



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 7811

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

Elevation 1484 Kelly Formation Mississippi Eff. Pay Dolomite Ft.

District Augusta Date 11-1-80 Customer Order No.

COMPANY NAME Range Oil Co. Inc

ADDRESS 240 Page Ct 220 W Douglas Wichita, Ks. 67202

LEASE AND WELL NO. #2 Klaassen "A" COUNTY Butler STATE Kans. Sec. 24 Twp 25s Rge 3E

Mail Invoice To #2 Klaassen "A" Co. Name Same Address Same No. Copies Requested 1

Mail Charts To Same Address Same No. Copies Requested 5

Formation Test No. 1 Interval Tested from 2657 ft. to 2670 ft. Total Depth 2670 ft.

Packer Depth 2652 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) 2662 ft. Recorder Number 3354 Cap. 4200

Bottom Recorder Depth (Outside) 2665 ft. Recorder Number 10980 Cap. 4200

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Rig 1 Drill Collar Length 92 I. D. 3 1/4 in.

Mud Type Chem Viscosity 34 Weight Pipe Length - I. D. - in.

Weight 10.2 Water Loss 19.2 cc. Drill Pipe Length 2442 I. D. 3.8 in.

Chlorides 2200 P.P.M. Test Tool Length 20 ft. Tool Size OD. 4 1/2 in.

Jars: Make NO Serial Number - Anchor Length 13 ft. Size OD. 4 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 1/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Weak to Fair throughout (built to 7" in bucket of water)

Recovered 200 ft. of Gas

Recovered 50 ft. of Gas cut free oil

Recovered 70 ft. of Gas cut slightly oil cut mud

Recovered - ft. of -

Recovered - ft. of -

Remarks:

Time On Location 5:00 A.M. Time Pick Up Tool 6:30 A.M. Time Off Location 2:30 P.M.

Time Set Packer(s) 8:30 A.M. Time Started Off Bottom 12:00 A.M. Maximum Temperature 106

Initial Hydrostatic Pressure 1413 P.S.I.

Initial Flow Period 30 Minutes (B) 10 P.S.I. to (C) 31 P.S.I.

Initial Closed In Period 30 Minutes (D) 643 P.S.I.

Final Flow Period 90 Minutes (E) 52 P.S.I. to (F) 84 P.S.I.

Final Closed In Period 60 Minutes (G) 443 P.S.I.

Final Hydrostatic Pressure 1413 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 Robert Olsen
Signature of Customer or his authorized representative

Western Representative Allen Edgington

FIELD INVOICE

Open Hole Test \$ 550.
Misrun \$ -
Straddle Test \$ -
Jars \$ -
Selective Zone \$ -
Safety Joint \$ -
Standby \$ -
Evaluation \$ -
Extra Packer \$ -
Circ. Sub. \$ -
20 Mileage \$ 15.00
Fluid Sampler \$ -
Extra Charts \$ -
Insurance \$ -
TOTAL \$ 565.00

WESTERN TESTING CO., INC.

Pressure Data

Date 11-1 Recorder No. 3354 Capacity 4200 Test Ticket No. 7811
 Clock No. Elevation 1484 KB Location 2662 Ft. Well Temperature 106 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1409</u> P.S.I.	<u>8:30</u> A	<u> </u> M
B First Initial Flow Pressure	<u>6</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>32</u> P.S.I.	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>650</u> P.S.I.	<u>90</u> Mins.	<u>90</u> Mins.
E Second Initial Flow Pressure	<u>61</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>72</u> P.S.I.		
G Final Closed-in Pressure	<u>443</u> P.S.I.		
H Final Hydrostatic Mud	<u>1409</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: 18 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

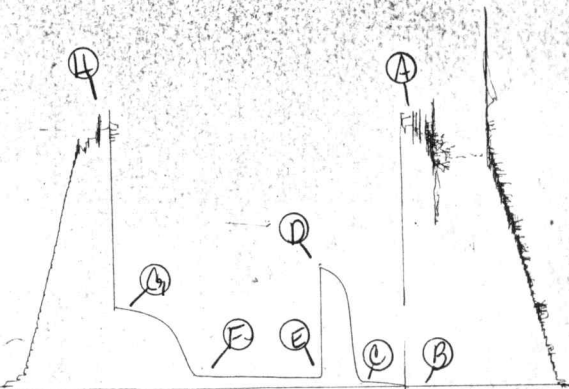
Final Shut-In
 Breakdown: 20 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>6</u>	0	<u>32</u>	0	<u>61</u>	0	<u>72</u>
P 2 5	<u>13</u>	3	<u>44</u>	5	<u>57</u>	3	<u>87</u>
P 3 10	<u>19</u>	6	<u>110</u>	10	<u> </u>	6	<u>122</u>
P 4 15	<u>23</u>	9	<u>283</u>	15	<u> </u>	9	<u>177</u>
P 5 20	<u>27</u>	12	<u>458</u>	20	<u> </u>	12	<u>232</u>
P 6 25	<u>30</u>	15	<u>534</u>	25	<u>57</u>	15	<u>278</u>
P 7 30	<u>32</u>	18	<u>574</u>	30	<u>59</u>	18	<u>316</u>
P 8 35	<u> </u>	21	<u>603</u>	35	<u>61</u>	21	<u>344</u>
P 9 40	<u> </u>	24	<u>618</u>	40	<u>62</u>	24	<u>361</u>
P10 45	<u> </u>	27	<u>631</u>	45	<u>64</u>	27	<u>373</u>
P11 50	<u> </u>	30	<u>643</u>	50	<u>65</u>	30	<u>388</u>
P12 55	<u> </u>	33	<u>650</u>	55	<u>66</u>	33	<u>397</u>
P13 60	<u> </u>	36	<u> </u>	60	<u>67</u>	36	<u>405</u>
P14	<u> </u>	39	<u> </u>	65	<u> </u>	39	<u>411</u>
P15	<u> </u>	42	<u> </u>	70	<u> </u>	42	<u>418</u>
P16	<u> </u>	45	<u> </u>	75	<u>67</u>	45	<u>424</u>
P17	<u> </u>	48	<u> </u>	80	<u>69</u>	48	<u>430</u>
P18	<u> </u>	51	<u> </u>	85	<u>71</u>	51	<u>435</u>
P19	<u> </u>	54	<u> </u>	90	<u>72</u>	54	<u>438</u>
P20	<u> </u>	57	<u> </u>		<u> </u>	57	<u>441</u>
		60	<u> </u>		<u> </u>	60	<u>443</u>

TK+ # 7811

I.

7766



Company Range Oil Company, Inc. Lease & Well No. #2 Klaassen "A"
 Elevation 1484 Kelly Bushing Mississippi Formation Effective Pay - Ft. Ticket No. 7811
 Date 11-1-80 Sec. 24 Twp. 25S Range 3E County Butler State Kansas
 Test Approved by Robert Olsen Western Representative Allen Edgington
 Formation Test No. 1 Interval Tested from 2657 ft. to 2670 ft. Total Depth 2670 ft.
 Packer Depth 2652 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) 2662 ft. Recorder Number 3354 Cap. 4200
 Bottom Recorder Depth (Outside) 2665 ft. Recorder Number 10980 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Range Rig #1 Drill Collar Length 92 I. D. 2 1/4 in.
 Mud Type Chemical Viscosity 34 Weight Pipe Length - I. D. - in.
 Weight 10.2 Water Loss 19.2 cc. Drill Pipe Length 2442 I. D. 3.8 in.
 Chlorides 2200 P.P.M. Test Tool Length 20 ft. Tool Size 4 1/2 in.
 Jars: Make No Serial Number - Anchor Length 13 ft. Size 4 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 to fair throughout - (build to 7 inches in bucket of water)

Recovered 200 ft. of gas
 Recovered 50 ft. of gas cut free oil
 Recovered 70 ft. of gas cut slightly oil cut mud

Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 8:30 ~~A.M.~~ P.M. Time Started Off Bottom 12:00 ~~A.M.~~ P.M. Maximum Temperature 106
 Initial Hydrostatic Pressure 1409 (A) P.S.I.
 Initial Flow Period 30 Minutes (B) 6 P.S.I. to (C) 32 P.S.I.
 Initial Closed In Period 33 Minutes (D) 650 P.S.I.
 Final Flow Period 90 Minutes (E) 61 P.S.I. to (F) 72 P.S.I.
 Final Closed In Period 60 Minutes (G) 443 P.S.I.
 Final Hydrostatic Pressure 1409 (H) P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 11/1/80 Test Ticket No. 7811
 Recorder No. 3354 Capacity 4200 Location 2662 Ft.
 Clock No. ----- Elevation 1484 Kelly Bushing Well Temperature 106 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1409</u>	P.S.I.	8:30A	M
B First Initial Flow Pressure	<u>6</u>	P.S.I.	30	Mins. 30
C First Final Flow Pressure	<u>32</u>	P.S.I.	30	Mins. 33
D Initial Closed-in Pressure	<u>650</u>	P.S.I.	90	Mins. 90
E Second Initial Flow Pressure	<u>61</u>	P.S.I.	60	Mins. 60
F Second Final Flow Pressure	<u>72</u>	P.S.I.		
G Final Closed-in Pressure	<u>443</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1409</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>18</u> Inc.		Breakdown: <u>20</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 <u>0</u>	<u>6</u>	<u>0</u>	<u>32</u>	<u>0</u>	<u>61</u>	<u>0</u>	<u>72</u>
P 2 <u>5</u>	<u>13</u>	<u>3</u>	<u>44</u>	<u>5</u>	<u>57</u>	<u>3</u>	<u>87</u>
P 3 <u>10</u>	<u>19</u>	<u>6</u>	<u>110</u>	<u>10</u>	<u>57</u>	<u>6</u>	<u>122</u>
P 4 <u>15</u>	<u>23</u>	<u>9</u>	<u>283</u>	<u>15</u>	<u>57</u>	<u>9</u>	<u>177</u>
P 5 <u>20</u>	<u>27</u>	<u>12</u>	<u>458</u>	<u>20</u>	<u>57</u>	<u>12</u>	<u>232</u>
P 6 <u>25</u>	<u>30</u>	<u>15</u>	<u>534</u>	<u>25</u>	<u>57</u>	<u>15</u>	<u>278</u>
P 7 <u>30</u>	<u>32</u>	<u>18</u>	<u>574</u>	<u>30</u>	<u>59</u>	<u>18</u>	<u>316</u>
P 8		<u>21</u>	<u>603</u>	<u>35</u>	<u>61</u>	<u>21</u>	<u>344</u>
P 9		<u>24</u>	<u>618</u>	<u>40</u>	<u>62</u>	<u>24</u>	<u>361</u>
P10		<u>27</u>	<u>631</u>	<u>45</u>	<u>64</u>	<u>27</u>	<u>373</u>
P11		<u>30</u>	<u>643</u>	<u>50</u>	<u>65</u>	<u>30</u>	<u>388</u>
P12		<u>33</u>	<u>650</u>	<u>55</u>	<u>66</u>	<u>33</u>	<u>397</u>
P13				<u>60</u>	<u>67</u>	<u>36</u>	<u>405</u>
P14				<u>65</u>	<u>67</u>	<u>39</u>	<u>411</u>
P15				<u>70</u>	<u>67</u>	<u>42</u>	<u>418</u>
P16				<u>75</u>	<u>67</u>	<u>45</u>	<u>424</u>
P17				<u>80</u>	<u>69</u>	<u>48</u>	<u>430</u>
P18				<u>85</u>	<u>71</u>	<u>51</u>	<u>435</u>
P19				<u>90</u>	<u>72</u>	<u>54</u>	<u>438</u>
P20						<u>57</u>	<u>441</u>
						<u>60</u>	<u>443</u>