

Company Damson Oil Corporation Lease & Well No. Graves #1  
 Elevation -- Formation Cherokee Sand Effective Pay -- Ft. Ticket No. 1586  
 Date 2/2/79 Sec. 7 Twp. 35S Range 12W County Barber State Kansas  
 Test Approved by James H. Kennedy For Gordon Keen Western Representative Ron Emmons

Formation Test No. 1 Interval Tested from 4730 ft. to 4774 ft. Total Depth 4774 ft.  
 Packer Depth 4725 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4730 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 4731 ft. Recorder Number 3660 Cap. 4000  
 Bottom Recorder Depth (Outside) 4734 ft. Recorder Number 1560 Cap. 6000  
 Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. --

Drilling Contractor DaMac Drilling Rig #2 Drill Collar Length 473 I. D. 2 1/4 in.  
 Mud Type premix-driscopac Viscosity 51 Weight Pipe Length - I. D. - in.  
 Weight 9.4 Water Loss 16.8 cc. Drill Pipe Length 4225 I. D. 3.8 in.  
 Chlorides 23,000 P.P.M. Test Tool Length 32' Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 410 Anchor Length 44 ft. Size 5 1/2 OD in.  
 Did Well Flow? No Reversed Out \_\_\_\_\_ 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 flow periods.

Recovered 90 ft. of oil cut mud  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: Clock stopped on bottom recorder.

Time Set Packer(s) 5:10 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 9:40 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 164  
 Initial Hydrostatic Pressure ..... (A) 2367 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 61 P.S.I. to (C) 51 P.S.I.  
 Initial Closed In Period ..... Minutes 30 (D) 204 P.S.I.  
 Final Flow Period ..... Minutes 120 (E) 77 P.S.I. to (F) 79 P.S.I.  
 Final Closed In Period ..... Minutes 90 (G) 372 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 2351 P.S.I.

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

Date 2/2/79 Test Ticket No. 1586  
 Recorder No. 3660 Capacity 4000 Location 4731 Ft.  
 Clock No. -- Elevation -- Well Temperature 164 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2367</u> P.S.I.	Open Tool	<u>5:10A</u> M	
B First Initial Flow Pressure	<u>61</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>51</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>204</u> P.S.I.	Second Flow Pressure	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>77</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>79</u> P.S.I.			
G Final Closed-in Pressure	<u>372</u> P.S.I.			
H Final Hydrostatic Mud	<u>2351</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: 12 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

**Second Flow Pressure**  
 Breakdown: 23 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Final Shut-In**  
 Breakdown: 30 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

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	<u>61</u>	<u>0</u>	<u>51</u>	<u>0</u>	<u>77</u>	<u>0</u>	<u>79</u>	<u>0</u>
P 2	<u>51</u>	<u>3</u>	<u>51</u>	<u>3</u>	<u>73</u>	<u>5</u>	<u>83</u>	<u>3</u>
P 3	<u>47</u>	<u>6</u>	<u>53</u>	<u>6</u>	<u>69</u>	<u>10</u>	<u>85</u>	<u>6</u>
P 4	<u>45</u>	<u>9</u>	<u>55</u>	<u>9</u>	<u>67</u>	<u>15</u>	<u>91</u>	<u>9</u>
P 5	<u>47</u>	<u>12</u>	<u>63</u>	<u>12</u>	<u>67</u>	<u>20</u>	<u>97</u>	<u>12</u>
P 6	<u>49</u>	<u>15</u>	<u>75</u>	<u>15</u>	<u>70</u>	<u>25</u>	<u>103</u>	<u>15</u>
P 7	<u>51</u>	<u>18</u>	<u>85</u>	<u>18</u>	<u>70</u>	<u>30</u>	<u>113</u>	<u>18</u>
P 8		<u>21</u>	<u>95</u>	<u>21</u>	<u>70</u>	<u>35</u>	<u>121</u>	<u>21</u>
P 9		<u>24</u>	<u>113</u>	<u>24</u>	<u>71</u>	<u>40</u>	<u>128</u>	<u>24</u>
P10		<u>27</u>	<u>132</u>	<u>27</u>	<u>71</u>	<u>45</u>	<u>134</u>	<u>27</u>
P11		<u>30</u>	<u>154</u>	<u>30</u>	<u>73</u>	<u>50</u>	<u>142</u>	<u>30</u>
P12		<u>33</u>	<u>184</u>	<u>33</u>	<u>74</u>	<u>55</u>	<u>152</u>	<u>33</u>
P13		<u>36</u>	<u>204</u>	<u>36</u>	<u>74</u>	<u>60</u>	<u>158</u>	<u>36</u>
P14					<u>74</u>	<u>65</u>	<u>168</u>	<u>39</u>
P15					<u>75</u>	<u>70</u>	<u>176</u>	<u>42</u>
P16					<u>75</u>	<u>75</u>	<u>188</u>	<u>45</u>
P17					<u>76</u>	<u>80</u>	<u>194</u>	<u>48</u>
P18					<u>77</u>	<u>85</u>	<u>204</u>	<u>51</u>
P19					<u>78</u>	<u>90</u>	<u>217</u>	<u>54</u>
P20					<u>79</u>	<u>95</u>	<u>229</u>	<u>57</u>
					<u>79</u>	<u>100</u>	<u>241</u>	<u>60</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 2/2/79 Test Ticket No. 1586  
 Recorder No. 3660 Capacity 4000 Location 4731 Ft.  
 Clock No. -- Elevation -- Well Temperature 164 °F

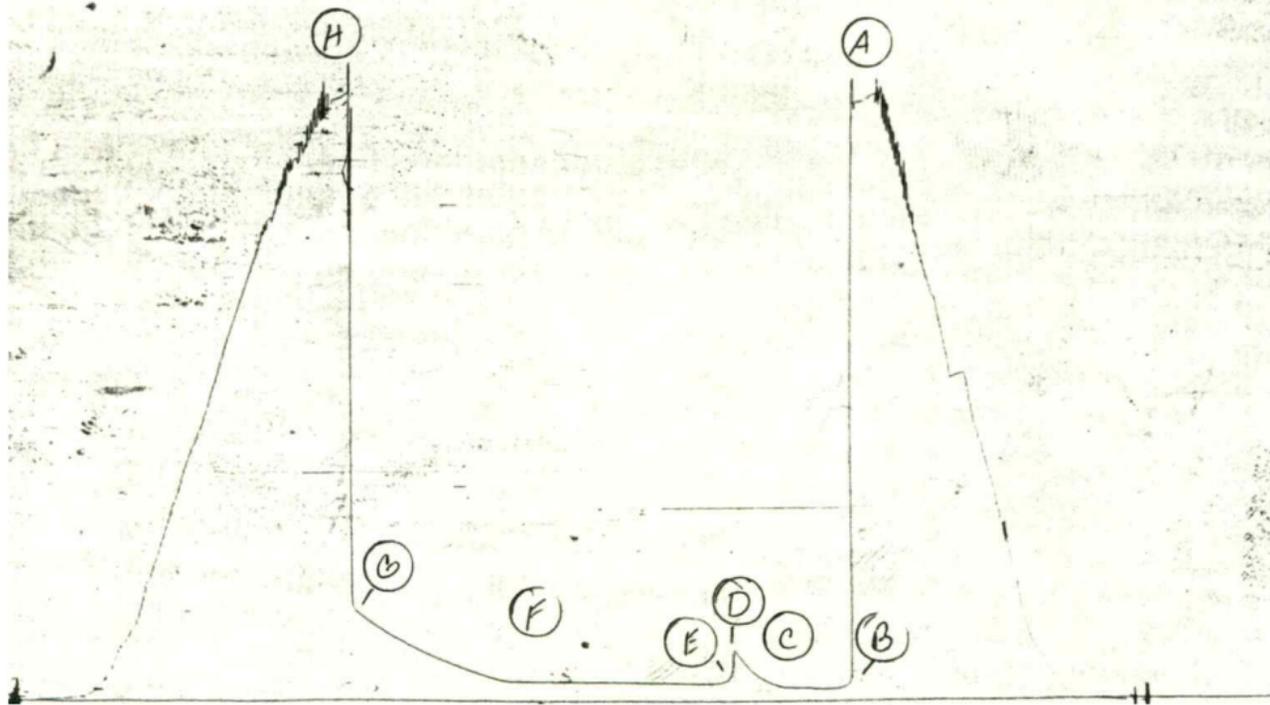
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2367</u> P.S.I.	Open Tool	<u>5:10A</u> M	
B First Initial Flow Pressure	<u>61</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>51</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>204</u> P.S.I.	Second Flow Pressure	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>77</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>79</u> P.S.I.			
G Final Closed-in Pressure	<u>372</u> P.S.I.			
H Final Hydrostatic Mud	<u>2351</u> P.S.I.			

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In	
	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>12</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>23</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>30</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	
	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1			<u>105</u>	<u>63</u>	<u>247</u>
P 2			<u>110</u>	<u>66</u>	<u>263</u>
P 3			<u>115</u>	<u>69</u>	<u>271</u>
P 4			<u>120</u>	<u>72</u>	<u>292</u>
P 5				<u>75</u>	<u>302</u>
P 6				<u>78</u>	<u>316</u>
P 7				<u>81</u>	<u>328</u>
P 8				<u>84</u>	<u>348</u>
P 9				<u>87</u>	<u>364</u>
P10				<u>90</u>	<u>372</u>
P11					
P12					
P13					
P14					
P15					
P16					
P17					
P18					
P19					
P20					

TKI # 1586

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Company Damson Oil Corporation Lease & Well No. Graves #1  
 Elevation -- Formation Mississippi Effective Pay -- Ft. Ticket No. 1587  
 Date 2/3/79 Sec. 7 Twp. 35S Range 12W County Barber State Kansas  
 Test Approved by Gordon W. Keen Western Representative Ron Emmons

Formation Test No. 2 Interval Tested from 4773' ft. to 4810' ft. Total Depth 4810' ft.  
 Packer Depth 4767 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4772 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set --

Top Recorder Depth (Inside) 4768 ft. Recorder Number 3660 Cap. 4000  
 Bottom Recorder Depth (Outside) 4771 ft. Recorder Number 1560 Cap. 6000  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor DaMac Drilling, Inc. Rig #2 Drill Collar Length 473 I. D. 2 1/4 in.  
 Mud Type drispac-premix Viscosity 59 Weight Pipe Length - I. D. - in.  
 Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 4267 I. D. 3.8 in.  
 Chlorides 21,000 P.P.M. Test Tool Length 32' Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 410 Anchor Length 38' ft. Size 5 1/2 OD in.  
 Did Well Flow? No Reversed Out \_\_\_\_\_ 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: Strong throughout flow periods.

Recovered 200 ft. of gas cut mud  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: Slid tool 10 feet (Gas to surface in 48 minutes.) (Clock stopped in recorder #1560)  
(Too small to gauge)

Time Set Packer(s) 5:35 ~~A.M.~~ P.M. Time Started Off Bottom 12:35 ~~A.M.~~ P.M. Maximum Temperature 120  
 Initial Hydrostatic Pressure ..... (A) 2431 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 80 P.S.I. to (C) 65 P.S.I.  
 Initial Closed In Period ..... Minutes 30 (D) 637 P.S.I.  
 Final Flow Period ..... Minutes 90 (E) 80 P.S.I. to (F) 66 P.S.I.  
 Final Closed In Period ..... Minutes 90 (G) 937 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 2385 P.S.I.

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

Date 2/3/79 Test Ticket No. 1587  
 Recorder No. 3660 Capacity 4000 Location 4768 Ft.  
 Clock No. --- Elevation --- Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2431</u> P.S.I.	Open Tool	<u>8:35A</u> M	
B First Initial Flow Pressure	<u>80</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>65</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>637</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>90</u> Mins.
E Second Initial Flow Pressure	<u>80</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>66</u> P.S.I.			
G Final Closed-in Pressure	<u>937</u> P.S.I.			
H Final Hydrostatic Mud	<u>2385</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: 10 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

**Second Flow Pressure**  
 Breakdown: 18 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Final Shut-In**  
 Breakdown: 30 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

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	<u>80</u>	<u>0</u>	<u>65</u>	<u>0</u>	<u>80</u>	<u>0</u>	<u>66</u>	<u>0</u>
P 2	<u>75</u>	<u>3</u>	<u>119</u>	<u>3</u>	<u>73</u>	<u>5</u>	<u>109</u>	<u>3</u>
P 3	<u>71</u>	<u>6</u>	<u>198</u>	<u>6</u>	<u>72</u>	<u>10</u>	<u>172</u>	<u>6</u>
P 4	<u>67</u>	<u>9</u>	<u>255</u>	<u>9</u>	<u>72</u>	<u>15</u>	<u>233</u>	<u>9</u>
P 5	<u>67</u>	<u>12</u>	<u>320</u>	<u>12</u>	<u>71</u>	<u>20</u>	<u>292</u>	<u>12</u>
P 6	<u>65</u>	<u>15</u>	<u>393</u>	<u>15</u>	<u>70</u>	<u>25</u>	<u>340</u>	<u>15</u>
P 7	<u>65</u>	<u>18</u>	<u>460</u>	<u>18</u>	<u>69</u>	<u>30</u>	<u>385</u>	<u>18</u>
P 8		<u>21</u>	<u>506</u>	<u>21</u>	<u>69</u>	<u>35</u>	<u>427</u>	<u>21</u>
P 9		<u>24</u>	<u>567</u>	<u>24</u>	<u>68</u>	<u>40</u>	<u>466</u>	<u>24</u>
P10		<u>27</u>	<u>617</u>	<u>27</u>	<u>67</u>	<u>45</u>	<u>506</u>	<u>27</u>
P11		<u>30</u>	<u>637</u>	<u>30</u>	<u>67</u>	<u>50</u>	<u>546</u>	<u>30</u>
P12					<u>67</u>	<u>55</u>	<u>585</u>	<u>33</u>
P13					<u>67</u>	<u>60</u>	<u>615</u>	<u>36</u>
P14					<u>67</u>	<u>65</u>	<u>645</u>	<u>39</u>
P15					<u>66</u>	<u>70</u>	<u>679</u>	<u>42</u>
P16					<u>66</u>	<u>75</u>	<u>702</u>	<u>45</u>
P17					<u>66</u>	<u>80</u>	<u>718</u>	<u>48</u>
P18					<u>66</u>	<u>85</u>	<u>738</u>	<u>51</u>
P19					<u>66</u>	<u>90</u>	<u>752</u>	<u>54</u>
P20							<u>768</u>	<u>57</u>
							<u>782</u>	<u>60</u>

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

Date 2/3/79 Test Ticket No. 1587  
 Recorder No. 3660 Capacity 4000 Location 4768 Ft.  
 Clock No. --- Elevation --- Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2431</u> P.S.I.	Open Tool	<u>8:35A</u> M	
B First Initial Flow Pressure	<u>80</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>65</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>637</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>90</u> Mins.
E Second Initial Flow Pressure	<u>80</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>66</u> P.S.I.			
G Final Closed-in Pressure	<u>937</u> P.S.I.			
H Final Hydrostatic Mud	<u>2385</u> P.S.I.			

**PRESSURE BREAKDOWN**

First Flow Pressure  
Breakdown: 6 Inc.  
of 5 mins. and a

Initial Shut-In  
Breakdown: 10 Inc.  
of 3 mins. and a

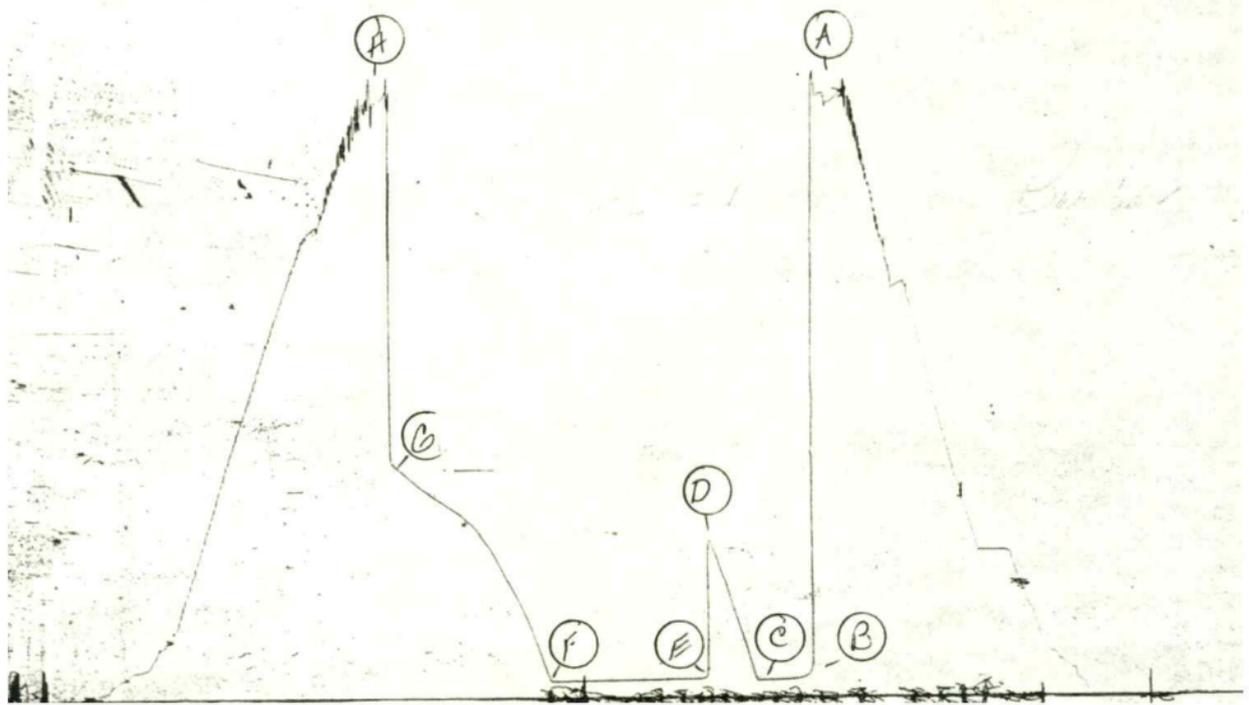
Second Flow Pressure  
Breakdown: 18 Inc.  
of 5 mins. and a

Final Shut-In  
Breakdown: 30 Inc.  
of 3 mins. and a

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	795
P 2						66	808
P 3						69	821
P 4						72	839
P 5						75	855
P 6						78	871
P 7						81	889
P 8						84	907
P 9						87	922
P 10						90	937
P 11							
P 12							
P 13							
P 14							
P 15							
P 16							
P 17							
P 18							
P 19							
P 20							

3640

TKL # 1587  
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Company Damson Oil Corporation Lease & Well No. Graves #1  
 Elevation -- Formation Mississippi Effective Pay -- Ft. Ticket No. 1588  
 Date 2/4/79 Sec. 7 Twp. 35S Range 12W County Barber State Kansas  
 Test Approved by Gordon W. Keen Western Representative Ron Emmons

Formation Test No. 3 Interval Tested from 4810 ft. to 4820 ft. Total Depth 4820 ft.  
 Packer Depth 4805 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4810 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set --

Top Recorder Depth (Inside) 4811 ft. Recorder Number 3660 Cap. 4000  
 Bottom Recorder Depth (Outside) 4814 ft. Recorder Number 1560 Cap. 6000  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor DaMac Drilling Rig #2 Drill Collar Length 473 I. D. 2 1/4 in.  
 Mud Type premix-drispac Viscosity 65 Weight Pipe Length - I. D. - in.  
 Weight 9.3 Water Loss 12.2 cc. Drill Pipe Length 4305 I. D. 3.8 in.  
 Chlorides 23,000 P.P.M. Test Tool Length 32' Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 410 Anchor Length 10' Size 5 1/2 OD in.  
 Did Well Flow? No Reversed Out \_\_\_\_\_ 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: Strong throughout flow period.

Recovered 135 ft. of slightly oil and gas cut mud  
 Recovered 60 ft. of heavy oil and gas cut mud  
 Recovered 600 ft. of gas in pipe  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: Slid tool 3 feet to bottom. (clock stopped in bottom recorder)(also stopped on top recorder

Time Set Packer(s) 5:45 ~~P.M.~~ A.M. Time Started Off Bottom 8:25 ~~P.M.~~ A.M. Maximum Temperature \_\_\_\_\_  
 Initial Hydrostatic Pressure ..... (A) 2478 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 61 P.S.I. to (C) 51 P.S.I.  
 Initial Closed In Period ..... Minutes 30 (D) 956 P.S.I.  
 Final Flow Period ..... Minutes 60 (E) 93 P.S.I. to (F) 95 P.S.I.  
 Final Closed In Period ..... Minutes 100 (G) 911 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 2401 P.S.I.

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

Date 2/4/79

Test Ticket No. 1588

Recorder No. 3660 Capacity 4000

Location 4811 Ft.

Clock No. -- Elevation --

Well Temperature -- °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	2478 P.S.I.	Open Tool	5:45A	M
B. First Initial Flow Pressure	61 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C. First Final Flow Pressure	51 P.S.I.	Initial Closed-in Pressure	30 Mins.	33 Mins.
D. Initial Closed-in Pressure	956 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E. Second Initial Flow Pressure	93 P.S.I.	Final Closed-in Pressure	100 Mins.	39 Mins.
F. Second Final Flow Pressure	95 P.S.I.			
G. Final Closed-in Pressure	911 P.S.I.			
H. Final Hydrostatic Mud	2401 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: 12 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

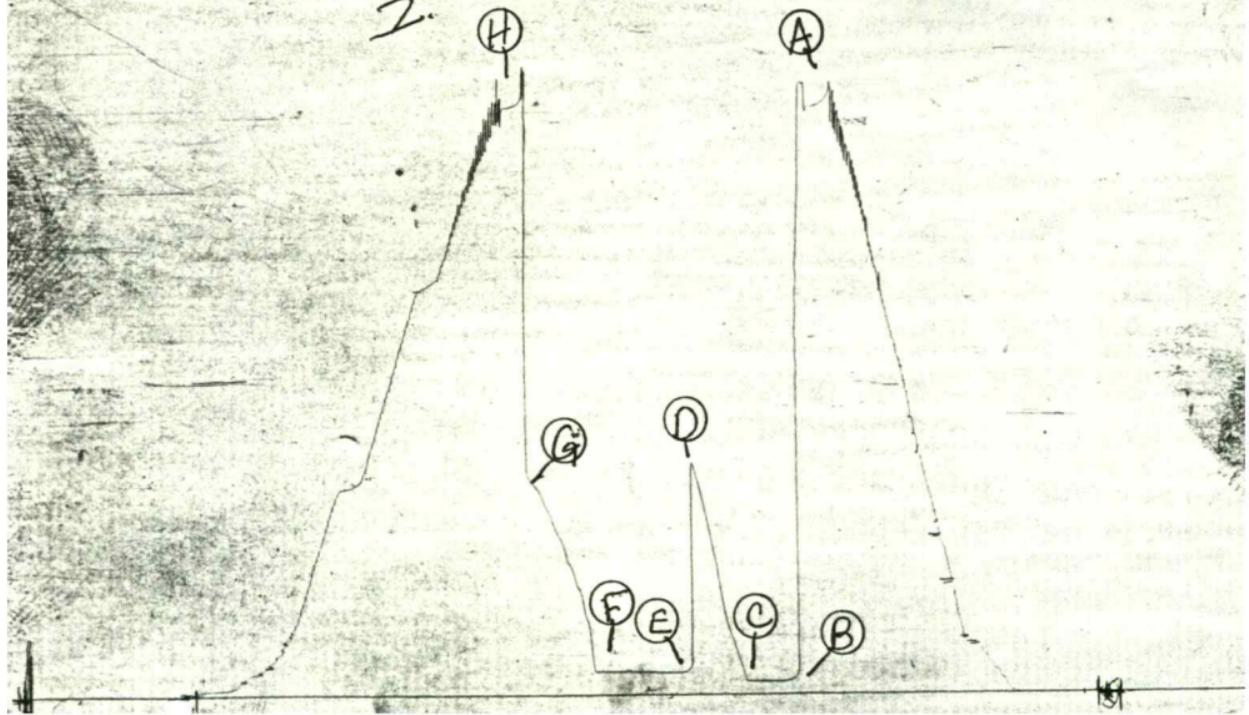
**Final Shut-In**  
Breakdown: 13 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1	0	61	0	51	0	93	0	95
P 2	5	55	3	93	5	89	3	259
P 3	10	51	6	154	10	87	6	336
P 4	15	51	9	225	15	88	9	433
P 5	20	51	12	277	20	90	12	492
P 6	25	51	15	372	25	93	15	540
P 7	30	51	18	480	30	95	18	615
P 8			21	581	35	95	21	655
P 9			24	681	40	95	24	702
P10			27	782	45	95	27	758
P11			30	865	50	95	30	806
P12			33	956	55	95	33	849
P13					60	95	36	875
P14							39	911
P15								
P16								
P17								
P18								
P19								
P20								

3660

RI# 1588

I.



Company Damson Oil Corporation Lease & Well No. Graves #1  
 Elevation -- Formation Mississippi Effective Pay -- Ft. Ticket No. 1589  
 Date 2/4/79 Sec. 7 Twp. 35S Range 12W County Barber State Kansas  
 Test Approved by Gordon W. Keen Western Representative Ron Emmons

Formation Test No. 4 Interval Tested from 4820' ft. to 4865' ft. Total Depth 4865' ft.  
 Packer Depth 4815 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4820 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set --

Top Recorder Depth (Inside) 4821 ft. Recorder Number 3660 Cap. 4000  
 Bottom Recorder Depth (Outside) 4824 ft. Recorder Number 1560 Cap. 6000  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Da Mac Drilling Rig #2 Drill Collar Length 473 I. D. 2 1/4 in.  
 Mud Type premix-driscopac Viscosity 65 Weight Pipe Length - I. D. - in.  
 Weight 9.3 Water Loss 12.2 cc. Drill Pipe Length 4315 I. D. 3.8 in.  
 Chlorides 23,000 P.P.M. Test Tool Length 32' in. Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 410 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: Strong blow throughout flow period.

Recovered 30 ft. of gas cut mud  
 Recovered 60 ft. of slightly oil and gas cut mud  
 Recovered 60 ft. of heavy oil and gas cut mud  
 Recovered 120 ft. of very heavy oil and gas cut mud  
 Recovered          ft. of         

Remarks: Slid tool 3 feet to bottom.

Time Set Packer(s) 4:25 ~~P.M.~~ A.M. Time Started Off Bottom 8:15 ~~P.M.~~ A.M. Maximum Temperature Broken  
 Initial Hydrostatic Pressure ..... (A) 2454 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 121 P.S.I. to (C) 81 P.S.I.  
 Initial Closed In Period ..... Minutes 30 (D) 736 P.S.I.  
 Final Flow Period ..... Minutes 60 (E) 121 P.S.I. to (F) 119 P.S.I.  
 Final Closed In Period ..... Minutes 90 (G) 1388 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 2425 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 2/4/79 Test Ticket No. 1589  
 Recorder No. 3660 Capacity 4000 Location 4821 Ft.  
 Clock No. -- Elevation -- Well Temperature -- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2454 P.S.I.	Open Tool	4:45A	M
B First Initial Flow Pressure	121 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	81 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	736 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	121 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	119 P.S.I.			
G Final Closed-in Pressure	1388 P.S.I.			
H Final Hydrostatic Mud	2425 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: 12 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: 30 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 0	121	0	81	0	121	0	119
P 2 5	121	3	95	5	107	3	138
P 3 10	75	6	134	10	105	6	188
P 4 15	71	9	168	15	105	9	235
P 5 20	75	12	202	20	106	12	279
P 6 25	79	15	263	25	107	15	340
P 7 30	81	18	320	30	107	18	403
P 8		21	383	35	111	21	468
P 9		24	457	40	113	24	532
P10		27	530	45	115	27	603
P11		30	607	50	115	30	673
P12		33	683	55	117	33	740
P13		36	736	60	119	36	802
P14						39	857
P15						42	907
P16						45	956
P17						48	1000
P18						51	1038
P19						54	1072
P20						57	1106
						60	1139

3660

TK# 1589

I

(H)

(A)

(G)

(D)

(F)

(E)

(C)

(B)

