Packer	\$ _____
Circ. Sub.	\$ _____
Mileage	\$ _____
Fluid Sampler	\$ _____
Extra Charts	\$ _____
Insurance	\$ _____
Telecopier	\$ _____
TOTAL	\$ _____



WESTERN TESTING CO., INC.

Pressure Data

Date: 4-17-85 Test Ticket No. 7965
 Recorder No. 6234 Capacity 4500 Location _____ Ft
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	P.S.I.	Open Tool	Time Given	M	Time Computed
A Initial Hydrostatic Mud	2125	P.S.I.				
B First Initial Flow Pressure	46	P.S.I.	First Flow Pressure	30	Mins.	30 Mins
C First Final Flow Pressure	48	P.S.I.	Initial Closed-in Pressure	60	Mins.	66 Mins
D Initial Closed-in Pressure	1159	P.S.I.	Second Flow Pressure	* 30	Mins.	30 Mins
E Second Initial Flow Pressure	64	P.S.I.	Final Closed-in Pressure	60	Mins.	66 Mins
F Second Final Flow Pressure	71	P.S.I.				
G Final Closed-in Pressure	1112	P.S.I.				
H Final Hydrostatic Mud	2105	P.S.I.				

* flushed tool

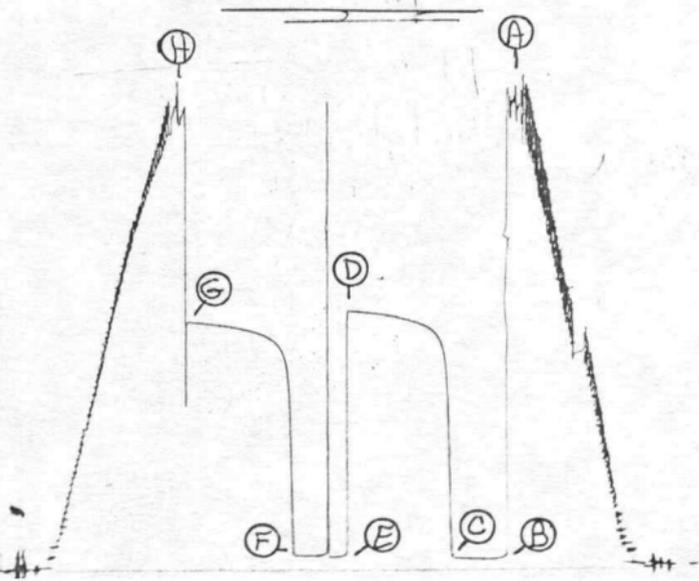
PRESSURE BREAKDOWN

<p>First Flow Pressure Breakdown: <u>7</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Initial Shut-In Breakdown: <u>23</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Second Flow Pressure Breakdown: <u>7</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Final Shut-In Breakdown: <u>23</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.</p>
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Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	46	0	48	0	64	0	71
P 2 5	46	3	480	5	64	3	514
P 3 10	46	6	804	10	64	6	816
P 4 15	47	9	963	15	* 71	9	942
P 5 20	47	12	1028	20	71	12	994
P 6 25	48	15	1061	25	71	15	1019
P 7 30	48	18	1081	30	71	18	1036
P 8 35		21	1095	35		21	1052
P 9 40		24	1104	40		24	1059
P10 45		27	1113	45		27	1068
P11 50		30	1117	50		30	1075
P12 55		33	1124	55		33	1079
P13 60		36	1131	60		36	1084
P14 65		39	1138	65		39	1090
P15 70		42	1140	70		42	1093
P16 75		45	1145	75		45	1097
P17 80		48	1149	80		48	1101
P18 85		51	1151	85		51	1103
P19 90		54	1152	90		54	1107
P20 95		57	1154	95		57	1109
100		60	1156	100		60	1110
		63	1158			63	1111
			1159			66	1112

6234
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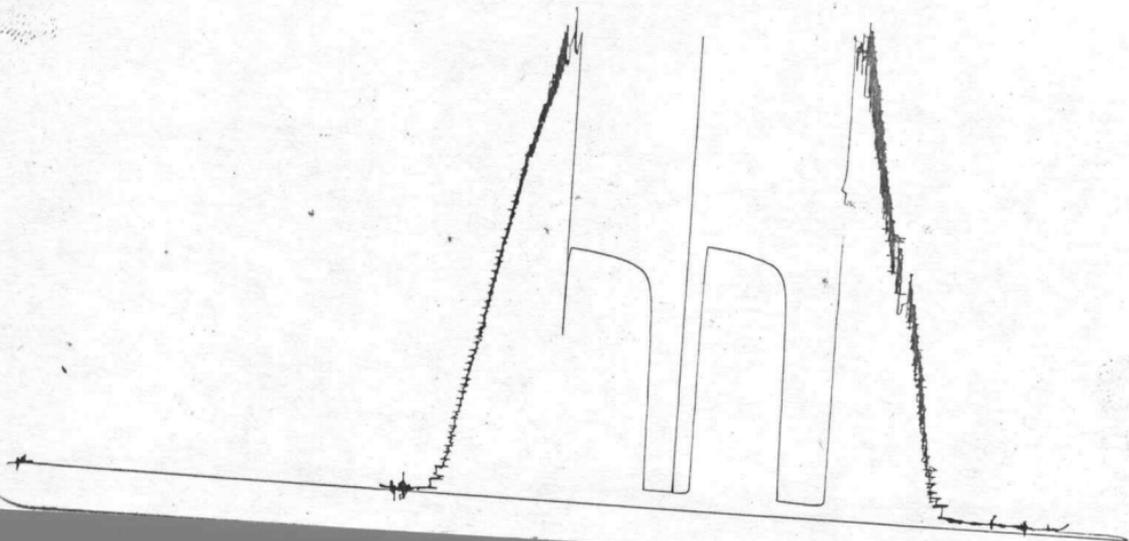
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DST-2

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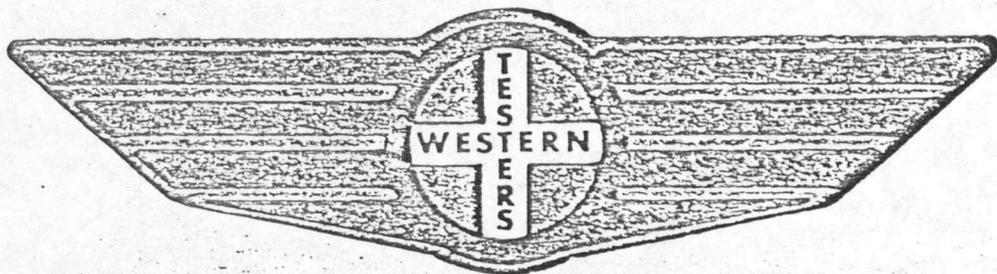
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company PICKRELL DRILLING COMPANY Lease & Well No. #1 "F" RILEY Sec. 18 Twp. 18S Rge. 29W Test No. 7 Date 4/11/02

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-17-85
CUSTOMER: PICKRELL DRILLING COMPANY
WELL: 1 TEST: 2
ELEVATION (KB): 2841 FORMATION: KANSAS CITY
SECTION: 18 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #6234 RANGE: 4500 CLOCK: 12

TICKET #7965

LEASE: "F" RILEY

GEOLOGIST: L. RICHARDSON

INTERVAL TEST FROM: 4167 FT TO: 4195 FT TOTAL DEPTH: 4195 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4162 FT SIZE: 6 3/4 IN PACKER DEPTH: 4167 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRLG. #10
MUD TYPE: CHEMICAL VISCOSITY: 47
WEIGHT: 9.4 WATER LOSS (CC): 12.4
CHLORIDES (P.P.M.): 4000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3967 FT I.D.: 3.6 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 28 FT SIZE: 5 1/2 OD 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 WEAK; BUILDING
TO 1" IN BUCKET.
FINAL FLOW PERIOD NO BLOW.

RECOVERED: 65 FT OF: MUDDY WATER (85% MUD; 15% WATER).
RECOVERED: FT OF: CHLORIDES 15000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: FLUSHED TOOL FINAL FLOW PERIOD.

TIME SET PACKER(S): 4:15 AM

TIME STARTED OFF BOTTOM: 7:15 AM

WELL TEMPERATURE: 116 °F

INITIAL HYDROSTATIC PRESSURE: (A) 2125 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 46 PSI TO (C) 48 PSI
INITIAL CLOSED IN PERIOD MIN: 66 (D) 1159 PSI
FINAL FLOW PERIOD MIN: 30 (E) 64 PSI TO (F) 71 PSI
FINAL CLOSED IN PERIOD MIN: 66 (G) 1112 PSI
FINAL HYDROSTATIC PRESSURE (H) 2105 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 7179

OK

P. O. BOX 1599 WICHITA, KANSAS 67201

Elevation 2841 KB Formation Kansing Eff. Pay Ft.

District 14 WAKEENEY Date 4-17-85 Customer Order No.

COMPANY NAME Pickreal Drilling Company

ADDRESS 110 N. Market Suite #205 Wichita KS

LEASE AND WELL NO. #1 RILEY "F" COUNTY Lane STATE KS Sec. 18 Twp. 18 Rge. 29W

Mail Invoice To #1 "F" RILEY "F" SAME No. Copies Requested 11

Co. Name " " Address " " No. Copies Requested " "

Mail Charts To " " Address " " No. Copies Requested " "

Formation Test No. 3 Interval Tested From 4195 ft. to 4210 ft. Total Depth 4210 ft.

Packer Depth 4190 ft. Size 6.314 in. Packer Depth " " Size " " in.

Packer Depth 4195 ft. Size " " in. Packer Depth " " Size " " in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4200 ft. Recorder Number 4339 Cap. 4300

Bottom Recorder Depth (Outside) 4203 ft. Recorder Number 13271 Cap. 4400

Below Saddle Recorder Depth " " ft. Recorder Number " " Cap. " "

Drilling Contractor Pickreal #10 Drill Collar Length 180 I. D. 2.25 in.

Mud Type Chem Viscosity 42 Weight Pipe Length " " I. D. " "

Weight 9.3 Water Loss 12.4 cc. Drill Pipe Length 3995 I. D. 3.8 in.

Chlorides 5,000 P.P.M. Test Tool Length 20 ft. Tool Size 5/20 in.

Jars: Make NO Serial Number NO Anchor Length 15 ft. Size " " in.

Did Well Flow? NO Reversed Out " " Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 77/8 in. Tool Joint Size 4 1/2 in.

Blow: FFP - weak 1/2" Blow decreasing to top of water

FFP - NO blow flushed tool weak blow for five min.

Recovered 182 ft. of muddy water

Recovered " " ft. of " "

Chlorides 34,000 P.P.M. Sample Jars used 4 Remarks:

Time On Location 2:50 A.M. Time Pick Up Tool 4:45 P.M. Time Off Location 12:15 P.M.

Time Set Packer(s) 6:20 A.M. Time Started Off Bottom 9:20 A.M. Maximum Temperature 116

Initial Hydrostatic Pressure (A) 2058 P.S.I.

Initial Flow Period (B) 30 Minutes (C) 45 P.S.I. to (C) 79 P.S.I.

Initial Closed In Period (D) 60 Minutes (E) 1155 P.S.I.

Final Flow Period (F) 35 Minutes (G) 79 P.S.I. to (F) 102 P.S.I.

Final Closed In Period (H) 60 Minutes (H) 1122 P.S.I.

Final Hydrostatic Pressure (H) 2037 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 Larry G. Richard Signature of Customer or his authorized representative

Western Representative " " 0350

Thankyou

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$598), Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, TOTAL.

WESTERN TESTING CO., INC.
Pressure Data

Date 4-17 Test Ticket No. 7179
 Recorder No. 4339 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2076</u> P.S.I.			
B. First Initial Flow Pressure	<u>40</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>61</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D. Initial Closed-in Pressure	<u>1140</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E. Second Initial Flow Pressure	<u>100</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>66</u> Mins.
F. Second Final Flow Pressure	<u>114</u> P.S.I.			
G. Final Closed-in Pressure	<u>1135</u> P.S.I.			
H. Final Hydrostatic Mud	<u>2044</u> P.S.I.			

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 21 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

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

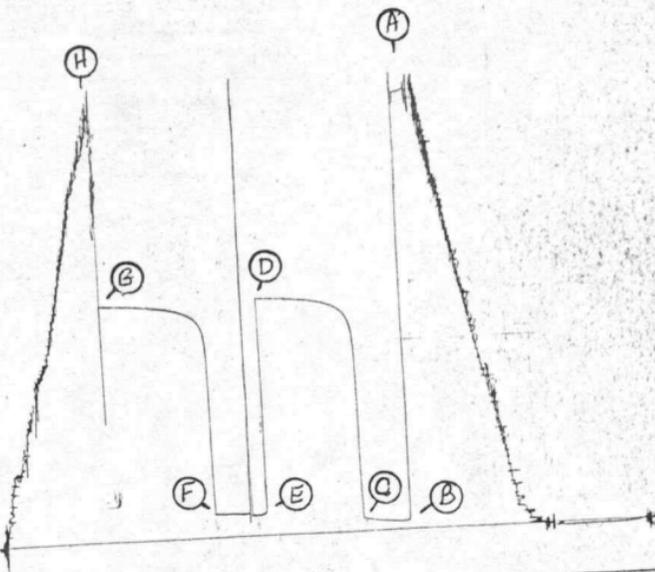
Final Shut-In
 Breakdown: 23 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>40</u>	0	<u>61</u>	0	<u>100</u>	0	<u>114</u>
P 2 5	<u>40</u>	3	<u>969</u>	5	<u>100</u>	3	<u>955</u>
P 3 10	<u>41</u>	6	<u>1035</u>	10	<u>100</u>	6	<u>1026</u>
P 4 15	<u>43</u>	9	<u>1061</u>	15	<u>110</u>	9	<u>1055</u>
P 5 20	<u>47</u>	12	<u>1079</u>	20	<u>113</u>	12	<u>1070</u>
P 6 25	<u>54</u>	15	<u>1092</u>	25	<u>114</u>	15	<u>1081</u>
P 7 30	<u>61</u>	18	<u>1101</u>	30	<u>114</u>	18	<u>1090</u>
P 8 35		21	<u>1107</u>	35		21	<u>1099</u>
P 9 40		24	<u>1113</u>	40		24	<u>1104</u>
P10 45		27	<u>1117</u>	45		27	<u>1109</u>
P11 50		30	<u>1121</u>	50		30	<u>1114</u>
P12 55		33	<u>1124</u>	55		33	<u>1117</u>
P13 60		36	<u>1127</u>	60		36	<u>1120</u>
P14 65		39	<u>1130</u>	65		39	<u>1122</u>
P15 70		42	<u>1132</u>	70		42	<u>1124</u>
P16 75		45	<u>1134</u>	75		45	<u>1126</u>
P17 80		48	<u>1136</u>	80		48	<u>1128</u>
P18 85		51	<u>1137</u>	85		51	<u>1130</u>
P19 90		54	<u>1138</u>	90		54	<u>1131</u>
P20 95		57	<u>1139</u>	95		57	<u>1132</u>
100		60	<u>1140</u>	100		60	<u>1133</u>
						63	<u>1134</u>
						66	<u>1135</u>

4339

④

TKT # 7179
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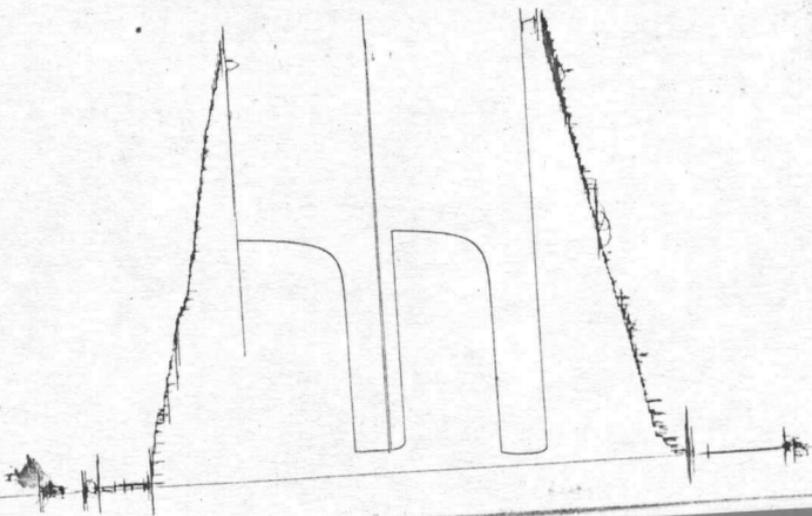


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TKT #9179

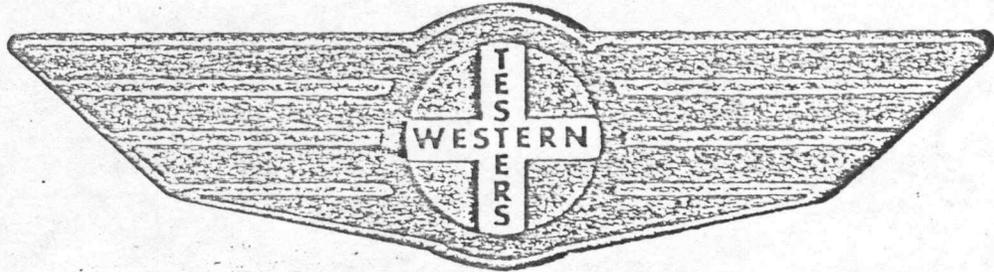
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____ PICKRELL DRILLING COMPANY Lease & Well No. #1 "E" KILBY Sec. 10 Twp. 10S Rge. 27W Test No. 3 Date 4/11/03

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-17-85
CUSTOMER: PICKRELL DRILLING CO. INC.
WELL: 1 TEST: 3
ELEVATION (KB): 2841 FORMATION: LANSING
SECTION: 18 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #4339 RANGE: 4300 CLOCK: 12

TICKET #7179
LEASE: "F" RILEY
GEOLOGIST: L. RICHARDSON

INTERVAL TEST FROM: 4195 FT TO: 4210 FT TOTAL DEPTH: 4210 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4190 FT SIZE: 6 3/4 IN PACKER DEPTH: 4195 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRLG. #10
MUD TYPE: CHEMICAL VISCOSITY: 42
WEIGHT: 9.3 WATER LOSS (CC): 12.4
CHLORIDES (P.P.M.): 5000
JARS - MAKE: NO SERIAL NUMBER: NO
DID WELL FLOW? NO REVERSED OUT?
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3995 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 15 FT SIZE: 5 1/2 OD 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK 1/2" BLOW
DECREASING TO TOP OF WATER.
FINAL FLOW PERIOD NO BLOW; FLUSHED TOOL;
WEAK BLOW FOR 5 MINUTES.

RECOVERED: 182 FT OF: MUDDY WATER.
RECOVERED: FT OF: CHLORIDES 34000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: FLUSHED TOOL FINAL FLOW PERIOD.

TIME SET PACKER(S): 6:20 PM TIME STARTED OFF BOTTOM: 9:20 PM
WELL TEMPERATURE: 116 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2076 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 40 PSI TO (C) 61 PSI
INITIAL CLOSED IN PERIOD MIN: 60 (D) 1140 PSI
FINAL FLOW PERIOD MIN: 30 (E) 100 PSI TO (F) 114 PSI
FINAL CLOSED IN PERIOD MIN: 66 (G) 1135 PSI
FINAL HYDROSTATIC PRESSURE (H) 2044 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 7180

OK

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

Elevation 2841 KB Formation Kans in 6 Eff. Pay Ft.

District WARENS Date 4-17-85 Customer Order No.

COMPANY NAME Pickrell Drilling Company

ADDRESS 110 N. Market Suite # 205 Wichita KS

LEASE AND WELL NO #1 Riley "F" COUNTY Lane STATE KS Sec. 18 Twp. 18 Rge. 29W

Mail Invoice To SAME No. Copies Requested 26

Mail Charts To #1 "F" RILEY Address No. Copies Requested 1

Formation Test No. 4 Interval Tested From 4255 ft. to 4321 ft. Total Depth 4321 ft.

Packer Depth 4250 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4255 ft. Size 11 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4272 ft. Recorder Number 4339 Cap. 4300

Bottom Recorder Depth (Outside) 4275 ft. Recorder Number 13271 Cap. 4400

Below Saddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Pickrell #10 Drill Collar Length 150 I. D. 2.25 in.

Mud Type Chem Viscosity 48 Weight Pipe Length I. D. 3.8 in.

Weight 9.3 Water Loss 10.4 cc. Drill Pipe Length 4085 I. D. 3.8 in.

Chlorides 5,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make NO Serial Number Anchor Length 66 ft. Size 11 in.

Did Well Flow? NO Reversed Out yes Surface Choke Size 3 1/4 in. Bottom Choke Size 3 1/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: IFF - weak to strong in 6 min.

IFF - weak to strong in 5 min.

Recovered 2366 ft. of muddy salt water 33.5 BBLs.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides 64,000 P.P.M. Sample Jars used Remarks: 31 feet of drill collar in anchor.

Time On Location 2:40 A.M. Time Pick Up Tool 4:00 A.M. Time Off Location 3:00 A.M.

Time Set Packer(s) 5:45 P.M. Time Started Off Bottom 10:15 P.M. Maximum Temperature 120

Initial Hydrostatic Pressure (A) 210 P.S.I.

Initial Flow Period Minutes 30 (B) 90 P.S.I. to (C) 320 P.S.I.

Initial Closed In Period Minutes 60 (D) 1199 P.S.I.

Final Flow Period Minutes 80 (E) 443 P.S.I. to (F) 935 P.S.I.

Final Closed In Period Minutes 90 (G) 155 P.S.I.

Final Hydrostatic Pressure (H) 208 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] Signature of Customer or his authorized representative

Western Representative [Signature]

Thank you 0350

FIELD INVOICE

Table with 2 columns: Item, Amount. Items include 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.

WESTERN TESTING CO., INC.

Pressure Data

Date 4-17 Test Ticket No. 7180
 Recorder No. 4339 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2102</u>	P.S.I.		
B First Initial Flow Pressure	<u>98</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>380</u>	P.S.I.	<u>60</u> Mins.	<u>63</u> Mins.
D Initial Closed-in Pressure	<u>1202</u>	P.S.I.	<u>90</u> Mins.	<u>90</u> Mins.
E Second Initial Flow Pressure	<u>450</u>	P.S.I.	<u>90</u> Mins.	<u>93</u> Mins.
F Second Final Flow Pressure	<u>935</u>	P.S.I.		
G Final Closed-in Pressure	<u>1155</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2058</u>	P.S.I.		

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 22 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 19 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 32 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 0	<u>98</u>	0	<u>380</u>	0	<u>450</u>	0	<u>935</u>
P 2 5	<u>130</u>	3	<u>1007</u>	5	<u>451</u>	3	<u>1068</u>
P 3 10	<u>186</u>	6	<u>1132</u>	10	<u>484</u>	6	<u>1088</u>
P 4 15	<u>241</u>	9	<u>1164</u>	15	<u>527</u>	9	<u>1099</u>
P 5 20	<u>292</u>	12	<u>1179</u>	20	<u>569</u>	12	<u>1105</u>
P 6 25	<u>348</u>	15	<u>1184</u>	25	<u>605</u>	15	<u>1110</u>
P 7 30	<u>380</u>	18	<u>1189</u>	30	<u>638</u>	18	<u>1114</u>
P 8 35		21	<u>1192</u>	35	<u>672</u>	21	<u>1118</u>
P 9 40		24	<u>1195</u>	40	<u>699</u>	24	<u>1121</u>
P10 45		27	<u>1197</u>	45	<u>727</u>	27	<u>1124</u>
P11 50		30	<u>1199</u>	50	<u>756</u>	30	<u>1127</u>
P12 55		33	<u>1200</u>	55	<u>783</u>	33	<u>1129</u>
P13 60		36	<u>1200</u>	60	<u>810</u>	36	<u>1131</u>
P14 65		39	<u>1201</u>	65	<u>836</u>	39	<u>1133</u>
P15 70		42	<u>1201</u>	70	<u>857</u>	42	<u>1135</u>
P16 75		45	<u>1202</u>	75	<u>875</u>	45	<u>1137</u>
P17 80		48		80	<u>897</u>	48	<u>1139</u>
P18 85		51		85	<u>913</u>	51	<u>1141</u>
P19 90		54		90	<u>935</u>	54	<u>1143</u>
P20 95		57		<u>95</u>		57	<u>1145</u>
100		60		<u>8</u>		60	<u>1147</u>
		<u>63</u>	<u>1202</u>	<u>100</u>			

cont

WESTERN TESTING CO., INC.
Pressure Data

Date _____

Test Ticket No. 7180

Recorder No. _____ Capacity _____ Location _____

Clock No. _____ Elevation _____ Well Temperature _____

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B. First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C. First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D. Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E. Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F. Second Final Flow Pressure	P.S.I.			
G. Final Closed-in Pressure	P.S.I.			
H. Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

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

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

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

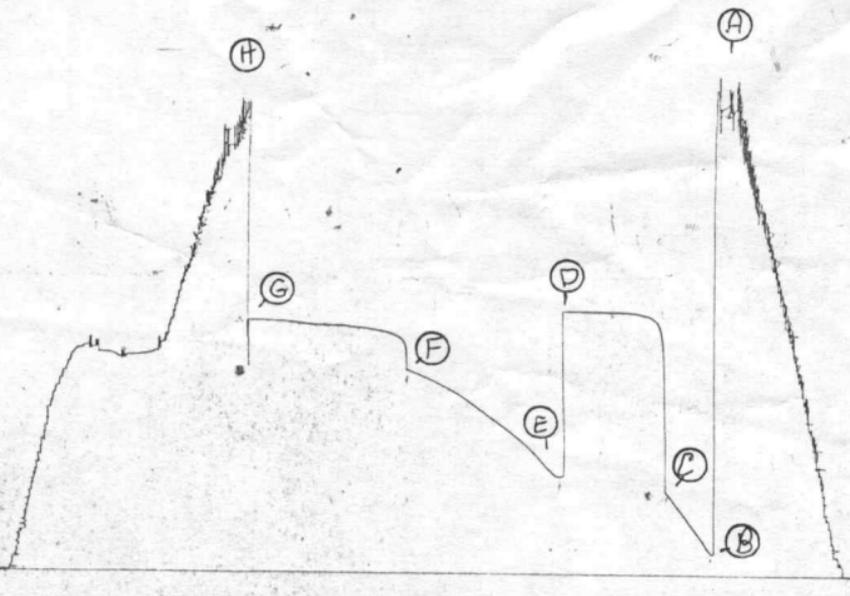
Final Shut-In
Breakdown: _____ Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 105		63		105		63	1148
P 2 110		66		110		66	1149
P 3 115		69		115		69	1150
P 4 120		72		120		72	1151
P 5 125		75		125		75	1152
P 6 130		78		130		78	1153
P 7 135		81		135		81	1153
P 8 140		84		140		84	1154
P 9 145		87		145		87	1154
P10 150		90		150		90	1155
P11 155		93		155		93	1155
P12 160		96		160		96	
P13 165		99		165		99	
P14 170		102		170		102	
P15 175		105		175		105	
P16 180		108		180		108	
P17 185		111		185		111	
P18 190		114		190		114	
P19 195		117		195		117	
P20 200		120		200		120	

4339

TKT #7180

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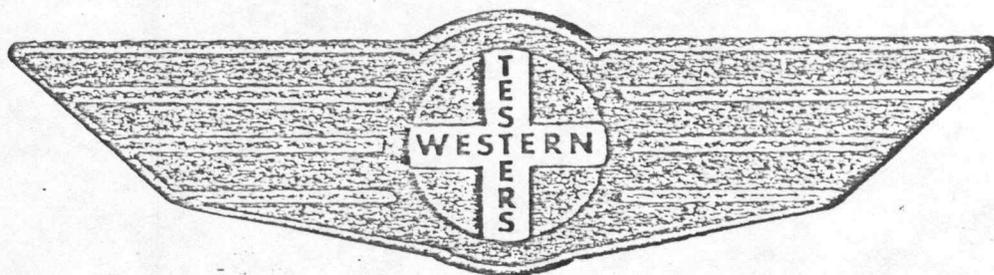
TKT #7180
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____ PICKRELL DRILLING COMPANY Lease & Well No. #1 "F" RILEY Sec. 18 Twp. 18S Rge. 29W Test No. 4 Date 4/11/83

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-17-85
CUSTOMER: PICKRELL DRILLING COMPANY
WELL: 1 TEST: 4
ELEVATION (KB): 2841 FORMATION: LANSING
SECTION: 18 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #4339 RANGE: 4300 CLOCK: 12

TICKET #7180
LEASE: "F" RILEY
GEOLOGIST: L. RICHARDSON

INTERVAL TEST FROM: 4255 FT TO: 4321 FT TOTAL DEPTH: 4321 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4250 FT SIZE: 6 3/4 IN PACKER DEPTH: 4255 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRLG. #10
MUD TYPE: CHEMICAL VISCOSITY: 48
WEIGHT: 9.3 WATER LOSS (CC): 10.4
CHLORIDES (P.P.M.): 5000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? YES
DRILL COLLAR LENGTH: 150 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4085 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 66 FT SIZE: 5 1/2 OD 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK TO STRONG
BLOW IN 6 MINUTES.
FINAL FLOW PERIOD WEAK TO STRONG
BLOW IN 5 MINUTES.

RECOVERED: 2366 FT OF: MUDDY SALT WATER (33.5 BBLs.).
RECOVERED: FT OF: CHLORIDES 64000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: 31 FEET OF DRILL COLLAR IN ANCHOR.

TIME SET PACKER(S): 5:45 PM TIME STARTED OFF BOTTOM: 10:15 PM
WELL TEMPERATURE: 120 'F
INITIAL HYDROSTATIC PRESSURE: (A) 2102 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 98 PSI TO (C) 380 PSI
INITIAL CLOSED IN PERIOD MIN: 63 (D) 1202 PSI
FINAL FLOW PERIOD MIN: 90 (E) 450 PSI TO (F) 935 PSI
FINAL CLOSED IN PERIOD MIN: 93 (G) 1155 PSI
FINAL HYDROSTATIC PRESSURE (H) 2058 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET No 7181

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

Elevation 2841 KB Formation mermaton Eff. Pay Ft.

District 14 WARENEG Date 4-19-85 Customer Order No.

COMPANY NAME Pickrell DRIB

ADDRESS 110 N Market Wichita KS

LEASE AND WELL NO #1 Riley "F" COUNTY Lane STATE KS Sec 18 Twp 18 Rge 29W

Mail Invoice To Co. Name SAME No. Copies Requested 26

Mail Charts To #1 "F" RILEY Address No. Copies Requested 11

Formation Test No 05 Interval Tested From 4370 ft. to 4385 ft. Total Depth 4385 ft.

Packer Depth 4365 ft. Size 63/4 in. Packer Depth ft. Size in.

Packer Depth 4370 ft. Size 11 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4374 ft. Recorder Number 4339 Cap. 4300

Bottom Recorder Depth (Outside) 4377 ft. Recorder Number 13271 Cap. 4400

Below Saddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Rig #10 Drill Collar Length 150 I. D. 2.25 in.

Mud Type DRIS Viscosity 48 Weight Pipe Length I. D. in.

Weight 9.3 Water Loss 12.0 cc. Drill Pipe Length 4170 I. D. 3-8 in.

Chlorides 5,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make NO Serial Number Anchor Length 15 ft. Size in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3 1/4 in. Bottom Choke Size 3 1/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 2 1/2 in.

Blow: PP - weak 3 1/4" blow increasing to strong in 10 min. PP - weak to strong blow in 8 min.

Recovered 1130 ft. of muddy water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides 72,000 P.P.M. Sample Jars used 4 Remarks:

Time On Location 12:00 A.M. Time Pick Up Tool 2:15 P.M. Time Off Location 11:30 A.M.

Time Set Packer(s) 3:10 A.M. Time Started Off Bottom 7:40 A.M. Maximum Temperature 121 P.M.

Initial Hydrostatic Pressure (A) 2200 P.S.I.

Initial Flow Period Minutes 30 (B) 45 P.S.I. to (C) 193 P.S.I.

Initial Closed In Period Minutes 60 (D) 1177 P.S.I.

Final Flow Period Minutes 90 (E) 238 P.S.I. to (F) 488 P.S.I.

Final Closed In Period Minutes 90 (G) 111 P.S.I.

Final Hydrostatic Pressure (H) 2189 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] Signature of Customer or his authorized representative

Western Representative [Signature]

Thank You

FIELD INVOICE

Table with 2 columns: Item, Price. Includes 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.

WESTERN TESTING CO., INC.

Pressure Data

Date 4-19

Test Ticket No. 7181

Recorder No. 4339

Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2210</u> P.S.I.	Open Tool		M
B. First Initial Flow Pressure	<u>50</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>191</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
D. Initial Closed-in Pressure	<u>1177</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>90</u> Mins.
E. Second Initial Flow Pressure	<u>243</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>93</u> Mins.
F. Second Final Flow Pressure	<u>492</u> P.S.I.			
G. Final Closed-in Pressure	<u>1112</u> P.S.I.			
H. Final Hydrostatic Mud	<u>2186</u> P.S.I.			

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 22 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 19 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 32 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 0	<u>50</u>	0	<u>191</u>	0	<u>243</u>	0	<u>492</u>
P 2 5	<u>57</u>	3	<u>935</u>	5	<u>243</u>	3	<u>958</u>
P 3 10	<u>95</u>	6	<u>1050</u>	10	<u>243</u>	6	<u>1007</u>
P 4 15	<u>120</u>	9	<u>1090</u>	15	<u>255</u>	9	<u>1029</u>
P 5 20	<u>141</u>	12	<u>1110</u>	20	<u>270</u>	12	<u>1046</u>
P 6 25	<u>161</u>	15	<u>1126</u>	25	<u>286</u>	15	<u>1057</u>
P 7 30	<u>191</u>	18	<u>1136</u>	30	<u>307</u>	18	<u>1062</u>
P 8 35		21	<u>1144</u>	35	<u>325</u>	21	<u>1067</u>
P 9 40		24	<u>1149</u>	40	<u>342</u>	24	<u>1072</u>
P10 45		27	<u>1154</u>	45	<u>358</u>	27	<u>1077</u>
P11 50		30	<u>1158</u>	50	<u>379</u>	30	<u>1081</u>
P12 55		33	<u>1161</u>	55	<u>395</u>	33	<u>1084</u>
P13 60		36	<u>1163</u>	60	<u>411</u>	36	<u>1087</u>
P14 65		39	<u>1165</u>	65	<u>424</u>	39	<u>1089</u>
P15 70		42	<u>1167</u>	70	<u>439</u>	42	<u>1091</u>
P16 75		45	<u>1169</u>	75	<u>455</u>	45	<u>1093</u>
P17 80		48	<u>1171</u>	80	<u>469</u>	48	<u>1095</u>
P18 85		51	<u>1173</u>	85	<u>482</u>	51	<u>1097</u>
P19 90		54	<u>1174</u>	90	<u>492</u>	54	<u>1099</u>
P20 95		57	<u>1175</u>	<u>95</u>		57	<u>1101</u>
100		60	<u>1176</u>	<u>100</u>		60	<u>1103</u>
		63	<u>1177</u>				

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 7181

Recorder No. _____ Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud _____	P.S.I. _____	Open Tool _____	M	
B. First Initial Flow Pressure _____	P.S.I. _____	First Flow Pressure _____	Mins.	Mins.
C. First Final Flow Pressure _____	P.S.I. _____	Initial Closed-in Pressure _____	Mins.	Mins.
D. Initial Closed-in Pressure _____	P.S.I. _____	Second Flow Pressure _____	Mins.	Mins.
E. Second Initial Flow Pressure _____	P.S.I. _____	Final Closed-in Pressure _____	Mins.	Mins.
F. Second Final Flow Pressure _____	P.S.I. _____			
G. Final Closed-in Pressure _____	P.S.I. _____			
H. Final Hydrostatic Mud _____	P.S.I. _____			

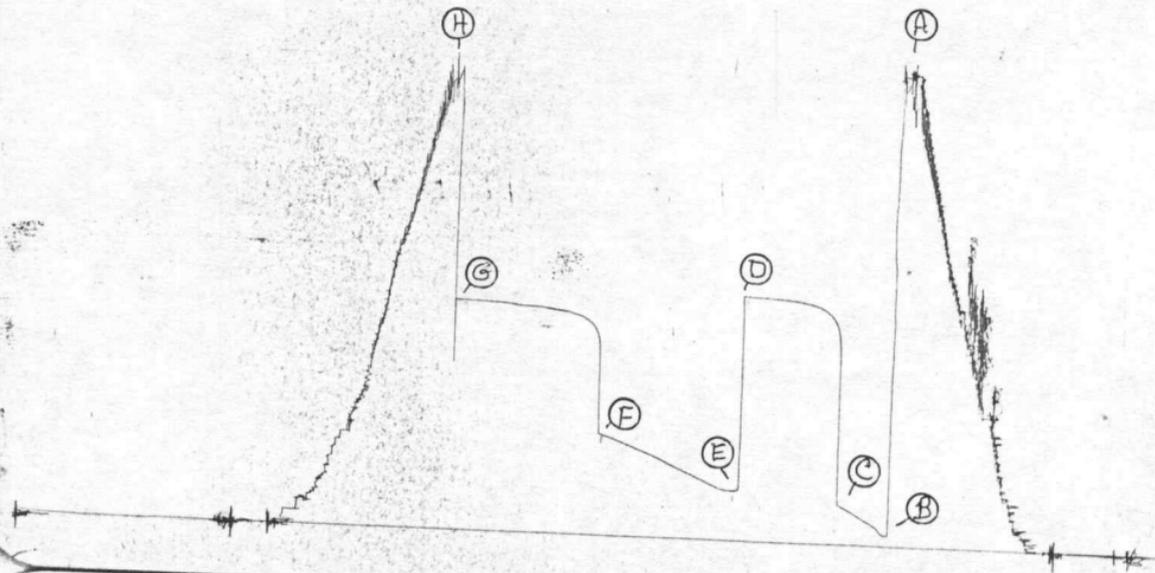
PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown: _____ Inc.	of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc.	of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc.	of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc.	of _____ mins. and a final inc. of _____ Min.
	Press.	Point Minutes						
P 1 105		63		105		63	1105	
P 2 110		66		110		66	1107	
P 3 115		69		115		69	1108	
P 4 120		72		120		72	1109	
P 5 125		75		125		75	1110	
P 6 130		78		130		78	1110	
P 7 135		81		135		81	1111	
P 8 140		84		140		84	1111	
P 9 145		87		145		87	1112	
P10 150		90		150		90	1112	
P11 155		93		155		93	1112	
P12 160		96		160		96		
P13 165		99		165		99		
P14 170		102		170		102		
P15 175		105		175		105		
P16 180		108		180		108		
P17 185		111		185		111		
P18 190		114		190		114		
P19 195		117		195		117		
P20 200		120		200		120		

4439

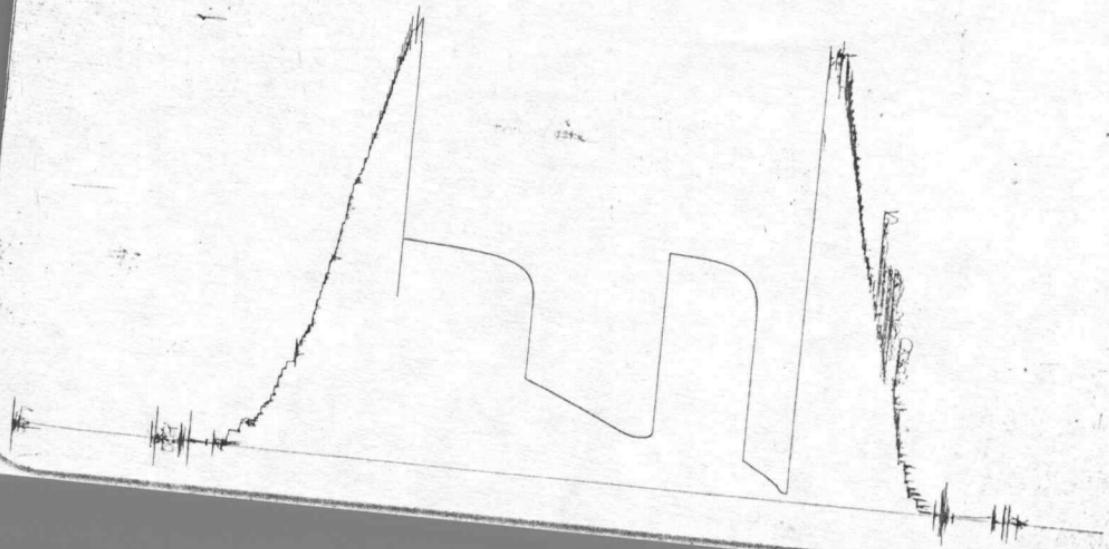
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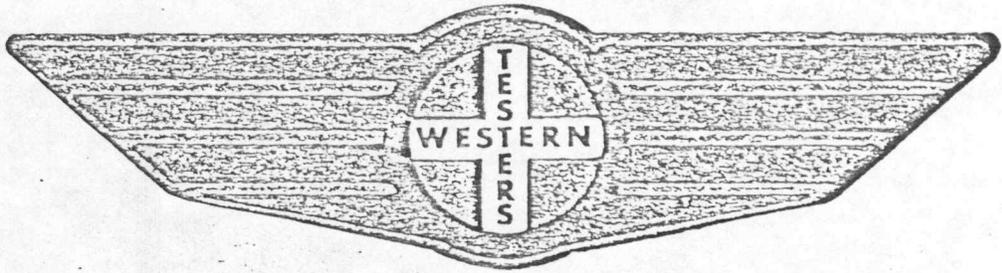
TKT #7181
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____ PICKRELL DRILLING COMPANY Lease & Well No. #1 "F" KILBY Sec. 18 Twp. 18S Rge. 29W Test No. 5 Date 4/19/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-19-85
CUSTOMER: PICKRELL DRILLING COMPANY
WELL: 1 TEST: 5
ELEVATION (KB): 2841 FORMATION: MARMATON
SECTION: 18 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #4337 RANGE: 4300 CLOCK: 12

TICKET #7181

LEASE: "F" RILEY

GEOLOGIST: L. RICHARDSON

INTERVAL TEST FROM: 4370 FT TO: 4385 FT TOTAL DEPTH: 4385 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4365 FT SIZE: 6 3/4 IN PAKER DEPTH: 4370 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRILLING
MUD TYPE: DRISPAC VISCOSITY: 48
WEIGHT: 9.3 WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 5000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4170 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 15 FT SIZE: 5 1/2 OD 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK 3/4" BLOW
INCREASING TO STRONG IN 10 MINUTES.
FINAL FLOW PERIOD WEAK TO STRONG
BLOW IN 8 MINUTES.

RECOVERED: 1130 FT OF: MUDDY WATER.
RECOVERED: FT OF: CHLORIDES 72000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 3:10 PM TIME STARTED OFF BOTTOM: 7:40 PM
WELL TEMPERATURE: 121 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2210 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 50 PSI TO (C) 191 PSI
INITIAL CLOSED IN PERIOD MIN: 63 (D) 1177 PSI
FINAL FLOW PERIOD MIN: 90 (E) 243 PSI TO (F) 492 PSI
FINAL CLOSED IN PERIOD MIN: 93 (G) 1112 PSI
FINAL HYDROSTATIC PRESSURE (H) 2186 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 7182

OK

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

Elevation 2841 KB Formation Myrick Station Eff. Pay Ft.

District 14 WAKEENEY Date 4-20-85 Customer Order No.
COMPANY NAME Pickrell Delt Colony

ADDRESS 110 N. Market Wichita KS

LEASE AND WELL NO. #1 Riley "F" COUNTY Lane STATE KS Sec 18 Twp 18 Rge 29W

Mail Invoice To Co. Name #1 "F" RILEY Address No. Copies Requested 266

Mail Charts To Address No. Copies Requested 11

Formation Test No. 6 Interval Tested From 4435 ft. to 4460 ft. Total Depth 2460 ft.

Packer Depth 4430 ft. Size 6.5 in. Packer Depth ft. Size in.

Packer Depth 4435 ft. Size 11 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4447 ft. Recorder Number 4339 Cap. 4300

Bottom Recorder Depth (Outside) 4450 ft. Recorder Number 13271 Cap. 4400

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Co. Tools Drill Collar Length 180 I. D. 2.2 in.

Mud Type Chem Viscosity 42 Weight Pipe Length I. D. in.

Weight 9.3 Water Loss 11.0 cc. Drill Pipe Length 4235 I. D. 3.8 in.

Chlorides 6,000 P.P.M. Test Tool Length 20 ft. Tool Size 5/200 in.

Jars: Make NO Serial Number NO Anchor Length 2.5 ft. Size 11 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 4.25 in.

Blow: FFP - weak 1/2" Blow for 10 min increasing to 1"

FFP - weak 1/2" Blow

Recovered 230 ft. of muddy water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides 58,000 P.P.M. Sample Jars used 3 Remarks:

Time On Location 11:45 A.M. Time Pick Up Tool 12:45 P.M. Time Off Location 9:30 A.M.

Time Set Packer(s) 2:00 A.M. Time Started Off Bottom 6:30 P.M. Maximum Temperature 122

Initial Hydrostatic Pressure (A) 2274 P.S.I.

Initial Flow Period Minutes 30 (B) 34 P.S.I. to (C) 56 P.S.I.

Initial Closed In Period Minutes 60 (D) 1177 P.S.I.

Final Flow Period Minutes 90 (E) 79 P.S.I. to (F) 125 P.S.I.

Final Closed In Period Minutes 90 (G) 7122 P.S.I.

Final Hydrostatic Pressure (H) 2200 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] Signature of Customer or his authorized representative

Western Representative [Signature] Thank you

FIELD INVOICE table with columns for item and amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTING CO., INC.
Pressure Data

Date 4-20 Test Ticket No. 7182
 Recorder No. 4339 Capacity _____ Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2258</u> P.S.I.		
B. First Initial Flow Pressure	<u>41</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>52</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
D. Initial Closed-in Pressure	<u>1174</u> P.S.I.	<u>90</u> Mins.	<u>90</u> Mins.
E. Second Initial Flow Pressure	<u>89</u> P.S.I.	<u>90</u> Mins.	<u>93</u> Mins.
F. Second Final Flow Pressure	<u>118</u> P.S.I.		
G. Final Closed-in Pressure	<u>1142</u> P.S.I.		
H. Final Hydrostatic Mud	<u>2192</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown:	<u>7</u> Inc.	Breakdown:	<u>21</u> Inc.	Breakdown:	<u>19</u> Inc.	Breakdown:	<u>32</u> Inc.
of	<u>5</u> mins. and a	of	<u>3</u> mins. and a	of	<u>5</u> mins. and a	of	<u>3</u> mins. and a
final inc. of	<u>0</u> Min.	final inc. of	<u>0</u> Min.	final inc. of	<u>0</u> Min.	final inc. of	<u>0</u> Min.
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>41</u>	0	<u>52</u>	0	<u>89</u>	0	<u>118</u>
P 2 5	<u>41</u>	3	<u>730</u>	5	<u>89</u>	3	<u>652</u>
P 3 10	<u>44</u>	6	<u>853</u>	10	<u>89</u>	6	<u>739</u>
P 4 15	<u>47</u>	9	<u>917</u>	15	<u>92</u>	9	<u>799</u>
P 5 20	<u>49</u>	12	<u>967</u>	20	<u>94</u>	12	<u>846</u>
P 6 25	<u>51</u>	15	<u>1004</u>	25	<u>96</u>	15	<u>879</u>
P 7 30	<u>52</u>	18	<u>1033</u>	30	<u>98</u>	18	<u>908</u>
P 8 35		21	<u>1057</u>	35	<u>100</u>	21	<u>931</u>
P 9 40		24	<u>1075</u>	40	<u>102</u>	24	<u>953</u>
P10 45		27	<u>1088</u>	45	<u>104</u>	27	<u>969</u>
P11 50		30	<u>1101</u>	50	<u>106</u>	30	<u>984</u>
P12 55		33	<u>1114</u>	55	<u>108</u>	33	<u>1000</u>
P13 60		36	<u>1124</u>	60	<u>110</u>	36	<u>1013</u>
P14 65		39	<u>1132</u>	65	<u>112</u>	39	<u>1026</u>
P15 70		42	<u>1140</u>	70	<u>114</u>	42	<u>1036</u>
P16 75		45	<u>1148</u>	75	<u>116</u>	45	<u>1046</u>
P17 80		48	<u>1155</u>	80	<u>117</u>	48	<u>1054</u>
P18 85		51	<u>1162</u>	85	<u>118</u>	51	<u>1062</u>
P19 90		54	<u>1167</u>	90	<u>118</u>	54	<u>1070</u>
P20 95		57	<u>1171</u>	<u>95</u>		57	<u>1078</u>
100		60	<u>1174</u>	<u>100</u>		60	<u>1086</u>

cont

WESTERN TESTING CO., INC.
Pressure Data

Date _____

Test Ticket No. 7182

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B. First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C. First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D. Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E. Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F. Second Final Flow Pressure	P.S.I.			
G. Final Closed-in Pressure	P.S.I.			
H. Final Hydrostatic Mud	P.S.I.			

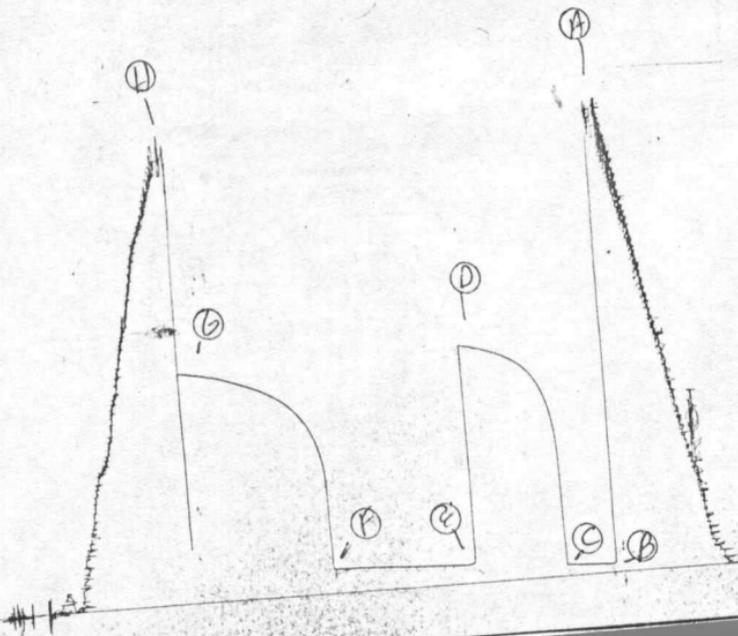
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.							
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 105		63		105		63	1094
P 2 110		66		110		66	1102
P 3 115		69		115		69	1110
P 4 120		72		120		72	1115
P 5 125		75		125		75	1120
P 6 130		78		130		78	1124
P 7 135		81		135		81	1128
P 8 140		84		140		84	1132
P 9 145		87		145		87	1136
P10 150		90		150		90	1139
P11 155		93		155		93	1142
P12 160		96		160		96	
P13 165		99		165		99	
P14 170		102		170		102	
P15 175		105		175		105	
P16 180		108		180		108	
P17 185		111		185		111	
P18 190		114		190		114	
P19 195		117		195		117	
P20 200		120		200		120	

4337

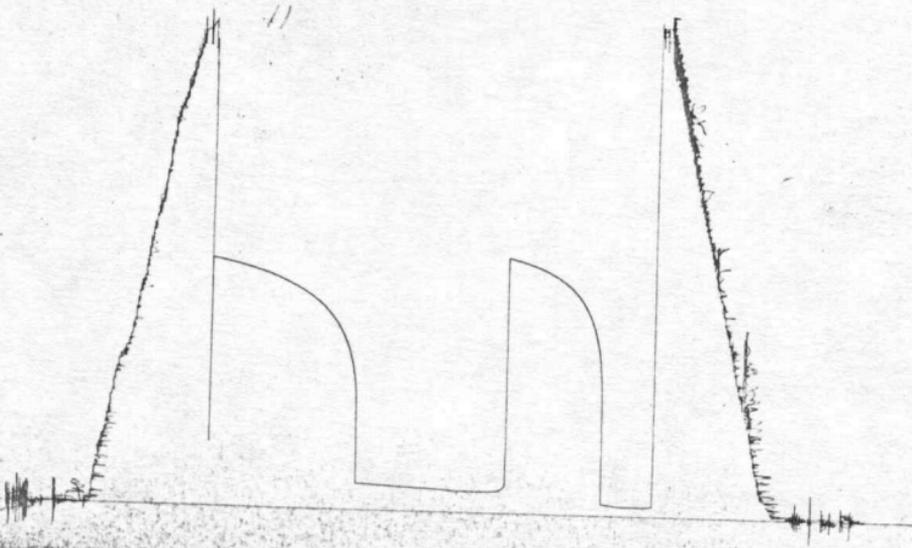
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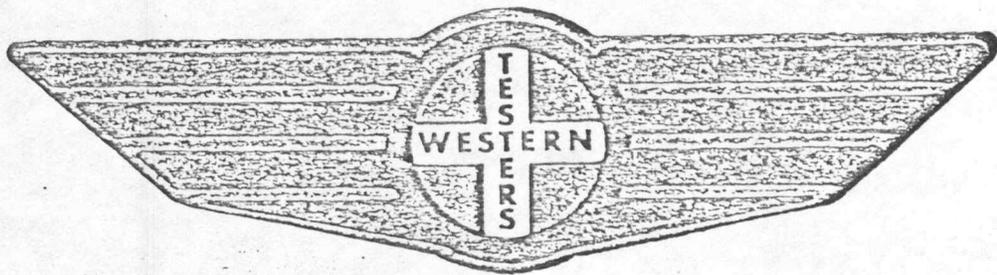
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____ PICKRELL DRILLING COMPANY Lease & Well No. #1 "P" RILEY Sec. 18 Twp. 18S Rge. 29W Test No. _____ Date 4/20/02

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-20-85
CUSTOMER: PICKRELL DRILLING COMPANY
WELL: 1 TEST: 6
ELEVATION (KB): 2841 FORMATION: MYRICK STATION
SECTION: 18 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #4339 RANGE: 4300 CLOCK: 12

INTERVAL TEST FROM: 4435 FT TO: 4460 FT TOTAL DEPTH: 4460 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4430 FT SIZE: 6 3/4 IN PACKER DEPTH: 4435 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRILLING
MUD TYPE: CHEMICAL VISCOSITY: 42
WEIGHT: 9.3 WATER LOSS (CC): 11.0
CHLORIDES (P.P.M.): 6000
JARS - MAKE: NO SERIAL NUMBER: NO
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4235 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 25 FT SIZE: 5 1/2 OD 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK 1/2" BLOW FOR
10 MINUTES INCREASING TO 1".
FINAL FLOW PERIOD WEAK 1/2" BLOW.

RECOVERED: 230 FT OF: MUDDY WATER.
RECOVERED: FT OF: CHLORIDES 58000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 2:00 PM TIME STARTED OFF BOTTOM: 6:40 PM
WELL TEMPERATURE: 122 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2258 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 41 PSI TO (C) 52 PSI
INITIAL CLOSED IN PERIOD MIN: 60 (D) 1174 PSI
FINAL FLOW PERIOD MIN: 90 (E) 89 PSI TO (F) 118 PSI
FINAL CLOSED IN PERIOD MIN: 93 (G) 1142 PSI
FINAL HYDROSTATIC PRESSURE (H) 2192 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 7183

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

Elevation 2841 KB Formation Cherokee Eff. Pay Ft.

District 14 Date WAKEENEY Customer Order No.

COMPANY NAME Pickrell Drilling Company

ADDRESS 110 N. MKT. WICHITA KS

LEASE AND WELL NO. #1 RILEY COUNTY Lane STATE KS Sec. 18 Twp. 18 Rge. 29W

Mail Invoice To #1 "F" RILEY SAME No. Copies Requested 200

Co. Name " Address " No. Copies Requested 11

Mail Charts To Address

Formation Test No. 7 Interval Tested From 4486 ft. to 4510 ft. Total Depth 4510 ft.

Packer Depth 4481 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4486 ft. Size 11 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4497 ft. Recorder Number 4339 Cap. 4300

Bottom Recorder Depth (Outside) 4500 ft. Recorder Number 13271 Cap. 4400

Below Saddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Go. Tools Drill Collar Length 180 I. D. 2.2 in.

Mud Type DRIS Viscosity 49 Weight Pipe Length I. D. in.

Weight 9.3 Water Loss 10.4 cc. Drill Pipe Length 4286 I. D. 3.8 in.

Chlorides 5,000 P.P.M. Test Tool Length 20 ft. Tool Size 5/8 in.

Jars: Make NO Serial Number Anchor Length 24 ft. Size in.

Did Well Flow? NO Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 2 7/8 in. Tool Joint Size 40 FH in.

Blow: FFP - 3/4" Blow top of water in 10 min. dead in 20 min.

FFP - NO blow fresh

Recovered 45 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides 8,000 P.P.M. Sample Jars used 2 Remarks:

Time On Location 7:10 A.M. Time Pick Up Tool 7:35 P.M. Time Off Location A.M.

Time Set Packer(s) 9:05 A.M. Time Started Off Bottom 10:15 A.M. Maximum Temperature 122 P.M.

Initial Hydrostatic Pressure (A) 2277 P.S.I.

Initial Flow Period (B) 30 Minutes P.S.I. to (C) 45 P.S.I.

Initial Closed In Period (D) 39 Minutes P.S.I.

Final Flow Period (E) 10 Minutes P.S.I. to (F) 45 P.S.I.

Final Closed In Period (G) P.S.I.

Final Hydrostatic Pressure (H) 2211 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] Signature of Customer or his authorized representative

Western Representative [Signature] 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

WESTERN TESTING CO., INC.

Pressure Data

Date 4-21

Test Ticket No. 7183

Recorder No. 4339

Capacity _____ Location _____

Clock No. _____ Elevation _____ Well Temperature _____

Point	Pressure	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2277</u> P.S.I.			
B. First Initial Flow Pressure	<u>36</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Min
C. First Final Flow Pressure	<u>40</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Min
D. Initial Closed-in Pressure	<u>1227</u> P.S.I.	Second Flow Pressure	<u>10</u> Mins.	<u>15</u> Min
E. Second Initial Flow Pressure	<u>60</u> P.S.I.	Final Closed-in Pressure	<u>—</u> Mins.	<u>—</u> Min
F. Second Final Flow Pressure	<u>60</u> P.S.I.			
G. Final Closed-in Pressure	_____ P.S.I.			
H. Final Hydrostatic Mud	<u>2218</u> P.S.I.			

PRESSURE BREAKDOWN

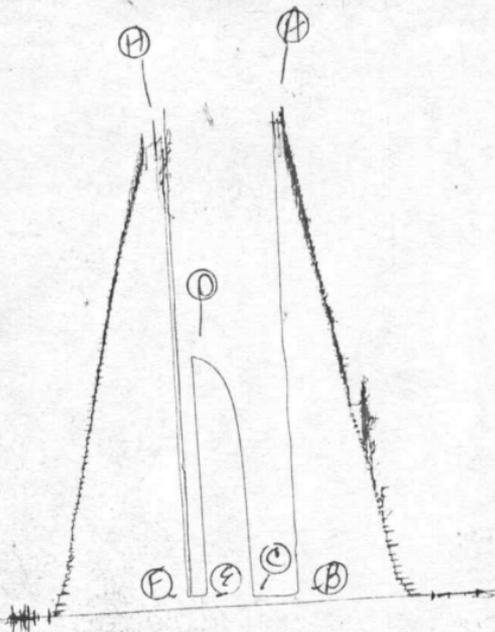
First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>4</u> Inc.		Breakdown: <u>0</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>36</u>	0	<u>40</u>	0	<u>60</u>	0	
P 2 5	<u>36</u>	3	<u>654</u>	5	<u>60</u>	3	
P 3 10	<u>36</u>	6	<u>897</u>	10	<u>60</u>	6	
P 4 15	<u>36</u>	9	<u>1022</u>	15	<u>60</u>	9	
P 5 20	<u>37</u>	12	<u>1090</u>	20		12	
P 6 25	<u>38</u>	15	<u>1134</u>	25		15	
P 7 30	<u>40</u>	18	<u>1162</u>	30		18	
P 8 35		21	<u>1186</u>	35		21	
P 9 40		24	<u>1202</u>	40		24	
P10 45		27	<u>1213</u>	45		27	
P11 50		30	<u>1221</u>	50		30	
P12 55		33	<u>1227</u>	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	

F.T.

4339

JK # 7183

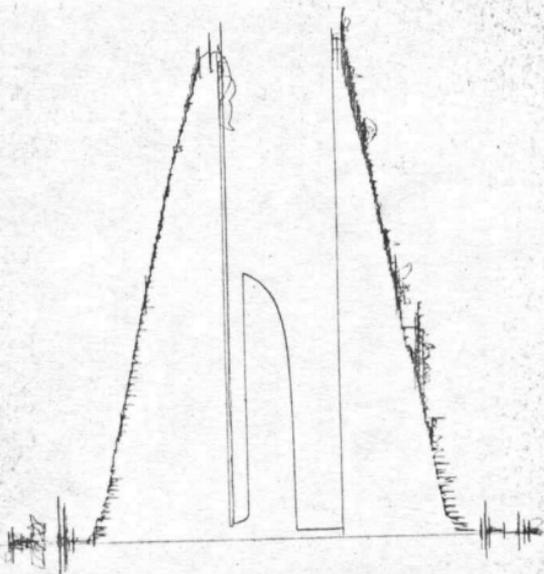
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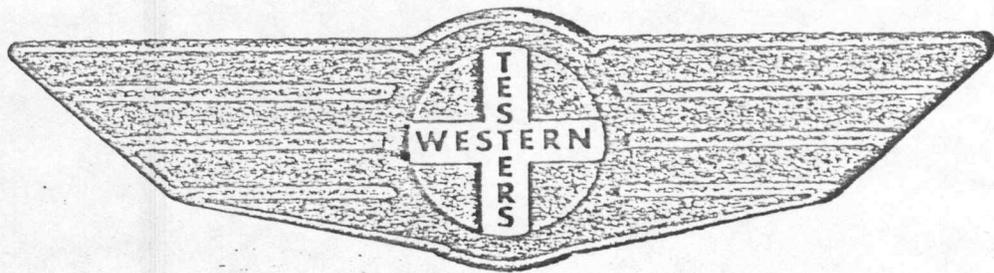
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JK # 7183

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

PICKRELL DRILLING COMPANY
Lease & Well No. #1 "E" RILEY
Sec. 10 Twp. 100 Rge. 7 Test No. Date

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-21-85
CUSTOMER: PICKRELL DRILLING COMPANY
WELL: 1 TEST: 7
ELEVATION (KB): 2841 FORMATION: CHEROKEE
SECTION: 18 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #4339 RANGE: 4300 CLOCK: 12

TICKET #7183

LEASE: "F" RILEY

GEOLOGIST: L. RICHARDSON

FORMATION: CHEROKEE

TOWNSHIP: 18S

STATE: KANSAS

CLOCK: 12

INTERVAL TEST FROM: 4486 FT TO: 4510 FT TOTAL DEPTH: 4510 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4481 FT SIZE: 6 3/4 IN PAKER DEPTH: 4486 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRILLING
MUD TYPE: DRISPAC VISCOSITY: 49
WEIGHT: 9.3 WATER LOSS (CC): 10.4
CHLORIDES (P.P.M.): 5000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT?

DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4286 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 24 FT SIZE: 5 1/2 OD 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 FH IN

BLOW: INITIAL FLOW PERIOD 3/4" BLOW;
TOP OF WATER IN 10 MINUTES; DIED IN 20 MINUTES.
FINAL FLOW PERIOD NO BLOW;
FLUSHED TOOL.

RECOVERED: 45 FT OF: MUD.
RECOVERED: FT OF: CHLORIDES 8000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: FLUSHED TOOL FINAL FLOW PERIOD.

TIME SET PACKER(S): 9:05 AM

TIME STARTED OFF BOTTOM: 10:15 AM

WELL TEMPERATURE: 122 °F

INITIAL HYDROSTATIC PRESSURE:		(A) 2277	PSI	
INITIAL FLOW PERIOD	MIN: 30	(B) 36	PSI TO (C) 40	PSI
INITIAL CLOSED IN PERIOD	MIN: 33	(D) 1227	PSI	
FINAL FLOW PERIOD	MIN: 15	(E) 60	PSI TO (F) 60	PSI
FINAL CLOSED IN PERIOD	MIN: 0	(G) 0	PSI	
FINAL HYDROSTATIC PRESSURE		(H) 2218	PSI	



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 7184

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

Elevation 2841 KB Formation Johnson 2nd Eff. Pay Ft.

District Wakeeney Date 4-22-85 Customer Order No.
COMPANY NAME Pickrell Data Drilling Company
ADDRESS 110 N mkt. Wichita KS
LEASE AND WELL NO. #1 Riley F COUNTY Lane STATE KS Sec. 18 Twp. 18 Rge. 29W
Mail Invoice To #1-F Riley Co. Name SAME Address No. Copies Requested 11
Mail Charts To Address No. Copies Requested 11

Formation Test No. 8 Interval Tested From 4508 ft. to 4540 ft. Total Depth 4540 ft.
Packer Depth 4503 ft. Size 634 in. Packer Depth ft. Size in.
Packer Depth 4508 ft. Size 11 in. Packer Depth ft. Size in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 4527 ft. Recorder Number 4339 Cap. 4300
Bottom Recorder Depth (Outside) 4530 ft. Recorder Number 1327 Cap. 4400
Below Scaddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor Go. Tools Drill Collar Length 180 I. D. 2.2 in.
Mud Type Chem Viscosity 499 Weight Pipe Length I. D. in.
Weight 9.3 Water Loss 10.4 cc. Drill Pipe Length 4308 I. D. 3.8 in.
Chlorides 5,000 P.P.M. Test Tool Length 20 ft. Tool Size 5/200 in.
Jars: Make NO Serial Number Anchor Length 32 ft. Size 11 in.
Did Well Flow? NO Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 77/8 in. Tool Joint Size 5/200 in.

Blow: 1FP - weak 3/4" Blow decreasing to depth in 23 min.
1FP - a few bubbles for 1 min tool flushed after 10 min.
Recovered 10 ft. of free oil Gravity of 38°
Recovered 120 ft. of mud w/ a few oil spots
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides 6,000 P.P.M. Sample Jars used 4 Remarks: 1FP - no response on 1st
flush - on second flush 10 to 15 ft mud drop down
annulus was noted

Time On Location 1:10 A.M. Time Pick Up Tool 2:30 A.M. Time Off Location A.M.
Time Set Packer(s) 3:55 P.M. Time Started Off Bottom 5:10 P.M. Maximum Temperature
Initial Hydrostatic Pressure (A) 2277 P.S.I.
Initial Flow Period Minutes 30 (B) 45 P.S.I. to (C) 68 P.S.I.
Initial Closed In Period Minutes 30 (D) 790 P.S.I.
Final Flow Period Minutes 15 (E) 68 P.S.I. to (F) 102 P.S.I.
Final Closed In Period Minutes (G) P.S.I.
Final Hydrostatic Pressure (H) 2211 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 Gary J. Richard
Signature of Customer or his authorized representative
Western Representative Day Case 0350
Thank You

FIELD INVOICE
Open Hole Test \$ 95
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$

WESTERN TESTING CO., INC.

Pressure Data

Date 4-22-85 Test Ticket No. 7184
 Recorder No. 4339 Capacity 4300 Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	P.S.I.	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2242</u>	P.S.I.		
B First Initial Flow Pressure	<u>55</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>66</u>	P.S.I.	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>808</u>	P.S.I.	<u>15</u> Mins.	<u>15</u> Mins.
E Second Initial Flow Pressure	<u>94</u>	P.S.I.	<u>X</u> Mins.	<u>X</u> Mins.
F Second Final Flow Pressure	<u>105</u>	P.S.I.		
G Final Closed-in Pressure	<u>—</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2212</u>	P.S.I.		

* Flushed tool

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 12 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 4 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

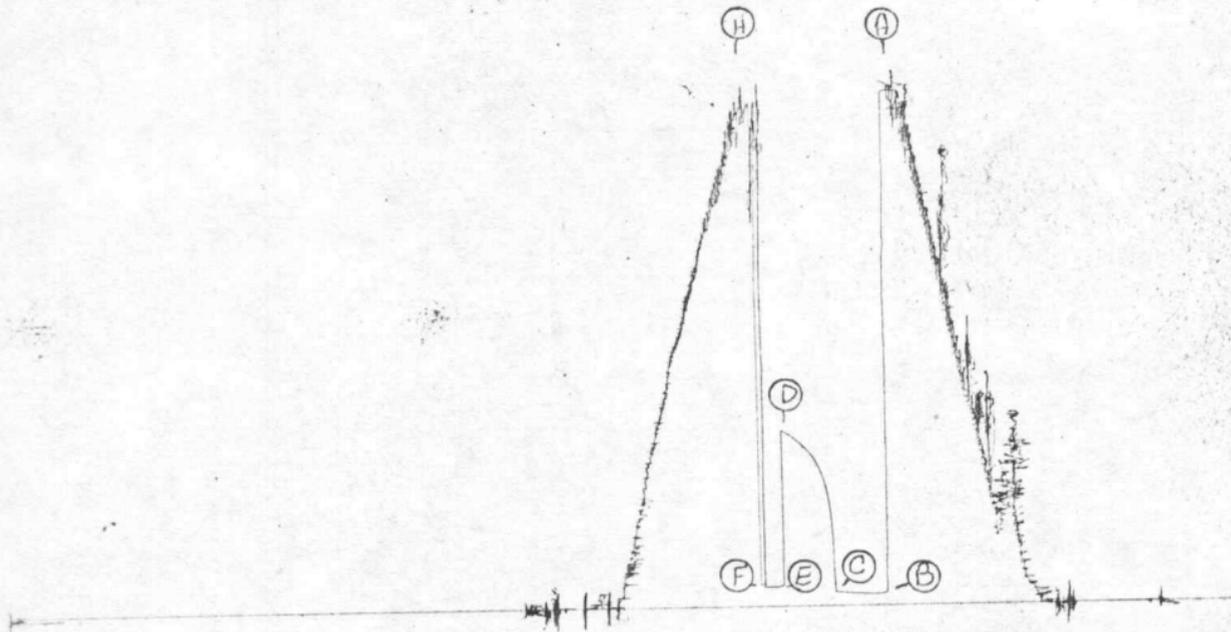
Final Shut-In
 Breakdown: X Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>55</u>	0	<u>66</u>	0	<u>94</u>	0	
P 2 5	<u>55</u>	3	<u>434</u>	5	<u>94</u>	3	
P 3 10	<u>56</u>	6	<u>556</u>	10	* <u>94</u>	6	
P 4 15	<u>58</u>	9	<u>621</u>	15	<u>105</u>	9	
P 5 20	<u>60</u>	12	<u>665</u>	20		12	
P 6 25	<u>63</u>	15	<u>701</u>	25		15	
P 7 30	<u>66</u>	18	<u>728</u>	30		18	
P 8 35		21	<u>750</u>	35		21	
P 9 40		24	<u>771</u>	40		24	
P10 45		27	<u>787</u>	45		27	
P11 50		30	<u>801</u>	50		30	
P12 55		33	<u>808</u>	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	

4339

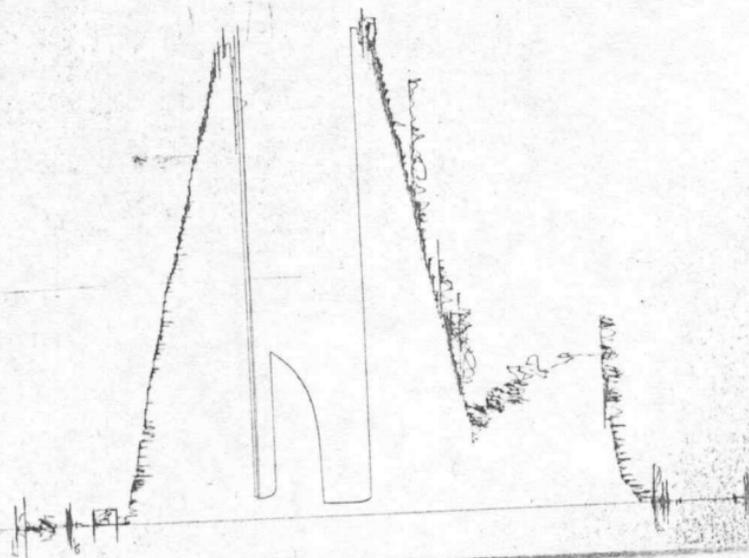
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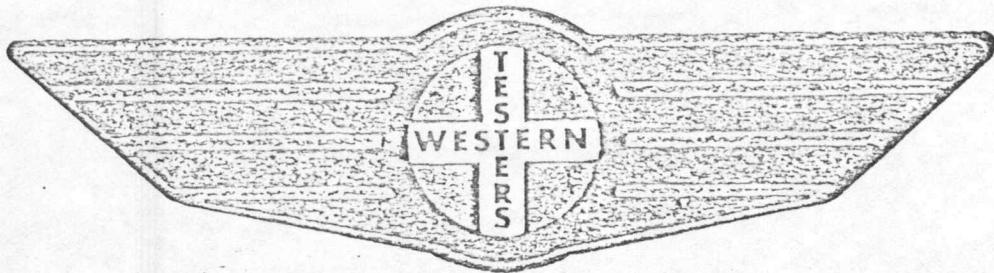
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company PICKRELL DRILLING COMPANY Lease & Well No. #1 "F" RILEY Sec. 18 Twp. 18S Rge. 29W Test No. 8 Date 4/22/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-22-85
CUSTOMER: PICKRELL DRILLING COMPANY
WELL: 1 TEST: 8
ELEVATION (KB): 2841 FORMATION: JOHNSON ZONE
SECTION: 18 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #4339 RANGE: 4300 CLOCK: 12

TICKET #7184
LEASE: "F" RILEY
GEOLOGIST: L. RICHARDSON

INTERVAL TEST FROM: 4508 FT TO: 4540 FT TOTAL DEPTH: 4540 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4503 FT SIZE: 6 3/4 IN PACKER DEPTH: 4508 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRILLING
MUD TYPE: CHEMICAL VISCOSITY: 49
WEIGHT: 9.3 WATER LOSS (CC): 10.4
CHLORIDES (P.P.M.): 5000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT?
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4308 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 32 FT SIZE: 5 1/2 OD 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 WEAK 3/4" BLOW
DECREASING TO DEAD IN 23 MINUTES.
FINAL FLOW PERIOD A FEW BUBBLES FOR 1 MINUTE;
TOOL FLUSHED AFTER 10 MINUTES.

RECOVERED: 10 FT OF: FREE OIL; GRAVITY OF 38 DEGREES.
RECOVERED: 120 FT OF: MUD WITH A FEW OIL SPOTS.
RECOVERED: FT OF: CHLORIDES 6000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 3:55 AM TIME STARTED OFF BOTTOM: 5:10 AM
WELL TEMPERATURE: 0 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2242 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 55 PSI TO (C) 66 PSI
INITIAL CLOSED IN PERIOD MIN: 33 (D) 808 PSI
FINAL FLOW PERIOD MIN: 15 (E) 94 PSI TO (F) 105 PSI
FINAL CLOSED IN PERIOD MIN: 0 (G) 0 PSI
FINAL HYDROSTATIC PRESSURE (H) 2212 PSI

