

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 9/12/78		SEP 22 1978	
Company Delta Drilling Company ✓		Connection El Paso Natural			
Pool <i>Wichita 3 Cuesta Bluff -</i> Designated <i>Atoka</i>		Formation Atoka		Unit O.C.E. ARTESIA, OFFICE	
Completion Date 9/5/78		Total Depth 13217'		Plug Back TD 13164'	
Elevation 3033' KB-13		Form or Lease Name Donaldson A Com		Well No. 1	
Perforations: From 11481 To 11486	Perforations: Open Ended				Unit Sec. Twp. Rge. F 23 23s 28e
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single		Packer Set At 10204'		County Eddy	
Producing Thru Tubing	Reservoir Temp. °F 178 @ 10152'	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	State New Mexico	
L 11483	H -	G _g 0.6171	% CO ₂ 0.325	% N ₂ 1.144	% H ₂ S 0.000
Prover		Meter Run	Type		
		X	F		

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
1.	6	5/64	3.000	626.8	1.00	78	5083				24.5
2.	6	7/64	3.000	626.8	2.25	72	4640		PKR		1.0
3.	6	9/64	3.000	626.8	4.00	68	4412				1.0
4.	6	11/64	3.000	626.8	6.25	63	4125				1.0
5.							3830				1.0

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	44.51	25.30	640	0.9831	1.273	1.051	1481.18
2	44.51	37.95	640	0.9887	1.273	1.052	2236.55
3	44.51	50.60	640	0.9924	1.273	1.053	2996.07
4	44.51	63.25	640	0.9971	1.273	1.056	3773.54
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	4.889	Mcft/bbl.
1	0.95	538	1.50	0.906	A.P.I. Gravity of Liquid Hydrocarbons	56.0	Deg.
2	0.95	532	1.49	0.904	Specific Gravity Separator Gas	0.6171	XXXXXX
3	0.95	528	1.48	0.902	Specific Gravity Flowing Fluid	XXXXXX	
4	0.95	523	1.46	0.897	Critical Pressure	672	P.S.I.A.
5					Critical Temperature	358	R

NO.	P _r	P _w *	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.266$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.266$
1		5982.2	35786.7	6948.3	AGF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 9785$	
2		5750.2	33064.8	9670.2		
3		5445.2	29650.2	13084.8		
4		5146.2	26483.4	16251.6		
5						

Actual Open Flow	9785	Mcf/d @ 15.025	Angle of Slope @	45° 0'	Slope, n	1.000
Remarks: Top 4 1/2" Liner @ 10575'						
* Bottom Hole Pressure @ (-8450) 11483' Used for Pressure Calculations						
Approved by Commission:	Conducted By:	Calculated By:	Checked by:			
	JARREL SERVICES, INC	Joe A. Coleman	<i>[Signature]</i>			