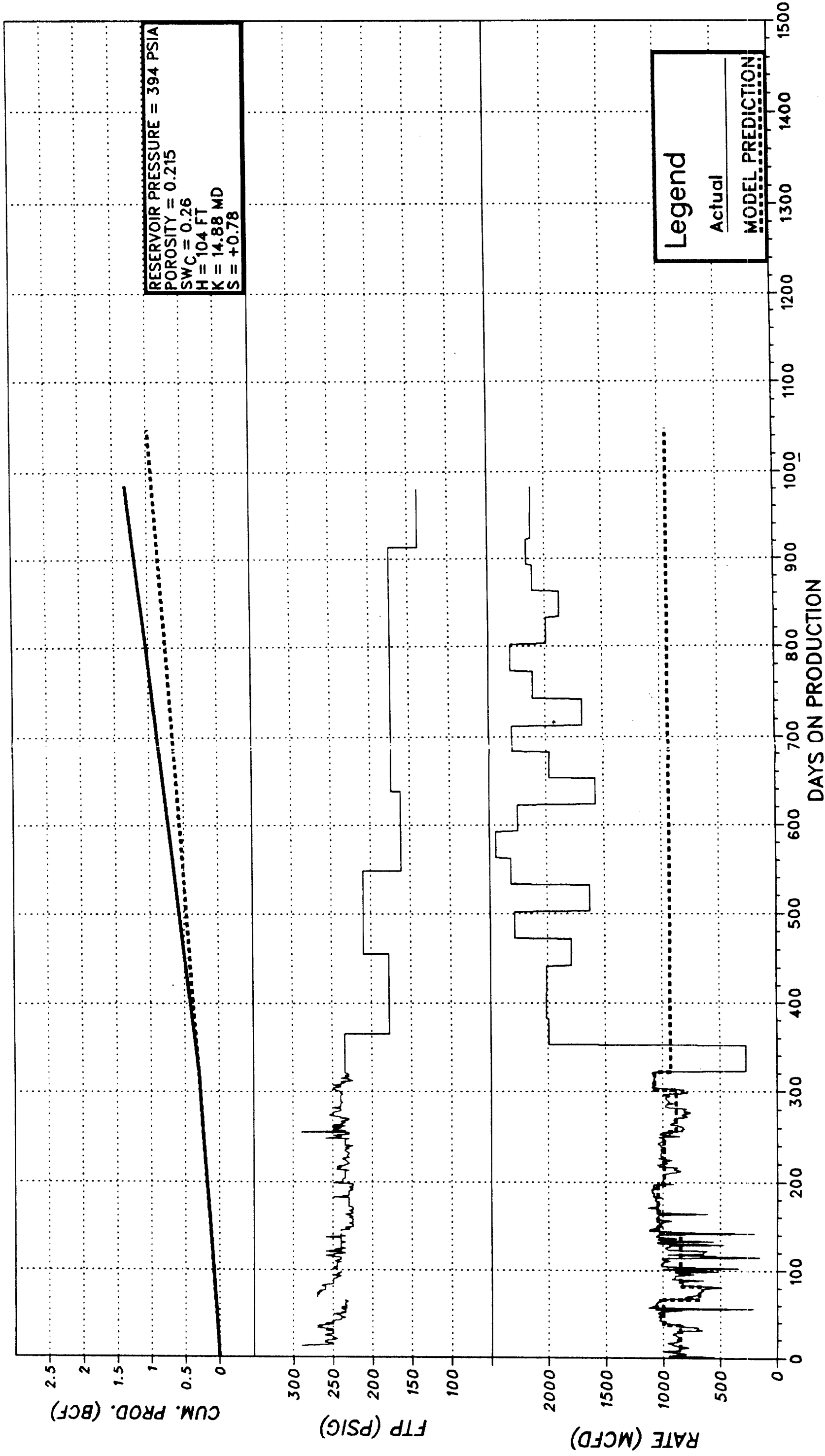


CITIES SERVICE OIL & GAS CORP
EXHIBIT 7
NO. 8352 (REOPENED)
DATE 8/26/87

**BRAVO DOME CO₂ GAS UNIT
BDCDGU WELL NO. 1934 201G
PERFORMANCE CURVE**

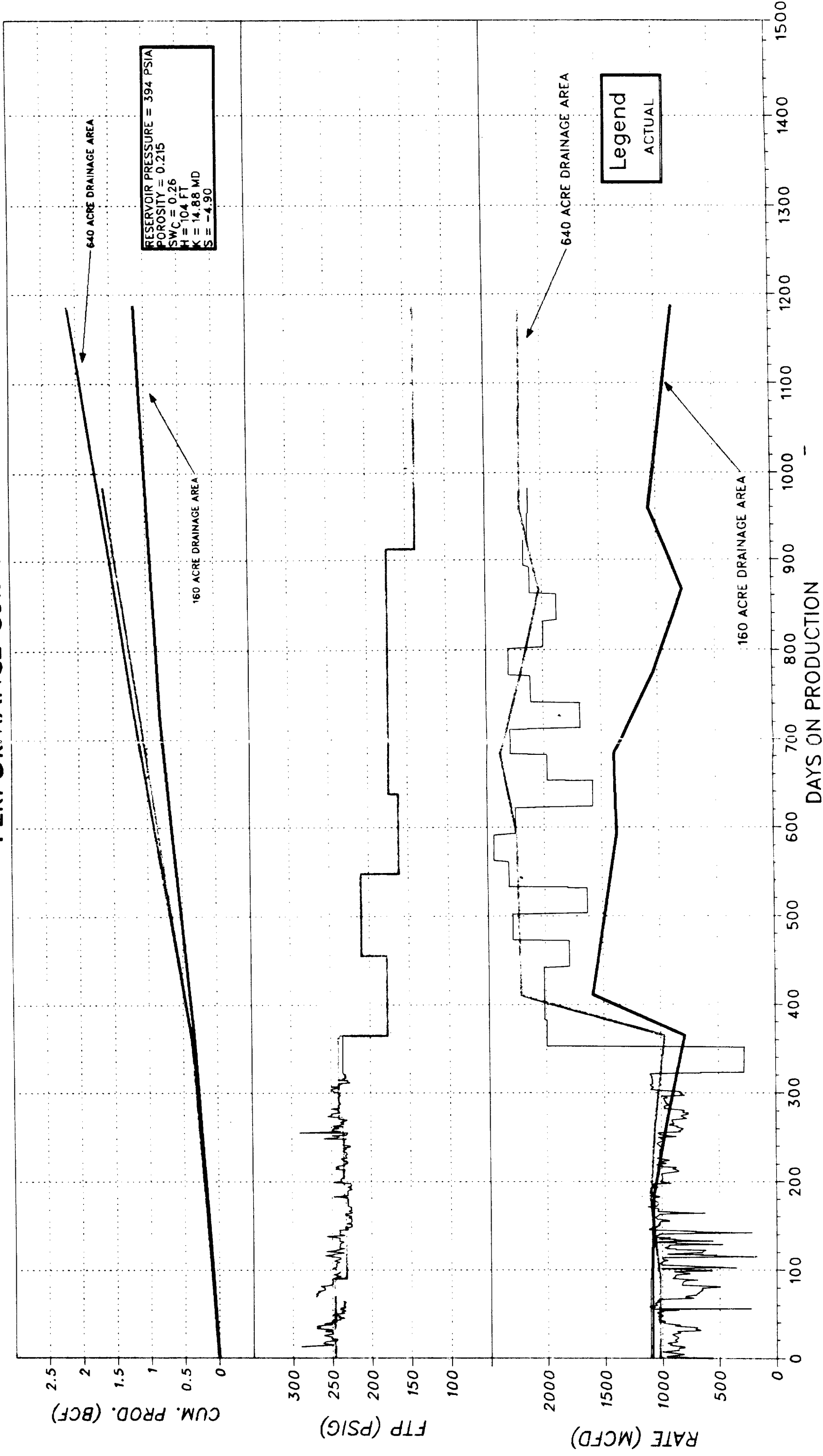
Amoco 8190 (REOPENED)
4



CITIES SERVICE OIL & GAS CORP
EXHIBIT 8
NO. 8352 (Revised)
DATE 8/24/57

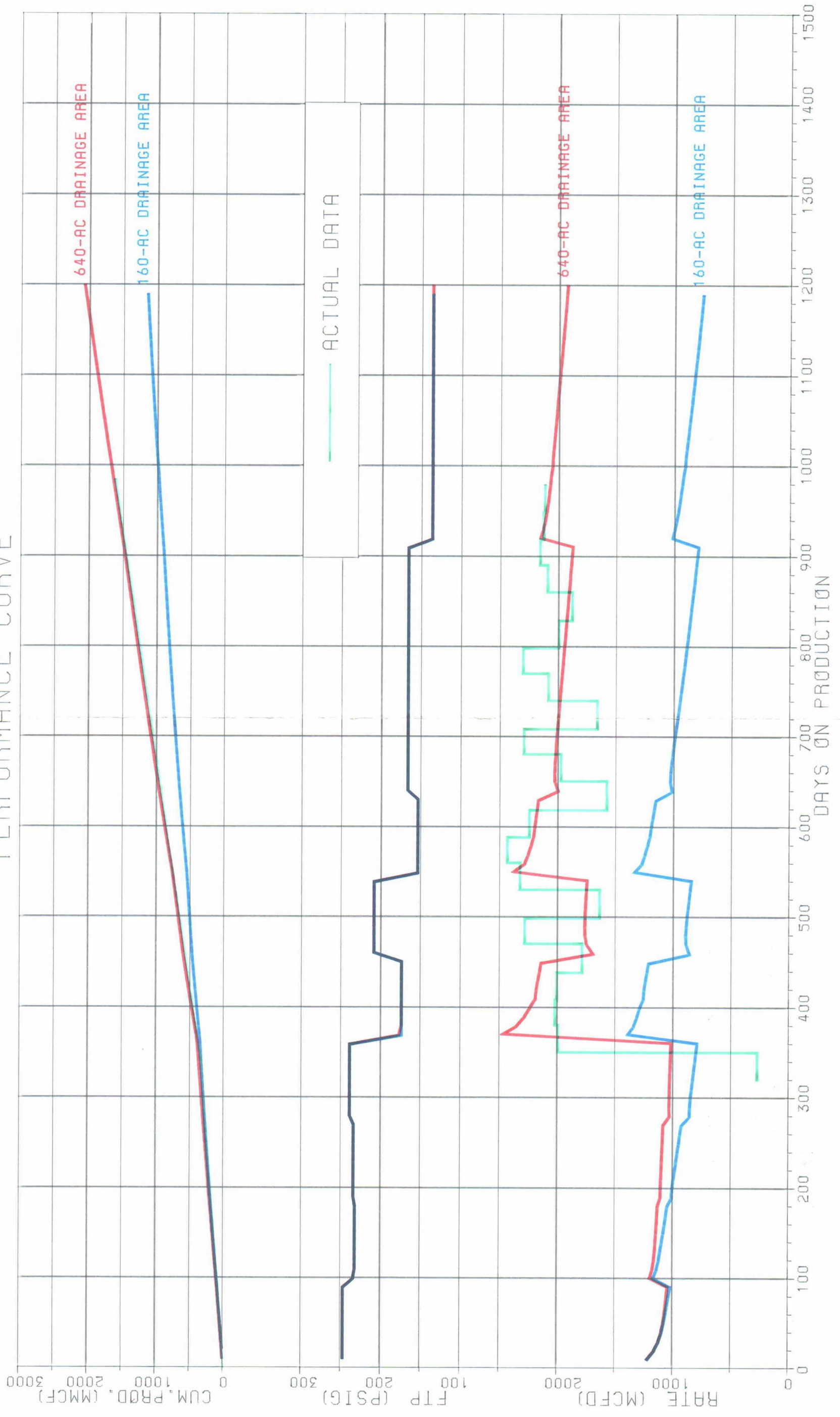
**BRAVO DOME CO₂ GAS UNIT
BDCDGU WELL NO. 1934 201G
PERFORMANCE CURVE**

Amoco - INVENT NO. 5
CASE NO. 8190 (REOPENED)



CITIES SERVICE OIL & GAS CORP.
EXHIBIT 9
NO. 8352 (REOPENED)
DATE 8/26/87

BRAVO DOME CO2 GAS UNIT
BDCDGU WELL NO. 1934 201G
PERFORMANCE CURVE



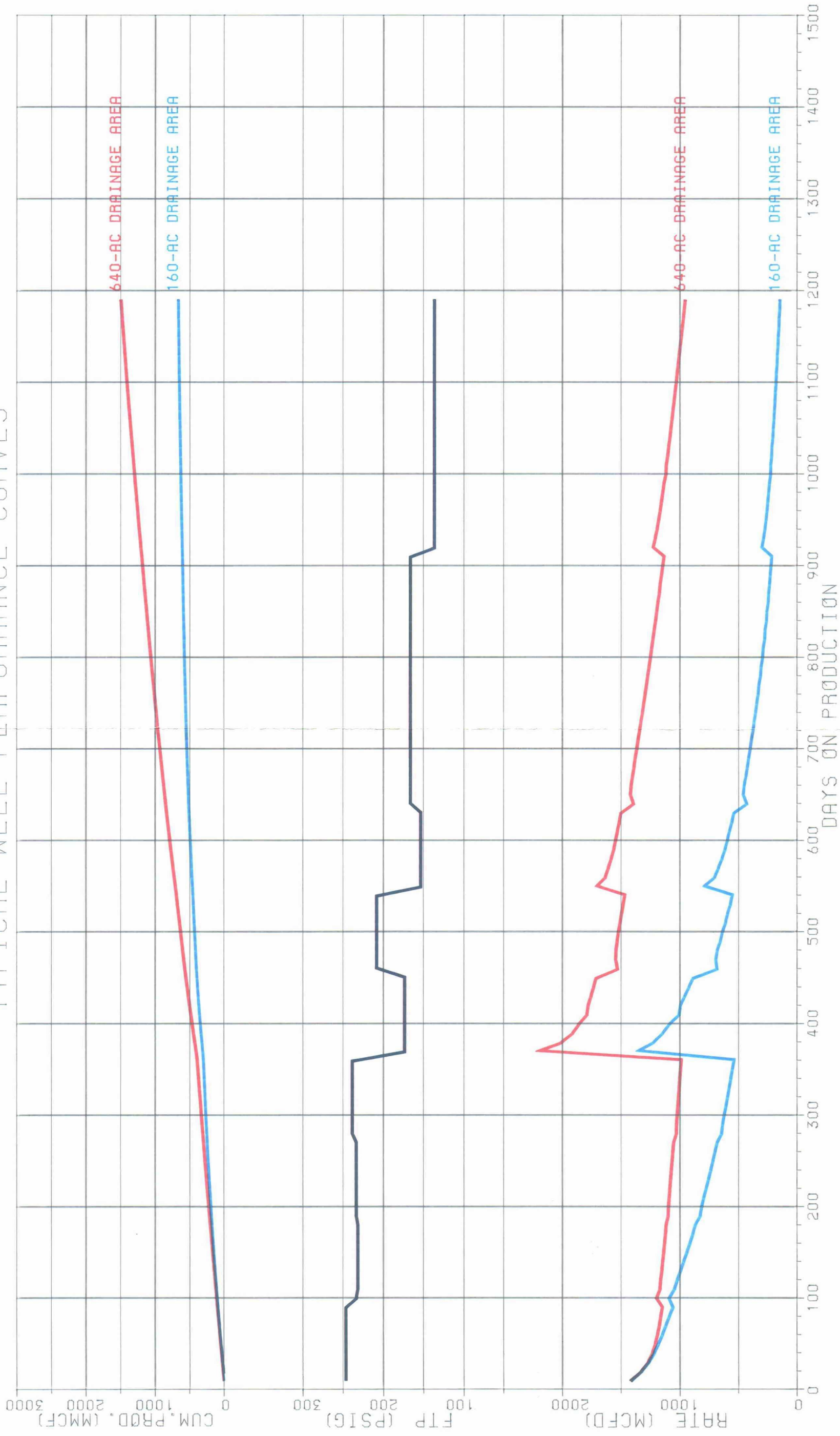
**RESERVOIR PARAMETERS
WEST BRAVO DOME AREA**

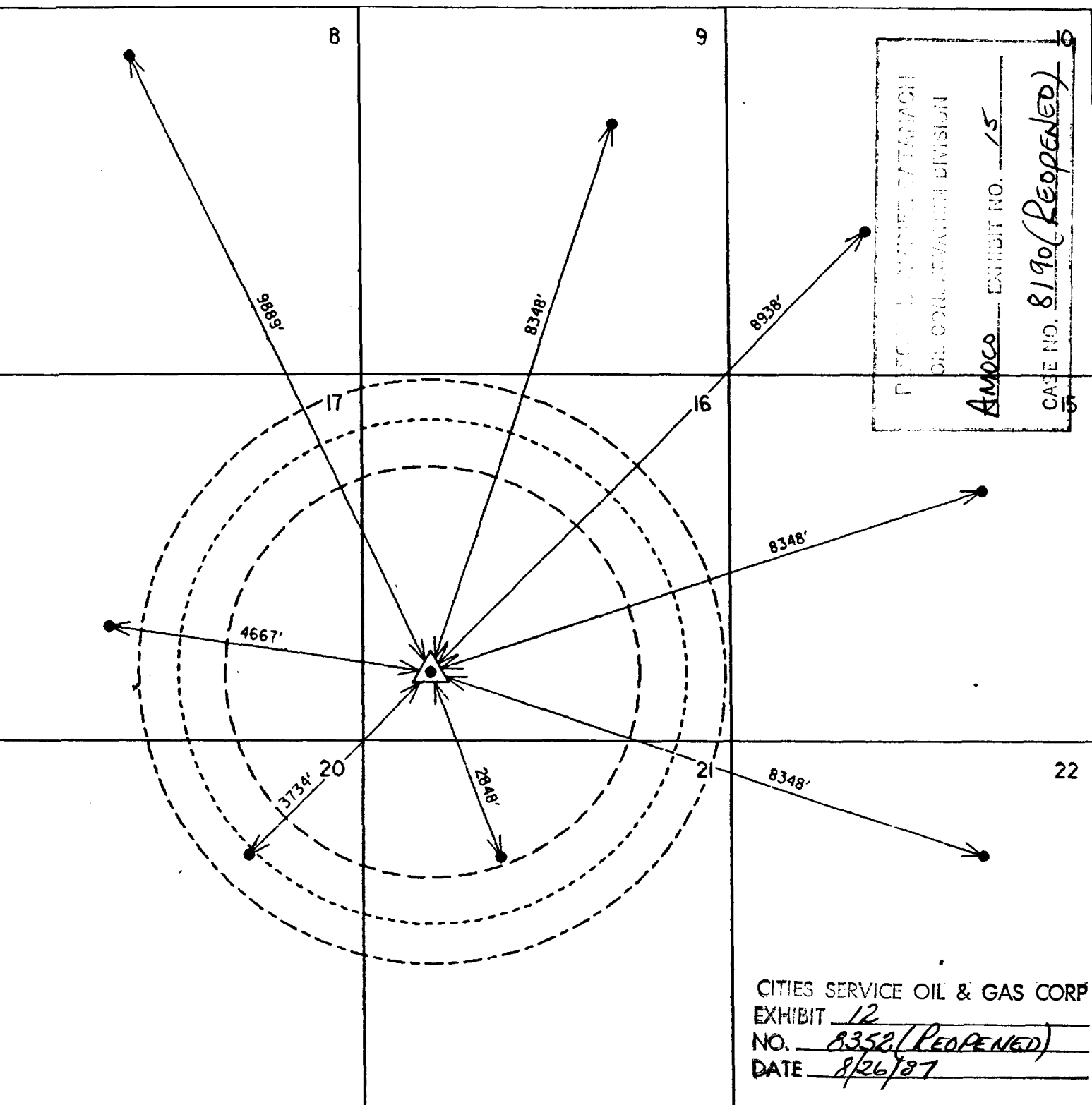
	<i>W.B.D.</i>	<i>Bravo Dome Area</i>
Average Net Pay	26 Feet	<i>104 feet</i>
Average Porosity	18%	<i>Same</i>
Average Water Saturation	50%	
Average Reservoir Pressure	650 PSI	<i>Some water lower</i>
Average Permeability	10 md	<i>Same</i>
Gas Formation Volume Factor	57 SCF/RCF	
Original Gas-in-Place	3.7 BCF/Section	
Recovery Factor	80%	
Reserves	3.0 BCF/Section	

CITIES SERVICE OIL & GAS CORP
EXHIBIT 10
NO. 8352 (REOPENED)
DATE 8/26/87

CITIES SERVICE OIL & GAS CORP
EXHIBIT 11
NO. 8352 (REOPENED)
DATE 8/26/87

WEST BRAVO DOME CO2 GAS UNIT
AVERAGE RESERVOIR PARAMETERS
TYPICAL WELL PERFORMANCE CURVES



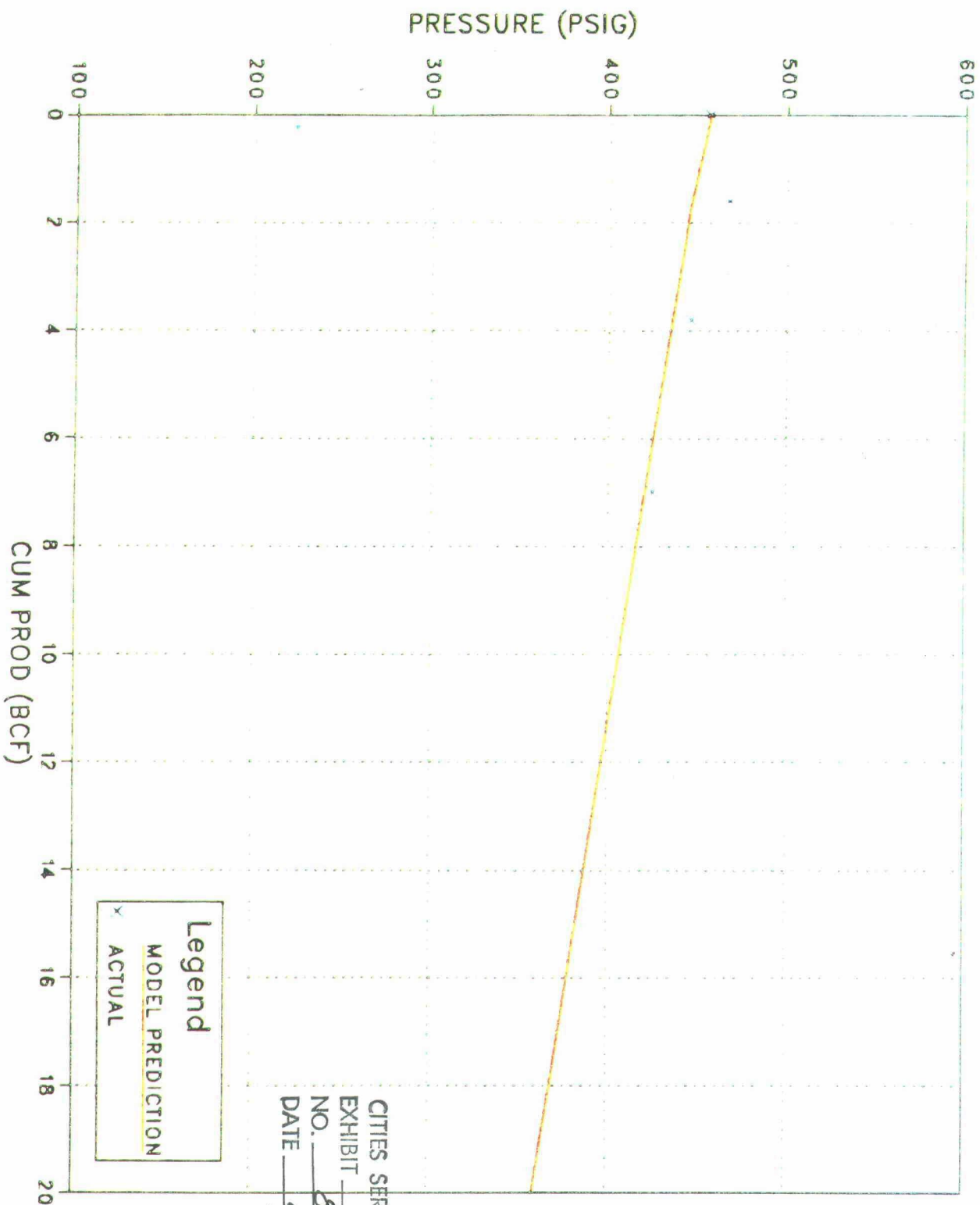


T18N/R35E
 Union County, New Mexico

- 640 ac $r=2978'$
- 960 ac $r=3648'$
- 1280 ac $r=4213'$
-  Shut-In Monitor Well

$P^*_{orig} = 456 \text{ psi}$
 $\Delta p = 35 \text{ psi}$
 $\Delta\% = 7.7\%$
 Scale: 1" = 2000'

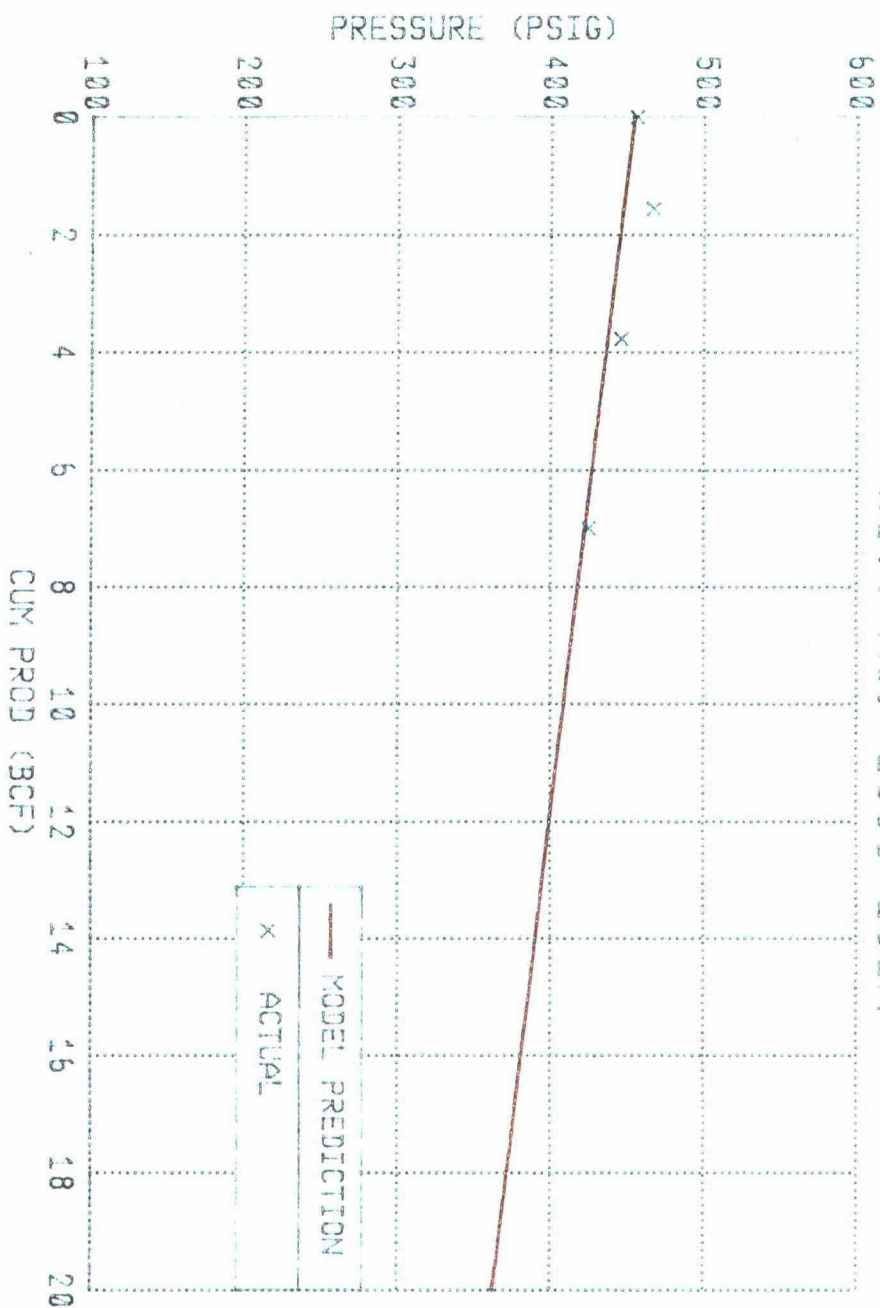
Bravo Dome Carbon Dioxide Gas Unit
Pressure Monitoring Wells
Well No. 1835-161M



CITIES SERVICE OIL & GAS CORP
EXHIBIT 13
NO. 8352 (REOPENED)
DATE 8/26/87

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
Amoco EXHIBIT NO. 11-B
CASE NO. 8190 (REOPENED)

Bravo Dome Carbon Dioxide Gas Unit Pressure Monitoring Wells Well No. 2835-161M



**1987 PRESSURE SURVEY RESULTS
WEST BRAVO DOME AREA**

<u>WELL</u>	<u>TWNSHP-RNG-SEC</u>	<u>PRESSURE, PSI*</u>
West BDCDGU #4	19N-29E-25	656
West BDCDGU #3	19N-29E-36	660
West BDCDGU #2	19N-30E-30	620
West BDCDGU #5	19N-30E-31	640
West BDCDGU #6	18N-30E-6	634
West BDCDGU #13	18N-30E-7	650
State DN #1	18N-30E-16	664

*Pressure at datum of +2500 ft. subsea

CITIES SERVICE OIL & GAS CORP
EXHIBIT 15
NO. 8352 (REOPENED)
DATE 8/26/87

OFFSET CO₂ PRODUCTION
WEST BRAVO DOME
MODEL STUDY AREA

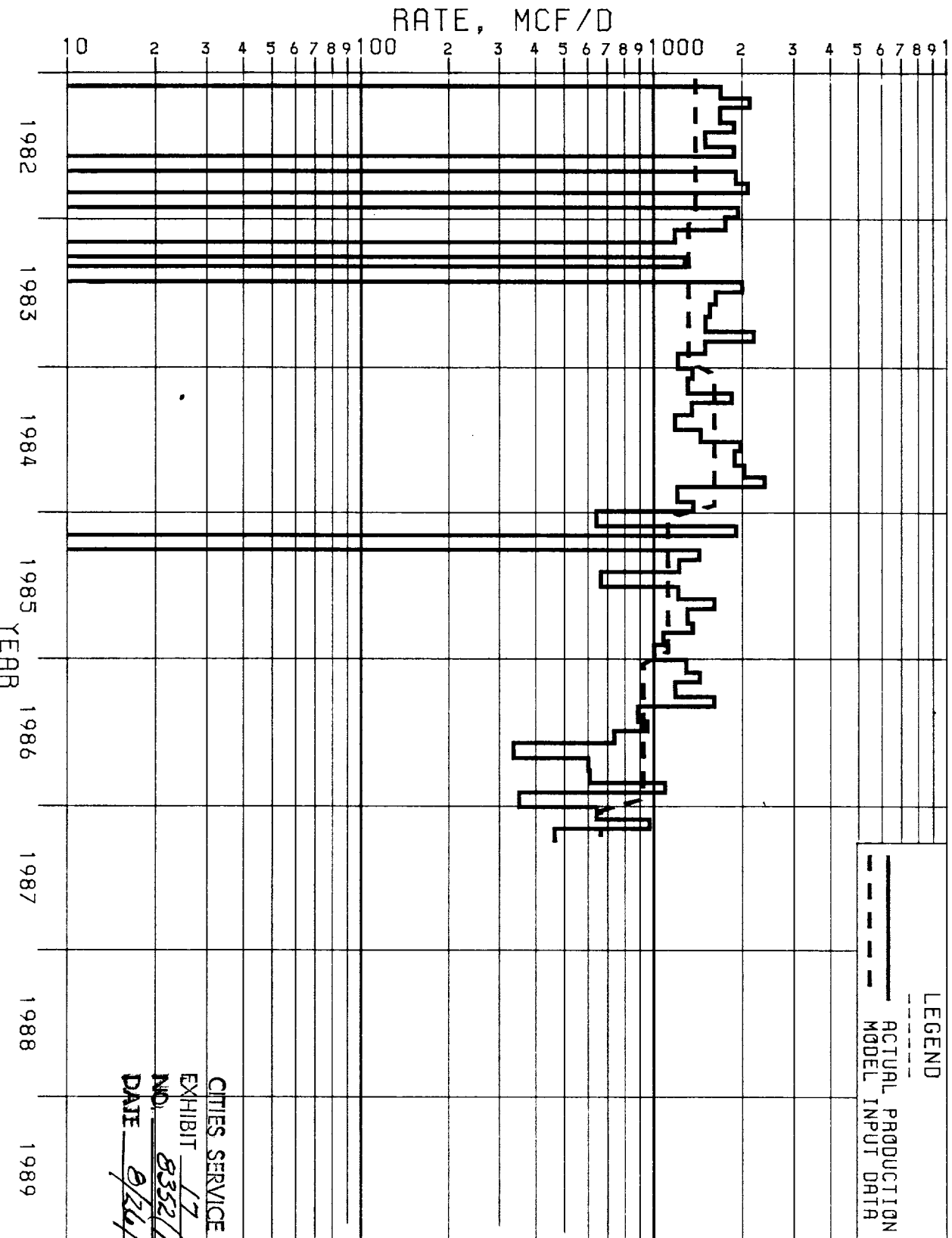
<u>WELL</u>	<u>TWNSHP-RNG-SEC</u>	<u>CUM. PROD., MCF*</u>
Mitchell #19	18N-30E-04	51,805
Mitchell #16	18N-30E-05	1,445,167
Mitchell #20	18N-30E-05	371,911
Mitchell #18	18N-30E-08	153,011
Mitchell #7	19N-30E-29	372,159
Mitchell #9	19N-30E-29	7,698
Mitchell #2	19N-30E-20	<u>1,242</u>
TOTAL		2,402,993

*Cumulative production from January 1982 through March 1987.

CITIES SERVICE OIL & GAS CORP
EXHIBIT 16
NO. 8352 (REOPENED)
DATE 8/26/87

AMERIGAS CO2 PRODUCTION

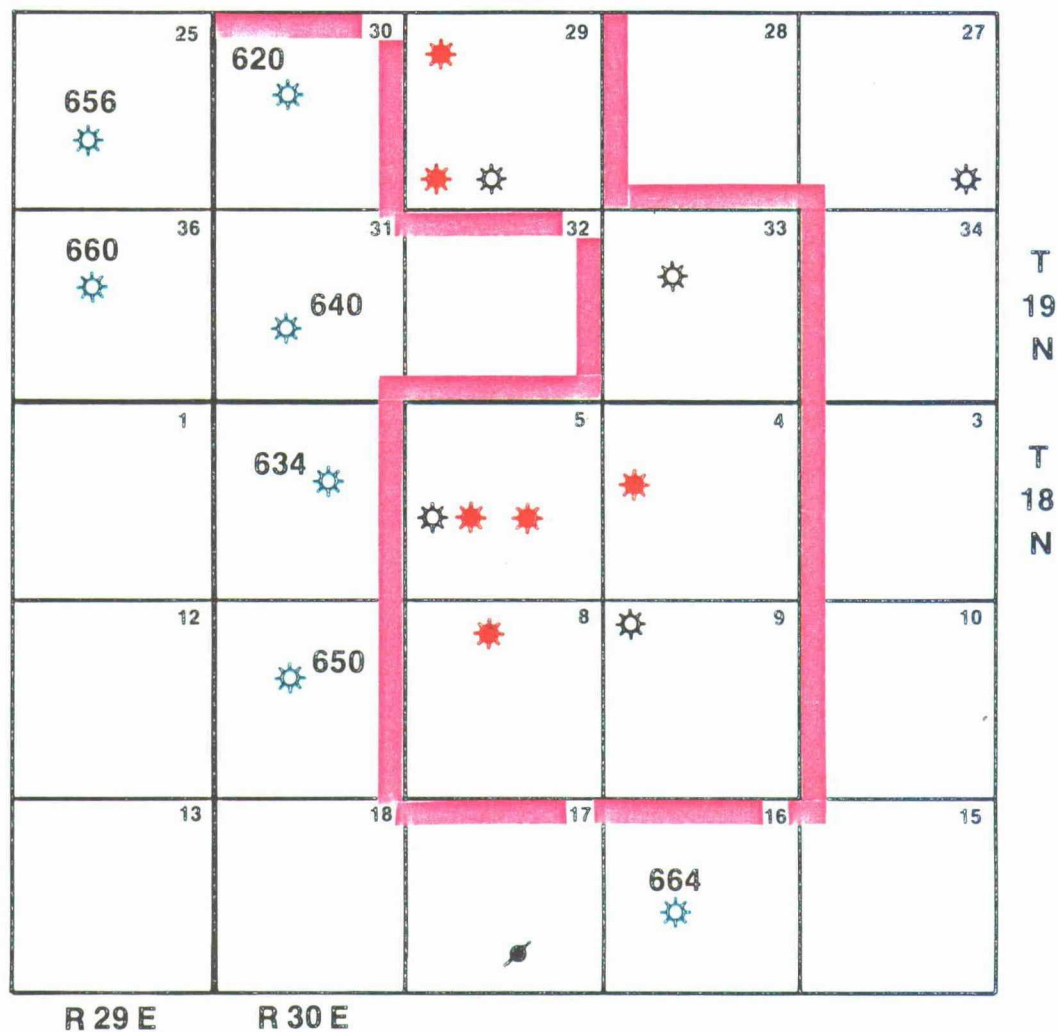
WELLS: MITCHELL 2, 7, 9, 16, 18, 19 & 20 (COMBINED AS ONE)
 UNIT WELL NO'S.: 1930-20M, 1930-29M, 1930-29D, 1830-05J,
 1830-08C, 1830-04E, & 1830-05K



CITIES SERVICE OIL & GAS CORP
 EXHIBIT 17
 NO. 8352 (AMERIGAS)
 DATE 9/26/87

WEST BRAVO DOME
HARDING COUNTY, NEW MEXICO
MODEL SURVEY AREA

CITIES SERVICE OIL & GAS CORP
EXHIBIT 18
NO. 8352 (REOPENED)
DATE 8/26/87



640 - ACRE SPACING APPLICATION AREA



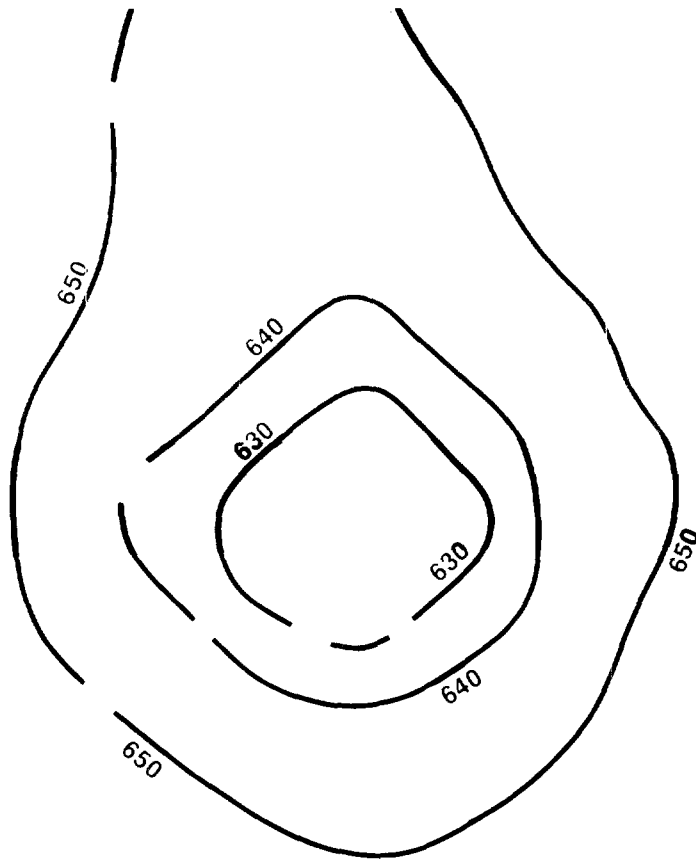
PRESSURE SURVEY WELLS



AMERIGAS CO₂ PRODUCTION WELLS

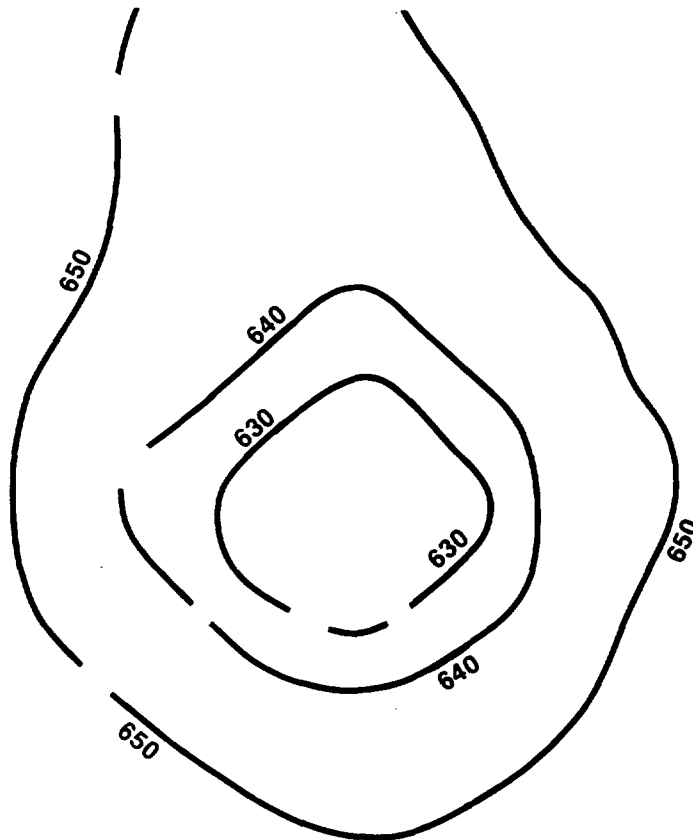


SIMULATED PRESSURE DISTRIBUTION



17
05/11/2017
6/12/17

SIMULATED PRESSURE DISTRIBUTION



CITIES SERVICE OIL & GAS CORP
EXHIBIT 19
NO. 8352 (REOPENED)
DATE 8/26/87

REPRODUCED BY
West Texas Electrical Log Service
1305 COMMERCE STREET
DALLAS 1, TEXAS

REFERENCE N°W 3940 -A

25-27N-36E

Herndon

MOCK #1

WELL: _____

FIELD: WILCOAT

LOCATION: SEC. 25-27N-36E

COUNTY: UNION

STATE: NEW MEXICO

Elevation D.F. 4502'

C.B. _____

or O.I. _____

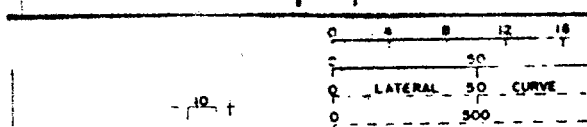
FILING No. _____

RUN NO.	1				
Date	3-4/5-45				
First Reading	4555				
Last Reading	445				
Footage Measured	4110				
Rig Shoe Closure	445				
Rig Shoe Driller	440				
Shoe Chuck Reached	445				
Shoe Driller	445				
Shoe Depth	4045				
Mud Nature	IMPERFECT				
• Density	10.5				
• Viscosity	41				
• Reactivity	0.2 @ 50 °F				
• Reactivity BHT	@ °F				
• pH	@ °F				
• Water Loss	CC 0 min	CC 30 min	CC 30 min	CC 30 min	CC 30
Maximum Temp. °F					
Sp. Grav.					
Spacings - AM	12"				
A					
AG	13"				
E.S. Rig Time					
Truck No.					
Recorded By	N.B. OTTINGER				
Witnessed By					

REMARKS

Carl Wiborg

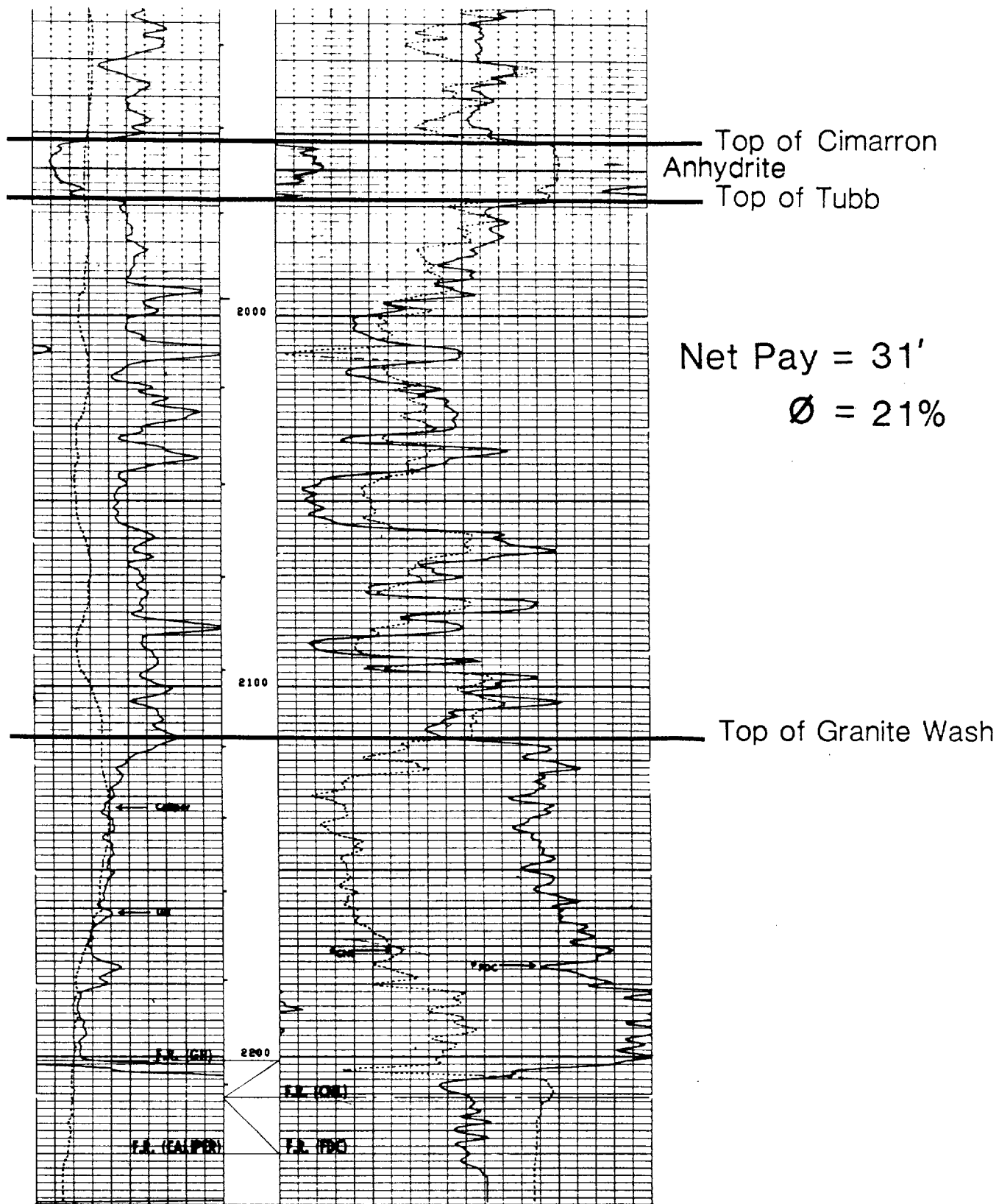
SPONTANEOUS-POTENTIAL millivolts	DEPTHS	RESISTIVITY ohms. m ² /m.
- +		



CITIES SERVICE
STATE "DC" NO. 1

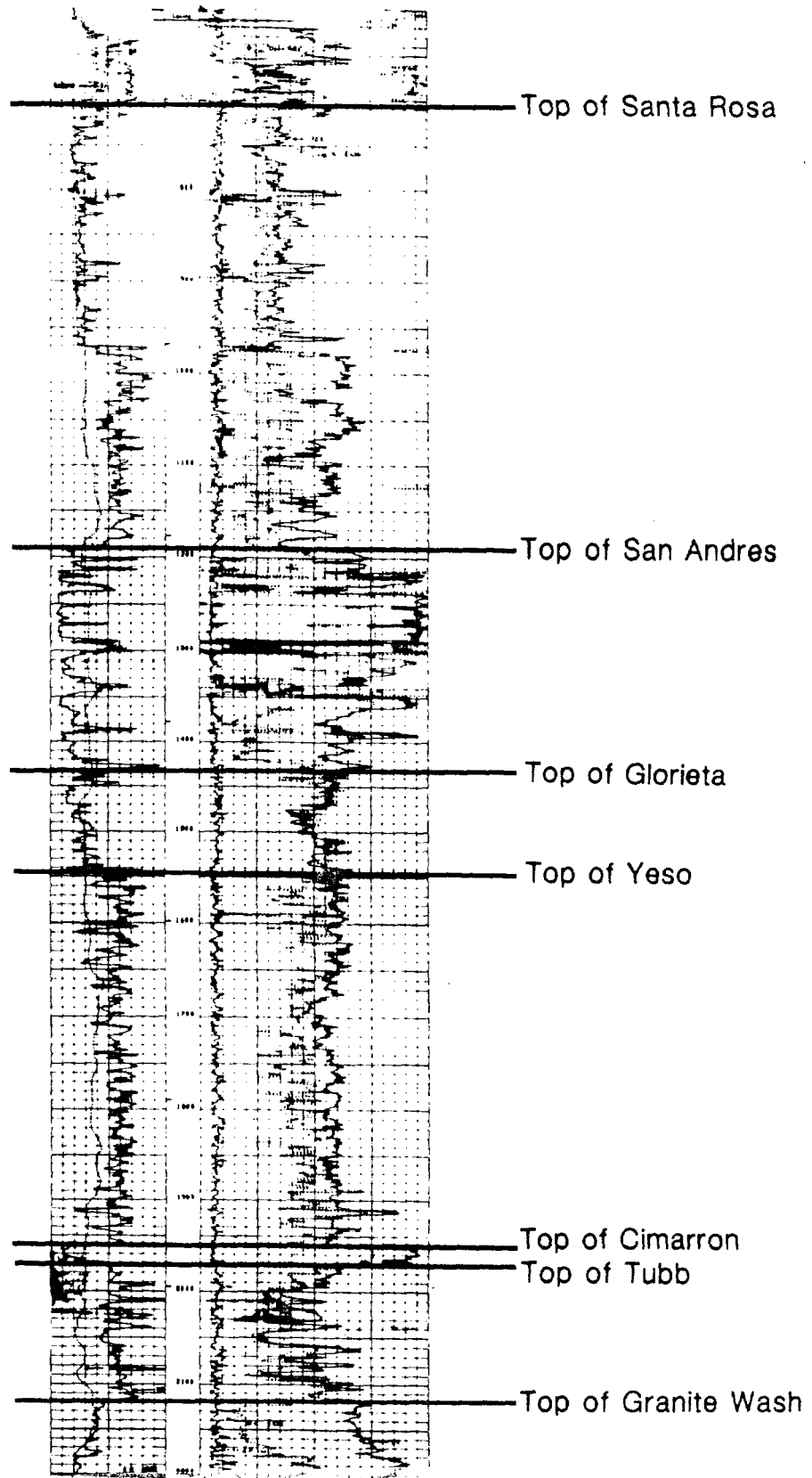
Tubb Formation

Type Log

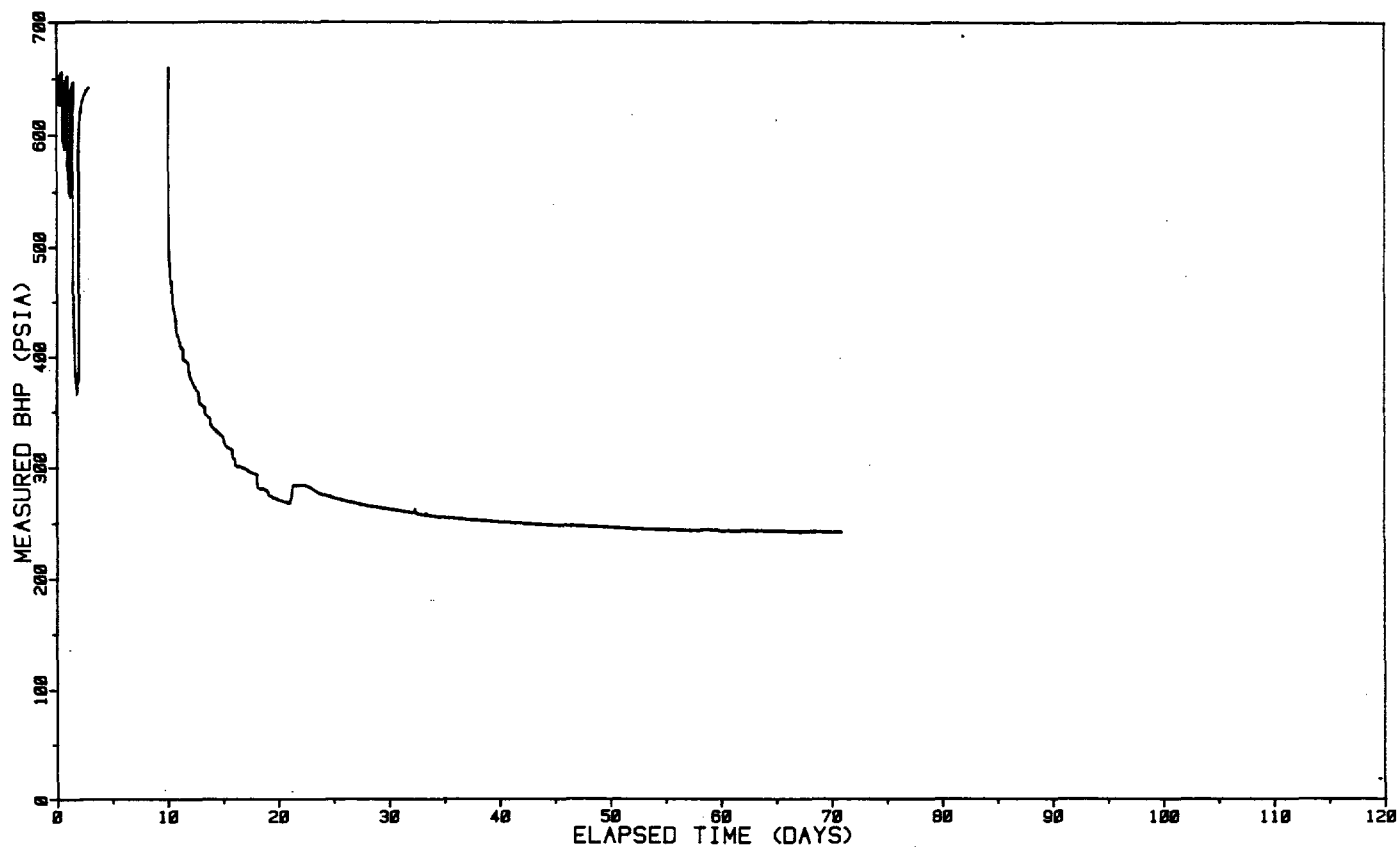


CITIES SERVICE
STATE "DC" NO. 1

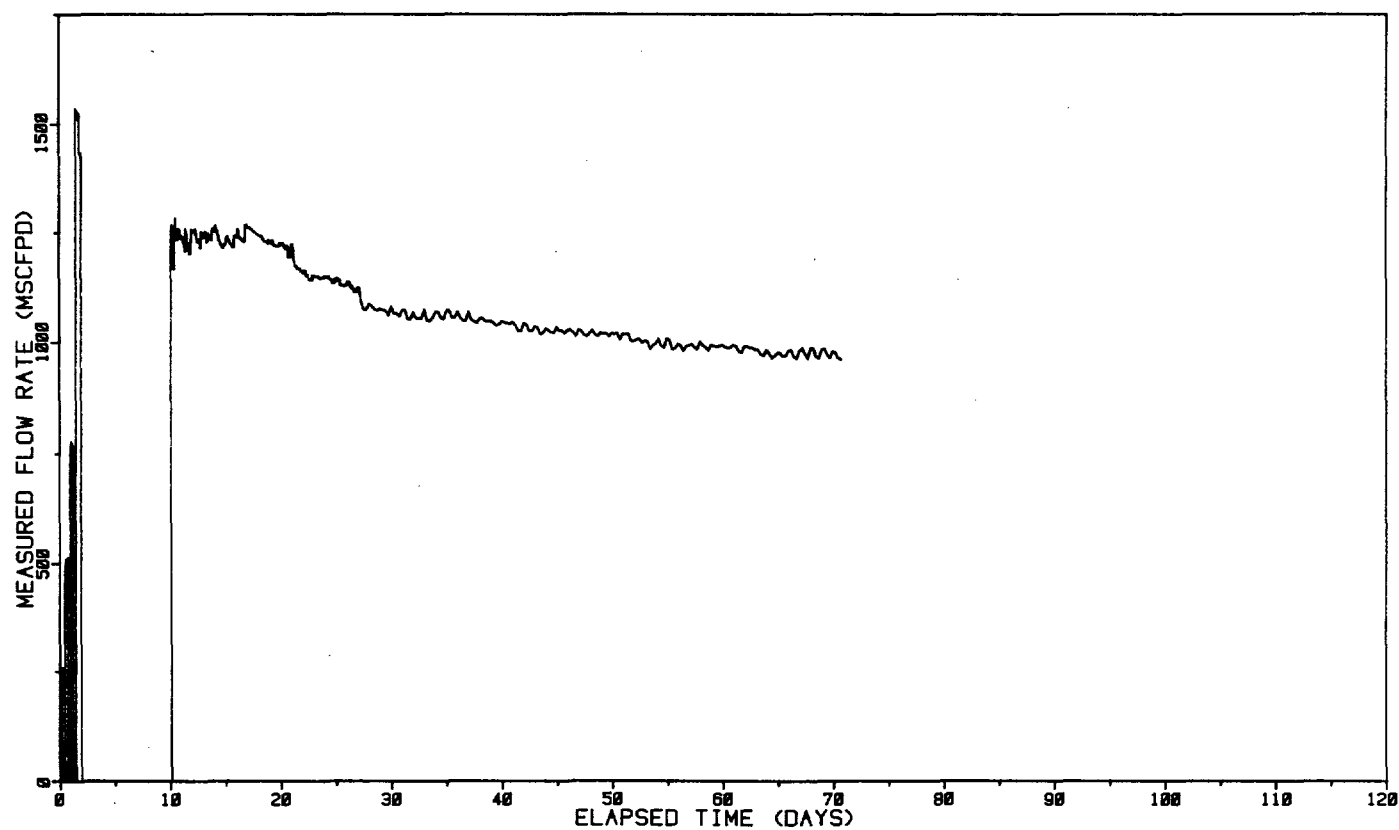
Compensated Neutron-Formation Density Log
Type Log



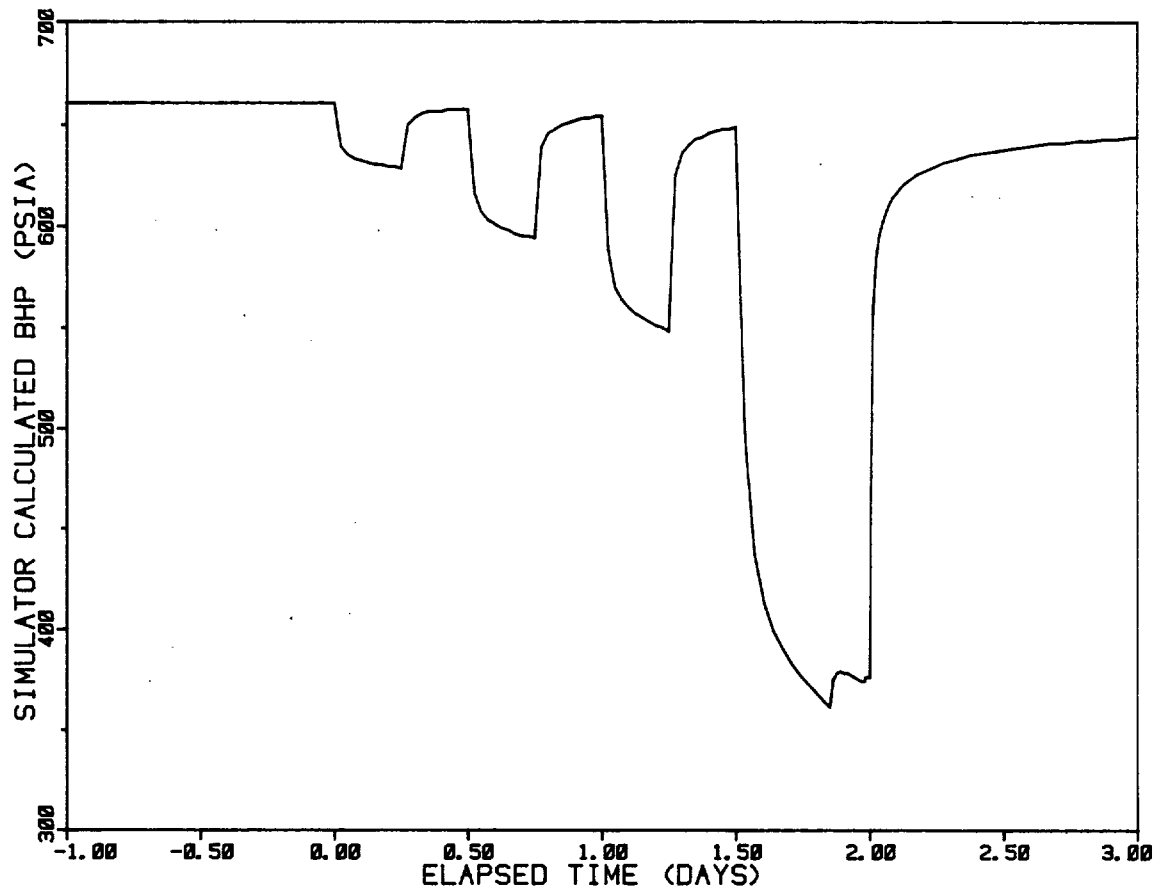
EXTENDED FLOW TEST - MEASURED PRESSURES



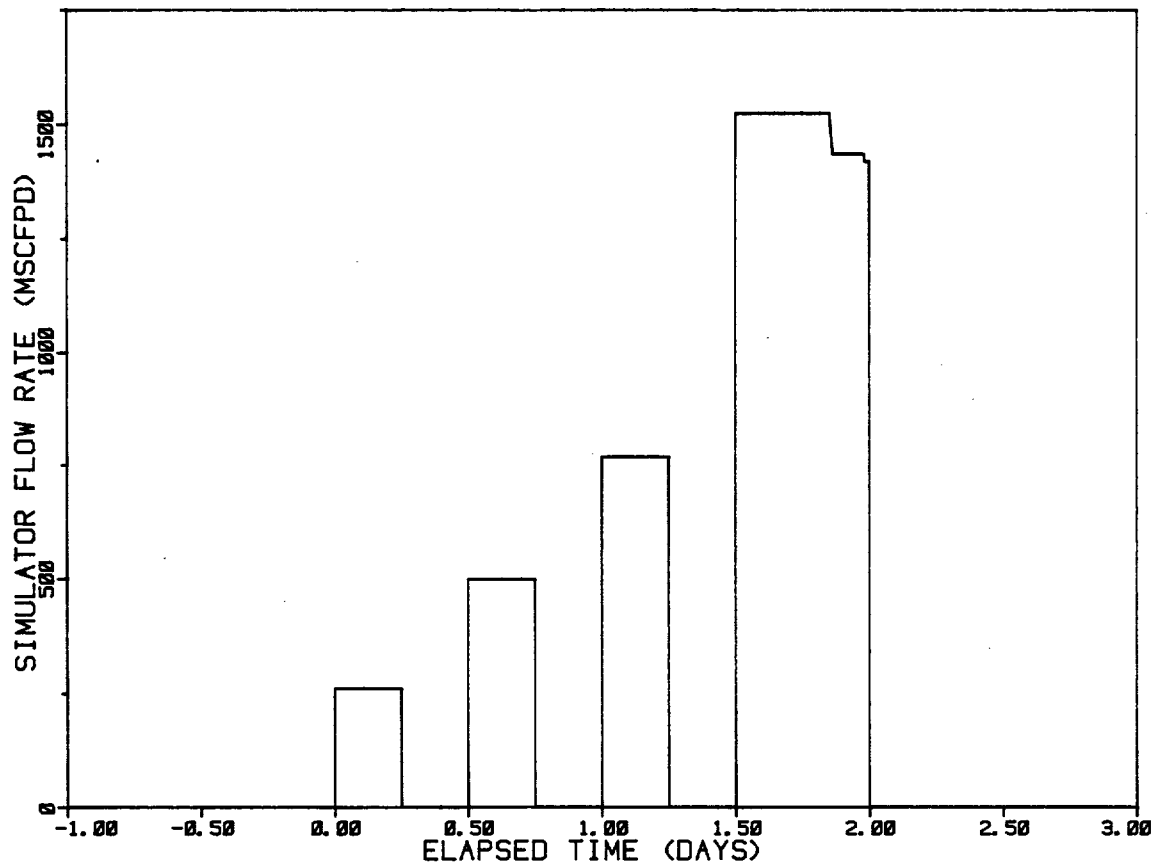
EXTENDED FLOW TEST - MEASURED FLOW RATES



ISOCHRONAL TEST - SIMULATED PRESSURES

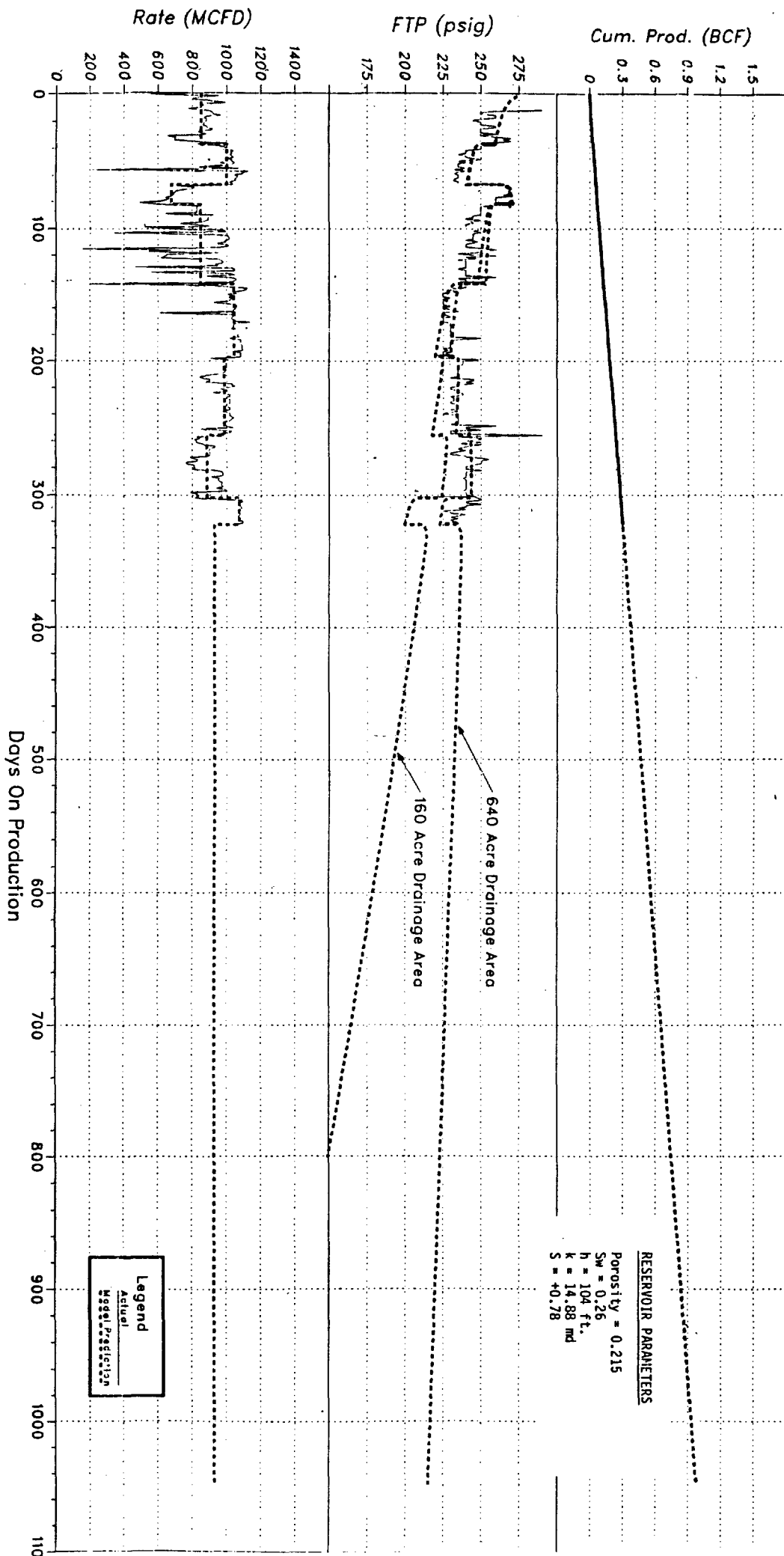


ISOCHRONAL TEST - SIMULATED FLOW RATES

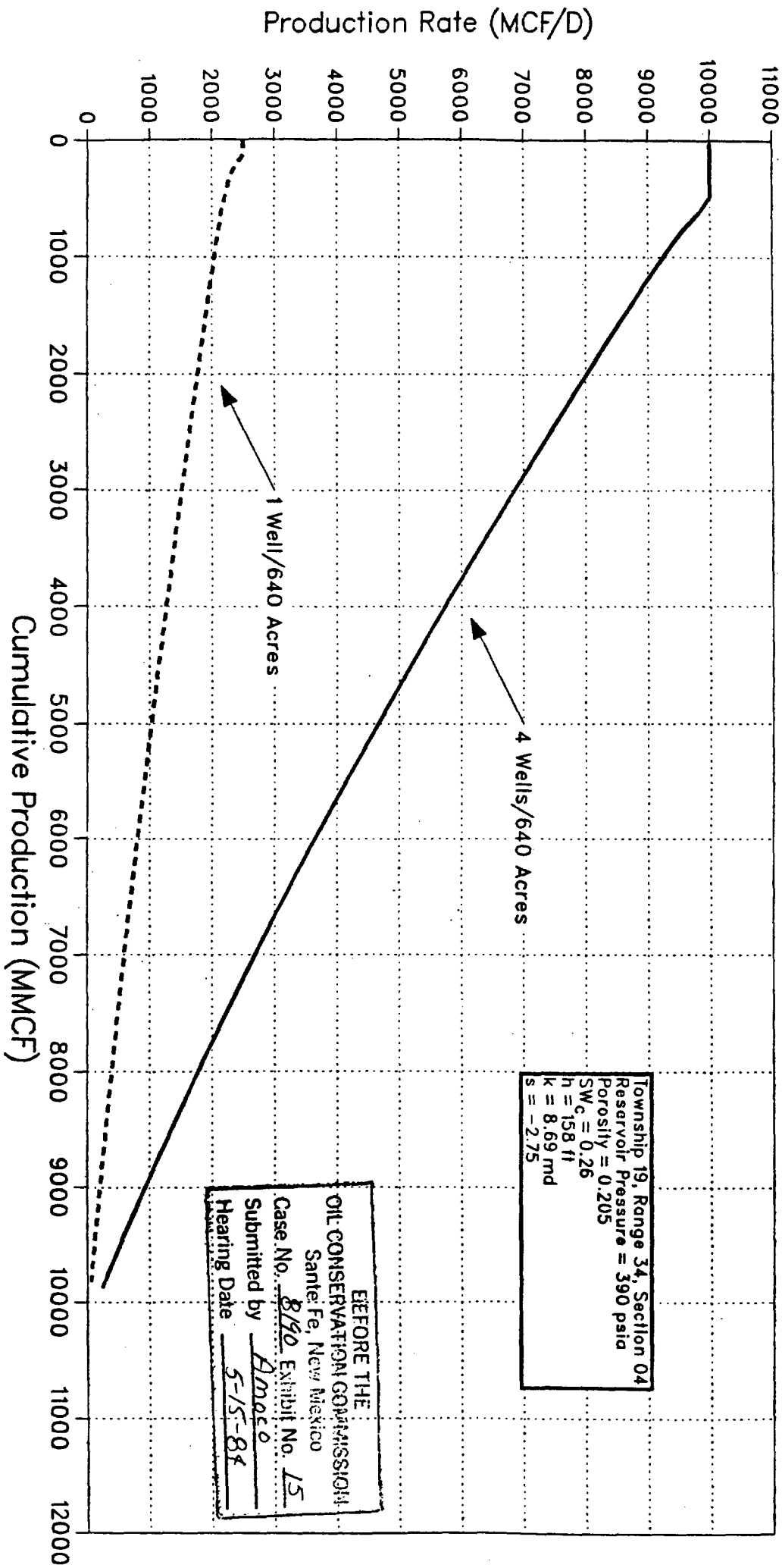


Bravo Dome CO₂ Gas Unit
 BDCDGU Well No. 1934 201G
 Performance Curve

BEFORE THE
 OIL CONSERVATION COMMISSION
 Santa Fe, New Mexico
 Case No. 8190 Exhibit No. 13
 Submitted by Amoco
 Hearing Date 5-15-84



Bravo Dome CO₂ Gas Unit Typical Well Performance Curve



Bravo Dome CO₂ Gas Unit Typical Well Performance Curve

