



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

Company Range Oil Company, Inc. Lease & Well No. Miller A #1
Elevation 1304 Kelly Bush. Formation Layton Effective Pay - Ft. Ticket No. 21898
Date 10-5-77 Sec. 3 Twp. 33S Range 5E County Cowley State Kansas
Test Approved by Stephen Kreider Western Representative Norman Allen
Formation Test No. 1 O.K. ☒ Misrun ☐ Interval Tested From 2350' to 2405' Total Depth 2405'
Size Main Hole 7 7/8 Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No
Top Packer Depth 2345 Ft. Size 6 3/4 Bottom Packer Depth 2350 Ft. Size 6 3/4
Straddle ☐ Conv. ☐ B.T. ☐ Damaged ☐ Yes ☐ No Packer Depth - Ft. Size -
Tool Size 4 1/2 OD Tool Joint Size 3 1/2 IF Anchor Length 55 Ft. Size 4 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 2371 Ft. Clock No. 8474 Depth 2374 Ft. Clock No. 6800
Top Make Kuster Cap. 4500 No. 3085 Inside Outside Bottom Make Kuster Cap. 3150 No. 1564 Inside Outside
Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside
Time Set Packer 4:58P. M
Tool Open I.F.P. From 5:00P M. to 5:30P M. - Hr. 30 Min. From (B) 58 P.S.I. To (C) 140 P.S.I.
Tool Closed I.C.I.P. From 5:30P M. to 6:00P M. - Hr. 30 Min (D) 768 P.S.I.
Tool Open F.F.P. From 6:00P M. to 7:00P M. - Hr. 60 Min. From (E) 166 P.S.I. To (F) 301 P.S.I.
Tool Closed F.C.I.P. From 7:00P M. to 7:30P M. - Hr. 30 Min. (G) 738 P.S.I.
Initial Hydrostatic Pressure (A) 1136 P.S.I. Final Hydrostatic Pressure (H) 1120 P.S.I. Maximum Temp. 107

INFORMATION

BLOW Fair blow throughout test.

Did Well Flow ☐ Yes ☒ No Recovery Total Ft. 90' of drilling mud. 480' of slightly muddy salt water.

Reversed Out ☐ Yes ☒ No Mud Type Chem Viscosity 35 Weight 9.3 Water Loss 13.6 cc. Chlorides 1300 PPM

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 Range Drlg. Co. Length Drill Pipe? 1520 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.

Length Weight Pipe 750 Ft. I.D. Weight Pipe 2.7 In. Tool Joint Size 4 1/2 FH In. Length Drill Collars 60 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 1/2 FH In. Length D.S.T. Tool 75 Ft.

Remarks: Fluid sample checked: 130,000 PPM Chlorides
.8 Resisitivity at 58°F.

WESTERN TESTING CO., INC.

Pressure Data

Date 10-5-77 Test Ticket No. 21898
 Recorder No. 3085 Capacity 4500 Location 2371 Ft.
 Clock No. 8474 Elevation 1304 Kelly Bushing Well Temperature 107 °F

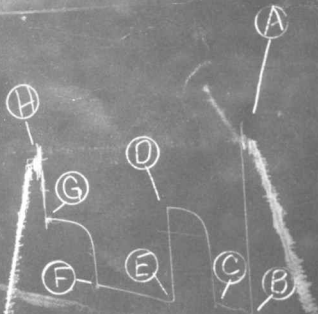
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1136 P.S.I.	Open Tool	4:58P.	M
B First Initial Flow Pressure	58 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	140 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	768 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	166 P.S.I.	Final Closed-in Pressure	30 Mins.	33 Mins.
F Second Final Flow Pressure	301 P.S.I.			
G Final Closed-in Pressure	738 P.S.I.			
H Final Hydrostatic Mud	1120 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>11</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>140</u>	<u>0</u>	<u>166</u>	<u>0</u>	<u>301</u>
P 2 <u>5</u>	<u>70</u>	<u>3</u>	<u>598</u>	<u>5</u>	<u>161</u>	<u>3</u>	<u>607</u>
P 3 <u>10</u>	<u>87</u>	<u>6</u>	<u>672</u>	<u>10</u>	<u>177</u>	<u>6</u>	<u>654</u>
P 4 <u>15</u>	<u>93</u>	<u>9</u>	<u>702</u>	<u>15</u>	<u>192</u>	<u>9</u>	<u>680</u>
P 5 <u>20</u>	<u>108</u>	<u>12</u>	<u>721</u>	<u>20</u>	<u>206</u>	<u>12</u>	<u>696</u>
P 6 <u>25</u>	<u>131</u>	<u>15</u>	<u>735</u>	<u>25</u>	<u>217</u>	<u>15</u>	<u>705</u>
P 7 <u>30</u>	<u>140</u>	<u>18</u>	<u>745</u>	<u>30</u>	<u>230</u>	<u>18</u>	<u>713</u>
P 8		<u>21</u>	<u>753</u>	<u>35</u>	<u>241</u>	<u>21</u>	<u>719</u>
P 9		<u>24</u>	<u>760</u>	<u>40</u>	<u>254</u>	<u>24</u>	<u>724</u>
P10		<u>27</u>	<u>765</u>	<u>45</u>	<u>266</u>	<u>27</u>	<u>730</u>
P11		<u>30</u>	<u>768</u>	<u>50</u>	<u>277</u>	<u>30</u>	<u>734</u>
P12				<u>55</u>	<u>290</u>	<u>33</u>	<u>738</u>
P13				<u>60</u>	<u>301</u>		
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TK# 21898

I.





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

Company Range Oil Company, Inc. Lease & Well No. Miller A #1
Elevation 1304 Kelly Bush Formation Mississippi Effective Pay - Ft. Ticket No. 22693
Date 10-8-77 Sec. 3 Twp. 33S Range 5E County Cowley State Kansas
Test Approved by Stephen M. Kreidler Western Representative Sam McClune
Formation Test No. 2 O.K. ☒ Misrun ☐ Interval Tested From 3162' to 3180' Total Depth 3180'
Size Main Hole 7 7/8 Rat Hole ☐ Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No
Top Packer Depth 3157 Ft. Size 6 3/4 Bottom Packer Depth 3162 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 18 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 3173 Ft. Clock No. 6896 Depth 3176 Ft. Clock No. 10167
Top Make Kuster Cap. 4200 No. 1558 Inside Outside Bottom Make Kuster Cap. 4200 No. 1559 Inside Outside
Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Rec. No. - Clock No. - Inside Outside
Time Set Packer 12:24A. M
Tool Open I.F.P. From 12:25A M. to 12:55A M. - Hr. 30 Min. From (B) 19 P.S.I. To (C) 21 P.S.I.
Tool Closed I.C.I.P. From 12:55A M. to 1:25A M. - Hr. 30 Min (D) 202 P.S.I.
Tool Open F.F.P. From 1:25A M. to 2:25A M. - Hr. 60 Min. From (E) 38 P.S.I. To (F) 36 P.S.I.
Tool Closed F.C.I.P. From 2:25A M. to 2:55A M. - Hr. 30 Min. (G) 306 P.S.I.
Initial Hydrostatic Pressure (A) 1656 P.S.I. Final Hydrostatic Pressure (H) 1646 P.S.I. Maximum Temp. 114

INFORMATION

BLOW Fair increasing blow throughout initial flow period. Strong blow throughout final flow period

Did Well Flow - Yes ☒ No ☐ Recovery Total Fr. 20' of oil cut mud.

Reversed Out - Yes ☒ No ☐ Mud Type Chem Viscosity 60 Weight 9.7 Water Loss 12.0 cc. Chlorides 2,000 PPM

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 Range Drilling Co. Length Drill Pipe? 2331 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.

Length Weight Pipe 750 Ft. I.D. Weight Pipe 2.7 In. Tool Joint Size 4 1/2 FH In. Length Drill Collars 60 Ft. I.D. Drill Collars 2.25 In.

Tool Joint Size 4 1/2 FH In. Length D.S.T. Tool 39 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 10-8-77

Test Ticket No. 22693

Recorder No. 1558 Capacity 4200 Location 3173 Ft.

Clock No. 6896 Elevation 1304 Kelly Bushing Well Temperature 114 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1656</u> P.S.I.	Open Tool	<u>12:24A.</u> M	
B First Initial Flow Pressure	<u>19</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>21</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>202</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>38</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>36</u> P.S.I.			
G Final Closed-in Pressure	<u>306</u> P.S.I.			
H Final Hydrostatic Mud	<u>1646</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>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>19</u>	<u>0</u>	<u>21</u>	<u>0</u>	<u>38</u>	<u>0</u>	<u>36</u>
P 2 <u>5</u>	<u>19</u>	<u>3</u>	<u>27</u>	<u>5</u>	<u>32</u>	<u>3</u>	<u>51</u>
P 3 <u>10</u>	<u>19</u>	<u>6</u>	<u>29</u>	<u>10</u>	<u>32</u>	<u>6</u>	<u>74</u>
P 4 <u>15</u>	<u>19</u>	<u>9</u>	<u>34</u>	<u>15</u>	<u>32</u>	<u>9</u>	<u>95</u>
P 5 <u>20</u>	<u>19</u>	<u>12</u>	<u>48</u>	<u>20</u>	<u>32</u>	<u>12</u>	<u>110</u>
P 6 <u>25</u>	<u>20</u>	<u>15</u>	<u>72</u>	<u>25</u>	<u>32</u>	<u>15</u>	<u>139</u>
P 7 <u>30</u>	<u>21</u>	<u>18</u>	<u>93</u>	<u>30</u>	<u>32</u>	<u>18</u>	<u>171</u>
P 8		<u>21</u>	<u>120</u>	<u>35</u>	<u>32</u>	<u>21</u>	<u>202</u>
P 9		<u>24</u>	<u>152</u>	<u>40</u>	<u>32</u>	<u>24</u>	<u>323</u>
P10		<u>27</u>	<u>181</u>	<u>45</u>	<u>33</u>	<u>27</u>	<u>259</u>
P11		<u>30</u>	<u>202</u>	<u>50</u>	<u>34</u>	<u>30</u>	<u>306</u>
P12				<u>55</u>	<u>35</u>		
P13				<u>60</u>	<u>36</u>		
P14							
P15							
P16							
P17							
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