

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 10-8-74		OCT 17 1974	
Company Charles A. Dean CHARLIE DEAN				Connection N.C.P.L.		O.C.C.		
Pool Northwest Indian Basin - Morrow INDIAN BASIN				Formation MORROW		Unit ARTESIA, OFFICE		
Completion Date 10-18-73		Total Depth 8936		Plug Back TD 8900		Elevation 4229		Form or Lease Name n.w. indian basin
Csg. Size 4 1/2"	Wt. d	Set At 8936'	Perforations: From 8749' To 8761'		Well No. 1-Y			
Tub. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 8771'	Perforations: From To		Unit K	Sec. 28	Twp. 20s
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At 8687'		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 172 @ 8781'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO
L 8771	H 8771	G _g 0.611	% CO ₂ .62	% N ₂ 2.29	% H ₂ S -----	Prover	Meter Run 3"	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.	
SI				L-10 chart readings			798.0		packer	choke
1.	3" x 0.750"			5.40	1.40	7.10	659.0	72		4/64
2.	3" x 0.750"			5.40	2.50	6.90	630.0	72		6/64
3.	3" x 0.750"			5.45	3.65	6.85	597.0	70		8/64
4.	3" x 0.750"			5.50	4.60	6.80	565.0	70		10/64
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	L-10 meter factor	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	2.672	2.449	349.9	0.9850	1.279	1.027	64.0
2	2.672	2.449	349.9	0.9896	1.279	1.028	114.9
3	2.672	2.449	356.4	0.9896	1.279	1.029	169.5
4	2.672	2.449	363.0	0.9915	1.279	1.029	216.0
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	21017	Mcf/bbl.
1	0.52	536	1.51	.948	A.P.I. Gravity of Liquid Hydrocarbons	not avail.	Deq.
2	0.52	531	1.49	.946	Specific Gravity Separator Gas	0.611	X X X X X X X X
3	0.53	531	1.49	.945	Specific Gravity Flowing Fluid	X X X X X	
4	0.54	529	1.49	.944	Critical Pressure	668	P.S.I.A.
5					Critical Temperature	356	R

FF 1076.2	FF ² 1158.2	(1) $\frac{FF^2}{P^2 - FF^2} = 4.6402$	(2) $\left[\frac{P_r^2}{FF^2 - P_s^2} \right]^n = 3.5120$
NO.	P _r ²	P _s ²	FF ² - P _s ²
1	1052.2	1107.1	51.1
2	1021.2	1042.8	115.4
3	987.2	974.6	183.6
4	953.2	908.6	249.6
5			

Absolute Open Flow		758.6	Mcf/d @ 15.025	Angle of Slope @	50.8	Slope, n	0.817
Remarks: L-10 chart - 50" - 1200# - 150° bottom hole pressure measured with kuster gauge @ 8781 feet							
Approved By Commission:		Conducted By: Don Tyson		Calculated By: Roy West		Checked By: J.W.W.	

R. 5615
5-28-75

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