

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	ERISIRIE #4	Test No.	1	Date	11/8/89
Company	QUINOCO PETROLEUM	Zone Tested	KANSAS CITY		
Address	P.O. BOX 378111 DENVER CO 80237	Elevation	1954		
Co. Rep./Geo.	MR SCOTT ALBERG	Cont.	DUKE #1	Est. Ft. of Pay	0
Location: Sec.	5	Twp	26S	Rge.	13W
Co.	PRATT	State	KANSAS		

Interval Tested	3825-3850	Drill Pipe Size	4.5" FH			
Anchor Length	25	Top Choke — 1"				
Top Packer Depth	3820	Bottom Choke — 1/4"				
Bottom Packer Depth	3825	Hole Size — 7 7/8"				
Total Depth	3850	Rubber Size — 6 3/4"				
Wt. Pipe I.D. — 2.7		Ft. Run	941			
Drill Collar — 2.25		Ft. Run	0			
Mud Wt.	9.3	lb./gal.	Viscosity	42	Filtrate	11.2
Tool Open @	10:30 PM	Initial Blow	1" BLOW BUILDING TO 5.5"			

Final Blow 1" BLOW BUILDING TO BOTTOM OF BUCKET IN 40 MINUTES

Recovery — Total Feet 80 Flush Tool?

Rec.	860	Feet of	GAS IN PIPE
Rec.	80	Feet of	GASSY MUD
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	

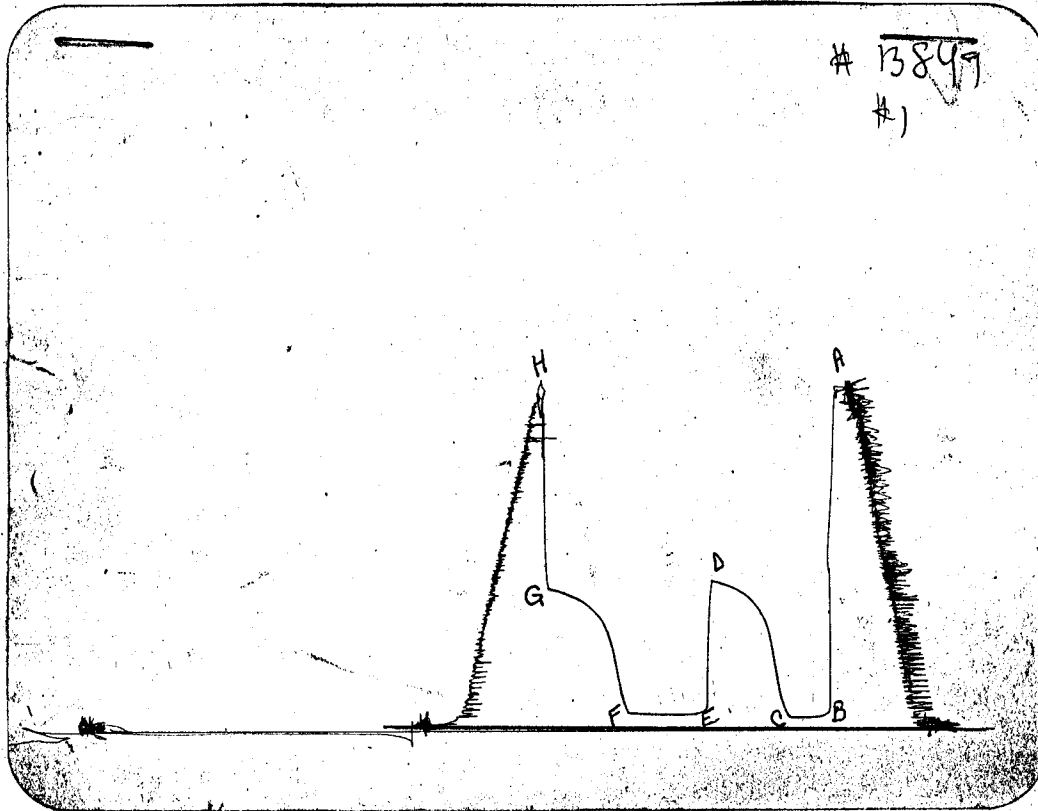
BHT 111 °F Gravity °API @ 0 °F Corrected Gravity 0 °API
RW .61 @ 65 °F Chlorides 11000 ppm Recovery Chlorides 5000 ppm System

(A) Initial Hydrostatic Mud	1923.6	PSI	AK1 Recorder No.	13849	Range	4375
(B) First Initial Flow Pressure	61.2	PSI	@(depth)	3849	w/Clock No.	25810
(C) First Final Flow Pressure	61.2	PSI	AK1 Recorder No.	13851	Range	4425
(D) Initial Shut-In Pressure	845.3	PSI	@(depth)	3830	w/Clock No.	26191
(E) Second Initial Flow Pressure	71.9	PSI	Initial Opening	30		
(F) Second Final Flow Pressure	79.6	PSI	Initial Shut-In	60		
(G) Final Shut-In Pressure	793.5	PSI	Final Flow	60		
(H) Final Hydrostatic Mud	1899.7	PSI	Final Shut-In	60		

ur Representative MR PAUL SIMPSON

TOTAL PRICE..... \$ 450

Printcraft Printers - Hays, KS

DST# 1 RECORDER# 13849


This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	1917	1923.6 PSI
(B) First Initial Flow Pressure.....	55	61.2 PSI
(C) First Final Flow Pressure.....	55	61.2 PSI
(D) Initial Closed-In Pressure.....	841	845.3 PSI
(E) Second Initial Flow Pressure.....	66	71.9 PSI
(F) Second Final Flow Pressure.....	78	79.6 PSI
(G) Final Closed-In Pressure.....	786	793.5 PSI
(H) Final Hydrostatic Mud.....	1895	1899.7 PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

2219

11/8/89

Ticket No. _____ Date _____

QUINOCO PETROLEUM

Company Name _____

FRISIBIE #4

1

Lease _____ Test No. _____

PRATT

5

26S

13W

County _____ Sec. _____ Twp. _____ Rng. _____

SAMPLER RECOVERY

1400

Gas _____ ML

0

Oil _____ ML

2600

Mud _____ ML

0

Water _____ ML

0

Other _____ ML

650

Pressure _____ PSI

4000

Total _____ ML

PIT MUD ANALYSIS

5000

Chlorides _____ ppm.

.7

Resistivity _____ ohms @ _____ F

42

Viscosity _____

9.3

Mud Weight _____

11.2

Filtrate _____

Other _____

SAMPLER ANALYSIS

.143

70.8

Resistivity _____ ohms @ _____ F

53000

Chlorides _____ ppm.

0

Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP

0

Resistivity _____ ohms @ _____ F

0

Chlorides _____ ppm.

MIDDLE

0

Resistivity _____ ohms @ _____ F

0

Chlorides _____ ppm.

BOTTOM

.61

65

Resistivity _____ ohms @ _____ F

11000

Chlorides _____ ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 2219

Well Name & No. <u>Frisking #4</u>	Test No. <u>1</u>	Date <u>11/8/89</u>
Company <u>Quinco Petroleum</u>	Zone Tested <u>PC</u>	
Address <u>PO Box 378111 Denver Co 80237</u>	Elevation <u>1954</u>	
Co. Rep./Geo. <u>Scott Alberg</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>5</u> Twp. <u>26S</u> Rge. <u>13W</u>	Co. <u>Pratt</u>	State <u>Ks</u>

Interval Tested <u>3825-3850</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>25</u>	Top Choke — 1" _____
Top Packer Depth <u>3820</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>3825</u>	Hole Size — 7 7/8" _____
Total Depth <u>3850</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run <u>941</u>
Drill Collar — 2.25 _____	Ft. Run _____
Mud Wt. <u>9.3</u> lb./gal.	Viscosity <u>42</u> Filtrate <u>11.2</u>
Tool Open @ <u>10:30 PM</u>	Initial Blow <u>1" blow building to 5 1/2"</u>
Final Blow <u>1" blow building to bottom of bucket in 40 minutes</u>	

Recovery — Total Feet <u>80</u>	Flush Tool? _____
Rec. <u>80</u> Feet of <u>gassy mud</u>	
Rec. _____ Feet of _____	
Rec. <u>860</u> Feet of <u>gas in pipe</u>	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
BHT <u>111</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API	
RW <u>.61</u> @ <u>.65</u> °F Chlorides <u>11,000</u> ppm Recovery Chlorides <u>5000</u> ppm System	
(A) Initial Hydrostatic Mud <u>1917</u> PSI AK1 Recorder No. <u>13849</u> Range <u>4325</u>	
(B) First Initial Flow Pressure <u>55</u> PSI @ (depth) <u>3849</u> w/Clock No. <u>25810</u>	
(C) First Final Flow Pressure <u>55</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>841</u> PSI @ (depth) <u>3830</u> w/Clock No. <u>26191</u>	
(E) Second Initial Flow Pressure <u>66</u> PSI Initial Opening <u>30</u> Test <u>400</u>	
(F) Second Final Flow Pressure <u>78</u> PSI Initial Shut-In <u>60</u> Jars <u>X</u>	
(G) Final Shut-In Pressure <u>786</u> PSI Final Flow <u>60</u> Safety Joint <u>X</u>	
(H) Final Hydrostatic Mud <u>1895</u> PSI Final Shut-In <u>60</u> Straddle _____	

Approved By <u>[Signature]</u>	Circ. Sub _____
Our Representative <u>Paul Simpson</u>	Sampler <u>50</u>
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ <u>450</u>

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	FRISIBIE #4	Test No.	2	Date	11/9/89
Company	QUINOCO PETROLEUM	Zone Tested	LANSING-K.C.		
Address	P.O. BOX 378111 DENVER CO 80237	Elevation	1954		
Co. Rep./Geo.	MR SCOTT ALBERG	Cont.	DUKE #1	Est. Ft. of Pay	0
Location: Sec.	5	Twp.	26S	Rge.	13W
Co.	PRATT	State	KANSAS		

Interval Tested	3894-3910	Drill Pipe Size	4.5" FH
Anchor Length	16	Top Choke — 1"	
Top Packer Depth	3889	Bottom Choke — 3/4"	
Bottom Packer Depth	3894	Hole Size — 7 7/8"	
Total Depth	3910	Rubber Size — 6 3/4"	
Wt. Pipe I.D. — 2.7		Ft. Run	941
Drill Collar — 2.25		Ft. Run	0
Mud Wt.	9.2	Viscosity	45
	lb./gal.	Filtrate	10.4
Tool Open @	10:47 AM	Initial Blow WEAK 1 1/2" BLOW BUILDING TO 4"	

Final Blow VERY WEAK SURFACE BLOW BUILDING TO 5"

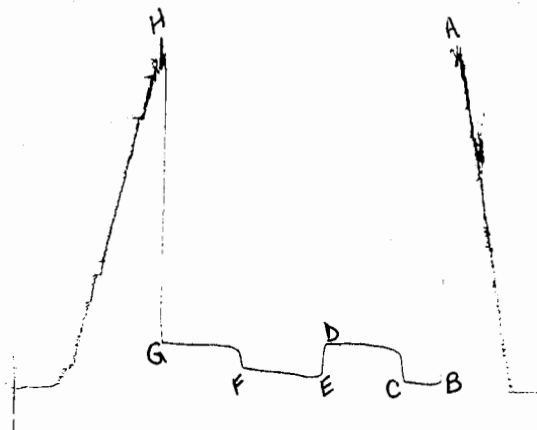
Recovery — Total Feet	190	Flush Tool?	
rec. 10	Feet of	GAS IN PIPE	
rec. 5	Feet of	CLEAN OIL	
rec. 60	Feet of	WATERY MUD WITH OIL SPECKS	
rec. 60	Feet of	MUDDY WATER-30%MUD/ 70% WATER	
rec. 65	Feet of	SALT WATER	
HT	119 °F	Gravity	33
	.116	°API @	70
		60000	°F
		ppm Recovery	32
		Clorides	8500
		ppm System	4375
A) Initial Hydrostatic Mud	2001.3	PSI	AK1 Recorder No.
	52.6		3909
B) First Initial Flow Pressure		PSI	Range
		@ (depth)	26191
C) First Final Flow Pressure	69.8	PSI	AK1 Recorder No.
			13851
D) Initial Shut-In Pressure	274.9	PSI	Range
		@ (depth)	4425
E) Second Initial Flow Pressure	74.8	PSI	Initial Opening
			30
F) Second Final Flow Pressure	121.6	PSI	Initial Shut-In
			60
G) Final Shut-In Pressure	264.8	PSI	Final Flow
			60
H) Final Hydrostatic Mud	1959.7	PSI	Final Shut-In
			60

Our Representative MR PAUL SIMPSON

TOTAL PRICE..... \$ 450

Printcraft Printers - Hays, KS

DST# 2 RECORDER# 13851



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	1993	2001.3 PSI
(B) First Initial Flow Pressure.....	44	52.6 PSI
(C) First Final Flow Pressure.....	56	69.8 PSI
(D) Initial Closed-In Pressure.....	267	274.9 PSI
(E) Second Initial Flow Pressure.....	67	74.8 PSI
(F) Second Final Flow Pressure.....	111	121.6 PSI
(G) Final Closed-In Pressure.....	256	264.8 PSI
(H) Final Hydrostatic Mud.....	1950	1959.7 PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2220 Date 11/9/89
Company Name QUINOCO PETROLEUM
Lease FRISIBIE #4 Test No. 2
County PRATT Sec. 5 Twp. 26S Rng. 13W

SAMPLER RECOVERY

Gas 0 ML
Oil 100 ML
Mud 1200 ML
Water 2700 ML
Other 0 ML
Pressure 50 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 8500 ppm.
Resistivity .65 ohms @ 76 F
Viscosity 45
Mud Weight 9.2
Filtrate 10.4
Other _____

SAMPLER ANALYSIS

Resistivity .098 ohms @ 77.6 F
Chlorides 73000 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 .116 ohms @ 78.4 F
Chlorides 60000 ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 2220

Well Name & No. <u>Frisbie #4</u>	Test No. <u>2</u>	Date <u>11/9/89</u>
Company <u>Quinco Petroleum</u>	Zone Tested <u>LKC 'H'</u>	
Address _____	Elevation <u>1954</u>	
Co. Rep./Geo. <u>Scott Alberg</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>5</u> Twp. <u>26s</u> Rge. <u>13w</u>	Co. <u>Pratt</u>	State <u>Ks</u>

Interval Tested <u>3894-3910</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>16</u>	Top Choke — 1" _____
Top Packer Depth <u>3889</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>3894</u>	Hole Size — 7 7/8" _____
Total Depth <u>3910</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run <u>941</u>
Drill Collar — 2.25 _____	Ft. Run _____
Mud Wt. <u>9.2</u> lb./gal.	Viscosity <u>45</u> Filtrate <u>10.4</u>
Tool Open @ <u>10:47 AM</u>	Initial Blow <u>weak 1/2" blow building to 4"</u>
Final Blow <u>very weak surface blow building to 5"</u>	

Recovery — Total Feet <u>190</u>	Flush Tool? _____
Rec. <u>10</u> Feet of <u>gas in pipe</u>	
Rec. <u>60</u> Feet of <u>water, mud w/ oil specks</u>	
Rec. <u>60</u> Feet of <u>muddy water 30% mud 70% water</u>	
Rec. <u>65</u> Feet of <u>salt water</u>	
Rec. <u>5</u> Feet of <u>clean oil</u>	
BHT <u>119</u> °F Gravity <u>33</u> °API @ <u>70</u> °F Corrected Gravity <u>32</u> °API	
RW <u>.116</u> @ <u>78.4</u> °F Chlorides <u>60,000</u> ppm Recovery Chlorides <u>8500</u> ppm System	
(A) Initial Hydrostatic Mud <u>1993</u> PSI AK1 Recorder No. <u>13849</u> Range <u>4375</u>	
(B) First Initial Flow Pressure <u>44</u> PSI @ (depth) <u>3909</u> w/Clock No. <u>26191</u>	
(C) First Final Flow Pressure <u>56</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>267</u> PSI @ (depth) <u>3896</u> w/Clock No. <u>25810</u>	
(E) Second Initial Flow Pressure <u>67</u> PSI Initial Opening <u>30</u> Test <u>400</u>	
(F) Second Final Flow Pressure <u>111</u> PSI Initial Shut-In <u>60</u> Jars <u>1</u>	
(G) Final Shut-In Pressure <u>256</u> PSI Final Flow <u>60</u> Safety Joint <u>1</u>	
(H) Final Hydrostatic Mud <u>1950</u> PSI Final Shut-In <u>60</u> Straddle _____	

Approved By [Signature]

Our Representative Paul Simpson

Circ. Sub _____

Sampler 50

Extra Packer _____

Other _____

TOTAL PRICE \$ 450

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	FRISIBIE #4	Test No.	3	Date	11/9/89
Company	QUINOCO PETROLEUM	Zone Tested	LANSING-K.C. "J"		
Address	P.O. BOX 378111 DENVER CO 80237	Elevation	1954		
Co. Rep./Geo.	MR SCOTT ALBERG	Cont.	DUKE #1	Est. Ft. of Pay	0
Location: Sec.	5	Twp.	26S	Rge.	13W
Co.	PRATT	State	KANSAS		

Interval Tested	3930-3961	Drill Pipe Size	4.5" FH			
Anchor Length	31	Top Choke — 1"				
Top Packer Depth	3925	Bottom Choke — 3/4"				
Bottom Packer Depth	3930	Hole Size — 7 7/8"				
Total Depth	3961	Rubber Size — 6 3/4"				
Wt. Pipe I.D. — 2.7		Ft. Run	941			
Drill Collar — 2.25		Ft. Run	0			
Mud Wt.	9.1	lb./gal.	Viscosity	45	Filtrate	10.4
Tool Open @	11:46 PM	Initial Blow	3/4" BLOW BUILDING TO 4.5"			

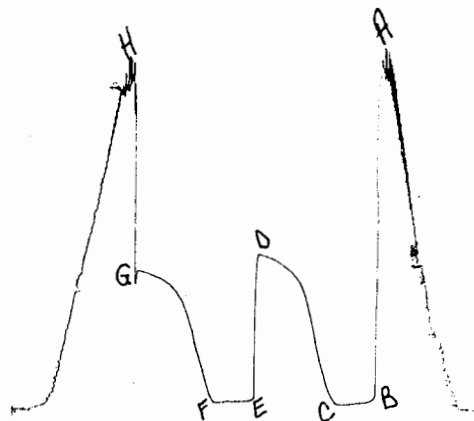
Final Blow SURFACE BLOW BUILDING TO 3"

Recovery — Total Feet	55	Flush Tool?	
Rec.	55	Feet of	SLIGHTLY OIL SPECKED WATERY MUD
Rec.	130	Feet of	GAS IN PIPE
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	

SHOT	111	°F	Gravity		°API @	0	°F	Corrected Gravity	0	°API		
W	.218	@	71.8	°F	Chlorides	34000	ppm	Recovery	Chlorides	8500	ppm	System
A) Initial Hydrostatic Mud	2021.3	PSI	AK1 Recorder No.	13849	Range	4375						
B) First Initial Flow Pressure	51.6	PSI	@ (depth)	3960	w/Clock No.	26199						
C) First Final Flow Pressure	51.6	PSI	AK1 Recorder No.	13851	Range	4425						
D) Initial Shut-In Pressure	894.7	PSI	@ (depth)	3932	w/Clock No.	25810						
E) Second Initial Flow Pressure	64.9	PSI	Initial Opening	30								
F) Second Final Flow Pressure	64.9	PSI	Initial Shut-In	60								
G) Final Shut-In Pressure	811.2	PSI	Final Flow	30								
H) Final Hydrostatic Mud	2003.6	PSI	Final Shut-In	60								

Our Representative	MR PAUL SIMPSON	TOTAL PRICE	\$ 450
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DST# 3 RECORDER# 13851



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	2015	2021.3 PSI
(B) First Initial Flow Pressure.....	44	51.6 PSI
(C) First Final Flow Pressure.....	44	51.6 PSI
(D) Initial Closed-In Pressure.....	885	894.7 PSI
(E) Second Initial Flow Pressure.....	55	64.9 PSI
(F) Second Final Flow Pressure.....	55	64.9 PSI
(G) Final Closed-In Pressure.....	808	811.2 PSI
(H) Final Hydrostatic Mud.....	1991	2003.6 PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2221 Date 11/9/89
Company Name QUINOCO PETROLEUM
Lease FRISIBIE #4 Test No. 3
County PRATT Sec. 5 Twp. 26S Rng. 13W

SAMPLER RECOVERY

Gas 100 ML
Oil 0 ML
Mud 3400 ML
Water 500 ML
Other 0 ML
Pressure 300 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 8500 ppm.
Resistivity .71 ohms @ 72 F
Viscosity 45
Mud Weight 9.1
Filtrate 10.4
Other _____

SAMPLER ANALYSIS

Resistivity .197 ohms @ 71.4 F
Chlorides 36,000 ppm.
Gravity ○ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity ○ ohms @ ○ F
Chlorides ○ ppm.
MIDDLE
Resistivity ○ ohms @ ○ F
Chlorides ○ ppm.
BOTTOM
Resistivity .218 ohms @ 71.8 F
Chlorides 34000 ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 2221

Well Name & No. <u>Frisbie #4</u>	Test No. <u>3</u>	Date <u>11/9/89</u>
Company <u>Quonoco Petroleum</u>	Zone Tested <u>LKC 5</u>	
Address _____	Elevation <u>1954</u>	
Co. Rep./Geo. <u>Scott Alberg</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>5</u> Twp. <u>26S</u>	Rge. <u>13W</u>	Co. <u>Pratt</u> State <u>Ks</u>

Interval Tested <u>3930-3961</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>31</u>	Top Choke — 1" _____
Top Packer Depth <u>3925</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>3930</u>	Hole Size — 7 7/8" _____
Total Depth <u>3961</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run <u>941</u>
Drill Collar — 2.25 _____	Ft. Run _____
Mud Wt. <u>9.1</u> lb./gal.	Viscosity <u>45</u> Filtrate <u>10.4</u>
Tool Open @ <u>11:46 AM</u>	Initial Blow <u>3 1/2" blow building to 4 1/2"</u>
Final Blow <u>surface blow building to 3"</u>	

Recovery — Total Feet <u>55</u>	Flush Tool? _____
Rec. <u>55</u> Feet of <u>sl oil specked watery mud</u>	
Rec. <u>130</u> Feet of <u>GI P</u>	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
BHT <u>111</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API	
RW <u>.218</u> @ <u>71.8</u> °F Chlorides <u>34,000</u> ppm Recovery Chlorides <u>8500</u> ppm System	
(A) Initial Hydrostatic Mud <u>2015</u> PSI AK1 Recorder No. <u>13849</u> Range <u>4375</u>	
(B) First Initial Flow Pressure <u>44</u> PSI @ (depth) <u>3960</u> w/Clock No. <u>26199</u>	
(C) First Final Flow Pressure <u>44</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>885</u> PSI @ (depth) <u>3932</u> w/Clock No. <u>25810</u>	
(E) Second Initial Flow Pressure <u>55</u> PSI Initial Opening <u>30</u> Test <u>400</u>	
(F) Second Final Flow Pressure <u>55</u> PSI Initial Shut-In <u>60</u> Jars _____	
(G) Final Shut-In Pressure <u>808</u> PSI Final Flow <u>30</u> Safety Joint _____	
(H) Final Hydrostatic Mud <u>1991</u> PSI Final Shut-In <u>60</u> Straddle _____	

Approved By [Signature]

Our Representative Paul Simpson

Circ. Sub _____

Sampler 50

Extra Packer _____

Other _____

TOTAL PRICE \$ 450

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	FRISIBIE #4	Test No.	4	Date	11/11/89
Company	QUINOCO PETROLEUM	Zone Tested	MARMATON		
Address	P.O. BOX 378111 DENVER CO 80237	Elevation	1954		
Co. Rep./Geo.	MR SCOTT ALBERG	Cont.	DUKE #1	Est. Ft. of Pay	3
Location: Sec.	5	Twp.	26S	Rge.	13W
		Co.	PRATT	State	KANSAS

Interval Tested	4094-4145	Drill Pipe Size	4.5" FH
Anchor Length	51	Top Choke—1"	
Top Packer Depth	4089	Bottom Choke— $\frac{3}{4}$ "	
Bottom Packer Depth	4094	Hole Size— $7\frac{7}{8}$ "	
Total Depth	4145	Rubber Size— $6\frac{3}{4}$ "	
Wt. Pipe I.D.—2.7		Ft. Run	941
Drill Collar—2.25		Ft. Run	0
Mud Wt.	9.2	Viscosity	44
	lb./gal.	Filtrate	
Tool Open @	12:08 AM	Initial Blow	1" BLOW BUILDING TO BOTTOM OF BUCKET IN 1
			MINUTE-GAS TO SURFACE IN 10 MIN-GAUGED 55.3 MCF/D TO 40 MCF/D
Final Blow	STRONG GAUGING GAS-44.8 AT FINAL-BLOW BACK TO		
	BOTTOM ON INITIAL & FINAL SHUT IN		
Recovery—Total Feet	460	Flush Tool?	
Rec.	220	Feet of	GASSY SLIGHTLY OIL CUT MUDDY WATER-10%GAS/7%OIL/63%H2O
Rec.	120	Feet of	GASSY OIL SPECKED WATER-20%GAS/2%OIL/78%WATER
Rec.	120	Feet of	GASSY MUDDY WATER
Rec.	0	Feet of	
Rec.	0	Feet of	
BHT	121 °F	Gravity	
		%API @	0 °F
Corrected Gravity	0	%API	
RW	.154 @	74.5 °F	Chlorides 48000 ppm
Recovery	11000	ppm	System
(A) Initial Hydrostatic Mud	2132.1	PSI	AK1 Recorder No. 13849 Range 4375
(B) First Initial Flow Pressure	130	PSI	@ (depth) 4144 w/Clock No. 25810
(C) First Final Flow Pressure	128.8	PSI	AK1 Recorder No. 13851 Range 4425
(D) Initial Shut-In Pressure	1434.7	PSI	@ (depth) 4124 w/Clock No. 26199
(E) Second Initial Flow Pressure	161.1	PSI	Initial Opening 30
(F) Second Final Flow Pressure	214.4	PSI	Initial Shut-In 60
(G) Final Shut-In Pressure	1404.8	PSI	Final Flow 60
(H) Final Hydrostatic Mud	2059.4	PSI	Final Shut-In 60

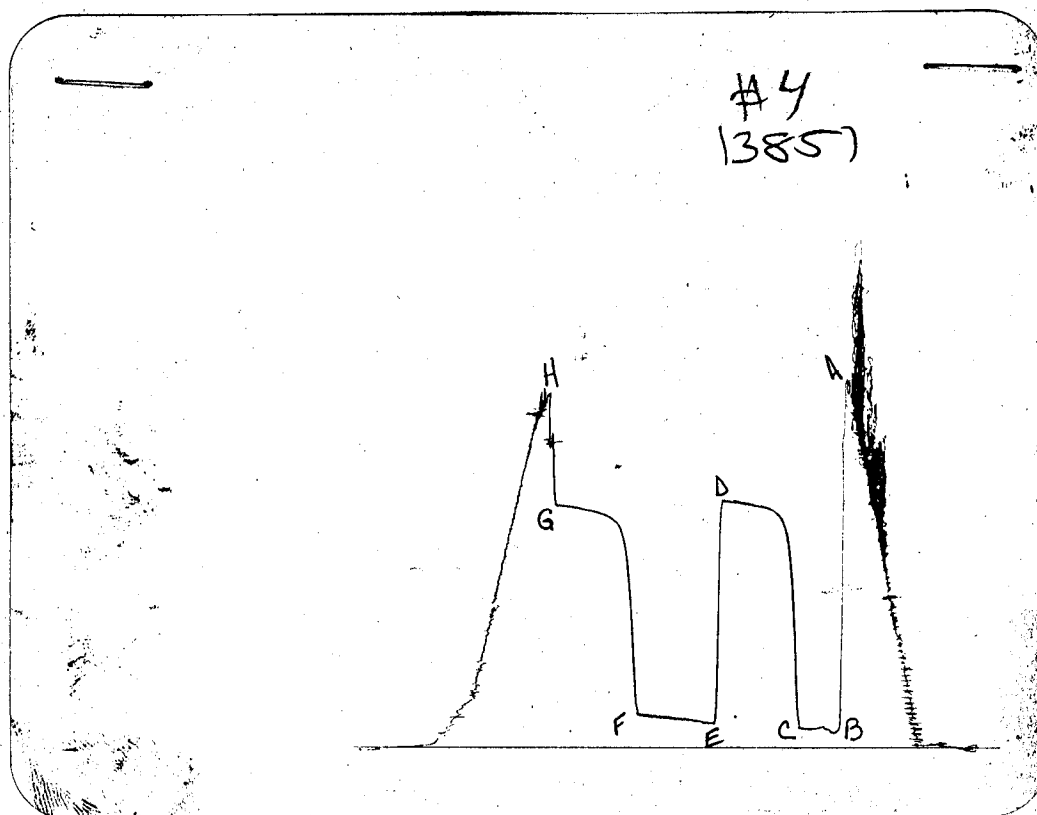
MR PAUL SIMPSON

450

Our Representative _____

TOTAL PRICE..... \$ _____

Printcraft Printers - Hays, KS

DST# 4 RECORDER# 13851


This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	2107	2132.1 PSI
(B) First Initial Flow Pressure.....	89	130 PSI
(C) First Final Flow Pressure.....	111	128.8 PSI
(D) Initial Closed-In Pressure.....	1409	1434.7 PSI
(E) Second Initial Flow Pressure.....	144	161.1 PSI
(F) Second Final Flow Pressure.....	200	214.4 PSI
(G) Final Closed-In Pressure.....	1377	1404.8 PSI
(H) Final Hydrostatic Mud.....	2040	2059.4 PSI

COMPUTER EVALUATION BY TRILOBITE TESTING
 QUINOCO PETROLEUM
 REPORT FOR DST#4 FOR THE FRISBIE #4
 5-26S-13W
 PRATT KANSAS

TEST PARAMETERS

EVATION:	1954 KB	EST. PAY:	3 FT
TUM:	-2191	ZONE TESTED:	MARMATON
ST INTERVAL:	4094-4145		
		TIME INTERVALS:	30-60-60-60
CORDER DEPTH:	4144	VISCOSITY:	.017 CP
TTOM HOLE TEMP:	121	HOLE SIZE:	7.875 IN
MPRESSIBILITY :	.9976	GAS GRAVITY:	.7108

CALCULATIONS

MPERATURE RANKINE	460 &
ANSMISSIBILITY	153.1881 Kh/%
EORITICAL FLOW CAPICITY	2.604197 Kh
ERAGE EFFECTIVE PERMEABILITY	.8680658 K(md.)
DIUS OF INVESTIGATION	8.838886 FT.
AGE RATIO	1.933071
SOLUTE OPEN FLOW(MAX)	45.75909 MCFD
SOLUTE OPEN FLOW(MIN)	45.27701 MCFD
EORITICAL OPEN FLOW(MAX)	88.45554 MCFD
EORITICAL OPEN FLOW(MIN)	87.52365 MCFD
TENTIOMETRIC SURFACE	1244.279 (FT.)

INITIAL SHUT-IN VALUES:
 EORETICAL STATIC PRESSURE 1487.756
 DPE 155052.5

VAL SHUT-IN VALUES
 EORETICAL STATIC PRESSURE 1480.931
 DPE 219692.9

AWDOWN FACTOR .4587412 (%)

FINAL FLOW

REORDER # 13849
DST #4

DT (MIN)	PRESSURE	<> PRESSURE
0	161.1	161.1
3	164.4	3.299988
6	164.4	0
9	164.4	0
12	166.6	2.200012
15	171.1	4.5
18	175.5	4.399994
21	178.8	3.300003
24	181.1	2.300003
27	182.2	1.099991
30	184.4	2.199997
33	186.6	2.200012
36	188.8	2.199997
39	194.4	5.599991
42	197.7	3.300003
45	201.1	3.400009
48	203.3	2.199997
51	206.6	3.300003
54	210	3.399994
57	212.2	2.199997
60	214.4	2.199997

INITIAL SHUT-IN BUILDUP

DST #4

RECORDER # 13849

INITIAL FLOW TIME (MIN.): 30

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	128.8	128.8
3	1.041205	344.4	215.6
6	.778011	715.8	371.4
9	.6367073	1103.9	388.1
12	.5439701	1182.5	78.59998
15	.4770353	1297.5	115
18	.425892	1346.2	48.69995
21	.3852815	1371.6	25.40003
24	.352119	1381.6	10
27	.3244526	1389.3	7.700073
30	.3009757	1403.7	14.3999
33	.280776	1407.1	3.400025
36	.263194	1413.7	6.599976
39	.2477398	1419.2	5.5
42	.234041	1422.5	3.300049
45	.2218087	1426.9	4.400025
48	.2108154	1428.1	1.199951
51	.2008786	1429.2	1.099976
54	.191851	1430.3	1.100098
57	.1836113	1432.5	2.199951
60	.1760595	1434.7	2.199951

FINAL SHUT-IN BUILDUP

DST #4

RECORDER # 13849

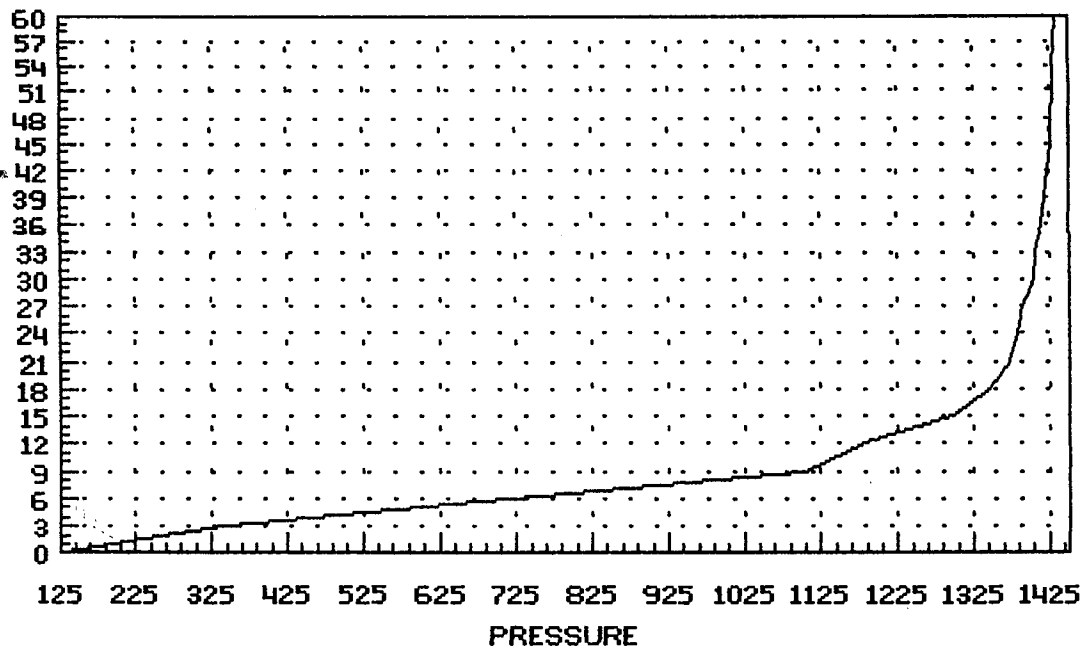
TOTAL FLOW TIME (MIN.): 90

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	214.4	214.4
3	1.491093	410	195.6
6	1.203903	692.7	282.7
9	1.041205	920.7	228
12	.9292515	1127.2	206.4999
15	.8449459	1220.1	92.90002
18	.778011	1292	71.90003
21	.7229735	1323	31
24	.6765717	1344	21
27	.6367073	1355.1	11.09998
30	.6019515	1369.4	14.30005
33	.5712882	1378.3	8.900024
36	.5439701	1381.6	3.299927
39	.5194315	1386.1	4.5
42	.4972351	1391.5	5.400025
45	.4770353	1394.9	3.400025
48	.4585552	1398.2	3.299927
51	.4415694	1401.5	3.300049
54	.425892	1402.6	1.099976
57	.4113683	1403.7	1.099976
60	.3978683	1404.8	1.100098

DELTA T DELTA P

DST #4 INITIAL SHUTIN
RECORDER # 13849

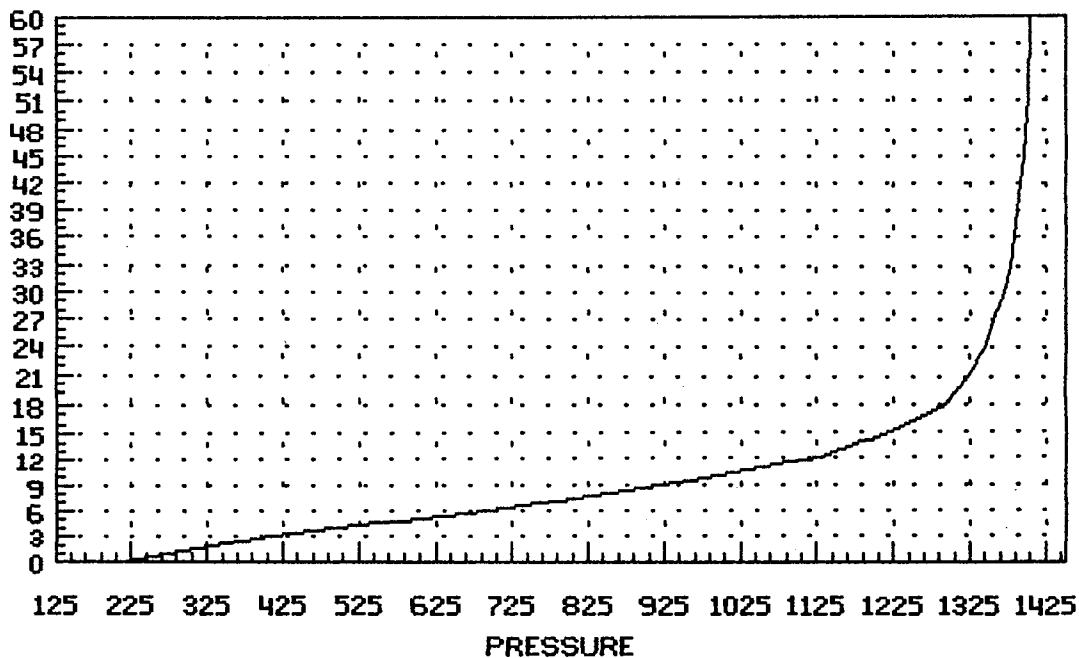
TIME



DELTA T DELTA P

DST #4 FINAL SHUTIN
RECORDER # 13849

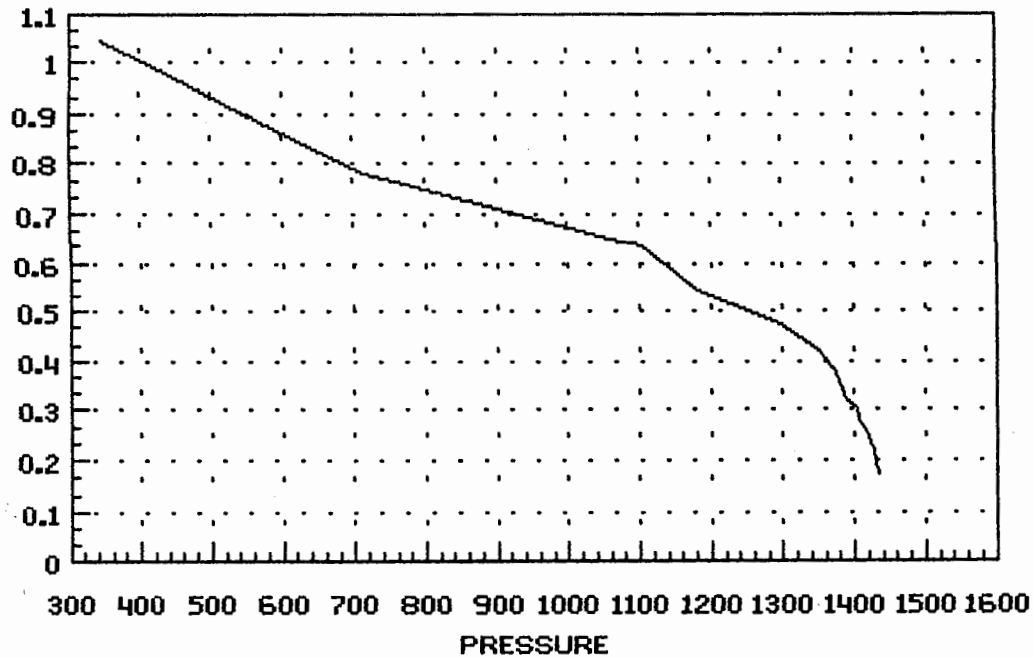
TIME



HORNER PLOT

DST #4 INITIAL SHUTIN
RECORDER # 13849

LOG(T+MIN/MIN)

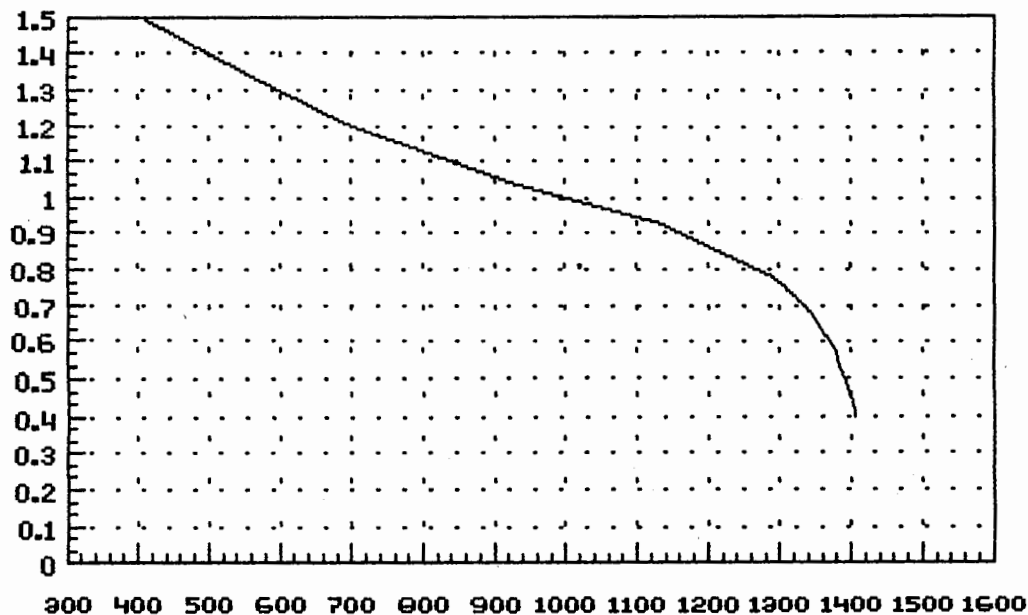


STATIC PRESSURE 1487.756
SLOPE 155052.5
POINTS USED 15

HORNER PLOT

DST #4 FINAL SHUTIN
RECORDER # 13849

LOG(T+MIN/MIN)



STATIC PRESSURE 1480.931
SLOPE 219692.9
POINTS USED 13

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2222 Date 11/11/89
Company Name QUINOCO PETROLEUM
Lease FRISIBIE #4 Test No. 4
County PRATT Sec. 5 Twp. 26S Rng. 13W

SAMPLER RECOVERY

Gas 4000 ML
Oil 0 ML
Mud 0 ML
Water 0 ML
Other 0 ML
Pressure 1250 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 11000 ppm.
Resistivity .55 ohms @ 75.1 F
Viscosity 44
Mud Weight 9.2
Filtrate _____
Other _____

SAMPLER ANALYSIS

Resistivity .197 ohms @ 71.4 F
Chlorides 36000 ppm.
Gravty 0 corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity .198 ohms @ 76.7 F
Chlorides 34000 ppm.
MIDDLE
Resistivity .154 ohms @ 74.5 F
Chlorides 48000 ppm.
BOTTOM
Resistivity .162 ohms @ 74.1 F
Chlorides 44000 ppm.



GAS VOLUME REPORT

4

DST NO.

Remarks: Gas to Surface 10 minutes initial flow (gas will burn)

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 2222

Well Name & No. <u>Erssbie #4</u>	Test No. <u>4</u>	Date <u>11/11/89</u>
Company <u>Quinoco</u>	Zone Tested <u>Marmaton</u>	
Address _____	Elevation <u>1954</u>	
Co. Rep./Geo. <u>Scott Alberg</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay <u>3</u>
Location: Sec. <u>5</u> Twp. <u>26S</u> Rge. <u>14W</u>	Co. <u>Pratt</u>	State <u>KS</u>

Interval Tested <u>4094-4145</u>	Drill Pipe Size <u>4 1/2" FH</u>
Anchor Length <u>51</u>	Top Choke — 1" _____
Top Packer Depth <u>4089</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>4094</u>	Hole Size — 7 7/8" _____
Total Depth <u>4143</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run <u>941</u>
Drill Collar — 2.25 _____	Ft. Run _____

Mud Wt. <u>9.2</u>	lb./gal. _____	Viscosity <u>44</u>	Filtrate _____
Tool Open @ <u>12:08 AM</u>	Initial Blow <u>1" blow build in to bottom of bucked in</u>		
<u>1 min L-TS in 10 minutes gauged 55.3 mcf/b to 40 mcf/b</u>			
Final Blow <u>Strong gauging gas</u>	<u>44.8 at final</u>		
<u>(flow back to bottom on initial & final shut in)</u>			
Recovery — Total Feet <u>460</u>	Flush Tool? _____		

Rec. <u>220</u>	Feet of <u>gassy SOC MW 10% gas 7% oil 63% water 20% mud</u>
Rec. <u>120</u>	Feet of <u>gassy oil speckled water 20% gas 2% oil 78% water</u>
Rec. <u>120</u>	Feet of <u>gassy muddy water</u>
Rec. _____	Feet of _____
Rec. _____	Feet of _____

BHT <u>121</u>	°F Gravity _____	°API @ _____	°F Corrected Gravity _____	°API _____
RW <u>154</u>	@ <u>74.5</u>	°F Chlorides <u>48,000</u>	ppm Recovery _____	Chlorides <u>11,000</u>
		ppm System _____		

(A) Initial Hydrostatic Mud <u>2107</u>	PSI AK1 Recorder No. <u>13849</u>	Range <u>25810-4375</u>
(B) First Initial Flow Pressure <u>89</u>	PSI @ (depth) <u>4144</u>	w/Clock No. <u>25810</u>
(C) First Final Flow Pressure <u>111</u>	PSI AK1 Recorder No. <u>13851</u>	Range <u>4425</u>
(D) Initial Shut-In Pressure <u>1409</u>	PSI @ (depth) <u>4124</u>	w/Clock No. <u>26199</u>
(E) Second Initial Flow Pressure <u>144</u>	PSI Initial Opening <u>30</u>	Test <u>400</u>
(F) Second Final Flow Pressure <u>200</u>	PSI Initial Shut-In <u>60</u>	Jars _____
(G) Final Shut-In Pressure <u>1377</u>	PSI Final Flow <u>60</u>	Safety Joint _____
(H) Final Hydrostatic Mud <u>2040</u>	PSI Final Shut-In <u>60</u>	Straddle _____

Approved By <u>Paul Simpson</u>	Circ. Sub _____
Our Representative <u>Paul Simpson</u>	Sampler <u>50</u>
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ <u>450</u>

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	FRISIBIE #4	Test No.	5	Date	11/13/89
Company	QUINOCO PETROLEUM	Zone Tested	MISS/CONG		
Address	P.O. BOX 378111 DENVER CO 80237	Elevation	1954		
Co. Rep./Geo.	MR SCOTT ALBERG	Cont.	DUKE #1	Est. Ft. of Pay	0
Location: Sec.	5	Twp.	26S	Rge.	13W
		Co.	PRATT	State	KANSAS

Interval Tested	4170-4204	Drill Pipe Size	4.5" FH	
Anchor Length	34	Top Choke — 1"		
Top Packer Depth	4165	Bottom Choke — ¾"		
Bottom Packer Depth	4170	Hole Size — 7 7/8"		
Total Depth	4514	Rubber Size — 6 3/4"		
Wt. Pipe I.D. — 2.7		Ft. Run	634	
Drill Collar — 2.25		Ft. Run	0	
Mud Wt.		Viscosity	0	
	lb./gal.	Filtrate		
Tool Open @	12:07 AM	Initial Blow	STRONG BLOW BUILT TO BOTTOM OF BUCKET IN	
	2 MINUTES			

Final Blow STRONG BLOW -OFF BOTTOM WHEN TOOL OPENED -DIED
BACK TO SURFACE BLOW AT END OF FLOW PERIOD

Recovery — Total Feet	3070	Flush Tool?	
Rec.	600	Feet of	GASSY MUD
Rec.	725	Feet of	WATERY MUD
Rec.	505	Feet of	MUDDY WATER
Rec.	1240	Feet of	GASSY SALT WATER
Rec.	0	Feet of	

BHT 129 °F Gravity °API @ 0 °F Corrected Gravity 0 °API
RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud	2136.9	PSI	AK1 Recorder No.	13337	Range	3975
(B) First Initial Flow Pressure	47.8	PSI	@ (depth)	4200	w/Clock No.	27501
(C) First Final Flow Pressure	790.2	PSI	AK1 Recorder No.	13851	Range	4425
(D) Initial Shut-In Pressure	1451.2	PSI	@ (depth)	4173	w/Clock No.	26199
(E) Second Initial Flow Pressure	989.6	PSI	Initial Opening	30		
(F) Second Final Flow Pressure	1433.2	PSI	Initial Shut-In	60		
(G) Final Shut-In Pressure	1433.2	PSI	Final Flow	60		
(H) Final Hydrostatic Mud	2101.3	PSI	Final Shut-In	60		

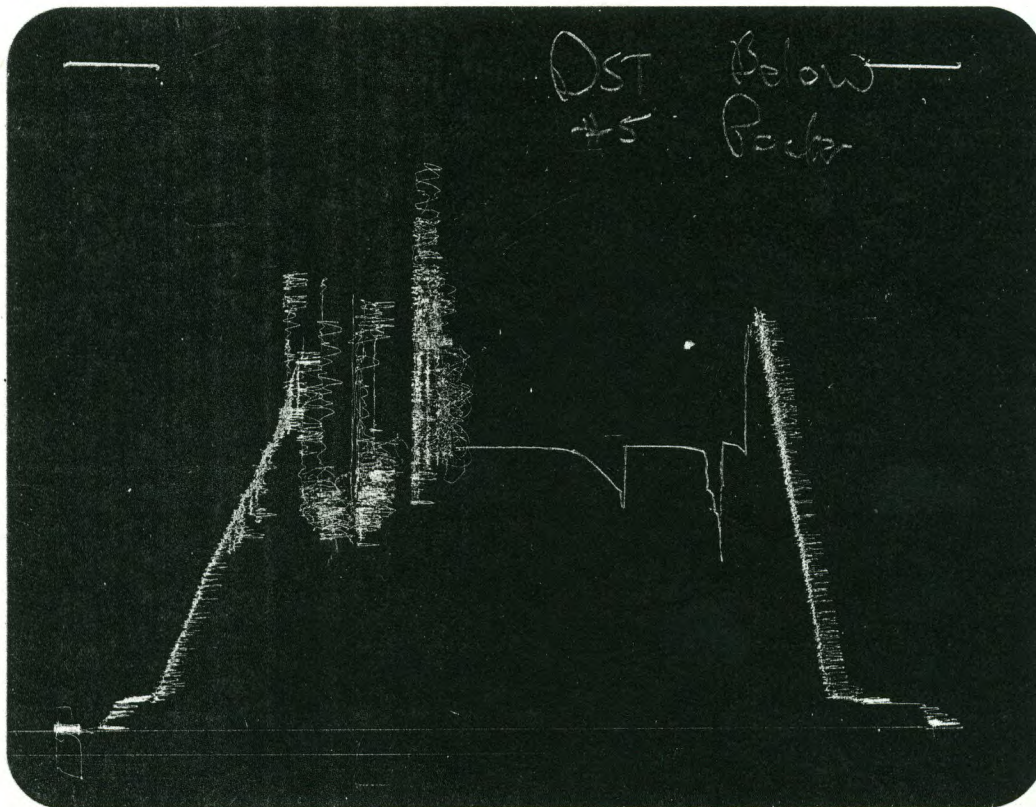
MR PAUL SIMPSON

650

Our Representative

TOTAL PRICE \$

Printcraft Printers - Hays, KS

DST# 5RECORDER# 13851

This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	2129	2136.9
(B) First Initial Flow Pressure.....	44	47.8
(C) First Final Flow Pressure.....	784	790.2
(D) Initial Closed-In Pressure.....	1442	1451.2
(E) Second Initial Flow Pressure.....	980	989.6
(F) Second Final Flow Pressure.....	1431	1433.2
(G) Final Closed-In Pressure.....	1431	1433.2
(H) Final Hydrostatic Mud.....	2096	2101.3

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2223 Date 11/13/89
Company Name QUINOCO PETROLEUM
Lease FRISIBIE #4 Test No. 5
County PRATT Sec. 5 Twp. 26S Rng. 13W

SAMPLER RECOVERY

Gas 0 ML Chlorides _____ ppm.
Oil 0 ML Resistivity .7 ohms @ 69 F
Mud 0 ML Viscosity 0
Water 4000 ML Mud Weight _____
Other 0 ML Filtrate _____
Pressure 50 PSI Other _____
Total 4000 ML _____

PIT MUD ANALYSIS

SAMPLER ANALYSIS

Resistivity .273 ohms @ 80 F
Chlorides 23,500 ppm.
Gravity 0 corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity .37 ohms @ 81.6 F
Chlorides 15,800 ppm.
MIDDLE
Resistivity .33 ohms @ 79.2 F
Chlorides 18,100 ppm.
BOTTOM
Resistivity .29 ohms @ 79.1 F
Chlorides 22000 ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 2223

Well Name & No. <u>Frisbie #4</u>	Test No. <u>5</u>	Date <u>11/13/89</u>
Company <u>Quinoco Petroleum</u>	Zone Tested <u>Miss Conglomerate</u>	
Address _____	Elevation <u>1954</u>	
Co. Rep./Geo. <u>Scott Alberg</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>5</u> Twp. <u>26s</u>	Rge. <u>14w</u>	Co. <u>Pratt</u> State <u>Ks</u>

Interval Tested <u>4170-4204</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>34</u>	Top Choke — 1" _____
Top Packer Depth <u>4165</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>4170-4204</u>	Hole Size — 7 7/8" _____
Total Depth <u>4514 LTD</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run <u>634</u>
Drill Collar — 2.25 _____	Ft. Run _____

Mud Wt. _____ lb./gal.	Viscosity _____	Filtrate _____
Tool Open @ <u>12:07 AM</u>	Initial Blow <u>Strong blow build to bottom of bucket</u>	

Final Blow <u>Strong blow - off bottom when tool opened</u>	
<u>died back to surface blow at end of flow period</u>	

Recovery — Total Feet <u>3050</u>	Flush Tool? _____
Rec. <u>600</u> Feet of <u>gassy mud</u>	
Rec. <u>725</u> Feet of <u>watery mud</u>	
Rec. <u>505</u> Feet of <u>muddy water</u>	
Rec. <u>1240</u> Feet of <u>gassy salt & water</u>	

BHT <u>129</u> °F	Gravity _____ °API @ _____ °F	Corrected Gravity _____ °API
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RW _____ @ _____ °F	Chlorides _____ ppm	Recovery _____	Chlorides _____ ppm	System _____
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(A) Initial Hydrostatic Mud <u>2129</u>	PSI AK1 Recorder No. <u>13337</u>	Range <u>3975</u>
(B) First Initial Flow Pressure <u>44</u>	PSI @ (depth) <u>4200</u>	w/Clock No. <u>27501</u>
(C) First Final Flow Pressure <u>784</u>	PSI AK1 Recorder No. <u>13851</u>	Range <u>4425</u>
(D) Initial Shut-In Pressure <u>1442</u>	PSI @ (depth) <u>4173</u>	w/Clock No. <u>26199</u>
(E) Second Initial Flow Pressure <u>980</u>	PSI Initial Opening <u>30</u>	Test <u>250 mls</u>
(F) Second Final Flow Pressure <u>1431</u>	PSI Initial Shut-In <u>60</u>	Jars <u>100</u>
(G) Final Shut-In Pressure <u>1431</u>	PSI Final Flow <u>60</u>	Safety Joint _____
(H) Final Hydrostatic Mud <u>2096</u>	PSI Final Shut-In <u>60</u>	Straddle <u>250</u>

Approved By <u>[Signature]</u>	Circ. Sub _____
Our Representative <u>[Signature]</u>	Sampler <u>50</u>
	Extra Packer <u>X</u>
	Other _____

TOTAL PRICE \$ 650

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	FRISIBIE #4	Test No.	6	Date	11/13/89
Company	QUINOCO PETROLEUM	Zone Tested	MISS/CONG		
Address	P.O. BOX 378111 DENVER CO 80237		Elevation	1954	
Co. Rep./Geo.	MR SCOTT ALBERG	Cont.	DUKE #1	Est. Ft. of Pay	0
Location: Sec.	5	Twp.	26S	Rge.	13W
Co.	PRATT	State	KANSAS		

Interval Tested	4170-4264	Drill Pipe Size	4.5" FH			
Anchor Length	94	Top Choke — 1"				
Top Packer Depth	4165	Bottom Choke — 1/4"				
Bottom Packer Depth	4264	Hole Size — 7 7/8"				
Total Depth	4513	Rubber Size — 6 3/4"				
Wt. Pipe I.D. — 2.7		Ft. Run	634			
Drill Collar — 2.25		Ft. Run	0			
Mud Wt.	9.1	lb./gal.	Viscosity	44	Filtrate	11.2
Tool Open @	5:09 PM	Initial Blow	1/2" BLOW BUILDING TO 7" (1/2" BLOW BACK ON SHUT IN)			

Final Blow 3" BLOW BUILDING TO BOTTOM OF BUCKET IN 25 MINUTES

Recovery — Total Feet	30	Flush Tool?	
Rec.	30	Feet of	GAS CUT MUD
Rec.	500	Feet of	GAS IN PIPE
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	

BHT	112	°F	Gravity		°API @	0	°F	Corrected Gravity	0	°API
RW	.71	@	71	°F	Chlorides	8500	ppm	Recovery	Chlorides	ppm

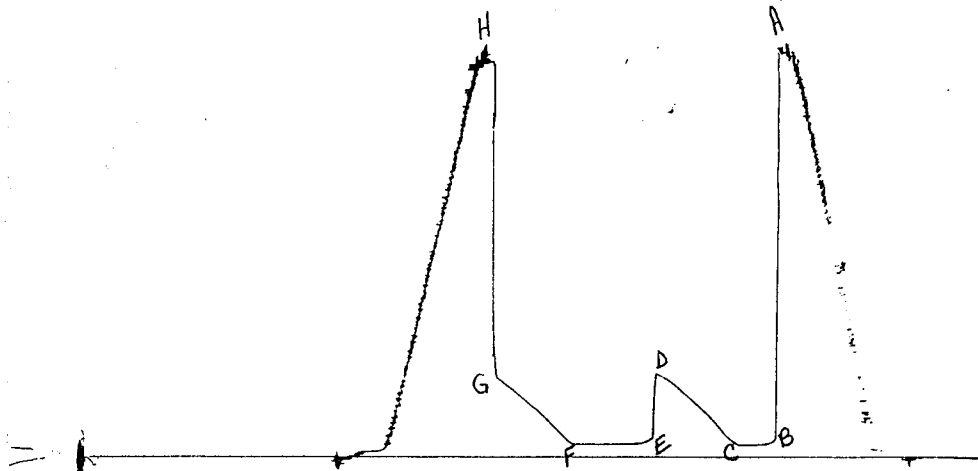
(A) Initial Hydrostatic Mud	2133.6	PSI	AK1 Recorder No.	13337	Range	3975
(B) First Initial Flow Pressure	71.2	PSI	@ (depth)	4260	w/Clock No.	26199
(C) First Final Flow Pressure	59.8	PSI	AK1 Recorder No.	13851	Range	4425
(D) Initial Shut-In Pressure	448.7	PSI	@ (depth)	4230	w/Clock No.	27501
(E) Second Initial Flow Pressure	71.2	PSI	Initial Opening	30		
(F) Second Final Flow Pressure	59.8	PSI	Initial Shut-In	60		
(G) Final Shut-In Pressure	428.9	PSI	Final Flow	60		
(H) Final Hydrostatic Mud	2044.7	PSI	Final Shut-In	60		

Our Representative	MR PAUL SIMPSON	TOTAL PRICE	\$	700
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Printcraft Printers - Hays, KS

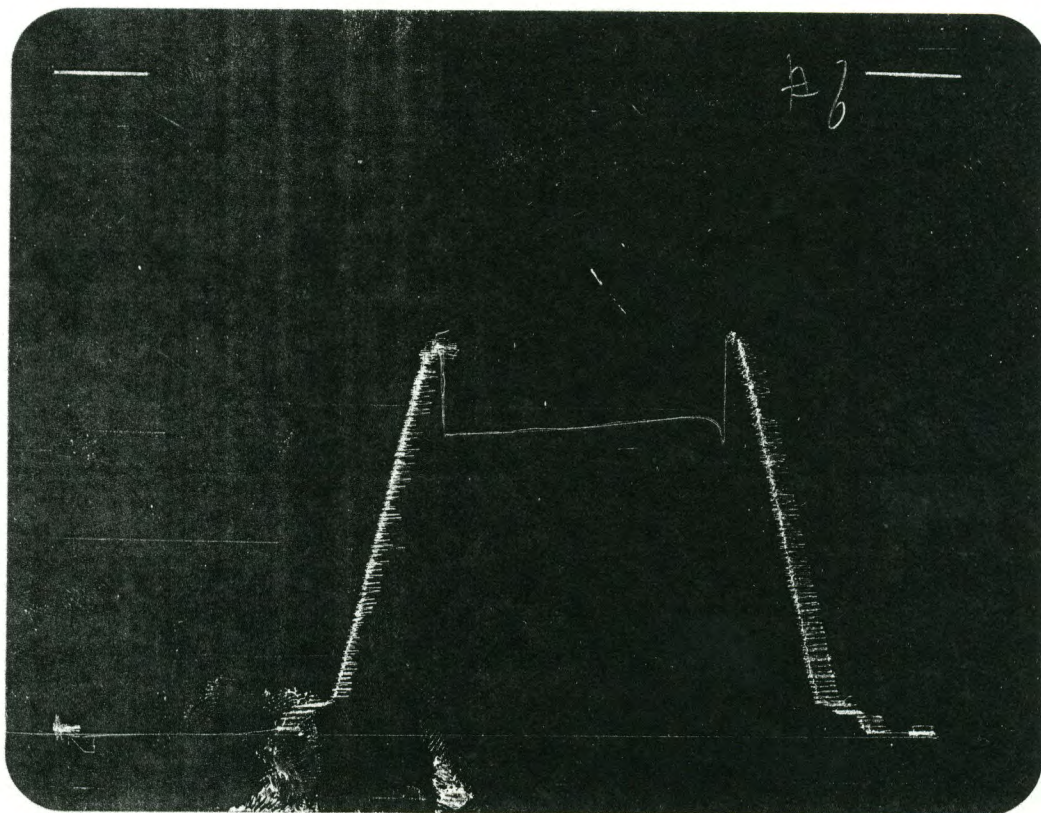
DST# 6 RECORDER# 13851

#6



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	2129	2133.6 PSI
(B) First Initial Flow Pressure.....	67	71.2 PSI
(C) First Final Flow Pressure.....	55	59.8 PSI
(D) Initial Closed-In Pressure.....	444	448.7 PSI
(E) Second Initial Flow Pressure.....	67	71.2 PSI
(F) Second Final Flow Pressure.....	55	59.8 PSI
(G) Final Closed-In Pressure.....	422	428.9 PSI
(H) Final Hydrostatic Mud.....	2040	2044.7 PSI

DST # 6RECORDER # Stroddle

This is an actual photograph of recorder chart.

PRESSURE

POINT	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....		PSI
(B) First Initial Flow Pressure.....		PSI
(C) First Final Flow Pressure.....		PSI
(D) Initial Closed-In Pressure.....		PSI
(E) Second Initial Flow Pressure.....		PSI
(F) Second Final Flow Pressure.....		PSI
(G) Final Closed-In Pressure.....		PSI
(H) Final Hydrostatic Mud.....		PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2224 Date 11/13/89

Company Name QUINOCO PETROLEUM

Lease FRISIBIE #4 Test No. 6

County PRAIRIE Sec. 5 Twp. 26S Rng. 13W

SAMPLER RECOVERY

Gas 4000 ML Chlorides _____ ppm.
Oil 0 ML Resistivity .7 ohms @ 70.8 F
Mud 0 ML Viscosity 44
Water 0 ML Mud Weight 9.1
Other 0 ML Filtrate 11.2
Pressure 400 PSI Other _____
Total 4000 ML _____

SAMPLER ANALYSIS

Resistivity .273 ohms @ 80 F
Chlorides 23,500 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 .71 ohms @ 71 F
Chlorides 8500 ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 2224 Date 11/13/89
Company Name Quinoco
Lease Frisbie #4 Test No. 6
County Hart Sec. 5 Twp. 26s Rng. 14w

SAMPLER RECOVERY

Gas 4000 ML
Oil _____ ML
Mud _____ ML
Water _____ ML
Other _____ ML
Pressure 400 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 8550 ppm.
Resistivity 7 ohms @ 70.8 F
Viscosity 44
Mud Weight 9.1
Filtrate 11.2
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 71 ohms @ 71 F
Chlorides 8,500 ppm.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 2224

Well Name & No. <u>Scrubbing #4</u>	Test No. <u>6</u>	Date <u>11/13/87</u>
Company <u>Quinn Petroleum</u>	Zone Tested <u>Miss Conglomerate</u>	
Address _____	Elevation <u>1954</u>	
Co. Rep./Geo. <u>Scott Alberg</u>	cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>5</u>	Twp. <u>26s</u>	Rge. <u>14w</u> Co. <u>Pratt</u> State <u>Ks</u>

Interval Tested <u>4170-4264</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>94</u>	Top Choke — 1" _____
Top Packer Depth <u>4165-4170</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>4264</u>	Hole Size — 7 7/8" _____
Total Depth <u>4513 LTO</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run <u>634</u>
Drill Collar — 2.25 _____	Ft. Run _____

Mud Wt. <u>9.1</u> lb./gal.	Viscosity <u>44</u>	Filtrate <u>11.2</u>
Tool open @ <u>5:09 PM</u>	Initial Blow <u>1/2" blow building to 7"</u>	
Final Blow <u>3" blow building to bottom of bucket in 25 minutes</u>		

Recovery — Total Feet <u>30</u>	Flush Tool? _____
Rec. <u>30</u> Feet of <u>gas and mud</u>	
Rec. <u>500</u> Feet of <u>CH</u>	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	

BHT <u>112</u> °F Gravity _____	°API @ _____	°F Corrected Gravity _____	°API _____
RW <u>71</u> @ <u>71</u> °F Chlorides <u>8,500</u> ppm Recovery _____	Chlorides _____	ppm System _____	
(A) Initial Hydrostatic Mud <u>2129</u> PSI AK1 Recorder No. <u>13337</u> Range <u>3975</u>			
(B) First Initial Flow Pressure <u>67</u> PSI @ (depth) <u>4260</u> w/Clock No. <u>26199</u>			
(C) First Final Flow Pressure <u>55</u> PSI AK1 Recorder No. <u>13551</u> Range <u>4425</u>			
(D) Initial Shut-In Pressure <u>444</u> PSI @ (depth) <u>4230</u> w/Clock No. <u>27501</u>			
(E) Second Initial Flow Pressure <u>67</u> PSI Initial Opening <u>30</u> Test <u>400</u>			
(F) Second Final Flow Pressure <u>55</u> PSI Initial Shut-In <u>60</u> Jars <u>X</u>			
(G) Final Shut-In Pressure <u>422</u> PSI Final Flow <u>60</u> Safety Joint <u>X</u>			
(H) Final Hydrostatic Mud <u>2040</u> PSI Final Shut-In <u>60</u> Straddle <u>250</u>			

Approved By <u>[Signature]</u>	Circ. Sub _____
Our Representative <u>[Signature]</u>	Sampler <u>50</u>
	Extra Packer <u>X</u>
	Other _____
	TOTAL PRICE \$ <u>700</u>