

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6-17-75	
Company American Quasar Petroleum Co.				Connection El Paso Natural Gas Co.	
Pool of New Mexico Wildcat				Formation Morrow	
Completion Date 6-17-75		Total Depth 15,950		Plug Back TD 15,900	
Elevation 3688 Gr		Farm or Lease Name Brinnins tool			
Csg. Size 5"	Wt. 23#	d 4.670	Set At 15,950	Perforations: From 15,586 To 15,631	
Trg. Size 2 7/8 "	Wt. 6.5	d 2.441	Set At 12,248	Perforations: From NONE To	
Type Well - Single - Fractured - G.G. or G.O. Multiple Single				Packer Set At 12,248	
Producing Thru Tubing		Reservoir Temp. °F 195 @ 15,611		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
L 15611	H 15611	G _g .578	% CO ₂	% N ₂	% H ₂ S
Prover		Meter Run X		Taps	

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.	
SI							7218	80		
1.	4.0	2.0		900	7"	110	7030	78		1 Hr
2.	4.0	2.0		900	28"	93	6740	80		1 Hr
3.	4.0	2.0		920	52	86	6415	80		1 Hr
4.	4.0	2.0		900	78	76	6085	82		1 Hr
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 _{pv}	Rate of Flow Q, Mcfd
1	19.81	79.95	913.2	.9551	1.3153	1.052	2093
2	19.81	159.90	913.2	.9697	1.3153	1.061	4287
3	19.81	220.28	913.2	.9759	1.3153	1.058	5927
4	19.81	266.89	913.2	.9850	1.3153	1.065	7295
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	1.36	570	1.63	.904	None Produced		.578	X X X X X X X X	672	350
2	1.36	551	1.57	.889				X X X X X		
3	1.39	546	1.56	.893						
4	1.36	538	1.54	.881						
5										

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1	7231.2	7050.0	49701	2589
2		6785.6	46044	6246
3		6492.2	42149	10141
4		6196.4	38395	13895
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{52290}{2589}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 10.8374$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 22683$$

Absolute Open Flow 22683 Mcfd @ 15.025		Angle of Slope 51° 35'		Slope, n .793	
Remarks:					
Approved by Commission: <i>John W. Rungtzen</i>		Conducted By: Metering & Testing Services, Inc.		Calculated By: West Texas Consulting Service, Inc.	
Checked By:					