TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No. HUCK A-5 (TWIN) Test No. 1 Date 10/21/89

Company QUINOCO PETROLEUM INC Zone Tested LANSING-KC

Address P.O. BOX 378111 DENVER CO 80237 Elevation 2243 KB

Co. Rep./Geo. MR JIM MUSGROVE Cont. RED TIGER #7 Est. Ft. of Pay 0

Location: Sec. 31 Twp. 11S Rge. 20W Co. ELLIS State KANSAS

Interval Tested 3690'-3740' Drill Pipe Size 5" IF

Anchor Length 50 Top Choke — 1"

Top Packer Depth 3685 Bottom Choke — ¾"

Bottom Packer Depth 3690 Hole Size — 7⅞"

Total Depth 3740 Rubber Size — 6¾"

Wt. Pipe I.D. — 2.7 Ft. Run 378

Drill Collar — 2.25 Ft. Run 0

Mud Wt. 9.3 lb./gal. Viscosity 40 Filtrate 12

Tool Open @ 1:23 PM Initial Blow WEAK 1/4" BLOW BUILDING TO 1 3/4"

Final Blow NO BLOW-FLUSH TOOL-VERY WEAK SURFACE BLOW BUILDING TO 1"

Recovery — Total Feet 65 Flush Tool? 2ND OPEN

Rec. 65 Feet of SLIGHTLY OIL SPECKED WATERY MUD-30% WATER/70% MUD

Rec. 0 Feet of

Rec. 0 Feet of

Rec. 0 Feet of

Rec. 0 Feet of

BHT 118 °F Gravity °API @ 0 °F Corrected Gravity 0 °API

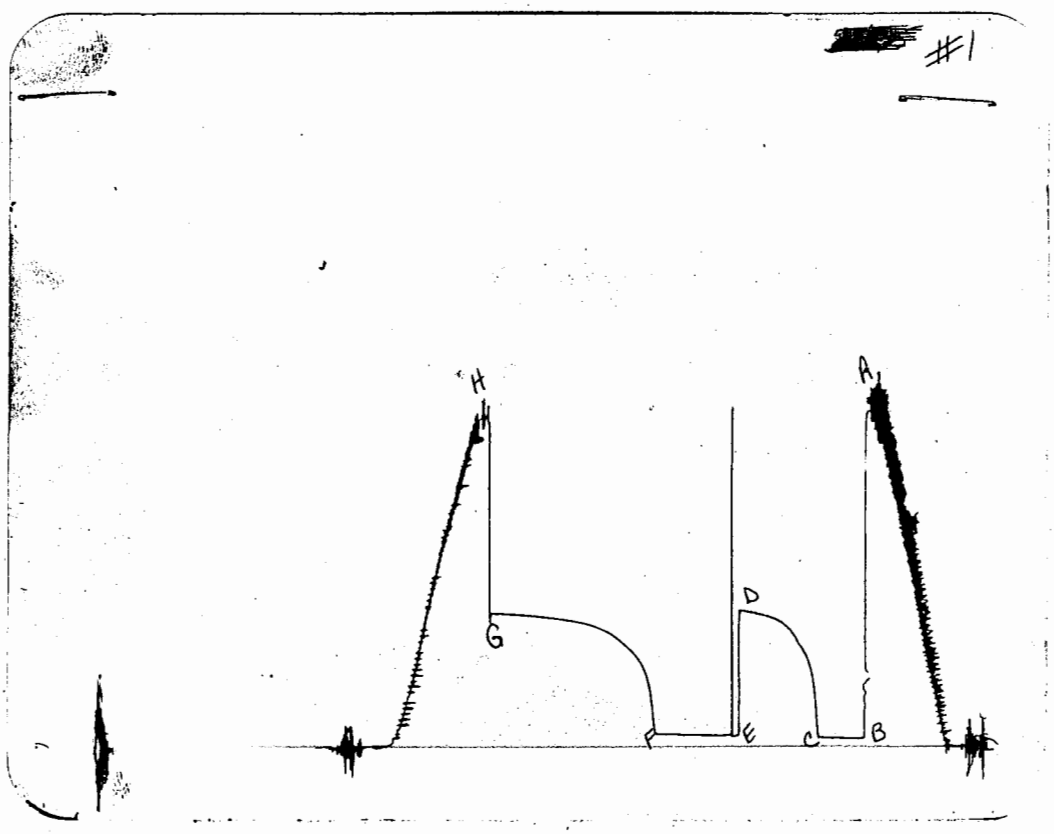
RW .33 @ 74 °F Chlorides 19500 ppm Recovery Clorides 4000 ppm System

(A)	Initial Hydrostatic Mud	1730.2 PSI	AK1 Recorder No.	3975	Range 13337
(B)	First Initial Flow Pressure	40.2 PSI	@ (depth)	3739	w/Clock No. 26191
(C)	First Final Flow Pressure	50.2 PSI	AK1 Recorder No.	7437	Range 4200
(D)	Initial Shut-In Pressure	692.3 PSI	@ (depth)	3725	w/Clock No. 25810
(E)	Second Initial Flow Pressure	50.2 PSI	Initial Opening	30	
(F)	Second Final Flow Pressure	60.3 PSI	Initial Shut-In	60	
(G)	Final Shut-In Pressure	695.4 PSI	Final Flow	60	
(H)	Final Hydrostatic Mud	1690.2 PSI	Final Shut-In	120	

Our Representative MR PAUL SIMPSON TOTAL PRICE..... $ 450

Printcraft Printers - Hays, KS

DST# 1 RECORDER# _____



This is an actual photograph of recorder chart.

POINT	PRESSURE Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1728	1730.2	PSI
(B) First Initial Flow Pressure	39	40.2	PSI
(C) First Final Flow Pressure	49	50.2	PSI
(D) Initial Closed-In Pressure	691	692.3	PSI
(E) Second Initial Flow Pressure	49	50.2	PSI
(F) Second Final Flow Pressure	59	60.3	PSI
(G) Final Closed-In Pressure	691	695.4	PSI
(H) Final Hydrostatic Mud	1689	1690.2	PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2204 Date 10/21/89

Company Name QUINOCO PETROLEUM INC

Lease HUCK A-5 (TWIN) Test No. 1

County ELLIS Sec. 31 Twp. 11S Rng. 20W

SAMPLER RECOVERY

Gas	0	ML
Oil	0	ML
Mud	2600	ML
Water	400	ML
Other	0	ML
Pressure	50	PSI
Total	3000	ML

PIT MUD ANALYSIS

Chlorides	4000	ppm.		
Resistivity	1.4	ohms @	75	F
Viscosity	40			
Mud Weight	9.3			
Filtrate	12			
Other				

SAMPLER ANALYSIS

Resistivity	.33	ohms @	74	F
Chlorides	19500	ppm.		
Gravity	0	corrected @ 60 F		

PIPE RECOVERY

TOP

Resistivity 0 ohms @ 0 F

Chlorides 0 ppm.

MIDDLE

Resistivity 0 ohms @ 0 F

Chlorides 0 ppm.

BOTTOM

Resistivity .33 ohms @ 74 F

Chlorides 19500 ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 2204

Well Name & No. Huck A-5 (twin) Test No. 1 Date 10/21/89

Company Quinoco Petroleum Inc Zone Tested LKC

Address PO Box 378111 Denver Colo 80237 Elevation

Co. Rep./Geo. Jim Musgrove Cont. Red Tiger #7 Est. Ft. of Pay

Location: Sec. 31 Twp. 11s Rge. 20w Co. Ellis State Ks

Interval Tested 3690 - 3740 Drill Pipe Size 5" IF

Anchor Length 50 Top Choke — 1"

Top Packer Depth 3685 Bottom Choke — ¾"

Bottom Packer Depth 3690 Hole Size — 7⅞"

Total Depth 3740 Rubber Size — 6¾"

Wt. Pipe I.D. — 2.7 Ft. Run 378

Drill Collar — 2.25 Ft. Run

Mud Wt. 9.1 lb./gal. Viscosity 40 Filtrate 12

Tool Open @ 1:23PM Initial Blow weak ¼" blow building to 1¾"

Final Blow no blow - flush tool - very weak surface blow building to 1"

Recovery — Total Feet 65 Flush Tool? 2nd open

Rec. 65 Feet of SI oilspected watery Mud

Rec. Feet of 30% water 70% mud

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 118 °F Gravity °API @ °F Corrected Gravity °API

RW .33 @ 74 °F Chlorides 19,500 ppm Recovery Chlorides 4000 ppm System

(A)	Initial Hydrostatic Mud	1728	PSI	AK1 Recorder No.	B175	Range	13337
(B)	First Initial Flow Pressure	39	PSI	@ (depth)	3739	w/Clock No.	~~3475~~ 2619
(C)	First Final Flow Pressure	49	PSI	AK1 Recorder No.	7437	Range	4200
(D)	Initial Shut-In Pressure	691	PSI	@ (depth)	3725	w/Clock No.	25810
(E)	Second Initial Flow Pressure	49	PSI	Initial Opening	30	Test	400
(F)	Second Final Flow Pressure	59	PSI	Initial Shut-In	60	Jars	
(G)	Final Shut-In Pressure	691	PSI	Final Flow	60	Safety Joint	50
(H)	Final Hydrostatic Mud	1654	PSI	Final Shut-In	120	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Other	

Approved By Ron Weaver

Our Representative Paul Simpson

TOTAL PRICE $ 450

Printcraft Printers - Hays, KS

invoice to Plainville copy to Musgrove

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No. HUCK A-5 (TWIN) Test No. 2 Date 10/22/89

Company QUINOCO PETROLEUM INC Zone Tested ARBUCKLE

Address P.O. BOX 378111 DENVER CO Elevation 2243 KB

Co. Rep./Geo. MR JIM MUSGROVE Cont. RED TIGER #7 Est. Ft. of Pay 8

Location: Sec. 31 Twp. 11S Rge. 20W Co. ELLIS State KANSAS

Interval Tested 3824-3832 Drill Pipe Size 5"IF

Anchor Length 8 Top Choke — 1"

Top Packer Depth 3819 Bottom Choke — ¾"

Bottom Packer Depth 3824 Hole Size — 7⅞"

Total Depth 3832 Rubber Size — 6¾"

Wt. Pipe I.D. — 2.7 Ft. Run 378

Drill Collar — 2.25 Ft. Run 0

Mud Wt. 9.4 lb./gal. Viscosity 49 Filtrate 11.6

Tool Open @ 10:41 AM Initial Blow WEAK 1/2" BLOW BUILDING TO 9"

Final Blow VERY WEAK SURFACE BLOW BUILDING TO 8"-(WEAK BLOW BACK ON SHUT-IN)

Recovery — Total Feet 250 Flush Tool?

Rec. 180 Feet of GAS IN PIPE

Rec. 190 Feet of CLEAN GASSY OIL

Rec. 60 Feet of HEAVY OIL CUT WATERY MUD-30% OIL/10% WATER/60% MUD

Rec. 0 Feet of

Rec. 0 Feet of

BHT 120 °F Gravity 36 °API @ 80 °F Corrected Gravity 34 °API

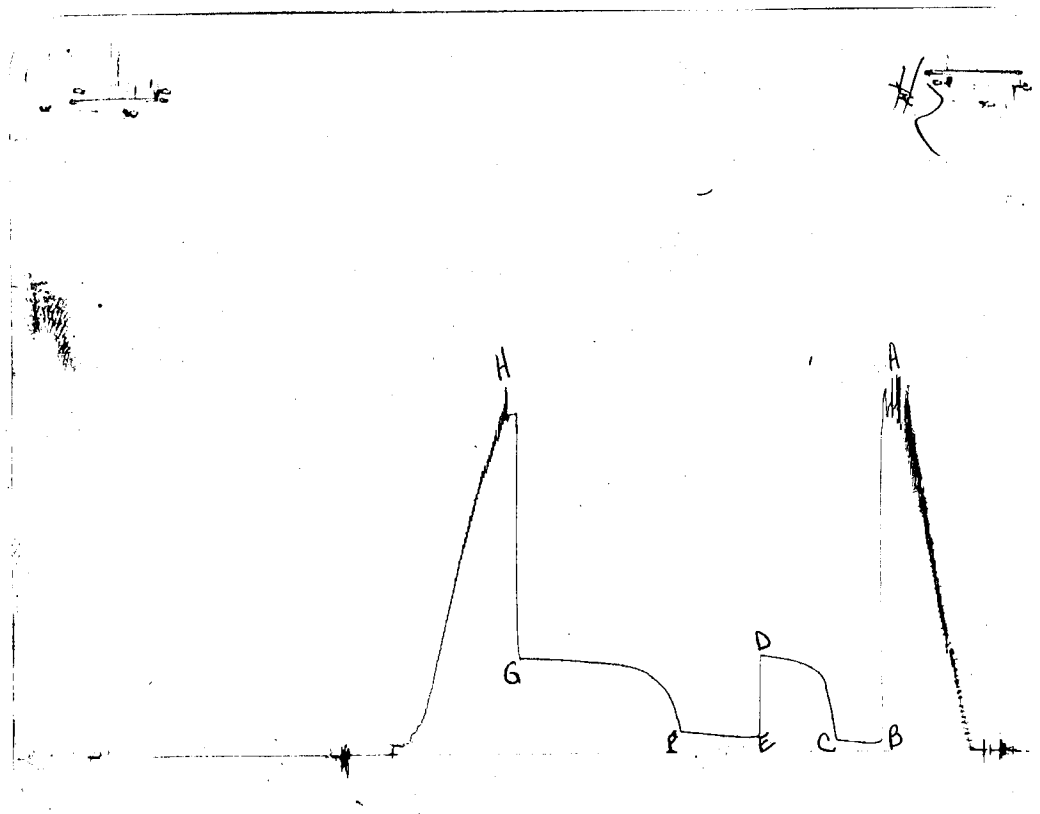
RW .60 @ 85.5 °F Chlorides 8400 ppm Recovery Clorides 6000 ppm System

(A) Initial Hydrostatic Mud	1995.4 PSI	AK1 Recorder No.	13337	Range	3975
(B) First Initial Flow Pressure	24.2 PSI	@(depth)	3831	w/Clock No.	27501
(C) First Final Flow Pressure	51.7 PSI	AK1 Recorder No.	5495	Range	4200
(D) Initial Shut-In Pressure	535.6 PSI	@(depth)	3827	w/Clock No.	25810
(E) Second Initial Flow Pressure	63.4 PSI	Initial Opening	30		
(F) Second Final Flow Pressure	104.5 PSI	Initial Shut-In	60		
(G) Final Shut-In Pressure	524.1 PSI	Final Flow	60		
(H) Final Hydrostatic Mud	1871.2 PSI	Final Shut-In	120		

Our Representative MR PAUL SIMPSON TOTAL PRICE..... $ 450

Printcraft Printers - Hays, KS

#2



This is an actual photograph of recorder chart.

POINT	PRESSURE Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2000	1995.4	PSI
(B) First Initial Flow Pressure	11	24.2	PSI
(C) First Final Flow Pressure	55	51.7	PSI
(D) Initial Closed-In Pressure	548	535.6	PSI
(E) Second Initial Flow Pressure	66	63.4	PSI
(F) Second Final Flow Pressure	110	104.5	PSI
(G) Final Closed-In Pressure	548	524.1	PSI
(H) Final Hydrostatic Mud	1884	1871.2	PSI

COMPUTER EVALUATION BY TRILOBITE TESTING
QUINOCO PETROLEUM INC
REPORT FOR DST#2 FOR THE HUCK A-5 (TWIN)
31-11S-20W ELLIS KS

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TEST PARAMETERS

:LEVATION: 2243 KB
)ATUM: -1585
'EST INTERVAL: 3824-3832

:ECORDER DEPTH: 3827
)OTTOM HOLE TEMP: 120

EST. PAY: 8 FT
ZONE TESTED: ARBUCKLE

TIME INTERVALS: 30-60-60-120
VISCOSITY: 5.345691 CP
HOLE SIZE: 7.875 IN

****

CALCULATIONS

:UBIC FEET OF GAS IN PIPE: .65

'OTAL FEET OF RECOVERY: 250
:ARRELS IN WEIGHT PIPE: 1.95
AS OIL RATIO: 4.690421 CU.FT./BBL
UBBLE POINT PRESSURE: ; .5202729
OTAL BARRELS OF RECOVERY: 1.95

UNCORR. INIT. PROD.: 31.2 BBL/DAY

PI GRAVITY: 34

FLUID GRADIENT: .37

ORRECTED PIPE FILLUP: 282.4324

CORR. BARRELS OF RECOVERY: 2.1996 BBL

NITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 35.1936 BBL/DAY
NITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE
20.18162

****

NITIAL SHUT-IN VALUES:
'HEORETICAL STATIC PRESSURE 592.096
;LOPE 320.8914

:INAL SHUT-IN VALUES
'HEORETICAL STATIC PRESSURE 570.5252
;LOPE 191.0548

****

[RANSMISSIBILITY 29.95203 (MD.-FT./CP.)
?ERMEABILITY 20.01429 (MD.)
[NDICATED FLOW CAPACITY 160.1143 (MD.FT)
?RODUCTIVITY INDEX .0338458 (BARRELS/DAY/PSI)
)AMAGE RATIO .4463778

RADIUS OF INVESTIGATION 42.44156 (FT.)
?OTENTIOMETRIC SURFACE -260.952 (FT.)
)RAWDOWN FACTOR 3.643125 (%)

INITIAL FLOW

RECORDER # 5495
DST 2

DT(MIN)	PRESSURE	<> PRESSURE
0	24.2	24.2
3	24.2	0
6	26.3	2.099999
9	29.5	3.200001
12	33.8	4.299999
15	36.9	3.100002
18	41.1	4.199997
21	43.2	2.100002
24	45.3	2.099999
27	47.4	2.100002
30	49.6	2.199997
33	51.7	2.100002

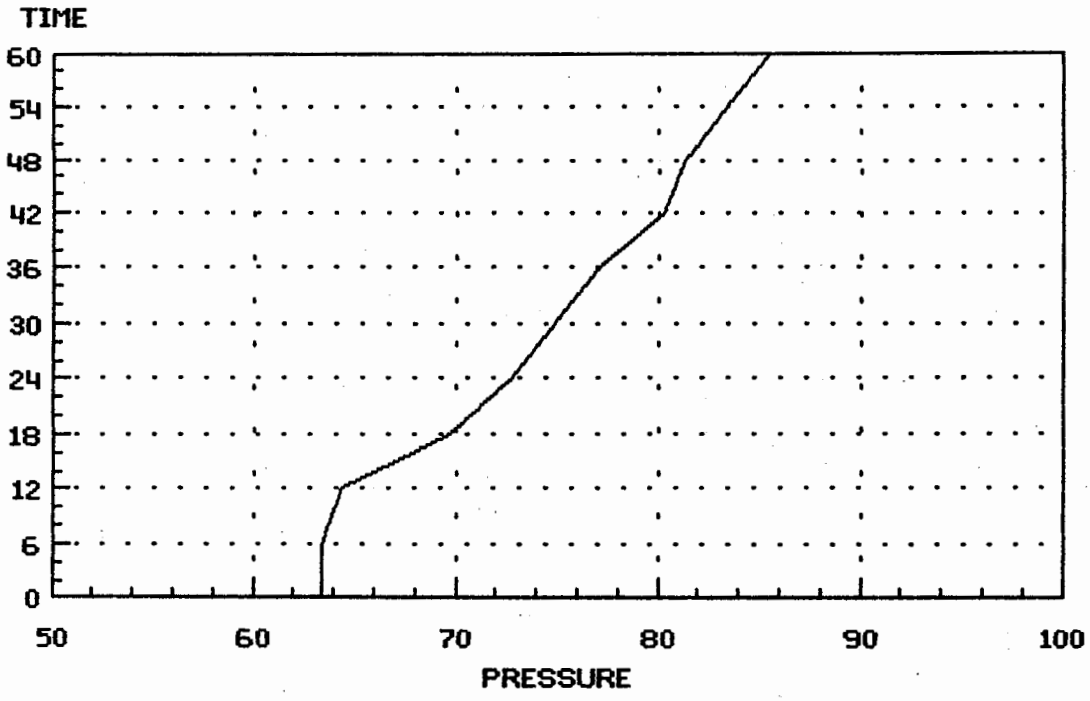
FINAL FLOW

RECORDER # 5495
DST 2

DT(MIN)	PRESSURE	<> PRESSURE
0	63.4	63.4
3	63.4	0
6	64.4	1
9	69.7	5.299996
12	72.8	3.100006
15	74.9	2.099999
18	77.1	2.199997
21	80.3	3.200005
24	81.3	1
27	83.4	2.099999
30	85.5	2.099999
33	88.7	3.199997
36	90.8	2.100006
39	91.8	1
42	91.8	0
45	93.9	2.099999
48	96.1	2.199997
51	97.2	1.099999
54	98.2	1
57	99.3	1.100006
60	104.5	5.199997

DELTA T DELTA P

DST #2 FINAL FLOW
RECORDER #5495



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 20.18162 BBL/DAY

INITIAL SHUT-IN BUILDUP
DST #2

RECORDER # 5495
INITIAL FLOW TIME (MIN.): 30

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	51.7	51.7
3	1.041205	204.8	153.1
6	.778011	301.1	96.3
9	.6367073	356.1	55
12	.5439701	394.2	38.10001
15	.4770353	432.1	37.9
18	.425892	449.1	17
21	.3852815	465.9	16.79999
24	.352119	477.6	11.70001
27	.3244526	489.1	11.5
30	.3009757	499.7	10.60001
33	.280776	506.2	6.5
36	.263194	512.4001	6.200012
39	.2477398	517.7	5.299988
42	.234041	520.8	3.099976
45	.2218087	523.1	2.299988
48	.2108154	524.1	1
51	.2008786	527.2	3.100037
54	.191851	530.4	3.200012
57	.1836113	531.4	1
60	.1760595	535.6	4.199951

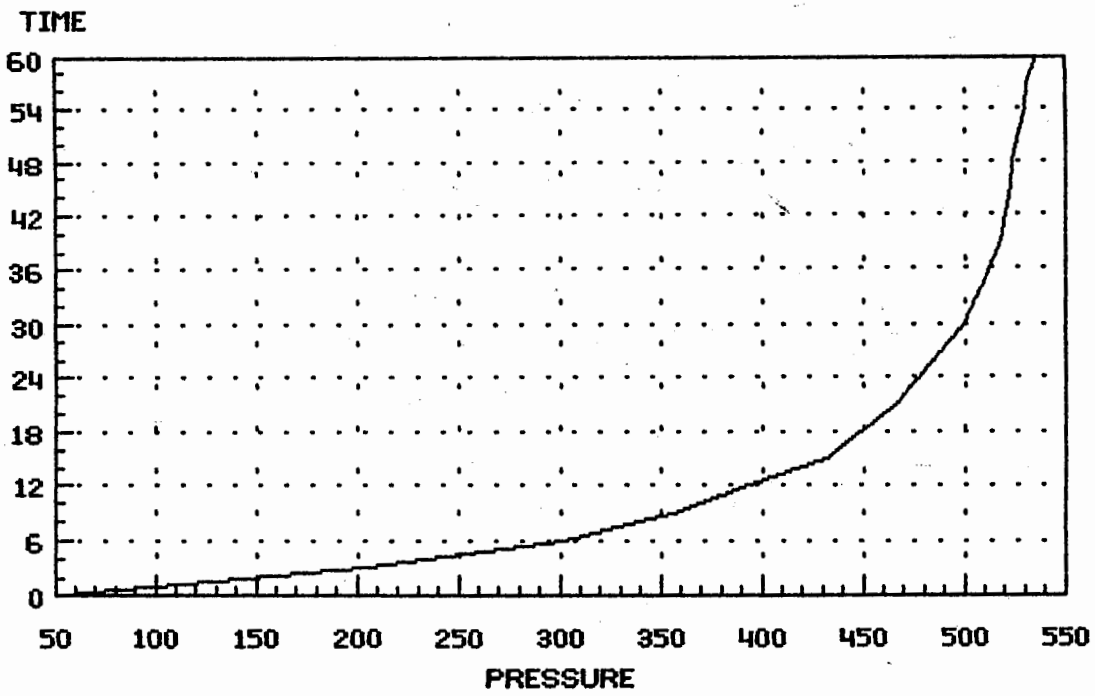
FINAL SHUT-IN BUILDUP
DST #2

RECORDER # 5495
TOTAL FLOW TIME (MIN.): 90

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	104.5	104.5
6	1.203903	286.3	181.8
12	.9292515	364.5	78.20001
18	.778011	404.6	40.10001
24	.6765717	430.1	25.5
30	.6019515	449.1	19
36	.5439701	463.8	14.69998
42	.4972351	474.8	11
48	.4585552	481.8	7
54	.425892	489.1	7.300019
60	.3978683	495.5	6.399994
66	.3735134	501.8	6.299988
72	.352119	505.1	3.300018
78	.3331547	510.3	5.199982
84	.316213	511.4	1.100006
90	.3009757	512.4001	1.000031
96	.2871899	516.6	4.199951
102	.2746515	517.7	1.100037
108	.263194	520.8	3.099976
114	.2526798	524.1	3.299988
120	.2429943	524.1	0
126	.234041	524.1	0

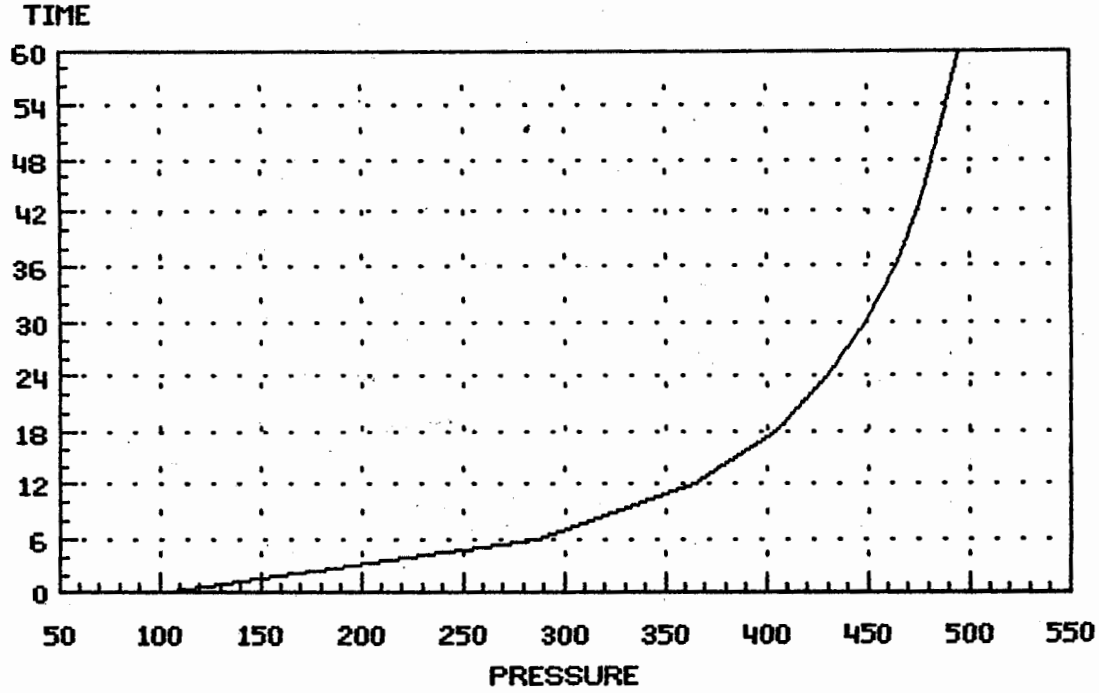
DELTA T DELTA P

DST #2 INITIAL SHUTIN
RECORDER #5495



DELTA T DELTA P

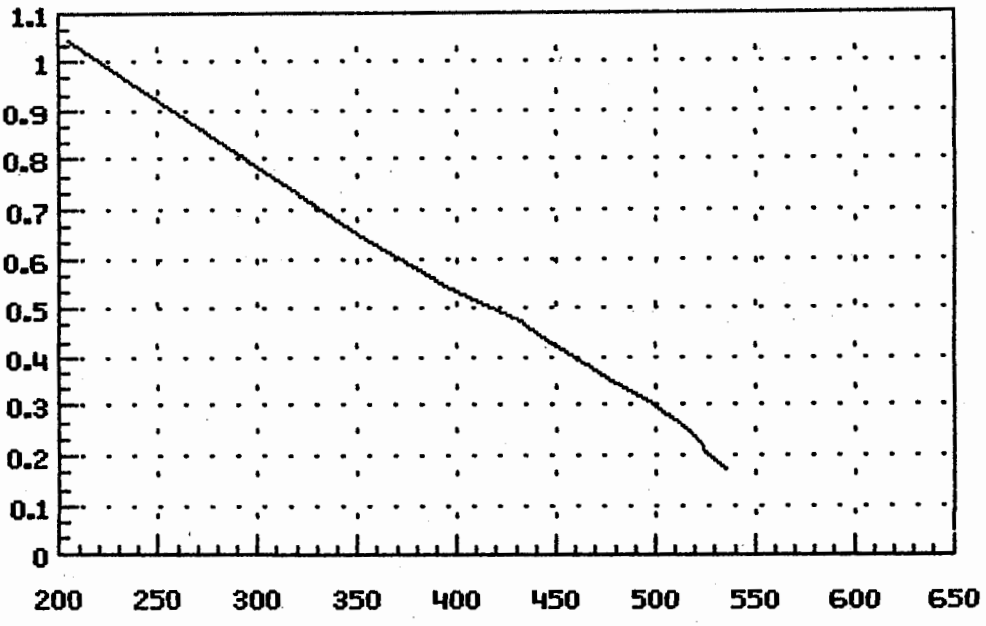
DST #2 FINAL SHUTIN
RECORDER #5495



HORNER PLOT

DST #2 INITIAL SHUTIN
RECORDER #5495

LOG = T +(MIN/MIN)

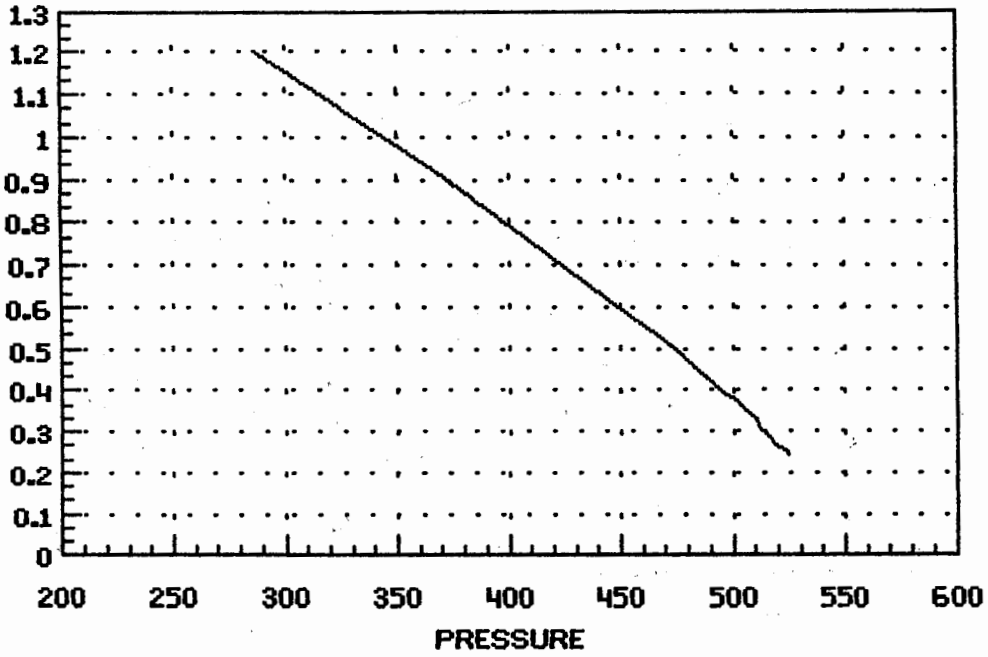


STATIC PRESSURE 592.096
SLOPE 320.8914
POINTS USED 21

HORNER PLOT

DST #2 FINAL SHUTIN
RECORDER #5495

LOG = T +(MIN/MIN)



STATIC PRESSURE 570.5252
SLOPE 191.0548
POINTS USED 21

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2205 Date 10/22/89

Company Name QUINOCO PETROLEUM INC

Lease HUCK A-5 (TWIN) Test No. 2

County ELLIS Sec. 31 Twp. 11S Rng. 20W

SAMPLER RECOVERY

Gas 300 ML

Oil 3500 ML

Mud 200 ML

Water 0 ML

Other 0 ML

Pressure 260 PSI

Total 4000 ML

PIT MUD ANALYSIS

Chlorides 6000 ppm.

Resistivity 1.4 ohms @ 70 F

Viscosity 49

Mud Weight 9.4

Filtrate 11.6

Other

SAMPLER ANALYSIS

Resistivity 0 ohms @ 0 F

Chlorides 0 ppm.

Gravity 34 corrected @ 60 F

PIPE RECOVERY

TOP

Resistivity 0 ohms @ 0 F

Chlorides 0 ppm.

MIDDLE

Resistivity 0 ohms @ 0 F

Chlorides 0 ppm.

BOTTOM

Resistivity .6 ohms @ 85.5 F

Chlorides 8400 ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No. 2205

Well Name & No. Huck A-5 (Twin) Test No. 2 Date 10/22/89

Company Quinoco Petroleum Inc. Zone Tested Arb

Address PO Box 37811 Denver Colo 80237 Elevation

Co. Rep./Geo. Jim Musgrove Cont. Red Tiger #7 Est. Ft. of Pay 8

Location: Sec. 31 Twp. 11s Rge. 20w Co. Ellis State Ks

Interval Tested 3824-3832 Drill Pipe Size 5" IF

Anchor Length 8 Top Choke — 1"

Top Packer Depth 3819 Bottom Choke — ¾"

Bottom Packer Depth 3824 Hole Size — 7⅞"

Total Depth 3832 Rubber Size — 6¾"

Wt. Pipe I.D. — 2.7 Ft. Run 378

Drill Collar — 2.25 Ft. Run

Mud Wt. 9.4 lb./gal. Viscosity 49 Filtrate 11.6

Tool Open @ 10:41 AM Initial Blow weak ½" blow building to 9"

Final Blow very weak surface blow building to 8"
(weak blow back on shutin)

Recovery — Total Feet Flush Tool?

Rec. 180 Feet of gas in pipe

Rec. 190 Feet of clean glassy oil

Rec. 60' Feet of ~~Very Heavy oil cut mud mud cut oil~~

Rec. Feet of Heavy oil cut watery mud 30% oil 10% water 60% mud

Rec. Feet of

BHT 120 °F Gravity 36 °API @ 80 °F Corrected Gravity 34 °API

RW .60 @ 85.5 °F Chlorides 8400 ppm Recovery Chlorides 6000 ppm System

(A)	Initial Hydrostatic Mud	2000 PSI	AK1 Recorder No.	13337	Range	3975
(B)	First Initial Flow Pressure	10 PSI	@ (depth)	3831	w/Clock No.	2750
(C)	First Final Flow Pressure	~~45~~ 55 PSI	AK1 Recorder No.	~~7439~~ 5495	Range	4200
(D)	Initial Shut-In Pressure	548 PSI	@ (depth)	3827	w/Clock No.	25810
(E)	Second Initial Flow Pressure	~~59~~ 66 PSI	Initial Opening	30	Test	1100
(F)	Second Final Flow Pressure	~~99~~ 110 PSI	Initial Shut-In	60	Jars	Y
(G)	Final Shut-In Pressure	548 PSI	Final Flow	60	Safety Joint	Y
(H)	Final Hydrostatic Mud	1884 PSI	Final Shut-In	120	Straddle	
					Circ. Sub	
					Sampler	V 50
					Extra Packer	
					Other	
					TOTAL PRICE	$ 450

Approved By Jim Musgrove

Our Representative Paul Simpson

Printcraft Printers - Hays, KS

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No. HUCK A-5 (TWIN) Test No. 3 Date 10/23/89

Company QUINOCO PETROLEUM INC Zone Tested ARBUCKLE

Address P.O. BOX 378111 DENVER COLORADO Elevation 2243 KB

Co. Rep./Geo. MR JIM MUSGROVE Cont. RED TIGER #7 Est. Ft. of Pay 11

Location: Sec. 31 Twp. 11S Rge. 20W Co. ELLIS State KANSAS

Interval Tested 3835'-3846' Drill Pipe Size 5" IF

Anchor Length 11 Top Choke — 1"

Top Packer Depth 3830 Bottom Choke — ¾"

Bottom Packer Depth 3835 Hole Size — 7⅞"

Total Depth 3846 Rubber Size — 6¾"

Wt. Pipe I.D. — 2.7 Ft. Run 378

Drill Collar — 2.25 Ft. Run 0

Mud Wt. 9.4 lb./gal. Viscosity 46 Filtrate 11.4

Tool Open @ 12:31 AM Initial Blow 1" BLOW BUILDING TO 12"

Final Blow VERY WEAK SURFACE BLOW BUILDING TO BOTTOM OF BUCKET IN 35 MINUTES

Recovery — Total Feet 320 Flush Tool?

Rec. 120 Feet of GAS IN PIPE

Rec. 114 Feet of CLEAN GASSY OIL

Rec. 60 Feet of OIL & WATER CUT MUD-5%OIL/15%WATER/80%MUD

Rec. 146 Feet of OIL SPECKED WATER

Rec. 0 Feet of

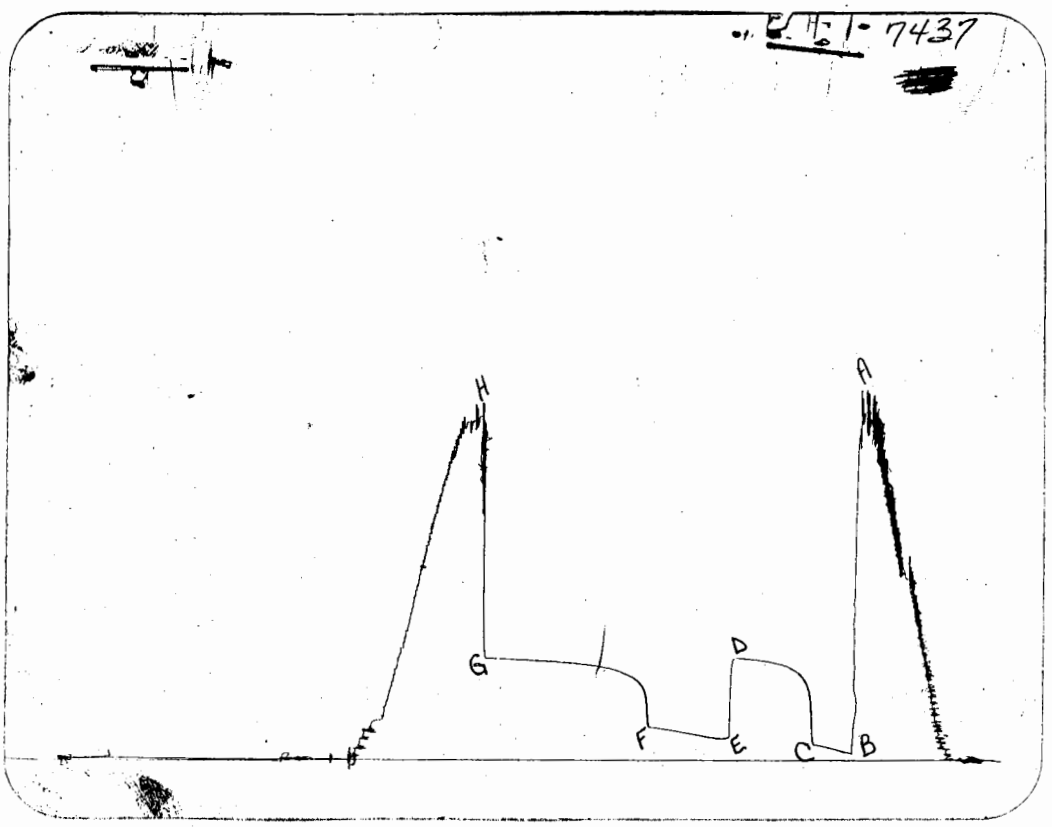
BHT 122 °F Gravity 35 °API @ 60 °F Corrected Gravity 35 °API

RW .256 @ 71.8 °F Chlorides 27000 ppm Recovery Clorides 6000 ppm System

(A) Initial Hydrostatic Mud	2106.9 PSI	AK1 Recorder No.	7437	Range	4200
(B) First Initial Flow Pressure	24.3 PSI	@ (depth)	3845	w/Clock No.	26199
(C) First Final Flow Pressure	80.3 PSI	AK1 Recorder No.	5495	Range	4200
(D) Initial Shut-In Pressure	560 PSI	@ (depth)	3840	w/Clock No.	25810
(E) Second Initial Flow Pressure	104.5 PSI	Initial Opening	30		
(F) Second Final Flow Pressure	170.1 PSI	Initial Shut-In	60		
(G) Final Shut-In Pressure	546.3 PSI	Final Flow	60		
(H) Final Hydrostatic Mud	1955.4 PSI	Final Shut-In	120		

Our Representative MR PAUL SIMPSON TOTAL PRICE ..... $ 450

Printcraft Printers - Hays, KS



This is an actual photograph of recorder chart.

POINT	PRESSURE Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1926	2106.9	PSI
(B) First Initial Flow Pressure	11	24.3	PSI
(C) First Final Flow Pressure	77	80.3	PSI
(D) Initial Closed-in Pressure	579	560	PSI
(E) Second Initial Flow Pressure	99	104.5	PSI
(F) Second Final Flow Pressure	187	170.1	PSI
(G) Final Closed-in Pressure	579	546.3	PSI
(H) Final Hydrostatic Mud	1894	1955.4	PSI

COMPUTER EVALUATION BY TRILOBITE TESTING
QUINOCO PETROLEUM INC
REPORT FOR DST#3 FOR THE HUCK A-5 (TWIN)
31-11S-20W ELLIS KS

****

TEST PARAMETERS

ELEVATION: 2243 KB
DATUM: -1598
TEST INTERVAL: 3835'-3846'

RECORDER DEPTH: 3840
BOTTOM HOLE TEMP: 122

EST. PAY: 11 FT
ZONE TESTED: ARBUCKLE

TIME INTERVALS: 30-60-60-120
VISCOSITY: 4.988997 CP
HOLE SIZE: 7.875 IN

****

CALCULATIONS

CUBIC FEET OF GAS IN PIPE: .65

TOTAL FEET OF RECOVERY: 320
BARRELS IN WEIGHT PIPE: 2.496
GAS OIL RATIO: 2.889925 CU.FT./BBL
BUBBLE POINT PRESSURE: ; .3220632
TOTAL BARRELS OF RECOVERY: 2.496

UNCORR. INIT. PROD.: 39.936 BBL/DAY

API GRAVITY: 35

FLUID GRADIENT: .368

CORRECTED PIPE FILLUP: 462.2283

CORR. BARRELS OF RECOVERY: 4.494 BBL

INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 71.904 BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE
36.51304

****

INITIAL SHUT-IN VALUES:
THEORETICAL STATIC PRESSURE 600.446
SLOPE 229.729

FINAL SHUT-IN VALUES
THEORETICAL STATIC PRESSURE 578.9415
SLOPE 134.3301

****

TRANSMISSIBILITY	87.03628 (MD.-FT./CP.)
PERMEABILITY	39.47489 (MD.)
INDICATED FLOW CAPACITY	434.2237 (MD.FT)
PRODUCTIVITY INDEX	9.835099E-02 (BARRELS/DAY/PSI)
DAMAGE RATIO	.5569712
RADIUS OF INVESTIGATION	59.60486 (FT.)
POTENTIOMETRIC SURFACE	-254.4346 (FT.)
DRAWDOWN FACTOR	3.581417 (%)

INITIAL FLOW

RECORDER # 5495
DST 3

DT(MIN)	PRESSURE	<> PRESSURE
0	24.3	24.3
3	31.7	7.400002
6	35.9	4.200001
9	40.1	4.199997
12	45.3	5.200001
15	53.8	8.5
18	60.2	6.400002
21	67.6	7.399998
24	72.8	5.200005
27	78.1	5.299996
30	80.3	2.200005

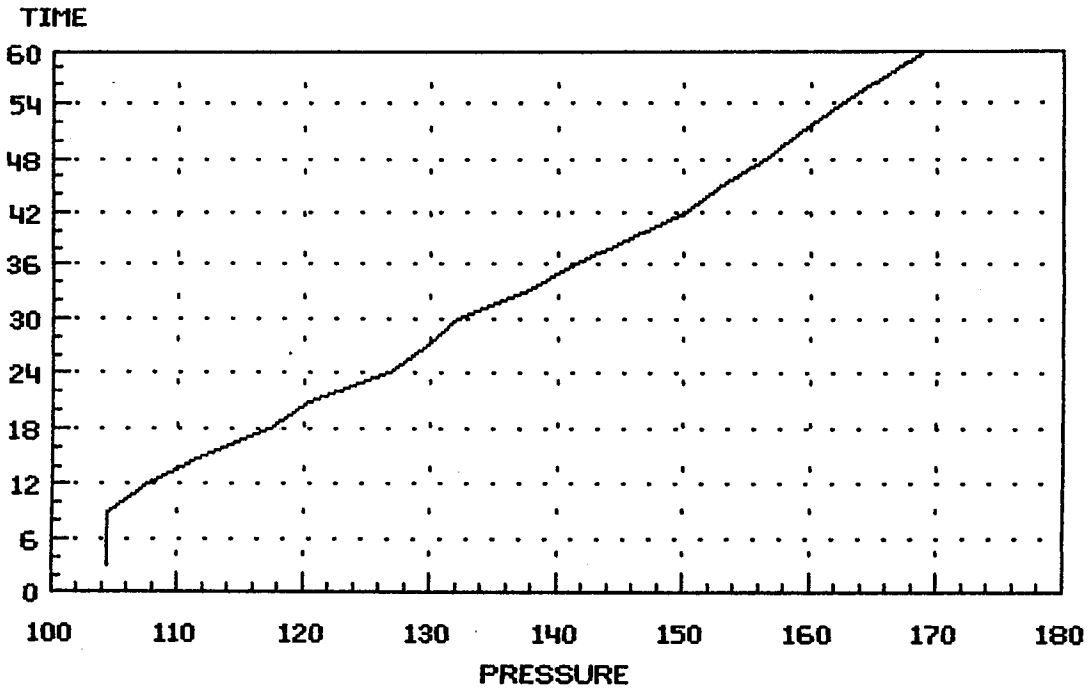
FINAL FLOW

RECORDER # 5495
DST 3

DT(MIN)	PRESSURE	<> PRESSURE
0	104.5	104.5
3	104.5	0
6	104.5	0
9	107.7	3.199997
12	112.1	4.400002
15	117.3	5.200005
18	120.4	3.099999
21	126.8	6.400002
24	129.9	3.099991
27	132.1	2.200012
30	137.3	5.199997
33	141.5	4.199997
36	145.8	4.300003
39	150.1	4.300003
42	153.1	3
45	156.4	3.299988
48	159.5	3.100006
51	162.7	3.199997
54	165.8	3.100006
57	169.1	3.300003
60	170.1	1

DELTA T DELTA P

DST #3 FINAL FLOW
RECORDER # 5495



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 36.51304 BBL/DAY

INITIAL SHUT-IN BUILDUP
DST #3

RECORDER # 5495
INITIAL FLOW TIME (MIN.): 30

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	80.3	80.3
3	1.041205	257.8	177.5
6	.778011	420.6	162.8
9	.6367073	463.8	43.19998
12	.5439701	479.7	15.90003
15	.4770353	495.5	15.79999
18	.425892	502.9	7.399994
21	.3852815	514.5	11.60001
24	.352119	520.8	6.299988
27	.3244526	526.2	5.400025
30	.3009757	531.5	5.299988
33	.280776	535.5	4
36	.263194	541	5.5
39	.2477398	542.1	1.099976
42	.234041	544.2	2.100037
45	.2218087	546.2	2
48	.2108154	549.4	3.200012
51	.2008786	552.7	3.299988
54	.191851	555.8	3.099976
57	.1836113	559.5	3.700012
60	.1760595	560	.5

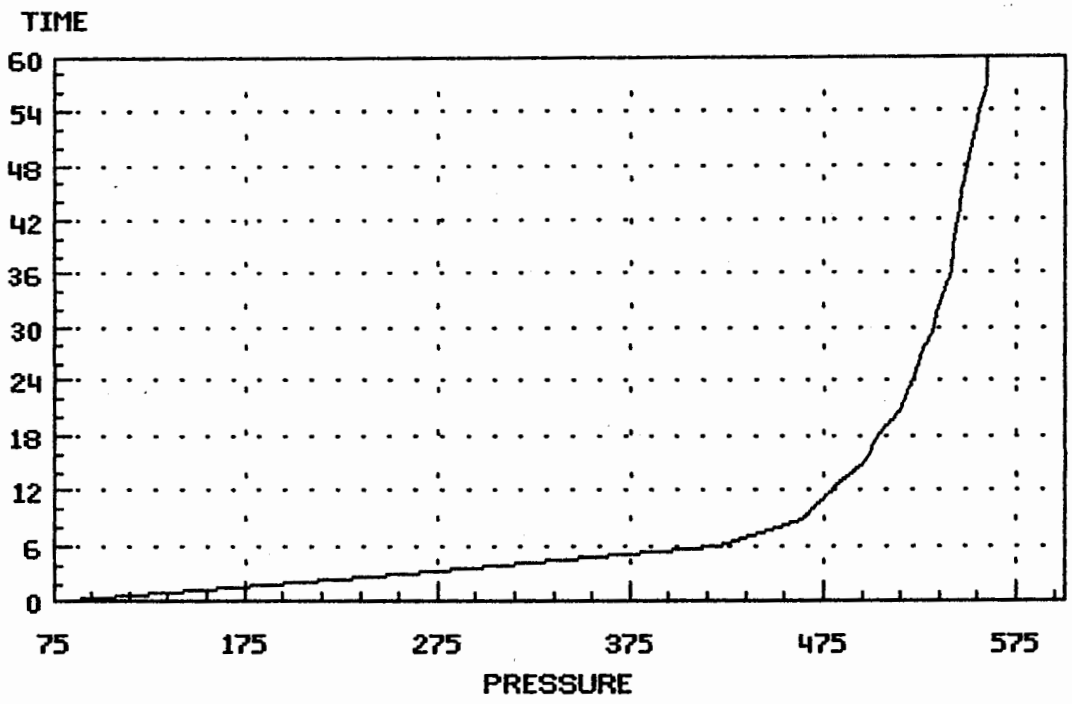
FINAL SHUT-IN BUILDUP
DST #3

RECORDER # 5495
TOTAL FLOW TIME (MIN.): 90

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	170.1	170.1
6	1.203903	412.1	242
12	.9292515	454.4	42.29999
18	.778011	478.7	24.30002
24	.6765717	490.3	11.59998
30	.6019515	498.7	8.400024
36	.5439701	507.2	8.5
42	.4972351	510.3	3.099976
48	.4585552	514.6	4.299988
54	.425892	518.7	4.100037
60	.3978683	523.1	4.399964
66	.3735134	528.3	5.200012
72	.352119	532.5	4.200012
78	.3331547	534.7	2.200012
84	.316213	537.9	3.200012
90	.3009757	538.9	1
96	.2871899	541	2.099976
102	.2746515	543.1	2.099976
108	.263194	544.2	1.100037
114	.2526798	545.3	1.099976
120	.2429943	546.3	1

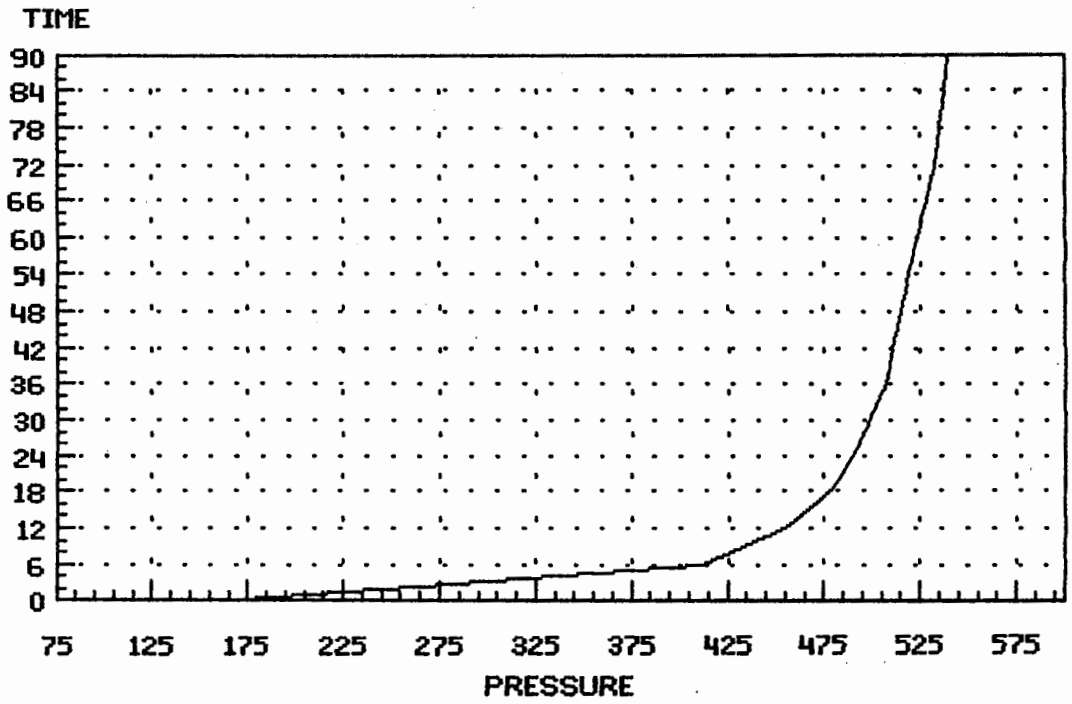
DELTA T DELTA P

DST #3 INITIAL SHUTIN
RECORDER #5495



DELTA T DELTA P

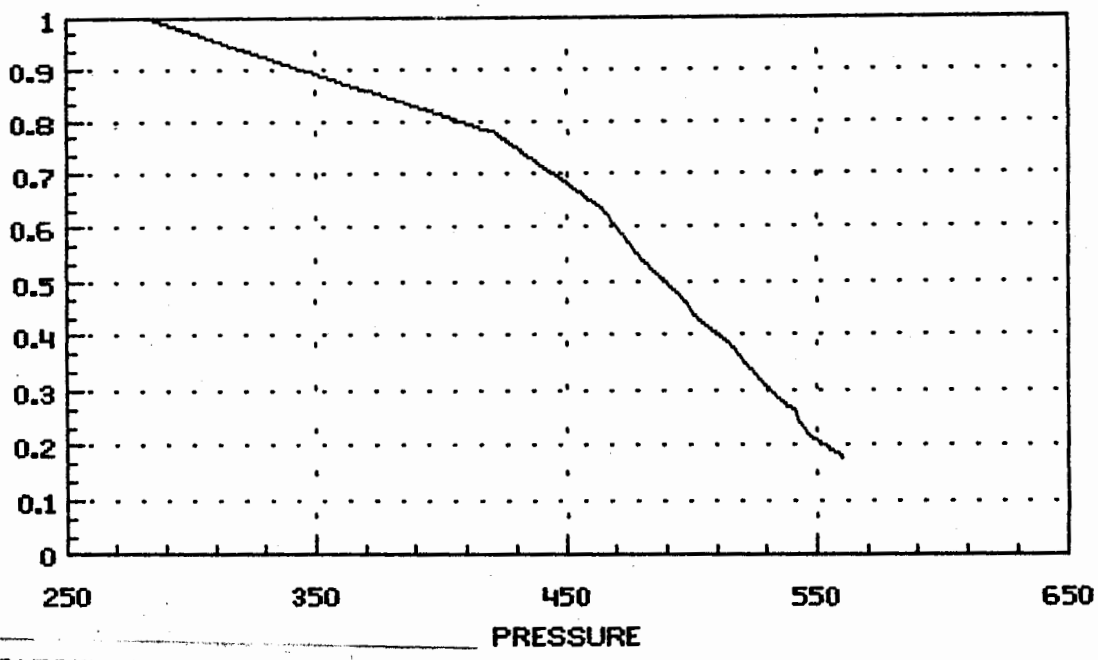
DST #3 FINAL SHUTIN
RECORDER #5495



HORNER PLOT

DST #3 INITIAL SHUTIN
RECORDER #5495

LOG = T+(MIN/MIN)

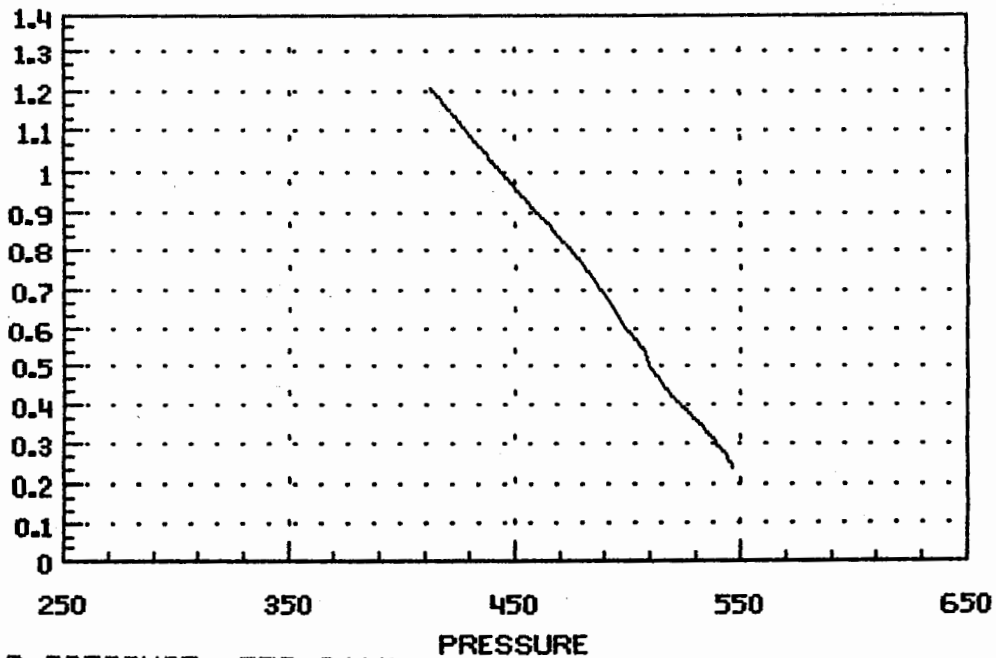


STATIC PRESSURE 600.446
SLOPE 229.729
POINTS USED 19

HORNER PLOT

DST # 3 FINAL SHUTIN
RECORDER #5495

LOG = T+(MIN/MIN)



STATIC PRESSURE 578.9415
SLOPE 134.3301
POINTS USED 20

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2206 Date 10/23/89

Company Name QUINOCO PETROLEUM INC

Lease HUCK A-5 (TWIN) Test No. 3

County ELLIS Sec. 31 Twp. 11S Rng. 20W

SAMPLER RECOVERY

Gas 200 ML

Oil 600 ML

Mud 0 ML

Water 3200 ML

Other 0 ML

Pressure 150 PSI

Total 400 ML

PIT MUD ANALYSIS

Chlorides 6000 ppm.

Resistivity 1.1 ohms @ 70 F

Viscosity 46

Mud Weight 9.4

Filtrate 11.4

Other

SAMPLER ANALYSIS

Resistivity .255 ohms @ 72.7 F

Chlorides 26500 ppm.

Gravity 35 corrected @ 60 F

PIPE RECOVERY

TOP

Resistivity 0 ohms @ 0 F

Chlorides 0 ppm.

MIDDLE

Resistivity .268 ohms @ 71.1 F

Chlorides 26000 ppm.

BOTTOM

Resistivity .256 ohms @ 71.8 F

Chlorides 27000 ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No. 2206

Well Name & No. Huck A-3 (twin) Test No. 3 Date 10/23/89

Company Quinoco Zone Tested Arbuckle

Address Elevation 2243

Co. Rep./Geo. Jim Musgrove Cont. Red Tiger #7 Est. Ft. of Pay 11

Location: Sec. 31 Twp. 11s Rge. 20w Co. Ellis State Ks

Interval Tested 3835-3846 Drill Pipe Size 5" IF

Anchor Length 11 Top Choke — 1"

Top Packer Depth 3830 Bottom Choke — ¾"

Bottom Packer Depth 3835 Hole Size — 7⅞"

Total Depth 3846 Rubber Size — 6¾"

Wt. Pipe I.D. — 2.7 Ft. Run 378

Drill Collar — 2.25 Ft. Run

Mud Wt. 9+ lb./gal. Viscosity 46 Filtrate 11+

Tool Open @ 12:31 AM Initial Blow 1" blow building to 12"

Final Blow very weak surface blow building to bottom of bucket in 35 minutes

Recovery — Total Feet 320 Flush Tool?

Rec. 120 Feet of G I P

Rec. 114 Feet of cl gassy oil

Rec. 60 Feet of O & W CM) 5% oil 15% H_2O 80% mud

Rec. 146 Feet of oil specked water

Rec. Feet of

BHT 122 °F Gravity 35 °API @ 60 °F Corrected Gravity 35 °API

RW .256 @ 71.8 °F Chlorides 27,000 ppm Recovery Chlorides 6000 ppm System

(A)	Initial Hydrostatic Mud	1926	PSI	AK1 Recorder No.	743	Range	4200
(B)	First Initial Flow Pressure	11	PSI	@ (depth)	3845	w/Clock No.	26199
(C)	First Final Flow Pressure	77	PSI	AK1 Recorder No.	5495	Range	4200
(D)	Initial Shut-In Pressure	579	PSI	@ (depth)	3840	w/Clock No.	25810
(E)	Second Initial Flow Pressure	99	PSI	Initial Opening	30	Test	400
(F)	Second Final Flow Pressure	187	PSI	Initial Shut-In	60	Jars	
(G)	Final Shut-In Pressure	579	PSI	Final Flow	60	Safety Joint	
(H)	Final Hydrostatic Mud	1894	PSI	Final Shut-In	120	Straddle	
						Circ. Sub	
						Sampler	50
						Extra Packer	
						Other	
						TOTAL PRICE	$ 450

Approved By Jim Musgrove

Our Representative Paul Simpson

Printcraft Printers - Hays, KS