WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 20116

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

Elevation 1673 G.L. Formation MISSISSIPPI Eff. Pay ____ Ft.

District GREAT BEND Date 11-20-93 Customer Order No. ____

COMPANY NAME RAYMOND OIL CO.

ADDRESS P.O. BOX 48788, INC. ~~CITY~~ WICHITA KS 67201

LEASE AND WELL NO. GAGNEBIN #1 COUNTY RENO STATE KS Sec. 27 Twp. 24S Rge. 9W

Mail Invoice To SAME No. Copies Requested R66
Co. Name Address

Mail Charts To " No. Copies Requested "
Address

Formation Test No. 1 Interval Tested From 3761 ft. to 3792 ft. Total Depth 3792 ft.

Packer Depth 3756 ft. Size 6 7/8 in. Packer Depth — ft. Size — in.

Packer Depth 3761 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 3764 ft. Recorder Number 11018 Cap. 4425 PSI

Bottom Recorder Depth (Outside) 3789 ft. Recorder Number 13629 Cap. 4425 PSI

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

Drilling Contractor DUKE DRILLING RIG 2 Drill Collar Length 0 I. D. — in.

Mud Type CHEMICAL Viscosity 48 Weight Pipe Length 0 I. D. ____ in.

Weight 9.4 Water Loss 10.0 cc. Drill Pipe Length 3739 I. D. 3.8 in.

Chlorides 6,500 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.

Jars: Make NOT RAN Serial Number — Anchor Length 31 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: 1ST FLOW: STRONG BLOW B.O.B IMMEDIATELY (NO SHUT-IN BLOWBACKS)
2ND FLOW: STRONG BLOW - GAS TO SURFACE IN 5 MINUTES SEE GAS VOLUME REPORT

Recovered 40 ft. of GAS CUT DRILLING MUD (20% GAS 80% MUD)

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Chlorides 7,000 P.P.M. Sample Jars used ____ Remarks: GAS DID BURN

Time On Location 7:30 (A.M.) P.M. Time Pick Up Tool 7:45 (A.M.) P.M. Time Off Location 2:00 A.M. P.M.

Time Set Packer(s) 8:50 (A.M.) P.M. Time Started Off Bottom 12:35 A.M. P.M. Maximum Temperature 112°

Initial Hydrostatic Pressure		(A)	1856	P.S.I.		
Initial Flow Period	Minutes 30	(B)	44	P.S.I. to (C)	22	P.S.I.
Initial Closed In Period	Minutes 60	(D)	1224	P.S.I.		
Final Flow Period	Minutes 45	(E)	40	P.S.I. to (F)	28	P.S.I.
Final Closed In Period	Minutes 90	(G)	1240	P.S.I.		
Final Hydrostatic Pressure		(H)	1830	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 of Customer or his authorized representative

Western Representative John Ricoll

FIELD INVOICE

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

Phone 316 262-5861

P. O. Box 1599
WICHITA, KANSAS 67201

No. 1020

GAS FLOW REPORT

Date 11-20-93 Ticket 20116 Company RAYMOND OIL CO.

Well Name and No. GAGNEBIN #1 Dst No. 1 Interval Tested 3761-3792

County RENO State KS Sec. 27 Twp. 24S Rg. 9W

Time Gauge in Min.	~~Bbl.~~ #26 on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
8:50 ~~8:50~~	TOOL OPEN				
SECOND FLOW					
10:20	2ND FLOW				
~~10:35~~	35	1/4			10,100 CF/D
10:35	25	1/4			8,460 CF/D
10:45	18	1/4			6,930 CF/D
10:55	18	1/4			6,930 CF/D
11:05	18	1/4			6,930 CF/D

GAS BOTTLE

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 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 CO

Authorized by_____

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 11-20-93 Test Ticket No. 20116

Recorder No. 11018 Capacity 4425 Location 3764 Ft.

Clock No. Elevation 6736.L Well Temperature 112 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1874 P.S.I.	Open Tool	M	
B First Initial Flow Pressure	63 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	16 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1223 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E Second Initial Flow Pressure	78 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	24 P.S.I.			
G Final Closed-in Pressure	1253 P.S.I.			
H Final Hydrostatic Mud	1845 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: 20 Inc. of 3 mins. and a final inc. of 0 Min.

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

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

Point	First Flow Pressure Mins.	Press.	Initial Shut-In Minutes	Press.	Second Flow Pressure Minutes	Press.	Final Shut-In Minutes	Press.
P 1	0	63	0	16	0	78	0 24	63 1156
P 2	5	36	3	178	5	42	3 127	66 1174
P 3	10	24	6	340	10	35	6 238	69 1183
P 4	15	24	9	444	15	33	9 354	72 1198
P 5	20	18	12	567	20	25	12 456	75 1209
P 6	25	16	15	665	25	25	15 560	78 1218
P 7	30	16	18	759	30	24	18 627	81 1226
P 8			21	832	35	24	21 702	84 1235
P 9			24	887	40	24	24 776	87 1246
P10			27	942	45	24	27 822	90 1253
P11			30	981			30 876	
P12			33	1023			33 916	
P13			36	1053			36 947	
P14			39	1086			39 989	
P15			42	1112			42 1014	
P16			45	1134			45 1040	
P17			48	1154			48 1067	
P18			51	1171			51 1085	
P19			54	1190			54 1107	
P20			57	1204			57 1123	
			60	1223			60 1137	

WTC - 4

P. O. BOX 1589 PHONE (316) 262-5861
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING TICKET Nº 20116

Elevation 1673 G.L. Formation MISSISSIPPI Eff. Pay ___ Ft.

District GREAT BEND Date 11-20-93 Customer Order No. ___

COMPANY NAME RAYMOND OIL CO

ADDRESS P.O. BOX 48788, INC. WICHITA KS 67201

LEASE AND WELL NO. GAGNEBIN #1 COUNTY RENO STATE KS Sec. 22 Twp. 24S Rge. 9W

Mail Invoice To Co. Name GAGNEBIN #1 Address SAME No. Copies Requested 666

Mail Charts To Address " No. Copies Requested "

Formation Test No. 1 Interval Tested From 3761 ft. to 3792 ft. Total Depth 3792 ft.

Packer Depth 3756 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.

Packer Depth 3761 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set ___

Top Recorder Depth (Inside) 3764 ft. Recorder Number A1012 Cap. 4425 PSI

Bottom Recorder Depth (Outside) 3789 ft. Recorder Number 13629 Cap. 4425 PSI

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

Drilling Contractor DUKE DRILLING RIG 2 Drill Collar Length 0 I. D. — in.

Mud Type CHEMICAL Viscosity 48 Weight Pipe Length 0 I. D. ___ in.

Weight 9.4 Water Loss 10.0 cc. Drill Pipe Length 3739 I. D. 3.8 in.

Chlorides 6,500 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.

Jars: Make NOT RAN Serial Number — Anchor Length 31 ft. Size 5 3/4 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: 1ST FLOW: STRONG BLOW B.O.B IMMEDIATELY (NO SHUT-IN BLOWBACK)
2ND FLOW: STRONG BLOW - GAS TO SURFACE IN 5 MINUTES SEE GAS VOLUME REPORT

Recovered 40 ft. of GAS CUT DRILLING MUD (20% GAS 80% MUD)

Recovered ___ ft. of ___

Recovered ___ ft. of ___

Recovered ___ ft. of ___

Recovered ___ ft. of ___

Chlorides 7,000 P.P.M. Sample Jars used ___ Remarks: GAS DID BURN

Time On Location 7:30 A.M. Time Pick Up Tool 7:45 A.M. Time Off Location 2:00 P.M.

Time Set Packer(s) 8:50 P.M. Time Started Off Bottom 12:35 A.M. Maximum Temperature 112°

Initial Hydrostatic Pressure			(A) 1856	P.S.I.		
Initial Flow Period	Minutes 30		(B) 44	P.S.I. to	(C) 22	P.S.I.
Initial Closed In Period	Minutes 60		(D) 1224	P.S.I.		
Final Flow Period	Minutes 45		(E) 40	P.S.I. to	(F) 28	P.S.I.
Final Closed In Period	Minutes 90		(G) 1240	P.S.I.		
Final Hydrostatic Pressure			(H) 1830	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 of Customer or his authorized representative

Western Representative John Rauch

FIELD INVOICE

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

WESTERN TESTING CO., INC.

Pressure Data

Date 11-20-93 Test Ticket No. 20116

Recorder No. 11018 Capacity 4426 Location 3264 Ft.

Clock No. Elevation 6236.L Well Temperature 112 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1874	P.S.I.	Open Tool	M	
B	First Initial Flow Pressure	63	P.S.I.	First Flow Pressure	30 Mins	30 Mins.
C	First Final Flow Pressure	16	P.S.I.	Initial Closed-in Pressure	60 Mins	60 Mins.
D	Initial Closed-in Pressure	1223	P.S.I.	Second Flow Pressure	45 Mins	45 Mins.
E	Second Initial Flow Pressure	78	P.S.I.	Final Closed-in Pressure	90 Mins	90 Mins.
F	Second Final Flow Pressure	24	P.S.I.			
G	Final Closed-in Pressure	1253	P.S.I.			
H	Final Hydrostatic Mud	1845	P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	63
P 2 5	36
P 3 10	24
P 4 15	24
P 5 20	18
P 6 25	16
P 7 30	16
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	16
3	128
6	340
9	444
12	567
15	665
18	759
21	832
24	887
27	942
30	981
33	1023
36	1053
39	1086
42	1112
45	1134
48	1154
51	1171
54	1190
57	1204
60	1223

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

Point Minutes	Press.
0	78
5	42
10	35
15	33
20	25
25	25
30	24
35	24
40	24
45	24

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

Point Minutes	Press.
0 24	63 1156
3 127	66 1174
6 238	69 1183
9 354	72 1198
12 456	75 1209
15 560	78 1218
18 627	81 1226
21 702	84 1235
24 776	87 1246
27 822	90 1253
30 876	
33 916	
36 947	
39 989	
42 1014	
45 1040	
48 1067	
51 1085	
54 1107	
57 1123	
60 1137	

WTC - 4

Phone 316 262-5861

WESTERN

P. O. Box 1599
WICHITA, KANSAS 67201

№ 1020

GAS FLOW REPORT

Date 11-20-93 Ticket 2011 Company RAYMOND OIL CO

Well Name and No. GAB MURBIN #1 Dst No 1 Interval Tested 3761-3792

County REND State KS Sec. 27 Twp. 24S Rg. 9W

Time Gauge in Min.	10 2/4 on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow

PRE FLOW

8:50	TOOL OPEN				

SECOND FLOW

10:20	2ND FLOW				
10:25	35	1/4			10,160 CF/D
10:35	26	1/4			8,440 CF/D
10:45	18	1/4			6,930 CF/D
10:55	18	1/4			6,930 CF/D
11:05	18	1/4			6,930 CF/D

GAS BOTTLE

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.

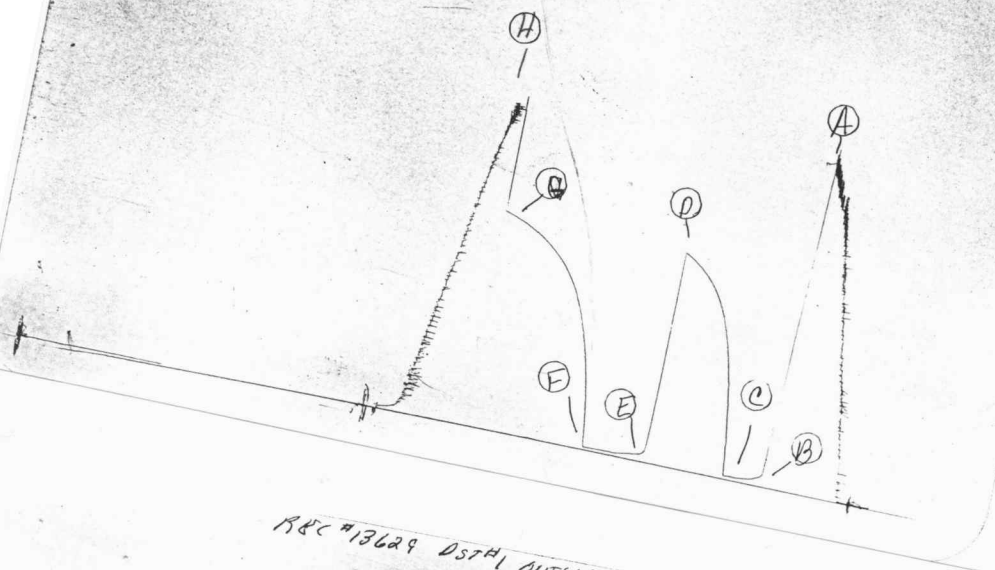
All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME RAYMOND OIL CO

Authorized by _____

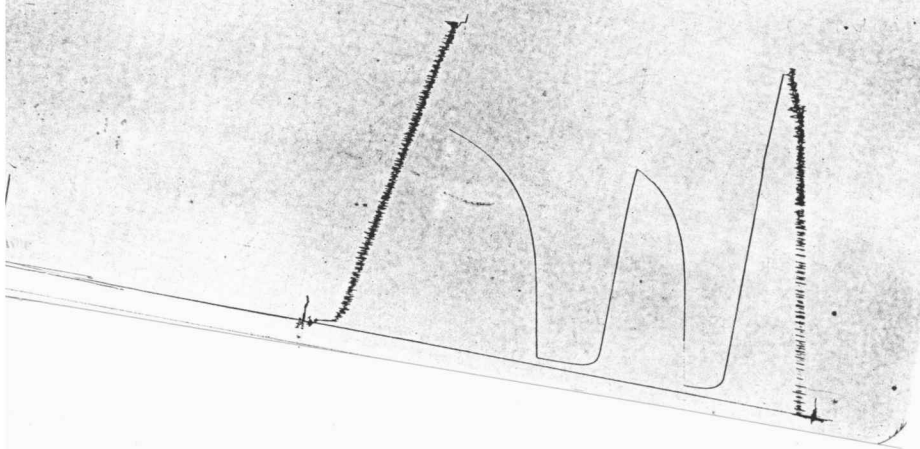
FORM WTC 6

IK# 20116
I

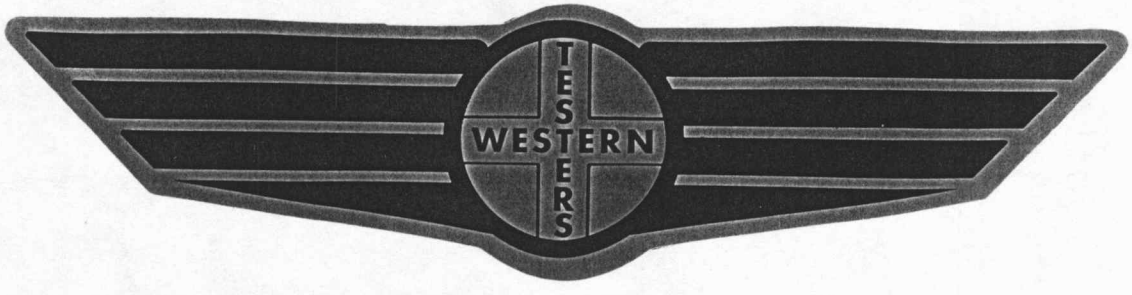


REC #13629 DST#1 OUTSIDE

IK# 20116
O_c



FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

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

COMPANY RAYMOND OIL CO. LEASE & WELL NO. GAGNEBIN #1 SEC. 27 TWP. 24S RGE. 9W TEST NO. 1 DATE 11-20-93

DST REPORT

GENERAL INFORMATION

DATE	: 11-20-93	TICKET	: 20116
CUSTOMER	: RAYMOND OIL COMPANY	LEASE	: GAGNEBIN
WELL	: 1 TEST: 1	GEOLOGIST:	
ELEVATION	: 1673 G.L.	FORMATION:	MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 24S
RANGE	: 9W COUNTY: RENO	STATE	: KS
GAUGE SN#	: 11018 RANGE : 4425	CLOCK	: 12 HR

WELL INFORMATION

PERFORATION INTERVAL FROM: 3761.00 ft TO: 3792.00 ft TVD: 3792.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
DEPTH OF RECORDERS: 3764.0 ft 3769.0 ft
TEMPERATURE: 112.0

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 :	3739.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	22.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	31.0 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:	3756.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3761.0 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 RIG 2		
MUD TYPE	: CHEMICAL	VISCOSITY :	48.00 cp
WEIGHT	: 9.400 ppg	WATER LOSS:	10.000 cc
CHLORIDES	: 6500 ppm		
JARS-MAKE	: NONE	SERIAL NUMBER:	
DID WELL FLOW?	: NO	REVERSED OUT?:	NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW BOTTOM OF BUCKET
NO SHUTIN BLOW BACK
FINAL FLOW PERIOD STRONG BLOW GAS TO SURFACE IN 5

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment
MINUTES SEE GAS SHEET

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
40.0	0.0	20.0	0.0	80.0	GAS CUT DRILLING MUD

RATE INFORMATION

OIL VOLUME:	0.0000 STB		
GAS VOLUME:	0.6301 SCF	TOTAL FLOW TIME:	75.0000 min.
MUD VOLUME:	0.4488 STB	AVERAGE OIL RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB	AVERAGE WATER RATE:	0.0000 STB/D
TOTAL FLUID :	0.4488 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1856.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	44.00	22.00
INITIAL SHUT-IN	60.00		1224.00
FINAL FLOW	45.00	40.00	28.00
FINAL SHUT-IN	90.00		1240.00

FINAL HYDROSTATIC PRESSURE: 1830.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1874.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	63.00	16.00
INITIAL SHUT-IN	60.00		1223.00
FINAL FLOW	45.00	78.00	24.00
FINAL SHUT-IN	90.00		1253.00

FINAL HYDROSTATIC PRESSURE: 1845.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE	: 11-20-93	TICKET	: 20116
CUSTOMER	: RAYMOND OIL COMPANY	LEASE	: GAGNEBIN
WELL	: 1 TEST: 1	GEOLOGIST:	
ELEVATION	: 1673 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 24S
RANGE	: 9W COUNTY: RENO	STATE	: KS
GAUGE SN#	: 11018 RANGE : 4425	CLOCK	: 12 HR

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
25 MIN	MERLA	0.250	35 IN OF WTR	10100 SCF/D
30 MIN	MERLA	0.250	25 IN OF WTR	8400 SCF/D
35 MIN	MERLA	0.250	18 IN OF WTR	6930 SCF/D
40 MIN	MERLA	0.250	18 IN OF WTR	6930 SCF/D
45 MIN	MERLA	0.250	18 IN OF WTR	9630 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 11-20-93	TICKET	: 20116
CUSTOMER	: RAYMOND OIL COMPANY	LEASE	: GAGNEBIN
WELL	: 1 TEST: 1	GEOLOGIST:	
ELEVATION	: 1673 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 24S
RANGE	: 9W COUNTY: RENO	STATE	: KS
GAUGE SN#	: 11018 RANGE : 4425	CLOCK	: 12 HR

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	63.00	63.00
5.00	36.00	-27.00
10.00	24.00	-12.00
15.00	24.00	0.00
20.00	18.00	-6.00
25.00	16.00	-2.00
30.00	16.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	178.00	178.00	11.00
6.00	340.00	162.00	6.00
9.00	444.00	104.00	4.33
12.00	567.00	123.00	3.50
15.00	665.00	98.00	3.00
18.00	759.00	94.00	2.67
21.00	832.00	73.00	2.43
24.00	887.00	55.00	2.25
27.00	942.00	55.00	2.11
30.00	981.00	39.00	2.00
33.00	1023.00	42.00	1.91
36.00	1053.00	30.00	1.83
39.00	1086.00	33.00	1.77
42.00	1112.00	26.00	1.71
45.00	1134.00	22.00	1.67
48.00	1154.00	20.00	1.63
51.00	1171.00	17.00	1.59
54.00	1190.00	19.00	1.56
57.00	1204.00	14.00	1.53

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
60.00	1223.00	19.00	1.50

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	78.00	78.00
5.00	42.00	-36.00
10.00	35.00	-7.00
15.00	33.00	-2.00
20.00	25.00	-8.00
25.00	25.00	0.00
30.00	24.00	-1.00
35.00	24.00	0.00
40.00	24.00	0.00
45.00	24.00	0.00

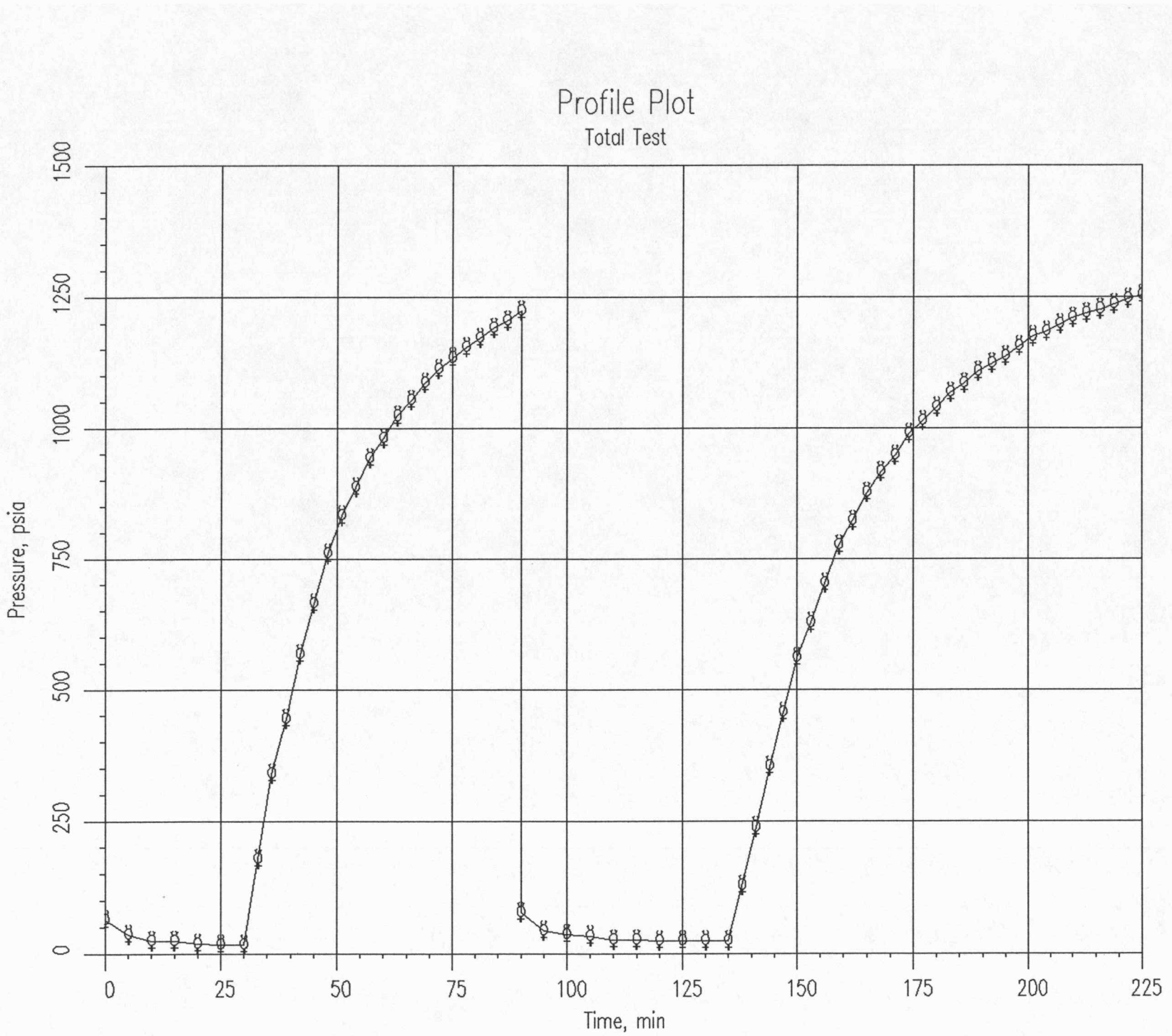
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	127.00	127.00	16.00
6.00	238.00	111.00	8.50
9.00	354.00	116.00	6.00
12.00	456.00	102.00	4.75
15.00	560.00	104.00	4.00
18.00	627.00	67.00	3.50
21.00	702.00	75.00	3.14
24.00	776.00	74.00	2.88
27.00	822.00	46.00	2.67
30.00	876.00	54.00	2.50
33.00	916.00	40.00	2.36
36.00	947.00	31.00	2.25
39.00	989.00	42.00	2.15
42.00	1014.00	25.00	2.07
45.00	1040.00	26.00	2.00
48.00	1067.00	27.00	1.94
51.00	1085.00	18.00	1.88
54.00	1107.00	22.00	1.83
57.00	1123.00	16.00	1.79

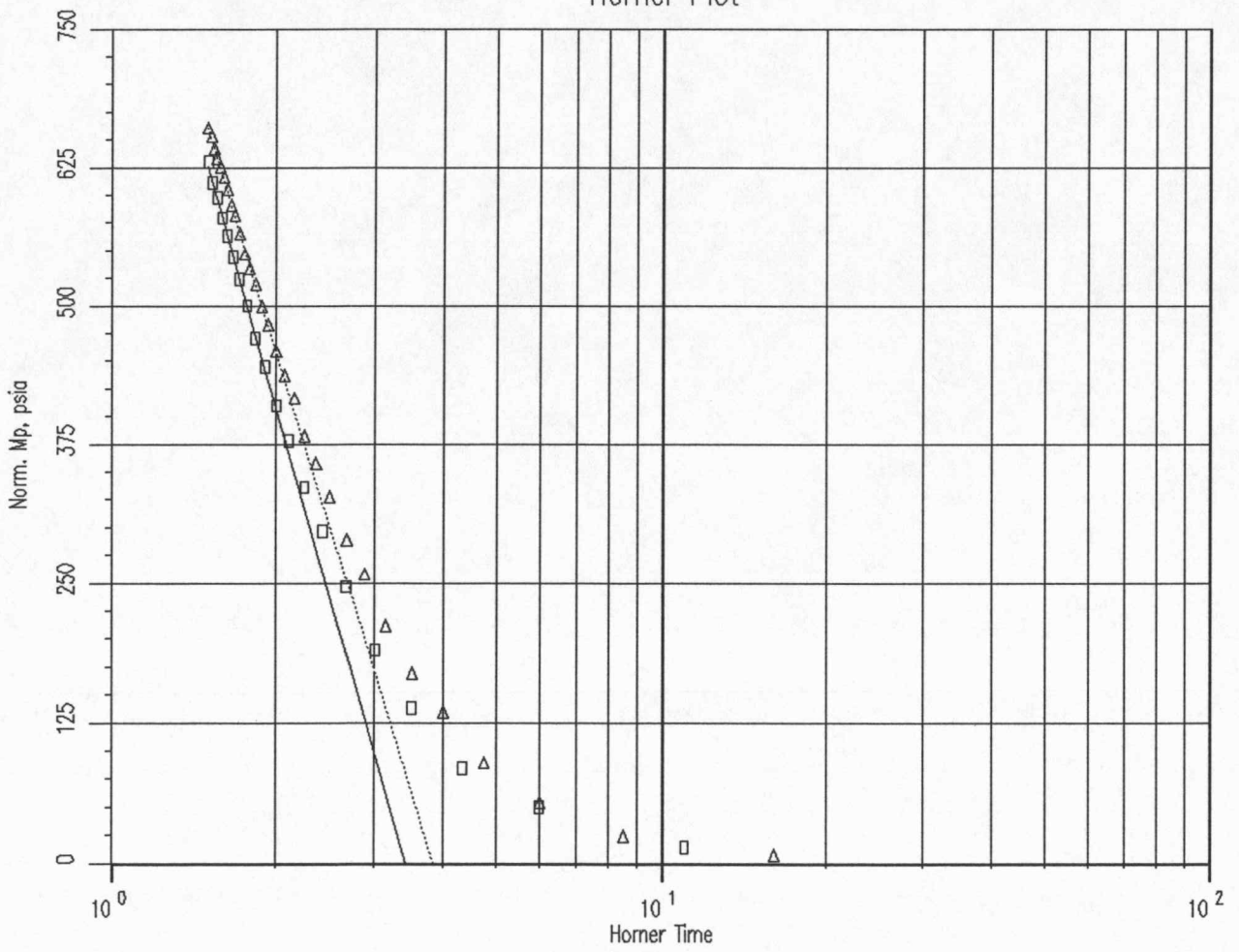
PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
60.00	1137.00	14.00	1.75
63.00	1156.00	19.00	1.71
66.00	1174.00	18.00	1.68
69.00	1183.00	9.00	1.65
72.00	1198.00	15.00	1.63
75.00	1209.00	11.00	1.60
78.00	1218.00	9.00	1.58
81.00	1226.00	8.00	1.56
84.00	1235.00	9.00	1.54
87.00	1246.00	11.00	1.52
90.00	1253.00	7.00	1.50


Profile Plot
Total Test
Pressure, psia
0
250
500
750
1000
1250
1500
0
25
50
75
100
125
150
175
200
225
Time, min

DATE	11-20-93			TICKET	20116
CUSTOMER	RAYMOND OIL COMPANY			LEASE	GAGNEBIN
WELL	1	TEST	1	GEOLOGIST	
ELEVATION	1673 G.L.			FORMATION	MISSISSIPPI
SECTION	27			TOWNSHIP	24S
RANGE	9W	COUNTY	RENO	STATE	KS
GAUGE SN#	11018	RANGE	4425	CLOCK	12 HR



Result

	#1	#2
tp, hrs	0.50	0.75
Slope	-1755.19	-1625.01
Pstar, psig	1501.35	1511.30
P1hr, psig	625.77	551.69
Skin	0.16	-0.02
k, md	0.00	0.00
kh/u, md-ft/cp	1.80	1.94
ri, ft	0.69	0.88
DR, %	0.52	0.47
Drawdown Factor, %		-0.025
Drawdown P*		-0.007

____ BUILD 1

..... BUILD 2

HORNER ANALYSIS REPORT

GENERAL INFORMATION

DATE	: 11-20-93	TICKET	: 20116
CUSTOMER	: RAYMOND OIL COMPANY	LEASE	: GAGNEBIN
WELL	: 1 TEST: 1	GEOLOGIST:	
ELEVATION	: 1673 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 24S
RANGE	: 9W COUNTY: RENO	STATE	: KS
GAUGE SN#	: 11018 RANGE : 4425	CLOCK	: 12 HR

Input Data

Porosity 0.360 Rw: 0.328 ft h: 6.000 ft

qg 9630.0 STB

Pvt Data
Evalutation Pressure : 1223.0
Evalutation Temperature: 112.0

Gas Grav 0.65 API
Bg 0.002 RBL/STB Vis 0.014 cp Ct 9.2738E-004 1/PSI

Horner Results

	Inital Shut-In	Final Shut-In
pseudo pressure time	0.50 hrs	0.75 hrs
slope	-1755.19	-1625.01
pstar	1501.35 psig	1511.30 psig
p1hr	625.77 psig	551.69 psig
skin	0.16	-0.02
permeability	0.00 md	0.00 md
transmisability	1.80 md-ft/cp	1.94 md-ft/cp
radius of investigation	0.69 ft	0.88 ft
Damage-Ratio	0.52 percent	0.47 percent
Drawdown Factor		-0.025 percent
Drawdown P*		-0.007 percent

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 20117

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

Elevation 1673 G.L. Formation MISSISSIPPI Eff. Pay ____ Ft.

District GREAT BEND Date 11-21-93 Customer Order No. ____

COMPANY NAME RAYMOND OIL CO

ADDRESS P.O. BOX 48788, INC. ~~KANS~~ WICHITA KS 67201

LEASE AND WELL NO. GAGNEBIN #1 COUNTY RENO STATE KS Sec. 27 Twp. 24S Rge. 9W

Mail Invoice To SAME No. Copies Requested REG

Mail Charts To Co. Name #1 Gagnebin Address " No. Copies Requested 11

Address

Formation Test No. 2 Interval Tested From 3792 ft. to 3802 ft. Total Depth 3802 ft.

Packer Depth 3787 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 3792 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 3795 ft. Recorder Number 11018 Cap. 4425 PSI

Bottom Recorder Depth (Outside) 3799 ft. Recorder Number 13629 Cap. 4425 PSI

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

Drilling Contractor DUKE DRILLING RIG 2 Drill Collar Length 0 I. D. — in.

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

Weight 9.2 Water Loss 10.0 cc. Drill Pipe Length 3770 I. D. 3.8 in.

Chlorides 6,500 P.P.M. Test Tool Length 22 ft. Tool Size 5½ in.

Jars: Make NOT RAN Serial Number — Anchor Length 10 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 4½ XH in.

Blow: 1ST FLOW: STRONG BLOW B.O.B 1 MINUTES GTS IN 17 MINUTES ~~GTS~~ WEAK BLOWBACK
2ND FLOW: STRONG BLOW GTS THROUGHOUT - SEE GAS VOLUME REPORT NO BLOWBACK

Recovered 30 ft. of GAS CUT MUD (20% GAS 80% MUD)

Recovered 60 ft. of MUDDY WATER (50% MUD 50% WATER)

Recovered ____ ft. of (CHLORIDES 60,000 PPM)

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Chlorides ____ P.P.M. Sample Jars used ____ Remarks: GAS BURNED

Time On Location 2:00 A.M. P.M. Time Pick Up Tool 7:30 A.M. P.M. Time Off Location 5:00 A.M. ~~P.M.~~

Time Set Packer(s) 8:30 A.M. P.M. Time Started Off Bottom 12:15 A.M. P.M. Maximum Temperature 118°

Initial Hydrostatic Pressure			(A)	1878	P.S.I.	
Initial Flow Period	Minutes 30		(B)	33	P.S.I. to (C) 33	P.S.I.
Initial Closed In Period	Minutes 60		(D)	1387	P.S.I.	
Final Flow Period	Minutes 45		(E)	40	P.S.I. to (F) 44	P.S.I.
Final Closed In Period	Minutes 90		(G)	1383	P.S.I.	
Final Hydrostatic Pressure			(H)	1834	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 of Customer or his authorized representative

Western Representative John Reed

FIELD INVOICE

Open Hole Test	$ V
Misrun	$ ____
Straddle Test	$ ____
Jars	$ ____
Selective Zone	$ ____
Safety Joint	$ 1
Standby	$ ____
Evaluation	$ ____
Extra Packer	$ ____
Circ. Sub.	$ ____
Mileage	$ ____
Fluid Sampler	$ ____
Extra Charts	$ ____
Insurance	$ ____
Telecopier	$ ____
TOTAL	$ ____

Phone 316 262-5861

WESTERN TESTERS

P. O. Box 1599
WICHITA, KANSAS 67201

Nº 1021

GAS FLOW REPORT

Date 11-21-93 Ticket 2017 Company RAYMOND OIL CO.

Well Name and No. CAGNEBIN #1 Dst No. 2 Interval Tested 3792-3802

County RENO State KS Sec. 27 Twp. 24S Rg. 9W

Time Gauge in Min.	~~P.S.I.~~ INCHES on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
8:30	TOOL OPEN GTS IN 17 MINUTES				
8:50	30	¼			9,200 CF/D
9:00	30	¼			9,200 "
SECOND FLOW					
10:00	2ND FLOW OPENING				
10:05	30	¼			9,200 CF/D
10:15	17	¼			6,936 "
10:25	12	¼			5,860 "
10:35	10	¼			5,320 "
10:45	10	¼			5,320 "

GAS BOTTLE

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 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 CO.

Authorized by _____

FORM WTC 6

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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 20117

Elevation 1623 G.L. Formation MISSISSIPPI Eff. Pay Ft.

District GREAT BEND Date 11-21-93 Customer Order No.

COMPANY NAME RAYMOND OIL CO

ADDRESS P.O. BOX 48788, INC. WICHITA KS 67201

LEASE AND WELL NO. GRIGNEBIN #1 COUNTY RENO STATE KS Sec. 27 Twp. 24S Rge. 7W

Mail Invoice To SAME No. Copies Requested 666
Co. Name Address

Mail Charts To " No. Copies Requested 1
Address

Formation Test No. 2 Interval Tested From 3292 ft. to 3302 ft. Total Depth 3302

Packer Depth 3287 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 3292 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3295 ft. Recorder Number 11618 Cap. 4925 PSI

Bottom Recorder Depth (Outside) 3299 ft. Recorder Number 13629 Cap. 4925 PSI

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

Drilling Contractor DUKE DRILLING #2 Drill Collar Length 0 I. D. — in.

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

Weight 9.2 Water Loss 10.0 cc. Drill Pipe Length 3220 I. D. 3.8 in.

Chlorides 6,500 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.

Jars: Make NOTRAN Serial Number — Anchor Length 10 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: 1ST FLOW: STRONG BLOW B.O.B. 1 MINUTE GTS IN 17 MINUTES WEAK BLOWING
2ND FLOW: STRONG BLOW GTS THROUGHOUT - SEE GAS VOLUME REPORT NO BLOWBACK

Recovered 30 ft. of GAS CUT MUD (20% GAS 80% MUD)

Recovered 60 ft. of MUDDY WATER (5% MUD 50% WATER)

Recovered — ft. of (CHLORIDES 60,000 PPM)

Recovered — ft. of

Recovered — ft. of

Chlorides — P.P.M. Sample Jars used — Remarks: GAS BURNED

Time On Location 2:00 A.M./P.M. Time Pick Up Tool 7:30 A.M./P.M. Time Off Location 5:00 A.M./P.M.

Time Set Packer(s) 8:30 A.M./P.M. Time Started Off Bottom 12:15 A.M./P.M. Maximum Temperature 120

Initial Hydrostatic Pressure			(A) 1828	P.S.I.		
Initial Flow Period	Minutes 30	(B) 33	P.S.I. to	(C) 33	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 1387	P.S.I.			
Final Flow Period	Minutes 45	(E) 40	P.S.I. to	(F) 44	P.S.I.	
Final Closed In Period	Minutes 90	(G) 1383	P.S.I.			
Final Hydrostatic Pressure		(H) 1834	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 for 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]

FIELD INVOICE

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

Phone 316 262-5861

P. O. Box 1599
WICHITA, KANSAS 67201

№ 1021

GAS FLOW REPORT

Date 11-21-93 Ticket 20117 Company RAYMOND OIL CO

Well Name and No. CAGNEBIN #1 Dst. No. 2 Interval Tested 3292-3302

County REND State KS Sec. 27 Twp. 24S Rg. 9W

Time Gauge in Min.	INT PSI on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
8:30	TOOL OPEN	GTS IN 17 MINUTES			
8:50	20	¼			9,200 CF/D
9:00	30	¼			9,200
SECOND FLOW					
10:00	2ND FLOW OPENING				
10:05	30	¼			9,200 CF/D
10:15	17	¼			6,930 "
10:25	12	¼			5,860 "
10:35	10	¼			5,320 "
10:45	10	¼			5,320 "

GAS BOTTLE

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 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 CO

Authorized by _____

FORM WTC 6

WESTERN TESTING CO., INC.

Pressure Data

Date 11-21-93 Test Ticket No. 20117

Recorder No. 11018 Capacity 4425 PSI Location 3291 Ft.

Clock No. Elevation 16736.2 Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1882 P.S.I.	Open Tool	M	
B First Initial Flow Pressure	100 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	28 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1386 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E Second Initial Flow Pressure	78 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	43 P.S.I.			
G Final Closed-in Pressure	1387 P.S.I.			
H Final Hydrostatic Mud	1855 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1. 0	100
P 2. 5	40
P 3. 10	37
P 4. 15	33
P 5. 20	30
P 6. 25	28
P 7. 30	28
P 8.	
P 9.	
P10.	
P11.	
P12.	
P13.	
P14.	
P15.	
P16.	
P17.	
P18.	
P19.	
P20.	

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

Point Minutes	Press.
0	28
3	462
6	796
9	1002
12	1137
15	1211
18	1267
21	1300
24	1321
27	1339
30	1350
33	1357
36	1368
39	1373
42	1375
45	1377
48	1379
51	1382
54	1384
57	1386
60	1386

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

Point Minutes	Press.
0	78
5	49
10	42
15	42
20	43
25	42
30	43
35	43
41	43
45	43

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

Point Minutes	Press.
0 43	45 1383
3 435	46 1384
6 785	49 1384
9 1006	52 1384
12 1130	55 1385
15 1221	58 1385
18 1273	61 1386
21 1305	64 1386
24 1324	67 1387
27 1346	90 1387
30 1354	
33 1362	
36 1368	
39 1374	
42 1377	
45 1381	
48 1382	
51 1382	
54 1383	
57 1383	
60 1383	

WTC - 4

WESTERN TESTING CO., INC.
Pressure Data

Date 11-21-93 Test Ticket No. 20117

Recorder No. 11018 Capacity 4425 PSI Location 3791 Ft.

Clock No. Elevation 16736.2 Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1882 P.S.I.	Open Tool	M	
B First Initial Flow Pressure	100 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	28 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1386 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E Second Initial Flow Pressure	78 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	43 P.S.I.			
G Final Closed-in Pressure	1387 P.S.I.			
H Final Hydrostatic Mud	1855 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	100
P 2 5	40
P 3 10	27
P 4 15	37
P 5 20	30
P 6 25	28
P 7 30	28
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	28
3	462
6	796
9	1002
12	1137
15	1211
18	1267
21	1300
24	1321
27	1339
30	1350
33	1357
36	1368
39	1373
42	1375
45	1377
48	1379
51	1382
54	1384
57	1386
60	1386

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

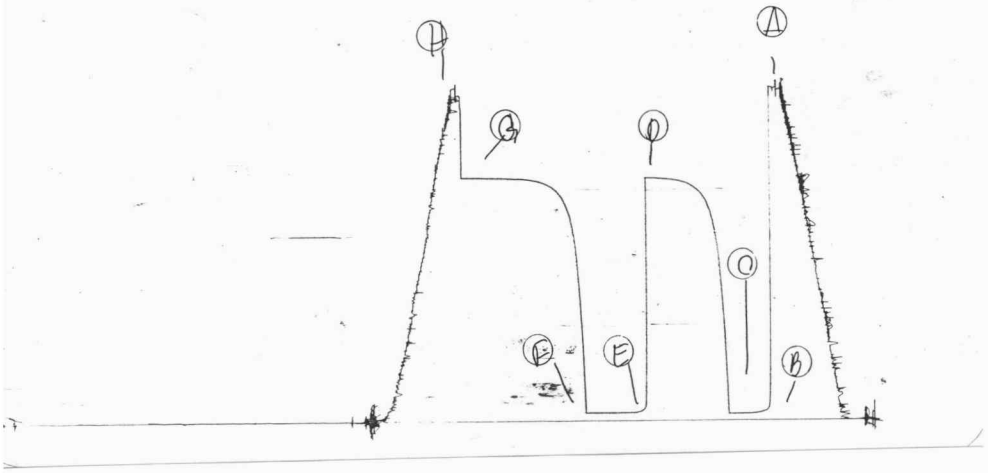
Point Minutes	Press.
0	78
5	49
10	42
15	42
20	42
25	42
30	43
35	43
40	43
45	43

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

Point Minutes	Press.
0 43	63 1383
3 435	66 1384
6 785	69 1384
9 1006	72 1384
12 1130	75 1385
15 1221	78 1385
18 1273	81 1386
21 1305	84 1386
24 1324	87 1387
27 1346	90 1387
30 1354	
33 1362	
36 1368	
39 1374	
42 1377	
45 1381	
48 1382	
51 1382	
54 1383	
57 1383	
60 1383	

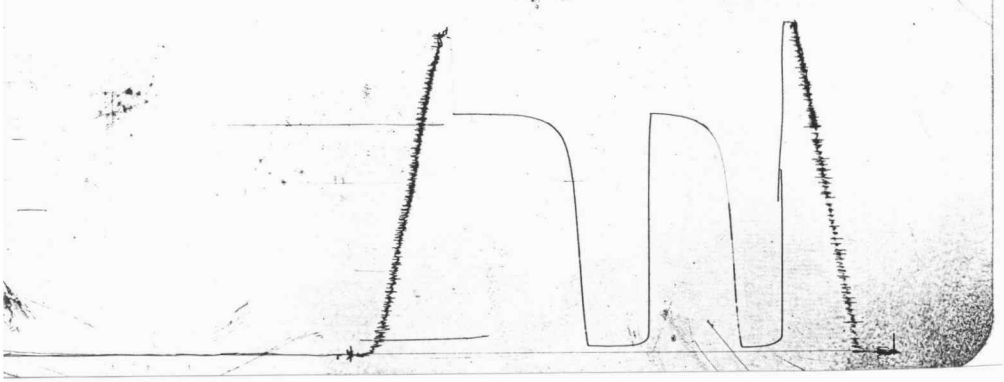
WTC - 4

TK# 20117
I.

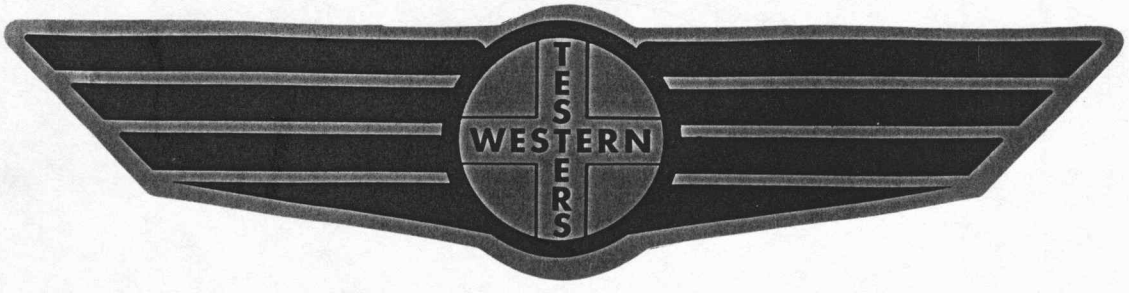


Rec# 13629 DST #2 OUTSIDE

TK# 20117
O.



FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

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

COMPANY RAYMOND OIL CO. LEASE & WELL NO. GAGNEBIN #1 SEC. 27 TWP. 24S RGE. 9W TEST NO. 2 DATE 11-21-93

DST REPORT

GENERAL INFORMATION

DATE	: 11-20-93	TICKET	: 20117
CUSTOMER	: RAYMOND OIL COMPANY	LEASE	: GAGNEBIN
WELL	: 1 TEST: 2	GEOLOGIST:	
ELEVATION:	1673 G.L.	FORMATION:	MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 24S
RANGE	: 9W COUNTY: RENO	STATE	: KS
GAUGE SN#:	11018 RANGE : 4425	CLOCK	: 12 HR

WELL INFORMATION

PERFORATION INTERVAL FROM: 3792.00 ft TO: 3802.00 ft TVD: 3802.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
DEPTH OF RECORDERS: 3795.0 ft 3799.0 ft
TEMPERATURE: 118.0

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 :	3770.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	22.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	10.0 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:	3787.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3799.0 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 RIG 2		
MUD TYPE	: CHEMICAL	VISCOSITY :	50.00 cp
WEIGHT	: 9.200 ppg	WATER LOSS:	10.000 cc
CHLORIDES	: 6500 ppm		
JARS-MAKE	: NONE	SERIAL NUMBER:	
DID WELL FLOW?:	NO	REVERSED OUT?:	NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW BOTTOM OF BUCKET
IN 1 MINUTE GAS TO SURFACE IN 17 MINUTES
FINAL FLOW PERIOD GAS TO SURFACE SEE GAS FLOW

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

SHEET

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	0.0	20.0	0.0	80.0	GAS CUT DRILLING MUD
60.0	0.0	50.0	50.0	0.0	MUDDY WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 60000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000 STB		
GAS VOLUME:	2.8353 SCF	TOTAL FLOW TIME:	75.0000 min.
MUD VOLUME:	0.3366 STB	AVERAGE OIL RATE:	0.0000 STB/D
WATER VOLUME:	0.4208 STB	AVERAGE WATER RATE:	8.0792 STB/D
TOTAL FLUID :	0.7574 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1878.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	33.00	33.00
INITIAL SHUT-IN	60.00		1387.00
FINAL FLOW	45.00	40.00	44.00
FINAL SHUT-IN	90.00		1383.00

FINAL HYDROSTATIC PRESSURE: 1834.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1882.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	100.00	28.00
INITIAL SHUT-IN	60.00		1387.00
FINAL FLOW	45.00	78.00	43.00
FINAL SHUT-IN	90.00		1387.00

FINAL HYDROSTATIC PRESSURE: 1855.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE	: 11-20-93	TICKET	: 20117
CUSTOMER	: RAYMOND OIL COMPANY	LEASE	: GAGNEBIN
WELL	: 1 TEST: 2	GEOLOGIST:	
ELEVATION	: 1673 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 24S
RANGE	: 9W COUNTY: RENO	STATE	: KS
GAUGE SN#	: 11018 RANGE : 4425	CLOCK	: 12 HR

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
25 MIN	MERLA	0.250	30 IN OF WTR	9200 SCF/D
30	MERLA	0.250	30 IN OF WTR	9200 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
25 MIN	MERLA	0.250	30 IN OF WTR	9200 SCF/D
30 MIN	MERLA	0.250	17 IN OF WTR	6930 SCF/D
35 MIN	MERLA	0.250	12 IN OF WTR	5860 SCF/D
40 MIN	MERLA	0.250	10 IN OF WTR	5320 SCF/D
45 MIN	MERLA	0.250	10 IN OF WTR	5320 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 11-20-93	TICKET	: 20117
CUSTOMER	: RAYMOND OIL COMPANY	LEASE	: GAGNEBIN
WELL	: 1 TEST: 2	GEOLOGIST:	
ELEVATION	: 1673 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 24S
RANGE	: 9W COUNTY: RENO	STATE	: KS
GAUGE SN#	: 11018 RANGE : 4425	CLOCK	: 12 HR

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	100.00	100.00
5.00	40.00	-60.00
10.00	37.00	-3.00
15.00	33.00	-4.00
20.00	20.00	-13.00
25.00	28.00	8.00
30.00	28.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	462.00	462.00	11.00
6.00	796.00	334.00	6.00
9.00	1002.00	206.00	4.33
12.00	1137.00	135.00	3.50
15.00	1211.00	74.00	3.00
18.00	1267.00	56.00	2.67
21.00	1300.00	33.00	2.43
24.00	1321.00	21.00	2.25
27.00	1339.00	18.00	2.11
30.00	1350.00	11.00	2.00
33.00	1357.00	7.00	1.91
36.00	1368.00	11.00	1.83
39.00	1373.00	5.00	1.77
42.00	1375.00	2.00	1.71
45.00	1377.00	2.00	1.67
48.00	1379.00	2.00	1.63
51.00	1382.00	3.00	1.59
54.00	1384.00	2.00	1.56
57.00	1386.00	2.00	1.53

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
60.00	1387.00	1.00	1.50

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	78.00	78.00
5.00	49.00	-29.00
10.00	42.00	-7.00
15.00	42.00	0.00
20.00	42.00	0.00
25.00	42.00	0.00
30.00	43.00	1.00
35.00	43.00	0.00
40.00	43.00	0.00
45.00	43.00	0.00

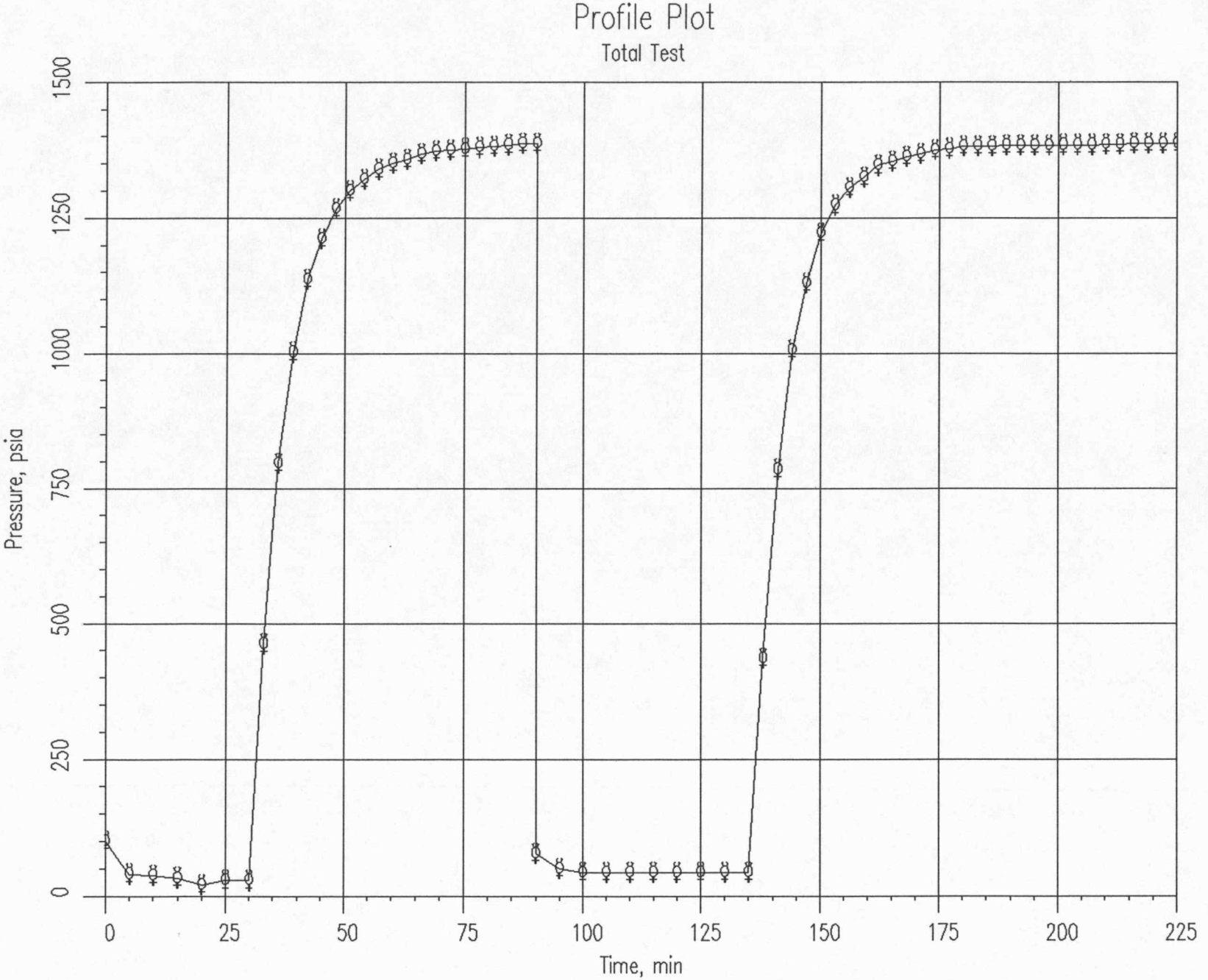
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	435.00	435.00	16.00
6.00	785.00	350.00	8.50
9.00	1006.00	221.00	6.00
12.00	1130.00	124.00	4.75
15.00	1221.00	91.00	4.00
18.00	1273.00	52.00	3.50
21.00	1305.00	32.00	3.14
24.00	1324.00	19.00	2.88
27.00	1346.00	22.00	2.67
30.00	1354.00	8.00	2.50
33.00	1362.00	8.00	2.36
36.00	1368.00	6.00	2.25
39.00	1374.00	6.00	2.15
42.00	1377.00	3.00	2.07
45.00	1381.00	4.00	2.00
48.00	1382.00	1.00	1.94
51.00	1382.00	0.00	1.88
54.00	1383.00	1.00	1.83
57.00	1383.00	0.00	1.79

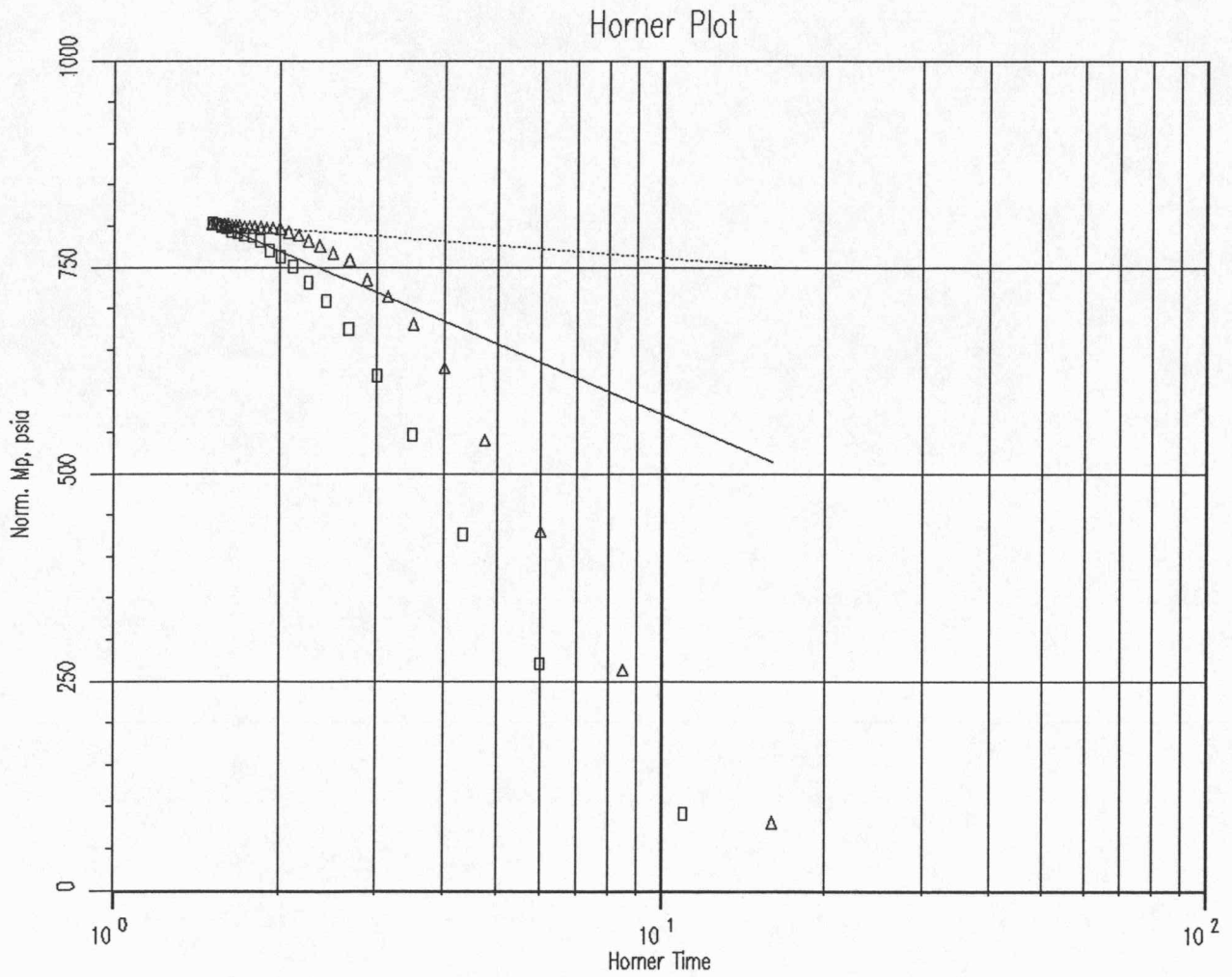
PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
60.00	1383.00	0.00	1.75
63.00	1383.00	0.00	1.71
66.00	1384.00	1.00	1.68
69.00	1384.00	0.00	1.65
72.00	1384.00	0.00	1.63
75.00	1385.00	1.00	1.60
78.00	1385.00	0.00	1.58
81.00	1386.00	1.00	1.56
84.00	1386.00	0.00	1.54
87.00	1387.00	1.00	1.52
90.00	1387.00	0.00	1.50


Profile Plot
Total Test
Pressure, psia
0
250
500
750
1000
1250
1500
0
25
50
75
100
125
150
175
200
225
Time, min

DATE	11-20-93			TICKET	20117
CUSTOMER	RAYMOND OIL COMPANY			LEASE	GAGNEBIN
WELL	1	TEST	2	GEOLOGIST	
ELEVATION	1673 G.L.			FORMATION	MISSISSIPPI
SECTION	27			TOWNSHIP	24S
RANGE	9W	COUNTY	RENO	STATE	KS
GAUGE SN#	11018	RANGE	4425	CLOCK	12 HR



Result

	#1	#2
tp, hrs	0.50	0.75
Slope	-282.11	-50.05
Pstar, psig	1432.40	1394.31
P1hr, psig	804.89	799.44
Skin	2.37	16.46
k, md	0.01	0.05
kh/u, md-ft/cp	6.29	35.45
ri, ft	1.34	3.90
DR, %	2.24	7.89
Drawdown Factor, %		
Drawdown P*		0.027

____ BUILD 1

..... BUILD 2

HORNER ANALYSIS REPORT

GENERAL INFORMATION

DATE	: 11-20-93	TICKET	: 20117
CUSTOMER	: RAYMOND OIL COMPANY	LEASE	: GAGNEBIN
WELL	: 1 TEST: 2	GEOLOGIST:	
ELEVATION:	1673 G.L.	FORMATION:	MISSISSIPPI
SECTION	: 27	TOWNSHIP	: 24S
RANGE	: 9W COUNTY: RENO	STATE	: KS
GAUGE SN#:	11018 RANGE : 4425	CLOCK	: 12 HR

Input Data

Porosity 0.200 Rw: 0.328 ft h: 10.000 ft

qg 5320.0 STB

Pvt Data
Evalutation Pressure : 1223.0
Evalutation Temperature: 118.0

Gas Grav 0.65 API
Bg 0.002 RBL/STB Vis 0.014 cp Ct 9.2081E-004 1/PSI

Horner Results

	Inital Shut-In	Final Shut-In
pseudo pressure time	0.50 hrs	0.75 hrs
slope	-282.11	-50.05
pstar	1432.40 psig	1394.31 psig
p1hr	804.89 psig	799.44 psig
skin	2.37	16.46
permeability	0.01 md	0.05 md
transmisability	6.29 md-ft/cp	35.45 md-ft/cp
radius of investigation	1.34 ft	3.90 ft
Damage-Ratio	2.2 percent	7.9 percent
Drawdown Factor		
Drawdown P*		0.027 percent