

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 5-22-73		JUN 5 1973	
Company Great Western Drilling Company				Connection None				C.C.C.	
Well K-4734 Rocky Draw Undesignated				Formation Morrow				Unit ARTESIA, OFFICE	
Completion Date 5-19-73		Total Depth 9456		Plug Back TD 9423		Elevation 4301 GL		Farm or Lease Name Cawley Draw	
Csg. Size 5 1/2	Wt. 17	Set At 9456	Perforations: From 9086 To 9120		Well No. 1				
Tbg. Size 2 3/8	Wt. 4.7	Set At 9086	Perforations: From To		Unit -B		Sec. 4	Twp. 22-S	Rge. 22-E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 9038		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 170 @ 9000		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 9038	H 9039	Gg	% CO ₂ .75	% N ₂ .27	% H ₂ S Nil	Prover	Meter Run 4.026	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.	Temp. °F	
SI	39 hrs.						2731	74			
1.	4.026	X	1.750	600	4	86	2690	73			60 min.
2.	"	"	"	630	9	78	2530	71			60 min.
3.	"	"	"	640	28	63	2312	71			60 min.
4.	"	"	"	600	61	70	2096	71			60 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	14.93	49.53	613.2	0.9759	1.286	1.076	997
2	14.93	76.08	643.2	0.9831	1.286	1.077	1547
3	14.93	135.24	653.2	0.9971	1.286	1.080	2794
4	14.93	193.40	613.2	0.9905	1.286	1.081	3976
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	4.523	533	1.709	.864	56.2	0.6053			669	340
2	4.396	531	1.709	.862						
3	4.087	531	1.709	.857						
4	3.801	531	1.709	.855						
5										

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1	2721.2	7404	594	
2	2644.2	6991	1007	
3	2458.2	6042	1956	
4	2285.2	5221	2777	
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.880$

ACF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 10,690$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.6886$

Absolute Open Flow 10,690 Mcfd @ 15.025		Angle of Slope θ 47	Slope, n .935
Remarks:			
Approved By Commission: Conducted By: Calculated By: Checked By:			