

TKL # 3207
I

1652

A B F E D C A

Company Range Oil Company, Inc. Lease & Well No. McCollum #1

Elevation -- Formation -- Effective Pay -- Ft. Ticket No. 3207

Date 7/12/79 Sec. 13 Twp. 33S Range 4E County Cowley State Kansas

Test Approved by Gerald B. Becker Western Representative James Rogers

Formation Test No. 1 Interval Tested from 338' ft. to 435' ft. Total Depth 435' ft.

Packer Depth 333 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Packer Depth 338 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 370 ft. Recorder Number 1558 Cap. 4200

Bottom Recorder Depth (Outside) 373 ft. Recorder Number 1559 Cap. 4200

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

Drilling Contractor Range Oil Company Drill Collar Length 252 I. D. 2 1/4 in.

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

Weight -- Water Loss -- cc. Drill Pipe Length 61 I. D. 2.8 in.

Chlorides -- P.P.M. Test Tool Length 117 ft. Tool Size 5 1/2 OD in.

Jars: Make -- Serial Number -- Anchor Length 97 ft. Size 5 1/2 OD 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: Fair blow throughout test.

Recovered 65 ft. of muddy water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Readings from Recorder #1558

Time Set Packer(s) 3:15 A.M. Time Started Off Bottom 5:15 A.M. Maximum Temperature 78

Initial Hydrostatic Pressure 141 (A) P.S.I.

Initial Flow Period 30 Minutes (B) 46 P.S.I. to (C) 32 P.S.I.

Initial Closed In Period 30 Minutes (D) 65 P.S.I.

Final Flow Period 30 Minutes (E) 48 P.S.I. to (F) 46 P.S.I.

Final Closed In Period 30 Minutes (G) 89 P.S.I.

Final Hydrostatic Pressure 137 (H) P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 7/12/79 Recorder No. 1558 Capacity 4200 Test Ticket No. 3207
 Clock No. -- Elevation -- Location 370 Ft. 78
 Well Temperature °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	141	P.S.I.	3:15A	M
B First Initial Flow Pressure	46	P.S.I.	30	Mins.
C First Final Flow Pressure	32	P.S.I.	30	Mins.
D Initial Closed-in Pressure	65	P.S.I.	30	Mins.
E Second Initial Flow Pressure	48	P.S.I.	30	Mins.
F Second Final Flow Pressure	46	P.S.I.	30	Mins.
G Final Closed-in Pressure	89	P.S.I.		
H Final Hydrostatic Mud	137	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 <u>0</u>	<u>46</u>	<u>0</u>	<u>32</u>	<u>0</u>	<u>48</u>	<u>0</u>	<u>46</u>
P 2 <u>5</u>	<u>40</u>	<u>3</u>	<u>32</u>	<u>5</u>	<u>48</u>	<u>3</u>	<u>46</u>
P 3 <u>10</u>	<u>32</u>	<u>6</u>	<u>34</u>	<u>10</u>	<u>46</u>	<u>6</u>	<u>46</u>
P 4 <u>15</u>	<u>32</u>	<u>9</u>	<u>36</u>	<u>15</u>	<u>46</u>	<u>9</u>	<u>46</u>
P 5 <u>20</u>	<u>32</u>	<u>12</u>	<u>40</u>	<u>20</u>	<u>46</u>	<u>12</u>	<u>51</u>
P 6 <u>25</u>	<u>32</u>	<u>15</u>	<u>48</u>	<u>25</u>	<u>46</u>	<u>15</u>	<u>55</u>
P 7 <u>30</u>	<u>32</u>	<u>18</u>	<u>52</u>	<u>30</u>	<u>46</u>	<u>18</u>	<u>62</u>
P 8 <u> </u>	<u> </u>	<u>21</u>	<u>56</u>	<u> </u>	<u> </u>	<u>21</u>	<u>69</u>
P 9 <u> </u>	<u> </u>	<u>24</u>	<u>60</u>	<u> </u>	<u> </u>	<u>24</u>	<u>76</u>
P10 <u> </u>	<u> </u>	<u>27</u>	<u>63</u>	<u> </u>	<u> </u>	<u>27</u>	<u>82</u>
P11 <u> </u>	<u> </u>	<u>30</u>	<u>65</u>	<u> </u>	<u> </u>	<u>30</u>	<u>89</u>
P12 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P13 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P14 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P15 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P16 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P17 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P18 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P19 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P20 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Trk # 3208
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Company Range Oil Company, Inc. Lease & Well No. McCollum #1
Elevation 1287 Kelly Bushing Formation Admire Effective Pay -- Ft. Ticket No. 3208
Date 7/12/79 Sec. 13 Twp. 33S Range 4E County Cowley State Kansas
Test Approved by Gerald B. Becker Western Representative James Rogers

Formation Test No. 2 Interval Tested from 555' ft. to 595' ft. Total Depth 595' ft.

Packer Depth 550 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 555 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 560 ft. Recorder Number 1558 Cap. 4200

Bottom Recorder Depth (Outside) 563 ft. Recorder Number 1559 Cap. 4200

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

Drilling Contractor Range Oil Company Drill Collar Length 252 I. D. 2 1/4 in.

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

Weight -- Water Loss -- cc. Drill Pipe Length 283 I. D. 3.8 in.

Chlorides -- P.P.M. Test Tool Length 60 ft. Tool Size 5 1/2 OD in.

Jars: Make -- Serial Number -- Anchor Length 40 ft. Size 5 1/2 OD 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 blow. Gas to surface in 28 minutes on initial flow period. Good blow throughout test.

Recovered 100 ft. of muddy water gas cut

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:15 A.M. Time Started Off Bottom 4:15 A.M. Maximum Temperature 100
P.M. =P.M.

Initial Hydrostatic Pressure (A) 240 P.S.I.

Initial Flow Period Minutes 30 (B) 36 P.S.I. to (C) 17 P.S.I.

Initial Closed In Period Minutes 30 (D) 114 P.S.I.

Final Flow Period Minutes 30 (E) 48 P.S.I. to (F) 27 P.S.I.

Final Closed In Period Minutes 30 (G) 179 P.S.I.

Final Hydrostatic Pressure (H) 217 P.S.I.

Phone 316 262-5861
316 838-0601



P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

Date 7/12/79 Ticket 3208 Company Range Oil Company, Inc.
Well Name and No. McCollum #1 Dst No. 2 Interval Tested 555' - 595'
County Cowley State Kansas Sec. 13 Twp. 33S Rg. 4E

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
PRE FLOW						
GAS TO SURFACE 28 MINUTES OF FIRST OPENING.						
	28 min.	.5 lbs.	1/4" orifice			4500 CFPD

SECOND FLOW						
	35 min.	1 lbs.	1/4" orifice			8,950 CFPD
	40 min.	1 lbs.	1/4" orifice			8,950 CFPD
	45 min.	1 lbs.	1/4" orifice			8,950 CFPD
	50 min.	1 lbs.	1/4" orifice			8,950 CFPD
	55 min.	1.5 lbs.	1/4" orifice			11,020 CFPD
	60 min.	1.5 lbs.	1/4" orifice			11,020 CFPD

GAS BOTTLE

Serial No. 621 Date Bottle Filled 7/12/79 Date to be Invoiced 7/12/79

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Range Oil Company, Inc.

Authorized by Gerald B. Becker

WESTERN TESTING CO., INC.

Pressure Data

Date 7/12/79 Recorder No. 1558 Capacity 4200 Test Ticket No. 3208
 Clock No. -- Elevation 1287 Kelly Bushing Location 560 Ft. Well Temperature 100 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	240	P.S.I.	2:15A	M
B First Initial Flow Pressure	36	P.S.I.	30	Mins.
C First Final Flow Pressure	17	P.S.I.	30	Mins.
D Initial Closed-in Pressure	114	P.S.I.	30	Mins.
E Second Initial Flow Pressure	48	P.S.I.	30	Mins.
F Second Final Flow Pressure	27	P.S.I.	30	Mins.
G Final Closed-in Pressure	179	P.S.I.		
H Final Hydrostatic Mud	217	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.

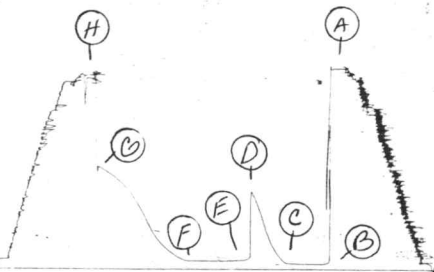
Second Flow Pressure
 Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

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>36</u>	<u>0</u>	<u>17</u>	<u>0</u>	<u>48</u>	<u>0</u>	<u>27</u>
P 2 <u>5</u>	<u>27</u>	<u>3</u>	<u>42</u>	<u>5</u>	<u>42</u>	<u>3</u>	<u>105</u>
P 3 <u>10</u>	<u>23</u>	<u>6</u>	<u>65</u>	<u>10</u>	<u>34</u>	<u>6</u>	<u>137</u>
P 4 <u>15</u>	<u>18</u>	<u>9</u>	<u>78</u>	<u>15</u>	<u>27</u>	<u>9</u>	<u>152</u>
P 5 <u>20</u>	<u>17</u>	<u>12</u>	<u>91</u>	<u>20</u>	<u>27</u>	<u>12</u>	<u>160</u>
P 6 <u>25</u>	<u>17</u>	<u>15</u>	<u>101</u>	<u>25</u>	<u>27</u>	<u>15</u>	<u>165</u>
P 7 <u>30</u>	<u>17</u>	<u>18</u>	<u>105</u>	<u>30</u>	<u>27</u>	<u>18</u>	<u>167</u>
P 8		<u>21</u>	<u>108</u>			<u>21</u>	<u>169</u>
P 9		<u>24</u>	<u>110</u>			<u>24</u>	<u>171</u>
P10		<u>27</u>	<u>112</u>			<u>27</u>	<u>173</u>
P11		<u>30</u>	<u>114</u>			<u>30</u>	<u>179</u>
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKL# 2200
I

3085



Company Range Oil Company, Inc. Lease & Well No. McCollum #1
Elevation 1124 Kelly Bush. Formation Kansas City Effective Pay - Ft. Ticket No. 2200
Date 7-15-79 Sec. 13 Twp. 33S Range 4E County Cowley State Kansas
Test Approved by Gerald B. Becker Western Representative James Rogers

Formation Test No. 3 Interval Tested from 2529 ft. to 2539 ft. Total Depth 2539 ft.

Packer Depth 2524 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2529 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2533 ft. Recorder Number 3085 Cap. 4500

Bottom Recorder Depth (Outside) 2536 ft. Recorder Number 1661 Cap. 3200

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

Drilling Contractor Range Drllg. Co. Drill Collar Length 127 I. D. 2 1/4 in.

Mud Type Chemical Viscosity 36 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 16.0 cc. Drill Pipe Length 2382 I. D. 3.8 in.

Chlorides 2,800 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 10 ft. Size 5 1/2 OD 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 blow throughout test.

Recovered 850 ft. of gas in pipe

Recovered 2 ft. of free gassy oil

Recovered 61 ft. of slightly oil cut mud (8.8% oil, 11.8% water, 79.4% mud)

Recovered 61 ft. of slightly oil cut mud (6.9% oil, 0.0% water, 93.1% mud)

Recovered 2 ft. of watery mud.

Remarks: 126 ft of fluid total = .62 bbls.

Time Set Packer(s) 9:50 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 12:35 ~~P.M.~~ ^{A.M.} Maximum Temperature 108
Initial Hydrostatic Pressure 30 (A) 1217 P.S.I.
Initial Flow Period 35 Minutes 30 (B) 41 P.S.I. to (C) 36 P.S.I.
Initial Closed In Period 30 Minutes 478 P.S.I.
Final Flow Period 45 Minutes 60 (E) 60 P.S.I. to (F) 53 P.S.I.
Final Closed In Period 60 Minutes 625 P.S.I.
Final Hydrostatic Pressure 1176 (H) 1176 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 7-15-79 Recorder No. 3085 Capacity 4500 Test Ticket No. 2200
 Clock No. Elevation 1124 Kelly Bushing Location 2533 Ft.
 Well Temperature 108 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1217	P.S.I.	9:50A.	M.
B First Initial Flow Pressure	41	P.S.I.	30	Mins.
C First Final Flow Pressure	36	P.S.I.	30	Mins.
D Initial Closed-in Pressure	478	P.S.I.	45	Mins.
E Second Initial Flow Pressure	60	P.S.I.	60	Mins.
F Second Final Flow Pressure	53	P.S.I.		
G Final Closed-in Pressure	625	P.S.I.		
H Final Hydrostatic Mud	1176	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>9</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>41</u>	<u>0</u>	<u>36</u>	<u>0</u>	<u>60</u>	<u>0</u>	<u>53</u>
P 2 <u>5</u>	<u>36</u>	<u>3</u>	<u>45</u>	<u>5</u>	<u>55</u>	<u>3</u>	<u>55</u>
P 3 <u>10</u>	<u>36</u>	<u>6</u>	<u>67</u>	<u>10</u>	<u>53</u>	<u>6</u>	<u>72</u>
P 4 <u>15</u>	<u>36</u>	<u>9</u>	<u>105</u>	<u>15</u>	<u>53</u>	<u>9</u>	<u>84</u>
P 5 <u>20</u>	<u>36</u>	<u>12</u>	<u>143</u>	<u>20</u>	<u>53</u>	<u>12</u>	<u>103</u>
P 6 <u>25</u>	<u>36</u>	<u>15</u>	<u>210</u>	<u>25</u>	<u>53</u>	<u>15</u>	<u>120</u>
P 7 <u>30</u>	<u>36</u>	<u>18</u>	<u>277</u>	<u>30</u>	<u>53</u>	<u>18</u>	<u>143</u>
P 8 <u> </u>	<u> </u>	<u>21</u>	<u>351</u>	<u>35</u>	<u>53</u>	<u>21</u>	<u>170</u>
P 9 <u> </u>	<u> </u>	<u>24</u>	<u>418</u>	<u>40</u>	<u>53</u>	<u>24</u>	<u>206</u>
P10 <u> </u>	<u> </u>	<u>27</u>	<u>478</u>	<u>45</u>	<u>53</u>	<u>27</u>	<u>251</u>
P11 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>30</u>	<u>296</u>
P12 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>33</u>	<u>349</u>
P13 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>36</u>	<u>394</u>
P14 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>39</u>	<u>438</u>
P15 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>42</u>	<u>473</u>
P16 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>45</u>	<u>495</u>
P17 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>48</u>	<u>522</u>
P18 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>51</u>	<u>551</u>
P19 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>54</u>	<u>573</u>
P20 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>57</u>	<u>598</u>
						<u>60</u>	<u>625</u>