

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

Form C-122
Revised 9-1-65
1-C-102
File

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3/1/78		APR 12 1978	
Company Petroleum Development Corp				Connection El Paso Natural Gas Co.					
Pool <u>Wildcat</u> <u>Undersaturated</u>				Formation Wolfcamp				Unit B.C.C. ARTESIA, OFFICE	
Completion Date 3/1/78		Total Depth 9550		Plug Back TD 7300		Elevation 4273KB		Farm or Lease Name Mahum Federal	
Csg. Size 4 1/2"	Wt. 11.6#	d 4.000	Set At 7341	Perforations: From 7006 To 7034		Well No. 1			
Thq. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 7034	Perforations: From 7006 To 7034		Unit I 27 21S 22E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 6960		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 139 @ 6950		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
7006	H 7006	Gg 0.705	% CO ₂ 0.25	% N ₂ 2.55	% H ₂ S --	Prover	Meter Run 4"	Taps Flg.	

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											
1.	4		1"	491	58	92	966	58			1 1/2 hrs.
2.	4		1"	491	30	88	910	60			1 hr.
3.	4		1"	491	15	86	901	62			1 hr.
4.	4		1"	491	6	85	938	62			1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.753	171.0	504.2	.9706	1.191	1.047	984
2.	4.753	123.0	504.2	.9741	1.191	1.049	711
3.	4.753	87.0	504.2	.9759	1.191	1.049	504
4.	4.753	55.0	504.2	.9768	1.191	1.049	319
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 125 Mcf/bbl.
1	0.76	552	1.44	0.912	A.P.I. Gravity of Liquid Hydrocarbons 54
2.	0.76	548	1.42	0.908	Specific Gravity Separator Gas 0.705
3.	0.76	546	1.42	0.908	Specific Gravity Flowing Fluid X X X X X
4.	0.76	545	1.42	0.908	Critical Pressure 664 P.S.I.A.
5.					Critical Temperature 385 R

P _c 1642	P _c ² 2696	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.003$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.003$
NO	P _t ²	P _w	P _w ²
1		1231	1515
2		1162	1350
3		1162	1346
4		1203	1447
5			

Absolute Open Flow 1424 Mcfd @ 15.025		Angle of Slope @ 45°	Slope, n 1.00
---------------------------------------	--	----------------------	---------------

Remarks: Amerada BHP gauge at 6950. Flowed at highest rate first to unload accumulated fluid. BHP not stabilized at end of flow period #1. BHP stabilized during periods #2, #3 & #4.	
---	--

Approved By Commission:	Conducted By: Charles W. Sanders	Calculated By: Charles W. Sanders	Checked By: J. C. Johnson
-------------------------	-------------------------------------	--------------------------------------	------------------------------

