NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

C/SF

RECEIVED
MAR 25 1981
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] [ ] Special						Test Date: 3-16-81			
Company: Cities Service Company ✓				To Atmosphere					
Pool: ~~Undesig.~~ NORTH TURKEY TRACK Morrow								Unit:	
Completion Date: 3-5-81		Total Depth: 11,500		Plug Back TD: 11453		Elevation: 3421 Gr.		Farm or Lease Name: State "CZ" Com.	
Csg. Size: 5 1/2	Wt.: 17# 20#	d: 4.892 4.778	Set At: 11,500	Perforations: From 11,340' To 11,345'				Well No.: 1	
Tbg. Size: 2 7/8	Wt.: 6.5#	d: 1.441"	Set At: 1248	Perforations: From Open Ended To				Unit: H	Sec.: 4 Twp.: 19S Rge.: 29E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At: 11,241				County: EDDY	
Producing Thru: Tubing		Reservoir Temp. °F: 187° @ 11,343		Mean Annual Temp. °F: 60		Baro. Press. – P_a: 13.2		State: New Mexico	
L: 11,343	H: 11,343	Gg: .6216	% CO_2: .699	% N_2: .385	% H_2S: -0-	Prover:	Meter Run: 4"	Taps: Flange	

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI	Shut-In					3189		PKE	choke	119 hrs.
1.	4"	x 1.5"	540	13"	75°	3080	61°		8/64	45 min.
2.	4	x 1.5"	550	24"	62°	3016	65°		9/64	45 min
3.	4"	x 1.5"	550	42"	58°	2919	67°		10/64	45 min.
4.	4	x 1.5"	560	78"	57°	2748	68°		12/64	45 min.
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	10.88	84	543.2	.9859	1.268	1.048	1.197
2.	10.88	116	563.2	.9981	1.268	1.051	1.679
3.	10.88	154	563.2	1.002	1.268	1.052	2.240
4.	10.88	211	573.2	1.003	1.268	1.057	3.086
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.807	535	1.47	.912
2.	.837	522	1.44	.906
3.	.837	518	1.43	.904
4.	.852	517	1.42	.895
5.				

Gas Liquid Hydrocarbon Ratio 256 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.2 @ 60 Deg.
Specific Gravity Separator Gas .6216 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx
Critical Pressure 673 P.S.I.A. .6334 P.S.I.A.
Critical Temperature 363 R 672 R
366

* P_c 3202.2 P_c^2 10,254

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3094.81	9577.8	676.1
2		3035.6	9214.8	1039.2
3		2943.5	8663.4	1590.6
4		2782.33	7741.4	2512.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.08$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.858$

$\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 8.820$

Absolute Open. Flow 8,820 Mcfd @ 15.025 | Angle of Slope θ 53° 15' | Slope, n 74689

Remarks:* Calculated from known Bottom Hole Pressures
made 1 Bbl condensate during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W.S.	M.K.	M.K.