



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 5888

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

Elevation Formation Mississippi Eff. Pay Ft.

District Augusta Ka Date 8-11-80 Customer Order No.

COMPANY NAME Range Oil Co. Inc.

ADDRESS 240 Page Court Wichita Ks.

LEASE AND WELL NO. 1 Joseph "A" COUNTY Butler STATE Ka Sec. 17 Twp 24S Rge 5E

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 2490 ft. to 2511 ft. Total Depth 2511 ft.

Packer Depth 2490 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2495 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2495 ft.

Recorder Number 1559 Cap. 4200 PSI

Bottom Recorder Depth (Outside) 2498 ft.

Recorder Number 5666 Cap. 3950 PSI

Below Straddle Recorder Depth - ft.

Recorder Number - Cap. -

Drilling Contractor ROET Rig 1

Drill Collar Length 93 I. D. 2 1/4 in.

Mud Type Chem Viscosity 40

Weight Pipe Length - I. D. - in.

Weight 9.6 Water Loss 14.4 cc.

Drill Pipe Length 2375 I. D. 2.8 in.

Chlorides 1400 P.P.M.

Test Tool Length 43 ft. Tool Size 5 1/2 in.

Jars: Make NO Serial Number -

Anchor Length 21 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 7/8 in. Tool Joint Size 4 1/2 x H in.

Blow: Initial Flow very weak, died 15 min; Final Flow (dead)

Recovered 3 ft. of very light oil cut mud

Recovered 4" of free oil.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

out 12:05 on location 2:42 well set 2:50 tool in hole 3:17 on pump 10:40 off location 10:30

Time Set Packer(s) 5:23 P.M. Time Started Off Bottom 8:08 P.M. Maximum Temperature 103

Initial Hydrostatic Pressure (A) 1026 P.S.I.

Initial Flow Period Minutes 30 (B) 27 P.S.I. to (C) 18 P.S.I.

Initial Closed In Period Minutes 45 (D) 687 P.S.I.

Final Flow Period Minutes 30 (E) 30 P.S.I. to (F) 18 P.S.I.

Final Closed In Period Minutes 60 (G) 736 P.S.I.

Final Hydrostatic Pressure (H) 1231 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 of Customer or his authorized representative

Western Representative Fred G. Klaus

FIELD INVOICE

Open Hole Test \$ 550.00

Misrun \$

Straddle Test \$

Jars \$

Selective Zone \$

Safety Joint \$

Standby \$

Evaluation \$

Extra Packer \$

Circ. Sub. \$

Mileage 28 \$ 21.00

Fluid Sampler \$

Extra Charts \$

TOTAL \$ 571.00

WESTERN TESTING CO., INC.
Pressure Data

Date 8-12-80 Test Ticket No. 5888
 Recorder No. 1559 Capacity 4200 Location 2516 Ft.
 Clock No. _____ Elevation _____ Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1272</u>	P.S.I.	<u>7:50 AM</u>	
B First Initial Flow Pressure	<u>36</u>	P.S.I.	<u>30</u> Mins.	<u>35</u> Mins.
C First Final Flow Pressure	<u>22</u>	P.S.I.	<u>45</u> Mins.	<u>39</u> Mins.
D Initial Closed-in Pressure	<u>693</u>	P.S.I.	<u>30</u> Mins.	<u>35</u> Mins.
E Second Initial Flow Pressure	<u>52</u>	P.S.I.	<u>60</u> Mins.	<u>63</u> Mins.
F Second Final Flow Pressure	<u>25</u>	P.S.I.		
G Final Closed-in Pressure	<u>139</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1259</u>	P.S.I.		

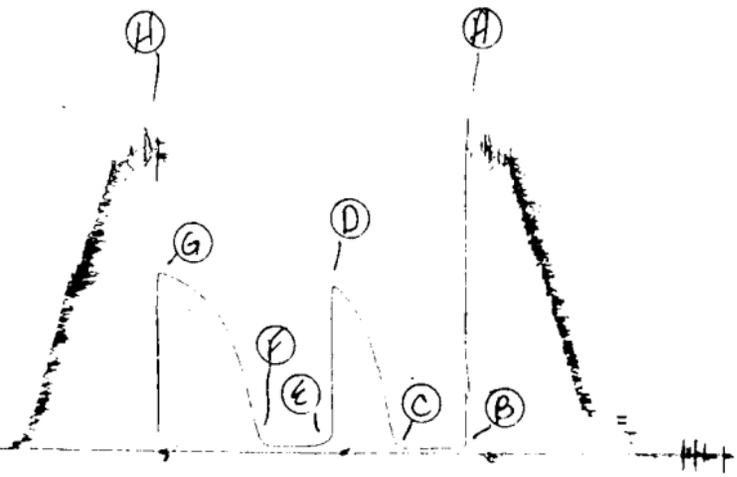
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>7</u> Inc.		Breakdown: <u>21</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>0</u>	<u>22</u>	<u>0</u>	<u>52</u>	<u>0</u>	<u>25</u>
P 2	<u>5</u>	<u>3</u>	<u>52</u>	<u>5</u>	<u>36</u>	<u>3</u>	<u>42</u>
P 3	<u>10</u>	<u>6</u>	<u>109</u>	<u>10</u>	<u>29</u>	<u>6</u>	<u>73</u>
P 4	<u>15</u>	<u>9</u>	<u>226</u>	<u>15</u>	<u>27</u>	<u>9</u>	<u>157</u>
P 5	<u>20</u>	<u>12</u>	<u>332</u>	<u>20</u>	<u>25</u>	<u>12</u>	<u>238</u>
P 6	<u>25</u>	<u>15</u>	<u>376</u>	<u>25</u>	<u>25</u>	<u>15</u>	<u>333</u>
P 7	<u>30</u>	<u>18</u>	<u>452</u>	<u>30</u>	<u>25</u>	<u>18</u>	<u>395</u>
P 8	<u>35</u>	<u>21</u>	<u>515</u>	<u>35</u>	<u>25</u>	<u>21</u>	<u>450</u>
P 9	<u>40</u>	<u>24</u>	<u>560</u>	<u>40</u>		<u>24</u>	<u>494</u>
P10	<u>45</u>	<u>27</u>	<u>594</u>	<u>45</u>		<u>27</u>	<u>540</u>
P11	<u>50</u>	<u>30</u>	<u>627</u>	<u>50</u>		<u>30</u>	<u>573</u>
P12	<u>55</u>	<u>33</u>	<u>656</u>	<u>55</u>		<u>33</u>	<u>600</u>
P13	<u>60</u>	<u>36</u>	<u>675</u>	<u>60</u>		<u>36</u>	<u>623</u>
P14		<u>39</u>	<u>693</u>	<u>65</u>		<u>39</u>	<u>648</u>
P15		<u>42</u>		<u>70</u>		<u>42</u>	<u>662</u>
P16		<u>45</u>		<u>75</u>		<u>45</u>	<u>681</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	<u>691</u>
P18		<u>51</u>		<u>85</u>		<u>51</u>	<u>704</u>
P19		<u>54</u>		<u>90</u>		<u>54</u>	<u>714</u>
P20		<u>57</u>				<u>57</u>	<u>725</u>
		<u>60</u>				<u>60</u>	<u>731</u>
						<u>63</u>	<u>739</u>

JK #5880

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055%



Company Range Oil Company, Inc. Lease & Well No. Joseph 'A' #1
 Elevation ----- Formation Mississippi Effective Pay ---- Ft. Ticket No. 5888
 Date 8/11/80 Sec. 17 Twp. 24S Range 5E County Butler State Kansas
 Test Approved by Stephen M. Kreidler Western Representative Fred G. Klaus

Formation Test No. 1 Interval Tested from 2490 ft. to 2511 ft. Total Depth 2511 ft.
 Packer Depth 2490 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) 2495 ft. Recorder Number 1559 Cap 4200 PSI
 Bottom Recorder Depth (Outside) 2498 ft. Recorder Number 5666 Cap 3950 PSI
 Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor R.O.C.I. Drlg. Rig #1 Drill Collar Length 93 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 40 Weight Pipe Length - I. D. - in.
 Weight 9.6 Water Loss 14.4 cc. Drill Pipe Length 2375 I. D. 2.8 in.
 Chlorides 1,400 P.P.M. Test Tool Length 43 ft. Tool Size 5 1/2 in.
 Jars: Make No Serial Number - Anchor Length 21 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 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Initial flow very weak; died fifteen minutes. Final flow - dead.

Recovered 3 ft. of very light oil cut mud
 Recovered 4" of free oil
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 5:23 ~~AM~~ P.M. Time Started Off Bottom 8:08 ~~AM~~ P.M. Maximum Temperature 103°
 Initial Hydrostatic Pressure (A) 1272 P.S.I.
 Initial Flow Period Minutes 35 (B) 36 P.S.I. to (C) 22 P.S.I.
 Initial Closed In Period Minutes 39 (D) 693 P.S.I.
 Final Flow Period Minutes 35 (E) 52 P.S.I. to (F) 25 P.S.I.
 Final Closed In Period Minutes 63 (G) 739 P.S.I.
 Final Hydrostatic Pressure (H) 1259 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 8-12-80 Test Ticket No. 5888
 Recorder No. 1559 Capacity 4200 Location 2516 Ft.
 Clock No. ---- Elevation ----- Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1272</u> P.S.I.	Open Tool	<u>7:50</u> A. M.	
B First Initial Flow Pressure	<u>36</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>35</u> Mins.
C First Final Flow Pressure	<u>22</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>39</u> Mins.
D Initial Closed-in Pressure	<u>693</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>35</u> Mins.
E Second Initial Flow Pressure	<u>52</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
F Second Final Flow Pressure	<u>25</u> P.S.I.			
G Final Closed-in Pressure	<u>739</u> P.S.I.			
H Final Hydrostatic Mud	<u>1259</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>13</u> Inc.		Breakdown: <u>7</u> Inc.		Breakdown: <u>21</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>36</u>	<u>0</u>	<u>22</u>	<u>0</u>	<u>52</u>	<u>0</u>	<u>25</u>
P 2 <u>5</u>	<u>29</u>	<u>3</u>	<u>52</u>	<u>5</u>	<u>36</u>	<u>3</u>	<u>42</u>
P 3 <u>10</u>	<u>25</u>	<u>6</u>	<u>109</u>	<u>10</u>	<u>29</u>	<u>6</u>	<u>73</u>
P 4 <u>15</u>	<u>25</u>	<u>9</u>	<u>226</u>	<u>15</u>	<u>27</u>	<u>9</u>	<u>157</u>
P 5 <u>20</u>	<u>24</u>	<u>12</u>	<u>332</u>	<u>20</u>	<u>25</u>	<u>12</u>	<u>239</u>
P 6 <u>25</u>	<u>23</u>	<u>15</u>	<u>376</u>	<u>25</u>	<u>25</u>	<u>15</u>	<u>333</u>
P 7 <u>30</u>	<u>23</u>	<u>18</u>	<u>452</u>	<u>30</u>	<u>25</u>	<u>18</u>	<u>395</u>
P 8 <u>35</u>	<u>22</u>	<u>21</u>	<u>515</u>	<u>35</u>	<u>25</u>	<u>21</u>	<u>450</u>
P 9		<u>24</u>	<u>560</u>			<u>24</u>	<u>494</u>
P10		<u>27</u>	<u>594</u>			<u>27</u>	<u>540</u>
P11		<u>30</u>	<u>627</u>			<u>30</u>	<u>573</u>
P12		<u>33</u>	<u>656</u>			<u>33</u>	<u>600</u>
P13		<u>36</u>	<u>675</u>			<u>36</u>	<u>623</u>
P14		<u>39</u>	<u>693</u>			<u>39</u>	<u>648</u>
P15						<u>42</u>	<u>662</u>
P16						<u>45</u>	<u>681</u>
P17						<u>48</u>	<u>691</u>
P18						<u>51</u>	<u>704</u>
P19						<u>54</u>	<u>714</u>
P20						<u>57</u>	<u>725</u>
						<u>60</u>	<u>731</u>
						<u>63</u>	<u>739</u>



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO. 5889

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

Elevation _____ Formation Mississippi Eff. Pay _____ Ft.

District Wichita Date 8-12-80 Customer Order No. _____

COMPANY NAME Range Oil Co

ADDRESS 240 Page Court Wichita, Ks.

LEASE AND WELL NO. Joseph "A" COUNTY Buller STATE Ka Sec. 17 Twp. 24S Rge. 5E

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

Mail Charts To _____ Co. Name Same Address _____ No. Copies Requested 5

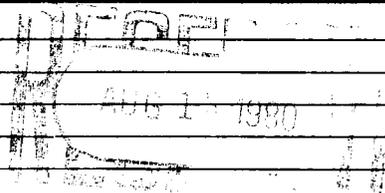
Formation Test No. 2 Interval Tested from 2511 ft. to 2531 ft. Total Depth 2531 ft.
Packer Depth 2511 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 2506 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 2516 ft. Recorder Number 1559 Cap. 4200 PSI
Bottom Recorder Depth (Outside) 2519 ft. Recorder Number 5666 Cap. 3950 PSI
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor POCI Reg 1 Drill Collar Length 93 I. D. 2 1/4 in.
Mud Type Chem Viscosity 48 Weight Pipe Length _____ I. D. _____ in.
Weight 10 Water Loss 15.2 cc. Drill Pipe Length 2396 I. D. 3.8 in.
Chlorides 1500 P.P.M. Test Tool Length 42 ft. Tool Size 5 1/2 in.
Jars: Make NO Serial Number _____ Anchor Length 20 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 1/2 in. Tool Joint Size 7 2 X U in.

Blow: Initial Flow Period: Very weak Final Flow Period: (Dead)

Recovered 3 ft. of Dulling Mud
Recovered _____ ft. of _____
Remarks: _____



on location 5:05 on Bank 5:20 Picked up tool 6:10 off location
Time Set Packer(s) 7:50 A.M. Time Started Off Bottom 11:05 A.M. Maximum Temperature 103
Initial Hydrostatic Pressure (A) 1307 P.S.I.
Initial Flow Period Minutes 30 (B) 18 P.S.I. to (C) 18 P.S.I.
Initial Closed In Period Minutes 45 (D) 916 P.S.I.
Final Flow Period Minutes 30 (E) 24 P.S.I. to (F) 27 P.S.I.
Final Closed In Period Minutes 90 (G) 928 P.S.I.
Final Hydrostatic Pressure (H) 1244 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 of Customer or his authorized representative

Western Representative Fred G Klaus

FIELD INVOICE

Open Hole Test	\$ <u>550.00</u>
Misrun	\$ _____
Straddle Test	\$ _____
Jars	\$ _____
Selective Zone	\$ _____
Safety Joint	\$ _____
Standby	\$ _____
Evaluation	\$ _____
Extra Packer	\$ _____
Circ. Sub.	\$ _____
Mileage	\$ <u>21.00</u>
Fluid Sampler	\$ _____
Extra Charts	\$ _____
TOTAL	\$ <u>571.00</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 8-11-80 Test Ticket No. 5889
 Recorder No. 1559 Capacity 4200 Location 2495 Ft.
 Clock No. Elevation Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1307</u>	P.S.I.	<u>5:23 PM</u>	
B First Initial Flow Pressure	<u>42</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>19</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>808</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>36</u>	P.S.I.	<u>60</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>21</u>	P.S.I.		
G Final Closed-in Pressure	<u>822</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1265</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>15</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>30</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>0</u>	<u>19</u>	<u>0</u>	<u>36</u>	<u>0</u>	<u>21</u>
P 2	<u>5</u>	<u>3</u>	<u>142</u>	<u>5</u>	<u>25</u>	<u>3</u>	<u>138</u>
P 3	<u>10</u>	<u>6</u>	<u>293</u>	<u>10</u>	<u>21</u>	<u>6</u>	<u>280</u>
P 4	<u>15</u>	<u>9</u>	<u>410</u>	<u>15</u>		<u>9</u>	<u>385</u>
P 5	<u>20</u>	<u>12</u>	<u>506</u>	<u>20</u>		<u>12</u>	<u>462</u>
P 6	<u>25</u>	<u>15</u>	<u>567</u>	<u>25</u>		<u>15</u>	<u>521</u>
P 7	<u>30</u>	<u>18</u>	<u>627</u>	<u>30</u>	<u>21</u>	<u>18</u>	<u>564</u>
P 8	<u>35</u>	<u>21</u>	<u>654</u>	<u>35</u>		<u>21</u>	<u>596</u>
P 9	<u>40</u>	<u>24</u>	<u>693</u>	<u>40</u>		<u>24</u>	<u>627</u>
P10	<u>45</u>	<u>27</u>	<u>723</u>	<u>45</u>		<u>27</u>	<u>652</u>
P11	<u>50</u>	<u>30</u>	<u>741</u>	<u>50</u>		<u>30</u>	<u>675</u>
P12	<u>55</u>	<u>33</u>	<u>764</u>	<u>55</u>		<u>33</u>	<u>693</u>
P13	<u>60</u>	<u>36</u>	<u>779</u>	<u>60</u>		<u>36</u>	<u>706</u>
P14		<u>39</u>	<u>789</u>	<u>65</u>		<u>39</u>	<u>720</u>
P15		<u>42</u>	<u>800</u>	<u>70</u>		<u>42</u>	<u>731</u>
P16		<u>45</u>	<u>808</u>	<u>75</u>		<u>45</u>	<u>741</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	<u>752</u>
P18		<u>51</u>		<u>85</u>		<u>51</u>	<u>762</u>
P19		<u>54</u>		<u>90</u>		<u>54</u>	<u>770</u>
P20		<u>57</u>				<u>57</u>	<u>775</u>
		<u>60</u>				<u>60</u>	<u>783</u>

cont

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 5889
 Recorder No. _____ Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

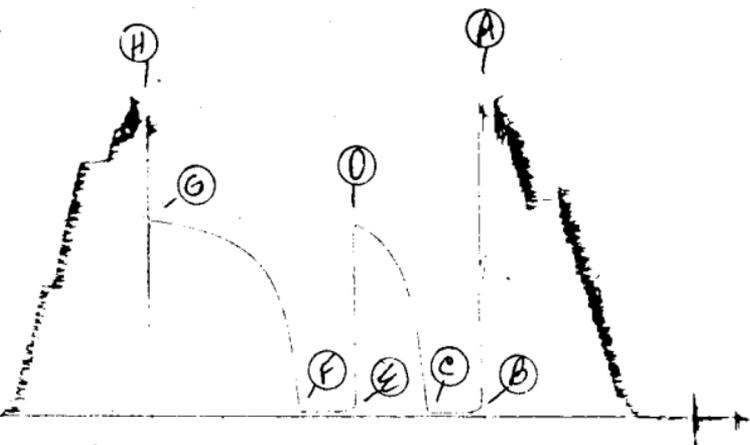
Point	Pressure	Open Tool	Time Given	Time Computed
A	Initial Hydrostatic Mud _____ P.S.I.	Open Tool _____	_____ M	_____ Mins.
B	First Initial Flow Pressure _____ P.S.I.	First Flow Pressure _____	_____ Mins.	_____ Mins.
C	First Final Flow Pressure _____ P.S.I.	Initial Closed-in Pressure _____	_____ Mins.	_____ 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	Press.	Point Minutes	Press.
P 1		63		63	789
P 2		66		66	793
P 3		69		69	799
P 4		72		72	805
P 5		75		75	810
P 6		78		78	812
P 7		81		81	816
P 8		84		84	818
P 9		87		87	820
P10		90		90	822
P11		93		93	
P12		96		96	
P13		99		99	
P14		102		102	
P15		105		105	
P16		108		108	
P17		111		111	
P18		114		114	
P19		117		117	
P20		120		120	

JK # 5889

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Company Range Oil Company, Inc. Lease & Well No. Joseph "A" #1
 Elevation ----- Formation Mississippi Effective Pay ----- Ft. Ticket No. 5889
 Date 8/12/80 Sec. 17 Twp. 24S Range 5E County Butler State Kansas
 Test Approved by Stephen M. Kreidler Western Representative Fred G. Klaus

Formation Test No. 2 Interval Tested from 2511 ft. to 2531 ft. Total Depth 2531 ft.
 Packer Depth 2511 ft. Size 6 3/4. Packer Depth - ft. Size - in.
 Packer Depth 2506 ft. Size 6 3/4. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2516 ft. Recorder Number 1559 Cap. 4200 PSI
 Bottom Recorder Depth (Outside) 2519 ft. Recorder Number 5666 Cap. 3950 PSI
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor R. O. C. I. Drlg. Rig #1 Drill Collar Length 93 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 40 Weight Pipe Length - I. D. - in.
 Weight 10 Water Loss 15.2 cc. Drill Pipe Length 2396 I. D. 3.8 in.
 Chlorides 1,500 P.P.M. Test Tool Length 42 ft. Tool Size 5 1/2 in.
 Jars: Make No Serial Number - Anchor Length 20 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 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Initial flow period very weak; Final flow period (dead)

Recovered 3 ft. of drilling mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 7:50 ~~P.M.~~ A.M. Time Started Off Bottom 11:05 ~~P.M.~~ A.M. Maximum Temperature 103°
 Initial Hydrostatic Pressure (A) 1307 P.S.I.
 Initial Flow Period Minutes 30 (B) 42 P.S.I. to (C) 19 P.S.I.
 Initial Closed In Period Minutes 45 (D) 808 P.S.I.
 Final Flow Period Minutes 30 (E) 36 P.S.I. to (F) 21 P.S.I.
 Final Closed In Period Minutes 90 (G) 822 P.S.I.
 Final Hydrostatic Pressure (H) 1265 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 8-11-80 Test Ticket No. 5889
 Recorder No. 1559 Capacity 4200 Location 2495 Ft.
 Clock No. ----- Elevation ----- Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1307</u> P.S.I.	Open Tool	<u>5:23</u> P. M.	
B First Initial Flow Pressure	<u>42</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>19</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>808</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>36</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>21</u> P.S.I.			
G Final Closed-in Pressure	<u>822</u> P.S.I.			
H Final Hydrostatic Mud	<u>1265</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>15</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>30</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>42</u>	<u>0</u>	<u>19</u>	<u>0</u>	<u>36</u>	<u>0</u>	<u>21</u>
P 2	<u>19</u>	<u>3</u>	<u>142</u>	<u>5</u>	<u>25</u>	<u>3</u>	<u>138</u>
P 3	<u>19</u>	<u>6</u>	<u>293</u>	<u>10</u>	<u>21</u>	<u>6</u>	<u>280</u>
P 4	<u>19</u>	<u>9</u>	<u>410</u>	<u>15</u>	<u>21</u>	<u>9</u>	<u>385</u>
P 5	<u>19</u>	<u>12</u>	<u>506</u>	<u>20</u>	<u>21</u>	<u>12</u>	<u>462</u>
P 6	<u>19</u>	<u>15</u>	<u>567</u>	<u>25</u>	<u>21</u>	<u>15</u>	<u>521</u>
P 7	<u>19</u>	<u>18</u>	<u>627</u>	<u>30</u>	<u>21</u>	<u>18</u>	<u>564</u>
P 8		<u>21</u>	<u>654</u>			<u>21</u>	<u>596</u>
P 9		<u>24</u>	<u>693</u>			<u>24</u>	<u>627</u>
P10		<u>27</u>	<u>723</u>			<u>27</u>	<u>652</u>
P11		<u>30</u>	<u>741</u>			<u>30</u>	<u>675</u>
P12		<u>33</u>	<u>764</u>			<u>33</u>	<u>693</u>
P13		<u>36</u>	<u>779</u>			<u>36</u>	<u>706</u>
P14		<u>39</u>	<u>789</u>			<u>39</u>	<u>720</u>
P15		<u>42</u>	<u>800</u>			<u>42</u>	<u>731</u>
P16		<u>45</u>	<u>808</u>			<u>45</u>	<u>741</u>
P17						<u>48</u>	<u>752</u>
P18						<u>51</u>	<u>762</u>
P19						<u>54</u>	<u>770</u>
P20						<u>57</u>	<u>775</u>
						<u>60</u>	<u>783</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 8-11-80

Test Ticket No. 5889

Recorder No. 1559

Capacity 4200

Location 2495 Ft

Clock No. -----

Elevation -----

Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed	
				P.	M.
A Initial Hydrostatic Mud	<u>1307</u>	P.S.I.	<u>5:23</u>		
B First Initial Flow Pressure	<u>42</u>	P.S.I.	<u>30</u>	Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>19</u>	P.S.I.	<u>45</u>	Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>808</u>	P.S.I.	<u>30</u>	Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>36</u>	P.S.I.	<u>60</u>	Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>21</u>	P.S.I.			
G Final Closed-in Pressure	<u>822</u>	P.S.I.			
H Final Hydrostatic Mud	<u>1265</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: 15 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: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Initial Shut-In		Second Flow Pressure		Final Shut-In	
		Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						<u>63</u>	<u>789</u>
P 2						<u>66</u>	<u>793</u>
P 3						<u>69</u>	<u>799</u>
P 4						<u>72</u>	<u>805</u>
P 5						<u>75</u>	<u>810</u>
P 6						<u>78</u>	<u>813</u>
P 7						<u>81</u>	<u>816</u>
P 8						<u>84</u>	<u>818</u>
P 9						<u>87</u>	<u>820</u>
P10						<u>90</u>	<u>822</u>
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							