WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 4250

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation 1813 KB Formation K.C. Eff. Pay — Ft.

District Great Bend Date 3-18-80 Customer Order No. —

COMPANY NAME Raymond Oil Co., Inc.

ADDRESS One Main + Douglas Suite 900 Wichita KS 67202

LEASE AND WELL NO. Hullman #4 COUNTY Barton STATE KS Sec. 5 Twp. 19S Rge. 12W

Mail Invoice To Hullman #4 Same No. Copies Requested 5
Co. Name Address

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. #1 Interval Tested from 3106 ft. to 3140 ft. Total Depth 3140 ft.

Packer Depth 3101 ft. Size 6 3/4 in. Packer Depth 3106 ft. Size 6 3/4 in.

Packer Depth — ft. Size — in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3132 ft. Recorder Number 969 Cap. 4200

Bottom Recorder Depth (Outside) 3135 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Duke Rig #2 Drill Collar Length — I. D. — in.

Mud Type Starch Viscosity 40 Weight Pipe Length 918 I. D. 3.4 in.

Weight 10.0 Water Loss 7.4 cc. Drill Pipe Length 2167 I. D. 3.8 in.

Chlorides 89,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make — Serial Number — Anchor Length 34 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Weak Blow Died in 9 min First Opening
No Blow Second Opening Wait 5 min Flush Tool Still No Blow

Recovered 80 ft. of Mud (Few Oil Spots)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Tool Slid 10 FT To Bottom

RECEIVED
MAR 20 1980

Time Set Packer(s) 11:17 A.M. Time Started Off Bottom 1:20 P.M. Maximum Temperature 107

Initial Hydrostatic Pressure		(A)	1642	P.S.I.		
Initial Flow Period	Minutes 30	(B)	107	P.S.I. to	(C) 107	P.S.I.
Initial Closed In Period	Minutes 30	(D)	867	P.S.I.		
Final Flow Period	Minutes 30	(E)	107	P.S.I. to	(F) 96	P.S.I.
Final Closed In Period	Minutes 30	(G)	161	P.S.I.		
Final Hydrostatic Pressure		(H)	1606	P.S.I.		

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [signature]
Signature of Customer or his authorized representative

Western Representative Roger Lisenby thank you

FIELD INVOICE

Open Hole Test	$ 500.00
Misrun	$ —
Straddle Test	$ —
Jars	$ —
Selective Zone	$ —
Safety Joint	$ —
Standby	$ —
Evaluation	$ —
Extra Packer	$ —
Circ. Sub.	$ —
Mileage	$ —
Fluid Sampler	$ —
Extra Charts	$ —
TOTAL	$ 500.00

WESTERN TESTING CO., INC.
Pressure Data

Date 3-16-80 Test Ticket No. 4250

Recorder No. 969 Capacity 4200 Location 3132 Ft.

Clock No. Elevation 1813 KB Well Temperature 107 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1684	P.S.I.
B	First Initial Flow Pressure	92	P.S.I.
C	First Final Flow Pressure	85	P.S.I.
D	Initial Closed-in Pressure	904	P.S.I.
E	Second Initial Flow Pressure	96	P.S.I.
F	Second Final Flow Pressure	89	P.S.I.
G	Final Closed-in Pressure	173	P.S.I.
H	Final Hydrostatic Mud	1640	P.S.I.

	Time Given	Time Computed
Open Tool	11:17 AM	
First Flow Pressure	30 Mins.	30 Mins
Initial Closed-in Pressure	30 Mins.	33 Mins
Second Flow Pressure	30 Mins.	30 Mins
Final Closed-in Pressure	30 Mins.	33 Mins

PRESSURE BREAKDOWN

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

Point Mins.		Press.
P 1	0	92
P 2	5	88
P 3	10	86
P 4	15	88
P 5	20	86
P 6	25	85
P 7	30	85
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 11 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	85
3	91
6	106
9	118
12	128
15	162
18	266
21	379
24	551
27	662
30	828
33	904
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	96
5	FLUSHED TOOL 98
10	96
15	93
20	91
25	90
30	89
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

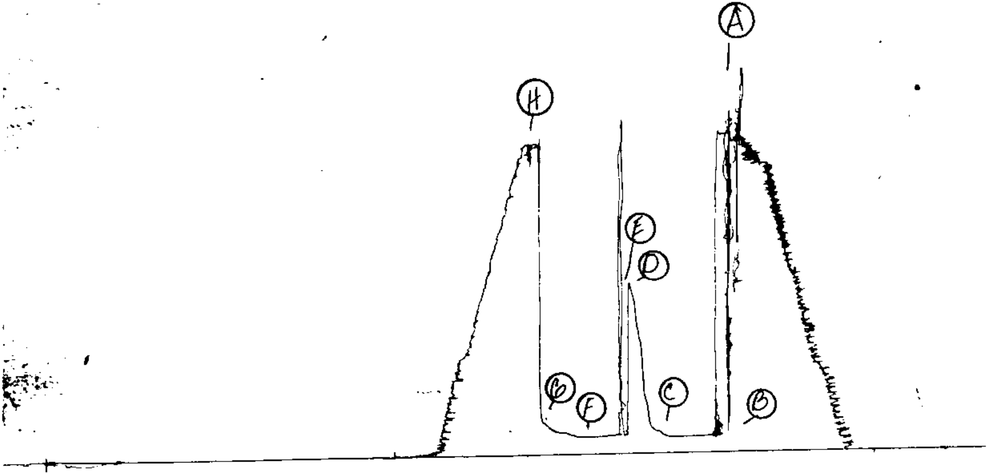
Final Shut-In
Breakdown: 11 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	89
3	90
6	92
9	98
12	106
15	115
18	116
21	120
24	129
27	145
30	164
33	173
36	
39	
42	
45	
48	
51	
54	
57	
60	

WTC - 4

969

IKC# 4250
I



Company Raymond Oil Company, Inc. Lease & Well No. Hullman #4

Elevation 1813 Kelly Bushing Formation Kansas City Effective Pay ------ Ft. Ticket No. 4250

Date 3/18/80 Sec. 5 Twp. 19S Range 12W County Barton State Kansas

Test Approved by R. E. Rowland Western Representative Roger Lisenby

Formation Test No. 1 Interval Tested from 3106 ft. to 3140 ft. Total Depth 3140 ft.

Packer Depth 3101 ft. Size 6 3/4 in. Packer Depth 3106 ft. Size 6 3/4 in.

Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3132 ft. Recorder Number 969 Cap. 4200

Bottom Recorder Depth (Outside) 3135 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length -- I. D. - in.

Mud Type starch Viscosity 40 Weight Pipe Length 918 I. D. 3.4 in.

Weight 10.0 Water Loss 7.4 cc. Drill Pipe Length 2167 I. D. 3.8 in.

Chlorides 80,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make - Serial Number - Anchor Length 34 ft. Size 5½ in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Weak blow;died in nine minutes first opening. No blow second opening waited five minutes;flushed tool-still no blow.

Recovered 80 ft. of mud (few oil spots)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Tool slid ten feet to bottom.

Time Set Packer(s) 11:17 A.M. P.M. Time Started Off Bottom 1:20 A.M. P.M. Maximum Temperature 107°

Initial Hydrostatic Pressure (A) 1684 P.S.I.

Initial Flow Period Minutes 30 (B) 92 P.S.I. to (C) 85 P.S.I.

Initial Closed In Period Minutes 33 (D) 904 P.S.I.

Final Flow Period Minutes 30 (E) 96 P.S.I. to (F) 89 P.S.I.

Final Closed In Period Minutes 33 (G) 173 P.S.I.

Final Hydrostatic Pressure (H) 1640 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/18/80 Test Ticket No. 4250

Recorder No. 969 Capacity 4200 Location 3132 Ft.

Clock No. ------ Elevation 1813 Kelly Bushing Well Temperature 107 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1684 P.S.I.				
B	First Initial Flow Pressure	92 P.S.I.		Open Tool	11:17A M	
C	First Final Flow Pressure	85 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	904 P.S.I.		Initial Closed-in Pressure	30 Mins.	33 Mins.
E	Second Initial Flow Pressure	96 P.S.I.		Second Flow Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	89 P.S.I.		Final Closed-in Pressure	30 Mins.	33 Mins.
G	Final Closed-in Pressure	173 P.S.I.				
H	Final Hydrostatic Mud	1640 P.S.I.				

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

Final Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	First Flow Pressure Mins.	First Flow Pressure Press.	Initial Shut-In Point Minutes	Initial Shut-In Press.	Second Flow Pressure Point Minutes	Second Flow Pressure Press.	Final Shut-In Point Minutes	Final Shut-In Press.
P 1	0	92	0	85	0	96	0	89
P 2	5	88	3	91	5	98	3	90
P 3	10	86	6	106	10	96	6	92
P 4	15	88	9	118	15	93	9	98
P 5	20	86	12	128	20	91	12	106
P 6	25	85	15	162	25	90	15	115
P 7	30	85	18	266	30	89	18	116
P 8			21	379			21	120
P 9			24	551			24	129
P10			27	662			27	145
P11			30	828			30	164
P12			33	904			33	173
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								

flushed tool

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 5551

Elevation 1813 KB Formation KC Eff. Pay — Ft.

District Great Bend Date 3-19-80 Customer Order No. —

COMPANY NAME Raymond Oil Co, Inc.

ADDRESS 100 North Douglas Suite 900 Wichita KS 67202

LEASE AND WELL NO. #4 Hulman COUNTY Barton STATE KS Sec. 5 Twp. 19 Rge. 12

Mail Invoice To Hullman #4 Same No. Copies Requested 5
Co. Name Address

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 2 Interval Tested from 3140 ft. to 3180 ft. Total Depth 3180 ft.

Packer Depth 3135 ft.	Size 6 3/4 in.	Packer Depth 3140 ft.	Size 6 3/4 in.
Packer Depth — ft.	Size — in.	Packer Depth — ft.	Size — in.
Depth of Selective Zone Set —			

Top Recorder Depth (Inside)	3173 ft.	Recorder Number 969	Cap. 4200
Bottom Recorder Depth (Outside)	3176 ft.	Recorder Number 1051	Cap. 4250
Below Straddle Recorder Depth	— ft.	Recorder Number —	Cap. —

Drilling Contractor Duke Rig #2		Drill Collar Length —	I. D. — in.
Mud Type Starch	Viscosity 48	Weight Pipe Length 918	I. D. 3 1/4 in.
Weight 10.1	Water Loss 7.8 cc.	Drill Pipe Length 2201	I. D. 3 1/8 in.
Chlorides 82,000	P.P.M.	Test Tool Length 21 ft.	Tool Size 4 3/4 in.
Jars: Make —	Serial Number —	Anchor Length 40 ft.	Size 5 1/2 in. 3/4
Did Well Flow? Gas	Reversed Out —	Surface Choke Size 3/4 in.	Bottom Choke Size in.
		Main Hole Size 7 7/8 in.	Tool Joint Size 4 1/2 XH in.

Blow: STRONG - GAS TO SURFACE IN 18 MIN - FIRST OPENING
See attached sheet for gas measurements

Recovered 105 ft. of OIL & GAS CUT MUD 10% OIL 45% MUD 15% WATER 30% GAS
Recovered 190 ft. of FROTHY OIL
Recovered 20 ft. of CLEAN OIL 38 GRAVITY
Recovered — ft. of
Recovered 315 ft. of TOTAL FLUID

Chlorides 84,000 PPM

Remarks:

(RIG MOTOR DEAD ON FIRST SHUT IN)

Time Set Packer(s) 3:52 A.M. Time Started Off Bottom 6:30 A.M. Maximum Temperature 108

Initial Hydrostatic Pressure			(A) 1691	P.S.I.		
Initial Flow Period	Minutes 48	(B) 107	P.S.I. to	(C) 107	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 569	P.S.I.			
Final Flow Period	Minutes 45	(E) 161	P.S.I. to	(F) 129	P.S.I.	
Final Closed In Period	Minutes 60	(G) 580	P.S.I.			
Final Hydrostatic Pressure			(H) 1664	P.S.I.		

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for wh[illegible]

All charges subject to 12% interest after 60 days from date of invoice. [illegible] for collection will be added to the original amount.

RECEIVED
MAR 20 1980

Test Approved By [signature]
Signature of Customer or his authorized representativ[illegible]

Western Representative Roger Lisenby Thank You

FIELD INVOICE

Open Hole Test	$ 500.00
Misrun	$ —
Straddle Test	$ —
[illegible]	$ —
Selective Zone	$ —
Safety Joint	$ —
Standby	$ —
Evaluation	$ —
Extra Packer	$ —
Circ. Sub.	$ —
Mileage	$ —
Fluid Sampler	$ —
Extra Charts	$ —
TOTAL	$ 500.00

Phone 316 838-0601

P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

No. 1434

Date 3-19-80 Ticket #5551 Company Raymond Oil Co

Well Name and No. Hullman #4 Dst No. #2 Interval Tested 3140-3180

County Barton State KS Sec. 5 Twp. 19 Rg. 12

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow

Gas to surface in 18 minutes

PRE FLOW

20 min	12 Inches water	¼ Inch	—	—	OK 5,860	CFPD
30 min	30 "	"	—	—	OK 9,200	"
40 min	28 "	"	—	—	OK 8,890	"
45 min	28 "	"	—	—	OK 8,890	"

SECOND FLOW

10 min	44 Inches water	¼ Inch	—	—	OK 11,100	CFPD
20 min	22	¼ "	—	—	OK 8,880	CFPD
30 min	16	¼ "	—	—	OK 7,720	CFPD
40 min	14	¼ "	—	—	OK 7,330	CFPD
45 min	14	¼ "	—	—	OK 7,330	CFPD

GAS BOTTLE

Hold Gas Sample For Three days

Serial No. Date Bottle Filled Date to be Invoiced

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

Authorized by

FORM WTC 9

WESTERN TESTING CO., INC.
Pressure Data

Date 3-19-80 Test Ticket No. 5551

Recorder No. 969 Capacity 4200 Location 3173 Ft.

Clock No. Elevation 1813 KB Well Temperature 108 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1919	P.S.I.	Open Tool	3:52 AM
B	First Initial Flow Pressure	133	P.S.I.	First Flow Pressure	48 Mins. 50 Mins.
C	First Final Flow Pressure	115	P.S.I.	Initial Closed-in Pressure	60 Mins. 60 Mins.
D	Initial Closed-in Pressure	594	P.S.I.	Second Flow Pressure	45 Mins. 45 Mins.
E	Second Initial Flow Pressure	149	P.S.I.	Final Closed-in Pressure	60 Mins. 60 Mins.
F	Second Final Flow Pressure	152	P.S.I.		
G	Final Closed-in Pressure	604	P.S.I.		
H	Final Hydrostatic Mud	1707	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 10 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	133
P 2	5	111
P 3	10	96
P 4	15	94
P 5	20	95
P 6	25	96
P 7	30	97
P 8	35	101
P 9	40	106
P10	45	110
P11	50	115
P12	55	
P13	60	
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	115
3	135
6	180
9	236
12	275
15	301
18	313
21	326
24	337
27	349
30	359
33	366
36	385
39	424
42	463
45	496
48	517
51	535
54	556
57	573
60	594

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

Point Minutes	Press.
0	149
5	139
10	133
15	136
20	139
25	141
30	143
35	146
40	149
45	152
50	
55	
60	
65	
70	
75	
80	
85	
90	

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

Point Minutes	Press.
0	152
3	215
6	254
9	285
12	307
15	320
18	330
21	373
24	414
27	443
30	469
33	494
36	516
39	531
42	545
45	557
48	566
51	576
54	587
57	595
60	604

Pkt # 5551
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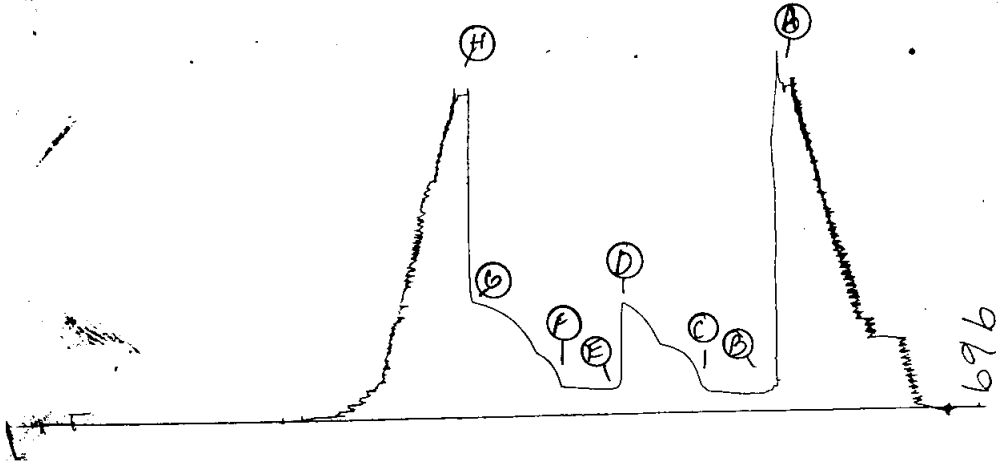


Company Raymond Oil Company, Inc. Lease & Well No. Hullman #4

Elevation 1813 Kelly Bushing Formation Kansas City Effective Pay ------ Ft. Ticket No. 5551

Date 3/19/80 Sec. 5 Twp. 19S Range 12W County Barton State Kansas

Test Approved by R. E. Rowland Western Representative Roger Lisenby

Formation Test No. 2 Interval Tested from 3140 ft. to 3180 ft. Total Depth 3180 ft.

Packer Depth 3135 ft. Size 6 3/4 in. Packer Depth 3140 ft. Size 6 3/4 in.

Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3173 ft. Recorder Number 969 Cap. 4200

Bottom Recorder Depth (Outside) 3176 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length - I. D. - in.

Mud Type starch Viscosity 48 Weight Pipe Length 918 I. D. 3.4 in.

Weight 10.1 Water Loss 7.8 cc. Drill Pipe Length 2201 I. D. 3.8 in.

Chlorides 87,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make - Serial Number - Anchor Length 40 ft. Size 5½ in.

Did Well Flow? Gas Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Strong. Gas to surface in eighteen minutes first opening. See attached sheet for gas measurements.

Recovered 105 ft. of oil and gas cut mud (10% oil;45% mud:15% water;30% gas)

Recovered ft. of Chlorides 84,000 ppm

Recovered 190 ft. of frothy oil

Recovered 20 ft. of clean oil 38 gravity

Recovered 315 ft. of Total Fluid

Remarks: Rig motor dead on first shut-in.

Time Set Packer(s) 3:52 A.M. ~~P.M.~~ Time Started Off Bottom 6:30 A.M. ~~P.M.~~ Maximum Temperature 108°

Initial Hydrostatic Pressure (A) 1719 P.S.I.

Initial Flow Period Minutes 50 (B) 133 P.S.I. to (C) 115 P.S.I.

Initial Closed In Period Minutes 60 (D) 594 P.S.I.

Final Flow Period Minutes 45 (E) 149 P.S.I. to (F) 152 P.S.I.

Final Closed In Period Minutes 60 (G) 604 P.S.I.

Final Hydrostatic Pressure (H) 1707 P.S.I.

GAS FLOW REPORT

Date 3/19/80 Ticket 5551 Company Raymond Oil Company, Inc.

Well Name and No. Hullman #4 Dst No. 2 Interval Tested 3140'-3180'

County Barton State Kansas Sec. 5 Twp. 19S Rg. 12W

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
Gas to surface in 18 minutes. **PRE FLOW**						
	20min	12" of water		1/4" orifice		5,860 CFPD
	30 min.	30" of water		1/4" orifice		9,200 CFPD
	40 min.	28" of water		1/4" orifice		8,890 CFPD
	45 min.	28" of water		1/4" orifice		8,890 CFPD
SECOND FLOW						
	10 min.	44" of water		1/4" orifice		11,100 CFPD
	20 min.	22" of water		1/4" orifice		7,880 CFPD
	30 min.	16" of water		1/4" orifice		6,720 CFPD
	40 min.	14" of water		1/4" orifice		6,330 CFPD
	45 min.	14" of water		1/4" orifice		6,330 CFPD
		HOLD GAS SAMPLE	FOR THREE DAYS			

GAS BOTTLE

Serial No. ------ Date Bottle Filled ------ Date to be Invoiced 3/19/80

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 1½% per month, equal to 18% 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 Raymond Oil Company, Inc.

Authorized by R. E. Rowland

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 3/19/80 Test Ticket No. 5551

Recorder No. 969 Capacity 4200 Location 3173 Ft.

Clock No. ----- Elevation 1813 Kelly Bushing Well Temperature 108 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1719 P.S.I.		Open Tool	3:52A M	
B	First Initial Flow Pressure	133 P.S.I.		First Flow Pressure	48 Mins.	50 Mins.
C	First Final Flow Pressure	115 P.S.I.		Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	594 P.S.I.		Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	149 P.S.I.		Final Closed-in Pressure	60 Mins.	60 Mins.
F	Second Final Flow Pressure	152 P.S.I.				
G	Final Closed-in Pressure	604 P.S.I.				
H	Final Hydrostatic Mud	1707 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 10 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	133
P 2	5	111
P 3	10	96
P 4	15	94
P 5	20	95
P 6	25	96
P 7	30	97
P 8	35	101
P 9	40	106
P10	45	110
P11	50	115
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	115
3	135
6	180
9	236
12	275
15	301
18	313
21	326
24	337
27	349
30	359
33	366
36	385
39	424
42	463
45	496
48	517
51	535
54	556
57	575
60	594

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

Point Minutes	Press.
0	149
5	137
10	133
15	136
20	139
25	141
30	143
35	146
40	149
45	152

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

Point Minutes	Press.
0	152
3	215
6	254
9	285
12	307
15	320
18	330
21	375
24	414
27	443
30	469
33	494
36	516
39	531
42	545
45	557
48	566
51	576
54	587
57	595
60	604

WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET Nº 5552

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation 1813 KB Formation KC Eff. Pay — Ft.

District Great Bend Date 3-20-80 Customer Order No. —

COMPANY NAME Raymond Oil Co, Inc.

ADDRESS 2 Broadview Plaza Suite 500 Wichita KS 67202

LEASE AND WELL NO. Hullman # 4 COUNTY Barton STATE KS Sec. 5 Twp. 19S Rge. 12W

Mail Invoice To Hullman #4 9 mi E No. Copies Requested 5
Co. Name Address

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 3 Interval Tested from 3236 ft. to 3320 ft. Total Depth 3320 ft.

Packer Depth 3231 ft. Size 6 3/4 in. Packer Depth 3236 ft. Size 6 3/4 in.

Packer Depth — ft. Size — in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3240 ft. Recorder Number 969 Cap. 4200

Bottom Recorder Depth (Outside) 3243 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Duke Rig # 2 Drill Collar Length — I. D. — in.

Mud Type Starch Viscosity 43 Weight Pipe Length 856 I. D. 3.4 in.

Weight 9.8 Water Loss 12.6 cc. Drill Pipe Length 2359 I. D. 3.8 in.

Chlorides 80,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make — Serial Number — Anchor Length 84 3/4 ft. Size 5 1/2 with 2 3/8 IF WT PIP in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Weak Blow Steady increasing to Strong (Bottom of Bucket) First Opening Strong Blow second opening -

Recovered 277 ft. of Gas in Pipe

Recovered 188 ft. of Total Fluid

Recovered 66 ft. of 32% Mud 8% Oil 60% Gas (No water)

Recovered 122 ft. of Frothy Oil (Mixed with mud)

Recovered — ft. of —

Remarks: Showed some plugging for about 10 min on first opening

Time Set Packer(s) 4:25 A.M. Time Started Off Bottom 7:58 A.M. Maximum Temperature 110

Initial Hydrostatic Pressure			(A)	1760	P.S.I.	
Initial Flow Period	Minutes	45	(B)	86	P.S.I. to (C)	96 P.S.I.
Initial Closed In Period	Minutes	60	(D)	867	P.S.I.	
Final Flow Period	Minutes	45	(E)	118	P.S.I. to (F)	107 P.S.I.
Final Closed In Period	Minutes	60	(G)	825	P.S.I.	
Final Hydrostatic Pressure			(H)	1717	P.S.I.	

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

RECEIVED MAR 21 1980

Test Approved By [signature]
Signature of Customer or his authorized representative

Western Representative Roger Livingston Thank You

FIELD INVOICE

Open Hole Test	$ 500.00
Misrun	$ —
Straddle Test	$ —
Jars	$ —
Selective Zone	$ —
Safety Joint	$ —
Standby	$ —
Evaluation	$ —
Extra Packer	$ —
Circ. Sub.	$ —
Mileage	$ —
Fluid Sampler	$ —
Extra Charts	$ —
TOTAL	$ 500.00

WESTERN TESTING CO., INC.
Pressure Data

Date 3-20-80 Test Ticket No. 5552

Recorder No. 969 Capacity 4200 Location 3240 F

Clock No. Elevation 1813 KB Well Temperature 110 °

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1751 P.S.I.	Open Tool	4:25 A M	
B	First Initial Flow Pressure	74 P.S.I.	First Flow Pressure	45 Mins.	35 Mins
C	First Final Flow Pressure	57 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins
D	Initial Closed-in Pressure	893 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins
E	Second Initial Flow Pressure	104 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins
F	Second Final Flow Pressure	86 P.S.I.			
G	Final Closed-in Pressure	824 P.S.I.			
H	Final Hydrostatic Mud	1730 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.		Press.
P 1	0	74
P 2	5	176
P 3	10	72
P 4	15	57
P 5	20	
P 6	25	
P 7	30	57
P 8	35	57
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
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	57
3	66
6	86
9	113
12	152
15	188
18	248
21	322
24	416
27	494
30	574
33	639
36	699
39	742
42	777
45	807
48	834
51	857
54	873
57	887
60	893

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

Point Minutes	Press.
0	104
5	80
10	78
15	78
20	78
25	81
30	83
35	84
40	85
45	86
50	
55	
60	
65	
70	
75	
80	
85	
90	

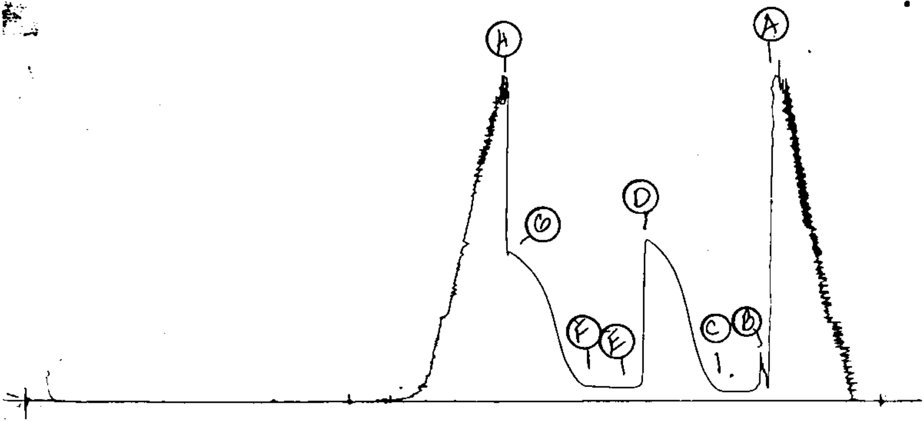
Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	86
3	104
6	123
9	155
12	188
15	234
18	295
21	365
24	443
27	514
30	574
33	608
36	642
39	687
42	720
45	744
48	766
51	782
54	801
57	816
60	824

WTC - 4

969

Tkt # 5552
I



Company: Raymond Oil Company, Inc. | Lease & Well No.: Hullman #4

Elevation: 1813 Kelly Bushing | Formation: Kansas City | Effective Pay: ---- Ft. | Ticket No.: 5552

Date: 3/20/80 | Sec.: 5 | Twp.: 19S | Range: 12W | County: Barton | State: Kansas

Test Approved by: R. E. Rowland | Western Representative: Roger Lisenby

Formation Test No.: 3 | Interval Tested from: 3236 ft. to: 3320 ft. | Total Depth: 3320 ft.

Packer Depth: 3231 ft. | Size: 6 3/4 in. | Packer Depth: 3236 ft. | Size: 6 3/4 in.

Packer Depth: - ft. | Size: - in. | Packer Depth: - ft. | Size: - in.

Depth of Selective Zone Set: -

Top Recorder Depth (Inside): 3240 ft. | Recorder Number: 969 | Cap.: 4200

Bottom Recorder Depth (Outside): 3243 ft. | Recorder Number: 1051 | Cap.: 4250

Below Straddle Recorder Depth: - ft. | Recorder Number: - | Cap.: -

Drilling Contractor: Duke Drilling | Drill Collar Length: - | I. D.: - in.

Mud Type: starch | Viscosity: 43 | Weight Pipe Length: 856 | I. D.: 3.4 in.

Weight: 9.8 | Water Loss: 12.6 cc. | Drill Pipe Length: 2359 | I. D.: 3.8 in.

Chlorides: 80,000 P.P.M. | Test Tool Length: 21 ft. | Tool Size: 4 3/4 in.

Jars: Make: -- | Serial Number: -- | Anchor Length: 84 ft. | Size: 5½ with 2 JTs WT pipe in.

Did Well Flow?: No | Reversed Out: No | Surface Choke Size: 3/4 in. | Bottom Choke Size: 3/4 in.

Main Hole Size: 7 7/8 in. | Tool Joint Size: 4½XH in.

Blow: Weak blow, steady increasing to strong(bottom of bucket) first opening.
Strong blow second opening.

Recovered: 277 ft. of gas in pipe

Recovered: 188 ft. of total fluid

Recovered: 66 ft. of 32% mud;8% oil;60% gas (no water)

Recovered: 122 ft. of frothy oil (mixed with mud)

Recovered: ft. of

Remarks: Showed some plugging for about ten minutes on first opening.

Time Set Packer(s): 4:25 A.M. ~~P.M.~~ | Time Started Off Bottom: 7:58 A.M. ~~P.M.~~ | Maximum Temperature: 110°

Initial Hydrostatic Pressure			(A) 1751	P.S.I.		
Initial Flow Period	Minutes 35	(B) 74	P.S.I. to	(C) 57	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 893	P.S.I.			
Final Flow Period	Minutes 45	(E) 104	P.S.I. to	(F) 86	P.S.I.	
Final Closed In Period	Minutes 60	(G) 824	P.S.I.			
Final Hydrostatic Pressure			(H) 1730	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 3/20/80 Test Ticket No. 5552

Recorder No. 969 Capacity 4200 Location 3240 Ft.

Clock No. ----- Elevation 1813 Kelly Bushing Well Temperature 110 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1751 P.S.I.	Open Tool		4:25A M	
B	First Initial Flow Pressure	74 P.S.I.	First Flow Pressure		45 Mins.	35 Mins.
C	First Final Flow Pressure	57 P.S.I.	Initial Closed-in Pressure		60 Mins.	60 Mins.
D	Initial Closed-in Pressure	893 P.S.I.	Second Flow Pressure		45 Mins.	45 Mins.
E	Second Initial Flow Pressure	104 P.S.I.	Final Closed-in Pressure		60 Mins.	60 Mins.
F	Second Final Flow Pressure	86 P.S.I.				
G	Final Closed-in Pressure	824 P.S.I.				
H	Final Hydrostatic Mud	1730 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 7 Inc.		Breakdown: 20 Inc.		Breakdown: 9 Inc.		Breakdown: 20 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 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	74	0	57	0	104	0	86
P 2 5	176	3	66	5	80	3	104
P 3 10	72	6	86	10	78	6	123
P 4 15	57	9	113	15	78	9	155
P 5 20	57	12	152	20	78	12	188
P 6 25	57	15	188	25	81	15	234
P 7 30	57	18	248	30	83	18	295
P 8 35	57	21	322	35	84	21	365
P 9		24	416	40	85	24	443
P10		27	494	45	86	27	514
P11		30	574			30	574
P12		33	639			33	608
P13		36	699			36	642
P14		39	742			39	687
P15		42	777			42	720
P16		45	807			45	744
P17		48	834			48	760
P18		51	857			51	782
P19		54	873			54	801
P20		57	887			57	816
WTC - 4		60	893			60	824

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 5553

Elevation 1813 Formation arb Eff. Pay — Ft.

District Great Bend Date 3-20-80 Customer Order No. —

COMPANY NAME Raymond Oil Company Inc.

ADDRESS 200 West Douglas Suite 800 Wichita KS 67202

LEASE AND WELL NO. Hullman #4 COUNTY Barton STATE KS Sec. 5 Twp. 19 Rge. 12

Mail Invoice To Co. Name Same Address No. Copies Requested 5

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. #4 Interval Tested from 3372 ft. to 3380 ft. Total Depth 3380 ft.

Packer Depth 3367 ft. Size 6 3/4 in. Packer Depth 3372 ft. Size 6 3/4 in.

Packer Depth — ft. Size — in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3374 ft. Recorder Number 969 Cap. 4200

Bottom Recorder Depth (Outside) 3377 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Duke Rig #2 Drill Collar Length — I. D. — in.

Mud Type Starch Viscosity 40 Weight Pipe Length 918 I. D. 3.4 in.

Weight 10.0 Water Loss 16.0 cc. Drill Pipe Length 2433 I. D. 3.8 in.

Chlorides 80,000 P.P.M. Test Tool Length 21 ft. Tool Size 6 3/4 in.

Jars: Make — Serial Number — Anchor Length 8 ft. Size 5 1/2 in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Weak Blow For 5 Min-Tool Slid 4 FT-Bleed Pressure-No Blow Flush Tool-No Blow-First Opening-No Blow Second Opening-Flush Tool Still No Blow

Recovered — ft. of

Recovered 90 ft. of Oil cut mud (total)

Recovered — ft. of

Recovered 30 ft. of 98% mud, 2% oil

Recovered 60 ft. of 85% mud 15% oil (No water)

Remarks: Lost 15 FT mud when tool slid Showed plugging on first opening-showed no plugging on second opening

Time Set Packer(s) 9:20 P.M. Time Started Off Bottom 11:23 P.M. Maximum Temperature 134

Initial Hydrostatic Pressure			(A) 1813	P.S.I.		
Initial Flow Period	Minutes 30	(B) 129	P.S.I. to	(C) 129	P.S.I.	
Initial Closed In Period	Minutes 30	(D) 835	P.S.I.			
Final Flow Period	Minutes 30	(E) 86	P.S.I. to	(F) 86	P.S.I.	
Final Closed In Period	Minutes 30	(G) 225	P.S.I.			
Final Hydrostatic Pressure		(H) 1771	P.S.I.			

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By R E Rowland
Signature of Customer or his authorized representative

Western Representative Roger Lisenby Thank You

Read outside Chart # 1051

FIELD INVOICE

Open Hole Test	$ 500 00
Misrun	$ —
Straddle Test	$ —
Jars	$ —
Selective Zone	$ —
Safety Joint	$ —
Standby	$ —
Evaluation	$ —
Extra Packer	$ —
Circ. Sub.	$ —
Mileage	$ —
Fluid Sampler	$ —
Extra Charts	$ —
TOTAL	$ 500 00

WESTERN, TESTING CO., INC.
Pressure Data

Date 3-20-80 Test Ticket No. 5553

Recorder No. [redacted] 1051 Capacity 4250 Location 3370 Ft.

Clock No. Elevation 1613 Well Temperature 134 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1805	P.S.I.
B	First Initial Flow Pressure	Plugging Action	P.S.I.
C	First Final Flow Pressure	105	P.S.I.
D	Initial Closed-in Pressure	825	P.S.I.
E	Second Initial Flow Pressure	129	P.S.I.
F	Second Final Flow Pressure	75	P.S.I.
G	Final Closed-in Pressure	226	P.S.I.
H	Final Hydrostatic Mud	1756	P.S.I.

	Time Given	Time Computed
Open Tool	2:20 PM	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	30 Mins.	30 Mins.

PRESSURE BREAKDOWN

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

Point Mins.		Press.
P 1	0	Plugging Action
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	Plugging Action
P 7	30 30	105
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	105
3	325
6	528
9	614
12	663
15	704
18	744
21	770
24	787
27	804
30	825
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	129
5	Flushed Tool 75
10	
15	
20	
25	
30	75
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	75
3	131
6	176
9	196
12	204
15	213
18	219
21	224
24	224
27	224
30	226
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

TK#5553

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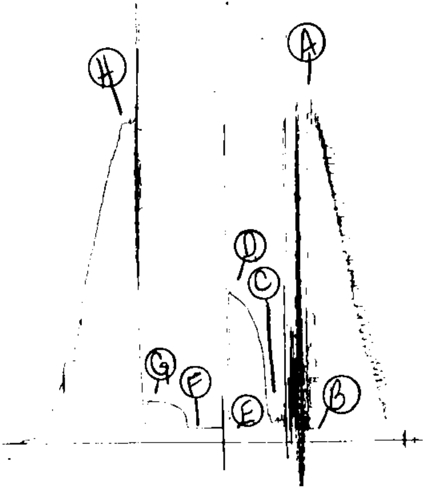

Company Raymond Oil Company , Inc. Lease & Well No. Hullman #4

Elevation 1813 Kelly Bushing Formation Arbuckle Effective Pay ----- Ft. Ticket No. 5553

Date 3/20/80 Sec. 5 Twp. 19S Range 12W County Barton State Kansas

Test Approved by R. E. Rowland Western Representative Roger Lisenby

Formation Test No. 4 Interval Tested from 3372 ft. to 3380 ft. Total Depth 3380 ft.

Packer Depth 3367 ft. Size 6 3/4 in. Packer Depth 3372 ft. Size 6 3/4 in.

Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3374 ft. Recorder Number 969 Cap. 4200

Bottom Recorder Depth (Outside) 3377 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth == ft. Recorder Number = Cap. =

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length - I. D. - in.

Mud Type starch Viscosity 40 Weight Pipe Length 918 I. D. 3.4 in.

Weight 10.0 Water Loss 16.0 cc. Drill Pipe Length 2433 I. D. 3.8 in.

Chlorides 80,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make - Serial Number - Anchor Length 8 ft. Size 5½ in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Weak blow for five minutes.Tool slid four feet;bled pressure- no blow. Flushed tool-no blow-first opening -no blow second opening-flushed tool, still no blow.

Recovered ft. of

Recovered 90 ft. of oil cut mud (total)

Recovered ft. of

Recovered 30 ft. of 98% mud;2% oil

Recovered 60 ft. of 85% mud;15% oil (no water)

Remarks: Lost fifteen feet mud when tool slid;showed plugging on first opening. Showed no plugging on second opening.

Time Set Packer(s) 9:20 ~~A.M.~~ P.M. Time Started Off Bottom 11:23 ~~A.M.~~ P.M. Maximum Temperature 134°

Initial Hydrostatic Pressure			(A) 1805 P.S.I.			
Initial Flow Period	Minutes 30	(B) Plugging action P.S.I.	to	(C) 105 P.S.I.		
Initial Closed In Period	Minutes 30	(D) 825 P.S.I.				
Final Flow Period	Minutes 30	(E) 129 P.S.I.	to	(F) 75 P.S.I.		
Final Closed In Period	Minutes 30	(G) 226 P.S.I.				
Final Hydrostatic Pressure			(H) 1756 P.S.I.			

WESTERN TESTING CO., INC.
Pressure Data

Date 3/20/80 Test Ticket No. 5553

Recorder No. 1051 Capacity 4250 Location 3377 Ft.

Clock No. -- Elevation 1813 Well Temperature 134 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1805 P.S.I.		Open Tool	9:20P M	
B	First Initial Flow Pressure	Plugging action P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	105 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	825 P.S.I.		Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	129 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	75 P.S.I.				
G	Final Closed-in Pressure	226 P.S.I.				
H	Final Hydrostatic Mud	1756 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: 6 Inc.	Breakdown: 10 Inc.	Breakdown: 6 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 0 Min.	final inc. of 0 Min.	final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	PLUGGING ACTION	0	105	0	129 flushed tool	0	75
P 2 5	PLUGGING ACTION	3	375	5	75	3	131
P 3 10	PLUGGING ACTION	6	528	10	75	6	176
P 4 15	PLUGGING ACTION	9	614	15	75	9	196
P 5 20	PLUGGING ACTION	12	663	20	75	12	204
P 6 25	PLUGGING ACTION	15	704	25	75	15	213
P 7 30	105	18	744	30	75	18	219
P 8		21	770			21	224
P 9		24	787			24	224
P10		27	804			27	224
P11		30	825			30	226
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 5554

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation 1813 KB Formation Arbuckle Eff. Pay — Ft.

District Great Bend Date 3-21-80 Customer Order No. —

COMPANY NAME Raymond Oil Company Inc.

ADDRESS 200 West Douglas Suite 800 Wichita KS 67202

LEASE AND WELL NO. Hullman # 4 OF COUNTY Barton STATE KS Sec. 5 Twp. 19 Rge. 12 OF

Mail Invoice To Same (Co. Name / Address) No. Copies Requested 5

Mail Charts To Same (Address) No. Copies Requested 5

Formation Test No. 5 Interval Tested from 3372 ft. to 3390 ft. Total Depth 3390 ft.

Packer Depth 3367 ft. Size 6 3/4 in. Packer Depth 3372 ft. Size 6 3/4 in.

Packer Depth — ft. Size — in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3381 ft. Recorder Number 969 Cap. 4200

Bottom Recorder Depth (Outside) 3384 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Duke Rig #2 Drill Collar Length — I. D. — in.

Mud Type Starch Viscosity 40 Weight Pipe Length 918 I. D. 3.4 in.

Weight 10.0 Water Loss 16.0 cc. Drill Pipe Length 2437 I. D. 3.8 in.

Chlorides 80,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make — Serial Number — Anchor Length 14 ft. Size 5 1/2 in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Weak Blow Died in 18 min - Flush Tool - Weak Blow For 4 min - First Opening
Weak Blow Died in 7 min - Flush Tool - Weak Blow For 6 min On second open (A)

Recovered 80 ft. of Oil Cut Mud 70% Mud 30% Oil (No water) (Died)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s)	9:25 A.M.	Time Started Off Bottom	12:12 P.M.	Maximum Temperature	124	
Initial Hydrostatic Pressure		(A)	1867	P.S.I.		
Initial Flow Period	Minutes 45	(B)	107	P.S.I. to (C)	96	P.S.I.
Initial Closed In Period	Minutes 60	(D)	750	P.S.I.		
Final Flow Period	Minutes 30	(E)	129	P.S.I. to (F)	107	P.S.I.
Final Closed In Period	Minutes 30	(G)	569	P.S.I.		
Final Hydrostatic Pressure		(H)	1803	P.S.I.		

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [signature] Signature of Customer or his authorized representative

Western Representative Roger Lisenby Thank You

FIELD INVOICE

Open Hole Test	$ 500.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$
TOTAL	$ 500.00

WESTERN TESTING CO., INC.
Pressure Data

Date 3-21-80 Test Ticket No. 5554

Recorder No. 969 Capacity 4200 Location 3381 Ft

Clock No. Elevation 1813 K.B. Well Temperature 124 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1905 P.S.I.		Open Tool	9:25 A M	
B	First Initial Flow Pressure	102 P.S.I.		First Flow Pressure	45 Mins.	45 Mins
C	First Final Flow Pressure	74 P.S.I.		Initial Closed-in Pressure	60 Mins.	63 Mins
D	Initial Closed-in Pressure	720 P.S.I.		Second Flow Pressure	30 Mins.	30 Mins
E	Second Initial Flow Pressure	108 P.S.I.		Final Closed-in Pressure	30 Mins.	33 Mins
F	Second Final Flow Pressure	81 P.S.I.				
G	Final Closed-in Pressure	584 P.S.I.				
H	Final Hydrostatic Mud	1863 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	102
P 2	5	77
P 3	10	73
P 4	15	73
P 5	20	Flushed Tool 87
P 6	25	79
P 7	30	76
P 8	35	74
P 9	40	74
P10	45	74
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	74
3	122
6	235
9	350
12	438
15	498
18	539
21	575
24	596
27	620
30	641
33	657
36	676
39	690
42	702
45	717
48	729
51	739
54	751
57	760
60	764
63	770

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

Point Minutes	Press.
0	108
5	87
10	Flushed Tool
15	87
20	83
25	81
30	81
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	87
3	112
6	210
9	317
12	387
15	441
18	482
21	512
24	532
27	555
30	575
33	584
36	
39	
42	
45	
48	
51	
54	
57	
60	

WTC - 4

TK#5554
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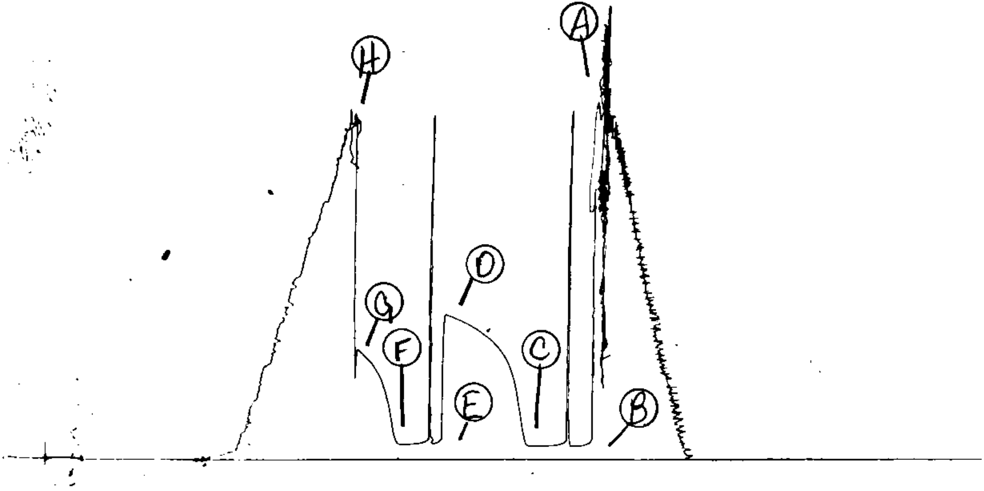

Company Raymond Oil Company, Inc. Lease & Well No. Hullman #4

Elevation 1813 Kelly Bushing Formation Arbuckle Effective Pay ----- Ft. Ticket No. 5554

Date 3/21/80 Sec. 5 Twp. 19S Range 12W County Barton State Kansas

Test Approved by R. E. Rowland Western Representative Roger Lisenby

Formation Test No. 5 Interval Tested from 3372 ft. to 3390 ft. Total Depth 3390 ft.

Packer Depth	3367 ft. Size 6 3/4 in.	Packer Depth	3372 ft. Size 6 3/4 in.
Packer Depth	- ft. Size - in.	Packer Depth	- ft. Size - in.
Depth of Selective Zone Set	-		
Top Recorder Depth (Inside)	3381 ft.	Recorder Number	969 Cap. 4200
Bottom Recorder Depth (Outside)	3384 ft.	Recorder Number	1051 Cap. 4250
Below Straddle Recorder Depth	- ft.	Recorder Number	- Cap. -
Drilling Contractor	Duke Drilling Rig #2	Drill Collar Length	- I. D. - in.
Mud Type	starch Viscosity 40	Weight Pipe Length	918 I. D. 3.4 in.
Weight	10.0 Water Loss 16.0 cc.	Drill Pipe Length	2437 I. D. 3.8 in.
Chlorides	80,000 P.P.M.	Test Tool Length	21 ft. Tool Size 4 3/4 in.
Jars: Make	-- Serial Number -	Anchor Length	14 ft. Size 5½ in.
Did Well Flow?	No Reversed Out No	Surface Choke Size	3/4 in. Bottom Choke Size 3/4 in.
		Main Hole Size	7 7/8 in. Tool Joint Size 4½XH in.

Blow: Weak blow;died in eighteen minutes;flushed tool;weak blow for four minutes-first opening, weak blow, died in seven minutes-flushed tool, weak blow for six minutes, died on second opening.

Recovered ft. of

Recovered 80 ft. of oil cut mud (70% mud;30% oil) (no water)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 9:25 ~~A.M.~~ ~~P.M.~~ Time Started Off Bottom 12:12 ~~A.M.~~ P.M. Maximum Temperature 124°

Initial Hydrostatic Pressure		(A) 1905	P.S.I.	
Initial Flow Period	Minutes 45	(B) 102	P.S.I. to (C) 74	P.S.I.
Initial Closed In Period	Minutes 63	(D) 770	P.S.I.	
Final Flow Period	Minutes 30	(E) 108	P.S.I. to (F) 81	P.S.I.
Final Closed In Period	Minutes 33	(G) 584	P.S.I.	
Final Hydrostatic Pressure		(H) 1863	P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 3/21/80 Test Ticket No. 5554

Recorder No. 969 Capacity 4200 Location 3381 Ft.

Clock No. ------ Elevation 1813 Kelly Bushing Well Temperature 124 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1905	P.S.I.
B	First Initial Flow Pressure	102	P.S.I.
C	First Final Flow Pressure	74	P.S.I.
D	Initial Closed-in Pressure	770	P.S.I.
E	Second Initial Flow Pressure	108	P.S.I.
F	Second Final Flow Pressure	81	P.S.I.
G	Final Closed-in Pressure	584	P.S.I.
H	Final Hydrostatic Mud	1863	P.S.I.

	Time Given	Time Computed
Open Tool	9:25A M	
First Flow Pressure	45 Mins.	45 Mins.
Initial Closed-in Pressure	60 Mins.	63 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	30 Mins.	33 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	102
P 2	5	77
P 3	10	73
P 4	15	73
P 5	20	flushed tool 87
P 6	25	79
P 7	30	76
P 8	35	74
P 9	40	74
P10	45	74
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	74
	3	122
	6	235
	9	350
	12	438
	15	498
	18	539
	21	575
	24	596
	27	620
	30	641
	33	657
	36	676
	39	690
	42	702
	45	717
	48	729
	51	739
	54	751
	57	760
	60	764
	63	770

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

Point	Minutes	Press.
	0	108
	5	87
	10	flushed tool
	15	87
	20	83
	25	81
	30	81

Final Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	87
	3	112
	6	210
	9	317
	12	387
	15	441
	18	482
	21	512
	24	532
	27	555
	30	575
	33	584