

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

1-7 file
1-C-12 Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3-1-79		MAR 15 1979	
Company W.C. BLANKS		To Air		O.C.C.	
Pool UNDESIG.		ATOKA		Unit ARTEBIA, OFFICE	
Completion Date 2-27-79		Total Depth 13,250'		Well-back TD 12,040'	
Elevation 3280 KB		Form or Lease Name BIG EDDY UNIT			
Seq. 7-5/8 4 1/2"		WT. 126.40 11.60		d 6.969" 4.000"	
Set At 12093-13248		Perforations: from 11,926' to 11,932'		Well No. 67	
Tbg. Size 2 7/8"		WT. 6.50		d 2.441" 11,827'	
Set At 11,827'		Perforations: From OPEN ENDED		Unit Sec. Twp. Rge. L 15 21s 30E	
Type Well - Single - Bradenhead - G.O. or G.O. Multiple SINGLE		Facker Set At 11,827'		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 193 @ 11,929'		Mean Annual Temp. °F 60	
Baro. Press. - P _g 13.2		State NEW MEXICO			
L 11,929		H 11,929		Gg 0.677	
% CO ₂ .302		% N ₂ 1.179		% H ₂ S	
Prover		Meter Run 4"		Taps FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in in.	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3614	60			72 HRS.
1.	4"	x	.750	480	10	70	2985	63			60 MIN
2.	4"	x	.750	480	20	77	2760	64			60 MIN
3.	4"	x	.750	480	30	81	2557	66			60 MIN
4.	4"	x	.750	485	45	82	2354	67			60 MIN
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	2.661	70.23	493.2	.9905	1.215	1.052	237
2	2.661	99.32	493.2	.9840	1.215	1.049	331
3	2.661	121.64	493.2	.9804	1.215	1.048	404
4	2.661	149.73	498.2	.9795	1.215	1.048	497
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.74	530	1.39	.903	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.74	537	1.41	.908	Specific Gravity Separator Gas .667 X X X X X X X X
3	.74	541	1.42	.910	Specific Gravity Flowing Fluid X X X X X
4	.74	542	1.42	.910	Critical Pressure 669 P.S.I.A. P.S.I.A.
5					Critical Temperature 382 R R

* P_c 4209.5 P_c² 17,719.9

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.482$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.482$
1	3771.1	14221.2	3498.7			
2	3622.8	13124.7	4595.2			
3	3405.0	11594.0	6125.9			
4	3252.8	10580.7	7139.2			
5						

ABS - $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.234$

Absolute Oper. Flow	1,234	Mcf/d @ 15.025	Angle of Slope @	45	Slope, n	1.000
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Remarks: *CALCULATED FROM KNOWN B.H.P., BOTTOM HOLE PRESSURE MEASURED WITH AMERADA GAUGE @ 11,929 FEET. NO WAY TO MEASURE FLUID. EST. 4 BBLS.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	B.R.D.	R.R.	J.W.W.

$$\text{ABS. SLOPE (N)} = Q_1 = 900 = 2.954242$$

$$Q_2 = 90 = 1.954242$$

$$N = \frac{1.000000}{1.000000}$$

$$\text{CAOF} = 497 \frac{17,719.9}{7139.2}$$

$$1.00$$

$$= 1,234 \text{ MCF/DAY}$$

