

Submit in duplicate to
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 PETROLEUM					Lease or Unit Name R.L. BURNS				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1/13/07		Well No.		
Completion Date		Total Depth 12150		Plug Back TD		Elevation		Uplift - See - TWP - Rge	
Csg. Size 5 1/2	Wt. 17#	d 6.214	Set At 12150	Perforations: From: 12004 To: 12050		To: 12050		Pool	
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 11700	Perforations: From: To:					
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11700		Formation			
Producing Thru TBG		Reservoir Temp. °F 172 @ 11700		Mean Annual Temp. °F 60		Baro. Press. -P _a 13.2		Connection	
L 11700	H 11700	Gg 0.6738	%CO ₂ 0.61	%N ₂ 0.875	%H ₂ S	Prover N/A	Meter Run	Taps	
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
1					74	567			
2					54	69			
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								111	
2				TOTAL	FLOW	METER			
3									
4									
5									
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY Mcf bbl.				
1					A.P. I. Gravity of Liquid Hydrocarbons DRY GAS Deg.				
2					Specific Gravity Separator Gas 0.6738 XXXXXXXX				
3			N/A		Specific Gravity Flowing Fluid XXXXXX N/A				
4					Critical Pressure 669 P.S.I.A. P.S.I.A.				
5					Critical Temperature 382 R. R.				
P _c 580.2 P _{c2} 336.6									
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $P_c^2 = \frac{1.021}{P_c^2 - P_w^2}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.021$				
1		83.3	6.9	329.7					
2									
3									
4									
5									
Absolute Open Flow 113 MCF					Mcf @ 15.025				
Angle of Slope (°): 45					Slope n: 1				
Remarks: NO FLUID PRODUCED									
Approved By Division <i>Chris Williams</i>			Conducted By: ProWell Testing & Wire Line		Calculated By: BM			Checked By: BM	

COMPANY : STATES PETROLEUM LEASE : R. L. BURNS WELL NO. : 1
 UNIT : SECTION : TOWNSHIP :
 L : 11700 H : 11700 L/H : 1 G/GMIX : 0.674
 %CO2 : 0.61 %N2 : 0.875 H2S : DATE : 1-13-07
 d : 2.441 Fr : 0.010763 GH : 7883.5 RANGE :

VOL 1 : 111 PSIA 1 : 172
 VOL 2 : PSIA 2 :
 VOL 3 : PSIA 3 : SHUT-IN PR= 580.2
 VOL 4 : PSIA 4 :
 PCR : 669
 TCR : 382

Pc = 580.2 Pc2 = 336.6 *
 Pt2 = 6.8 Pw = 83.3 *
 0.0 ERR *
 0.0 ERR *
 0.0 ERR *
 Pc2-Pw2= 329.7 Pw2 = 6.9 *
 ERR ERR *
 ERR ERR *
 ERR ERR *
 n = 1.000 *
 Pc2/(Pc2-Pw2) = 1.021 *
 ERR *
 ERR *
 ERR *

LINE		RATE 1		RATE 2		RATE 3		RATE 4	
		1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1	QM	0.111	0.111	0.000	0.000	0.000	0.000	0.000	0.000
2	TW	534	534	534	534	534	534	534	534
3	Ts	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
4	T	583.0	583.0	583.0	583.0	583.0	583.0	583.0	583.0
	PR (est)	0.12		0.00		0.00		0.00	
5	Z(est)	0.964	0.962	ERR	ERR	ERR	ERR	ERR	ERR
6	TZ	562.1	561.1	ERR	ERR	ERR	ERR	ERR	ERR
7	GH/TZ	14.024	14.050	ERR	ERR	ERR	ERR	ERR	ERR
8	eS	1.692	1.694	ERR	ERR	ERR	ERR	ERR	ERR
9	l-e-S	0.409	0.410	ERR	ERR	ERR	ERR	ERR	ERR
10	Pt	82.2	82.2	0.0	0.0	0.0	0.0	0.0	0.0
11	Pt2 /1000	6.8	6.8	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	0.0107631
13	Fc=FrTZ	6.050	6.039	ERR	ERR	ERR	ERR	ERR	ERR
14	FcQm	0.67	0.67	ERR	ERR	ERR	ERR	ERR	ERR
15	L/H(FcQm)	0.5	0.4	ERR	ERR	ERR	ERR	ERR	ERR
16	Fw	0.184461	0.184035	ERR	ERR	ERR	ERR	ERR	ERR
17	Pw2	6.9	6.9	ERR	ERR	ERR	ERR	ERR	ERR
18	Ps2	11.7	11.8	ERR	ERR	ERR	ERR	ERR	ERR
19	Ps	108.4	108.4	ERR	ERR	ERR	ERR	ERR	ERR
20	P	95.3	95.3	ERR	ERR	ERR	ERR	ERR	ERR
21	Pr	0.14	0.14	ERR	ERR	ERR	ERR	ERR	ERR
22	Tr	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53
23	Z	0.962	0.962	ERR	ERR	ERR	ERR	ERR	ERR

[Pc2/Pc2-Pw2]n = 1.021 *
 ERR *
 ERR *
 ERR *
 AOF= Q 0.113 *
 ERR *
 ERR *
 ERR *



Laboratory Services, Inc.

2609 West Marland
Hobbs, New Mexico 88240

Telephone: (505) 784-3640

FOR:

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

SAMPLE:

IDENTIFICATION R.L. Burns #1
COMPANY: Yates Petroleum
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED 1/18/07 12:00pm
ANALYSIS DATE: 1/19/07
PRESSURE - PSIG 45
SAMPLE TEMP. °F 67
ATMOS. TEMP. °F 40
REMARKS: H2S = 0

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

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)	0.000	
Nitrogen (N2)	0.870	
Carbon Dioxide (CO2)	0.610	
Methane (C1)	80.216	
Ethane (C2)	9.207	2.456
Propane (C3)	4.433	1.219
i-Butane (IC4)	0.732	0.239
N-Butane (NC4)	1.464	0.461
i-Pentane (IC5)	0.560	0.204
N-Pentane (NC5)	0.501	0.181
Hexane Plus (C6+)	1.407	0.611
	100.000	5.371
BTU/CU.FT. - DRY	1266	
AT 14.650 DRY	1262	
AT 14.650 WET	1240	
AT 14.73 DRY	1269	
AT 14.73 WET	1247	
SPECIFIC GRAVITY - CALCULATED	0.738	
MEASURED		

MOLECULAR WT. 21.4453

YATES PETROLEUM

R.L. BURNS #1

