

Company National Oil Company Lease & Well No. Velma #1  
 Elevation 1876 Kelly Bushing Mississippii Formation Effective Pay -- Ft. Ticket No. 3475  
 Date 1/20/80 Sec. 12 Twp 33S Range 15W County Barber State Kansas  
 Test Approved by R. B. Gebbart, Jr. Western Representative Dave Sloan

Formation Test No. 1 Interval Tested from 4795 ft. to 4840 ft. Total Depth 4840 ft.  
 Packer Depth 4790 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4795 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 4832 ft. Recorder Number 2604 Cap. 4150  
 Bottom Recorder Depth (Outside) 4835 ft. Recorder Number 6246 Cap. 5200  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Venture Drilling Rig #2 Drill Collar Length -- I. D. - in.  
 Mud Type drispac Viscosity 50 Weight Pipe Length 1050 I. D. 3.2 in.  
 Weight 9.2 Water Loss 12.0 cc. Drill Pipe Length 3717 I. D. 3.8 in.  
 Chlorides 15,000 P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 405 Anchor Length 45 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 blow throughout both flow periods.

Recovered 65 ft. of drilling mud  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

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

Time Set Packer(s)	<u>6:20</u>	<del>P.M.</del> <u>A.M.</u>	Time Started Off Bottom	<u>9:20</u>	<del>P.M.</del> <u>A.M.</u>	Maximum Temperature	<u>122°</u>
Initial Hydrostatic Pressure	(A)	<u>2407</u>				<u>P.S.I.</u>	
Initial Flow Period	Minutes	<u>30</u>	(B)	<u>102</u>		<u>P.S.I. to (C)</u>	<u>66</u> P.S.I.
Initial Closed In Period	Minutes	<u>42</u>	(D)	<u>247</u>		<u>P.S.I.</u>	
Final Flow Period	Minutes	<u>60</u>	(E)	<u>111</u>		<u>P.S.I. to (F)</u>	<u>72</u> P.S.I.
Final Closed In Period	Minutes	<u>45</u>	(G)	<u>263</u>		<u>P.S.I.</u>	
Final Hydrostatic Pressure	(H)	<u>2327</u>				<u>P.S.I.</u>	

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

Date 1/20/80 Test Ticket No. 3475  
 Recorder No. 2604 Capacity 4150 Location 4832 Ft.  
 Clock No. -- Elevation 1876 Kelly Bushing Well Temperature 122 °F

Point	Pressure		Open Tool	Time Given	Time Computed
	P.S.I.	P.S.I.		M	Mins.
A Initial Hydrostatic Mud	2407	P.S.I.	Open Tool	6:20A	M
B First Initial Flow Pressure	102	P.S.I.	First Flow Pressure	30	30
C First Final Flow Pressure	66	P.S.I.	Initial Closed-in Pressure	45	42
D Initial Closed-in Pressure	247	P.S.I.	Second Flow Pressure	60	60
E Second Initial Flow Pressure	111	P.S.I.	Final Closed-in Pressure	45	45
F Second Final Flow Pressure	72	P.S.I.			
G Final Closed-in Pressure	263	P.S.I.			
H Final Hydrostatic Mud	2327	P.S.I.			

**PRESSURE BREAKDOWN**

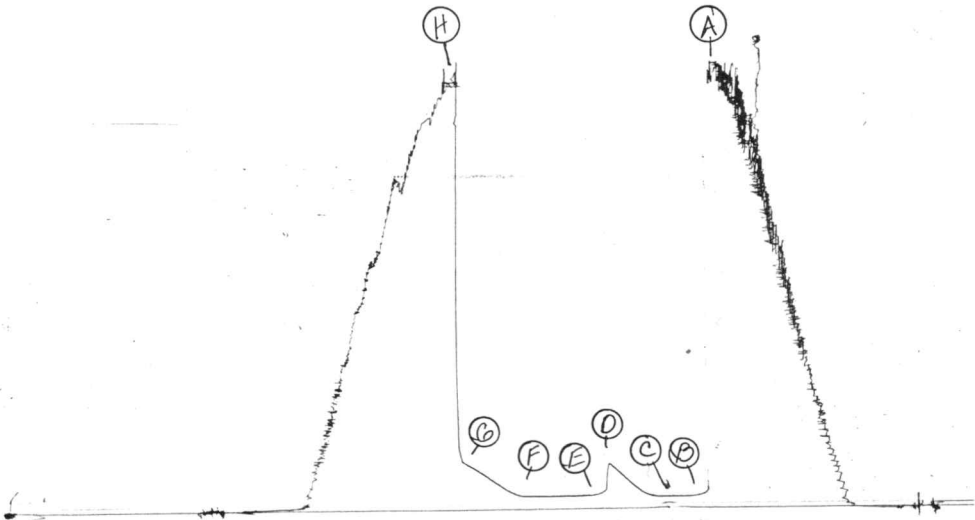
<b>First Flow Pressure</b> Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<b>Initial Shut-In</b> Breakdown: <u>14</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	<b>Second Flow Pressure</b> Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<b>Final Shut-In</b> Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
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Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes
P 1 0	102	0	66	0	111	0	72	0
P 2 5	75	3	66	3	83	5	76	3
P 3 10	68	6	66	6	75	10	82	6
P 4 15	66	9	68	9	72	15	93	9
P 5 20	66	12	72	12	72	20	104	12
P 6 25	66	15	80	15	72	25	117	15
P 7 30	66	18	92	18	72	30	132	18
P 8		21	109	21	72	35	147	21
P 9		24	126	24	72	40	160	24
P10		27	147	27	72	45	177	27
P11		30	167	30	72	50	192	30
P12		33	188	33	72	55	205	33
P13		36	208	36	72	60	220	36
P14		39	229	39			233	39
P15		42	247	42			247	42
P16							263	45
P17								
P18								
P19								
P20								

2604

NATIONAL OIL  
Volume #1  
DST1

TRK # 3475  
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Company National Oil Company Lease & Well No. Velma #1  
 Elevation 1876 Kelly Bushing Mississippi Formation Effective Pay --- Ft. Ticket No. 5576  
 Date 1/21/80 Sec. 12 Twp. 33S Range 15W County Barber State Kansas  
 Test Approved by R. B. Gebbart, Jr. Western Representative Dave Sloan

Formation Test No. 2 Interval Tested from 4840 ft. to 4855 ft. Total Depth 4855 ft.  
 Packer Depth 4835 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4840 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4847 ft. Recorder Number 2604 Cap. 4150  
 Bottom Recorder Depth (Outside) 4850 ft. Recorder Number 6246 Cap. 5200  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Venture Drilling Rig #2 Drill Collar Length -- I. D. - in.  
 Mud Type drispac Viscosity 61 Weight Pipe Length 1050 I. D. 3.2 in.  
 Weight 8.9 Water Loss 10.4 cc. Drill Pipe Length 3762 I. D. 3.8 in.  
 Chlorides 14,000 P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 405 Anchor Length 15 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 1/4 FH in.

Blow: Moderate throughout initial flow dying to weak blow during final flow.

Recovered 65 ft. of drilling mud; slightly oil spotting on top of tool.  
 Recovered          ft. of           
 Recovered          ft. of           
 Recovered          ft. of           
 Recovered          ft. of         

Remarks:         

Time Set Packer(s) 3:25 ~~P.M.~~ A.M. Time Started Off Bottom 6:40 ~~P.M.~~ A.M. Maximum Temperature 123°  
 Initial Hydrostatic Pressure ..... (A) 2354 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 74 P.S.I. to (C) 39 P.S.I.  
 Initial Closed In Period ..... Minutes 45 (D) 179 P.S.I.  
 Final Flow Period ..... Minutes 60 (E) 72 P.S.I. to (F) 46 P.S.I.  
 Final Closed In Period ..... Minutes 60 (G) 306 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 2300 P.S.I.

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

Date 1/21/80 Test Ticket No. 5576  
 Recorder No. 2604 Capacity 4150 Location 4847 Ft.  
 Clock No. ----- Elevation ----- Well Temperature 123 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2354</u> P.S.I.	Open Tool	<u>3:25A</u>	<u>M</u>
B First Initial Flow Pressure	<u>74</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>39</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>179</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>72</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>46</u> P.S.I.			
G Final Closed-in Pressure	<u>306</u> P.S.I.			
H Final Hydrostatic Mud	<u>2300</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: 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.

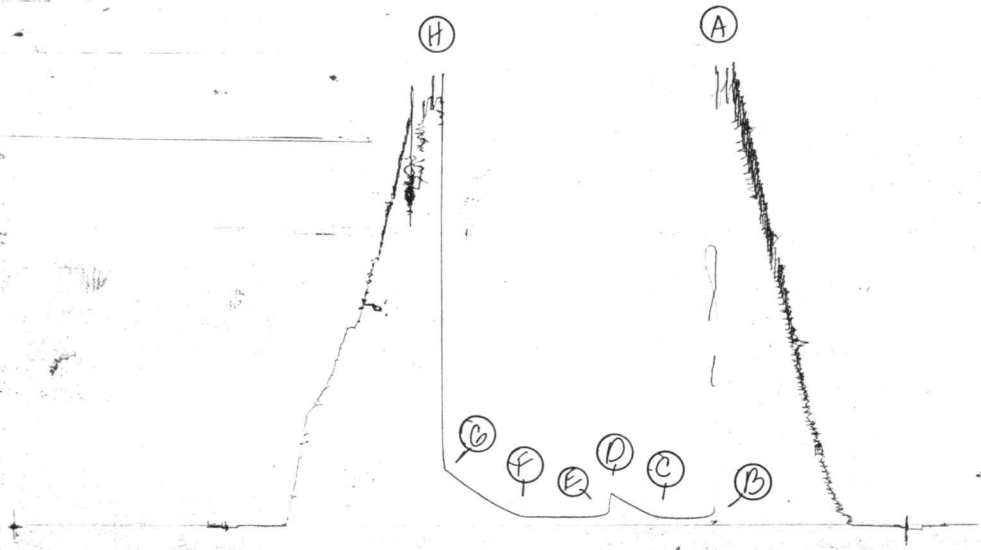
**Final Shut-In**  
 Breakdown: 20 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>74</u>	<u>0</u>	<u>39</u>	<u>0</u>	<u>72</u>	<u>0</u>	<u>46</u>
P 2 <u>5</u>	<u>49</u>	<u>3</u>	<u>39</u>	<u>5</u>	<u>55</u>	<u>3</u>	<u>49</u>
P 3 <u>10</u>	<u>43</u>	<u>6</u>	<u>43</u>	<u>10</u>	<u>49</u>	<u>6</u>	<u>54</u>
P 4 <u>15</u>	<u>39</u>	<u>9</u>	<u>47</u>	<u>15</u>	<u>47</u>	<u>9</u>	<u>64</u>
P 5 <u>20</u>	<u>39</u>	<u>12</u>	<u>51</u>	<u>20</u>	<u>46</u>	<u>12</u>	<u>72</u>
P 6 <u>25</u>	<u>39</u>	<u>15</u>	<u>60</u>	<u>25</u>	<u>46</u>	<u>15</u>	<u>83</u>
P 7 <u>30</u>	<u>39</u>	<u>18</u>	<u>68</u>	<u>30</u>	<u>46</u>	<u>18</u>	<u>94</u>
P 8		<u>21</u>	<u>81</u>	<u>35</u>	<u>46</u>	<u>21</u>	<u>107</u>
P 9		<u>24</u>	<u>93</u>	<u>40</u>	<u>46</u>	<u>24</u>	<u>118</u>
P10		<u>27</u>	<u>104</u>	<u>45</u>	<u>46</u>	<u>27</u>	<u>130</u>
P11		<u>30</u>	<u>117</u>	<u>50</u>	<u>46</u>	<u>30</u>	<u>145</u>
P12		<u>33</u>	<u>130</u>	<u>55</u>	<u>46</u>	<u>33</u>	<u>158</u>
P13		<u>36</u>	<u>143</u>	<u>60</u>	<u>46</u>	<u>36</u>	<u>177</u>
P14		<u>39</u>	<u>156</u>			<u>39</u>	<u>190</u>
P15		<u>42</u>	<u>173</u>			<u>42</u>	<u>205</u>
P16		<u>45</u>	<u>179</u>			<u>45</u>	<u>220</u>
P17						<u>48</u>	<u>237</u>
P18						<u>51</u>	<u>254</u>
P19						<u>54</u>	<u>271</u>
P20						<u>57</u>	<u>290</u>
						<u>60</u>	<u>306</u>

2654

NATIONAL  
VE/MA#1  
DST 2

TK# 5576  
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Company National Oil Company Lease & Well No. Velma #1  
 Elevation 1876 Kelly Bushing Mississippi Formation Mississippi Effective Pay -- Ft. Ticket No. 5577  
 Date 1/22/80 Sec. 12 Twp 33s Range 15w County Barber State Kansas  
 Test Approved by R. B. Gebbart, Jr. Western Representative Dave Sloan

Formation Test No. 3 Interval Tested from 4855 ft. to 4876 ft. Total Depth 4876 ft.  
 Packer Depth 4850 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4855 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 4868 ft. Recorder Number 2604 Cap. 4150  
 Bottom Recorder Depth (Outside) 4871 ft. Recorder Number 6246 Cap. 5200  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Venture Drilling Rig #2 Drill Collar Length - I. D. - in.  
 Mud Type drispac Viscosity 48 Weight Pipe Length 1050 I. D. 3.2 in.  
 Weight 9 Water Loss 10.4 cc. Drill Pipe Length 3777 I. D. 3.8 in.  
 Chlorides 14,000 P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 405 Anchor Length 21 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 blow dying after forty minutes on final flow.

Recovered 10 ft. of slightly gas cut drilling mud  
 Recovered     ft. of      
 Recovered     ft. of      
 Recovered     ft. of      
 Recovered     ft. of    

Remarks:    

Time Set Packer(s) 12:55 <sup>A.M.</sup>/<sub>-P.M.</sub> Time Started Off Bottom 4:10 <sup>A.M.</sup>/<sub>=P.M.</sub> Maximum Temperature 124°  
 Initial Hydrostatic Pressure ..... (A) 2447 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 55 P.S.I. to (C) 27 P.S.I.  
 Initial Closed In Period ..... Minutes 42 (D) 81 P.S.I.  
 Final Flow Period ..... Minutes 60 (E) 60 P.S.I. to (F) 32 P.S.I.  
 Final Closed In Period ..... Minutes 57 (G) 117 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 2367 P.S.I.

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

Date 1-22-80 Test Ticket No. 5577  
 Recorder No. 2604 Capacity 4150 Location 4868 Ft.  
 Clock No. - Elevation 1876 Kelly Bushing Well Temperature 124 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2447</u> P.S.I.	Open Tool	<u>12:55A.</u> M	
B First Initial Flow Pressure	<u>55</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>27</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>42</u> Mins.
D Initial Closed-in Pressure	<u>81</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>60</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>32</u> P.S.I.			
G Final Closed-in Pressure	<u>117</u> P.S.I.			
H Final Hydrostatic Mud	<u>2367</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.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1 <u>0</u>	<u>55</u>	<u>0</u>	<u>27</u>	<u>0</u>	<u>60</u>	<u>0</u>	<u>32</u>	
P 2 <u>5</u>	<u>36</u>	<u>3</u>	<u>30</u>	<u>3</u>	<u>43</u>	<u>3</u>	<u>34</u>	
P 3 <u>10</u>	<u>32</u>	<u>6</u>	<u>30</u>	<u>6</u>	<u>36</u>	<u>6</u>	<u>38</u>	
P 4 <u>15</u>	<u>30</u>	<u>9</u>	<u>30</u>	<u>9</u>	<u>33</u>	<u>9</u>	<u>40</u>	
P 5 <u>20</u>	<u>29</u>	<u>12</u>	<u>32</u>	<u>12</u>	<u>32</u>	<u>12</u>	<u>44</u>	
P 6 <u>25</u>	<u>28</u>	<u>15</u>	<u>34</u>	<u>15</u>	<u>32</u>	<u>15</u>	<u>49</u>	
P 7 <u>30</u>	<u>27</u>	<u>18</u>	<u>36</u>	<u>18</u>	<u>32</u>	<u>18</u>	<u>51</u>	
P 8 _____		<u>21</u>	<u>42</u>	<u>21</u>	<u>32</u>	<u>21</u>	<u>55</u>	
P 9 _____		<u>24</u>	<u>47</u>	<u>24</u>	<u>32</u>	<u>24</u>	<u>60</u>	
P10 _____		<u>27</u>	<u>53</u>	<u>27</u>	<u>32</u>	<u>27</u>	<u>64</u>	
P11 _____		<u>30</u>	<u>60</u>	<u>30</u>	<u>32</u>	<u>30</u>	<u>68</u>	
P12 _____		<u>33</u>	<u>65</u>	<u>33</u>	<u>32</u>	<u>33</u>	<u>74</u>	
P13 _____		<u>36</u>	<u>70</u>	<u>36</u>	<u>32</u>	<u>36</u>	<u>77</u>	
P14 _____		<u>39</u>	<u>77</u>	<u>39</u>		<u>39</u>	<u>85</u>	
P15 _____		<u>42</u>	<u>81</u>	<u>42</u>		<u>42</u>	<u>89</u>	
P16 _____						<u>45</u>	<u>95</u>	
P17 _____						<u>48</u>	<u>100</u>	
P18 _____						<u>51</u>	<u>104</u>	
P19 _____						<u>54</u>	<u>111</u>	
P20 _____						<u>57</u>	<u>117</u>	

2604.

TKT # 5577

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Velma # 1

DST 3

