



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET NO 7387

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

Elevation 1856 KB Formation LANSING Eff. Pay

District Concat Bend Date 9-18-80 Customer Order No.

COMPANY NAME Petroleum Energy Inc.

ADDRESS Suite 710 ONE TWENTY Bldg, WICHITA KS 67202

LEASE AND WELL NO. Grosshart A3 COUNTY BARTON STATE KS Sec 9 Twp 17 S Rge 11 W

Mail Invoice To same Grosshardt "A" #3 No. Copies Requested 5

Mail Charts To same Copy to Murphy No. Copies Requested 8

Formation Test No. 1 Interval Tested from 3023 ft. to 3085 ft. Total Depth 3085 ft.

Packer Depth 3018 ft. Size 6 3/4 in. Packer Depth 3023 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) 3043 ft. Recorder Number 6077 Cap. 4700

Bottom Recorder Depth (Outside) 3046 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Allen Rig #1 Drill Collar Length 30 I. D. 2 1/4 in.

Mud Type Starch Viscosity 40 Weight Pipe Length I. D. in.

Weight 9.9 Water Loss 7.8 cc. Drill Pipe Length 2972 I. D. 3.8 in.

Chlorides 6500 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make Serial Number Anchor Length 62 ft. Size 5 1/2 with 1 drill collar

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 XH in.

Blow: 1/2 inch Blow slowly increasing to 4 inches in bucket first opening

Steady Blow 4 inches in bucket through second opening

Recovered 70 ft. of Gas in pipe

Recovered 50 ft. of Gas cut mud with some oil & water

Recovered ft. of 890 oil - 890 water - 6090 mud - 2490 Gas

Recovered ft. of

Recovered ft. of

Remarks: Chlorides 63,000 PPM

Time On Location 9:30 P.M. Time Pick Up Tool 11:30 P.M. Time Off Location 7:00 A.M.

Time Set Packer(s) 1:24 A.M. Time Started Off Bottom 4:29 A.M. Maximum Temperature 106

Initial Hydrostatic Pressure (A) 1653 P.S.I.

Initial Flow Period Minutes 45 (B) 61 P.S.I. to (C) 61 P.S.I.

Initial Closed In Period Minutes 45 (D) 134 P.S.I.

Final Flow Period Minutes 45 (E) 61 P.S.I. to (F) 61 P.S.I.

Final Closed In Period Minutes 45 (G) 110 P.S.I.

Final Hydrostatic Pressure (H) 1629 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 Signature of Customer or his authorized representative

Western Representative

FIELD INVOICE

Open Hole Test \$ 550.00

Misrun \$

Straddle Test \$

Jars \$

Selective Zone \$

Safety Joint \$

Standby \$

Evaluation \$

Extra Packer \$

Circ. Sub. \$

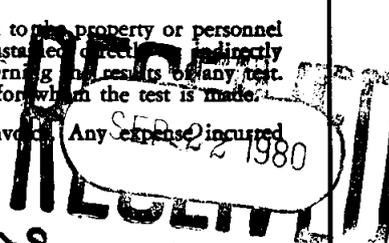
25 Mileage \$ 18.75

Fluid Sampler \$

Extra Charts \$

Insurance \$

TOTAL \$ 568.75



Handwritten signatures and 'Thank you' note

WESTERN TESTING CO., INC.

Pressure Data

Date 9-18-80 Test Ticket No. 7387
 Recorder No. 6077 Capacity 4700 Location 3043 Ft.
 Clock No. — Elevation 1856 KB Well Temperature 106 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1661</u>	P.S.I.	<u>1:24 A</u> M	
B First Initial Flow Pressure	<u>75</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>50</u>	P.S.I.	<u>45</u> Mins.	<u>57</u> Mins.
D Initial Closed-in Pressure	<u>118</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>72</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>50</u>	P.S.I.		
G Final Closed-in Pressure	<u>95</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1635</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: 19 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

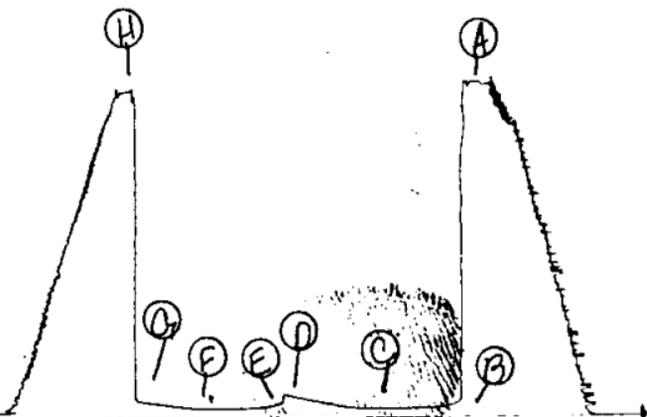
Second Flow Pressure
 Breakdown: 9 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

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>75</u>	<u>0</u>	<u>50</u>	<u>0</u>	<u>72</u>	<u>0</u>	<u>50</u>
P 2 <u>5</u>	<u>65</u>	<u>3</u>	<u>50</u>	<u>5</u>	<u>63</u>	<u>3</u>	<u>50</u>
P 3 <u>10</u>	<u>50</u>	<u>6</u>	<u>50</u>	<u>10</u>	<u>53</u>	<u>6</u>	<u>50</u>
P 4 <u>15</u>		<u>9</u>	<u>50</u>	<u>15</u>	<u>50</u>	<u>9</u>	<u>55</u>
P 5 <u>20</u>		<u>12</u>	<u>50</u>	<u>20</u>		<u>12</u>	<u>60</u>
P 6 <u>25</u>		<u>15</u>	<u>53</u>	<u>25</u>		<u>15</u>	<u>63</u>
P 7 <u>30</u>		<u>18</u>	<u>55</u>	<u>30</u>		<u>18</u>	<u>68</u>
P 8 <u>35</u>		<u>21</u>	<u>58</u>	<u>35</u>		<u>21</u>	<u>73</u>
P 9 <u>40</u>		<u>24</u>	<u>63</u>	<u>40</u>		<u>24</u>	<u>78</u>
P10 <u>45</u>	<u>50</u>	<u>27</u>	<u>68</u>	<u>45</u>	<u>50</u>	<u>27</u>	<u>80</u>
P11 <u>50</u>		<u>30</u>	<u>73</u>	<u>50</u>		<u>30</u>	<u>83</u>
P12 <u>55</u>		<u>33</u>	<u>82</u>	<u>55</u>		<u>33</u>	<u>85</u>
P13 <u>60</u>		<u>36</u>	<u>85</u>	<u>60</u>		<u>36</u>	<u>87</u>
P14		<u>39</u>	<u>89</u>	<u>65</u>		<u>39</u>	<u>89</u>
P15		<u>42</u>	<u>91</u>	<u>70</u>		<u>42</u>	<u>93</u>
P16		<u>45</u>	<u>95</u>	<u>75</u>		<u>45</u>	<u>95</u>
P17		<u>48</u>	<u>100</u>	<u>80</u>		<u>48</u>	
P18		<u>51</u>	<u>105</u>	<u>85</u>		<u>51</u>	
P19		<u>54</u>	<u>113</u>	<u>90</u>		<u>54</u>	
P20		<u>57</u>	<u>118</u>			<u>57</u>	
		<u>60</u>				<u>60</u>	

TK# 7387

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6097

Company Petroleum Energy, Inc. Lease & Well No. Grosshardt 'A' #3
 Elevation 1856 Kelly Bushing Lansing Formation Effective Pay ---- Ft. Ticket No. 7387
 Date 9/18/80 Sec. 9 Twp. 17S Range 11W County Barton State Kansas
 Test Approved by Jim Musgrove Western Representative Roger Lisenby

Formation Test No. 1 Interval Tested 3023 from 3085 ft. to 3085 ft. Total Depth 3085 ft.
 Packer Depth 3018 ft. Size 6 3/4 in. Packer Depth 3023 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) 3043 ft. Recorder Number 6077 Cap 4700
 Bottom Recorder Depth (Outside) 3046 ft. Recorder Number 1051 Cap 4250
 Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor Allen Drilling Rig #1 Drill Collar Length 30 I. D. 2 1/4 in.
 Mud Type starch Viscosity 40 Weight Pipe Length - I. D. - in.
 Weight 9.9 Water Loss 7.8 cc. Drill Pipe Length 2972 I. D. 3.8 in.
 Chlorides 65,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
 Jars: Make - Serial Number - Anchor Length 62 ft. Size 5 1/2 with 1 Drill Collar 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 XH in.

Blow: One half inch blow slowly increasing to four inches in bucket initial flow period. Steady blow four inches in bucket rhgouthout final flow period.

Recovered 70 ft. of gas in pipe
 Recovered 50 ft. of gas cut mud with some oil and water
 Recovered - ft. of 8% oil; 8% water; 60% mud; 24% gas
 Recovered - ft. of -
 Recovered - ft. of Chlorides 63,000 ppm

Remarks: _____

Time Set Packer(s) 1:24 ~~PM~~ A.M. Time Started Off Bottom 4:29 ~~PM~~ A.M. Maximum Temperature 106°
 Initial Hydrostatic Pressure (A) 1661 P.S.I.
 Initial Flow Period Minutes 45 (B) 75 P.S.I. to (C) 50 P.S.I.
 Initial Closed In Period Minutes 57 (D) 118 P.S.I.
 Final Flow Period Minutes 45 (E) 72 P.S.I. to (F) 50 P.S.I.
 Final Closed In Period Minutes 45 (G) 95 P.S.I.
 Final Hydrostatic Pressure (H) 1635 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 9-18-80 Test Ticket No. 7387
 Recorder No. 6077 Capacity 4700 Location 3043 Ft.
 Clock No. ----- Elevation 1856 Kelly Bushing Well Temperature 106 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1661</u>	P.S.I.	<u>1:24</u> A M	
B First Initial Flow Pressure	<u>75</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>50</u>	P.S.I.	<u>45</u> Mins.	<u>57</u> Mins.
D Initial Closed-in Pressure	<u>118</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>72</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>50</u>	P.S.I.		
G Final Closed-in Pressure	<u>95</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1635</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>19</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>75</u>	<u>0</u>	<u>50</u>	<u>0</u>	<u>72</u>	<u>0</u>	<u>50</u>
P 2 <u>5</u>	<u>65</u>	<u>3</u>	<u>50</u>	<u>5</u>	<u>63</u>	<u>3</u>	<u>50</u>
P 3 <u>10</u>	<u>50</u>	<u>6</u>	<u>50</u>	<u>10</u>	<u>53</u>	<u>6</u>	<u>50</u>
P 4 <u>15</u>	<u>50</u>	<u>9</u>	<u>50</u>	<u>15</u>	<u>50</u>	<u>9</u>	<u>55</u>
P 5 <u>20</u>	<u>50</u>	<u>12</u>	<u>50</u>	<u>20</u>	<u>50</u>	<u>12</u>	<u>60</u>
P 6 <u>25</u>	<u>50</u>	<u>15</u>	<u>53</u>	<u>25</u>	<u>50</u>	<u>15</u>	<u>63</u>
P 7 <u>30</u>	<u>50</u>	<u>18</u>	<u>55</u>	<u>30</u>	<u>50</u>	<u>18</u>	<u>68</u>
P 8 <u>35</u>	<u>50</u>	<u>21</u>	<u>58</u>	<u>35</u>	<u>50</u>	<u>21</u>	<u>73</u>
P 9 <u>40</u>	<u>50</u>	<u>24</u>	<u>63</u>	<u>40</u>	<u>50</u>	<u>24</u>	<u>78</u>
P10 <u>45</u>	<u>50</u>	<u>27</u>	<u>68</u>	<u>45</u>	<u>50</u>	<u>27</u>	<u>80</u>
P11		<u>30</u>	<u>73</u>			<u>30</u>	<u>83</u>
P12		<u>33</u>	<u>82</u>			<u>33</u>	<u>85</u>
P13		<u>36</u>	<u>85</u>			<u>36</u>	<u>87</u>
P14		<u>39</u>	<u>89</u>			<u>39</u>	<u>89</u>
P15		<u>42</u>	<u>91</u>			<u>42</u>	<u>93</u>
P16		<u>45</u>	<u>95</u>			<u>45</u>	<u>95</u>
P17		<u>48</u>	<u>100</u>				
P18		<u>51</u>	<u>105</u>				
P19		<u>54</u>	<u>113</u>				
P20		<u>57</u>	<u>118</u>				



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET NO 7388

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

Elevation 1856 K.B. Formation — Eff. Pay — Ft.

District Great Bend Date 9-19-80 Customer Order No. —

COMPANY NAME Petroleum Energy, Inc

ADDRESS SUITE 710 ONE TWENTY BLDG, WICHITA KS 67202

LEASE AND WELL NO. GROSSHARDT COUNTY Barton STATE KS Sec. 9 Twp. 17S Rge. 11W

Mail Invoice To SAME GROSSHARDT A#3 No. Copies Requested 5

Co. Name Address Address No. Copies Requested 58

Mail Charts To Address Address No. Copies Requested 58

Formation Test No. 2 Interval Tested from 3166 ft. to 3210 ft. Total Depth 3210 ft.

Packer Depth 3161 ft. Size 6 3/4 in. Packer Depth 3166 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) 3203 ft. Recorder Number 4077 Cap. 4700

Bottom Recorder Depth (Outside) 3206 ft. Recorder Number 1051 Cap. 4250

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

Drilling Contractor ALLEN RIG#1 Drill Collar Length — I. D. — in.

Mud Type STARCH Viscosity 44 Weight Pipe Length — I. D. — in.

Weight 9.8 Water Loss 1010 cc. Drill Pipe Length 3145 I. D. 3.8 in.

Chlorides 62,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make — Serial Number — Anchor Length 44 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 X 11 in.

Blow: Weak Blow 1/2 inch slowly increasing to 1 inch in bucket FIRST OPENING

Weak Blow died in 10 min. Flush tool - weak blow thru REST OF SECOND OPENING

Recovered 10 ft. of mud with a few oil spots

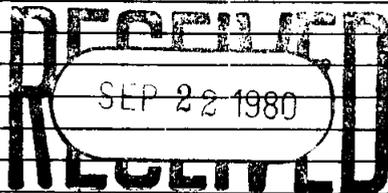
Recovered — ft. of

Recovered — ft. of

Recovered — ft. of

Recovered — ft. of

Remarks: Chlorides 62,000 ppm



Time On Location 10:30 P.M. Time Pick Up Tool 11:30 P.M. Time Off Location 7:00 A.M.

Time Set Packer(s) 12:30 A.M. Time Started Off Bottom 4:04 A.M. Maximum Temperature 108

Initial Hydrostatic Pressure (A) 1760 P.S.I.

Initial Flow Period Minutes 45 (B) 49 P.S.I. to (C) 61 P.S.I.

Initial Closed In Period Minutes 60 (D) 623 P.S.I.

Final Flow Period Minutes 45 (E) 61 P.S.I. to (F) 61 P.S.I.

Final Closed In Period Minutes 60 (G) 367 P.S.I.

Final Hydrostatic Pressure (H) 1700 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 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 [Signature] Signature on Customer or his authorized representative

Western Representative Roger Lisenby Thank you

FIELD INVOICE

Table with 2 columns: Item and Amount. Includes Open Hole Test (550.00), Mileage (18.75), and TOTAL (568.75).

WESTERN TESTING CO., INC.
Pressure Data

Date 9-19 Test Ticket No. 7388
 Recorder No. 6077 Capacity 4700 Location 3203 Ft.
 Clock No. — Elevation 1856 KB Well Temperature 108 °F

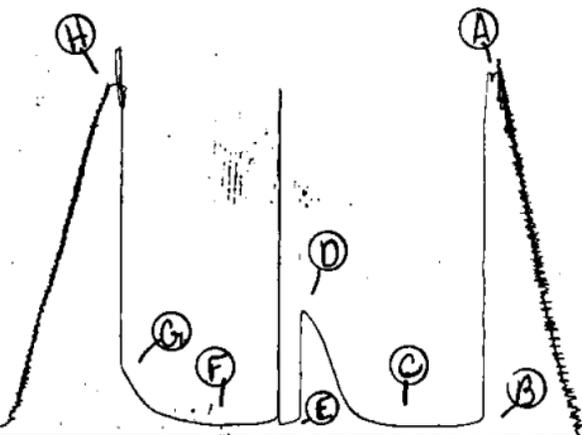
Point	Pressure	P.S.I.	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1769</u>	P.S.I.		<u>12:30 AM</u>	
B First Initial Flow Pressure	<u>75</u>	P.S.I.	First Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>58</u>	P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D Initial Closed-in Pressure	<u>630</u>	P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>82</u>	P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>63</u>	P.S.I.			
G Final Closed-in Pressure	<u>345</u>	P.S.I.			
H Final Hydrostatic Mud	<u>1719</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>20</u> Inc.		Breakdown: <u>9</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>0</u>	<u>58</u>	<u>0</u>	<u>82</u>	<u>0</u>	<u>63</u>
P 2	<u>5</u>	<u>3</u>	<u>58</u>	<u>5</u>	<u>75</u>	<u>3</u>	<u>63</u>
P 3	<u>10</u>	<u>6</u>	<u>60</u>	<u>10</u>	<u>63</u>	<u>6</u>	<u>65</u>
P 4	<u>15</u>	<u>9</u>	<u>63</u>	<u>15</u>	<u>88</u>	<u>9</u>	<u>68</u>
P 5	<u>20</u>	<u>12</u>	<u>68</u>	<u>20</u>	<u>73</u>	<u>12</u>	<u>70</u>
P 6	<u>25</u>	<u>15</u>	<u>73</u>	<u>25</u>	<u>68</u>	<u>15</u>	<u>75</u>
P 7	<u>30</u>	<u>18</u>	<u>80</u>	<u>30</u>	<u>64</u>	<u>18</u>	<u>80</u>
P 8	<u>35</u>	<u>21</u>	<u>85</u>	<u>35</u>	<u>64</u>	<u>21</u>	<u>85</u>
P 9	<u>40</u>	<u>24</u>	<u>98</u>	<u>40</u>	<u>64</u>	<u>24</u>	<u>88</u>
P10	<u>45</u>	<u>27</u>	<u>115</u>	<u>45</u>	<u>63</u>	<u>27</u>	<u>98</u>
P11	<u>50</u>	<u>30</u>	<u>140</u>	<u>50</u>		<u>30</u>	<u>108</u>
P12	<u>55</u>	<u>33</u>	<u>178</u>	<u>55</u>		<u>33</u>	<u>112</u>
P13	<u>60</u>	<u>36</u>	<u>233</u>	<u>60</u>		<u>36</u>	<u>123</u>
P14		<u>39</u>	<u>315</u>	<u>65</u>		<u>39</u>	<u>135</u>
P15		<u>42</u>	<u>388</u>	<u>70</u>		<u>42</u>	<u>153</u>
P16		<u>45</u>	<u>460</u>	<u>75</u>		<u>45</u>	<u>178</u>
P17		<u>48</u>	<u>515</u>	<u>80</u>		<u>48</u>	<u>208</u>
P18		<u>51</u>	<u>558</u>	<u>85</u>		<u>51</u>	<u>248</u>
P19		<u>54</u>	<u>596</u>	<u>90</u>		<u>54</u>	<u>285</u>
P20		<u>57</u>	<u>620</u>			<u>57</u>	<u>345</u>
		<u>60</u>	<u>630</u>			<u>60</u>	<u>—</u>

TKT# 7388

I



6077

Company Petroleum Energy, Inc. Lease & Well No. Grosshardt "A" #3
 Elevation 1856 Kelly Bushing Formation ----- Effective Pay ----- Ft. Ticket No. 7388
 Date 9/19/80 Sec 9 Twp 17S Range 11W County Barton State Kansas
 Test Approved by Jim Musgrove Western Representative Roger Lisenby

Formation Test No. 2 Interval Tested from 3166 ft. to 3210 ft. Total Depth 3210 ft.
 Packer Depth 3161 ft. Size 6 3/4 in. Packer Depth 3166 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) 3203 ft. Recorder Number 6077 Cap 4700
 Bottom Recorder Depth (Outside) 3206 ft. Recorder Number 1051 Cap 4250
 Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor Allen Drilling Rig #1 Drill Collar Length - I. D. - in.
 Mud Type starch Viscosity 44 Weight Pipe Length - I. D. - in.
 Weight 9.8 Water Loss 10.0 cc. Drill Pipe Length 3145 I. D. 3.8 in.
 Chlorides 62,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
 Jars: Make - Serial Number - Anchor Length 44 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 XH in.

Blow: Weak blow one half inch slowly increasing to one inch in bucket on initial flow period.
Weak blow died in ten minutes; flushed tool; weak blow throughout rest of final flow period.

Recovered 10 ft. of mud with a few oil spots
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks: Chlorides 62,000 ppm

Time Set	Packer(s)	Time Started	Off Bottom	Maximum Temperature
<u>12:30</u>	<u>A.M.</u>	<u>4:04</u>	<u>A.M.</u>	<u>108°</u>
	<u>P.M.</u>		<u>P.M.</u>	
Initial Hydrostatic Pressure	(A)	<u>1769</u>	P.S.I.	
Initial Flow Period	Minutes	<u>45</u>	(B) <u>75</u>	P.S.I. to (C) <u>58</u> P.S.I.
Initial Closed In Period	Minutes	<u>60</u>	(D) <u>630</u>	P.S.I.
Final Flow Period	Minutes	<u>45</u>	(E) <u>82</u>	P.S.I. to (F) <u>63</u> P.S.I.
Final Closed In Period	Minutes	<u>51</u>	(G) <u>345</u>	P.S.I.
Final Hydrostatic Pressure	(H)	<u>1719</u>	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 9-19-80 Test Ticket No. 7388
 Recorder No. 6077 Capacity 4700 Location 3203 Ft.
 Clock No. ----- Elevation 1856 Kelly Bushing Well Temperature 108 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1769</u>	P.S.I.	<u>12:30 AM</u>	
B First Initial Flow Pressure	<u>75</u>	P.S.I.	<u>45 Mins.</u>	<u>45 Mins.</u>
C First Final Flow Pressure	<u>58</u>	P.S.I.	<u>60 Mins.</u>	<u>60 Mins.</u>
D Initial Closed-in Pressure	<u>630</u>	P.S.I.	<u>45 Mins.</u>	<u>45 Mins.</u>
E Second Initial Flow Pressure	<u>82</u>	P.S.I.	<u>60 Mins.</u>	<u>57 Mins.</u>
F Second Final Flow Pressure	<u>63</u>	P.S.I.		
G Final Closed-in Pressure	<u>345</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1719</u>	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.	
	Press.	Point Minutes						
P 1	<u>75</u>	<u>0</u>	<u>58</u>	<u>0</u>	<u>82</u>	<u>0</u>	<u>63</u>	<u>0</u>
P 2	<u>70</u>	<u>3</u>	<u>58</u>	<u>3</u>	<u>75</u>	<u>3</u>	<u>63</u>	<u>3</u>
P 3	<u>63</u>	<u>6</u>	<u>60</u>	<u>6</u>	<u>63</u>	<u>6</u>	<u>65</u>	<u>6</u>
P 4	<u>58</u>	<u>9</u>	<u>63</u>	<u>9</u>	<u>88</u>	<u>9</u>	<u>68</u>	<u>9</u>
P 5	<u>58</u>	<u>12</u>	<u>68</u>	<u>12</u>	<u>73</u>	<u>12</u>	<u>70</u>	<u>12</u>
P 6	<u>58</u>	<u>15</u>	<u>73</u>	<u>15</u>	<u>68</u>	<u>15</u>	<u>75</u>	<u>15</u>
P 7	<u>58</u>	<u>18</u>	<u>80</u>	<u>18</u>	<u>64</u>	<u>18</u>	<u>80</u>	<u>18</u>
P 8	<u>58</u>	<u>21</u>	<u>89</u>	<u>21</u>	<u>64</u>	<u>21</u>	<u>85</u>	<u>21</u>
P 9	<u>58</u>	<u>24</u>	<u>98</u>	<u>24</u>	<u>64</u>	<u>24</u>	<u>88</u>	<u>24</u>
P10	<u>58</u>	<u>27</u>	<u>115</u>	<u>27</u>	<u>63</u>	<u>27</u>	<u>98</u>	<u>27</u>
P11		<u>30</u>	<u>140</u>	<u>30</u>		<u>30</u>	<u>108</u>	<u>30</u>
P12		<u>33</u>	<u>178</u>	<u>33</u>		<u>33</u>	<u>113</u>	<u>33</u>
P13		<u>36</u>	<u>233</u>	<u>36</u>		<u>36</u>	<u>123</u>	<u>36</u>
P14		<u>39</u>	<u>315</u>	<u>39</u>		<u>39</u>	<u>135</u>	<u>39</u>
P15		<u>42</u>	<u>388</u>	<u>42</u>		<u>42</u>	<u>153</u>	<u>42</u>
P16		<u>45</u>	<u>460</u>	<u>45</u>		<u>45</u>	<u>178</u>	<u>45</u>
P17		<u>48</u>	<u>515</u>	<u>48</u>		<u>48</u>	<u>208</u>	<u>48</u>
P18		<u>51</u>	<u>558</u>	<u>51</u>		<u>51</u>	<u>248</u>	<u>51</u>
P19		<u>54</u>	<u>596</u>	<u>54</u>		<u>54</u>	<u>285</u>	<u>54</u>
P20		<u>57</u>	<u>620</u>	<u>57</u>		<u>57</u>	<u>345</u>	<u>57</u>
		<u>60</u>	<u>630</u>	<u>60</u>				<u>60</u>

Flushed Tool



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 7389

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

Elevation 1856 KB Formation Arbuckle Eff. Pay Ft.

District Great Bend Date 9-19-80 Customer Order No.

COMPANY NAME Petroleum Energy, Inc.

ADDRESS SUITE 710 ONE TWENTY BLDG WICHITA KS 67202

LEASE AND WELL NO A'GROSSHARDT #3 COUNTY BARTON STATE KS Sec 9 Twp 17 S Rge 11 W

Mail Invoice To Same Grosshardt #3 No. Copies Requested 5

Mail Charts To Same Cypriano No. Copies Requested 58

Formation Test No 3 Interval Tested from 3275 ft. to 3290 ft. Total Depth 3290 ft.

Packer Depth 3270 ft. Size 6 3/4 in. Packer Depth 3275 ft. Size 6 3/4 in.

Packer Depth in. Packer Depth in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3283 ft. Recorder Number 6077 Cap. 4200

Bottom Recorder Depth (Outside) 3286 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth Recorder Number Cap.

Drilling Contractor Allen Rig #1 Drill Collar Length I. D. in.

Mud Type Starch Viscosity 54 Weight Pipe Length I. D. in.

Weight 9.8 Water Loss 12.6 cc. Drill Pipe Length 3254 I. D. 3.8 in.

Chlorides 54,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make Serial Number Anchor Length 15 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 2 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Very weak Blow died in 11 minutes. First attempt - NO blow 3286

Blow: 6 - Flush 001 - NO BLOW

Recovered 10 ft. of oil cut mud (Free oil Top Tool)

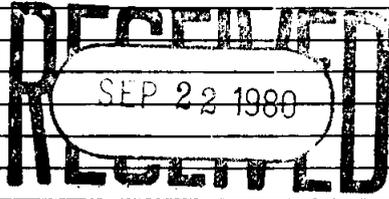
Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of Chlorides 54,000 PPM

Remarks:



Time On Location 7:30 P.M. Time Pick Up Tool 8:00 P.M. Time Off Location 1:00 A.M.

Time Set Packer(s) 9:27 P.M. Time Started Off Bottom 10:50 P.M. Maximum Temperature 109

Initial Hydrostatic Pressure (A) 1870 P.S.I.

Initial Flow Period Minutes 20 (B) 73 P.S.I. to (C) 73 P.S.I.

Initial Closed In Period Minutes 20 (D) 73 P.S.I.

Final Flow Period Minutes 20 (E) 73 P.S.I. to (F) 73 P.S.I.

Final Closed In Period Minutes 20 (G) 73 P.S.I.

Final Hydrostatic Pressure (H) 1748 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 [Signature] Signature of Customer or his authorized representative

Western Representative Roger Trumbley Thank you

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test \$550.00, Mileage \$18.75, TOTAL \$568.75.

WESTERN TESTING CO., INC.
Pressure Data

Date 9-19-80 Test Ticket No. 7389
 Recorder No. 6077 Capacity 4700 Location 3283 Ft.
 Clock No. — Elevation 1856 KB Well Temperature 109 °F

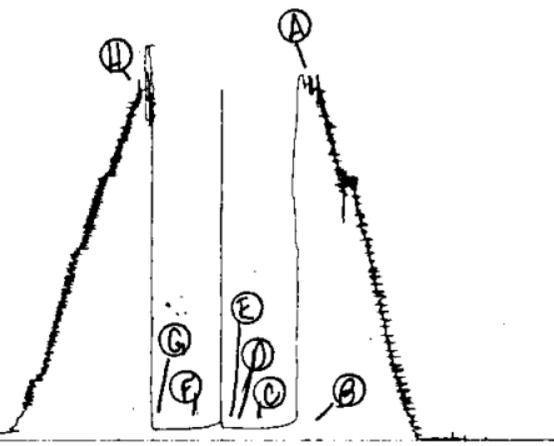
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1431</u>	P.S.I.	<u>9:27 P</u>	<u>M</u>
B First Initial Flow Pressure	<u>97</u>	P.S.I.	<u>20</u>	Mins. <u>20</u> Mins.
C First Final Flow Pressure	<u>68</u>	P.S.I.	<u>20</u>	Mins. <u>20</u> Mins.
D Initial Closed-in Pressure	<u>70</u>	P.S.I.	<u>20</u>	Mins. <u>20</u> Mins.
E Second Initial Flow Pressure	<u>70</u>	P.S.I.	<u>20</u>	Mins. <u>24</u> Mins.
F Second Final Flow Pressure	<u>67</u>	P.S.I.		
G Final Closed-in Pressure	<u>62</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1746</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>6</u> Inc.		Breakdown: <u>4</u> Inc.		Breakdown: <u>8</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>97</u>	<u>0</u>	<u>68</u>	<u>0</u>	<u>70</u>	<u>0</u>	<u>67</u>
P 2 <u>5</u>	<u>83</u>	<u>3</u>	<u>68</u>	<u>5</u>	<u>Flushed Tool</u>	<u>3</u>	<u>65</u>
P 3 <u>10</u>	<u>75</u>	<u>6</u>	<u>68</u>	<u>10</u>	<u>80</u>	<u>6</u>	<u>64</u>
P 4 <u>15</u>	<u>68</u>	<u>9</u>	<u>69</u>	<u>15</u>	<u>70</u>	<u>9</u>	<u>63</u>
P 5 <u>20</u>	<u>68</u>	<u>12</u>	<u>69</u>	<u>20</u>	<u>67</u>	<u>12</u>	<u>62</u>
P 6 <u>25</u>		<u>15</u>	<u>70</u>	<u>25</u>		<u>15</u>	<u>62</u>
P 7 <u>30</u>		<u>18</u>	<u>70</u>	<u>30</u>		<u>18</u>	<u>↑</u>
P 8 <u>35</u>		<u>21</u>		<u>35</u>		<u>21</u>	<u>↓</u>
P 9 <u>40</u>		<u>24</u>		<u>40</u>		<u>24</u>	<u>62</u>
P10 <u>45</u>		<u>27</u>		<u>45</u>		<u>27</u>	
P11 <u>50</u>		<u>30</u>		<u>50</u>		<u>30</u>	
P12 <u>55</u>		<u>33</u>		<u>55</u>		<u>33</u>	
P13 <u>60</u>		<u>36</u>		<u>60</u>		<u>36</u>	
P14		<u>39</u>		<u>65</u>		<u>39</u>	
P15		<u>42</u>		<u>70</u>		<u>42</u>	
P16		<u>45</u>		<u>75</u>		<u>45</u>	
		<u>48</u>		<u>80</u>		<u>48</u>	
		<u>51</u>		<u>85</u>		<u>51</u>	
		<u>54</u>		<u>90</u>		<u>54</u>	
		<u>57</u>				<u>57</u>	
		<u>60</u>				<u>60</u>	

6079

TK# 7389
I.



Company Petroleum Energy, Inc. Lease & Well No. Grosshardt "A" #3
 Elevation 1856 Kelly Bushing Formation Arbuckle Effective Pay - Ft. Ticket No. 7389
 Date 9/19/80 Sec. 9 Twp. 17S Range 11W County Barton State Kansas
 Test Approved by Jim Musgrove Western Representative Roger Lisenby

Formation Test No. 3 Interval Tested from 3275 ft. to 3290 ft. Total Depth 3290 ft.
 Packer Depth 3270 ft. Size 6 3/4 in. Packer Depth 3275 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) 3283 ft. Recorder Number 6077 Cap 4700
 Bottom Recorder Depth (Outside) 3286 ft. Recorder Number 1051 Cap 4250
 Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor Allen Drilling Rig #1 Drill Collar Length - I. D. - in.
 Mud Type starch Viscosity 54 Weight Pipe Length - I. D. - in.
 Weight 9.8 Water Loss 12.6 cc. Drill Pipe Length 3254 I. D. 3.8 in.
 Chlorides 56,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
 Jars: Make - Serial Number - Anchor Length 15 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 XH in.

Blow: Very weak blow; died in eleven minutes on initial flow period. No blow final flow period.
Flushed tool, no blow.

Recovered 10 ft. of oil cut mud (free oil top of tool)
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of Chlorides 54,000 ppm

Remarks:

Time Set Packer(s)	9:27 A.M. P.M.	Time Started Off Bottom	10:50 A.M. P.M.	Maximum Temperature	109°
Initial Hydrostatic Pressure		(A)	1831 P.S.I.		
Initial Flow Period	Minutes 20	(B)	97 P.S.I. to (C)	68	P.S.I.
Initial Closed In Period	Minutes 18	(D)	70 P.S.I.		
Final Flow Period	Minutes 20	(E)	70 P.S.I. to (F)	67	P.S.I.
Final Closed In Period	Minutes 24	(G)	62 P.S.I.		
Final Hydrostatic Pressure		(H)	1746 P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 9-19-80 Test Ticket No. 7389
 Recorder No. 6077 Capacity 4700 Location 3283 Ft.
 Clock No. _____ Elevation 1856 Kelly Bushing Well Temperature 109 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1831	P.S.I.	9:27P M	
B First Initial Flow Pressure	97	P.S.I.	20 Mins.	20 Mins.
C First Final Flow Pressure	68	P.S.I.	20 Mins.	18 Mins.
D Initial Closed-in Pressure	70	P.S.I.	20 Mins.	20 Mins.
E Second Initial Flow Pressure	70	P.S.I.	20 Mins.	24 Mins.
F Second Final Flow Pressure	67	P.S.I.		
G Final Closed-in Pressure	62	P.S.I.		
H Final Hydrostatic Mud	1746	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 4 mins. and a final inc. of 0 Min.		of 3 mins. and a final inc. of 0 Min.		of 5 mins. and a final inc. of 0 Min.		of 3 mins. and a final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1	97	0	68	0	70	0	67	
P 2	83	3	68	5	70	3	65	
P 3	75	6	68	10	80	6	64	
P 4	68	9	69	15	70	9	63	
P 5	68	12	69	20	67	12	62	
P 6		15	70			15	62	
P 7		18	70			18	62	
P 8						21	62	
P 9						24	62	
P10								
P11								
P12								
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 7390

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

Elevation 1856 Kelly Bushing Formation Abucklie Eff. Pay Ft.

District GREAT BEND Date 9-20-80 Customer Order No.

COMPANY NAME PETROLEUM ENERGY, Inc.

ADDRESS SUITE 710 ONE TWENTY Bldg, Wichita KS 67202

LEASE AND WELL NO. A-688888 COUNTY BARTON STATE KS Sec 9 Twp 17S Rgd 11W

Mail Invoice To S A M E Grosshaedt A#3 No. Copies Requested 5

Co. Name sam ely Address No. Copies Requested 58

Formation Test No. 4 Interval Tested from 3275 ft. to 3296 ft. Total Depth 3296 ft.

Packer Depth 3270 ft. Size 6 3/4 in. Packer Depth 3275 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) 3288 ft. Recorder Number 6077 Cap 4700

Bottom Recorder Depth (Outside) 3291 ft. Recorder Number 1051 Cap 4250

Below Straddle Recorder Depth ft. Recorder Number Cap

Drilling Contractor ALLEN RIG #1 Drill Collar Length I. D. in.

Mud Type STARCH Viscosity 54 Weight Pipe Length I. D. in.

Weight 9.8 Water Loss 12.6 cc. Drill Pipe Length 3254 I. D. 3.8 in.

Chlorides 56000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make Serial Number Anchor Length 21 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 X 1 1/4 in.

Blow: WEAK Blow slowly increasing TO BOTTOM OF BUCKET IN 25 MIN. FIRST OPENING

WEAK Blow slowly increasing TO BOTTOM OF BUCKET IN 30 MIN SECOND OPENING

Recovered 420 ft. of WATER

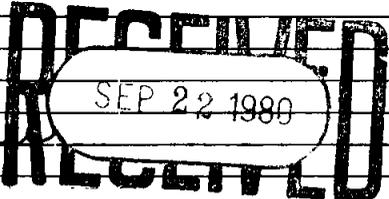
Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Read outside record #1051 Chlorides 19,000 PPM.



Time On Location 7:30 A.M. Time Pick Up Tool 7:45 A.M. Time Off Location 3:00 P.M.

Time Set Packer(s) 9:09 A.M. Time Started Off Bottom 12:12 P.M. Maximum Temperature 112°

Initial Hydrostatic Pressure (A) 1771 P.S.I.

Initial Flow Period Minutes 45 (B) 64 P.S.I. to (C) 118 P.S.I.

Initial Closed In Period Minutes 45 (D) 1048 P.S.I.

Final Flow Period Minutes 45 (E) 182 P.S.I. to (F) 215 P.S.I.

Final Closed In Period Minutes 45 (G) 1048 P.S.I.

Final Hydrostatic Pressure (H) 1749 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 Signature of Customer or his authorized representative

Western Representative Roger L. Stanley Thank you

FIELD INVOICE

Table with 2 columns: Item and Amount. Items include Open Hole Test (\$550.00), Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage NC, Fluid Sampler, Extra Charts, Insurance, and TOTAL (\$550.00).

WESTERN TESTING CO., INC.
Pressure Data

Date 9-20-80 Test Ticket No. 7390
 Recorder No. 1051 Capacity 4250 Location 3291 Ft.
 Clock No. _____ Elevation 1856 Kelly Bushing Well Temperature 112 °F

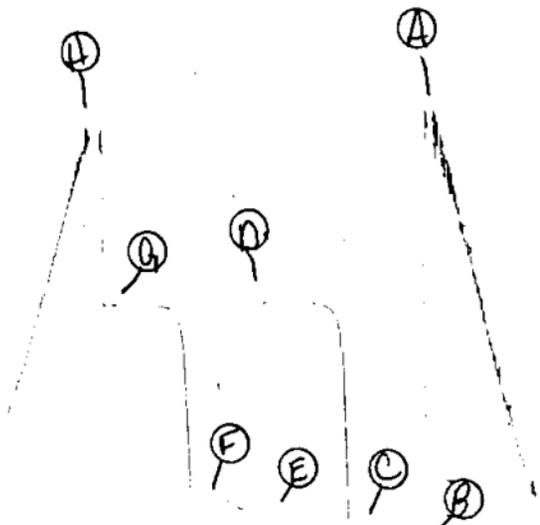
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1777</u>	P.S.I.	<u>7:30 A</u>	<u>M</u>
B First Initial Flow Pressure	<u>60</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>116</u>	P.S.I.	<u>45</u> Mins.	<u>48</u> Mins.
D Initial Closed-in Pressure	<u>1042</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>174</u>	P.S.I.	<u>45</u> Mins.	<u>48</u> Mins.
F Second Final Flow Pressure	<u>212</u>	P.S.I.		
G Final Closed-in Pressure	<u>1042</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1743</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>16</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>16</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>116</u>	<u>0</u>	<u>174</u>	<u>0</u>	<u>212</u>
P 2	<u>5</u>	<u>3</u>	<u>199</u>	<u>5</u>	<u>169</u>	<u>3</u>	<u>818</u>
P 3	<u>10</u>	<u>6</u>	<u>978</u>	<u>10</u>	<u>169</u>	<u>6</u>	<u>974</u>
P 4	<u>15</u>	<u>9</u>	<u>1009</u>	<u>15</u>	<u>169</u>	<u>9</u>	<u>1012</u>
P 5	<u>20</u>	<u>12</u>	<u>1023</u>	<u>20</u>	<u>178</u>	<u>12</u>	<u>1025</u>
P 6	<u>25</u>	<u>15</u>	<u>1030</u>	<u>25</u>	<u>184</u>	<u>15</u>	<u>1030</u>
P 7	<u>30</u>	<u>18</u>	<u>1032</u>	<u>30</u>	<u>191</u>	<u>18</u>	<u>1032</u>
P 8	<u>35</u>	<u>21</u>	<u>1034</u>	<u>35</u>	<u>199</u>	<u>21</u>	<u>1034</u>
P 9	<u>40</u>	<u>24</u>	<u>1036</u>	<u>40</u>	<u>206</u>	<u>24</u>	<u>1036</u>
P10	<u>45</u>	<u>27</u>	<u>1038</u>	<u>45</u>	<u>212</u>	<u>27</u>	<u>1039</u>
P11	<u>50</u>	<u>30</u>	<u>1040</u>	<u>50</u>		<u>30</u>	<u>1041</u>
P12	<u>55</u>	<u>33</u>	<u>1040</u>	<u>55</u>		<u>33</u>	<u>1041</u>
P13	<u>60</u>	<u>36</u>	<u>1041</u>	<u>60</u>		<u>36</u>	<u>1041</u>
P14		<u>39</u>	<u>1041</u>	<u>65</u>		<u>39</u>	<u>1042</u>
P15		<u>42</u>	<u>1042</u>	<u>70</u>		<u>42</u>	<u>1042</u>
P16		<u>45</u>	<u>1042</u>	<u>75</u>		<u>45</u>	<u>1042</u>
P17		<u>48</u>	<u>1042</u>	<u>80</u>		<u>48</u>	<u>1042</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>	

TK# 7390

D.



1051

Company Petroleum Energy, Inc. Lease & Well No. Grosshardt "A" #3
1856 Kelly Bushing Arbuckle Effective Pay --- Ft. Ticket No. 7390
 Elevation --- Formation --- Date 9/20/80 Sec. 9 Twp. 17S Range 11W County Barton State Kansas
 Test Approved by Jim Musgrove Western Representative Roger Lisenby

Formation Test No. 4 Interval Tested from 3275 ft. to 3296 ft. Total Depth 3296 ft.
 Packer Depth 3270 ft. Size 6 3/4 in. Packer Depth 3275 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) 3288 ft. Recorder Number 6077 Cap. 4700
 Bottom Recorder Depth (Outside) 3291 ft. Recorder Number 1051 Cap. 4250
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Allen Drilling Rig #1 Drill Collar Length - I. D. - in.
 Mud Type starch Viscosity 54 Weight Pipe Length - I. D. - in.
 Weight 9.8 Water Loss 12.6 cc. Drill Pipe Length 3254 I. D. 3.8 in.
 Chlorides 56,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
 Jars: Make - Serial Number - Anchor Length 21 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 XH in.

Blow: Weak blow slowly increasing to bottom of bucket in twenty-five minues on initial flow period. Weak blow slowly increasing to bottom of bucket in thirty minutes of final flow period.

Recovered 420 ft. of water
 Recovered --- ft. of ---
 Recovered --- ft. of Chlorides 19,000 ppm

Remarks: READ OUTSIDE RECORDER #1051

Time Set Packer(s) 9:09 ~~A.M.~~ P.M. Time Started Off Bottom 12:12 ~~A.M.~~ P.M. Maximum Temperature 112°
 Initial Hydrostatic Pressure (A) 1777 P.S.I.
 Initial Flow Period Minutes 45 (B) 60 P.S.I. to (C) 116 P.S.I.
 Initial Closed In Period Minutes 48 (D) 1042 P.S.I.
 Final Flow Period Minutes 45 (E) 174 P.S.I. to (F) 212 P.S.I.
 Final Closed In Period Minutes 48 (G) 1042 P.S.I.
 Final Hydrostatic Pressure (H) 1743 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 9-20-80

Test Ticket No. 7390

Recorder No. 1051 Capacity 4250 Location 3291 Ft.

Clock No. _____ Elevation 1856 Kelly Bushing Well Temperature 112 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1777	P.S.I.	7:30A	M
B First Initial Flow Pressure	60	P.S.I.	45 Mins.	45 Mins.
C First Final Flow Pressure	116	P.S.I.	45 Mins.	48 Mins.
D Initial Closed-in Pressure	1042	P.S.I.	45 Mins.	45 Mins.
E Second Initial Flow Pressure	174	P.S.I.	45 Mins.	48 Mins.
F Second Final Flow Pressure	212	P.S.I.		
G Final Closed-in Pressure	1042	P.S.I.		
H Final Hydrostatic Mud	1743	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: 16 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: 16 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>60</u>	<u>0</u>	<u>116</u>	<u>0</u>	<u>174</u>	<u>0</u>	<u>212</u>
P 2 <u>5</u>	<u>60</u>	<u>3</u>	<u>199</u>	<u>5</u>	<u>169</u>	<u>3</u>	<u>818</u>
P 3 <u>10</u>	<u>60</u>	<u>6</u>	<u>978</u>	<u>10</u>	<u>169</u>	<u>6</u>	<u>974</u>
P 4 <u>15</u>	<u>66</u>	<u>9</u>	<u>1009</u>	<u>15</u>	<u>169</u>	<u>9</u>	<u>1012</u>
P 5 <u>20</u>	<u>75</u>	<u>12</u>	<u>1023</u>	<u>20</u>	<u>178</u>	<u>12</u>	<u>1025</u>
P 6 <u>25</u>	<u>79</u>	<u>15</u>	<u>1030</u>	<u>25</u>	<u>184</u>	<u>15</u>	<u>1030</u>
P 7 <u>30</u>	<u>88</u>	<u>18</u>	<u>1032</u>	<u>30</u>	<u>191</u>	<u>18</u>	<u>1032</u>
P 8 <u>35</u>	<u>96</u>	<u>21</u>	<u>1034</u>	<u>35</u>	<u>199</u>	<u>21</u>	<u>1034</u>
P 9 <u>40</u>	<u>107</u>	<u>24</u>	<u>1036</u>	<u>40</u>	<u>206</u>	<u>24</u>	<u>1036</u>
P10 <u>45</u>	<u>116</u>	<u>27</u>	<u>1038</u>	<u>45</u>	<u>212</u>	<u>27</u>	<u>1039</u>
P11 _____		<u>30</u>	<u>1040</u>			<u>30</u>	<u>1041</u>
P12 _____		<u>33</u>	<u>1040</u>			<u>33</u>	<u>1041</u>
P13 _____		<u>36</u>	<u>1041</u>			<u>36</u>	<u>1041</u>
P14 _____		<u>39</u>	<u>1041</u>			<u>39</u>	<u>1042</u>
P15 _____		<u>42</u>	<u>1042</u>			<u>42</u>	<u>1042</u>
P16 _____		<u>45</u>	<u>1042</u>			<u>45</u>	<u>1042</u>
P17 _____		<u>48</u>	<u>1042</u>			<u>48</u>	<u>1042</u>
P18 _____							
P19 _____							
P20 _____							