

Submit in duplicate to
appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources

Form C-122
Revised October, 1999

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: E.O.G. Resources, Inc. ✓						Lease or Unit Name: Zephyr 33 St. Com.							
Type Test						Test Date: 6/18/00		Well No: 1					
Complete ☒ Initial ☐ Annual ☐ Special ☐ Date: 3-17-00 Total Depth: 9619' Plug Back TD: 13,710' Elevation: 3,477' gl						Unit Ltr - Sec - TWP Rge 33 / 6 - 48 - 28							
Csg Size: 5 1/2" Wt: 17#			ID		Set At: 9619		Perforations: From: 9593' To: 9611'			County: Eddy			
Thg Size: N/A			Wt: N/A		ID: N/A		Set At: N/A		Perforations: From: N/A To: N/A			Pack: SE Crow Flats Morrow	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At: N/A		Formation: Morrow					
Producing Thru Csg.		Reservoir Temp °F 152.9 @ 9593'		Mean Annual Temp °F 60		Baro. Press - P _a : 13.2		Connection: 6-11-00					
1. 9593'		2. 9593'		Gg: .659		%CO ₂ : 3.007		%N ₂ : 433		%H ₂ S:		Prover	
										Meter Run 4026		Taps: FLG	

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.	Temp. °F	
SI							N/A		1544		48 Hrs
1.	4"	x	2.625	464	1.0	52	N/A		1310		1 Hr
2.	4"	x	2.625	477	2.2	48	N/A		1170		1 Hr
3.	4"	x	2.625	497	4.5	45	N/A		1098		1 Hr
4.	4"	x	2.625	510	7.0	53	N/A		995		1 Hr
5.											

RATE OF FLOW CALCULATIONS							
No.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{spv}	Rate of Flow Q, Mcfd
1.	36.66	21.84	477.2	1.008	1.232	1.051	1,045
2.	36.66	32.84	480.2	1.012	1.232	1.055	1,584
3.	36.66	47.92	510.2	1.015	1.232	1.059	2,326
4.	36.66	60.52	523.2	1.007	1.232	1.057	2,909
5.							

No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcft/bbl.
1.	.69	512	1.37	.905	A. P. 1. Gravity of Liquid Hydrocarbons	Dry	Deg.
2.	.71	508	1.36	.898	Specific Gravity Separator Gas	659	XXXXXXXXXX
3.	.74	505	1.35	.892	Specific Gravity Flowing Fluid	XXXXXX	Gmix = N/A
4.	.76	513	1.37	.895	Critical Pressure	682	P.S.I.A. P.S.I.A.
5.					Critical Temperature	372	R. R.

P _c 1557.2		P _{c2} 2424.9	
No.	P _r ²	P _w	P _w ²
1.	N/A	1323.3	1751.1
2.	N/A	1183.5	1400.6
3.	N/A	1111.9	1236.2
4.	N/A	1009.4	1018.8
5.			

(1) $P_{c2} = 1.725$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^{1/2} = 1.725$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^{1/2} = 5.017$

Absolute Open Flow	5.017	Mcfd @ 15.025	Angle of Slope 0: 45	Slope, n: 1.000
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Remarks: No fluid produced Corrected to 3.007% CO ₂			
Approved By Division	Conducted By: Production Testing Services, Inc. 505-391-8703	Calculated By: Bob Murray, Independent Consultant 505-395-2349	Checked By: Bob Murray, Independent Consultant 505-395-2349

