

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RECEIVED BY 1007

JUL 30 1988 Form C-222
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

O. C. D.
ARTESIA, OFFICE

Type Test		4 POINT ☒ Initial ☐ Annual ☐ Special		Test Date		6-23-87		1980 W	
Company				Connection				780 S	
MCKAY OIL CORP.				TO AIR					
Well				Formation				Unit	
WEST PECOS SLOPE - Abo				ABO					
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name	
6-20-87		3400		3056		4326		PIERCE FEE	
Coq. Size	Wd.	d	Set At	Perforations:		Well No.			
4.5	9.5	4.052	3142	From 2748 To 2901		2			
Thq. Size	Vd.	d	Set At	Perforations:		Unit		Sec.	
2.375	4.7	1.995	2969	From OPEN To ENDED		N		4 22E	
Type Well - Single - Brdenhead - G.C. or G.O. Multiple				Packer Set At				County	
SINGLE				NONE				CHAVES	
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State	
TUBING		98 2824		60°		13.2		NEW MEXICO	
L	H	G _q	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run		
2824	2824	.628	0.000	5.067	0	2.000	0	0	

FLOW DATA						TUBING DATA		CASING DATA		Location 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
Sl.							891	78	891	78	72 WRS
1.	2.000	.375	103	0.00	47	872	80	873	80	60	
2.	2.000	.375	350	0.00	53	803	81	812	81	MIN	
3.	2.000	.375	603	0.00	67	721	80	742	80	60 MIN	
4.	2.000	.500	425	0.00	66	611	80	653	80	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, Mscf/d
1	2.378	0.00	116.2	1.013	1.262	1.018	360
2	2.378	0.00	363.2	1.007	1.262	1.033	1134
3	2.378	0.00	616.2	0.9933	1.262	1.049	1926
4	4.279	0.00	438.2	0.9943	1.262	1.036	2437
5							

NO.	P _t	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.	.29	507	1.43	.965	0	0	0.628	XXXXXX	661	354
2.	.55	513	1.45	.937	0	0	XXXXX	0.628	661	354
3.	.93	527	1.49	.908						
4.	.66	526	1.49	.931						
5										

NO.	P _t ²	P _w ²	P _w ²	P _t ² - P _w ²
1		886.2	785.3	32.3
2		825.2	680.9	136.7
3		755.2	570.3	247.3
4		666.2	443.8	373.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.1873$

AOF = O $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4466$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1397$

Absolute Open Flow		4466	Mscf @ 15.025	Angle of Slope	52.25	Flow	0.774
Remarks:							
Approved By Division		Conducted By:		Calculated By:		Checked By:	