

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool West Jal Strawn Formation Strawn County Lea
Initial X Annual _____ Special _____ Date of Test 6-16-64 to 6-26-64
Company SKELLY OIL COMPANY Lease WEST JAL "B" Well No. 1
Unit J Sec. 17 Twp. 25 S Rge. 36 E Purchaser El Paso Natural Gas Company
Liner Casing 5" OD Wt. 18#N-80 I.D. 4.276" Set at 12,273' Perf. 11,959 To 12,090
Tubing 2 3/8" OD Wt. 4.7#N-80 I.D. 1.995" Set at 11,917 Perf. 11,911 To 11,917
Gas Pay: From 11,959 To 12,090 L 11,911 xMic .649 -GL 7730 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well SINGLE
Date of Completion: 6-3-64 Packer Model "D" @ 11,905 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 172° F

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps FLANGE

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	6"	3"				6001				72 Hrs.
1.	6"	3"	801	4.20	58	5058	84			22 Hrs.
2.	6"	3"	779	6.75	4	4567	89			26 Hrs.
3.	6"	3"	835	6.90	3	4427	91			24 Hrs.
4.	6"	3"	835	16.00	9	3013	94			24 Hrs.
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	57.46	58.48	814.2	1.0019	1.0084	1.069	3629
2.	57.46	73.13	792.2	1.0586	1.0084	1.108	4970
3.	57.46	76.50	848.2	1.0598	1.0084	1.118	5252
4.	57.46	116.50	848.2	1.0529	1.0084	1.110	7889
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 47,584 cf/bbl.
Gravity of Liquid Hydrocarbons 52° deg.
F_c 9.936 (1-e^{-s}) 0.413
Specific Gravity Separator Gas 590
Specific Gravity Flowing Fluid .7711
P_c 6014 P_c² 36,168

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w / P _c
1.	5071.2	25717	36.058	1300.18	536.97	26,253.97	9914.03	5123.9	85.2
2.	4580.2	20978	49.382	2438.58	1007.13	21,985.13	14182.87	4688.8	78.0
3.	4440.2	19715	52.184	2723.17	1124.67	20,839.67	15328.33	4565.0	75.9
4.	3026.2	9158	78.385	6144.21	2537.56	11,695.56	24472.44	3419.9	56.9
5.									

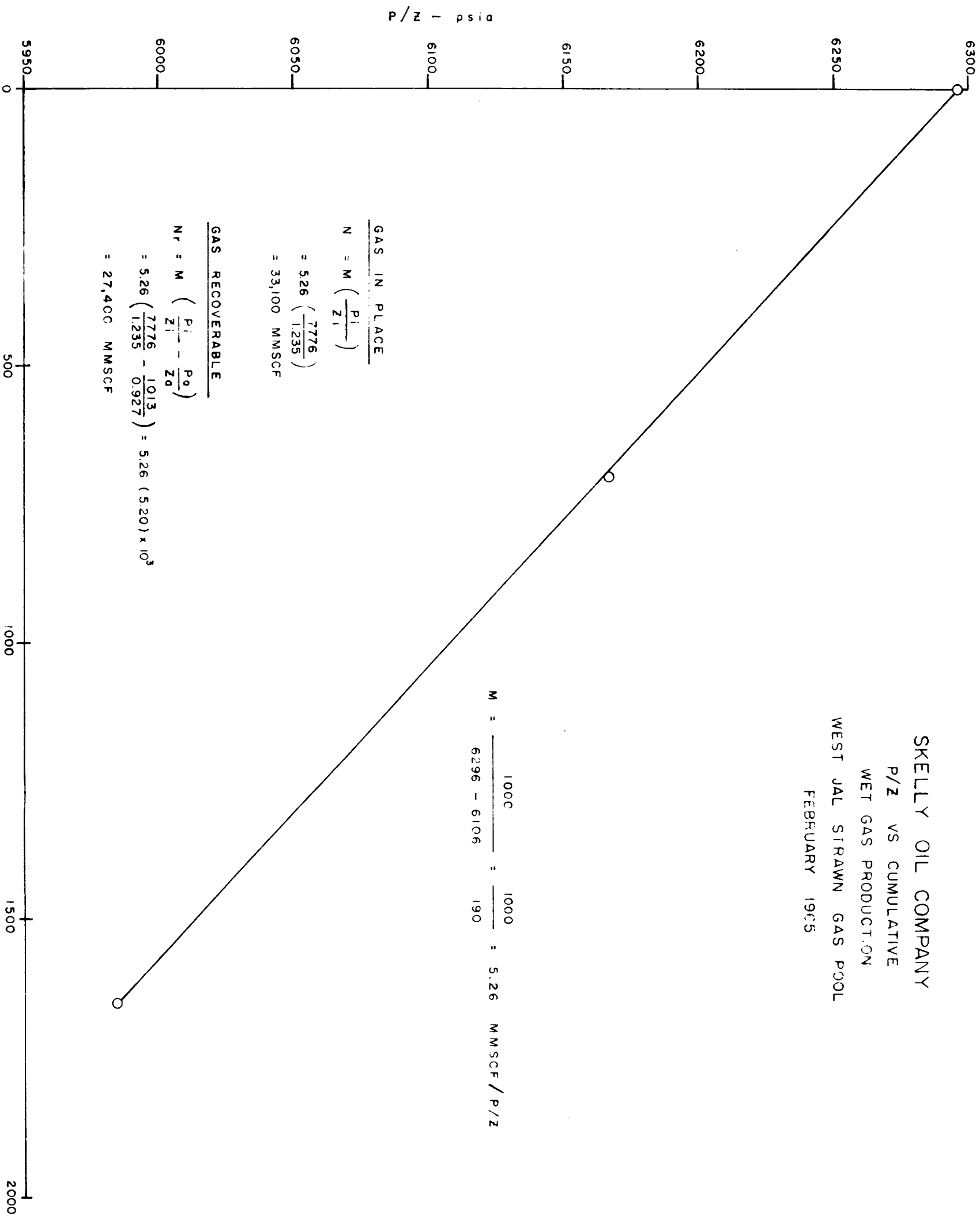
Absolute Potential: 11,200 MCFPD; n .86COMPANY SKELLY OIL COMPANYADDRESS P.O. Box 730, Hobbs, New MexicoAGENT and TITLE H. E. Aab, District Superintendent

WITNESSED _____

COMPANY _____

REMARKS _____

SKELLY OIL COMPANY
P/Z VS CUMULATIVE
WET GAS PRODUCTION
WEST JAL STRAWN GAS POOL
FEBRUARY 1965



$$M = \frac{1000}{6296 - 6106} = \frac{1000}{190} = 5.26 \text{ MMSCF / P/Z}$$

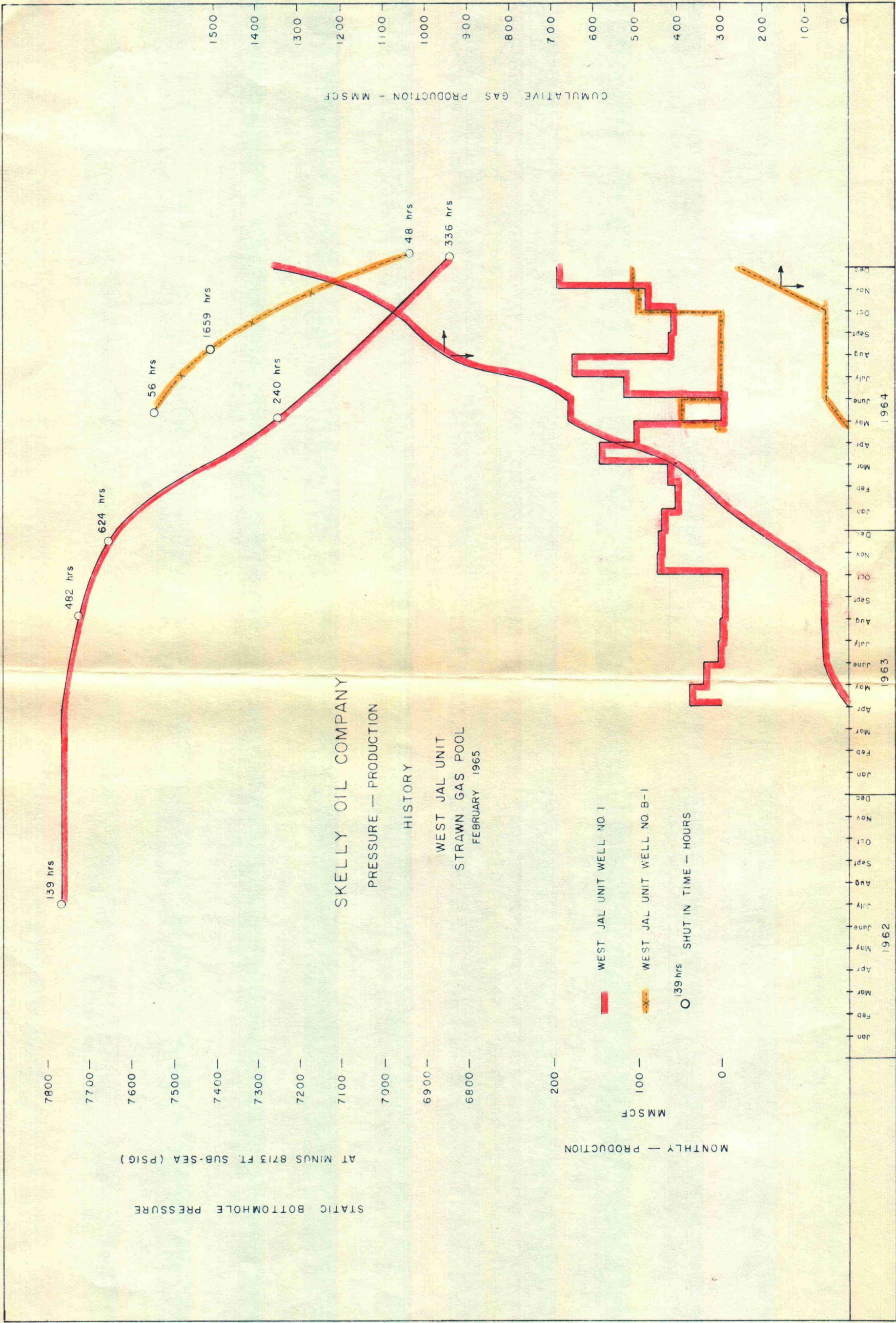
GAS IN PLACE

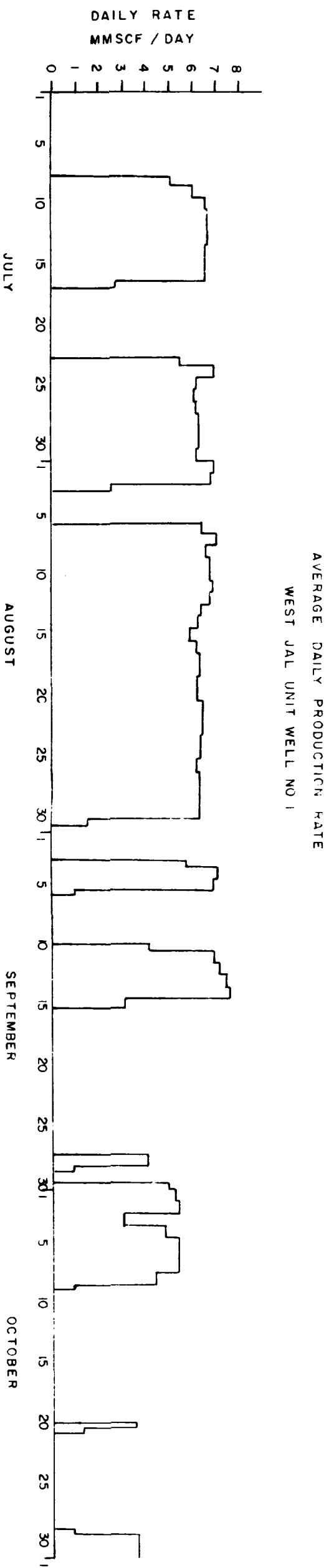
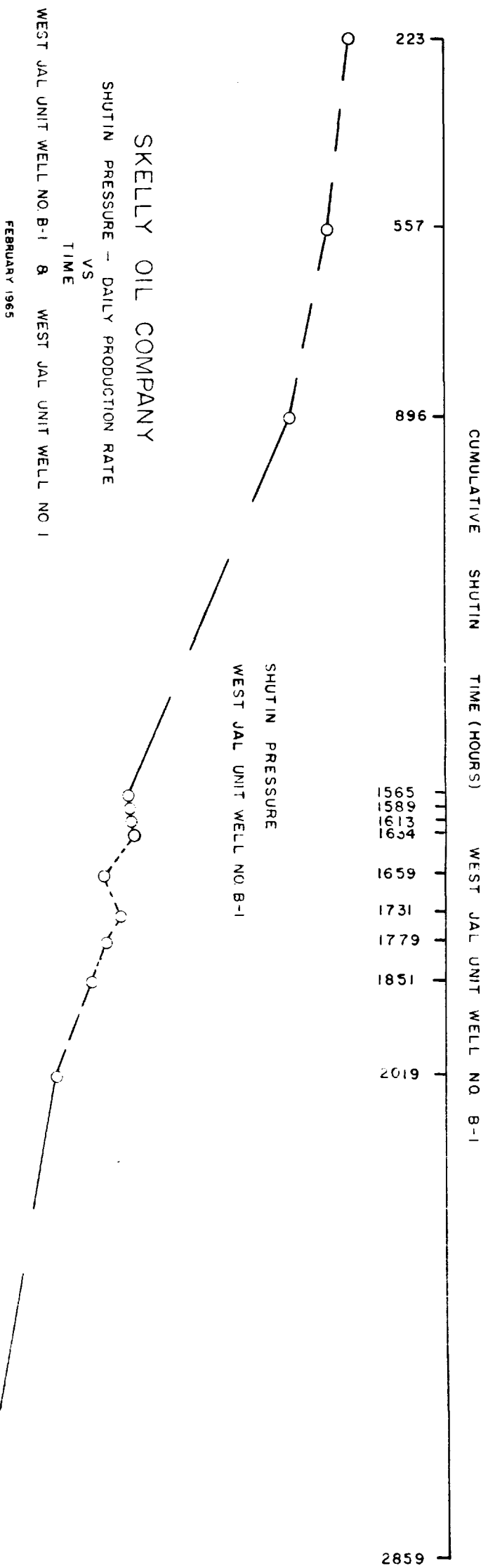
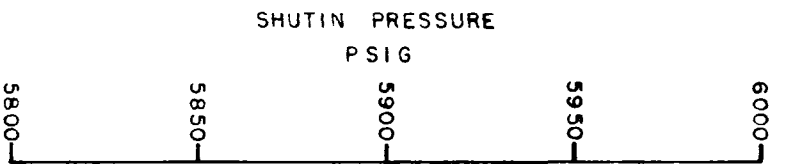
$$N = M \left(\frac{P_1}{Z_1} \right)$$
$$= 5.26 \left(\frac{7776}{1.235} \right)$$
$$= 33,100 \text{ MMSCF}$$

GAS RECOVERABLE

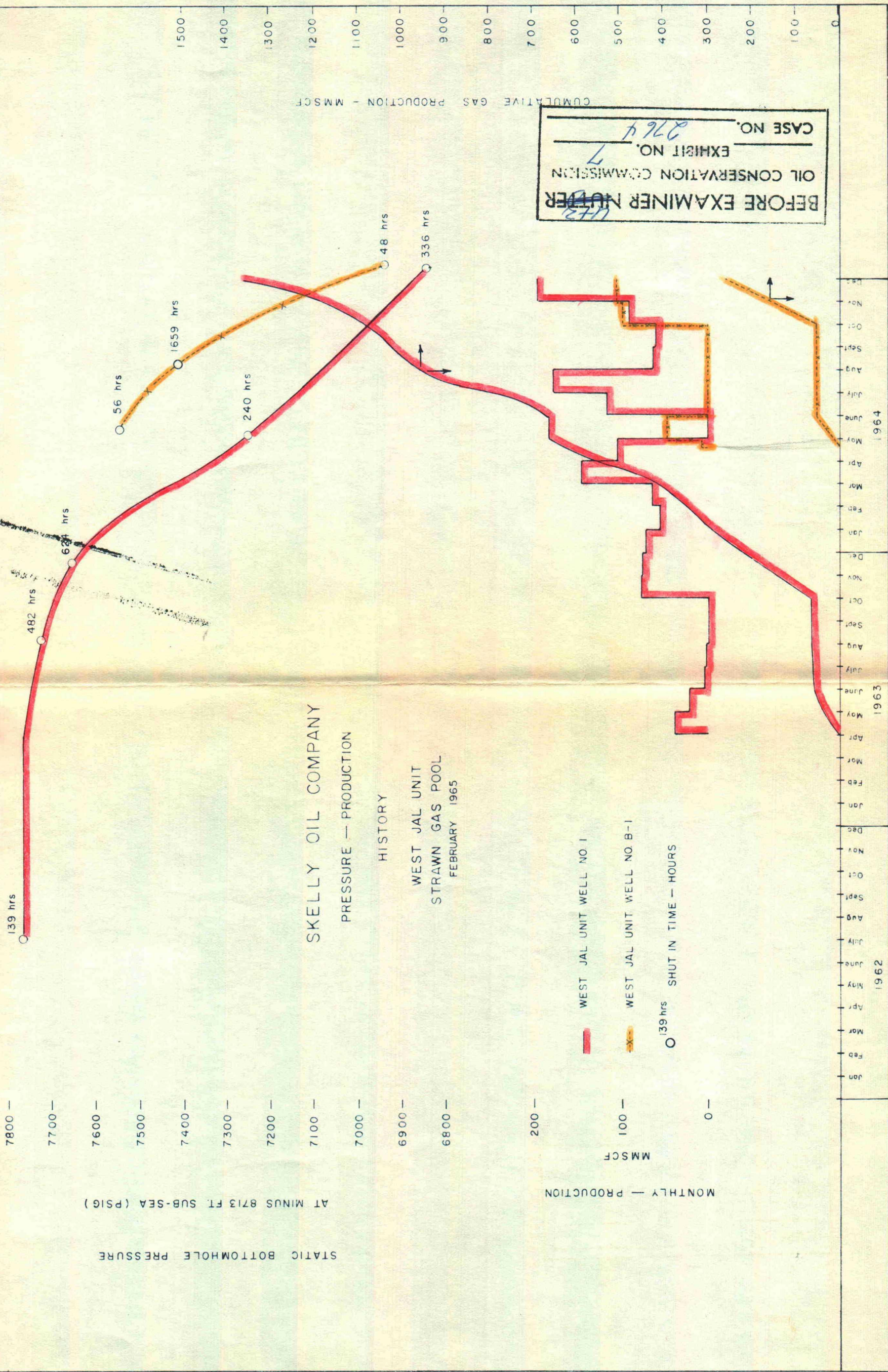
$$N_r = M \left(\frac{P_1}{Z_1} - \frac{P_o}{Z_o} \right)$$
$$= 5.26 \left(\frac{7776}{1.235} - \frac{1013}{0.927} \right) = 5.26 (5.20) \times 10^3$$
$$= 27,400 \text{ MMSCF}$$

CUMULATIVE WET GAS PRODUCTION MMSCF





BEFORE EXAMINER NUMBER 443
 OIL CONSERVATION COMMISSION
 EXHIBIT NO. 7
 CASE NO. 2764

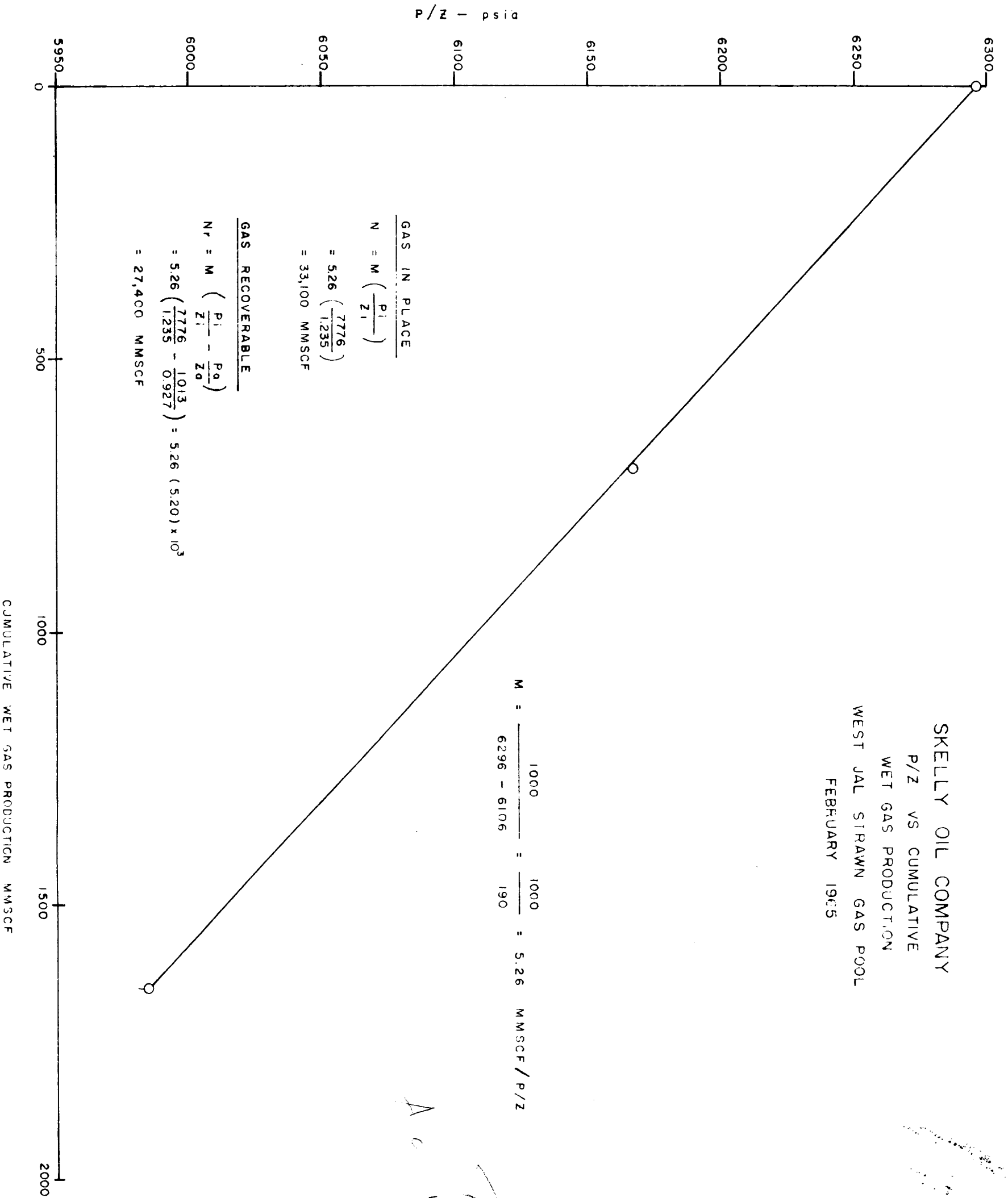


SKELLY OIL COMPANY

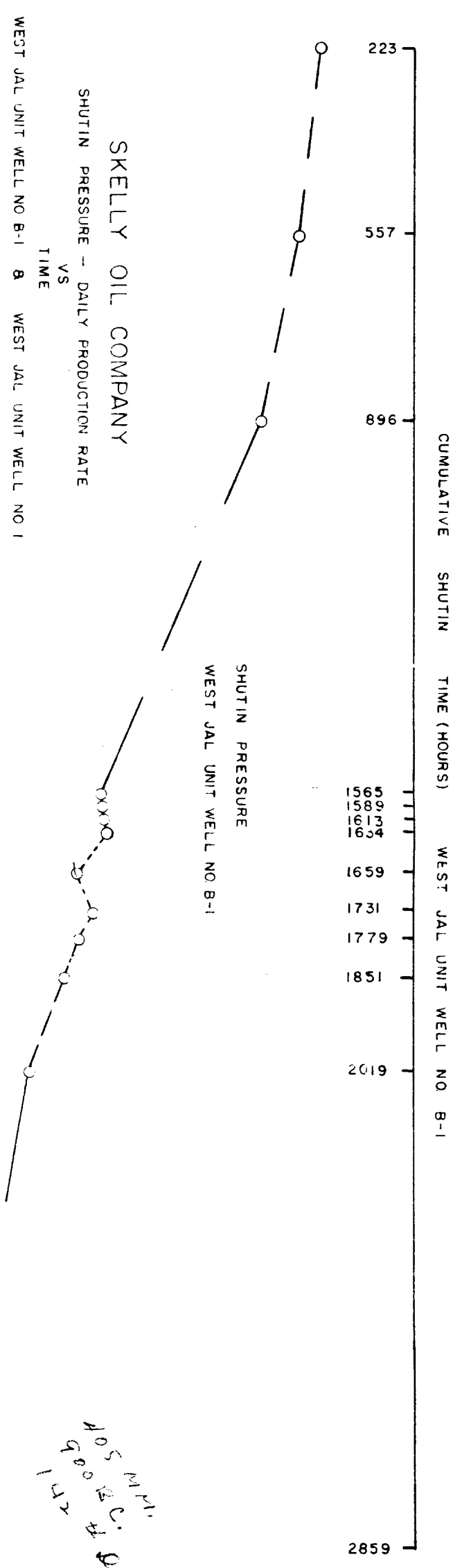
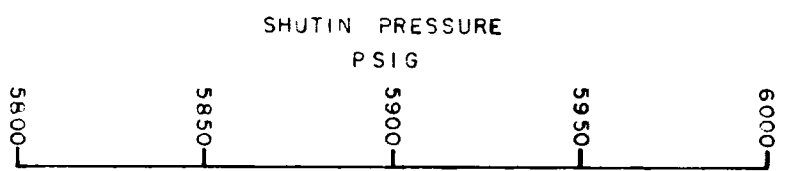
P/Z VS CUMULATIVE
WET GAS PRODUCTION

WEST JAL STRAWN GAS POOL

FEBRUARY 1965



478
BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 8
CASE NO. 2764

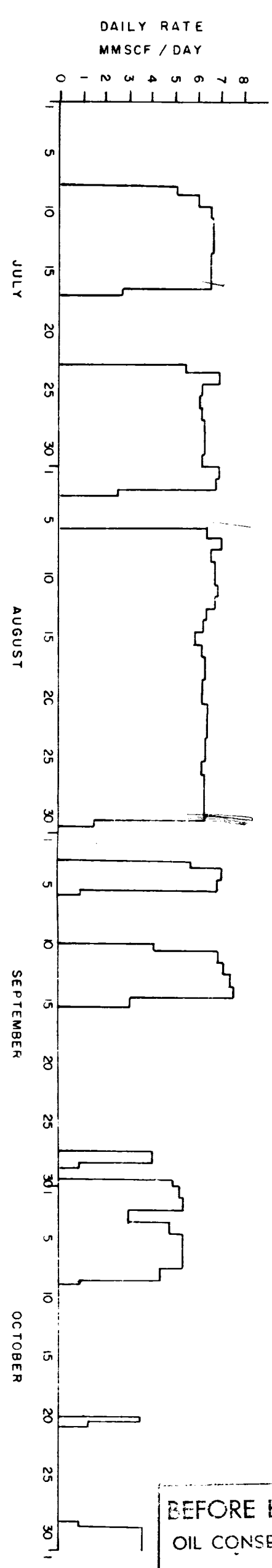


405 W. 111.
400 E. C. 4
1577

SKELLY OIL COMPANY
SHUTIN PRESSURE - DAILY PRODUCTION RATE
VS
TIME

WEST JAL UNIT WELL NO B-1 & WEST JAL UNIT WELL NO 1
FEBRUARY 1965

AVERAGE DAILY PRODUCTION RATE
WEST JAL UNIT WELL NO 1



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BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 9
CASE NO. 2764

1964