



Home Office: Wichita, Kansas 67201
 P. O. Box 1599 (316) 838-0601

Grossardt "A" #2

Company Petroleum Energy, Inc. Lease & Well No. 3788
 Elevation 1845 Kelly Bushing Kansas City Effective Pay --- Ft. Ticket No. 3788
 Date 10/31/79 Formation 9 Range 17S County 11W State Barton Kansas
 Sec. 9 Twp 17S Range 11W County Barton State Kansas
 Test Approved by Jim Musgrove Western Representative Denis Wondra
 Formation Test No. 1 Interval Tested from 3182 ft. to 3215 ft. Total Depth 3215 ft.
 Packer Depth 3177 ft. Size 6 3/4 in. Packer Depth 3182 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) 3205 ft. Recorder Number 3474 Cap. 3000
 Bottom Recorder Depth (Outside) 3208 ft. Recorder Number 3659 Cap. 4000
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor White & Ellis Drilling Rig #2
 Mud Type starch Viscosity 41
 Weight 9.4 Water Loss 10.8 cc.
 Chlorides 48,000 P.P.M.
 Jars: Make -- Serial Number --
 Did Well Flow? No Reversed Out No
 Drill Collar Length 335 I. D. 2.7 in.
 Weight Pipe Length - I. D. - in.
 Drill Pipe Length 2825 I. D. 3.8 in.
 Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
 Anchor Length 33 ft. Size 5 1/2 OD in.
 Surface Choke Size 3/4 in. Bottom Choke Size 3/4
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH

Blow: Weak. Decreased to very weak by end of first flow period. Very weak throughout second opening.

Recovered 75 ft. of mud with few spots of oil

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:53 A.M. Time Started Off Bottom 2:55 P.M. Maximum Temperature 101⁰
 Initial Hydrostatic Pressure 1625 P.S.I. (A)
 Initial Flow Period 45 Minutes (B) 45 P.S.I. to (C) 47 P.S.I.
 Initial Closed In Period 45 Minutes (D) 718 P.S.I.
 Final Flow Period 45 Minutes (E) 67 P.S.I. to (F) 64 P.S.I.
 Final Closed In Period 42 Minutes (G) 662 P.S.I.
 Final Hydrostatic Pressure 1605 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 10-31-79 Test Ticket No. 3788
 Recorder No. 3474 Capacity 3000 Location 3205 Ft.
 Clock No. - Elevation 1845 Kelly Bushing Well Temperature 101 °F

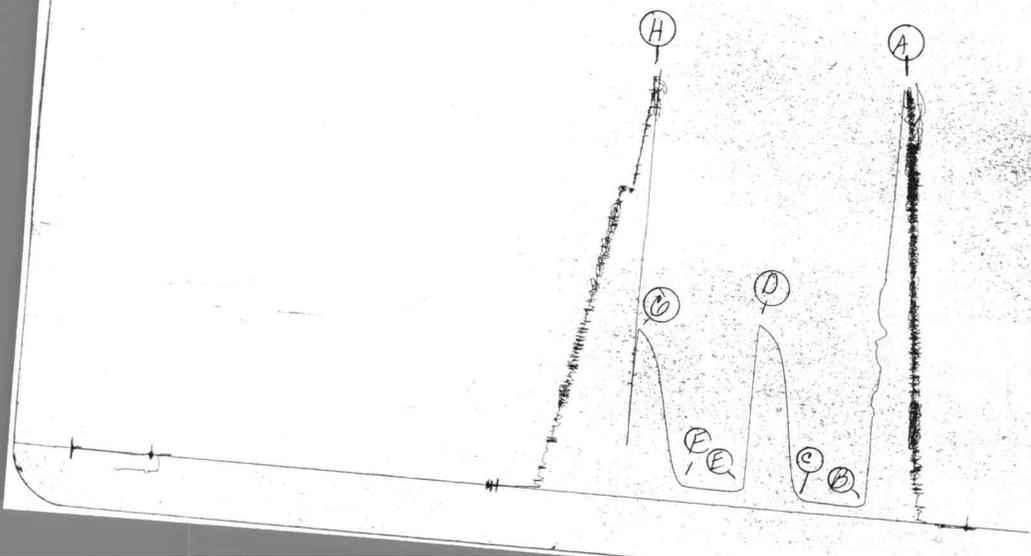
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1625</u> P.S.I.	Open Tool	<u>11:53A.M</u>	
B First Initial Flow Pressure	<u>45</u> P.S.I.	First Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>47</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>718</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>67</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>42</u> Mins.
F Second Final Flow Pressure	<u>64</u> P.S.I.			
G Final Closed-in Pressure	<u>662</u> P.S.I.			
H Final Hydrostatic Mud	<u>1605</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>9</u> mins. and a final inc. of <u>0</u> Min.		of <u>15</u> mins. and a final inc. of <u>0</u> Min.		of <u>9</u> mins. and a final inc. of <u>0</u> Min.		of <u>14</u> mins. and a 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>45</u>	<u>0</u>	<u>47</u>	<u>0</u>	<u>67</u>	<u>0</u>	<u>64</u>	
P 2 <u>5</u>	<u>44</u>	<u>3</u>	<u>56</u>	<u>5</u>	<u>64</u>	<u>3</u>	<u>79</u>	
P 3 <u>10</u>	<u>39</u>	<u>6</u>	<u>73</u>	<u>10</u>	<u>58</u>	<u>6</u>	<u>103</u>	
P 4 <u>15</u>	<u>39</u>	<u>9</u>	<u>108</u>	<u>15</u>	<u>58</u>	<u>9</u>	<u>142</u>	
P 5 <u>20</u>	<u>40</u>	<u>12</u>	<u>180</u>	<u>20</u>	<u>58</u>	<u>12</u>	<u>200</u>	
P 6 <u>25</u>	<u>41</u>	<u>15</u>	<u>279</u>	<u>25</u>	<u>59</u>	<u>15</u>	<u>271</u>	
P 7 <u>30</u>	<u>43</u>	<u>18</u>	<u>383</u>	<u>30</u>	<u>60</u>	<u>18</u>	<u>341</u>	
P 8 <u>35</u>	<u>44</u>	<u>21</u>	<u>482</u>	<u>35</u>	<u>61</u>	<u>21</u>	<u>418</u>	
P 9 <u>40</u>	<u>45</u>	<u>24</u>	<u>556</u>	<u>40</u>	<u>62</u>	<u>24</u>	<u>485</u>	
P10 <u>45</u>	<u>47</u>	<u>27</u>	<u>611</u>	<u>45</u>	<u>64</u>	<u>27</u>	<u>539</u>	
P11		<u>30</u>	<u>647</u>			<u>30</u>	<u>576</u>	
P12		<u>33</u>	<u>670</u>			<u>33</u>	<u>609</u>	
P13		<u>36</u>	<u>688</u>			<u>36</u>	<u>633</u>	
P14		<u>39</u>	<u>702</u>			<u>39</u>	<u>650</u>	
P15		<u>42</u>	<u>711</u>			<u>42</u>	<u>662</u>	
P16		<u>45</u>	<u>718</u>					
P17								
P18								
P19								
P20								

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P. O. Box 1599 (316) 838-0601

Petroleum Energy, Inc.

Grossardt "A"#2

Company 1845 Kelly Bushing Arbuckle Lease & Well No. --- Ticket No. 3789
Elevation Formation Effective Pay Ft. Ticket No.
Date 11/1/79 9 17S 11W County Barton State Kansas
Test Approved by Jim Musgrove Western Representative Denis Wondra

Formation Test No. 2 Interval Tested from 3277 ft. to 3316 ft. Total Depth 3316 ft.
Packer Depth 3272 ft. Size 6 3/4 in. Packer Depth 3277 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) 3306 ft. Recorder Number 3474 Cap. 3000
Bottom Recorder Depth (Outside) 3309 ft. Recorder Number 3659 Cap. 4000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor White & Ellis Drilling Rig #2 Drill Collar Length 220 I. D. 2.7 in.
Mud Type starch Viscosity 40 Weight Pipe Length - I. D. - in.
Weight 9.7 Water Loss 10.4 cc. Drill Pipe Length 3035 I. D. 3.8 in.
Chlorides 40,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
Jars: Make -- Serial Number -- Anchor Length 39 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. Decreasing throughout first flow period. Very weak throughout second opening.

Recovered 130 ft. of slightly oil cut mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks:

Time Set Packer(s) 3:03 AM- P.M. Time Started Off Bottom 5:35 AM- P.M. Maximum Temperature Broken
Initial Hydrostatic Pressure (A) 1688 P.S.I.
Initial Flow Period Minutes 45 (B) 94 P.S.I. to (C) 93 P.S.I.
Initial Closed In Period Minutes 30 (D) 995 P.S.I.
Final Flow Period Minutes 40 (E) 114 P.S.I. to (F) 102 P.S.I.
Final Closed In Period Minutes 30 (G) 933 P.S.I.
Final Hydrostatic Pressure (H) 1668 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 11-1-79 Test Ticket No. 3789
 Recorder No. 3474 Capacity 3000 Location 3306 Ft.
 Clock No. - Elevation 1845 Kelly Bushing Well Temperature - °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1688</u>	P.S.I.	<u>3:03P.</u>	<u>M</u>
B First Initial Flow Pressure	<u>94</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>93</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>995</u>	P.S.I.	<u>45</u> Mins.	<u>40</u> Mins.
E Second Initial Flow Pressure	<u>114</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>102</u>	P.S.I.		
G Final Closed-in Pressure	<u>933</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1668</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: 10 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 8 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 10 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>94</u>	<u>0</u>	<u>93</u>	<u>0</u>	<u>114</u>	<u>0</u>	<u>102</u>
P 2 <u>5</u>	<u>97</u>	<u>3</u>	<u>371</u>	<u>5</u>	<u>105</u>	<u>3</u>	<u>276</u>
P 3 <u>10</u>	<u>97</u>	<u>6</u>	<u>641</u>	<u>10</u>	<u>102</u>	<u>6</u>	<u>491</u>
P 4 <u>15</u>	<u>92</u>	<u>9</u>	<u>779</u>	<u>15</u>	<u>100</u>	<u>9</u>	<u>641</u>
P 5 <u>20</u>	<u>88</u>	<u>12</u>	<u>859</u>	<u>20</u>	<u>100</u>	<u>12</u>	<u>733</u>
P 6 <u>25</u>	<u>88</u>	<u>15</u>	<u>906</u>	<u>25</u>	<u>101</u>	<u>15</u>	<u>792</u>
P 7 <u>30</u>	<u>88</u>	<u>18</u>	<u>939</u>	<u>30</u>	<u>102</u>	<u>18</u>	<u>844</u>
P 8 <u>35</u>	<u>94</u>	<u>21</u>	<u>962</u>	<u>35</u>	<u>102</u>	<u>21</u>	<u>876</u>
P 9 <u>40</u>	<u>93</u>	<u>24</u>	<u>979</u>	<u>40</u>	<u>102</u>	<u>24</u>	<u>903</u>
P10 <u>45</u>	<u>93</u>	<u>27</u>	<u>991</u>			<u>27</u>	<u>921</u>
P11		<u>30</u>	<u>995</u>			<u>30</u>	<u>933</u>
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

Kit # 3489
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(H)

(A)

(B)

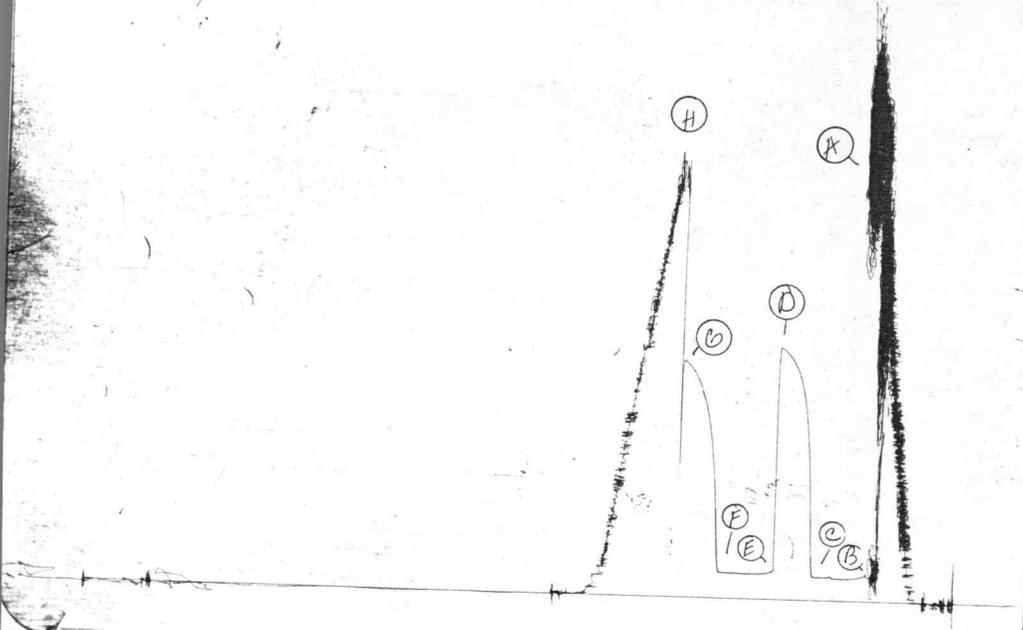
(D)

(F)

(E)

(C)

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Company Petroleum Energy, Inc. Lease & Well No. Grossardt "A"#2
 Elevation 1845 Kelly Bushing Arbuckle Formation Effective Pay --- Ft. Ticket No. 3790
 Date 11/2/79 Sec. 9 Twp. 17S Range 11W County Barton State Kansas
 Test Approved by Jim Musgrove Western Representative Denis Wondra
 Formation Test No. 3 Interval Tested from 3278 ft. to 3319 ft. Total Depth 3319 ft.
 Packer Depth 3275 ft. Size 6 3/4 in. Packer Depth 3278 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) 3282 ft. Recorder Number 3474 Cap. 3000
 Bottom Recorder Depth (Outside) 3285 ft. Recorder Number 3659 Cap. 4000
 Below Straddle Recorder Depth -- ft. Recorder Number - Cap. -
 Drilling Contractor White & Ellis Drilling Rig #2 Drill Collar Length 220 I. D. 2.7 in.
 Mud Type starch Viscosity 40 Weight Pipe Length - I. D. - in.
 Weight 9.7 Water Loss 10.4 cc. Drill Pipe Length 3036 I. D. 3.8 in.
 Chlorides 40,000 P.P.M. Test Tool Length 22 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: Very good throughout flow periods.

Recovered	85	ft. of	slightly oil cut water
Recovered	60	ft. of	oil specked water
Recovered	240	ft. of	water Chlorides 26,000 ppm
Recovered		ft. of	
Recovered		ft. of	

Remarks:

Time Set Packer(s)	<u>4:53</u>	<u>A.M.</u> <u>=P.M.</u>	Time Started Off Bottom	<u>7:25</u>	<u>A.M.</u> <u>=P.M.</u>	Maximum Temperature	<u>110°</u>
Initial Hydrostatic Pressure			(A)	<u>1329</u>		P.S.I.	
Initial Flow Period			Minutes	<u>45</u>	(B)	<u>56</u>	P.S.I. to (C) <u>118</u> P.S.I.
Initial Closed In Period			Minutes	<u>30</u>	(D)	<u>809</u>	P.S.I.
Final Flow Period			Minutes	<u>45</u>	(E)	<u>139</u>	P.S.I. to (F) <u>155</u> P.S.I.
Final Closed In Period			Minutes	<u>33</u>	(G)	<u>767</u>	P.S.I.
Final Hydrostatic Pressure			(H)	<u>1306</u>		P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 11/2/79 Test Ticket No. 3790
 Recorder No. 3474 Capacity 3000 Location 3282 Ft.
 Block No. --- Elevation 1845 Kelly Bushing Well Temperature 110 °F

Point	Pressure	Open Tool	Time Given	Time Computed
Initial Hydrostatic Mud	1329 P.S.I.		4:53A M	
First Initial Flow Pressure	56 P.S.I.	First Flow Pressure	45 Mins.	45 Mins.
First Final Flow Pressure	118 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	809 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
Second Initial Flow Pressure	139 P.S.I.	Final Closed-in Pressure	30 Mins.	33 Mins.
Second Final Flow Pressure	155 P.S.I.			
Final Closed-in Pressure	767 P.S.I.			
Final Hydrostatic Mud	1306 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>9</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>11</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	56	0	118	0	139	0	155
P 2	61	3	532	5	136	3	523
P 3	68	6	618	10	136	6	583
P 4	77	9	664	15	138	9	624
P 5	88	12	694	20	141	12	658
P 6	97	15	721	25	144	15	677
P 7	105	18	742	30	147	18	694
P 8	111	21	761	35	150	21	714
P 9	115	24	777	40	153	24	730
P 10	118	27	791	45	155	27	748
P 11		30	809			30	761
P 12						33	767
P 13							
P 14							
P 15							
P 16							
P 17							
P 18							
P 19							
P 20							

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