

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 8-23-66	
Company Sunray DX Oil Company			Connection Northern Natural		
Pool Blinebry Gas			Formation Blinebry		Unit Linam Hardy
Completion Date 3-18-66 (PB)		Total Depth 7871	Plug Back TD 5862		Elevation 3472 GL
Cas. Size 5 1/2	Wt. 15.5	d 4.950	Set At 7871	Perforations: From 5536 To 5828	
Thg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 5504	Perforations: From Open To Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G-G				Packer Set At 5442	
Producing Thru Tubing		Reservoir Temp. °F 111° 5682	Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2
L 5504	H 5504	G _g 0.685	% CO ₂ -	% N ₂ -	% H ₂ S -
Prover			Meter Run 4"	Taps Pipe	

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							1484	70	P	-	
1.	4 x 1.75			460	5	66	530	70	-	-	18 hrs
2.	4 x 1.75			460	4	68	733	70	-	-	2
3.	4 x 1.75			460	2.5	68	958	69	-	-	2
4.	4 x 1.75			460	1	68	1197	69	-	-	2
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	17.12	48.64	473.2	0.9943	1.208	1.055	1055
2	17.12	43.51	473.2	0.9924	1.208	1.055	942
3	17.12	34.39	473.2	0.9924	1.208	1.055	745
4	17.12	21.75	473.2	0.9924	1.208	1.055	471
5							

NO.	F _t	Temp. °R	T _f	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	0.71	526	1.36	0.899	119	38.7	0.685	XXXXXX	669	385
2	0.71	528	1.36	0.899				0.713		
3	0.71	528	1.36	0.899						
4	0.71	528	1.36	0.899						
5										

F _c 1497 P _c ² 2242		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.163$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.139$	
NO	P _w ²	P _w	P _w ²	P _c ² - P _w ²	
1	295.1		314	1928	
2	556.8		571	1671	
3	943.2		952	1290	
4	1464.6		1468	774	
5					

Absolute Open Flow 1202 Mcfd @ 15.025		Angle of Slope @ 49.3°		Slope, n .861	
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Remarks: Unable to stabilize flow in 6 hours therefore well was flowed 24 hours then tested in decreasing rate sequence.					
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Approved By Commission:	Conducted By: Weir	Calculated By: J. B. Hastings	Checked By:
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GAS WELL BACK PRESSURE CURVE

County Lea Field Blinebry Gas
 Operator Sunray DX Oil Company
 Lease Linam-Hardy Unit Well No. 2
 Volume 1202 MCF/24 hr.
 Date August 31, 1966

THOUSANDS
 ← — $P_f^2 - P_s^2$ — →

K&S LOGARITHMIC 359-120
 KEUFFEL & ESSER CO. MADE IN U.S.A.
 3 X 3 CYCLES

