



P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 7604

Elevation 2179 H.B Formation Miss Eff. Pay — Ft.

District Pratt Date 9/14/80 Customer Order No. —

COMPANY NAME Pendleton Land & Exploration Inc.

ADDRESS 1700 Security Life Bldg. Denver Colo.

LEASE AND WELL NO. Ruff #1-B COUNTY Hodgeman STATE Ks Sec. 25 Twp. 22 Rge. 22W

Mail Invoice To Same Co. Name — Address — No. Copies Requested 5

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

Formation Test No. 1 Interval Tested from 4406 ft. to 4447 ft. Total Depth 4447 ft.

Packer Depth 4406 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 4406 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4437 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4440 ft. Recorder Number 3351 Cap. 4000

Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Buffalo Drilling Rig #7 Drill Collar Length — I. D. — in.

Mud Type Premix-Monpac Viscosity 42 Weight Pipe Length 623 I. D. 2.7 in.

Weight 9.5 Water Loss 11.2 cc. Drill Pipe Length 3759 I. D. 3.8 in.

Chlorides 25,000 P.P.M. Test Tool Length 24 ft. Tool Size 5 1/2 in.

Jars: Make — Serial Number — Anchor Length 41 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 1/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Weak to fair blow throughout flow periods

Recovered 90 ft. of Muddy Water (Few specks of oil)

Recovered — ft. of —

Recovered — ft. of —

Recovered — ft. of —

Recovered — ft. of —

Remarks: —

—

Time On Location 6:00 ~~P.M.~~ Time Pick Up Tool 7:00 ~~P.M.~~ Time Off Location 4:00 ~~P.M.~~

Time Set Packer(s) 9:20 ~~P.M.~~ Time Started Off Bottom 12:20 ~~P.M.~~ Maximum Temperature 128°

Initial Hydrostatic Pressure — (A) 2257 P.S.I.

Initial Flow Period — Minutes 15 (B) 63 P.S.I. to (C) 63 P.S.I.

Initial Closed In Period — Minutes 45 (D) 1374 P.S.I.

Final Flow Period — Minutes 60 (E) 73 P.S.I. to (F) 95 P.S.I.

Final Closed In Period — Minutes 60 (G) 1374 P.S.I.

Final Hydrostatic Pressure — (H) 2236 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 John Youle
Signature of Customer or his authorized representative

Western Representative Jim Wondra Thank You

FIELD INVOICE

Open Hole Test \$ 550.00
Misrun \$ —
Straddle Test \$ —
Jars \$ —
Selective Zone \$ —
Safety Joint \$ 150.00
Standby \$ —
Evaluation \$ —
Extra Packer \$ —
Circ. Sub. \$ —
Mileage 95m \$ 171.25
Fluid Sampler \$ —
Extra Charts \$ —
Insurance \$ —
TOTAL \$ 671.25

WESTERN TESTING CO., INC.

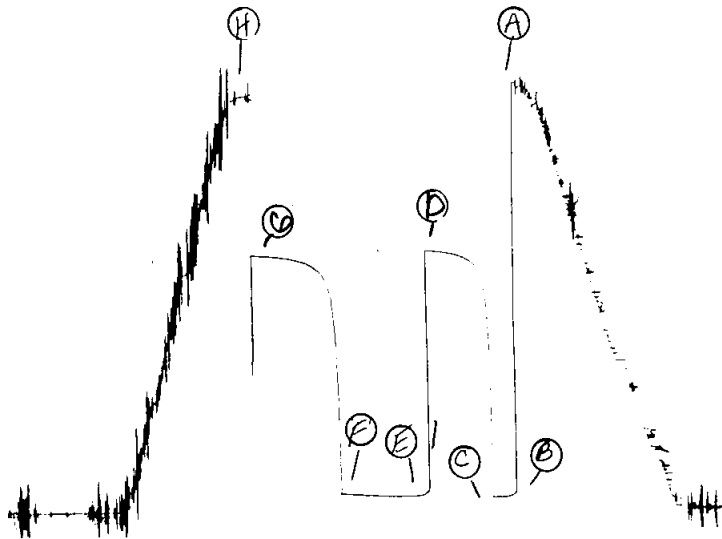
Pressure Data

Date 9-14-80 Test Ticket No. 7604
 Recorder No. 2607 Capacity 4150 Location 4437 Ft.
 Clock No. _____ Elevation 2179 Kelly Bushing Well Temperature 128 °F
 Point Pressure Time Given Time Computed
 A Initial Hydrostatic Mud 2267 P.S.I. Open Tool 9:20 PM
 B First Initial Flow Pressure 89 P.S.I. First Flow Pressure 15 Mins. 15 Mins.
 C First Final Flow Pressure 73 P.S.I. Initial Closed-in Pressure 45 Mins. 51 Mins.
 D Initial Closed-in Pressure 1403 P.S.I. Second Flow Pressure 60 Mins. 65 Mins.
 E Second Initial Flow Pressure 97 P.S.I. Final Closed-in Pressure 60 Mins. 66 Mins.
 F Second Final Flow Pressure 95 P.S.I.
 G Final Closed-in Pressure 1382 P.S.I.
 H Final Hydrostatic Mud 2240 P.S.I.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>17</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>22</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>89</u>	<u>0</u>	<u>73</u>	<u>0</u>	<u>97</u>	<u>0</u>	<u>95</u>
P 2 <u>5</u>	<u>78</u>	<u>3</u>	<u>671</u>	<u>5</u>	<u>87</u>	<u>3</u>	<u>517</u>
P 3 <u>10</u>	<u>74</u>	<u>6</u>	<u>1091</u>	<u>10</u>	<u>81</u>	<u>6</u>	<u>1008</u>
P 4 <u>15</u>	<u>73</u>	<u>9</u>	<u>1244</u>	<u>15</u>		<u>9</u>	<u>1186</u>
P 5 <u>20</u>		<u>12</u>	<u>1297</u>	<u>20</u>		<u>12</u>	<u>1252</u>
P 6 <u>25</u>		<u>15</u>	<u>1329</u>	<u>25</u>		<u>15</u>	<u>1286</u>
P 7 <u>30</u>		<u>18</u>	<u>1345</u>	<u>30</u>		<u>18</u>	<u>1303</u>
P 8 <u>35</u>		<u>21</u>	<u>1362</u>	<u>35</u>		<u>21</u>	<u>1322</u>
P 9 <u>40</u>		<u>24</u>	<u>1371</u>	<u>40</u>	<u>81</u>	<u>24</u>	<u>1334</u>
P10 <u>45</u>		<u>27</u>	<u>1378</u>	<u>45</u>	<u>86</u>	<u>27</u>	<u>1344</u>
P11 <u>50</u>		<u>30</u>	<u>1385</u>	<u>50</u>	<u>91</u>	<u>30</u>	<u>1351</u>
P12 <u>55</u>		<u>33</u>	<u>1390</u>	<u>55</u>	<u>91</u>	<u>33</u>	<u>1357</u>
P13 <u>60</u>		<u>36</u>	<u>1393</u>	<u>60</u>	<u>95</u>	<u>36</u>	<u>1362</u>
P14		<u>39</u>	<u>1395</u>	<u>65</u>	<u>95</u>	<u>39</u>	<u>1366</u>
P15		<u>42</u>	<u>1397</u>	<u>70</u>		<u>42</u>	<u>1368</u>
P16		<u>45</u>	<u>1400</u>	<u>75</u>		<u>45</u>	<u>1373</u>
P17		<u>48</u>	<u>1403</u>	<u>80</u>		<u>48</u>	<u>1375</u>
P18		<u>51</u>	<u>1403</u>	<u>85</u>		<u>51</u>	<u>1378</u>
P19		<u>54</u>		<u>90</u>		<u>54</u>	<u>1378</u>
P20		<u>57</u>				<u>57</u>	<u>1378</u>
		<u>60</u>				<u>60</u>	<u>1382</u>
		<u>63</u>				<u>63</u>	<u>1382</u>
		<u>66</u>				<u>66</u>	<u>1382</u>

Trk # 7604
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Company Pendleton Land & Exploration, Inc. Lease & Well No. Ruff #1-B
Elevation 2179 Kelly Bushing Formation Mississippi Effective Pay ----- Ft. Ticket No. 7604
Date 9/14/80 Sec. 25 Twp. 22 S Range 22 W County Hodgeman State KS
Test Approved by John Youle Western Representative Jim Wondra

Formation Test No. 1 Interval Tested from 4406 ft. to 4447 ft. Total Depth 4447 ft.

Packer Depth 4401 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.

Packer Depth 4406 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.

Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 4437 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4440 ft. Recorder Number 3351 Cap. 4000

Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. ---

Drilling Contractor Buffalo Drilling Rig #7 Drill Collar Length ----- I. D. ----- in.

Mud Type Premix-Monpac Viscosity 42 Weight Pipe Length 623 I. D. 2.7 in.

Weight 9.5 Water Loss 11.2 cc. Drill Pipe Length 3759 I. D. 3.8 in.

Chlorides 25,000 P.P.M. Test Tool Length 24 ft. Tool Size 5 1/2 OD in.

Jars: Make ----- Serial Number ----- Anchor Length 41 ft. Size 5 1/2 OD 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 to fair blow throughout test.

Recovered 90 ft. of Muddy water (Few specks of oil).

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 9:20 ~~P.M.~~ A.M. Time Started Off Bottom 12:20 ~~P.M.~~ A.M. Maximum Temperature 128 ° F.

Initial Hydrostatic Pressure (A) 2267 P.S.I.

Initial Flow Period Minutes 15 (B) 89 P.S.I. to (C) 73 P.S.I.

Initial Closed In Period Minutes 51 (D) 1403 P.S.I.

Final Flow Period Minutes 65 (E) 97 P.S.I. to (F) 95 P.S.I.

Final Closed In Period Minutes 66 (G) 1382 P.S.I.

Final Hydrostatic Pressure (H) 2240 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 9-14-80

Test Ticket No. 7604

Recorder No. 2607

Capacity 4150

Location 4437 Ft.

Clock No. ----- Elevation 2179

Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2267</u> P.S.I.	Open Tool	<u>9:20</u> P M	
B First Initial Flow Pressure	<u>89</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>73</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>51</u> Mins.
D Initial Closed-in Pressure	<u>1403</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>65</u> Mins.
E Second Initial Flow Pressure	<u>97</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>66</u> Mins.
F Second Final Flow Pressure	<u>95</u> P.S.I.			
G Final Closed-in Pressure	<u>1382</u> P.S.I.			
H Final Hydrostatic Mud	<u>2240</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>17</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>22</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>89</u>	<u>0</u>	<u>73</u>	<u>0</u>	<u>97</u>	<u>0</u>	<u>95</u>
P 2 <u>5</u>	<u>78</u>	<u>3</u>	<u>671</u>	<u>5</u>	<u>87</u>	<u>3</u>	<u>517</u>
P 3 <u>10</u>	<u>74</u>	<u>6</u>	<u>1091</u>	<u>10</u>	<u>81</u>	<u>6</u>	<u>1008</u>
P 4 <u>15</u>	<u>73</u>	<u>9</u>	<u>1244</u>	<u>15</u>	<u>81</u>	<u>9</u>	<u>1186</u>
P 5 _____		<u>12</u>	<u>1297</u>	<u>20</u>	<u>81</u>	<u>12</u>	<u>1252</u>
P 6 _____		<u>15</u>	<u>1329</u>	<u>25</u>	<u>81</u>	<u>15</u>	<u>1286</u>
P 7 _____		<u>18</u>	<u>1345</u>	<u>30</u>	<u>81</u>	<u>18</u>	<u>1303</u>
P 8 _____		<u>21</u>	<u>1362</u>	<u>35</u>	<u>81</u>	<u>21</u>	<u>1322</u>
P 9 _____		<u>24</u>	<u>1371</u>	<u>40</u>	<u>81</u>	<u>24</u>	<u>1334</u>
P10 _____		<u>27</u>	<u>1378</u>	<u>45</u>	<u>86</u>	<u>27</u>	<u>1344</u>
P11 _____		<u>30</u>	<u>1385</u>	<u>50</u>	<u>91</u>	<u>30</u>	<u>1351</u>
P12 _____		<u>33</u>	<u>1390</u>	<u>55</u>	<u>91</u>	<u>33</u>	<u>1357</u>
P13 _____		<u>36</u>	<u>1393</u>	<u>60</u>	<u>95</u>	<u>36</u>	<u>1362</u>
P14 _____		<u>39</u>	<u>1395</u>	<u>65</u>	<u>95</u>	<u>39</u>	<u>1366</u>
P15 _____		<u>42</u>	<u>1397</u>			<u>42</u>	<u>1368</u>
P16 _____		<u>45</u>	<u>1400</u>			<u>45</u>	<u>1373</u>
P17 _____		<u>48</u>	<u>1403</u>			<u>48</u>	<u>1375</u>
P18 _____		<u>51</u>	<u>1403</u>			<u>51</u>	<u>1378</u>
P19 _____						<u>54</u>	<u>1378</u>
P20 _____						<u>57</u>	<u>1378</u>
						<u>60</u>	<u>1382</u>
						<u>63</u>	<u>1382</u>
						<u>66</u>	<u>1382</u>