

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

Form C-122
 Revised 9-1-65

RECEIVED *C/SF*

Type Test: ☒ Initial ☐ Annual ☐ Special						Test Date: 9-29-82		OCT 5 1982	
Company: COQUINA <i>oil corp</i>				Connection: AIR NEW WELL				O.C.D.	
Pool: <i>WILBEAT malaqa atoka</i>				Formation: ATOKA				Unit: ARRESTA, OFFICE	
Completion Date: 9-25-82		Total Depth: <i>2880</i> 12,750		Plug Hole: <i>11950</i> 12,000		Elevation: 3002		Farm or Lease Name: MARRA	
Well Size: 7.625	Wt.: 33.7	d: 6.765	Set At: 12,000	Perforations: From 11,786 To 11,793		Well No.: 1			
Log Size: 2.875	Wt.: 6.7	d: 2.441	Set At: 11,576	Perforations: From OPEN To ENDED		Unit: <i>AC</i> Sec. 14 Twp. 24S Rge. 28E			
Type Well - Single - (Needlehead - G.O. or G.O. Multiple) SINGLE						Packer Set At: 11,575		County: EDDY	
Producing thru TUBING		Reservoir Temp. °F: 198 @ 11,789		Mean Annual Temp. °F: 60°		Baro. Press. - P _g : 13.2		State: N.M.	
L: 11,789	H: 11,789	G _g : 0.570	% CO ₂ : 0.50	% N ₂ : 0.59	% H ₂ S: 0	Prover: 0	Meter Run: 4.0	Tape: FLANGE	

FLOW DATA						TUBING DATA		B.H.P. 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.		CHOKE
51							4843	70			70 HRS.
1.	4.03	X	1.000	303	2.2	81	4453	70	0	8/64	1 HR
2.	4.03	X	1.000	320	4.4	80	4302	70	0	9/64	1 HR
3.	4.03	X	1.000	320	10.9	82	3990	69	0	10/64	1 HR
4.	4.03	X	1.000	359	20.2	90	3327	68	0	11/64	1 HR
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compres. Factor, F _{sp}	Rate of Flow Q, Mhd
1	4.75	26.65	315.7	0.9804	1.3241	1.0214	168
2	4.75	38.35	333.5	0.9813	1.3241	1.0229	242
3	4.75	60.29	333.5	0.9795	1.3241	1.0225	380
4	4.75	86.80	372.1	0.9723	1.3241	1.0235	544
5							

NO.	P _g	Temp. °R	Q	Z	Gas Liquid Hydrocarbon Ratio _____ Mol/bbl.
1	0.47	541	1.56	0.958	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	0.49	540	1.56	0.956	Specific Gravity Separator Gas: 0.570
3	0.49	542	1.56	0.956	Specific Gravity Flowing Fluid: XXXXX
4	0.55	550	1.59	0.955	Critical Pressure: 675 P.S.I.A.
5					Critical Temperature: 347 °R

$P_c = 4846.6 P_r^2 = 23489$				$(1) \frac{P_g^2}{P_r^2 - P_w^2} = 1.8974$		$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.7626$	
NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 958$		
1	19947	4456	19860	3630			
2	18621	4305	18537	4953			
3	16026	3995	15958	7531			
4	11157	3333	11110	12379			
5							

Absolute Open Flow: 958		Mhd @ 15.025	Angle of Slope @: 48.5	Slope, n: 0.885
Remarks:				
Approved By Commission: _____ Conducted By: DON BENNETT Calculated By: BENNETT - CATHEY Checked By: _____				