30-015-30339

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

Form C-122
Revised 4-1-1996

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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: OXY USA INC				Lease or Unit Name: Duchess State	
Test Type: ☒ Initial ☐ Annual ☐ Special				Test Date: December 18, 1998	Well No.: 1
Completion Date	Total Depth	Plug Back TD	Elevation		Unit Ltr - Sec - TWP - Rge.: F 14-17-27
Csg. Size / Wt. / d / Set At		Perforation: From 9276 To 9314			County: Eddy
Tbg. Size / Wt. / d / Set At		Perforation: From To			Pool: Logan Draw MOR
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: Single			Packer Set At		Formation: Morrow
Producing Thru: TUB	Reservoir Temp.F	Mean Annual Temp.F: 60	Baro. Pressure: 14.40		Connection
L: 9295	H: 9295	Gg: .653	% CO_2: .61	% N_2: .70	% H_2S	Prover	Meter Run / Tap: Flange

NO	(PROVER) LINE SIZE x ORIFICE SIZE	FLOW DATA PRESS. PSIG	DIFF. h_w	TEMP. F	TUBING DATA PRESS. PSIG	TEMP. F	CASING DATA PRESS. PSIG	TEMP. F	SIP/FLOW DURATION (HRS.)
SHUT-IN PRESSURE							2858	158	2
1.	3.07 x 1.75	729.30	10.03	76	2148	69	2838	159	1
2.	3.07 x 1.75	731.00	17.95	63	2100	69	2827	159	1
3.	3.07 x 1.75	747.80	54.68	83	2003	69	2775	158	1
4.	3.07 x 1.75	766.00	95.00	74	1853	69	2752	154	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_{pv}	RATE OF FLOW (Q) MCFD
1.	16.010	86.367	743.7	.9850	1.2375	1.0671	1798.5
2.	16.010	115.672	745.4	.9971	1.2375	1.0743	2455.0
3.	16.010	204.150	762.2	.9786	1.2375	1.0653	4216.7
4.	16.010	272.283	780.4	.9868	1.2375	1.0717	5705.0

NO	P_r	TEMP.	T_r	Z
1.	1.108	536	1.446	.8782
2.	1.111	523	1.411	.8664
3.	1.136	543	1.465	.8811
4.	1.163	534	1.441	.8707

Gas-Liquid Hydrocarbon Ratio	61.1	Mcf/bbl	
API Gravity of Liquid Hydrocarbons	45.000	Deg.	
Specific Gravity Separator Gas	.653		
Specific Gravity Flowing Fluid		.705	
Critical Pressure	670 PSIA	668 PSIA	
Critical Temperature	370 R	387 R	

P_c = 2872.4 P_c^2 = 8250.7

NO	P_w	P_w^2	$P_c^2 - P_w^2$
1.	2852.4	8136	114.496
2.	2841.4	8073	177.128
3.	2789.4	7780	469.929
4.	2766.4	7652	597.713

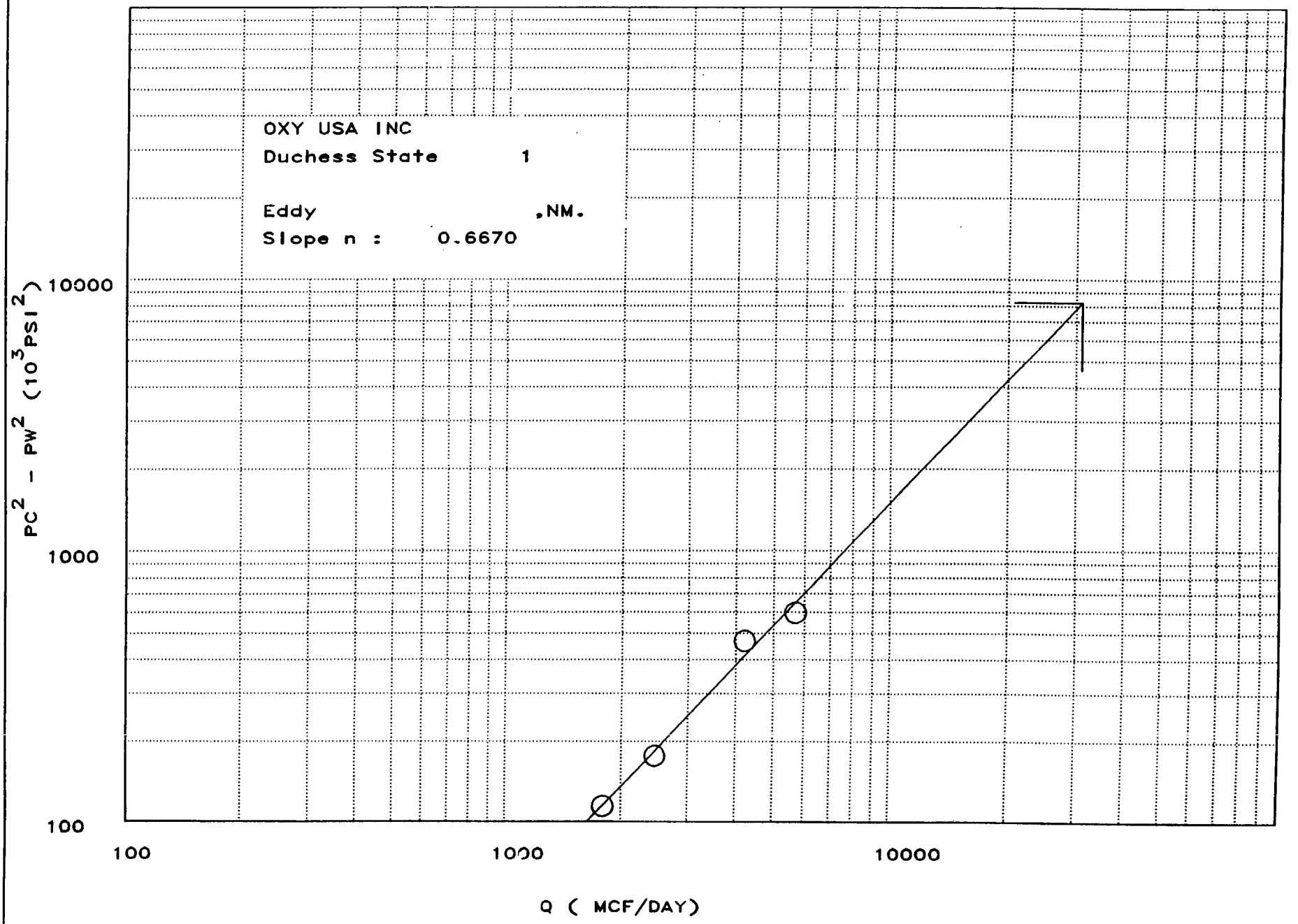
(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 13.804 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 5.761

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 32865

Absolute Open Flow	32865	Mcfd @ 15.025	Angle of Slope - 56.3	Slope, n	.667
Remarks					
Approved By Division:	Conducted By: Jeremy Cates		Calculated By: BPT System/SCHLUMBERGER	Checked By: D.Sykes-Bookhammer	

GAS WELL BACK PRESSURE CURVE

WELL TESTER: Jeremy Cates
TEST DATE: December 18, 1998



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