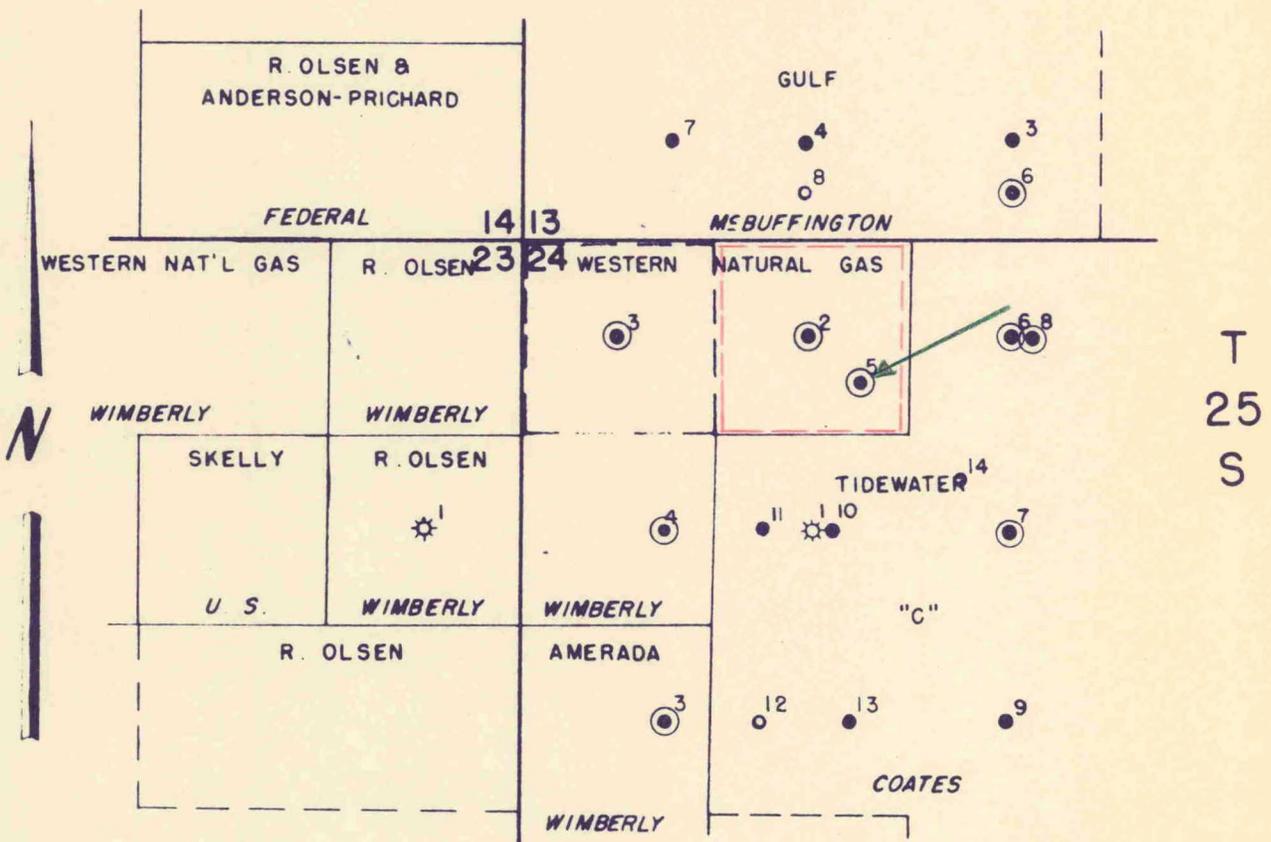


BEFORE EXAMINER UTZ  
 OIL CONSERVATION COMMISSION  
*Western Nat'l* EXHIBIT NO. 1  
 CASE NO. 1488

R 37 E

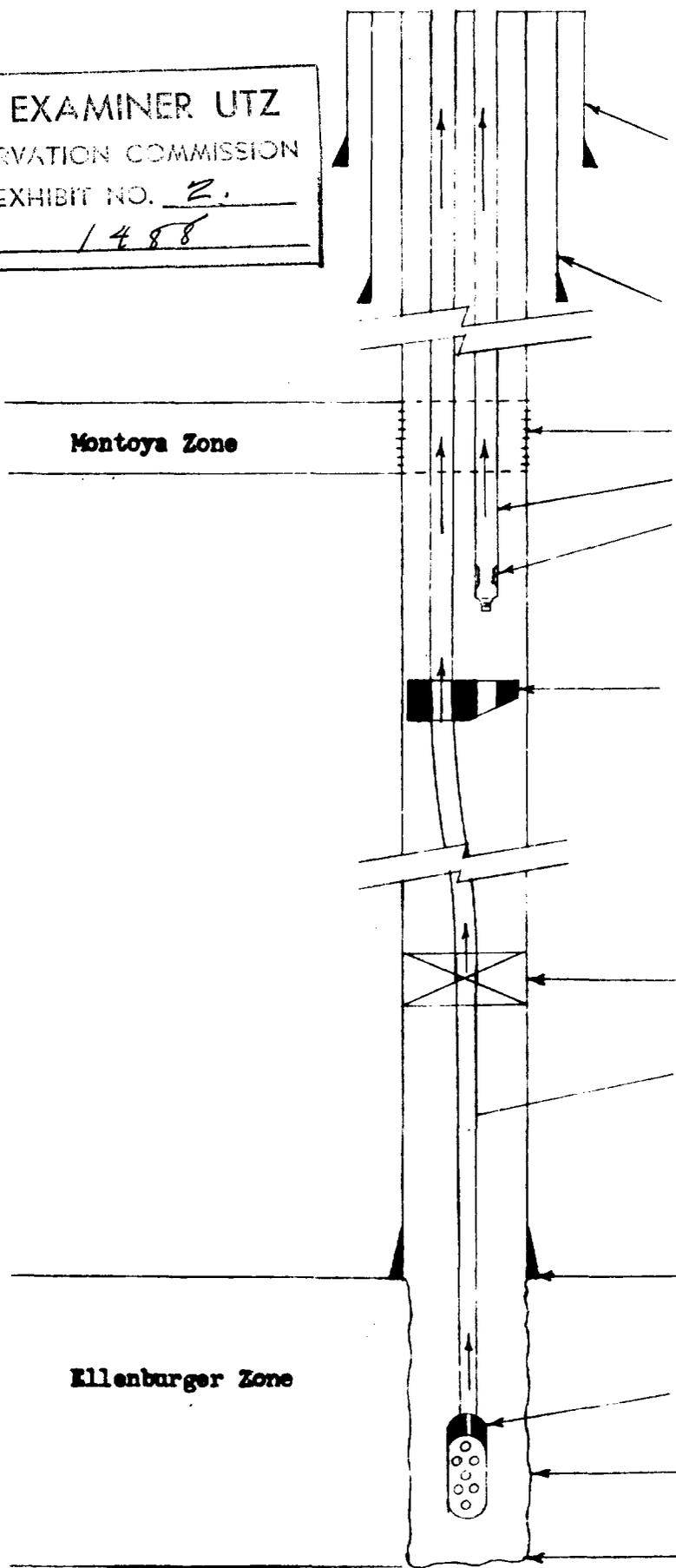


LEA COUNTY  
 NEW MEXICO

WESTERN NATURAL GAS COMPANY  
 WIMBERLEY #5  
 Dual Completion showing single-packer,  
 Full-Opening parallel string hookup,  
 Short string suspended

Oil - Oil Dual

BEFORE EXAMINER UTZ  
 OIL CONSERVATION COMMISSION  
*West. Nat.* EXHIBIT NO. 2.  
 CASE NO. 1488



13 3/8" casing @ 543'.

9 5/8" casing @ 3387'.

Perforations 7002-7015'.

2" tubing string @ 7029'.

Std. seating nipple & perf. sub  
 w/Baker latch-on nipple.

Baker Parallel String Anchor  
 @ 7063'.

Baker Model "D" Retainer  
 Production Packer @ 8000'.

6 jts. EUE tubing

7" casing set @ 8085'.

Primary 2 3/8" EUE tbg string  
 @ 8189'.

Open hole: 8085-8210'.

T. D. 8210'.

Applicant's exhibit No. 3

BEFORE EXAMINER UTZ

NEW MEXICO

OIL CONSERVATION COMMISSION CONSERVATION COMMISSION

Sheet #1  
4-1-56

EXHIBIT NO. 3

PACKER LEAKAGE TEST

CASE NO. 1788. 5 sheets

Operator WESTERN NATURAL GAS CO. Pool (Upper Completion) MONTOYA

Lease WIMBERLEY Well 5 Pool (Lower Completion) ELLENBURGER

Location: Unit C, S. 24, T25S, R37E, LEA County, N. M.

Pre-Test Shut-In

	Upper Completion	Lower Completion
Shut-in at (hour, date).....	<u>11:00 PM(6-2-58)</u>	<u>11:00 PM(6-2-58)</u>
Pressure stabilized at (hour, date).....	<u>UNKNOWN</u>	<u>UNKNOWN</u>
Length of time required to stabilize (hours).....	<u>2 HR. MIN.</u>	<u>2 HR. MIN.</u>

Flow Test No. 1

Test commenced at (hour, date) 12:30 PM (JUNE 6, 1958) . Choke size 20/64"  
 Completion producing MONTOYA Completion shut-in ELLENBURGER

	Upper Completion	Lower Completion
Stabilized pressure at beginning of test.....	<u>650 CHART</u> psi	<u>1175 CHART</u> psi
Maximum pressure during test.....	<u>650</u> psi	<u>1175</u> psi
Minimum pressure during test.....	<u>350</u> psi	<u>1175</u> psi
Pressure at end of test.....	<u>590</u> psi	<u>1175</u> psi
Maximum pressure change during test.....	<u>300</u> psi	<u>NONE</u> psi
Oil flow rate during test: <u>634</u> BOPD based on <u>52.80</u> BO in		<u>2</u> hours.
Gas flow rate during test: <u>514.48</u> MCFPD based on <u>42.874</u> MCF in		<u>2</u> hours.

Mid-Test Shut-In

	Upper Completion	Lower Completion
Shut-in at (hour, date).....	<u>7:00 PM (6-6-58)</u>	<u>11:00 PM (6-2-58)</u>
Pressure stabilized at (hour, date).....	<u>8:30 AM (6-7-58)</u>	<u>UNKNOWN</u>
Length of time required to stabilize (hours).....	<u>13 1/2</u>	<u>2 HR. MIN.</u>

Flow Test No. 2

Test commenced at (hour, date) 11:30 AM (JUNE 7, 1958) . Choke size 28/64"  
 Completion producing ELLENBURGER Completion shut-in MONTOYA

	Upper Completion	Lower Completion
Stabilized pressure at beginning of test.....	<u>460 CHART</u> psi	<u>1140 CHART</u> psi
Maximum pressure during test.....	<u>460</u> psi	<u>1140</u> psi
Minimum pressure during test.....	<u>460</u> psi	<u>575</u> psi
Pressure at end of test.....	<u>460</u> psi	<u>1050</u> psi
Maximum pressure change during test.....	<u>NONE</u> psi	<u>565</u> psi
Oil flow rate during test: <u>480</u> BOPD based on <u>39.96</u> BO in		<u>2</u> hours.
Gas flow rate during test: <u>888.07</u> MCFPD based on <u>74.006</u> MCF in		<u>2</u> hours.

Test performed by COLEMAN PETR. ENGR. CO. Title AGENT  
 Witnessed by MR. COOK Title DISTRICT ENGINEER  
 REMARKS: TEST RESULTS INDICATE THAT THE TWO PRODUCING ZONES ARE SEPARATED PROPERLY.

NOTE: Recording gauge pressure charts, test data sheet, and a graphic depiction of all phases of the test shall be submitted with this report.

AFFIDAVIT:

I HEREBY CERTIFY that all conditions prescribed by Oil Conservation Commission of the State of New Mexico for this packer leakage test were complied with and carried out in full, and that all dates and facts set forth in this form and all attached material are true and correct.

Joe A. Coleman  
JOE A. COLEMAN  
(Representative of Company Making Test)

For WESTERN NATURAL GAS COMPANY  
(Company Making Test)

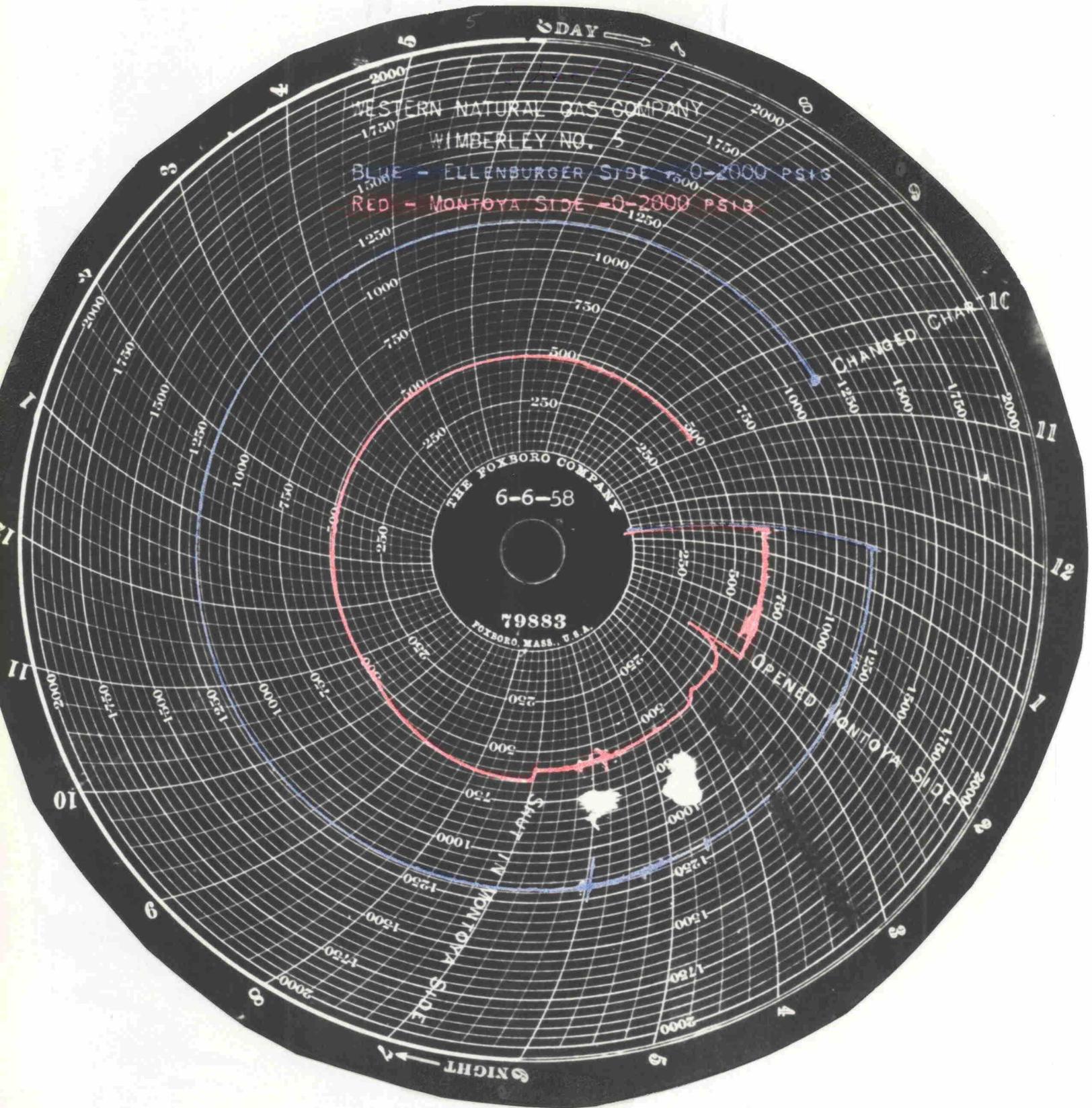
SWORN TO AND SUBSCRIBED before me this the 17th day of JULY, 19 58

Norothy S. Pitt  
Notary Public in and for the County of LEA  
State of NEW MEXICO

(OVER) COMMISSION EXPIRES 4-23-60

INSTRUCTIONS  
(SOUTHEAST NEW MEXICO ONLY)

1. At least 24 hours prior to the commencement of this test, the operator shall notify the District Office of the Oil Conservation Commission in writing of the exact time said test is to be commenced.
2. The packer leakage test shall commence with both sides of the completion shut-in. Both sides of the completion must be shut-in a sufficient length of time to allow for complete stabilization of both wellhead pressures, and for a minimum of 2 hours thereafter- this minimum of 2 hours shut-in must show on the charts of the pressure recorder and also must appear on the data sheet.
3. For Flow Test No. 1, one side of the dual completion shall be produced with the other side shut-in. Such test shall be continued until the flowing wellhead pressure has become stabilized and for a minimum of 2 hours thereafter, and shall be at a rate of flow approximating the normal rate of flow for the zone being produced.
4. Following the completion of flow test No. 1, the well will again be shut-in, and remain so until the wellhead pressures have again become stabilized and for a minimum of 2 hours thereafter.
5. Flow Test No. 2 shall be performed with the previously shut-in side of the dual completion flowing and with the flowing side of the completion used in test number 1 remaining shut-in. This test shall be conducted exactly as outlined under Flow Test No. 1, and must be performed even though no leak was indicated by Flow Test No. 1.
6. All pressures, throughout the entire test, must be continuously measured and recorded with recording pressure gauges.
7. The accuracy of the recording gauges shall be checked at regular intervals throughout the test with a dead weight test gauge, and such readings shall be recorded on the test data sheet provided.
8. For any well on which the wellhead pressures will not stabilize in (24) twenty four hours or less, the minimum producing or shut-in time allowed for stabilization shall be (24) twenty-four hours.
9. This form must be completed and filed in duplicate with the District Office of the Oil Conservation Commission within 15 days following the completion of the testing, and must be accompanied by:
  - a. all of the charts, or copies thereof, used on the pressure recorders during the test.
  - b. the test data-sheet (s), or copies thereof, required under paragraph 7 above.
  - c. a graph depicting the pressures and their changes, for both sides of the completion over the entire test.
10. This packer leakage test shall be performed upon dual completion of any new wells so approved by the Commission. This test shall also be required each year during the annual GOR test for the lowermost oil zone or oil pool so concerned. The Commission may also request packer leakage tests at any time they feel that a new test is desirable.



WESTERN NATURAL GAS COMPANY

WIMBERLEY NO. 5

BLUE - ELLENBURGER SIDE - 0-2000 PSIG

RED - MONTOYA SIDE - 0-2000 PSIG

THE FOXBORO COMPANY  
6-6-58

79883

FOXBORO, MASS. U.S.A.

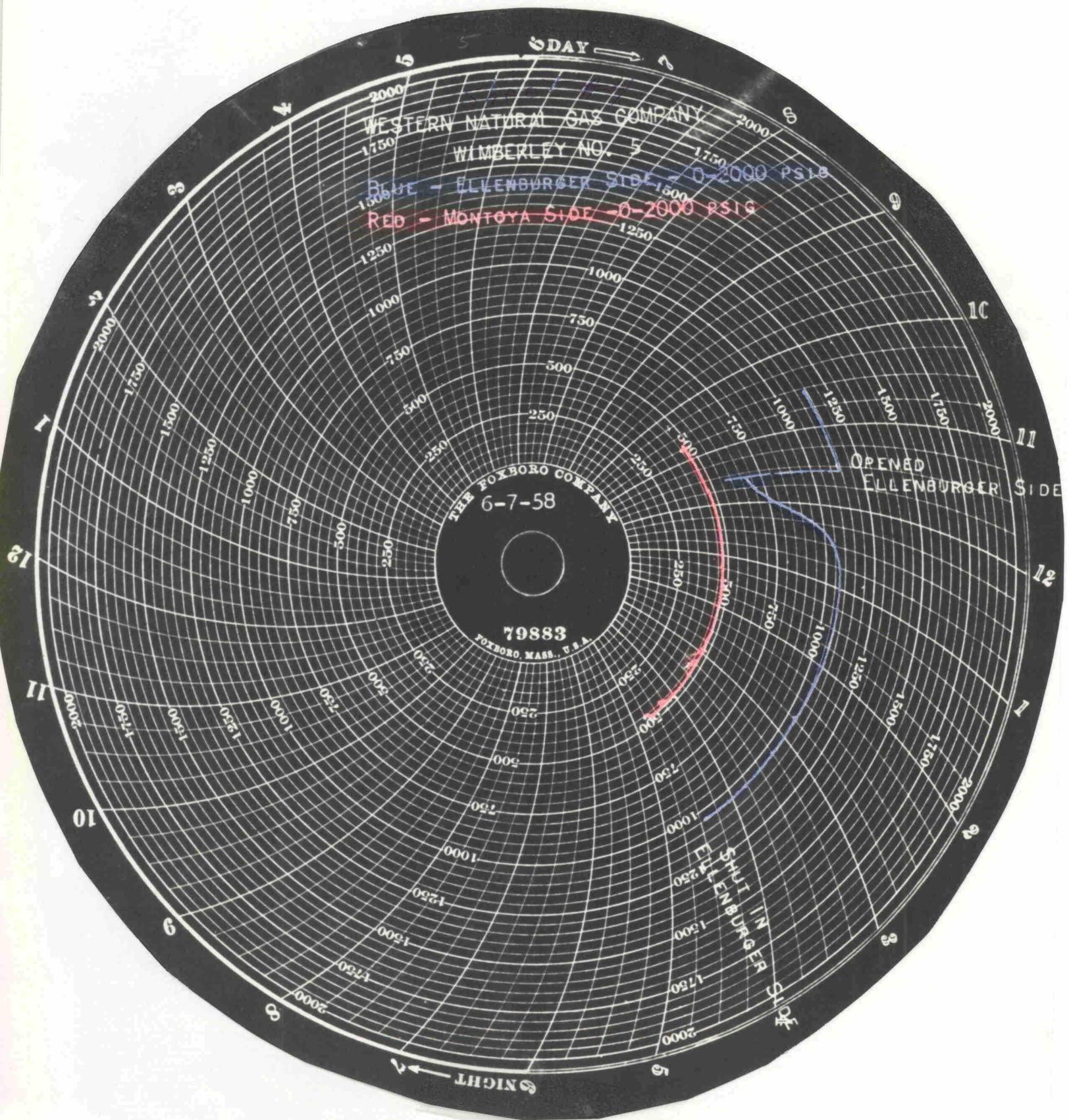
CHANGED CHART 1C

OPENED MONTOYA SIDE

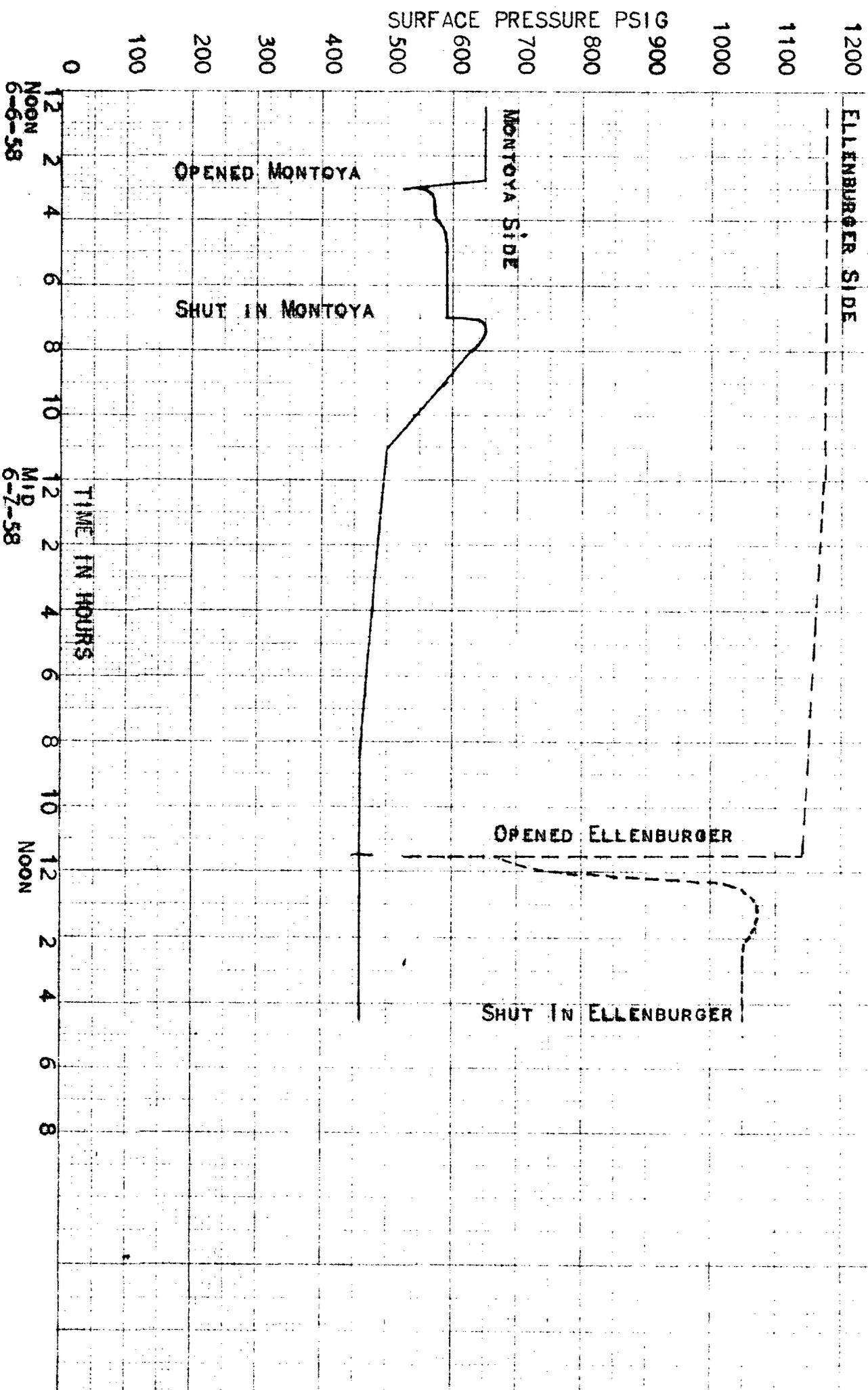
CHART 1C  
IN MONTOYA SIDE

DAY

NIGHT



WESTERN NATURAL GAS COMPANY  
 WIMBERLEY, WELL NO. 5  
 JUSTICE - MONTOYA - ELLENBURGER (DUAL)  
 LEA COUNTY, NEW MEXICO  
 SURFACE PRESSURE VS TIME CURVE





# COLEMAN PETROLEUM ENGINEERING COMPANY

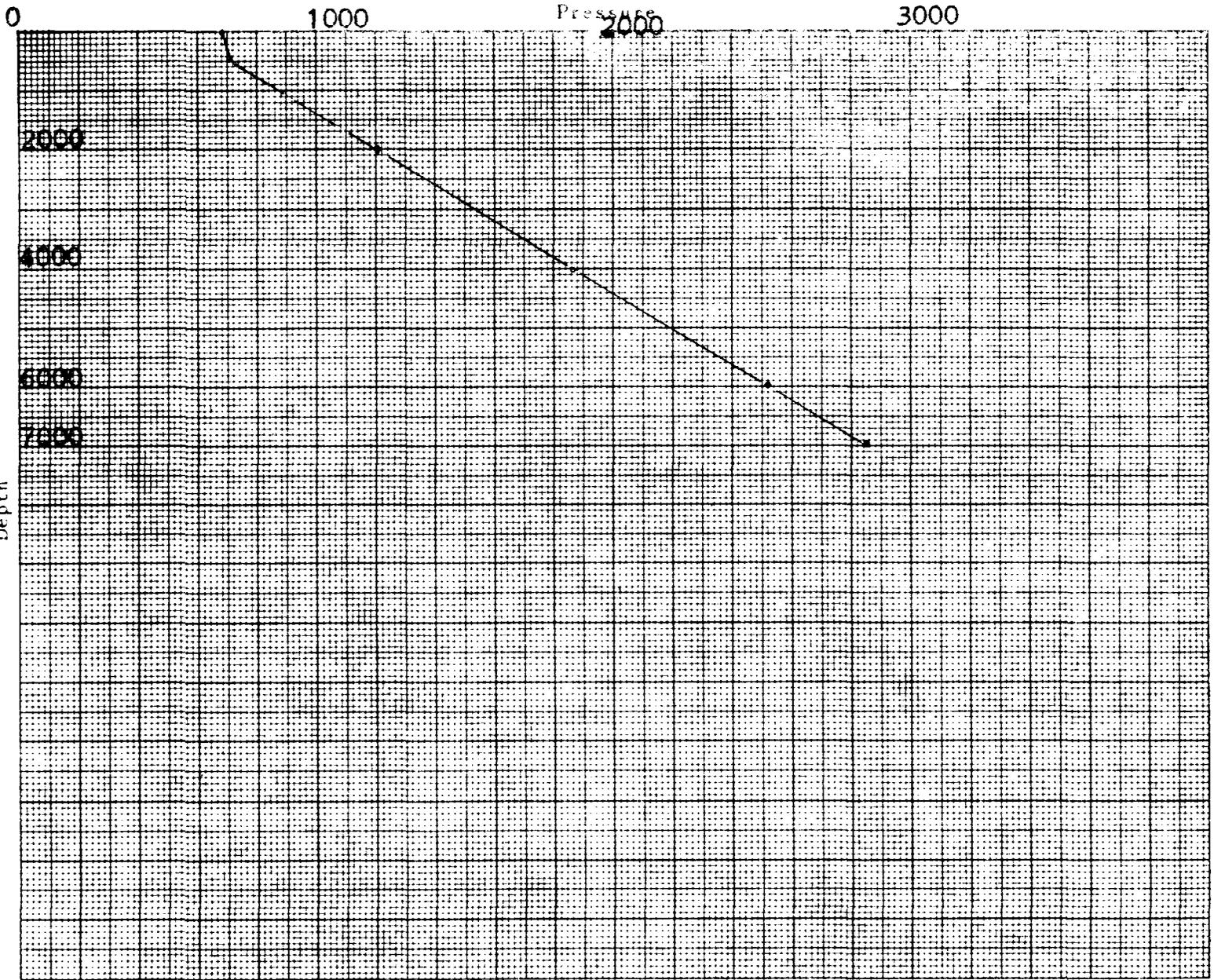
BEFORE EXAMINER **UTZ**  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 4  
 CASE NO. 1458

## BOTTOM HOLE PRESSURE

OPERATOR **WESTERN NATURAL GAS COMPANY**  
 FIELD **JUSTICE** FORMATION **MONTGYA**  
 LEASE **WIMBERLEY** WELL # **5**  
 COUNTY **LEA** STATE **NEW MEXICO**  
 DATE **6-6-38** TIME **10:00 AM**  
 Status **SHUT IN** Test depth **7000**  
 Time S. I. **83 Hrs** Last test date **INITIAL**  
 Tub Pres. **682 DWT** BHP last test **-**  
 Cas. Pres. **-** BHP change **-**  
 Elev. **3078** Fluid top **450'**  
 Datum **-3940** Water top **NONE**  
 Temp. @ **110°** Run by **BLAND**  
 Cal. No. **M-6-6** Chart No. **2**

Depth	Pressure	Gradient
0	682	-
2000	1206	.262
4000	1855	.329
6000	2523	.329
7000	2853	.330
7018(-3940)	2859*	

\* EXTRAPOLATED PRESSURE





# COLEMAN PETROLEUM ENGINEERING COMPANY

PHONE EXPRESS 3 3813

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION HOBBS, NEW MEXICO

EXHIBIT NO. 5

CASE NO. 1488

BOTTOM HOLE 1125'

OPERATOR WESTERN NATURAL GAS COMPANY  
 FIELD JUSTICE FORMATION ELLENBURGER  
 LEASE WIMBERLEY WELL # 5  
 COUNTY LEA STATE NEW MEXICO  
 DATE C-C-58 TIME 9:00 AM  
 Status SHUT IN Test depth 8150'  
 Time S. I. 92 HRS Last test date INITIAL  
 Tub Pres. 1193 DWT BHP last test -  
 Gas. Pres. - BHP change -  
 Elev. 3973 Fluid top 1125'  
 Datum -5100 Water top NONE  
 Temp. @ 122° Run by BLAND  
 Cal. No. M-6-6 Chart No. 1

Depth	Pressure	Gradient
0	1193	-
2000	1481	.144
4000	2050	.285
6000	2622	.286
8000	3194	.286
8150	3237	.287
8178 (-5100)	3245*	

\* EXTRAPOLATED PRESSURE

