

Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Graves Drilling Co. Inc. Lease & Well No. Moeckel # 1
Elevation 1738 Kelly Bushing Formation Mississippian Effective Pay _____ Ft. Ticket No. 10821
Date 5-19-68 Sec. 6 Twp. 24 Range 9 County Reno State Kansas
Test Approved by John Graves Western Representative Leon Elmore

Formation Test No. 1 O.K. ☒ Misrun _____ Interval Tested From 3720' to 3746' Total Depth 3746'
Size Main Hole 7 7/8 Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Packer Depth 3715 Ft. Size 6 3/4 Packer Depth 3720 Ft. Size 6 3/4
Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____
Tool Size 5 1/2" OD Tool Jt. Size 4 1/2" FH - XH Anchor Length 26 Ft. Size 5 1/2" OD

RECORDERS	Depth <u>3739</u>	Ft.	Clock No. <u>6897</u>	Depth <u>3742</u>	Ft.	Clock No. <u>6799</u>	
	Top Make <u>Kuster</u>	Cap. <u>4500</u>	No. <u>3085</u>	Bottom Make <u>Kuster</u>	Cap. <u>4400</u>	No. <u>2603</u>	
			Inside <u>Outside</u>				<u>Inside</u>
Below Straddle: Depth _____			Inside _____	Depth _____			Inside _____
			Outside _____				Outside _____
Top Make _____	Cap. _____	No. _____	Inside _____	Bottom Make _____	Cap. _____	No. _____	Inside _____
			Outside _____				Outside _____

Time Set Packer 4:58 P. M
Tool Open I.F.P. From 5:00 M. to 5:15 P.M. Hr. 15 Min. From (B) 35 P.S.I. To (C) 35 P.S.I.
Tool Closed I.C.I.P. From 5:15 M. to 5:45 P.M. Hr. 30 Min. (D) 711 P.S.I.
Tool Open F.F.P. From 5:45 M. to 6:45 P.M. 1 Hr. -- Min. From (E) 48 P.S.I. To (F) 54 P.S.I.
Tool Closed F.C.I.P. From 6:45 M. to 7:15 P.M. Hr. 30 Min. (G) 246 P.S.I.
Initial Hydrostatic Pressure (A) 1995 P.S.I. Final Hydrostatic Pressure (H) 1983 P.S.I.

SURFACE	Size Choke <u>3/4</u> In.	Max. Press. P.S.I.	Time	Description of Flow
INFORMATION	_____	_____	M.	_____
	_____	_____	M.	_____
	_____	_____	M.	_____

BLOW Fair - increasing slightly. Bottom Choke Size 3/4 In.
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 90 feet mud.

Reversed Out _____ Yes ☒ No _____ Mud Type starch Viscosity 40 Weight 9.8 Water Loss 10.4 cc. Maximum Temp. 112 °F
Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____
Length Drill Pipe 3157 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 553 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 46 ft.

Remarks _____

WESTERN TESTING CO., INC.

Pressure Data

Date 5-19-68 Test Ticket No. 10821
 Recorder No. 3085 Capacity 4500 Location 3739 Ft.
 Clock No. 6897 Elevation 1738 Kelly Bushing Well Temperature 112 °F
 Time Given 4:58 P. Time Computed M

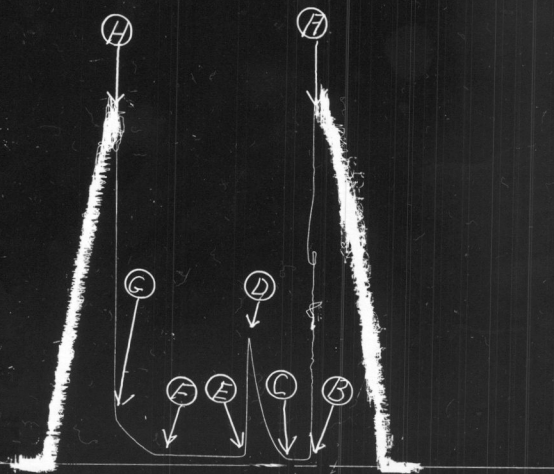
Point	Pressure		
A Initial Hydrostatic Mud	<u>1995</u>	P.S.I.	Opened Tool
B First Initial Flow Pressure	<u>35</u>	P.S.I.	First Flow Pressure
C First Final Flow Pressure	<u>35</u>	P.S.I.	Initial Closed-in Pressure
D Initial Closed-in Pressure	<u>711</u>	P.S.I.	Second Flow Pressure
E Second Initial Flow Pressure	<u>48</u>	P.S.I.	Final Closed-in Pressure
F Second Final Flow Pressure	<u>54</u>	P.S.I.	
G Final Closed-in Pressure	<u>246</u>	P.S.I.	
H Final Hydrostatic Mud	<u>1983</u>	P.S.I.	

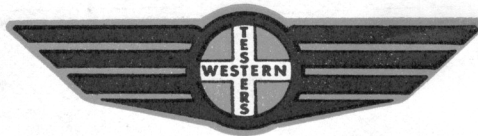
PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>9</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>--</u> Min.		final inc. of <u>--</u> Min.		final inc. of <u>--</u> Min.		final inc. of <u>2</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>35</u>	<u>0</u>	<u>35</u>	<u>0</u>	<u>48</u>	<u>0</u>	<u>54</u>
P 2 <u>5</u>	<u>35</u>	<u>3</u>	<u>48</u>	<u>5</u>	<u>48</u>	<u>3</u>	<u>64</u>
P 3 <u>10</u>	<u>35</u>	<u>6</u>	<u>71</u>	<u>10</u>	<u>48</u>	<u>6</u>	<u>71</u>
P 4 <u>15</u>	<u>35</u>	<u>9</u>	<u>102</u>	<u>15</u>	<u>50</u>	<u>9</u>	<u>90</u>
P 5		<u>12</u>	<u>141</u>	<u>20</u>	<u>50</u>	<u>12</u>	<u>107</u>
P 6		<u>15</u>	<u>203</u>	<u>25</u>	<u>50</u>	<u>15</u>	<u>126</u>
P 7		<u>18</u>	<u>282</u>	<u>30</u>	<u>50</u>	<u>18</u>	<u>150</u>
P 8		<u>21</u>	<u>389</u>	<u>35</u>	<u>50</u>	<u>21</u>	<u>174</u>
P 9		<u>24</u>	<u>513</u>	<u>40</u>	<u>50</u>	<u>24</u>	<u>198</u>
P 10		<u>27</u>	<u>641</u>	<u>45</u>	<u>54</u>	<u>27</u>	<u>222</u>
P 11		<u>30</u>	<u>711</u>	<u>50</u>	<u>54</u>	<u>29</u>	<u>246</u>
P 12				<u>55</u>	<u>54</u>		
P 13				<u>60</u>	<u>54</u>		
P 14							
P 15							
P 16							
P 17							
P 18							
P 19							
P 20							

GRAVES DRUG CO.
MOECKEL #1

T.K.T 10821
TEST #1





Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Graves Drilling Co. Inc. Lease & Well No. Moeckel # 1
Elevation 1738 Kelly Bushing Formation Mississippian Effective Pay _____ Ft. Ticket No. 10822
Date 5-20-68 Sec. 6 Twp. 24 Range 9 County Reno State Kansas
Test Approved by Edgar E. Smith Western Representative Leon Elmore
Formation Test No. 2 O.K. ☒ Misrun _____ Interval Tested From 3720' to 3757' Total Depth 3757'
Size Main Hole 7 7/8 Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Packer Depth 3715 Ft. Size 6 3/4 Packer Depth 3720 Ft. Size 6 3/4
Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No
Packer Depth _____ Ft. Size _____
Tool Size 5 1/2" OD Tool Jt. Size 4 1/2" FH - XH Anchor Length 37 Ft. Size 5 1/2" OD
RECORDERS Depth 3749 Ft. Clock No. 6897 Depth 3752 Ft. Clock No. 6799
Top Make Kuster Cap. 4500 No. 3085 Inside Bottom Make Kuster Cap. 4400 No. 2603 ==Inside
Below Straddle: Depth _____ Clock No. _____ Outside Depth _____ Ft. Clock No. _____ Inside
Top Make _____ Cap. _____ No. _____ Inside Bottom Make _____ Cap. _____ No. _____ Inside
Time Set Packer 5:30 A. M
Tool Open I.F.P. From 5:32 M. to 5:47 AM. Hr. 15 Min. From (B) 41 P.S.I. To (C) 41 P.S.I.
Tool Closed I.C.I.P. From 5:47 M. to 6:17 AM. Hr. 30 Min. (D) 165 P.S.I.
Tool Open F.F.P. From 6:17 M. to 6:47 AM. Hr. 35 Min. From (E) 54 P.S.I. To (F) 54 P.S.I.
Tool Closed F.C.I.P. From 6:47 M. to 7:22 AM. Hr. 30 Min. (G) 100 P.S.I.
Initial Hydrostatic Pressure (A) 2063 P.S.I. Final Hydrostatic Pressure (H) 2007 P.S.I.
SURFACE Size Choke 3/4" In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW Weak. Bottom Choke Size 3/4 In.
Did Well Flow _____ Yes ☒ No Recovery Total Ft. 40 feet mud.
Reversed Out _____ Yes ☒ No Mud Type starch Viscosity 40 Weight 9.8 Water Loss 10.4 cc. Maximum Temp. 116 °F
Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____
Length Drill Pipe _____ ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 553 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 57 ft.
Remarks Slide tool 4 feet to bottom.

WESTERN TESTING CO., INC.

Pressure Data

Date 5-20-68 Test Ticket No. 10822
 Recorder No. 3085 Capacity 4500 Location 3749 Ft.
 Clock No. 6897 Elevation 1738 Kelly Bushing Well Temperature 116 °F
 Time Given 5:30 AM Time Computed _____

Point	Pressure	
A Initial Hydrostatic Mud	<u>2063</u>	P.S.I.
B First Initial Flow Pressure	<u>41</u>	P.S.I.
C First Final Flow Pressure	<u>41</u>	P.S.I.
D Initial Closed-in Pressure	<u>165</u>	P.S.I.
E Second Initial Flow Pressure	<u>54</u>	P.S.I.
F Second Final Flow Pressure	<u>54</u>	P.S.I.
G Final Closed-in Pressure	<u>100</u>	P.S.I.
H Final Hydrostatic Mud	<u>2007</u>	P.S.I.

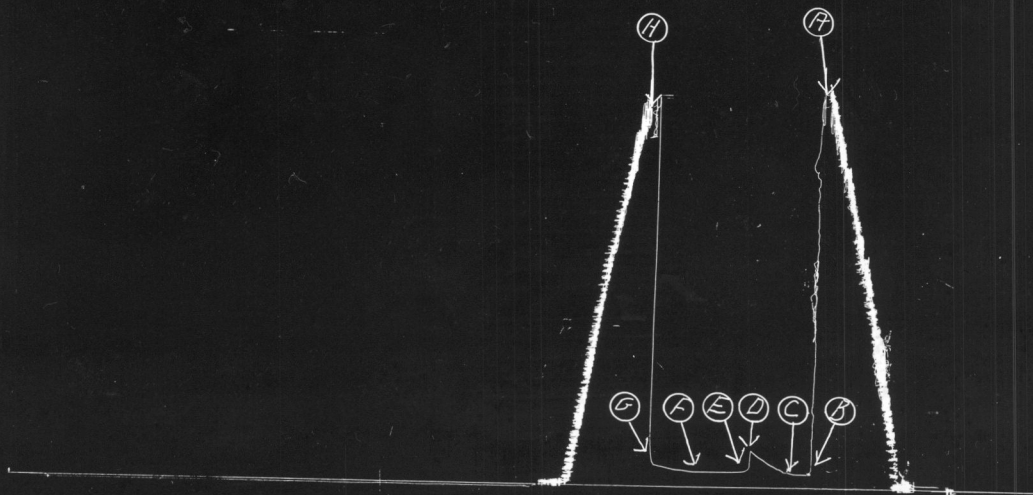
Opened Tool _____
 First Flow Pressure _____
 Initial Closed-in Pressure _____
 Second Flow Pressure _____
 Final Closed-in Pressure _____

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>7</u> Inc.		Breakdown: <u>10</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>--</u> Min.		final inc. of <u>--</u> Min.		final inc. of <u>--</u> Min.		final inc. of <u>2</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>41</u>	<u>0</u>	<u>41</u>	<u>0</u>	<u>54</u>	<u>0</u>	<u>54</u>
P 2 <u>5</u>	<u>41</u>	<u>3</u>	<u>45</u>	<u>5</u>	<u>54</u>	<u>3</u>	<u>54</u>
P 3 <u>10</u>	<u>41</u>	<u>6</u>	<u>54</u>	<u>10</u>	<u>54</u>	<u>6</u>	<u>62</u>
P 4 <u>15</u>	<u>41</u>	<u>9</u>	<u>64</u>	<u>15</u>	<u>54</u>	<u>9</u>	<u>65</u>
P 5 _____	_____	<u>12</u>	<u>76</u>	<u>20</u>	<u>54</u>	<u>12</u>	<u>67</u>
P 6 _____	_____	<u>15</u>	<u>88</u>	<u>25</u>	<u>54</u>	<u>15</u>	<u>71</u>
P 7 _____	_____	<u>18</u>	<u>102</u>	<u>30</u>	<u>54</u>	<u>18</u>	<u>74</u>
P 8 _____	_____	<u>21</u>	<u>117</u>	<u>35</u>	<u>54</u>	<u>21</u>	<u>78</u>
P 9 _____	_____	<u>24</u>	<u>133</u>	_____	_____	<u>24</u>	<u>84</u>
P 10 _____	_____	<u>27</u>	<u>150</u>	_____	_____	<u>27</u>	<u>88</u>
P 11 _____	_____	<u>30</u>	<u>165</u>	_____	_____	<u>30</u>	<u>96</u>
P 12 _____	_____	_____	_____	_____	_____	<u>32</u>	<u>100</u>
P 13 _____	_____	_____	_____	_____	_____	_____	_____
P 14 _____	_____	_____	_____	_____	_____	_____	_____
P 15 _____	_____	_____	_____	_____	_____	_____	_____
P 16 _____	_____	_____	_____	_____	_____	_____	_____
P 17 _____	_____	_____	_____	_____	_____	_____	_____
P 18 _____	_____	_____	_____	_____	_____	_____	_____
P 19 _____	_____	_____	_____	_____	_____	_____	_____
P 20 _____	_____	_____	_____	_____	_____	_____	_____

GRAVES DRUG CO.
MOECKEL #1

T.K.T 10822
TEST #2





Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Graves Drilling Co. Inc. Lease & Well No. Moeckel # 1
Elevation 1738 Kelly Bushing Formation Mississippian Effective Pay _____ Ft. Ticket No. 10823
Date 5-20-68 Sec. 6 Twp. 24 Range 9 County Reno State Kansas
Test Approved by E. E. Smith Western Representative Leon Elmore

Formation Test No. 3 O.K. ☒ Misrun _____ Interval Tested From 3757' to 3780' Total Depth 3780'
Size Main Hole 7 7/8 Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Packer Depth 3752 Ft. Size 6 3/4 Packer Depth 3757 Ft. Size 6 3/4
Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____
Tool Size 5 1/2" OD Tool Jt. Size 4 1/2" FH XH Anchor Length 23 Ft. Size 5 1/2" OD

RECORDERS Depth 3771 Ft. Clock No. 6897 Depth 3774 Ft. Clock No. 6799
Top Make Kuster Cap. 4500 No. 3085 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 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 3:48 P. M

Tool Open I.F.P. From 3:50 M. to 4:05 P M. Hr. 15 Min. From (B) 35 P.S.I. To (C) 35 P.S.I.
Tool Closed I.C.I.P. From 4:05 M. to 4:35 P M. Hr. 30 Min. (D) 54 P.S.I.
Tool Open F.F.P. From 4:35 M. to 5:35 P M. 1 Hr. -- Min. From (E) 38 P.S.I. To (F) 38 P.S.I.
Tool Closed F.C.I.P. From 5:35 M. to 6:05 P M. Hr. 30 Min. (G) 50 P.S.I.
Initial Hydrostatic Pressure (A) 2052 P.S.I. Final Hydrostatic Pressure (H) 2022 P.S.I.

SURFACE	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
INFORMATION	<u>3/ 4</u> In.		<u>M.</u>	
			<u>M.</u>	
			<u>M.</u>	

BLOW Weak - decreasing - died in 55 minutes. Bottom Choke Size 3/4 In.
Did Well Flow Yes ☒ No Recovery Total Ft. 40 feet mud; oil cut between tools.

Reversed Out Yes ☒ No Mud Type starch Viscosity 45 Weight 9.7 Water Loss 14 cc. Maximum Temp. 112 °F
Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____
Length Drill Pipe 3184 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 553 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 43 ft.

Remarks Tool slid 4 feet to bottom.

WESTERN TESTING CO., INC.

Pressure Data

Date 5-20-68 Test Ticket No. 10823
 Recorder No. 3085 Capacity 4500 Location 3771 Ft.
 Clock No. 6897 Elevation 1738 Kelly Bushing Well Temperature 112 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2052</u> P.S.I.	Opened Tool	<u>3:48 P</u> M	
B First Initial Flow Pressure	<u>35</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>35</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>54</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>38</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>38</u> P.S.I.			
G Final Closed-in Pressure	<u>50</u> P.S.I.			
H Final Hydrostatic Mud	<u>2022</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>10</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>--</u> Min.		final inc. of <u>--</u> Min.		final inc. of <u>--</u> Min.		final inc. of <u>--</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>35</u>	<u>0</u>	<u>35</u>	<u>0</u>	<u>38</u>	<u>0</u>	<u>38</u>
P 2 <u>5</u>	<u>35</u>	<u>3</u>	<u>35</u>	<u>5</u>	<u>38</u>	<u>3</u>	<u>38</u>
P 3 <u>10</u>	<u>35</u>	<u>6</u>	<u>35</u>	<u>10</u>	<u>38</u>	<u>6</u>	<u>38</u>
P 4 <u>15</u>	<u>35</u>	<u>9</u>	<u>37</u>	<u>15</u>	<u>38</u>	<u>9</u>	<u>38</u>
P 5		<u>12</u>	<u>37</u>	<u>20</u>	<u>38</u>	<u>12</u>	<u>38</u>
P 6		<u>15</u>	<u>40</u>	<u>25</u>	<u>38</u>	<u>15</u>	<u>38</u>
P 7		<u>18</u>	<u>43</u>	<u>30</u>	<u>38</u>	<u>18</u>	<u>40</u>
P 8		<u>21</u>	<u>45</u>	<u>35</u>	<u>38</u>	<u>21</u>	<u>43</u>
P 9		<u>24</u>	<u>47</u>	<u>40</u>	<u>38</u>	<u>24</u>	<u>45</u>
P 10		<u>27</u>	<u>50</u>	<u>45</u>	<u>38</u>	<u>27</u>	<u>47</u>
P 11		<u>30</u>	<u>54</u>	<u>50</u>	<u>38</u>	<u>30</u>	<u>50</u>
P 12				<u>55</u>	<u>38</u>		
P 13				<u>60</u>	<u>38</u>		
P 14							
P 15							
P 16							
P 17							
P 18							
P 19							
P 20							

GRAVES DRLG. CO.
MOECKEL #1

T.K.T. 10823
TEST #3

