

15-167-00664

WESTERN

36-15s-12w

Home Office: Great Bend, Kansas

P. O. Box 793

Gladstone 3-7903

Company Bergman Drilling Company Lease & Well No. Lawson #1
 Elevation 1827' A.F. Ticket Number 4809
 Date 5-4-63 Sec. 36 Twp. 15 Range 12 County Lawson State Kansas
 Test Approved by George Reed Western Representative A. M. Nothing

Formation Test No. 1 O.K. X Misrun _____ Interval Tested From 2821' to 2851' Total Depth 2851'
 Size Main Hole 7 7/8" Rat Hole _____ Conv. X B.T. _____ Damaged _____ Yes X No _____ Conv. _____ B.T. X Damaged _____ Yes X No _____
 Packer Depth 2821 Ft. Size 6 3/4" Packer Depth 2816 Ft. Size 6 3/4"
 Straddle _____ Yes _____ No X Conv. _____ B.T. _____ Damaged _____ Yes _____ No _____
 Tool Size 5 1/2" O.D. Packer Depth _____ Ft. Size _____
 Tool Jt. Size 4 1/2" F.H. Anchor Length 30 Ft. Size 5 1/2" O.D.

RECORDERS Depth 2829 Ft. Clock No. 6879 Depth 2851 Ft. Clock No. 22
 Top Make Amrad Cap. 3150 No. 1564 Inside _____ Outside _____ Bottom Make Western Cap. 4000 No. 17 Inside _____ Outside _____
 Below Straddle: Depth _____ Clock No. _____ Inside _____ Outside _____
 Top Make _____ Cap. _____ No. _____ Inside _____ Outside _____ Bottom Make _____ Cap. _____ No. _____ Inside _____ Outside _____

Time Set Packer 12:20 P
 Tool Open I.F.P. From 12:23P M to 12:33P M - Hr. 10 Min. From (B) 31 P.S.I. To (C) 47 P.S.I.
 Tool Closed I.C.I.P. From 12:33P M. to 1:03P M. - Hr. 30 Min. (D) 1022 P.S.I.
 Tool Open F.F.P. From 1:03P M. to 2:03P M. - Hr. 1 Hr. 30 Min. From (E) 70 P.S.I. To (F) 163 P.S.I.
 Tool Closed F.C.I.P. From 2:03P M. to 3:03P M. - Hr. 30 Min. (G) 987 P.S.I.
 Initial Hydrostatic Pressure (A) 1496 P.S.I. Final Hydrostatic Pressure (H) 1488 P.S.I.

SURFACE Size Choke 1/2 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
 INFORMATION _____

Fair blow throughout test
 BLOW _____ Bottom Choke Size 3/4 in.
 Did Well Flow _____ Yes _____ No _____ Recovery Total Ft. 330' Fluid - 300' Gas - 90' Oil and gas out and -
240' slightly oil out salt water
 Reversed Out _____ Yes X No _____ Mud Type Starch Viscosity 37 Weight 9.4 Maximum Temp. 100 °F
 EXTRA EQUIPMENT: Dual Packers Dual Safety Joint 15 Jars: Size 15 Make _____ Ser. No. 200
 Type Circ. Sub. Plug Did Tool Plug? 3.4 Where? 720 Did Packer Hold? 2.7
 Length Drill Pipe 2081 ft. I.D. Drill Pipe 30 Length Weight Pipe _____ ft. I.D. Weight Pipe _____ in. Length Drill Collars _____ ft.
 I. D. Drill Collars _____ in. Length D. S. T. Tool _____ ft.
 Remarks _____

WESTERN TESTING CO., INC. Pressure Data

Date 5-6-63 Test Ticket No. 4903
Recorder No. 1560 Capacity 31500 Location 2829 Ft.
Clock No. 6899 Elevation 1827' D.P. Well Temperature 100 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1488</u> P.S.I.	Opened Tool	<u>12:23 P</u> M	<u>12:23 PM</u>
B First Initial Flow Pressure	<u>38</u> P.S.I.	First Flow Pressure	<u>10</u> Mins.	<u>10</u> Mins.
C First Final Flow Pressure	<u>49</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1080</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>90</u> Mins.
E Second Initial Flow Pressure	<u>71</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>31</u> Mins.
F Second Final Flow Pressure	<u>167</u> P.S.I.			
G Final Closed-in Pressure	<u>965</u> P.S.I.			
H Final Hydrostatic Mud	<u>1478</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 2 Inc.
of 5 mins. and a
final inc. of - Min.

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

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

Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 1 Min.

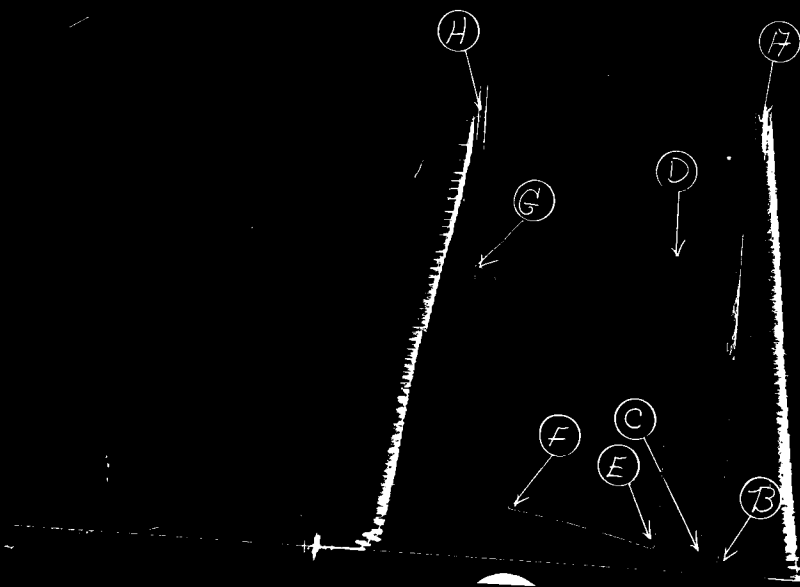
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>38</u>	<u>0</u>	<u>49</u>	<u>0</u>	<u>71</u>	<u>0</u>	<u>167</u>
P 2 <u>5</u>	<u>43</u>	<u>3</u>	<u>401</u>	<u>5</u>	<u>72</u>	<u>3</u>	<u>239</u>
P 3 <u>10</u>	<u>49</u>	<u>6</u>	<u>901</u>	<u>10</u>	<u>80</u>	<u>6</u>	<u>442</u>
P 4		<u>9</u>	<u>957</u>	<u>15</u>	<u>85</u>	<u>9</u>	<u>663</u>
P 5		<u>12</u>	<u>984</u>	<u>20</u>	<u>93</u>	<u>12</u>	<u>838</u>
P 6		<u>15</u>	<u>995</u>	<u>25</u>	<u>100</u>	<u>15</u>	<u>888</u>
P 7		<u>18</u>	<u>1006</u>	<u>30</u>	<u>106</u>	<u>18</u>	<u>918</u>
P 8		<u>21</u>	<u>1012</u>	<u>35</u>	<u>113</u>	<u>21</u>	<u>935</u>
P 9		<u>24</u>	<u>1017</u>	<u>40</u>	<u>117</u>	<u>24</u>	<u>946</u>
P10		<u>27</u>	<u>1018</u>	<u>45</u>	<u>125</u>	<u>27</u>	<u>956</u>
P11		<u>30</u>	<u>1020</u>	<u>50</u>	<u>130</u>	<u>30</u>	<u>962</u>
P12				<u>55</u>	<u>136</u>	<u>31</u>	<u>965</u>
P13				<u>60</u>	<u>141</u>		
P14				<u>65</u>	<u>145</u>		
P15				<u>70</u>	<u>150</u>		
P16				<u>75</u>	<u>155</u>		
P17				<u>80</u>	<u>159</u>		
P18				<u>85</u>	<u>164</u>		
P19				<u>90</u>	<u>167</u>		
P20							

Bengman Dr/g. Inc.
Kaufman #1.

Test #1

T. H. T. #4803

Inside



This is an actual photograph of recorder chart.

POINT

PRESSURE

(A)	Initial Hydrostatic Mud	1496	PSI
(B)	First Initial Flow Pressure	31	PSI
(C)	First Final Flow Pressure	47	PSI
(D)	Initial Closed-in Pressure	1022	PSI
(E)	Second Initial Flow Pressure	70	PSI
(F)	Second Final Flow Pressure	163	PSI
(G)	Final Closed-in Pressure	967	PSI
(H)	Final Hydrostatic Mud	1488	PSI

Amale Co., Inc.

WESTERN

Home Office: Great Bend, Kansas

P. O. Box 793

GLadstone 3-7903

Company Bergman Drilling, Inc. Lease & Well No. Kaufman #1
 Elevation 1827' D.F. Ticket Number 4804
 Date 5-8-63 Sec. 36 Twp. 15 Range 12 County Russell State Kansas
 Test Approved by George Reed Western Representative W. M. Nething

Formation Test No. 2 O.K. ☒ Misrun _____ Interval Tested From 3318' to 3332' Total Depth 3332'
 Size Main Hole 7 7/8" Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No _____ Conv. _____ B.T. ☒ Damaged _____ Yes ☒ No _____
 Packer Depth 3318 Ft. Size 6 3/4" Packer Depth 3313 Ft. Size 6 3/4"

Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No _____

Tool Size 5 1/2" O.D. Packer Depth _____ Ft. Size _____
 Tool Jt. Size 4 1/2" F.H. Anchor Length 14 Ft. Size 5 1/2" O.D.

RECORDERS	Depth <u>3321</u> Ft.	Clock No. <u>6899</u>	Depth <u>3323</u> Ft.	Clock No. <u>22</u>
	Top Make <u>Amerada</u> Cap. <u>3150#</u> No. <u>1564</u>	Inside _____ Outside ☒	Bottom Make <u>Western</u> Cap. <u>4000#</u> No. <u>17</u>	Inside _____ Outside ☒
Below Straddle:	Depth _____ Clock No. _____	Inside _____ Outside _____	Depth _____ Ft. Clock No. _____	Inside _____ Outside _____
	Top Make _____ Cap. _____ No. _____	Inside _____ Outside _____	Bottom Make _____ Cap. _____ No. _____	Inside _____ Outside _____

Time Set Packer 1:37 A M
 Tool Open I.F.P. From _____ M to _____ M _____ Hr _____ Min. From (B) _____ P.S.I. To (C) _____ P.S.I.
 Tool Closed I.C.I.P. From _____ M. to _____ M. _____ Hr. _____ Min. (D) Not taken P.S.I.
 Tool Open F.F.P. From 1:40A M. to 2:40A M. 1 Hr. _____ Min. From (E) 99 P.S.I. To (F) 679 P.S.I.
 Tool Closed F.C.I.P. From 2:40A M. to 3:10A M. _____ Hr. 30 Min. (G) 1055 P.S.I.
 Initial Hydrostatic Pressure (A) 1820 P.S.I. Final Hydrostatic Pressure (H) 1788 P.S.I.

SURFACE	Size Choke <u>1/2</u> 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. 1550' Sulphur Water

Reversed Out _____ Yes ☒ No _____ Mud Type Starch Viscosity 39 Weight 9.9 Maximum Temp. 116 °F

EXTRA EQUIPMENT: Dual Packers Dual Safety Joint No Jars: Size NO Make _____ Ser. No. _____
 Type Circ. Sub. plug Did Tool Plug? No Where? _____ Did Packer Hold? Yes
 Length Drill Pipe 2578 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 720 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D. S. T. Tool 34 ft.

Remarks

WESTERN TESTING CO., INC. Pressure Data

Date 5-8-63 Test Ticket No. 4804
Recorder No. 1564 Capacity 3150# Location 3321 Ft.
Clock No. 6899 Elevation 1827' D.F. Well Temperature 116 °F

Point	Pressure		Time Given 1:40 A	Time Computed 1:40 AM
A Initial Hydrostatic Mud	<u>1820</u> P.S.I.	Opened Tool		
B First Initial Flow Pressure	<u>-</u> P.S.I.	First Flow Pressure	<u>-</u> Mins.	<u>0</u> Mins.
C First Final Flow Pressure	<u>-</u> P.S.I.	Initial Closed-in Pressure	<u>-</u> Mins.	<u>-</u> Mins.
D Initial Closed-in Pressure	<u>-</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>64</u> Mins.
E Second Initial Flow Pressure	<u>99</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>679</u> P.S.I.			
G Final Closed-in Pressure	<u>1055</u> P.S.I.			
H Final Hydrostatic Mud	<u>1788</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: _____ Inc.	Breakdown: _____ Inc.	Breakdown: <u>12</u> Inc.	Breakdown: <u>10</u> Inc.
of _____ mins. and a	of _____ mins. and a	of <u>5</u> mins. and a	of <u>3</u> mins. and a
final inc. of _____ Min.	final inc. of _____ Min.	final inc. of <u>4</u> Min.	final inc. of <u>0</u> Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1				0	99	0	679
P 2				5	139	3	987
P 3				10	266	6	1014
P 4				15	347	9	1023
P 5				20	289	12	1030
P 6				25	440	15	1036
P 7				30	468	18	1041
P 8				35	501	21	1045
P 9				40	543	24	1050
P10				45	578	27	1053
P11				50	606	30	1055
P12				55	637		
P13				60	662		
P14				64	679		
P15							
P16							
P17							
P18							
P19							
P20							

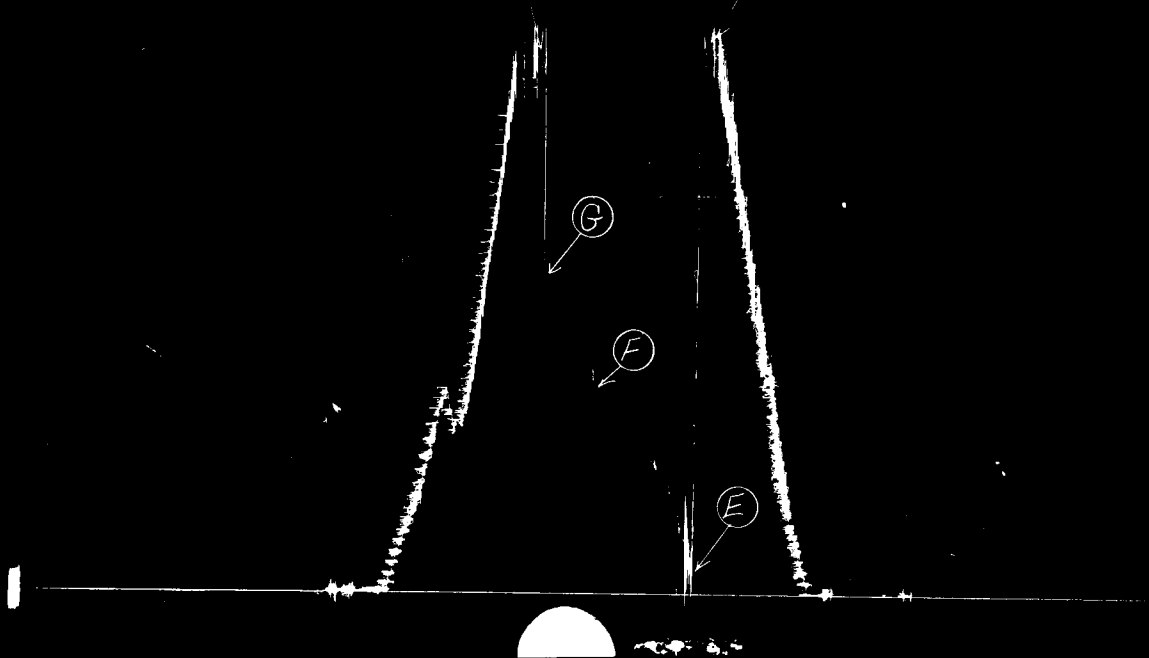
Bergman Drilling Inc.

Test #2

Kaufman #1

Tool # 4804

(H) Inside (H)



This is an actual photograph of recorder chart.

POINT

PRESSURE

(A)	Initial Hydrostatic Mud	1820	PSI
(B)	First Initial Flow Pressure	0	PSI
(C)	First Final Flow Pressure	-	PSI
(D)	Initial Closed-in Pressure	Not Taken	PSI
(E)	Second Initial Flow Pressure	99	PSI
(F)	Second Final Flow Pressure	679	PSI
(G)	Final Closed-in Pressure	1055	PSI
(H)	Final Hydrostatic Mud	1788	PSI

Amwell Co., Inc.