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State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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Form C-122
Revised October, 1999

DEC - 9 2004

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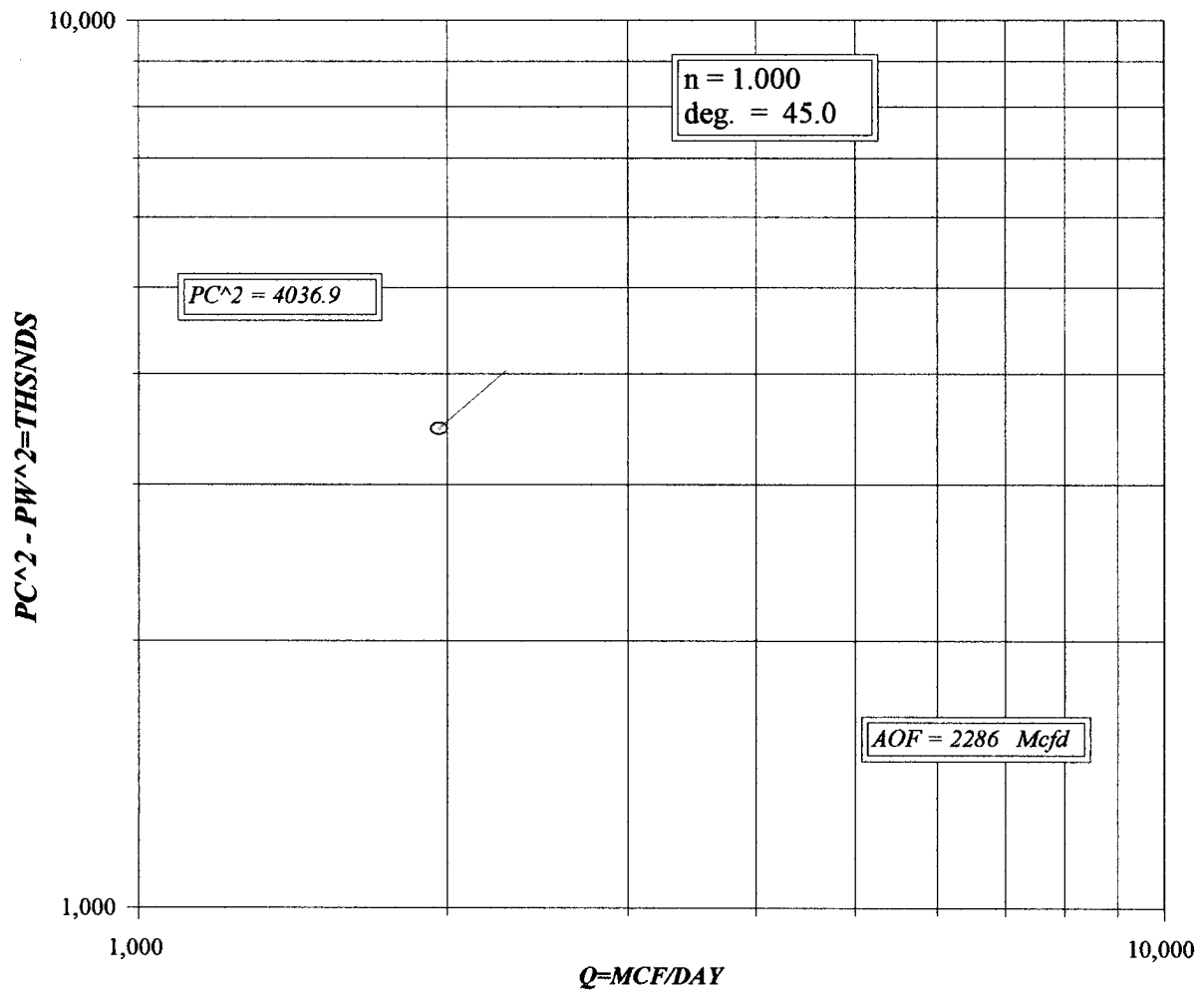
30-015-33222

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL				Lease or Unit Name DINERO 20 FED					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date		Well No. 1	
Completion Date		Total Depth 12650		Plug Back TD 12567		Elevation 3065 GL		Unit Ltr - Sec - TWP - Rge P 20 22S 28E	
Csg. Size 5 1/2	Wt. 20#	d 4.778	Set At 12650	Perforations: From: 12410 To: 12420				County EDDY	
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 11911	Perforations: From: 11997 To: 12196				Pool DUBLIN RANCH	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11897				Formation MORROW	
Producing Thru TUBING		Reservoir Temp. 181		Mean Annual Temp. 60		Baro. Press.-P _a 13.2		Connection SALES	
L 10506	H 10506	Gg 0.61	%CO ₂ 0.806	%N ₂ 0.27	%H ₂ S N/A	Prover N/A	Meter Run 3.067	Taps FLG	
FLOW DATA				TUBING DATA				CASING DATA	
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp.	Press p.s.i.g.	Temp.	Press p.s.i.g.	Temp.
SI						1996		PKR	
1	3.067 X 1.375		552	91.16	86	700		"	
2									
3									
4									
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								1966	
2									
3	TOTAL		FLOW	METER					
4									
5									
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY GAS Mcf bbl.				
1					A.P. I. Gravity of Liquid Hydrocarbons DRY Deg.				
2	TOTAL	FLOW	METER		Specific Gravity Separator Gas 0.574 XXXXXXXX				
3					Specific Gravity Flowing Fluid XXXXXX N/A				
4					Critical Pressure 675 P.S.I.A. N/A P.S.I.A.				
5					Critical Temperature 342 R. N/A R				
P _c 2009.2 P _{c2} 4036.9					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.163 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.163$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.286$				
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²					
1		751.7	508.7	3471.8					
2									
3									
4									
Absolute Open Flow 2.286 Mcfd @ 15.025					Angle of Slope (°): 45 Slope, n: 1.000				
Remarks: NO LIQUID MADE DURING TEST.									
Approved By Division:			Conducted By: MEWBOURNE OIL		Calculated By: MERV BUECKER		Checked By: BM		

MEWBOURNE OIL

DINERO 20 FED #1



COMPANY : MEWBOURNE OIL		LEASE : DINERO 20 FED		WELL NO. : 1		Pc = 2009.2		Pc2 = 4036.9	
UNIT : P		SECTION : 20		TOWNSHIP : 22S					
L :	11911	H :	11911	L/H :	1	G/GMIX :	0.574	Pt2 = 508.7	Pw = 751.7
%CO2 :	1.239	%N2 :	1.180	H2S :		DATE :		0.0	#DIV/0!
d :	2.441	Fr :	0.010763	GH :	8197.0	RANGE :	28E	0.0	#DIV/0!
							0.0	#DIV/0!	
VOL 1 : 1966		PSIA 1 : 713.2		RESV.TEMP : 193.0		Pc2-Pw2 = 3471.8		Pw2 = 565.1	
VOL 2 :		PSIA 2 :				#DIV/0!		#DIV/0!	
VOL 3 :		PSIA 3 :		SHUT-IN PR = 2009.2		#DIV/0!		#DIV/0!	
VOL 4 :		PSIA 4 :				#DIV/0!		#DIV/0!	
PCR : 675				n = 1.000					
TCR : 342				Pc2/(Pc2-Pw2) = 1.163				#DIV/0!	
				#DIV/0!				#DIV/0!	
				#DIV/0!				#DIV/0!	
LINE	RATE 1		RATE 2		RATE 3		RATE 4		
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	
1 QM	1.966	1.966	0.000	0.000	0.000	0.000	0.000	0.000	
2 TW	534	534	534	534	534	534	534	534	
3 Ts	653.0	653.0	653.0	653.0	653.0	653.0	653.0	653.0	
4 T	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	
PR (est)	1.06		0.00		0.00		0.00		
5 Z(est)	0.917	0.907	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
6 TZ	544.1	538.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
7 GH/TZ	15.065	15.232	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
8 eS	1.759	1.770	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
9 I-e-S	0.432	0.435	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
10 Pt	713.2	713.2	0.0	0.0	0.0	0.0	0.0	0.0	
11 Pt2 /1000	508.7	508.7	0.0	0.0	0.0	0.0	0.0	0.0	
12 Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	
13 Fc=FrTZ	5.856	5.792	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
14 FcQm	11.51	11.39	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
15 L/H(FcQm)2	132.6	129.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
16 Fw	57.21437	56.42496	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
17 Pw2	565.9	565.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
18 Ps2	995.5	1000.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
19 Ps	997.8	1000.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
20 P	855.5	856.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
21 Pr	1.27	1.27	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
22 Tr	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	
23 Z	0.907	0.907	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
									FORM C122-D

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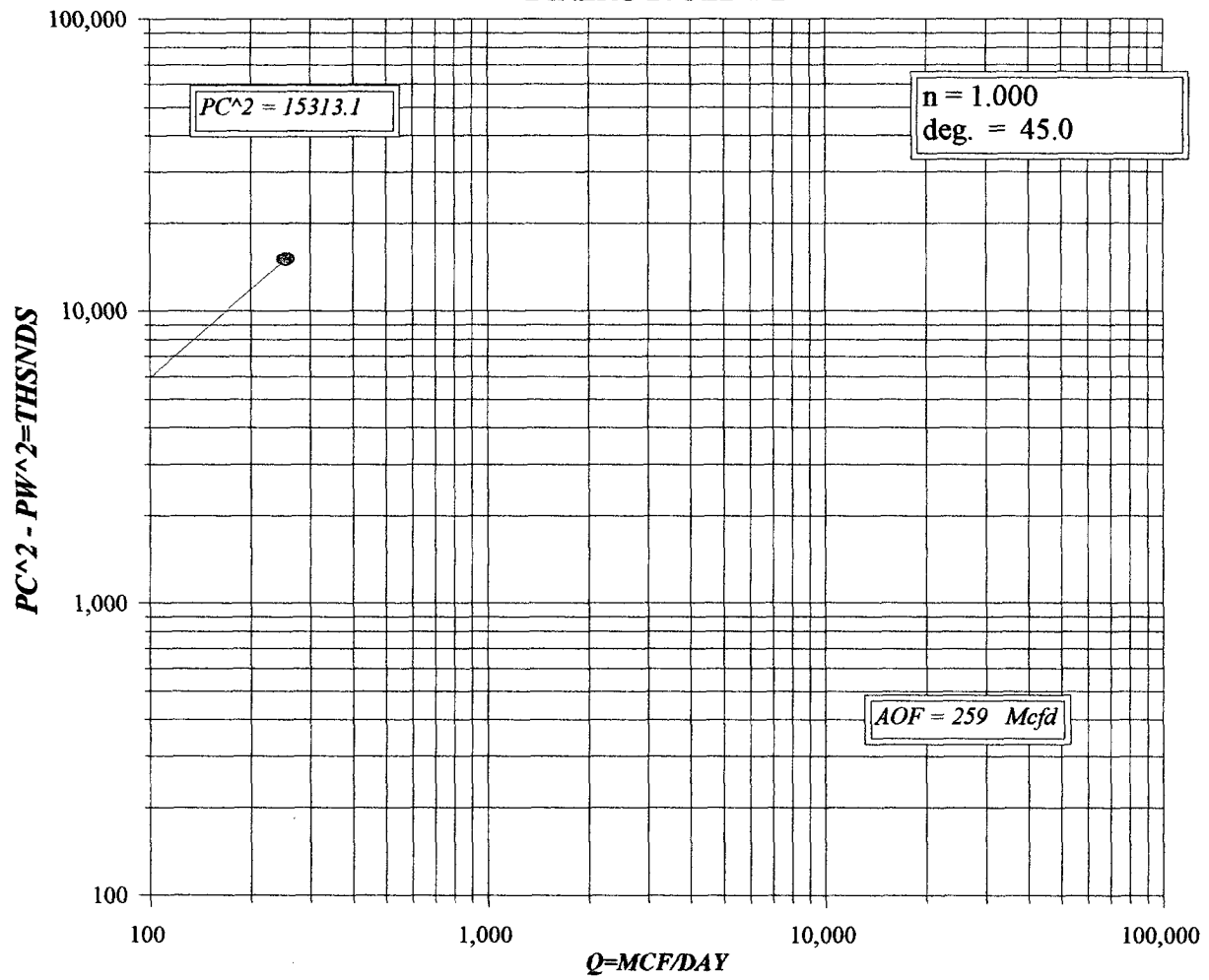
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30-015-32572

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL				Lease or Unit Name DINERO 20 FED			
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12/7/2004	Well No. 2
Completion Date 9/11/2004		Total Depth 12530		Plug Back TD 12404		Elevation 3066 GL	Unit Ltr - Sec - TWP - Rge H 20 22S 28E
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 12530	Perforations: From: 12302 To: 12370			County EDDY
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 11538	Perforations: From: To:			Pool DUBLIN RANCH
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11528		Formation MORROW	
Producing Thru TUBING		Reservoir Temp. 181	Mean Annual Temp. 60	Baro. Press.-P _a 13.2			Connection SALES
L 11538	H 11538	Gg 0.602	%CO ₂ 1.375	%N ₂ 5.185	%H ₂ S N/A	Prover N/A	Meter Run 3.067
Taps FLG							
FLOW DATA				TUBING DATA			CASING DATA
No.	Prover Line Size	Orifice Size	Press p.s.i.g.	Diff. h _w	Temp.	Press p.s.i.g.	Temp.
SI						3900	PKR
1	3.067 X 1.000		529	3.06	73	700	"
2							
3							
4							
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							254
2							
3	TOTAL	FLOW	METER				
4							
5							
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY GAS Mcf bbl.		
1					A.P. I. Gravity of Liquid Hydrocarbons DRY Deg.		
2	TOTAL	FLOW	METER		Specific Gravity Separator Gas 0.602 XXXXXXXX		
3					Specific Gravity Flowing Fluid XXXXXX N/A		
4					Critical Pressure 666 P.S.I.A. N/A P.S.I.A.		
5					Critical Temperature 343 R N/A R		
P _c 3913.2 P _{c2} 15313.1							
No.	P _t ²	P _w	P _w ²	P _c ² -P _w ²	(1) $P_c^2 = \frac{1.019}{P_c^2 - P_w^2}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.019$		
1		530	280.9	15032.2			
2							
3							
4							
5					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 0.259$		
Absolute Open Flow 259				Mcf @ 15.025	Angle of Slope (°) 45	Slope, n: 1.000	
Remarks: NO LIQUID MADE DURING TEST.							
Approved By Division:		Conducted By: MEWBOURNE OIL		Calculated By: MERV BUECKER		Checked By: BM	

MEWBOURNE OIL
DINERO 20 FED # 2



COMPANY : MEWBOURNE OIL		LEASE : DINERO 20 FED		WELL NO. : 2		Pc = 3913.2		Pc2 = 15313.1	
UNIT : H		SECTION : 20		TOWNSHIP : 22S					
L : 11538		H : 11538		L/H : 1		G/GMIX : 0.602		P12 = 280.1	
%CO2 : 1.315		%N2 : 5.185		H2S : 0.00		DATE : 12/7/04		Pw = 530.0	
d : 2.441		Fr : 0.010763		GH : 6945.9		RANGE : 28E		0.0	
								0.0	
=====									
VOL 1 : 254		PSIA 1 : 529.2		RESV.TEMP 189.4		Pc2-Pw2=		15032.2	
VOL 2 :		PSIA 2 :				#DIV/0!		#DIV/0!	
VOL 3 :		PSIA 3 :		SHUT-IN PRI = 3913.2		#DIV/0!		#DIV/0!	
VOL 4 :		PSIA 4 :				#DIV/0!		#DIV/0!	
		PCR : 666						n = 1.000	
		TCR : 343							
						Pc2/(Pc2-Pw2) =		1.019	
								#DIV/0!	
								#DIV/0!	
								#DIV/0!	
LINE	RATE 1		RATE 2		RATE 3		RATE 4		
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	
1 QM	0.254	0.254	0.000	0.000	0.000	0.000	0.000	0.000	
2 TW	534	534	534	534	534	534	534	534	
3 Ts	649.4	649.4	649.4	649.4	649.4	649.4	649.4	649.4	
4 T	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	
PR (est)	0.79		0.00		0.00		0.00		
5 Z(est)	0.929	0.923	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
6 TZ	549.8	546.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
7 GH/TZ	12.633	12.712	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
8 eS	1.606	1.611	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
9 l-e-S	0.377	0.379	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
10 Pt	529.2	529.2	0.0	0.0	0.0	0.0	0.0	0.0	
11 P12 /1000	280.1	280.1	0.0	0.0	0.0	0.0	0.0	0.0	
12 Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	
13 Fc=FrTZ	5.918	5.881	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
14 FcQm	1.50	1.49	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
15 L/H(FcQm)	2.3	2.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
16 Fw	0.852487	0.846102	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
17 Pw2	280.9	280.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
18 Ps2	451.1	452.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
19 Ps	671.7	672.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
20 P	600.4	600.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
21 Pr	0.90	0.90	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
22 Tr	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	
23 Z	0.923	0.923	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
=====									
FORM C122-D									