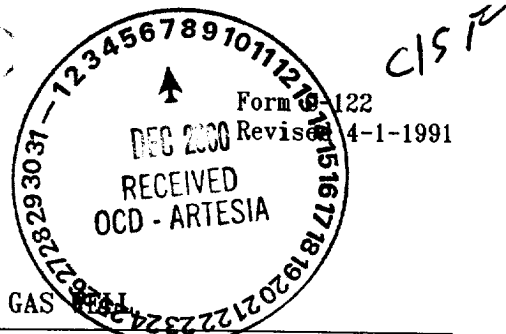


Submit in duplicate to
appropriate district office
see Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

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



MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

Operator Ocean Energy Resources, Inc.					Lease or Unit Name Mesd State Com #2				
Test Type ☒ Initial ☐ Annual ☐ Special					Test Date Nov 25, 2000		Well No. 31-2		
Completion Date		Total Depth		Plug Back TD		Elevation		Unit Ltr - Sec - TWP - Rge. 20- 19w- 29e 7	
Csg. Size 5.500	Wt. 17.000	d 4.892	Set At	Perforation: From 9049 To 9057			County Eddy		
Tbg. Size 2.875	Wt. 6.500	d 2.441	Set At 8968	Perforation: From To			Pool Diamond Mound		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple Single					Packer Set At 8968		Formation Morrow		
Producing Thru Tubing		Reservoir Temp.F 148		Mean Annual Temp.F 60		Baro. Pressure 13.20		Connection	
L 9053	H 9053	Gg .689	% CO ₂ .40	% N ₂ .96	% H ₂ S	Prover		Meter Run 4.026	Taps Flange

FLOW DATA					TUBING DATA		CASING DATA		SIP/FLOW DURATION (HRS.)
NO.	(PROVER) LINE SIZE x ORIFICE SIZE	PRESS. PSIG	DIFF. h _w	TEMP. F	PRESS. PSIG	TEMP. F	PRESS. PSIG	TEMP. F	
SHUT-IN PRESSURE					1500	70	2047	148	64
1.	4.03 x 2.75	46.03	2.00	65	1390	70	1857	148	1
2.	4.03 x 2.75	49.27	3.80	80	1267	70	1748	148	1
3.	4.03 x 2.75	53.43	6.50	87	1106	70	1559	148	1
4.	4.03 x 2.75	63.05	14.10	113	823	70	1118	148	1

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 _{py}	RATE OF FLOW (Q) MCFD
1.	42.150	10.884	59.2	.9950	1.2047	1.0058	553.1
2.	42.150	15.407	62.5	.9812	1.2047	1.0056	772.0
3.	42.150	20.810	66.6	.9748	1.2047	1.0057	1036.1
4.	42.150	32.789	76.3	.9525	1.2047	1.0057	1595.0

NO.	P _r	TEMP.	T _r	Z
1.	.089	525	1.376	.9884
2.	.094	540	1.415	.9889
3.	.100	547	1.434	.9886
4.	.114	573	1.501	.9888

Gas-Liquid Hydrocarbon Ratio		Mcf/bbl
API Gravity of Liquid Hydrocarbons		Deg.
Specific Gravity Separator Gas	.689	
Specific Gravity Flowing Fluid	.689	
Critical Pressure	667 PSIA	667 PSIA
Critical Temperature	381 R	381 R

$P_C =$ 2060.9		$P_C^2 =$ 4247.3	
NO.	P_w	P_w^2	$P_C^2 - P_w^2$
1.	1870.4	3498	748.913
2.	1762.1	3104	1142.312
3.	1572.5	2472	1774.552
4.	1131.9	1281	2966.111

$$(1) \frac{P_C^2}{P_C^2 - P_W^2} = \frac{1.432}{1.315} \quad (2) \left[\frac{P_C^2}{P_C^2 - P_W^2} \right]^n = \frac{2096}{1.315}$$

$$AOF = Q \left[\frac{P_C^2}{P_C^2 - P_W^2} \right]^n = 2096$$

Absolute Open Flow 2096 Mcfd @ 15.025		Angle of Slope - 52.7		Slope, n .762	
Remarks Plot based on measured bottomhole pressure. Data listed in the casing pressure section. No liquids produced during the test.					
Approved By Division:		Conducted By: Roy Cherry, Jr.		Calculated By: BPT System/SCHLUMBERGER	
				Checked By: Dick Simper	