OR

WESTERN TESTING CO., INC.
FORMATION TESTING TICKET

Nº 19618

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1832 KB Formation Miss Eff. Pay Ft.

District Pratt Date 7-6-93 Customer Order No.

COMPANY NAME Raymond Oil Co. Inc.

ADDRESS P.O. Box 48788 / Main Place #900. Wichita, Kansas 67201

LEASE AND WELL NO. Teichman #1 COUNTY Stafford STATE Kansas Sec. 27 Twp. 25 S Rge. 11W

Mail Invoice To Same No. Copies Requested Reg 1
Co. Name Address

Mail Charts To Same No. Copies Requested Reg 1
Address

Formation Test No. 1 Interval Tested From 3933 ft. to 3976 ft. Total Depth 3976 ft.

Packer Depth 3928 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 3933 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3937 ft. Recorder Number 13268 Cap. 4225

Bottom Recorder Depth (Outside) 3940 ft. Recorder Number 13265 Cap. 5975

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

Drilling Contractor Duke Drilling Rig 2 Drill Collar Length 0 I. D. — in.

Mud Type Chem Viscosity 50 Weight Pipe Length 0 I. D. — in.

Weight 9.3 Water Loss 7.4 cc. Drill Pipe Length 3913 I. D. 3.8 in.

Chlorides 11,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make NO Serial Number — Anchor Length 43 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 XH in.

Blow: Very weak blow building to a fair 5 inch blow on initial flow fair blow building to a 9 inch blow on final

Recovered 90 ft. of Slightly oil & gas cut watery mud 5% gas - 25% water 70% mud

Recovered ft. of 68,000 P.P.M

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used Remarks:

JUL 08 1993

Time On Location 1:00 A.M./P.M. Time Pick Up Tool 2:00 A.M./P.M. Time Off Location 10:00 A.M./P.M.

Time Set Packer(s) 3:10 A.M./P.M. Time Started Off Bottom 7:25 A.M./P.M. Maximum Temperature 124 °F

Initial Hydrostatic Pressure			(A) 1962	P.S.I.		
Initial Flow Period	Minutes 45	(B) 85	P.S.I. to	(C) 53	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 1170	P.S.I.			
Final Flow Period	Minutes 60	(E) 106	P.S.I. to	(F) 106	P.S.I.	
Final Closed In Period	Minutes 90	(G) 1170	P.S.I.			
Final Hydrostatic Pressure			(H) 1962	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 Tim Heuman
Signature of Customer or his authorized representative

Western Representative Rod Tritt Thank You

FIELD INVOICE

Open Hole Test	$ ✓
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$ 2
Insurance	$
Telecopier	$
TOTAL	$ ✓

WESTERN TESTING CO., INC.
Pressure Data

Date 7-6-92 Test Ticket No. 15618

Recorder No. 12268 Capacity Location Ft.

Clock No. Elevation Well Temperature °F

Point		Pressure	
A	Initial Hydrostatic Mud	1981	P.S.I.
B	First Initial Flow Pressure	117	P.S.I.
C	First Final Flow Pressure	694	P.S.I.
D	Initial Closed-in Pressure	1154	P.S.I.
E	Second Initial Flow Pressure	122	P.S.I.
F	Second Final Flow Pressure	85	P.S.I.
G	Final Closed-in Pressure	1159	P.S.I.
H	Final Hydrostatic Mud	1958	P.S.I.

	Time Given	Time Computed
Open Tool	M	
First Flow Pressure	Mins.	45 Mins.
Initial Closed-in Pressure	Mins. 60	Mins.
Second Flow Pressure	Mins. 60	Mins.
Final Closed-in Pressure	Mins. 90	Mins.

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	117
P 2	5	117
P 3	10	96
P 4	15	84
P 5	20	78
P 6	25	72
P 7	30	67
P 8	35	65
P 9	40	64
P10	45	64
P11	50	
P12	55	
P13	60	
P14	65	
P15	70	
P16	75	
P17	80	
P18	85	
P19	90	
P20	95	
	100	

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

Point Minutes	Press.
0	694
3	694
6	765
9	830
12	876
15	919
18	924
21	957
24	1004
27	1035
30	1049
33	1054
36	1069
39	1077
42	1054
45	1061
48	1089
51	1116
54	1132
57	1149
60	1154

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

Point Minutes	Press.
0	122
5	122
10	106
15	97
20	92
25	87
30	88
35	87
40	86
45	85
50	
55	
60	85
65	
70	
75	
80	
85	
90	
95	
100	

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

Point Minutes	Press.
0	85
3	85
6	88
9	92
12	106
15	145
18	220
21	337
24	454
27	537
30	630
33	710
36	772
39	842
42	866
45	904
48	937
51	966
54	991
57	1014
60	1034

WESTERN TESTING CO., INC.

Pressure Data

Date _____ Test Ticket No. 15618

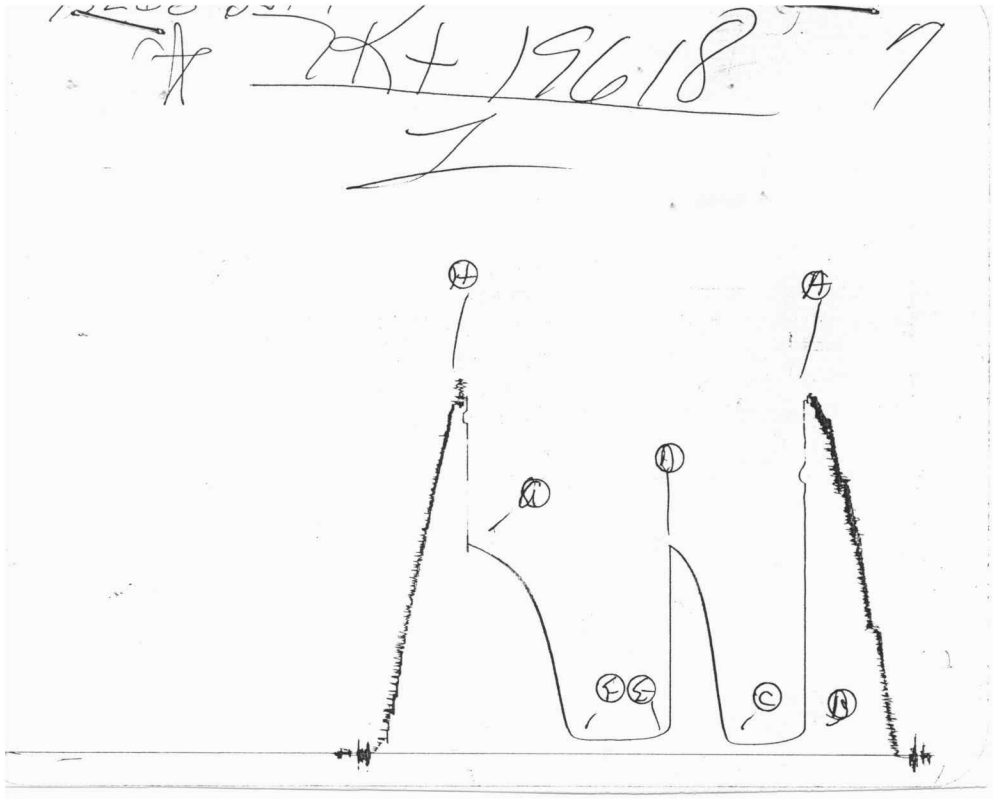
Recorder No. _____ Capacity _____ Location _____ Ft.

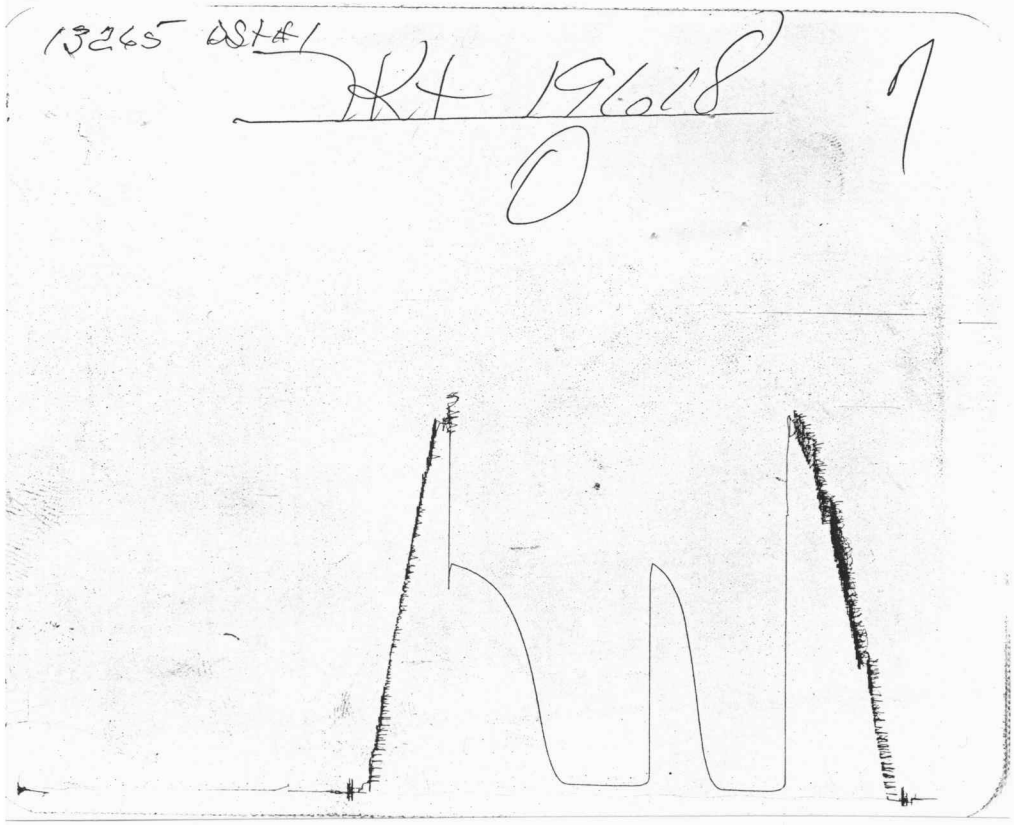
Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ mins. and a	
final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 105		63		105		63	1050
P 2 110		66		110		66	1063
P 3 115		69		115		69	1076
P 4 120		72		120		72	1091
P 5 125		75		125		75	1102
P 6 130		78		130		78	1117
P 7 135		81		135		81	1128
P 8 140		84		140		84	1137
P 9 145		87		145		87	1148
P10 150		90		150		90	1159
P11 155		93		155		93	
P12 160		96		160		96	
P13 165		99		165		99	
P14 170		102		170		102	
P15 175		105		175		105	
P16 180		108		180		108	
P17 185		111		185		111	
P18 190		114		190		114	
P19 195		117		195		117	
P20 200		120		200		120	


A
A
B
C
D
E
F



COMPANY RAYMOND OIL COMPANY, INC. LEASE & WELL NO. #1 TEICHMAN SEC. 27 TWP. 25S RGE. 11W TEST NO. 1 DATE 7/6/93

FORMATION TEST REPORT

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone 1-800-688-7021

DST REPORT

GENERAL INFORMATION

DATE	: 7/6/93	TICKET	: 19618
CUSTOMER	: RAYMOND OIL COMPANY INC	LEASE	: TEICHMAN
WELL	: #1 TEST: 1	GEOLOGIST	: HELLMAN
ELEVATION	: 1832 KB	FORMATION	: MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 25S
RANGE	: 11W COUNTY: STAFFORD	STATE	: KS
GAUGE SN#	: 13265 RANGE : 4225	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3933.00 ft TO: 3976.00 ft TVD: 3976.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3937.0 ft 3940.0 ft
TEMPERATURE: 124.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	3913.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	43.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	3928.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3933.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: DUKE DRLG RIG 2		
MUD TYPE	: CHEMICAL	VISCOSITY :	50.00 cp
WEIGHT	: 9.300 ppg	WATER LOSS:	7.400 cc
CHLORIDES	: 11000 ppm		
JARS-MAKE	:	SERIAL NUMBER:	
DID WELL FLOW?	: NO	REVERSED OUT?	: NO

COMMENTS

Comment

INITIAL FLOW PERIOD VERY WEAK BLOW BUILDING TO A FAIR 5 INCH BLOW. FINAL FLOW PERIOD FAIR BLOW BUILDING TO A 9 INCH BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
90.0	0.0	5.0	25.0	70.0	SL OIL & GAS CUT WTRY MUD
0.0	0.0	0.0	0.0	0.0	CHLORIDES 68000 PPM

RATE INFORMATION

OIL VOLUME: 0.0000 STB
GAS VOLUME: 0.3544 SCF
MUD VOLUME: 0.8837 STB
WATER VOLUME: 0.3156 STB
TOTAL FLUID : 1.1993 STB

TOTAL FLOW TIME: 105.0000 min.
AVERAGE OIL RATE: 0.0000 STB/D
AVERAGE WATER RATE: 16.4469 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1962.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	85.00	53.00
INITIAL SHUT-IN	60.00		1170.00
FINAL FLOW	60.00	106.00	106.00
FINAL SHUT-IN	90.00		1170.00

FINAL HYDROSTATIC PRESSURE: 1962.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1981.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	117.00	64.00
INITIAL SHUT-IN	60.00		1154.00
FINAL FLOW	60.00	122.00	85.00
FINAL SHUT-IN	90.00		1159.00

FINAL HYDROSTATIC PRESSURE: 1958.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 7/6/93			TICKET	: 19618
CUSTOMER	: RAYMOND OIL COMPANY INC			LEASE	: TEICHMAN
WELL	: #1	TEST: 1		GEOLOGIST	: HELLMAN
ELEVATION	: 1832 KB			FORMATION	: MISSISSIPPI
SECTION	: 27			TOWNSHIP	: 25S
RANGE	: 11W	COUNTY:	STAFFORD	STATE	: KS
GAUGE SN#	: 13265	RANGE :	4225	CLOCK	: 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	117.00	117.00
5.00	117.00	0.00
10.00	96.00	-21.00
15.00	84.00	-12.00
20.00	78.00	-6.00
25.00	72.00	-6.00
30.00	67.00	-5.00
35.00	65.00	-2.00
40.00	64.00	-1.00
45.00	64.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	64.00	64.00	0.00
6.00	65.00	1.00	0.00
9.00	70.00	5.00	0.00
12.00	76.00	6.00	0.00
15.00	119.00	43.00	0.00
18.00	224.00	105.00	0.00
21.00	357.00	133.00	0.00
24.00	504.00	147.00	0.00
27.00	633.00	129.00	0.00
30.00	749.00	116.00	0.00
33.00	851.00	102.00	0.00
36.00	919.00	68.00	0.00
39.00	977.00	58.00	0.00
42.00	1021.00	44.00	0.00
45.00	1061.00	40.00	0.00
48.00	1089.00	28.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
51.00	1116.00	27.00	0.00
54.00	1132.00	16.00	0.00
57.00	1149.00	17.00	0.00
60.00	1154.00	5.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	122.00	122.00
5.00	122.00	0.00
10.00	106.00	-16.00
15.00	97.00	-9.00
20.00	93.00	-4.00
25.00	89.00	-4.00
30.00	88.00	-1.00
35.00	87.00	-1.00
40.00	86.00	-1.00
45.00	85.00	-1.00
50.00	85.00	0.00
55.00	85.00	0.00
60.00	85.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	85.00	85.00	0.00
6.00	88.00	3.00	0.00
9.00	92.00	4.00	0.00
12.00	106.00	14.00	0.00
15.00	143.00	37.00	0.00
18.00	220.00	77.00	0.00
21.00	337.00	117.00	0.00
24.00	434.00	97.00	0.00
27.00	537.00	103.00	0.00
30.00	630.00	93.00	0.00
33.00	710.00	80.00	0.00
36.00	772.00	62.00	0.00
39.00	822.00	50.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
42.00	866.00	44.00	0.00
45.00	904.00	38.00	0.00
48.00	937.00	33.00	0.00
51.00	966.00	29.00	0.00
54.00	991.00	25.00	0.00
57.00	1014.00	23.00	0.00
60.00	1034.00	20.00	0.00
63.00	1050.00	16.00	0.00
66.00	1063.00	13.00	0.00
69.00	1076.00	13.00	0.00
72.00	1091.00	15.00	0.00
75.00	1102.00	11.00	0.00
78.00	1117.00	15.00	0.00
81.00	1128.00	11.00	0.00
84.00	1137.00	9.00	0.00
87.00	1148.00	11.00	0.00
90.00	1159.00	11.00	0.00