



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 5736

P. O. BOX 1599 WICHITA, KANSAS 67201

Elevation 1853 Gk Formation Indian Cave Eff. Pay Ft.

District Peatt Date 4-18-80 Customer Order No.
COMPANY NAME Raymond City Co., Inc.
ADDRESS One Main St - Suite 900
LEASE AND WELL NO Hazelton and Co COUNTY Barber STATE Kansas Sec 32 Twp 30S Rge 12W
Mail Invoice To Samuel Hazelton Land Company #1 No. Copies Requested 1
Mail Charts To Same No. Copies Requested 1

Formation Test No 1 Interval Tested from 2792 ft. to 2850 ft. Total Depth 2850 ft.
Packer Depth 2787 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 2792 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 2794 ft. Recorder Number 2606 Cap 4150
Bottom Recorder Depth (Outside) 2797 ft. Recorder Number 4332 Cap 4200
Below Straddle Recorder Depth - ft. Recorder Number - Cap -
Drilling Contractor Beant Drilling Co Rig 2 Drill Collar Length 343 I. D. 2 1/4 in.
Mud Type Starch Viscosity 35 Weight Pipe Length 310 I. D. 2 1/2 in.
Weight 9.5 Water Loss 10.8 cc. Drill Pipe Length 2160 I. D. 3.8 in.
Chlorides 80,000 P.P.M. Test Tool Length 20 ft. Tool Size 5200 in.
Jars: Make - Serial Number - Anchor Length 58 ft. Size 5 1/2 + 0.431
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 FH in.

Blow: Strong blow in 100 min on initial flow period
Strong blow on final flow - no gas to slip

Recovered 460 ft. of muddy water
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks:

on location 9:AM off 5:00 P.M
Time Set Packer(s) 12:30 AM Time Started Off Bottom 2:30 PM Maximum Temperature
Initial Hydrostatic Pressure (A) 1475 P.S.I.
Initial Flow Period Minutes 30 (B) 145 P.S.I. to (C) 270 P.S.I.
Initial Closed In Period Minutes 30 (D) 883 P.S.I.
Final Flow Period Minutes 30 (E) 249 P.S.I. to (F) 260 P.S.I.
Final Closed In Period Minutes 30 (G) 935 P.S.I.
Final Hydrostatic Pressure (H) 1453 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.

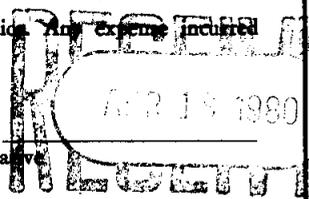
Test Approved By [Signature] Signature of Customer or his authorized representative

Western Representative [Signature] 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



Pressure Data

4-18-80

Test Ticket No. 5736

Order No. 2606

Capacity 4150

Location 2794

Core No. Elevation 1853 G.L.

Well Temperature

	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	1477	P.S.I.	12:30 AM	
First Initial Flow Pressure	147	P.S.I.	30 Mins	30
First Final Flow Pressure	Plug in 9'	P.S.I.	30 Mins	30
Initial Closed-in Pressure	878	P.S.I.	30 Mins	25
Second Initial Flow Pressure	235	P.S.I.	30 Mins	33
Second Final Flow Pressure	251	P.S.I.		
Final Closed-in Pressure	856	P.S.I.		
Final Hydrostatic Mud	1464	P.S.I.		

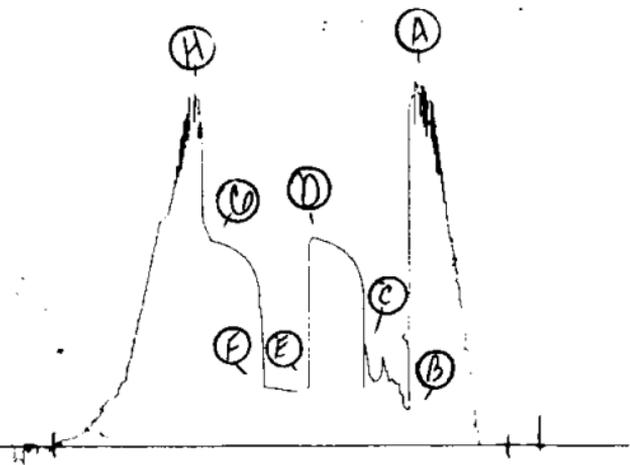
PRESSURE BREAKDOWN

<p>First Flow Pressure Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Initial Shut-In Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Second Flow Pressure Breakdown: <u>5</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Final Shut-In Breakdown: <u>11</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.</p>
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at s.	Press.	Point Minutes	Press.?	Point Minutes	Press.	Point Minutes	Press.
0	147	0	230?	0	235	0	251
5		3	700	5	235	3	568
10		6	752	10	237	6	698
15		9	789	15	242	9	754
20		12	810	20	247	12	785
25		15	831	25	251	15	806
30		18	844	30		18	823
35		21	854	35		21	837
40		24	863	40		24	848
45		27	873	45		27	854
50		30	878	50		30	860
55		33		55		33	865
60		36		60		36	
		39		65		39	
		42		70		42	
		45		75		45	
		48		80		48	
		51		85		51	
		54		90		54	
		57				57	
		60				60	

4600 40111

TKT #5736
I



Company Raymond Oil Co., Inc. Lease & Well No. Hazelton Land Company #1
 Elevation 1853 Ground Level Formation Indian Cav e Effective Pay - Ft. Ticket No. 5736
 Date 4-18-80 Sec. 32 Twp. 30S Range 12W County Barber State Kansas
 Test Approved by R.E. Rowland Western Representative Rodney Tritt

Formation Test No. I Interval Tested from 2792 ft. to 2850 ft. Total Depth 2850 ft.
 Packer Depth 2787 ft. Size 6 3/4 in. Packer Depth -- ft. Size - in.
 Packer Depth 2792 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2794 ft. Recorder Number 2606 Cap. 4150
 Bottom Recorder Depth (Outside) 2797 ft. Recorder Number 4332 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Brandt Drilling Co., (#2) Drill Collar Length 343 I. D. 2 1/4 in.
 Mud Type Starch Viscosity 35 Weight Pipe Length 310 I. D. 2 1/2 in.
 Weight 9.5 Water Loss 10.8 cc. Drill Pipe Length 2160 I. D. 3.8 in.
 Chlorides 80,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 58 ft. Size 5 1/2 + D.P. 31
 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 FH in.

Blow: Strong blow in 10 minutes on initial flow period. Strong blow on final flow period
No Gas to surface.

Recovered 460 ft. of muddy water
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 12:30 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 2:30 ~~P.M.~~ ^{A.M.} Maximum Temperature
 Initial Hydrostatic Pressure 1477 P.S.I. (A)
 Initial Flow Period 30 Minutes (B) 147 P.S.I. to (C) Plugging Action P.S.I.
 Initial Closed In Period 30 Minutes (D) 878 P.S.I.
 Final Flow Period 30 Minutes (E) 235 P.S.I. to (F) 251 P.S.I.
 Final Closed In Period 30 Minutes (G) 856 P.S.I.
 Final Hydrostatic Pressure 1464 P.S.I. (H)

WESTERN TESTING CO., INC.
Pressure Data

Date 4-18-80 Test Ticket No. 5736
 Recorder No. 2606 Capacity 4150 Location 2794 Ft.
 Clock No. - Elevation 1853 Ground Level Well Temperature - °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1477</u> P.S.I.	Open Tool	<u>12:30A.</u> M	
B First Initial Flow Pressure	<u>147</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>Plugging Action</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>878</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>25</u> Mins.
E Second Initial Flow Pressure	<u>235</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
F Second Final Flow Pressure	<u>251</u> P.S.I.			
G Final Closed-in Pressure	<u>856</u> P.S.I.			
H Final Hydrostatic Mud	<u>1464</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>5</u> Inc.		Breakdown: <u>11</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point	Press.	Point	Press.	Point	Press.	Point	Press.
Mins.		Minutes		Minutes		Minutes	
P 1 <u>0</u>	<u>147</u>	<u>0</u>	<u>230*</u>	<u>0</u>	<u>235</u>	<u>0</u>	<u>251</u>
P 2 <u>5</u>	<u>Plugging Action</u>	<u>3</u>	<u>700</u>	<u>5</u>	<u>235</u>	<u>3</u>	<u>568</u>
P 3 <u>10</u>	<u>Plugging Action</u>	<u>6</u>	<u>752</u>	<u>10</u>	<u>237</u>	<u>6</u>	<u>698</u>
P 4 <u>15</u>	<u>Plugging Action</u>	<u>9</u>	<u>789</u>	<u>15</u>	<u>242</u>	<u>9</u>	<u>754</u>
P 5 <u>20</u>	<u>Plugging Action</u>	<u>12</u>	<u>810</u>	<u>20</u>	<u>247</u>	<u>12</u>	<u>785</u>
P 6 <u>25</u>	<u>Plugging Action</u>	<u>15</u>	<u>831</u>	<u>25</u>	<u>251</u>	<u>15</u>	<u>806</u>
P 7 <u>30</u>	<u>Plugging Action</u>	<u>18</u>	<u>844</u>			<u>18</u>	<u>823</u>
P 8		<u>21</u>	<u>854</u>			<u>21</u>	<u>837</u>
P 9		<u>24</u>	<u>863</u>			<u>24</u>	<u>848</u>
P10		<u>27</u>	<u>873</u>			<u>27</u>	<u>854</u>
P11		<u>30</u>	<u>878</u>			<u>30</u>	<u>860</u>
P12						<u>33</u>	<u>865</u>
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

WTC - 4 * Questionable because of plugging action



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 5737

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

Elevation 1853 G/L Formation TACK10 Eff. Pay Ft.

District PEATH Date 4-19-80 Customer Order No.

COMPANY NAME Raymond Oil Co. Inc

ADDRESS One Main Plaza Suite 900 Wichita

LEASE AND WELL NO Hazelton Land Co COUNTY Barber STATE Kansas Sec 32 Twp 30 S Rge 12 W

Mail Invoice To Same Hazelton Land Co #1 No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg

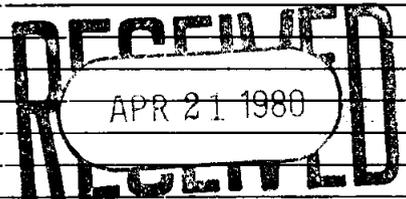
Formation Test No 2 Interval Tested from 2983 ft to 3010 ft Total Depth 3010 ft
Packer Depth 2978 ft Size 6 3/4 in. Packer Depth - ft Size - in.
Packer Depth 2983 ft Size 6 3/4 in. Packer Depth - ft Size - in.
Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2987 ft Recorder Number 2606 Cap 4150
Bottom Recorder Depth (Outside) 2990 ft Recorder Number 4332 Cap 4200
Below Straddle Recorder Depth - ft Recorder Number - Cap -

Drilling Contractor Brandt Drilling Co Rig 2 Drill Collar Length 151 I. D. 2 1/4 in.
Mud Type Starch Viscosity 40 Weight Pipe Length 310 I. D. 2 1/2 in.
Weight 9.6 Water Loss 12 cc Drill Pipe Length 2502 I. D. 3.8 in.
Chlorides 80,000 P.P.M. Test Tool Length 20 ft Tool Size 5 1/2 in.
Jars: Make NO Serial Number - Anchor Length 27 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 7/8 in. Tool Joint Size 4 1/2 in.

Blow: fair blow decreasing to weak blow on initial flow period
Weak to very weak - to dead in 20 minutes on gural

Recovered 75 ft of drilling mud
Recovered - ft of
Recovered - ft of
Recovered - ft of
Recovered - ft of
Remarks:



on location 6:30 AM off 1:00 PM 4-19-80
Time Set Packer(s) 9: AM A.M. Time Started Off Bottom 11:00 A.M. P.M. Maximum Temperature 126 f
Initial Hydrostatic Pressure (A) 1558 P.S.I.
Initial Flow Period Minutes 30 (B) 72 P.S.I. to (C) 72 P.S.I.
Initial Closed In Period Minutes 30 (D) 83 P.S.I.
Final Flow Period Minutes 30 (E) 72 P.S.I. to (F) 72 P.S.I.
Final Closed In Period Minutes 30 (G) 72 P.S.I.
Final Hydrostatic Pressure (H) 1548 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 Timothy D. Mellman
Signature of Customer or his authorized representative

Western Representative Rod Jirt 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

Pressure Data

4-19-80

Test Ticket No. 5737

2606

Capacity 4150

Location 2987

Order No. _____ Elevation 1853 G.L. _____ Well Temperature 126 _____

Core No. _____ Pressure _____ P.S.I. _____ Time Given 9:00 AM _____ Time Computed _____

Item	Pressure	P.S.I.	Open Tool	Time Given	Time Computed
Initial Hydrostatic Mud	1556	P.S.I.		9:00 AM	
First Initial Flow Pressure	72	P.S.I.	First Flow Pressure	30 Mins	30 Mins
First Final Flow Pressure	72	P.S.I.	Initial Closed-in Pressure	30 Mins	24 Mins
Initial Closed-in Pressure	81	P.S.I.	Second Flow Pressure	30 Mins	30 Mins
Second Initial Flow Pressure	74	P.S.I.	Final Closed-in Pressure	30 Mins	30 Mins
Second Final Flow Pressure	74	P.S.I.			
Final Closed-in Pressure	79	P.S.I.			
Final Hydrostatic Mud	1539	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: 8 Inc. of 3 mins. and a final inc. of 0 Min.

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

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

Point Minutes	Press.						
0	72	0	72	0	74	0	74
5		3		5		3	
10		6		10		6	
15		9		15		9	
20		12		20		12	
25		15	72	25		15	
30	72	18	76	30	74	18	
35		21	79	35		21	
40		24	81	40		24	
45		27		45		27	74
50		30		50		30	79
55		33		55		33	
60		36		60		36	
		39		65		39	
		42		70		42	
		45		75		45	
		48		80		48	
		51		85		51	
		54		90		54	
		57				57	
		60				60	

2606 | DST #2

TK # 5737
I



Company Raymond Oil Company, Inc. Lease & Well No. Hazelton Land Co. #1
 Elevation 1853 Ground Level Formation Tarkio Effective Pay ---- Ft. Ticket No. 5737
 Date 4/19/80 Sec. 32 Twp. 30S Range 12W County Barber State Kansas

Test Approved by Timothy D. Hellman Western Representative Rod Tritt

Formation Test No. 2 Interval Tested from 2983 ft. to 3010 ft. Total Depth 3010 ft.
 Packer Depth 2978 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2983 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2987 ft. Recorder Number 2606 Cap. 4150
 Bottom Recorder Depth (Outside) 2990 ft. Recorder Number 4332 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Brandt Drilling Rig #2 Drill Collar Length 151 I. D. 2 1/4 in.
 Mud Type starch Viscosity 40 Weight Pipe Length 310 I. D. 2 1/2 in.
 Weight 9.6 Water Loss 12 cc. Drill Pipe Length 2502 I. D. 3.8 in.
 Chlorides 80,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.
 Jars: Make No Serial Number - Anchor Length 27 ft. Size 5 1/2 OD 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 FH in.

Blow: Fair blow decreasing to weak blow on initial flow period. Weak to very weak to dead in twenty minutes on final flow.

Recovered 75 ft. of drilling mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 9:00 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 11:00 ~~P.M.~~ ^{A.M.} Maximum Temperature 125°
 Initial Hydrostatic Pressure (A) 1556 P.S.I.
 Initial Flow Period Minutes 30 (B) 72 P.S.I. to (C) 72 P.S.I.
 Initial Closed In Period Minutes 24 (D) 81 P.S.I.
 Final Flow Period Minutes 30 (E) 74 P.S.I. to (F) 74 P.S.I.
 Final Closed In Period Minutes 30 (G) 79 P.S.I.
 Final Hydrostatic Pressure (H) 1539 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 4/19/80 Test Ticket No. 5737
 Recorder No. 2606 Capacity 4150 Location 2987 Ft.
 Clock No. ----- Elevation 1853 Ground Level Well Temperature 126 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1556 P.S.I.	Open Tool	9:00A M	
B First Initial Flow Pressure	72 P.S.I.	First Flow Pressure	30 Mins	30 Mins.
C First Final Flow Pressure	72 P.S.I.	Initial Closed-in Pressure	30 Mins	24 Mins.
D Initial Closed-in Pressure	81 P.S.I.	Second Flow Pressure	30 Mins	30 Mins.
E Second Initial Flow Pressure	74 P.S.I.	Final Closed-in Pressure	30 Mins	30 Mins.
F Second Final Flow Pressure	74 P.S.I.			
G Final Closed-in Pressure	79 P.S.I.			
H Final Hydrostatic Mud	1539 P.S.I.			

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	of		of		of		of	
	mins. and a		mins. and a		mins. and a		mins. and a	
	final inc. of		final inc. of		final inc. of		final inc. of	
	0 Min.		0 Min.		0 Min.		0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1 0	72	0	72	0	74	0	74	
P 2 5	72	3	72	5	74	3	74	
P 3 10	72	6	72	10	74	6	74	
P 4 15	72	9	72	15	74	9	74	
P 5 20	72	12	72	20	74	12	74	
P 6 25	72	15	72	25	74	15	74	
P 7 30	72	18	76	30	74	18	74	
P 8		21	79			21	74	
P 9		24	81			24	74	
P10						27	74	
P11						30	79	
P12								
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET NO 5739

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

Elevation Douglas Sand Formation 1853GL Eff. Pay Ft.

District PRATT Date 4-22-80 Customer Order No.

COMPANY NAME Raymond Oil Co

ADDRESS One Main Place, Suite 900 Wichita Ks.

LEASE AND WELL NO Hazelton Land Co #1 COUNTY Barber STATE KANSAS Sec 32 Twp 30s Rge 12 W

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

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 2 Interval Tested from 3777 ft. to 3830 ft. Total Depth 3830 ft.

Packer Depth 3772 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3777 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3780 ft. Recorder Number 2606 Cap. 4150

Bottom Recorder Depth (Outside) 3783 ft. Recorder Number 4332 Cap. 4200

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

Drilling Contractor Beandt Drilling Co Drill Collar Length 151 I. D. 2 1/4 in.

Mud Type Starch Viscosity 50 Weight Pipe Length 310 I. D. 2 1/2 in.

Weight 9.1 Water Loss 9.5 cc. Drill Pipe Length 3324 I. D. 3.0 in.

Chlorides 70,000 P.P.M. Test Tool Length 21 ft. Tool Size 5600 in.

Jars: Make NO Serial Number - Anchor Length 22 + 3100 ft. Size 5200 in.

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

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

Blow: Strong blow through out test - no gas to surface

Recovered 955 ft. of gas cut mud.

Recovered 630 ft. of water + gas cut mud.

Recovered 745 ft. of water - (gas + mud cut) 102,000 PPM

Recovered - ft. of

Recovered 2530 ft. of

Remarks 253

on location 10:15 AM 4-21-80 off P.M. 4:22-80

Time Set Packer(s) 7:15 A.M. P.M. Time Started Off Bottom 10:15 A.M. P.M. Maximum Temperature 118°F

Initial Hydrostatic Pressure (A) 2083 P.S.I.

Initial Flow Period Minutes 60 (B) 572 P.S.I. to (C) 779 P.S.I.

Initial Closed In Period Minutes 30 (D) 1537 P.S.I.

Final Flow Period Minutes 60 (E) 704 P.S.I. to (F) 987 P.S.I.

Final Closed In Period Minutes 30 (G) 1371 P.S.I.

Final Hydrostatic Pressure (H) 1978 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 [Signature] Thank you.

Test 1 + Test 2 Old Price Schedule

FIELD INVOICE

Open Hole Test \$550.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$15.00
Fluid Sampler \$
Extra Charts \$
TOTAL \$565.00

APR 25 1980

WESTERN TESTING CO., INC.

Pressure Data

Date 4-22-80 Test Ticket No. 5739
 Recorder No. 2606 Capacity 4150 Location 3980 Ft.
 Clock No. _____ Elevation 1853 42 Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2077</u>	P.S.I.	<u>7:15 A M</u>	
B First Initial Flow Pressure	<u>578</u>	P.S.I.	<u>60</u> Mins.	<u>55</u> Mins.
C First Final Flow Pressure	<u>780</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1536</u>	P.S.I.	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>906</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>992</u>	P.S.I.		
G Final Closed-in Pressure	<u>1371</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1968</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 11 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

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

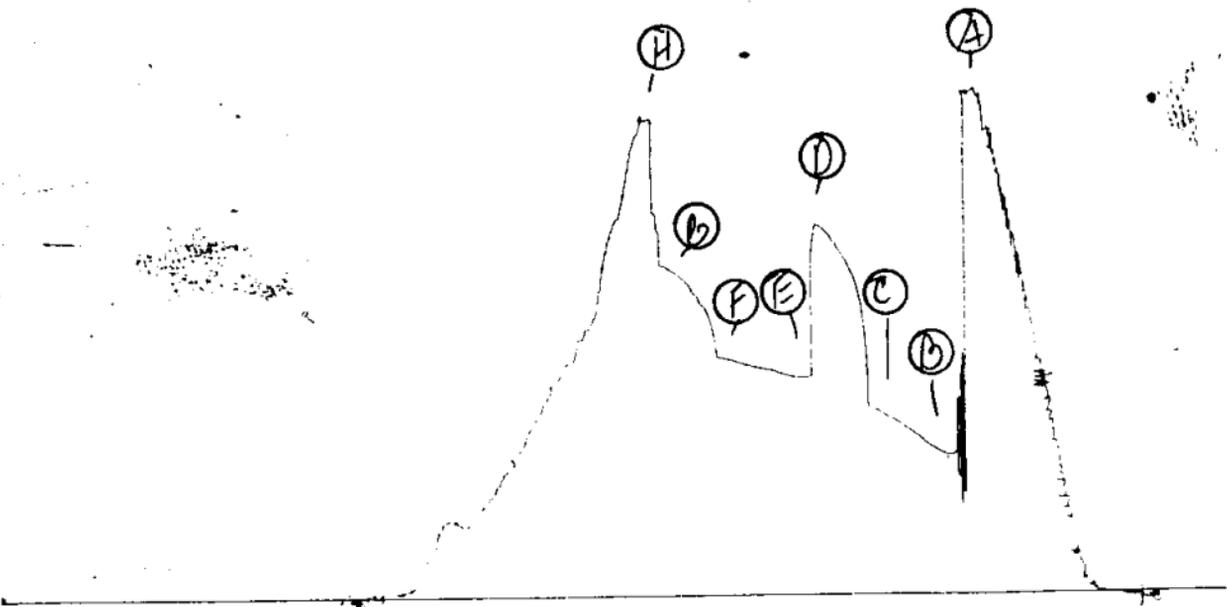
Second Flow Pressure
 Breakdown: 12 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 10 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	<u>0</u> <u>578</u>	<u>0</u> <u>780</u>	<u>0</u> <u>906</u>	<u>0</u> <u>992</u>			
P 2	<u>5</u> <u>578</u>	<u>3</u> <u>1106</u>	<u>5</u> <u>906</u>	<u>3</u> <u>1132</u>			
P 3	<u>10</u> <u>578</u>	<u>6</u> <u>1242</u>	<u>10</u> <u>906</u>	<u>6</u> <u>1188</u>			
P 4	<u>15</u> <u>593</u>	<u>9</u> <u>1319</u>	<u>15</u> <u>917</u>	<u>9</u> <u>1213</u>			
P 5	<u>20</u> <u>618</u>	<u>12</u> <u>1367</u>	<u>20</u> <u>929</u>	<u>12</u> <u>1248</u>			
P 6	<u>25</u> <u>647</u>	<u>15</u> <u>1408</u>	<u>25</u> <u>938</u>	<u>15</u> <u>1284</u>			
P 7	<u>30</u> <u>676</u>	<u>18</u> <u>1442</u>	<u>30</u> <u>944</u>	<u>18</u> <u>1311</u>			
P 8	<u>35</u> <u>697</u>	<u>21</u> <u>1469</u>	<u>35</u> <u>953</u>	<u>21</u> <u>1327</u>			
P 9	<u>40</u> <u>724</u>	<u>24</u> <u>1504</u>	<u>40</u> <u>964</u>	<u>24</u> <u>1344</u>			
P 10	<u>45</u> <u>742</u>	<u>27</u> <u>1525</u>	<u>45</u> <u>973</u>	<u>27</u> <u>1356</u>			
P 11	<u>50</u> <u>763</u>	<u>30</u> <u>1536</u>	<u>50</u> <u>984</u>	<u>30</u> <u>1371</u>			
P 12	<u>55</u> <u>780</u>	<u>33</u> _____	<u>55</u> <u>992</u>	<u>33</u> _____			
P 13	<u>60</u> _____	<u>36</u> _____	<u>60</u> _____	<u>36</u> _____			
P 14	_____	<u>39</u> _____	<u>65</u> _____	<u>39</u> _____			
P 15	_____	<u>42</u> _____	<u>70</u> _____	<u>42</u> _____			
P 16	_____	<u>45</u> _____	<u>75</u> _____	<u>45</u> _____			
P 17	_____	<u>48</u> _____	<u>80</u> _____	<u>48</u> _____			
P 18	_____	<u>51</u> _____	<u>85</u> _____	<u>51</u> _____			
P 19	_____	<u>54</u> _____	<u>90</u> _____	<u>54</u> _____			
P 20	_____	<u>57</u> _____	_____	<u>57</u> _____			
		<u>60</u> _____	_____	<u>60</u> _____			

2606 DST #3

TKT # 5739
I



Company Raymond Oil Co., Inc. Lease & Well No. Hazelton Land Co. #1
 Elevation 1853 Ground Level Formation Douglas Sand Effective Pay - Ft. Ticket No. 5739
 Date 4-22-80 Sec. 32 Twp. 30S Range 12W County Barber State Kansas
 Test Approved by R.E. Rowland Western Representative Rod Tritt

Formation Test No. 3 Interval Tested from 3777 ft. to 3830 ft. Total Depth 3830 ft.
 Packer Depth 3772 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3777 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3780 ft. Recorder Number 2606 Cap. 4150
 Bottom Recorder Depth (Outside) 3783 ft. Recorder Number 4332 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Brandt Drilling Co. Drill Collar Length 151 I. D. 2 1/4 in.
 Mud Type Starch Viscosity 50 Weight Pipe Length 310 I. D. 2 1/2 in.
 Weight 9.1 Water Loss 9.5 cc. Drill Pipe Length 3326 I. D. 3.8 in.
 Chlorides 70,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
 Jars: Make No Serial Number - Anchor Length 22+31 D.P. ft. Size 5 1/2 OD in.
 Did Well Flow? No Reversed Out - 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 FH in.

Blow: Strong blow throughout test. No gas to surface

Recovered 955 ft. of gas cut mud
 Recovered 630 ft. of water and gas cut mud
 Recovered 945 ft. of water (gas and mud cut) Chlorides: 102,000 PPM
 Recovered ft. of total fluid
 Recovered 2530 ft. of total fluid

Remarks: _____

Time Set Packer(s) 7:15 ~~==~~ A.M. ~~P.M.~~ Time Started Off Bottom 10:15 A.M. ~~P.M.~~ Maximum Temperature 118°
 Initial Hydrostatic Pressure (A) 2077 P.S.I.
 Initial Flow Period Minutes 55 (B) 578 P.S.I. to (C) 780 P.S.I.
 Initial Closed In Period Minutes 30 (D) 1536 P.S.I.
 Final Flow Period Minutes 55 (E) 906 P.S.I. to (F) 992 P.S.I.
 Final Closed In Period Minutes 30 (G) 1371 P.S.I.
 Final Hydrostatic Pressure (H) 1968 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 4-22-80 Test Ticket No. 5739
 Recorder No. 2606 Capacity 4150 Location 3780 Ft.
 Clock No. - Elevation 1853 Ground Level Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2077</u> P.S.I.	Open Tool	<u>7:15A.</u> M	
B First Initial Flow Pressure	<u>578</u> P.S.I.	First Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
C First Final Flow Pressure	<u>780</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1536</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>906</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>992</u> P.S.I.			
G Final Closed-in Pressure	<u>1371</u> P.S.I.			
H Final Hydrostatic Mud	<u>1968</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 11 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 10 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: 10 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 <u>0</u>	<u>578</u>	<u>0</u>	<u>780</u>	<u>0</u>	<u>906</u>	<u>0</u>	<u>992</u>
P 2 <u>5</u>	<u>578</u>	<u>3</u>	<u>1106</u>	<u>5</u>	<u>906</u>	<u>3</u>	<u>1132</u>
P 3 <u>10</u>	<u>578</u>	<u>6</u>	<u>1242</u>	<u>10</u>	<u>906</u>	<u>6</u>	<u>1188</u>
P 4 <u>15</u>	<u>593</u>	<u>9</u>	<u>1319</u>	<u>15</u>	<u>917</u>	<u>9</u>	<u>1213</u>
P 5 <u>20</u>	<u>618</u>	<u>12</u>	<u>1367</u>	<u>20</u>	<u>929</u>	<u>12</u>	<u>1248</u>
P 6 <u>25</u>	<u>647</u>	<u>15</u>	<u>1408</u>	<u>25</u>	<u>938</u>	<u>15</u>	<u>1284</u>
P 7 <u>30</u>	<u>676</u>	<u>18</u>	<u>1442</u>	<u>30</u>	<u>944</u>	<u>18</u>	<u>1311</u>
P 8 <u>35</u>	<u>697</u>	<u>21</u>	<u>1469</u>	<u>35</u>	<u>953</u>	<u>21</u>	<u>1327</u>
P 9 <u>40</u>	<u>724</u>	<u>24</u>	<u>1504</u>	<u>40</u>	<u>964</u>	<u>24</u>	<u>1344</u>
P10 <u>45</u>	<u>742</u>	<u>27</u>	<u>1525</u>	<u>45</u>	<u>973</u>	<u>27</u>	<u>1356</u>
P11 <u>50</u>	<u>763</u>	<u>30</u>	<u>1536</u>	<u>50</u>	<u>984</u>	<u>30</u>	<u>1371</u>
P12 <u>55</u>	<u>780</u>			<u>55</u>	<u>992</u>		
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET NO 5740

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

Elevation 1853 GL Formation Douglas Sand Eff. Pay Ft.

District Pratt Date 4-23-80 Customer Order No.

COMPANY NAME Raymond Oil Co. Inc.

ADDRESS One Main Place, Suite 900 Wichita, Ks.

LEASE AND WELL NO Hazelton Land Co COUNTY Barber STATE Kansas Sec. 32 Twp. 30 S. Rge. 12 W

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

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 4 Interval Tested from 3861 ft. to 3910 ft. Total Depth 3910 ft. Packer Depth 3856 ft. Size 6 3/4 in. Packer Depth 3861 ft. Size 6 3/4 in.

Top Recorder Depth (Inside) 3865 ft. Recorder Number 2606 Cap. 4150 Bottom Recorder Depth (Outside) 3868 ft. Recorder Number 4332 Cap. 4200 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Beaudt Drilling Co. Inc. Mud Type Starch Viscosity - Weight - Water Loss - cc. Chlorides 20,000 P.P.M. Jars: Make NO Serial Number - Did Well Flow? NO Reversed Out NO Drill Collar Length 15-1 I. D. 2 1/4 in. Weight Pipe Length 310 I. D. 2 1/2 in. Drill Pipe Length 3410 I. D. 3.8 in. Test Tool Length 21 ft. Tool Size 5 1/2 in. Anchor Length 49-18+31 in. Size 5 1/2 in. Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in. Main Hole Size 7/8 in. Tool Joint Size 4 1/2 in.

Blow: misrun hit bridge 100 feet off bottom

Recovered ft. of Remarks:

Time Set Packer(s) 4:15 A.M. Time Started Off Bottom 4:45 A.M. Maximum Temperature Initial Hydrostatic Pressure (A) P.S.I. Initial Flow Period (B) Minutes P.S.I. to (C) P.S.I. Initial Closed In Period (D) Minutes P.S.I. Final Flow Period (E) Minutes P.S.I. to (F) P.S.I. Final Closed In Period (G) Minutes P.S.I. Final Hydrostatic Pressure (H) 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

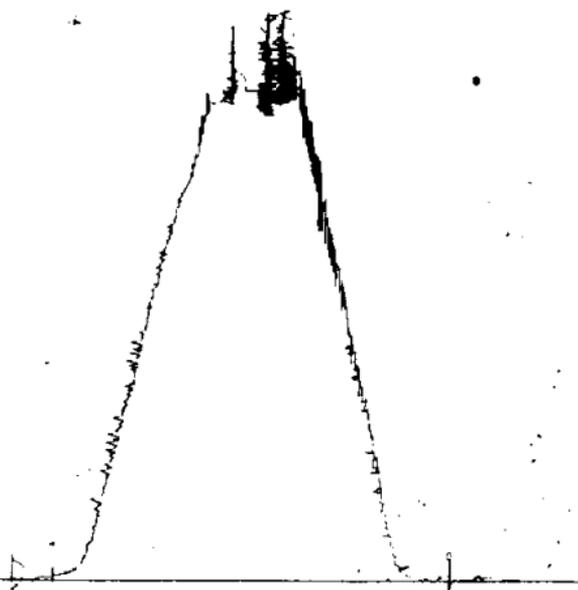
Western Representative [Signature] [Signature]

FIELD INVOICE

Open Hole Test 300.00 Misrun 300.00 Straddle Test \$ Jars \$ Selective Zone \$ Safety Joint \$ Standby \$ Evaluation \$ Extra Packer \$ 20 Circ. Sub. 40 Mileage Fluid Sampler Extra Charts \$

TOTAL \$ 600.00

TKL # 5740
I



Company Raymond Oil Company, Inc. Lease & Well No. Hazelton Land Co. #1
 Elevation 1853 Ground Level Formation Douglas Sand Effective Pay -- Ft. Ticket No. 5740
 Date 4/23/80 Sec. 32 Twp. 30S Range 12W County Barber State Kansas
 Test Approved by R. E. Rowland Western Representative Rod Tritt

Formation Test No. 4 Interval Tested from 3861 ft. to 3910 ft. Total Depth 3910 ft.
 Packer Depth 3856 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3861 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3865 ft. Recorder Number 2606 Cap. 4150
 Bottom Recorder Depth (Outside) 3868 ft. Recorder Number 4332 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Brandt Drilling Co. Rig #2 Drill Collar Length 151 I. D. 2 1/2 in.
 Mud Type starch Viscosity _____ Weight Pipe Length 310 I. D. 2 1/2 in.
 Weight _____ Water Loss _____ cc. Drill Pipe Length 3410 I. D. 3.8 in.
 Chlorides 70,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
 Jars: Make No Serial Number - Anchor Length 49-18 +31DP ft. Size 5 1/2 OD+DP 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: MISRUN HIT BRIDGE ONE HUNDRED FEET OFF BOTTOM

Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____ MISRUN
 Recovered _____ ft. of _____

Remarks: _____

NO PRESSURES AVAILABLE

Time Set Packer(s) 4:15 A.M. Time Started Off Bottom 4:45 P.M. Maximum Temperature -
 Initial Hydrostatic Pressure _____ (A) _____ P.S.I.
 Initial Flow Period _____ Minutes _____ (B) _____ P.S.I. to (C) _____ P.S.I.
 Initial Closed In Period _____ Minutes _____ (D) _____ P.S.I.
 Final Flow Period _____ Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.
 Final Closed In Period _____ Minutes _____ (G) _____ P.S.I.
 Final Hydrostatic Pressure _____ (H) _____ P.S.I.



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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 5741

Elevation 1853 G.L. Formation Douglas 2200 Eff. Pay Ft.

District PRAT Date 4-23-80 Customer Order No.

COMPANY NAME Raymond Oil Co. Inc.

ADDRESS One Main Street, Suite 900 Wichita Ks 32-300-12W

LEASE AND WELL NO Nazellon Land Co #1 COUNTY Barber STATE Kansas Sec. 32 Twp. 30 Rge 12

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

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

Formation Test No. 5 Interval Tested from 3861 ft. to 3910 ft. Total Depth 3910 ft.
Packer Depth 3876 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3861 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 3865 ft. Recorder Number 2606 Cap. 4150
Bottom Recorder Depth (Outside) 3868 ft. Recorder Number 4332 Cap. 4200
Below Straddle Recorder Depth ft. Recorder Number Cap.

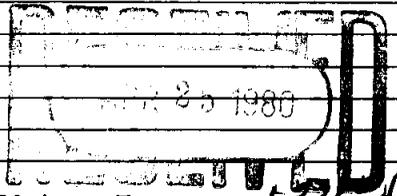
Drilling Contractor Brand + Denting Co. Inc #2 Drill Collar Length 151 I. D. 2 1/4 in.
Mud Type Starck Viscosity 45 Weight Pipe Length 311 I. D. 2 1/4 in.
Weight 7.8 Water Loss 10.4 cc. Drill Pipe Length 3381 I. D. 3.8 in.
Chlorides 55,000 P.P.M. Test Tool Length 22 ft. Tool Size 5400 in.
Jars: Make WTC Serial Number 408 Anchor Length 28 + 31 DP ft. Size 5400 + D.P.
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 FW in.

Blow: fair blow decreasing to very weak blow on initial flow
very weak blow on final flow periods

Recovered 60 ft. of thin drilling mud (very slightly oil cut)
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks: On location 10:30 Am off.

Time Set Packer(s) <u>4:55</u> <u>AM</u> P.M.	Time Started Off Bottom <u>7:55</u> <u>AM</u> P.M.	Maximum Temperature <u>121</u> <u>F</u>
Initial Hydrostatic Pressure <u> </u> (A) <u>2114</u> P.S.I.	Initial Flow Period <u>60</u> (B) <u>104</u> P.S.I. to (C) <u>72</u> P.S.I.	
Initial Closed In Period <u>30</u> (D) <u>104</u> P.S.I.	Final Flow Period <u>60</u> (E) <u>72</u> P.S.I. to (F) <u>72</u> P.S.I.	
Final Closed In Period <u>30</u> (G) <u>104</u> P.S.I.	Final Hydrostatic Pressure <u> </u> (H) <u>2083</u> 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 [Signature] Thank you

FIELD INVOICE

Open Hole Test	\$ <u>550.00</u>
Misrun	\$ <u> </u>
Straddle Test	\$ <u> </u>
Jars	\$ <u>300.00</u>
Selective Zone	\$ <u> </u>
Safety Joint	\$ <u>50.00</u>
Standby	\$ <u> </u>
Evaluation	\$ <u> </u>
Extra Packer	\$ <u> </u>
Circ. Sub. 9 Mileage	\$ <u> </u>
Fluid Sampler	\$ <u> </u>
Extra Charts	\$ <u> </u>
TOTAL	\$ <u>900.00</u>

40 miles
[Signature]
[Signature]

WESTERN TESTING CO., INC.

Pressure Data

Date 4-23-80 Recorder No. 2606 Capacity 4150 Location 3865 Ft.
 Clock No. _____ Elevation 1852 G L Well Temperature 124 °F

Test Ticket No. 5741

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2134</u> P.S.I.	Open Tool	<u>4:55 P M</u>	
B First Initial Flow Pressure	<u>79</u> P.S.I.	First Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
C First Final Flow Pressure	<u>71</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>24</u> Mins.
D Initial Closed-in Pressure	<u>92</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>73</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>69</u> P.S.I.			
G Final Closed-in Pressure	<u>96</u> P.S.I.			
H Final Hydrostatic Mud	<u>2077</u> P.S.I.			

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 8 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

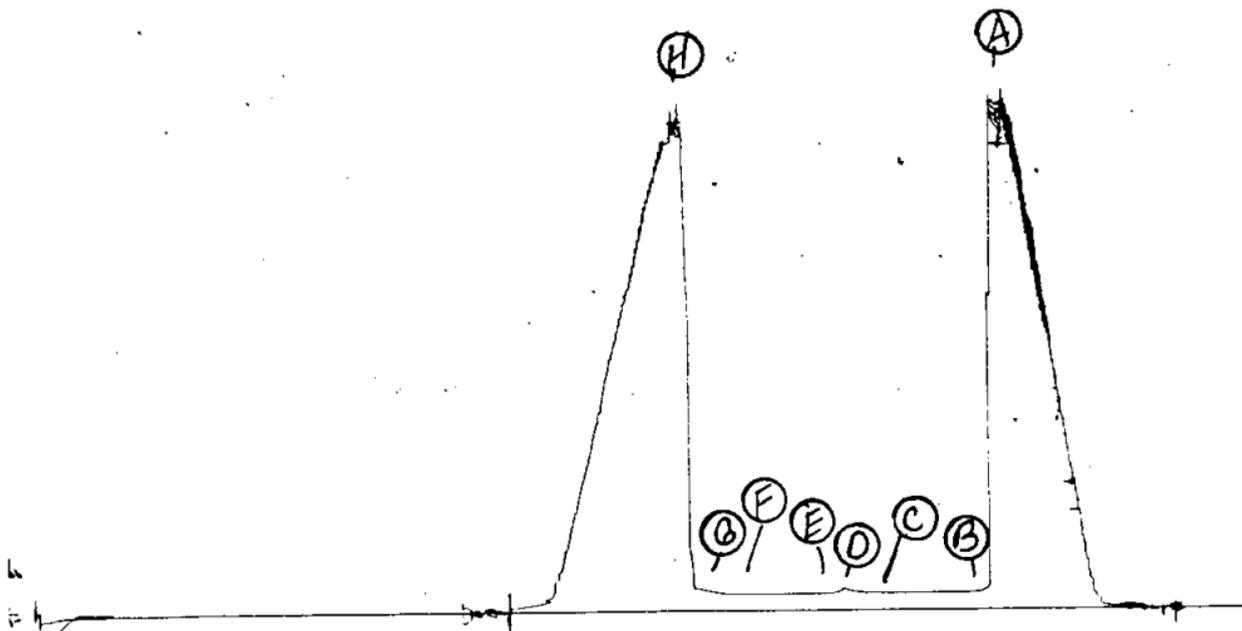
Second Flow Pressure
 Breakdown: 12 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 11 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 0	<u>79</u>	0	<u>71</u>	0	<u>73</u>	0	<u>69</u>
P 2 5	<u>79</u>	3	<u>71</u>	5	<u>73</u>	3	<u>71</u>
P 3 10	<u>73</u>	6	<u>73</u>	10	<u>71</u>	6	<u>73</u>
P 4 15	<u>71</u>	9	<u>74</u>	15	<u>69</u>	9	<u>74</u>
P 5 20		12	<u>75</u>	20		12	<u>77</u>
P 6 25		15	<u>77</u>	25		15	<u>81</u>
P 7 30		18	<u>80</u>	30		18	<u>85</u>
P 8 35		21	<u>86</u>	35		21	<u>89</u>
P 9 40		24	<u>92</u>	40		24	<u>93</u>
P10 45		27		45		27	<u>96</u>
P11 50		30		50		30	
P12 55		33		55		33	
P13 60	<u>71</u>	36		60	<u>69</u>	36	
P14		39		65		39	
P15		42		70		42	
P16		45		75		45	
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P20		57				57	
		60				60	

2606 DST #5

TRK # 5741
I



Company Raymond Oil Company, Inc. Lease & Well No. Hazelton Land Co. #1
 Elevation 1853 Ground Level Douglas Zone Formation Effective Pay - Ft. Ticket No. 5741
 Date 4/23/80 Sec. 32 Twp. 30s Range 12W County Barber State Kansas
 Test Approved by R. E. Rowland Western Representative Rod Tritt

Formation Test No. 5 Interval Tested from 3861 ft. to 3910 ft. Total Depth 3910 ft.
 Packer Depth 3876 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3861 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3865 ft. Recorder Number 2606 Cap. 4150
 Bottom Recorder Depth (Outside) 3868 ft. Recorder Number 4332 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Brandt & Drlg. Rig #2 Drill Collar Length 151 I. D. 2 1/4 in.
 Mud Type starch Viscosity 45 Weight Pipe Length 31 I. D. 2 1/2 in.
 Weight 9.8 Water Loss 10.4 cc. Drill Pipe Length 3381 I. D. 3.8 in.
 Chlorides 55,000 P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 OD in.
 Jars: Make WTC Serial Number 408 Anchor Length 28 +31' DP ft. Size 5 1/2 OD + DP
 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 FH in.

Blow: Fair blow, decreasing to very weak blow on initial flow. Very weak blow on final flow periods.

Recovered 60 ft. of thin drilling mud (very slightly oil cut),
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s)	<u>4:55</u>	AM P.M.	Time Started Off Bottom	<u>7:55</u>	AM P.M.	Maximum Temperature	<u>124°</u>
Initial Hydrostatic Pressure			(A)	<u>2134</u>		P.S.I.	
Initial Flow Period		Minutes	(B)	<u>60</u>		P.S.I. to (C)	<u>71</u> P.S.I.
Initial Closed In Period		Minutes	(D)	<u>24</u>		P.S.I.	
Final Flow Period		Minutes	(E)	<u>60</u>		P.S.I. to (F)	<u>69</u> P.S.I.
Final Closed In Period		Minutes	(G)	<u>27</u>		P.S.I.	
Final Hydrostatic Pressure			(H)	<u>2077</u>		P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 4/23/80 Test Ticket No. 5741
 Recorder No. 2606 Capacity 4150 Location 3865 Ft.
 Clock No. ----- Elevation 1853 Well Temperature 124 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2134 P.S.I.	Open Tool	4:55P	M
B First Initial Flow Pressure	79 P.S.I.	First Flow Pressure	60 Mins.	60 Mins.
C First Final Flow Pressure	71 P.S.I.	Initial Closed-in Pressure	30 Mins.	24 Mins.
D Initial Closed-in Pressure	92 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	73 P.S.I.	Final Closed-in Pressure	30 Mins.	27 Mins.
F Second Final Flow Pressure	69 P.S.I.			
G Final Closed-in Pressure	96 P.S.I.			
H Final Hydrostatic Mud	2077 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Initial Shut-In Breakdown: <u>8</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Second Flow Pressure Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Final Shut-In Breakdown: <u>11</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
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Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1	0	79	0	71	0	73	0	69
P 2	5	79	3	71	5	73	3	71
P 3	10	73	6	73	10	71	6	73
P 4	15	71	9	74	15	69	9	74
P 5	20	71	12	75	20	69	12	77
P 6	25	71	15	77	25	69	15	81
P 7	30	71	18	80	30	69	18	85
P 8	35	71	21	86	35	69	21	89
P 9	40	71	24	92	40	69	24	93
P10	45	71			45	69	27	96
P11	50	71			50	69		
P12	55	71			55	69		
P13	60	71			60	69		
P14								
P15								
P16								
P17								
P18								
P19								
P20								