

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 6-25-81		JUL 28 1981	
Company Ike Lovelady Inc. /					To Air		O. C. D.	
Pool Wildcat					Abo		Unit ARTESIA, OFFICE	
Completion Date 6-5-81		Total Depth 4770		Flow Back TD 4728 / 4620		Elevation 3757.5 N.G.		Farm or Lease Name Pennzoil State
Csg. Size 4 1/2	Wt. 10 1/2 #	d 4.052	Set At 4770	Perforations: From 4298 To 4544		Well No. 1		
Tbg. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 4090	Perforations: From Open To Ended		Unit Sec. Twp. Rge. E 16 9 S 26 E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At No Packer		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 104° @ 4,421		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2		State New Mexico
L 4,421	H 4,421	Gg .7118	% CO ₂ 7.62	% N ₂ 5.96	% H ₂ S -0-	Prover ---	Meter Run 4"	Taps Flg.

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.	
SI							940			
1.	4	x	3/4"	310	18"	102°	927	90	960	
2.	4	x	3/4"	310	53"	91°	840	90	850	
3.	4	x	3/4"	310	80"	90°	802	90	800	
4.	4	x	1"	310	55"	87°	744	90	715	
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, Mcfd
1	2.661	76.27	323.2	.9619	1.186	1.023	237
2	2.661	130.88	323.2	.9715	1.186	1.025	411
3	2.661	160.80	323.2	.9723	1.186	1.025	506
4	4.753	133.33	323.2	.9750	1.186	1.025	751
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.469	562	1.53	.955	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.469	551	1.50	.952	Specific Gravity Separator Gas .7118
3.	.469	550	1.49	.952	Specific Gravity Flowing Fluid X X X X X
4.	.469	547	1.49	.952	Critical Pressure 689 P.S.I.A.
5.					Critical Temperature 368 R

P _c * 985 P _c ² 970.225				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		835	697.2	273.0
2		757.2	573.4	396.8
3		723.8	523.8	446.4
4		672.7	452.5	517.72
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.87403$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.87403$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.407$$

Absolute Open Flow	1,407	Mcf/d @ 15.025	Angle of Slope @	45°	Slope, n	1.000
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Remarks: * Plot too flat use 45° thru High Rate

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	M.R.	M.K.	M.K.