Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Hummon Oil Company Lease & Well No. Bruce #1

Elevation 1252 Kelly Bushing Formation "See remarks" Effective Pay - Ft. Ticket No. 21867

Date 4-16-77 Sec. 12 Twp. 32S Range 4W County Sumner State Kansas

Test Approved by Kenneth W. Johnson Western Representative Bill Baker

Formation Test No. 1 O.K. X Misrun - Interval Tested From 2041' to 2280' Total Depth 2280'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 2036 Ft. Size 6 3/4 Bottom Packer Depth 2041 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 239 Ft. Size 5½ OD Surface Choke Size 1/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2033 Ft. Clock No. 8475 Depth 2036 Ft. Clock No. 8474

Top Make Kuster Cap. 3150 No. 1565 Inside =~~Outside~~ Bottom Make Kuster Cap. 3200 No. 1561 =~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 2:13 PM

Tool Open I.F.P. From 2:15 PM. to 3:00 PM. - Hr. 45 Min. From (B) 129 P.S.I. To (C) 308 P.S.I.

Tool Closed I.C.I.P. From 3:00 M. to 4:00P M. 1 Hr. - Min (D) 859 P.S.I.

Tool Open F.F.P. From 4:00 PM. to 4:45 PM. - Hr. 45 Min. From (E) 358 P.S.I. To (F) 470 P.S.I.

Tool Closed F.C.I.P. From 4:45 M. to 5:45 PM. 1 Hr. - Min. (G) 877 P.S.I.

Initial Hydrostatic Pressure (A) 1134 P.S.I. Final Hydrostatic Pressure (H) 1107 P.S.I. Maximum Temp. 102

INFORMATION

BLOW Strong blow throughout test. Gas to surface in 20 minutes. See attached sheet for gas measurements.

Did Well Flow = Yes X No Recovery Total Ft. 1060' muddy gassy saltwater.

Reversed Out X Yes - No Mud Type salt Viscosity 52 Weight 10.5 Water Loss - cc. Chlorides 69,000 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Gabbert-Jones, Inc. Length Drill Pipe? 1890 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 390 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4½H90 In. Length D.S.T. Tool 259 Ft.

Remarks:

Tested three zones: White Cloud, Topeka, and Sevry.
Read outside recorder #1561.

WESTERN TESTING CO., INC.
Pressure Data

Date 4-16-77 Test Ticket No. 21867

Recorder No. 1561 Capacity 3200 Location 2036 Ft.

Clock No. 8474 Elevation 1252 Kelly Bushing Well Temperature 102 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1134 P.S.I.		Open Tool	2:13 PM	
B	First Initial Flow Pressure	129 P.S.I.		First Flow Pressure	45 Mins.	45 Mins.
C	First Final Flow Pressure	308 P.S.I.		Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	859 P.S.I.		Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	358 P.S.I.		Final Closed-in Pressure	60 Mins.	57 Mins.
F	Second Final Flow Pressure	470 P.S.I.				
G	Final Closed-in Pressure	877 P.S.I.				
H	Final Hydrostatic Mud	1107 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	129
P 2	5	133
P 3	10	168
P 4	15	194
P 5	20	214
P 6	25	231
P 7	30	253
P 8	35	272
P 9	40	290
P10	45	308
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	308
	3	434
	6	550
	9	645
	12	703
	15	740
	18	764
	21	781
	24	795
	27	806
	30	815
	33	823
	36	830
	39	835
	42	839
	45	845
	48	849
	51	852
	54	855
	57	857
	60	859

Second Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	358
	5	361
	10	381
	15	400
	20	412
	25	425
	30	436
	35	446
	40	456
	45	470

Final Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	470
	3	593
	6	687
	9	739
	12	771
	15	792
	18	808
	21	821
	24	829
	27	839
	30	845
	33	850
	36	855
	39	860
	42	864
	45	867
	48	870
	51	873
	54	876
	57	877

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

GAS FLOW REPORT

Date 4-16-77 Ticket 21867 Company Hummon Oil Company

Well Name and No. Bruce #1 Dst No. 1 Interval Tested 2041' - 2280'

County Sumner State Kansas Sec. 12 Twp. 32S Rg. 4W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow		
PRE FLOW								
2:35 PM	20 min.	30 inches	of water		¼" choke	9,200	C.F.P.D.	Gas
2:40 PM	25 min.	2 PSIG			¼" choke	12,700	C.F.P.D.	Gas
2:45 PM	30 min.	2.5 PSIG			¼" choke	14,300	C.F.P.D.	Gas
2:55 PM	40 min.	3.5 PSIG			¼" choke	17,100	C.F.P.D.	Gas
3:00 PM	45 min.	4 PSIG			¼" choke	18,500	C.F.P.D.	Gas
SECOND FLOW								
4:05 PM	50 min.	4.5 PSIG			¼" choke	19,500	C.F.D.P.	Gas
4:10 PM	55 min.	6 PSIG			¼" choke	22,900	C.F.P.D.	Gas
4:15 PM	60 min.	10.5 PSIG			¼" choke	31,000	C.F.P.D.	Gas
4:20 PM	65 min.	9 PSIG			¼" choke	29,000	C.F.P.D.	Gas
4:25 PM	70 min.	8.5 PSIG			¼" choke	28,000	C.F.P.D.	Gas
4:30 PM	75 min.	7.5 PSIG			¼" choke	26,000	C.F.P.D.	Gas
4:35 PM	80 min.	7 PSIG			¼" choke	25,000	C.F.P.D.	Gas
4:45 PM	90 min.	7 PSIG			¼" choke	25,000	C.F.P.D.	Gas

GAS BOTTLE

Serial No. 630 Date Bottle Filled 4-16-77 Date to be Invoiced 4-16-77

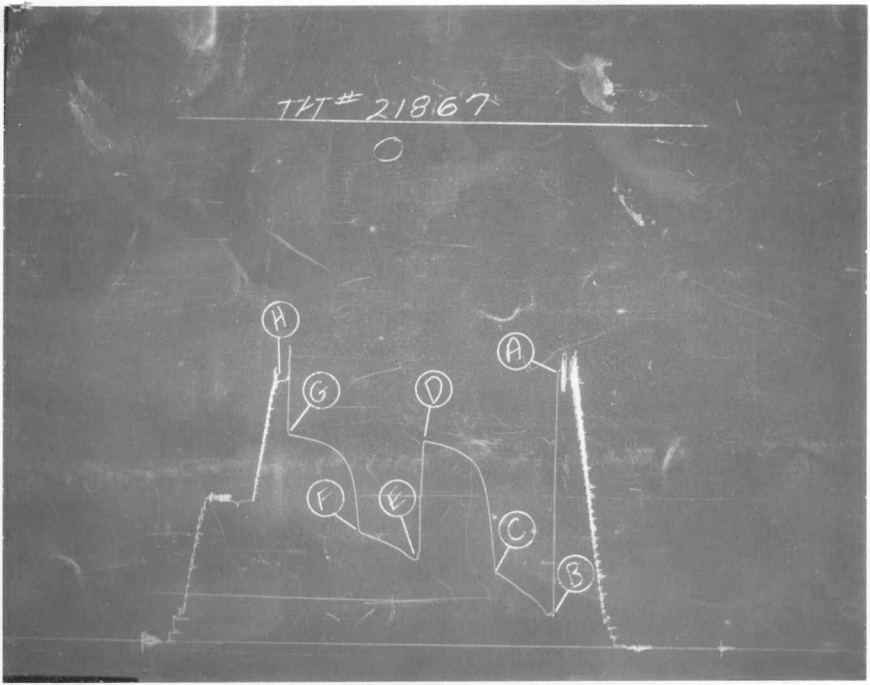
Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Hummon Oil Company

Authorized by Kenneth W. Johnson

FORM WTC 6


TAT # 21867
H
G
D
A
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C
B

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Hummon Oil Company Lease & Well No. Bruce #1

Elevation 1252 Kelly Bushing Formation Hoover Effective Pay - Ft. Ticket No. 21868

Date 4-17-77 Sec. 12 Twp. 33S Range 4W County Sumner State Kansas

Test Approved by Kenneth W. Johnson Western Representative Bill Baker

Formation Test No. 2 O.K. X Misrun - Interval Tested From 2472' to 2515' Total Depth 2515'

Size Main Hole 77/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. - B.T. X Damaged - Yes X No

Top Packer Depth 2465 Ft. Size 6 3/4 Bottom Packer Depth 2472 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 4½ OD Tool Joint Size 3½ IF Anchor Length 43 Ft. Size 4½ OD&DC Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2470 Ft. Clock No. 10167 Depth 2473 Ft. Clock No. 8474

Top Make Kuster Cap. 4500 No. 3085 Inside ~~Outside~~ Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 2:43 PM

Tool Open I.F.P. From 2:45 PM. to 3:30 PM. - Hr. 45 Min. From (B) 43 P.S.I. To (C) 44 P.S.I.

Tool Closed I.C.I.P. From 3:30PM. to 4:30 PM. 1 Hr. - Min (D) 738 P.S.I.

Tool Open F.F.P. From 4:30 PM. to 5:00 PM. - Hr. 30 Min. From (E) 67 P.S.I. To (F) 66 P.S.I.

Tool Closed F.C.I.P. From 5:00PM. to 6:00 PM. 1 Hr. - Min. (G) 709 P.S.I.

Initial Hydrostatic Pressure (A) 1049 P.S.I. Final Hydrostatic Pressure (H) 1035 P.S.I. Maximum Temp. 105

INFORMATION

BLOW Strong blow throughout test.

Did Well Flow - Yes X No Recovery Total Ft. 120' thin drilling mud, 840' gas in pipe.

Reversed Out - Yes X No Mud Type salt Viscosity 42 Weight 9.6 Water Loss - cc. Chlorides 69,000 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Gabbert-Jones, Inc. Length Drill Pipe? 1945 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 570 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4½H90 In. Length D.S.T. Tool 63 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 4-17-77 Test Ticket No. 21868

Recorder No. 3085 Capacity 4500 Location 2470 Ft.

Clock No. 10167 Elevation 1252 Kelly Bushing Well Temperature 105 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1049	P.S.I.
B	First Initial Flow Pressure	43	P.S.I.
C	First Final Flow Pressure	44	P.S.I.
D	Initial Closed-in Pressure	738	P.S.I.
E	Second Initial Flow Pressure	67	P.S.I.
F	Second Final Flow Pressure	66	P.S.I.
G	Final Closed-in Pressure	709	P.S.I.
H	Final Hydrostatic Mud	1035	P.S.I.

	Time Given	Time Computed
Open Tool	2:43 PM	
First Flow Pressure	45 Mins.	45 Mins.
Initial Closed-in Pressure	60 Mins.	60 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	60 Mins.	60 Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc. of 5 mins. and a final inc. of 0 Min.

Point Mins.	Press.
P 1 0	43
P 2 5	29
P 3 10	31
P 4 15	33
P 5 20	34
P 6 25	37
P 7 30	38
P 8 35	42
P 9 40	43
P10 45	44
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

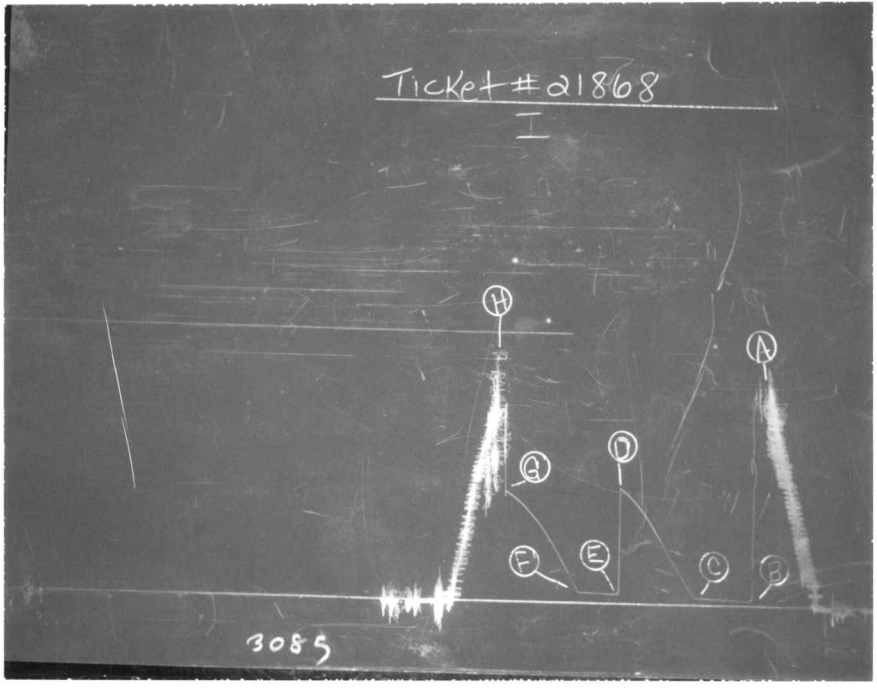
Point Minutes	Press.
0	44
3	67
6	105
9	143
12	179
15	217
18	261
21	304
24	343
27	387
30	431
33	476
36	521
39	560
42	593
45	625
48	655
51	679
54	701
57	723
60	738

Second Flow Pressure
Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	67
5	57
10	60
15	61
20	63
25	64
30	66

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	66
3	93
6	139
9	184
12	230
15	277
18	318
21	359
24	402
27	439
30	474
33	509
36	538
39	567
42	593
45	618
48	642
51	662
54	679
57	696
60	709


Ticket #21868
I
H
A
G
D
F
E
C
B
3085

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Hummon Oil Company Lease & Well No. Bruce #1

Elevation 1252 Kelly Bushing Formation Stalnaker Effective Pay - Ft. Ticket No. 21869

Date 4-19-77 Sec. 12 Twp. 33S Range 4W County Sumner State Kansas

Test Approved by Kenneth W. Johnson Western Representative Bill Baker

Formation Test No. 3 O.K. X Misrun - Interval Tested From 2964' to 3033' Total Depth 3033'

Size Main Hole 77/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 2959 Ft. Size 6 3/4 Bottom Packer Depth 2964 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 4½ OD Tool Joint Size 3½ IF Anchor Length 69 Ft. Size 4½ OD&DC Surface Choke Size ½&¼ In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3000 Ft. Clock No. 10167 Depth 3003 Ft. Clock No. 8474

Top Make Kuster Cap. 4500 No. 3085 ~~Inside~~ Outside Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 1:13 A M

Tool Open I.F.P. From 1:15 AM. to 2:00A M. - Hr. 45 Min. From (B) 572 P.S.I. To (C) 765 P.S.I.

Tool Closed I.C.I.P. From 2:00A M. to 3:00A M. 1 Hr. - Min (D) 1185 P.S.I.

Tool Open F.F.P. From 3:00 AM. to 3:45A M. - Hr. 45 Min. From (E) 811 P.S.I. To (F) 1046 P.S.I.

Tool Closed F.C.I.P. From 3:45A M. to 4:45A M. 1 Hr. - Min. (G) 1187 P.S.I.

Initial Hydrostatic Pressure (A) 1484 P.S.I. Final Hydrostatic Pressure (H) 1419 P.S.I. Maximum Temp. 118

INFORMATION

BLOW Strong blow throughout test. Gas to surface in 7 minutes. See attached sheet for gas measurements.

Did Well Flow - Yes X No Recovery Total Ft. 2800' total recovery. 300' oil & gas cut mud, 2500' muddy gassy salt water.

Reversed Out - Yes X No Mud Type salt Viscosity 41 Weight 9.6 Water Loss - cc. Chlorides 52,000 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Gabbert - Jones, Inc. Length Drill Pipe? 2588 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 450 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4½H90 In. Length D.S.T. Tool 89 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 4-19-77 Test Ticket No. 21869

Recorder No. 3085 Capacity 4500 Location 3000 Ft

Clock No. 10167 Elevation 1252 Kelly Bushing Well Temperature 118 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1484 P.S.I.	Open Tool		1:13 AM	
B	First Initial Flow Pressure	572 P.S.I.	First Flow Pressure		45 Mins.	45 Mins
C	First Final Flow Pressure	765 P.S.I.	Initial Closed-in Pressure		60 Mins.	60 Mins
D	Initial Closed-in Pressure	1185 P.S.I.	Second Flow Pressure		45 Mins.	45 Mins
E	Second Initial Flow Pressure	811 P.S.I.	Final Closed-in Pressure		60 Mins.	60 Mins
F	Second Final Flow Pressure	1046 P.S.I.				
G	Final Closed-in Pressure	1187 P.S.I.				
H	Final Hydrostatic Mud	1419 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	572
P 2	5	662
P 3	10	830
P 4	15	965
P 5	20	553
P 6	25	519
P 7	30	546
P 8	35	653
P 9	40	709
P10	45	765
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	765
3	1035
6	1095
9	1120
12	1134
15	1146
18	1152
21	1159
24	1164
27	1169
30	1171
33	1173
36	1176
39	1179
42	1181
45	1182
48	1182
51	1183
54	1184
57	1185
60	1185

Second Flow Pressure
Breakdown: 9 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	811
5	851
10	879
15	909
20	939
25	967
30	991
35	1009
40	1028
45	1046

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	1046
3	1136
6	1152
9	1160
12	1166
15	1171
18	1173
21	1176
24	1179
27	1180
30	1181
33	1181
36	1182
39	1182
42	1183
45	1183
48	1184
51	1184
54	1185
57	1186
60	1187

Phone 316 262-5861
316 838-0601

P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

Date 4-19-77 Ticket 21869 Company Hummon Oil Company

Well Name and No. Bruce #1 Dst No. 3 Interval Tested 2964' - 3033'

County Sumner State Kansas Sec. 12 Twp. 33S Rg. 4W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
Open 1:15 AM Gas to surface in 7 minutes.						**PRE FLOW**
1:25 AM	10 min.	3 PSIG	½" choke			59,200 C.F.P.D. Gas
1:30 AM	15 min.	2 PSIG	½" choke			47,000 C.F.P.D. Gas
1:35 AM	20 min.	5 PSIG	¼" choke			20,700 C.F.P.D. Gas
1:45 AM	30 min.	6 PSIG	¼" choke			22,900 C.F.P.D. Gas
1:50 AM	35 min.	3 PSIG	¼" choke			15,700 C.F.P.D. Gas
2:00 AM	45 min.	4 PSIG	¼" choke			18,500 C.F.P.D. Gas
Open 3:00 AM						**SECOND FLOW**
3:05 AM	50 min.	3 PSIG	¼" choke			15,700 C.F.P.D. Gas
3:20 AM	65 min.	2 PSIG	¼" choke			12,700 C.F.P.D. Gas
3:25 AM	70 min.	4 PSIG	¼" choke			18,500 C.F.P.D. Gas
3:30 AM	75 min.	3 PSIG	¼" choke			15,700 C.F.P.D. Gas
3:45 AM	90 min.	2 PSIG	¼" choke			12,700 C.F.P.D. Gas

GAS BOTTLE

Serial No. _____ Date Bottle Filled 4-19-77 Date to be Invoiced 4-19-77

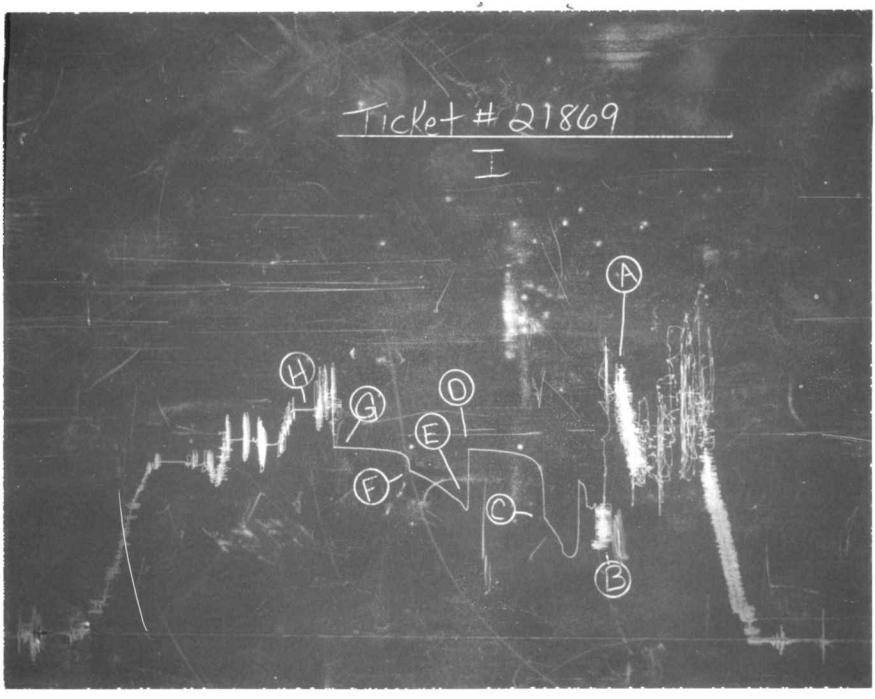
Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Hummon Oil Company

Authorized by Kenneth W. Johnson

FORM WTC 6


Ticket # 21869
I
A
B
C
D
E
F
G
H

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Hummon Oil Company Lease & Well No. Bruce #1

Elevation 1252 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 21987

Date 4-20-77 Sec. 12 Twp. 32S Range 4W County Sumner State Kansas

Test Approved by K.W. Johnson Western Representative Bill Baker

Formation Test No. 4 O.K. X Misrun - Interval Tested From 3394' to 3410' Total Depth 3410'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 3389 Ft. Size 6 3/4 Bottom Packer Depth 3394 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 16 Ft. Size 5½ OD Surface Choke Size 1/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3403 Ft. Clock No. 6800 Depth 3406 Ft. Clock No. 8476

Top Make Kuster Cap. 4200 No. 1558 Inside ~~Outside~~ Bottom Make Kuster Cap. 3150 No. 1564 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 1:58 P M

Tool Open I.F.P. From 2:00 PM. to 2:45 PM. - Hr. 45 Min. From (B) 97 P.S.I. To (C) 194 P.S.I.

Tool Closed I.C.I.P. From 2:45 PM. to 3:45 PM. 1 Hr. - Min (D) 1382 P.S.I.

Tool Open F.F.P. From 3:45 P M. to 4:30 PM. - Hr. 45 Min. From (E) 253 P.S.I. To (F) 333 P.S.I.

Tool Closed F.C.I.P. From 4:30 PM. to 5:30 PM. 1 Hr. - Min. (G) 1381 P.S.I.

Initial Hydrostatic Pressure (A) 1768 P.S.I. Final Hydrostatic Pressure (H) 1751 P.S.I. Maximum Temp. 124

INFORMATION

BLOW Strong blow throughout, decreasing on final flow period. Gas to surface in 55 minutes, 10 minutes into initial shut-in. Not enough volume to guage.

Did Well Flow - Yes X No Recovery Total Ft. 720' total recovery, 120' oil & gas cut mud, 60' oil & gas cut muddy water, 540' saltwater.

Reversed Out - Yes X No Mud Type salt Viscosity 42 Weight 9.7 Water Loss 19.0 cc. Chlorides 53,000 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Gabbert-Jones, Inc. #12 Length Drill Pipe? 2990 Ft. I.D. Drill Pipe - In. Tool Joint Size - In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 420 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4½H90 In. Length D.S.T. Tool 36 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 4-20-77 Test Ticket No. 21987

Recorder No. 1558 Capacity 4200 Location 3403 Ft.

Clock No. 6800 Elevation 1252 Kelly Bushing Well Temperature 124 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1768	P.S.I.
B	First Initial Flow Pressure	97	P.S.I.
C	First Final Flow Pressure	194	P.S.I.
D	Initial Closed-in Pressure	1382	P.S.I.
E	Second Initial Flow Pressure	253	P.S.I.
F	Second Final Flow Pressure	333	P.S.I.
G	Final Closed-in Pressure	1381	P.S.I.
H	Final Hydrostatic Mud	1751	P.S.I.

	Time Given	Time Computed
Open Tool	1:58 PM	
First Flow Pressure	45 Mins.	45 Mins.
Initial Closed-in Pressure	60 Mins.	60 Mins.
Second Flow Pressure	45 Mins.	45 Mins.
Final Closed-in Pressure	60 Mins.	60 Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	97
P 2	5	86
P 3	10	95
P 4	15	104
P 5	20	123
P 6	25	148
P 7	30	160
P 8	35	169
P 9	40	179
P10	45	194
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

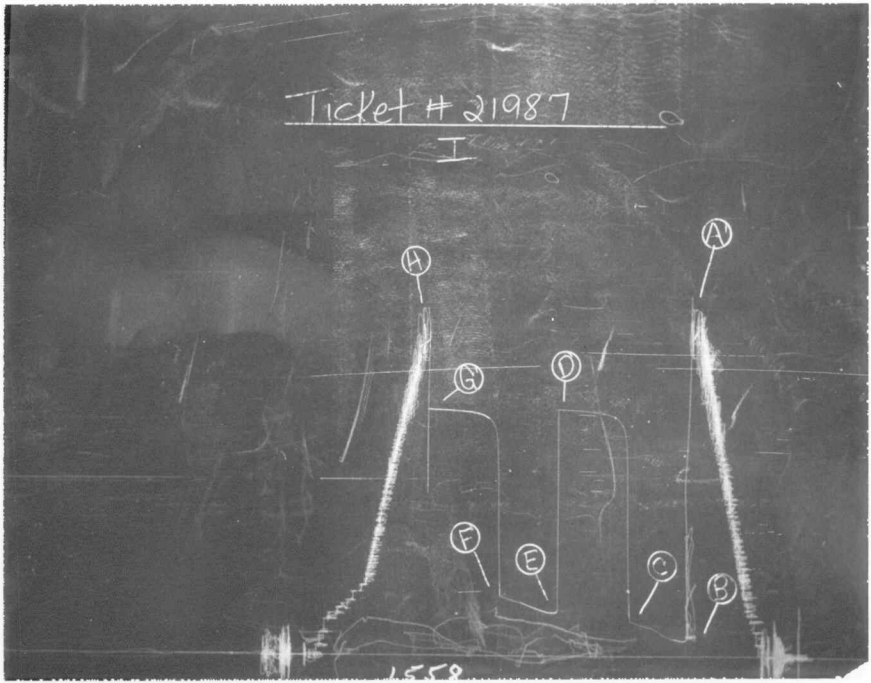
Point Minutes	Press.
0	194
3	1111
6	1286
9	1320
12	1339
15	1349
18	1355
21	1362
24	1366
27	1370
30	1372
33	1375
36	1377
39	1378
42	1380
45	1380
48	1381
51	1381
54	1382
57	1382
60	1382

Second Flow Pressure
Breakdown: 9 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	253
5	240
10	247
15	259
20	272
25	287
30	300
35	310
40	321
45	333

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	333
3	1113
6	1286
9	1324
12	1339
15	1349
18	1357
21	1364
24	1367
27	1369
30	1371
33	1372
36	1373
39	1374
42	1375
45	1376
48	1377
51	1378
54	1379
57	1380
60	1381


Ticket # 21987
I
A
A
G
D
F
E
C
B

WESTERN TESTERS

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Hummon Oil Company Lease & Well No. Bruce #1

Elevation 1252 Kelly Bush Formation Mississippi Effective Pay - Ft. Ticket No. 21871

Date 4-23-77 Sec. 12 Twp. 32S Range 4W County Sumner State Kansas

Test Approved by K.W. Johnson Western Representative Bill Baker

Formation Test No. 5 O.K. X Misrun - Interval Tested From 3946' to 3980' Total Depth 3980'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 3941 Ft. Size 6 3/4 Bottom Packer Depth 3946 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 34 Ft. Size 5½OD Surface Choke Size 1 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3973 Ft. Clock No. 10167 Depth 3976 Ft. Clock No. 8476

Top Make Kuster Cap. 4500 No. 3085 Inside ~~Outside~~ Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 4:43A. M

Tool Open I.F.P. From 4:45A M. to 5:30A M. - Hr. 45 Min. From (B) 148 P.S.I. To (C) 158 P.S.I.

Tool Closed I.C.I.P. From 5:30A M. to 6:30A M. - Hr. 60 Min (D) 1520 P.S.I.

Tool Open F.F.P. From 6:30A M. to 7:30A M. - Hr. 60 Min. From (E) 179 P.S.I. To (F) 148 P.S.I.

Tool Closed F.C.I.P. From 7:30A M. to 9:00A M. - Hr. 90 Min. (G) 1509 P.S.I.

Initial Hydrostatic Pressure (A) 2098 P.S.I. Final Hydrostatic Pressure (H) 2080 P.S.I. Maximum Temp. 134

INFORMATION

BLOW Strong blow throughout test. Gas to surface in 3 minutes, see attached sheet for gas measurements.

Did Well Flow - Yes X No Recovery Total Ft. 130' of gas cut mud.

Reversed Out - Yes X No Mud Type Starch Viscosity 43 Weight 9.7 Water Loss 10.0 cc. Chlorides 57,000 PPM

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Gabbert-Jones, Inc. Length Drill Pipe? 3560 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 420 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4½H-90 In. Length D.S.T. Tool 54 Ft.

Remarks:

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

GAS FLOW REPORT

Date 4-23-77 Ticket 21871 Company Hummon Oil Company

Well Name and No. Bruce #1 Dst No. 5 Interval Tested 3946' - 3980'

County Sumner State Kansas Sec. 12 Twp. 32S Rg. 4W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
PRE FLOW						
Tool open at 4:45A.						
4:50A.	5 min.	10 PSIG		1" choke		472,000 C.F.P.D.
4:55A.	10 min.	12 PSIG		1" choke		526,000 C.F.P.D.
5:00A.	15 min.	14 PSIG		1" choke		577,000 C.F.P.D.
5:10A.	25 min.	15 PSIG		1" choke		603,000 C.F.P.D.
5:30A.	45 min.	15 PSIG		1" choke		603,000 C.F.P.D.
Gas to surface in 3 minutes.						
SECOND FLOW						
tool open at 6:30A.						
6:35AM	50 min.	14 PSIG		1" choke		577,000 C.F.P.D.
6:40AM	55 min.	17 PSIG		1" choke		652,000 C.F.P.D.
6:45AM	60 min.	18 PSIG		1" choke		687,000 C.F.P.D.
6:50AM	65 min.	17 PSIG		1" choke		652,000 C.F.P.D.
7:15AM	90 min.	16 PSIG		1" choke		627,000 C.F.P.D.
7:30AM	105 min.	16 PSIG		1" choke		627,000 C.F.P.D.

GAS BOTTLE

Serial No. 613 Date Bottle Filled 4-23-77 Date to be Invoiced 4-23-77

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Hummon Oil Company

Authorized by K.W. Johnson

FORM WTG 6

WESTERN TESTING CO., INC.
Pressure Data

Date 4-23-77 Test Ticket No. 21871

Recorder No. 3085 Capacity 4500 Location 3973 Ft.

Clock No. 10167 Elevation 1252 Kelly Bushing Well Temperature 134 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2098 P.S.I.	Open Tool	4:43A. M.	
B First Initial Flow Pressure	148 P.S.I.	First Flow Pressure	45 Mins.	450 Mins.
C First Final Flow Pressure	158 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1520 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	179 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	148 P.S.I.			
G Final Closed-in Pressure	1509 P.S.I.			
H Final Hydrostatic Mud	2080 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	148
P 2 5	148
P 3 10	155
P 4 15	157
P 5 20	157
P 6 25	158
P 7 30	158
P 8 35	158
P 9 40	158
P10 45	158
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	158
3	1268
6	1419
9	1444
12	1460
15	1472
18	1481
21	1490
24	1495
27	1500
30	1504
33	1509
36	1512
39	1513
42	1516
45	1517
48	1518
51	1518
54	1518
57	1519
60	1520

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	179
5	158
10	158
15	157
20	157
25	156
30	155
35	152
40	150
45	150
50	150
55	149
60	148

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	148
3	1245
6	1339
9	1370
12	1386
15	1398
18	1409
21	1416
24	1421
27	1428
30	1435
33	1442
36	1451
39	1456
42	1460
45	1463
48	1469
51	1472
54	1477
57	1484
60	1488

Cont'd on next page

WESTERN TESTING CO., INC.
Pressure Data

Date 4-23-77 Test Ticket No. 21871

Recorder No. 3085 Capacity 4500 Location 3973 Ft.

Clock No. 10167 Elevation 1252 Kelly Bushing Well Temperature 134 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2098 P.S.I.		Open Tool	4:43A. M	
B	First Initial Flow Pressure	148 P.S.I.		First Flow Pressure	45 Mins.	450 Mins.
C	First Final Flow Pressure	158 P.S.I.		Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	1520 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	179 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	148 P.S.I.				
G	Final Closed-in Pressure	1509 P.S.I.				
H	Final Hydrostatic Mud	2080 P.S.I.				

PRESSURE BREAKDOWN

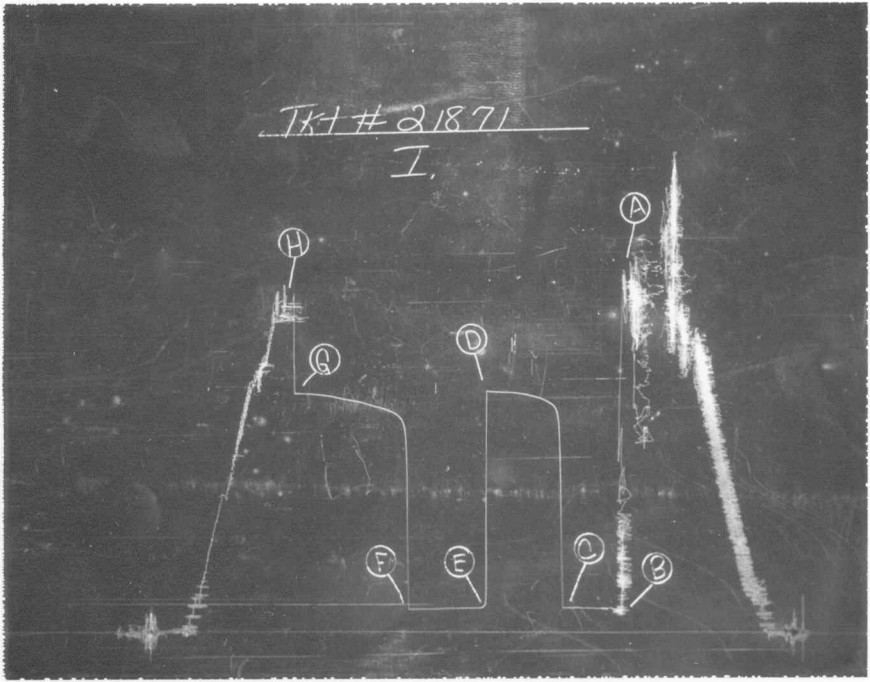
First Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	1495
P 2						66	1498
P 3						69	1500
P 4						72	1502
P 5						75	1504
P 6						78	1505
P 7						81	1506
P 8						84	1507
P 9						87	1508
P10						90	1509
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							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Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Hummon Oil Company Lease & Well No. Bruce #1

Elevation 1252 Kelly Bush. Formation White Cloud-Stalnaker Effective Pay - Ft. Ticket No. 21872

Date 4-24-77 Sec. 12 Twp. 32S Range 4W County Sumner State Kansas

Test Approved by Byron E. Hummon, Jr. Western Representative Bill Baker

Formation Test No. 6 O.K. - Misrun X Interval Tested From 2964' to 3027' Total Depth 3980'

Size Main Hole 7 7/8 Rat Hole - Conv. X B.T. - Damaged - Yes X No Conv. - B.T. - Damaged - Yes - No

Top Packer Depth 3034 Ft. Size 6 3/4 Bottom Packer Depth - Ft. Size -

Straddle Yes Conv. X B.T. - Damaged - Yes X No Packer Depth 3027 Ft. Size 6 3/4

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 63 Ft. Size 5½OD&DC Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2977 Ft. Clock No. 10167 Depth 2980 Ft. Clock No. 8474

Top Make Kuster Cap. 4500 No. 3085 ~~Outside~~ Inside Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth 3032 Rec. No. 45 Clock No. 23 ~~Outside~~ Inside Depth - Ft. Rec. No. - Clock No. - Outside

Time Set Packer M Misrun, packer seat failure

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) P.S.I.

Tool Open F.F.P. From M. to M. Hr. Min. From (E) P.S.I. To (F) P.S.I.

Tool Closed F.C.I.P. From M. to M. Hr. Min. (G) P.S.I.

Initial Hydrostatic Pressure (A) 1594 P.S.I. Final Hydrostatic Pressure (H) 1587 P.S.I. Maximum Temp. -

INFORMATION

BLOW Strong blow throughout test. Top packer seat failure

Did Well Flow - Yes X No Recovery Total Ft. 520' of drilling mud.

Reversed Out - Yes X No Mud Type Starch Viscosity 42 Weight 9.6 Water Loss 12.4 cc. Chlorides 50,000 PPM

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

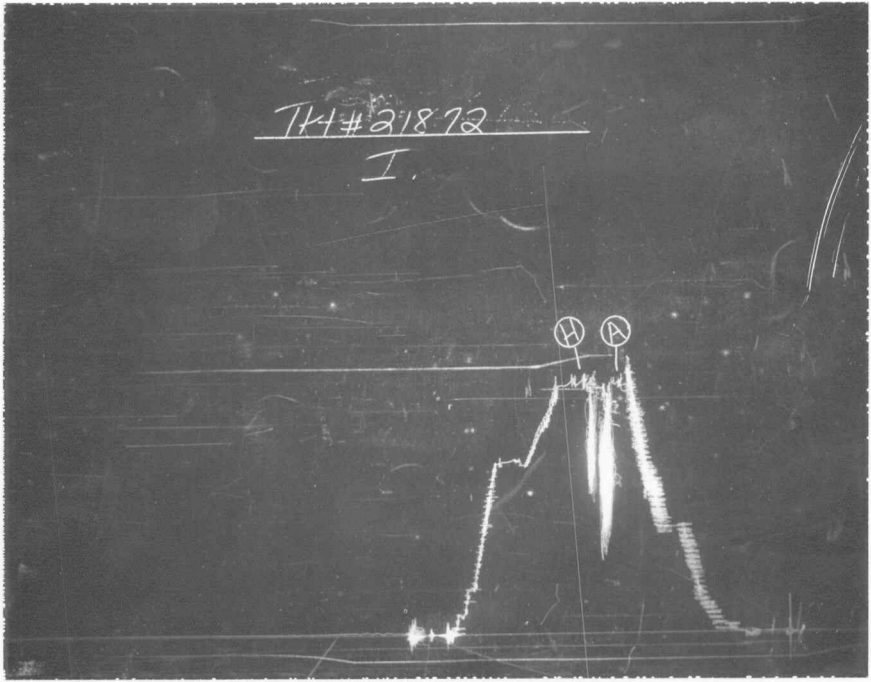
Dual Packer Yes Did Packers Hold? No Did Tool Plug? No Where? -

DRILLING CONTRACTOR Gabbert-Jones, Inc. Length Drill Pipe? 2637 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 390 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4½H-90 In. Length D.S.T. Tool 84 Ft.

Remarks: Moved hook 2' lower, top packer seat failure.
Moved hook 2' higher, hook would not set
Moved hook 4' lower, hook would not set.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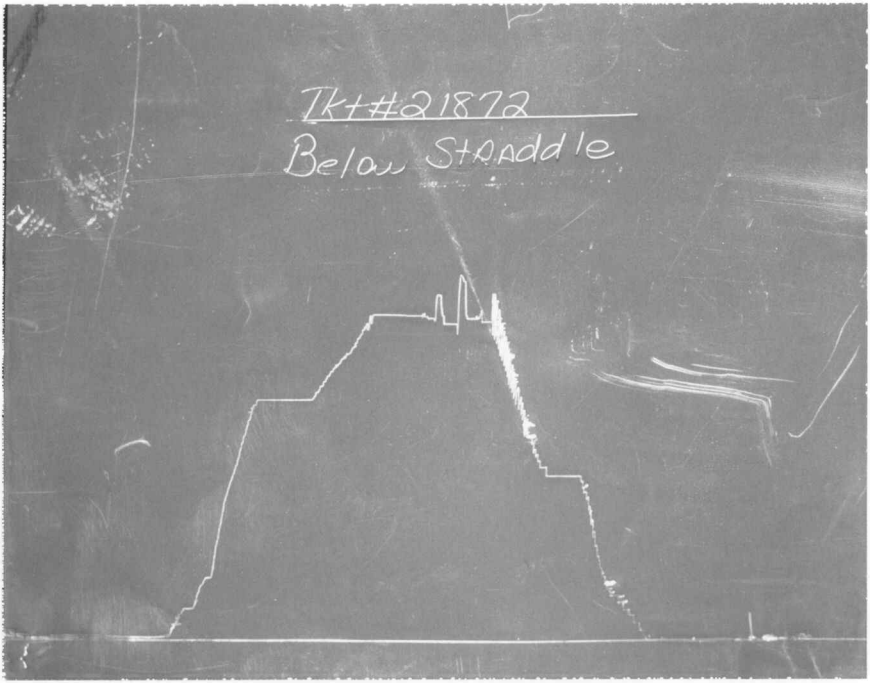
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Below Straddle

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Hummon Oil Company Lease & Well No. Bruce #1

Elevation 1252 Kelly Bush. Formation Stalnaker Effective Pay - Ft. Ticket No. 21873

Date 4-24-77 Sec. 12 Twp. 32S Range 4W County Sumner State Kansas

Test Approved by Byron E. Hummon, Jr. Western Representative Bill Baker

Formation Test No. 7 O.K. - Misrun X Interval Tested From 3024' to 3029' Total Depth 3980'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 3019 Ft. Size 6 3/4 Bottom Packer Depth 3024 Ft. Size 6 3/4

Straddle Yes Conv. X B.T. - Damaged - Yes X No Packer Depth 3029 Ft. Size 6 3/4

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 5 Ft. Size 5½OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3013 Ft. Clock No. 10167 Depth 3016 Ft. Clock No. 8474

Top Make Kuster Cap. 4500 No. 3085 Inside ~~Outside~~ Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth 3034 Rec. No. 45 Clock No. 23 Inside ~~Outside~~ Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 11:28 M

Tool Open I.F.P. From 11:30 M. to 11:45 M. - Hr. 15 Min. From (B) 54 P.S.I. To (C) 231 P.S.I.

Tool Closed I.C.I.P. From 11:45 M. to 12:00 M. - Hr. 15 Min (D) 1161 P.S.I.

Tool Open F.F.P. From - M. to - M. - Hr. - Min. From (E) - P.S.I. To (F) - P.S.I.

Tool Closed F.C.I.P. From - M. to - M. - Hr. - Min. (G) - P.S.I.

Initial Hydrostatic Pressure (A) 1580 P.S.I. Final Hydrostatic Pressure (H) 1572 P.S.I. Maximum Temp. 120

INFORMATION

BLOW Weak blow increasing to a strong blow throughout test.

Did Well Flow - Yes X No Recovery Total Ft. 510' of muddy saltwater.

Reversed Out - Yes X No Mud Type Starch Viscosity 42 Weight 9.6 Water Loss 12.4 cc. Chlorides 50,000 PPM

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Gabbert-Jones, Inc. Length Drill Pipe? 2609 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 420 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4½H-90 In. Length D.S.T. Tool 42 Ft.

Remarks: Hook would not set in correct zone, hook set 10' low.

WESTERN TESTING CO., INC.
Pressure Data

Date 4-24-77 Test Ticket No. 21873

Recorder No. 3085 Capacity 4500 Location 3013 Ft.

Clock No. 10167 Elevation 1252 Kelly Bushing Well Temperature 120 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1580	P.S.I.
B	First Initial Flow Pressure	54	P.S.I.
C	First Final Flow Pressure	231	P.S.I.
D	Initial Closed-in Pressure	1161	P.S.I.
E	Second Initial Flow Pressure	Not taken	P.S.I.
F	Second Final Flow Pressure	Not taken	P.S.I.
G	Final Closed-in Pressure	Not taken	P.S.I.
H	Final Hydrostatic Mud	1572	P.S.I.

	Time Given	Time Computed
Open Tool	11:28 M	
First Flow Pressure	15 Mins.	15 Mins.
Initial Closed-in Pressure	15 Mins.	15 Mins.
Second Flow Pressure	– Mins.	– Mins.
Final Closed-in Pressure	– Mins.	– Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 3 Inc. of 5 mins. and a final inc. of 0 Min.

Initial Shut-In
Breakdown: 5 Inc. of 3 mins. and a final inc. of 0 Min.

Second Flow Pressure
Breakdown: – Inc. of – mins. and a final inc. of – Min.

Final Shut-In
Breakdown: – Inc. of – mins. and a final inc. of – Min.

Point	First Flow Mins.	First Flow Press.	Initial Shut-In Minutes	Initial Shut-In Press.	Second Flow Minutes	Second Flow Press.	Final Shut-In Minutes	Final Shut-In Press.
P 1	0	54	0	231				
P 2	5	134	3	1069				
P 3	10	125	6	1118				
P 4	15	231	9	1139				
P 5			12	1152				
P 6			15	1161				
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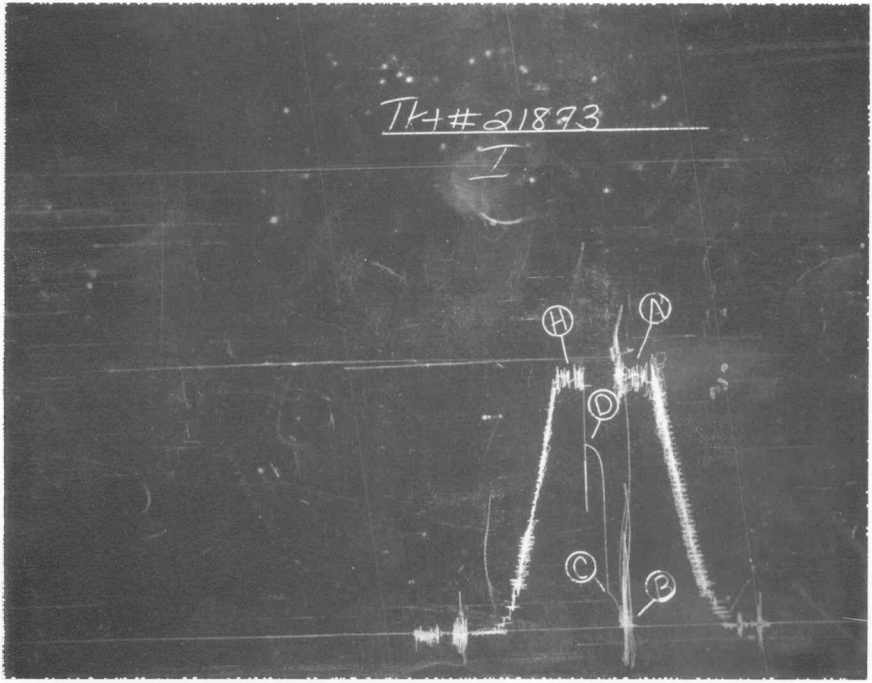
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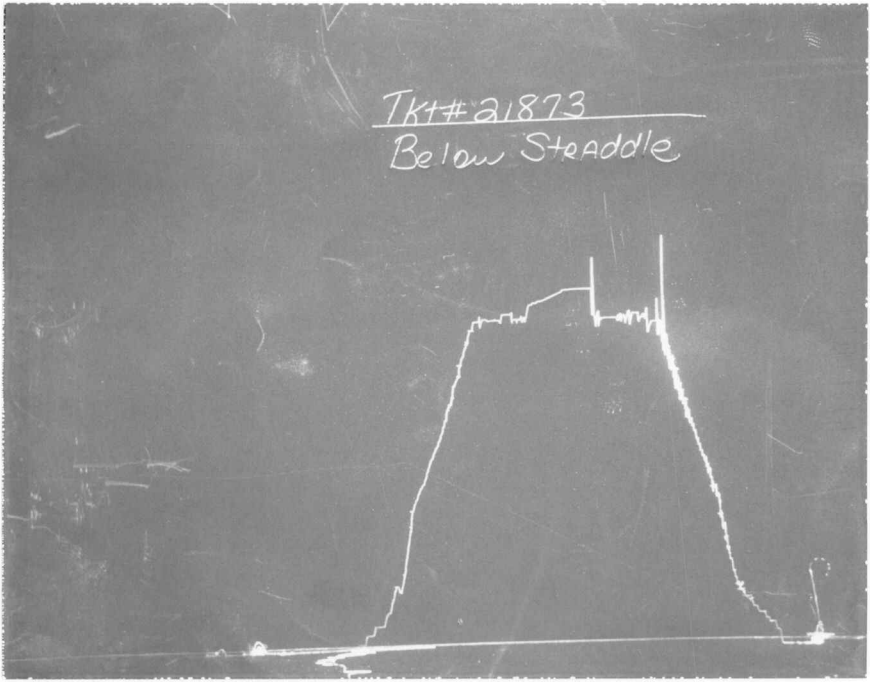
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