

3 - NMOCD

1 - McHugh

1 - File

1 - EPNG, Clark

OIL CONSERVATION DIVISION

Form C-122
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-2-81			
Company Dugan Production Corp.				Connection					
Pool Gavilan				Formation Pictured Cliffs				Unit	
Completion Date 12-18-80		Total Depth 3745		Plug Back TD		Elevation 7336'		Farm or Lease Name McDug	
Csg. Size 4 1/2"	Wt. 10.5#	Set At 3740	Perforations: From 3654 To 3672		Well No. #1				
Tub. Size 1 1/2"	Wt. 2.4#	Set At 3641'	Perforations: From open To		Unit Sec. Twp. Rge. C 9 25N 2W				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At		County Rio Arriba	
Producing Thru tbq.		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico	
L	H	G _g .62	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI							735		781		7 days
1.	1/2" pos. choke						41	58°	242		3 hrs.
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 Fg	Super Compress. Factor, F _{pv}	Rate of Flow O, Mcfd
1	5.4315		53	1.002	.9837	1.00	283.74
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas	XXXXXXXXXX
3.					Specific Gravity Flowing Fluid	XXXXXX
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R

$P_c = 793$ $P_c^2 = 628849$

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		254	64516	564333
2				
3				
4				
5				

$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.11$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.09$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 310.06$

Absolute Open Flow	310	Mcf/d @ 15.025	Angle of Slope @	Slope, n	.85
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Remarks: Moderate mist during test

Approved By Division	Conducted By:	Calculated By:	Checked By:
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