

SIDE ONE

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACD-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

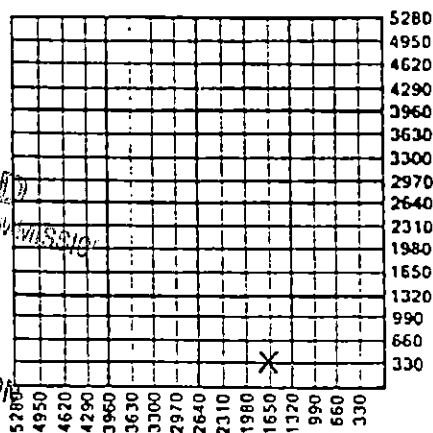
Operator: License # 03613
Name: Hallwood Petroleum, Inc.
Address 4582 S. Ulster St. Pkwy
#1700, P.O. Box 378111
City/State/Zip Denver, Co 80237
Purchaser: Koch Oil Co.
Operator Contact Person: George Hutton
Phone (316) 792-2756
Contractor: Name: Duke Drilling Company, Inc.
License: #5929
Wellsite Geologist: Scott Alberg

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD Temp. Abd.
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply, etc.)

If **OWO**: old well info as follows:
Operator: _____
Well Name: _____
Comp. Date _____ Old Total Depth _____

Drilling Method:
 Mud Rotary Air Rotary Cable
6/4/90 6/11/90 6/30/90
Spud Date Date Reached TD Completion Date

API NO. 15- 185-22,683.0000
County Stafford
SE SW SE Sec. 32 Twp. 21 Rge. 13 East West
330 Ft. North from Southeast Corner of Section
1650 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)
Lease Name Chapman Well # 7
Field Name Hufford
Producing Formation Arbuckle
Elevation: Ground .1900 KB 1908
Total Depth 3889 PBDT 3815



RECEIVED
KANSAS CORPORATION COMMISSION
FEB 14 1992
CONSERVATION DIVISION
WICHITA, KS

Amount of Surface Pipe Set and Cemented at 263 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ sx cmt.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature *Marvin Hall*
Title _____ Date 2/10/92
Subscribed and sworn to before me this 10th day of February, 1992.
Notary Public *Charles Kaus*
Date Commission Expires May 21, 1994

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Drillers Timelog Received
Distribution
____ KCC _____ SWD/Rep _____ NGPA
____ KGS _____ Plug _____ Other (Specify)

SIDE TWO

Operator Name Hallwood Petroleum, Inc. Lease Name Chapman Well # 7
 Sec. 32 Twp. 21 Rge. 13 East County Stafford
 West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Formation Description <input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample Name Top Bottom Topeka 2862(-954) Heebner 3238(-1330) Lansing 3379(-1471) B/KC 3598(-1691) Viola 3657(-1746) Simpson Shale 3699(-1791) Simpson Sand 3718(-1808) Arbuckle 3751(-1841)
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

CASING RECORD <input checked="" type="checkbox"/> New <input checked="" type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	22#	262'	40/60 poz	235	see attached
production	7 7/8"	5 1/2"	14#	3885'	common	200	
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used) Depth			
4	3843-48'			no acid used			
4	3772-80'			no acid used			
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Size		Set At	Packer At				
2 7/8"		3815'	N/A				
Date of First Production	Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)						
6/30/90							
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio		Gravity	
	15.1	-	740	0		29	

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perforation Dually Completed Commingled Other (Specify) _____

Production Interval: _____

ORIGINAL

HALLWOOD PETROLEUM, INC.

CHAPMAN #7

Sec. 32-T21S-13W
API #185-22,683

Surface:

175 sx 40/60 poz, 3% cc 2% gel. Tailed w/60 sx 40/60 poz, 3% cc,
no gel.

Production:

200 sx common 5% EA2 10% salt, .75% Halid 322 5#/sk gilsonite in
last 125 sx, 1/4# sk Flocele.

RECEIVED
KANSAS CORP. REGULATION COMMISSION

FEB 14 1992

CONSERVATION DIVISION
WICHITA, KS

TRILOBITE TESTING COMPANY

ORIGINAL

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	CHAPMAN #7	Test No.	1	Date	6/8/90
Company	QUINOCO PETROLEUM INC	Zone Tested	LANSING-KS CITY		
Address	4582 S ULSTER ST PKWY #1700 DENVER CO	Elevation	1908 KB		
Co. Rep./Geo.	B BRACKEEN/S ALBERG	Cont.	DUKE DRLG RIG #2	Est. Ft. of Pay	7
Location: Sec.	32	Twp.	21S	Rge.	13W
		Co.	STAFFORD	State	KANSAS

F 6
2005

Interval Tested	3432-3480	Drill Pipe Size	4.5" XH
Anchor Length	48	Top Choke — 1"	Bottom Choke — 3/4"
Top Packer Depth	3427	Hole Size — 7 7/8"	Rubber Size — 6 3/4"
Bottom Packer Depth	3432	Wt. Pipe I.D. — 2.7 Ft. Run	256.34
Total Depth	3480	Drill Collar — 2.25 Ft. Run	0
Mud Wt.	9.0 lb/gal.	Viscosity	47
		Filtrate	8.8
Tool Open @	3:52 AM	Initial Blow	STRONG BLOW OFF BOTTOM OF BUCKET IN
	2 MINUTES		
Final Blow	STRONG BLOW OFF BOTTOM OF BUCKET IN 1 1/2		
	MINUTES		

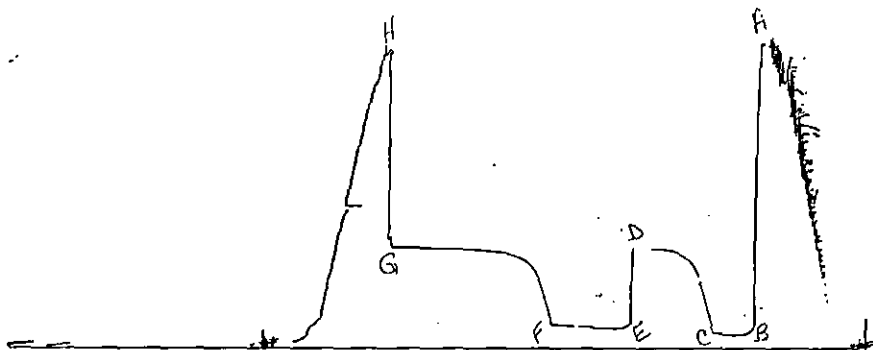
Recovery — Total Feet	210	Flush Tool?	
Rec.	30	Feet of	OIL SPECKED MUD
Rec.	180	Feet of	WATERY OIL & GAS CUT MUD-20%GAS/10%OIL/5%WTR/ 65% MUD
Rec.	0	Feet of	
Rec.	1860	Feet of	GAS IN PIPE
Rec.	0	Feet of	
BHT	105 °F	Gravity	°API @ 0 °F Corrected Gravity 0 °API
RW	@	°F Chlorides	ppm Recovery Chlorides 1850 ppm System
(A) Initial Hydrostatic Mud	1668.1	PSI	Ak1 Recorder No. 13851 Range 4425
(B) First Initial Flow Pressure	40	PSI	@ (depth) 3435 w/Clock No. 31154
(C) First Final Flow Pressure	65.5	PSI	AK1 Recorder No. 13850 Range 4325
(D) Initial Shut-In Pressure	543.6	PSI	@ (depth) 3477 w/Clock No. 30401
(E) Second Initial Flow Pressure	74.4	PSI	AK1 Recorder No. 0 Range 0
(F) Second Final Flow Pressure	114.4	PSI	@ (depth) 0 w/Clock No. 0
(G) Final Shut-In Pressure	545.8	PSI	Initial Opening 30
(H) Final Hydrostatic Mud	1650.4	PSI	Initial Shut-In 60
			Final Flow 60
			Final Shut-In 120

MR CARL F GOFF

500

Our Representative _____

TOTAL PRICE \$ _____



#1

This is an actual photograph of recorder chart.

POINT	PRESSURE		PSI
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	1674	1668.1	PSI
(B) First Initial Flow Pressure.....	44	40	PSI
(C) First Final Flow Pressure.....	66	65.5	PSI
(D) Initial Closed-In Pressure.....	554	543.6	PSI
(E) Second Initial Flow Pressure.....	77	74.4	PSI
(F) Second Final Flow Pressure.....	122	114.4	PSI
(G) Final Closed-In Pressure.....	543	545.8	PSI
(H) Final Hydrostatic Mud.....	1652	1650.4	PSI

INITIAL FLOW

ORIGINAL

RECORDER # 13851
DST #1

DT (MIN)	PRESSURE	<> PRESSURE
0	40	40
3	42.2	2.200001
6	43.3	1.099999
9	44.4	1.100002
12	46.6	2.199997
15	48.8	2.200001
18	52.2	3.400002
21	55.5	3.299999
24	58.8	3.299999
27	62.2	3.400002
30	65.5	3.299999

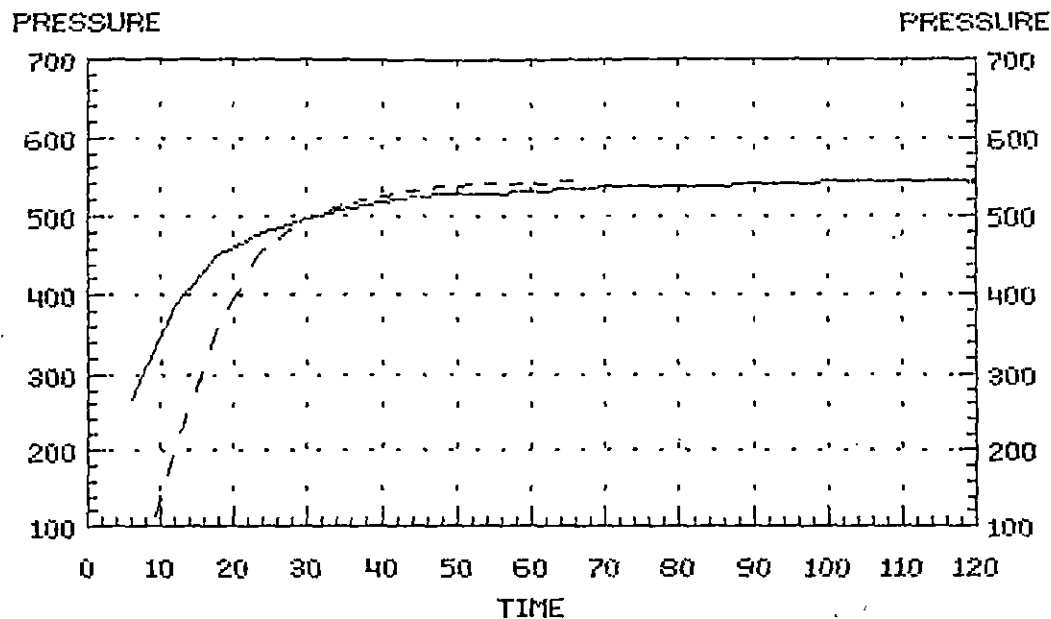
FINAL FLOW

RECORDER # 13851
DST #1

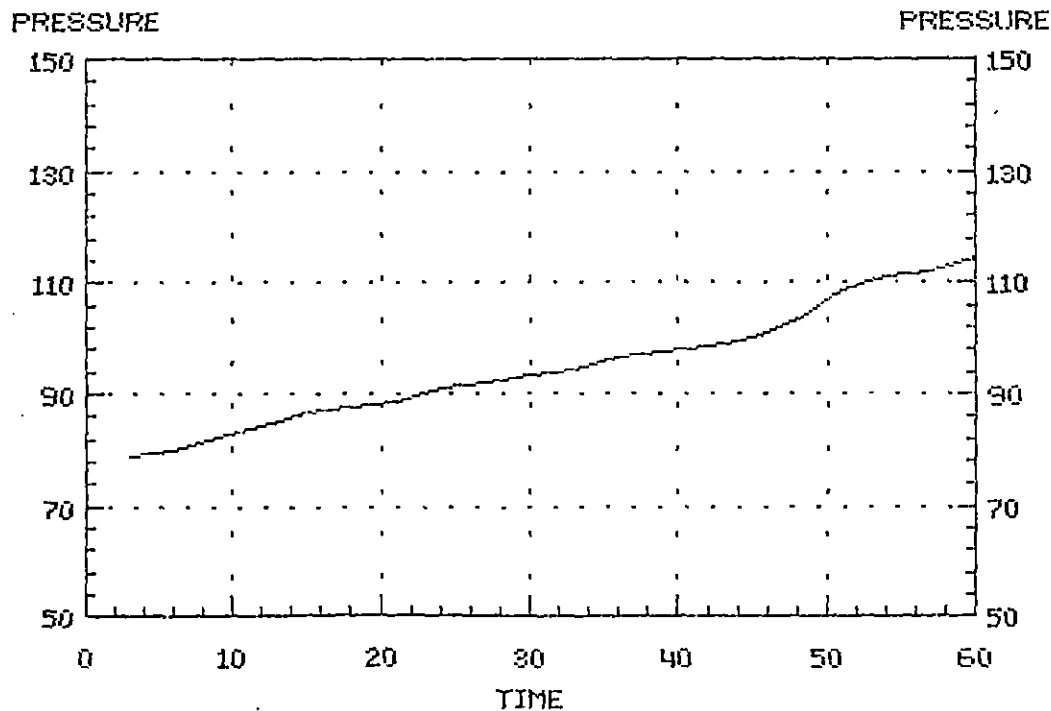
DT (MIN)	PRESSURE	<> PRESSURE
0	74.4	74.4
3	78.8	4.400002
6	80	1.199997
9	82.2	2.199997
12	84.4	2.200005
15	86.6	2.199997
18	87.7	1.099999
21	88.8	1.100006
24	91.1	2.299996
27	92.4	1.300003
30	94.4	2
33	96.6	2.199997
36	97.7	1.099999
39	98.8	1.100006
42	100	1.199997
45	103.3	3.300003
48	104.4	1.099999
51	108.8	4.400002
54	111.1	2.299996
57	112.2	1.099999
60	114.4	2.200005

DELTA T DELTA P
DST #1 INITIAL & FINAL SHUTIN
RECORDER # 13851

FINAL INITIAL



DELTA T DELTA P
DST #1 FINAL FLOW
RECORDER # 13851



CHAPMAN #7 DST #1
 INITIAL SHUTIN
 30 INITIAL FLOW TIME

Slope -414.58 psi/cycle
 P * 617 psi

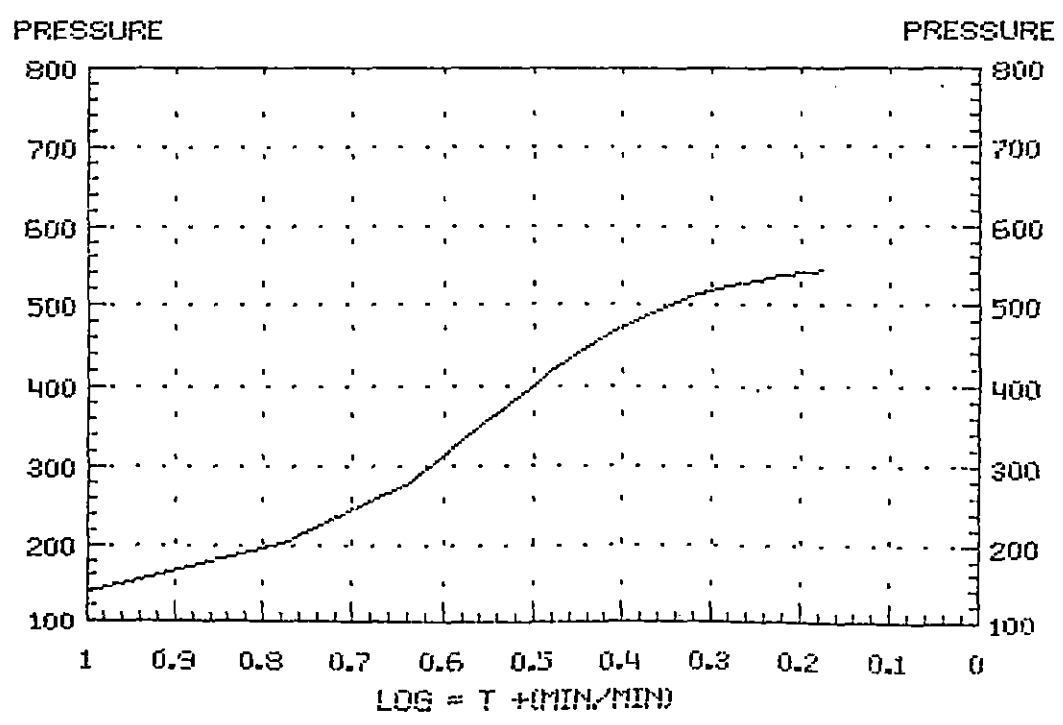
X

X

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	126.6	11	1.041	126.6
6	202.2	6	0.778	75.6
9	277.7	4	0.637	75.5
12	363.3	4	0.544	85.6
15	418.8	3	0.477	55.5
18	457.7	3	0.426	38.9
21	480.0	2	0.385	22.3
24	497.7	2	0.352	17.7
27	510.9	2	0.325	13.2
30	518.5	2	0.301	7.6
33	525.1	2	0.281	6.6
36	528.3	2	0.263	3.2
39	531.6	2	0.248	3.3
42	536.0	2	0.234	4.4
45	538.2	2	0.222	2.2
48	539.3	2	0.211	1.1
51	540.3	2	0.201	1.0
54	542.0	2	0.192	1.7
57	542.5	2	0.184	0.5
60	543.6	2	0.176	1.1

HORNER PLOT

DST #1 INITIAL SHUTIN
 RECORDER # 13851



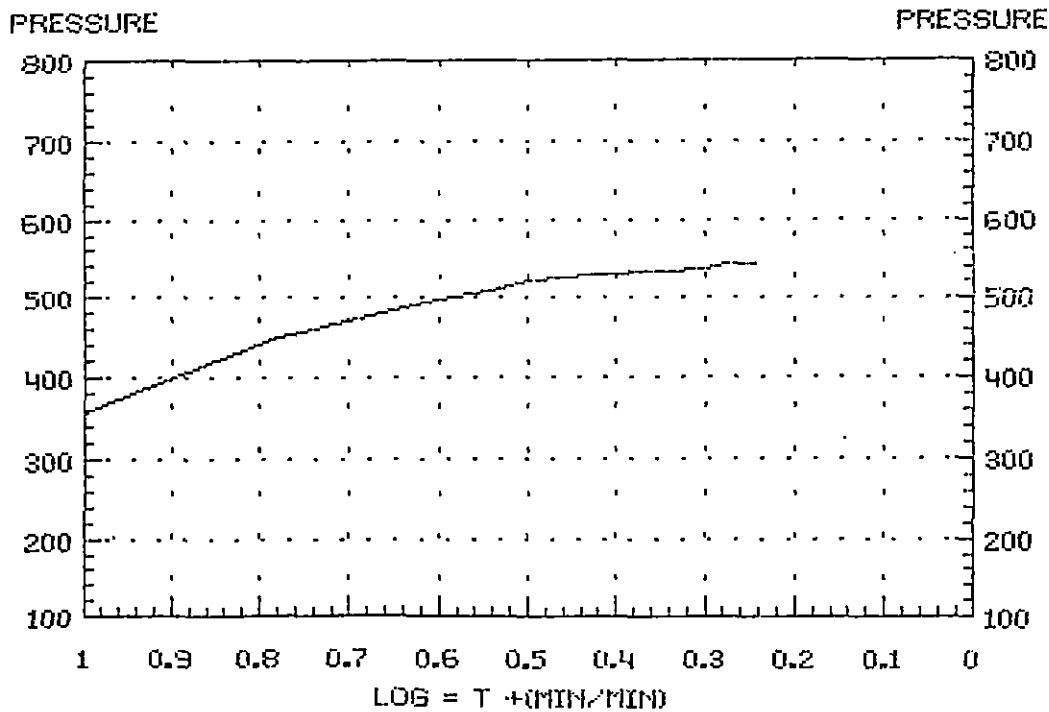
CHAPMAN #7 DST #1
 FINAL SHUTIN
 90 TOTAL FLOW TIME

Slope -176.97 psi/cycle
 P * 589 psi

	TIME(MIN)	Pws (psi)	Log		<> PRESSURE
			Horn T	Horn T	
	6	266.6	16	1.204	266.6
	12	386.6	9	0.929	120.0
X	18	451.1	6	0.778	64.5
	24	478.8	5	0.677	27.7
	30	497.7	4	0.602	18.9
	36	508.7	4	0.544	11.0
	42	520.7	3	0.497	12.0
	48	526.2	3	0.459	5.5
	54	528.3	3	0.426	2.1
	60	530.5	3	0.398	2.2
	66	533.8	2	0.374	3.3
	72	536.0	2	0.352	2.2
	78	536.0	2	0.333	0.0
	84	537.1	2	0.316	1.1
	90	539.3	2	0.301	2.2
	96	542.5	2	0.287	3.2
	102	543.6	2	0.275	1.1
	108	543.6	2	0.263	0.0
	114	544.7	2	0.253	1.1
X	120	545.8	2	0.243	1.1

HORNER PLOT

DST #1 FINAL SHUTIN
 RECORDER # 13851



TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

ORIGINAL

No. 2667

Well Name & No. Chapman #7 Test No. 1 Date 6/8/90
 Company Quinco Petroleum Inc. Zone Tested 2 KP F-G
 Address 4582 S. Wister St. Pkwy #1000 Denver Co. Elevation 1908 HB
 Co. Rep./Geo. Bob Brackeen/Scott Allen Cont. Duke Rig # 2 Est. Ft. of Pay 7'
 Location: Sec. 32 Twp. 21S Rge. 13W Co. Stafford State Ks.
 No. of Copies 8 Distribution Sheet Yes No Turnkey Yes No

Interval Tested 3432-3480 Drill Pipe Size 4 1/2 x 1 1/2
 Anchor Length 48 Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 3427 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 3432 Wt. Pipe I.D. — 2.7 Ft. Run 256.34
 Total Depth 3480 Drill Collar — 2.25 Ft. Run
 Mud Wt. 9.9 lb/gal. Viscosity 47 Filtrate 8.8

Tool Open @ 3:53 AM Initial Blow Strong blow off bottom of bucket in 2 min.

Final Blow Strong blow off bottom of bucket in 1 1/2 min.

Recovery — Total Feet 210 Flush Tool? _____

Rec. 20 Feet of oil spotted mud
 Rec. 180 Feet of oil in Ann. Pit. Mud 20% Gas 10% Oil
 Rec. _____ Feet of (90' slightly heavy) 5% wt. 65% mud
 Rec. _____ Feet of _____
 Rec. 1860 Feet of Ann. in Pipe

BHT 105 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1830 ppm System

(A) Initial Hydrostatic Mud 1674 PSI AK1 Recorder No. 12857 Range 4425
 (B) First Initial Flow Pressure 44 PSI @ (depth) 3435 w/Clock No. 3115-1
 (C) First Final Flow Pressure 66 PSI AK1 Recorder No. 12857 Range 4325
 (D) Initial Shut-In Pressure 554 PSI @ (depth) 3427 w/Clock No. 30401
 (E) Second Initial Flow Pressure 77 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 122 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 543 PSI Initial Opening 30 Test 400 °F
 (H) Final Hydrostatic Mud 1652 PSI Initial Shut-In 60 Jars X
 Final Flow 60 Safety Joint X
 Final Shut-In 120 Straddle _____

Approved By Scott Allen

Our Representative _____

Circ. Sub X
 Sampler X 100 °F
 Extra Packer _____
 Other _____

TOTAL PRICE \$ _____

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No. <u>CHAPMAN #7</u>	Test No. <u>2</u>	Date <u>6/8/90</u>
Company <u>QUINOCO PETROLEUM INC</u>	Zone Tested <u>LANSING-KS CITY</u>	
Address <u>4582 S ULSTER ST PKWY #1700 DENVER CO</u>	Elevation <u>1908 KB</u>	
Co. Rep./Geo. <u>B BRACKEEM/S ALBERG</u>	Cont. <u>DUKE DRLG RIG #2</u>	Est. Ft. of Pay <u>6</u>
Location: Sec. <u>32</u>	Twp. <u>21S</u>	Rge. <u>13W</u>
Co. <u>STAFFORD</u>		State <u>KANSAS</u>

H202

Interval Tested <u>3496-3512</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>16</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3491</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3496</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>256.34</u>
Total Depth <u>3512</u>	Drill Collar — 2.25 Ft. Run <u>0</u>
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>10.8</u>

Tool Open @ 5:08 PM Initial Blow 1/2" BLOW INCREASING TO A STRONG BLOW OFF
BOTTOM OF BUCKET IN 4 MIN-WEAK 1/2" RESIDUAL 10 MIN
 Final Blow STRONG BLOW OFF BOTTOM OF BUCKET IN 1 1/2" MINUTES-
NO RESIDUAL

Recovery — Total Feet 70 Flush Tool? _____

Rec. <u>2730</u>	Feet of <u>GAS IN PIPE</u>
Rec. <u>0</u>	Feet of _____
Rec. <u>70</u>	Feet of <u>OIL & GAS CUT MUD-30% OIL/20% GAS/ 50% MUD</u>
Rec. <u>0</u>	Feet of _____
Rec. <u>0</u>	Feet of _____

BHT 108 °F Gravity _____ °API @ 0 °F Corrected Gravity 0 °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 5000 ppm System

(A) Initial Hydrostatic Mud	<u>1766.5</u> PSI	Ak1 Recorder No. <u>13851</u>	Range <u>4425</u>
(B) First Initial Flow Pressure	<u>18.8</u> PSI	@ (depth) <u>3498</u>	w/Clock No. <u>31154</u>
(C) First Final Flow Pressure	<u>32.2</u> PSI	Ak1 Recorder No. <u>13850</u>	Range <u>4325</u>
(D) Initial Shut-In Pressure	<u>203.3</u> PSI	@ (depth) <u>3509</u>	w/Clock No. <u>30401</u>
(E) Second Initial Flow Pressure	<u>32.2</u> PSI	Ak1 Recorder No. <u>0</u>	Range <u>0</u>
(F) Second Final Flow Pressure	<u>42.2</u> PSI	@ (depth) <u>0</u>	w/Clock No. <u>0</u>
(G) Final Shut-In Pressure	<u>191.1</u> PSI	Initial Opening <u>30</u>	
(H) Final Hydrostatic Mud	<u>1704.6</u> PSI	Initial Shut-In <u>60</u>	
		Final Flow <u>60</u>	
		Final Shut-In <u>120</u>	

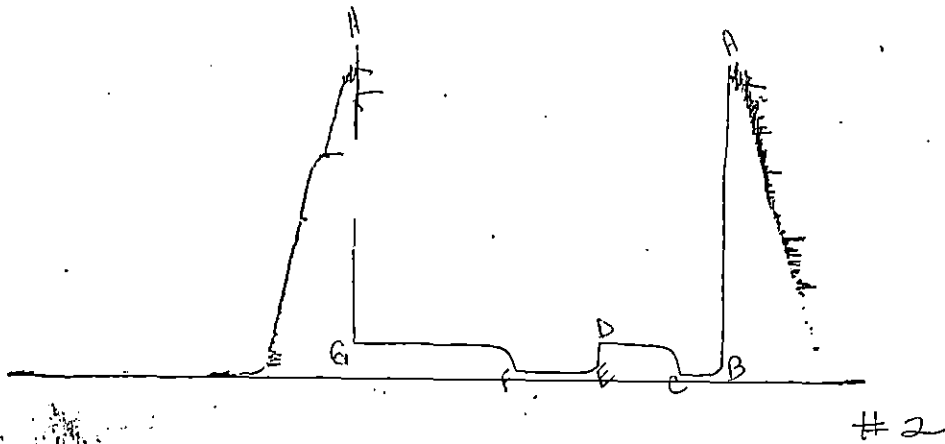
MR CARL F GOFF

500

Our Representative _____ TOTAL PRICE \$ _____

DST# 2

RECORDER# 17357



This is an actual photograph of recorder chart.

PRESSURE

POINT	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	1741	1766.5	PSI
(B) First Initial Flow Pressure.....	33	18.8	PSI
(C) First Final Flow Pressure.....	44	32.2	PSI
(D) Initial Closed-In Pressure.....	211	203.3	PSI
(E) Second Initial Flow Pressure.....	44	32.2	PSI
(F) Second Final Flow Pressure.....	55	42.2	PSI
(G) Final Closed-In Pressure.....	200	191.1	PSI
(H) Final Hydrostatic Mud.....	1719	1704.6	PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2668 Date 6/8/90
Company Name QUINOCO PETROLEUM INC
Lease CHAPMAN #7 Test No. 2
County STAFFORD Sec. 32 Twp. 21S Rng. 13W

SAMPLER RECOVERY

Gas 1000 ML
Oil 1500 ML
Mud 1500 ML
Water 0 ML
Other 0 ML
Pressure 200 PSI
Total 0 ML

PIT MUD ANALYSIS

Chlorides 5000 ppm.
Resistivity 0 ohms @ 0 F
Viscosity 44
Mud Weight 9.0
Filtrate 10.8
Other _____

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

INITIAL FLOW

ORIGINAL

RECORDED # 13851
DST #2

DT (MIN)	PRESSURE	<> PRESSURE
0	18.8	18.8
3	22.2	3.400002
6	24.4	2.199999
9	24.4	0
12	25.5	1.1
15	25.5	0
18	26.6	1.1
21	27.7	1.1
24	30	2.299999
27	31.1	1.1
30	32.2	1.1

FINAL FLOW

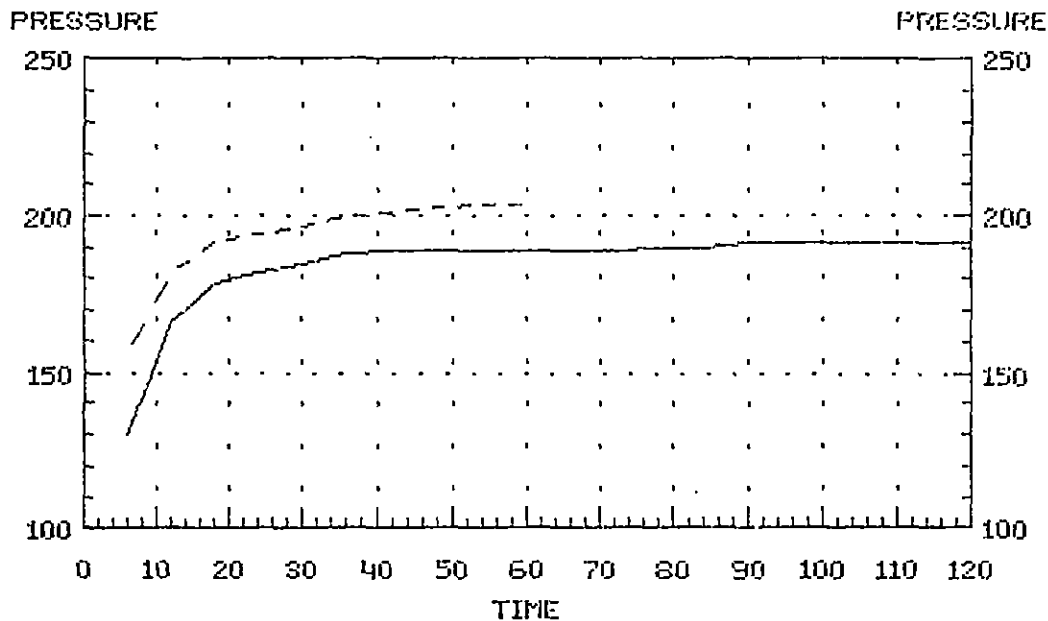
RECORDED # 13851
DST #2

DT (MIN)	PRESSURE	<> PRESSURE
0	32.2	32.2
3	33.3	1.099999
6	33.3	0
9	34.4	1.100002
12	34.4	0
15	34.4	0
18	35.5	1.099999
21	35.5	0
24	35.5	0
27	37.7	2.200001
30	37.7	0
33	38.8	1.099999
36	40	1.200001
39	42.2	2.200001
42	42.2	0
45	42.2	0
48	42.2	0
51	42.2	0
54	42.2	0
57	42.2	0
60	42.2	0

DELTA T DELTA P

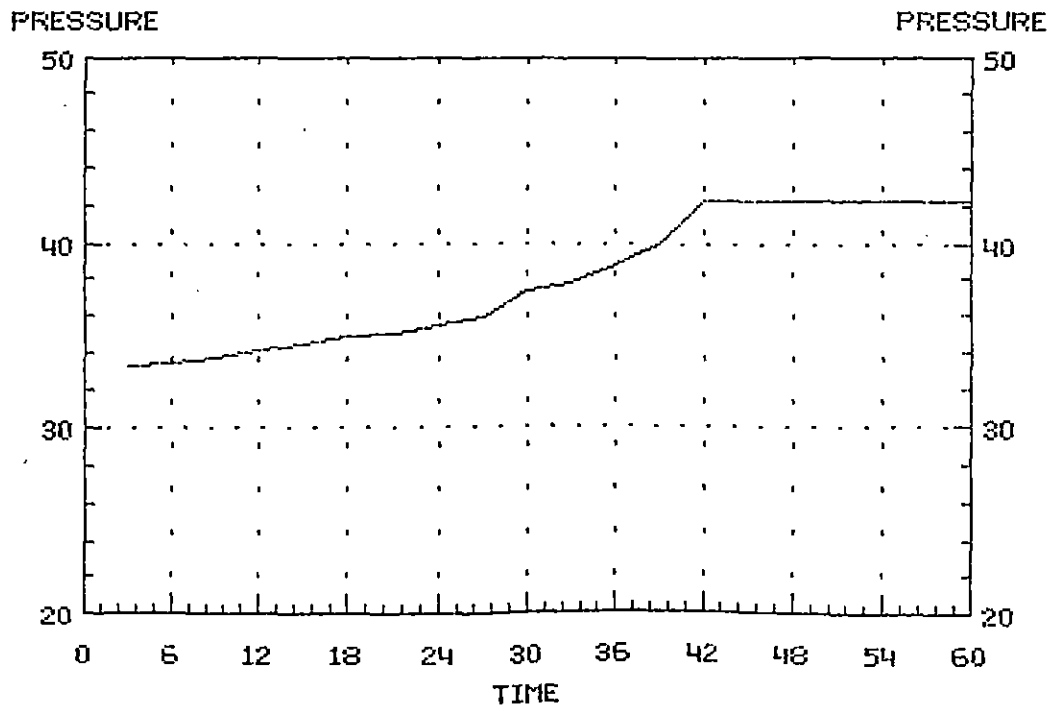
DST #2 INITIAL & FINAL SHUTIN
RECORDER # 13851

FINAL INITIAL



DELTA T DELTA P

DST #2 FINAL FLOW
RECORDER # 13851



CHAPMAN #7 DST #2
 FINAL SHUTIN
 90 TOTAL FLOW TIME

ORIGINAL

Slope -22.99 psi/cycle
 P * 197 psi

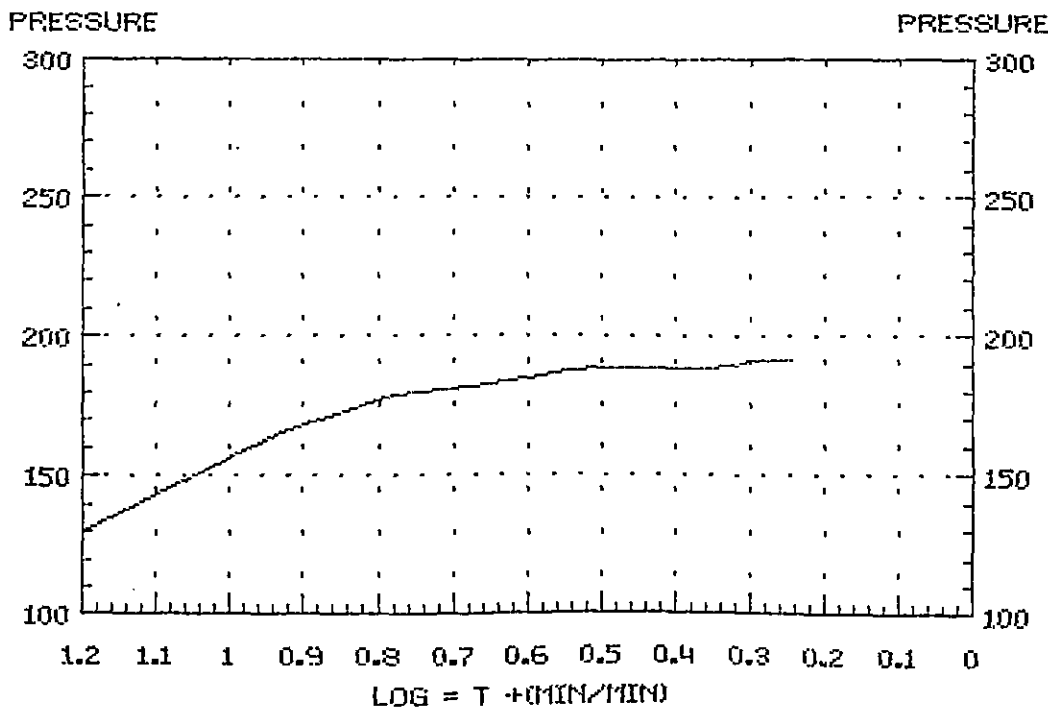
X

X

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
6	130.0	16	1.204	130.0
12	165.5	9	0.929	35.5
18	178.8	6	0.778	13.3
24	182.2	5	0.677	3.4
30	184.4	4	0.602	2.2
36	187.7	4	0.544	3.3
42	188.8	3	0.497	1.1
48	188.8	3	0.459	0.0
54	188.8	3	0.426	0.0
60	188.8	3	0.398	0.0
66	188.8	2	0.374	0.0
72	188.8	2	0.352	0.0
78	190.0	2	0.333	1.2
84	190.0	2	0.316	0.0
90	191.1	2	0.301	1.1
96	191.1	2	0.287	0.0
102	191.1	2	0.275	0.0
108	191.1	2	0.263	0.0
114	191.1	2	0.253	0.0
120	191.1	2	0.243	0.0

HORNER PLOT

DST #2 FINAL SHUTIN
 RECORDER # 13851



CHAPMAN #7 DST #2
 INITIAL SHUTIN

30 INITIAL FLOW TIME

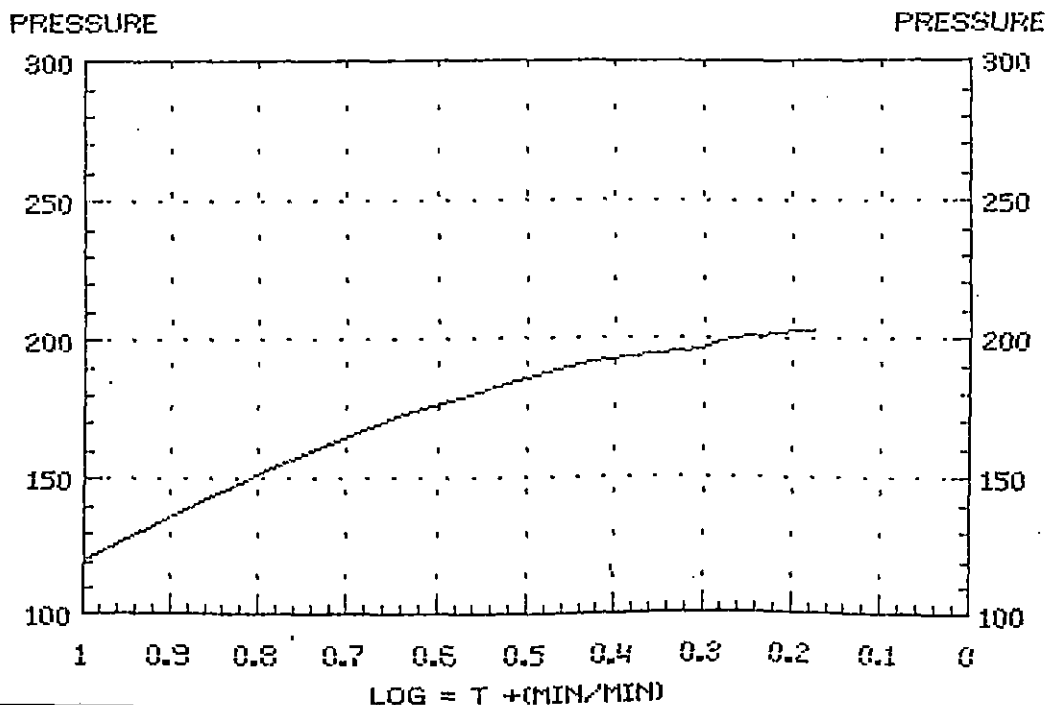
Slope -79.39 psi/cycle

P * 217 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	3	114.4	11	1.041	114.4
X	6	155.5	6	0.778	41.1
	9	173.3	4	0.637	17.8
	12	182.2	4	0.544	8.9
	15	187.7	3	0.477	5.5
	18	191.1	3	0.426	3.4
	21	193.3	2	0.385	2.2
	24	194.4	2	0.352	1.1
	27	195.5	2	0.325	1.1
	30	196.6	2	0.301	1.1
	33	198.8	2	0.281	2.2
	36	200.0	2	0.263	1.2
	39	201.1	2	0.248	1.1
	42	201.1	2	0.234	0.0
	45	202.2	2	0.222	1.1
	48	202.2	2	0.211	0.0
	51	203.3	2	0.201	1.1
	54	203.3	2	0.192	0.0
	57	203.3	2	0.184	0.0
X	60	203.3	2	0.176	0.0

HORNER PLOT

DST #2 INITIAL SHUTIN
 RECORDER # 13851



TRILOBITE TESTING COMPANY ORIGINAL

P.O. BOX 362 • Hays, Kansas 67601

TEST TICKET

No 2668

Well Name & No. Chapman #7 Test No. 2 Date 6/18/90
 Company Quinn & Proctor Inc. Zone Tested LHC 'H'
 Address 11582 S. 116th St. Overland Park, Mo. Elevation 1908 KRP
 Co. Rep. / Geo. Scott Alber Cont. Proctor Est. Ft. of Pay 6'
 Location: Sec. 22 Twp. 21 S Rge. 12 W Co. St. Louis State Mo.
 No. of Copies 8 Distribution Sheet Yes No Turnkey Yes No

Interval Tested 3496 - 3512 Drill Pipe Size 4 1/2 X H
 Anchor Length 16 Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 3491 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 3496 Wt. Pipe I.D. — 2.7 Ft. Run 256.34
 Total Depth 3512 Drill Collar — 2.25 Ft. Run
 Mud Wt. 9.9 lb/gal. Viscosity 44 Filtrate 10.5"

Tool Open @ 5:08 pm. Initial Blow 1/2" blow increasing to a strong blow at bottom of bucket in 10 min. - Weak 1/2" Residual 10 min.
 Final Blow Strong blow at bottom of bucket in 1/2 min. - No Residual

Recovery — Total Feet 70 Flush Tool?

Rec. 2730 Feet of Gas in Pipe
 Rec. 70 Feet of Oil & Gas Out Mud 30% Oil 20% Gas 50% Mud
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____

BHT 108 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 5000 ppm System

(A) Initial Hydrostatic Mud 1241 PSI Ak1 Recorder No. 128571 Range 4425
 (B) First Initial Flow Pressure 37 PSI @ (depth) 3497 w/Clock No. 1104
 (C) First Final Flow Pressure 44 PSI AK1 Recorder No. 128571 Range 4425
 (D) Initial Shut-In Pressure 211 PSI @ (depth) 3509 w/Clock No. 70211
 (E) Second Initial Flow Pressure 44 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 55 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 200 PSI Initial Opening 30 Test 400
 (H) Final Hydrostatic Mud 1719 PSI Initial Shut-In 60 Jars X
 Final Flow 60 Safety Joint X
 Final Shut-in 120 Straddle _____

Approved By Scott Alber Circ. Sub X
 Our Representative Carl D. Bell Sampler X 100
 Extra Packer _____
 Other _____

TOTAL PRICE \$ _____

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	CHAPMAN #7	Test No.	3	Date	6/9/90
Company	QUINOCO PETROLEUM INC	Zone Tested	VIOLA		
Address	4582 S ULSTER ST PKWY #1700 DENVER CO		Elevation	1908 KB	
Co. Rep./Geo.	B BRACKEEN/S ALBERG	Cont.	DUKE DRIG RIG #2	Est. Ft. of Pay	0
Location: Sec.	32	Twp.	21S	Rge.	13W
			co.	STAFFORD	state KANSAS

Interval Tested	3658-3690	Drill Pipe Size	4.5" XH		
Anchor Length	32	Top Choke — 1"	Bottom Choke — 3/4"		
Top Packer Depth	3653	Hole Size — 77/8"	Rubber Size — 63/4"		
Bottom Packer Depth	3658	Wt. Pipe I.D. — 2.7 Ft. Run	256.34		
Total Depth	3690	Drill Collar — 2.25 Ft. Run	0		
Mud Wt.	9.1	lb/gal.	Viscosity 43	Filtrate 10.4	
Tool Open @	3:31 PM	Initial Blow	WEAK 1/4" BLOW INCREASING TO A WEAK 3" BLOW		

Final Blow WEAK SURFACE BLOW INCREASING TO A WEAK 2" BLOW

Recovery — Total Feet	10	Flush Tool?				
Rec.	180	Feet of	GAS IN PIPE			
Rec.	0	Feet of				
Rec.	10	Feet of	DRILLING MUD WITH SCUM OF OIL			
Rec.	0	Feet of				
Rec.	0	Feet of				
BHT	110	°F Gravity	°API @ 0	°F Corrected Gravity	0	°API
RW	@	°F Chlorides	ppm Recovery	Chlorides	6500	ppm System
(A) Initial Hydrostatic Mud	1755.4	PSI	Ak1 Recorder No.	13851	Range	4425
(B) First Initial Flow Pressure	32.6	PSI	@ (depth)	3660	w/Clock No.	31154
(C) First Final Flow Pressure	33.8	PSI	Ak1 Recorder No.	13850	Range	4325
(D) Initial Shut-in Pressure	101.2	PSI	@ (depth)	3687	w/Clock No.	30401
(E) Second Initial Flow Pressure	34.6	PSI	Ak1 Recorder No.	0	Range	0
(F) Second Final Flow Pressure	35.8	PSI	@ (depth)	0	w/Clock No.	0
(G) Final Shut-in Pressure	91.4	PSI	Initial Opening	30		
(H) Final Hydrostatic Mud	1721.3	PSI	Initial Shut-in	45		
			Final Flow	45		
			Final Shut-in	60		

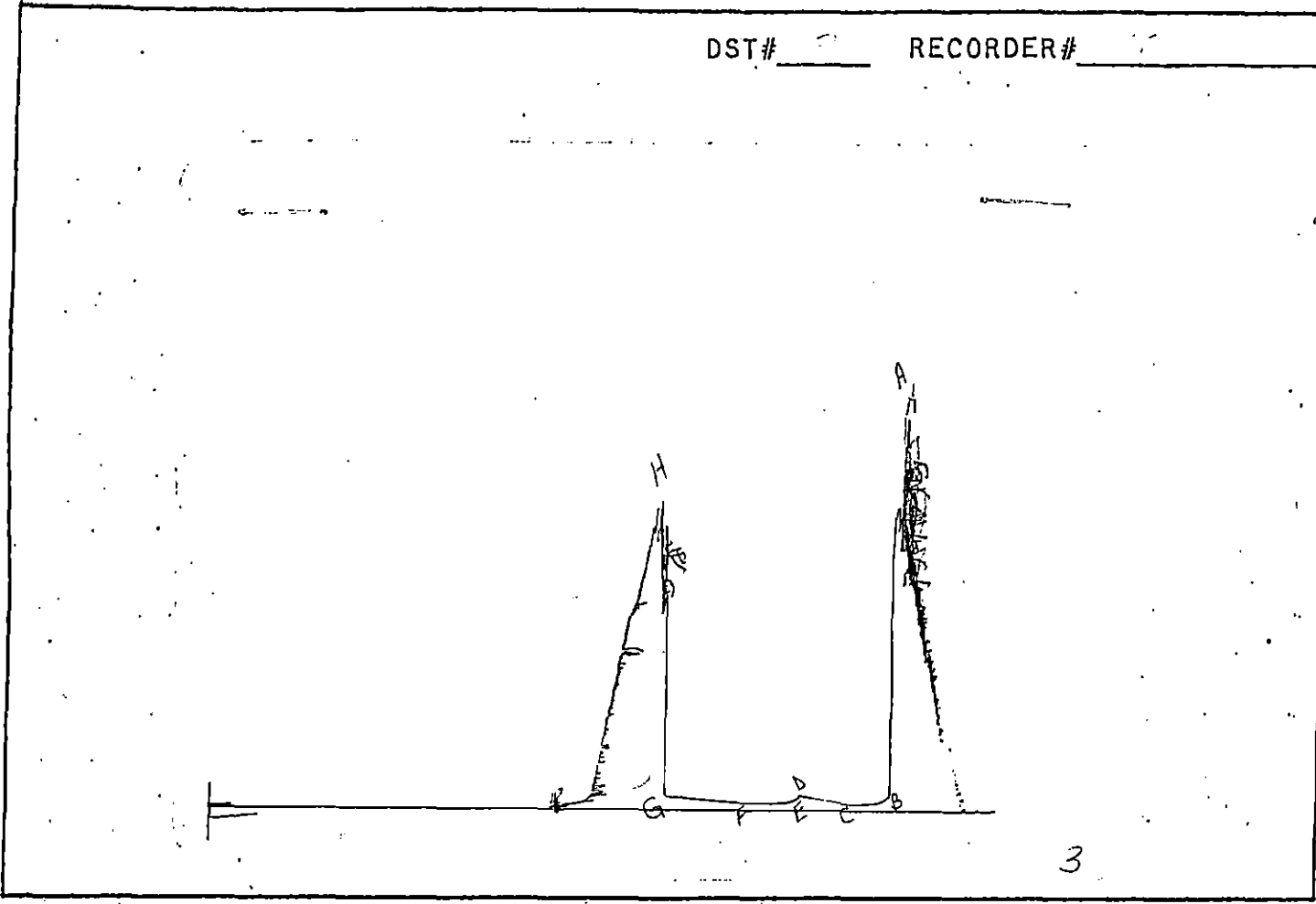
MR CARL F GOFF

500

Our Representative _____

TOTAL PRICE \$ _____

DST# _____ RECORDER# _____



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	1752	1755.4	PSI
(B) First Initial Flow Pressure.....	33	32.6	PSI
(C) First Final Flow Pressure.....	33	33.8	PSI
(D) Initial Closed-In Pressure.....	100	101.2	PSI
(E) Second Initial Flow Pressure.....	33	34.6	PSI
(F) Second Final Flow Pressure.....	33	35.8	PSI
(G) Final Closed-In Pressure.....	88	91.4	PSI
(H) Final Hydrostatic Mud.....	1719	1721.3	PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2669 Date 6/9/90
Company Name QUINOCO PETROLEUM INC
Lease CHAPMAN #7 Test No. 3
County STAFFORD Sec. 32 Twp. 21S Rng. 13W

SAMPLER RECOVERY

Gas 0 ML
Oil 0 ML
Mud 4000 with scum of oil ML
Water 0 ML
Other 0 ML
Pressure 25 PSI
Total 0 ML

PIT MUD ANALYSIS

Chlorides 6500 ppm.
Resistivity 0 ohms @ 0 F
Viscosity 43
Mud Weight 9.1
Filtrate 10.4
Other _____

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity _____ corrected @ 80 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

TRILOBITE TESTING COMPANY

ORIGINAL

P.O. BOX 362 • Hays, Kansas 67601

TEST TICKET

N^o 2669

Well Name & No. Chapman #7 Test No. 3 Date 6/9/90
 Company Quinco Pet. Inc. Zone Tested Viola
 Address 45825 Water St. Pkwy #1200 Denver Co. Elevation 1908 HB
 Co. Rep. / Geo. Bob Bruckner / Scott Alberg Cont. Duke Dely. Rig #2 Est. Ft. of Pay _____
 Location: Sec. 32 Twp. 21S Rge. 13W Co. Stafford State Ks.
 No. of Copies 8 Distribution Sheet _____ Yes No Turnkey _____ Yes No

Interval Tested 3658-3690 Drill Pipe Size 4 1/2 X H
 Anchor Length 33 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 3653 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 3658 Wt. Pipe I.D. — 2.7 Ft. Run 256.34
 Total Depth 3690 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. _____ 9.4 lb/gal. Viscosity 43 Filtrate 10.4
 Tool Open @ 3:31 pm Initial Blow Weak 1/4" blow increasing to a weak 3" blow
 Final Blow Weak surface blow increasing to a weak 3" blow

Recovery — Total Feet 10 Flush Tool? _____
 Rec. 180 Feet of Gas in Pipe
 Rec. 10' Feet of Dely Mud w/sum of oil
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 BHT 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 6500 ppm System
 (A) Initial Hydrostatic Mud 1702 PSI Ak1 Recorder No. 13851 Range 4425
 (B) First Initial Flow Pressure 33 PSI @ (depth) 3660 W/Clock No. 21154
 (C) First Final Flow Pressure 33 PSI AK1 Recorder No. 13850 Range 4325
 (D) Initial Shut-In Pressure 100 PSI @ (depth) 3687 W/Clock No. 20401
 (E) Second Initial Flow Pressure 33 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 33 PSI @ (depth) _____ W/Clock No. _____
 (G) Final Shut-In Pressure 88 PSI Initial Opening 30 Test 4010 °F
 (H) Final Hydrostatic Mud 1219 PSI Initial Shut-In 45 Jars X
 Final Flow 115 Safety Joint X
 Final Shut-In 40 Straddle _____

Approved By [Signature] Circ. Sub X
 Our Representative Carl D. Hoff Sampler X 100 °C
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ _____

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No. <u>CHAPMAN #7</u>	Test No. <u>4</u>	Date <u>6/10/90</u>
Company <u>QUINOCO PETROLEUM INC</u>	Zone Tested <u>ARBUCKLE</u>	
Address <u>4582 S ULSTER ST PKWY #1700 DENVER CO</u>	Elevation <u>1908 KB</u>	
Co. Rep./Geo <u>B BRACKEEN/S ALBERG</u>	Cont. <u>DUKE DRLG RIG #2</u>	Est. Ft. of Pay <u>3</u>
Location: Sec. <u>32</u>	Twp. <u>21S</u>	Rge. <u>13W</u> Co. <u>STAFFORD</u> State <u>KANSAS</u>

Interval Tested <u>3724-3753</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>29</u>	Top Choke — 1" <u> </u> Bottom Choke — ¾" <u> </u>
Top Packer Depth <u>3719</u>	Hole Size — 77/8" <u> </u> Rubber Size — 63/4" <u> </u>
Bottom Packer Depth <u>3724</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>256.34</u>
Total Depth <u>3753</u>	Drill Collar — 2.25 Ft. Run <u>0</u>
Mud Wt. <u>9.2</u> lb/gal.	Viscosity <u>42</u> Filtrate <u>10.4</u>

Tool Open @ 5:56 AM Initial Blow 1/2" BLOW INCREASING TO STRONG BLOW OFF
BOTTOM OF BUCKET IN 19 MIN-WEAK SURFACE RESIDUAL

Final Blow 1/2" BLOW INCREASING TO STRONG BLOW OFF BOTTOM OF BUCKET
IN 22 MINUTES-2 1/2" RESIDUAL

Recovery — Total Feet 430 Flush Tool?

Rec. 250 Feet of GAS IN PIPE

Rec. 60 Feet of CLEAN GASSY OIL

Rec. 60 Feet of OIL & WTR CUT MUD-10% OIL/20%WTR/70%MUD

Rec. 310 Feet of SALT WATER

Rec. 0 Feet of

BHT 118 °F Gravity 30 °API @ 74 °F Corrected Gravity 29 °API

RW .346 @ 83.4 °F Chlorides 17000 ppm Recovery Chlorides 6500 ppm System

(A) Initial Hydrostatic Mud	<u>1861.7</u> PSI	Ak1 Recorder No. <u>13851</u>	Range <u>4425</u>
(B) First Initial Flow Pressure	<u>46.6</u> PSI	@ (depth) <u>3726</u>	w/Clock No. <u>31154</u>
(C) First Final Flow Pressure	<u>116.6</u> PSI	AK1 Recorder No. <u>13850</u>	Range <u>4325</u>
(D) Initial Shut-In Pressure	<u>1107.9</u> PSI	@ (depth) <u>3750</u>	w/Clock No. <u>30401</u>
(E) Second Initial Flow Pressure	<u>137.7</u> PSI	AK1 Recorder No. <u>0</u>	Range <u>0</u>
(F) Second Final Flow Pressure	<u>212.2</u> PSI	@ (depth) <u>0</u>	w/Clock No. <u>0</u>
(G) Final Shut-In Pressure	<u>1103.5</u> PSI	Initial Opening <u>30</u>	
(H) Final Hydrostatic Mud	<u>1768.8</u> PSI	Initial Shut-In <u>60</u>	
		Final Flow <u>60</u>	
		Final Shut-In <u>120</u>	

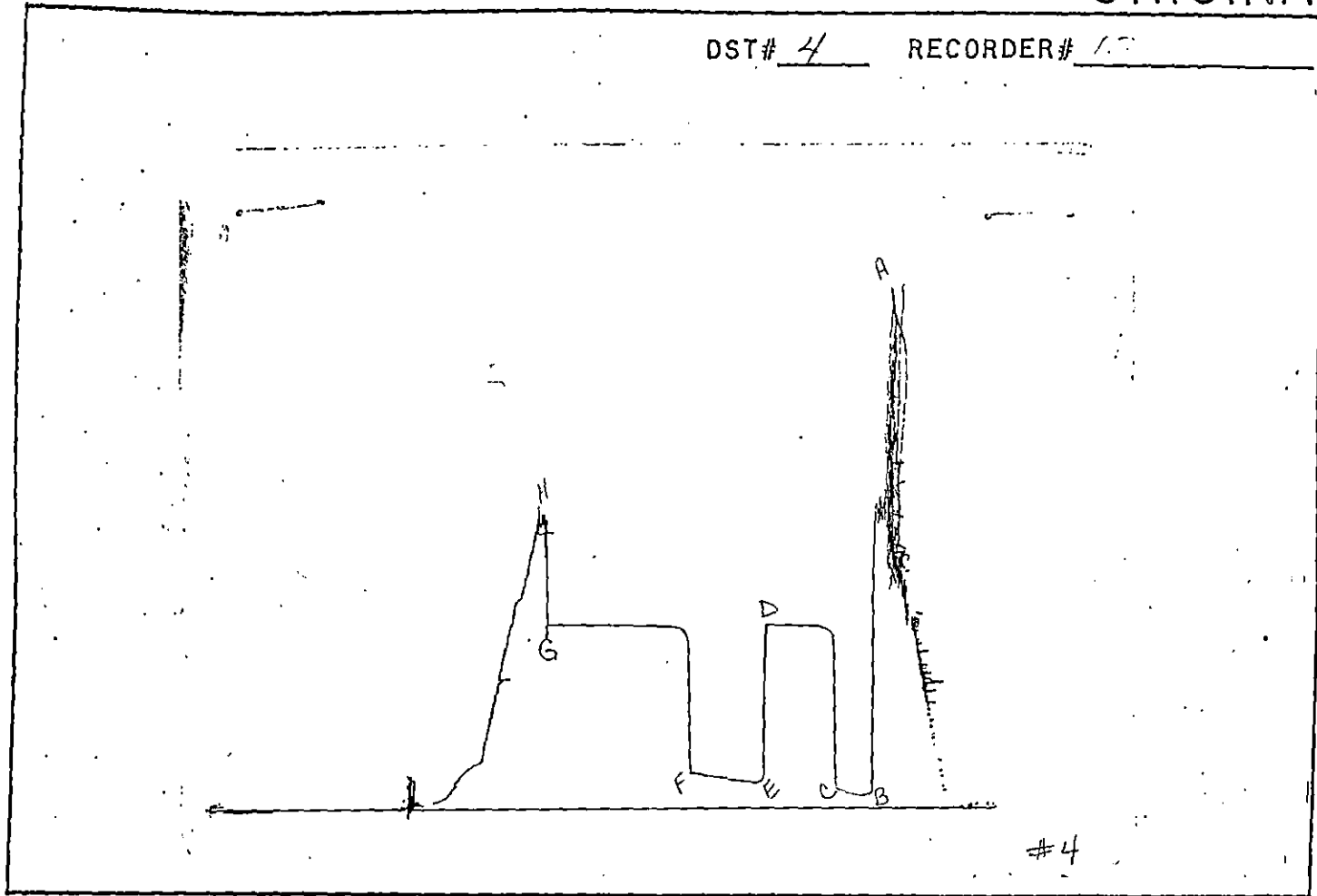
MR CARL F GOFF

500

Our Representative _____

TOTAL PRICE \$ _____

DST# 4 RECORDER# 10



This is an actual photograph of recorder chart.

PRESSURE

POINT	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	1829	1861.7	PSI
(B) First Initial Flow Pressure.....	33	46.6	PSI
(C) First Final Flow Pressure.....	100	116.6	PSI
(D) Initial Closed-In Pressure.....	1101	1107.9	PSI
(E) Second Initial Flow Pressure.....	122	137.7	PSI
(F) Second Final Flow Pressure.....	211	212.2	PSI
(G) Final Closed-In Pressure.....	1101	1103.5	PSI
(H) Final Hydrostatic Mud.....	1774	1768.8	PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2670 Date 6/10/90
Company Name QUINOCO PETROLEUM INC
Lease CHAPMAN #7 Test No. 4
County STAFFORD Sec. 32 Twp. 21S Rng. 13W

SAMPLER RECOVERY

Gas 600 ML
Oil 800 ML
Mud _____ ML
Water 2,600 ML
Other _____ ML
Pressure 500# PSI
Total _____ ML

PIT MUD ANALYSIS

Chlorides 6500 ppm.
Resistivity 0 ohms @ 0 F
Viscosity 42
Mud Weight 9.2
Filtrate 10.4
Other _____

SAMPLER ANALYSIS

Resistivity .346 ohms @ 83.4 F
Chlorides 17000 ppm.
Gravity 29 corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity .41 ohms @ 85 F
Chlorides 13000 ppm.
MIDDLE
Resistivity .412 ohms @ 82.1 F
Chlorides 14000 ppm.
BOTTOM
Resistivity .346 ohms @ 83.4 F
Chlorides 17000 ppm.

COMPUTER EVALUATION BY TRILOBITE TESTING
QUINOCO PETROLEUM INC
REPORT FOR DST#4 FOR THE CHAPMAN #7
32-21S-13W STAFFORD KS

ORIGINAL

TEST PARAMETERS

ELEVATION: 1908 KB EST. PAY: 3 FT
DATUM: -1819 ZONE TESTED: ARBUCKLE
TEST INTERVAL: 3724-3753
TIME INTERVALS: 30-60-60-120
RECORDER DEPTH: 3726 VISCOSITY: 17.93608 CP
BOTTOM HOLE TEMP: 118 HOLE SIZE: 7.875 IN

CALCULATIONS

CUBIC FEET OF GAS IN PIPE: 19.95985
TOTAL FEET OF RECOVERY: 430
BARRELS IN DRILL PIPE: 2.47428
BARRELS IN WEIGHT PIPE: 1.792
GAS OIL RATIO: 4.678513 CU.FT./BBL
BUBBLE POINT PRESSURE: ; 5.799897E-02
TOTAL BARRELS OF RECOVERY: 4.26628
UNCORR. INIT. PROD.: 68.26048 BBL/DAY
API GRAVITY: 28 FLUID GRADIENT: .384
CORRECTED PIPE FILLUP: 552.6041

CORR. BARRELS OF RECOVERY: 6.00112 BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 96.01791 BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE
63.38792

INITIAL SLOPE 31.54 PSI/CYCLE
INITIAL P* 1113 PSI

FINAL SLOPE 8.649999 PSI/CYCLE
FINAL P* 1106 PSI

TRANSMISSIBILITY 1804.915 (MD.-FT./CP.)
PERMEABILITY 10791.03 (MD.)
INDICATED FLOW CAPACITY 32373.1 (MD.FT)
PRODUCTIVITY INDEX 2.039554 (BARRELS/DAY/PSI)
DAMAGE RATIO 18.9093
RADIUS OF INVESTIGATION 985.4912 (FT.)
THEORETICAL POTENTIAL FROM FINAL FLOW PRESSURE 1815.631 BBL/DAY
THEORITICAL POTENTIAL FROM PSEUDO STEADY FLOW STATE 1198.621 BBL/DAY
POTENTIOMETRIC SURFACE 746.814 (FT.)
DRAWDOWN FACTOR .6289303 (%)

COMPUTER EVALUATION BY TRILOBITE TESTING
 QUINOCO PETROLEUM
 REPORT FOR DST#4 FOR THE CHAPMAN #7
 32 21S 13W STAFFORD KS

 TEST PARAMETERS

ELEVATION: 1908 KB EST. PAY: 3 FT
 DATUM: -1819 ZONE TESTED: ARBUCKLE
 TEST INTERVAL: 3724-3753
 TIME INTERVALS: 30-60-60-120
 RECORDER DEPTH: 3726 VISCOSITY: .5666634 CP
 BOTTOM HOLE TEMP: 118 HOLE SIZE: 7.875 IN

 CALCULATIONS

CUBIC FEET OF GAS IN PIPE: 19.95985
 TOTAL FEET OF RECOVERY: 430
 BARRELS IN DRILL PIPE: 2.47428
 BARRELS IN WEIGHT PIPE: 1.792
 GAS OIL RATIO: 0 CU.FT./BBL
 BUBBLE POINT PRESSURE: ; 0
 TOTAL BARRELS OF RECOVERY: 4.26628
 UNCORR. INIT. PROD.: 68.26048 BBL/DAY
 API GRAVITY: 1 FLUID GRADIENT: .45
 CORRECTED PIPE FILLUP: 471.5556
 CORR. BARRELS OF RECOVERY: 4.849301 BBL
 INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 77.58861 BBL/DAY
 INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE
 53.38792

 INITIAL SLOPE 31.54 PSI/CYCLE
 INITIAL P* 1113 PSI

FINAL SLOPE 8.649999 PSI/CYCLE
 FINAL P* 1106 PSI

 TRANSMISSIBILITY 1458.49 (MD.-FT./CP.)
 PERMEABILITY 275.491 (MD.)
 INDICATED FLOW CAPACITY 826.473 (MD.FT)
 PRODUCTIVITY INDEX 1.648094 (BARRELS/DAY/PSI)
 DAMAGE RATIO 18.9093
 RADIUS OF INVESTIGATION 157.4617 (FT.)
 THEORETICAL POTENTIAL FROM FINAL FLOW PRESSURE 1467.15 BBL/DAY
 THEORETICAL POTENTIAL FROM PSEUDO STEADY FLOW STATE 1198.621 BBL/DAY
 POTENTIOMETRIC SURFACE 746.814 (FT.)
 RAWDOWN FACTOR .6289303 (%)

INITIAL FLOW

ORIGINAL

REORDER # 13851
DST #4

DT (MIN)	PRESSURE	<> PRESSURE
0	46.6	46.6
3	50	3.400002
6	54.4	4.400002
9	63.3	8.899998
12	70	6.700001
15	76.6	6.599999
18	82.2	5.599999
21	90	7.800003
24	91.1	1.000001
27	99.3	7.700005
30	106.6	7.799996
33	116.6	10

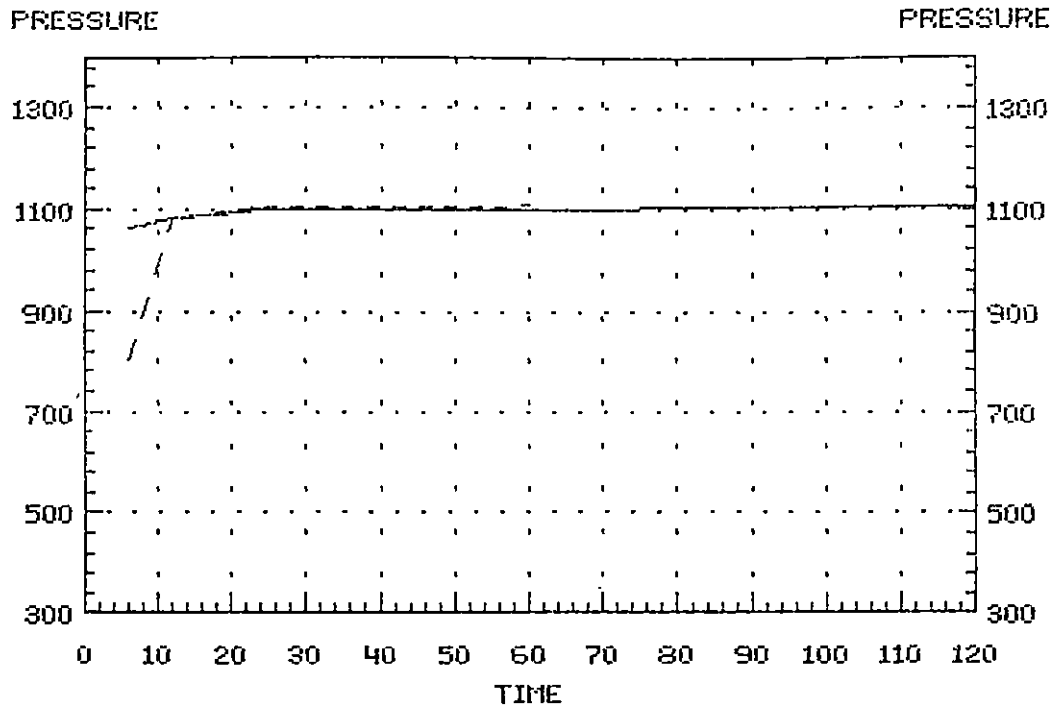
FINAL FLOW

REORDER # 13851
DST #4

DT (MIN)	PRESSURE	<> PRESSURE
0	137.7	137.7
3	143.3	5.600006
6	143.3	0
9	144.4	1.099991
12	146.6	2.200012
15	152.2	5.599991
18	155.5	3.300003
21	160	4.5
24	164.4	4.399994
27	165.5	1.100006
30	170	4.5
33	173.3	3.300003
36	177.7	4.399994
39	182.2	4.5
42	186.6	4.400009
45	190	3.399994
48	194.4	4.399994
51	197.7	3.300003
54	200	2.300003
57	204.4	4.399994
60	206.6	2.200012
63	212.2	5.599991

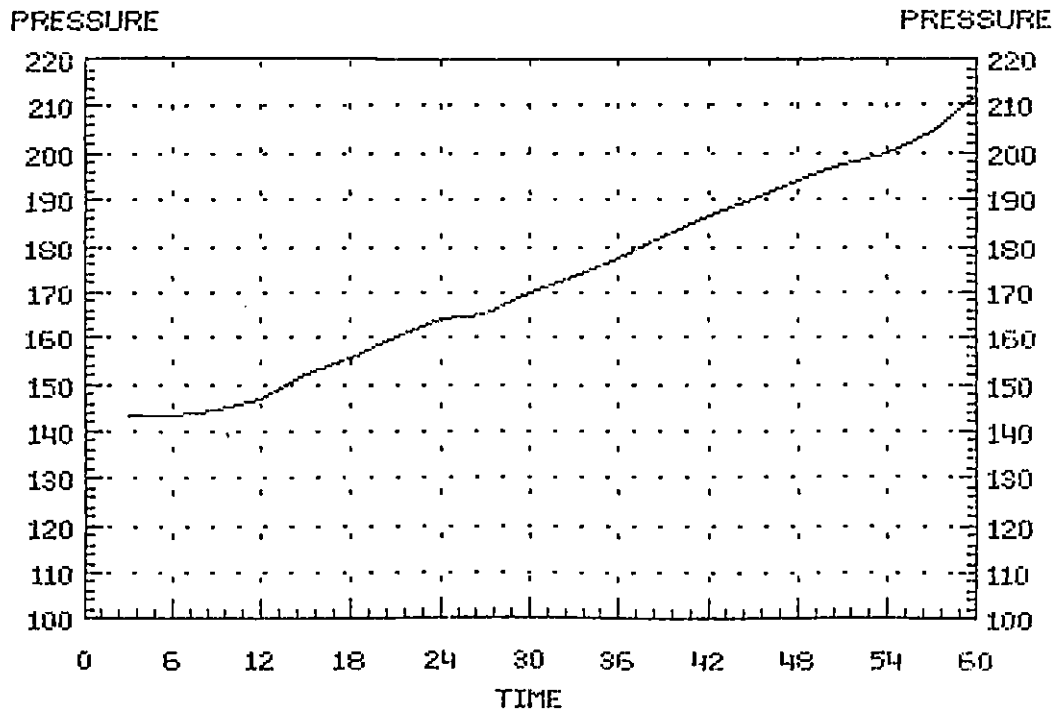
DELTA T DELTA P

DST #4 INITIAL & FINAL SHUTIN
RECORDER # 13851



DELTA T DELTA P

DST #4 FINAL FLOW
RECORDER # 13851



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 63.38792 BBL/DAY

ORIGINAL

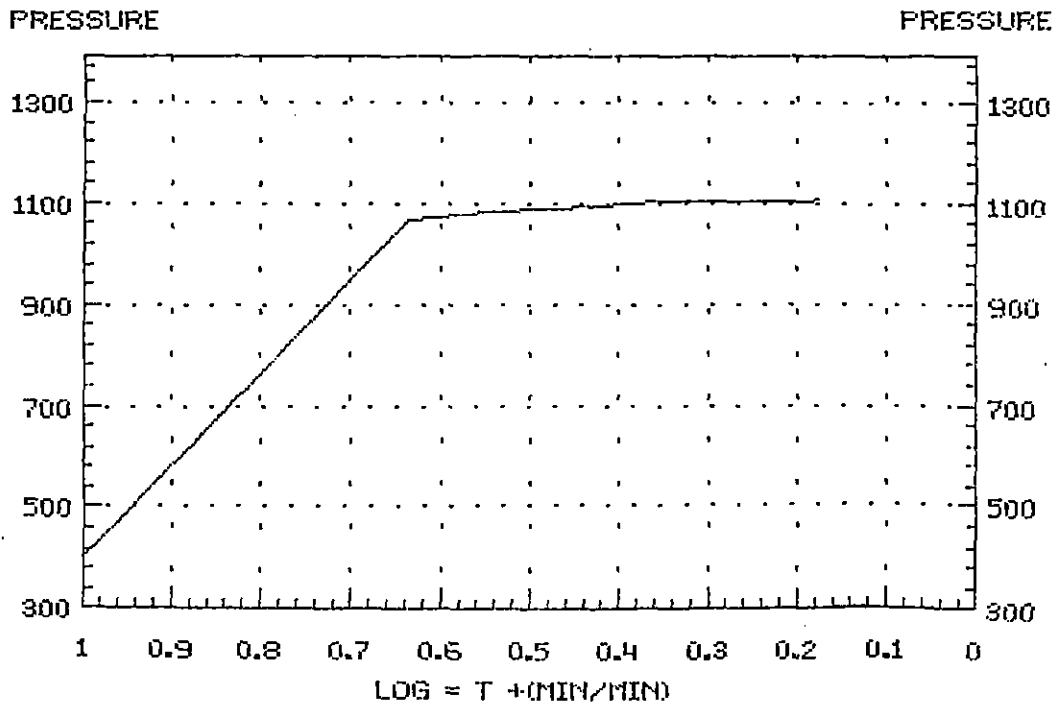
CHAPMAN #7 DST #4
 INITIAL SHUTIN
 30 INITIAL FLOW TIME

Slope -31.54 psi/cycle
 P * 1,113 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	3	330.0	11	1.041	330.0
	6	802.4	6	0.778	472.4
	9	1066.0	4	0.637	263.6
	12	1082.6	4	0.544	16.6
	15	1090.3	3	0.477	7.7
	18	1095.8	3	0.426	5.5
X	21	1101.3	2	0.385	5.5
	24	1103.5	2	0.352	2.2
	27	1105.7	2	0.325	2.2
	30	1105.7	2	0.301	0.0
	33	1105.7	2	0.281	0.0
	36	1105.7	2	0.263	0.0
	39	1105.7	2	0.248	0.0
	42	1105.7	2	0.234	0.0
	45	1105.7	2	0.222	0.0
	48	1106.8	2	0.211	1.1
	51	1106.8	2	0.201	0.0
	54	1106.8	2	0.192	0.0
	57	1106.8	2	0.184	0.0
X	60	1107.9	2	0.176	1.1

HORNER PLOT

DST #4 INITIAL SHUTIN
 RECORDER # 13851



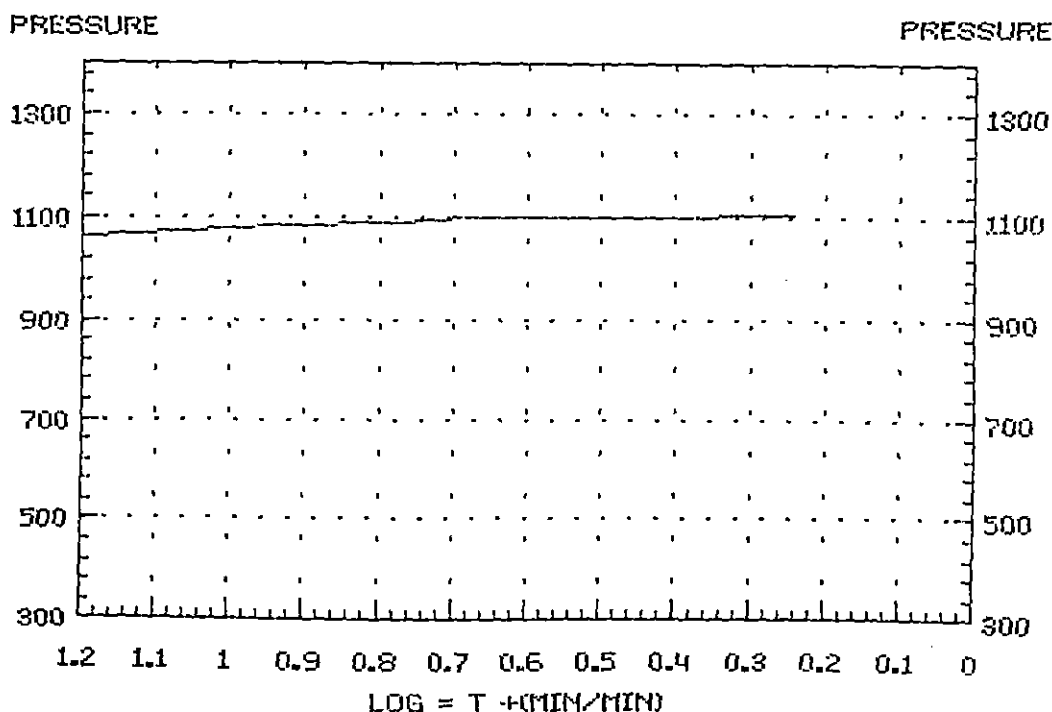
CHAPMAN #7 DST #4
 FINAL SHUTIN
 90 TOTAL FLOW TIME

 Slope -8.65 psi/cycle
 P * 1,106 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	6	1062.7	16	1.204	1062.7
	12	1082.6	9	0.929	19.9
	18	1090.3	6	0.778	7.7
	24	1096.9	5	0.677	6.6
	30	1098.0	4	0.602	1.1
	36	1099.1	4	0.544	1.1
X	42	1101.3	3	0.497	2.2
	48	1101.3	3	0.459	0.0
	54	1101.3	3	0.426	0.0
	60	1101.3	3	0.398	0.0
	66	1101.3	2	0.374	0.0
	72	1101.3	2	0.352	0.0
	78	1102.4	2	0.333	1.1
	84	1102.4	2	0.316	0.0
	90	1102.4	2	0.301	0.0
	96	1103.5	2	0.287	1.1
	102	1103.5	2	0.275	0.0
	108	1103.5	2	0.263	0.0
	114	1103.5	2	0.253	0.0
X	120	1103.5	2	0.243	0.0

HORNER PLOT

DST #4 FINAL SHUTIN
 RECORDER # 12851



TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

ORIGINAL No. 2670

Well Name & No. <u>Chapman # 2</u>	Test No. <u>4</u>	Date <u>4/10/90</u>
Company <u>Quinnco Pet. Inc.</u>	Zone Tested <u>Arch.</u>	
Address <u>45825 11th St. P.O. Box # 1000 Berwyn Pa</u>	Elevation <u>1908 KB</u>	
Co. Rep./Geo. <u>Bob Paschke</u> / <u>5911</u>	Cont. <u>Duke Polg. Ass'n</u>	Est. Ft. of Pay <u>3'</u>
Location: Sec. <u>32</u> Twp. <u>25E</u> Rge. <u>13W</u> Co. <u>St. Paul</u> State <u>Ks.</u>		
No. of Copies <u>2</u> Distribution sheet <u>Yes</u> <input checked="" type="checkbox"/> <u>No</u> <input type="checkbox"/> Turnkey <u>Yes</u> <input checked="" type="checkbox"/> <u>No</u> <input type="checkbox"/>		

Interval Tested <u>2724-2753</u>	Drill Pipe Size <u>4 1/2 XH</u>
Anchor Length <u>29</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>3719</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>2724</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>256.34</u>
Total Depth <u>2753</u>	Drill Collar — 2.25 Ft. Run
Mud Wt. <u>13</u> lb/gal. Viscosity <u>42</u> Filtrate <u>10.4</u>	
Tool Open @ <u>5:56 pm</u> Initial Blow <u>1/2" blow increasing to a strong blow off bottom of bucket in 19 min - 2 1/2" residual</u>	
Final Blow <u>1/2" blow increasing to a strong blow off bottom of bucket in 22 min. 2 1/2" residual</u>	

Recovery — Total Feet <u>1130</u>	Flush Tool? <u></u>
Rec. <u>250</u> Feet of <u>Base in Pipe</u>	
Rec. <u>60</u> Feet of <u>Open Heavy Oil</u>	
Rec. <u>60</u> Feet of <u>Oil & Water 10% Oil 20% Water 20% mud</u>	
Rec. <u>310</u> Feet of <u>Salt 2100</u>	
Rec. <u></u> Feet of <u></u>	

BHT <u>118</u> °F Gravity <u>30</u> °API @ <u>24</u> °F Corrected Gravity <u>29</u> °API	
RW <u>.346</u> @ <u>83.4</u> °F Chlorides <u>17000</u> ppm Recovery Chlorides <u>5000</u> ppm System	
(A) Initial Hydrostatic Mud <u>1829</u> PSI Ak1 Recorder No. <u>13851</u> Range <u>21155</u>	
(B) First Initial Flow Pressure <u>33</u> PSI @ (depth) <u>2036</u> w/Clock No. <u>51124</u>	
(C) First Final Flow Pressure <u>100</u> PSI AK1 Recorder No. <u>13250</u> Range <u>42255</u>	
(D) Initial Shut-In Pressure <u>1101</u> PSI @ (depth) <u>2250</u> w/Clock No. <u>20401</u>	
(E) Second Initial Flow Pressure <u>152</u> PSI AK1 Recorder No. <u></u> Range <u></u>	
(F) Second Final Flow Pressure <u>211</u> PSI @ (depth) <u></u> w/Clock No. <u></u>	
(G) Final Shut-In Pressure <u>1101</u> PSI Initial Opening <u>30</u> Test. <u>400 cc</u>	
(H) Final Hydrostatic Mud <u>1774</u> PSI Initial Shut-In <u>60</u> Jars <u>X</u>	
Final Flow <u>60</u> Safety Joint <u>X</u>	
Final Shut-In <u>120</u> Straddle <u></u>	

Approved By Scott Atwood

Our Representative Carl P. Hoff

Circ. Sub X

Sampler X 100 cc

Extra Packer

Other

TOTAL PRICE \$

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

ORIGINAL

No. 2670

Well Name & No. Chapman #7 Test No. 4 Date 4/10/90
 Company Quinoco Pet. Inc. Zone Tested Arb.
 Address 45825 11th St. Platteville, Mo Elevation 1908 KB
 Co. Rep./Geo. Bob Roakeen / Scott Wilson Cont. Duke Dalg. Ariz Est. Ft. of Pay 3'
 Location: Sec. 32 Twp. 5S Rge. 13W CO. St. Louis State Ks.
 No. of Copies 2 Distribution Sheet Yes No Turnkey Yes No

Interval Tested 3724-3753 Drill Pipe Size 4 1/2 X H
 Anchor Length 29 Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 3719 Hole Size — 7 1/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 3724 Wt. Pipe I.D. — 2.7 Ft. Run 256.34
 Total Depth 3753 Drill Collar — 2.25 Ft. Run
 Mud Wt. 9.3 lb/gal. Viscosity 42 Filtrate 10.4

Tool Open @ 5:56 a.m. Initial Blow 1/2" blow increasing to a strong blow off bottom of bucket in 19 min. - Next surface residual
 Final Blow 1/2" blow increasing to a strong blow off bottom of bucket in 22 min. 2 1/2" residual

Recovery — Total Feet 1130 Flush Tool?
 Rec. 250 Feet of Gas in Pipe
 Rec. 60 Feet of Clear Brown Oil
 Rec. 10 Feet of Oil & Water Bit Mud 10% Oil 20% Water 70% Mud
 Rec. 310 Feet of Salt 2 1/2"
 Rec. _____ Feet of _____

BHT 118 °F Gravity 30 °API @ 24 °F Corrected Gravity 29 °API
 RW .346 @ 83.4 °F Chlorides 17000 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud 1829 PSI AK1 Recorder No. 18857 Range 21155
 (B) First Initial Flow Pressure 33 PSI @ (depth) 3006 W/Clock No. 51154
 (C) First Final Flow Pressure 100 PSI AK1 Recorder No. 18850 Range 21155
 (D) Initial Shut-In Pressure 1101 PSI @ (depth) 3753 W/Clock No. 30201
 (E) Second Initial Flow Pressure 122 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 211 PSI @ (depth) _____ W/Clock No. _____
 (G) Final Shut-In Pressure 1101 PSI Initial Opening 30 Test 400 cc
 (H) Final Hydrostatic Mud 1774 PSI Initial Shut-In 60 Jars
 Final Flow 60 Safety Joint
 Final Shut-In 120 Straddle _____

Approved By Scott Wilson
 Our Representative Carl P. Duff
 Circ. Sub
 Sampler 100 cc
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ _____