NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

RECEIVED
JUL 2 1974
O.C.C.
ARTESIA, OFFICE

[X] Initial [ ] Annual [ ] Special | Test Date: 5/28/74

Company: Penroc Oil Corporation	Connection: None		Unit
Pool: Undesignated	Formation: Morrow		
Completion Date: 5/28/74	Total Depth: 10,892	Plug Back TD: 10,933	Elevation
Farm or Lease Name: Allied Com A			
Csg. Size: 4½ / Wt.: 11.6 / d / Set At: 10933	Perforations: From 10,792 To 10,669 and 10840 To 10892		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 6.5 / d: 2.441 / Set At: 10567	Perforations: From open To end		Unit: N / Sec.: 22 / Twp.: 20 / Rge.: 27
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 10567 & 10,822		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 181 @ 10,669	Mean Annual Temp. °F	Baro. Press. – P_a: 13.2
State: New Mexico			
L: 10,567 / H: 10,567 / Gg: .622	% CO_2	% N_2	% H_2S / Prover / Meter Run: 3 / Taps: Flg.

	FLOW DATA				TUBING DATA		CASING DATA		
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						3280	S.I.P.			168 hr. S.I.P.
1.	3	x 1.250	615	4.0	96	2640	91			1 hr.
2.	3	x 1.250	628	7.2	95	2510	95			45 Min.
3.	3	x 1.250	667	12.2	90	2250	98			1 hr.
4.	3	x 1.250	680	21.0	84	1942	98			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	7.577	50 13	628 2	.9671	1.268	1.048	488
2	7.577	67.95	641.2	.9680	1.268	1.049	663
3	7.577	91.10	680 2	9723	1.268	1.053	896
4	7.577	120.65	693.2	.9777	1.268	1.059	1,200
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.94	556	1.52	.911
2.	.96	555	1.57	.909
3.	1.01	550	1.51	902
4	1.03	544	1.49	.891
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure 671 P.S.I.A. _____ P.S.I.A.
Critical Temperature 365 R _____ R

P_c 3293.2 P_c^2 10845.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2654.6	7046.9	3798.3
2		2524.4	6372.6	4472.6
3		2265.3	5131.6	5713.6
4		1938 3	3757.0	7088.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.530$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.530$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.836$

Absolute Open Flow 1,836 Mcfd @ 15.025 | Angle of Slope θ 45 | Slope, n 1.000

Remarks: Slope was flat, a 45° line was drawn through the high rate of flow. No fluid was made during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Reggie Reston	Reggie Reston	