

Submit in duplicate to
appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacific
Santa Fe, NM 87505

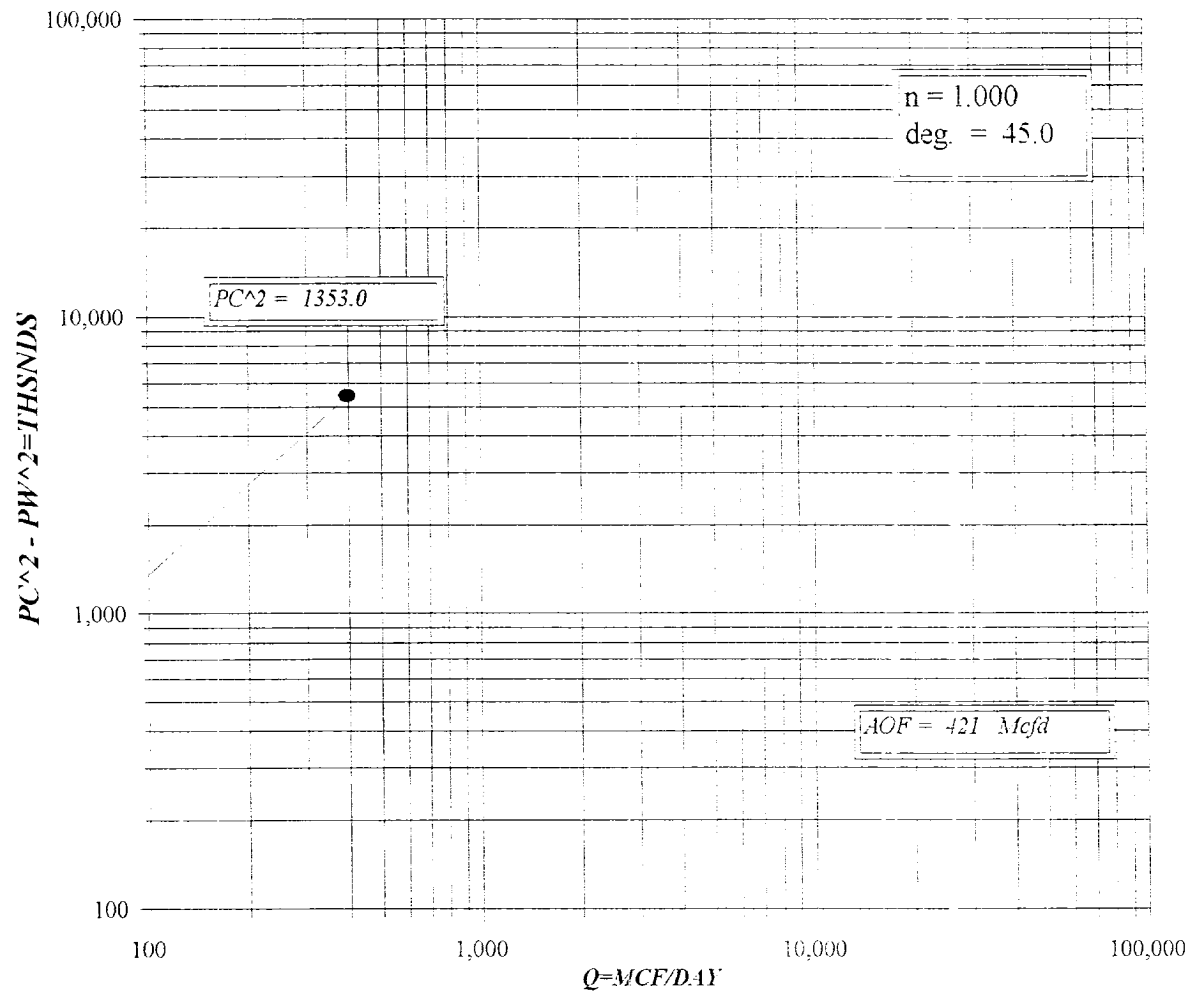
Form C-122
Revised October, 1999

4/5F

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL /				Lease or Unit Name LIBERTY 36 ST. COM.			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5/14/02		Well No. 1Y	
Completion Date 3/8/02		Total Depth 11815		Plug Back TD 11693		Elevation 3230	
Csg. Size 5 1/2		Wt. 17		d 4.892		Set At 11815	
Tbg. Size 2 7/8		Wt. 6.5		d 2.441		Set At 11215	
Perforations: From: 11310 To: 11450				County EDDY			
Perforations: From: To:				Pool BURTON FLATS			
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11206		Formation MORROW	
Producing Thru Tubing		Reservoir Temp. °F 186		Mean Annual Temp. °F 60		Baro. Press. - P ₁ 13.2	
Connection SALES							
L 11215	H 11215	Gg 0.586	%CO ₂ 1.048	%N ₂ 1.347	%H ₂ S N/A	Prover N/A	Meter Run 3.067
Taps FLG							
FLOW DATA				TUBING DATA		CASING DATA	
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp. °F	Press p.s.i.g.	Temp. °F
SI							
1	3.067 X 1.250		480	47	62	490	
2							
3							
4							
5							
RATE OF FLOW CALCULATIONS							
No.	COEFFICIENT (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}	Rate of Flow Q, Mcfd
1							402
2							
3	TOTAL	FLOW	METER				
4							
5							
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 134.000 Mcf bbl.		
1					A.P. I. Gravity of Liquid Hydrocarbons 52 @ 60 Deg.		
2					Specific Gravity Separator Gas 0.586 XXXXXXXX		
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid XXXXXX GMIX= .609		
4					Critical Pressure 675 P.S.I.A. 674 P.S.I.A.		
5					Critical Temperature 346 R. 354 R		
P _c 1163.2 P _{c2} 1353							
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.047$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.047$		
1		505.6	255.6	5452.7			
2							
3							
4							
5							
Absolute Open Flow 421				Mcf/d @ 15.025		Angle of Slope (°): 45	
						Slope n: 1	
Remarks: * WELL MADE 3 BBLs OF 52 API GRAVITY CONDENSATE DURING TEST.							
Approved By Division:		Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: BM	

MEWBOURNE OIL CO.
LIBERTY "36" ST. COM #1Y



COMPANY		MEWBOURNE OIL		LEASE		LIBERTY 36 ST. COM		WELL NO		V1		Pc = 1389.2		Pc2 = 5708.3	
UNIT				SECTION		36		TOWNSHIP		20S		Pc1 = 253.2		Pw = 505.6	
L		11215		H		11215		L/H		1		G/GMIX		0.586	
%CO2		1048		%N2		1.347		H2S				DATE		5/14/02	
d		2.441		Fr		0.010763		GH		8197.0		RANGE		28E	
=====															
VOL 1		402		PSIA 1		503.2		RESV. TEMP		136.0		Pc3-Pw2 =		-452.7	
VOL 2				PSIA 2				SHUT-IN PRESS =		1163.2		+DIV/O!		+DIV/O!	
VOL 3				PSIA 3								+DIV/O!		+DIV/O!	
VOL 4				PSIA 4								+DIV/O!		+DIV/O!	
				PCR		674									
				TCR		354									
=====															
LINE		RATE 1		RATE 2		RATE 3		RATE 4				Pc2 (Pc1-Pw2) =		1.047	
		1ST		2ND		1ST		2ND							
1 OM		0.402		0.402		0.000		0.000							
2 TW		534		534		534		534							
3 Ts		646.0		646.0		646.0		646.0				[Pc2/Pc3-Pw2] =		1.047	
4 T		590.0		590.0		590.0		590.0							
PR (est)		0.75		0.00		0.00		0.00							
5 Z(est)		0.926		0.918		#DIV/O!		#DIV/O!							
6 TZ		546.4		541.9		#DIV/O!		#DIV/O!							
7 GH/TZ		15.002		15.127		#DIV/O!		#DIV/O!							
8 eS		1.755		1.763		#DIV/O!		#DIV/O!							
9 reS		0.430		0.433		#DIV/O!		#DIV/O!							
10 Pt		503.2		503.2		0.0		0.0							
11 Pt2 /1000		253.2		253.2		0.0		0.0							
12 Fr		0.010763		0.010763		0.010763		0.010763							
13 Pc=FrTZ		5.881		5.832		#DIV/O!		#DIV/O!							
14 PcQm		2.36		2.34		#DIV/O!		#DIV/O!							
15 L/H(FcQm)2		5.6		5.5		#DIV/O!		#DIV/O!							
16 Fw		2.4046334		2.379764		#DIV/O!		#DIV/O!							
17 Pw2		255.6		255.6		#DIV/O!		#DIV/O!							
18 Ps2		448.7		450.7		#DIV/O!		#DIV/O!							
19 Ps		669.8		671.4		#DIV/O!		#DIV/O!							
20 P		586.5		587.3		#DIV/O!		#DIV/O!							
21 Pr		0.87		0.87		#DIV/O!		#DIV/O!							
22 Tr		1.67		1.67		1.67		1.67							
23 Z		0.918		0.918		#DIV/O!		#DIV/O!							
=====															
														FORM C122-D	

=====

NEW MEXICO G.O.R./G. MIX

=====

NO. OF BBLs PRODUCED = 3.0

API GRAVITY @ 60 DEG. = 52.0

.....
SPECIFIC GRAVITY OF GAS = 0.5860

XX

TOTAL GAS PRODUCED = 402

G.O.R. = 134.000

G.MIX = 0.609