

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company NATIONAL PETROLEUM RESERVES INC.	Test No. 1
Well Name & Number GILL #1	Zone Tested Lansing
Company Address 260 Rock Road, Suite 215, Wichita, Ks.	Date 4-14-87
Company Rep. Ted C. Bredehoft - Dan DeBoer	Tester Richard Elliott
Contractor Red Tiger Drlg. Rig #10	Elevation 2801 K.B.
Location: Sec. 35 Twp. 16S Rge. 29W Co. Lane State Kansas	Est. Feet of Pay

Recorder No. 13224 Type AK-1 Range 4350 PSI

Recorder Depth 4202 Clock # _____

(A) Initial Hydrostatic Mud 2064 PSI

(B) First Initial Flow Pressure 148 PSI

(C) First Final Flow Pressure 360 PSI

(D) Initial Shut-in Pressure 806 PSI

(E) Second Initial Flow Pressure 492 PSI

(F) Second Final Flow Pressure 590 PSI

(G) Final Shut-in Pressure 817 PSI

(H) Final Hydrostatic Mud 2032 PSI

Temperature 115°

Mud Weight 9.4 Viscosity 36

Fluid Loss 8.4

Interval Tested 4175-4205

Anchor Length 30

Top Packer Depth 4170

Bottom Packer Depth 4175

Total Depth 4205

Drill Pipe Size 4½XH

Wt. Pipe I. D. 2.7 Ft. Run 108

Recovery-Total Feet 1400

Recovered 300 Feet Of Gas in Pipe.

Recovered 10 Feet Of Gassy Oil.

Recovered 200 Feet Of Oily Water-cut Mud. (15% Oil, 25% Water, 60% Mud)

Recovered 290 Feet Of Slightly Oily, Muddy Water. (5% Oil, 30% Mud, 65% Water)

Recovered 900 Feet Of Slightly Oily, Muddy Water. (3% Oil, 27% Mud, 70% Water)

Recovered _____ Feet Of RW .26 @ 66.2° = 40,000 P.P.M.

Extra Equipment _____

Recorder No. 13222 Type AK-1 Range 4000 PSI

Recorder Depth 4199 Clock # _____

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 60 Mins.

Flow Period 30 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 7:20 P.M.

Blow Remarks Strong blow off bottom of bucket in 3 min. (1st Open)

(2nd Open) Strong blow off bottom of bucket 7 min.

Price of Job \$426.00

CHENEY TESTING COMPANY, INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

Dist. Hays

TEST TICKET

Company <u>NATIONAL PET. RESOURCES INC.</u>	Test No. <u>1</u>
Well Name & Number <u>Gill #2</u>	Zone Tested <u> Lansing</u>
Company Address <u>Wichita KS 67206</u>	Date <u>4-14-87</u>
Company Rep. <u>Tom C. Beneshoff + Don DeBoer</u>	Tester <u>Richard Elliott + Tracy Houser</u>
Contractor <u>Red Tiger Drilling</u>	Elevation
Location: Sec. <u>35</u> Twp. <u>16</u> Rge. <u>29</u> Co. <u>LANE</u> State <u>KS</u>	

Recorder No. 13224 Type AC Range 4350 PSI
 Recorder Depth 4202 Clock # _____
 (A) Initial Hydrostatic Mud 2064 PSI
 (B) First Initial Flow Pressure 148 PSI
 (C) First Final Flow Pressure 360 PSI
 (D) Initial Shut-in Pressure 806' PSI
 (E) Second Initial Flow Pressure 492 PSI
 (F) Second Final Flow Pressure 590 PSI
 (G) Final Shut-in Pressure 817 PSI
 (H) Final Hydrostatic Mud 2032 PSI
 Temperature 115°
 Mud Weight 9.4 36 Viscosity
 Fluid Loss 8.4
 Interval Tested 4175' - 4205'
 Anchor Length 30'
 Top Packer Depth 4170'
 Bottom Packer Depth 4175'
 Total Depth 4205'
 Drill Pipe Size 4 1/2 X-H
 Wt. Pipe I. D. 2.7 Ft. Run 1085'
 Recovery—Total Feet 1400'
 Rec. G.I.P 300'
 Rec. 10' G.Oil

Recorder No. 13222 Type AK Range 4000 PSI
 Recorder Depth 4199' Clock # _____
 Tool Open Before I. S. I. 30 Mins.
 Initial Shut-in 60 Mins.
 Flow Period 30 Mins.
 Final Shut-in 60 Mins.
 T Choke Size 1" Hole Size 7 7/8"
 B Choke Size 3/4" Rubber Size 6 7/8"
 Tool Open @ 7:20 A.M.
 Blow Strong flow off bottom of bucket
 Remarks 3 min.

2" opening strong flow off bottom of bucket 7 min.

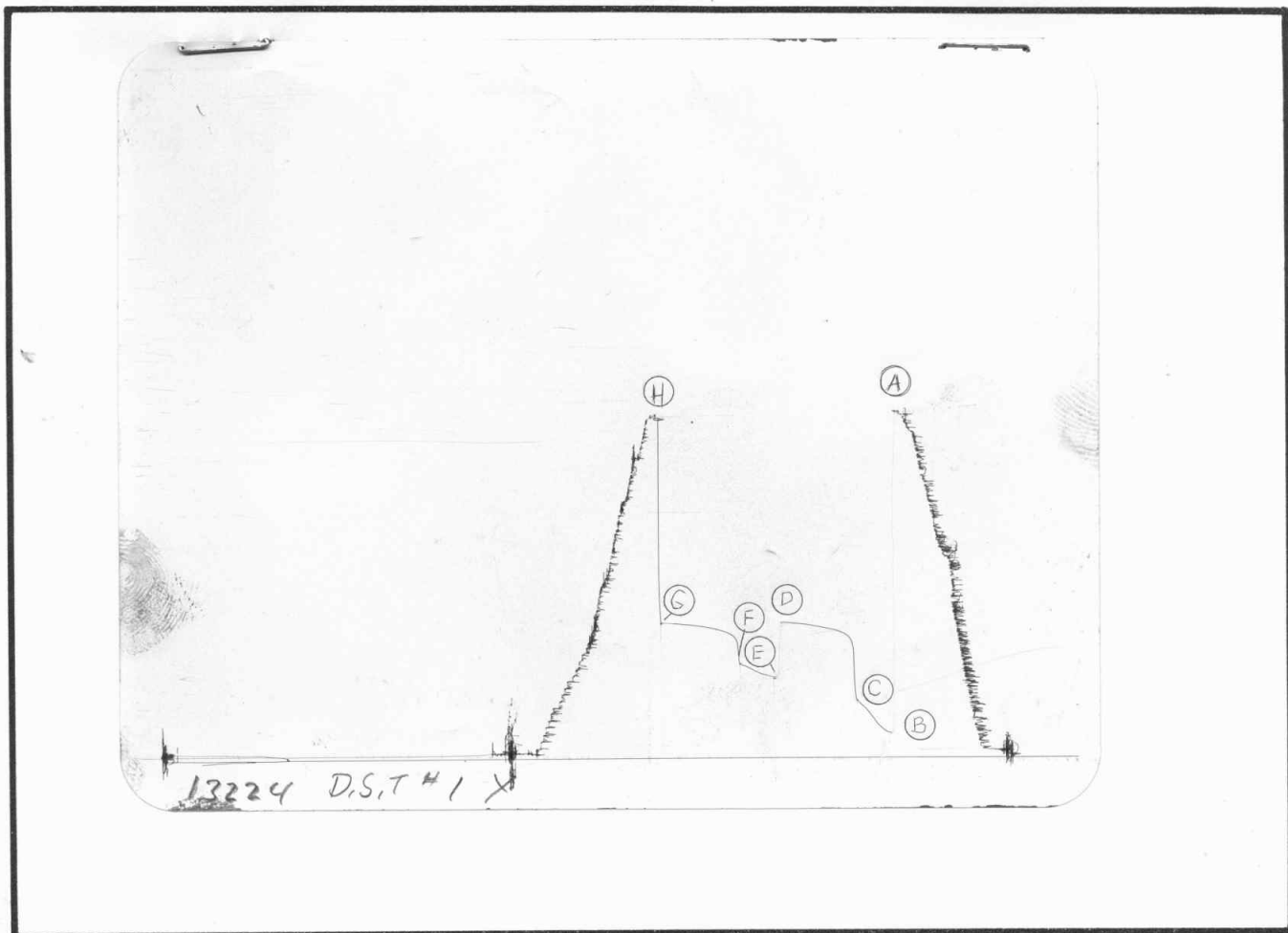
00 Rec. O.W.C.M 15% O 25% W 60% M
 Rec. 290' O.M.C.W 5% O 30% M 65% W
 Rec. 900' O.M.C.W 3% O 27% M 70% W
 Rec. _____
RW .26
T- 66.2
R.P.M 40,000

Test\$ _____
 Straddle _____
 Bowen Jars _____
 Safety Joint _____
 Selective Zone Tool _____
 Sampler _____
 Extra Packer _____
 Circulating Sub _____
 Down Hole Insurance _____
 Others _____
 Price of Job\$ _____

CHENEY TESTING COMPANY, INC.

Approved By _____
 Our Representative Richard Elliott

TICKET N° 12015



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2064		PSI
(B) First Initial Flow Pressure	148		PSI
(C) First Final Flow Pressure	360		PSI
(D) Initial Closed-in Pressure	806		PSI
(E) Second Initial Flow Pressure	492		PSI
(F) Second Final Flow Pressure	590		PSI
(G) Final Closed-in Pressure	817		PSI
(H) Final Hydrostatic Mud	2032		PSI

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company NATIONAL PETROLEUM RESERVES	Test No. 2
Well Name & Number GILL # 2	Zone Tested Kansas City
Company Address 260 N. Rock Rd Suite 215, Wichita, Ks. 67202	Date 4-15-87
Company Rep. Ted C. Bredehoft - Dan DeBoer	Tester Richard Elliott
Contractor Red Tiger Drlg. Rig #10	Elevation 2801 K.B.
Location: Sec. 35 Twp. 16S Rge. 29W Co. Lane State Ks.	Est. Feet of Pay

Recorder No. 13222 Type AK-1 Range 4000 PSI

Recorder Depth 4292 Clock # _____

(A) Initial Hydrostatic Mud 2078 PSI

(B) First Initial Flow Pressure 131 PSI

(C) First Final Flow Pressure 182 PSI

(D) Initial Shut-in Pressure 796 PSI

(E) Second Initial Flow Pressure 273 PSI

(F) Second Final Flow Pressure 293 PSI

(G) Final Shut-in Pressure 786 PSI

(H) Final Hydrostatic Mud 2038 PSI

Temperature 117°

Mud Weight 9.4 Viscosity 36

Fluid Loss 8.4

Interval Tested 4208-4295

Anchor Length 87

Top Packer Depth 4203

Bottom Packer Depth 4208

Total Depth 4295

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.7 Ft. Run 1026

Recovery-Total Feet 630

Recovered 390 Feet Of Gas In Pipe

Recovered 150 Feet Of Gassy Oil-cut Mud. (10% Oil, 90% Mud)

Recovered 120 Feet Of Mud-cut Gassy Oil. (20% Gas, 20% Mud, 60% Oil)

Recovered 120 Feet Of Gassy Mud-cut Oil. (30% Gas, 15% Mud, 55% Oil)

Recovered 120 Feet Of Gassy Mud-cut Oil. (50% Gas, 20% Mud, 30% Oil)

Recovered 120 Feet Of Gassy Mud-cut Oil. (10% Gas, 45% Mud, 45% Oil)

Extra Equipment Down Hole Ins.

Recorder No. 13224 Type AK-1 Range 4350 PSI

Recorder Depth 4298 Clock # _____

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 60 Mins.

Flow Period 30 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 1:37 A.M.

Blow Remarks Strong Blow off bottom of Bucket in 7 min. (1st Open)

Strong blow off bottom of bucket in 10 min. (2nd Open)

Price of Job \$426.00

CHENEY TESTING COMPANY, INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

Dist. Hays

TEST TICKET

Company <u>NATIONAL RET. RESERVES INC.</u>	Test No. <u>D.S.T # 2</u>
Well Name & Number <u>Gill #2</u>	Zone Tested <u>K.C</u>
Company Address <u>260 N ROCK RD. STE. 215 WICHITA KS.</u>	Date <u>4-15-87</u>
Company Rep. <u>Ted Bredhoff & Dan DeBoer</u>	Tester <u>Richard Elliott & Troy Hauer</u>
Contractor <u>Red Tiger Dr. #0</u>	Elevation _____
Location: Sec. <u>35</u> Twp. <u>16</u> Rge. <u>29</u> Co. <u>Lang</u> State <u>KS.</u>	

Recorder No. 13222 Type AK-1 Range 4000 PSI
 Recorder Depth 4292' Clock # _____
 (A) Initial Hydrostatic Mud 2078 PSI
 (B) First Initial Flow Pressure 131 PSI
 (C) First Final Flow Pressure 182 PSI
 (D) Initial Shut-in Pressure 796 PSI
 (E) Second Initial Flow Pressure 273 PSI
 (F) Second Final Flow Pressure 293 PSI
 (G) Final Shut-in Pressure 786 PSI
 (H) Final Hydrostatic Mud 2038 PSI
 Temperature _____ 117°
 Mud Weight 9.4 36 Viscosity
 Fluid Loss 8H
 Interval Tested 4208' - 4295'
 Anchor Length 87'
 Top Packer Depth 4203'
 Bottom Packer Depth 4208'
 Total Depth 4295'
 Drill Pipe Size 4 1/2 X.H
 Wt. Pipe I. D. 2.7 Ft. Run 1026'
 Recovery—Total Feet 630'
 Rec. G.I.P 390'

Recorder No. 13224 Type AK-1 Range 4350 PSI
 Recorder Depth 4289' Clock # _____
 Tool Open Before I. S. I. 30 Mins.
 Initial Shut-in 60 Mins.
 Flow Period 30 Mins.
 Final Shut-in 60 Mins.
 T Choke Size 1" Hole Size 7 7/8"
 B Choke Size 3/4" Rubber Size 6 3/4"
 Tool Open @ 1:37 A.M
 Blow Strong Blow OFF BOTTOM OF
 Remarks BUCKET in 3 min.

2nd opening Strong Blow OFF BOTTOM OF BUCKET in 10 min.

Rec. <u>150' G.O.C.M</u>	<u>10% G</u>	<u>90% M</u>		
Rec. <u>120' M.C.G.O</u>	<u>20% G</u>	<u>20% M</u>	<u>60% O</u>	
Rec. <u>120' G.M.C.O</u>	<u>30% G</u>	<u>15% M</u>	<u>55% O</u>	
Rec. <u>120' G.M.C.O</u>	<u>50% G</u>	<u>20% M</u>	<u>30% O</u>	
Rec. <u>120' G.M.C.O</u>	<u>10% G</u>	<u>45% M</u>	<u>45% O</u>	

Test	\$ 375.00 <u>375.00</u>
Straddle	
Bowen Jars	
Safety Joint	
Selective Zone Tool	
Sampler	
Extra Packer	
Circulating Sub	
Down Hole Insurance	<u>51.00</u>
Others	
Price of Job	\$ <u>426.00</u>

CHENEY TESTING COMPANY, INC.

Approved By _____
 Our Representative Richard Elliott

TICKET NO 12016

CHENEY TESTING CO, INC.
CALCULATION OF FORMATION CHARACTERISTICS
FROM DST DATA

FOR: NATIONAL PETROLEUM RESERVES
GILL #2 DST # 2
35-16S-29W FORMATION: KANSAS CITY
LANE COUNTY, KANSAS ELEVATION: 2801 KB

TEST PARAMETERS

TEST INTERVAL: 4208 - 4295	EST PAY: 5
TIME INTERVAL: 30 - 55 - 30 - 70	VISCOSITY OF FLUID: 6
INITIAL FLOW PRESS: 115.5- 182.7	HOLE SIZE: 7.875
FINAL FLOW PRESS: 261.0- 282.1	D.C. CAPACITY:0.00000
SHUT-IN PRESS(I-F): 797.2- 763.1	W.P. CAPACITY:0.00708
BOTTOM HOLE TEMPERATURE: 117	D.P. CAPACITY:0.01402
TOTAL FEET OF RECOVERY: 630	TOTAL BARRELS RECOVERY: 4.4592

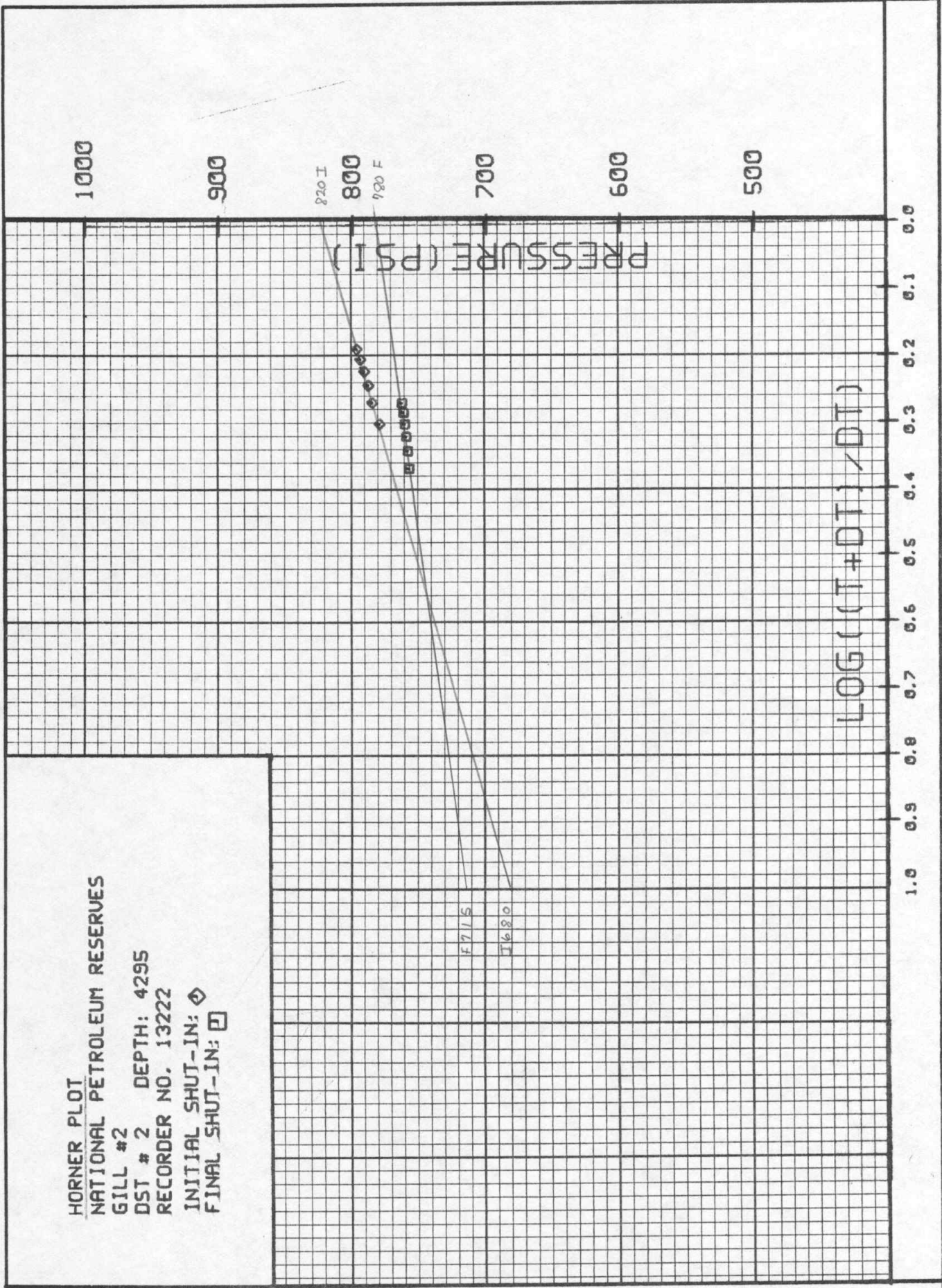
EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 820
SLOPE (PSI-CYCLE): 140 POINTS USED: 6

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 780
SLOPE (PSI-CYCLE): 65 POINTS USED: 5

CALCULATIONS

PRODUCTION POTENTIAL (B/D)	: 107.02
TRANSMISSIBILITY (MD-FT/CP)	: 267.72
EFFECTIVE PERMEABILITY (MD)	: 321.26
PRODUCTIVITY INDEX (B/D/PSI)	: 0.3025
DAMAGE RATIO	: 1.402
APPROXIMATE RADIUS OF INVESTIGATION (FT)	: 138.8
DRAWDOWN FACTOR (%)	: 4.878
POTENTIOMETRIC SURFACE (FT)	: 314.82

HORNER PLOT
 NATIONAL PETROLEUM RESERVES
 GILL #2
 DST # 2 DEPTH: 4295
 RECORDER NO. 13222
 INITIAL SHUT-IN: \diamond
 FINAL SHUT-IN: \square



INITIAL SHUT-IN

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RECORDER NO: 13222 DEPTH: 4295 FT.
 INITIAL FLOW TIME (T): 30 MIN.

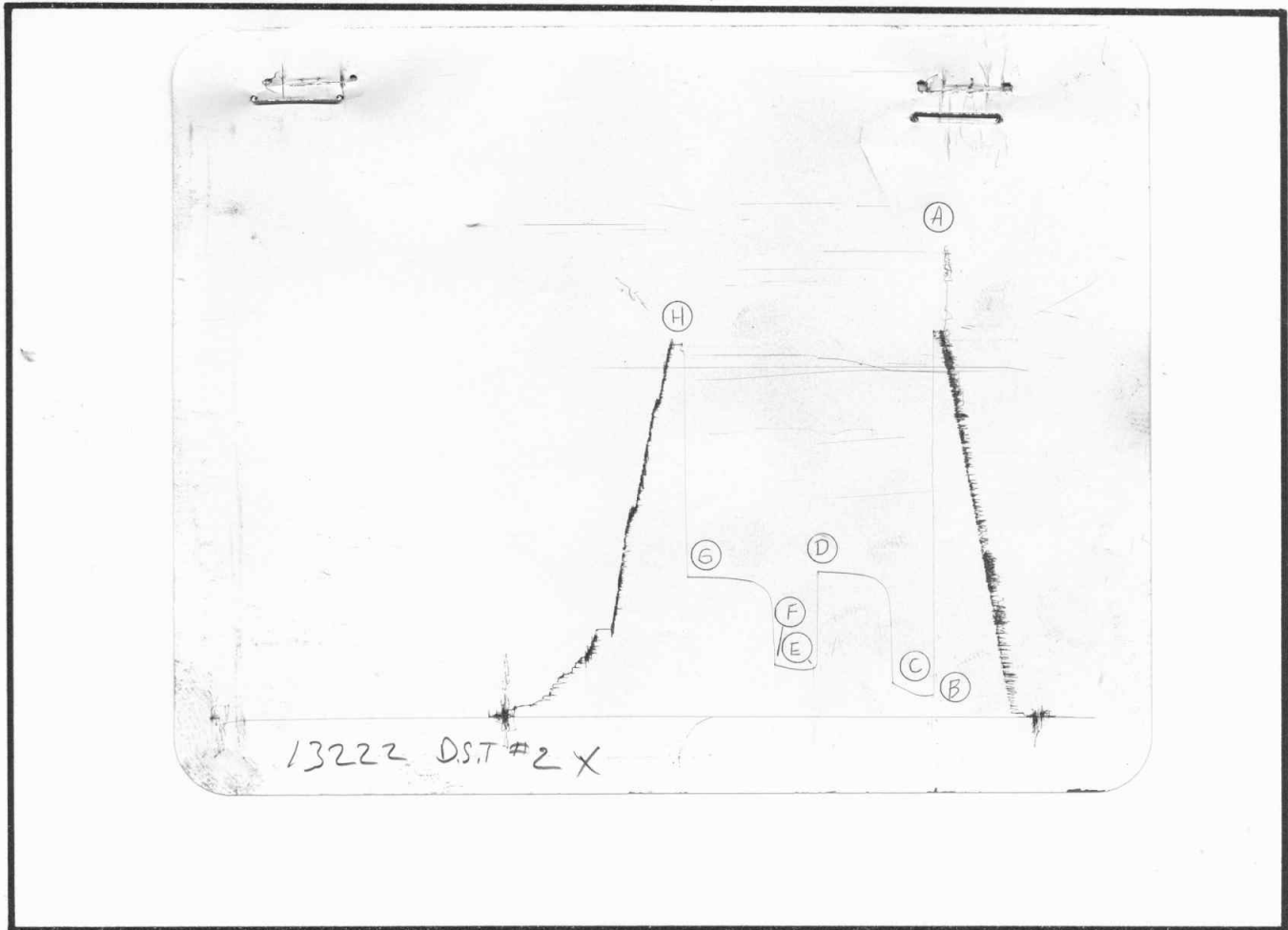
DT(MIN)	LOG((T+DT)/DT)	PRESSURE(PSIG)
0	0.000	182.7
5	0.845	670.7
10	0.602	721.9
15	0.477	756.0
20	0.398	770.1
25	0.342	778.1
30	0.301	780.1
35	0.269	785.2
40	0.243	788.2
45	0.222	791.2
50	0.204	794.2
55	0.189	797.2

FINAL SHUT-IN

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RECORDER NO: 13222 DEPTH: 4295 FT.
 TOTAL FLOW TIME: 60 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(PSIG)
0	0.000	282.1
5	1.114	668.7
10	0.845	702.8
15	0.699	724.9
20	0.602	739.0
25	0.531	744.0
30	0.477	748.0
35	0.434	753.0
40	0.398	756.0
45	0.368	758.0
50	0.342	759.0
55	0.320	760.1
60	0.301	761.1
65	0.284	762.1
70	0.269	763.1



This is an actual photograph of recorder chart.

POINT	PRESSURE		PSI
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2078		PSI
(B) First Initial Flow Pressure	131		PSI
(C) First Final Flow Pressure	182		PSI
(D) Initial Closed-in Pressure	796		PSI
(E) Second Initial Flow Pressure	273		PSI
(F) Second Final Flow Pressure	293		PSI
(G) Final Closed-in Pressure	786		PSI
(H) Final Hydrostatic Mud	2038		PSI

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HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company NATIONAL PETROLEUM RESERVES	Test No. #3
Well Name & Number Gill #2	Zone Tested Cherokee-Johnson
Company Address 260 N. Rock Road, Suite 215, Wichita, KS.	Date 4-17-87
Company Rep. Ted Bredehoft - Dan DeBoer	Tester Richard Elliott
Contractor Red Tiger Drlg. Rig #10	Elevation 2801 K.B.
Location: Sec. 35 Twp. 16S Rge. 29W Co. Lane State KS.	Est. Feet of Pay

Recorder No. 13224 Type AK-1 Range 4350 PSI

Recorder Depth 4558 Clock # _____

(A) Initial Hydrostatic Mud _____ 2271 PSI

(B) First Initial Flow Pressure _____ 92 PSI

(C) First Final Flow Pressure _____ 80 PSI

(D) Initial Shut-in Pressure _____ 148 PSI

(E) Second Initial Flow Pressure _____ 92 PSI

(F) Second Final Flow Pressure _____ 126 PSI

(G) Final Shut-in Pressure _____ - PSI

(H) Final Hydrostatic Mud _____ 2216 PSI

Temperature _____ 121°

Mud Weight 9.6 Viscosity 48

Fluid Loss _____ 8.0

Interval Tested _____ 4507-4561

Anchor Length _____ 54

Top Packer Depth _____ 4502

Bottom Packer Depth _____ 4507

Total Depth _____ 4561

Drill Pipe Size _____ 4½XH

Wt. Pipe I. D. 2.7 Ft. Run 1056

Recovery-Total Feet _____ 5

Recovered 5 Feet Of Drilling Mud with oil spots.

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment Down Hole Insurance Price of Job \$426.00

Recorder No. 13222 Type AK-1 Range 4000 PSI

Recorder Depth 4555 Clock # _____

Tool Open Before I.S.I. _____ 14 Mins.

Initial Shut-in _____ 15 Mins.

Flow Period _____ 8 Mins.

Final Shut-in _____ - Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 4:05 P.M.

Blow Remarks Very Weak Blow Died in 10 Min.
(1st Open)

No Blow. (2nd Open) Flushed Tool.

CHENEY TESTING COMPANY, INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

Dist. Hays

TEST TICKET

Company <u>Uatl. Pet. Reserves Inc.</u>	Test No. <u>D.S.T # 3</u>
Well Name & Number <u>Gill #2</u>	Zone Tested <u>Cherokee Johnson</u>
Company Address <u>240 W Rock Rd. Ste 215 Wichita KS</u>	Date <u>4-17-87</u>
Company Rep. <u>TED Bredehoff + DAN Debusch</u>	Tester <u>R. Elliott + T. Hauser</u>
Contractor <u>Red Tiger Drllg #10</u>	Elevation <u>2801 KB</u>
Location: Sec. <u>35</u> Twp. <u>10</u> Rge. <u>29</u> Co. <u>LANC</u> State <u>KS</u>	

Recorder No. 13224 Type AK-1 Range 4350 PSI

Recorder Depth 4558' Clock # 45

(A) Initial Hydrostatic Mud 2271 PSI

(B) First Initial Flow Pressure 92 PSI

(C) First Final Flow Pressure 89 PSI

(D) Initial Shut-in Pressure 148 PSI

(E) Second Initial Flow Pressure 92 PSI

(F) Second Final Flow Pressure 126 PSI

(G) Final Shut-in Pressure - PSI

(H) Final Hydrostatic Mud 2216 PSI

Temperature 121°

Mud Weight 9.6 Viscosity 48

Fluid Loss 8.0

Interval Tested 4507' - 4561'

Anchor Length 54'

Top Packer Depth 4502'

Bottom Packer Depth 4507'

Total Depth 4561'

Drill Pipe Size 4 1/2 X.H

Wt. Pipe I. D. 2.7 Ft. Run 1056'

Recovery—Total Feet 5'

Recorder No. 13222 Type AK-1 Range 4000 PSI

Recorder Depth 4155' Clock # 45

Tool Open Before I. S. I. 14 Mins.

Initial Shut-in 15 Mins.

Flow Period 8 Mins.

Final Shut-in - Mins.

T Choke Size 1" Hole Size 7 1/8"

B Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 4:05 P.M

Blow Very weak blow Died in

Remarks 10 min.

2nd opening NO BLOW

Flush Tool

2nd open

Rec. 5 day mud w/ oil spots

Rec. _____

Rec. _____

Rec. _____

Rec. _____

Rec. _____

Test \$ _____

Straddle _____

Bowen Jars _____

Safety Joint _____

Selective Zone Tool . _____

Sampler _____

Extra Packer _____

Circulating Sub _____

Down Hole Insurance _____

Others _____

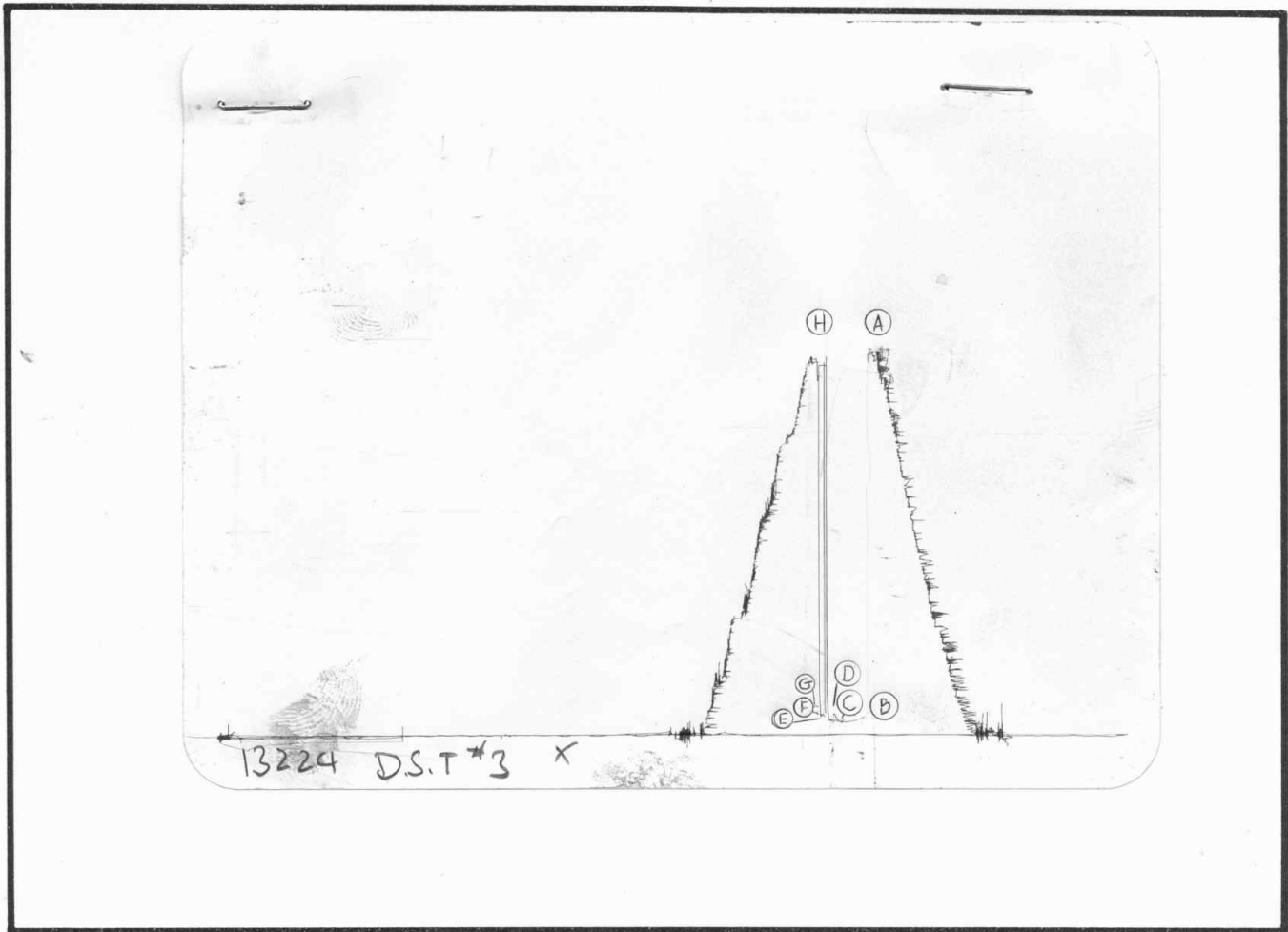
Price of Job \$ _____

CHENEY TESTING COMPANY, INC.

Approved By [Signature]

Our Representative [Signature]

TICKET N^o 12017



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2271		PSI
(B) First Initial Flow Pressure	92		PSI
(C) First Final Flow Pressure	80		PSI
(D) Initial Closed-in Pressure	148		PSI
(E) Second Initial Flow Pressure	92		PSI
(F) Second Final Flow Pressure	126		PSI
(G) Final Closed-in Pressure	-		PSI
(H) Final Hydrostatic Mud	2216		PSI