



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

Company Pickrell Drilling Company Lease & Well No. Davis K-#1

Elevation 2262 Kelly Bush. Formation Lansing Effective Pay - Ft. Ticket No. 23334

Date 10-29-77 Sec. 15 Twp. 27S Range 19W County Kiowa State Kansas

Test Approved by Brad Rine Western Representative Joe N. Lusk

Formation Test No. 1 O.K.  Misrun  Interval Tested From 4218' to 4230' Total Depth 4230'

Size Main Hole 7 7/8 at Hole - Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No

Top Packer Depth 4213 Ft. Size 6 3/4 Bottom Packer Depth 4218 Ft. Size 6 3/4

Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth - Ft. Size -

Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 12 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4224 Ft. Clock No. 10168 Depth 4227 Ft. Clock No. 6894

Top Make Kuster Cap. 4150 No. 969 ~~Inside~~ Outside Bottom Make Kuster Cap. 4400 No. 2603 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - ~~Inside~~ Outside Depth - Ft. Rec. No. - Clock No. - ~~Inside~~ Outside

Time Set Packer 10:33A M

Tool Open I.F.P. From 10:35A M. to 11:05 M. - Hr. 30 Min. From (B) 79 P.S.I. To (C) 57 P.S.I.

Tool Closed I.C.I.P. From 11:05 M. to 11:35 M. - Hr. 30 Min (D) 244 P.S.I.

Tool Open F.F.P. From 11:35 M. to 1:05 M. - Hr. 90 Min. From (E) 87 P.S.I. To (F) 71 P.S.I.

Tool Closed F.C.I.P. From 1:05 M. to 2:05 M. - Hr. 60 Min. (G) 799 P.S.I.

Initial Hydrostatic Pressure (A) 2207 P.S.I. Final Hydrostatic Pressure (H) 2196 P.S.I. Maximum Temp. 117

**INFORMATION**

BLOW Weak blow increasing to fair blow on initial flow period. Fair blow increasing to good blow on final flow period.

Did Well Flow -  Yes  No Recovery Total Ft. 93' total recovery 31' slightly oil cut mud, 62' watery mud, with trace of oil, approximately 1' free oil on top of fluid in last stand.

Reversed Out -  Yes  No Mud Type Premix Viscosity 46 Weight 9.7 Water Loss 11.8 cc. Chlorides 25,000 p.p.m.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer  Yes Did Packers Hold? Yes Did Tool Plug? NO Where? -

DRILLING CONTRACTOR Pickrell Drlg. Rig #1 Length Drill Pipe? 3953 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 244 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 1/2 H-90 Length D.S.T. Tool 33 Ft.

Remarks: Slid tool approximately 2'. Chlorides checked: Bottom 45,000 p.p.m.

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

Date 10-29-77 Test Ticket No. 23334  
 Recorder No. 969 Capacity 4150 Location 4224 Ft.  
 Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 117 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2207</u> P.S.I. | Open Tool                  | <u>10:33A</u> M |                 |
| B First Initial Flow Pressure  | <u>79</u> P.S.I.   | First Flow Pressure        | <u>30</u> Mins. | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>57</u> P.S.I.   | Initial Closed-in Pressure | <u>30</u> Mins. | <u>30</u> Mins. |
| D Initial Closed-in Pressure   | <u>244</u> P.S.I.  | Second Flow Pressure       | <u>90</u> Mins. | <u>90</u> Mins. |
| E Second Initial Flow Pressure | <u>87</u> P.S.I.   | Final Closed-in Pressure   | <u>60</u> Mins. | <u>63</u> Mins. |
| F Second Final Flow Pressure   | <u>71</u> P.S.I.   |                            |                 |                 |
| G Final Closed-in Pressure     | <u>799</u> P.S.I.  |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2196</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.

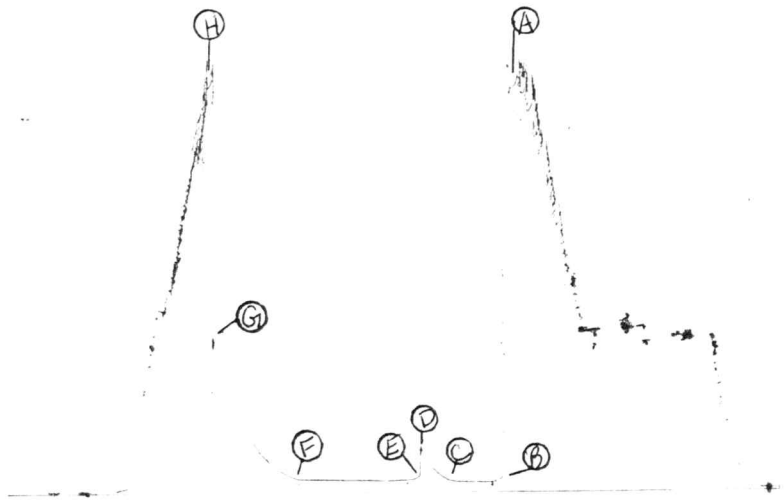
**Second Flow Pressure**  
 Breakdown: 18 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

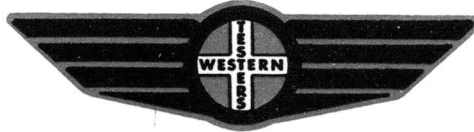
**Final Shut-In**  
 Breakdown: 21 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

| Point Mins.   | Press.    | Point Minutes | Press.     | Point Minutes | Press.    | Point Minutes | Press.     |
|---------------|-----------|---------------|------------|---------------|-----------|---------------|------------|
| P 1 <u>0</u>  | <u>79</u> | <u>0</u>      | <u>57</u>  | <u>0</u>      | <u>87</u> | <u>0</u>      | <u>71</u>  |
| P 2 <u>5</u>  | <u>58</u> | <u>3</u>      | <u>57</u>  | <u>5</u>      | <u>67</u> | <u>3</u>      | <u>76</u>  |
| P 3 <u>10</u> | <u>54</u> | <u>6</u>      | <u>57</u>  | <u>10</u>     | <u>64</u> | <u>6</u>      | <u>82</u>  |
| P 4 <u>15</u> | <u>54</u> | <u>9</u>      | <u>62</u>  | <u>15</u>     | <u>62</u> | <u>9</u>      | <u>92</u>  |
| P 5 <u>20</u> | <u>54</u> | <u>12</u>     | <u>71</u>  | <u>20</u>     | <u>62</u> | <u>11</u>     | <u>104</u> |
| P 6 <u>25</u> | <u>55</u> | <u>15</u>     | <u>83</u>  | <u>25</u>     | <u>62</u> | <u>15</u>     | <u>115</u> |
| P 7 <u>30</u> | <u>57</u> | <u>18</u>     | <u>98</u>  | <u>30</u>     | <u>62</u> | <u>18</u>     | <u>130</u> |
| P 8 _____     |           | <u>21</u>     | <u>121</u> | <u>35</u>     | <u>63</u> | <u>21</u>     | <u>146</u> |
| P 9 _____     |           | <u>24</u>     | <u>146</u> | <u>40</u>     | <u>64</u> | <u>24</u>     | <u>166</u> |
| P10 _____     |           | <u>27</u>     | <u>181</u> | <u>45</u>     | <u>64</u> | <u>27</u>     | <u>186</u> |
| P11 _____     |           | <u>30</u>     | <u>244</u> | <u>50</u>     | <u>65</u> | <u>30</u>     | <u>210</u> |
| P12 _____     |           |               |            | <u>55</u>     | <u>66</u> | <u>33</u>     | <u>238</u> |
| P13 _____     |           |               |            | <u>60</u>     | <u>67</u> | <u>36</u>     | <u>268</u> |
| P14 _____     |           |               |            | <u>65</u>     | <u>67</u> | <u>39</u>     | <u>304</u> |
| P15 _____     |           |               |            | <u>70</u>     | <u>68</u> | <u>42</u>     | <u>350</u> |
| P16 _____     |           |               |            | <u>75</u>     | <u>68</u> | <u>45</u>     | <u>404</u> |
| P17 _____     |           |               |            | <u>80</u>     | <u>69</u> | <u>48</u>     | <u>451</u> |
| P18 _____     |           |               |            | <u>85</u>     | <u>70</u> | <u>51</u>     | <u>510</u> |
| P19 _____     |           |               |            | <u>90</u>     | <u>71</u> | <u>54</u>     | <u>575</u> |
| P20 _____     |           |               |            |               |           | <u>57</u>     | <u>649</u> |
|               |           |               |            |               |           | <u>60</u>     | <u>727</u> |
|               |           |               |            |               |           | <u>63</u>     | <u>799</u> |

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TKT# 23334.  
I.





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

Company Pickrell Drilling Company Lease & Well No. Davis K-#1  
 Elevation 2262 Kelly Bush. Formation Lansing Effective Pay - Ft. Ticket No. 23335  
 Date 10-30-77 Sec. 15 Twp. 27S Range 19W County Kiowa State Kansas  
 Test Approved by Brad Rine Western Representative Joe N. Lusk  
 Formation Test No. 2 O.K.  Misrun  Interval Tested From 4253' to 4265' Total Depth 4265'  
 Size Main Hole 7 7/8 Rat Hole  Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No  
 Top Packer Depth 4248 Ft. Size 6 3/4 Bottom Packer Depth 4253 Ft. Size 6 3/4  
 Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth - Ft. Size -  
 Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 12 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.  
 RECORDERS Depth 4259 Ft. Clock No. 10168 Depth 4262 Ft. Clock No. 6894  
 Top Make Kuster Cap. 4150 No. 969 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 Inside Outside  
 Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside  
 Time Set Packer 3:08A M  
 Tool Open I.F.P. From 3:10 M. to 3:40 M. - Hr. 30 Min. From (B) 42 P.S.I. To (C) 67 P.S.I.  
 Tool Closed I.C.I.P. From 3:40 M. to 4:40 M. - Hr. 60 Min (D) 1470 P.S.I.  
 Tool Open F.F.P. From 4:40 M. to 6:10 M. - Hr. 90 Min. From (E) 115 P.S.I. To (F) 143 P.S.I.  
 Tool Closed F.C.I.P. From 6:10 M. to 7:10 M. - Hr. 60 Min. (G) 1416 P.S.I.  
 Initial Hydrostatic Pressure (A) 2141 P.S.I. Final Hydrostatic Pressure (H) 2141 P.S.I. Maximum Temp. 125

**INFORMATION**

BLOW Weak to fair blow on initial flow period. Fair to good blow on final flow period.  
 Did Well Flow  Yes  No Recovery Total Ft. 248' total recovery, 62' slightly oil cut mud, 186' muddy water.  
 Reversed Out  Yes  No Mud Type Premix Viscosity 46 Weight 9.7 Water Loss 11.8 cc. Chlorides 25,000 p.p.m.  
 EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint  Jars: Size - In. Make - Ser. No. -  
 Dual Packer  Yes Did Packers Hold?  Yes Did Tool Plug?  No Where? -  
 DRILLING CONTRACTOR Pickrell Drlg. Rig #1 Length Drill Pipe? 3978 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.  
 Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 244 Ft. I.D. Drill Collars 2 1/4 In.  
 Tool Joint Size 4 1/2 H-90 Length D.S.T. Tool 33 Ft.  
 Remarks: Chlorides checked: Top 60,000 p.p.m. Middle 100,000 p.p.m. Bottom 110,000 p.p.m.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 10-30-77 Test Ticket No. 23335  
 Recorder No. 969 Capacity 4150 Location 4259 Ft.  
 Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 125 °F

| Point | Pressure                     |             |                            | Time     |          |
|-------|------------------------------|-------------|----------------------------|----------|----------|
|       |                              |             |                            | Given    | Computed |
| A     | Initial Hydrostatic Mud      | 2141 P.S.I. | Open Tool                  | 3:08A    | M        |
| B     | First Initial Flow Pressure  | 42 P.S.I.   | First Flow Pressure        | 30 Mins. | 30 Mins. |
| C     | First Final Flow Pressure    | 67 P.S.I.   | Initial Closed-in Pressure | 60 Mins. | 57 Mins. |
| D     | Initial Closed-in Pressure   | 1470 P.S.I. | Second Flow Pressure       | 90 Mins. | 85 Mins. |
| E     | Second Initial Flow Pressure | 115 P.S.I.  | Final Closed-in Pressure   | 60 Mins. | 60 Mins. |
| F     | Second Final Flow Pressure   | 143 P.S.I.  |                            |          |          |
| G     | Final Closed-in Pressure     | 1416 P.S.I. |                            |          |          |
| H     | Final Hydrostatic Mud        | 2141 P.S.I. |                            |          |          |

### PRESSURE BREAKDOWN

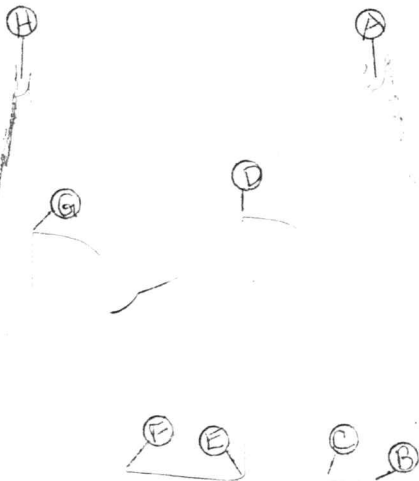
|  |   |  |   |
|--|---|--|---|
| <b>First Flow Pressure</b><br>Breakdown: <u>6</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. | <b>Initial Shut-In</b><br>Breakdown: <u>19</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. | <b>Second Flow Pressure</b><br>Breakdown: <u>17</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. | <b>Final Shut-In</b><br>Breakdown: <u>21</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |
|--|---|--|---|

| Point Mins. | Initial Shut-In |        | Second Flow Pressure |        | Final Shut-In |        |    |      |
|-------------|-----------------|--------|----------------------|--------|---------------|--------|----|------|
|             | Point Minutes   | Press. | Point Minutes        | Press. | Point Minutes | Press. |    |      |
| P 1 0       | 0               | 42     | 0                    | 67     | 0             | 115    | 0  | 143  |
| P 2 5       | 3               | 42     | 5                    | 240    | 5             | 90     | 3  | 241  |
| P 3 10      | 6               | 45     | 10                   | 1263   | 10            | 86     | 6  | 944  |
| P 4 15      | 9               | 48     | 15                   | 1331   | 15            | 89     | 9  | 1172 |
| P 5 20      | 12              | 54     | 20                   | 1369   | 20            | 92     | 12 | 1237 |
| P 6 25      | 15              | 61     | 25                   | 1391   | 25            | 95     | 15 | 1278 |
| P 7 30      | 18              | 67     | 30                   | 1407   | 30            | 98     | 18 | 1301 |
| P 8         | 21              |        | 35                   | 1420   | 35            | 102    | 21 | 1323 |
| P 9         | 24              |        | 40                   | 1429   | 40            | 106    | 24 | 1338 |
| P10         | 27              |        | 45                   | 1438   | 45            | 111    | 27 | 1354 |
| P11         | 30              |        | 50                   | 1444   | 50            | 115    | 30 | 1367 |
| P12         | 33              |        | 55                   | 1450   | 55            | 121    | 33 | 1374 |
| P13         | 36              |        | 60                   | 1453   | 60            | 126    | 36 | 1381 |
| P14         | 39              |        | 65                   | 1458   | 65            | 129    | 39 | 1387 |
| P15         | 42              |        | 70                   | 1461   | 70            | 133    | 42 | 1393 |
| P16         | 45              |        | 75                   | 1464   | 75            | 136    | 45 | 1398 |
| P17         | 48              |        | 80                   | 1466   | 80            | 139    | 48 | 1401 |
| P18         | 51              |        | 85                   | 1469   | 85            | 143    | 51 | 1405 |
| P19         | 54              |        |                      | 1470   |               |        | 54 | 1408 |
| P20         | 57              |        |                      | 1470   |               |        | 57 | 1411 |
|             |                 |        |                      |        |               |        | 60 | 1413 |
|             |                 |        |                      |        |               |        | 63 | 1416 |

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TK# 23335

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

Company Pickrell Drilling Company Lease & Well No. Davis K-#1  
 Elevation 2262 Kelly Bush. Formation Mississippi Effective Pay \_\_\_\_\_ Ft. Ticket No. 23336  
 Date 11-1-77 Sec. 15 Twp. 27S Range 19W County Kiowa State Kansas  
 Test Approved by Brad Rine Western Representative Joe N. Lusk

Formation Test No. 3 O.K.  Misrun  Interval Tested From 4791' to 4815' Total Depth 4815'  
 Size Main Hole 7 7/8 Rat Hole  Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No  
 Top Packer Depth 4786 Ft. Size 6 3/4 Bottom Packer Depth 4791 Ft. Size 6 3/4  
 Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth \_\_\_\_\_ Ft. Size \_\_\_\_\_  
 Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 24 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4797 Ft. Clock No. 10168 Depth 4800 Ft. Clock No. 6894  
 Top Make Kuster Cap. 4150 No. 969 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 Inside Outside  
 Below Straddle: Depth \_\_\_\_\_ Rec. No. \_\_\_\_\_ Clock No. \_\_\_\_\_ Inside Outside Depth \_\_\_\_\_ Ft. Rec. No. \_\_\_\_\_ Clock No. \_\_\_\_\_ Inside Outside

Time Set Packer 5:23P M  
 Tool Open I.F.P. From 5:25 M. to 6:10 M. - Hr. 45 Min. From (B) 71 P.S.I. To (C) 47 P.S.I.  
 Tool Closed I.C.I.P. From 6:10 M. to 7:10 M. - Hr. 60 Min (D) 648 P.S.I.  
 Tool Open F.F.P. From 7:10 M. to 8:40 M. - Hr. 90 Min. From (E) 80 P.S.I. To (F) 61 P.S.I.  
 Tool Closed F.C.I.P. From 8:40 M. to 10:10 M. - Hr. 90 Min. (G) 970 P.S.I.  
 Initial Hydrostatic Pressure (A) 2405 P.S.I. Final Hydrostatic Pressure (H) 2405 P.S.I. Maximum Temp. 126

**INFORMATION**

BLOW Strong blow throughout test. Had small amount of gas to surface 38 minutes into final flow period.

Did Well Flow  Yes  No Recovery Total Ft. 65' mud.

Reversed Out  Yes  No Mud Type Premix Viscosity 48 Weight 9.3 Water Loss 10.8 cc. Chlorides 16,000 p.p.m.

EXTRA EQUIPMENT: Type Circ. Sub. Pin \_\_\_\_\_ Safety Joint \_\_\_\_\_ Jars: Size \_\_\_\_\_ In. Make \_\_\_\_\_ Ser. No. \_\_\_\_\_

Dual Packer  Yes \_\_\_\_\_ Did Packers Hold?  Yes \_\_\_\_\_ Did Tool Plug?  No \_\_\_\_\_ Where? \_\_\_\_\_

DRILLING CONTRACTOR Pickrell Drilling Rig #1 Length Drill Pipe? 4525 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.

Length Weight Pipe \_\_\_\_\_ Ft. I.D. Weight Pipe \_\_\_\_\_ In. Tool Joint Size \_\_\_\_\_ In. Length Drill Collars 244 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 1/2 H-90 In. Length D.S.T. Tool 46 Ft.

Remarks:

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

Date 11-1-77 Test Ticket No. 23336  
 Recorder No. 969 Capacity 4150 Location 4797 Ft.  
 Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 126 °F

| Point                          | Pressure    |        | Time         |                       |
|--------------------------------|-------------|--------|--------------|-----------------------|
|                                |             |        | Given        | Computed              |
| A Initial Hydrostatic Mud      | <u>2405</u> | P.S.I. | <u>5:23P</u> | <u>M</u>              |
| B First Initial Flow Pressure  | <u>71</u>   | P.S.I. | <u>45</u>    | Mins. <u>45</u> Mins. |
| C First Final Flow Pressure    | <u>47</u>   | P.S.I. | <u>60</u>    | Mins. <u>57</u> Mins. |
| D Initial Closed-in Pressure   | <u>648</u>  | P.S.I. | <u>90</u>    | Mins. <u>90</u> Mins. |
| E Second Initial Flow Pressure | <u>80</u>   | P.S.I. | <u>90</u>    | Mins. <u>84</u> Mins. |
| F Second Final Flow Pressure   | <u>61</u>   | P.S.I. |              |                       |
| G Final Closed-in Pressure     | <u>970</u>  | P.S.I. |              |                       |
| H Final Hydrostatic Mud        | <u>2405</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: 18 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Final Shut-In**  
 Breakdown: 28 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>71</u>           | <u>0</u>      | <u>47</u>       | <u>0</u>      | <u>80</u>            | <u>0</u>      | <u>61</u>     | <u>0</u>      |
| P 2         | <u>47</u>           | <u>5</u>      | <u>88</u>       | <u>3</u>      | <u>62</u>            | <u>5</u>      | <u>88</u>     | <u>3</u>      |
| P 3         | <u>43</u>           | <u>10</u>     | <u>150</u>      | <u>6</u>      | <u>56</u>            | <u>10</u>     | <u>164</u>    | <u>6</u>      |
| P 4         | <u>43</u>           | <u>15</u>     | <u>197</u>      | <u>9</u>      | <u>54</u>            | <u>15</u>     | <u>240</u>    | <u>9</u>      |
| P 5         | <u>43</u>           | <u>20</u>     | <u>226</u>      | <u>12</u>     | <u>53</u>            | <u>20</u>     | <u>309</u>    | <u>12</u>     |
| P 6         | <u>43</u>           | <u>25</u>     | <u>251</u>      | <u>15</u>     | <u>53</u>            | <u>25</u>     | <u>369</u>    | <u>15</u>     |
| P 7         | <u>43</u>           | <u>30</u>     | <u>273</u>      | <u>18</u>     | <u>53</u>            | <u>30</u>     | <u>424</u>    | <u>18</u>     |
| P 8         | <u>45</u>           | <u>35</u>     | <u>291</u>      | <u>21</u>     | <u>53</u>            | <u>35</u>     | <u>470</u>    | <u>21</u>     |
| P 9         | <u>46</u>           | <u>40</u>     | <u>307</u>      | <u>24</u>     | <u>54</u>            | <u>40</u>     | <u>513</u>    | <u>24</u>     |
| P10         | <u>47</u>           | <u>45</u>     | <u>322</u>      | <u>27</u>     | <u>55</u>            | <u>45</u>     | <u>556</u>    | <u>27</u>     |
| P11         |                     |               | <u>339</u>      | <u>30</u>     | <u>56</u>            | <u>50</u>     | <u>596</u>    | <u>30</u>     |
| P12         |                     |               | <u>359</u>      | <u>33</u>     | <u>57</u>            | <u>55</u>     | <u>633</u>    | <u>33</u>     |
| P13         |                     |               | <u>380</u>      | <u>36</u>     | <u>58</u>            | <u>60</u>     | <u>668</u>    | <u>36</u>     |
| P14         |                     |               | <u>410</u>      | <u>39</u>     | <u>59</u>            | <u>65</u>     | <u>699</u>    | <u>39</u>     |
| P15         |                     |               | <u>436</u>      | <u>42</u>     | <u>59</u>            | <u>70</u>     | <u>725</u>    | <u>42</u>     |
| P16         |                     |               | <u>474</u>      | <u>45</u>     | <u>60</u>            | <u>75</u>     | <u>752</u>    | <u>45</u>     |
| P17         |                     |               | <u>516</u>      | <u>48</u>     | <u>60</u>            | <u>80</u>     | <u>779</u>    | <u>48</u>     |
| P18         |                     |               | <u>559</u>      | <u>51</u>     | <u>61</u>            | <u>85</u>     | <u>801</u>    | <u>51</u>     |
| P19         |                     |               | <u>607</u>      | <u>54</u>     | <u>61</u>            | <u>90</u>     | <u>823</u>    | <u>54</u>     |
| P20         |                     |               | <u>648</u>      | <u>57</u>     |                      |               | <u>843</u>    | <u>57</u>     |

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

Date 11-1-77 Test Ticket No. 23336  
 Recorder No. 969 Capacity 4150 Location 4797 Ft.  
 Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 126 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2405</u> P.S.I. | Open Tool                  | <u>5:23P</u> M  |                 |
| B First Initial Flow Pressure  | <u>71</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>60</u> Mins. | <u>57</u> Mins. |
| D Initial Closed-in Pressure   | <u>648</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>84</u> Mins. |
| F Second Final Flow Pressure   | <u>61</u> P.S.I.   |                            |                 |                 |
| G Final Closed-in Pressure     | <u>970</u> P.S.I.  |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2405</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: 18 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Final Shut-In**  
 Breakdown: 28 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         |        |               |        |               |        | 60            | 861    |
| P 2         |        |               |        |               |        | 63            | 879    |
| P 3         |        |               |        |               |        | 66            | 894    |
| P 4         |        |               |        |               |        | 69            | 909    |
| P 5         |        |               |        |               |        | 72            | 923    |
| P 6         |        |               |        |               |        | 75            | 937    |
| P 7         |        |               |        |               |        | 78            | 949    |
| P 8         |        |               |        |               |        | 81            | 962    |
| P 9         |        |               |        |               |        | 84            | 970    |
| P10         |        |               |        |               |        |               |        |
| P11         |        |               |        |               |        |               |        |
| P12         |        |               |        |               |        |               |        |
| P13         |        |               |        |               |        |               |        |
| P14         |        |               |        |               |        |               |        |
| P15         |        |               |        |               |        |               |        |
| P16         |        |               |        |               |        |               |        |
| P17         |        |               |        |               |        |               |        |
| P18         |        |               |        |               |        |               |        |
| P19         |        |               |        |               |        |               |        |
| P20         |        |               |        |               |        |               |        |

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

Date 11-1-77 Test Ticket No. 23336  
 Recorder No. 969 Capacity 4150 Location 4797 Ft.  
 Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 126 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2405</u> P.S.I. | Open Tool                  | <u>5:23P</u>    | <u>M</u>        |
| B First Initial Flow Pressure  | <u>71</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>60</u> Mins. | <u>57</u> Mins. |
| D Initial Closed-in Pressure   | <u>648</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>84</u> Mins. |
| F Second Final Flow Pressure   | <u>61</u> P.S.I.   |                            |                 |                 |
| G Final Closed-in Pressure     | <u>970</u> P.S.I.  |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2405</u> P.S.I. |                            |                 |                 |

**PRESSURE BREAKDOWN**

| Point Mins. | First Flow Pressure  | Initial Shut-In   | Second Flow Pressure  | Final Shut-In   |           |               |            |
|-------------|--|---|---|---|-----------|---------------|------------|
|             | Breakdown: <u>9</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. | Breakdown: <u>19</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. | Breakdown: <u>18</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. | Breakdown: <u>28</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |           |               |            |
|             | Press.   | Point Minutes   | Press.  | Point Minutes   | Press.    | Point Minutes | Press.     |
| P 1         | <u>71</u>  | <u>0</u>  | <u>47</u>   | <u>0</u>  | <u>80</u> | <u>0</u>      | <u>61</u>  |
| P 2         | <u>47</u>  | <u>3</u>  | <u>88</u>   | <u>5</u>  | <u>62</u> | <u>3</u>      | <u>88</u>  |
| P 3         | <u>43</u>  | <u>6</u>  | <u>150</u>  | <u>10</u>   | <u>56</u> | <u>6</u>      | <u>164</u> |
| P 4         | <u>43</u>  | <u>9</u>  | <u>197</u>  | <u>15</u>   | <u>54</u> | <u>9</u>      | <u>240</u> |
| P 5         | <u>43</u>  | <u>12</u>   | <u>226</u>  | <u>20</u>   | <u>53</u> | <u>12</u>     | <u>309</u> |
| P 6         | <u>43</u>  | <u>15</u>   | <u>251</u>  | <u>25</u>   | <u>53</u> | <u>15</u>     | <u>369</u> |
| P 7         | <u>43</u>  | <u>18</u>   | <u>273</u>  | <u>30</u>   | <u>53</u> | <u>18</u>     | <u>424</u> |
| P 8         | <u>45</u>  | <u>21</u>   | <u>291</u>  | <u>35</u>   | <u>53</u> | <u>21</u>     | <u>470</u> |
| P 9         | <u>46</u>  | <u>24</u>   | <u>307</u>  | <u>40</u>   | <u>54</u> | <u>24</u>     | <u>513</u> |
| P10         | <u>47</u>  | <u>27</u>   | <u>322</u>  | <u>45</u>   | <u>55</u> | <u>27</u>     | <u>556</u> |
| P11         |  | <u>30</u>   | <u>339</u>  | <u>50</u>   | <u>56</u> | <u>30</u>     | <u>596</u> |
| P12         |  | <u>33</u>   | <u>359</u>  | <u>55</u>   | <u>57</u> | <u>33</u>     | <u>633</u> |
| P13         |  | <u>36</u>   | <u>380</u>  | <u>60</u>   | <u>58</u> | <u>36</u>     | <u>668</u> |
| P14         |  | <u>39</u>   | <u>410</u>  | <u>65</u>   | <u>59</u> | <u>39</u>     | <u>699</u> |
| P15         |  | <u>42</u>   | <u>436</u>  | <u>70</u>   | <u>59</u> | <u>42</u>     | <u>725</u> |
| P16         |  | <u>45</u>   | <u>474</u>  | <u>75</u>   | <u>60</u> | <u>45</u>     | <u>752</u> |
| P17         |  | <u>48</u>   | <u>516</u>  | <u>80</u>   | <u>60</u> | <u>48</u>     | <u>779</u> |
| P18         |  | <u>51</u>   | <u>559</u>  | <u>85</u>   | <u>61</u> | <u>51</u>     | <u>801</u> |
| P19         |  | <u>54</u>   | <u>607</u>  | <u>90</u>   | <u>61</u> | <u>54</u>     | <u>823</u> |
| P20         |  | <u>57</u>   | <u>648</u>  |   |           | <u>57</u>     | <u>843</u> |

Cont. on next page

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

Date 11-1-77 Test Ticket No. 23336  
 Recorder No. 969 Capacity 4150 Location 4797 Ft.  
 Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 126 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2405</u> P.S.I. | Open Tool                  | <u>5:23P</u> M  |                 |
| B First Initial Flow Pressure  | <u>71</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>60</u> Mins. | <u>57</u> Mins. |
| D Initial Closed-in Pressure   | <u>648</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>84</u> Mins. |
| F Second Final Flow Pressure   | <u>61</u> P.S.I.   |                            |                 |                 |
| G Final Closed-in Pressure     | <u>970</u> P.S.I.  |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2405</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: 18 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

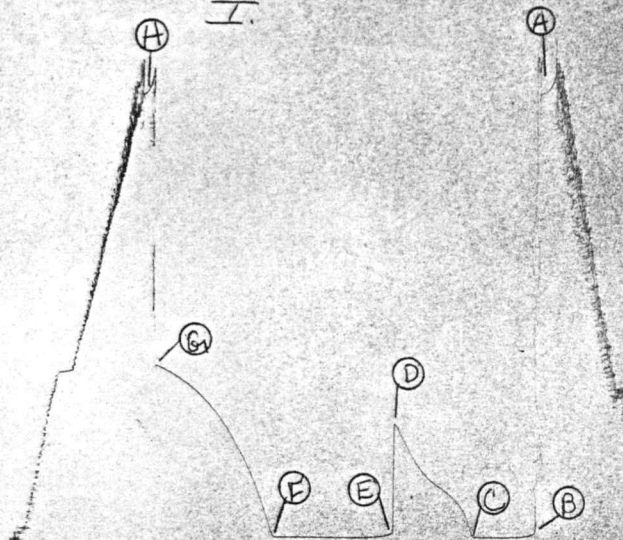
**Final Shut-In**  
 Breakdown: 28 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

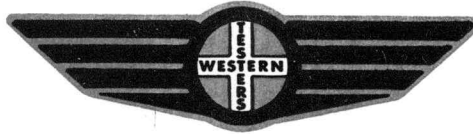
| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|-------------|--------|---------------|--------|---------------|--------|---------------|--------|
| P 1         |        |               |        |               |        | 60            | 861    |
| P 2         |        |               |        |               |        | 63            | 879    |
| P 3         |        |               |        |               |        | 66            | 894    |
| P 4         |        |               |        |               |        | 69            | 909    |
| P 5         |        |               |        |               |        | 72            | 923    |
| P 6         |        |               |        |               |        | 75            | 937    |
| P 7         |        |               |        |               |        | 78            | 949    |
| P 8         |        |               |        |               |        | 81            | 962    |
| P 9         |        |               |        |               |        | 84            | 970    |
| P10         |        |               |        |               |        |               |        |
| P11         |        |               |        |               |        |               |        |
| P12         |        |               |        |               |        |               |        |
| P13         |        |               |        |               |        |               |        |
| P14         |        |               |        |               |        |               |        |
| P15         |        |               |        |               |        |               |        |
| P16         |        |               |        |               |        |               |        |
| P17         |        |               |        |               |        |               |        |
| P18         |        |               |        |               |        |               |        |
| P19         |        |               |        |               |        |               |        |
| P20         |        |               |        |               |        |               |        |

969

TK# 23.336

I.





Home Office: Wichita, Kansas 67201

P. O. Box 1599

(316) 838-0601

Company Pickrell Drilling Company Lease & Well No. Davis K-#1

Elevation 2262 Kelly Bush. Formation Mississippi Effective Pay - Ft. Ticker No. 23337

Date 11-2-77 Sec. 15 Twp. 27S Range 19W County Kiowa State Kansas

Test Approved by Brad Rine Western Representative Joe N. Lusk

Formation Test No. 4 O.K.  Misrun  Interval Tested From 4814' to 4823' Total Depth 4823'

Size Main Hole 7 7/8 Rat Hole  Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No

Top Packer Depth 4809 Ft. Size 6 3/4 Bottom Packer Depth 4814 Ft. Size 6 3/4

Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth - Ft. Size -

Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 10 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4820 Ft. Clock No. 10168 Depth 4823 Ft. Clock No. 6894

Top Make Kuster Cap. 4150 No. 969 ~~Inside~~ Outside Bottom Make Kuster Cap. 4400 No. 2603 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - ~~Inside~~ Outside Depth - Ft. Rec. No. - Clock No. - ~~Inside~~ Outside

Time Set Packer 10:08A M

Tool Open I.F.P. From 10:10 M. to 11:10 M. - Hr. 60 Min. From (B) 61 P.S.I. To (C) 56 P.S.I.

Tool Closed I.C.I.P. From 11:10 M. to 12:10 M. - Hr. 60 Min (D) 1182 P.S.I.

Tool Open F.F.P. From 12:10 M. to 1:40 M. - Hr. 90 Min. From (E) 78 P.S.I. To (F) 95 P.S.I.

Tool Closed F.C.I.P. From 1:40 M. to 3:10 M. - Hr. 90 Min. (G) 1245 P.S.I.

Initial Hydrostatic Pressure (A) 2451 P.S.I. Final Hydrostatic Pressure (H) 2451 P.S.I. Maximum Temp. 127

**INFORMATION**

BLOW Strong blow throughout test.

Did Well Flow - Yes  No  Recovery Total Ft. 110' gas cut mud.

Reversed Out - Yes  No  Mud Type Premix Viscosity 48 Weight 9.3 Water Loss 10.8 cc. Chlorides 16,000 p.p.m.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Pickrell Drilling Rig #1 Length Drill Pipe? 4548 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 244 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 1/2 H-90 In. Length D.S.T. Tool 31 Ft.

Remarks:

# WESTERN TESTING CO., INC.

## Pressure Data

Date 11-2-77 Test Ticket No. 23337  
 Recorder No. 969 Capacity 4150 Location 4820 Ft.  
 Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 127 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2451</u> P.S.I. | Open Tool                  | <u>10:08A</u> M |                 |
| B First Initial Flow Pressure  | <u>61</u> P.S.I.   | First Flow Pressure        | <u>60</u> Mins. | <u>60</u> Mins. |
| C First Final Flow Pressure    | <u>56</u> P.S.I.   | Initial Closed-in Pressure | <u>60</u> Mins. | <u>54</u> Mins. |
| D Initial Closed-in Pressure   | <u>1182</u> P.S.I. | Second Flow Pressure       | <u>90</u> Mins. | <u>85</u> Mins. |
| E Second Initial Flow Pressure | <u>78</u> P.S.I.   | Final Closed-in Pressure   | <u>90</u> Mins. | <u>90</u> Mins. |
| F Second Final Flow Pressure   | <u>95</u> P.S.I.   |                            |                 |                 |
| G Final Closed-in Pressure     | <u>1245</u> P.S.I. |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2451</u> P.S.I. |                            |                 |                 |

### PRESSURE BREAKDOWN

| 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>56</u>       | <u>0</u>      | <u>78</u>            | <u>0</u>      | <u>95</u>     | <u>0</u>      |
| P 2         | <u>43</u>           | <u>3</u>      | <u>63</u>       | <u>3</u>      | <u>70</u>            | <u>3</u>      | <u>184</u>    | <u>3</u>      |
| P 3         | <u>42</u>           | <u>6</u>      | <u>72</u>       | <u>6</u>      | <u>70</u>            | <u>6</u>      | <u>339</u>    | <u>6</u>      |
| P 4         | <u>42</u>           | <u>9</u>      | <u>78</u>       | <u>9</u>      | <u>71</u>            | <u>9</u>      | <u>475</u>    | <u>9</u>      |
| P 5         | <u>43</u>           | <u>12</u>     | <u>84</u>       | <u>12</u>     | <u>74</u>            | <u>12</u>     | <u>585</u>    | <u>12</u>     |
| P 6         | <u>44</u>           | <u>15</u>     | <u>139</u>      | <u>15</u>     | <u>79</u>            | <u>15</u>     | <u>677</u>    | <u>15</u>     |
| P 7         | <u>45</u>           | <u>18</u>     | <u>332</u>      | <u>18</u>     | <u>95</u>            | <u>18</u>     | <u>754</u>    | <u>18</u>     |
| P 8         | <u>47</u>           | <u>21</u>     | <u>541</u>      | <u>21</u>     | <u>84</u>            | <u>21</u>     | <u>818</u>    | <u>21</u>     |
| P 9         | <u>49</u>           | <u>24</u>     | <u>680</u>      | <u>24</u>     | <u>83</u>            | <u>24</u>     | <u>867</u>    | <u>24</u>     |
| P10         | <u>49</u>           | <u>27</u>     | <u>792</u>      | <u>27</u>     | <u>84</u>            | <u>27</u>     | <u>908</u>    | <u>27</u>     |
| P11         | <u>51</u>           | <u>30</u>     | <u>875</u>      | <u>30</u>     | <u>85</u>            | <u>30</u>     | <u>945</u>    | <u>30</u>     |
| P12         | <u>52</u>           | <u>33</u>     | <u>942</u>      | <u>33</u>     | <u>87</u>            | <u>33</u>     | <u>974</u>    | <u>33</u>     |
| P13         | <u>56</u>           | <u>36</u>     | <u>993</u>      | <u>36</u>     | <u>88</u>            | <u>36</u>     | <u>1004</u>   | <u>36</u>     |
| P14         |                     | <u>39</u>     | <u>1039</u>     | <u>39</u>     | <u>90</u>            | <u>39</u>     | <u>1030</u>   | <u>39</u>     |
| P15         |                     | <u>42</u>     | <u>1079</u>     | <u>42</u>     | <u>92</u>            | <u>42</u>     | <u>1053</u>   | <u>42</u>     |
| P16         |                     | <u>45</u>     | <u>1110</u>     | <u>45</u>     | <u>93</u>            | <u>45</u>     | <u>1074</u>   | <u>45</u>     |
| P17         |                     | <u>48</u>     | <u>1137</u>     | <u>48</u>     | <u>94</u>            | <u>48</u>     | <u>1091</u>   | <u>48</u>     |
| P18         |                     | <u>51</u>     | <u>1158</u>     | <u>51</u>     | <u>95</u>            | <u>51</u>     | <u>1109</u>   | <u>51</u>     |
| P19         |                     | <u>54</u>     | <u>1182</u>     | <u>54</u>     |                      | <u>54</u>     | <u>1126</u>   | <u>54</u>     |
| P20         |                     |               |                 |               |                      | <u>57</u>     | <u>1141</u>   | <u>57</u>     |

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

Date 11-2-77 Test Ticket No. 23337  
 Recorder No. 969 Capacity 4150 Location 4820 Ft.  
 Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 127 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2451</u> P.S.I. | Open Tool                  | <u>10:08A</u> M |                 |
| B First Initial Flow Pressure  | <u>61</u> P.S.I.   | First Flow Pressure        | <u>60</u> Mins. | <u>60</u> Mins. |
| C First Final Flow Pressure    | <u>56</u> P.S.I.   | Initial Closed-in Pressure | <u>60</u> Mins. | <u>54</u> Mins. |
| D Initial Closed-in Pressure   | <u>1182</u> P.S.I. | Second Flow Pressure       | <u>90</u> Mins. | <u>85</u> Mins. |
| E Second Initial Flow Pressure | <u>78</u> P.S.I.   | Final Closed-in Pressure   | <u>90</u> Mins. | <u>90</u> Mins. |
| F Second Final Flow Pressure   | <u>95</u> P.S.I.   |                            |                 |                 |
| G Final Closed-in Pressure     | <u>1245</u> P.S.I. |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2451</u> P.S.I. |                            |                 |                 |

**PRESSURE BREAKDOWN**

**First Flow Pressure**  
 Breakdown: 12 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Initial Shut-In**  
 Breakdown: 18 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

**Second Flow Pressure**  
 Breakdown: 17 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

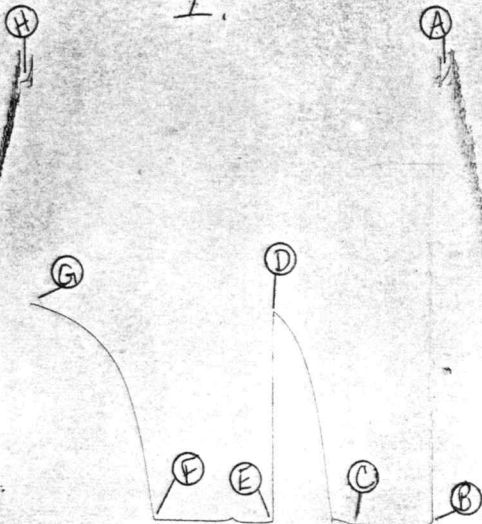
**Final Shut-In**  
 Breakdown: 30 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press.      |
|-------------|--------|---------------|--------|---------------|--------|---------------|-------------|
| P 1         |        |               |        |               |        | <u>60</u>     | <u>1154</u> |
| P 2         |        |               |        |               |        | <u>63</u>     | <u>1166</u> |
| P 3         |        |               |        |               |        | <u>66</u>     | <u>1179</u> |
| P 4         |        |               |        |               |        | <u>69</u>     | <u>1189</u> |
| P 5         |        |               |        |               |        | <u>72</u>     | <u>1198</u> |
| P 6         |        |               |        |               |        | <u>75</u>     | <u>1208</u> |
| P 7         |        |               |        |               |        | <u>78</u>     | <u>1217</u> |
| P 8         |        |               |        |               |        | <u>81</u>     | <u>1226</u> |
| P 9         |        |               |        |               |        | <u>84</u>     | <u>1233</u> |
| P10         |        |               |        |               |        | <u>87</u>     | <u>1240</u> |
| P11         |        |               |        |               |        | <u>90</u>     | <u>1245</u> |
| P12         |        |               |        |               |        |               |             |
| P13         |        |               |        |               |        |               |             |
| P14         |        |               |        |               |        |               |             |
| P15         |        |               |        |               |        |               |             |
| P16         |        |               |        |               |        |               |             |
| P17         |        |               |        |               |        |               |             |
| P18         |        |               |        |               |        |               |             |
| P19         |        |               |        |               |        |               |             |
| P20         |        |               |        |               |        |               |             |

969

TK# 2337

I.





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

Company Pickrell Drilling Company Lease & Well No. Davis "K" - 1

Elevation 2262 Kelly Bush. Formation Mississippi Effective Pay - Ft. Ticket No. 23338

Date 11-3-77 Sec. 15 Twp. 27S Range 19W County Kiowa State Kansas

Test Approved by Brad Rine Western Representative Joe N. Lusk

Formation Test No. 5 O.K.  Misrun  Interval Tested From 4823' to 4833' Total Depth 4833'

Size Main Hole 7-7/8 Rat Hole  Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No

Top Packer Depth 4818 Ft. Size 6-3/4 Bottom Packer Depth 4823 Ft. Size 6-3/4

Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth - Ft. Size -

Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 10 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4829 Ft. Clock No. 10168 Depth 4832 Ft. Clock No. 6894

Top Make Kuster Cap. 4150 No. 969  Inside  Outside Bottom Make Kuster Cap. 4400 No. 2603  Inside  Outside

Below Straddle: Depth - Rec. No. - Clock No. -  Inside  Outside Depth - Ft. Rec. No. - Clock No. -  Inside  Outside

Time Set Packer 2:08 AM

Tool Open I.F.P. From 2:10 AM to 2:40 M. - Hr. 30 Min. From (B) 108 P.S.I. To (C) 200 P.S.I.

Tool Closed I.C.I.P. From 2:40 M. to 3:40 M. 1 Hr. 00 Min (D) 1460 P.S.I.

Tool Open F.F.P. From 3:40 M. to 5:10 M. 1 Hr. 30 Min. From (E) 248 P.S.I. To (F) 361 P.S.I.

Tool Closed F.C.I.P. From 5:10 M. to 6:40 M. 1 Hr. 30 Min. (G) 1471 P.S.I.

Initial Hydrostatic Pressure (A) 2484 P.S.I. Final Hydrostatic Pressure (H) 2443 P.S.I. Maximum Temp. 133°

**INFORMATION**

BLOW Strong blow throughout test - Gas to surface in 3 minutes of final flow period.

See attached sheet for gas measurements.

Did Well Flow  Yes  No Recovery Total Ft. 800' Total recovery - 240' Very slow mud cut and

Gas cut oil - 560' Water.

Reversed Out  Yes  No Mud Type Drispac Premix Viscosity 49 Weight 9.5 Water Loss 11.8 cc. Chlorides 22,000 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Pickrell Drilling - Rig. Length Drill Pipe? 4558 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. <sup>#1</sup> Tool Joint Size - In. Length Drill Collars 244 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 1/2 H-90 In. Length D.S.T. Tool 31 Ft.

Remarks:  
 65% Oil Chlorides  
 33% Water Top 69,000 P.P.M.  
 2% Mud Bottom 69,000 "



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

**GAS FLOW REPORT**

Date 11-3-77 Ticket 23338 Company Pickrell Drilling Company  
 Well Name and No. Davis "K" -1 Dst No. 5 Interval Tested 4823' - 4833'  
 County Kiowa State Kansas Sec. 15 Twp. 27S Rg. 19W

| Time Gauge Pre-Flow | Time Gauge in Min. | P.S.I. on Merla Orifice Well Tester | P.S.I. on Pitot Tester | P.S.I. on Side Static Tester | P.S.I. on U-Tube Tester | Description of Flow |
|---------------------|--------------------|-------------------------------------|------------------------|------------------------------|-------------------------|---------------------|
| <b>PRE FLOW</b>     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |

| <b>SECOND FLOW</b> |              |              |              |        |          |  |
|--------------------|--------------|--------------|--------------|--------|----------|--|
| Gas to surface     | in 3 minutes |              |              |        |          |  |
| 3:53A              | 13 Min.      | 17" Of Water | 1/2" OFIFICE | 25,800 | C.F.P.D. |  |
| 4:03A              | 23 "         | 17" "        | "            | 25,800 | "        |  |
| 4:13A              | 33 "         | 16" "        | "            | 25,100 | "        |  |
| 4:23A              | 43 "         | 14" "        | "            | 23,700 | "        |  |
| 4:33A              | 53 "         | 14" "        | "            | 23,700 | "        |  |
| 4:43A              | 63 "         | 13" "        | "            | 22,800 | "        |  |
| 4:53A              | 73 "         | 12" "        | "            | 21,900 | "        |  |
| 5:03A              | 83 "         | 11" "        | "            | 20,900 | "        |  |
| 6:10A              | 90 "         | 10" "        | "            | 19,900 | "        |  |
|                    |              |              |              |        |          |  |
|                    |              |              |              |        |          |  |

**GAS BOTTLE**

Serial No. - Date Bottle Filled - Date to be Invoiced -

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Pickrell Drilling Company  
 Authorized by Brad Rine

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

Date 11-3-77 Test Ticket No. 23338  
 Recorder No. 969 Capacity 4150 Location 4829 Ft.  
 Block No. 10168 Elevation 2262 Kelly Bushing Well Temperature 133 °F

| Point                          | Pressure           | Open Tool                  | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2484</u> P.S.I. |                            | <u>2:08</u> A M |                 |
| B First Initial Flow Pressure  | <u>108</u> P.S.I.  | First Flow Pressure        | <u>30</u> Mins. | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>200</u> P.S.I.  | Initial Closed-in Pressure | <u>60</u> Mins. | <u>57</u> Mins. |
| D Initial Closed-in Pressure   | <u>1460</u> P.S.I. | Second Flow Pressure       | <u>90</u> Mins. | <u>85</u> Mins. |
| E Second Initial Flow Pressure | <u>248</u> P.S.I.  | Final Closed-in Pressure   | <u>90</u> Mins. | <u>87</u> Mins. |
| F Second Final Flow Pressure   | <u>361</u> P.S.I.  |                            |                 |                 |
| G Final Closed-in Pressure     | <u>1471</u> P.S.I. |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2443</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>6</u>            |               | of <u>19</u>           |               | of <u>17</u>           |               | of <u>29</u>           |               |
|             | mins. and a            |               | mins. and a            |               | mins. and a            |               | mins. and a            |               |
|             | final inc. of <u>0</u> |               | final inc. of <u>0</u> |               | final inc. of <u>0</u> |               | final inc. of <u>0</u> |               |
|             | Min.                   |               | Min.                   |               | Min.                   |               | Min.                   |               |
|             | Press.                 | Point Minutes | Press.                 | Point Minutes | Press.                 | Point Minutes | Press.                 | Point Minutes |
| P 1         | <u>108</u>             | <u>0</u>      | <u>200</u>             | <u>0</u>      | <u>248</u>             | <u>0</u>      | <u>361</u>             |               |
| P 2         | <u>98</u>              | <u>3</u>      | <u>369</u>             | <u>3</u>      | <u>221</u>             | <u>3</u>      | <u>539</u>             |               |
| P 3         | <u>113</u>             | <u>6</u>      | <u>949</u>             | <u>6</u>      | <u>219</u>             | <u>6</u>      | <u>845</u>             |               |
| P 4         | <u>137</u>             | <u>9</u>      | <u>1064</u>            | <u>9</u>      | <u>228</u>             | <u>9</u>      | <u>963</u>             |               |
| P 5         | <u>158</u>             | <u>12</u>     | <u>1140</u>            | <u>12</u>     | <u>240</u>             | <u>12</u>     | <u>1043</u>            |               |
| P 6         | <u>181</u>             | <u>15</u>     | <u>1197</u>            | <u>15</u>     | <u>250</u>             | <u>15</u>     | <u>1099</u>            |               |
| P 7         | <u>200</u>             | <u>18</u>     | <u>1243</u>            | <u>18</u>     | <u>261</u>             | <u>18</u>     | <u>1148</u>            |               |
| P 8         |                        | <u>21</u>     | <u>1279</u>            | <u>21</u>     | <u>271</u>             | <u>21</u>     | <u>1185</u>            |               |
| P 9         |                        | <u>24</u>     | <u>1309</u>            | <u>24</u>     | <u>283</u>             | <u>24</u>     | <u>1219</u>            |               |
| P 10        |                        | <u>27</u>     | <u>1335</u>            | <u>27</u>     | <u>292</u>             | <u>27</u>     | <u>1247</u>            |               |
| P 11        |                        | <u>30</u>     | <u>1359</u>            | <u>30</u>     | <u>301</u>             | <u>30</u>     | <u>1271</u>            |               |
| P 12        |                        | <u>33</u>     | <u>1378</u>            | <u>33</u>     | <u>310</u>             | <u>33</u>     | <u>1293</u>            |               |
| P 13        |                        | <u>36</u>     | <u>1395</u>            | <u>36</u>     | <u>319</u>             | <u>36</u>     | <u>1315</u>            |               |
| P 14        |                        | <u>39</u>     | <u>1408</u>            | <u>39</u>     | <u>327</u>             | <u>39</u>     | <u>1333</u>            |               |
| P 15        |                        | <u>42</u>     | <u>1422</u>            | <u>42</u>     | <u>336</u>             | <u>42</u>     | <u>1350</u>            |               |
| P 16        |                        | <u>45</u>     | <u>1434</u>            | <u>45</u>     | <u>344</u>             | <u>45</u>     | <u>1365</u>            |               |
| P 17        |                        | <u>48</u>     | <u>1443</u>            | <u>48</u>     | <u>352</u>             | <u>48</u>     | <u>1378</u>            |               |
| P 18        |                        | <u>51</u>     | <u>1451</u>            | <u>51</u>     | <u>361</u>             | <u>51</u>     | <u>1389</u>            |               |
| P 19        |                        | <u>54</u>     | <u>1457</u>            |               |                        | <u>54</u>     | <u>1399</u>            |               |
| P 20        |                        | <u>57</u>     | <u>1460</u>            |               |                        | <u>57</u>     | <u>1410</u>            |               |
|             |                        |               |                        |               |                        | <u>60</u>     | <u>1420</u>            |               |

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

Date 11-3-77

Test Ticket No. 23338

Recorder No. 969 Capacity 4150 Location 4829 Ft.

Clock No. 10168 Elevation 2262 Kelly Bushing Well Temperature 133 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2484</u> P.S.I. | Open Tool                  | <u>2:08</u> A M |                 |
| B First Initial Flow Pressure  | <u>108</u> P.S.I.  | First Flow Pressure        | <u>30</u> Mins. | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>200</u> P.S.I.  | Initial Closed-in Pressure | <u>60</u> Mins. | <u>57</u> Mins. |
| D Initial Closed-in Pressure   | <u>1460</u> P.S.I. | Second Flow Pressure       | <u>90</u> Mins. | <u>85</u> Mins. |
| E Second Initial Flow Pressure | <u>248</u> P.S.I.  | Final Closed-in Pressure   | <u>90</u> Mins. | <u>87</u> Mins. |
| F Second Final Flow Pressure   | <u>361</u> P.S.I.  |                            |                 |                 |
| G Final Closed-in Pressure     | <u>1471</u> P.S.I. |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2443</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: 19 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

**Second Flow Pressure**  
Breakdown: 17 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

**Final Shut-In**  
Breakdown: 29 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>63</u>     | <u>1428</u> |
| P 2         |        |               |        |               |        | <u>66</u>     | <u>1436</u> |
| P 3         |        |               |        |               |        | <u>69</u>     | <u>1442</u> |
| P 4         |        |               |        |               |        | <u>72</u>     | <u>1449</u> |
| P 5         |        |               |        |               |        | <u>75</u>     | <u>1454</u> |
| P 6         |        |               |        |               |        | <u>78</u>     | <u>1459</u> |
| P 7         |        |               |        |               |        | <u>81</u>     | <u>1463</u> |
| P 8         |        |               |        |               |        | <u>84</u>     | <u>1467</u> |
| P 9         |        |               |        |               |        | <u>87</u>     | <u>1471</u> |
| P10         |        |               |        |               |        |               |             |
| P11         |        |               |        |               |        |               |             |
| P12         |        |               |        |               |        |               |             |
| P13         |        |               |        |               |        |               |             |
| P14         |        |               |        |               |        |               |             |
| P15         |        |               |        |               |        |               |             |
| P16         |        |               |        |               |        |               |             |
| P17         |        |               |        |               |        |               |             |
| P18         |        |               |        |               |        |               |             |
| P19         |        |               |        |               |        |               |             |
| P20         |        |               |        |               |        |               |             |

969

TK# 23338

I.

