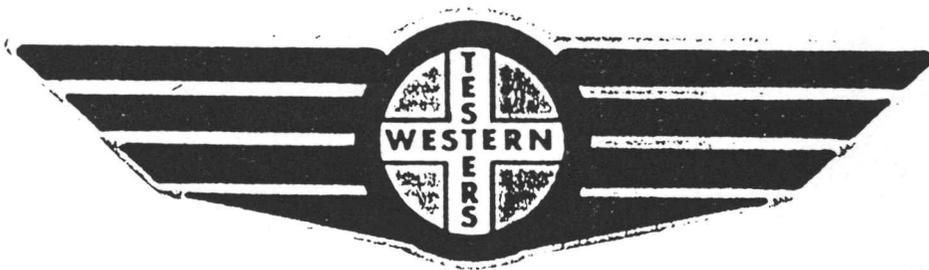


# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 7-26-88 TICKET : 13980  
CUSTOMER : McCOY PETROLEUM CORP. LEASE : BROLLIER  
WELL : 1-34 TEST: 1 GEOLOGIST : J. HASTINGS  
ELEVATION : FORMATION : LANSING  
SECTION : 34 TOWNSHIP : 31S  
RANGE : 34W COUNTY : SEWARD STATE : KS  
GAUGE SN# : 13552 RANGE : 4050 CLOCK : 12

INTERVAL FROM : 4131 TO : 4150 TOTAL DEPTH : 4150  
DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 4126 SIZE : 6.63  
PACKER DEPTH : 4131 SIZE : 6.63  
PACKER DEPTH : SIZE :  
PACKER DEPTH : SIZE :

DRILLING CON. : SWEETMAN DRLG #1  
MUD TYPE : DESCO VISCOSITY : 48  
WEIGHT : 9.0 WATER LOSS (CC) : 14.4  
CHLORIDES (PPM) : 2500  
JARS-MAKE : WTC SERIAL NUMBER : 407  
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 270 FT I.D. inch : 2.25  
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
DRILL PIPE LENGTH : 3832 FT I.D. inch : 3.80  
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 19 FT ANCHOR SIZE : 5.50  
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75  
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5FH

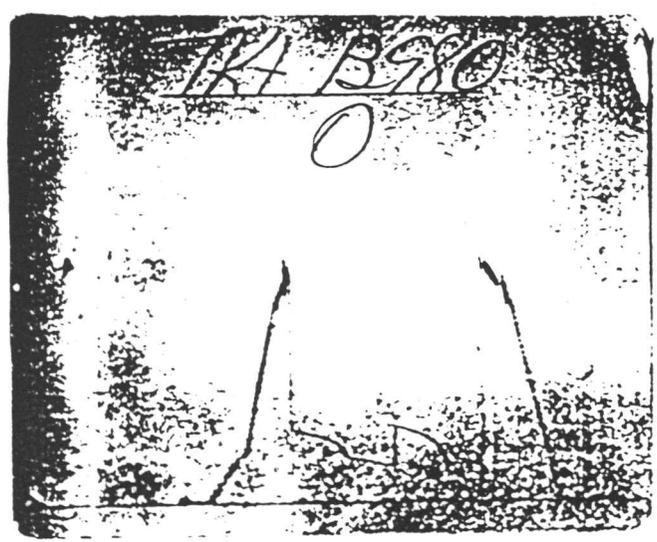
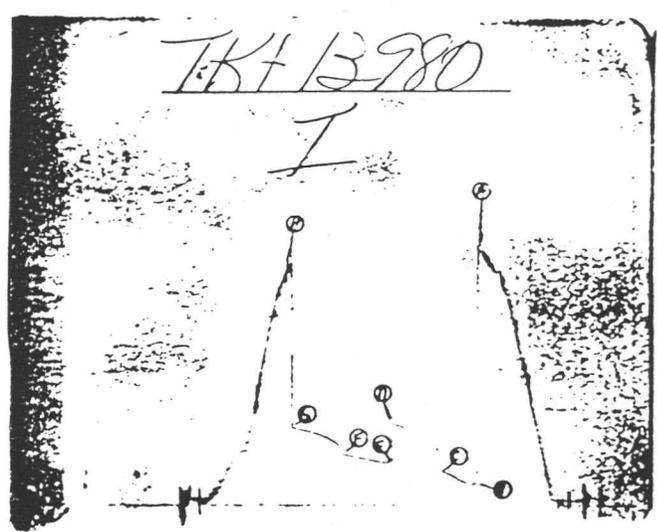
BLOW COMMENT #1 : STRONG BLOW THROUGHOUT TEST.  
BLOW COMMENT #2 :  
BLOW COMMENT #3 :  
BLOW COMMENT #4 :

RECOVERED : 90 FT OF: CLEAN GASSY OIL-40 DEGREES F. GRAVITY  
 RECOVERED : 90 FT OF: GASSY OIL & WTR C/MUD  
 RECOVERED : 0 FT OF: 50%GAS 20%WTR 10%OIL  
 RECOVERED : 690 FT OF: SALT WATER

Total Barrels Fluid = 9.74  
 Total Fluid Prod Rate = 140.31 BFPD  
 Indicated Oil Rate = 15.97 BOPD  
 Indicated Wtr Rate = 114.18 BWPD  
 Corrected Oil Rate = 106.08 BOPD  
 Corrected Wtr Rate = 758.66 BWPD

REMARK 1 : REC. 2460 GAS ABOVE FLUID  
 REMARK 2 : CHLORIDES 95000 PPM  
 REMARK 3 : TIGHT HOLE  
 REMARK 4 :

SET PACKER(S) : 7:45 AM TIME STARTED OFF BOTTOM : 11:30 AM  
 WELL TEMPERATURE : 117  
 INITIAL HYDROSTATIC PRESSURE (A) 2059  
 INITIAL FLOW PERIOD MIN: 40 (B) 176 PSI TO (C) : 274  
 INITIAL CLOSED IN PERIOD MIN: 60 (D) 661  
 FINAL FLOW PERIOD MIN: 60 (E) 349 PSI TO (F) : 411  
 FINAL CLOSED IN PERIOD MIN: 60 (G) 628  
 FINAL HYDROSTATIC PRESSURE (H) 1962



WESTERN TESTING CO. INC.  
WICHITA-KANSAS

Pressure Transient Report  
-----

COMPANY : McCOY PETROLEUM CORP.  
RIG : SEWARD-KS  
FIELD : BROLLIER  
WELL : 1-34  
DATE : 7-26-88  
GAUGE NO : 13552

OPERATIONAL COMMENTS

REC. 2460 GAS ABOVE FLUID  
CHLORIDES 95000 PPM  
TIGHT HOLE

COMPANY : McCOY PETROLEUM CORP.  
 WELL : 1-34  
 GAUGE # : 13552  
 DATE : 26/ 7/88

FIELD : BROLLIER  
 JOB # : 13980  
 DEPTH : 4150  
 TEST : REC. 2460 GAS ABOVE FLUID

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	7:45: 0	0.000	176.000	117.00	0.000
3	7:49:59	0.083	176.000	117.00	0.000
4	7:55: 0	0.167	176.000	117.00	0.000
5	8: 0: 0	0.250	186.000	117.00	10.000
6	8: 4:59	0.333	203.000	117.00	17.000
7	8:10: 0	0.417	227.000	117.00	24.000
8	8:15: 0	0.500	245.000	117.00	18.000
9	8:19:59	0.583	260.000	117.00	15.000
10	8:25: 0	0.667	274.000	117.00	14.000
INITIAL SHUT-IN					
11	8:28: 0	0.717	400.000	117.00	126.000
12	8:31: 0	0.767	446.000	117.00	46.000
13	8:34: 0	0.817	474.000	117.00	28.000
14	8:37: 0	0.867	499.000	117.00	25.000
15	8:40: 0	0.917	518.000	117.00	19.000
16	8:43: 0	0.967	533.000	117.00	15.000
17	8:46: 0	1.017	548.000	117.00	15.000
18	8:49: 0	1.067	564.000	117.00	16.000
19	8:52: 0	1.117	576.000	117.00	12.000
20	8:55: 0	1.167	587.000	117.00	11.000
21	8:58: 0	1.217	596.000	117.00	9.000
22	9: 1: 0	1.267	606.000	117.00	10.000
23	9: 4: 0	1.317	616.000	117.00	10.000
24	9: 7: 0	1.367	625.000	117.00	9.000
25	9:10: 0	1.417	631.000	117.00	6.000
26	9:13: 0	1.467	638.000	117.00	7.000
27	9:16: 0	1.517	644.000	117.00	6.000
28	9:19: 0	1.567	651.000	117.00	7.000
29	9:22: 0	1.617	657.000	117.00	6.000
30	9:25: 0	1.667	661.000	117.00	4.000
FINAL FLOW					
31	9:26: 0	1.683	349.000	117.00	-312.000
32	9:30: 0	1.750	349.000	117.00	0.000
33	9:35: 0	1.833	352.000	117.00	3.000
34	9:40: 0	1.917	355.000	117.00	3.000
35	9:45: 0	2.000	360.000	117.00	5.000
36	9:50: 0	2.083	366.000	117.00	6.000
37	9:55: 0	2.167	376.000	117.00	10.000
38	10: 0: 0	2.250	382.000	117.00	6.000
39	10: 5: 0	2.333	390.000	117.00	8.000
40	10:10: 0	2.417	395.000	117.00	5.000
41	10:15: 0	2.500	402.000	117.00	7.000
42	10:20: 0	2.583	409.000	117.00	7.000
43	10:25: 0	2.667	411.000	117.00	2.000
FINAL SHUT-IN					
44	10:28: 0	2.717	465.000	117.00	54.000
45	10:31: 0	2.767	492.000	117.00	27.000
46	10:34: 0	2.817	511.000	117.00	19.000
47	10:37: 0	2.867	524.000	117.00	13.000
48	10:40: 0	2.917	536.000	117.00	12.000

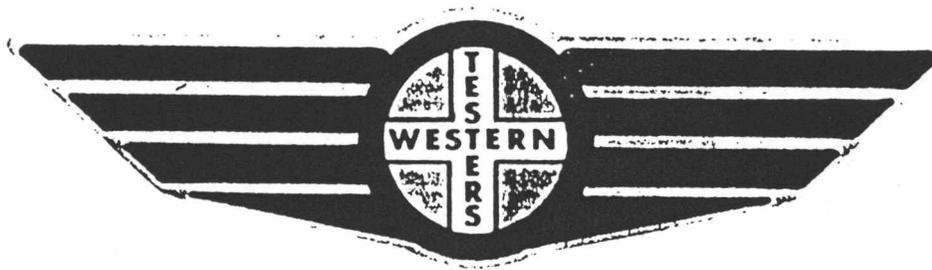
COMPANY : McCOY PETROLEUM CORP.  
WELL : 1-34  
GAUGE # : 13552  
DATE : 26/ 7/88

FIELD : BROLLIER  
JOB # : 13980  
DEPTH : 4150  
TEST : REC. 2460 GAS ABOVE FLUID

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	10:43: 0	2.967	546.000	117.00	10.000
50	10:46: 0	3.017	553.000	117.00	7.000
51	10:49: 0	3.067	561.000	117.00	8.000
52	10:52: 0	3.117	570.000	117.00	9.000
53	10:55: 0	3.167	577.000	117.00	7.000
54	10:58: 0	3.217	583.000	117.00	6.000
55	11: 1: 0	3.267	591.000	117.00	8.000
56	11: 4: 0	3.317	596.000	117.00	5.000
57	11: 7: 0	3.367	601.000	117.00	5.000
58	11:10: 0	3.417	605.000	117.00	4.000
59	11:13: 0	3.467	609.000	117.00	4.000
60	11:16: 0	3.517	614.000	117.00	5.000
61	11:19: 0	3.567	618.000	117.00	4.000
62	11:22: 0	3.617	625.000	117.00	7.000
63	11:25: 0	3.667	628.000	117.00	3.000

WESTERN TESTING CO. INC.

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 7-27-88 TICKET : 13981  
CUSTOMER : McCOY PETROLEUM CORP. LEASE : BROLLIER  
WELL : #1-34 TEST: 2 GEOLOGIST : J HASTINGS  
ELEVATION : NA FORMATION : NA  
SECTION : 34 TOWNSHIP : 31S  
RANGE : 34W COUNTY : SEWARD STATE : KANSAS  
GAUGE SN# : 13552 RANGE : 4050 CLOCK : 12

INTERVAL FROM : 4542 TO : 4554 TOTAL DEPTH : 4554

DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 4537 SIZE : 6.63  
PACKER DEPTH : 4542 SIZE : 6.63  
PACKER DEPTH : SIZE :  
PACKER DEPTH : SIZE :

DRILLING CON. : SWEETMAN RIG 1  
MUD TYPE : DESCO VISCOSITY : 46  
WEIGHT : 9.3 WATER LOSS (CC) : 14.4  
CHLORIDES (PPM) : 4000  
JARS-MAKE : WTC SERIAL NUMBER : 407  
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 270 FT I.D. inch : 2.25  
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
DRILL PIPE LENGTH : 4243 FT I.D. inch : 3.80  
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 12 FT ANCHOR SIZE : 5.50  
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75  
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5 FH

BLOW COMMENT #1 : STRONG BLOW THROUGHOUT BOTH FLOW PERIODS.  
BLOW COMMENT #2 :  
BLOW COMMENT #3 :  
BLOW COMMENT #4 :

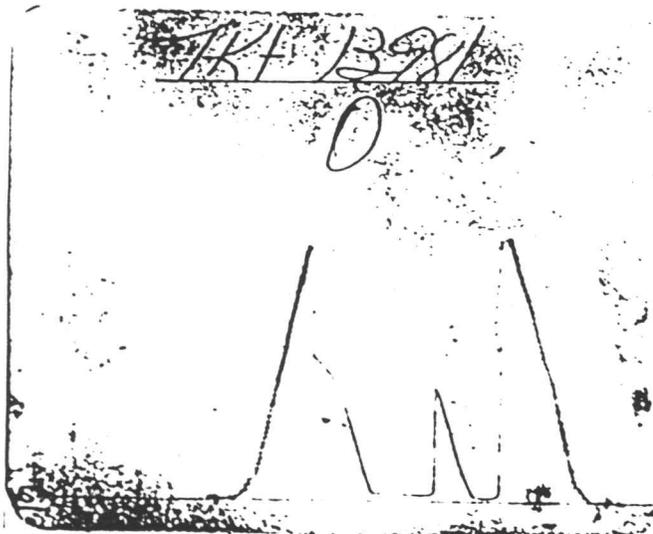
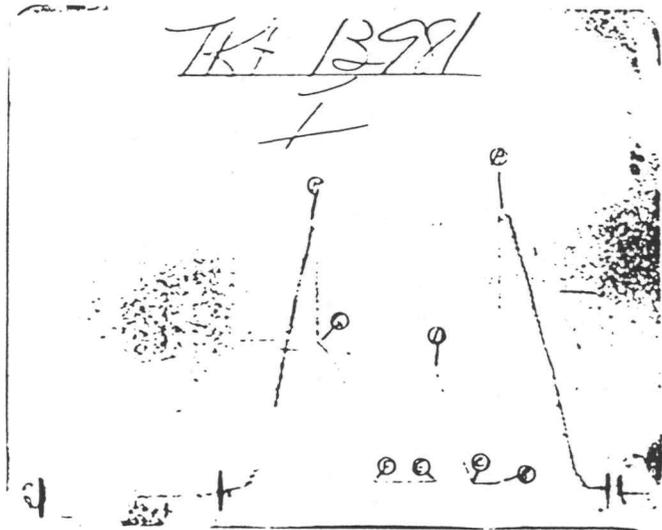
RECOVERED : 40 FT OF: DRILLING MUD  
RECOVERED : 60 FT OF: MUD CUT SALT WATER

CHLORIDES: 42000 PPM

Total Barrels Fluid = 0.49  
Total Fluid Prod Rate = 6.74 BFPD  
Indicated Wtr Rate = 2.29 BWPD

REMARK 1 : TIGHT HOLE !!  
REMARK 2 : WENT 15 MINUTES OVER ON THE FINAL FLOW-WORKING ON DRAW-WORKS.  
REMARK 3 :  
REMARK 4 :

SET PACKER(S) : 5:15 PM  
WELL TEMPERATURE : 118  
INITIAL HYDROSTATIC PRESSURE (A) 2269  
INITIAL FLOW PERIOD MIN: 30 (B) 93 PSI TO (C) : 93  
INITIAL CLOSED IN PERIOD MIN: 42 (D) 991  
FINAL FLOW PERIOD MIN: 75 (E) 111 PSI TO (F) : 111  
FINAL CLOSED IN PERIOD MIN: 66 (G) 1238  
FINAL HYDROSTATIC PRESSURE (H) 2200



WESTERN TESTING CO. INC.  
WICHITA-KANSAS

Pressure Transient Report  
-----

COMPANY : McCOY PETROLEUM CORP.  
RIG : SEWARD-KANSAS  
FIELD : BROLLIER  
WELL : #1-34  
DATE : 7-27-88  
GAUGE NO : 13552

OPERATIONAL COMMENTS

TIGHT HOLE !!  
WENT 15 MINUTES OVER ON THE FINAL FLOW-WORKING ON DRAW-WORKS.

COMPANY : McCOY PETROLEUM CORP.  
 WELL : #1-34  
 GAUGE # : 13552  
 DATE : 27/ 7/88

FIELD : BROLLIER  
 JOB # : 13981  
 DEPTH : 4554  
 TEST : TIGHT HOLE !!

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	5:15:0	0.000	93.000	118.00	0.000
3	5:19:59	0.083	93.000	118.00	0.000
4	5:25:0	0.167	93.000	118.00	0.000
5	5:30:0	0.250	93.000	118.00	0.000
6	5:34:59	0.333	93.000	118.00	0.000
7	5:40:0	0.417	93.000	118.00	0.000
8	5:45:0	0.500	93.000	118.00	0.000
INITIAL SHUT-IN					
9	5:48:0	0.550	120.000	118.00	27.000
10	5:51:0	0.600	171.000	118.00	51.000
11	5:54:0	0.650	226.000	118.00	55.000
12	5:57:0	0.700	280.000	118.00	54.000
13	6:0:0	0.750	343.000	118.00	63.000
14	6:3:0	0.800	417.000	118.00	74.000
15	6:6:0	0.850	492.000	118.00	75.000
16	6:9:0	0.900	572.000	118.00	80.000
17	6:12:0	0.950	653.000	118.00	81.000
18	6:15:0	1.000	728.000	118.00	75.000
19	6:18:0	1.050	809.000	118.00	81.000
20	6:21:0	1.100	874.000	118.00	65.000
21	6:24:0	1.150	935.000	118.00	61.000
22	6:27:0	1.200	991.000	118.00	56.000
FINAL FLOW					
23	6:28:0	1.217	111.000	118.00	-880.000
24	6:31:59	1.283	111.000	118.00	0.000
25	6:37:0	1.367	111.000	118.00	0.000
26	6:42:0	1.450	111.000	118.00	0.000
27	6:46:59	1.533	111.000	118.00	0.000
28	6:52:0	1.617	111.000	118.00	0.000
29	6:57:0	1.700	111.000	118.00	0.000
30	7:1:59	1.783	111.000	118.00	0.000
31	7:7:0	1.867	111.000	118.00	0.000
32	7:12:0	1.950	111.000	118.00	0.000
33	7:16:59	2.033	111.000	118.00	0.000
34	7:22:0	2.117	111.000	118.00	0.000
35	7:27:0	2.200	111.000	118.00	0.000
36	7:31:59	2.283	111.000	118.00	0.000
37	7:37:0	2.367	111.000	118.00	0.000
38	7:42:0	2.450	111.000	118.00	0.000
FINAL SHUT-IN					
39	7:45:0	2.500	163.000	118.00	52.000
40	7:48:0	2.550	234.000	118.00	71.000
41	7:51:0	2.600	301.000	118.00	67.000
42	7:54:0	2.650	376.000	118.00	75.000
43	7:57:0	2.700	452.000	118.00	76.000
44	8:0:0	2.750	526.000	118.00	74.000
45	8:3:0	2.800	606.000	118.00	80.000
46	8:6:0	2.850	684.000	118.00	78.000
47	8:9:0	2.900	746.000	118.00	62.000
48	8:12:0	2.950	810.000	118.00	64.000

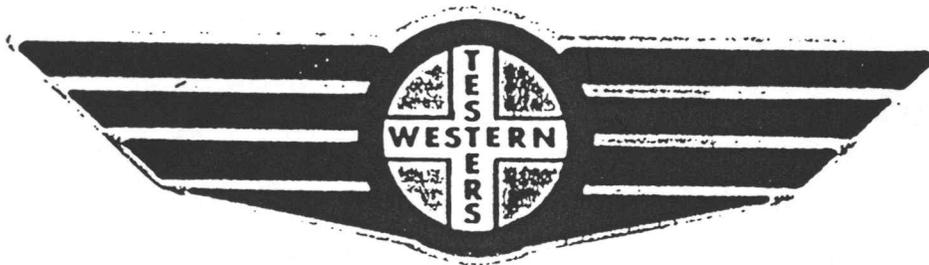
COMPANY : McCOY PETROLEUM CORP.  
WELL : #1-34  
GAUGE # : 13552  
DATE : 27/ 7/88

FIELD : BROLLIER  
JOB # : 13981  
DEPTH : 4554  
TEST : TIGHT HOLE !!

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	8:15: 0	3.000	874.000	118.00	64.000
50	8:18: 0	3.050	928.000	118.00	54.000
51	8:21: 0	3.100	982.000	118.00	54.000
52	8:24: 0	3.150	1030.000	118.00	48.000
53	8:27: 0	3.200	1065.000	118.00	35.000
54	8:30: 0	3.250	1099.000	118.00	34.000
55	8:33: 0	3.300	1131.000	118.00	32.000
56	8:36: 0	3.350	1161.000	118.00	30.000
57	8:39: 0	3.400	1183.000	118.00	22.000
58	8:42: 0	3.450	1206.000	118.00	23.000
59	8:45: 0	3.500	1225.000	118.00	19.000
60	8:48: 0	3.550	1238.000	118.00	13.000

WESTERN TESTING CO. INC.

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 7-28-88  
CUSTOMER : McCOY PETROLEUM CORP.  
WELL : 1-34 TEST: 3  
ELEVATION :  
SECTION : 34  
RANGE : 34W COUNTY : SEWARD  
GAUGE SN# : 13552 RANGE : 4050  
TICKET : 13982  
LEASE : BROLLIER  
GEOLOGIST : J. HASTINGS  
FORMATION : MARMATON  
TOWNSHIP : 31S  
STATE : KS  
CLOCK : 12

INTERVAL FROM : 4746 TO : 4767 TOTAL DEPTH : 4767  
DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 4741 SIZE : 6.63  
PACKER DEPTH : 4746 SIZE : 6.63  
PACKER DEPTH : SIZE :  
PACKER DEPTH : SIZE :

DRILLING CON. : SWEETMAN DRLG. #1  
MUD TYPE : DESCO VISCOSITY : 44  
WEIGHT : 9.0 WATER LOSS (CC) : 16.0  
CHLORIDES (PPM) : 5500  
JARS-MAKE : WTC SERIAL NUMBER : 407  
DID WELL FLOW ? : YES REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 270 FT I.D. inch : 2.25  
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
DRILL PIPE LENGTH : 4447 FT I.D. inch : 3.80  
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 21 FT ANCHOR SIZE : 5.50  
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75  
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5FH

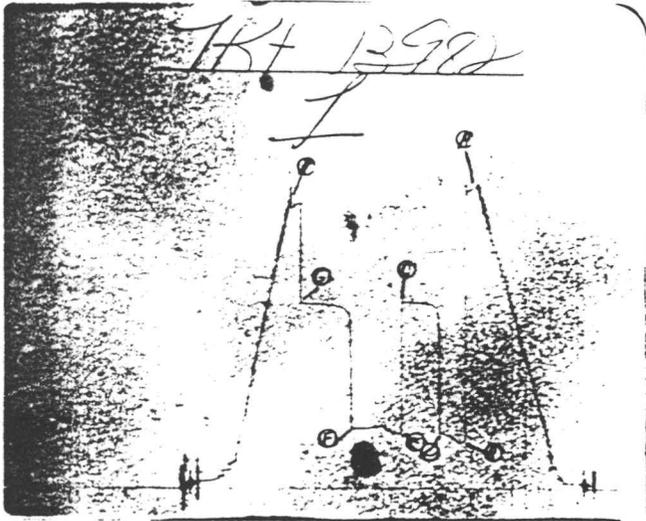
BLOW COMMENT #1 : STRONG BLOW THROUGHOUT TEST.  
BLOW COMMENT #2 : GAS TO SURFACE IN 3 MIN. ON INITIAL FLOW PERIOD.  
BLOW COMMENT #3 : SEE ATTACHED SHEET FOR GAS MEASUREMENTS.  
BLOW COMMENT #4 :

RECOVERED : 210 FT OF: WATER CUT THIN MUD 30%WATER

Total Barrels Fluid = 1.03  
Total Fluid Prod Rate = 16.52 BFPD  
Indicated Wtr Rate = 4.96 BWPD

REMARK 1 : TIGHT HOLE  
REMARK 2 : CHLORIDES 22000 PPM  
REMARK 3 :  
REMARK 4 :

SET PACKER(S) : 5:45PM  
WELL TEMPERATURE : 126  
INITIAL HYDROSTATIC PRESSURE (A) 2453  
INITIAL FLOW PERIOD MIN: 30 (B) 385 PSI TO (C) : 456  
INITIAL CLOSED IN PERIOD MIN: 48 (D) 1532  
FINAL FLOW PERIOD MIN: 60 (E) 457 PSI TO (F) : 498  
FINAL CLOSED IN PERIOD MIN: 63 (G) 1519  
FINAL HYDROSTATIC PRESSURE (H) 2380



GAS FLOW REPORT

Date : 7-28-88	Ticket # : 13982
Customer : McCOY PETROLEUM CORPORATION	Lease : BROLLIER
Well : #1-34	Test : 3
Elevation (KB) : NA	Geologist : J HASTINGS
Section : 34	Formation : MARMATON
Range : 34W	Township : 31S
Gauge SN # : 13552	County : SEWARD
	State : KANSAS
	Range : 4050
	Clock : 12

TIME GAUGE (MIN)	TESTER TYPE	ORFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
---------------------	-------------	----------------	-------------------	------------------

PRE FLOW

=====

5	MERLA	1"	10	472000 CFPD
10			16	627000 CFPD
15			23	796000 CFPD
20			28	907000 CFPD
25			30	951000 CFPD
30			30	951000 CFPD

SECOND FLOW

=====

5	MERLA	1"	10	472000 CFPD
10			18	687000 CFPD
15			22	773000 CFPD
20			26	865000 CFPD
25			30	951000 CFPD
30			28	907000 CFPD
35			26	865000 CFPD
40			26	865000 CFPD
45			26	865000 CFPD
50			26	865000 CFPD
55			26	865000 CFPD
60			26	865000 CFPD

Gas Bottle SN # : 40 P  
 Date Bottle Filled : 7-28-88  
 Date to be Invoiced :

WESTERN TESTING CO. INC.  
WICHITA-KANSAS

Pressure Transient Report  
-----

COMPANY : McCOY PETROLEUM CORP.  
RIG : SEWARD-KS  
FIELD : BROLLIER  
WELL : 1-34  
DATE : 7-28-88  
GAUGE NO : 13552

OPERATIONAL COMMENTS

TIGHT HOLE  
CHLORIDES 22000 PPM

COMPANY : McCOY PETROLEUM CORP.  
 WELL : 1-34  
 GAUGE # : 13552  
 DATE : 28/ 7/88

FIELD : BROLLIER  
 JOB # : 13982  
 DEPTH : 4767  
 TEST : TIGHT HOLE

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	5:45: 0	0.000	385.000	126.00	0.000
3	5:49:59	0.083	385.000	126.00	0.000
4	5:55: 0	0.167	394.000	126.00	9.000
5	6: 0: 0	0.250	419.000	126.00	25.000
6	6: 4:59	0.333	440.000	126.00	21.000
7	6:10: 0	0.417	451.000	126.00	11.000
8	6:15: 0	0.500	456.000	126.00	5.000
INITIAL SHUT-IN					
9	6:18: 0	0.550	872.000	126.00	416.000
10	6:21: 0	0.600	1343.000	126.00	471.000
11	6:24: 0	0.650	1475.000	126.00	132.000
12	6:27: 0	0.700	1494.000	126.00	19.000
13	6:30: 0	0.750	1505.000	126.00	11.000
14	6:33: 0	0.800	1511.000	126.00	6.000
15	6:36: 0	0.850	1517.000	126.00	6.000
16	6:39: 0	0.900	1520.000	126.00	3.000
17	6:42: 0	0.950	1523.000	126.00	3.000
18	6:45: 0	1.000	1524.000	126.00	1.000
19	6:48: 0	1.050	1525.000	126.00	1.000
20	6:51: 0	1.100	1526.000	126.00	1.000
21	6:54: 0	1.150	1527.000	126.00	1.000
22	6:57: 0	1.200	1528.000	126.00	1.000
23	7: 0: 0	1.250	1530.000	126.00	2.000
24	7: 3: 0	1.300	1532.000	126.00	2.000
FINAL FLOW					
25	7: 4: 0	1.317	457.000	126.00	-1075.000
26	7: 7:59	1.383	457.000	126.00	0.000
27	7:13: 0	1.467	463.000	126.00	6.000
28	7:18: 0	1.550	476.000	126.00	13.000
29	7:22:59	1.633	510.000	126.00	34.000
30	7:28: 0	1.717	515.000	126.00	5.000
31	7:33: 0	1.800	512.000	126.00	-3.000
32	7:37:59	1.883	505.000	126.00	-7.000
33	7:43: 0	1.967	501.000	126.00	-4.000
34	7:48: 0	2.050	499.000	126.00	-2.000
35	7:52:59	2.133	498.000	126.00	-1.000
36	7:58: 0	2.217	498.000	126.00	0.000
37	8: 3: 0	2.300	498.000	126.00	0.000
FINAL SHUT-IN					
38	8: 6: 0	2.350	884.000	126.00	386.000
39	8: 8:59	2.400	1338.000	126.00	454.000
40	8:12: 0	2.450	1444.000	126.00	106.000
41	8:15: 0	2.500	1467.000	126.00	23.000
42	8:18: 0	2.550	1479.000	126.00	12.000
43	8:21: 0	2.600	1489.000	126.00	10.000
44	8:23:59	2.650	1493.000	126.00	4.000
45	8:27: 0	2.700	1498.000	126.00	5.000
46	8:30: 0	2.750	1502.000	126.00	4.000
47	8:33: 0	2.800	1505.000	126.00	3.000
48	8:36: 0	2.850	1507.000	126.00	2.000

COMPANY : MCCOY PETROLEUM CORP.  
WELL : 1-34  
GAUGE # : 13552  
DATE : 28/ 7/88

FIELD : BROLLIER  
JOB # : 13982  
DEPTH : 4767  
TEST : TIGHT HOLE

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	8:39: 0	2.900	1509.000	126.00	2.000
50	8:41:59	2.950	1511.000	126.00	2.000
51	8:45: 0	3.000	1513.000	126.00	2.000
52	8:48: 0	3.050	1515.000	126.00	2.000
53	8:51: 0	3.100	1516.000	126.00	1.000
54	8:54: 0	3.150	1517.000	126.00	1.000
55	8:56:59	3.200	1518.000	126.00	1.000
56	9: 0: 0	3.250	1519.000	126.00	1.000
57	9: 3: 0	3.300	1519.000	126.00	0.000
58	9: 6: 0	3.350	1519.000	126.00	0.000

WESTERN TESTING CO. INC.





WESTERN TESTING CO. INC.  
WICHITA-KANSAS

WELL TEST ANALYSIS REPORT  
HORNER METHOD  
SHUTIN No. 2

COMPANY. . . . . McCOY PETROLEUM CORP.  
DATE . . . . . 7-28-88  
FIELD. . . . . BROLLIER  
WELL . . . . . 1-34  
AREA . . . . . SEWARD-KS  
JOB NUMBER . . . . 13982  
GAUGE NUMBER . . . 13552  
GAUGE DEPTH. . . . 4767  
ZONE TESTED. . . . 4746-4767

PHASE : GAS FUNCTION : PRESSURE SQ

=====I=N=P=U=T====D=A=T=A====S=U=M=M=A=R=Y=====

THICKNESS. . . . .	H	1.5000E+01	Feet
POROSITY . . . . .	POR	2.0000E-01	Frac
VISCOSITY. . . . .	U	1.8000E-02	Cp
GAS COMPRESSIBILITY FACTOR . . . . .	Z	7.0000E-01	
TOTAL COMPRESSIBILITY. . . . .	Ct	8.2000E-01	Psi^-1
WELLBORE RADIUS. . . . .	Rw	5.2000E-01	Feet
DRAINAGE RADIUS. . . . .	Re	8.0000E+02	Feet
RESERVOIR TEMPERATURE. . . . .	T	1.2600E+02	Deg F
GRAVITY OF FLUID . . . . .	G	0.0000E+00	
PVT EVALUATION PRESSURE. . . . .	P	0.0000E+00	Psig
PRESSURE AT SHUT-IN. . . . .	Pwf	2.4800E+05	Psig
FINAL RECORDED PRESSURE. . . . .	Ps	1.5190E+03	Psig
PRODUCTION RATE. . . . .	Q	8.6500E+05	Mscf/day
TOTAL FLOW TIME. . . . .	T	1.0000E+00	Hours

=====R=E=G=R=E=S=S=I=O=N====R=E=S=U=L=T=S=====

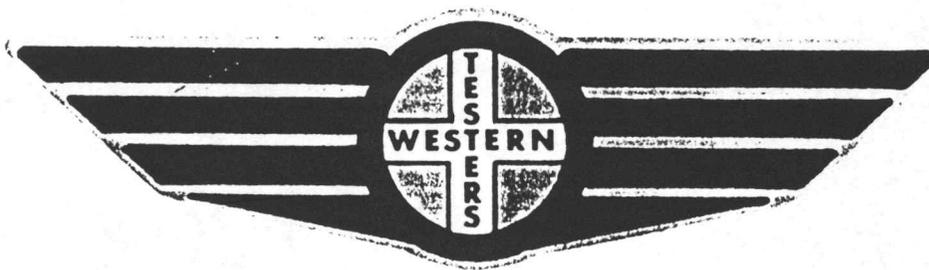
LEAST SQUARE RESULTS OVER THE INTERVAL :  
FROM 2.2 TO 1.7

SLOPE OF THE LINE. . . . .	1.3159E+05	psi^2/cycle
FALSE PRESSURE, PSTAR. . . . .	2.3468E+06	psi^2
PRESSURE AT 1 HOUR . . . . .	2.3071E+06	psi^2

=====A=N=A=L=Y=S=I=S====R=E=S=U=L=T=S=====

TRANSMISSIBILITY. . . . .	.Kh/u	4.4150E+06	md-ft/cp
FLOW CAPACITY. . . . .	.Kh	7.9470E+04	md-ft
PERMEABILITY to PHASE. . . . .	K	5.2980E+03	md
DAMAGE RATIO . . . . .	.Dr	1.0021E+00	
RADIUS OF INVESTIGATION. . . . .	.Rinv	4.3510E+01	ft
SKIN FACTOR. . . . .	S	1.4227E+01	
AVERAGE PRESSURE . . . . .	.Pbar	1.5319E+03	psig
DIMENSIONLESS TIME . . . . .	.Tda	2.3565E-04	
MATTHEWS-BRONS-HAZEBROEK . . . . .	.PDmbh	2.9613E-03	

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 7-30-88 TICKET : 13983  
CUSTOMER : McCOY PETROLEUM CORP. LEASE : BROLLIER  
WELL : #1-34 TEST: 4 GEOLOGIST : J HASTINGS  
ELEVATION : NA FORMATION : CHESTER  
SECTION : 34 TOWNSHIP : 31S  
RANGE : 34W COUNTY : SEWARD STATE : KANSAS  
GAUGE SN# : 13552 RANGE : 4050 CLOCK : 12

INTERVAL FROM : 5501 TO : 5540 TOTAL DEPTH : 5540  
DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 5496 SIZE : 6.63  
PACKER DEPTH : 5501 SIZE : 6.63  
PACKER DEPTH : SIZE :  
PACKER DEPTH : SIZE :

DRILLING CON. : SWEETMAN RIG 1  
MUD TYPE : DESCO VISCOSITY : 50  
WEIGHT : 9.3 WATER LOSS (CC) : 10.4  
CHLORIDES (PPM) : 3500  
JARS-MAKE : WTC SERIAL NUMBER : 407  
DID WELL FLOW ? : YES REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 270 FT I.D. inch : 2.25  
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
DRILL PIPE LENGTH : 5202 FT I.D. inch : 3.80  
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 39 FT ANCHOR SIZE : 5.50  
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75  
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5 FH

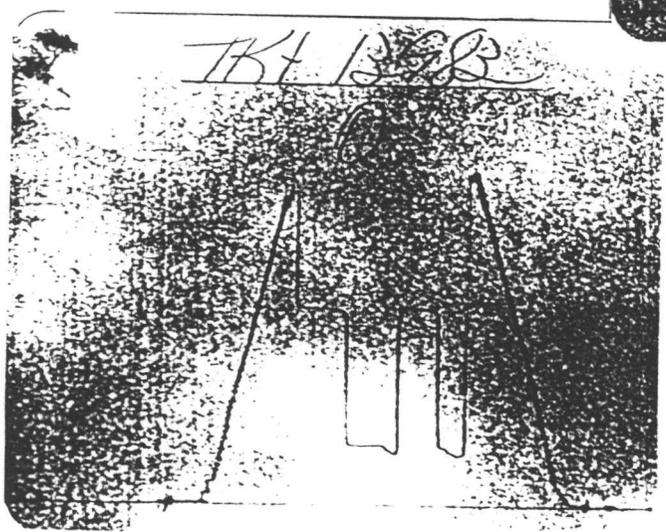
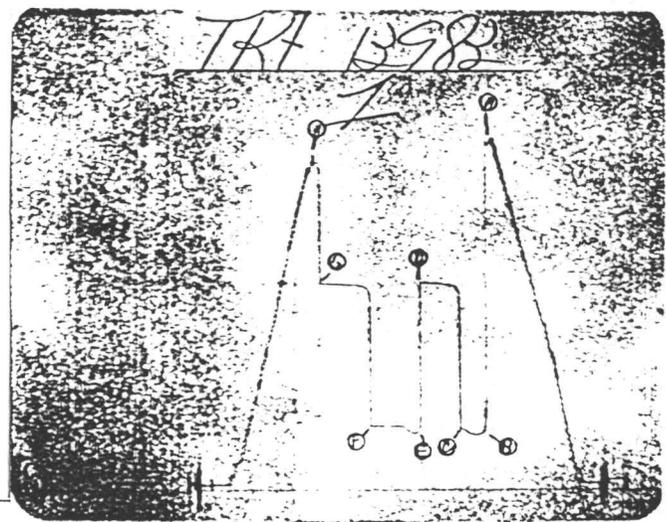
BLOW COMMENT #1 : STRONG BLOW THROUGHOUT BOTH FLOW PERIODS.  
BLOW COMMENT #2 : GAS TO SURFACE IN 3 MINUTES ON THE INITIAL FLOW.  
BLOW COMMENT #3 : SEE ATTACHED FLOW CHART.  
BLOW COMMENT #4 :

RECOVERED : 190 FT OF: GAS CUT MUD  
(SPECKS OF OIL ON TOP OF TOOL)

Total Barrels Fluid = 0.93  
Total Fluid Prod Rate = 14.95 BFPD  
Indicated Wtr Rate = 1.49 BWPD

REMARK 1 : TIGHT HOLE !!  
REMARK 2 :  
REMARK 3 :  
REMARK 4 :

SET PACKER(S) : 8:45 PM TIME STARTED OFF BOTTOM : 12:00 AM  
WELL TEMPERATURE : 142  
INITIAL HYDROSTATIC PRESSURE (A) 2860  
INITIAL FLOW PERIOD MIN: 30 (B) 469 PSI TO (C) : 517  
INITIAL CLOSED IN PERIOD MIN: 48 (D) 1707  
FINAL FLOW PERIOD MIN: 60 (E) 483 PSI TO (F) : 540  
FINAL CLOSED IN PERIOD MIN: 60 (G) 1703  
FINAL HYDROSTATIC PRESSURE (H) 2768



GAS FLOW REPORT

Date : 7-30-88	Ticket # : 13983
Customer : McCOY PETROLEUM CORPORATION	Lease : BROLLIER
Well : #1-34	Test : 4
Elevation (KB) : NA	Geologist : J HASTINGS
Section : 34	Formation : CHESTER
Range : 34W	Township : 31S
Gauge SN # : 13552	County : SEWARD
	State : KANSAS
	Range : 4050
	Clock : 12

TIME GAUGE (MIN)	TESTER TYPE	ORFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
PRE FLOW				
=====				
5	MERLA	1"	10	472000 CFPD
10			20	725000 CFPD
15			40	1162000 CFPD
20			46	1291000 CFPD
25			50	1379000 CFPD
30			50	1379000 CFPD
SECOND FLOW				
=====				
5	MERLA	1"	22	773000 CFPD
10			36	1076000 CFPD
15			48	1333000 CFPD
20			54	1466000 CFPD
25			58	1553000 CFPD
30			58	1553000 CFPD
35			58	1553000 CFPD
40			58	1553000 CFPD
45			58	1553000 CFPD
50			58	1553000 CFPD
55			58	1553000 CFPD
60			58	1553000 CFPD

Gas Bottle SN # : 45 P  
 Date Bottle Filled : 7-30-88  
 Date to be Invoiced :

WESTERN TESTING CO. INC.  
WICHITA-KANSAS

Pressure Transient Report

COMPANY : McCOY PETROLEUM CORP.  
RIG : SEWARD-KANSAS  
FIELD : BROLLIER  
WELL : #1-34  
DATE : 7-30-88  
GAUGE NO : 13552

OPERATIONAL COMMENTS

TIGHT HOLE !!

COMPANY : McCOY PETROLEUM CORP.  
 WELL : #1-34  
 GAUGE # : 13552  
 DATE : 30/ 7/88

FIELD : BROLLIER  
 JOB # : 13983  
 DEPTH : 5540  
 TEST : TIGHT HOLE !!

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	8:45: 0	0.000	469.000	142.00	0.000
3	8:49:59	0.083	469.000	142.00	0.000
4	8:55: 0	0.167	469.000	142.00	0.000
5	9: 0: 0	0.250	472.000	142.00	3.000
6	9: 4:59	0.333	484.000	142.00	12.000
7	9:10: 0	0.417	510.000	142.00	26.000
8	9:15: 0	0.500	517.000	142.00	7.000
INITIAL SHUT-IN					
9	9:18: 0	0.550	1629.000	142.00	1112.000
10	9:21: 0	0.600	1670.000	142.00	41.000
11	9:24: 0	0.650	1681.000	142.00	11.000
12	9:27: 0	0.700	1687.000	142.00	6.000
13	9:30: 0	0.750	1691.000	142.00	4.000
14	9:33: 0	0.800	1693.000	142.00	2.000
15	9:36: 0	0.850	1697.000	142.00	4.000
16	9:39: 0	0.900	1699.000	142.00	2.000
17	9:42: 0	0.950	1700.000	142.00	1.000
18	9:45: 0	1.000	1703.000	142.00	3.000
19	9:48: 0	1.050	1705.000	142.00	2.000
20	9:51: 0	1.100	1706.000	142.00	1.000
21	9:54: 0	1.150	1707.000	142.00	1.000
22	9:57: 0	1.200	1707.000	142.00	0.000
23	10: 0: 0	1.250	1707.000	142.00	0.000
24	10: 3: 0	1.300	1707.000	142.00	0.000
FINAL FLOW					
25	10: 4: 0	1.317	483.000	142.00	-1224.000
26	10: 7:59	1.383	483.000	142.00	0.000
27	10:13: 0	1.467	490.000	142.00	7.000
28	10:18: 0	1.550	512.000	142.00	22.000
29	10:22:59	1.633	540.000	142.00	28.000
30	10:28: 0	1.717	540.000	142.00	0.000
31	10:33: 0	1.800	540.000	142.00	0.000
32	10:37:59	1.883	540.000	142.00	0.000
33	10:43: 0	1.967	540.000	142.00	0.000
34	10:48: 0	2.050	540.000	142.00	0.000
35	10:52:59	2.133	540.000	142.00	0.000
36	10:58: 0	2.217	540.000	142.00	0.000
37	11: 3: 0	2.300	540.000	142.00	0.000
FINAL SHUT-IN					
38	11: 6: 0	2.350	1636.000	142.00	1096.000
39	11: 8:59	2.400	1667.000	142.00	31.000
40	11:12: 0	2.450	1679.000	142.00	12.000
41	11:15: 0	2.500	1684.000	142.00	5.000
42	11:18: 0	2.550	1689.000	142.00	5.000
43	11:21: 0	2.600	1691.000	142.00	2.000
44	11:23:59	2.650	1692.000	142.00	1.000
45	11:27: 0	2.700	1693.000	142.00	1.000
46	11:30: 0	2.750	1694.000	142.00	1.000
47	11:33: 0	2.800	1696.000	142.00	2.000
48	11:36: 0	2.850	1697.000	142.00	1.000

COMPANY : McCOY PETROLEUM CORP.  
WELL : #1-34  
GAUGE # : 13552  
DATE : 30/ 7/88

FIELD : BROLLIER  
JOB # : 13983  
DEPTH : 5540  
TEST : TIGHT HOLE !!

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	11:39: 0	2.900	1698.000	142.00	1.000
50	11:41:59	2.950	1699.000	142.00	1.000
51	11:45: 0	3.000	1700.000	142.00	1.000
52	11:48: 0	3.050	1701.000	142.00	1.000
53	11:51: 0	3.100	1702.000	142.00	1.000
54	11:54: 0	3.150	1702.000	142.00	0.000
55	11:56:59	3.200	1703.000	142.00	1.000
56	12: 0: 0	3.250	1703.000	142.00	0.000
57	12: 3: 0	3.300	1703.000	142.00	0.000

WESTERN TESTING CO. INC.

WESTERN TESTING CO. INC.  
WICHITA-KANSAS

WELL TEST ANALYSIS REPORT  
HORNER METHOD  
SHUTIN No. 2

COMPANY. . . . . McCOY PETROLEUM CORP.  
DATE . . . . . 7-30-88  
FIELD. . . . . BROLLIER  
WELL . . . . . #1-34  
AREA . . . . . SEWARD-KANSAS  
JOB NUMBER . . . . 13983  
GAUGE NUMBER . . . 13552  
GAUGE DEPTH. . . . 5540  
ZONE TESTED. . . . 5501-5540

PHASE : GAS FUNCTION : PRESSURE SQ

=====I=N=P=U=T====D=A=T=A====S=U=M=M=A=R=Y=====

THICKNESS. . . . .	H	1.5000E+01	Feet
POROSITY . . . . .	POR	1.6000E-01	Frac
VISCOSITY. . . . .	U	1.8000E-02	Cp
GAS COMPRESSIBILITY FACTOR . . . . .	Z	7.0000E-01	
TOTAL COMPRESSIBILITY. . . . .	Ct	8.2000E-01	Psi <sup>-1</sup>
WELLBORE RADIUS. . . . .	Rw	5.2000E-01	Feet
DRAINAGE RADIUS. . . . .	Re	8.0000E+02	Feet
RESERVOIR TEMPERATURE. . . . .	T	1.4200E+02	Deg F
GRAVITY OF FLUID . . . . .	G	0.0000E+00	
PVT EVALUATION PRESSURE. . . . .	P	0.0000E+00	Psig
PRESSURE AT SHUT-IN. . . . .	Pwf	2.9160E+05	Psig
FINAL RECORDED PRESSURE. . . . .	Ps	1.7030E+03	Psig
PRODUCTION RATE. . . . .	Q	1.5530E+06	Mscf/day
TOTAL FLOW TIME. . . . .	T	1.0000E+00	Hours

=====R=E=G=R=E=S=S=I=O=N====R=E=S=U=L=T=S=====

LEAST SQUARE RESULTS OVER THE INTERVAL :  
FROM 2.5 TO 2

SLOPE OF THE LINE. . . . .	1.2385E+05	psi <sup>2</sup> /cycle
FALSE PRESSURE, PSTAR. . . . .	2.9389E+06	psi <sup>2</sup>
PRESSURE AT 1 HOUR . . . . .	2.9017E+06	psi <sup>2</sup>

=====A=N=A=L=Y=S=I=S====R=E=S=U=L=T=S=====

TRANSMISSIBILITY. . . . .	.Kh/u	8.6516E+06	md-ft/cp
FLOW CAPACITY. . . . .	.Kh	1.5573E+05	md-ft
PERMEABILITY to PHASE. . . . .	K	1.0382E+04	md
DAMAGE RATIO . . . . .	.Dr	1.0023E+00	
RADIUS OF INVESTIGATION. . . . .	.Rinv	6.8098E+01	ft
SKIN FACTOR. . . . .	S	2.0025E+01	
AVERAGE PRESSURE . . . . .	.Pbar	1.7142E+03	psig
DIMENSIONLESS TIME . . . . .	.Tda	5.7723E-04	
MATTHEWS-BRONS-HAZEBROEK . . . . .	.PDmbh	7.2536E-03	

Pressure Squared (Thou)

COMPANY: MCCOY PETROLEUM CORP.  
FIELD: BROOKLIEH

WELL # : 41334  
LOCATION: BEARD-KANSAS

ENGINEER: LARRY KLINE  
DATE: 05-03-1988

TEST DATE: 7-30-88  
GAUGE NUM: 13552  
EVENT ID: SHUT-IN 2  
USER CMNT: DST 4  
Horner T : 1 hrs

PMF : 41.0  
PSSUN : 258.95  
PIHP : 2904.654  
Slope : -128.8404

Pressure Squared (Thou)	8618.03	6180.03	4961.03	3742.03	2523.03	1304.03	85.0305
4	.333						
6	.2						
8	.143						
10	.111						
20	.053						
40	.026						
60	.017						
80	.013						
100	.01						
200	.005						
400	.003						
600	.002						
800	.001						
1000	.001						
2000	.001						
4000	0						
6000	0						
8000	0						
10000	0						

Job No. 13923  
WESTERN TESTING CO. INC.

Horner Ratio, (T+dt) / dt

RES-TRAN

