NM, OCD
File, 122 file

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

Form C-122
Revised 9-1-65

RECEIVED
DEC 21 1977
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 11-14-77	
Company: Texas Oil & Gas Corporation		Connection: To Air		
Pool: ~~Lost Lake Strawn~~ Undesignated Strawn		Formation: Strawn		Unit:
Completion Date: 11-19-77	Total Depth: 8930'	Plug Back TD: 8822'	Elevation: 3980.8	Farm or Lease Name: O'Brien "B" C
Csg. Size: 4 1/2" / Wt.: 11.6 & 10.5 / d: 4.00 / Set At: 8930		Perforations: From 8542 To 8690		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: 8311		Perforations: From To		Unit: N / Sec.: 2 / Twp.: 9S / Rge.: 29E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 8311		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 166 @ 8542	Mean Annual Temp. °F:	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
8542	8542	.689				Critical Flow		

NO.	FLOW DATA: Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI.					2151	67			
1.	2" x 1/16"	1833		56	1833	66			1 Hr.
2.	2" x 3/32"	1362		59	1362	64			1 Hr.
3.	2" x 1/8"	812		62	812	61			1 Hr.
4.	2" x 3/16"	251		64	251	60			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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	0.06405		1846.2	1.004	1.205	1.235	177
2.	0.1410		1375.2	1.001	1.205	1.181	276
3.	0.2648		825.2	0.9981	1.205	1.101	289
4.	0.6082		264.2	0.9962	1.205	1.030	199
5.							

NO.	P_r	Temp. °R	T_r	Z
1	2.760	516	1.33	.656
2.	2.056	519	1.34	.717
3.	1.233	522	1.35	.825
4.	.395	524	1.35	.943
5.				

Gas Liquid Hydrocarbon Ratio: None Produced Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .689 .689
Specific Gravity Flowing Fluid: XXXX .689
Critical Pressure: 669 P.S.I.A. 669 P.S.I.A.
Critical Temperature: 388 R 388 R

P_f 2962.2 P_f^2 8775

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1		2690.2	7237	1538
2		2116.2	4478	4297
3		1508.2	2275	6500
4		927.2	860	7915
5				

(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 5.705$ (2) $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 2.389$

AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n$ = 423

Absolute Open Flow: 423 Mcfd @ 15.025 Angle of Slope θ: 63.5° Slope, n: .500

Remarks: Bottom Hole Pressure Recorded with Amerada RPG-3 Instrument No. 41379 (0-6000 psi Range)

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Tom Hansen Co. Inc.	McPherson	