

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

RECEIVED
Form C-122
Revised 9-1-65
DEC 21 1972

Type Test ☐ Initial ☒ Annual ☐ Special				Test Date 12-8-72		O.C.C. ARTESIA, OFFICE	
Company Midwest Oil Corp.,				Connection Amoco Delhi Gas Pipeline Corp.			
Pool So. Empire Morrow Gas				Formation Morrow		Unit	
Completion Date 11-28-71		Total Depth 12,100		Plug Back TD 11,100		Elevation	
Farm or Lease Name So. Empire Deep Unit				Well No. 1			
Csg. Size 5 1/2	Wt. 20#	d 4.778	Set At 11,162	Perforations: From 10,716 To 10,784		Unit Sec. Twp. Rge.	
Thg. Size 2 7/8	Wt. 6.4#	d 2,441	Set At 10,653	Perforations: From To			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single Gas Dist.				Packer Set At 10,623		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F @ 160		Mean Annual Temp. °F 60° F		Baro. Press. - P _a 13.2	
State N.M.							
L 10,750	H 10,750	Gg .641	% CO ₂ Nil	% N ₂ .37	% H ₂ S Nil	Prover X	Meter Run Flange

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							2720	58	Packer	
1.	4 x 2 3/4			737	3.8	70	2655	70	"	
2.	4 x 2 3/8			772	14	72	2559	70	"	1 hr.
3.	4 x 2 3/4			808	31.5	66	2360	71	"	1 hr.
4.	4 x 2 3/4			835	47.8	66	2172	72	"	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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	42.28	53.39	750.2	.9905	1.249	1.075	3002
2	42.28	104.85	785.2	.9887	"	1.074	5879
3	42.28	160.84	821.2	.9943	"	1.082	9137
4	42.28	201.36	848.2	.9943	"	1.086	11482
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	24.75 Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	56 Deg.
2.					Specific Gravity Separator Gas	.641 X X X X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X
4.					Critical Pressure	P.S.I.A. P.S.I.A.
5.					Critical Temperature	R R

P _c 3789.2	P _c ² 14,358					
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1		3730.2	13,914	444		
2		3650.2	13,324	1034		
3		3524.2	12,420	1938		
4		3419.2	11,691	2667		
5						

Absolute Open Flow 37,000 Mcfd @ 15.025		Angle of Slope @ 35°		Slope, n .695	
Remarks:					
Approved By Commission:		Conducted By: C. Allen Dorsey		Calculated By: C. Allen Dorsey	
				Checked By:	