



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 5860

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

Elevation _____ Formation Lansing Eff. Pay _____ Ft.

District Augusta Date July 18, 1980 Customer Order No. _____

COMPANY NAME Barge Out Control Company

ADDRESS 240 Page Court 220 West Douglas Wichita Ks 67202

LEASE AND WELL NO Brewer #1 COUNTY Marion STATE Ks Sec 33 Twp 22S Rge 4E

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

Mail Charts To Same Address _____ No. Copies Requested 5

Formation Test No. 1 Interval Tested from 1879 ft. to 1890 ft. Total Depth 1890 ft.

Packer Depth 1879 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 1874 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 1884 ft. Recorder Number 2605 Cap. 4100

Bottom Recorder Depth (Outside) 1887 ft. Recorder Number 10980 Cap. 4200

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

Drilling Contractor Co Tools #1 Drill Collar Length 120 I. D. _____ in.

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

Weight 8.8 Water Loss N/A cc. Drill Pipe Length 1738 I. D. _____ in.

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

Jars: Make N/A Serial Number _____ Anchor Length 11 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 x 1+ in.

Blow Weak blow throughout test

Recovered 90' ft. of salt water

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

One local test 7 P.M., July 18, 1980, test 7:30 P.M. to 8:13 P.M.

Time Set Packer(s) 11:30 A.M. Time Started Off Bottom 2:30 A.M. Maximum Temperature 103°

Initial Hydrostatic Pressure _____ (A) 860 P.S.I.

Initial Flow Period _____ Minutes 30 (B) 10 P.S.I. to (C) 21 P.S.I.

Initial Closed In Period _____ Minutes 30 (D) 560 P.S.I.

Final Flow Period _____ Minutes 60 (E) 31 P.S.I. to (F) 52 P.S.I.

Final Closed In Period _____ Minutes 60 (G) 570 P.S.I.

Final Hydrostatic Pressure _____ (H) 860 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 Joe M. Baker Signature of Customer or his authorized representative

Western Representative Kenneth K. Kendall

FIELD INVOICE

Open Hole Test \$ 550.00
Misrun \$ _____
Straddle Test \$ _____
Jars \$ _____
Selective Zone \$ _____
Safety Joint \$ _____
Standby \$ _____
Evaluation \$ _____
Extra Packer \$ _____
Circ. Sub. \$ _____
Mileage \$ 25.50
Fluid Sampler \$ _____
Extra Charts \$ _____

TOTAL \$ 575.50

WESTERN TESTING CO., INC.

Pressure Data

Date 7-18-80 Test Ticket No. 5860

Recorder No. 2605 Capacity 4100 Location 1884 Ft.

Clock No. _____ Elevation _____ Well Temperature 103 °F

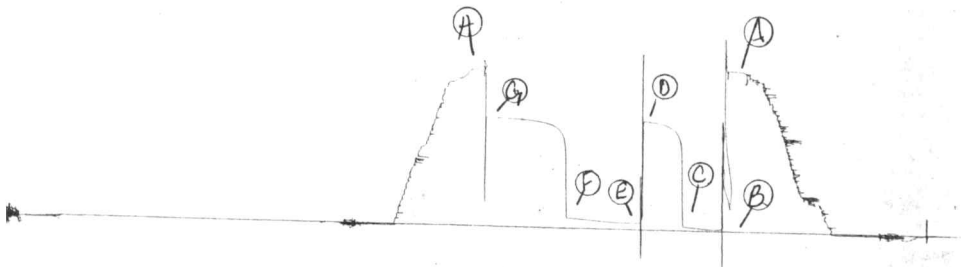
Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>859</u> P.S.I.	<u>11:30</u> P.M.	
B First Initial Flow Pressure	<u>13</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>23</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>585</u> P.S.I.	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>38</u> P.S.I.	<u>60</u> Mins.	<u>63</u> Mins.
F Second Final Flow Pressure	<u>57</u> P.S.I.		
G Final Closed-in Pressure	<u>587</u> P.S.I.		
H Final Hydrostatic Mud	<u>846</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>10</u> Inc.		Breakdown: <u>11</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>0</u>	<u>23</u>	<u>0</u>	<u>38</u>	<u>0</u>	<u>57</u>
P 2	<u>5</u>	<u>3</u>	<u>485</u>	<u>5</u>	<u>38</u>	<u>3</u>	<u>468</u>
P 3	<u>10</u>	<u>6</u>	<u>527</u>	<u>10</u>	<u>38</u>	<u>6</u>	<u>512</u>
P 4	<u>15</u>	<u>9</u>	<u>550</u>	<u>15</u>	<u>38</u>	<u>9</u>	<u>537</u>
P 5	<u>20</u>	<u>12</u>	<u>560</u>	<u>20</u>	<u>38</u>	<u>12</u>	<u>552</u>
P 6	<u>25</u>	<u>15</u>	<u>570</u>	<u>25</u>	<u>44</u>	<u>15</u>	<u>560</u>
P 7	<u>30</u>	<u>18</u>	<u>575</u>	<u>30</u>	<u>46</u>	<u>18</u>	<u>565</u>
P 8	<u>35</u>	<u>21</u>	<u>577</u>	<u>35</u>	<u>49</u>	<u>21</u>	<u>568</u>
P 9	<u>40</u>	<u>24</u>	<u>580</u>	<u>40</u>	<u>53</u>	<u>24</u>	<u>572</u>
P10	<u>45</u>	<u>27</u>	<u>583</u>	<u>45</u>	<u>55</u>	<u>27</u>	<u>576</u>
P11	<u>50</u>	<u>30</u>	<u>585</u>	<u>50</u>	<u>57</u>	<u>30</u>	<u>578</u>
P12	<u>55</u>	<u>33</u>		<u>55</u>	<u>57</u>	<u>33</u>	<u>579</u>
P13	<u>60</u>	<u>36</u>		<u>60</u>		<u>36</u>	<u>580</u>
P14		<u>39</u>		<u>65</u>		<u>39</u>	<u>581</u>
P15		<u>42</u>		<u>70</u>		<u>42</u>	<u>582</u>
P16		<u>45</u>		<u>75</u>		<u>45</u>	<u>583</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	<u>584</u>
P18		<u>51</u>		<u>85</u>		<u>51</u>	<u>585</u>
P19		<u>54</u>		<u>90</u>		<u>54</u>	<u>586</u>
P20		<u>57</u>				<u>57</u>	<u>587</u>
		<u>60</u>				<u>60</u>	<u>587</u>
						<u>63</u>	<u>587</u>

2605

TK# 5860
I



Company Range Oil Company, Inc. Lease & Well No. Brewer #1
Elevation ----- Formation Lansing Effective Pay ----- Ft. Ticket No. 5860
Date 7/18/80 Sec. 33 Twp. 22S Range 4E County Marion State Kansas
Test Approved by Joe M. Baker Western Representative Kenny Kirkendall

Formation Test No. 1 Interval Tested from 1879 ft. to 1890 ft. Total Depth 1890 ft.

Packer Depth 1879 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 1874 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 1884 ft. Recorder Number 2605 Cap. 4100

Bottom Recorder Depth (Outside) 1887 ft. Recorder Number 10980 Cap. 4200

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

Drilling Contractor Range Drilling Co. Rig #1 Drill Collar Length 120 I. D. - in.

Mud Type chemical Viscosity - Weight Pipe Length - I. D. - in.

Weight 8.8 Water Loss N/A cc. Drill Pipe Length 1738 I. D. - in.

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

Jars: Make No Serial Number - Anchor Length 11 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 blow throughout test.

Recovered 90 ft. of salt water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:30 A.M. Time Started Off Bottom 2:30 A.M. Maximum Temperature 103°
P.M. P.M.

Initial Hydrostatic Pressure 859 P.S.I. (A)

Initial Flow Period 30 Minutes (B) 13 P.S.I. to (C) 23 P.S.I.

Initial Closed In Period 30 Minutes (D) 585 P.S.I.

Final Flow Period 55 Minutes (E) 38 P.S.I. to (F) 57 P.S.I.

Final Closed In Period 63 Minutes (G) 587 P.S.I.

Final Hydrostatic Pressure 846 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 7-18-80

Test Ticket No. 5860

Recorder No. 2605 Capacity 4100 Location 1884 Ft.

Clock No. -- Elevation -- Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	859 P.S.I.	Open Tool	11:30 P.M.	
B First Initial Flow Pressure	13 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	23 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	585 P.S.I.	Second Flow Pressure	60 Mins.	55 Mins.
E Second Initial Flow Pressure	38 P.S.I.	Final Closed-in Pressure	60 Mins.	63 Mins.
F Second Final Flow Pressure	57 P.S.I.			
G Final Closed-in Pressure	587 P.S.I.			
H Final Hydrostatic Mud	846 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>11</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>13</u>	<u>0</u>	<u>23</u>	<u>0</u>	<u>38</u>	<u>0</u>	<u>57</u>
P 2 <u>5</u>	<u>13</u>	<u>3</u>	<u>485</u>	<u>5</u>	<u>38</u>	<u>3</u>	<u>468</u>
P 3 <u>10</u>	<u>13</u>	<u>6</u>	<u>527</u>	<u>10</u>	<u>38</u>	<u>6</u>	<u>512</u>
P 4 <u>15</u>	<u>19</u>	<u>9</u>	<u>550</u>	<u>15</u>	<u>38</u>	<u>9</u>	<u>537</u>
P 5 <u>20</u>	<u>21</u>	<u>12</u>	<u>560</u>	<u>20</u>	<u>38</u>	<u>12</u>	<u>552</u>
P 6 <u>25</u>	<u>21</u>	<u>15</u>	<u>570</u>	<u>25</u>	<u>44</u>	<u>15</u>	<u>560</u>
P 7 <u>30</u>	<u>23</u>	<u>18</u>	<u>575</u>	<u>30</u>	<u>46</u>	<u>18</u>	<u>565</u>
P 8		<u>21</u>	<u>577</u>	<u>35</u>	<u>49</u>	<u>21</u>	<u>568</u>
P 9		<u>24</u>	<u>580</u>	<u>40</u>	<u>53</u>	<u>24</u>	<u>572</u>
P10		<u>27</u>	<u>583</u>	<u>45</u>	<u>55</u>	<u>27</u>	<u>576</u>
P11		<u>30</u>	<u>585</u>	<u>50</u>	<u>57</u>	<u>30</u>	<u>378</u>
P12				<u>55</u>	<u>57</u>	<u>33</u>	<u>579</u>
P13						<u>36</u>	<u>580</u>
P14						<u>39</u>	<u>581</u>
P15						<u>42</u>	<u>582</u>
P16						<u>45</u>	<u>583</u>
P17						<u>48</u>	<u>584</u>
P18						<u>51</u>	<u>585</u>
P19						<u>54</u>	<u>586</u>
P20						<u>57</u>	<u>587</u>
						<u>60</u>	<u>587</u>
						<u>63</u>	<u>587</u>



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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 5862

Elevation 1452

Formation Kansas City

Eff. Pay Ft.

District Augusta Date July 20, 1980 Customer Order No.

COMPANY NAME Range Oil Co. Inc.

ADDRESS 240 Page Court, 220 West Douglas

LEASE AND WELL NO Brewer #1 COUNTY Marion STATE Ia Sec. 33 Twp. 22S Rge. 4E

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

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 2 Interval Tested from 2133 ft. to 2145 ft. Total Depth 2145 ft.

Packer Depth 2133 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 2128 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2138 ft. Recorder Number 2605 Cap 2100

Bottom Recorder Depth (Outside) 2141 ft. Recorder Number 10980 Cap 2200

Below Straddle Recorder Depth ft. Recorder Number Cap

Drilling Contractor Co Tools #1 Drill Collar Length 120 I. D. in.

Mud Type Chem Viscosity 45 Weight Pipe Length I. D. in.

Weight 94 Water Loss 14.4 cc. Drill Pipe Length 1992 I. D. in.

Chlorides 1800 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.

Jars: Make NO Serial Number Anchor Length 12 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 14 in.

Blow: fair blow throughout first flow period. Weak blow through out second flow period

Recovered 165 ft. of muddy salt water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

On location 12:10 P.M., pickup tools 12:20

Time Set Packer(s) 200 A.M. Time Started Off Bottom 5:00 A.M. Maximum Temperature 106°

Initial Hydrostatic Pressure (A) 1047 P.S.I.

Initial Flow Period Minutes 30 (B) 52 P.S.I. to (C) 63 P.S.I.

Initial Closed In Period Minutes 30 (D) 275 P.S.I.

Final Flow Period Minutes 60 (E) 95 P.S.I. to (F) 95 P.S.I.

Final Closed In Period Minutes 66 (G) 296 P.S.I.

Final Hydrostatic Pressure (H) 1047 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 Joe M Baker
Signature of Customer or his authorized representative

Western Representative Kenny Kirkendall

FIELD INVOICE

Open Hole Test \$ 550.00

Misrun \$

Straddle Test \$

Jars \$

Selective Zone \$

Safety Joint \$

Standby \$

Evaluation \$

Extra Packer \$

Circ. Sub. \$

34 Mileage \$ 25.50

Fluid Sampler \$

Extra Charts \$

TOTAL \$ 575.50

WESTERN TESTING CO., INC.

Pressure Data

Date 7-20 Test Ticket No. 5862
 Recorder No. 2605 Capacity 2100 Location 2138 Ft.
 Clock No. Elevation 1452 Well Temperature 106 °F

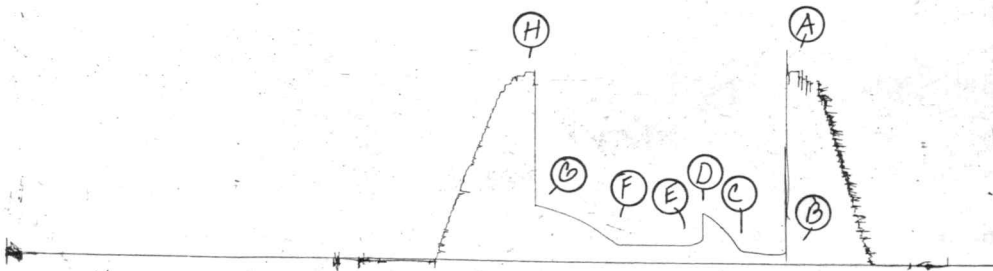
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1043</u> P.S.I.	Open Tool	<u>2:00 P</u>	<u>M</u>
B First Initial Flow Pressure	<u>50</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>61</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>266</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>118</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>95</u> P.S.I.			
G Final Closed-in Pressure	<u>300</u> P.S.I.			
H Final Hydrostatic Mud	<u>1022</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>10</u> Inc.		Breakdown: <u>12</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>50</u>	<u>0</u>	<u>61</u>	<u>0</u>	<u>118</u>	<u>0</u>	<u>95</u>
P 2 <u>5</u>	<u>48</u>	<u>3</u>	<u>80</u>	<u>5</u>	<u>105</u>	<u>3</u>	<u>103</u>
P 3 <u>10</u>	<u>47</u>	<u>6</u>	<u>106</u>	<u>10</u>	<u>95</u>	<u>6</u>	<u>118</u>
P 4 <u>15</u>	<u>51</u>	<u>9</u>	<u>137</u>	<u>15</u>		<u>9</u>	<u>133</u>
P 5 <u>20</u>	<u>55</u>	<u>12</u>	<u>163</u>	<u>20</u>		<u>12</u>	<u>148</u>
P 6 <u>25</u>	<u>60</u>	<u>15</u>	<u>185</u>	<u>25</u>		<u>15</u>	<u>165</u>
P 7 <u>30</u>	<u>61</u>	<u>18</u>	<u>206</u>	<u>30</u>		<u>18</u>	<u>180</u>
P 8 <u>35</u>		<u>21</u>	<u>226</u>	<u>35</u>		<u>21</u>	<u>192</u>
P 9 <u>40</u>		<u>24</u>	<u>245</u>	<u>40</u>		<u>24</u>	<u>205</u>
P10 <u>45</u>		<u>27</u>	<u>256</u>	<u>45</u>		<u>27</u>	<u>218</u>
P11 <u>50</u>		<u>30</u>	<u>266</u>	<u>50</u>		<u>30</u>	<u>226</u>
P12 <u>55</u>		<u>33</u>		<u>55</u>		<u>33</u>	<u>237</u>
P13 <u>60</u>		<u>36</u>		<u>60</u>	<u>95</u>	<u>36</u>	<u>246</u>
P14		<u>39</u>		<u>65</u>		<u>39</u>	<u>254</u>
P15		<u>42</u>		<u>70</u>		<u>42</u>	<u>260</u>
P16		<u>45</u>		<u>75</u>		<u>45</u>	<u>269</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	<u>275</u>
P18		<u>51</u>		<u>85</u>		<u>51</u>	<u>284</u>
P19		<u>54</u>		<u>90</u>		<u>54</u>	<u>290</u>
P20		<u>57</u>				<u>57</u>	<u>294</u>
		<u>60</u>				<u>60</u>	<u>300</u>

TK4#5862
I.

2605



Company Range Oil Company, Inc. Lease & Well No. #1 Brewer
Elevation 1452 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 5862
Date 7-20-80 Sec. 33 Twp. 22S Range 4E County Marion State KS
Test Approved by Joe M. Baker Western Representative Kenny Kirkendall

Formation Test No. #2 Interval Tested from 2133 ft. to 2145 ft. Total Depth 2145 ft.

Packer Depth 2133 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2128 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2138 ft. Recorder Number 2605 Cap. 2100

Bottom Recorder Depth (Outside) 2141 ft. Recorder Number 10980 Cap. 2200

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

Drilling Contractor Range Drilling Co. Drill Collar Length 120 I. D. - in.

Mud Type Chemcial Viscosity 45 Weight Pipe Length - I. D. - in.

Weight 9.4 Water Loss 14.4 cc. Drill Pipe Length 1992 I. D. - in.

Chlorides 1800 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 12 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 blow throughout first flow period, weak blow throughout second flow period.

Recovered 165 ft. of Muddy salt water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:00 -AM P.M. Time Started Off Bottom 5:00 -AM P.M. Maximum Temperature 106

Initial Hydrostatic Pressure (A) 1043 P.S.I.

Initial Flow Period Minutes 30 (B) 50 P.S.I. to (C) 61 P.S.I.

Initial Closed In Period Minutes 30 (D) 266 P.S.I.

Final Flow Period Minutes 60 (E) 118 P.S.I. to (F) 95 P.S.I.

Final Closed In Period Minutes 60 (G) 300 P.S.I.

Final Hydrostatic Pressure (H) 1022 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 7-20-80 Test Ticket No. 5862
 Recorder No. 2605 Capacity 2100 Location 2138 Ft.
 Clock No. -- Elevation 1452 Well Temperature 106 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	1043 P.S.I.	2:00 P. M.	
B First Initial Flow Pressure	50 P.S.I.	30 Mins.	30 Mins.
C First Final Flow Pressure	61 P.S.I.	30 Mins.	30 Mins.
D Initial Closed-in Pressure	266 P.S.I.	60 Mins.	60 Mins.
E Second Initial Flow Pressure	118 P.S.I.	60 Mins.	60 Mins.
F Second Final Flow Pressure	95 P.S.I.		
G Final Closed-in Pressure	300 P.S.I.		
H Final Hydrostatic Mud	1022 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>12</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>50</u>	<u>0</u>	<u>61</u>	<u>0</u>	<u>118</u>	<u>0</u>	<u>95</u>
P 2 <u>5</u>	<u>48</u>	<u>3</u>	<u>80</u>	<u>5</u>	<u>105</u>	<u>3</u>	<u>103</u>
P 3 <u>10</u>	<u>47</u>	<u>6</u>	<u>106</u>	<u>10</u>	<u>95</u>	<u>6</u>	<u>118</u>
P 4 <u>15</u>	<u>51</u>	<u>9</u>	<u>137</u>	<u>15</u>	<u>95</u>	<u>9</u>	<u>133</u>
P 5 <u>20</u>	<u>55</u>	<u>12</u>	<u>163</u>	<u>20</u>	<u>95</u>	<u>12</u>	<u>148</u>
P 6 <u>25</u>	<u>60</u>	<u>15</u>	<u>185</u>	<u>25</u>	<u>95</u>	<u>15</u>	<u>165</u>
P 7 <u>30</u>	<u>61</u>	<u>18</u>	<u>206</u>	<u>30</u>	<u>95</u>	<u>18</u>	<u>180</u>
P 8		<u>21</u>	<u>226</u>	<u>35</u>	<u>95</u>	<u>21</u>	<u>192</u>
P 9		<u>24</u>	<u>245</u>	<u>40</u>	<u>95</u>	<u>24</u>	<u>205</u>
P10		<u>27</u>	<u>256</u>	<u>45</u>	<u>95</u>	<u>27</u>	<u>218</u>
P11		<u>30</u>	<u>266</u>	<u>50</u>	<u>95</u>	<u>30</u>	<u>226</u>
P12				<u>55</u>	<u>95</u>	<u>33</u>	<u>237</u>
P13				<u>60</u>	<u>95</u>	<u>36</u>	<u>246</u>
P14						<u>39</u>	<u>254</u>
P15						<u>42</u>	<u>260</u>
P16						<u>45</u>	<u>269</u>
P17						<u>48</u>	<u>275</u>
P18						<u>51</u>	<u>284</u>
P19						<u>54</u>	<u>290</u>
P20						<u>57</u>	<u>294</u>
						<u>60</u>	<u>300</u>



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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 6952

Elevation _____ Formation MISS Eff. Pay _____ Ft.

District Great Bend Date 7-21-80 Customer Order No. _____

COMPANY NAME Range Oil Co., Inc.

ADDRESS 240 PAGE COURT - 220 WEST DOUGLAS WICHITA KS 67202

LEASE AND WELL NO. Brewer #1 COUNTY Marion STATE KS Sec. 33 Twp 22S Rge 4E

Mail Invoice To same No. Copies Requested 5

Co. Name same Address _____ No. Copies Requested 5

Mail Charts To _____ Address _____

Formation Test No. 3 Interval Tested from 2420 ft. to 2436 ft. Total Depth 2436 ft.

Packer Depth 2415 ft. Size 6 3/4 in. Packer Depth 2426 ft. Size 6 3/4 in.

Packer Depth _____ ft. Size _____ in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 2429 ft. Recorder Number 6052 Cap. 4700

Bottom Recorder Depth (Outside) 2432 ft. Recorder Number 1051 Cap. 4250

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

Drilling Contractor Range Rig #1 Drill Collar Length 90 I. D. 2 1/4 in.

Mud Type Chemical Viscosity 43 Weight Pipe Length _____ I. D. _____ in.

Weight 9.8 Water Loss 16.8 cc. Drill Pipe Length 2309 I. D. 3.8 in.

Chlorides 1600 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make _____ Serial Number _____ Anchor Length 16 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: very weak thru first opening

very weak blow thru second opening

Recovered 16 ft. of oil cut mud 70% mud 30% oil

Recovered 1/2 ft. of FREE oil

Recovered 2 ft. of 34 Gravity

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

ON LOG @ 4:00 - Tool made up at 4:30 P.M. Leave at 12:00 midnite

Time Set Packer(s) 6:25 P.M. Time Started Off Bottom 8:57 P.M. Maximum Temperature 102

Initial Hydrostatic Pressure _____ (A) 1259 P.S.I.

Initial Flow Period _____ Minutes 30 (B) 49 P.S.I. to (C) 36 P.S.I.

Initial Closed In Period _____ Minutes 30 (D) 550 P.S.I.

Final Flow Period _____ Minutes 30 (E) 49 P.S.I. to (F) 36 P.S.I.

Final Closed In Period _____ Minutes 60 (G) 562 P.S.I.

Final Hydrostatic Pressure _____ (H) 1234 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 Roger L. Lisenby

FIELD INVOICE

Open Hole Test 550.00

Misrun \$ _____

Straddle Test \$ _____

Jars \$ _____

Selective Zone \$ _____

Safety Joint \$ _____

Standby \$ _____

Evaluation \$ _____

Extra Packer \$ _____

Circ. Sub. \$ _____

Mileage 34 \$ 25.00

Fluid Sampler \$ _____

Extra Charts \$ _____

TOTAL \$ 575.50

WESTERN TESTING CO., INC.

Pressure Data

Date 7-21-80 Test Ticket No. 6952
 Recorder No. 6072 Capacity 4700 Location 2429 Ft.
 Clock No. _____ Elevation _____ Well Temperature 102 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1272</u> P.S.I.	Open Tool	<u>6:25</u> P M	
B First Initial Flow Pressure	<u>58</u> P.S.I.	First Flow Pressure	<u>30</u> Mins	<u>30</u> Mins.
C First Final Flow Pressure	<u>38</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>575</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>65</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins	<u>63</u> Mins.
F Second Final Flow Pressure	<u>47</u> P.S.I.			
G Final Closed-in Pressure	<u>577</u> P.S.I.			
H Final Hydrostatic Mud	<u>1251</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: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 21 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>58</u>	0	<u>38</u>	0	<u>65</u>	0	<u>47</u>
P 2 5	<u>50</u>	3	<u>38</u>	5	<u>53</u>	3	<u>65</u>
P 3 10	<u>40</u>	6	<u>53</u>	10	<u>47</u>	6	<u>201</u>
P 4 15	<u>38</u>	9	<u>170</u>	15	<u>47</u>	9	<u>360</u>
P 5 20	<u>38</u>	12	<u>375</u>	20	<u>47</u>	12	<u>448</u>
P 6 25	<u>38</u>	15	<u>473</u>	25	<u>47</u>	15	<u>483</u>
P 7 30	<u>38</u>	18	<u>502</u>	30	<u>47</u>	18	<u>502</u>
P 8 35	<u>38</u>	21	<u>522</u>	35	<u>47</u>	21	<u>522</u>
P 9 40	<u>38</u>	24	<u>541</u>	40	<u>47</u>	24	<u>534</u>
P10 45	<u>38</u>	27	<u>548</u>	45	<u>47</u>	27	<u>543</u>
P11 50	<u>38</u>	30	<u>558</u>	50	<u>47</u>	30	<u>548</u>
P12 55	<u>38</u>	33	<u>575</u>	55	<u>47</u>	33	<u>555</u>
P13 60	<u>38</u>	36	<u>575</u>	60	<u>47</u>	36	<u>558</u>
P14	<u>38</u>	39	<u>575</u>	65	<u>47</u>	39	<u>561</u>
P15	<u>38</u>	42	<u>575</u>	70	<u>47</u>	42	<u>563</u>
P16	<u>38</u>	45	<u>575</u>	75	<u>47</u>	45	<u>565</u>
P17	<u>38</u>	48	<u>575</u>	80	<u>47</u>	48	<u>568</u>
P18	<u>38</u>	51	<u>575</u>	85	<u>47</u>	51	<u>570</u>
P19	<u>38</u>	54	<u>575</u>	90	<u>47</u>	54	<u>572</u>
P20	<u>38</u>	57	<u>575</u>		<u>47</u>	57	<u>574</u>
	<u>38</u>	60	<u>575</u>		<u>47</u>	60	<u>576</u>
	<u>38</u>		<u>575</u>		<u>47</u>	<u>63</u>	<u>577</u>

TRC # 6952
I

H

A

G

D

E

E

C

B

1.1.2.2

Company Range Oil Company, Inc. Lease & Well No. Brewer #1
Elevation ----- Formation Mississippi Effective Pay ---- Ft. Ticket No. 6952
Date 7-21-80 Sec 33 Twp 22s Range 4 E County Marion State Kansas
Test Approved by Joe M. Baker Western Representative Rober Lisenby

Formation Test No. 3 Interval Tested from 2420 ft. to 2436 ft. Total Depth 2436 ft.

Packer Depth 2415 ft. Size 6 3/4 in. Packer Depth 2426 ft. Size 6 3/4 in.

Packer^V Depth ----- ft. Size --- in. Packer Depth ----- ft. Size ---- in.

Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 2429 ft. Recorder Number 6072 Cap 4700

Bottom Recorder Depth (Outside) 2432 ft. Recorder Number 1051 Cap 4250

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

Drilling Contractor Range Rig #1 Drill Collar Length 90 I. D. 2 1/4 in.

Mud Type Chemical Viscosity 4 3 Weight Pipe Length ----- I. D. ---- in.

Weight 9.8 Water Loss 16.8 cc. Drill Pipe Length 2309 I. D. 3.8 in.

Chlorides 1600 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make ----- Serial Number ---- Anchor Length 16 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: Very weak blow throughout first opening.

Very weak blow throughout second opening.

Recovered 16 ft. of Oil cut mud 70% Mud 30% Oil

Recovered 1/2 ft. of Free Oil 34 Gravity

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 6:25 ~~A.M.~~ P.M. Time Started Off Bottom 8:57 ~~A.M.~~ P.M. Maximum Temperature 102

Initial Hydrostatic Pressure (A) 1272 P.S.I.

Initial Flow Period Minutes 30 (B) 58 P.S.I. to (C) 38 P.S.I.

Initial Closed In Period Minutes 33 (D) 575 P.S.I.

Final Flow Period Minutes 30 (E) 65 P.S.I. to (F) 47 P.S.I.

Final Closed In Period Minutes 63 (G) 577 P.S.I.

Final Hydrostatic Pressure (H) 1251 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date: 7-21-80 Test Ticket No. 6952

Recorder No. 6072 Capacity 4700 Location 2429 Ft.

Clock No. ----- Elevation ----- Well Temperature 102 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1272</u> P.S.I.	Open Tool	<u>6:25</u> P. M.	
B First Initial Flow Pressure	<u>58</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>38</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>575</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>65</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
F Second Final Flow Pressure	<u>47</u> P.S.I.			
G Final Closed-in Pressure	<u>577</u> P.S.I.			
H Final Hydrostatic Mud	<u>1251</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>6</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>58</u>	<u>0</u>	<u>38</u>	<u>0</u>	<u>65</u>	<u>0</u>	<u>47</u>
P 2 <u>5</u>	<u>50</u>	<u>3</u>	<u>38</u>	<u>5</u>	<u>53</u>	<u>3</u>	<u>65</u>
P 3 <u>10</u>	<u>40</u>	<u>6</u>	<u>53</u>	<u>10</u>	<u>47</u>	<u>6</u>	<u>201</u>
P 4 <u>15</u>	<u>38</u>	<u>9</u>	<u>170</u>	<u>15</u>	<u>47</u>	<u>9</u>	<u>360</u>
P 5 <u>20</u>	<u>38</u>	<u>12</u>	<u>375</u>	<u>20</u>	<u>47</u>	<u>12</u>	<u>448</u>
P 6 <u>25</u>	<u>38</u>	<u>15</u>	<u>473</u>	<u>25</u>	<u>47</u>	<u>15</u>	<u>483</u>
P 7 <u>30</u>	<u>38</u>	<u>18</u>	<u>502</u>	<u>30</u>	<u>47</u>	<u>18</u>	<u>502</u>
P 8 _____		<u>21</u>	<u>522</u>			<u>21</u>	<u>522</u>
P 9 _____		<u>24</u>	<u>541</u>			<u>24</u>	<u>534</u>
P10 _____		<u>27</u>	<u>548</u>			<u>27</u>	<u>543</u>
P11 _____		<u>30</u>	<u>558</u>			<u>30</u>	<u>548</u>
P12 _____		<u>33</u>	<u>575</u>			<u>33</u>	<u>555</u>
P13 _____						<u>36</u>	<u>558</u>
P14 _____						<u>39</u>	<u>561</u>
P15 _____						<u>42</u>	<u>563</u>
P16 _____						<u>45</u>	<u>565</u>
P17 _____						<u>48</u>	<u>568</u>
P18 _____						<u>51</u>	<u>570</u>
P19 _____						<u>54</u>	<u>572</u>
P20 _____						<u>57</u>	<u>574</u>
						<u>60</u>	<u>576</u>
						<u>63</u>	<u>577</u>



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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO. 6953

Elevation _____ Formation MISS Eff. Pay _____ Ft.

District GREAT BEND Date 7-22

Customer Order No. _____

PANY NAME Range Oil Co., Inc.

RESS 240 PAGE COURT-220 WEST DOUGLAS WICHITA KS 67202

SE AND WELL NO. Brewer #1 COUNTY Marion STATE KS Sec. 32 Twp 22S Rge 4E

Invoice To SAME Address _____ No. Copies Requested 5

Co. Name SAME Address _____ No. Copies Requested 5

il Charts To _____ Address _____

ormation Test No. 4 Interval Tested from 2436 ft. to 2453 ft. Total Depth 2453 ft.

ucker Depth 2431 ft. Size 6 3/4 in. Packer Depth 2436 ft. Size 6 3/4 in.

ker Depth _____ ft. Size _____ in. Packer Depth _____ ft. Size _____ in.

pth of Selective Zone Set _____

op Recorder Depth (Inside) 2445 ft. Recorder Number 6007 Cap. 4700

ottom Recorder Depth (Outside) 2448 ft. Recorder Number 1051 Cap. 4250

elow Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Range Rig #1 Drill Collar Length 90 I. D. 2 1/4 in.

fluid Type Chemical Viscosity 36 Weight Pipe Length _____ I. D. _____ in.

Weight 9.7 Water Loss 6.0 cc. Drill Pipe Length 2325 I. D. 3.8 in.

Chlorides 1500 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

ars: Make _____ Serial Number _____ Anchor Length 17 1/4 ft. Size 5 1/2 in.

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

Main Hole Size 5 7/8 in. Tool Joint Size 4 1/2 X 1 1/2 in.

Blow: Weak Steady Blow Thru First Opening

Weak Steady Blow Thru Second Opening

Recovered 60 ft. of Watery Mud Chlorides 600

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

Stay at Loc-Made Tool @ 6:00 A.M. Leave @ 2:00 P.M.

Time Set Packer(s) 7:42 A.M. Time Started Off Bottom 11:14 A.M. Maximum Temperature 102

Initial Hydrostatic Pressure _____ (A) 1247 P.S.I.

Initial Flow Period _____ Minutes 30 (B) 49 P.S.I. to (C) 36 P.S.I.

Initial Closed In Period _____ Minutes 30 (D) 562 P.S.I.

Final Flow Period _____ Minutes 90 (E) 49 P.S.I. to (F) 41 P.S.I.

Final Closed In Period _____ Minutes 60 (G) 562 P.S.I.

Final Hydrostatic Pressure _____ (H) 1235 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 Joe M. Baker
Signature of Customer or his authorized representative

Western Representative Roger Lisenby Thank you

FIELD INVOICE

Open Hole Test 550.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage 25.50
Fluid Sampler \$
Extra Charts \$
TOTAL 575.50

WESTERN TESTING CO., INC.

Pressure Data

Date 7-22-80 Recorder No. 6077 Capacity 4700 Test Ticket No. 6853
 Clock No. _____ Elevation _____ Location 2445 Ft
 Well Temperature 102 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1253</u>	P.S.I.	<u>7142</u>	<u>A M</u>
B First Initial Flow Pressure	<u>60</u>	P.S.I.		
C First Final Flow Pressure	<u>43</u>	P.S.I.	<u>30</u>	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>582</u>	P.S.I.	<u>30</u>	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>65</u>	P.S.I.	<u>90</u>	<u>95</u> Mins.
F Second Final Flow Pressure	<u>63</u>	P.S.I.	<u>60</u>	<u>66</u> Mins.
G Final Closed-in Pressure	<u>569</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1244</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.

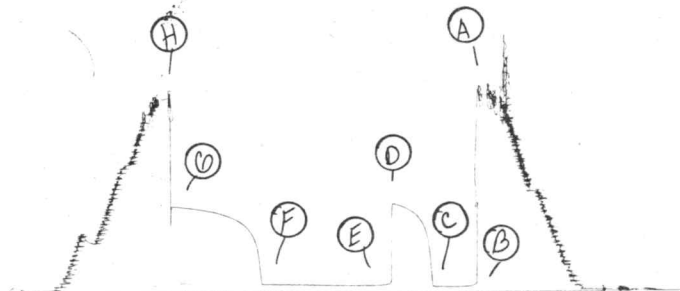
Second Flow Pressure
 Breakdown: 19 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

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 0	<u>60</u>	0	<u>43</u>	0	<u>65</u>	0	<u>63</u>
P 2 5	<u>45</u>	3	<u>260</u>	5	<u>55</u>	3	<u>250</u>
P 3 10	<u>43</u>	6	<u>395</u>	10	<u>55</u>	6	<u>353</u>
P 4 15	<u>43</u>	9	<u>458</u>	15	<u>55</u>	9	<u>400</u>
P 5 20	<u>43</u>	12	<u>495</u>	20	<u>55</u>	12	<u>433</u>
P 6 25	<u>43</u>	15	<u>519</u>	25	<u>55</u>	15	<u>458</u>
P 7 30	<u>43</u>	18	<u>536</u>	30	<u>55</u>	18	<u>475</u>
P 8 35	<u>43</u>	21	<u>551</u>	35	<u>55</u>	21	<u>490</u>
P 9 40	<u>43</u>	24	<u>563</u>	40	<u>56</u>	24	<u>502</u>
P10 45	<u>43</u>	27	<u>572</u>	45	<u>56</u>	27	<u>510</u>
P11 50	<u>43</u>	30	<u>582</u>	50	<u>57</u>	30	<u>519</u>
P12 55	<u>43</u>	33	<u>582</u>	55	<u>57</u>	33	<u>528</u>
P13 60	<u>43</u>	36	<u>582</u>	60	<u>58</u>	36	<u>534</u>
P14	<u>43</u>	39	<u>582</u>	65	<u>58</u>	39	<u>539</u>
P15	<u>43</u>	42	<u>582</u>	70	<u>59</u>	42	<u>543</u>
P16	<u>43</u>	45	<u>582</u>	75	<u>60</u>	45	<u>548</u>
P17	<u>43</u>	48	<u>582</u>	80	<u>61</u>	48	<u>552</u>
P18	<u>43</u>	51	<u>582</u>	85	<u>62</u>	51	<u>553</u>
P19	<u>43</u>	54	<u>582</u>	90	<u>63</u>	54	<u>558</u>
P20	<u>43</u>	57	<u>582</u>	95	<u>63</u>	57	<u>562</u>
		60	<u>582</u>			60	<u>565</u>
						63	<u>568</u>
						66	<u>569</u>

6077

TR# 6953
I



Company Range Oil Company, Inc. Lease & Well No. Brewer #1
Elevation ----- Formation Mississippi Effective Pay ----- Ft. Ticket No. 6953
Date 7-22-80 Sec. 33 Twp. 22s Range 4e County Marion State Kansas
Test Approved by Joe M. Baker Western Representative Roger Lisenby
Formation Test No. 4 Interval Tested from 2436 ft. to 2453 ft. Total Depth 2453 ft.
Packer Depth 2431 ft. Size 6 3/4 in. Packer Depth 2436 ft. Size 6 3/4 in.
Packer Depth --- ft. Size - in. Packer Depth ----- ft. Size ---- in.
Depth of Selective Zone Set -----
Top Recorder Depth (Inside) 2445 ft. Recorder Number 6077 Cap. 4700
Bottom Recorder Depth (Outside) 2448 ft. Recorder Number 1051 Cap. 4250
Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. -----
Drilling Contractor Range Rig #1 Drill Collar Length 90 I. D. 2 1/4 in.
Mud Type Chemical Viscosity 36 Weight Pipe Length ----- I. D. ----- in.
Weight 9.7 Water Loss 6.0 cc. Drill Pipe Length 2325 I. D. 3.8 in.
Chlorides 1500 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
Jars: Make No Serial Number ----- Anchor Length 17 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 steady blow through first opening. Weak steady blow through second opening.

Recovered 60 ft. of Watery mud Chlorides 600
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks:

Time Set Packer(s) 7:42 ~~AM~~ P.M. Time Started Off Bottom 11:14 ~~AM~~ P.M. Maximum Temperature 102
Initial Hydrostatic Pressure (A) 1253 P.S.I.
Initial Flow Period Minutes 30 (B) 60 P.S.I. to (C) 43 P.S.I.
Initial Closed In Period Minutes 30 (D) 582 P.S.I.
Final Flow Period Minutes 95 (E) 65 P.S.I. to (F) 63 P.S.I.
Final Closed In Period Minutes 66 (G) 569 P.S.I.
Final Hydrostatic Pressure (H) 1244 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 7-22-80 Test Ticket No. 6953
 Recorder No. 6077 Capacity 4700 Location 2445 Ft.
 Clock No. ----- Elevation ----- Well Temperature 102 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>1253</u> P.S.I.	Open Tool	7:42 A. M.	
B First Initial Flow Pressure <u>60</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure <u>43</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure <u>582</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>95</u> Mins.
E Second Initial Flow Pressure <u>65</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>66</u> Mins.
F Second Final Flow Pressure <u>63</u> P.S.I.			
G Final Closed-in Pressure <u>569</u> P.S.I.			
H Final Hydrostatic Mud <u>1244</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>19</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>22</u> Inc. of <u>3</u> mins. and a 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>60</u>	<u>0</u>	<u>43</u>	<u>0</u>	<u>65</u>	<u>0</u>	<u>63</u>
P 2 <u>5</u>	<u>45</u>	<u>3</u>	<u>260</u>	<u>5</u>	<u>55</u>	<u>3</u>	<u>250</u>
P 3 <u>10</u>	<u>43</u>	<u>6</u>	<u>395</u>	<u>10</u>	<u>55</u>	<u>6</u>	<u>353</u>
P 4 <u>15</u>	<u>43</u>	<u>9</u>	<u>458</u>	<u>15</u>	<u>55</u>	<u>9</u>	<u>400</u>
P 5 <u>20</u>	<u>43</u>	<u>12</u>	<u>495</u>	<u>20</u>	<u>55</u>	<u>12</u>	<u>433</u>
P 6 <u>25</u>	<u>43</u>	<u>15</u>	<u>519</u>	<u>25</u>	<u>55</u>	<u>15</u>	<u>458</u>
P 7 <u>30</u>	<u>43</u>	<u>18</u>	<u>536</u>	<u>30</u>	<u>55</u>	<u>18</u>	<u>475</u>
P 8 <u> </u>	<u> </u>	<u>21</u>	<u>551</u>	<u>35</u>	<u>55</u>	<u>21</u>	<u>490</u>
P 9 <u> </u>	<u> </u>	<u>24</u>	<u>563</u>	<u>40</u>	<u>56</u>	<u>24</u>	<u>502</u>
P10 <u> </u>	<u> </u>	<u>27</u>	<u>572</u>	<u>45</u>	<u>56</u>	<u>27</u>	<u>510</u>
P11 <u> </u>	<u> </u>	<u>30</u>	<u>582</u>	<u>50</u>	<u>57</u>	<u>30</u>	<u>519</u>
P12 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>55</u>	<u>57</u>	<u>33</u>	<u>528</u>
P13 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>60</u>	<u>58</u>	<u>36</u>	<u>534</u>
P14 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>65</u>	<u>58</u>	<u>39</u>	<u>539</u>
P15 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>70</u>	<u>59</u>	<u>42</u>	<u>543</u>
P16 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>75</u>	<u>60</u>	<u>45</u>	<u>548</u>
P17 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>80</u>	<u>61</u>	<u>48</u>	<u>552</u>
P18 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>85</u>	<u>62</u>	<u>51</u>	<u>555</u>
P19 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>90</u>	<u>63</u>	<u>54</u>	<u>558</u>
P20 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>95</u>	<u>63</u>	<u>57</u>	<u>562</u>
						<u>60</u>	<u>565</u>
						<u>63</u>	<u>568</u>
						<u>66</u>	<u>569</u>