

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 7-30-81		AUG 11 1981	
Company Cities Service Company				Concentration Atoms.					
Pool Turkey Track				Formation Morrow				Unit O. C. D. ARTEGIA OFFICE	
Completion Date 7-30-81		Total Depth 11,525		Flow Back TD 11,450		Elevation 3394 G.L.		Farm or Lease Name State "DA"	
Csg. Size 5 1/2"	Wt. 20#	d 4.778	Set At 11,525	Perforations: From 11,396 To 11,419				Well No. 1	
Tbg. Size 2 7/8"	Wt. 6.5#	d 2.441"	Set At 11,294	Perforations: From open To ended				Unit Sec. Twp. Rge. J 3 19S 29E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At 11,286		County Eddy	
Producing Thru TBG.		Reservoir Temp. °F 191 @ 11420		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 11,420	H 11,420	Gg .5974	% CO ₂ .744	% N ₂ .309	% H ₂ S	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.	Temp. °F	
SI	SI						3477		P.K.R.	Choke	70 Hrs.
1.	4	x	1.250	500	16"	86	3426	75°		6/64	1/2 hr.
2.	4	x	1.250	500	28"	88	3415	"		8/64	1/2 hr.
3.	4	x	1.250	500	42"	75	3390	"		9.5/64	1/2 hr.
4.	4	x	1.250	510	86"	80	3348	76°		12/64	1/2 hr.
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	7.469	90.62	513.2	.9759	1.294	1.038	887
2	7.469	119.87	513.2	.9741	1.294	1.036	1169
3	7.469	146.81	513.2	.9859	1.294	1.040	1455
4	7.469	212.12	523.2	.9813	1.294	1.041	2094
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio T.S.T.M. Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons Deg.
1.	.761	546	1.53	.929	Specific Gravity Separator Gas .5974	XXXXXXX
2.	.761	548	1.54	.931	Specific Gravity Flowing Fluid XXXXX	
3.	.761	535	1.50	.924	Critical Pressure 674 P.S.I.A.	P.S.I.A.
4.	.776	540	1.52	.922	Critical Temperature 356 R	R
5.						

P_c * 3569.6 P_c² 12,742

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		3514.5	12352	390
2		3506.4	12294.5	447.5
3		3473.8	12067.3	674.7
4		3429.7	11762.8	979.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 13.0126$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 10.33709$

$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 22.064$

Absolute Open Flow 22,064 Mcfd @ 15,025		Angle of Slope θ 42° 27'	Slope, n .91776
Remarks: * Calculated from known Bottom Hole Pressures			
Approved By Commission:	Conducted By:	Calculated By:	Checked By: