



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N<sup>o</sup> 6186

P. O. BOX 1599 PHONE (316) 838-0601 WICHITA, KANSAS 67201

Elevation 2079 K.B. Formation Cher. Eff. Pay Ft.

District PRATT Date 6-3-80 Customer Order No.

COMPANY NAME Patton Oil Co. business stop

ADDRESS #200-5660 S. Syracuse Circle Englewood, Colo. 80110

LEASE AND WELL NO. Michael #2 COUNTY EDWARDS STATE KS Sec. 9 Twp 26S Rge 16W

Mail Invoice To SAME Michael #2 Co. Name Address No. Copies Requested Reg

Mail Charts To SAME Address No. Copies Requested Reg

Formation Test No. Interval Tested from 4403 ft. to 4433 ft. Total Depth 4433 ft. Packer Depth 4398 ft. Size 6 3/4 in. Packer Depth 4403 ft. Size 6 3/4 in. Packer Depth 4403 ft. Size 6 3/4 in. Depth of Selective Zone Set

Top Recorder Depth (Inside) 4406 ft. Recorder Number 2604 Cap. 4150 Bottom Recorder Depth (Outside) 4409 ft. Recorder Number 6246 Cap. 5200 Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Big Springs #1 Mud Type DRIS pac Viscosity 47 Weight 9.3 Water Loss 21 cc. Chlorides 30,000 P.P.M. Jars: Make Serial Number Did Well Flow? NO Reversed Out NO Drill Collar Length I. D. in. Weight Pipe Length I. D. in. Drill Pipe Length 4353 I. D. 3.8 in. Test Tool Length 20 ft. Tool Size 52.00 in. Anchor Length 30 ft. Size 52.00 in. Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in. Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 in.

Blow: STRONG thru Both Flow Periods

Recovered 310 ft. of mud cut water Chlorides = 86,000 p.p.m. Recovered ft. of Recovered ft. of Recovered ft. of Recovered ft. of Recovered ft. of Remarks:

ON LOCATION 10:00 P.M. - pick up tool 12:00 A.M. - OFF LOCATION 8:00 A.M.

Table with 4 columns: Time Set, Packer(s), Time Started Off Bottom, Maximum Temperature. Rows include Initial Hydrostatic Pressure, Initial Flow Period, Initial Closed In Period, Final Flow Period, Final Closed In Period, Final Hydrostatic Pressure.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Robert Armstrong Signature of Customer or his authorized representative

Western Representative Dave Sloan

Thank you

RECEIVED JUN 4 - 1980

FIELD INVOICE

Table with 2 columns: Item, Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub, Mileage, Fluid Sampler, Extra Charts, TOTAL.

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 6-3-80 Test Ticket No. 6186  
 Recorder No. 2604 Capacity 4150 Location 4406 Ft.  
 Clock No. \_\_\_\_\_ Elevation 2079 K.B. Well Temperature 135 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2215</u>	P.S.I.	<u>1:35</u> AM	
B First Initial Flow Pressure	<u>58</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>100</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>676</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>138</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>168</u>	P.S.I.		
G Final Closed-in Pressure	<u>673</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2126</u>	P.S.I.		

**PRESSURE BREAKDOWN**

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>9</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>9</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>0</u>	<u>100</u>	<u>0</u>	<u>138</u>	<u>0</u>	<u>168</u>
P 2	<u>5</u>	<u>3</u>	<u>250</u>	<u>5</u>	<u>131</u>	<u>3</u>	<u>346</u>
P 3	<u>10</u>	<u>6</u>	<u>602</u>	<u>10</u>	<u>131</u>	<u>6</u>	<u>596</u>
P 4	<u>15</u>	<u>9</u>	<u>636</u>	<u>15</u>	<u>134</u>	<u>9</u>	<u>630</u>
P 5	<u>20</u>	<u>12</u>	<u>655</u>	<u>20</u>	<u>141</u>	<u>12</u>	<u>646</u>
P 6	<u>25</u>	<u>15</u>	<u>661</u>	<u>25</u>	<u>147</u>	<u>15</u>	<u>657</u>
P 7	<u>30</u>	<u>18</u>	<u>670</u>	<u>30</u>	<u>153</u>	<u>18</u>	<u>659</u>
P 8	<u>35</u>	<u>21</u>	<u>671</u>	<u>35</u>	<u>160</u>	<u>21</u>	<u>665</u>
P 9	<u>40</u>	<u>24</u>	<u>673</u>	<u>40</u>	<u>165</u>	<u>24</u>	<u>669</u>
P10	<u>45</u>	<u>27</u>	<u>676</u>	<u>45</u>	<u>168</u>	<u>27</u>	<u>669</u>
P11	<u>50</u>	<u>30</u>		<u>50</u>		<u>30</u>	<u>669</u>
P12	<u>55</u>	<u>33</u>		<u>55</u>		<u>33</u>	<u>671</u>
P13	<u>60</u>	<u>36</u>		<u>60</u>		<u>36</u>	<u>671</u>
P14		<u>39</u>		<u>65</u>		<u>39</u>	<u>672</u>
P15		<u>42</u>		<u>70</u>		<u>42</u>	<u>672</u>
P16		<u>45</u>	<u>676</u>	<u>75</u>		<u>45</u>	<u>673</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	
P18		<u>51</u>		<u>85</u>		<u>51</u>	
P19		<u>54</u>		<u>90</u>		<u>54</u>	
P20		<u>57</u>				<u>57</u>	
		<u>60</u>				<u>60</u>	



**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 6-3-80

Test Ticket No. 6186

Recorder No. 2604

Capacity 4150

Location 4406 Ft.

Clock No. ----

Elevation 2079 Kelly Bushing

Well Temperature 135 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2215</u> P.S.I.	Open Tool	<u>1:35</u> A. M	
B First Initial Flow Pressure	<u>58</u> P.S.I.	First Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>100</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>676</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>138</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>168</u> P.S.I.			
G Final Closed-in Pressure	<u>673</u> P.S.I.			
H Final Hydrostatic Mud	<u>2126</u> P.S.I.			

**PRESSURE BREAKDOWN**

**First Flow Pressure**  
Breakdown: 9 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

**Initial Shut-In**  
Breakdown: 15 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

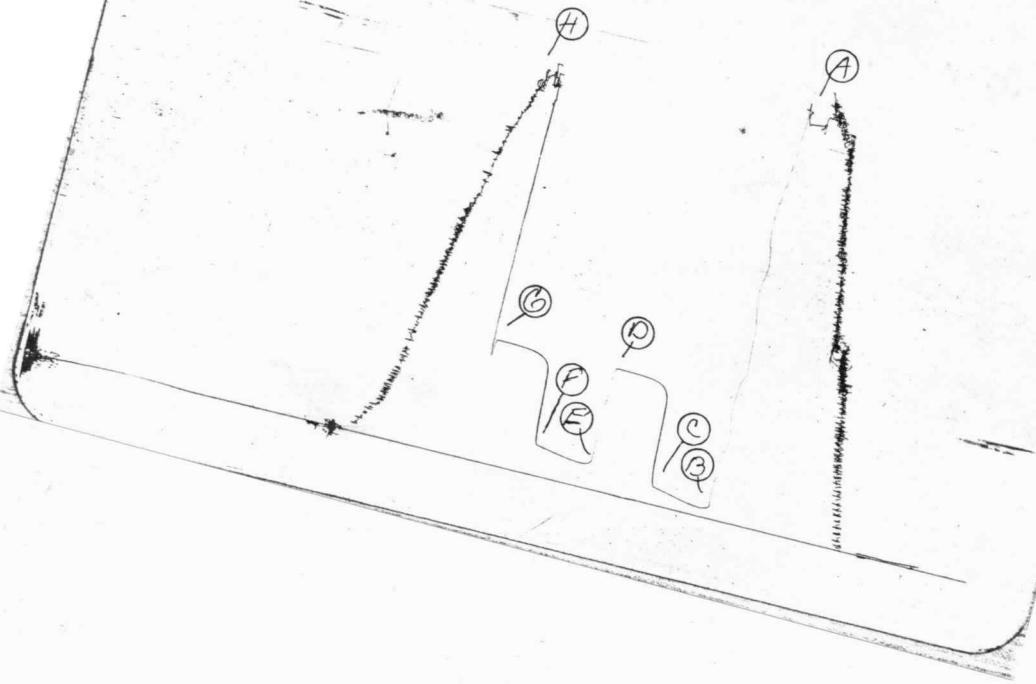
**Second Flow Pressure**  
Breakdown: 9 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

**Final Shut-In**  
Breakdown: 15 Inc.  
of 3 mins. and a  
final inc. of 0 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>100</u>	<u>0</u>	<u>138</u>	<u>0</u>	<u>168</u>
P 2 <u>5</u>	<u>51</u>	<u>3</u>	<u>250</u>	<u>5</u>	<u>131</u>	<u>3</u>	<u>346</u>
P 3 <u>10</u>	<u>51</u>	<u>6</u>	<u>602</u>	<u>10</u>	<u>131</u>	<u>6</u>	<u>596</u>
P 4 <u>15</u>	<u>58</u>	<u>9</u>	<u>636</u>	<u>15</u>	<u>134</u>	<u>9</u>	<u>630</u>
P 5 <u>20</u>	<u>64</u>	<u>12</u>	<u>655</u>	<u>20</u>	<u>141</u>	<u>12</u>	<u>646</u>
P 6 <u>25</u>	<u>75</u>	<u>15</u>	<u>661</u>	<u>25</u>	<u>147</u>	<u>15</u>	<u>657</u>
P 7 <u>30</u>	<u>81</u>	<u>18</u>	<u>670</u>	<u>30</u>	<u>153</u>	<u>18</u>	<u>659</u>
P 8 <u>35</u>	<u>91</u>	<u>21</u>	<u>671</u>	<u>35</u>	<u>160</u>	<u>21</u>	<u>665</u>
P 9 <u>40</u>	<u>96</u>	<u>24</u>	<u>673</u>	<u>40</u>	<u>165</u>	<u>24</u>	<u>669</u>
P10 <u>45</u>	<u>100</u>	<u>27</u>	<u>676</u>	<u>45</u>	<u>168</u>	<u>27</u>	<u>669</u>
P11		<u>30</u>	<u>676</u>			<u>30</u>	<u>669</u>
P12		<u>33</u>	<u>676</u>			<u>33</u>	<u>671</u>
P13		<u>36</u>	<u>676</u>			<u>36</u>	<u>671</u>
P14		<u>39</u>	<u>676</u>			<u>39</u>	<u>672</u>
P15		<u>42</u>	<u>676</u>			<u>42</u>	<u>672</u>
P16		<u>45</u>	<u>676</u>			<u>45</u>	<u>673</u>
P17							
P18							
P19							
P20							

TR # 6186  
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patton-oil  
Michael's  
DST





WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET NO 6187

P. O. BOX 1599 PHONE (316) 838-0601  
WICHITA, KANSAS 67201

Elevation 2079 K.B. Formation MISS. Eff. Pay Ft.

District PRATT Date 6-3-80 Customer Order No.  
COMPANY NAME PATTON OIL CO.

ADDRESS #200 5660 S. Synacres. Englewood, COLO.

LEASE AND WELL NO. Michael #2 COUNTY Edwards STATE KS Sec. 9 Twp 26S Rge 16W

Mail Invoice To Same Co. Name Address No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg.

Formation Test No. 2 Interval Tested from 4433 ft. to 4471 ft. Total Depth 4471 ft.  
Packer Depth 4428 ft. Size 6 3/4 in. Packer Depth ft. Size in.  
Packer Depth 4433 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set  
Top Recorder Depth (Inside) 4436 ft. Recorder Number 2604 Cap. 4150  
Bottom Recorder Depth (Outside) 4439 ft. Recorder Number 6246 Cap. 5200  
Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Big Springs #1 Drill Collar Length I. D. in.  
Mud Type DriSpace Viscosity 48 Weight Pipe Length I. D. in.  
Weight 9.2 Water Loss 18.9 cc. Drill Pipe Length 4413 I. D. 38 in.  
Chlorides 24,000 P.P.M. Test Tool Length 20 ft. Tool Size 5200 in.  
Jars: Make to Serial Number Anchor Length 38 ft. Size 5200 in.  
Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: STRONG thru Both Flow Periods Gas to Surface  
During Final closed in period

Recovered 837 ft. of mud + Gas cut water Chlorides 80,000 p.p.m.  
Recovered ft. of  
Recovered ft. of  
Recovered ft. of  
Recovered ft. of

Remarks:  
ON LOCATION 3:00 P.M. - Pick up Tool 4:45 P.M. - OFF LOCATION 1:00 A.M.  
Time Set Packer(s) 6:10 A.M. Time Started Off Bottom 9:10 A.M. Maximum Temperature 126 P.M.  
Initial Hydrostatic Pressure (A) 2337 P.S.I.  
Initial Flow Period Minutes 45 (B) 31 P.S.I. to (C) 149 P.S.I.  
Initial Closed In Period Minutes 45 (D) 352 P.S.I.  
Final Flow Period Minutes 45 (E) 298 P.S.I. to (F) 363 P.S.I.  
Final Closed In Period Minutes 45 (G) 658 P.S.I.  
Final Hydrostatic Pressure (H) 2105 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Robert C. Crumpton  
Signature of Customer or his authorized representative

Western Representative Dave Sloan  
Thank you

FIELD INVOICE

Open Hole Test \$ 600.00  
Misrun \$  
Straddle Test \$  
Jars \$  
Selective Zone \$  
Safety Joint \$  
Standby \$  
Evaluation \$  
Extra Packer \$  
Circ. Sub. \$  
Mileage \$ N.C.  
Fluid Sampler \$  
Extra Charts \$  
TOTAL \$ 600.00

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 6-3-80 Test Ticket No. 6187  
 Recorder No. 2604 Capacity 4150 Location 4436 Ft.  
 Clock No.      Elevation 2079 KB Well Temperature 126 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2358</u>	P.S.I.	<u>6:10 PM</u>	
B First Initial Flow Pressure	<u>64</u>	P.S.I.	<u>45</u>	<u>45</u> Mins.
C First Final Flow Pressure	<u>179</u>	P.S.I.	<u>45</u>	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>382</u>	P.S.I.	<u>45</u>	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>320</u>	P.S.I.	<u>45</u>	<u>45</u> Mins.
F Second Final Flow Pressure	<u>395</u>	P.S.I.		
G Final Closed-in Pressure	<u>665</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2129</u>	P.S.I.		

**PRESSURE BREAKDOWN**

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>9</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>9</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>0</u>	<u>179</u>	<u>0</u>	<u>320</u>	<u>0</u>	<u>395</u>
P 2	<u>5</u>	<u>3</u>	<u>245</u>	<u>5</u>	<u>316</u>	<u>3</u>	<u>491</u>
P 3	<u>10</u>	<u>6</u>	<u>281</u>	<u>10</u>	<u>322</u>	<u>6</u>	<u>590</u>
P 4	<u>15</u>	<u>9</u>	<u>307</u>	<u>15</u>	<u>329</u>	<u>9</u>	<u>615</u>
P 5	<u>20</u>	<u>12</u>	<u>325</u>	<u>20</u>	<u>338</u>	<u>12</u>	<u>627</u>
P 6	<u>25</u>	<u>15</u>	<u>344</u>	<u>25</u>	<u>352</u>	<u>15</u>	<u>638</u>
P 7	<u>30</u>	<u>18</u>	<u>352</u>	<u>30</u>	<u>366</u>	<u>18</u>	<u>644</u>
P 8	<u>35</u>	<u>21</u>	<u>359</u>	<u>35</u>	<u>378</u>	<u>21</u>	<u>649</u>
P 9	<u>40</u>	<u>24</u>	<u>363</u>	<u>40</u>	<u>387</u>	<u>24</u>	<u>653</u>
P10	<u>45</u>	<u>27</u>	<u>366</u>	<u>45</u>	<u>395</u>	<u>27</u>	<u>657</u>
P11	<u>50</u>	<u>30</u>	<u>369</u>	<u>50</u>		<u>30</u>	<u>658</u>
P12	<u>55</u>	<u>33</u>	<u>372</u>	<u>55</u>		<u>33</u>	<u>660</u>
P13	<u>60</u>	<u>36</u>	<u>374</u>	<u>60</u>		<u>36</u>	<u>661</u>
P14		<u>39</u>	<u>376</u>	<u>65</u>		<u>39</u>	<u>663</u>
P15		<u>42</u>	<u>379</u>	<u>70</u>		<u>42</u>	<u>664</u>
P16		<u>45</u>	<u>382</u>	<u>75</u>		<u>45</u>	<u>665</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	
P18		<u>51</u>		<u>85</u>		<u>51</u>	
P19		<u>54</u>		<u>90</u>		<u>54</u>	
P20		<u>57</u>				<u>57</u>	
		<u>60</u>				<u>60</u>	

Company Patton Oil Co. Lease & Well No. Michael #2  
 Elevation 2079 Kelly Bush Formation Mississippi Effective Pay - Ft. Ticket No. 6187  
 Date 6-3-80 Sec. 9 Twp. 26S Range 16W County Edwards State Kansas  
 Test Approved by Robert C. Armstrong Western Representative Dave Sloan

Formation Test No. 2 Interval Tested from 4433 ft. to 4471 ft. Total Depth 4471 ft.  
 Packer Depth 4428 ft. Size 6 3/4 in. Packer Depth 4433 ft. Size 6 3/4 in.  
 Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4436 ft. Recorder Number 2604 Cap 4150  
 Bottom Recorder Depth (Outside) 4439 ft. Recorder Number 6246 Cap 5200  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor Big Springs Drlg. (#1) Drill Collar Length - I. D. - in.  
 Mud Type Drispac Viscosity 48 Weight Pipe Length - I. D. - in.  
 Weight 9.2 Water Loss 18.9 cc. Drill Pipe Length 4413 I. D. 3.8 in.  
 Chlorides 24,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
 Jars: Make - Serial Number - Anchor Length 38 ft. Size 5 1/2 OD in.  
 Did Well Flow? No Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Strong blow throughout test. Gas to surface during final closed in period.

Recovered 837 ft. of mud and gas cut water Chlorides: 80,000PPM  
 Recovered          ft. of           
 Recovered          ft. of           
 Recovered          ft. of           
 Recovered          ft. of         

Remarks:         

Time Set Packer(s) 6:10 ~~5:30~~ P.M. Time Started Off Bottom 9:10 ~~8:30~~ P.M. Maximum Temperature 126  
 Initial Hydrostatic Pressure ..... (A) 2358 P.S.I.  
 Initial Flow Period ..... Minutes 45 (B) 64 P.S.I. to (C) 179 P.S.I.  
 Initial Closed In Period ..... Minutes 45 (D) 382 P.S.I.  
 Final Flow Period ..... Minutes 45 (E) 320 P.S.I. to (F) 395 P.S.I.  
 Final Closed In Period ..... Minutes 45 (G) 665 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 2129 P.S.I.

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 6-3-80 Test Ticket No. 6187  
 Recorder No. 2604 Capacity 4150 Location 4436 Ft.  
 Clock No. ----- Elevation 2079 Kelly Bushing Well Temperature 126 °F

Point	Pressure		Time Given		Time Computed	
			P.	M.		
A Initial Hydrostatic Mud	2358	P.S.I.	6:10			
B First Initial Flow Pressure	64	P.S.I.	45	Mins.	45	Mins.
C First Final Flow Pressure	179	P.S.I.	45	Mins.	45	Mins.
D Initial Closed-in Pressure	382	P.S.I.	45	Mins.	45	Mins.
E Second Initial Flow Pressure	320	P.S.I.	45	Mins.	45	Mins.
F Second Final Flow Pressure	395	P.S.I.				
G Final Closed-in Pressure	665	P.S.I.				
H Final Hydrostatic Mud	2129	P.S.I.				

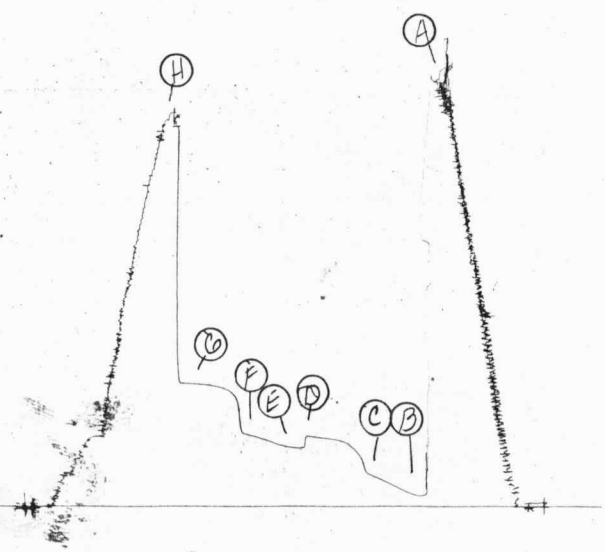
**PRESSURE BREAKDOWN**

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	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 0	65	0	179	0	320	0	395	
P 2 5	58	3	245	5	316	3	491	
P 3 10	68	6	281	10	322	6	590	
P 4 15	81	9	307	15	329	9	615	
P 5 20	99	12	325	20	338	12	627	
P 6 25	117	15	344	25	352	15	638	
P 7 30	134	18	352	30	366	18	644	
P 8 35	152	21	359	35	378	21	649	
P 9 40	168	24	363	40	387	24	653	
P10 45	179	27	366	45	395	27	657	
P11		30	369			30	658	
P12		33	372			33	660	
P13		36	374			36	661	
P14		39	376			39	663	
P15		42	379			42	664	
P16		45	382			45	665	
P17								
P18								
P19								
P20								

104

paton oil  
Michael +  
DSTV

Wt # 6187  
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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 6188

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation 2079 K.B. Formation Kinderhook chert Pay Ft.

District PRATT Date 6-4-80 Customer Order No.

COMPANY NAME PATTON oil Co.

ADDRESS 5660 S. Syracuse Circle #200 Englewood, Colorado

LEASE AND WELL NO. Michael #2 COUNTY Edwards STATE KS. Sec. 9 Twp 26S Rge 16W

Mail Invoice To Same Co. Name Address No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 3 Interval Tested from 4485 ft. to 4525 ft. Total Depth 4525 ft.

Packer Depth 4480 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4485 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4488 ft. Recorder Number 2604 Cap. 4150

Bottom Recorder Depth (Outside) 4491 ft. Recorder Number 6246 Cap. 5200

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Big Springs #1 Drill Collar Length I. D. in.

Mud Type Pt 13 pac Viscosity 52 Weight Pipe Length I. D. in.

Weight 7.3 Water Loss 14.4 cc. Drill Pipe Length I. D. 3.8 in.

Chlorides 28,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 o.d. in.

Jars: Make Serial Number Anchor Length 40 ft. Size 5 1/2 o.d. in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: WEAK - dying 15 min. Initial Flow period

Recovered 10 ft. of DRG. mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

ON LOCATION 1:00 P.M. - Pick up Tool 2:00 P.M. - OFF LOCATION 7:00 P.M.

Time Set Packer(s) 3:30 AM P.M. Time Started Off Bottom 5:30 AM P.M. Maximum Temperature 126

Initial Hydrostatic Pressure (A) 2316 P.S.I.

Initial Flow Period Minutes 30 (B) 31 P.S.I. to (C) 21 P.S.I.

Initial Closed In Period Minutes 30 (D) 363 P.S.I.

Final Flow Period Minutes 30 (E) 31 P.S.I. to (F) 31 P.S.I.

Final Closed In Period Minutes 30 (G) 127 P.S.I.

Final Hydrostatic Pressure (H) 2263 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Robert C. Armentrout Signature of Customer or his authorized representative

Western Representative Dave Sloan

Thank you

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$600.00), Mileage 30 (\$22.50), and TOTAL (\$622.50).

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 6-4-80 Test Ticket No. 6188  
 Recorder No. 2604 Capacity 4150 Location 4488 Ft.  
 Clock No. — Elevation 2079 K.B Well Temperature 126 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2306</u> P.S.I.	<u>3:30</u> P	M
B First Initial Flow Pressure	<u>64</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>28</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>374</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>72</u> P.S.I.	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>34</u> P.S.I.		
G Final Closed-in Pressure	P.S.I.		
H Final Hydrostatic Mud	<u>2282</u> P.S.I.		

**PRESSURE BREAKDOWN**

**First Flow Pressure**  
 Breakdown: 6 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Initial Shut-In**  
 Breakdown: 10 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

**Second Flow Pressure**  
 Breakdown: 6 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Final Shut-In**  
 Breakdown: 9 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>64</u>	0	<u>28</u>	0	<u>72</u>	0	<u>34</u>
P 2	<u>36</u>	3	<u>32</u>	5	<u>45</u>	3	<u>40</u>
P 3	<u>28</u>	6	<u>40</u>	10	<u>36</u>	6	<u>45</u>
P 4		9	<u>48</u>	15	<u>34</u>	9	<u>51</u>
P 5		12	<u>63</u>	20		12	<u>62</u>
P 6		15	<u>87</u>	25		15	<u>72</u>
P 7	<u>28</u>	18	<u>121</u>	30 ✓	<u>34</u>	18	<u>87</u>
P 8		21	<u>183</u>	35		21	<u>107</u>
P 9		24	<u>247</u>	40		24	<u>132</u>
P10		27	<u>327</u>	45		27	<u>141</u>
P11		30 ✓	<u>374</u>	50		30 -	
P12		33		55		33	
P13		36		60		36	
P14		39		65		39	
P15		42		70		42	
P16		45		75		45	
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P20		57				57	
		60				60	

Company Patton Oil Co. Lease & Well No. Michael #2  
 Elevation 2079 Kelly Bush Formation Kinderhook Chert Effective Pay - Ft. Ticket No. 6188  
 Date 6-4-80 Sec. 9 Twp. 26S Range 16W County Edwards State Kansas  
 Test Approved by Robert C. Armstrong Western Representative Dave Sloan

Formation Test No. 3 Interval Tested from 4485 ft. to 4525 ft. Total Depth 4525 ft.  
 Packer Depth 4480 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4485 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 4488 ft. Recorder Number 2604 Cap. 4150  
 Bottom Recorder Depth (Outside) 4491 ft. Recorder Number 6246 Cap. 5200  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Big Springs Drlg. (#1) Drill Collar Length - I. D. - in.  
 Mud Type Drispac Viscosity 52 Weight Pipe Length - I. D. - in.  
 Weight 9.3 Water Loss 14.4 cc. Drill Pipe Length 4465 I. D. 3.8 in.  
 Chlorides 28,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
 Jars: Make - Serial Number - Anchor Length 40 ft. Size 5 1/2 OD in.  
 Did Well Flow? No Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Weak blow dying in 15 minutes on initial flow period.

Recovered 10 ft. of drilling mud  
 Recovered     ft. of      
 Recovered     ft. of      
 Recovered     ft. of      
 Recovered     ft. of    

Remarks:    

Time Set Packer(s) 3:30 ~~AM~~ P.M. Time Started Off Bottom 5:30 ~~AM~~ P.M. Maximum Temperature 126  
 Initial Hydrostatic Pressure (A) 2306 P.S.I.  
 Initial Flow Period Minutes 30 (B) 64 P.S.I. to (C) 28 P.S.I.  
 Initial Closed In Period Minutes 30 (D) 374 P.S.I.  
 Final Flow Period Minutes 30 (E) 72 P.S.I. to (F) 34 P.S.I.  
 Final Closed In Period Minutes 27 (G) 141 P.S.I.  
 Final Hydrostatic Pressure (H) 2283 P.S.I.

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 6-4-80 Test Ticket No. 6188  
 Recorder No. 2604 Capacity 4150 Location 4488 Ft.  
 Clock No. - Elevation 2079 Kelly Bushing Well Temperature 126 °F

Point	Pressure			Time Given	Time Computed
		P.S.I.			
Initial Hydrostatic Mud	2306	P.S.I.	Open Tool	3:30P.	M
First Initial Flow Pressure	24	P.S.I.	First Flow Pressure	30	Mins. 30 Mins.
First Final Flow Pressure	28	P.S.I.	Initial Closed-in Pressure	30	Mins. 30 Mins.
Initial Closed-in Pressure	374	P.S.I.	Second Flow Pressure	30	Mins. 30 Mins.
Second Initial Flow Pressure	72	P.S.I.	Final Closed-in Pressure	30	Mins. 27 Mins.
Second Final Flow Pressure	34	P.S.I.			
Final Closed-in Pressure	141	P.S.I.			
Final Hydrostatic Mud	2282	P.S.I.			

**PRESSURE BREAKDOWN**

Point ns.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	6		10		6		9	
	of 5	mins. and a	of 3	mins. and a	of 5	mins. and a	of 3	mins. and a
	final inc. of 0	Min.	final inc. of 0	Min.	final inc. of 0	Min.	final inc. of 0	Min.
	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes
1	64	0	28	0	72	0	34	0
2	36	3	32	3	45	3	40	3
3	28	6	40	6	36	6	45	6
4	28	9	48	9	34	9	51	9
5	28	12	63	12	34	12	62	12
6	28	15	87	15	34	15	72	15
7	28	18	121	18	34	18	87	18
8		21	183	21		21	107	21
9		24	247	24		24	132	24
10		27	327	27		27	141	27
11		30	374	30				
12								
13								
14								
15								
16								
17								
18								
19								
20								

PATTON  
Michael  
DST 3

TR# 6188  
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