NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 4-30-82	
Company: MGF Oil Corporation			Connection		
Pool			Formation: SEVEN RIVERS		Unit
Completion Date: 4-1-82	Total Depth: 3,200		Plug Back TD	Elevation: 3588	Farm or Lease Name: J. Wright
Csg. Size: 4½" / Wt.: 10.5# / d: 4.052 / Set At: 3200			Perforations: From 3004 To 3121		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: 1.995 / Set At: 2923			Perforations: From OPENENDED To		Unit: D / Sec.: 5 / Twp.: 20S / Rge.: 39E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 2923		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 85 @ 3064'	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3064	3064	.7792	.206	26.55		2"		

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						1552		1426		
1.	2	x 1/8"			64°	1440	66°	1135		
2.	2	x 7/32"			64	1130	67	934		
3.	2	x 1/4"			61	942	62	710		
4.	2	x 5/16"			59	714	60			
5.										

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	.2648		1439.2	.9943	1.133	1.108	476
2	.8393		1148.2	.9933	1.133	1.090	1182
3	1.087		947.2	.9981	1.133	1.078	1255
4	1.672		723.2	1.000	1.133	1.061	1454
5							

NO.	P_t	Temp. °R	T_r	Z
1	2.29	526	1.52	.814
2	1.85	527	1.52	.841
3	1.52	522	1.51	.860
4	1.16	520	1.50	.888
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas .7792 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 622 P.S.I.A. _____ P.S.I.A.
Critical Temperature 346 R _____ R

P_c 1565 P_c^2 2449.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1450	2102.5	346.7
2		1151	1324.8	1124.4
3		1009	1018	1431.2
4		797	635.2	1814
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.35017$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.23249$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1792$

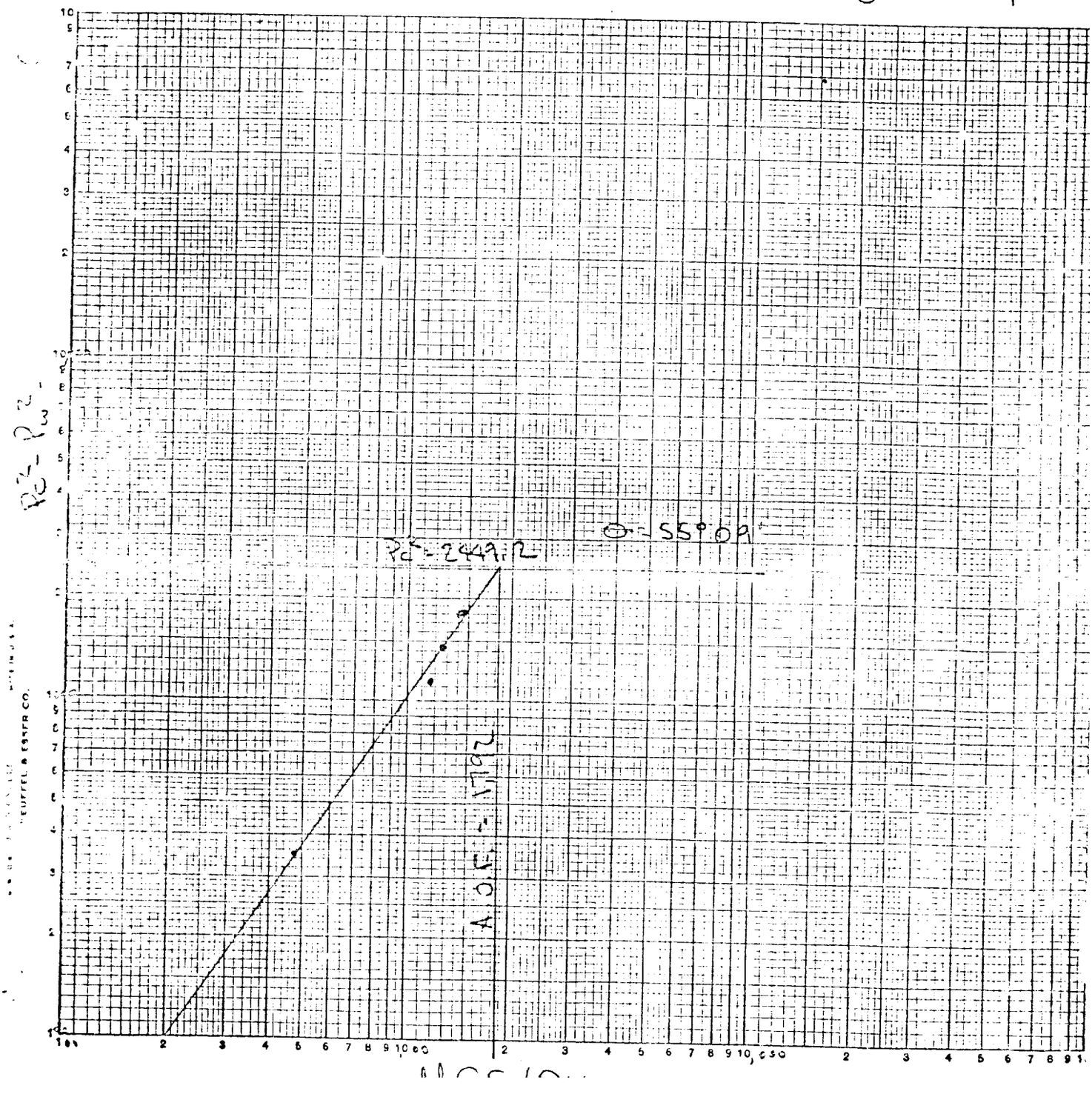
Absolute Open Flow 1,792 Mcfd @ 15.025 Angle of Slope θ 55° 09' Slope, n .69626

Remarks: Calculated from known bottom hole pressures.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	R.W.	M.K.	M.K.

MGF OIL CORPORATION J. WRIGHT NO. 1 APRIL 30, 1982

$Q_1 = 1600 = \text{LOG } 3.20412$.
$Q_2 = 322 = \text{LOG } 2.50786$
$.69626 = \theta = 55°09'$ $1,454\left(\frac{2449.2}{1814}\right) \cdot .69626 = 1,792$.



WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_w) FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_s)

Form C-122P
Adopted 9-1-65

COMPANY MGF oil Corp LEASE J. wright WELL NO. 1 DATE 4-30-82

LOCATION: Unit D Section 5 Township 20S Range 39E

L 3064 H 3064 L/H 1.000 G .7792 % CO_2 .206 % N_2 26.55 % H_2S —

GH 2387 P_{ct} 622 (TABLE IX & X) T_{ct} 346. (TABLE IX & X)

S.I. 1 2 3 4

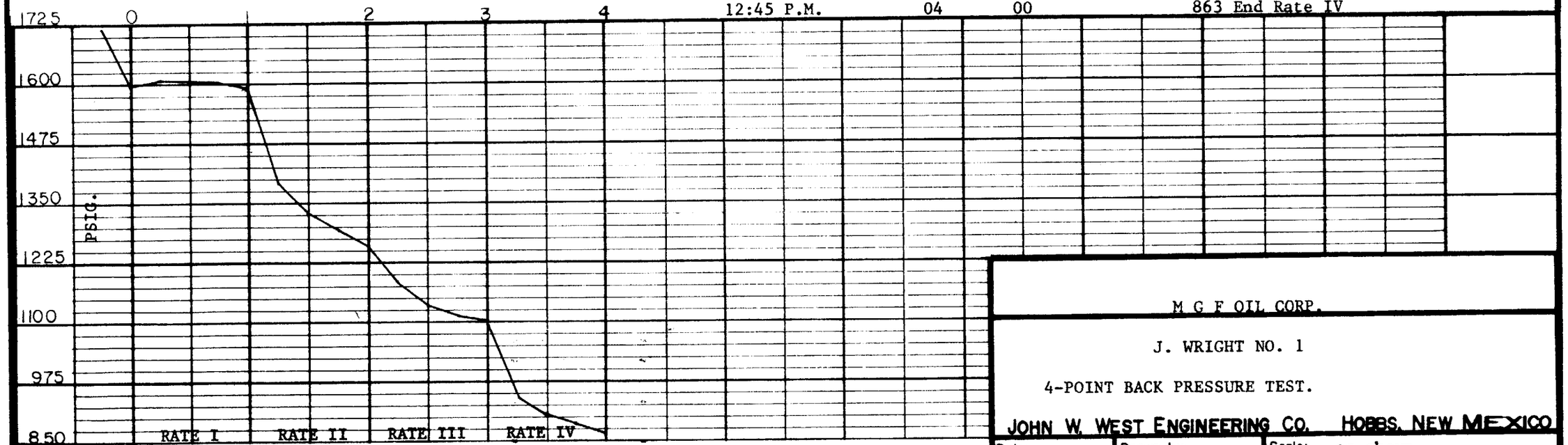
LINE		1	2	3	4	5	6	7	8
1	T_w (W.H. °R)	526	527	522	522	520			
2	T_s (B.H. °R)	545.	545	545	545.	545			
3	$T = (\frac{T_w + T_s}{2})$	535.5	536.	533.5	533.5	532.5			
4	$\bar{z}$ (Est.)	.812	.820	.842	.856	.883			
5	$T\bar{z}$	434.826	439.52	449.21	456.676	470.198			
6	GH/T$\bar{z}$	5.49063	5.43199	5.31485	5.22792	5.0775			
7	e^{s} (Table XIII)	1.228628	1.2259	1.27055	1.21658	1.20974			
8	P_f or P_s	1734.2	1605.2	1271.2	1113.2	876.7			
9	P_f^2 or P_s^2	3007.4	2577	1616	1239.2	767.7			
10	$P_c^2 - P_f^2/e^s$ or $P_w^2 = P_s^2/e^s$	2447.8	2101.8	1323.9	1018.6	634.62			
11	P_c or P_w	1565	1450	1151	1009	797			
12	$P = \frac{P_w + P_s}{2}$ or $(\frac{P_c + P_f}{2})$	1649.6	1527.6	1211.1	1061.1	836.6			
13	$P_r = (P/P_{ct})$	2.65	2.46	1.95	1.71	1.34			
14	$T_r = (T/T_{ct})$	1.55	1.55	1.54	1.54	1.54			
15	Z (Table XI)	.812	.820	.842	.856	.883			

TEST DATE: APRIL 30, 1982
TEST DEPTH:

ELEMENT NO: 18054
RANGE: 0-3500 psi
CLOCK NO: RPG-3
RANGE: 0-72 Hrs.

TEST CONDUCTED BY:
JOHN WEST ENGINEERING COMPANY

DATE	TIME	CUM HRS./MIN.	PSIG @ 3064 FEET
4-30-82	8:30 A.M.		1721 gauge reached 3064'
	8:45 A.M.	00 Hrs. 00 Min.	1599 Open Choke, Begin Test.
	9:00 A.M.	00 15	1608
	9:15 A.M.	00 30	1602
	9:30 A.M.	00 45	1601
	9:45 A.M.	01 00	1592 End Rate I
	10:00 A.M.	01 15	1397
	10:15 A.M.	01 30	1326
	10:30 A.M.	01 45	1292
	10:45 A.M.	02 00	1258 End Rate II
	11:00 A.M.	02 15	1178
	11:15 A.M.	02 30	1132
	11:30 A.M.	02 45	1112
	11:45 A.M.	03 00	1100 End Rate III
	12:00 Noon	03 15	944
	12:15 P.M.	03 30	903
	12:30 P.M.	03 45	884
	12:45 P.M.	04 00	863 End Rate IV



M G F OIL CORP.

J. WRIGHT NO. 1

4-POINT BACK PRESSURE TEST.

JOHN W. WEST ENGINEERING CO. HOBBS, NEW MEXICO

Date: 5-4-82 Drawn by: bem Scale: as shown

JOHN W. WEST ENGINEERING COMPANY
412 NORTH DAL PASO, HOBBS, NEW MEXICO

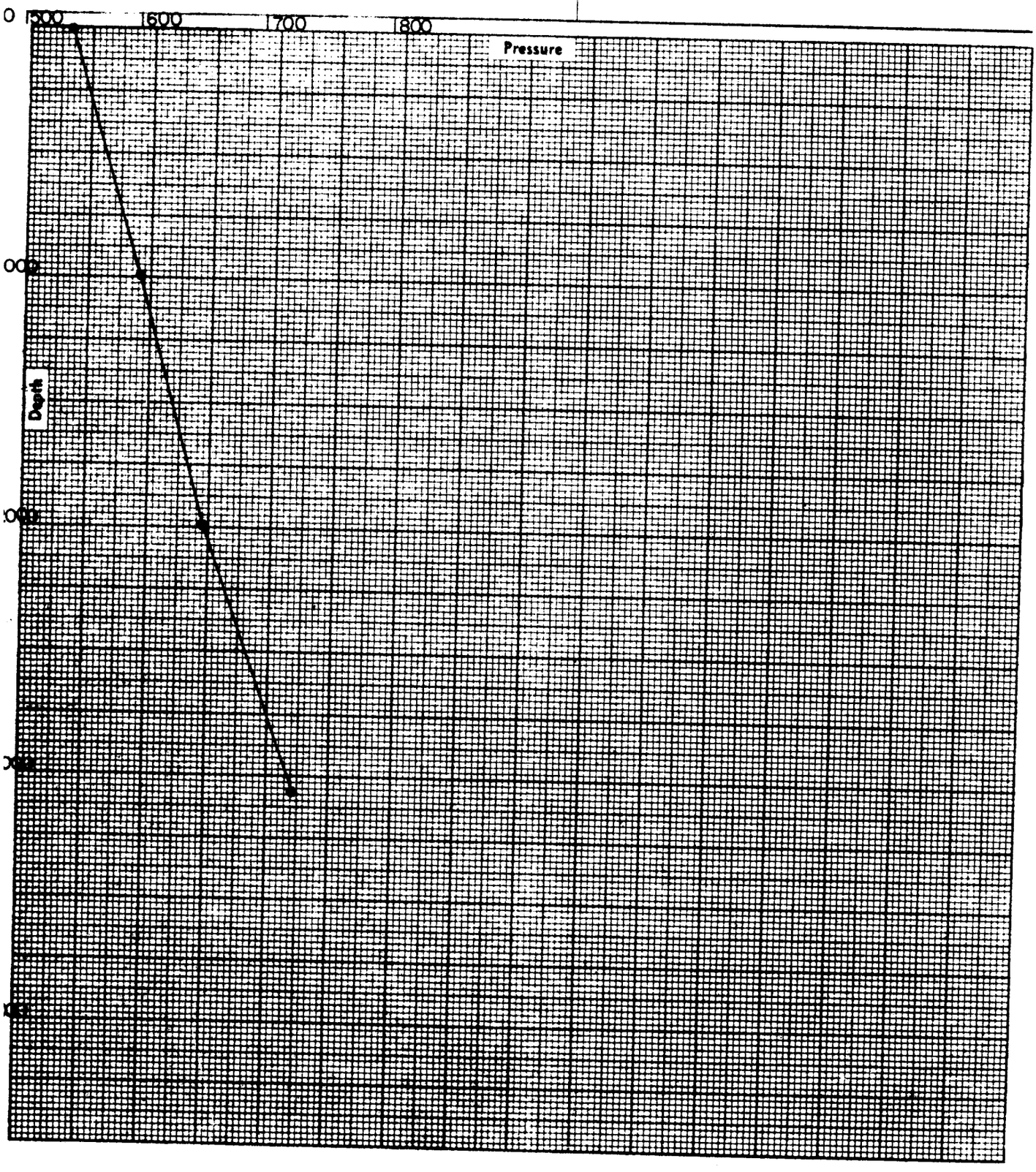
TELEPHONES 393-3942
393-3117

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR M G F OIL CORPORATION
LEASE J. WRIGHT
WELL NO. 1
FIELD
DATE 4-30-82 TIME

STATUS Shut-In TEST DEPTH 3064'
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 1535 BHP CHANGE
ELEV. FLUID TOP
DATUM WATER TOP
TEMP RUN BY Rusty Weaver
CLOCK NO. RPG-3 GAUGE NO. 19389
ELEMENT NO. 18054 (0-3500 psi)

DEPTH	PRESSURE	GRADIENT
000	1535	
1000	1592	.057
2000	1645	.053
2500	1675	.060
3064	1721	.082



NEW-TEX LAB
PHONE 505/393-3561 • P. O. BOX 1161 • 611 W. SNYDER • HOBBS, NEW MEXICO 88240

ANALYSIS CERTIFICATE

CLIENT:
ADDRESS:
CITY, STATE:

SAMPLE IDENT:
SAMPLING FROM:

ANALYSIS NUMBER :
DATE OF RUN :
DATE SECURED :

NITROGEN		
CARBON DIOXIDE		
METHANE		
ETHANE		
PROPANE		
ISO-BUTANE		
NORMAL BUTANE		
ISO-PENTANE		
NORMAL PENTANE		
HEXANES		
HEPTANES PLUS		
TOTAL		

PROPANE GPM:
ETHANE GPM:

SPECIFIC GRAV (CALC):
MOLE WEIGHT:

BTU-BTU/CU FT

ANALYZED BY: DEANE SIMPSON

APPROVED BY