

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

Type Test: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date: 6-12-82							
Company: BTA OIL PRODUCERS			Connection: LLANO, INC.								
Pool: Undesignated			Formation: Wolfcamp		Unit:						
Completion Date: 5/5/82		Total Depth: 16,100'		Plug Back TD: 13,980'							
				Elevation: 3366' KB							
Form or Lease Name: 8105 JV-P Mesa											
Csg. Size: 7-5/8"		Wt.: 29.7&39		Set At: 13,700'							
				Perforations: From 13,367' To 13,778'							
Well No.: 1											
Tub. Size: 2-7/8"		Wt.: 6.5		Set At: 12,740'							
		d: 2.441		Perforations: From - - To - -							
Unit: I		Sec.: 1		Twp.: 26S							
Rnge.: 32E											
Type Well - Single - Broadhead - G.G. or G.O. Multiple: Single				Packer Set At: 12,740'							
Producing Thru Tbg.: L 12,740' H 12,740'				County: Lea							
Reservoir Temp. *F: 205 @ 13,778'		Mean Annual Temp. *F: 60		Baro. Press. - P <sub>a</sub> : 13.2							
State: New Mexico											
L: 12,740'		H: 12,740'		G <sub>g</sub> : 0.648							
		% CO <sub>2</sub> : 0.35		% N <sub>2</sub> : 0.50							
		% H <sub>2</sub> S: 0		Prover: Meter Run: x Taps: F							
FLOW DATA			TUBING DATA								
CASING DATA			Duration of Flow								
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. *F	Press. p.s.i.g.	Temp. *F	Press. p.s.i.g.	Temp. *F	Duration of Flow
1.	3.068	x	1.250	423	62	75	3520	60	423	60	24 hr.
2.	3.068	x	1.250	435	26	80	4050	60	435	60	2 hr.
3.	3.068	x	1.250	420	12	79	4540	60	420	60	2 hr.
4.	3.068	x	1.250	405	2 1/2	89	4970	60	405	60	2 hr.
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor FL	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd				
1.	7.577	164.41	436.2	0.9859	.242	1.041	1,587				
2.	7.577	107.95	448.2	0.9813	.242	1.041	1,043				
3.	7.577	72.10	433.2	0.9822	.242	1.040	693				
4.	7.577	32.33	418.2	0.9732	.242	1.037	307				
5.											
NO.	P <sub>r</sub>	Temp. *R	Z	Gas Liquid Hydrocarbon Ratio: 39.13 Mcf/bbl.							
1.	0.65	535	1.43	A.P.I. Gravity of Liquid Hydrocarbons: 60.8 Deg.							
2.	0.67	540	1.44	Specific Gravity Separator Gas: 0.648							
3.	0.65	539	1.44	Specific Gravity Flowing Fluid: 0.722							
4.	0.62	549	1.46	Critical Pressure: 671 P.S.I.A. 669 P.S.I.A.							
5.				Critical Temperature: 375 R 398 R							
P <sub>c</sub> 5219.2		P <sub>c</sub> <sup>2</sup> 27237									
NO.	P <sub>1</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.849$						
1.	12475		12513	14725	(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7469$						
2.	16508		16526	10712							
3.	20730		20738	6500							
4.	24830		24832	2405	AOF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.772$						
5.											
Absolute Open Flow: 2.772 Mcfd @ 15.025				Angle of Slope @: 47.8		Slope, n: 0.907					
Remarks: Ran test in descending order in attempt to obtain reasonable results. Well produces + 100 Bbl. water per MMCF. Total liquid rate approximately 145 bbl/MMCF.											
Applied For By: JERRY SEXTON		Conducted By:		Calculated By:		Checked By:					