CHENEY TESTING COMPANY

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Isern Petroleum	Test No.	1
Well Name & Number	Herbel #1	Zone Tested	Kansas City
Company Address	Box 486, Ellinwood, Kan.	Date	11-4-76
Comp. Rep.	L. O. Chubb	Tester	James Ricketts
Contractor	Chief Drlg. Co. Inc.	Elevation	3165 K.B.
Location: Sec. 28 Twp. 9S Rge. 33W Co. Thomas State Kansas		Est. Feet of Pay	

Recorder No. 6730 Type Kuster Range 4200 PSI
Recorder Depth 4294
(A) Initial Hydrostatic Mud 2280 PSI
(B) First Initial Flow Pressure 64 PSI
(C) First Final Flow Pressure 172 PSI
(D) Initial Closed-in Pressure 1331 PSI
(E) Second Initial Flow Pressure 183 PSI
(F) Second Final Flow Pressure 200 PSI
(G) Final Closed-in Pressure 1331 PSI
(H) Final Hydrostatic Mud 2270 PSI
Temperature 116
Mud Weight 9.5 Viscosity 51
Fluid Loss 6.8 C.C.
Interval Tested 4252-4300
Anchor Length 48'
Top Packer Depth 4247
Bottom Packer Depth 4252
Total Depth 4300
Drill Pipe Size 4½ F.H.
Wt. Pipe I. D. 2.7 Ft. Run 725
Drill Collar I. D. ____ Ft. Run ____

Recorder No. 54 Type Western Range 4000 PSI
Recorder Depth 4292
Tool Open Before I. S. I. 30 Mins.
Initial Shut-in 30 Mins.
Flow Period 30 Mins.
Final Shut-in 30 Mins.
Surface Choke Size 1"
Bottom Choke Size ½"
Main Hole Size 7 7/8"
Rubber Size 6 3/4"
Tool Open @ 4:15 P.M.
Blow Strong for 60 minutes.
Remarks

Recovery—Total Feet 2190
Recovered 1680 Feet Of Gas
Recovered 60 Feet Of Oil Cut mud
Recovered 360 Feet Of Gasie Oil
Recovered 90 Feet Of Free Oil

Extra Equipment ____ Price of Job $375.00

CHENEY TESTING COMPANY
Pressure Data

Date 11-4-76 Test Ticket No. 392

Recorder No. 6730 Capacity 4200 Location 4294 Ft.

Clock No. 17921 Elevation 3165 K.B. Well Temperature 116 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2280	P.S.I.
B	First Initial Flow Pressure	53	P.S.I.
C	First Final Flow Pressure	179	P.S.I.
D	Initial Closed-in Pressure	1337	P.S.I.
E	Second Initial Flow Pressure	198	P.S.I.
F	Second Final Flow Pressure	284	P.S.I.
G	Final Closed-in Pressure	1329	P.S.I.
H	Final Hydrostatic Mud	2250	P.S.I.

	Time Given	Time Computed
Open Tool	4:15 P. M	
First Flow Pressure	30 Mins.	Mins.
Initial Closed-in Pressure	30 Mins.	Mins.
Second Flow Pressure	30 Mins.	Mins.
Final Closed-in Pressure	30 Mins.	Mins.

PRESSURE BREAKDOWN

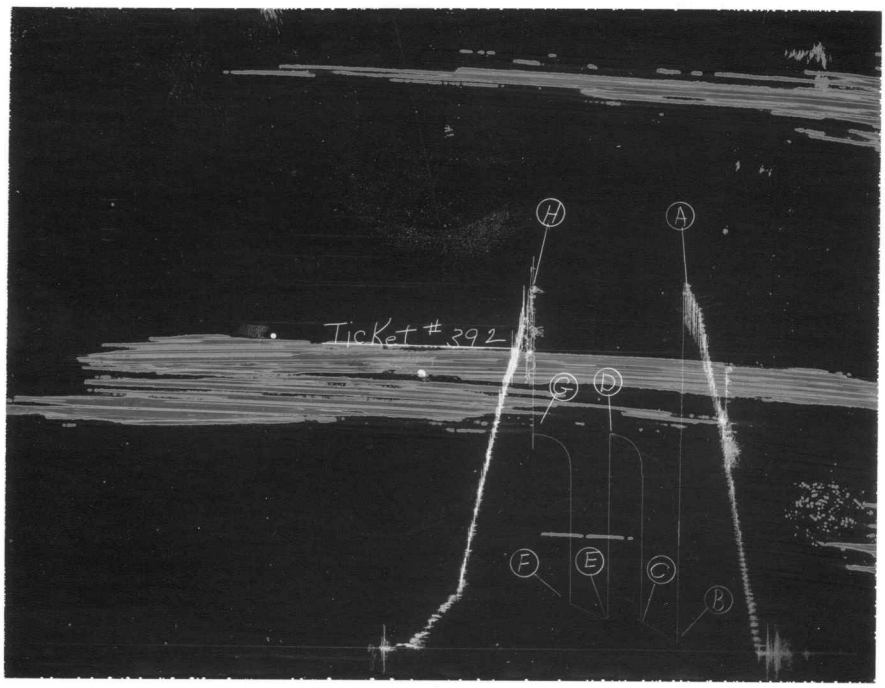
First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of ____ Min.

Initial Shut-In
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of ____ Min.

Second Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of ____ Min.

Final Shut-In
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of ____ Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	53	0	179	0	198	0	284
P 2 5	64	5	1232	5	202	5	1233
P 3 10	88	10	1286	10	217	10	1274
P 4 15	116	15	1310	15	237	15	1299
P 5 20	136	20	1324	20	250	20	1312
P 6 25	161	25	1333	25	267	25	1320
P 7 30	179	30	1337	30	284	30	1329
P 8							
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2280	2280	PSI
(B)	First Initial Flow Pressure	64	53	PSI
(C)	First Final Flow Pressure	172	179	PSI
(D)	Initial Closed-in Pressure	1331	1337	PSI
(E)	Second Initial Flow Pressure	183	198	PSI
(F)	Second Final Flow Pressure	200	284	PSI
(G)	Final Closed-in Pressure	1331	1329	PSI
(H)	Final Hydrostatic Mud	2270	2250	PSI

COMPANY ISERN PETROLEUM LEASE AND WELL NO. HERBEL #1 SEC. 28 TWP. 9S RGE. 33W TEST NO. 1 DATE 11-4-

CHENEY TESTING COMPANY

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Isern Petroleum	Test No.	2
Well Name & Number	Herbel #1	Zone Tested	Kansas City
Company Address	Box 486, Ellinwood, Kan.	Date	11-5-76
Comp. Rep.	L.O. Chubb	Tester	James Ricketts
Contractor	Chief Drlg. Co. Inc.	Elevation	3165 K.B.
Location: Sec. 28 Twp. 9S Rge. 33W Co. Thomas State Kan.		Est. Feet of Pay	

Recorder No. 6730 Type Kuster Range 4200 PSI

Recorder Depth 4334

(A) Initial Hydrostatic Mud 2122 PSI

(B) First Initial Flow Pressure 53 PSI

(C) First Final Flow Pressure 107 PSI

(D) Initial Closed-in Pressure 1341 PSI

(E) Second Initial Flow Pressure 118 PSI

(F) Second Final Flow Pressure 204 PSI

(G) Final Closed-in Pressure 1320 PSI

(H) Final Hydrostatic Mud 2115 PSI

Temperature

Mud Weight 9.5 Viscosity 51

Fluid Loss 6.8 C.C.

Interval Tested 4292-4340

Anchor Length 48'

Top Packer Depth 4287

Bottom Packer Depth 4292

Total Depth 4340

Drill Pipe Size 4½ F.H.

Wt. Pipe I. D. 2.7 Ft. Run 725

Drill Collar I. D. Ft. Run

Recovery—Total Feet 900

Recovered 410 Feet Of Gas (41°) Gravity

Recovered 430 Feet Of Free Oil

Recovered 60 Feet Of Gasie Oil

Recovered Feet Of

Extra Equipment

Recorder No. 54 Type Western Range 4000 PSI

Recorder Depth 4332

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

Initial Shut-in 30 Mins.

Flow Period 45 Mins.

Final Shut-in 60 Mins.

Surface Choke Size 1"

Bottom Choke Size ½"

Main Hole Size 7 7/8"

Rubber Size 6 3/4"

Tool Open @ 8:00 A.M.

Blow Strong for 75 minutes

Remarks

Price of Job $375.00

CHENEY TESTING COMPANY
Pressure Data

Date 11-5-76 Test Ticket No. 393

Recorder No. 6730 Capacity 4200 Location 4334 Ft.

Clock No. 17921 Elevation 3165 K.B. Well Temperature °F

Point		Pressure	
A	Initial Hydrostatic Mud	2102	P.S.I.
B	First Initial Flow Pressure	53	P.S.I.
C	First Final Flow Pressure	107	P.S.I.
D	Initial Closed-in Pressure	1331	P.S.I.
E	Second Initial Flow Pressure	131	P.S.I.
F	Second Final Flow Pressure	206	P.S.I.
G	Final Closed-in Pressure	1329	P.S.I.
H	Final Hydrostatic Mud	2100	P.S.I.

	Time Given	Time Computed
Open Tool	8:00 A M	
First Flow Pressure	30 Mins.	Mins.
Initial Closed-in Pressure	30 Mins.	Mins.
Second Flow Pressure	45 Mins.	Mins.
Final Closed-in Pressure	60 Mins.	Mins.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	53
P 2 5	63
P 3 10	71
P 4 15	79
P 5 20	90
P 6 25	99
P 7 30	107
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of Min.

Point Minutes	Press.
0	107
5	1202
10	1277
15	1303
20	1316
25	1322
30	1331
35	

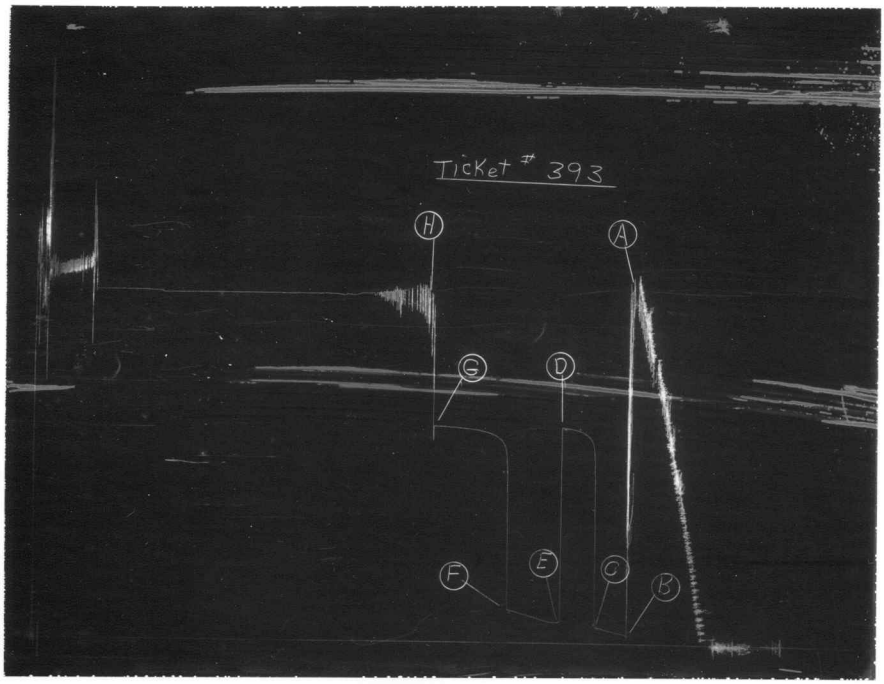
Second Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of Min.

Point Minutes	Press.
0	131
5	131
10	131
15	142
20	155
25	166
30	176
35	185
40	196
45	206

Final Shut-In
Breakdown: 13 Inc.
of 5 mins. and a
final inc. of Min.

Point Minutes	Press.
0	206
5	1097
10	1244
15	1274
20	1291
25	1299
30	1308
35	1312
40	1316
45	1320
50	1322
55	1325
60	1328
65	1329

COMPANY ISERN PETROLEUM LEASE AND WELL NO. HERBEL #1 SEC. 28 TWP. 9S RGE. 33W TEST NO. 2 DATE 11-5-



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2122	2102	PSI
(B)	First Initial Flow Pressure	53	53	PSI
(C)	First Final Flow Pressure	107	107	PSI
(D)	Initial Closed-in Pressure	1341	1331	PSI
(E)	Second Initial Flow Pressure	118	131	PSI
(F)	Second Final Flow Pressure	204	206	PSI
(G)	Final Closed-in Pressure	1320	1329	PSI
(H)	Final Hydrostatic Mud	2115	2100	PSI

CHENEY TESTING COMPANY

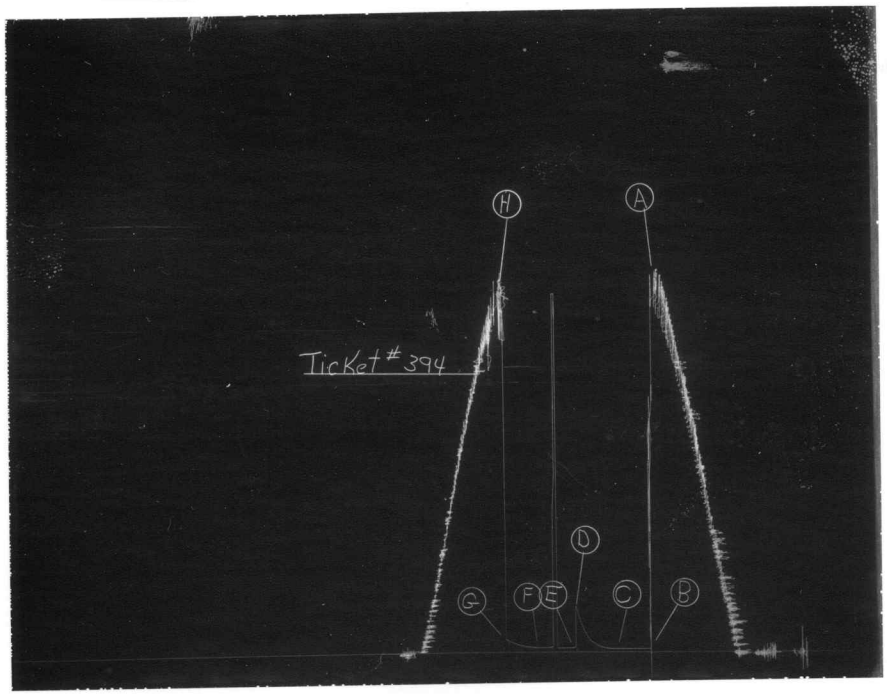
P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Isern Petrolem	Test No.	3
Well Name & Number	Herbel #1	Zone Tested	Kansas City
Company Address	Box 486, Ellinwood, Kan.	Date	11-9-76
Comp. Rep.	L.O. Chubb	Tester	Kenneth Cheney
Contractor	Chief Drlg. Co.	Elevation	3165 K.B.
Location: Sec. 28 Twp. 9S Rge. 33W Co. Thomas State Kan		Est. Feet of Pay	

Recorder No. 6730 Type Kuster Range 4200 PSI
Recorder Depth 4374
(A) Initial Hydrostatic Mud 2227 PSI
(B) First Initial Flow Pressure 21 PSI
(C) First Final Flow Pressure 21 PSI
(D) Initial Closed-in Pressure 172 PSI
(E) Second Initial Flow Pressure 21 PSI
(F) Second Final Flow Pressure 32 PSI
(G) Final Closed-in Pressure 75 PSI
(H) Final Hydrostatic Mud 2201 PSI
Temperature
Mud Weight 9.5 Viscosity 51
Fluid Loss 16.0 C.C.
Interval Tested 4346-4377
Anchor Length 31'
Top Packer Depth 4341
Bottom Packer Depth 4346
Total Depth 4377
Drill Pipe Size 4½ F.H.
Wt. Pipe I. D. 2.7 Ft. Run 1054
Drill Collar I. D. Ft. Run
Recovery—Total Feet 20
Recovered 20 Feet Of Mud
Recovered Feet Of
Recovered Feet Of
Recovered Feet Of
Extra Equipment

Recorder No. 54 Type Western Range 4000 PSI
Recorder Depth 4372
Tool Open Before I. S. I. 30 Mins.
Initial Shut-in 30 Mins.
Flow Period 30 Mins.
Final Shut-in 30 Mins.
Surface Choke Size 1"
Bottom Choke Size ½"
Main Hole Size 7 7/8"
Rubber Size 6 3/4"
Tool Open @ 6:35 P.M.
Blow weak for 30 minutes
Remarks Flushed tool on final flow.
Price of Job $375.00



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2227		PSI
(B)	First Initial Flow Pressure	21		PSI
(C)	First Final Flow Pressure	21		PSI
(D)	Initial Closed-in Pressure	172		PSI
(E)	Second Initial Flow Pressure	21		PSI
(F)	Second Final Flow Pressure	32		PSI
(G)	Final Closed-in Pressure	75		PSI
(H)	Final Hydrostatic Mud	2201		PSI

COMPANY ISEKIN PETROLEUM LEASE AND WELL NO. HERBEL #1 SEC. 28 TWP. 9S RGE. 33W TEST NO. 3 DATE 11-9-

CHENEY TESTING COMPANY

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company Isern Petrolum Co.	Test No. 4
Well Name & Number Herbel # 1	Zone Tested Johnson
Company Address P.O. Box 486 Ellinwood, Kan.	Date 11-12-76
Comp. Rep. Lewis Chubb	Tester Kenneth Cheney
Contractor Chief Drlg. Co.	Elevation
Location: Sec. 28 Twp. 9 S Rge 33 W Co. Thomas State Kan.	Est. Feet of Pay

Recorder No. 6730 Type Kuster Range 4200 PSI

Recorder Depth 4665

(A) Initial Hydrostatic Mud 2280 PSI

(B) First Initial Flow Pressure 43 PSI

(C) First Final Flow Pressure 107 PSI

(D) Initial Closed-in Pressure 961 PSI

(E) Second Initial Flow Pressure 129 PSI

(F) Second Final Flow Pressure 204 PSI

(G) Final Closed-in Pressure 919 PSI

(H) Final Hydrostatic Mud 2259 PSI

Temperature 108

Mud Weight 9.5 Viscosity 47

Fluid Loss 9.8

Interval Tested 4636-4670

Anchor Length 34

Top Packer Depth 4631

Bottom Packer Depth 4636

Total Depth 4670

Drill Pipe Size 4 ½ F. H.

Wt. Pipe I. D. 2.7 Ft. Run 1054

Drill Collar I. D. _____ Ft. Run _____

Recovery—Total Feet 540

Recovered 420 Feet Of Clean oil

Recovered 120 Feet Of Muddy oil

Recovered 1320 Feet Of G. I. P.

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment _____ Price of Job $375.00

Recorder No. 54 Type H&T Range 4000 PSI

Recorder Depth 4663

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

Initial Shut-in 30 Mins.

Flow Period 45 Mins.

Final Shut-in 60 Mins.

Surface Choke Size 1"

Bottom Choke Size ½"

Main Hole Size 7 7/8"

Rubber Size 6 3/4"

Tool Open @ 12:25 A. M.

Blow Strong

Remarks _____

CHENEY TESTING COMPANY
Pressure Data

Date 11-12-76 Test Ticket No. 395

Recorder No. 6730 Capacity 4200 Location 4665 Ft.

Clock No. 17921 Elevation 3165 K. B. Well Temperature 108 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2322	P.S.I.
B	First Initial Flow Pressure	43	P.S.I.
C	First Final Flow Pressure	109	P.S.I.
D	Initial Closed-in Pressure	967	P.S.I.
E	Second Initial Flow Pressure	140	P.S.I.
F	Second Final Flow Pressure	224	P.S.I.
G	Final Closed-in Pressure	932	P.S.I.
H	Final Hydrostatic Mud	2291	P.S.I.

	Time Given	Time Computed
Open Tool	12:25 A. M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	45 Mins.	45 Mins.
Final Closed-in Pressure	60 Mins.	57 Mins.

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: ____ Inc. of 5 mins. and a final inc. of ____ Min.

Point	Mins.	Press.
P 1	0	43
P 2	5	45
P 3	10	54
P 4	15	66
P 5	20	81
P 6	25	95
P 7	30	109
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In

Breakdown: ____ Inc. of 3 mins. and a final inc. of ____ Min.

Point	Minutes	Press.
	0	109
	3	622
	6	822
	9	872
	12	896
	15	914
	18	928
	21	938
	24	951
	27	958
	30	967
	33	
	36	
	39	
	42	
	45	
	48	
	51	
	54	
	57	
	60	

Second Flow Pressure

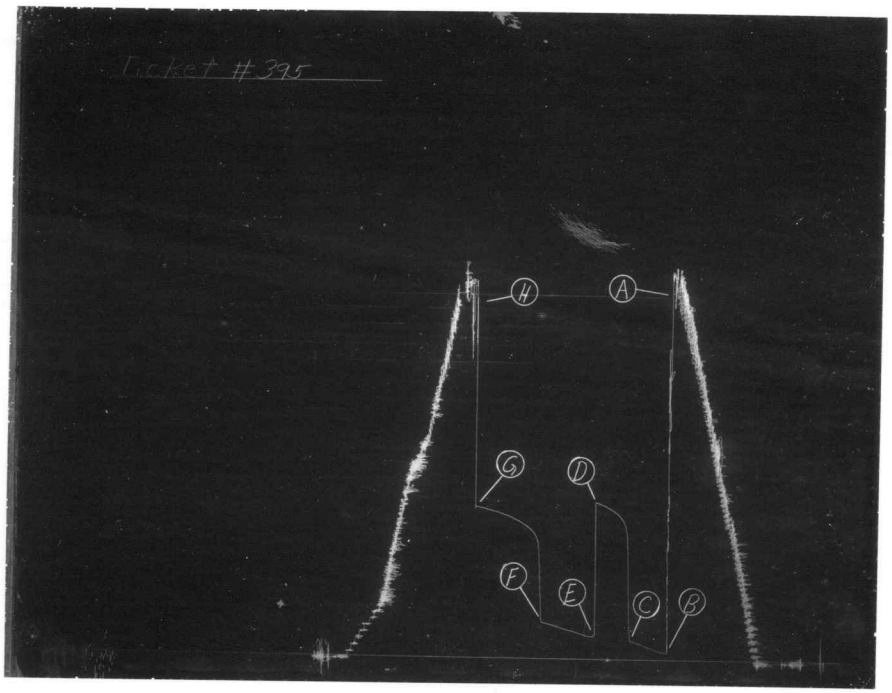
Breakdown: ____ Inc. of 5 mins. and a final inc. of ____ Min.

Point	Minutes	Press.
	0	140
	5	140
	10	148
	15	159
	20	172
	25	182
	30	193
	35	206
	40	215
	45	224
	50	
	55	
	60	

Final Shut-In

Breakdown: ____ Inc. of 3 mins. and a final inc. of ____ Min.

Point	Minutes	Press.
	0	224
	3	686
	6	760
	9	788
	12	808
	15	824
	18	838
	21	850
	24	860
	27	870
	30	878
	33	886
	36	896
	39	901
	42	908
	45	914
	48	920
	51	924
	54	928
	57	932
	60	



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2280	2322	PSI
(B)	First Initial Flow Pressure	43	43	PSI
(C)	First Final Flow Pressure	107	109	PSI
(D)	Initial Closed-in Pressure	961	967	PSI
(E)	Second Initial Flow Pressure	129	140	PSI
(F)	Second Final Flow Pressure	204	224	PSI
(G)	Final Closed-in Pressure	919	932	PSI
(H)	Final Hydrostatic Mud	2259	2291	PSI

COMPANY ISERN PETROLUM CO. LEASE AND WELL NO. HERBEL # 1 SEC. 28 TWP. 9 S RGE. 33 W TEST NO. 4 DATE 11-1

CHENEY TESTING COMPANY

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Isern Petroleum Co	Test No.	5 (straddle test)
Well Name & Number	Herbel #1	Zone Tested	Marmaton
Company Address	PO Box Ellinwood	Date	11-12-76
Comp. Rep.	Lewis Chubb	Tester	Kenneth Cheney
Contractor	Chief Drlg. Co.	Elevation	3165 K.B.
Location: Sec. 28 Twp. 9 S Rge. 33 W Co. Thomas State Ks		Est. Feet of Pay	

Recorder No. 6730 Type Kuster Range 4200 PSI

Recorder Depth 4530

(A) Initial Hydrostatic Mud 2270 PSI

(B) First Initial Flow Pressure 10 PSI

(C) First Final Flow Pressure 10 PSI

(D) Initial Closed-in Pressure 961 PSI

(E) Second Initial Flow Pressure 21 PSI

(F) Second Final Flow Pressure 21 PSI

(G) Final Closed-in Pressure 1004 PSI

(H) Final Hydrostatic Mud 2252 PSI

Temperature 112

Mud Weight 9.5 Viscosity 51

Fluid Loss 6.2 cc

Interval Tested 4502-4534

Anchor Length 32

Top Packer Depth 4502

Bottom Packer Depth 4534

Total Depth 4761

Drill Pipe Size 4½ Fh

Wt. Pipe I. D. 2.7 Ft. Run 1054

Recovery—Total Feet 30

Recovered 30 Feet Of Mud

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Straddle $125.00

Recorder No. 54 Type H&T Range 4000 PSI

Recorder Depth 4528

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

Initial Shut-in 30 Mins.

Flow Period 45 Mins.

Final Shut-in 60 Mins.

Surface Choke Size 1 "

Bottom Choke Size ½ "

Main Hole Size 7 7/8 "

Rubber Size 6 3/4 "

Tool Open @ 10:30 P.M.

Blow Weak for 40 Min.

Remarks

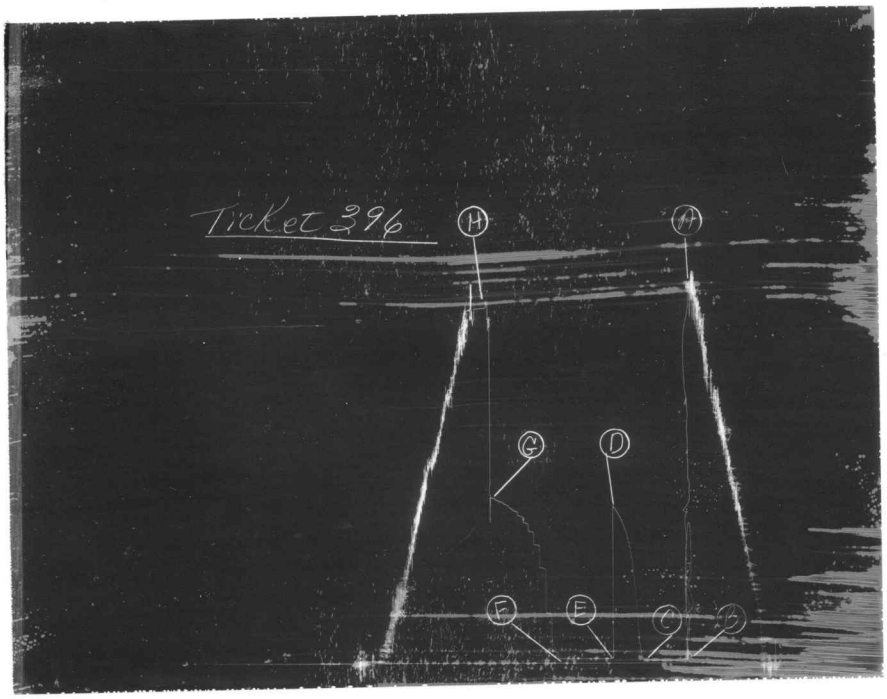
(Straddle Test)

Drill Collar I. D. Ft. Run

125

375

Price of Job $500.00



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2270		PSI
(B)	First Initial Flow Pressure	10		PSI
(C)	First Final Flow Pressure	10		PSI
(D)	Initial Closed-in Pressure	961		PSI
(E)	Second Initial Flow Pressure	21		PSI
(F)	Second Final Flow Pressure	21		PSI
(G)	Final Closed-in Pressure	1004		PSI
(H)	Final Hydrostatic Mud	2252		PSI

COMPANY Isern Petroleum Co. LEASE AND WELL NO. Herbel #1 SEC. 28 TWP. 9 S RGE. 33 W TEST NO. 5 DATE 11-1