

Company Mack Oil Company Lease & Well No. Woodbury #7
 Elevation 1450 Ground Level Formation Viola Effective Pay - Ft. Ticket No. 7760
 Date 11-15-80 Sec. 11 Twp. 15S Range 10E County Wabaunsee State Kansas
 Test Approved by Kevan Marsh Western Representative Norman Allen - Wynn Wier

Formation Test No. 1 Interval Tested from 3229 ft. to 3237 ft. Total Depth 3265 ft.
 Packer Depth 3229 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3237 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3219 ft. Recorder Number 1559 Cap. 4200
 Bottom Recorder Depth (Outside) 3222 ft. Recorder Number 5666 Cap. 3950
 Below Straddle Recorder Depth 3263 ft. Recorder Number 42 Cap. 4000

Drilling Contractor Glacier Drilling Rig #1 Drill Collar Length 178 I. D. 2 1/4 in.
 Mud Type Chemical Viscosity 49 Weight Pipe Length - I. D. - in.
 Weight 9.6 Water Loss 6.4 cc. Drill Pipe Length 3209 I. D. 2.7 in.
 Chlorides 2000 P.P.M. Test Tool Length 59 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 8 ft. Size 5 1/2 in.
 Did Well Flow? No Reversed Out Yes Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 3 1/2 IF in.

Blow: Strong decreasing to fair at end of test.

Recovered 60 ft. of free oil 20 gravity
 Recovered 600 ft. of very slightly oil cut salt water
 Recovered 1680 ft. of salt water Chlorides 9,000 PPM 1.2 Resistivity @ 60°F
 Recovered ft. of
 Recovered ft. of

Remarks: Waited till daylight to pull test; Note 600 ft. very slightly oil cut salt water groundout. - 10% oil at top- top of sample; 2% oil out of bottom - bottom of sample.

Time Set Packer(s) 10:00 A.M. Time Started Off Bottom 12:45 P.M. Maximum Temperature 124
 Initial Hydrostatic Pressure (A) 1614 P.S.I.
 Initial Flow Period Minutes 15 (B) 249 P.S.I. to (C) 816 P.S.I.
 Initial Closed In Period Minutes 30 (D) 1029 P.S.I.
 Final Flow Period Minutes 60 (E) 939 P.S.I. to (F) 1044 P.S.I.
 Final Closed In Period Minutes 57 (G) 1047 P.S.I.
 Final Hydrostatic Pressure (H) 1589 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 11-15-80 Recorder No. 1559 Capacity 4200 Test Ticket No. 7760
 Location 3219 Ft. Clock No. - Elevation 1450 Ground Level Well Temperature 124 °F

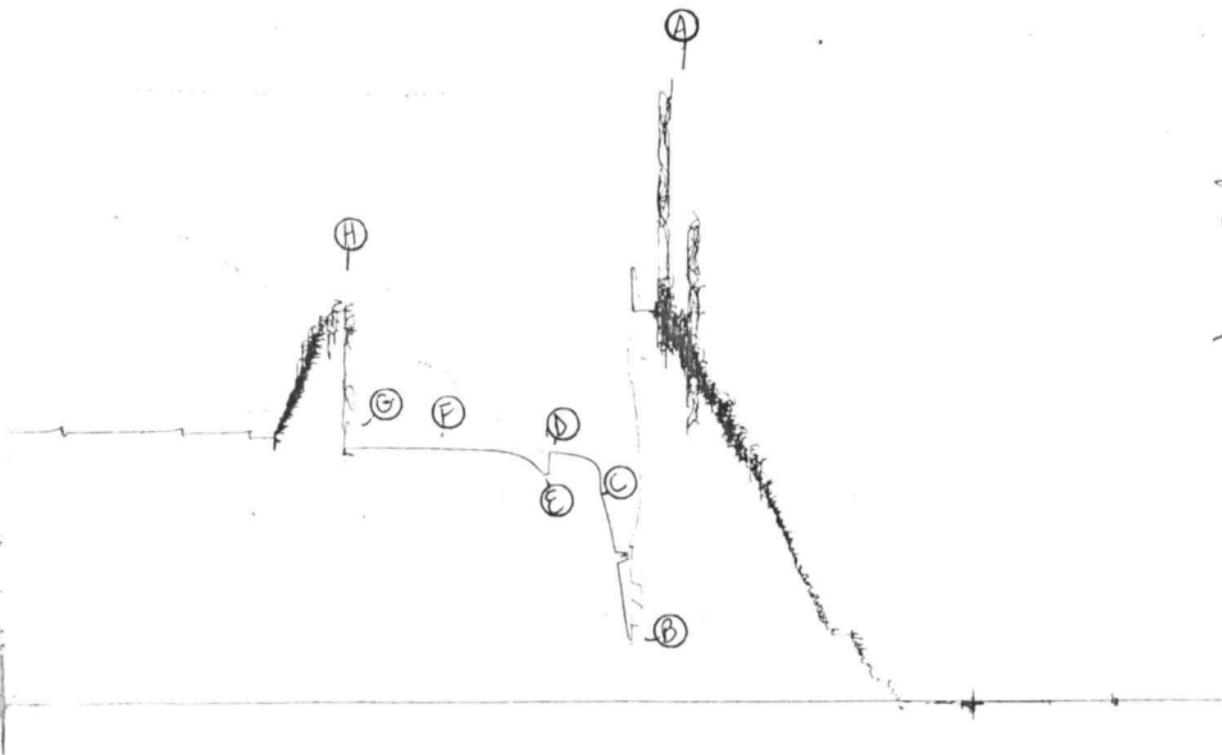
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1614</u> P.S.I.	Open Tool	<u>10:00P</u> M	
B First Initial Flow Pressure	<u>249</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>816</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1029</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>939</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>1044</u> P.S.I.			
G Final Closed-in Pressure	<u>1047</u> P.S.I.			
H Final Hydrostatic Mud	<u>1589</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</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>249</u>	<u>0</u>	<u>816</u>	<u>0</u>	<u>939</u>	<u>0</u>	<u>1044</u>
P 2 <u>5</u>	<u>418</u>	<u>3</u>	<u>952</u>	<u>5</u>	<u>952</u>	<u>3</u>	<u>1044</u>
P 3 <u>10</u>	<u>662</u>	<u>6</u>	<u>985</u>	<u>10</u>	<u>985</u>	<u>6</u>	<u>1044</u>
P 4 <u>15</u>	<u>816</u>	<u>9</u>	<u>1000</u>	<u>15</u>	<u>1008</u>	<u>9</u>	<u>1044</u>
P 5 _____	_____	<u>12</u>	<u>1007</u>	<u>20</u>	<u>1021</u>	<u>12</u>	<u>1044</u>
P 6 _____	_____	<u>15</u>	<u>1015</u>	<u>25</u>	<u>1029</u>	<u>15</u>	<u>1044</u>
P 7 _____	_____	<u>18</u>	<u>1019</u>	<u>30</u>	<u>1036</u>	<u>18</u>	<u>1044</u>
P 8 _____	_____	<u>21</u>	<u>1021</u>	<u>35</u>	<u>1038</u>	<u>21</u>	<u>1045</u>
P 9 _____	_____	<u>24</u>	<u>1024</u>	<u>40</u>	<u>1040</u>	<u>24</u>	<u>1046</u>
P10 _____	_____	<u>27</u>	<u>1027</u>	<u>45</u>	<u>1041</u>	<u>27</u>	<u>1046</u>
P11 _____	_____	<u>30</u>	<u>1029</u>	<u>50</u>	<u>1042</u>	<u>30</u>	<u>1047</u>
P12 _____	_____	_____	_____	<u>55</u>	<u>1043</u>	<u>33</u>	<u>1047</u>
P13 _____	_____	_____	_____	<u>60</u>	<u>1044</u>	<u>36</u>	<u>1047</u>
P14 _____	_____	_____	_____	_____	_____	<u>39</u>	<u>1047</u>
P15 _____	_____	_____	_____	_____	_____	<u>42</u>	<u>1047</u>
P16 _____	_____	_____	_____	_____	_____	<u>45</u>	<u>1047</u>
P17 _____	_____	_____	_____	_____	_____	<u>48</u>	<u>1047</u>
P18 _____	_____	_____	_____	_____	_____	<u>51</u>	<u>1047</u>
P19 _____	_____	_____	_____	_____	_____	<u>54</u>	<u>1047</u>
P20 _____	_____	_____	_____	_____	_____	<u>57</u>	<u>1047</u>

TKT # 7760

I

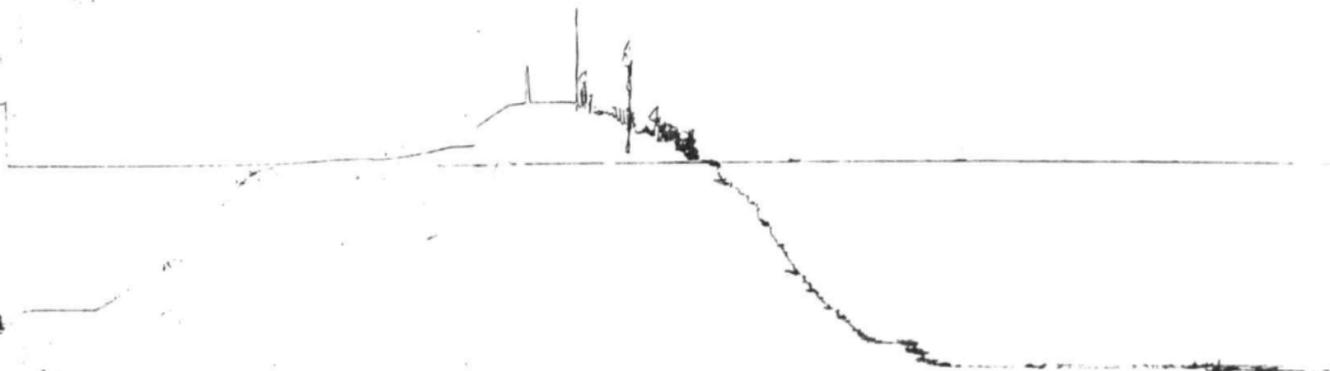


TKT # 7760
BELOW STRADDLE

TKT 7760

42

Straddle



Company Mack Oil Company Lease & Well No. Woodbury #7
 Elevation 1450 Ground Level Formation Simpson Sand Effective Pay - Ft. Ticket No. 7761
 Date 11-17-80 Sec. 11 Twp. 15S Range 10E County Wabaunsee State Kansas
 Test Approved by Kevan Marsh Western Representative Wynn Weir

Formation Test No. 2 Interval Tested from 3314 ft. to 3343 ft. Total Depth 3343 ft.
 Packer Depth 3314 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3309 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3335 ft. Recorder Number 1559 Cap. 4200
 Bottom Recorder Depth (Outside) 3338 ft. Recorder Number 5666 Cap. 3950
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Glacier Drilling Co Rig #1 Drill Collar Length 178 I. D. 2 1/4 in.
 Mud Type Chemical Viscosity 50 Weight Pipe Length - I. D. - in.
 Weight 9.4 Water Loss 8.0 cc. Drill Pipe Length 3132 I. D. 2.7 in.
 Chlorides 3000 P.P.M. Test Tool Length 51 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 29 ft. Size 5 1/2 in.
 Did Well Flow? No Reversed Out Yes Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 3 1/2 IF in.

Blow: Fair throughout test.

Recovered 2 ft. of free oil 20 gravity
 Recovered 10 ft. of oil cut mud
 Recovered 550 ft. of muddy water - heavy sulphur order
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 6:15 ~~P.M.~~ A.M. Time Started Off Bottom 9:00 ~~P.M.~~ A.M. Maximum Temperature 124
 Initial Hydrostatic Pressure (A) 1689 P.S.I.
 Initial Flow Period Minutes 20 (B) 82 P.S.I. to (C) 135 P.S.I.
 Initial Closed In Period Minutes 30 (D) 914 P.S.I.
 Final Flow Period Minutes 65 (E) 186 P.S.I. to (F) 315 P.S.I.
 Final Closed In Period Minutes 63 (G) 954 P.S.I.
 Final Hydrostatic Pressure (H) 1668 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 11-17-80 Test Ticket No. 7761
 Recorder No. 1559 Capacity 4200 Location 3335 Ft.
 Clock No. - Elevation 1450 Ground Level Well Temperature 124 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1689</u>	P.S.I.	<u>6:15A</u>	<u>M</u>
B First Initial Flow Pressure	<u>82</u>	P.S.I.	<u>15</u>	<u>Mins. 20</u> Mins.
C First Final Flow Pressure	<u>135</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u> Mins.
D Initial Closed-in Pressure	<u>914</u>	P.S.I.	<u>60</u>	<u>Mins. 65</u> Mins.
E Second Initial Flow Pressure	<u>186</u>	P.S.I.	<u>60</u>	<u>Mins. 63</u> Mins.
F Second Final Flow Pressure	<u>315</u>	P.S.I.		
G Final Closed-in Pressure	<u>954</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1668</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>4</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>21</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>82</u>	<u>0</u>	<u>135</u>	<u>0</u>	<u>186</u>	<u>0</u>	<u>315</u>
P 2 <u>5</u>	<u>79</u>	<u>3</u>	<u>443</u>	<u>5</u>	<u>182</u>	<u>3</u>	<u>581</u>
P 3 <u>10</u>	<u>98</u>	<u>6</u>	<u>583</u>	<u>10</u>	<u>190</u>	<u>6</u>	<u>668</u>
P 4 <u>15</u>	<u>117</u>	<u>9</u>	<u>677</u>	<u>15</u>	<u>205</u>	<u>9</u>	<u>723</u>
P 5 <u>20</u>	<u>135</u>	<u>12</u>	<u>750</u>	<u>20</u>	<u>219</u>	<u>12</u>	<u>760</u>
P 6 _____	_____	<u>15</u>	<u>799</u>	<u>25</u>	<u>232</u>	<u>15</u>	<u>787</u>
P 7 _____	_____	<u>18</u>	<u>835</u>	<u>30</u>	<u>245</u>	<u>18</u>	<u>810</u>
P 8 _____	_____	<u>21</u>	<u>864</u>	<u>35</u>	<u>257</u>	<u>21</u>	<u>829</u>
P 9 _____	_____	<u>24</u>	<u>889</u>	<u>40</u>	<u>268</u>	<u>24</u>	<u>845</u>
P10 _____	_____	<u>27</u>	<u>904</u>	<u>45</u>	<u>278</u>	<u>27</u>	<u>862</u>
P11 _____	_____	<u>30</u>	<u>914</u>	<u>50</u>	<u>288</u>	<u>30</u>	<u>870</u>
P12 _____	_____	_____	_____	<u>55</u>	<u>298</u>	<u>33</u>	<u>885</u>
P13 _____	_____	_____	_____	<u>60</u>	<u>307</u>	<u>36</u>	<u>897</u>
P14 _____	_____	_____	_____	<u>65</u>	<u>315</u>	<u>39</u>	<u>906</u>
P15 _____	_____	_____	_____	_____	_____	<u>42</u>	<u>913</u>
P16 _____	_____	_____	_____	_____	_____	<u>45</u>	<u>921</u>
P17 _____	_____	_____	_____	_____	_____	<u>48</u>	<u>928</u>
P18 _____	_____	_____	_____	_____	_____	<u>51</u>	<u>934</u>
P19 _____	_____	_____	_____	_____	_____	<u>54</u>	<u>941</u>
P20 _____	_____	_____	_____	_____	_____	<u>57</u>	<u>945</u>
						<u>60</u>	<u>950</u>
						<u>63</u>	<u>954</u>

TKT # 7761
I

1554

