

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT, ONE POINT BACK PRESSURE TEST, OR GAS WELL

31
File Form C-122
122 Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 2-15-80		MAR 3 1980	
Company Alpha Twenty-One Prod. Corp.		Connection El Paso			
Pool Cass Draw (Wolfcamp)		Formation Wolfcamp		Unit O.C.D. ARTESIA, OFFICE	
Completion Date 2-9-80		Total Depth 12401		Plug Back TD 10115	
Elevation 3092.4 GL		Farm or Lease Name Cerro Comm.			
Csg. Size 7 5/8	Wt. 29.7	d 6.875	Set At 11720	Perforations: From 9765 To 9817	
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 9715	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9715	
Producing Thru Tubing		Reservoir Temp. °F 169 @ 9691		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		County Fddy		State New Mexico	
L 9791	H 9791	Gg 0.734	% CO ₂ 4.5	% N ₂ 0.72	% 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.	Temp. °F	
SI	72 hours						4119				
1.	4" X .750			312	1.9	73 ⁰ F	3279	67 ⁰ F	Pkr.		60
2.	4" X .750			312	3.0	80 ⁰ F	2812	65 ⁰ F	Pkr.		60
3.	4" X .750			312	4.8	80 ⁰ F	2403	62 ⁰ F	Pkr.		60
4.	4" X .750			323	7.7	74 ⁰ F	1791	63 ⁰ F	Pkr.		60
5.				L-10 Chart							

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure Factor P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	2.661	10.83	3.162	0.9877	1.167	1.041	109.34
2	2.661	17.10	3.162	0.9813	1.167	1.038	171.03
3	2.661	27.36	3.162	0.9813	1.167	1.038	273.65
4	2.661	44.66	3.162	0.9868	1.167	1.043	451.35
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.		USED				54.2				
2.		SIMPLIFIED					0.734			
3.		SUPERCOMPRESSIBILITY								
4.		TABLES								
5.										

NO.	P _i ²	P _s	P _s ²	P _f ² - P _s ²
1	10839	5074.2	25748	8220
2	7982	4489.2	20153	13815
3	5838	3872.2	14994	18974
4	3255	2816.2	7931	26037
5				

P_f 5928.2 P_f² 33968

(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 1.3046049$ (2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.3046049$

AOIF = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 588.83$

Absolute Open Flow 588.83 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.0000

Remarks: BHP measured with Amerada RPG-3 Gauge, 46424N, 0-8000 Psig.

Approved By Commission:	Conducted By: Teffteller, Inc.	Calculated By: Farrest Tefteller	Checked By: <i>[Signature]</i>
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