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appropriate district office.
See Rule 401 & Rule 1122

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

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MAR - 5 2004

OCD-ARTESIA

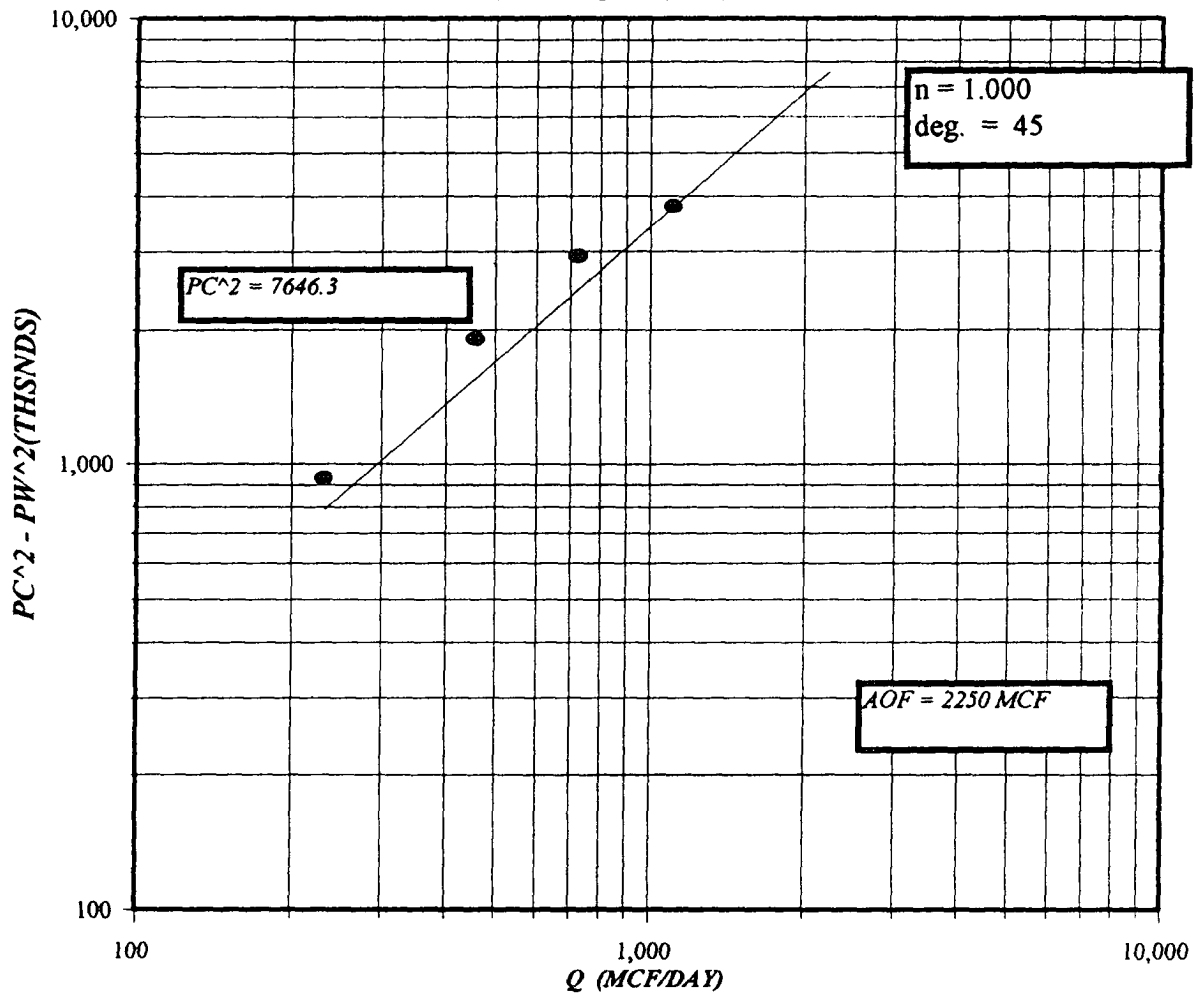
Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

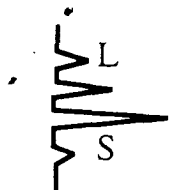
30-015-33007

Operator MURCHISON OIL & GAS					Lease or Unit Name STRONG FED. COM.				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-26-04		Well No. 3		
Completion Date 2-20-04		Total Depth 11611		Plug Back TD 11120		Elevation 3293 GL		Unit Ltr - Sec - TWP - Rge A 34 24 26	
Csg. Size 5 1/2	Wt. 17 #	d 4.892	Set At 11611		Perforations: From: 10244 To: 11045		County EDDY		
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 10206		Perforations: From: OPEN To: ENDED		Pool WHITE CITY		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE					Packer Set At 10206		Formation PENN		
Producing Thru TBG		Reservoir Temp. °F 176.1 @ 10206		Mean Annual Temp. °F 60		Baro. Press. -P _a 13.2		Connection DUKE ENERGY	
L 10206	H 10206	Gg 0.586	%CO ₂ 0.708	%N ₂ 0.773	%H ₂ S N/A	Prover N/A	Meter Run 4.026	Taps FLG	
FLOW DATA					TUBING DATA			CASING DATA	
No.	Prover Line Size	Onifice x 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						2752		PKR	
1	4 X	1.000	145	8	65	2578		"	
2	4 X	1.000	145	34	60	2380		"	
3	4 X	1.000	150	83	55	2157		"	
4	4 X	1.000	155	198	55	1950		"	
5									
RATE OF FLOW CALCULATIONS									
No.	COEFFICIENT (24 Hour)		√ 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								232	
2								458	
3	MEASURED		BY		TOTAL	FLOW	METER	725	
4								1,112	
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					Specific Gravity Separator Gas 0.586 XXXXXXXX				
3		N/A			Specific Gravity Flowing Fluid XXXXXX				
4					Critical Pressure 672 P.S.I.A. P.S.I.A.				
5					Critical Temperature 350 R. R.				
P _c 2765.2 P _{c2} 7646.3									
No.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $P_c^2 = \frac{2.023}{P_c^2 - P_w^2}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.023$				
1		2591.3	6714.9	931.5					
2		2393.6	5729.5	1916.8					
3		2171.4	4715.1	2931.2					
4		1966.4	3866.7	3779.6					
5									
79825					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.25$				
Absolute Open Flow 2,250 Mcfd @ 15.025					Angle of Slope (°): 45 Slope n: 1				
Remarks: WELL PRODUCED NO FLUID									
Approved By Division:			Conducted By: JARREL SERVICES, INC.		Calculated By: BM		Checked By: BM		

MURCHISON OIL & GAS
STRONG FED. COM. # 3



COMPANY :MURCHASON OIL & GAS LEASE :STRONG FED. COM										WELL NO. : 3		PC = 2105.2		PC2 = 7040.5			
UNIT : A		SECTION : 34				TOWNSHIP : 24											
L : 10206		H : 10206		L/H : 1		G/GMIX : 0.586				Pt2 = 6714.3		Pw = 2591.3		*			
%CO2 : 0.708		%N2 : 0.773		H2S :		DATE :2-26-04				5727.4		2393.6		*			
d : 2.441		Fr :0.010763		GH : 5980.7		RANGE : 26				4709.8		2171.4		*			
												3854.2		1966.4		*	
VOL 1 : 232		PSIA 1 : 2591.2				RESV.TEMP 176.1				Pc2-Pw2= 931.5		Pw2 = 6714.9		*			
VOL 2 : 458		PSIA 2 : 2393.2								1916.8		5729.5		*			
VOL 3 : 725		PSIA 3 : 2170.2				SHUT-IN PR= 2765.2				2931.2		4715.1		*			
VOL 4 : 1112		PSIA 4 : 1963.2								3779.6		3866.7		*			



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Jarrel Services Inc.
Attention: Mr. Donnie Dickerson
P.O. Box 1230
Hobbs, New Mexico 88240

SAMPLE:
IDENTIFICATION: Strong Fed. Com. #3
COMPANY: Murchison Oil & Gas
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 2/26/04
ANALYSIS DATE: 2/27/04
PRESSURE - PSIG
SAMPLE TEMP. °F
ATMOS. TEMP. °F

GAS (XX) LIQUID ()
SAMPLED BY: Donnie Dickerson
ANALYSIS BY: Vickie Biggs

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.773	
Carbon Dioxide	(CO2)	0.708	
Methane	(C1)	96.308	
Ethane	(C2)	1.447	0.386
Propane	(C3)	0.185	0.051
I-Butane	(IC4)	0.036	0.012
N-Butane	(NC4)	0.036	0.011
I-Pentane	(IC5)	0.015	0.005
N-Pentane	(NC5)	0.015	0.005
Hexane Plus	(C6+)	0.477	0.207
		100.000	0.677

BTU/CU.FT. - DRY 1029
AT 14.650 DRY 1026
AT 14.650 WET 1008
AT 14.73 DRY 1032
AT 14.73 WET 1014

MOLECULAR WT. 16.9974

SPECIFIC GRAVITY -
CALCULATED 0.586
MEASURED