

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Primero Operating Inc.						Lease or Unit Name Tilley					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-13-98		Well No. 1			
Completion Date 7-10-98		Total Depth 11542		Plug Back TD 11542		Elevation 3965 GL		Unit Ltr. - Sec. - TWP - Rge. N 26- 16S-35E			
Csg. Size 5 1/2	Wt. 20	d	Set At	Perforations: From: 11430 To: 11488				County Lea			
Tbg. Size 2-7/8	Wt. 6.5	d	Set At 11257	Perforations: From: To:				Pool Shoebar			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 11257		Formation Atoka			
Producing Thru Tbg.		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press - P _a		Connection			
L 11459	H 11459	Gg .691	% CO ₂ .556	% N ₂ 1.449	% H ₂ S	Prover		Meter Run 3.068		Taps Flg.	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice 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							2369		PKR		72 Hours
1.	3	X	1.000	128	2.89	40	2130		"		1 Hour
2.	3	X	1.000	130	16.81	35	1595		"		1 Hour
3.	3	X	1.000	130	28.09	38	1270		"		1 Hour
4.	3	X	1.000	130	36.00	38	750		"		1 Hour
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	h _w P _m	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv} .	Rate of Flow Q, Mcfd
1.	4.789	20.20	141.2	1.020	1.203	1.017	120
2.	4.789	49.06	143.2	1.025	1.203	1.017	295
3.	4.789	63.42	143.2	1.022	1.203	1.017	380
4.	4.789	71.80	143.2	1.022	1.203	1.017	430
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 10.208 Mcf/bbl.
1.	.21	500	1.29	.967	A.P. L Gravity of Liquid Hydrocarbons 60.9 @ 60° Deg.
2.	.21	495	1.28	.966	Specific Gravity Separator Gas .691 XXXXXXXXXX
3.	.21	498	1.29	.967	Specific Gravity Flowing Fluid XXXXXX GMIX = .946
4.	.21	498	1.29	.967	Critical Pressure **669 P.S.I.A. 660 P.S.I.A.
5.					Critical Temperature **385 R 468 R

*** p_c **3316.4** p_c² **10998.5**

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.838$	2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 1.616$
1.	***	3101.0	9616.2	1382.3	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = .614$	
2.	***	2630.4	6919.0	4079.5		
3.	***	2239.6	5015.8	5982.7		
4.	***	1682.4	2830.5	8168.0		
5.						

Absolute Open Flow 614 Mcfd @ 15.025	Angle of Slope θ 51.76	Slope, n .7878
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Remarks: * = BHP INSTRUMENT SET @ THIS DEPTH
 ** = CORRECTED TO 1.449 N2 & .556 CO2

Approved By Division	Conducted By: West-Test, Inc.	Calculated By: BM	Checked By: BM
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*** = BHP's CORRECTED BACK TO SURFACE PRESSURE

PRIMERO OPERATING

TILLEY # 1

