



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 5972

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

Elevation 1372 KB Formation Uncl Eff. Pay Ft.

District Augusta Date 15 May 80 Customer Order No.

COMPANY NAME Ponderton Land & Development Co

ADDRESS 1700 Security Life Bldg - Denver, Colo 80202

LEASE AND WELL NO. Hatch #1 COUNTY Washington STATE Kan Sec. 22 Twp 13S Rge 10E

Mail Invoice To Same Co. Name Address No. Copies Requested 1

Mail Charts To Same Co. Name Address No. Copies Requested 5

Formation Test No. 1 Interval Tested from 3224 ft. to 3230 ft. Total Depth 3230 ft.

Packer Depth 3219 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 3224 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3208 ft. Recorder Number 1557 Cap. 4200

Bottom Recorder Depth (Outside) 3211 ft. Recorder Number 1558 Cap. 4200

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Edco #6 Drill Collar Length 240' I. D. 2 1/4 in.

Mud Type Chemical Viscosity 37 Weight Pipe Length I. D. in.

Weight 9.3 Water Loss .2 cc. Drill Pipe Length 3000' I. D. 3.8 in.

Chlorides 1300 P.P.M. Test Tool Length 40 ft. Tool Size 5 1/2 in.

Jars: Make WTC Serial Number 404 Anchor Length 6 ft. Size 5 1/2 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: weak increasing to strong flow on initial flow period / then slow on final flow period

Recovered 630 ft. of heavy oil 10 gravity

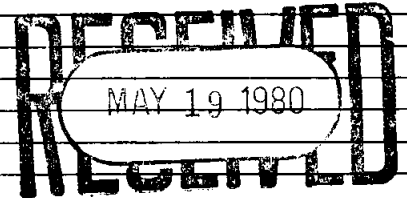
Recovered 30 ft. of soft water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:



Time on location: 12:00 AM / prior test 3:30 AM / job complete 1:00 PM

Time Set Packer(s) 6:00 AM. Time Started Off Bottom 9:20 AM. Maximum Temperature 113°

Initial Hydrostatic Pressure (A) 1567 P.S.I.

Initial Flow Period Minutes 23:30 (B) 62 P.S.I. to (C) 146 P.S.I.

Initial Closed In Period Minutes 45 (D) 1002 P.S.I.

Final Flow Period Minutes 60 (E) 209 P.S.I. to (F) 282 P.S.I.

Final Closed In Period Minutes 60 (G) 1002 P.S.I.

Final Hydrostatic Pressure (H) 1556 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 Ray A. Vand
Signature of Customer or his authorized representative

Western Representative WK Hager Thank You!

FIELD INVOICE

Open Hole Test	\$ 550 ⁰⁰
Misrun	\$
Straddle Test	\$
Jars	\$ 300 ⁰⁰
Selective Zone	\$
Safety Joint	\$ 50 ⁰⁰
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
124 Mileage x .754	\$ 93.00
Fluid Sampler	\$
Extra Charts	\$
TOTAL	\$ 993.00

WESTERN TESTING CO., INC.
Pressure Data

Date 5-15-80 Test Ticket No. 5972
 Recorder No. 1559 Capacity 4200 Location 3208 Ft.
 Block No. _____ Elevation 1392 K.B. Well Temperature 113 °F

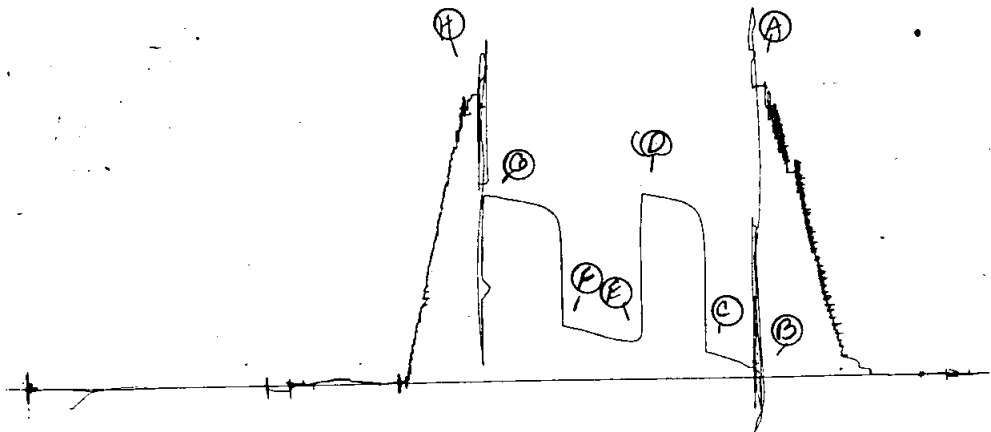
Point	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	<u>1567</u>	P.S.I.	<u>6:00 A</u>	M
First Initial Flow Pressure	<u>54</u>	P.S.I.	<u>36</u> Mins.	<u>35</u> Mins.
First Final Flow Pressure	<u>142</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
Initial Closed-in Pressure	<u>996</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
Second Initial Flow Pressure	<u>213</u>	P.S.I.	<u>60</u> Mins.	<u>57</u> Mins.
Second Final Flow Pressure	<u>292</u>	P.S.I.		
Final Closed-in Pressure	<u>998</u>	P.S.I.		
Final Hydrostatic Mud	<u>1548</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>7</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Initial Shut-In Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Second Flow Pressure Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Final Shut-In Breakdown: <u>19</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
--	---	--	---

Point mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1 0	<u>54</u>	0	<u>142</u>	0	<u>213</u>	0	<u>292</u>
2 5	<u>62</u>	3	<u>795</u>	5	<u>204</u>	3	<u>855</u>
3 10	<u>85</u>	6	<u>872</u>	10	<u>204</u>	6	<u>891</u>
4 15	<u>98</u>	9	<u>905</u>	15	<u>211</u>	9	<u>908</u>
5 20	<u>110</u>	12	<u>926</u>	20	<u>217</u>	12	<u>926</u>
6 25	<u>123</u>	15	<u>939</u>	25	<u>226</u>	15	<u>935</u>
7 30	<u>133</u>	18	<u>949</u>	30	<u>236</u>	18	<u>943</u>
8 35	<u>142</u>	21	<u>958</u>	35	242 <u>250</u>	21	<u>949</u>
9 40		24	<u>962</u>	40	246 <u>263</u>	24	<u>955</u>
10 45		27	<u>964</u>	45	252 <u>273</u>	27	<u>960</u>
11 50		30	<u>967</u>	50	258 <u>280</u>	30	<u>964</u>
12 55		33	<u>971</u>	55	265 <u>288</u>	33	<u>968</u>
13 60		36	<u>977</u>	60	271 <u>292</u>	36	<u>972</u>
14		39	<u>983</u>	65	278	39	<u>978</u>
15		42	<u>991</u>	70	<u>280</u>	42	<u>982</u>
16		45	<u>996</u>	75	<u>282</u>	45	<u>987</u>
17		48		80	<u>284</u>	48	<u>993</u>
18		51		85	<u>290</u>	51	<u>997</u>
19		54		90		54	<u>998</u>
20		57				57	<u>998</u>
		60				60	

TK# 5972
I



Company Pendleton Land & Exploration, Inc. Lease & Well No. Hess #1
 Elevation 1392 Kelly Bushing Formation Viola Effective Pay - Ft. Ticket No. 5972
 Date 5/15/80 Sec. 22 Twp. 13S Range 10E County Wabaunsee State Kansas
 Test Approved by Percy A. Hand Western Representative W. K. Hager

Formation Test No. 1 Interval Tested from 3224 ft. to 3230 ft. Total Depth 3230 ft.
 Packer Depth 3219 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3224 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3208 ft. Recorder Number 1559 Cap. 4200
 Bottom Recorder Depth (Outside) 3211 ft. Recorder Number 1558 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Edco Drilling Rig #6 Drill Collar Length 240 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 37 Weight Pipe Length - I. D. - in.
 Weight 9.3 Water Loss 12 cc. Drill Pipe Length 3000 I. D. 3.8 in.
 Chlorides 1,300 P.P.M. Test Tool Length 40 ft. Tool Size 5 1/2 in.
 Jars: Make WTC Serial Number 404 Anchor Length 6 ft. Size 5 1/2 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 increasing to strong blow on initial flow period/strong blow on final flow period.

Recovered 630 ft. of heavy oil 10° gravity
 Recovered 30 ft. of salt water
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 6:00 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 9:20 ~~P.M.~~ ^{A.M.} Maximum Temperature 113°
 Initial Hydrostatic Pressure (A) 1567 P.S.I.
 Initial Flow Period Minutes 35 (B) 54 P.S.I. to (C) 142 P.S.I.
 Initial Closed In Period Minutes 45 (D) 996 P.S.I.
 Final Flow Period Minutes 60 (E) 213 P.S.I. to (F) 292 P.S.I.
 Final Closed In Period Minutes 57 (G) 998 P.S.I.
 Final Hydrostatic Pressure (H) 1548 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 5-15-80 Test Ticket No. 5972
 Recorder No. 1559 Capacity 4200 Location 3208 Ft.
 Clock No. ---- Elevation 1392 Kelly Bushing Well Temperature 113 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1567</u> P.S.I.	Open Tool	<u>6:00</u> A. M.	
B First Initial Flow Pressure	<u>54</u> P.S.I.	First Flow Pressure	<u>36</u> Mins.	<u>35</u> Mins.
C First Final Flow Pressure	<u>142</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>996</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>213</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>292</u> P.S.I.			
G Final Closed-in Pressure	<u>998</u> P.S.I.			
H Final Hydrostatic Mud	<u>1548</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 7 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: 12 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 19 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point	Mins.	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1	<u>0</u>	<u>54</u>		<u>0</u>	<u>142</u>		<u>0</u>	<u>292</u>
P 2	<u>5</u>	<u>62</u>		<u>3</u>	<u>795</u>		<u>3</u>	<u>855</u>
P 3	<u>10</u>	<u>85</u>		<u>6</u>	<u>872</u>		<u>6</u>	<u>891</u>
P 4	<u>15</u>	<u>98</u>		<u>9</u>	<u>905</u>		<u>9</u>	<u>908</u>
P 5	<u>20</u>	<u>110</u>		<u>12</u>	<u>926</u>		<u>12</u>	<u>926</u>
P 6	<u>25</u>	<u>123</u>		<u>15</u>	<u>939</u>		<u>15</u>	<u>935</u>
P 7	<u>30</u>	<u>133</u>		<u>18</u>	<u>949</u>		<u>18</u>	<u>943</u>
P 8	<u>35</u>	<u>142</u>		<u>21</u>	<u>958</u>		<u>21</u>	<u>949</u>
P 9				<u>24</u>	<u>962</u>		<u>24</u>	<u>955</u>
P10				<u>27</u>	<u>964</u>		<u>27</u>	<u>960</u>
P11				<u>30</u>	<u>967</u>		<u>30</u>	<u>964</u>
P12				<u>33</u>	<u>971</u>		<u>33</u>	<u>968</u>
P13				<u>36</u>	<u>977</u>		<u>36</u>	<u>972</u>
P14				<u>39</u>	<u>983</u>		<u>39</u>	<u>978</u>
P15				<u>42</u>	<u>991</u>		<u>42</u>	<u>982</u>
P16				<u>45</u>	<u>996</u>		<u>45</u>	<u>987</u>
P17							<u>48</u>	<u>993</u>
P18							<u>51</u>	<u>997</u>
P19							<u>54</u>	<u>998</u>
P20							<u>57</u>	<u>998</u>