



Home Office: Great Bend, Kansas  
 P. O. Box 793 Gladstone 3-7903

Company Pickrell Drilling Company Lease & Well No. Betz Estate #1  
 Elevation 2259 Derrick Floor Ticket Number 5642  
 Date August 24, 1964 Sec. 9 Twp. 20 Range 21w County Ness State Kansas  
 Test Approved by George E. Link Western Representative Bill Hager

Formation Test No. 1 O.K.  Misrun \_\_\_\_\_ Interval Tested From 4310' to 4345' Total Depth 4345'  
 Size Main Hole 7 7/8 Rat Hole None Conv. \_\_\_\_\_ B.T.  Damaged \_\_\_\_\_ Yes  No Conv.  B.T. \_\_\_\_\_ Damaged \_\_\_\_\_ Yes  No  
 Packer Depth 4305 Ft. Size 6 3/4 Packer Depth 4310 Ft. Size 6 3/4  
 Straddle \_\_\_\_\_ Yes  No \_\_\_\_\_ Conv. \_\_\_\_\_ B.T. \_\_\_\_\_ Damaged \_\_\_\_\_ Yes \_\_\_\_\_ No  
 Packer Depth \_\_\_\_\_ Ft. Size \_\_\_\_\_  
 Tool Size 5 1/2 O. D. Tool Jt. Size 4 1/2 F. H. Anchor Length 35 Ft. Size 5 1/2 O. D.

RECORDERS Depth 4313 Ft. Clock No. 6893 Depth 4316 Ft. Clock No. 132  
 Top Make Amerada Cap. 4300 No. 1566 Inside Outside Bottom Make Western Cap. 4000 No. 21 Inside Outside  
 Below Straddle: Depth \_\_\_\_\_ Clock No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_  
 Top Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_  
 Bottom Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_

Time Set Packer 8:58 P M  
 Tool Open I.F.P. From 9:00 M to 9:05 M Hr. 5 Min. From (B) 15 P.S.I. To (C) 15 P.S.I.  
 Tool Closed I.C.I.P. From 9:06 M. to 9:36 M. Hr. 30 Min. (D) 259 P.S.I.  
 Tool Open F.F.P. From 9:37 M. to 10:37 M. 1 Hr. Min. From (E) 30 P.S.I. To (F) 36 P.S.I.  
 Tool Closed F.C.I.P. From 10:38 M. to 11:08 M. Hr. 30 Min. (G) 92 P.S.I.  
 Initial Hydrostatic Pressure (A) 2279 P.S.I. Final Hydrostatic Pressure (H) 2267 P.S.I.

SURFACE Size Choke 3/8 In. Max. Press. P.S.I. \_\_\_\_\_ Time \_\_\_\_\_ Description of Flow \_\_\_\_\_  
 INFORMATION \_\_\_\_\_ M. \_\_\_\_\_  
 \_\_\_\_\_ M. \_\_\_\_\_  
 \_\_\_\_\_ M. \_\_\_\_\_

BLOW Weak blow for 5 minutes Bottom Choke Size 3/4 in.  
 Did Well Flow \_\_\_\_\_ Yes  No Recovery Total Ft. 10' oil spotted mud

Reversed Out \_\_\_\_\_ Yes  No Mud Type starch Viscosity 46 Weight 10 Maximum Temp. 117 °F

EXTRA EQUIPMENT: Dual Packers yes Safety Joint \_\_\_\_\_ Jars: Size \_\_\_\_\_ Make \_\_\_\_\_ Ser. No. \_\_\_\_\_  
 Type Circ. Sub. plug Did Tool Plug? no Where? \_\_\_\_\_ Did Packer Hold? yes  
 Length Drill Pipe 3511 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 780 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars \_\_\_\_\_ ft.  
 I. D. Drill Collars \_\_\_\_\_ in. Length D. S. T. Tool 54 ft.

Remarks  
Flushed tool after 30 minutes.

# WESTERN TESTING CO., INC.

## Pressure Data

Date August 24, 1964 Test Ticket No. 5642  
 Recorder No. 1566 Capacity 4300 Location 4313 Ft.  
 Clock No. 6893 Elevation 2259 Derrick Floor Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2279</u> P.S.I.	Opened Tool	<u>8:58 P</u> M	
B First Initial Flow Pressure	<u>15</u> P.S.I.	First Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
C First Final Flow Pressure	<u>15</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>259</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>57</u> Mins.
E Second Initial Flow Pressure	<u>30</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>36</u> P.S.I.			
G Final Closed-in Pressure	<u>92</u> P.S.I.			
H Final Hydrostatic Mud	<u>2267</u> P.S.I.			

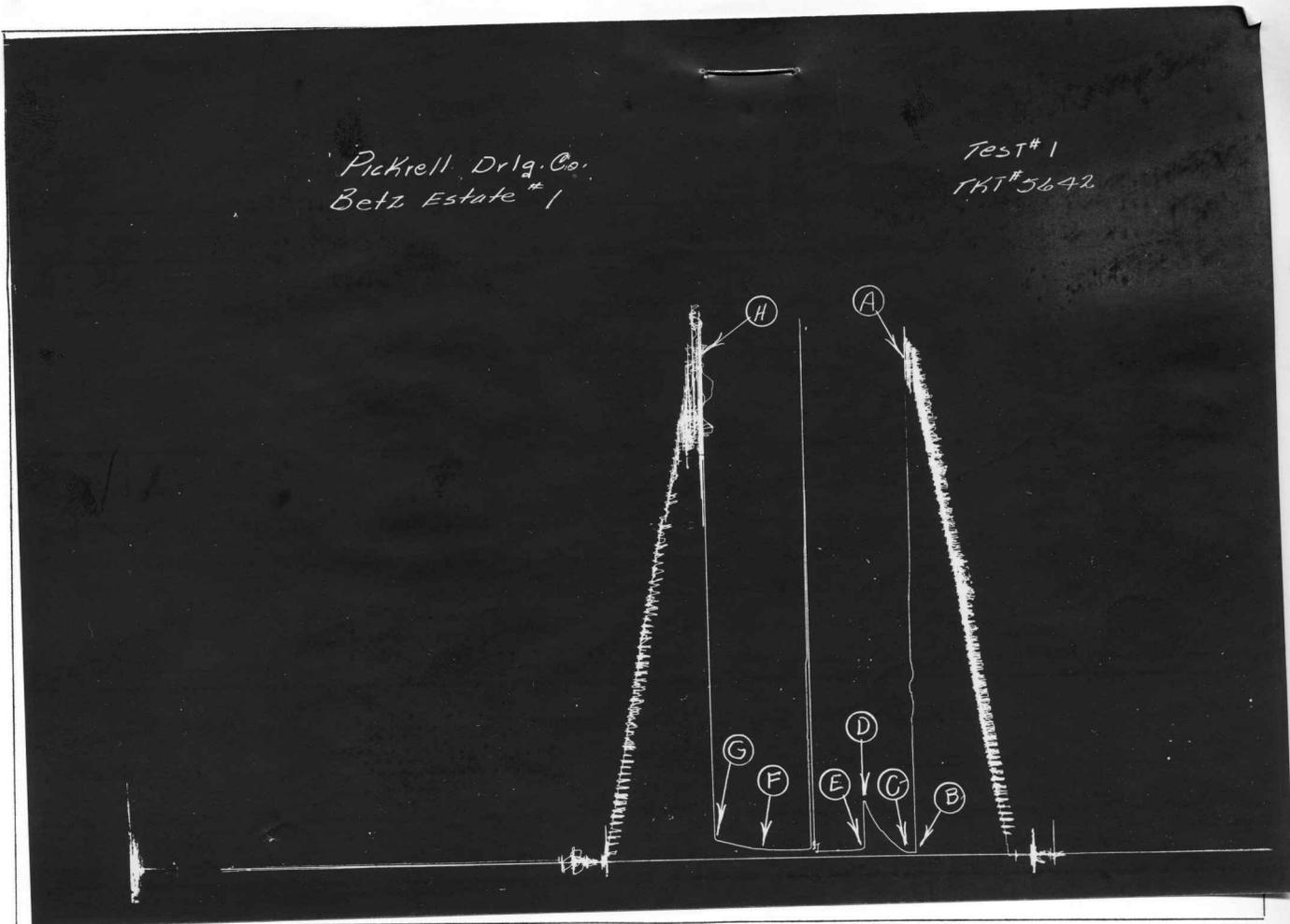
### PRESSURE BREAKDOWN

<b>First Flow Press.</b> Breakdown: <u>1</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<b>Initial Shut-In</b> Breakdown: <u>9</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	<b>Second Flow Pressure</b> Breakdown: <u>11</u> Inc. of <u>5</u> mins. and a final inc. of <u>2</u> Min.	<b>Final Shut-In</b> Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
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Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>15</u>	<u>0</u>	<u>15</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>36</u>
P 2 <u>5</u>	<u>15</u>	<u>3</u>	<u>25</u>	<u>5</u>	<u>30</u>	<u>3</u>	<u>42</u>
P 3		<u>6</u>	<u>45</u>	<u>10</u>	<u>30</u>	<u>6</u>	<u>47</u>
P 4		<u>9</u>	<u>64</u>	<u>15</u>	<u>30</u>	<u>9</u>	<u>50</u>
P 5		<u>12</u>	<u>90</u>	<u>20</u>	<u>30</u>	<u>12</u>	<u>54</u>
P 6		<u>15</u>	<u>114</u>	<u>25</u>	<u>30</u>	<u>15</u>	<u>58</u>
P 7		<u>18</u>	<u>140</u>	<u>30</u>	<u>30</u>	<u>18</u>	<u>63</u>
P 8		<u>21</u>	<u>179</u>	<u>35</u>	<u>36</u>	<u>21</u>	<u>71</u>
P 9		<u>24</u>	<u>231</u>	<u>40</u>	<u>36</u>	<u>24</u>	<u>79</u>
P10		<u>27</u>	<u>259</u>	<u>45</u>	<u>36</u>	<u>27</u>	<u>84</u>
P11				<u>50</u>	<u>36</u>	<u>30</u>	<u>92</u>
P12				<u>55</u>	<u>36</u>		
P13				<u>57</u>	<u>36</u>		
P14							
P15							
P16							
P17							
P18							
P19							
P20							

Pickrell Drilling Co.  
Betz Estate #1

Test #1  
TKT #5642



This is an actual photograph of recorder chart.

POINT	PRESSURE
(A) Initial Hydrostatic Mud .....	2279 PSI
(B) First Initial Flow Pressure .....	15 PSI
(C) First Final Flow Pressure .....	15 PSI
(D) Initial Closed-in Pressure .....	259 PSI
(E) Second Initial Flow Pressure .....	30 PSI
(F) Second Final Flow Pressure .....	36 PSI
(G) Final Closed-in Pressure .....	92 PSI
(H) Final Hydrostatic Mud .....	2267 PSI



Home Office: Great Bend, Kansas

P. O. Box 793 Gladstone 3-7903

Company Pickrell Drilling Company Lease & Well No. Betz Estate #1  
 Elevation 2259 Derrick Floor Ticket Number 5643  
 Date August 25, 1964 Sec. 9 Twp. 20 Range 21w County Ness State Kansas  
 Test Approved by George E. Link Western Representative Bill Hager

Formation Test No. 2 O.K.  Misrun \_\_\_\_\_ Interval Tested From 4370' to 4405' Total Depth 4405'  
 Size Main Hole 7 7/8 Rat Hole None Conv. \_\_\_\_\_ B.T.  Damaged \_\_\_\_\_ Yes  No Conv.  B.T. \_\_\_\_\_ Damaged \_\_\_\_\_ Yes  No  
 Packer Depth 4365 Ft. Size 6 3/4 Packer Depth 4370' Ft. Size 6 3/4  
 Straddle \_\_\_\_\_ Yes  No \_\_\_\_\_ Conv. \_\_\_\_\_ B.T. \_\_\_\_\_ Damaged \_\_\_\_\_ Yes \_\_\_\_\_ No  
 Tool Size 5 1/2" O. D. Tool Jt. Size 4 1/2 P. H. Anchor Length 35 Ft. Size 5 1/2" O. D.

RECORDERS Depth 4373 Ft. Clock No. 6893 Depth 4376 Ft. Clock No. 132  
 Top Make Amerada Cap. 4300 No. 1566 Inside \_\_\_\_\_ Outside \_\_\_\_\_ Bottom Make Western Cap. 4000 No. 21 Inside \_\_\_\_\_ Outside \_\_\_\_\_  
 Below Straddle: Depth \_\_\_\_\_ Clock No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_  
 Top Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_

Time Set Packer 5:17 P. M  
 Tool Open I.F.P. From 5:19 M to 5:24 M Hr. 5 Min. From (B) \_\_\_\_\_ P.S.I. To (C) \_\_\_\_\_ P.S.I.  
 Tool Closed I.C.I.P. From 5:25 M. to 6:00 M. Hr. 35 Min. (D) \_\_\_\_\_ P.S.I. 1338 P.S.I.  
 Tool Open F.F.P. From 6:01 M. to 7:31 M. Hr. 1 Hr. 30 Min. From (E) 45 P.S.I. To (F) \_\_\_\_\_ P.S.I. 155 P.S.I.  
 Tool Closed F.C.I.P. From 7:32 M. to 8:02 M. Hr. 30 Min. (G) \_\_\_\_\_ P.S.I. 1132 P.S.I.  
 Initial Hydrostatic Pressure (A) 2238 P.S.I. Final Hydrostatic Pressure (H) \_\_\_\_\_ P.S.I. 2223 P.S.I.

SURFACE Size Choke 3/8 In. Max. Press. P.S.I. \_\_\_\_\_ Time \_\_\_\_\_ Description of Flow \_\_\_\_\_  
 INFORMATION \_\_\_\_\_ M. \_\_\_\_\_  
 \_\_\_\_\_ M. \_\_\_\_\_  
 \_\_\_\_\_ M. \_\_\_\_\_

BLOW Good blow throughout test Bottom Choke Size 3/4 in.  
 Did Well Flow \_\_\_\_\_ Yes  No \_\_\_\_\_ Recovery Total Ft. 420' muddy oil - 186' gas in pipe

Reversed Out. \_\_\_\_\_ Yes  No \_\_\_\_\_ Mud Type starch Viscosity 46 Weight 10 Maximum Temp. 127 °F  
 EXTRA EQUIPMENT: Dual Packers \_\_\_\_\_ Safety Joint \_\_\_\_\_ Jars: Size \_\_\_\_\_ Make \_\_\_\_\_ Ser. No. \_\_\_\_\_  
 Type Circ. Sub. plug Did Tool Plug? no Where? \_\_\_\_\_ Did Packer Hold? yes  
 Length Drill Pipe 3571 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 780 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars \_\_\_\_\_ ft.  
 I. D. Drill Collars \_\_\_\_\_ in. Length D. S. T. Tool 54 ft.

Remarks \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## WESTERN TESTING CO., INC. Pressure Data

Date August 25, 1964 Test Ticket No. 5643  
 Recorder No. 1566 Capacity 4300 Location 4373 Ft.  
 Clock No. 6893 Elevation 2259 Derrick Floor Well Temperature 127 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2238</u> P.S.I.	Opened Tool	<u>5:17 P.</u> M	
B First Initial Flow Pressure	<u>28</u> P.S.I.	First Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
C First Final Flow Pressure	<u>28</u> P.S.I.	Initial Closed-in Pressure	<u>35</u> Mins.	<u>36</u> Mins.
D Initial Closed-in Pressure	<u>1338</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>87</u> Mins.
E Second Initial Flow Pressure	<u>45</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>155</u> P.S.I.			
G Final Closed-in Pressure	<u>1132</u> P.S.I.			
H Final Hydrostatic Mud	<u>2223</u> P.S.I.			

### PRESSURE BREAKDOWN

**First Flow Press.**  
 Breakdown: 1 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.

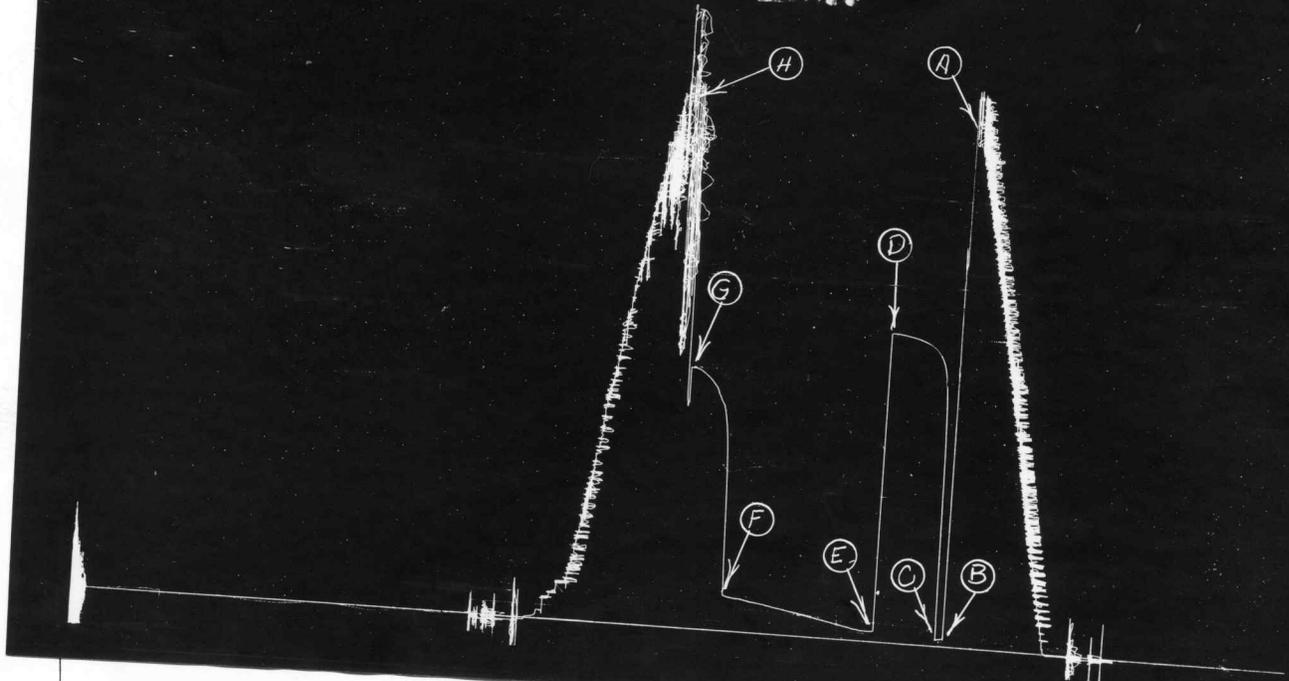
**Second Flow Pressure**  
 Breakdown: 17 Inc.  
 of 5 mins. and a  
 final inc. of 2 Min.

**Final Shut-In**  
 Breakdown: 9 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>28</u>	<u>0</u>	<u>28</u>	<u>0</u>	<u>45</u>	<u>0</u>	<u>155</u>
P 2	<u>28</u>	<u>3</u>	<u>519</u>	<u>5</u>	<u>46</u>	<u>3</u>	<u>800</u>
P 3		<u>6</u>	<u>1126</u>	<u>10</u>	<u>49</u>	<u>6</u>	<u>965</u>
P 4		<u>9</u>	<u>1237</u>	<u>15</u>	<u>56</u>	<u>9</u>	<u>1019</u>
P 5		<u>12</u>	<u>1274</u>	<u>20</u>	<u>62</u>	<u>12</u>	<u>1062</u>
P 6		<u>15</u>	<u>1295</u>	<u>25</u>	<u>71</u>	<u>15</u>	<u>1087</u>
P 7		<u>18</u>	<u>1306</u>	<u>30</u>	<u>79</u>	<u>18</u>	<u>1107</u>
P 8		<u>21</u>	<u>1315</u>	<u>35</u>	<u>88</u>	<u>21</u>	<u>1121</u>
P 9		<u>24</u>	<u>1323</u>	<u>40</u>	<u>95</u>	<u>24</u>	<u>1130</u>
P10		<u>27</u>	<u>1328</u>	<u>45</u>	<u>103</u>	<u>27</u>	<u>1132</u>
P11		<u>30</u>	<u>1334</u>	<u>50</u>	<u>112</u>		
P12		<u>33</u>	<u>1336</u>	<u>55</u>	<u>116</u>		
P13		<u>36</u>	<u>1338</u>	<u>60</u>	<u>120</u>		
P14				<u>65</u>	<u>129</u>		
P15				<u>70</u>	<u>133</u>		
P16				<u>75</u>	<u>140</u>		
P17				<u>80</u>	<u>144</u>		
P18				<u>85</u>	<u>151</u>		
P19				<u>87</u>	<u>155</u>		
P20							

Dickrell Drilling Co.  
 Betz Estate #1

Test # 2  
 TKT # 5643



This is an actual photograph of recorder chart.

**POINT**

**PRESSURE**

(A) Initial Hydrostatic Mud .....	2238	PSI
(B) First Initial Flow Pressure .....	28	PSI
(C) First Final Flow Pressure .....	28	PSI
(D) Initial Closed-in Pressure .....	1338	PSI
(E) Second Initial Flow Pressure .....	45	PSI
(F) Second Final Flow Pressure .....	155	PSI
(G) Final Closed-in Pressure .....	1132	PSI
(H) Final Hydrostatic Mud .....	2223	PSI