NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-65

RECEIVED
APR 28 1982
O. C. D.
ARTESIA, OFFICE

C/SF
C-122

Type Test: ☒ Initial FOUR POINT ☐ Annual ☐ Special		Test Date: 4-12-82	1980 FNL
Company: ~~JACK GRYNBERG & ASSOCIATES~~ Viking Petr. Inc.	Connection: AIR NEW WELL		660 FWL
Pool: ~~UNDESIGNATED~~ Pecos Slope Abo gas	Formation: ABO		Unit: E
Completion Date: 4-10-82	Total Depth: 4150	Plug Back TD: 3645	Elevation: 4021 KB
			Farm or Lease Name: GRYNBERG, STATE 16
Csg. Size: 4.5 / Wt.: 10.5 / d: 4.052 / Set At: 3900	Perforations: From 3566 To 3583		Well No.: ~~16~~ 3
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 3560	Perforations: From OPEN To ENDED		Unit: E / Sec.: 16 / Twp.: 5S / Rge.: 24E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE	Packer Set At: NONE		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 96 @ 3575	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2
			State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3574	3574	.6841	1.215	8.995		2.00		

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	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	CHOKE	Duration of Flow
SI						68	579		579		48 HRS.
1	2.00	X	.250	130	0	58	557	60	615	7/64	1
2	2.00	X	.250	227	0	57	524	60	580	9/64	1
3	2.00	X	.250	300	0	55	448	59	530	11/64	1
4	2.00	X	.250	250	0	55	315	58	496	12/64	1
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	1.1150	.00	143.2	1.0019	1.2091	1.0122	196
2	1.1150	.00	240.2	1.0029	1.2091	1.0217	332
3	1.1150	.00	313.2	1.0048	1.2091	1.0298	437
4	1.1150	.00	263.2	1.0048	1.2091	1.0249	365
5							

NO	P_t	Temp. °R	T_t	Z
1	.22	518	1.45	.976
2	.36	517	1.45	.958
3	.48	515	1.44	.943
4	.40	515	1.44	.952
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas .6840 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 659 P.S.I.A. _____ P.S.I.A.
Critical Temperature 357 R _____ R

P_c 649.2 P_c^2 421.5

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1		628.2	394.6	27.0
2		593.2	351.9	70.0
3		543.2	295.1	126.0
4		509.2	259.3	162.0
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.349$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.8819$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 822.4$

Absolute Open Flow 822.4 Mcfd @ 15.025 Angle of Slope θ 62.4 Slope, n .5236

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

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