



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

Company **Graves Drilling Company** Lease & Well No. **Bartleh #2**
Elevation **1940 Kelly Bushings** Formation **K. C.** Ticket Number **6489**
Date **June 22, 1965** Sec. Twp. Range County **Stafford** State **Kansas**
Test Approved by **George A. McCaleb** Western Representative **Leon Elmore**

Formation Test No. **1** O.K. ☒ Misrun Interval Tested From **3474'** to **3547'** Total Depth **3547'**
Size Main Hole **7 7/8** Bat Hole Conv. ☒ B.T. Damaged Yes ☒ No Conv. B.T. ☒ Damaged Yes ☒ No
Packer Depth **3469** Ft. Size **6 3/4** Packer Depth **3474** Ft. Size **6 3/4**
Straddle Yes ☒ No Conv. B.T. Damaged Yes No

Packer Depth Ft. Size **39' of 5 1/2 OD**
Tool Size **5 1/2 OD** Tool Jt. Size **4 1/2 FH** Anchor Length **73** Ft. Size **31' of 3.8 ID**
RECORDERS Depth **3502** Ft. Clock No. **6861** Depth **3505** Ft. Clock No. **35**
Top Make **Amerada** Cap. **4200** No. **1559** Inside Outside Bottom Make **Western** Cap. **4000** No. **152** Inside Outside
Below Straddle: Depth Clock No. Depth Ft. Clock No. Inside Outside
Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer **8:17 A** M
Tool Open I.F.P. From **8:19** M to **8:24** M Hr. **5** Min. From (B) **56** P.S.I. To (C) **56** P.S.I.
Tool Closed I.C.I.P. From **8:24** M. to **8:54** M. Hr. **30** Min. (D) **1216** P.S.I.
Tool Open F.F.P. From **8:54** M. to **9:54** M. Hr. **60** Min. From (E) **73** P.S.I. To (F) **151** P.S.I.
Tool Closed F.C.I.P. From **9:54** M. to **10:24** M. Hr. **30** Min. (G) **1101** P.S.I.
Initial Hydrostatic Pressure (A) **1928** P.S.I. Final Hydrostatic Pressure (H) **1902** P.S.I.

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

BLOW **Weak to fair** Bottom Choke Size **3/4** In.

Did Well Flow Yes ☒ No Recovery Total Ft. **155' slightly speckled oil gassy mud; 90' slightly speckled gassy oil muddy water** Mud

Reversed Out Yes ☒ No Mud Type **starch** Viscosity **49** Weight **10.1** Maximum Temp. **109** °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 **2697** ft. I.D. Drill Pipe **3.8** in Length Weight Pipe **571** ft. I.D. Weight Pipe **2.7** in Length Drill Collars ft.

I. D. Drill Collars in Length D.S.T. Tool **59** ft.

Remarks

WESTERN TESTING CO., INC. Pressure Data

Date June 22, 1965

Test Ticket No. 6489

Recorder No. 1559

Capacity 4200

Location 3502 Ft.

Clock No. 6861

Elevation 1940 Kelly Bushings

Well Temperature 109 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1928</u> P.S.I.	Opened Tool	<u>8:19</u> M	<u>8:19</u>
B First Initial Flow Pressure	<u>56</u> P.S.I.	First Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
C First Final Flow Pressure	<u>56</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>31</u> Mins.
D Initial Closed-in Pressure	<u>1216</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>73</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>151</u> P.S.I.			
G Final Closed-in Pressure	<u>1101</u> P.S.I.			
H Final Hydrostatic Mud	<u>1902</u> P.S.I.			

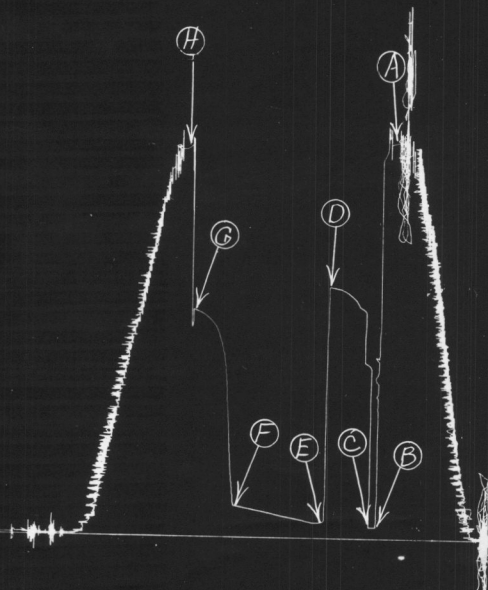
PRESSURE BREAKDOWN

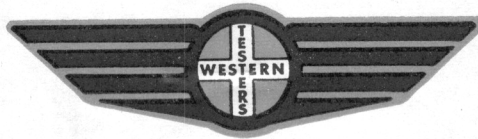
First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>1</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>10</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>1</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>56</u>	<u>0</u>	<u>56</u>	<u>0</u>	<u>73</u>	<u>0</u>	<u>151</u>
P 2 <u>5</u>	<u>56</u>	<u>3</u>	<u>828</u>	<u>5</u>	<u>73</u>	<u>3</u>	<u>355</u>
P 3		<u>6</u>	<u>1004</u>	<u>10</u>	<u>79</u>	<u>6</u>	<u>626</u>
P 4		<u>9</u>	<u>1101</u>	<u>15</u>	<u>87</u>	<u>9</u>	<u>878</u>
P 5		<u>12</u>	<u>1131</u>	<u>20</u>	<u>94</u>	<u>12</u>	<u>954</u>
P 6		<u>15</u>	<u>1160</u>	<u>25</u>	<u>99</u>	<u>15</u>	<u>1010</u>
P 7		<u>18</u>	<u>1183</u>	<u>30</u>	<u>104</u>	<u>18</u>	<u>1039</u>
P 8		<u>21</u>	<u>1196</u>	<u>35</u>	<u>114</u>	<u>21</u>	<u>1062</u>
P 9		<u>24</u>	<u>1204</u>	<u>40</u>	<u>123</u>	<u>24</u>	<u>1079</u>
P10		<u>27</u>	<u>1211</u>	<u>45</u>	<u>129</u>	<u>27</u>	<u>1087</u>
P11		<u>30</u>	<u>1215</u>	<u>50</u>	<u>137</u>	<u>30</u>	<u>1101</u>
P12		<u>31</u>	<u>1216</u>	<u>55</u>	<u>146</u>		
P13				<u>60</u>	<u>151</u>		
P14							
P15							
P16							
P17							
P18							
P19							
P20							

BARTLEH #2

TEST # 1

T.K.T. # 6489





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

Company **Graves Drilling Company** Lease & Well No. **Bartleh #2**
Elevation **1940 Kelly Bushings** Formation **K.C.** Ticket Number **6490**
Date **June 23, 1965** Sec. **36** Twp. **22** Range **14** County **Stafford** State **Kansas**
Test Approved by **George A. McCaleb** Western Representative **Leon Elmore**

Formation Test No. **2** O.K. ☒ Misrun Interval Tested From **3583'** to **3605'** Total Depth **3605'**
Size Main Hole **7 7/8** Rat Hole ☒ Conv. ☒ B.T. Damaged Yes ☒ No Conv. B.T. ☒ Damaged Yes ☒ No
Packer Depth **3578** Ft. Size **6 3/4** Packer Depth **3583** 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** Anchor Length **22** Ft. Size **5 1/2 OD**
RECORDERS Depth **3596** Ft. Clock No. **6861** Depth **3599** Ft. Clock No. **35**
Top Make **Amerada** Cap. **4200** No. **1559** Inside Outside Bottom Make **Western** Cap. **4000** No. **152** 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 **9:25** M
Tool Open I.F.P. From **9:28** M to **9:33** M Hr. **5** Min. From (B) **36** P.S.I. To (C) **36** P.S.I.
Tool Closed I.C.I.P. From **9:33** M. to **10:03** M. Hr. **30** Min. (D) **891** P.S.I.
Tool Open F.F.P. From **10:03** M. to **11:03** M. Hr. **1** Min. From (E) **54** P.S.I. To (F) **87** P.S.I.
Tool Closed F.C.I.P. From **11:03** M. to **11:33** M. Hr. **30** Min. (G) **794** P.S.I.
Initial Hydrostatic Pressure (A) **1959** P.S.I. Final Hydrostatic Pressure (H) **1951** P.S.I.

SURFACE	Size Choke	In.	Max. Press. P.S.I.	Time	Description of Flow
INFORMATION				M.	
				M.	
				M.	

BLOW **Fair to strong** Bottom Choke Size **3/4** In.
Did Well Flow Yes ☒ No Recovery Total Ft. **50' oil gassy cut mud; 60' heavy oil gas cut mud; 120' gassy slightly muddy oil.** Mud

Reversed Out Yes ☒ No Mud Type **starch** Viscosity **40** Weight **10** Maximum Temp. **112** °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 **2755** ft. I.D. Drill Pipe **3.8** in Length Weight Pipe **571** ft. I.D. Weight Pipe **2.7** in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool **42** ft.

Remarks

Gas to surface in 15 minutes. Too weak to gauge.

WESTERN TESTING CO., INC.

Pressure Data

Date **June 23, 1965**

Test Ticket No. **6490**

Recorder No. **1559** Capacity **4200** Location **3596** Ft.

Clock No. **6861** Elevation **1940 Kelly Bushings** Well Temperature **112** °F

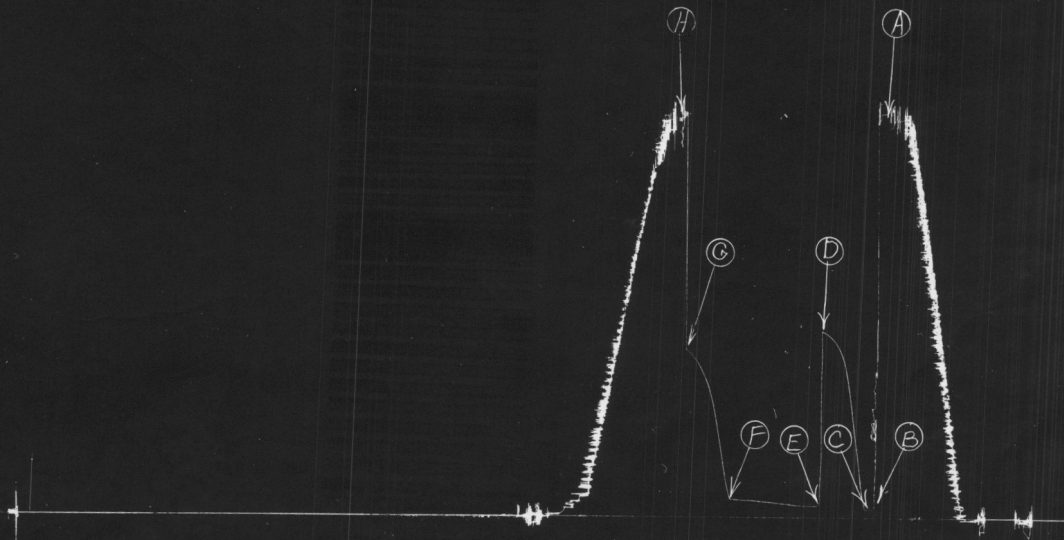
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1959 P.S.I.	Opened Tool	9:28	9:28
B First Initial Flow Pressure	36 P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C First Final Flow Pressure	36 P.S.I.	Initial Closed-in Pressure	30 Mins.	32 Mins.
D Initial Closed-in Pressure	891 P.S.I.	Second Flow Pressure	60 Mins.	59 Mins.
E Second Initial Flow Pressure	54 P.S.I.	Final Closed-in Pressure	30 Mins.	31 Mins.
F Second Final Flow Pressure	87 P.S.I.			
G Final Closed-in Pressure	794 P.S.I.			
H Final Hydrostatic Mud	1951 P.S.I.			

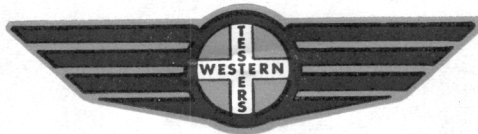
PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 1 Inc.		Breakdown: 10 Inc.		Breakdown: 11 Inc.		Breakdown: 10 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 2 Min.		final inc. of 4 Min.		final inc. of 1 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	36	0	36	0	58	0	87
P 2 5	36	3	146	5	54	3	173
P 3		6	246	10	54	6	265
P 4		9	395	15	57	9	384
P 5		12	549	20	61	12	479
P 6		15	666	25	64	15	591
P 7		18	756	30	68	18	656
P 8		21	809	35	71	21	701
P 9		24	843	40	76	24	737
P10		27	868	45	81	27	766
P11		30	880	50	83	30	791
P12		32	891	55	85	31	794
P13				59	87		
P14							
P15							
P16							
P17							
P18							
P19							
P20							

GRAVES DRLg Co
BARTLEH #2

TEST #2
TKT # 6490





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

Company **Graves Drilling Company** Lease & Well No. **Bartleh #2**
Elevation **1940 Kelly Bushings** Formation **K.C.** Ticket Number **6491**
Date **June 23, 1965** Sec. **36** Twp. **22** Range **14** County **Stafford** State **Kansas**
Test Approved by **George A. McCaleb** Western Representative **Leon Elmore**

Formation Test No. **3** O.K. ☒ Misrun Interval Tested From **3620'** to **3640'** Total Depth **3640'**
Size Main Hole **7 7/8** Rat Hole ☒ Conv. ☒ B.T. Damaged Yes ☒ No Conv. ☒ B.T. ☒ Damaged Yes ☒ No
Packer Depth **3615** Ft. Size **6 3/4** Packer Depth **3620** 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** Anchor Length **20** Ft. Size **5 1/2 OD**
RECORDERS Depth **3632** Ft. Clock No. **6861** Depth **3635** Ft. Clock No. **35**
Top Make **Amerada** Cap. **4200** No. **1559** Inside **Outside** Bottom Make **Western** Cap. **4000** No. **152** 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 **9:28** M
Tool Open I.F.P. From **9:31** M to **9:36** M Hr. **5** Min. From (B) **29** P.S.I. To (C) **29** P.S.I.
Tool Closed I.C.I.P. From **9:36** M. to **10:06** M. Hr. **30** Min. (D) **1054** P.S.I.
Tool Open F.F.P. From **10:06** M. to **11:06** M. Hr. **1** Min. From (E) **33** P.S.I. To (F) **33** P.S.I.
Tool Closed F.C.I.P. From **11:06** M. to **11:36** M. Hr. **30** Min. (G) **64** P.S.I.
Initial Hydrostatic Pressure (A) **2005** P.S.I. Final Hydrostatic Pressure (H) **1955** P.S.I.

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

BLOW **Weak for 25 minutes. Died.** Bottom Choke Size **3/4** In.

Did Well Flow Yes ☒ No ☐ Recovery Total Ft. **15' slightly oil cut mud**

Reversed Out Yes ☒ No ☐ Mud Type **starch** Viscosity **42** Weight **10.1** Maximum Temp. **112** °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 **2790** ft. I.D. Drill Pipe **3.8** in Length Weight Pipe **571** ft. I.D. Weight Pipe **2.7** in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool **40** ft.

Remarks _____

WESTERN TESTING CO., INC.

Pressure Data

Date June 23, 1965 Test Ticket No. 6491
 Recorder No. 1559 Capacity 4200 Location 3632 Ft.
 Clock No. 6861 Elevation 1940 Kelly Bushings Well Temperature 112 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2005</u> P.S.I.	Opened Tool	<u>9:31</u> M	<u>9:31</u>
B First Initial Flow Pressure	<u>29</u> P.S.I.	First Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
C First Final Flow Pressure	<u>29</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1054</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>33</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>33</u> P.S.I.			
G Final Closed-in Pressure	<u>64</u> P.S.I.			
H Final Hydrostatic Mud	<u>1955</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>1</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>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>0</u> <u>29</u>	<u>0</u> <u>29</u>	<u>0</u> <u>29</u>	<u>0</u> <u>33</u>	<u>0</u> <u>33</u>	<u>0</u> <u>33</u>	<u>33</u>
P 2	<u>5</u> <u>29</u>	<u>3</u> <u>33</u>	<u>3</u> <u>33</u>	<u>5</u> <u>33</u>	<u>3</u> <u>33</u>	<u>3</u> <u>33</u>	<u>33</u>
P 3		<u>6</u> <u>48</u>	<u>6</u> <u>48</u>	<u>10</u> <u>33</u>	<u>6</u> <u>33</u>	<u>6</u> <u>33</u>	<u>33</u>
P 4		<u>9</u> <u>75</u>	<u>9</u> <u>75</u>	<u>15</u> <u>33</u>	<u>9</u> <u>33</u>	<u>9</u> <u>33</u>	<u>35</u>
P 5		<u>12</u> <u>129</u>	<u>12</u> <u>129</u>	<u>20</u> <u>33</u>	<u>12</u> <u>33</u>	<u>12</u> <u>33</u>	<u>38</u>
P 6		<u>15</u> <u>250</u>	<u>15</u> <u>250</u>	<u>25</u> <u>33</u>	<u>15</u> <u>33</u>	<u>15</u> <u>33</u>	<u>41</u>
P 7		<u>18</u> <u>470</u>	<u>18</u> <u>470</u>	<u>30</u> <u>33</u>	<u>18</u> <u>33</u>	<u>18</u> <u>33</u>	<u>48</u>
P 8		<u>21</u> <u>668</u>	<u>21</u> <u>668</u>	<u>35</u> <u>33</u>	<u>21</u> <u>33</u>	<u>21</u> <u>33</u>	<u>52</u>
P 9		<u>24</u> <u>862</u>	<u>24</u> <u>862</u>	<u>40</u> <u>33</u>	<u>24</u> <u>33</u>	<u>24</u> <u>33</u>	<u>57</u>
P10		<u>27</u> <u>985</u>	<u>27</u> <u>985</u>	<u>45</u> <u>33</u>	<u>27</u> <u>33</u>	<u>27</u> <u>33</u>	<u>59</u>
P11		<u>30</u> <u>1054</u>	<u>30</u> <u>1054</u>	<u>50</u> <u>33</u>	<u>30</u> <u>33</u>	<u>30</u> <u>33</u>	<u>64</u>
P12				<u>55</u> <u>33</u>			
P13				<u>60</u> <u>33</u>			
P14							
P15							
P16							
P17							
P18							
P19							
P20							

GRAVES DRLg. Co
BARTLeH #2

Test #3
T.K.T. # 6491

