



Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Graves Drilling Co., Inc. Lease & Well No. Kuhn #1
Elevation 2194 Kelly Bushings Sand Effective Pay 13 Ft. Ticket No. 19030
Date 8-1-74 Sec. 13 Twp. 13S Range 21W County Trego State Kansas
Test Approved by R. G. Miller Western Representative Leon Elmore
Formation Test No. 1 O.K. ☒ Misrun Interval Tested From 3984' to 3997' Total Depth 3997'
Size Main Hole 7 7/8" Rat Hole Conv. ☒ B.T. Damaged Yes ☒ No Conv. B.T. ☒ Damaged Yes ☒ No
Top Packer Depth 3979 Ft. Size 6 3/4" Bottom Packer Depth 3984 Ft. Size 6 3/4"
Straddle No 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 13 Ft. Size 5 1/2"OD Surface Choke Size 3/4In. Bottom Choke Size 3/4
RECORDERS Depth 3989 Ft. Clock No. 6866 Depth 3991 Ft. Clock No. 8377
Top Make Kuster Cap. 4500 No. 3085 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 Inside Outside
Below Straddle: Depth Rec. No. Clock No. Inside Outside Depth Rec. No. Clock No. Inside Outside
Time Set Packer 4:04 A.M.
Tool Open I.F.P. From 4:06 M. to 4:21A. Hr. 15 Min. From (B) 39 P.S.I. To (C) 099 P.S.I.
Tool Closed I.C.I.P. From 4:21 M. to 5:06A. Hr. 45 Min. (D) 1169 P.S.I.
Tool Open F.F.P. From 5:06 M. to 6:06A. Hr. 60 Min. From (E) 134 P.S.I. To (F) 332 P.S.I.
Tool Closed F.C.I.P. From 6:06 M. to 6:51A. Hr. 45 Min. (G) 1108 P.S.I.
Initial Hydrostatic Pressure (A) 206 1/4 P.S.I. Final Hydrostatic Pressure (H) 1972 P.S.I. Maximum Temp. 125

INFORMATION

BLOW Good thru out test
Did Well Flow... Yes ☒ No Recovery Total Fr. 883 feet clean oil - 63 feet water and oil cut mud
(39 gravity - corrected)

Reversed Out... Yes ☒ No Mud Type Starch Viscosity 39 Weight 9.3 Water Loss 11.6 cc. Chlorides 125
EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint No Jars: Size In. Make Ser. No.
Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where?

DRILLING CONTRACTOR Length Drill Pipe? 3171 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size In.
Length Weight Pipe 793 Ft. I.D. Weight Pipe 2.7 In. Tool Joint Size In. Length Drill Collars Ft. I.D. Drill Collars In.
Tool Joint Size In. Length D.S.T. Tool 33 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 8-1-74 Test Ticket No. 19030
 Recorder No. 3085 Capacity 4500 Location 3989 Ft.
 Clock No. 6866 Elevation 2194 Kelly Bushings Well Temperature 125 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2064	P.S.I.	4:06 A.M.	
B First Initial Flow Pressure	39	P.S.I.	15 Mins.	15 Mins.
C First Final Flow Pressure	99	P.S.I.	45 Mins.	45 Mins.
D Initial Closed-in Pressure	1169	P.S.I.	60 Mins.	60 Mins.
E Second Initial Flow Pressure	134	P.S.I.	45 Mins.	45 Mins.
F Second Final Flow Pressure	332	P.S.I.		
G Final Closed-in Pressure	1108	P.S.I.		
H Final Hydrostatic Mud	1972	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>15</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>39</u>	<u>0</u>	<u>99</u>	<u>0</u>	<u>134</u>	<u>0</u>	<u>332</u>
P 2 <u>5</u>	<u>50</u>	<u>3</u>	<u>716</u>	<u>5</u>	<u>139</u>	<u>3</u>	<u>972</u>
P 3 <u>10</u>	<u>79</u>	<u>6</u>	<u>1053</u>	<u>10</u>	<u>158</u>	<u>6</u>	<u>1016</u>
P 4 <u>15</u>	<u>99</u>	<u>9</u>	<u>1099</u>	<u>15</u>	<u>179</u>	<u>9</u>	<u>1038</u>
P 5		<u>12</u>	<u>1120</u>	<u>20</u>	<u>203</u>	<u>12</u>	<u>1049</u>
P 6		<u>15</u>	<u>1134</u>	<u>25</u>	<u>222</u>	<u>15</u>	<u>1060</u>
P 7		<u>18</u>	<u>1141</u>	<u>30</u>	<u>2244</u>	<u>18</u>	<u>1068</u>
P 8		<u>21</u>	<u>1144</u>	<u>35</u>	<u>268</u>	<u>21</u>	<u>1075</u>
P 9		<u>24</u>	<u>1148</u>	<u>40</u>	<u>291</u>	<u>24</u>	<u>1083</u>
P10		<u>27</u>	<u>1150</u>	<u>45</u>	<u>302</u>	<u>27</u>	<u>1090</u>
P11		<u>30</u>	<u>1156</u>	<u>50</u>	<u>314</u>	<u>30</u>	<u>1095</u>
P12		<u>33</u>	<u>1161</u>	<u>55</u>	<u>325</u>	<u>33</u>	<u>1100</u>
P13		<u>36</u>	<u>1164</u>	<u>60</u>	<u>332</u>	<u>36</u>	<u>1104</u>
P14		<u>39</u>	<u>1169</u>			<u>39</u>	<u>1106</u>
P15		<u>42</u>	<u>1169</u>			<u>42</u>	<u>1107</u>
P16		<u>45</u>	<u>1169</u>			<u>45</u>	<u>1108</u>
P17							
P18							
P19							
P20							

This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1983	2064	PSI
(B) First Initial Flow Pressure	35	39	PSI
(C) First Final Flow Pressure	107	99	PSI
(D) Initial Closed-in Pressure	1175	1169	PSI
(E) Second Initial Flow Pressure	143	134	PSI
(F) Second Final Flow Pressure	334	332	PSI
(G) Final Closed-in Pressure	117	1108	PSI
(H) Final Hydrostatic Mud	1977	1972	PSI