

N MEXICO OIL CONSERVATION COM. SION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

APR - 6 1976

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-8-76		APR - 6 1976	
Company Vega Petroleum Corp.				Connection AIR		O.C.C. ARTESIA, OFFICE	
Pool Atoka				Formation Morrow		Unit	
Completion Date 3-8-76		Total Depth 9300'		Plug Back TD 9150'		Elevation 3314'GL	
Form or Lease Name Jerry Nelson				Well No. 1			
Csg. Size 4 1/2"		Set At 9300'		Perforations: From 9053' To 9032'		Unit Sec. Twp. Rge. C 14 18 26	
Tbg. Size 2 3/8"		Set At 8970'		Perforations: From To		County Eddy	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8970'		State New Mexico	
Producing Thru Tubing		Reservoir Temp. °F 164° @ 9043'		Mean Annual Temp. °F		Baro. Press. - P _a 13.2	
L 8970'		H 8970'		G _g .6337		Prover -	
		G _l .428		% CO ₂ 1.377		% H ₂ S -	
						Meter Run 3"	
						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							2718		PKR	
1.	3	x	1.625	355	4	87	2400	63		
2.	3	x	1.625	360	10	92	2250	66		
3.	3	x	1.625	360	20	89	2100	68		
4.	3	x	1.625	360	39	80	1680	70		
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_{tm}}$	Pressure P _{tm}	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1	13.24	38.4	368.2	.9750	1.256	1.028	640.
2	13.24	61.1	373.2	.9706	1.256	1.028	1014.
3	13.24	86.4	373.2	.9732	1.256	1.028	1437.
4	13.24	120.6	373.2	.9813	1.256	1.029	2029.
5							

NO.	P _t	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	Mcft/bbl.
1	.55	547	1.52	.946	47.4073	
2	.55	552	1.53	.947	49 @ 60°	
3	.55	549	1.52	.946		
4	.55	540	1.50	.944		
5						

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²
1	3607	13010		
1		3188.6	10163	2847
2		2926	8561	4449
3		2610	6810	6198
4		2251	5067	7943
5				

(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 2.10$

AOF = C $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 3020$

(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 2.10$

Absolute Open Flow	3020.	Mcf @ 15.025	Angle of Slope	45°	Slope, n	1
--------------------	-------	--------------	----------------	-----	----------	---

Remarks: P & P Figures were taken from Amerada Gauge RPG-3 Ser. No. 2602N

Approved By: Commitment	Conducted By: Larry Davis	Calculated By: Larry Davis	Checked By:
-------------------------	---------------------------	----------------------------	-------------