

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

Form C-122

RECEIVED

OCT 29 1991

Type Test [x] Initial [] Annual [] Special				Test Date 9/28/91		O. C. D. ARTESIA OFFICE	
Company Yates Petroleum Corporation				Connection			
Pool Morrow East Lusk Morrow				Formation Lusk Morrow		Unit	
Completion Date 4/28/90		Total Depth 13936.0'		Plug Back TD 13770.0'		Elevation 3565.9'	
Farm or Lease Name Lusk AHB Federal				Well No. 1			
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set At 13936.0'	Perforations: From 13616.0' To 13624.0'		Unit Sec Twp Rge B 35 19S 32E	
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 13538.0'	Perforations: From 0.0' To 0.0'			
Type Well Single				Packer Set At 13538.0'		County Lea	
Producing Thru Tubing		Resv. Temp. °F 189 @ 13620'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
State New Mexico							
L 13538.0'	H 13538.0'	Gg .636	%CO2 6.86	%N2 5.61	%H2S 0.00	Prover 0.000"	Meter Run 2.000"
						Taps Flange	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	
SI	0.000 X 0.000	0	0.0	73	1620	0	0	0	0 hrs.
1.	3.068 X 1.125	490	6.0	72	1590	62	0	0	24 hrs.
2.	3.068 X 1.125	510	7.7	69	1584	62	0	0	24 hrs.
3.	3.068 X 1.125	510	8.0	71	1578	62	0	0	24 hrs.
4.	3.068 X 1.125	520	11.0	73	1574	62	0	0	24 hrs.
5.	0.000 X 0.000	0	0.0	0	0	0	0	0	0 hrs.

RATE OF FLOW CALCULATIONS

NO	Coefficient (24 HOUR)	$\sqrt{hwP_m}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	6.092	54.95	503.20	.989	1.254	1.032	428
2.	6.092	63.47	523.20	.991	1.254	1.034	497
3.	6.092	64.70	523.20	.990	1.254	1.034	506
4.	6.092	76.58	533.20	.988	1.254	1.034	597
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcf/bbl.
1.	.73	532	1.56	.939	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.76	529	1.55	.935	Specific Gravity Separator Gas	.636	xxxxxxxxxxxxxx
3.	.76	531	1.56	.936	Specific Gravity Flowing Fluid	xxxxxx	.636
4.	.77	533	1.56	.935	Critical Pressure	691.1 PSIA	691.1 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	340.7°R	340.7°R

Pc 1633.2 Pc2 2667.3

NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	$\frac{Pc2}{Pc2-Pw2} = 18.6594$	(2) $\left[\frac{Pc2}{Pc2-Pw2} \right]^n = 10.3911$
1.	2570.3	1604.0	2572.7	94.6		
2.	2551.0	1598.3	2554.4	112.9		
3.	2531.9	1592.3	2535.4	132.0		
4.	2519.2	1588.7	2524.0	143.3		
5.	0.0	0.0	0.0	0.0		

$AOF = Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 6208 \text{ Mcfd}$

Absolute Open Flow 6208 Mcfd @ 15.025 Angle of Slope, 0 39 Slope, n .800
Remarks:

Approved By:	Conducted By: Ed Perry	Calculated By: Andrea Carpenter	Checked By:
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