

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Nearburg Producing Company					Lease or Unit Name Diamondback 25 Federal Com				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 6/28/00		Well No. 1		
Completion Date 4/13/00		Total Depth 13850		Plug Back TD 13800		Elevation 3580' GL		Unit Ltr. - Sec. - TWP - Rge. P 25 19s 32e	
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 13850	Perforations: From: 13408 To: 13652			County Lea		
Tbg. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 13284	Perforations: From: Open To: Ended			Pool Gem		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 13284			Formation Morrow	
Producing Thru Tbg		Reservoir Temp. °F 186.2@13284		Mean Annual Temp. °F 60		Baro. Press - P 13.2		Connection LG&E	
L 13284	H 13284	Gg 0.653	% CO ₂ 0.697	% N ₂ 0.525	% H ₂ S	Prover	Meter Run 3.068	Taps FLG	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	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						1935		PACKER		48 Hrs
1.	3.068 x 1.500		520.0	3.24	85	1832		"		1 Hr
2.	3.068 x 1.500		534.0	13.00	79	1728		"		1 Hr
3.	3.068 x 1.500		550.0	28.10	78	1572		"		1 Hr
4.	3.068 x 1.500		565.0	46.24	78	1364		"		1 Hr
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	11.13	41.56	533.2	.9768	1.237	1.048	586
2.	11.13	84.34	547.2	.9822	1.237	1.052	1200
3.	11.13	125.80	563.2	.9831	1.237	1.054	1795
4.	11.13	163.51	578.2	.9831	1.237	1.056	2337
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.79	545	1.45	.911	36.803	
2.	.81	539	1.43	.904	57 @ 60	
3.	.84	538	1.43	.900	A.P. I. Gravity of Liquid Hydrocarbons	Deg.
4.	.86	538	1.43	.896	Specific Gravity Separator Gas	
5.					Specific Gravity Flowing Fluid	
					Critical Pressure	P.S.I.A.
					Critical Temperature	R

P_c **1948.2** P_c² **3795.5**

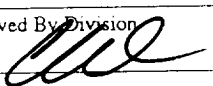
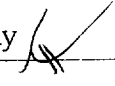
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		1848.5	3417.0	378.5
2.		1755.9	3083.1	712.4
3.		1621.3	2628.5	1167.0
4.		1447.9	2096.5	1699.0
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.234$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.846$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.314$

Absolute Open Flow **4,314** Mcfd @ 15.025 Angle of Slope θ **52.66** Slope, n **.7628**

Remarks: **Well produced 6.7 bbls condensate**

Approved By:  Conducted By: **Jarrel Services, Inc.** Calculated By: **Bob Murray** Checked By: **Bob Murray** 



NEARBURG PRODUCING COMPANY

DIAMONDBACK 25 FED. COM. # 1

