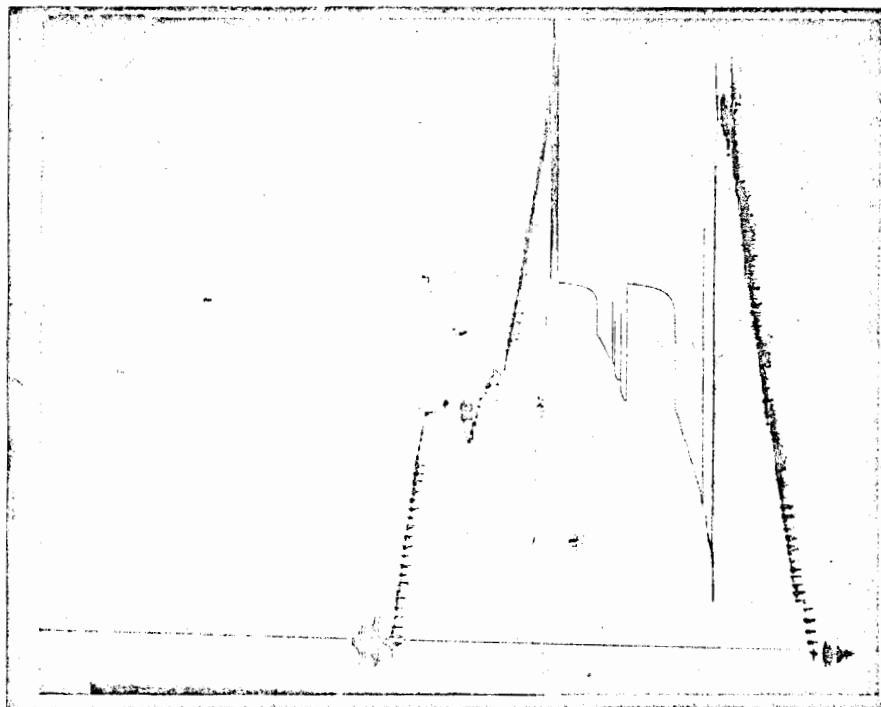


Date 6-16-66

DRILL STEM TEST RECOVERY REPORT

Ticket No. 5099Company Pet. Inc. Contractor Garvey Drlg. Co.Well No. B-1 Lease Dargel County Kiowa Sec. 15 Rg. 18 Twp. 29Test No. 1 Size Hole 7 7/8 Packer Size 6 3/4 Drill Pipe Size 4 1/2 F HInterval Tested From 4285 To 4338 Depth of Well 4338 Size Choke 5/8Fluid Recovered In Drill Pipe Temp. 106 Elev. _____Initial Hyd. 2189 P.S.I. Final Hyd. 2189 P.S.I.First Initial Flow Pressure 444 P.S.I. Opened Tool 9:00 A.M. PMFirst Final Flow Pressure 981 P.S.I. First Flow Pres. 30 min. P.S.I.Initial Closed-in Pressure 1510 P.S.I. Initial Closed-in Pres. 30 min. P.S.I.Second Initial Flow Pressure 1004 P.S.I. Second Flow Pres. 30 min. P.S.I.Second Final Flow Pressure 1261 P.S.I. Final Closed-in Pres. 30 min. P.S.I.Final Closed-in Pressure 1495 P.S.I.Blow Strong blow - Slide tool 15' to bottom - 10' on I. F. P. - 5' on F.F.P.Recovery 180' watery mud - 360' muddy salt water - 1770' Salt water

Remarks _____

Approved By Douglass Tester Keenan

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SUN

FORMATION TESTERS

CHART ANALYSIS

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Pressure Readings in 3 Minute Intervals
Corrected with Micrometer Chart Scanner

5099

TIME IN MIN.	ISIP	FSIP	FP	TIME IN MIN.	FP
3	1413	1446	421	63	1012
6	1440	1475	512	66	1089
9	1462	1481	585	69	1108
12	1476	1484	640	72	1194
15	1481	1487	677	75	1223
18	1484	1490	731	78	1248
21	1487	1495	779	81	1275
24	1492	1500	821	84	1275
27	1495	1501	866	87	
30	1496	1501	909	90	
33	1496			93	
36				96	
39				99	
42				102	
45				105	
48				108	
51				111	
54				114	
57				117	
60				120	

GARVEY DRILLING COMPANY

TESTING DIVISION

No 2835

Company Pet. INC. Lease & Well No. Daryl B-1
 Elevation 2197 DF Ticket Number _____
 Date 6-20-66 Sec. _____ Twp. _____ Range _____ County Missouri State Kansas
 Test Approved by Bob Douglas Garvey Representative Doyle Folkerts

Formation Test No. 3 O.K. ☒ Misrun ☐ Interval Tested From 4709 to 4943 Total Depth 4943
 Size Main Hole 7 7/8 Rat Hole _____ Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No ☐ Conv. ☒ B.T. ☐ Damaged ☒ Yes ☐ No ☐
 Packer Depth 4703 Ft. Size 6 3/4 Packer Depth 4709 Ft. Size 6 3/4
 Straddle ☐ Yes ☒ No ☐ Conv. ☐ B.T. ☐ Damaged ☐ Yes ☐ No ☐
 Tool Size 5" Tool Jt. Size 5 1/2" Anchor Length 34 Ft. Size 1 1/2 FH

RECORDERS Depth 4714 Ft. Clock No. 51 Depth 4916 Ft. Clock No. 52
 Top Make Western Cap. 4000 No. 51 Inside _____ Outside _____ Bottom Make Western Cap. 4000 No. 52 Inside _____ Outside _____
 Below Straddle: Depth _____ Clock No. _____ Inside _____ Outside _____
 Top Make _____ Cap. _____ No. _____ Inside _____ Outside _____
 Bottom Make _____ Cap. _____ No. _____ Inside _____ Outside _____

Time Set Packer 12:45 A.M.
 Tool Open I.F.P. From 12:47 M. to 1:17 M. - Hr. 30 Min. From (B) 120 P.S.I. To (C) 120 P.S.I.
 Tool Closed I.C.I.P. From 1:17 M. to 1:47 M. - Hr. 30 Min. (D) 860 P.S.I.
 Tool Open F.F.P. From 1:47 M. to 2:17 M. - Hr. 30 Min. From (E) 120 P.S.I. To (F) 120 P.S.I.
 Tool Closed F.C.I.P. From 2:17 M. to 2:47 M. - Hr. 30 Min. (G) 860 P.S.I.
 Initial Hydrostatic Pressure (A) 2520 P.S.I. Final Hydrostatic Pressure (H) 2520 P.S.I.

SURFACE Size Choke 4 in. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
 INFORMATION _____ M. _____
 _____ M. _____
 _____ M. _____

BLOW Weak Bottom Choke Size 4 in.
 Did Well Flow ☒ Yes ☐ No Recovery Total Ft. 70' Mud

Reversed Out ☐ Yes ☒ No Mud Type Shale Viscosity 47 Weight 9.7 Maximum Temp. 104 °F
 EXTRA EQUIPMENT: Dual Packers yes Safety Joint NO Jars: Size _____ Make _____ Ser. No. _____
 Type Circ. Sub Hoffman Did Tool Plug? NO Where? _____ Did Packer Hold? yes
 Length Drill Pipe 3966 ft. I.D. Drill Pipe 3 1/2 in. Length Weight Pipe 1000 ft. I.D. Weight Pipe 3 in. Length Drill Collars _____ ft.
 I.D. Drill Collars _____ in. Length D.S.T. Tool 57 ft.
 Remarks Slid Tool 5' to bottom

GARVEY DRILLING CO. **Pressure Data**

Date 6-20-66 Test Ticket No. 2835
 Recorder No. 51 Capacity 4000 Location 4914 Ft.
 Clock No. 51 Elevation _____ Well Temperature 104 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud <u>2520</u> P.S.I.		Opened Tool	<u>12:45</u>	<u>A</u> M
B First Initial Flow Pressure <u>106 plugging</u> P.S.I.		First Flow Pressure	<u>30</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure <u>106 plugging</u> P.S.I.		Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure <u>793</u> P.S.I.		Second Flow Pressure	<u>30</u> Mins.	<u>40</u> Mins.
E Second Initial Flow Pressure <u>113 plugging</u> P.S.I.		Final Closed-in Pressure	<u>30</u> Mins.	<u>25</u> Mins.
F Second Final Flow Pressure <u>113 plugging</u> P.S.I.				
G Final Closed-in Pressure <u>1002</u> P.S.I.				
H Final Hydrostatic Mud <u>2520</u> P.S.I.				

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>9</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>8</u> Inc.		Breakdown: <u>5</u> Inc.	
of <u>5</u> mins. and a		of <u>5</u> mins. and a		of <u>5</u> mins. and a		of <u>5</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>5</u>	<u>106</u>	<u>5</u>	<u>164</u>	<u>5</u>	<u>113</u>	<u>5</u>	<u>485</u>
P 2 <u>10</u>	<u>106</u>	<u>10</u>	<u>284</u>	<u>10</u>	<u>113</u>	<u>10</u>	<u>634</u>
P 3 <u>15</u>	<u>106</u>	<u>15</u>	<u>465</u>	<u>15</u>	<u>113</u>	<u>15</u>	<u>765</u>
P 4 <u>20</u>	<u>106</u>	<u>20</u>	<u>562</u>	<u>20</u>	<u>113</u>	<u>20</u>	<u>892</u>
P 5 <u>25</u>	<u>106</u>	<u>25</u>	<u>669</u>	<u>25</u>	<u>113</u>	<u>25</u>	<u>1002</u>
P 6 <u>30</u>	<u>106</u>	<u>30</u>	<u>793</u>	<u>30</u>	<u>113</u>		
P 7 <u>35</u>	<u>106</u>			<u>35</u>	<u>113</u>		
P 8 <u>40</u>	<u>106</u>			<u>40</u>	<u>113</u>		
P 9 <u>45</u>	<u>106</u>						
P10 _____							
P11 _____							
P12 _____							
P13 _____							
P14 _____							
P15 _____							
P16 _____							
P17 _____							
P18 _____							
P19 _____							
P20 _____							

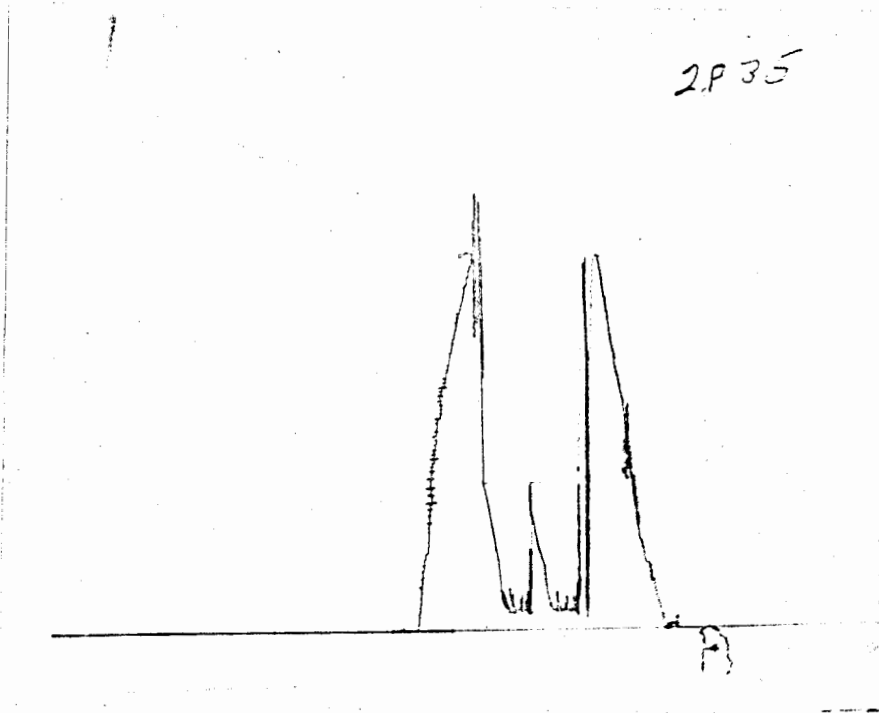
Garvey DRILLING COMPANY

ROUTE 2, GREAT BEND, KANSAS 67530 • PHONE SWIFT 2-4338 AREA CODE 316

Date 6-20-66

DRILL STEM TEST RECOVERY REPORT

Ticket No. 2835



Company Pet. Inc. Contractor Garvey Drilling Co.
Well No. B-1 Lease Dargel County Kiowa Sec. _____ Rg. _____ Twp. _____
Test No. 2 Size Hole 7 7/8 Packer Size 6 3/4 Drill Pipe Size 4 1/2 F H
Interval Tested From 4909 To 4943 Depth of Well 4943 Size Choke 1/2
Fluid Recovered In Drill Pipe Temp. 104 Elev. 2197 D F
Initial Hyd. 2520 P.S.I. Final Hyd. 2520 P.S.I.
First Initial Flow Pressure 106 P.S.I. Opened Tool 12:45 A.M. P.M.
First Final Flow Pressure 106 P.S.I. First Flow Pres. 45 Min.
Initial Closed-in Pressure 793 P.S.I. Initial Closed-in Pres. 30 Min.
Second Initial Flow Pressure 113 P.S.I. Second Flow Pres. 40 Min.
Second Final Flow Pressure 113 P.S.I. Final Closed-in Pres. 25 Min.
Final Closed-in Pressure 1002 P.S.I.

Blow Weak

Recovery 70' mud

Remarks Slid tool 5' to bottom

Approved By Douglas Tester Folkerts

GARVEY DRILLING COMPANY

TESTING DIVISION

No 2836

Company Pet Inc. Lease & Well No. Dargel B-1
 Elevation 2197 DF Ticket Number _____
 Date 6-20-66 Sec. _____ Twp. _____ Range _____ County Kiowa State Kansas
 Test Approved by Bob Douglas Garvey Representative Doyle Fulkeas

Formation Test No. 3 O.K. ☒ Misrun ☐ Interval Tested From 4944 to 4963 Total Depth 4963
 Size Main Hole 7 1/2 Rat Hole ☐ Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No ☐ Conv. ☒ B.T. ☐ Damaged ☒ Yes ☐ No ☐
 Packer Depth 4938 Ft. Size 6 3/4 Packer Depth 4944 Ft. Size 6 3/4
 Straddle ☐ Yes ☒ No ☐ Conv. ☐ B.T. ☐ Damaged ☐ Yes ☐ No ☐
 Packer Depth _____ Ft. Size _____
 Tool Size 5" Tool Jt. Size 5 1/2" Anchor Length 19 Ft. Size 4 1/2 FH

RECORDERS Depth 4949 Ft. Clock No. 51 Depth 4951 Ft. Clock No. 52
 Top Make Western Cap. 4000 No. 51 Inside ☒ Outside ☐ Bottom Make Western Cap. 4000 No. 52 Inside ☐ Outside ☒
 Below Straddle: Depth _____ Clock No. _____ Inside ☐ Outside ☐
 Top Make _____ Cap. _____ No. _____ Inside ☐ Outside ☐ Bottom Make _____ Cap. _____ No. _____ Inside ☐ Outside ☐

Time Set Packer 1:50 P.M.
 Tool Open I.F.P. From 1:53 M. to 2:23 M. - Hr. 30 Min. From (B) 140 P.S.I. To (C) 190 P.S.I.
 Tool Closed I.C.I.P. From 2:23 M. to 2:53 M. - Hr. 30 Min. (D) 1660 P.S.I.
 Tool Open F.F.P. From 2:53 M. to 3:23 M. - Hr. 30 Min. From (E) 190 P.S.I. To (F) 190 P.S.I.
 Tool Closed F.C.I.P. From 3:23 M. to 3:53 M. - Hr. 30 Min. (G) 1630 P.S.I.
 Initial Hydrostatic Pressure (A) 2760 P.S.I. Final Hydrostatic Pressure (H) 2760 P.S.I.

SURFACE Size Choke 4 in. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
 INFORMATION _____ M. _____
 _____ M. _____
 _____ M. _____

BLOW FLIP Bottom Choke Size 1/2 in.
 Did Well Flow - Yes ☒ No ☐ Recovery Total Ft. 210' Mud

Reversed Out ☐ Yes ☒ No ☐ Mud Type Stark Viscosity 43 Weight 9.5 Maximum Temp. 112 °F
 EXTRA EQUIPMENT: Dual Packers YES Safety Joint NO Jars: Size _____ Make _____ Ser. No. _____
 Type Circ. Sub. Halibuton Did Tool Plug? NO Where? _____ Did Packer Hold? YES
 Length Drill Pipe 4921 ft. I. D Drill Pipe 3 1/2 in. Length Weight Pipe 1000 ft. I. D. Weight Pipe 34 in. Length Drill Collars _____ ft.
 I. D. Drill Collars _____ in. Length D. S. T. Tool 42 ft.
 Remarks SHD Tool 10' TO BOTTOM

GARVEY DRILLING CO. **Pressure Data**

Date 6-20-66 Test Ticket No. 2836
 Recorder No. 51 Capacity 4000 Location 4949 Ft.
 Clock No. 51 Elevation _____ Well Temperature 112 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2760</u> P.S.I.	Opened Tool	<u>1:50</u> P M	
B First Initial Flow Pressure	<u>PLUGGED</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>0</u> Mins.
C First Final Flow Pressure	<u>PLUGGED</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1640</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>35</u> Mins.
E Second Initial Flow Pressure	<u>226</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>25</u> Mins.
F Second Final Flow Pressure	<u>226</u> P.S.I.			
G Final Closed-in Pressure	<u>1617</u> P.S.I.			
H Final Hydrostatic Mud	<u>2760</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u> </u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>7</u> Inc.		Breakdown: <u>5</u> Inc.	
of <u>-</u> mins. and a		of <u>5</u> mins. and a		of <u>5</u> mins. and a		of <u>5</u> mins. and a	
final inc. of <u>-</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>5</u>	<u>517</u>	<u>5</u>	<u>226</u>	<u>5</u>	<u>496</u>
P 2		<u>10</u>	<u>1165</u>	<u>10</u>	<u>226</u>	<u>10</u>	<u>1329</u>
P 3		<u>15</u>	<u>1508</u>	<u>15</u>	<u>226</u>	<u>15</u>	<u>1526</u>
P 4		<u>20</u>	<u>1574</u>	<u>20</u>	<u>226</u>	<u>20</u>	<u>1585</u>
P 5		<u>25</u>	<u>1626</u>	<u>25</u>	<u>226</u>	<u>25</u>	<u>1617</u>
P 6		<u>30</u>	<u>1640</u>	<u>30</u>	<u>226</u>		
P 7				<u>35</u>	<u>226</u>		
P 8							
P 9							
P10							
P11							
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P17							
P18							
P19							
P20							

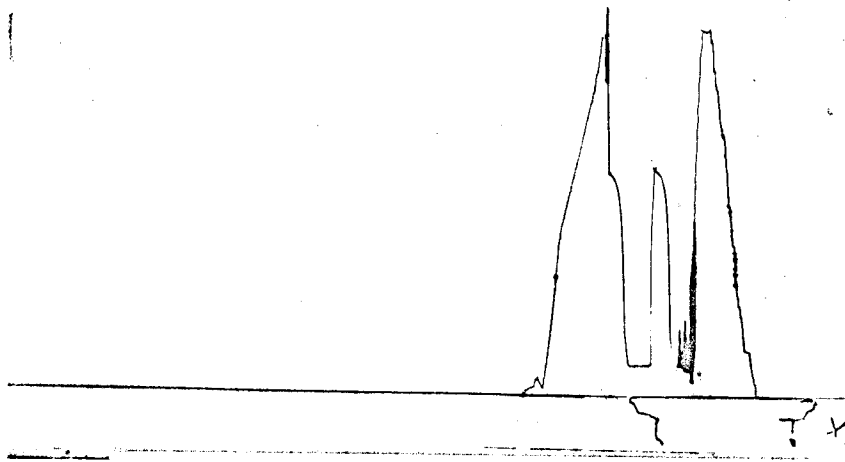
Garvey DRILLING COMPANY

ROUTE 2, GREAT BEND, KANSAS 67530 • PHONE SWIFT 2-4338 AREA CODE 316

Date 6-20-66

DRILL STEM TEST RECOVERY REPORT

Ticket No. 2836



Company Pet. Inc. Contractor Garvey Drilling Co.
Well No. B-1 Lease Dargel County Kiowa Sec. Rg. Twp.
Test No. 3 Size Hole 7 7/8 Packer Size 6 3/4 Drill Pipe Size 4 1/2 F H
Interval Tested From 4944 To 4963 Depth of Well 4963 Size Choke 1/2
Fluid Recovered In Drill Pipe Temp. 112 Elev. 2197 D F
Initial Hyd. 2760 P.S.I. Final Hyd. 2760 P.S.I.
First Initial Flow Pressure Plug P.S.I. Opened Tool 1:50 A.M. P.M.
First Final Flow Pressure plug P.S.I. First Flow Pres. 30 Min.
Initial Closed-in Pressure 1640 P.S.I. Initial Closed-in Pres. 30 Min.
Second Initial Flow Pressure 226 P.S.I. Second Flow Pres. 35 Min.
Second Final Flow Pressure 226 P.S.I. Final Closed-in Pres. 25 Min.
Final Closed-in Pressure 1617 P.S.I.
Blow Fair

Recovery 210' Mud

Remarks Slid tool 10' to bottom

Approved By Douglas

Tester Folkerts