

C/SF

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

RECEIVED
Form O-122
Revised 9-1-65

MAR 04 1981

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 2-27-81		O. C. D. ARTESIA, OFFICE	
Company AMOCO Prod. Co.		Location EL PASO		2310' FSL & 660' FEL	
Pool HAPPY VALLEY MORROW		Formation HAPPY VALLEY MORROW		Unit I	
Completion Date 10-29-80		Total Length 11,716		Play Back To 11,607	
Elevation 3414 GL		Date of Lease LANCASTER SPRING CO			
Crq. Size 5 1/2	Wt. 17	Set At 4,892	Set At 11,609	Perforations: From 10,912 To 11,330	Well No. #1
Trq. Size 2 3/8	Wt. 4.7	Set At 1.995	Set At 10,798	Perforations: From OPEN ENDED	Unit I
Type well - Single - Production - G.G. or G.O. Multiple SINGLE		Packer Set At 10,699		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 180° 11,121		Mean Annual Temp. °F 60	
		Baro. Press. - P ₀ 13.2		State NEW MEXICO	
L 11,121	H 11,121	G _g 0.6104	% CO ₂ .967	% N ₂ .380	% H ₂ S -0-
Prover		Meter Run 4"		Tag FLG.	
FLOW DATA					
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w
1	4" X 2.75			410	8
2	4" X 2.75			410	15
3	4" X 2.75			415	25
4	4" X 2.75			420	31
5					
TUBING DATA					
				Press. p.s.i.g.	Temp. °F
				2198.0	61
				1727	64
				1442	70
				1006	66
				690	62
CASING DATA					
				Press. p.s.i.g.	Temp. °F
				890	
				890	
				890	
				890	
				890	
RATE OF FLOW CALCULATIONS					
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g
1	42.15	58.19	423.2	.9990	1.2804
2	42.15	79.67	423.2	1.0000	1.2804
3	42.15	103.46	428.2	.9924	1.2804
4	42.15	115.88	433.2	.9868	1.2804
5					
Super Compress. Factor, F _{pv}					
					1.0370
					1.0370
					1.0353
					1.0336
Rate of Flow Q, Mhd					
					3253.0
					4459.0
					5737.0
					6379.0
Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.					
A.P.I. Gravity of Liquid Hydrocarbons .51 API @ 50 _____ Deg.					
Specific Gravity Separator Gas 0.6104 _____ X X X X X X X X					
Specific Gravity Flowing Fluid _____ X X X X X					
Critical Pressure .675 _____ P.S.I.A. _____ P.S.I.A.					
Critical Temperature 357 _____ R _____ R					
P _c 2211.2 P _w 4889.4					
NO.	BHP	P _w	P _w ²	P _c ² - P _w ²	
1	2401.2	1830.3	3350.1	1539.0	
2	2193.2	1674.5	2803.9	2086.0	
3	1955.2	1496.6	2239.7	2650.0	
4	1838.2	1408.8	1984.6	2905.0	
5					
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.8451$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6831$					
AOP = 0 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 9,655.9$					
Absolute Open Flow 9,655.9 _____ Mhd @ 15.025					
Angle of Slope 49.6 _____ Slope, n .850					
Remarks: CALCULATED FROM KNOWN BOTTOM HOLE PRESSURES, MEASURED WITH AMERADO					
RPG3 PRESSURE ELEMENT, SERIAL NO. 46950 0-7,000 PSI RANGE					
1 1/2" H2O, 2 1/2" COND. - BBL/ PER INCH UNKNOWN					
Approved by Consultant:		Conducted By:		Checked By:	
		DON BENNETT		DON BENNETT	