



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 6018

P. O. BOX 1599 WICHITA, KANSAS 67201
PHONE (316) 838-0601

Elevation P Formation Mississippi Eff. Pay Ft.

District Augusta Date 6-28-80 Customer Order No.

COMPANY NAME Range oil Company Inc.

ADDRESS 240 Page Court Wichita, Ks. 67202

LEASE AND WELL NO. Dell #3 COUNTY Butler STATE Ka. Sec. 3 Twp. 24-S Rge. 5E

Mail Invoice To Dell #3 Co. Name same Address No. Copies Requested 1

Mail Charts To same Address No. Copies Requested 5

Formation Test No. #1 Interval Tested from 2493 ft. to 2512 ft. Total Depth 2512 ft.

Packer Depth 2493 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 2485 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2498 ft.

Recorder Number 1558 Cap. 4200 PSI

Bottom Recorder Depth (Outside) 2503 ft.

Recorder Number 1559 Cap. 4200 PSE

Below Straddle Recorder Depth ft.

Recorder Number Cap.

Drilling Contractor Range Drilling

Drill Collar Length 120 I. D. 3 3/4 in.

Mud Type Chemical Viscosity 42

Weight Pipe Length I. D. in.

Weight 9.6 Water Loss 14.4 cc.

Drill Pipe Length 2353 I. D. 3-8 in.

Chlorides 1600 P.P.M.

Test Tool Length 39 ft. Tool Size 5 1/2 in.

Jars: Make NO Serial Number

Anchor Length 19 ft. Size 5 1/2 in.

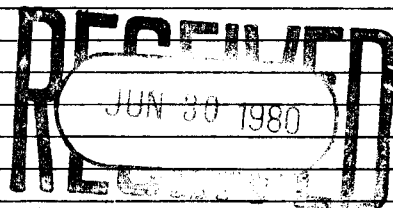
Did Well Flow? NO Reversed Out

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: weak steady blow

Recovered 30 ft. of free oil
Recovered 30 ft. of slight oil cut salty muddy water
Recovered 150 ft. of salt water
Recovered ft. of
Recovered ft. of



Remarks:

on location 3:15 PM picked up Tool 5:10 PM TOH: 2:00 AM 6-29

Time Set Packer(s) <u>8:00</u> P.M.	Time Started Off Bottom <u>11</u> P.M.	Maximum Temperature <u> </u>
Initial Hydrostatic Pressure (A) <u>1449</u> P.S.I.		
Initial Flow Period (B) <u>30</u> Minutes	<u>45</u> P.S.I. to (C) <u>56</u> P.S.I.	
Initial Closed In Period (D) <u>30</u> Minutes	<u>668</u> P.S.I.	
Final Flow Period (E) <u>60</u> Minutes	<u>85</u> P.S.I. to (F) <u>119</u> P.S.I.	
Final Closed In Period (G) <u>60</u> Minutes	<u> </u> P.S.I.	
Final Hydrostatic Pressure (H) <u>1439</u> 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 Fred A. Klam

FIELD INVOICE

Open Hole Test	\$ <u>550.00</u>
Misrun	\$ <u> </u>
Straddle Test	\$ <u> </u>
Jars	\$ <u> </u>
Selective Zone	\$ <u> </u>
Safety Joint	\$ <u> </u>
Standby	\$ <u> </u>
Evaluation	\$ <u> </u>
Extra Packer	\$ <u> </u>
Circ. Sub.	\$ <u>75</u>
<u>30</u> Mileage <u>30x</u>	\$ <u>22.50</u>
Fluid Sampler	\$ <u> </u>
Extra Charts	\$ <u> </u>
TOTAL	\$ <u>572.50</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 6-28 Test Ticket No. 6018
 Recorder No. 1558 Capacity ~~4200~~ 4200 Location 2498 Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1336</u>	P.S.I.	<u>8:00 P</u>	
B First Initial Flow Pressure	<u>51</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>51</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>650</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>95</u>	P.S.I.	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>91</u>	P.S.I.		
G Final Closed-in Pressure	<u>104</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1290</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

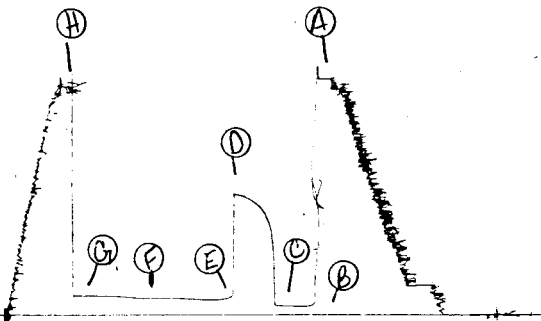
Initial Shut-In
 Breakdown: 10 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 12 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 19 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>51</u>	0	<u>51</u>	0	<u>95</u>	0	<u>91</u>
P 2	<u>46</u>	3	<u>420</u>	5	<u>89</u>	3	<u>91</u>
P 3	<u>46</u>	6	<u>510</u>	10	<u>82</u>	6	<u>91</u>
P 4	<u>46</u>	9	<u>557</u>	15	<u>81</u>	9	<u>92</u>
P 5	<u>47</u>	12	<u>583</u>	20	<u>82</u>	12	<u>92</u>
P 6	<u>49</u>	15	<u>600</u>	25	<u>83</u>	15	<u>95</u>
P 7	<u>51</u>	18	<u>618</u>	30	<u>85</u>	18	<u>97</u>
P 8		21	<u>629</u>	35	<u>87</u>	21	<u>99</u>
P 9		24	<u>635</u>	40	<u>89</u>	24	<u>101</u>
P10		27	<u>644</u>	45	<u>90</u>	27	<u>102</u>
P11		30	<u>650</u>	50	<u>90</u>	30	<u>103</u>
P12		33		55	<u>91</u>	33	<u>103</u>
P13		36		60	<u>91</u>	36	<u>103</u>
P14		39		65		39	<u>104</u>
P15		42		70		42	<u>104</u>
P16		45		75		45	<u>104</u>
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P19		57				57	<u>104</u>
P20		60				60	

TK#6018
I.



1558

Company Range Oil Company, Inc. Lease & Well No. Dell #3
 Elevation 1427 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No 6018
 Date 6-28-80 Sec. 3 Twp 24S Range 5E County Butler State Ks
 Test Approved by Stephen M. Kreidler Western Representative Fred Klaus

Formation Test No. 1 Interval Tested from 2493 ft. to 2512 ft. Total Depth 2512 ft.
 Packer Depth 2493 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2485 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2498 ft. Recorder Number 1558 Cap. 4200
 Bottom Recorder Depth (Outside) 2503 ft. Recorder Number 1559 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Drlg. Co. Drill Collar Length 120 I. D. 3 3/4 in.
 Mud Type Chemical Viscosity 42 Weight Pipe Length - I. D. - in.
 Weight 9.6 Water Loss 14.4 cc. Drill Pipe Length 2353 I. D. 3.8 in.
 Chlorides 1600 P.P.M. Test Tool Length 39 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 19 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 XH in.

Blow: Weak steady blow throughout test

Recovered 30 ft. of Free oil
 Recovered 30 ft. of Slightly oil cut salty muddy water
 Recovered 140 ft. of Salt water
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s)	8:00	- ^{A.M.} P.M.	Time Started Off Bottom	11:00	^{A.M.} P.M.	Maximum Temperature
Initial Hydrostatic Pressure			(A)	1336	P.S.I.	
Initial Flow Period	Minutes	30	(B)	51	P.S.I. to (C)	51 P.S.I.
Initial Closed In Period	Minutes	30	(D)	650	P.S.I.	
Final Flow Period	Minutes	60	(E)	95	P.S.I. to (F)	91 P.S.I.
Final Closed In Period	Minutes	57	(G)	104	P.S.I.	
Final Hydrostatic Pressure			(H)	1290	P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 6-28-80 Test Ticket No. 6018
 Recorder No. 1558 Capacity 4200 Location 2498 Ft.
 Clock No. ----- Elevation 1427 Kelly Bushing Well Temperature ----- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1336</u>	P.S.I.	<u>8:00</u> P. M.	
B First Initial Flow Pressure	<u>51</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>51</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>650</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>95</u>	P.S.I.	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>91</u>	P.S.I.		
G Final Closed-in Pressure	<u>104</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1290</u>	P.S.I.		

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In			
	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>19</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.			
	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>51</u>	<u>0</u>	<u>51</u>	<u>0</u>	<u>95</u>	<u>0</u>	<u>91</u>
P 2	<u>46</u>	<u>3</u>	<u>420</u>	<u>5</u>	<u>89</u>	<u>3</u>	<u>91</u>
P 3	<u>46</u>	<u>6</u>	<u>510</u>	<u>10</u>	<u>82</u>	<u>6</u>	<u>91</u>
P 4	<u>46</u>	<u>9</u>	<u>557</u>	<u>15</u>	<u>81</u>	<u>9</u>	<u>92</u>
P 5	<u>47</u>	<u>12</u>	<u>583</u>	<u>20</u>	<u>82</u>	<u>12</u>	<u>93</u>
P 6	<u>49</u>	<u>15</u>	<u>600</u>	<u>25</u>	<u>83</u>	<u>15</u>	<u>95</u>
P 7	<u>51</u>	<u>18</u>	<u>618</u>	<u>30</u>	<u>85</u>	<u>18</u>	<u>97</u>
P 8		<u>21</u>	<u>629</u>	<u>35</u>	<u>87</u>	<u>21</u>	<u>99</u>
P 9		<u>24</u>	<u>635</u>	<u>40</u>	<u>89</u>	<u>24</u>	<u>101</u>
P10		<u>27</u>	<u>644</u>	<u>45</u>	<u>90</u>	<u>27</u>	<u>102</u>
P11		<u>30</u>	<u>650</u>	<u>50</u>	<u>90</u>	<u>30</u>	<u>103</u>
P12				<u>55</u>	<u>91</u>	<u>33</u>	<u>103</u>
P13				<u>60</u>	<u>91</u>	<u>36</u>	<u>103</u>
P14						<u>39</u>	<u>104</u>
P15						<u>42</u>	<u>104</u>
P16						<u>45</u>	<u>104</u>
P17						<u>48</u>	<u>104</u>
P18						<u>51</u>	<u>104</u>
P19						<u>54</u>	<u>104</u>
P20						<u>57</u>	<u>104</u>



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 6019

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation KB 1427 KB Formation _____ Eff. Pay _____ Ft.

District Augusta Date 6-29-80 Customer Order No. _____

COMPANY NAME Range Oil Company Inc.

ADDRESS 240 Page Court 220 W. Douglas Wichita Ks. 67202

LEASE AND WELL NO. Dell #3 COUNTY Barber STATE Ks. Sec. 3 Twp. 24S Rge. 5E

Mail Invoice To Same Dell #3 No. Copies Requested 1

Co. Name _____ Address _____ No. Copies Requested _____

Mail Charts To Same Address _____ No. Copies Requested 5

Formation Test No. #2 Interval Tested from 2512 ft. to 2532 ft. Total Depth 2532 ft.
Packer Depth 2512 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 2507 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 2517 ft. Recorder Number 1558 Cap. 4200 PSI
Bottom Recorder Depth (Outside) 2520 ft. Recorder Number 1559 Cap. 4200 PSI
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Range Drill Collar Length 120 I. D. 3 3/4 in.
Mud Type Cher. Viscosity 41 Weight Pipe Length _____ I. D. _____ in.
Weight 9.6 Water Loss 15.2 cc. Drill Pipe Length 2371 I. D. 3.8 in.
Chlorides 1800 P.P.M. Test Tool Length 41 ft. Tool Size 5 1/2 in.
Jars: Make NO Serial Number _____ Anchor Length 20 ft. Size 6 1/2 in.
Did Well Flow? No 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: Good steady flow

Recovered 60 ft. of Gas Gravity 44 @ 101° - not corrected
Recovered 132 ft. of Free oil
Recovered 40 ft. of Heavy oil cut mud 60% Oil - 40% Mud
Recovered 80 ft. of Heavy gang out cut mud 70% Gas - 20% Oil - 10% Wtr
Recovered _____ ft. of _____

Remarks: _____

on location 6:40 AM Picked up tool 7:10 AM on job complete 4:00 PM 6-29-80

Time Set Packer(s)	A.M. P.M.	Time Started Off Bottom	A.M. P.M.	Maximum Temperature
9:25		11:55		
Initial Hydrostatic Pressure	(A)	1418	P.S.I.	
Initial Flow Period	Minutes	30	(B) 88	P.S.I. to (C) 143 P.S.I.
Initial Closed In Period	Minutes	30	(D) 1639	P.S.I.
Final Flow Period	Minutes	30	(E) 284	P.S.I. to (F) 301 P.S.I.
Final Closed In Period	Minutes	60	(G) 1683	P.S.I.
Final Hydrostatic Pressure	(H)	1408	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.

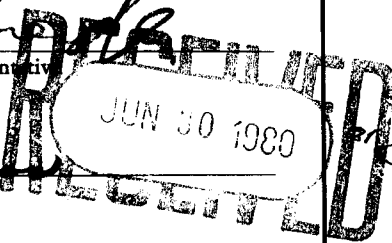
Test Approved By _____
Signature of Customer or his authorized representative

Western Representative Fred H. Klauer

FIELD INVOICE

Open Hole Test	\$ 550.00
Misrun	\$
Straddle Test	\$
Jars	\$
Selective Zone	\$
Safety Joint	\$
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage <u>30 x 75¢</u>	\$ 22.50
Fluid Sampler	\$
Extra Charts	\$

TOTAL \$ 572.50



WESTERN TESTING CO., INC.

Pressure Data

Date 6-29 Test Ticket No. 6019
 Recorder No. 1558 Capacity 4200 Location 2517 Ft.
 Clock No. — Elevation 1427 KB Well Temperature — °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1311</u>	P.S.I.	<u>9:25 AM</u>	
B First Initial Flow Pressure	<u>86</u>	P.S.I.	<u>30</u> Mins	<u>30</u> Mins
C First Final Flow Pressure	<u>137</u>	P.S.I.	<u>30</u> Mins	<u>30</u> Mins
D Initial Closed-in Pressure	<u>639</u>	P.S.I.	<u>30</u> Mins	<u>30</u> Mins
E Second Initial Flow Pressure	<u>175</u>	P.S.I.	<u>60</u> Mins	<u>60</u> Mins
F Second Final Flow Pressure	<u>186</u>	P.S.I.		
G Final Closed-in Pressure	<u>684</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1297</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 10 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

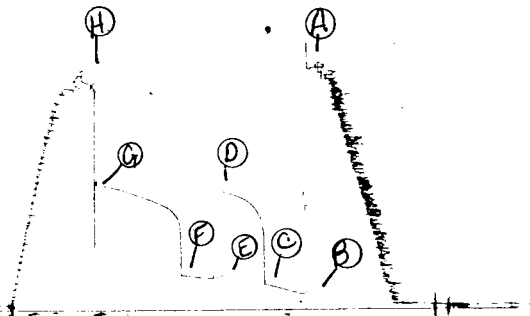
Second Flow Pressure
 Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

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

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>86</u>	0	<u>137</u>	0	<u>175</u>	0	<u>186</u>
P 2	<u>87</u>	3	<u>481</u>	5	<u>171</u>	3	<u>488</u>
P 3	<u>97</u>	6	<u>529</u>	10	<u>171</u>	6	<u>521</u>
P 4	<u>109</u>	9	<u>559</u>	15	<u>173</u>	9	<u>546</u>
P 5	<u>118</u>	12	<u>583</u>	20	<u>179</u>	12	<u>561</u>
P 6	<u>127</u>	15	<u>600</u>	25	<u>182</u>	15	<u>571</u>
P 7	<u>137</u>	18	<u>609</u>	30	<u>186</u>	18	<u>579</u>
P 8		21	<u>616</u>	35		21	<u>589</u>
P 9		24	<u>626</u>	40		24	<u>598</u>
P10		27	<u>632</u>	45		27	<u>605</u>
P11		30	<u>639</u>	50		30	<u>612</u>
P12		33		55		33	<u>621</u>
P13		36		60		36	<u>629</u>
P14		39		65		39	<u>637</u>
P15		42		70		42	<u>646</u>
P16		45		75		45	<u>652</u>
P17		48		80		48	<u>657</u>
P18		51		85		51	<u>662</u>
P19		54		90		54	<u>666</u>
P20		57				57	<u>671</u>
		60				60	<u>675</u>
						63	<u>677</u>
						66	<u>684</u>

TK# 6019

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1558

Company Range Oil Company, Inc. Lease & Well No. De11 #3
 Elevation 1427 Kelly Bushing Formation - Effective Pay - Ft. Ticket No. 6019
 Date 6-29-80 Sec. 3 Twp. 24S Range 5E County Butler State Kansas
 Test Approved by Stephen M. Kreidler Western Representative Fred Klaus

Formation Test # 2 Interval Tested from 2512 ft. to 2532 ft. Total Depth 2532 ft.
 Packer Depth 2512 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2507 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2517 ft. Recorder Number 1558 Cap. 4200
 Bottom Recorder Depth (Outside) 2520 ft. Recorder Number 1559 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Drilg. Co. Drill Collar Length 120 I. D. 3 3/4 in.
 Mud Type Chemcial Viscosity 41 Weight Pipe Length - I. D. - in.
 Weight 9.6 Water Loss 15.2 cc. Drill Pipe Length 2371 I. D. 3.8 in.
 Chlorides 1800 P.P.M. Test Tool Length 41 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 20 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 Xh in.

Blow: Good steady blow throughout test

Recovered 120 ft. of Gas
 Recovered 132 ft. of Free oil
 Recovered 40 ft. of Heavy oil cut mud 60% oil, 40% mud
 Recovered 80 ft. of Heavy gassy oil cut mud. 70% gas, 20% oil, 10% water. Gravity 44 @ 101°
 Recovered - ft. of not corrected

Remarks: -

Time Set Packer(s) 9:25 A.M. Time Started Off Bottom 11:55 A.M. Maximum Temperature -
-P.M.- -P.M.-
 Initial Hydrostatic Pressure (A) 1311 P.S.I.
 Initial Flow Period Minutes 30 (B) 86 P.S.I. to (C) 137 P.S.I.
 Initial Closed In Period Minutes 30 (D) 639 P.S.I.
 Final Flow Period Minutes 30 (E) 175 P.S.I. to (F) 186 P.S.I.
 Final Closed In Period Minutes 66 (G) 684 P.S.I.
 Final Hydrostatic Pressure (H) 1297 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 6-29-80 Test Ticket No. 6019
 Recorder No. 1558 Capacity 4200 Location 2517 Ft.
 Clock No. ---- Elevation 1427 Kelly Bushing Well Temperature --- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1311</u> P.S.I.	Open Tool	<u>9:25</u> A. M.	
B First Initial Flow Pressure	<u>86</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>137</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>639</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>175</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>66</u> Mins.
F Second Final Flow Pressure	<u>186</u> P.S.I.			
G Final Closed-in Pressure	<u>684</u> P.S.I.			
H Final Hydrostatic Mud	<u>1297</u> P.S.I.			

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In			
	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>22</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.			
	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>86</u>	<u>0</u>	<u>137</u>	<u>0</u>	<u>175</u>	<u>0</u>	<u>186</u>
P 2	<u>87</u>	<u>3</u>	<u>481</u>	<u>5</u>	<u>171</u>	<u>3</u>	<u>488</u>
P 3	<u>97</u>	<u>6</u>	<u>529</u>	<u>10</u>	<u>171</u>	<u>6</u>	<u>521</u>
P 4	<u>109</u>	<u>9</u>	<u>559</u>	<u>15</u>	<u>173</u>	<u>9</u>	<u>546</u>
P 5	<u>118</u>	<u>12</u>	<u>583</u>	<u>20</u>	<u>179</u>	<u>12</u>	<u>561</u>
P 6	<u>127</u>	<u>15</u>	<u>600</u>	<u>25</u>	<u>182</u>	<u>15</u>	<u>571</u>
P 7	<u>137</u>	<u>18</u>	<u>609</u>	<u>30</u>	<u>186</u>	<u>18</u>	<u>579</u>
P 8		<u>21</u>	<u>616</u>			<u>21</u>	<u>589</u>
P 9		<u>24</u>	<u>626</u>			<u>24</u>	<u>598</u>
P10		<u>27</u>	<u>632</u>			<u>27</u>	<u>605</u>
P11		<u>30</u>	<u>639</u>			<u>30</u>	<u>612</u>
P12						<u>33</u>	<u>621</u>
P13						<u>36</u>	<u>629</u>
P14						<u>39</u>	<u>637</u>
P15						<u>42</u>	<u>646</u>
P16						<u>45</u>	<u>652</u>
P17						<u>48</u>	<u>657</u>
P18						<u>51</u>	<u>662</u>
P19						<u>54</u>	<u>666</u>
P20						<u>57</u>	<u>671</u>
						<u>60</u>	<u>675</u>
						<u>63</u>	<u>677</u>
						<u>66</u>	<u>684</u>



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 6020

P. O. BOX 1599 WICHITA, KANSAS 67201 PHONE (316) 838-0601

Elevation KB 1427 Formation Eff. Pay Ft.

District Augusta, Mo Date 6-30-80 Customer Order No.

COMPANY NAME Range oil company Inc.

ADDRESS 240 Page Court Wichita, KS 67202

LEASE AND WELL NO. Dell #3 COUNTY Barber STATE Mo Sec 3 Twp 24S Rge 5E

Mail Invoice To Dell #3 same Co. Name Address No. Copies Requested 1

Mail Charts To same Address No. Copies Requested 5

Formation Test No. 3 Interval Tested from 2532 ft. to 2568 ft. Total Depth 2568 ft. Packer Depth 2532 ft. Size 6 3/4 in. Packer Depth 2527 ft. Size 6 3/4 in.

Top Recorder Depth (Inside) 2537 ft. Recorder Number 1558 Cap. 4200 P.S.I. Bottom Recorder Depth (Outside) 2546 ft. Recorder Number 1559 Cap. 4200 P.S.I.

Drilling Contractor Range Mud Type Mud Viscosity 42 Weight 9.6 Water Loss 15.2 cc. Chlorides 1800 P.P.M. Jars: Make NO Serial Number NO Did Well Flow? NO Reversed Out NO Drill Collar Length 120 I. D. 3 3/8 in. Weight Pipe Length I. D. in. Drill Pipe Length 2391 I. D. 3.8 in. Test Tool Length 57 ft. Tool Size 6 1/2 in. Anchor Length 36 ft. Size 5 1/2 in. Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in. Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Fair blow throughout test

Recovered 30 ft. of Free oil Recovered 15 ft. of Heavy oil cut mud Basey 50% oil 10% gas 40 mud Recovered 60 ft. of 5' length of cut mud slightly heavy 10% of 90 mud base gas Recovered 120 ft. of mud

Remarks:

on location 10:30 Packed up tool 12:15 pm 6/28 off location 7:30 Am 6-30-

Table with 8 columns: Time Set, Packer(s), A.M./P.M., Time Started Off Bottom, A.M./P.M., Maximum Temperature, and P.S.I. values for Initial Hydrostatic Pressure, Initial Flow Period, Initial Closed In Period, Final Flow Period, Final Closed In Period, and Final Hydrostatic Pressure.

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.

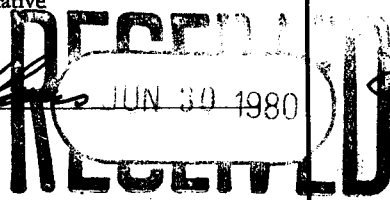
All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By: Stephen M. Kiebler Signature of Customer or his authorized representative

Western Representative: Fred [Signature]

FIELD INVOICE

Table listing items and costs: Open Hole Test \$550.00, Mileage 30 x 75¢ \$22.50, TOTAL \$572.50



WESTERN TESTING CO., INC.

Pressure Data

Date 6-30 Test Ticket No. 6020
 Recorder No. 1558 Capacity 4200 Location 2537 Ft.
 Clock No. _____ Elevation 1427 KB Well Temperature 91 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1304</u>	P.S.I.	<u>1:16 AM</u>	
B First Initial Flow Pressure	<u>61</u>	P.S.I.	<u>30</u> Mins	<u>30</u> Mins.
C First Final Flow Pressure	<u>75</u>	P.S.I.	<u>30</u> Mins	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>622</u>	P.S.I.	<u>60</u> Mins	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>109</u>	P.S.I.	<u>60</u> Mins	<u>64</u> Mins.
F Second Final Flow Pressure	<u>115</u>	P.S.I.		
G Final Closed-in Pressure	<u>634</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1301</u>	P.S.I.		

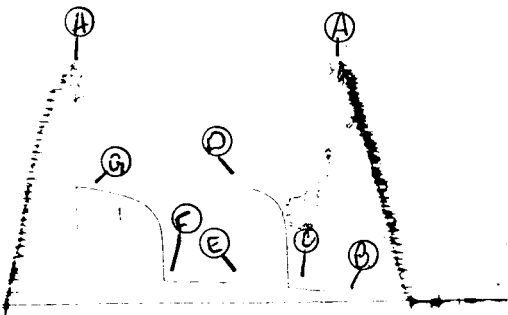
PRESSURE BREAKDOWN

First Flow Pressure Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.
 Initial Shut-In Breakdown: 11 Inc. of 3 mins. and a final inc. of 0 Min.
 Second Flow Pressure Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.
 Final Shut-In Breakdown: 22 Inc. of 3 mins. and a final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>61</u>	0	<u>75</u>	0	<u>109</u>	0	<u>115</u>
P 2	<u>57</u>	3	<u>361</u>	5	<u>105</u>	3	<u>394</u>
P 3	<u>60</u>	6	<u>462</u>	10	<u>104</u>	6	<u>457</u>
P 4	<u>60</u>	9	<u>515</u>	15	<u>104</u>	9	<u>492</u>
P 5	<u>67</u>	12	<u>543</u>	20	<u>104</u>	12	<u>517</u>
P 6	<u>72</u>	15	<u>562</u>	25	<u>106</u>	15	<u>532</u>
P 7	<u>75</u>	18	<u>581</u>	30	<u>107</u>	18	<u>548</u>
P 8		21	<u>592</u>	35	<u>108</u>	21	<u>559</u>
P 9		24	<u>601</u>	40	<u>108</u>	24	<u>569</u>
P10		27	<u>608</u>	45	<u>108</u>	27	<u>576</u>
P11		30	<u>614</u>	50	<u>110</u>	30	<u>580</u>
P12		33	<u>622</u>	55	<u>114</u>	33	<u>587</u>
P13		36		60	<u>115</u>	36	<u>592</u>
P14		39		63		39	<u>598</u>
P15		42		70		42	<u>604</u>
P16		45		75		45	<u>609</u>
P17		48		80		48	<u>614</u>
P18		51		85		51	<u>619</u>
P19		54		90		54	<u>624</u>
P20		57				57	<u>627</u>
		60				60	<u>629</u>
						63	<u>631</u>
						66	<u>634</u>

TK-#6020

I.



Company Range Oil Company, Inc. Lease & Well No. Dell #3
 Elevation 1427 Kelly Bushing Formation Effective Pay - Ft. Ticket No. 6020
 Date 6-30-80 Sec. 3 Twp. 24S Range 5E County Butler State Kansas
 Test Approved by Stephen M. Kreidler Western Representative Fred Klaus

Formation Test No. #3 Interval Tested from 2532 ft. to 2568 ft. Total Depth 2568 ft.
 Packer Depth 2532 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2527 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2537 ft. Recorder Number 1558 Cap. 4200
 Bottom Recorder Depth (Outside) 2540 ft. Recorder Number 1559 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Drlg. Co. Drill Collar Length 120 I. D. 3 3/8 in.
 Mud Type Chemcial Viscosity 42 Weight Pipe Length - I. D. - in.
 Weight 9.6 Water Loss 15.2 cc. Drill Pipe Length 2391 I. D. 3.8 in.
 Chlorides 1800 P.P.M. Test Tool Length 57 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 36 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 XH in.

Blow: Fair throughout test

Recovered 30 ft. of Free oil
 Recovered 15 ft. of Heavy oil cut gassy mud, 50% oil, 10% gas, 40% mud
 Recovered 60 ft. of Slightly oil cut mud, slightly gassy, 10% oil, 90% mud, trace gas
 Recovered 120 ft. of mud
 Recovered ft. of

Remarks:

Time Set Packer(s) 1:16 A.M. ~~P.M.~~ Time Started Off Bottom 4:16 A.M. ~~P.M.~~ Maximum Temperature 91
 Initial Hydrostatic Pressure (A) 1304 P.S.I.
 Initial Flow Period Minutes 30 (B) 61 P.S.I. to (C) 75 P.S.I.
 Initial Closed In Period Minutes 33 (D) 622 P.S.I.
 Final Flow Period Minutes 60 (E) 109 P.S.I. to (F) 115 P.S.I.
 Final Closed In Period Minutes 66 (G) 634 P.S.I.
 Final Hydrostatic Pressure (H) 1301 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 6-30-80 Test Ticket No. 6020
 Recorder No. 1558 Capacity 4200 Location 2537 Ft.
 Clock No. ---- Elevation 1427 Kelly Bushing Well Temperature 91 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1304</u> P.S.I.	Open Tool	<u>1:16 A. M</u>	
B First Initial Flow Pressure	<u>61</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>75</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>622</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>109</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>66</u> Mins.
F Second Final Flow Pressure	<u>115</u> P.S.I.			
G Final Closed-in Pressure	<u>634</u> P.S.I.			
H Final Hydrostatic Mud	<u>1301</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 11 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 12 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

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

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>61</u>	<u>0</u>	<u>75</u>	<u>0</u>	<u>109</u>	<u>0</u>	<u>115</u>
P 2 <u>5</u>	<u>57</u>	<u>3</u>	<u>361</u>	<u>5</u>	<u>105</u>	<u>3</u>	<u>394</u>
P 3 <u>10</u>	<u>60</u>	<u>6</u>	<u>462</u>	<u>10</u>	<u>104</u>	<u>6</u>	<u>457</u>
P 4 <u>15</u>	<u>60</u>	<u>9</u>	<u>515</u>	<u>15</u>	<u>104</u>	<u>9</u>	<u>492</u>
P 5 <u>20</u>	<u>67</u>	<u>12</u>	<u>543</u>	<u>20</u>	<u>104</u>	<u>12</u>	<u>517</u>
P 6 <u>25</u>	<u>72</u>	<u>15</u>	<u>562</u>	<u>25</u>	<u>106</u>	<u>15</u>	<u>533</u>
P 7 <u>30</u>	<u>75</u>	<u>18</u>	<u>581</u>	<u>30</u>	<u>107</u>	<u>18</u>	<u>548</u>
P 8 _____		<u>21</u>	<u>592</u>	<u>35</u>	<u>109</u>	<u>21</u>	<u>559</u>
P 9 _____		<u>24</u>	<u>601</u>	<u>40</u>	<u>109</u>	<u>24</u>	<u>569</u>
P10 _____		<u>27</u>	<u>608</u>	<u>45</u>	<u>109</u>	<u>27</u>	<u>576</u>
P11 _____		<u>30</u>	<u>614</u>	<u>50</u>	<u>110</u>	<u>30</u>	<u>580</u>
P12 _____		<u>33</u>	<u>622</u>	<u>55</u>	<u>114</u>	<u>33</u>	<u>587</u>
P13 _____				<u>60</u>	<u>115</u>	<u>36</u>	<u>592</u>
P14 _____						<u>39</u>	<u>598</u>
P15 _____						<u>42</u>	<u>604</u>
P16 _____						<u>45</u>	<u>609</u>
P17 _____						<u>48</u>	<u>614</u>
P18 _____						<u>51</u>	<u>619</u>
P19 _____						<u>54</u>	<u>624</u>
P20 _____						<u>57</u>	<u>627</u>
						<u>60</u>	<u>629</u>
						<u>63</u>	<u>631</u>
						<u>66</u>	<u>634</u>