

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial						Test Date 5-28-81			
Company Jake L. Hamon						To air			
Pool Osudo						Morrow			
Completion Date 5-22-81		Initial Pressure 11,331'		Final Pressure 11,264'		Flow Rate 3609.1		Field or Lease Name Amerada Federal	
Log. Size 4 1/2"	Wt. 10.5#	d 4.052"	Set At 11,331'	Perforations from 10,986' To 10,996'		Well No. 3			
Log. Size 2 3/8"	Wt. 4.7#	d 1.995"	Set At 10,678'	Perforations Open ^o Ended		Unit Sec. Twp. Rge. I 17 20S 36E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10,606'		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 155 @ 11,000'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 11000	H 11000	G _g .6020	% CO ₂ .241	% N ₂ .390	% H ₂ S -0-	Prover		Meter Run 3"	Tags Flange

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI						2448	60	Pkr.	Choke	24 Hrs.
1.	3"	x	1.50"	495	99	2322	60		8/64	30 min
2.	3"	x	1.50"	500	15	2217	60		10.5/64	45 min
3.	3"	x	1.50"	510	27	2104	60		12/64	30 min
4.	3"	x	1.50"	540	59	1902	60		14.5/64	45 min
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_w P_m}$	Flow Temp. °F	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd	
1	11.13	50.41	508.2	.9645	1.035	722	
2	11.13	87.74	513.2	.9636	1.034	1254	
3	11.13	118.85	523.2	.9697	1.036	1713	
4	11.13	180.66	553.2	.9777	1.036	2625	
5							

NO.	P _t	Temp. °F	T _r	Z	Temperature Correction Ratio	Gravity	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	.756	559	1.56	.934	82.21	53.0 @ 60	1.035	722
2	.764	560	1.57	.936	6020	XXXXXX	1.034	1254
3	.779	553	1.55	.931	672	XXXXXX	1.036	1713
4	.823	544	1.57	.931	357		1.036	2625
5								

NO.	P _t ²	P _w ²	P _w ² - P _t ²	P _t ² / (P _w ² - P _t ²)	P _t ² / (P _w ² - P _t ²) ⁿ
1	1772.4	3141.44	2916.06	1.53	1.53
2	1694.7	2872.00	3180.50	4.016	4.016
3	1606.01	2579.30	3478.20		
4	1452.8	2110.60	3946.90		
5					

Absolute Oper. Flow	4.016	Flow @ 15,025	Angle of Slope θ	45	Slope, n	1.00 limit
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Remarks: *Calculated from known bottom hole pressures.
Slope flat, used 45° thru high rate of flow.

Approved By Commission	Conducted By: W.S.	Calculated By: M.K.	Checked By: M.K.
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OIL CONSERVATION DIV.

JUN 2 '81

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