NEW MEXICO OIL CONSERVATION COMMISSION

MULTI NT AND ONE POINT BACK PRESSU TEST FOR GAS WELL

GSP

Form C-122
Revised 9-1-(

RECEIVED BY
FEB 5 1985
O. C. D.
ARTESIA, OFFICE

Type Test			Test Date	
4 POINT [X] Initial	[ ] Annual	[ ] Special	1-30-85	

Company	Connection		
POOL OIL COMPANY ✓	TO AIR		
Pool	**Formation**		**Unit**
Square Lake-G-SA	Penrose		B

Completion Date	Total Depth	Plug Back T.D.	Elevation	Farm or Lease Name
1-27-85	3828.	3410.	4070.5	HEATHER USA

Csg. Size	Wt.	d	Set At	Perforations:	Well No.
5.500	17.0	4.892	3828.	From 3204. To 3220.	#1

Tbg. Size	Wt.	d	Set At	Perforations:	Unit	Sec.	Twp.	Rge.
2.375	4.7	1.995	3170.	From 0. To 0.	B	27	16S	31E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
SINGLE		EDDY

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
TUBING	98. • 3212.	60.0	13.2	NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Tap
3212.	3212.	0.839	0.06	52.14	0.	2.0	0.	FLANGE

NO	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	B.H.P. DATA: Press. p.s.i.g.	CHOKE	Duration of Flow
SI					665.		665.		72.0
1.	2.00 X 0.063	580.	0.	58.	650.		620.	4/64	1.0
2.	2.00 X 0.094	580.	0.	60.	585.		595.	6/64	1.0
3.	2.00 X 0.125	370.	0.	56.	495.		520.	8/64	1.0
4.	2.00 X 0.188	260.	0.	56.	350.		490.	10/64	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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	0.06	0.	593.2	1.0019	1.0917	1.0266	43.
2	0.14	0.	593.2	1.0000	1.0917	1.0262	94.
3	0.26	0.	383.2	1.0039	1.0917	1.0179	113.
4	0.61	0.	273.2	1.0039	1.0917	1.0130	184.
5							

NO	P_t	Temp. °R	T_r	Z
1	1.04	518.	1.78	0.949
2	1.04	520.	1.79	0.950
3	0.67	516.	1.77	0.965
4	0.48	516.	1.77	0.974
5				

Gas Liquid Hydrocarbon Ratio 0. Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons 0. Deg.

Specific Gravity Separator Gas	0.839	XXXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	0.839
Critical Pressure	571. P.S.I.A.	571. P.S.I.A.
Critical Temperature	291. R	291. R

P_c 678.2 P_c^2 460.

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1	401.	633.	401.	59.
2	370.	608.	370.	90.
3	284.	533.	284.	176.
4	253.	503.	253.	207.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.2246$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.2246$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 409.$

Absolute Open Flow	Angle of Slope θ	Slope, n
409. Mcfd @ 15.025	45.0	1.000

Remarks

Approved By Commission	Conducted By:	Calculated By:	Checked By:
	RICHARD TOWNLEY	BENNETT AND CATHEY INC.	