



Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Range Oil Company, Inc. Lease & Well No. Brown #4
Elevation 1238 Kelly Bush. Formation Admire Effective Pay - Ft. Ticket No. 25250
Date 11-2-76 Sec. 25 Twp. 33S Range 5E County Cowley State Kansas
Test Approved by Gerald B. Becker Western Representative Bill Baker
Formation Test No. 1 O.K. Misrun Interval Tested From 554' to 593' Total Depth 593'
Size Main Hole 7 7/8 Rat Hole Conv. B.T. Damaged Yes No Conv. B.T. Damaged Yes No
Top Packer Depth 549 Ft. Size 6 3/4 Bottom Packer Depth 554 Ft. Size 6 3/4
Straddle Conv. B.T. Damaged Yes No Packer Depth - Ft. Size -
Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 39 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 505 Ft. Clock No. 6896 Depth 588 Ft. Clock No. 6866
Top Make Kuster Cap. 3150 No. 1562 ~~Inside~~ Outside Bottom Make Kuster Cap. 3150 No. 1562 ~~Inside~~ Outside
Below Straddle: Depth - Rec. No. - Clock No. - ~~Inside~~ Outside Depth - Ft. Rec. No. - Clock No. - ~~Inside~~ Outside
Time Set Packer 11:28A. M
Tool Open I.F.P. From 11:30A M. to 12:00P M. - Hr. 30 Min. From (B) 50 P.S.I. To (C) 32 P.S.I.
Tool Closed I.C.I.P. From 12:00 M. to 12:30P M. - Hr. 30 Min (D) 219 P.S.I.
Tool Open F.F.P. From 12:30P M. to 1:10P M. - Hr. 40 Min. From (E) 50 P.S.I. To (F) 31 P.S.I.
Tool Closed F.C.I.P. From 1:10P M. to 2:10P M. - Hr. 60 Min. (G) 251 P.S.I.
Initial Hydrostatic Pressure (A) 287 P.S.I. Final Hydrostatic Pressure (H) 287 P.S.I. Maximum Temp. 78

INFORMATION

BLOW Strong blow throughout test. Gas to surface in 10 minutes.
Did Well Flow Yes No Recovery Total Ft. 10' of drilling mud (.05 bbls)
Reversed Out Yes No Mud Type Chem Viscosity 36 Weight 9.1 Water Loss - cc. Chlorides -
EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -
Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -
DRILLING CONTRACTOR White & Ellis Drlg, Inc. Length Drill Pipe? 340 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 FH In.
Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 253 Ft. I.D. Drill Collars 2 1/4 In.
Tool Joint Size 4" H-90 In. Length D.S.T. Tool 39 Ft.
Remarks: See attached sheet for gas measurements.



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GAS FLOW REPORT

Date 11-2-76 Ticket 25250 Company Range Oil Company, Inc.
 Well Name and No. Brown #4 Dst No. 1 Interval Tested 554' - 593'
 County Cowley State Kansas Sec. 25 Twp. 33S Rg. 5E

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						
11:40AM	10 min.	1 PSIG	1/4"	choke		8,950 C.F.P.D.
11:45AM	15 min.	19" of water	1/4"	choke		7,320 C.F.P.D.
11:50AM	20 min.	19" of water	1/4"	choke		7,320 C.F.P.D.
11:55AM	25 min.	18" of water	1/4"	choke		7,120 C.F.P.D.
12:00PM	30 min.	18" of water	1/4"	choke		7,120 C.F.P.D.
Gas to surface		in 10 minutes.				

SECOND FLOW						
12:35PM	35 min.	21" of water	1/4"	choke		7,700 C.F.P.D.
12:40PM	40 min.	19" of water	1/4"	choke		7,320 C.F.P.D.
12:45PM	45 min.	18" of water	1/4"	choke		7,120 C.F.P.D.
12:50PM	50 min.	18" of water	1/4"	choke		7,120 C.F.P.D.
12:55PM	55 min.	17" of water	1/4"	choke		6,930 C.F.P.D.
1:00PM	60 min.	17" of water	1/4"	choke		6,930 C.F.P.D.
1:05PM	65 min.	17" of water	1/4"	choke		6,930 C.F.P.D.
1:10PM	70 min.	17" of water	1/4"	choke		6,930 C.F.P.D.
All measurements		were taken with a 2" merla orifice well tester with a 1/4" choke.				

GAS BOTTLE

Serial No. - Date Bottle Filled 11-2-76 Date to be Invoiced 11-2-76

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 11-2-76 Test Ticket No. 25250
 Recorder No. 1565 Capacity 3150 Location 505 Ft.
 Clock No. 6896 Elevation 1238 Kelly Bushing Well Temperature 78 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>287</u>	P.S.I.	<u>11:28A.</u>	<u>M</u>
B First Initial Flow Pressure	<u>50</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u> Mins.
C First Final Flow Pressure	<u>32</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u> Mins.
D Initial Closed-in Pressure	<u>219</u>	P.S.I.	<u>40</u>	<u>Mins. 40</u> Mins.
E Second Initial Flow Pressure	<u>50</u>	P.S.I.	<u>60</u>	<u>Mins. 54</u> Mins.
F Second Final Flow Pressure	<u>31</u>	P.S.I.		
G Final Closed-in Pressure	<u>251</u>	P.S.I.		
H Final Hydrostatic Mud	<u>287</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>8</u> Inc.		Breakdown: <u>18</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>32</u>	<u>0</u>	<u>50</u>	<u>0</u>	<u>31</u>
P 2	<u>5</u>	<u>3</u>	<u>99</u>	<u>5</u>	<u>34</u>	<u>3</u>	<u>140</u>
P 3	<u>10</u>	<u>6</u>	<u>171</u>	<u>10</u>	<u>32</u>	<u>6</u>	<u>187</u>
P 4	<u>15</u>	<u>9</u>	<u>193</u>	<u>15</u>	<u>31</u>	<u>9</u>	<u>210</u>
P 5	<u>20</u>	<u>12</u>	<u>202</u>	<u>20</u>	<u>31</u>	<u>12</u>	<u>221</u>
P 6	<u>25</u>	<u>15</u>	<u>208</u>	<u>25</u>	<u>31</u>	<u>15</u>	<u>229</u>
P 7	<u>30</u>	<u>18</u>	<u>213</u>	<u>30</u>	<u>31</u>	<u>18</u>	<u>235</u>
P 8		<u>21</u>	<u>216</u>	<u>35</u>	<u>31</u>	<u>21</u>	<u>238</u>
P 9		<u>24</u>	<u>218</u>	<u>40</u>	<u>31</u>	<u>24</u>	<u>241</u>
P10		<u>27</u>	<u>219</u>			<u>27</u>	<u>243</u>
P11		<u>30</u>	<u>219</u>			<u>30</u>	<u>245</u>
P12						<u>33</u>	<u>246</u>
P13						<u>36</u>	<u>246</u>
P14						<u>39</u>	<u>248</u>
P15						<u>42</u>	<u>249</u>
P16						<u>45</u>	<u>249</u>
P17						<u>48</u>	<u>250</u>
P18						<u>51</u>	<u>251</u>
P19						<u>54</u>	<u>251</u>
P20							

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