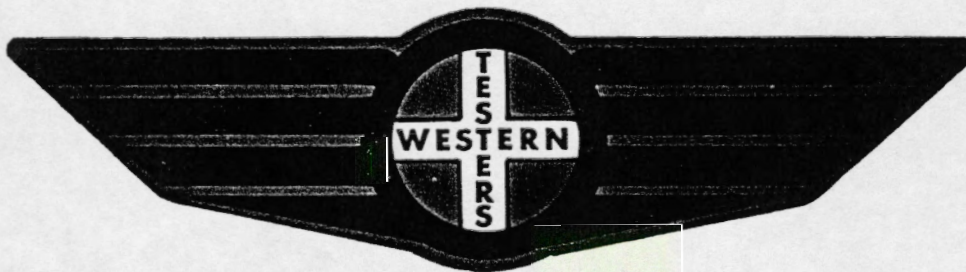


FORMATION TEST REPORT

Dickman #5
Test # 1



HOME OFFICE
P. O. BOX 793

GREAT BEND, KANSAS
Gladstone 3-7903

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING WICHITA, KANSAS

COMPANY Walters Drilling DATE 12-13-62
WELL Dickman #5 ANALYST IS
FIELD Dickman
COUNTY Ness STATE Kansas

The analyses and interpretations are based on material brought to Kansas Cores by the client, and such data and interpretations are accessible only to that company which the client represents. Kansas Cores makes no warranty and makes no guarantee for the interpretations and opinions of the data. Our opinions of an analysis are placed at the discretion of the operator.

PERMEABILITY MILLIDARCYS 

400 300 200 100 0

POROSITY-% 

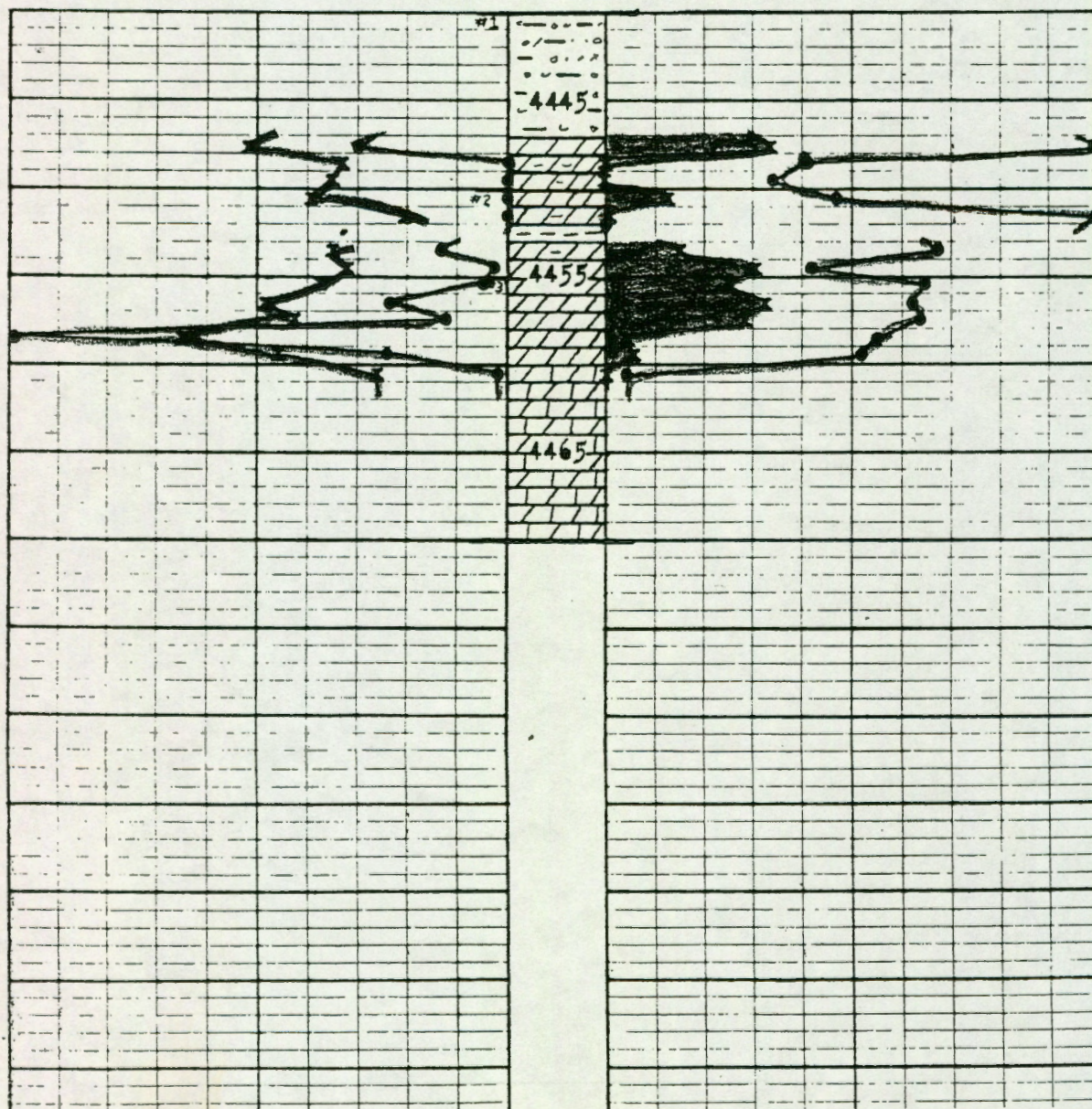
20 10 0

CONNATE WATER % SATURATION 

0 80 70 60 50

OIL % PORE SATURATION 

0 10 20



WESTERN TESTING CO., INC. Pressure Data

12-12-62
Order No. 1558
Capacity
Location 4353 Ft.
Well No. 6806
Elevation 2475' D.F.
Well Temperature 116 °F

	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	2404 P.S.I.	Opened Tool	9:17A	M 9:17 AM
First Initial Flow Pressure	60 P.S.I.	First Flow Pressure	2 Mins.	2 Mins.
First Final Flow Pressure	60 P.S.I.	Initial Closed-In Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	1351 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
Second Initial Flow Pressure	103 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
Second Final Flow Pressure	281 P.S.I.			
Final Closed-in Pressure	1333 P.S.I.			
Final Hydrostatic Mud	2324 P.S.I.			

PRESSURE BREAKDOWN

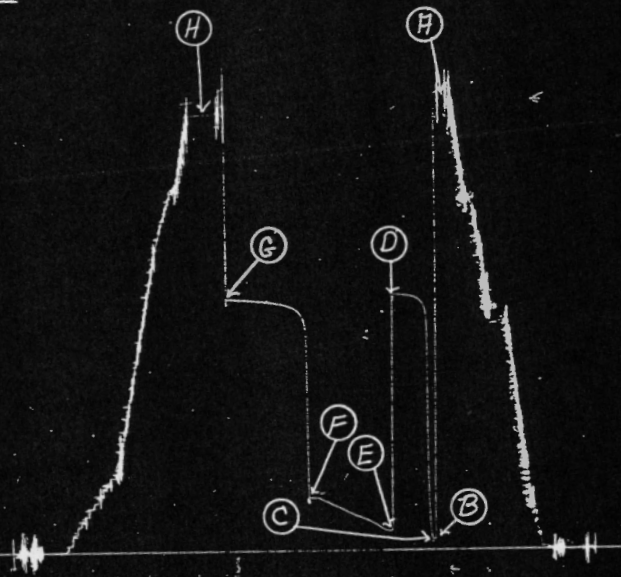
First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown:	1 Inc.	Breakdown:	10 Inc.	Breakdown:	12 Inc.	Breakdown:	20 Inc.
of	2 mins. and a	of	3 mins. and a	of	5 mins. and a	of	3 mins. and a
final inc. of	Min.	final inc. of	Min.	final inc. of	Min.	final inc. of	Min.
Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
0	60	0	60	0	103	0	281
2	60	3	284	5	103	3	1091
		6	1152	10	128	6	1236
		9	1298	15	149	9	1267
		12	1328	20	168	12	1282
		15	1338	25	181	15	1291
		18	1342	30	200	18	1299
		21	1347	35	216	21	1305
		24	1350	40	232	24	1309
		27	1351	45	251	27	1314
		30	1351	50	268	30	1317
				55	280	33	1319
				60	281	36	1322
						39	1324
						42	1326
						45	1328
						48	1330
						51	1331
						54	1333
						57	1333
						60	1333

Walters Drlg. Co.

Test #1

Dickman #5.

T.K.T. #2026



This is an actual photograph of recorder

POINT

PRESSURE

(A)	Initial Hydrostatic Mud	2404	PSI
(B)	First Initial Flow Pressure	60	PSI
(C)	First Final Flow Pressure	60	PSI
(D)	Initial Closed-in Pressure	1351	PSI
(E)	Second Initial Flow Pressure	103	PSI
(F)	Second Final Flow Pressure	281	PSI
(G)	Final Closed-in Pressure	1333	PSI
(H)	Final Hydrostatic Mud	2324	PSI



Home Office: Great Bend, Kansas

P. O. Box 793

Gladstone 3-7903

Elev. 2475' D.F.

Company Walters Drilling Company Lease & Well No. Dickman #5 Tkt. #2026

12-12-62 Sec. 17 Twp. 17 Range 24 County Ness State Kansas

Approved by Fredrick W. Stump Western Representative Guy M. Knipe

Location Test No. 1 O.K. ☒ Misrun ☐ Interval Tested From 4319' to 4362' Total Depth 4362'
Main Hole 7 7/8" Rat Hole ☐ Conv. ☒ B.T. ☐ Damaged Yes ☒ No ☐ Conv. ☐ B.T. ☒ Damaged Yes ☒ No ☐
Packer Depth 4316 Ft. Size 6 3/4" Packer Depth 4319 Ft. Size 6 3/4"
Idle ☐ Yes ☒ No ☐ Conv. ☐ B.T. ☐ Damaged Yes ☐ No ☐
Packer Depth Ft. Size
Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 43 Ft. Size 5 1/2" O.D.

ORDERS Depth 4353 Ft. Clock No. 6806 Depth 4356 Ft. Clock No.
Top Make Amerada Cap. 4200# No. 1558 Inside Bottom Make Western Cap. 4000# No. 4 Inside
w Straddle: Depth Clock No. Inside Depth Ft. Clock No. Inside
Top Make Cap. No. Outside Bottom Make Cap. No. Outside

Set Packer 9:14A M
Open I.F.P. From 9:17A M. to 9:19A M. Hr. 2 Min. From (B) 60 P.S.I. To (C) 60 P.S.I.
Closed I.C.I.P. From 9:19A M. to 9:49A M. Hr. 30 Min. (D) 1351 P.S.I.
Open F.F.P. From 9:49A M. to 10:49A M. 1 Hr. Min From (E) 103 P.S.I. To (F) 281 P.S.I.
Closed F.C.I.P. From 10:49A M. to 11:49A M. 1 Hr. Min. (G) 1333 P.S.I.
Hydrostatic Pressure (A) 2404 P.S.I. Final Hydrostatic Pressure (H) 2324 P.S.I.

FACE Size Choke 3/4 In. Max. Press. P.S.I. Time Description of Flow
FORMATION

W Weak to strong Bottom Choke Size 3/4 in.

Well Flow Yes ☒ No ☐ Recovery Total Ft. 720' Fluid - 2460' Gas in Pipe Oil Gas Water
30' Oil cut mud - 60' Mud cut oil - 480' Slightly mud cut oil Mud

ersed Out Yes ☒ No ☐ Mud Type Starch Viscosity 39 Weight 10.2 Maximum Temp. 116 °F

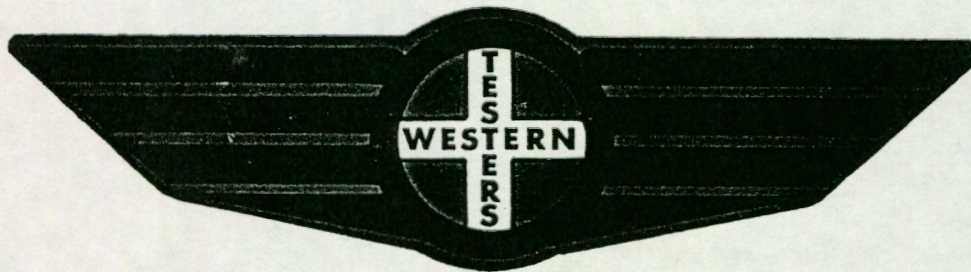
RA EQUIPMENT: Dual Packers Yes Safety Joint No Jars: Size No Make Ser. No.

Circ. Sub. Plug Did Tool Plug? No Where? Did Packer Hold? Yes

marks
62' Tool
720' Wt. Pipe - 2.7" I.D.
3580' D.P. - 3.8" I.D.

FORMATION TEST REPORT

*Dickman #5
Test #2*



HOME OFFICE
P. O. BOX 793

GREAT BEND, KANSAS
Gladstone 3-7903



Home Office: Great Bend, Kansas

P. O. Box 793

Gladstone 3-7903

Elev. 2477' K.B.

Company Walters Drilling Company Lease & Well No. Dickman #5 Tkt. #2994
Date 12-14-62 Sec. 17 Twp. 17 Range 24 County Ness State Kansas
Test Approved by Fredrich W. Stump Western Representative Jack Toelkes

Formation Test No. 2 O.K. ☒ Misrun ☐ Interval Tested From 4444' to 4455' Total Depth 4455'
Size Main Hole 7 7/8" Rat Hole 6 1/4" Conv. ☒ B.T. ☐ Damaged Yes ☒ No ☐ Conv. ☐ B.T. ☐ Damaged Yes ☐ No ☐
Packer Depth 4444 Ft. Size 5 1/2" Packer Depth Ft. Size
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 11 Ft. Size 4 1/2" O.D.

RECORDERS Depth 4447 Ft. Clock No. 6861 Depth 4450 Ft. Clock No. 41
Top Make Amerada Cap. 3150# No. 1563 Inside ☒ Outside ☐ Bottom Make Western Cap. 3000# No. 41 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 11:48 P M
Tool Open I.F.P. From 11:51P M. to 11:56P M. Hr. 5 Min. From (B) 23 P.S.I. To (C) 23 P.S.I.
Tool Closed I.C.I.P. From 11:56P M. to 12:26A M. Hr. 30 Min. (D) 1304 P.S.I.
Tool Open F.F.P. From 12:26A M. to 1:26A M. 1 Hr. Min. From (E) 41 P.S.I. To (F) 144 P.S.I.
Tool Closed F.C.I.P. From 1:26A M. to 2:26A M. 1 Hr. Min. (G) 1300 P.S.I.
Initial Hydrostatic Pressure (A) 2481 P.S.I. Final Hydrostatic Pressure (H) 2428 P.S.I.

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

LOW Weak build up to fair Bottom Choke Size 3/4 in.
Did Well Flow Yes ☒ No ☐ Recovery Total Ft. 310 150' Mud Cut Oil ☐ Gas 120' Water
40' Oil cut mud Mud
Reversed Out Yes ☒ No ☐ Mud Type Starch Viscosity 39 Weight 10.3 Maximum Temp. 129 °F
EXTRA EQUIPMENT: Dual Packers No Safety Joint No Jars: Size No Make Ser. No.
Type Circ. Sub. Plug Did Tool Plug? No Where? Did Packer Hold? Yes

Remarks

754' Wt. Pipe - 2.75" I.D.
25' Tool and anchor
3676' 4 1/2" D.P. - 3.8" I.D.

This test after packer failure

WESTERN TESTING CO., INC.
Pressure Data

12-14-62
No. 1563 Capacity 3150# Location 4447 Ft.
6861 Elevation 2477' K.B. Well Temperature 129 °F

	Pressure		Time Given	Time Computed
Hydrostatic Mud	<u>2481</u> P.S.I.	Opened Tool	<u>11:51 P</u>	<u>11:51 PM</u>
Initial Flow Pressure	<u>23</u> P.S.I.	First Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
Final Flow Pressure	<u>23</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>32</u> Mins.
Closed-in Pressure	<u>1304</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>57</u> Mins.
Initial Flow Pressure	<u>41</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>61</u> Mins.
Final Flow Pressure	<u>144</u> P.S.I.			
Closed-in Pressure	<u>1300</u> P.S.I.			
Hydrostatic Mud	<u>2428</u> P.S.I.			

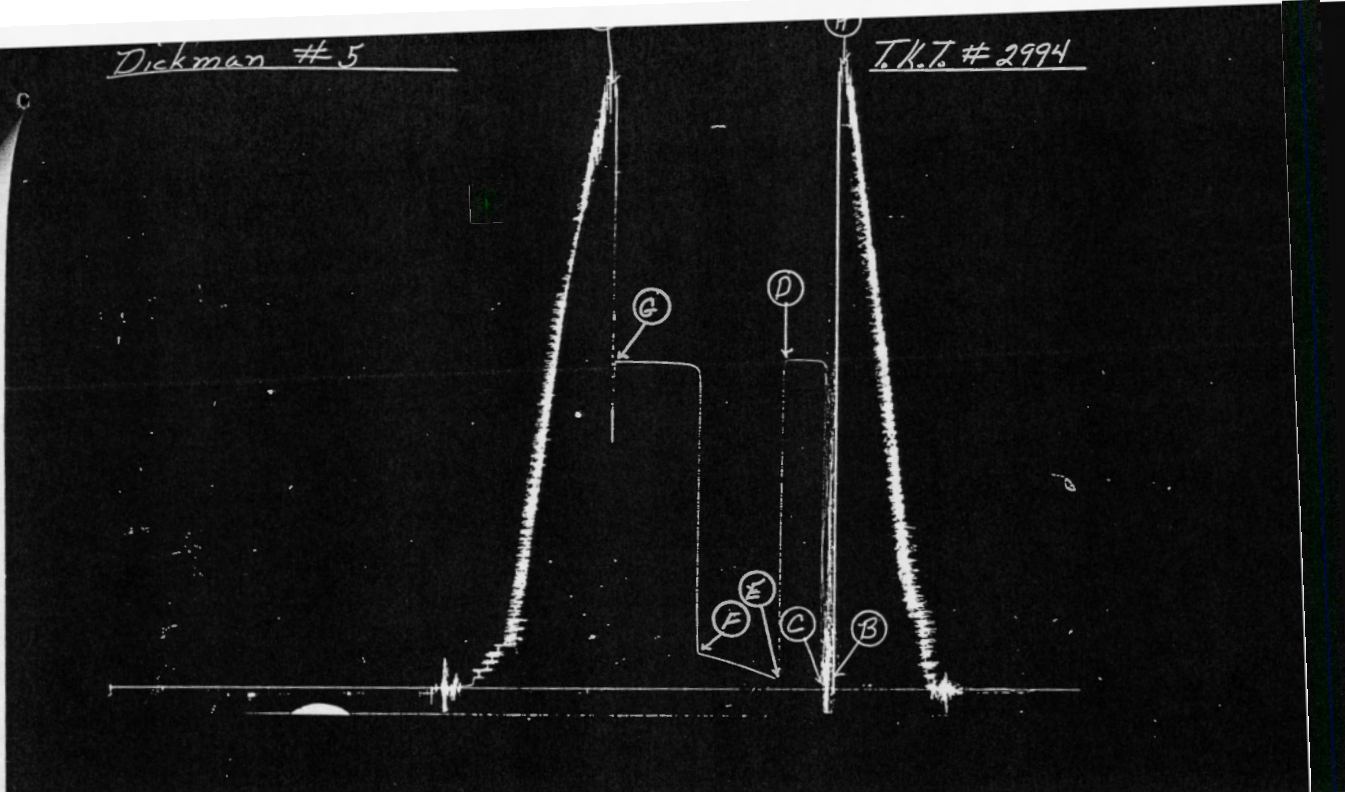
PRESSURE BREAKDOWN

First Flow Press.	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: <u>1</u> Inc.	Breakdown: <u>10</u> Inc.	Breakdown: <u>11</u> Inc.	Breakdown: <u>20</u> Inc.
<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
inc. of <u>-</u> Min.	final inc. of <u>2</u> Min.	final inc. of <u>2</u> Min.	final inc. of <u>1</u> Min.

Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
<u>23</u>	<u>0</u>	<u>23</u>	<u>0</u>	<u>41</u>	<u>0</u>	<u>144</u>
<u>23</u>	<u>3</u>	<u>821</u>	<u>5</u>	<u>48</u>	<u>3</u>	<u>780</u>
	<u>6</u>	<u>1292</u>	<u>10</u>	<u>58</u>	<u>6</u>	<u>1271</u>
	<u>9</u>	<u>1300</u>	<u>15</u>	<u>68</u>	<u>9</u>	<u>1282</u>
	<u>12</u>	<u>1301</u>	<u>20</u>	<u>79</u>	<u>12</u>	<u>1287</u>
	<u>15</u>	<u>1303</u>	<u>25</u>	<u>88</u>	<u>15</u>	<u>1290</u>
	<u>18</u>	<u>1304</u>	<u>30</u>	<u>97</u>	<u>18</u>	<u>1292</u>
	<u>21</u>	<u>1304</u>	<u>35</u>	<u>106</u>	<u>21</u>	<u>1293</u>
	<u>24</u>	<u>1304</u>	<u>40</u>	<u>114</u>	<u>24</u>	<u>1294</u>
	<u>27</u>	<u>1304</u>	<u>45</u>	<u>124</u>	<u>27</u>	<u>1295</u>
	<u>30</u>	<u>1304</u>	<u>50</u>	<u>131</u>	<u>30</u>	<u>1295</u>
	<u>32</u>	<u>1304</u>	<u>55</u>	<u>139</u>	<u>33</u>	<u>1296</u>
			<u>57</u>	<u>144</u>	<u>36</u>	<u>1296</u>
					<u>39</u>	<u>1297</u>
					<u>42</u>	<u>1297</u>
					<u>45</u>	<u>1298</u>
					<u>48</u>	<u>1298</u>
					<u>51</u>	<u>1299</u>
					<u>54</u>	<u>1299</u>
					<u>57</u>	<u>1299</u>
					<u>60</u>	<u>1300</u>
					<u>61</u>	<u>1300</u>

Dickman #5

T.K.T. # 2994



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	2481	PSI
(A) Initial Hydrostatic Mud	23	PSI
(B) First Initial Flow Pressure	23	PSI
(C) First Final Flow Pressure	1304	PSI
(D) Initial Closed-in Pressure	41	PSI
(E) Second Initial Flow Pressure	144	PSI
(F) Second Final Flow Pressure	1300	PSI
(G) Final Closed-in Pressure	2428	PSI
(H) Final Hydrostatic Mud		