

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78
OCT 22 1982

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS OIL D.

Type Test		☒ Initial		☐ Annual		☐ Special		Test Date		10-8-82		ARTESIA, OFFICE	
Company				Connection									
Mesa Petroleum Co.				Unconnected									
Pool				Formation				Unit					
Pecos Slope ABO				ABO									
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name					
10-8-82		4361'		3966'		3868'		Lodewick Fed Com					
Coq. Size	Wt.	Set At	Perforations:	Well No.									
4 1/2"	10.5#	4016'	From 3658' To 3913'	5									
Thg. Size	Wt.	Set At	Perforations:	Unit		Sec.		Twp.		Rge.			
2-3/8"	4.7#	3812'	From Open ended To	K		8		5S		25E			
Type Well - Single - Brdenhead - G.G. or G.O. Multiple				Packer Set At				County					
Single				None				Chaves					
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State					
Tubing		99° @ 4361'		60		13.2		New Mexico					
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Prover		Meter Run		Taps			
		.65	1	1		2" Critical Flow Prover							

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							940		940		72 hr. SI
1.	2" x 1"			43		36	860	77	880		1 hr.
2.	2" x 1"			75		48	725	78	790		1 hr.
3.	2" x 1"			87		54	590	78	700		1 hr.
4.	2" x 1"			94		60	425	78	525		1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	17.09	Flow Prover	56	1.024	1.24		1215
2.	"	" "	88	1.012	1.24		1887
3	"	" "	100	1.006	1.24		2131
4.	"	" "	107	1.003	1.24		2274
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
3.					Specific Gravity Flowing Fluid	X X X X X
4.					Critical Pressure	P.S.I.A.
5					Critical Temperature	R

NO.	P _c	P _w	P _c ² - P _w ²	Q
1	953	893	111	
2	908	803	263	
3		713	400	
4		538	619	
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4668$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2111$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2800$

Post ID-2
10-29-82
Camp + BK.

Absolute Open Flow 2800 Mcfd @ 15.025		Angle of Slope @ 63.5°		Slope, n .5	
Remarks: Plot of P _c ² - P _w ² vs. Q yielded a straight line with a θ greater than 63.5°. Drew 63.5° line through highest point.					
Approved By Division		Conducted By:		Calculated By:	
		James Craig		E.L. Buttross, Jr.	
				Checked By:	