

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10-24-79			
Company JAKE L. HAMON				Connection TO AIR					
Pool NORTH OSUDO				Formation MORROW				Unit	
Completion Date 10-21-79		Total Depth 11,600'		Plug Back TD 11,527'		Elevation 3647.7 GR.		Farm or Lease Name UNION STATE	
Csg. Size 5 1/2"	Wt. 20#	d 4.687"	Set At 11,600'	Perforations: From 11,338' To 11,350'				Well No. 2	
Tbg. Size 2 3/8"	Wt. 4.6#	d 1.995"	Set At 11,244'	Perforations: From OPEN ^o ENDED				Unit Sec. Twp. Rge. A 30 20s 36E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 11,244'		County LEA	
Producing Thru TUBING		Reservoir Temp. °F 187 @ 11,344'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 11344	H 11344	Gg .603	% CO ₂ .290	% N ₂ .453	% H ₂ S -0-	Prover	Meter Run 3	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							2035		PKR.	CHOKE	72 HRS
1.	3"	x	1.500"	500	17.00	98	1910	81		8/64	1 HR
2.	3"	x	1.500"	502	40.00	83	1862	83		10/64	1 HR
3.	3"	x	1.500"	500	60.00	79	1833	85		12/64	1 HR
4.	3"	x	1.500"	600	80.00	83	1783	87		14/64	1 HR
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	11.13	93.40	513.2	.9653	1.288	1.035	1338
2	11.13	143.55	515.2	.9786	1.288	1.039	2092
3	11.13	175.48	513.2	.9822	1.288	1.039	2567
4	11.13	221.49	613.2	.9786	1.288	1.047	3253
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	205.009 Mcf/bbl.	
1.	.76	558	1.56	.934	A.P.I. Gravity of Liquid Hydrocarbons	57.5 @ 60 Deg.	
2.	.77	543	1.52	.926	Specific Gravity Separator Gas	.603	XXXXXXXXXX
3.	.76	539	1.51	.926	Specific Gravity Flowing Fluid	XXXXXX	.617
4.	.91	543	1.52	.912	Critical Pressure	671 P.S.I.A.	671 P.S.I.A.
5.					Critical Temperature	358 R	365 F.

P _c 2048.2	P _c ² 4195.1		
NO.	P _w	P _w ²	P _c ² - P _w ²
1	2606.2	4044.9	150.2
2	2569.2	3930.7	264.4
3	2537.2	3835.7	359.4
4	2485.2	3680.3	514.8
5	2742.2	S.I.P.	

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.149$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.002$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 13.017$

Absolute Open Flow	13,017 Mcfd @ 15.025	Angle of Slope @	56.5°	Slope, n	.661
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Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA BOMB @ 11,344 FEET
WELL MADE 1.88 BBLs OF CONDENSATE DURING TEST

Approved By Commission: <i>John W. Runyan</i>	Conducted By: W.S.	Calculated By: R.P.	Checked By: J.W.
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