

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLForm C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3/5/71		MAR 19 1971	
Company Harvey E. Yates		Connection None		U. S. Geological Survey	
Pool Undesignated		Formation Morrow		Unit ARTESIA, NEW MEXICO	
Completion Date 3/5/71		Total Depth 12195		Plug Back TD 12195	
Elevation 3236 GR		Farm or Lease Name Stebbins Deep Fed.		Well No. 1	
Csg. Size 7"	Wt. Various	d 6.171	Set At 12195	Perforations: From 11276 To 11411	Well No. 1
Thg. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 11250	Perforations: From OPEN To ENDED	Unit Sec. Twp. Rge. H 30 20S 29E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple				Packer Set At 11250	
Producing Thru Tubing		Reservoir Temp. °F 177°		Mean Annual Temp. °F 66°	
Baro. Press. - P _a 13.2		State New Mexico		County Eddy	
L 11250	H 11250	Gg .604	% CO ₂ 1	% N ₂ 2	% H ₂ S ----
Prover 2"	Meter Run --	Taps --			

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	Duration of Flow
SI											SI 72hr
1.	2 x 3/8			36.67	--	63	3950.0	65			1
2.	"			129.50	--	61	3650.0	65	PKR		1
3.	"			246.60	--	61	3500.0	65			1
4.	"			400.70	--	61	2410.0	65			1
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	2.378	--	49.87	.9971	1.287	1.000	153
2	2.378	--	142.7	.9990	1.287	1.011	438
3	2.378	--	259.8	.9990	1.287	1.021	814
4	2.378	--	413.9	.9990	1.287	1.034	1313
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1	0.07	523	1.50	None	A.P.I. Gravity of Liquid Hydrocarbons	Dry	Deg.
2	0.21	521	1.49	0.978	Specific Gravity Separator Gas	.604	XXXXXXX
3	0.39	521	1.49	0.959	Specific Gravity Flowing Fluid	XXXXX	Dry Gas
4	0.62	521	1.49	0.936	Critical Pressure	671	P.S.I.A.
5					Critical Temperature	349	R

* P_c 4773.2 P_w 22783.4 *BHP Bomb

NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²
1	*	4723.2	22308.6	474.8
2		4396.2	19326.6	3456.8
3		3666.2	13441.0	9342.4
4		2723.2	7415.8	15367.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.439$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.696$

* AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1381$

Absolute Open Flow 1400 Mcfd @ 15.025		Angle of Slope °	Slope, n 593
Remarks: Tests Run on Shut-in Gas Well			
Approved By Commission:	Conducted By: Bennett & Donahue	Calculated By: Paul White	Checked By: