

3 NMOCD

1 O'Connell

1 File

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

P. O. BOX 2088

Form C-122
Revised 10-1-78

ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-23-85		JUL 29 1985							
Company Dugan Production Corp.		Connection									
Pool South Blanco PC		Formation Pictured Cliffs		Unit Cobh							
Completion Date 7-5-85		Total Depth 3370'		Plug Back TD 3314'							
Elevation 7321' RKB		Farm or Lease Name Cobh									
Csq. Size 4-1/2"	Wt. 11.6#	Set At 3370'	Perforations: From 3233 To 3250		Well No. 1						
Tbg. Size 1-1/4"	Wt. 2.4#	Set At 1.390	Perforations: From Open End To		Unit 0						
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single Gas		Packer Set At		County Rio Arriba							
Producing Thru Tubing		Reservoir Temp. °F 62 est		Mean Annual Temp. °F							
Baro. Press. - P _a		State New Mexico									
L	H	G _g	% CO ₂	% N ₂	% H ₂ S						
Prover		Meter Run		Taps							
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							420		420		7 days
1.											
2.											
3.	1" pos. choke		3			68°			350		3 hrs
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, Fpv	Rate of Flow Q, Mcfd				
1.											
2.											
3.	5.4315		15	.9924	.9837	1.000	80				
4.											
5.											
NO.	P _r	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 _____ X X X X X X X X X						
3.					Specific Gravity Flowing Fluid _____ X X X X X						
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.						
5.					Critical Temperature _____ R _____ R						
$P_c = 432$ $P_c^2 = 186,624$											
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.3578$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^{.85} = 2.8000$						
1.											
2.											
3.		362	131,044	55,580	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 223$						
4.											
5.											
Absolute Open Flow <u>223</u> Mcfd @ 15.025 Angle of Slope <u>85</u> Slope, n <u>85</u>											
Remarks: Heavy mist water throughout test											
Approved By Division Conducted By: Brown Calculated By: Jacobs Checked By:											