



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO. 7842

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

Elevation 1189 KB Formation K.C. Eff. Pay Ft.

District Augusta Date 8-18-81 Customer Order No.

COMPANY NAME Range Oil Co. Inc.

ADDRESS 240 Page Court 220 W. Douglas Wichita, Ks

LEASE AND WELL NO. Lacey #1 COUNTY Cowley STATE Ks Sec. 9 Twp. 33S Rge. 4E

Mail Invoice To Same Co. Name Address No. Copies Requested 1

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. #1 Interval Tested from 2662 ft. to 2681 ft. Total Depth 2681 ft.

Packer Depth 2662 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 2657 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2667 ft. Recorder Number 13240 Cap. 4500

Bottom Recorder Depth (Outside) 2671 ft. Recorder Number 11018 Cap. 4425

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Range Drilling #2 Drill Collar Length 151 I. D. in.

Mud Type Chem Viscosity 37 Weight Pipe Length I. D. in.

Weight 9.4 Water Loss 15.2 cc. Drill Pipe Length 2502 I. D. in.

Chlorides 1700 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.

Jars: Make None Serial Number Anchor Length 19 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out NO 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, died 10 min into 1st opening, Flushed tool 2nd opening

Surge when tool opened no blow F.F.P.

Recovered 5 ft. of oil spotted mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time On Location 7:30³⁰ A.M. Time Pick Up Tool 8:30 A.M.

Time Set Packer(s) 10:00 A.M. Time Started Off Bottom 1200 P.M.

Initial Hydrostatic Pressure (A) 1304 P.S.I. Maximum Temperature 108°

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

Initial Closed In Period Minutes 30 (D) 693 P.S.I.

Final Flow Period Minutes 30 (E) 34 P.S.I. to (F) 34 P.S.I.

Final Closed In Period Minutes 30 (G) 681 P.S.I.

Final Hydrostatic Pressure (H) 1304 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 Tim J. LAUER
Signature of Customer or his authorized representative

Western Representative Robert Davis

FIELD INVOICE

Open Hole Test \$ 625

Misrun \$

Straddle Test \$

Jars \$

Selective Zone \$

Safety Joint \$

Standby \$

Evaluation \$

Extra Packer \$

Circ. Sub. \$

36 Mileage \$ 27.00

Fluid Sampler \$

Extra Charts \$

Insurance \$

TOTAL \$ 652.00

WESTERN TESTING CO., INC.

Pressure Data

Date 8-18 Recorder No. 13240 Capacity 4500 Test Ticket No. 7842
 Clock No. — — — Elevation 1189 KB Location 2667 Ft. Well Temperature 108 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1315</u> P.S.I.	Open Tool	<u>10:00 A</u> M	
B First Initial Flow Pressure	<u>34</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>34</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>693</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>48</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>41</u> P.S.I.			
G Final Closed-in Pressure	<u>682</u> P.S.I.			
H Final Hydrostatic Mud	<u>1261</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: 10 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>34</u>	<u>0</u>	<u>34</u>	<u>0</u>	<u>48</u>	<u>0</u>	<u>41</u>
P 2 <u>5</u>	}	<u>3</u>	<u>35</u>	<u>5</u>	<u>Flushed 41 Tool</u>	<u>3</u>	<u>42</u>
P 3 <u>10</u>		<u>6</u>	<u>38</u>	<u>10</u>	<u>41</u>	<u>6</u>	<u>49</u>
P 4 <u>15</u>		<u>9</u>	<u>45</u>	<u>15</u>	}	<u>9</u>	<u>66</u>
P 5 <u>20</u>		<u>12</u>	<u>66</u>	<u>20</u>		<u>12</u>	<u>136</u>
P 6 <u>25</u>		<u>15</u>	<u>155</u>	<u>25</u>		<u>15</u>	<u>250</u>
P 7 <u>30</u>	<u>34</u>	<u>18</u>	<u>291</u>	<u>30</u>	<u>41</u>	<u>18</u>	<u>380</u>
P 8 <u>35</u>		<u>21</u>	<u>432</u>	<u>35</u>		<u>21</u>	<u>489</u>
P 9 <u>40</u>		<u>24</u>	<u>541</u>	<u>40</u>		<u>24</u>	<u>575</u>
P10 <u>45</u>		<u>27</u>	<u>630</u>	<u>45</u>		<u>27</u>	<u>641</u>
P11 <u>50</u>		<u>30</u>	<u>693</u>	<u>50</u>		<u>30</u>	<u>682</u>
P12 <u>55</u>		<u>38</u>		<u>55</u>		<u>38</u>	
P13 <u>60</u>		<u>36</u>		<u>60</u>		<u>36</u>	
P14		<u>39</u>		<u>65</u>		<u>39</u>	
P15		<u>42</u>		<u>70</u>		<u>42</u>	
P16		<u>45</u>		<u>75</u>		<u>45</u>	
P17		<u>48</u>		<u>80</u>		<u>48</u>	
P18		<u>51</u>		<u>85</u>		<u>51</u>	
P19		<u>54</u>		<u>90</u>		<u>54</u>	
P20		<u>57</u>				<u>57</u>	
		<u>60</u>				<u>60</u>	

Company Range Oil Company, Inc. Lease & Well No. Lacey #1
 Elevation 1189 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 7842
 Date 8/18/81 Sec. 9 Twp. 33S Range 4E County Cowley State Kansas
 Test Approved by Tim J. Lauer Western Representative Robert Davis
 Formation Test No. I Interval Tested from 2662 ft. to 2681 ft. Total Depth 2681 ft.
 Packer Depth 2662 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2657 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set =
 Top Recorder Depth (Inside) 2667 ft. Recorder Number 13240 Cap. 4500
 Bottom Recorder Depth (Outside) 2671 ft. Recorder Number 11018 Cap. 4425
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Range Drilling Rig #3 Drill Collar Length 151 I. D. - in.
 Mud Type chemical Viscosity 37 Weight Pipe Length - I. D. - in.
 Weight 9.4 Water Loss 15.2 cc. Drill Pipe Length 2502 I. D. - in.
 Chlorides 1,700 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.
 Jars: Make None Serial Number - Anchor Length 19 ft. Size 5 1/2 in.
 Did Well Flow? No Reversed Out NO 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 in.

Blow: Weak; died ten minutes into initial flow period. Flushed tool on final flow period.
Surge when tool opened - no blow.

Recovered 5 ft. of oil spotted mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: -

Time Set Packer(s) 10:00 ~~A.M.~~ P.M. Time Started Off Bottom 12:00 ~~A.M.~~ P.M. Maximum Temperature 108°
 Initial Hydrostatic Pressure (A) 1315 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) 693 P.S.I.
 Final Flow Period Minutes 30 (E) 48 P.S.I. to (F) 41 P.S.I.
 Final Closed In Period Minutes 30 (G) 682 P.S.I.
 Final Hydrostatic Pressure (H) 1261 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 8/18/81 Test Ticket No. 7842
 Recorder No. 13240 Capacity 4500 Location 2667 Ft.
 Clock No. - Elevation 1189 Kelly Bushing Well Temperature 108 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1315 P.S.I.	Open Tool	10:00A	
B First Initial Flow Pressure	34 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	34 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	693 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	48 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	41 P.S.I.			
G Final Closed-in Pressure	682 P.S.I.			
H Final Hydrostatic Mud	1261 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>10</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	34	0	34	0	48	0	41
P 2 5	34	3	35	5	41	3	42
P 3 10	34	6	38	10	41	6	49
P 4 15	34	9	45	15	41	9	66
P 5 20	34	12	66	20	41	12	136
P 6 25	34	15	155	25	41	15	250
P 7 30	34	18	291	30	41	18	380
P 8		21	432			21	489
P 9		24	541			24	575
P10		27	630			27	641
P11		30	693			30	682
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							