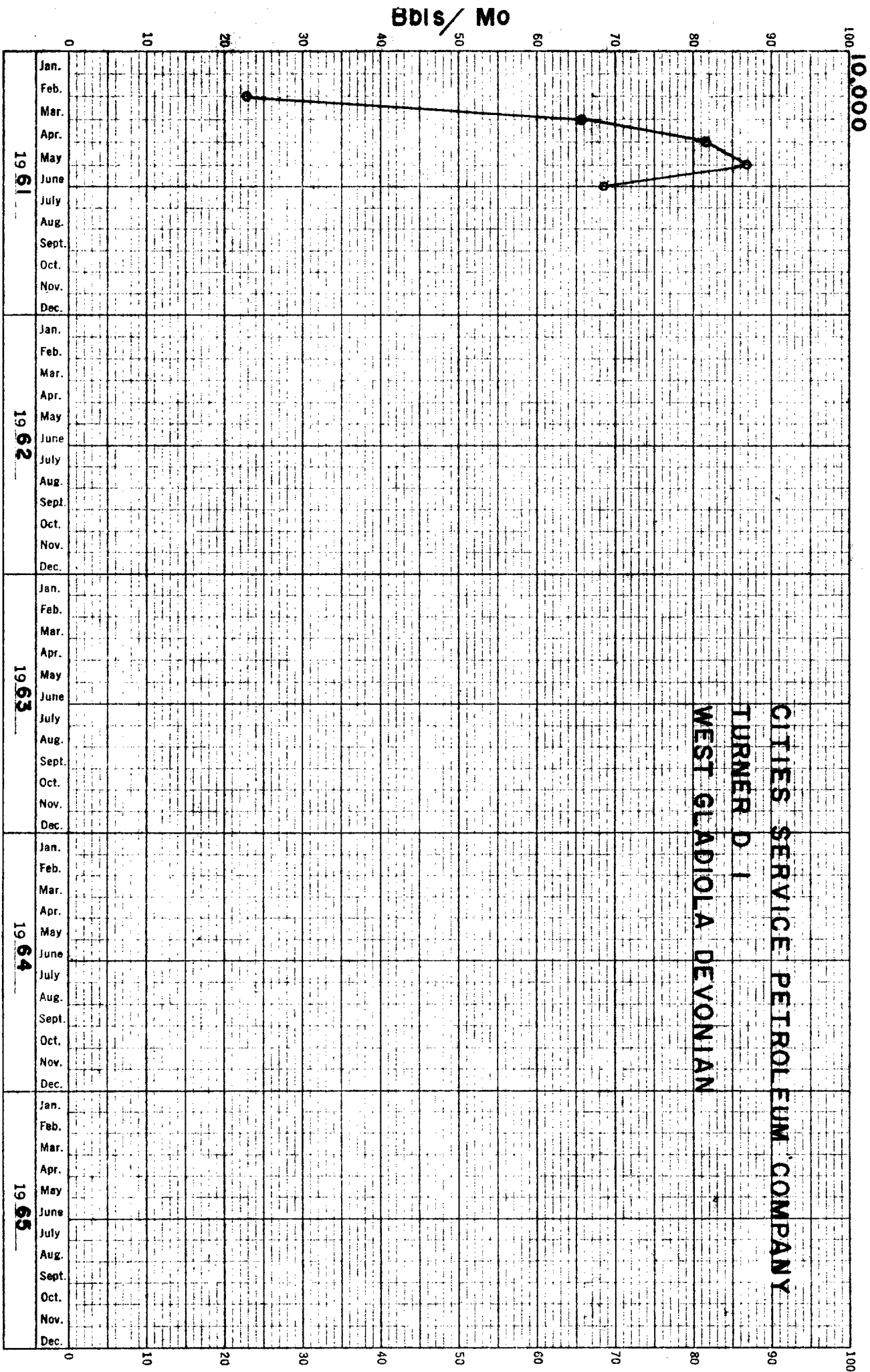


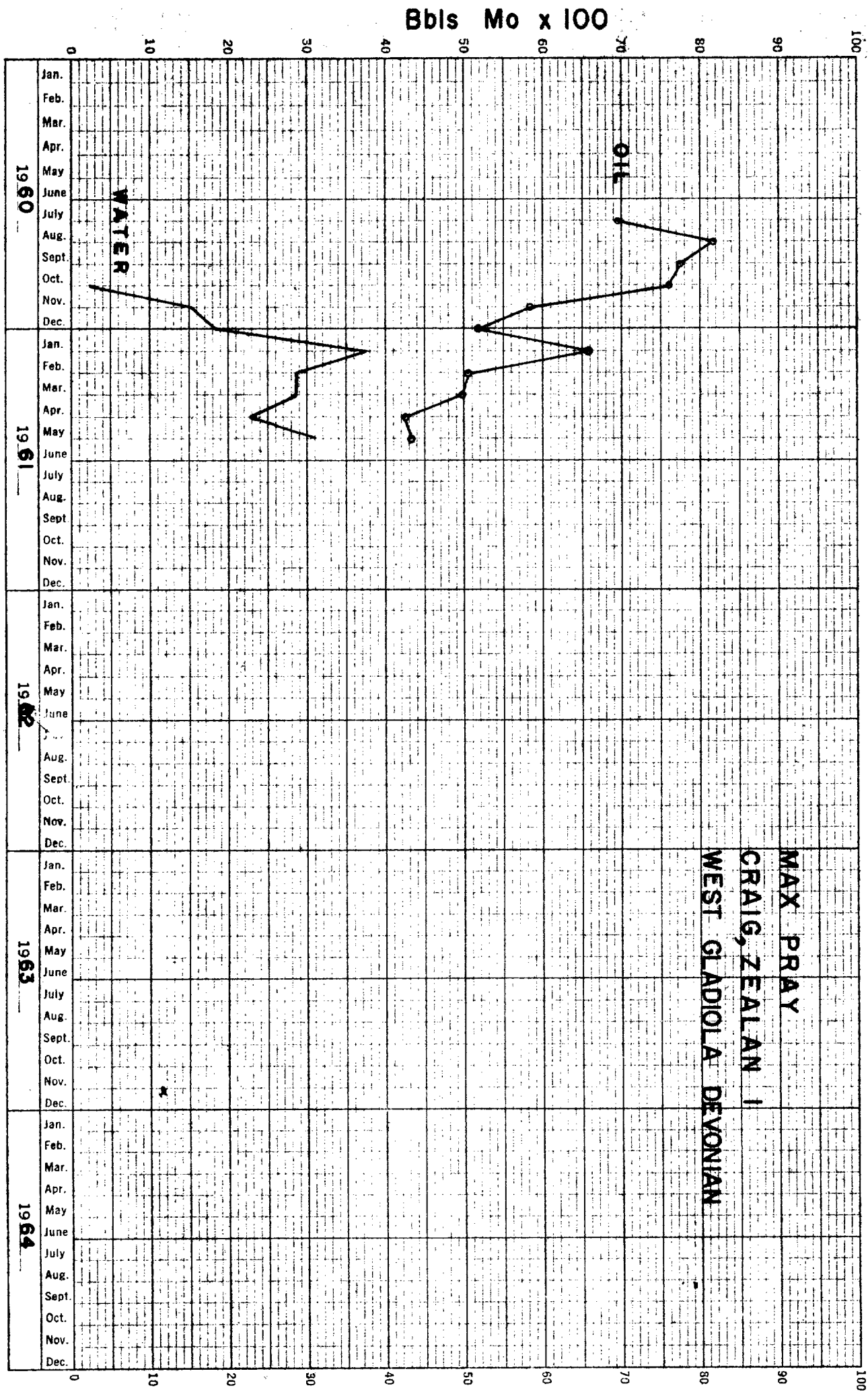
(1)	Q - PRODUCING RATE, BPD,	303	
(2)	U - VISCOSITY, CENT,	600	
(3)	B - FVF	1.07	
(4)	M - SLOPE OF B-U CURVE, PSI/CYCLE	3.9	
(5)	H - THICKNESS OF PRODUCING ZONE, FEET,	25	
(6)	K - PERM., MD. = $162.5 Q U B / M H$	324	X
(7)	P ₁ - PRESSURE ON SLOPE @ 1 HOUR, PSI,	4528	
(8)	P ₂ - PRESSURE @ 1 SEC. = (P ₁ - 3.56 M)	4514	
(9)	P _F - FLOWING PRESSURE, PSI,	4104	
(10)	$2.302(P_2 - P_F) / M$	2.41	
(11)	R _w - RADIUS OF DRILLED HOLE, INCHES,	3.938	
(12)	F - POROSITY, FRACTION, (ESTIMATE)	.04	
(13)	C - COMPRESS., VOL/VOL/PSI X 10 ⁶	.13 x 10 ⁶	
(14)	$2.30 \log_{10} \left\{ \frac{10.5 K}{F C U R_w R_w} \right\} + 0.8$	-5.75	
(15)	S - SKIN, DIMENSIONLESS, = $[(10) - (14)] / 2$	123	X
(16)	ΔP _s - PRESS. DROP DUE TO SKIN = (.868 M S)	415	
(17)	P _F [*] - FLOWING PRESS. W/NO SKIN = (P _F + ΔP _s)	4519	
(18)	P _E - FINAL PRESSURE, PSI,	4547	
(19)	(P _E - P ₁)	19	
(20)	ΔP̄ = $1.151(P_E - P_1) / M$	5.61	
(21)	T̄ - DIMENSIONLESS TIME @ 1 HOUR (FIG.1)	4.5 x 10 ⁻⁵	
(22)	FR _E ² = $264 K / U C T̄$	2.44 x 10 ⁻⁴	
(23)	(P _E - P _F [*])	28	
(24)	LOG ₁₀ R̄ = (23) / 2 M	3.59	
(25)	R̄ - DRAINAGE RADIUS/RADIUS DRILLED HOLE	3900	
(26)	R _E - DRAINAGE RADIUS, FT. = (25) X R _w /12	1280	1280
(27)	F - POROSITY, FRACTION, = (22)/(26)(26)	.015	
(28)	PI - PRODUCTIVITY INDEX = $Q / (P_E - P_F)$	.683	
(29)	PI* - PI W/NO SKIN = $Q / (P_E - P_F^*)$	10.82	X
(30)	E - COMPLETION EFFICIENCY = 100 X (28)/(29)	6.31%	

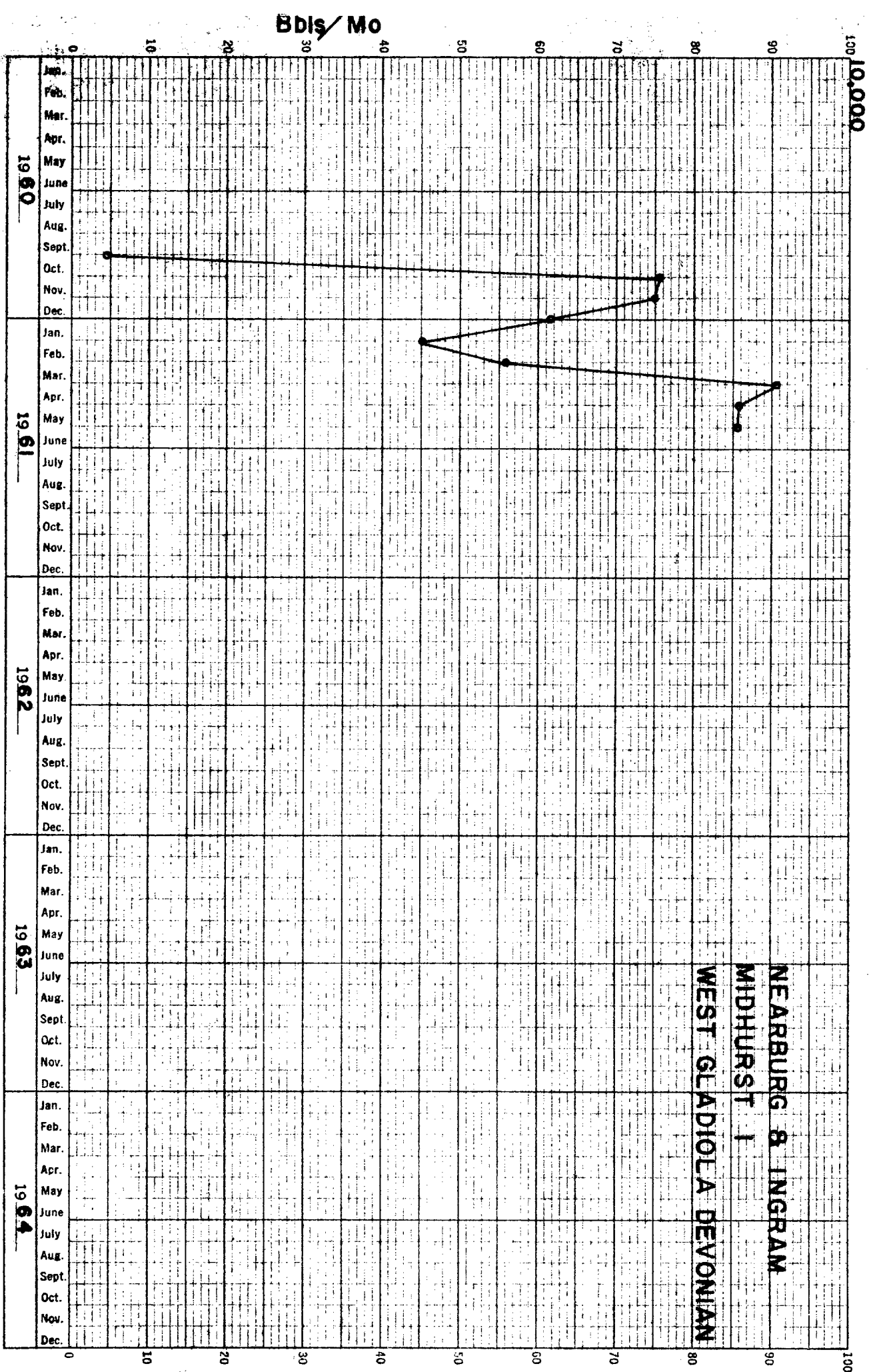
PRESSURE BUILDUP CALCULATIONS

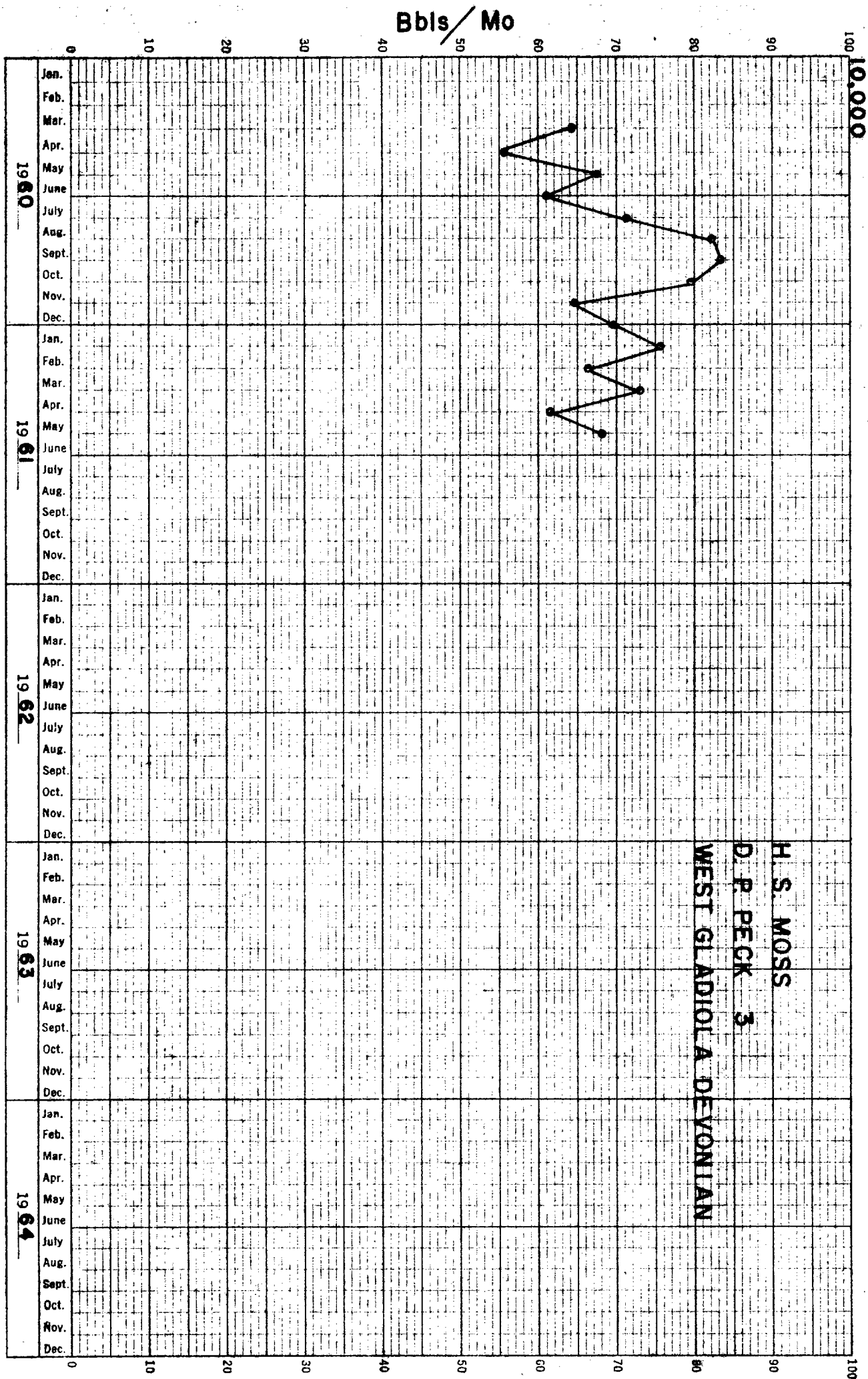
FIELD S. W. Gladiola WELL Cities Service Petroleum Co. - Turner D #1

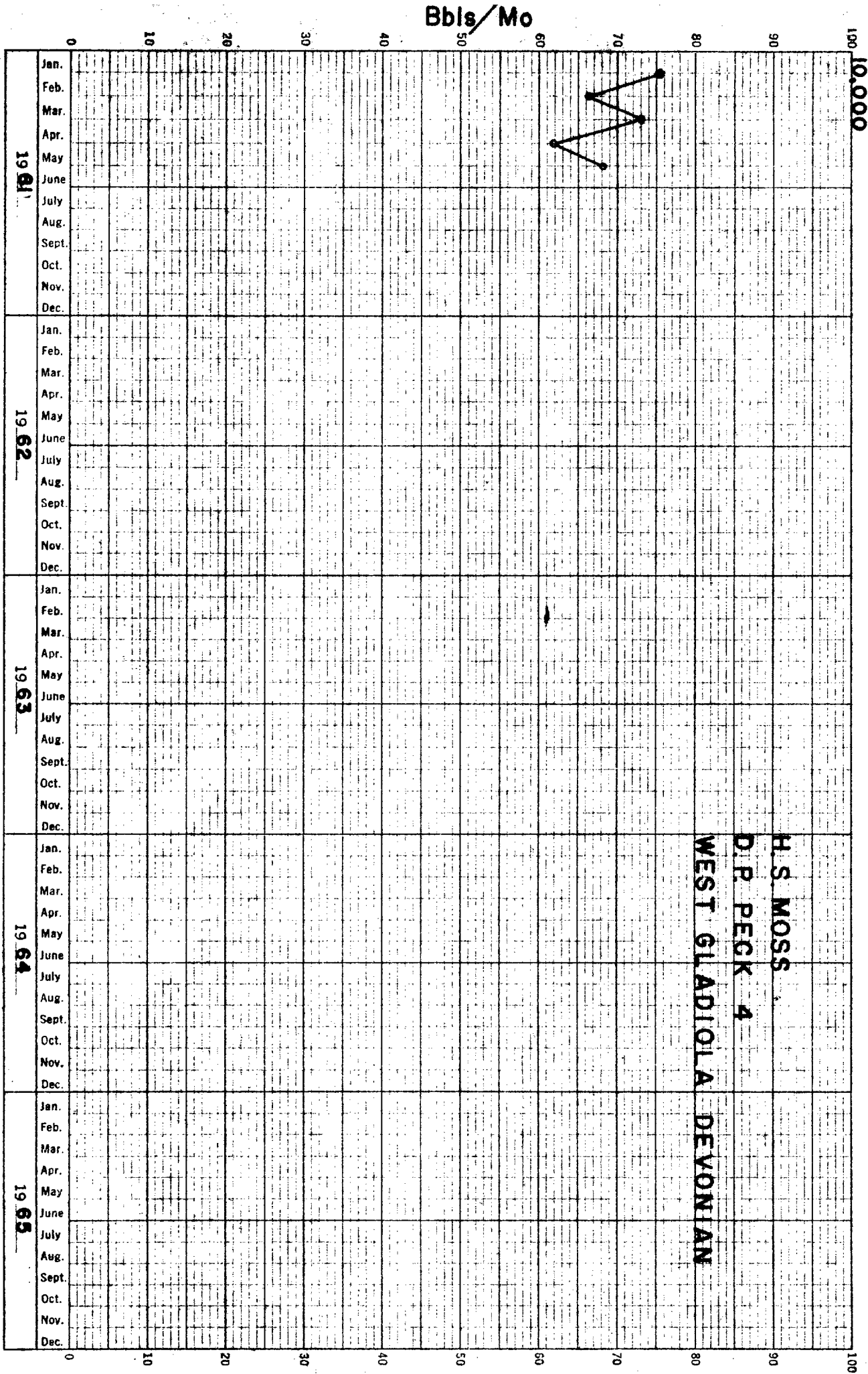
FORMATION Devonian PRODUCING INTERVAL 12263-12288



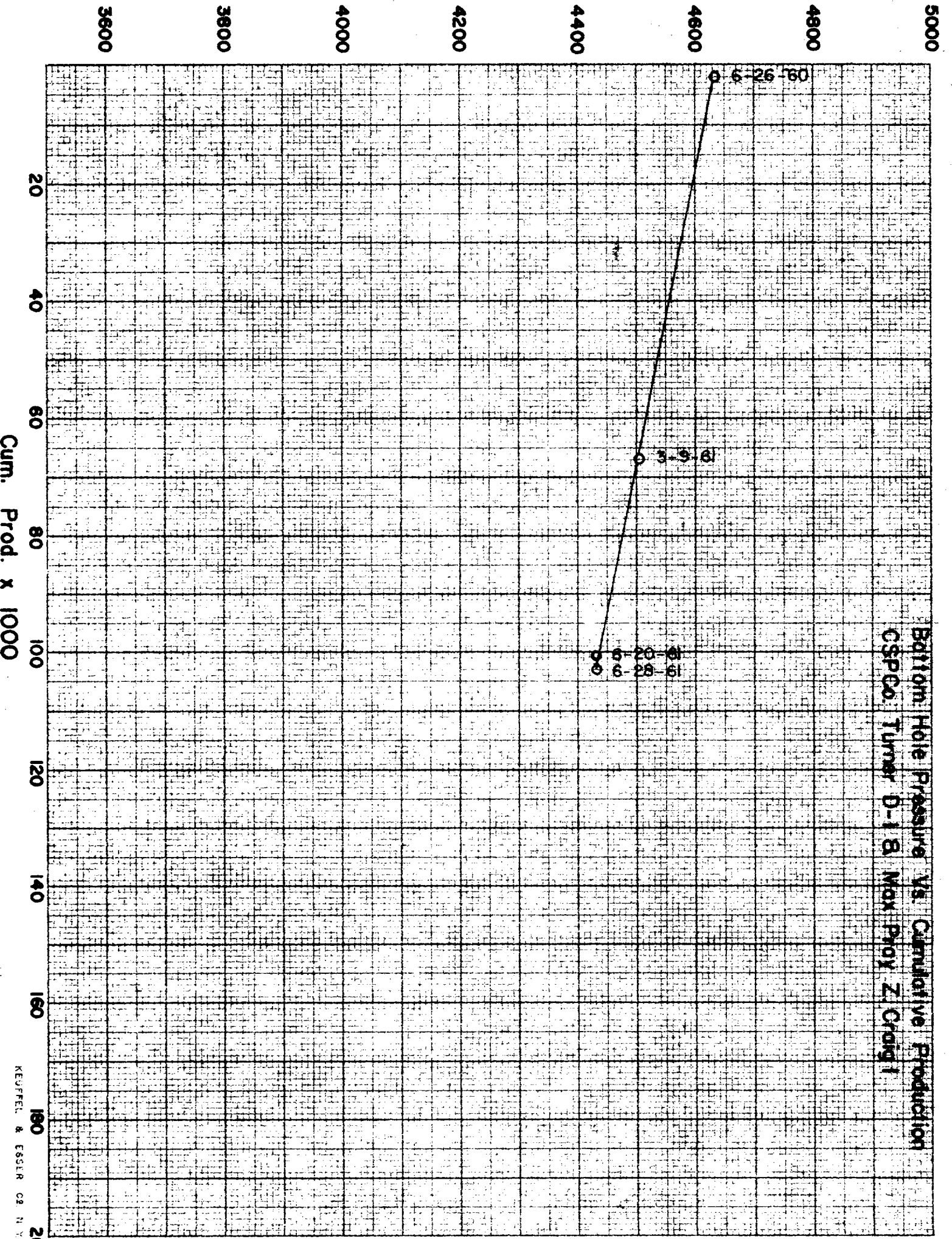








Bottom Hole Pressure Vs. Cumulative Production
 CSPCO, Turner D-1 B, Max Proj Z, Crdig 1



LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS

SIMULTANEOUS



Gamma Ray-Neutron

COUNTY LEA FIELD or LOCATION UNDESIGNATED WELL KEATING # 1 COMPANY NEARBURG AND INGRAM	COMPANY NEARBURG AND INGRAM	Other Surveys IES, MLL
	WELL KEATING # 1	Location of Well 1830' FROM N/L 660' FROM E/L
	FIELD UNDESIGNATED	OIL CONSERVATION COMMISSION BEFORE THE SANTA FE NEW MEXICO EXHIBIT No. 2735
	LOCATION SEC. 34-12S-37E	Elevation: D.F.: 464 K.B.: 3906 or G.L.: 3892
	COUNTY LEA	FILING No.
	STATE NEW MEXICO	

Log Depths Measured From KB 14 Ft. above GL

RUN NO.	ONE	
Date	2-26-61	
First Reading	12262	
Last Reading	0	
Footage Measured	12262	
Max. Depth Reached	12263	
Bottom Driller	12261	
Maximum Temp. °F.	161	
Fluid Nature	GEL, CAUSTIC, QUEBRACHO, SODA ASH	
Fluid Level	58	
Casing Size	8 5/8 in.	in.
Casing Weight	lb. SURF to 4495	lb. to
Casing Size	13 3/8 in. SURF 402	in.
Casing Weight	lb. to	lb. to
Bit Size	7 7/8 in. 4495 to TD	in. to
Bit Size	in. to	in. to
No. Counters Used	SCINT, GR-GM NEU.	
Type Equipment	GNT G	
Type Panel	GNP-C	
Opr. Rig Time	5 HOURS	
Truck No.	2526-HQBBS	
Observer	SCHAEFFER	
Witness	INGRAM	

FOR N HERE

SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS

SIMULTANEOUS



Gamma Ray-Neutron

COUNTY LEA FIELD or LOCATION GLADIOLA WELL MIDHURST # 2 COMPANY NEARBURG AND INGRAM	COMPANY NEARBURG AND	Other Surveys
	INGRAM	IES, ML
	WELL MIDHURST # 2	Location of Well
	FIELD GLADIOLA	FROM N/L
	LOCATION SEC. 35-12S-37E	W/L
COUNTY LEA	STATE NEW MEXICO	Elevation: D.F.: J.C. K.B.: 3894 or G.L.: 3880
		FILING No. 2135

Log Depths Measured From KB 14 Ft. above GL

RUN NO.	ONE	
Date	5-3-61	
First Reading	12219	
Last Reading	0	
Footage Measured	12219	
Max. Depth Reached	12220	
Bottom Driller	12225	
Maximum Temp. °F.	160°F	
Fluid Nature	CHEM GEL	
Fluid Level	78	
Casing Size	8 5/8in.	in.)
Casing Weight	lb. SURF to 4492	lb. } to
Casing Size	13 3/8in.	in.)
Casing Weight	lb. SURF to 412	lb. } to
Bit Size	7 7/8in. CSG to TD	in. } to
Bit Size	in. to	in. } to
No. Counters Used	SCINTILLATION	
Type Equipment	GNI-G	
Type Panel	GNP-C	
Opr. Rig Time	8 HOURS	
Truck No.	2527-HOBBS	
Observer	ROUSH	
Witness	INGRAM	