NMOCC COPY

NEW MEXICO OIL CONSERVATION C MSSION

MULTIPOINT AND ONE POINT BACK PRESSURE EST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

RECEIVED

FEB 22 1978

FEB 21 1978

O. C. C.
ARTESIA, OFFICE

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Type Test: [x] Initial [ ] Annual [ ] Special				Test Date: 2-7-78	
Company: Coquina Oil Corp.			Connection: N.G. P		
Pool: ~~South Carlsbad~~ Wildcat			Formation: Strawn		
Completion Date: 2-6-78	Total Depth: ~~12,128~~ 12,100		Plug Back TD: 11,970	Elevation: 3267 gr.	Farm or Lease Name: O'Neill Federal
Csg. Size: 4½ / Wt.: 11.6 / d: / Set At: 12,126			Perforations: From 10,713 To 10,719		Well No.: No. 1
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 10,638			Perforations: From To		Unit: E / Sec.: / Twp.: 24S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 10,638		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 185° @ 10,716		Mean Annual Temp. °F: 68	Baro. Press. – P_a: 13.2	State: New Mexico
L: 10,638	H: 10,638	Gg: .66	% CO_2: None	% N_2: None	% H_2S: None
Prover:	Meter Run: 3.068	Taps: Flange			

FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI					2770	40°			
1.	3.068 x .750	942.2	2.5	52°	2202	57			120 Min.
2.	3.068 x .750	942.2	4.8	58	1793	61			120 Min.
3.	3.068 x .750	942.2	7.34	61	1361	64			120 Min.
4.	3.068 x .750	942.2	8.24	61	937	64			120 Min.
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	2.672	48.53	942.2	1.008	1.231	1.116	180
2.	2.672	67.25	942.2	1.002	1.231	1.116	247
3.	2.672	83.16	942.2	.9990	1.231	1.116	305
4.	2.672	88.11	942.2	.9990	1.231	1.116	323
5.							

NO.	P_t	Temp. °R	T_r	Z
1	1.40	512	1.35	.803
2.	1.40	518	1.37	.803
3.	1.40	521	1.37	.803
4.	1.40	521	1.37	.803
5.				

Gas Liquid Hydrocarbon Ratio: None Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons: None Deg.

Specific Gravity Separator Gas: .66 XXXXXXXXX

Specific Gravity Flowing Fluid: XXXXX

Critical Pressure: 670 P.S.I.A. ____ P.S.I.A.

Critical Temperature: 378 R ____ R

P_c 4032.2 P_c^2 16259

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3396.2	11534	4725
2		2913.2	8487	7772
3		2407.2	5795	10464
4		1911.2	3653	12606
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.55$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3413$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 409$

Absolute Open Flow: 409 Mcfd @ 15.025

Angle of Slope θ: 56°

Slope, n: .67

Remarks: PW substituted for PT - Measured with Amerada Instrument No. 35745 0-6300# Element. 3rd Rate used for calculations

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
			D. Richburg