

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 7/31/78		7/31/78	
Company Darko Production Co.				Connection None			
Field North Turkey Track				Formation Morrow		Well No. 2	
Completion Date July 1978		Total Depth 11230'		Plug Back TD 11227'		Elevation 3469' KB-15	
Comp. Size 11.6		Set At 4,000		Perforations: From 10338' To 10882'		Farm or Lease Name Turkey Track St. Com.	
Comp. Size 4.6		Set At 1,995		Perforations: From OPEN ENDED To		Well No. 2	
Type Well - Single - Draddenhead - G.G. or G.O. Multiple Single				Packer Set At 10825'		County Eddy	
Producing Temp. 178°		Reservoir Temp. °F 10875		Mean Annual Temp. °F 60		Baro. Press. - P ₀ 13.2	
L 100%		H 0.6491		% CO ₂ 0.585		% N ₂ 0.720	
		G _g		% H ₂ S 0.000		Prover X	
						Meter Run F	
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.
1	3/64	1,000	430	24	78	1780	
2	3/64	1,000	520	35	78	1670	
3	3/64	1,000	610	53	78	1340	
4	3/64	1,000	630	66	80	1200	
5							
						PACKER	
						42.0 hrs	
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (1/4 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compens. Factor, F _{sp}	Rate of Flow Q, Mhd
1	4.150	103.13	443.2	0.9831	1.241	1.039	626.06
2	4.270	136.61	533.2	0.9831	1.241	1.047	835.69
3	4.290	181.74	623.2	0.9831	1.241	1.055	1120.26
4	4.780	206.03	643.2	0.9831	1.241	1.054	1268.78
5							
NO.	P ₀	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 43.680 Mhd/bbl.		
1	0.6491	538	1.46	0.927	A.P.I. Gravity of Liquid Hydrocarbons -		
2	0.6491	538	1.46	0.913	Specific Gravity Separator Gas 0.6491		
3	0.6491	538	1.46	0.899	Specific Gravity Flowing Fluid X X X X X		
4	0.6491	540	1.47	0.900	Critical Pressure 675 P.S.I.A.		
5					Critical Temperature 368 °R		
P ₀ = 19679.9							
NO.	P _w *	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.299$			
1	6886.2	15102.6	4577.3	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.260$			
2	8400.2	12181.5	7407.4				
3	2565.2	6570.3	13099.6	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1415$			
4	1830.2	3842.4	15837.5				
5							
Absolute Open Flow 1415 Mhd @ 15.025				Angle of Slope 60° 48'		Slope, n 0.559	
Remarks: Bottom Hole Pressure 0 (-7306) 10375' Used for Pressure Calculations							
Approved by Commission:		Conducted By: JARREL SERVICES, INC.		Calculated By: Joe A. Coleman		Checked By: Joe A. Coleman	