NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-65

Type Test: ☐ Initial ☐ Annual ☒ Special			Test Date: 9-13-85	
Company: POGO PRODUCING	Connection: TO AIR			
Pool: Sand Dunes Morrow	Formation: ~~ATOKA~~		Unit:	
Completion Date: 9-12-85	Total Depth: ~~15397~~ 15,377	Plug Back T.D.: 14683'	Elevation: 0	Farm or Lease Name: CAL-MON
Csg. Size: 7.000 / Wt.: 35.0 / d: 6.004	Set At: 14720'	Perforations: From 14344 To 14362		Well No.: 2
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995	Set At: 14248 ~~48~~	Perforations: From To		Unit: F / Sec.: 35 / Twp.: 23S / Rge.: 31E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 14246		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 220 @ 14355	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a:	State: NEW MEXICO
L: 14355 / H: 14355	Gg: 0.568	% CO_2: 0.49	% N_2: 0.37	% H_2S: 0	Prover: 0	Meter Run: 4.0	Taps: FLANGE

FLOW DATA / TUBING DATA / B.H.P. DATA

NO	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	B.H.P. Press. p.s.i.g.	CHOKE	Duration of Flow
SI							7273	220	9970		20.0
1.	4.03	X	2.125	400	7.0	96	6955	220	8628	5/64	1.0
2.	4.03	X	2.125	410	21.0	90	6549	220	8218	6.5/64	1.0
3.	4.03	X	2.125	410	38.0	79	6047	220	7762	8/64	1.0
4.	4.03	X	2.125	415	73.0	45	5110	220	6841	10/64	1.5
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	22.60	53.78	413.2	0.9671	1.3269	1.0247	1598
2	22.60	94.27	423.2	0.9723	1.3269	1.0265	2821
3	22.60	126.81	423.2	0.9822	1.3269	1.0289	3843
4	22.60	176.80	428.2	1.0147	1.3269	1.0379	5583
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.61	556	1.60	0.952
2	0.63	550	1.59	0.949
3	0.63	539	1.55	0.945
4	0.63	505	1.46	0.928
5				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.

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

Specific Gravity Separator Gas: 0.568 / XXXXXXXXXX

Specific Gravity Flowing Fluid: XXXXX / 0.568

Critical Pressure: 676 P.S.I.A. / 676 P.S.I.A.

Critical Temperature: 347 R / 347 R

P_c 7325.3 P_c^2 53660

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		7011	49159	4501
2		6637	44047	9613
3		6223	38730	14930
4		5402	29183	24477
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.1923$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.7810$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 9944$

Post ID-2
10-11-85
Comp & DK

Absolute Open Flow: 9944 Mcfd @ 15.025

Angle of Slope θ: 53.7 Slope, n: 0.735

Remarks: B.H.P. MEASURED WITH AMERADA PRESSURE ELEMENT

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	BENNETT & CATHEY	RICHARD TOWNLEY	