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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

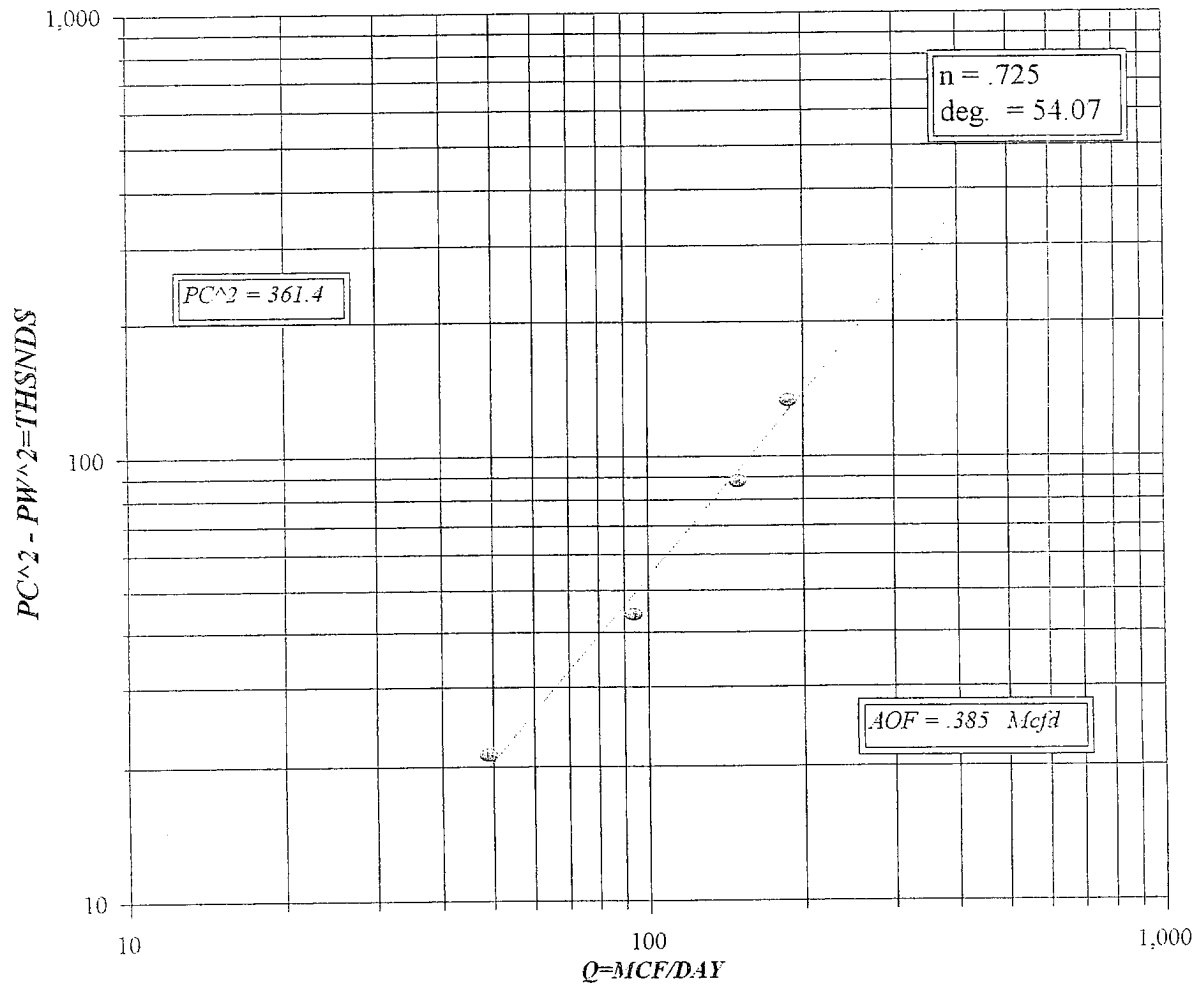
Form C-122
Revised October, 1999

30-025-24559

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator YATES PET.				Lease or Unit Name R.L.BURNS						
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6/23/03	Well No. 1			
Completion Date		Total Depth		Plug Back TD 12140		Elevation	Unit Ltr - Sec - TWP - Rge 22 15 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 0.823	%CO ₂ 10.652	%N ₂ 1.389	%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	Press p.s.i.g.	Temp. °F	Duration of Flow
SI						601.2	N/A	PKR	N/A	
1	4.026 X 1.375		98	0.8	86	570				1 HR
2	4.026 X 1.375		102	1.7	92	550				1 HR
3	4.026 X 1.375		101	4.4	94	509				1 HR
4	4.026 X 1.375		101	7.4	94	463				1 HR
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								49		
2								94		
3	TOTAL		FLOW	METER				150		
4								188		
5										
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio N/A Mcfbbl.					
1					A.P.I. Gravity of Liquid Hydrocarbons N/A Deg.					
2					Specific Gravity Separator Gas 0.823 XXXXXXXX					
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid N/A XXXXXX					
4					Critical Pressure 622 P.S.I.A. P.S.I.A.					
5					Critical Temperature 411 R. R.					
P _c 601.2 P _{c2} 361.4										
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.694}{\quad}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2.05}{\quad}$					
1		583.2	340.2	21.3	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{0.385}{\quad}$					
2		563.3	317.3	44.1						
3		522.5	273	88.4						
4		476.7	227.3	134.2						
5										
Absolute Open Flow 0.385 Mcfd @ 15.025					Angle of Slope (°): 54.07		Slope n: 0.7245			
Remarks: * NO LIQUID MADE DURING TEST.										
Approved By Division:			Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER			Checked By: MB		

YATES PET.
R.L. BURNS #1



COMPANY : YATES PETR.		LEASE : R.L. BURNS		WELL NO. : 1		Pc = 601.2		Pc2 = 361.4	
UNIT : 11700		SECTION : 22		TOWNSHIP : 15		Pt2 = 340.1		Pw = 553.2	
L : 11700		H : 11700		L/H : 1		DATE : 6/23/03		272.7	
%CO2 : 10.652		%N2 : 1.399		H2S : 8197.0		RANGE : 35		226.8	
d : 2.441		Fr : 0.010763		GH : 8197.0					
VOL 1 : 49		PSIA 1 : 553.2		RESV.TEMP : 187.0		Pc2-Pw2 = 21.3		Fw2 = 340.2	
VOL 2 : 94		PSIA 2 : 553.2				44.1		317.3	
VOL 3 : 150		PSIA 3 : 522.2		SHUT-IN PRE: = 601.2		88.4		273.0	
VOL 4 : 188		PSIA 4 : 476.2				134.2		227.3	
		PCR : 622				n = 0.725			
		TCR : 411				Pc2/(Pc2-Pw2) = 16.981			
LINE		RATE 1		RATE 2		RATE 3		RATE 4	
		1ST		2ND		1ST		2ND	
1	QM	0.049	0.049	0.094	0.094	0.150	0.150	0.188	0.188
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)	0.94	0.91	0.84	0.84	0.77	0.77	0.77	0.77
5	Z(est)	0.871	0.854	0.875	0.858	0.882	0.866	0.890	0.876
6	TZ	514.5	504.1	516.5	506.5	520.8	511.5	525.6	517.2
7	GH/TZ	15.932	16.251	15.868	16.183	15.739	16.025	15.595	15.850
8	SS	1.817	1.840	1.813	1.835	1.804	1.824	1.795	1.812
9	Ie-S	0.450	0.437	0.448	0.455	0.446	0.452	0.443	0.448
10	PL	553.2	553.2	553.2	553.2	522.2	522.2	476.2	476.2
11	Pt2 /1000	340.1	340.1	317.2	317.2	272.7	272.7	226.8	226.8
12	Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763
13	Fc=FrTZ	5.537	5.426	5.560	5.452	5.606	5.505	5.657	5.566
14	FcQm	0.27	0.27	0.52	0.51	0.84	0.83	1.06	1.05
15	L/H(FcQm)2	0.1	0.1	0.3	0.3	0.7	0.7	1.1	1.1
16	Pw	0.0331151	0.0322669	0.1224901	0.1194746	0.3151718	0.3080514	0.5008717	0.49068075
17	Pw2	340.2	340.2	317.3	317.3	273.0	273.0	227.3	227.3
18	Ps2	618.2	625.9	575.3	582.2	492.6	497.9	407.9	411.8
19	Ps	786.3	791.1	758.5	763.0	701.9	705.6	638.6	641.7
20	P	684.7	687.2	660.9	663.1	612.0	613.9	557.4	558.9
21	Pr	1.10	1.10	1.06	1.07	0.98	0.99	0.90	0.90
22	Tr	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
23	Z	0.854	0.853	0.855	0.857	0.866	0.866	0.876	0.876
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