

NORTH MEXICO OIL CONSERVATION COMM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special					Test Date 8-8-81		SEP 2 1981	
Company ALPINE PETROLEUM				Connection AIR - NEW WELL			O. C. D. ARTESIA, OFFICE	
Pool WILDCAT				Formation ABO			Unit 2	
Completion Date 8-3-81		Total Depth 7400		Plug Back TD 4551		Elevation 4099 KB		Farm or Lease Name SUN TEXAS STATE
Csg. Size 4.5	Wt. 10.5	d 3.927	Set At 4615	Perforations: From 4283 To 4340			Well No. 1	
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 4210	Perforations: From OPEN To ENDED			Unit Sec. Twp. Rge. J 24 18S 21E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE			County EDDY	
Producing Thru TUBING		Reservoir Temp. *F 100 @ 4,311		Mean Annual Temp. *F 60		Baro. Press. - P _a 13.2		State NEW MEXICO
L 4368	H 4368	G _g 0.	% CO ₂ 13.082	% N ₂ 1.447	% H ₂ S -0-	Prover 2" CFP	Meter Run	Taps

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	BHP	Temp. *F	
SI							905	80	1135		116.0
1.	2"	x	3/32	675		63	695	76	1014		1.0
2.	2"	x	1/8	625		66	650	79	932		1.0
3.	2"	x	5/32	475		66	490	74	714		1.0
4.	2"	x	3/16	295		79	300	74	516		1.0
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.446	.00	688.2	.9971	1.1478	1.0721	122
2	.2716	.00	638.2	.9943	1.1478	1.0654	211
3	.6237	.00	488.2	.9943	1.1478	1.0494	365
4	.6237	.00	308.2	.9822	1.1478	1.0281	223
5.							

NO.	P _t	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.95	523	1.37	.870	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.89	526	1.38	.881	Specific Gravity Separator Gas .7590 X X X X X X X X
3.	.68	526	1.38	.908	Specific Gravity Flowing Fluid .7590 X X X X X
4.	.43	539	1.41	.946	Critical Pressure 721 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 383 R _____ R

P _c 1148.2 P _c ² 1318.4		$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.6688$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 606.3$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6612$
NO.	P _t ²	
1	1027.2	
2	945.2	
3	727.2	
4	529.2	

P _w ²	P _w ²	P _c ² - P _w ²
1	1027.2	1055.1
2	945.2	893.4
3	727.2	528.8
4	529.2	280.1
5		

Absolute Open Flow 606.3 _____ Mcfd @ 15.025	Angle of Slope @ 45.3 _____	Slope, n .9910 _____
--	-----------------------------	----------------------

Remarks: BOTTOM HOLE PRESSURES TAKEN WITH AMERADA PRESSURE ELEMENTS			
Approved By Commission:	Conducted By: DON BENNETT	Calculated By: WOHLFORD & JENKINS	Checked By:

WITNESSED BY MARVIN HANSEN, NORTHERN NATURAL GAS COMPANY