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NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED BY
JUN 12 1987
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special	Test Date: 5/28/87		
Company: Terra Resources, Inc.	Connection: Transwestern Pipeline		
Pool: Diamond Mound	Formation: Atoka	Unit	
Completion Date: 5-25-87	Total Depth: 9555'	Plug Back TD: 9467'	Elevation: 3642.7	Farm or Lease Name: Pennzoil "9"
Csg. Size: 5 1/2	Wt.: 17	d: 4.892	Set At: 9555	Perforations: From 8972 To 9029 (~~9046~~)	Well No.: Federal #1
Tbg. Size: 2 3/8	Wt.: 4.7	d: 1.995	Set At: 8865 (~~8850~~)	Perforations: From To	Unit C, Sec. 9, Twp. 16S, Rge. 28E
Type Well – Single – Bradenhead – G.C. or G.O. Multiple: Single	Packer Set At: 8865	County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: @ 143	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 15.025	State: New Mexico
L: .9009	H: 9009	Gg: 0.743	% CO_2: 0.36	% N_2: 2,57	% H_2S: 0.00	Prover: 0.0	Meter Run: 4.0	Taps: Flange

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2105	70			72.0
1.	4.03 X 1.250	300	7.8	83	1808	71	0.00	0.00	3.0
2.	4.03 X 1.250	300	20.0	84	1679	73	0.00	0.00	2.2
3.	4.03 X 1.250	300	30.0	84	1514	71	0.00	0.00	3.0
4.	4.03 X 1.250	300	52.0	84	1152	72	0.00	0.00	2.0
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	7.47	49.43	313.2	0.9786	1.1601	1.0346	434
2.	7.47	79.15	313.2	0.9777	1.1601	1.0343	693
3.	7.47	96.93	313.2	0.9777	1.1601	1.0343	849
4.	7.47	127.62	313.2	0.9777	1.1601	1.0343	1118
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.47	543	1.37	.934
2.	0.47	544	1.38	.935
3.	0.47	544	1.38	.935
4.	0.47	544	1.38	.935
5.				

Gas Liquid Hydrocarbon Ratio 0.0000 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0.0 Deg.
Specific Gravity Separator Gas 0.743 | XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX | 0.743
Critical Pressure 662 P.S.I.A. | 662 P.S.I.A.
Critical Temperature 396 R | 396 R

P_c 2105.4 P_c^2 4433

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1807	3265	1168
2		1679	2820	1613
3		1520	2311	2122
4		1169	1366	3066
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4456$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3193$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1475$

Post ID-2
12-11-87
comp & BK

Absolute Open Flow 1475 Mcfd @ 15.025 | Angle of Slope θ 53.1 | Slope, n 0.752

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Well Testing Wire Line	Ralph Veniez Assoc.	Gordon Williams