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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

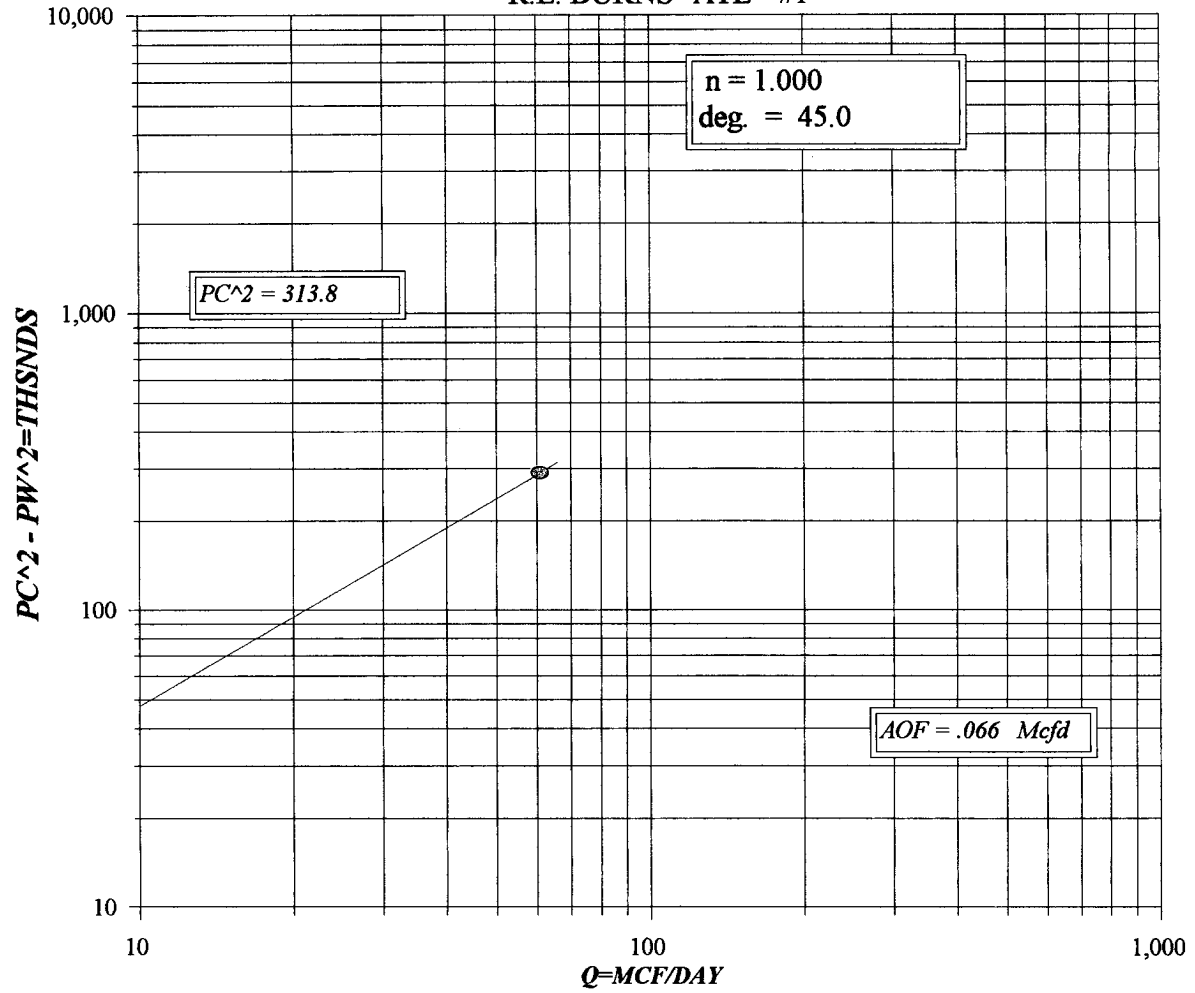
Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

3D-025-24559

Operator YATES PET.				Lease or Unit Name R.L.BURNS			
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7/22/04	Well No. 1
Completion Date		Total Depth		Plug Back TD 12140		Elevation	Unit Ltr - Sec - TWP - Rge 22-15-35 11-16-35
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At	Perforations: From: 12004 To: 12050		County LEA	
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 11700	Perforations: From: To:		Pool	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11700		Formation	
Producing Thru Tubing		Reservoir Temp. °F 187	Mean Annual Temp. °F 60	Baro. Press.-P _a 13.2		Connection SALES	
L 11700	H 11700	Gg 0.689	%CO ₂ 0.635	%N ₂ 0.976	%H ₂ S N/A	Prover N/A	Meter Run 4.026
Taps FLG							
FLOW DATA				TUBING DATA		CASING DATA	
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp. °F	Press p.s.i.g.	Temp. °F
SI							
1	4.026	X .625	42	40	97	142	
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							
2							
3	TOTAL	FLOW	METER				
4							
5							
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		Mcf bbl.
1					N/A		
2					A.P. I. Gravity of Liquid Hydrocarbons		Deg.
3	TOTAL	FLOW	METER		Specific Gravity Separator Gas		
4					Specific Gravity Flowing Fluid		
5					Critical Pressure		
	P _c 560.2	P ₂ 313.8			672 P.S.I.A.		P.S.I.A.
					Critical Temperature		
					384 R.		R
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.083$		
1		155.4	24.1	289.7	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.083$		
2							
3					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 0.066$		
4							
5							
Absolute Open Flow		0.066		Mcf/d @ 15.025		Angle of Slope (°)	45
						Slope n:	1
Remarks: * NO LIQUID MADE DURING TEST.							
Approved By Division:		Conducted By:		Calculated By:		Checked By:	
<i>Paul J. Harty</i>		PRO WELL TESTING		MERV BUECKER		MB	

YATES PET.
R.L. BURNS "ATL" #1



COMPANY : YATES PETR.		LEASE : R.L. BURNS		WELL NO. : 1		Pc = 560.2		Pc2 = 313.8		*	
UNIT : 11700		SECTION : 22		TOWNSHIP : 15		P12 = 24.1		Pw = 155.4		*	
L : 11700		H : 11700		L/H : 1		G/GMIX : 0.823		DATE : 7/22/04		*	
%CO2 : 10.652		%N2 : 1.389		H2S : 0.010763		GH : 8197.0		RANGE : 35		*	
d : 2.441		Fr : 0.010763								*	
VOL 1 : 61		PSIA 1 : 155.2		RESV. TEMP : 187.0		Pc2-Pw2 = 289.7		Pw2 = 24.1		*	
VOL 2 :		PSIA 2 :				#DIV/0!		#DIV/0!		*	
VOL 3 :		PSIA 3 :		SHUT-IN PRE! = 560.2		#DIV/0!		#DIV/0!		*	
VOL 4 :		PSIA 4 :				#DIV/0!		#DIV/0!		*	
		PCR : 672				n = 1.000				*	
		TCR : 384				Pc2/(Pc2-Pw2) = 1.083				*	
LINE		RATE 1		RATE 2		RATE 3		RATE 4		*	
		1ST		2ND		1ST		2ND		*	
1 QM		0.061	0.061	0.000	0.000	0.000	0.000	0.000	0.000	*	
2 TW		534	534	534	534	534	534	534	534	*	
3 Ts		647.0	647.0	647.0	647.0	647.0	647.0	647.0	647.0	*	
4 T		590.5	590.5	590.5	590.5	590.5	590.5	590.5	590.5	*	
PR (est)		0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	*	
5 Z(est)		0.955	0.952	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
6 TZ		563.8	561.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
7 GH/TZ		14.538	14.587	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
8 eS		1.725	1.728	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
9 I-e-S		0.420	0.421	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
10 Pt		155.2	155.2	0.0	0.0	0.0	0.0	0.0	0.0	*	
11 P12 /1000		24.1	24.1	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		6.069	6.048	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
14 FcQm		0.37	0.37	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
15 L/H(FcQm)2		0.1	0.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
16 Fw		0.0575898	0.0573465	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
17 Pw2		24.1	24.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
18 Ps2		41.6	41.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
19 Ps		204.1	204.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
20 P		179.6	179.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
21 Pr		0.27	0.27	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
22 Tr		1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	*	
23 Z		0.952	0.952	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	*	
										FORM C122-D	



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Pro Well Testing & Wireline
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE:
IDENTIFICATION: R. L. Burns
COMPANY: Yates Petroleum
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 7/20/04 1:15 pm
ANALYSIS DATE: 7/21/04
PRESSURE - PSIG 40
SAMPLE TEMP. °F 102
ATMOS. TEMP. °F 100

GAS (XX) LIQUID ()
SAMPLED BY: J. Rice
ANALYSIS BY: Vickie Biggs

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.976	
Carbon Dioxide (CO2)	0.635	
Methane (C1)	82.937	
Ethane (C2)	8.947	2.387
Propane (C3)	3.824	1.051
I-Butane (IC4)	0.617	0.201
N-Butane (NC4)	1.217	0.383
I-Pentane (IC5)	0.274	0.100
N-Pentane (NC5)	0.218	0.079
Hexane Plus (C6+)	0.355	0.154
	100.000	4.355

BTU/CU.FT. - DRY 1189
AT 14.650 DRY 1185
AT 14.650 WET 1164
AT 14.73 DRY 1191
AT 14.73 WET 1171

MOLECULAR WT. 19.9819

SPECIFIC GRAVITY -
CALCULATED 0.689
MEASURED