

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 3-1-65

RECEIVED

Type Test: ☒ Initial ☐ Annual ☐ Special						Test Date: 3-27-76		APR 13 1976	
Company: Exxon Corporation						Connection: -		O. C. C.	
Pool: Laguna Grande Menow Wildcat						Formation: Morrow		Unit: I	
Completion Date: 3-27-76		Total Depth: 13700		Flow Back TD: 13390		Elevation: 2980 ft		Farm or Lease Name: Laguna Grande (Federal)	
Csg. Size: 5"	Wt.: 18.0	d: 4.276	Set At: 13695	Perforations: From 13107 To 13258		Well No.: 1			
Tq. Size: 2-7/8	Wt.: 6.5	d: 2.441	Set At: 12890	Perforations: From - To -		Unit: I Sec. 28 Twp. 22-S Rge. 29-E			
Type Well - Single - Bradenhead - G.O. or G.O. Multiple: Single						Packoff Set At: 12890		County: Eddy	
Producing Thru: Tubing		Reservoir Temp. °F: 200 @ 13200		Mean Annual Temp. °F: 60		Baro. Press. - P _a : 15		State: New Mexico	
L: 13107	H: 13107	Gg: .5737	% CO ₂ : 1.21	% N ₂ : 0.21	% H ₂ S: -	Prover: -	Meter Run: 4"	Taps: Flange	

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.	
SI							4148			
1.	4"	1.625	200	9	61	3724	52			1hr.
2.	4"	1.625	300	26	72	3202	59			1hr.
3.	4"	1.625	300	57	83	2702	62			1hr.
4.	4"	1.625	400	74	85	2187	62			1hr.
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{n_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.79	43.99	215	.9990	1.287	1.017	736
2.	12.79	90.50	315	.9887	1.287	1.023	1507
3.	12.79	134.00	315	.9786	1.287	1.022	2206
4.	12.79	175.24	415	.9768	1.287	1.028	2897
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio Dry Gas Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons Dry Deg.	Specific Gravity Separator Gas 0.604 XXXXXXXXXX	Specific Gravity Flowing Fluid XXXXXX Dry gas	Critical Pressure 689 P.S.I.A.	Critical Temperature 350 R
1.	.31	521	1.49	.967						
2.	.46	532	1.52	.955						
3.	.45	543	1.55	.958						
4.	.60	545	1.56	.947						
5.										

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1.	4163	3741	17330.6	13995.1	3335.5
2.		3228		10420.0	6910.6
3.		2744		7529.5	9801.0
4.		2258		5098.6	12232.0
5.					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.417$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.417$

$n = 4105$

RECEIVED
APR 12-1976
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Absolute Open Flow: 4105	Angle of Slope: 45	Slope, n: 1.000
Remarks:		
Approved By Commission:	Conducted By: L. B. Ivanhoe	Checked By: J. A. Blodgett