

N MEXICO OIL CONSERVATION COMM - ON
MULTIPOINT ONE POINT BACK PRESSURE TEST FOR GAS WELL

Copy 1001
Form C-122
Revised 9-1-65

DEC 4 1973

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-26-73		DEC - 6 1973			
Company Dorchester Exploration Co.				Connection El Paso Natural Gas Company							
Pool Winchester				Formation Morrow				Unit O. C. C.			
Completion Date 10-17-73		Total Depth 11,400		Plug Back TD 11,200		Elevation 3324 KB		Form or Lease Name Arco Federal			
Coq. Size 4 1/2	Wt. 11.6	d	Set At 11,400	Perforations: From 10,937 To 10,963				Well No. 1			
Trq. Size 2 3/8	Wt. 4.7	d	Set At 10792	Perforations: From To				Unit Sec. Twp. Rge. E 34 19 28			
Type Well - Single - Brasshead - G.G. or G.O. Multiple Single						Packer Set At 10792		County Eddy			
Producing Thru Tbg.		Reservoir Temp. °F 184 @ 10,963		Mean Annual Temp. °F		Baro. Press. - P _g 13.2		State New Mexico			
L 10792	H 10792	G _g .670	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 4"	Taps Flg.			

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							3220				72 hrs.
1.	4	x	1.250	859	4"	72	2959	62			1 hr.
2.	4	x	1.250	869	22"	72	2622	62			1 hr.
3.	4	x	1.250	880	35"	74	2324	62			1 hr.
4.	4	x	1.250	890	59"	73	1885	62			1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	59.07	872.2	.9887	1.222	1.094	583
2	7.469	139.31	822.2	.9887	1.222	1.096	1378
3	7.469	176.81	893.2	.9868	1.222	1.094	1742
4	7.469	230.84	903.2	.9877	1.222	1.096	2286
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	1.30	532	1.39	.835	35.6	54.6 @ 60°	.670	X X X X X X X X	669	382
2	1.32	532	1.39	.832				X X X X X X X X	P.S.I.A. 667	R 408
3	1.34	534	1.40	.835				X X X X X		
4	1.35	533	1.40	.834						
5										

P _r 3232.2 P _w 10447.1				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.563$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.533$	
NO.	P _r	P _w	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.406$		
1		2974.3	8846.5	1600.6			
2		2640.1	7017.7	3420.4			
3		2359.4	5566.8	4880.3			
4		1939.7	3762.4	6684.7			
5							

Absolute Open Flow 3.406 Mcfd @ 15.025		Angle of Slope @ 46.25		Slope, n .957	
Remarks: Made 7 bbls. of 54.5 gravity condensate during 4-hr. test.					
Approved By Commission:		Conducted By: Kiker and Pagan		Calculated By: Kiker and Pagan	
				Checked By:	