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C-122

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
APR 1 - 1974
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 3-20-74

Company: Coquina Oil Corporation — Connection: Natural Gas Pipeline Co. of America

Pool: West Aloha Morrow 5 Mile Draw Unit — Formation: Morrow

Completion Date: 3-20-74 — Total Depth: 8665 — Plug Back TD: 8620 — Elevation: 3447 GL 34 8 KB — Farm or Lease Name: Superior Federal

Csg. Size	Wt.	d	Set At	Perforations	Well No.
5 1/2			8666.80	From 8434 To 8445 (8440)	2
Tbg. Size	Wt.	d	Set At	Perforations	Unit / Sec. / Twp. / Rge.
2 3/8	4.7		8450	From To	K / 1 / 18 / 25

Type Well – Single – Bradenhead – G.G. or G.O. Multiple: single — Packer Set At: 8380 — County: Eddy

Producing Thru: tubing — Reservoir Temp. °F: 178 @ 8425 — Mean Annual Temp. °F: 60 — Baro. Press. – P_a: 13.2 — State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
8449	8449	.626	None	None	None		4.026	flange

NO.	Prover Line Size	X	Orifice Size	FLOW DATA 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							2595				
1.	4.026		2.250	886	5.6	66	980	60	910		90 min.
2.	4.026		2.250	886	4.7	70	1499	57	922		90 min.
3.	4.026		2.250	882	3.8	68	1602	57	955		90 min.
4.	4.026		2.250	885	3.0	66	1210	54	960		90 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.	25.99	70.96	899.2	.9943	1.264	1.080	2503
2.	25.99	64.65	899.2	.9905	1.264	1.080	2272
3.	25.99	58.32	895.2	.9924	1.264	1.080	2053
4.	25.99	51.91	898.2	.9943	1.264	1.080	1831
5							

NO.	P_t	Temp. °R	T_t	Z
1.	1.325	528	1.44	.857
2.	1.325	530	1.45	.857
3.	1.334	528	1.446	.857
4.	1.338	526	1.44	.857
5				

P_c 3443.2 P_c^2 11856

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3092.2	9562	2024
2		3146.2	9899	1957
3		3202.2	10247	1609
4		3253.2	10583	1273
5				

Gas Liquid Hydrocarbon Ratio: 57.63 to 1 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 58 Deg.
Specific Gravity Separator Gas: .626 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 671 P.S.I.A. P.S.I.A.
Critical Temperature: 365 R R

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.058$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.4776$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5.629$

Absolute Open Flow: 5629 Mcfd @ 15.025 — Angle of Slope θ: 62.5 — Slope, n: .504

Remarks: PW substituted for PT - measured with Amerada instrument no. 33109 7000# element

Approved By: — Calculated By: Sprue11 — Checked By: Pyle