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State of New Mexico
Energy, Minerals and Natural Resources Department

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Revised 4-1-91

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OIL CONSERVATION DIVISION

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

MAY 29 1992

O. C. D.
OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Bridge Oil Company, L.P.					Lease or Unit Name Federal 12 Com				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 4-20-92		Well No. 1		
Completion Date 4-8-92		Total Depth 11,400'		Plug Back TD 10,175'		Elevation 3187.5' GL		Unit Ltr. - Sec. - TWP - Rge. 12-21-26	
Csg. Size 5-1/2	Wt. 17	d	Set At 11,400	Perforations: From: 10,00.7 To: 10,094		County Eddy			
Tbg. Size 2-3/8	Wt. 4.7	d	Set At 9825'	Perforations: From: To:		Pool W. Burton Flat Strawn			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9825'		Formation Strawn			
Producing Thru Tubing		Reservoir Temp. °F 175°@10,048'		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2		Connection	
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	
10,048	10,048	.682	.44	.80		6" positive	choke		

FLOW DATA

TUBING DATA

CASING 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.	Temp. °F	Duration of Flow
SI							3340		PKR.		72 hr
1.	2 x 3/32			3105		72	3105		"		1 hr
2.	2 x 1/8			2810		58	2810		"		1 hr
3.	2 x 9/64			2470		46	2470		"		1 hr
4.	2 x 5/32			2220		39	2220		"		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 Fg.	Super Compress. Factor, F _{pv} .	Rate of Flow Q, Mcfd
1.	.1433		3118.2	.9887	1.211	1.178	630
2.	.2618		2823.2	1.002	1.211	1.197	1,074
3.	.3346		2483.2	1.014	1.211	1.249	1,274
4.	.4173		2233.2	1.021	1.211	1.261	1,453
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	4.66	532	1.38	.721	A.P. I. Gravity of Liquid Hydrocarbons	Dry	Deg.
2.	4.22	518	1.34	.698	Specific Gravity Separator Gas	.682	XXXXXXXXXX
3.	3.71	506	1.31	.641	Specific Gravity Flowing Fluid	XXXXXX	
4.	3.33	499	1.29	.629	Critical Pressure	669 P.S.I.A.	P.S.I.A.
5.					Critical Temperature	385 R	R

P_c **3400.3 P_c² 11,562.0

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.	**	3246.1	10,537.2	1024.8
2.	**	2999.4	8,996.4	2565.6
3.	**	2629.9	6,916.4	4645.6
4.	**	2341.4	5,482.2	6079.8
5.				

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = 11.282 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.359$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.116$$

Absolute Open Flow	2,116	Mcf/d @ 15.025	Angle of Slope θ	63.5	Slope, n	.500
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Remarks: No fluid produced during test. *BHP instrument set at this depth.

**From known BHP's calculated back to surface.

Approved By Division	Conducted By: PRO WELL TESTERS	Calculated By: BM	Checked By: BM
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