OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

C/SF File 122

Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test	Test Date	RECEIVED
[X] Initial [ ] Annual [ ] Special	5-20-81	JUN 01 1981

Company	Connection	O. C. D.
SOUTHLAND ROYALTY	El Paso Natural Gas Company	ARTESIA, OFFICE

Pool	Formation	Unit
~~Undesignated~~	Atoka	G

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
4-30-81	11,725	~~11,405~~ 11100	3357'	State 14 "A" COM

Csg. Size	Wt.	d	Set At	Perforations:	Well No.
4.5	11.60	6,958	11,725	From 10,812 To 11,062	1

Tbg. Size	Wt.	d	Set At	Perforations:	Unit	Sec.	Twp.	Rge.
2 3/8	4.7	1.995	10,700	From Open To Ended	G	14	19	29

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
Single	10,700	Eddy

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
Tbg.		60	13.2	New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10,700	10,700	.657	.28	1.54	.		4"	Flg.

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					2669				72 hrs.
1.	4.000 X .750	559	1.0	79	2600				45 min.
2.	4.000 X .750	573	4.0	96	2477				60 min.
3.	4.000 X .750	560	9.0	102	2304				60 min.
4.	4.000 X .750	554	16.0	101	2132				60 min.
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	2.661	23.92	572.2	.9822	1.234	1.058	82
2.	2.661	48.42	586.2	.9671	1.234	1.052	162
3.	2.661	71.82	573.2	.9619	1.234	1.048	238
4.	2.661	95.26	567.2	.9623	1.234	1.048	316
5.							

NO.	P_r	Temp. °R	T_r	Z
1	.86	539	1.41	.894
2.	.86	556	1.45	.904
3.	.84	562	1.47	.910
4.	.83	561	1.47	.911
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure 668 P.S.I.A. _____ P.S.I.A.
Critical Temperature 382 R _____ R

P_c 2682.2 P_c^2 7194.2

NO	P_w	P_w^2	$P_c^2 - P_w^2$
1	2613.2	6829.0	365.2
2	2490.4	6201.9	992.3
3	2317.6	5371.1	1823.1
4	2145.9	4604.9	2589.3
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.778$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.0868$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = .6594$

Absolute Open Flow 659 Mcfd @ 15.025 Angle of Slope θ 54° Slope, n .727

Remarks: Made no fluid during test.

Approved by Division	Conducted by:	Calculated by:	Checked by:
	Townley	Townley	

SOUTHLAND ROYALTY COMPANY
STATE 14 "A" COM No. 1
G-14-19-29
May 20, 1981