

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP.O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3/7/83	
Company Exxon Company USA		Connection None	
Foot: South Lovington		Formation Morrow	
Completion Date 12/8/82	Total Depth 13123'	Plug Back TD 13075'	Elevation 3952' GL
Well No. 2		Name or Lease Name New Mexico State CX	
Cas. Size 5 1/2"	wt. 17.0	d 4.892	Set At 13123'
Perforations: From 12953' To 12968'		Well No. 2	
Trg. Size 2 7/8"	wt. 6.5	d 2.441	Set At 12884'
Perforations: Open Ended		Unit G 2 17s 35e	
Type Well - Single - Brodenhead - G.C. or G.O. Multiple Single		Packer Set At 12884'	
Producing Thru Tubing		Country Lea	
Reservoir Temp. °F 190° 12908'		State New Mexico	
Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 12961'	H -	G _g 0.6948	% CO ₂ 0.694
% N ₂ 0.715		% H ₂ S -	
Prover -		Meter Run 2.900' X 1.000'	
FLOW DATA		TUBING DATA	
NO.	Prover Line Size	X	Orifice Size
SI			
1	2.900	4/64	1.000
2	2.900	5/64	1.000
3	2.900	6/64	1.000
4	2.900	7/64	1.000
5			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1	4.801	46.00	423.2
2	4.801	74.61	428.2
3	4.801	123.84	438.2
4	4.801	158.51	433.2
5			
NO.	R ₁	Temp. °R	T ₁
1	0.63	540	1.41
2	0.64	541	1.41
3	0.65	543	1.41
4	0.64	538	1.40
5			
Gas Liquid Hydrocarbon Ratio 5.21 Mcf/bbl.			
A.P.L. Gravity of Liquid Hydrocarbons 55 Deg.			
Specific Gravity Separator Gas 0.6948 XXXXX			
Specific Gravity Flowing Fluid XXXXX			
Critical Pressure 672 P.S.I.A.			
Critical Temperature 384 °R			
1. 6040.2 * r ₁ ² 36484.0			
NO.	P ₁	P _w	P _e ² - P _w ²
1	5653.2	31958.7	4525.3
2	5489.2	30131.3	6352.7
3	4933.2	24336.5	12147.5
4	4560.2	20795.4	15688.6
5			
(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 2.326$			
(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 2.312$			
AOF = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 2166.99$			
Absolute Open Flow 2167 Mcf @ 15.025			
Angle of Slope 45° 12'			
Slope, n 0.993			
* BOTTOM HOLE PRESSURES @ (-9009) 12961' USED FOR PRESSURE CALCULATIONS			
WELL PRODUCED 19 BBL/Oil in 4.0 hrs. = 114 BO/D			
Approved By Division		Conducted By:	
		JARREL WELL TESTING INC.	
Calculated By:		Checked By:	
D. Dickerson		PE #2208 Joe A. Coleman	