



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

Company Range Oil Company, Inc. Lease & Well No. Voorhis #1
Elevation - Formation Severy Effective Pay - Ft. Ticket No. 24235
Date 8-10-75 Sec. 21 Twp. 34S Range 3E County Cowley State Kansas
Test Approved by Ray Goodin Western Representative Forrest Purnell
Formation Test No. 1 O.K. X Misrun - Interval Tested From 1330' to 1405' Total Depth 1405'
Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No
Top Packer Depth 1325 Ft. Size 6 3/4 Bottom Packer Depth 1330 Ft. Size 6 3/4
Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -
Tool Size 5/8 OD Tool Joint Size 4 1/2 FH Anchor Length 75 Ft. Size 5/8 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 1392 Ft. Clock No. 6800 Depth 1395 Ft. Clock No. 6859
Top Make Kuster Cap. 4200 No. 1559 Inside Outside Bottom Make Kuster Cap. 3150 No. 1565 Inside Outside
Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside
Time Set Packer 8:27 P M
Tool Open I.F.P. From 8:30P M. to 9:00P M. - Hr. 30 Min. From (B) 190 P.S.I. To (C) 270 P.S.I.
Tool Closed I.C.I.P. From 9:00P M. to 9:30P M. - Hr. 30 Min (D) 570 P.S.I.
Tool Open F.F.P. From 9:30P M. to 10:30P M. - Hr. 60 Min. From (E) 292 P.S.I. To (F) 292 P.S.I.
Tool Closed F.C.I.P. From 10:30P M. to 11:30P M. - Hr. 60 Min. (G) 570 P.S.I.
Initial Hydrostatic Pressure (A) 676 P.S.I. Final Hydrostatic Pressure (H) 637 P.S.I. Maximum Temp. 93

INFORMATION

BLOW Strong blow throughout test. Gas to surface in 1 1/2 minutes.

Did Well Flow Gas Yes X No Recovery Total Ft. 180' thin gassy drilling mud.

Reversed Out. 0 Yes X No Mud Type Chemical Viscosity 36 Weight 9.0 Water Loss - cc. Chlorides 500 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 White & Ellis Drilling Length Drill Pipe? 1137 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 180 Ft. I.D. Drill Collars 2 1/2 In.

Tool Joint Size 4H-90 In. Length D.S.T. Tool 96 Ft.

Remarks: See attached sheet for gas measurements. Gas stabilized at 1,146,000 C.F.P.D.

WESTERN TESTING CO., INC.

Pressure Data

Date 8-10-75

Test Ticket No. 24235

Recorder No. 1559 Capacity 4200 Location 1392 Ft.

Clock No. 6800 Elevation - Well Temperature 93 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>676</u> P.S.I.	Open Tool	<u>8:27 P</u> M	
B First Initial Flow Pressure	<u>190</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>270</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>570</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>292</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>292</u> P.S.I.			
G Final Closed-in Pressure	<u>570</u> P.S.I.			
H Final Hydrostatic Mud	<u>637</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>190</u>	<u>0</u>	<u>270</u>	<u>0</u>	<u>292</u>	<u>0</u>	<u>292</u>
P 2 <u>5</u>	<u>194</u>	<u>3</u>	<u>537</u>	<u>5</u>	<u>307</u>	<u>3</u>	<u>524</u>
P 3 <u>10</u>	<u>226</u>	<u>6</u>	<u>552</u>	<u>10</u>	<u>305</u>	<u>6</u>	<u>552</u>
P 4 <u>15</u>	<u>261</u>	<u>9</u>	<u>552</u>	<u>15</u>	<u>298</u>	<u>9</u>	<u>560</u>
P 5 <u>20</u>	<u>269</u>	<u>12</u>	<u>562</u>	<u>20</u>	<u>298</u>	<u>12</u>	<u>567</u>
P 6 <u>25</u>	<u>270</u>	<u>15</u>	<u>568</u>	<u>25</u>	<u>296</u>	<u>15</u>	<u>567</u>
P 7 <u>30</u>	<u>270</u>	<u>18</u>	<u>570</u>	<u>30</u>	<u>296</u>	<u>18</u>	<u>567</u>
P 8		<u>21</u>	<u>570</u>	<u>35</u>	<u>298</u>	<u>21</u>	<u>567</u>
P 9		<u>24</u>	<u>570</u>	<u>40</u>	<u>298</u>	<u>24</u>	<u>567</u>
P10		<u>27</u>	<u>570</u>	<u>45</u>	<u>292</u>	<u>27</u>	<u>567</u>
P11		<u>30</u>	<u>570</u>	<u>50</u>	<u>292</u>	<u>30</u>	<u>567</u>
P12				<u>55</u>	<u>292</u>	<u>33</u>	<u>567</u>
P13				<u>60</u>	<u>292</u>	<u>36</u>	<u>567</u>
P14						<u>39</u>	<u>567</u>
P15						<u>42</u>	<u>567</u>
P16						<u>45</u>	<u>567</u>
P17						<u>48</u>	<u>570</u>
P18						<u>51</u>	<u>570</u>
P19						<u>54</u>	<u>570</u>
P20						<u>57</u>	<u>570</u>
						<u>60</u>	<u>570</u>

Phone 316 262-5861
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P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

Date **8-10-75** Ticket **24235** Company **Range Oil Company, Inc.**
Well Name and No. **Voorhis #1** Dst No. **1** Interval Tested **1330' - 1405'**
County **Cowley** State **Kansas** Sec. **21** Twp. **34S** Rg. **3E**

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						
8:40PM	10 min.	11.0 P.S.I.G.	1 1/4" choke			847,000 C.F.P.D.
8:50PM	10 min.	16.0 P.S.I.G.	1 1/4" choke			1,064,000 C.F.P.D.
9:00PM	10 min.	18.0 P.S.I.G.	1 1/4" choke			1,146,000 C.F.P.D.
Tool opened at 8:30 PM in pre-flow.						

SECOND FLOW						
9:40PM	10 min.	18.0 P.S.I.G.	1 1/4" choke			1,146,000 C.F.P.D.
9:50PM	10 min.	18.0 P.S.I.G.	1 1/4" choke			1,146,000 C.F.P.D.
10:00PM	10 min.	18.0 P.S.I.G.	1 1/4" choke			1,146,000 C.F.P.D.
10:10PM	10 min.	18.0 P.S.I.G.	1 1/4" choke			1,146,000 C.F.P.D.
10:20PM	10 min.	18.0 P.S.I.G.	1 1/4" choke			1,146,000 C.F.P.D.
10:30PM	10 min.	18.0 P.S.I.G.	1 1/4" choke			1,146,000 C.F.P.D.
Tool opened at 9:30PM in second flow. All measurements were taken through a 2" merla orifice well tester through a 1 1/4" choke at 10 minute intervals. Gas stabilized at 1,146,000 C.F.P.D.						

GAS BOTTLE

Serial No. **637** Date Bottle Filled **8-10-75** Date to be Invoiced **8-10-75**

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.

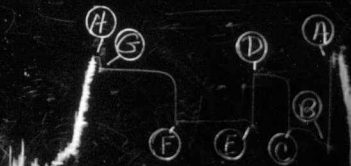
All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME **Range Oil Company, Inc.**

Authorized by **Ray Goodin**

TKT# 24235
I.

1550





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

Company **Range Oil Company** Lease & Well No. **Voorhis #1**
Elevation **1117 Kelly Bushing** Formation **Layton** Effective Pay **-** Ft. Ticket No. **24236**
Date **8-13-75** Sec. **21** Twp. **34S** Range **3E** County **Cowley** State **Kansas**
Test Approved by **Ray Goodin** Western Representative **Norman Allen**
Formation Test No. **#2** O.K. ☒ Misrun ☐ Interval Tested From **2595'** to **2602'** Total Depth **2602'**
Size Main Hole **7 7/8** Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No
Top Packer Depth **2590** Ft. Size **6 3/4** Bottom Packer Depth **2595** Ft. Size **6 3/4**
Straddle ☐ Conv. ☐ B.T. ☐ Damaged ☐ Yes ☐ No Packer Depth **-** Ft. Size **-**
Tool Size **540D** Tool Joint Size **4 1/2 FH** Anchor Length **7** Ft. Size **540D** Surface Choke Size **1 1/4"** In. Bottom Choke Size **3/4** In.
RECORDERS Depth **2587 AP** Ft. Clock No. **6800** Depth **2598** Ft. Clock No. **6855**
Top Make **Kuster** Cap. **4200** No. **1559** Inside ☐ Outside ☐ Bottom Make **Kuster** Cap. **3150** No. **1565** Inside ☐ Outside ☐
Below Straddle: Depth **-** Rec. No. **-** Clock No. **-** Inside ☐ Outside ☐ Depth **-** Ft. Rec. No. **-** Clock No. **-** Inside ☐ Outside ☐
Time Set Packer **7:27 P** M
Tool Open I.F.P. From **7:30P** M. to **8:00P** M. - Hr. **30** Min. From (B) **79** P.S.I. To (C) **194** P.S.I.
Tool Closed I.C.I.P. From **8:00P** M. to **8:30P** M. - Hr. **30** Min. (D) **956** P.S.I.
Tool Open F.F.P. From **8:30P** M. to **9:30P** M. - Hr. **60** Min. From (E) **163** P.S.I. To (F) **250** P.S.I.
Tool Closed F.C.I.P. From **9:30P** M. to **10:30P** M. - Hr. **60** Min. (G) **947** P.S.I.
Initial Hydrostatic Pressure (A) **1323** P.S.I. Final Hydrostatic Pressure (H) **1307** P.S.I. Maximum Temp. **103**

INFORMATION

BLOW **Very strong throughout test. Gas to surface in 2 minutes**

See attached gas report

Did Well Flow **Gas -** No Recovery Total Ft. **No fluid recovery**

Reversed Out ☐ Yes ☒ No Mud Type **Chemical** Viscosity **40** Weight **9.6** Water Loss **11.6** cc. Chlorides **2200**
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 Drilling Co.** Length Drill Pipe? **2390** 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 **180** Ft. I.D. Drill Collars **2 1/2** In.
Tool Joint Size **4H90** In. Length D.S.T. Tool **32** Ft.

Remarks:

Gas measurement 777,000 C.F.P.D. at 7:40P.M.

" " 1,233,000 C.F.P.D. at 8.50 stablized

" " " " 9:30

Gas sample taken, bottle #602, left on location with operator

WESTERN TESTING CO., INC.

Pressure Data

Date 8-13-75 Recorder No. 1559 Capacity 4200 Test Ticket No. 24236
 Clock No. 6800 Elevation 1117 Kelly Bushing Location 2587 AP Ft.
 Well Temperature 103 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1323</u> P.S.I.		<u>7:27P</u> M	
B First Initial Flow Pressure	<u>79</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>194</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>956</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>163</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>250</u> P.S.I.			
G Final Closed-in Pressure	<u>947</u> P.S.I.			
H Final Hydrostatic Mud	<u>1307</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>79</u>	<u>0</u>	<u>194</u>	<u>0</u>	<u>163</u>	<u>0</u>	<u>250</u>
P 2 <u>5</u>	<u>119</u>	<u>3</u>	<u>920</u>	<u>5</u>	<u>198</u>	<u>3</u>	<u>872</u>
P 3 <u>10</u>	<u>148</u>	<u>6</u>	<u>933</u>	<u>10</u>	<u>209</u>	<u>6</u>	<u>891</u>
P 4 <u>15</u>	<u>169</u>	<u>9</u>	<u>941</u>	<u>15</u>	<u>215</u>	<u>9</u>	<u>903</u>
P 5 <u>20</u>	<u>181</u>	<u>12</u>	<u>943</u>	<u>20</u>	<u>221</u>	<u>12</u>	<u>910</u>
P 6 <u>25</u>	<u>190</u>	<u>15</u>	<u>949</u>	<u>25</u>	<u>227</u>	<u>15</u>	<u>918</u>
P 7 <u>30</u>	<u>194</u>	<u>18</u>	<u>951</u>	<u>30</u>	<u>236</u>	<u>18</u>	<u>922</u>
P 8		<u>21</u>	<u>956</u>	<u>35</u>	<u>238</u>	<u>21</u>	<u>924</u>
P 9		<u>24</u>	<u>956</u>	<u>40</u>	<u>248</u>	<u>24</u>	<u>928</u>
P10		<u>27</u>	<u>956</u>	<u>45</u>	<u>250</u>	<u>27</u>	<u>933</u>
P11		<u>30</u>	<u>956</u>	<u>50</u>	<u>250</u>	<u>30</u>	<u>935</u>
P12				<u>55</u>	<u>250</u>	<u>33</u>	<u>939</u>
P13				<u>60</u>		<u>36</u>	<u>941</u>
P14						<u>39</u>	<u>941</u>
P15						<u>42</u>	<u>941</u>
P16						<u>45</u>	<u>941</u>
P17						<u>48</u>	<u>941</u>
P18						<u>51</u>	<u>941</u>
P19						<u>54</u>	<u>947</u>
P20						<u>57</u>	<u>947</u>
						<u>60</u>	<u>947</u>

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GAS FLOW REPORT

Date **8-13-75** Ticket **24236** Company **Range Oil Company**
Well Name and No. **Voorhis #1** Dst No. **2** Interval Tested **2595' to 2602'**
County **Cowley** State **Kansas** Sec. **21** Twp. **34S** Rg. **3E**

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						
7:40 P.M.	10min.	9.5 P.S.I.G.		1 1/4" choke		777,000 C.F.P.D.
7:50 "	10min.	13 "		" "		937,000 C.F.P.D.
8:00 "	10min.	15 "		" "		1023,000 C.F.P.D.
Tool opened at 7:30 P.M. with gas to surface in 2 minutes in pre-flow						

SECOND FLOW

8:40 P.M.	10min.	19 P.S.I.G.		1 1/4" choke		1187,000 C.F.P.D.
8:50 "	10 "	20 "		" "		1233,000 C.F.P.D.
9:00 "	10 "	20 "		" "		1233,000 C.F.P.D.
9:10 "	10 "	20 "		" "		1233,000 C.F.P.D.
9:20 "	10 "	20 "		" "		1233,000 C.F.P.D.
9:30 "	10 "	20 "		" "		1233,000 C.F.P.D.
Tool opened at 8:30 P.M. in second flow. All measurements were taken with a 2" merla orifice well tester, through a 1 1/4" choke at 10 minute intervals.						

GAS BOTTLE

Serial No. **602** Date Bottle Filled **8-13-75** Date to be Invoiced **8-13-75**

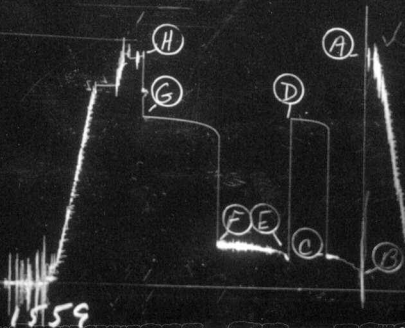
Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By 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**

Authorized by **Ray Goodin**

TXT # 24236
I





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

Company Range Oil Co. Lease & Well No. Voorhis #1
Elevation 1117 Kelly Bush. Formation Layton Effective Pay - Ft. Ticket No. 24237
Date 8-14-75 Sec. 21 Twp. 34S Range 3E County Cowley State Kansas
Test Approved by Ray Goodin Western Representative Norman Allen
Formation Test No. 3 O.K. ☒ Misrun ☐ Interval Tested From 2602' to 2612' Total Depth 2612'
Size Main Hole 7 7/8 Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No
Top Packer Depth 2597 Ft. Size 6 3/4 Bottom Packer Depth 2602 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 10 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 2605 Ft. Clock No. 6800 Depth 2608 Ft. Clock No. 6855
Top Make Kuster Cap. 4200 No. 1559 Inside Outside Bottom Make Kuster Cap. 3150 No. 1565 Inside Outside
Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside
Time Set Packer 6:27 A M
Tool Open I.F.P. From 6:30A M. to 7:00A M. - Hr. 30 Min. From (B) 64 P.S.I. To (C) 110 P.S.I.
Tool Closed I.C.I.P. From 7:00A M. to 7:30A M. - Hr. 30 Min (D) 956 P.S.I.
Tool Open F.F.P. From 7:30A M. to 8:30A M. - Hr. 60 Min. From (E) 114 P.S.I. To (F) 146 P.S.I.
Tool Closed F.C.I.P. From 8:30A M. to 9:30A M. - Hr. 60 Min. (G) 954 P.S.I.
Initial Hydrostatic Pressure (A) 1390 P.S.I. Final Hydrostatic Pressure (H) 1372 P.S.I. Maximum Temp. 105

INFORMATION

BLOW Very strong blow throughout test. Gas to surface in 2 minutes.
See attached sheet for gas measurements.
Did Well Flow Gas Yes ☐ No ☒ Recovery Total Ft. 180' slightly muddy gas cut salt water.
Water checked-.26 resistivity, 174,000 PPM chlorides.

Reversed Out ☐ Yes ☒ No ☐ Mud Type Chemical Viscosity 40 Weight 9.6 Water Loss 11.6 cc. Chlorides 2200 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 White & Ellis Drilling Length Drill Pipe? 2402 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 180 Ft. I.D. Drill Collars 2 1/2 In.

Tool Joint Size 4H-90 In. Length D.S.T. Tool 30 Ft.

Remarks: Gas gauged 411,000 C.F.P.D. at 6:40 P Am.

Gas gauged 802,000 C.F.P.D. at 8:00 AM. & stabilized.

WESTERN TESTING CO., INC.

Pressure Data

Date 8-14-75

Test Ticket No. 24237

Recorder No. 1559

Capacity 4200

Location 2605 Ft.

Clock No. 6800

Elevation 1117 Kelly Bushing

Well Temperature 105 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1390</u> P.S.I.	Open Tool	<u>6:27 A</u> M	
B First Initial Flow Pressure	<u>64</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>25</u> Mins.
C First Final Flow Pressure	<u>110</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>956</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>114</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>146</u> P.S.I.			
G Final Closed-in Pressure	<u>954</u> P.S.I.			
H Final Hydrostatic Mud	<u>1372</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>5</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>19</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>64</u>	<u>0 0</u>	<u>110</u>	<u>0</u>	<u>114</u>	<u>0</u>	<u>146</u>
P 2 <u>5</u>	<u>68</u>	<u>3 3</u>	<u>933</u>	<u>5</u>	<u>119</u>	<u>3</u>	<u>914</u>
P 3 <u>10</u>	<u>83</u>	<u>1 6</u>	<u>943</u>	<u>10</u>	<u>125</u>	<u>6</u>	<u>924</u>
P 4 <u>15</u>	<u>89</u>	<u>9</u>	<u>949</u>	<u>15</u>	<u>131</u>	<u>9</u>	<u>931</u>
P 5 <u>20</u>	<u>96</u>	<u>12</u>	<u>951</u>	<u>15</u>	<u>131</u>	<u>12</u>	<u>939</u>
P 6 <u>25</u>	<u>110</u>	<u>15</u>	<u>951</u>	<u>20</u>	<u>135</u>	<u>15</u>	<u>941</u>
P 7		<u>18</u>	<u>951</u>	<u>25</u>	<u>140</u>	<u>18</u>	<u>945</u>
P 8		<u>21</u>	<u>951</u>	<u>30</u>	<u>142</u>	<u>21</u>	<u>947</u>
P 9		<u>24</u>	<u>951</u>	<u>35</u>	<u>144</u>	<u>24</u>	<u>947</u>
P10		<u>27</u>	<u>956</u>	<u>40</u>	<u>146</u>	<u>27</u>	<u>947</u>
P11		<u>30</u>	<u>956</u>	<u>45</u>	<u>146</u>	<u>30</u>	<u>947</u>
P12				<u>50</u>	<u>146</u>	<u>33</u>	<u>947</u>
P13				<u>55</u>	<u>146</u>	<u>36</u>	<u>954</u>
P14				<u>60</u>	<u>146</u>	<u>39</u>	<u>954</u>
P15						<u>42</u>	<u>954</u>
P16						<u>45</u>	<u>954</u>
P17						<u>48</u>	<u>954</u>
P18						<u>51</u>	<u>954</u>
P19						<u>54</u>	<u>954</u>
P20						<u>57</u>	<u>954</u>

Phone 316 262-5861
316 838-0601



P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

Date **8-14-75** Ticket **24237** Company **Range Oil Company, Inc.**
Well Name and No. **Voorhis #1** Dst No. **3** Interval Tested **2602' - 2612'**
County **Cowley** State **Kansas** Sec. **21** Twp. **34S** Rg. **3E**

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						
6:40 AM	10 min.	3 P.S.I.G.	1 1/4" choke			411,000 C.F.P.D.
6:50 AM	10 min.	5 P.S.I.G.	1 1/4" choke			542,000 C.F.P.D.
7:00 AM	10 min.	7 P.S.I.G.	1 1/4" Choke			653,000 C.F.P.D.
Tool opened at 6:30 AM in pre-flow, gas to surface in 2 minutes.						

SECOND FLOW

7:40 AM	10 min.	8 P.S.I.G.	1 1/4" choke			700,000 C.F.P.D.
7:50 AM	10 min.	9 P.S.I.G.	1 1/4" choke			754,000 C.F.P.D.
8:00 AM	10 min.	10 P.S.I.G.	1 1/4" choke			802,000 C.F.P.D.
8:10 AM	10 min.	10 P.S.I.G.	1 1/4" choke			802,000 C.F.P.D.
8:20 AM	10 min.	10 P.S.I.G.	1 1/4" choke			802,000 C.F.P.D.
8:30 AM	10 min.	10 P.S.I.G.	1 1/4" choke			802,000 C.F.P.D.
Tool opened at 7:30 AM in second flow. All measurements were taken through a 2" merla orifice well tester through a 1 1/4" choke at 10 minute intervals.						

GAS BOTTLE

Serial No. _____ Date Bottle Filled **8-14-75** Date to be Invoiced **8-14-75**

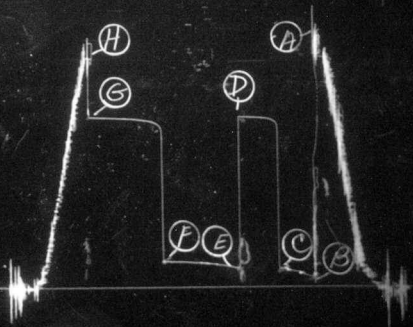
Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By 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 **Ray Goodin**

TRT # 24037
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Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Range Oil Company Lease & Well No. Voorhis #1
Elevation 1117 Kelly Buhh. Formation Bartlesville Effective Pay - Ft. Ticket No. 24238
Date 8-16-75 Sec. 21 Twp. 34S Range 3E County Cowley State Kansas
Test Approved by Ray Goodin Western Representative Norman Allen
Formation Test No. 4 O.K. ☒ Misrun ☐ Interval Tested From 3305' to 3316' Total Depth 3316'
Size Main Hole 7 7/8 Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No
Top Packer Depth 3300 Ft. Size 6 3/4 Bottom Packer Depth 3305 Ft. Size 6 3/4
Straddle ☐ Conv. ☐ B.T. ☐ Damaged ☐ Yes ☐ No Packer Depth ☐ Ft. Size ☐
Tool Size 5/8 OD Tool Joint Size 4 1/2 FH Anchor Length 11 Ft. Size 5/8 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 3109 Ft. Clock No. 6800 Depth 3112 Ft. Clock No. 6855
Top Make Kuster Cap. 4200 No. 1559 Inside ☐ Outside ☒ Bottom Make Kuster Cap. 3150 No. 1565 Inside ☐ Outside ☒
Below Straddle: Depth ☐ Rec. No. ☐ Clock No. ☐ Inside ☐ Outside ☐ Depth ☐ Ft. Rec. No. ☐ Clock No. ☐ Inside ☐ Outside ☐
Time Set Packer 10:13 A M
Tool Open I.F.P. From 10:15A M. to 10:45A M. - Hr. 30 Min. From (B) 12 P.S.I. To (C) 12 P.S.I.
Tool Closed I.C.I.P. From 10:45A M. to 11:15A M. - Hr. 30 Min (D) 294 P.S.I.
Tool Open F.F.P. From 11:15A M. to 12:15P M. - Hr. 60 Min. From (E) 25 P.S.I. To (F) 25 P.S.I.
Tool Closed F.C.I.P. From 12:15P M. to 1:15P M. - Hr. 60 Min. (G) 566 P.S.I.
Initial Hydrostatic Pressure (A) 1715 P.S.I. Final Hydrostatic Pressure (H) 1727 P.S.I. Maximum Temp. 117

INFORMATION

BLOW WEAK throughout test.

Did Well Flow ☒ Yes ☐ No Recovery Total Ft. 50' slightly oil & gas cut mud. 190' gas in pipe.

Reversed Out ☐ Yes ☒ No Mud Type Chemical Viscosity 44 Weight 9.8 Water Loss 11.6 cc. Chlorides 2,600 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 White & Ellis Drilling Length Drill Pipe? 3105 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 180 Ft. I.D. Drill Collars 2 1/2 In.

Tool Joint Size 4H-90 In. Length D.S.T. Tool 31 Ft.

Remarks: Fluid checked 10% oil 90% mud.

WESTERN TESTING CO., INC.

Pressure Data

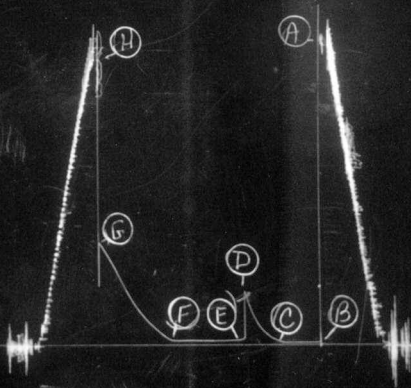
Date 8-16-75 Test Ticket No. 24238
 Recorder No. 1559 Capacity 4200 Location 3109 Ft.
 Clock No. 6800 Elevation 1117 Kelly Bushing Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1715</u>	P.S.I.	<u>10:13 A</u>	
B First Initial Flow Pressure	<u>12</u>	P.S.I.	<u>30</u>	<u>30</u>
C First Final Flow Pressure	<u>12</u>	P.S.I.	<u>30</u>	<u>33</u>
D Initial Closed-in Pressure	<u>294</u>	P.S.I.	<u>60</u>	<u>55</u>
E Second Initial Flow Pressure	<u>25</u>	P.S.I.	<u>60</u>	<u>57</u>
F Second Final Flow Pressure	<u>25</u>	P.S.I.		
G Final Closed-in Pressure	<u>566</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1727</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>12</u>	<u>0</u>	<u>12</u>	<u>0</u>	<u>25</u>	<u>0</u>	<u>25</u>
P 2 <u>5</u>	<u>12</u>	<u>3</u>	<u>14</u>	<u>5</u>	<u>25</u>	<u>3</u>	<u>35</u>
P 3 <u>10</u>	<u>12</u>	<u>6</u>	<u>22</u>	<u>10</u>	<u>25</u>	<u>6</u>	<u>50</u>
P 4 <u>15</u>	<u>12</u>	<u>9</u>	<u>31</u>	<u>15</u>	<u>25</u>	<u>9</u>	<u>71</u>
P 5 <u>20</u>	<u>12</u>	<u>12</u>	<u>45</u>	<u>20</u>	<u>25</u>	<u>12</u>	<u>89</u>
P 6 <u>25</u>	<u>12</u>	<u>15</u>	<u>62</u>	<u>25</u>	<u>25</u>	<u>15</u>	<u>104</u>
P 7 <u>30</u>	<u>12</u>	<u>18</u>	<u>81</u>	<u>30</u>	<u>25</u>	<u>18</u>	<u>129</u>
P 8		<u>21</u>	<u>117</u>	<u>35</u>	<u>25</u>	<u>21</u>	<u>150</u>
P 9		<u>24</u>	<u>148</u>	<u>40</u>	<u>25</u>	<u>24</u>	<u>169</u>
P10		<u>27</u>	<u>198</u>	<u>45</u>	<u>25</u>	<u>27</u>	<u>200</u>
P11		<u>30</u>	<u>257</u>	<u>50</u>	<u>25</u>	<u>30</u>	<u>234</u>
P12		<u>33</u>	<u>294</u>	<u>55</u>	<u>25</u>	<u>33</u>	<u>265</u>
P13						<u>36</u>	<u>305</u>
P14						<u>39</u>	<u>349</u>
P15						<u>42</u>	<u>384</u>
P16						<u>45</u>	<u>426</u>
P17						<u>48</u>	<u>470</u>
P18						<u>51</u>	<u>504</u>
P19						<u>54</u>	<u>541</u>
P20						<u>57</u>	<u>566</u>

TKT # 24238
I.





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

Company Range Oil Company Lease & Well No. Voorhis #1
Elevation 1117 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 24239
Date 8-17-75 Sec. 21 Twp. 34S Range 3E County Cowley State Kansas
Test Approved by Ray Goodin Western Representative Forrest Purnell
Formation Test No. 5 O.K. ☒ Misrun ☐ Interval Tested From 3332' to 3377' Total Depth 3377'
Size Main Hole 7 7/8 Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No
Top Packer Depth 3327 Ft. Size 6 3/4 Bottom Packer Depth 3332 Ft. Size 6 3/4
Straddle ☐ Conv. ☐ B.T. ☐ Damaged ☐ Yes ☐ No Packer Depth ☐ Ft. Size ☐
Tool Size 540D Tool Joint Size 4 1/2 FH Anchor Length 45 Ft. Size 540D Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 3339 Ft. Clock No. 6800 Depth 3342 Ft. Clock No. 6859
Top Make Kuster Cap. 4200 No. 1559 Inside ☐ Outside ☒ Bottom Make Kuster Cap. 3150 No. 1565 Inside ☐ Outside ☒
Below Straddle: Depth ☐ Rec. No. ☐ Clock No. ☐ Inside ☐ Outside ☐ Depth ☐ Ft. Rec. No. ☐ Clock No. ☐ Inside ☐ Outside ☐
Time Set Packer 2:27 A M
Tool Open I.F.P. From 2:30A M. to 3:00A M. - Hr. 30 Min. From (B) 14 P.S.I. To (C) 29 P.S.I.
Tool Closed I.C.I.P. From 3:00A M. to 3:30A M. - Hr. 30 Min (D) 50 P.S.I.
Tool Open F.F.P. From 3:30A M. to 4:00A M. - Hr. 30 Min. From (E) 25 P.S.I. To (F) 25 P.S.I.
Tool Closed F.C.I.P. From 4:00A M. to 4:30A M. - Hr. 30 Min. (G) 25 P.S.I.
Initial Hydrostatic Pressure (A) 1763 P.S.I. Final Hydrostatic Pressure (H) 1694 P.S.I. Maximum Temp. 118

INFORMATION

BLOW Very weak blow at 10 minutes.

Did Well Flow ☐ Yes ☒ No Recovery Total Ft. 15' drilling mud.

Reversed Out ☐ Yes ☒ No Mud Type Chemical Viscosity ☐ Weight 9.8 Water Loss 11.6 cc. Chlorides 2,690 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 B & N Drilling CO. Length Drill Pipe? 3126 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 180 Ft. I.D. Drill Collars 2 1/2 In.
Tool Joint Size 4H-90 In. Length D.S.T. Tool 71 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 8-17-75 Recorder No. 1559 Capacity 4200 Test Ticket No. 24239
 Clock No. 6800 Elevation 1117 Kelly Bushing Location 3339 Ft.
 Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1763	P.S.I.	2:27 A	M
B First Initial Flow Pressure	14	P.S.I.	30	Mins. 30 Mins.
C First Final Flow Pressure	29	P.S.I.	30	Mins. 36 Mins.
D Initial Closed-in Pressure	50	P.S.I.	30	Mins. 20 Mins.
E Second Initial Flow Pressure	25	P.S.I.	30	Mins. 24 Mins.
F Second Final Flow Pressure	25	P.S.I.		
G Final Closed-in Pressure	25	P.S.I.		
H Final Hydrostatic Mud	1694	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>4</u> Inc.		Breakdown: <u>8</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>	14	<u>0</u>	29	<u>0</u>	25	<u>0</u>	25
P 2 <u>5</u>	18	<u>3</u>	27	<u>5</u>	25	<u>3</u>	25
P 3 <u>10</u>	16	<u>6</u>	27	<u>10</u>	25	<u>6</u>	25
P 4 <u>15</u>	16	<u>9</u>	27	<u>15</u>	25	<u>9</u>	25
P 5 <u>20</u>	22	<u>12</u>	31	<u>20</u>	25	<u>12</u>	25
P 6 <u>25</u>	29	<u>15</u>	39			<u>15</u>	25
P 7 <u>30</u>	29	<u>18</u>	39			<u>18</u>	25
P 8		<u>21</u>	41			<u>21</u>	25
P 9		<u>24</u>	43			<u>24</u>	25
P10		<u>27</u>	43				
P11		<u>30</u>	45				
P12		<u>33</u>	48				
P13		<u>36</u>	50				
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT #24239
I.

