

Company Petroleum Energy, Inc. Lease & Well No. Melcher #1  
 Elevation 1772 Kelly Bushing Formation Lansing Effective Pay ---- Ft. Ticket No. 4216  
 Date 12/17/79 Sec. 17 Twp. 20S Range 9W County Rice State Kansas  
 Test Approved by David P. Williams Western Representative Denis Wondra

Formation Test No. 1 Interval Tested from 3069 ft. to 3087 ft. Total Depth 3087 ft.  
 Packer Depth 3064 ft. Size 6 3/4 in. Packer Depth 3069 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) 3077 ft. Recorder Number 3474 Cap. 3000  
 Bottom Recorder Depth (Outside) 3080 ft. Recorder Number 3659 Cap. 4000  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length - I. D. - in.  
 Mud Type starch Viscosity 55 Weight Pipe Length 370 I. D. 2.8 in.  
 Weight 10.4 Water Loss 7.0 cc. Drill Pipe Length 2677 I. D. 3.8 in.  
 Chlorides 68,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.  
 Jars: Make -- Serial Number -- Anchor Length 18 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 XH in.

Blow: Steady one inch blow throughout first flow period. Fair throughout second opening.

Recovered 40 ft. of watery mud  
 Recovered 45 ft. of muddy water Chlorides 150,000 ppm  
 Recovered ft. of some oil on top of tool.  
 Recovered ft. of   
 Recovered ft. of

Remarks: \_\_\_\_\_

Time Set Packer(s) 4:18 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 6:20 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 99<sup>0</sup>  
 Initial Hydrostatic Pressure ..... (A) 1743 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 58 P.S.I. to (C) 44 P.S.I.  
 Initial Closed In Period ..... Minutes 33 (D) 906 P.S.I.  
 Final Flow Period ..... Minutes 30 (E) 71 P.S.I. to (F) 62 P.S.I.  
 Final Closed In Period ..... Minutes 30 (G) 854 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1721 P.S.I.

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

Date 12/17/79 Test Ticket No. 4216  
 Recorder No. 3474 Capacity 3000 Location 3077 Ft.  
 Clock No. ---- Elevation 1772 Kelly Bushing Well Temperature 99 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1743</u> P.S.I.	Open Tool	<u>4:18A</u>	<u>M</u>
B First Initial Flow Pressure	<u>58</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>44</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>906</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>71</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>62</u> P.S.I.			
G Final Closed-in Pressure	<u>854</u> P.S.I.			
H Final Hydrostatic Mud	<u>1721</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: 11 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

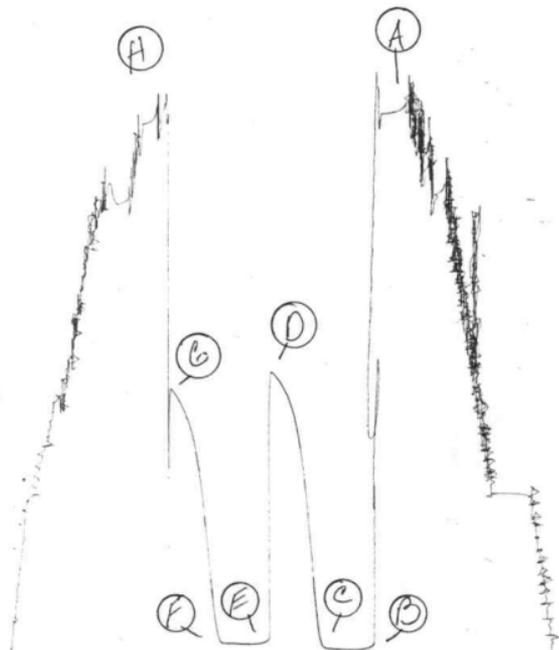
**Second Flow Pressure**  
 Breakdown: 6 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Final Shut-In**  
 Breakdown: 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>58</u>	<u>0</u>	<u>44</u>	<u>0</u>	<u>71</u>	<u>0</u>	<u>62</u>
P 2 <u>5</u>	<u>39</u>	<u>3</u>	<u>86</u>	<u>5</u>	<u>59</u>	<u>3</u>	<u>86</u>
P 3 <u>10</u>	<u>38</u>	<u>6</u>	<u>212</u>	<u>10</u>	<u>56</u>	<u>6</u>	<u>217</u>
P 4 <u>15</u>	<u>38</u>	<u>9</u>	<u>394</u>	<u>15</u>	<u>58</u>	<u>9</u>	<u>394</u>
P 5 <u>20</u>	<u>37</u>	<u>12</u>	<u>562</u>	<u>20</u>	<u>59</u>	<u>12</u>	<u>533</u>
P 6 <u>25</u>	<u>41</u>	<u>15</u>	<u>668</u>	<u>25</u>	<u>61</u>	<u>15</u>	<u>637</u>
P 7 <u>30</u>	<u>44</u>	<u>18</u>	<u>745</u>	<u>30</u>	<u>62</u>	<u>18</u>	<u>711</u>
P 8 _____	_____	<u>21</u>	<u>800</u>	_____	_____	<u>21</u>	<u>759</u>
P 9 _____	_____	<u>24</u>	<u>844</u>	_____	_____	<u>24</u>	<u>795</u>
P10 _____	_____	<u>27</u>	<u>871</u>	_____	_____	<u>27</u>	<u>826</u>
P11 _____	_____	<u>30</u>	<u>892</u>	_____	_____	<u>30</u>	<u>854</u>
P12 _____	_____	<u>33</u>	<u>906</u>	_____	_____	_____	_____
P13 _____	_____	_____	_____	_____	_____	_____	_____
P14 _____	_____	_____	_____	_____	_____	_____	_____
P15 _____	_____	_____	_____	_____	_____	_____	_____
P16 _____	_____	_____	_____	_____	_____	_____	_____
P17 _____	_____	_____	_____	_____	_____	_____	_____
P18 _____	_____	_____	_____	_____	_____	_____	_____
P19 _____	_____	_____	_____	_____	_____	_____	_____
P20 _____	_____	_____	_____	_____	_____	_____	_____

74

JKL # 4216  
I



Company Petroleum Energy, Inc. Lease & Well No. Melcher #1  
 Elevation 1772 Kelly Bushing Arbuckle Formation Effective Pay ---- Ft. Ticket No. 4217  
 Date 12/18/79 Sec. 17 Twp. 20S Range 9W County Rice State Kansas  
 Test Approved by David P. Williams Western Representative Denis Wondra

Formation Test No. 2 Interval Tested from 3305 ft. to 3311 ft. Total Depth 3311 ft.  
 Packer Depth 3300 ft. Size 6 3/4 in. Packer Depth 3305 ft. Size 6 3/4  
 Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3295 ft. Recorder Number 3474 Cap. 3000  
 Bottom Recorder Depth (Outside) 3307 ft. Recorder Number 3659 Cap. 4000  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length - I. D. - in.  
 Mud Type starch Viscosity 48 Weight Pipe Length 865 I. D. 2.8 in.  
 Weight 10.7 Water Loss 11.6 cc. Drill Pipe Length 2415 I. D. 3.8 in.  
 Chlorides 76,000 P.P.M. Test Tool Length 27 ft. Tool Size 5 1/2 OD in.  
 Jars: Make -- Serial Number -- Anchor Length 6 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 XH in.

Blow: Very weak ; died in twenty five minutes on first flow period. No blow on second opening.

Recovered 10 ft. of very slightly oil cut mud  
 Recovered     ft. of      
 Recovered     ft. of      
 Recovered     ft. of      
 Recovered     ft. of    

Remarks:    

Time Set Packer(s) 1:28 ~~A.M.~~ P.M. Time Started Off Bottom 3:00 ~~A.M.~~ P.M. Maximum Temperature 103  
 Initial Hydrostatic Pressure ..... (A) 1901 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 21 P.S.I. to (C) 16 P.S.I.  
 Initial Closed In Period ..... Minutes 15 (D) 45 P.S.I.  
 Final Flow Period ..... Minutes 20 (E) 24 P.S.I. to (F) 18 P.S.I.  
 Final Closed In Period ..... Minutes 20 (G) 48 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1886 P.S.I.

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

Date 12/18/79 Test Ticket No. 4217  
 Recorder No. 3474 Capacity 3000 Location 3295 Ft.  
 Clock No. ---- Elevation 1772 Kelly Bushing Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	1901	P.S.I.	1:28P	M
B. First Initial Flow Pressure	21	P.S.I.	30	30
C. First Final Flow Pressure	16	P.S.I.	20	15
D. Initial Closed-in Pressure	45	P.S.I.	20	20
E. Second Initial Flow Pressure	24	P.S.I.	20	20
F. Second Final Flow Pressure	18	P.S.I.		
G. Final Closed-in Pressure	48	P.S.I.		
H. Final Hydrostatic Mud	1886	P.S.I.		

**PRESSURE BREAKDOWN**

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>5</u> Inc.		Breakdown: <u>4</u> Inc.		Breakdown: <u>6</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>2</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>21</u>	<u>0</u>	<u>16</u>	<u>0</u>	<u>24</u>	<u>0</u>	<u>18</u>
P 2 <u>5</u>	<u>21</u>	<u>3</u>	<u>21</u>	<u>5</u>	<u>24</u>	<u>3</u>	<u>18</u>
P 3 <u>10</u>	<u>16</u>	<u>6</u>	<u>24</u>	<u>10</u>	<u>20</u>	<u>6</u>	<u>21</u>
P 4 <u>15</u>	<u>16</u>	<u>9</u>	<u>32</u>	<u>15</u>	<u>19</u>	<u>9</u>	<u>24</u>
P 5 <u>20</u>	<u>16</u>	<u>12</u>	<u>39</u>	<u>20</u>	<u>18</u>	<u>12</u>	<u>30</u>
P 6 <u>25</u>	<u>16</u>	<u>15</u>	<u>45</u>			<u>15</u>	<u>34</u>
P 7 <u>30</u>	<u>16</u>					<u>18</u>	<u>39</u>
P 8						<u>21</u>	<u>48</u>
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

74

TKT # 4217  
I



Company Petroelum Energy, Inc. Lease & Well No. Melcher #1  
 Elevation 1772 Kelly Bushing Formation Arbuckle Effective Pay ---- Ft. Ticket No. 4218  
 Date 12/19/79 Sec. 17 Twp. 20S Range 9W County Rice State Kansas  
 Test Approved by David P. Williams Western Representative Denis Wondra

Formation Test No. 3 Interval Tested from 3305 ft. to 3319 ft. Total Depth 3319 ft.  
 Packer Depth 3297 ft. Size 6 3/4 in. Packer Depth 3305 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) 3309 ft. Recorder Number 3474 Cap. 3000  
 Bottom Recorder Depth (Outside) 3312 ft. Recorder Number 3659 Cap. 4000  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length -- I. D. - in.  
 Mud Type starch Viscosity 48 Weight Pipe Length 865 I. D. 2.8 in.  
 Weight 10.7 Water Loss 11.6 cc. Drill Pipe Length 2616 I. D. 3.8 in.  
 Chlorides 76,000 P.P.M. Test Tool Length 24 ft. Tool Size 5 1/2 OD in.  
 Jars: Make -- Serial Number -- Anchor Length 14 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 XH in.

Blow: Good. Increased to very good by end of first flow period. Very good throughout second opening.

Recovered 20 ft. of heavily oil cut mud  
 Recovered 185 ft. of 50% mud; 20% water ;30% oil  
 Recovered 125 ft. of oil cut muddy water chlorides 50,000 ppm  
 Recovered ft. of  
 Recovered ft. of

Remarks: \_\_\_\_\_

Time Set Packer(s) 1:33 A.M. = P.M. Time Started Off Bottom 3:35 A.M. = P.M. Maximum Temperature 105<sup>0</sup>  
 Initial Hydrostatic Pressure ..... (A) 1889 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 47 P.S.I. to (C) 108 P.S.I.  
 Initial Closed In Period ..... Minutes 30 (D) 977 P.S.I.  
 Final Flow Period ..... Minutes 30 (E) 132 P.S.I. to (F) 164 P.S.I.  
 Final Closed In Period ..... Minutes 30 (G) 929 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1857 P.S.I.

**WESTERN TESTING CO., INC.**

**Pressure Data**

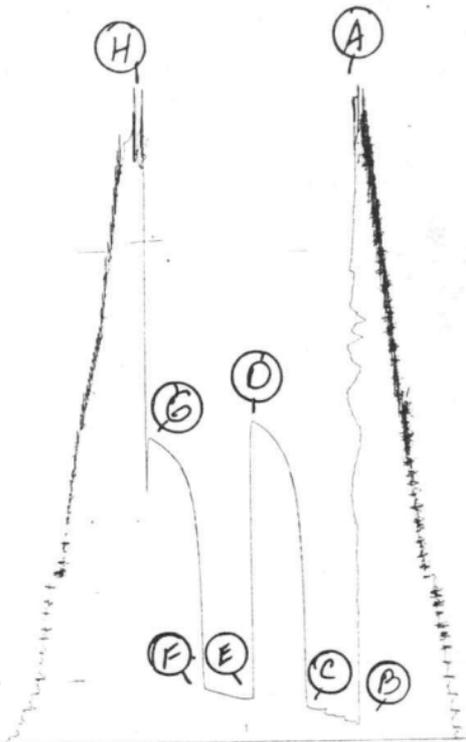
Date 12/19/79 Test Ticket No. 4218  
 Recorder No. 3474 Capacity 3000 Location 3309 Ft.  
 Clock No. --- Elevation 1772 Kelly Bushing Well Temperature 105 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1889</u> P.S.I.	Open Tool	<u>1:33A</u> M	
B First Initial Flow Pressure	<u>47</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>108</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>977</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>132</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>164</u> P.S.I.			
G Final Closed-in Pressure	<u>929</u> P.S.I.			
H Final Hydrostatic Mud	<u>1857</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.							
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1 <u>0</u>	<u>47</u>	<u>0</u>	<u>108</u>	<u>0</u>	<u>132</u>	<u>0</u>	<u>164</u>	
P 2 <u>5</u>	<u>61</u>	<u>3</u>	<u>455</u>	<u>5</u>	<u>132</u>	<u>3</u>	<u>500</u>	
P 3 <u>10</u>	<u>74</u>	<u>6</u>	<u>683</u>	<u>10</u>	<u>138</u>	<u>6</u>	<u>670</u>	
P 4 <u>15</u>	<u>80</u>	<u>9</u>	<u>786</u>	<u>15</u>	<u>145</u>	<u>9</u>	<u>759</u>	
P 5 <u>20</u>	<u>98</u>	<u>12</u>	<u>847</u>	<u>20</u>	<u>153</u>	<u>12</u>	<u>812</u>	
P 6 <u>25</u>	<u>98</u>	<u>15</u>	<u>885</u>	<u>25</u>	<u>159</u>	<u>15</u>	<u>848</u>	
P 7 <u>30</u>	<u>108</u>	<u>18</u>	<u>912</u>	<u>30</u>	<u>164</u>	<u>18</u>	<u>871</u>	
P 8		<u>21</u>	<u>932</u>			<u>21</u>	<u>886</u>	
P 9		<u>24</u>	<u>950</u>			<u>24</u>	<u>902</u>	
P10		<u>27</u>	<u>964</u>			<u>27</u>	<u>914</u>	
P11		<u>30</u>	<u>977</u>			<u>30</u>	<u>929</u>	
P12								
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								

THE # 4218  
I



24