

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

RECEIVED Form C-12
Revised 9-1-65

JUL 06 1984

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6-12-84		O. C. D. ARTESIA OFFICE	
Company Tco production Corp.				Delhi Gas Pipeline Corp.			
Pool E9ST Burton Flat Morrow				Unit			
Completion Date 12-13-83		Total Depth 11,770'		Casing Back TD 11,588'		Elevation 3290 G.L.	
Csg. Size 4 1/2"		Wt. 13.5#		Set At 11,770'		Perforations: From 11,475 To 11,500	
Tbg. Size 2 3/8"		Wt. 4.7		Set At 11,200		Perforations: From OPEN-ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,200'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 190° @ 11,595		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 11,595		H 11,595		Gg .606		% CO ₂ .781	
				% N ₂ .311		% H ₂ S	
				Prover		Meter Run 3.068	
						Taps Flange	

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							2028		PKR	CHOKE	24 Hrs.
1.	3.068	x	2.00	267	40"	65°	1810			13/64	1 Hr.
2.	3.068	x	2.00	222	27	70	1920			10/64	1 Hr.
3.	3.068	x	2.00	217	24	71	1962			9/64	1 Hr.
4.	3.068	x	2.00	199	10	78	2022			7/64	1 Hr.
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	21.32	105.87	280.2	.9952	1.285	1.024	2956
2	21.32	79.69	235.2	.9905	1.285	1.020	2206
3	21.32	74.33	230.2	.9896	1.285	1.019	2053
4	21.32	46.07	212.2	.9831	1.285	1.017	1262
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcf/bbl.
1	42	525	1.47	.953	A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2	35	530	1.48	.962	Specific Gravity Separator Gas	.606	XXXXXX
3	34	531	1.48	.963	Specific Gravity Flowing Fluid	XXXXX	
4	32	538	1.50	.967	Critical Pressure	671	P.S.I.A.
5					Critical Temperature	358	R

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 16.968$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.119$
1		1931.9	3732.2	747.4		
2		2014.4	4057.8	421.8		
3		2053.3	4215.6	264.0		
4		2115.0	4473.0	6.6		
5						

AGF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8.457$

Absolute Open Flow		8.457	Mcf/d @ 15.025	Angle of Slope	63.5	Slope, n	.500
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Remarks: Calculated from known BHP, taken with a Kuster Gauge, point alignment to steep, a slope of 63.5 was drawn through low rate of flow in corresponding line.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W.S.	R.R.	R.R.