

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

Form C-122
Revised 9-1-65

RECEIVED

C/SF
C-122
4565

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special		Test Date 2-22-82		MAR 10 1982	
Company COQUINA OIL CORP.		Connection AIR NEW WELL		O. C. O.	
Well Malaga Atoka		Formation ATOKA		Unit ARTESIAL OFFICE	
Completion Date 2-20-82		Total Depth 13,100		Plug Back TD 11,850	
Elevation 2997 KB		Firm or Lease Name VASQUEZ		Well No. 1	
Top Size 7.625	Wt. 39.0	Set At 6.625	Perforations: From 11,765 To 11,817	Unit J	Sec. 11
Reg. Size 2.875	Wt. 6.5	Set At 2.441	Perforations: From OPEN To ENDED	Twp. 24S	Rge. 28E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 11,519	
Producing Thru TUBING		Reservoir Temp. °F 11,787		Mean Annual Temp. °F 60.0	
Baro. Press. - P _g 13.2		County EDDY		State NEW MEXICO	
H 11,787	G _g 11,787	% CO ₂ .573	% N ₂ .570	% H ₂ S .519	Prover 4.028
Meter Run FLANGE					

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							5284		6501		87 HRS.
1.	4.028	X	1.500	490	9.0	96	5075		6265		1
2.	4.028	X	1.500	500	27.0	78	4815		5963		1
3.	4.028	X	1.500	525	55.0	80	4462		5550		1
4.	4.028	X	1.500	625	78.0	79	4138		5264		1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mgd
1	11.1200	67.30	503.2	.9671	1.3211	1.0298	985
2	11.1200	117.71	513.2	.9831	1.3211	1.0347	1759
3	11.1200	172.05	538.2	.9813	1.3211	1.0353	2568
4	11.1200	223.11	638.2	.9831	1.3211	1.0431	3361
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.75	566	1.61	.943			.5730		675	345
2	.76	538	1.56	.934						
3	.80	540	1.57	.933						
4	.95	538	1.56	.919						
5										

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²
1	6514.2	6278.2	39415.8	3019.0
2	4243.8	5976.2	35715.0	6720.0
3		5563.2	30949.2	11485.0
4		5277.2	27878.8	14585.0
5				

(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 3.6945$

AGF = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 6,560.6$

(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 2.5548$

Absolute Open Flow	6,560.6	Mgd @ 15.025	Angle of Slope @	54.3	Slope, n	.7177
--------------------	---------	--------------	------------------	------	----------	-------

Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission:	Conducted By: RICHARD TOWNLEY	Calculated By: BENNETT-CATHEY	Checked By:
-------------------------	----------------------------------	----------------------------------	-------------