

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

Copy 655
Form G-122
Revised 6-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7.30.74		AUG 13 1974	
Company PETER OIL CORPORATION		Connection ---		O. C. C.	
Loc. SOUTH CARLSBAD MOUNTAIN		Formation MORROW		Unit ARTESIA, OFFICE	
Completion Date 7.27.74		Total Depth 12,270'		Plug Back TD 12,205'	
Elevation 5175.4'		Form or Lease Name STEEPS		Well No. 1	
Gas. Size 7"	Wt. 26"	d 6.276	Set At 12,270	Perforations: From 11,596 To 12,071	
Tub. Size 2 3/4"	Wt. 12.25	d 1.975	Set At 11,520	Perforations: From To	
Type Well - Single - Braconhead - G.G. or G.O. Multiple SINGLE			Packer Set At 11,520		County CADDY
Producing Thru TUBING		Reservoir Temp. °F 185 @ 12,200		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State NEW MEXICO			
L 11,520	H 11,740	G _g 0.5946	% CO ₂ 2.307	% N ₂ 0.577	% H ₂ S -
Prover -		Meter Run 11"		Taps 12,205'	

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	Duration of Flow
SI							4020	60	0	-	48
1.	4" X 2			480	6	78	3760	60	0	-	1.00
2.	4" X 2			570	19.5	67	3310	60	0	-	1.00
3.	4" X 2			660	30	61	2800	60	0	-	1.00
4.	4" X 2			735	42	60	2370	60	0	-	1.00
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	17.21	54.39	493.2	0.9822	1.2964	1.0341	1419
2	19.21	101.00	523.2	0.9933	1.2964	1.0395	2679
3	19.21	142.11	673.2	0.9990	1.2964	1.0534	3841
4	19.21	177.26	748.2	1.0000	1.2964	1.0596	4824
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	Mcf/ebf.
1	0.72	539	1.54	0.935	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2.	0.77	527	1.51	0.925	Specific Gravity Separator Gas	0.5946
3.	0.49	521	1.49	0.901	Specific Gravity Flowing Fluid	XXXXXX
4.	1.10	520	1.49	0.890	Critical Pressure	679 P.S.I.A.
5.					Critical Temperature	342 R

NO.	P _t ²	P _w	P _w ²	P _t ² - P _w ²
1	14237	3782.6	14308.6	1758
2	11043.6	3359.4	11285.9	4980.7
3	7914	2895.7	8385.3	7881.3
4	5679.6	2528.5	6393.4	9873.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.063$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.854$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7124$

Absolute Open Flow	7124	Mcf @ 15.025	Angle of Slope @	49.548	Slope, n	0.852
--------------------	------	--------------	------------------	--------	----------	-------

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	AR PLAMODINE	K. J. COOK	AR PLAMODINE