MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

4/51

RECEIVED OCT 15 1982 F. le

RECEIVED

OCT 20 1982

O. C. D.
ARTESIA, OFFICE

Type Test: XX Initial FOUR POINT ☐ Annual ☐ Special

Test Date: 10-11-82

Company: RAULT PETROLEUM

Connection: AIR NEW WELL

Pool: ~~Wildcat~~ PECOS SLOPE U.D.

Formation: ABO

Unit:

Completion Date: 10-7-82

Total Depth: 4250

Plug Back TD: 3640

Elevation: 3804

Farm or Lease Name: M.W. ISLER

Csg. Size	Wt.	d	Set At
4.500	10.5	4.052	4040

Perforations: From 3537 To 3593

Well No.: 1

Tbg. Size	Wt.	d	Set At
2.375	4.7	1.995	3550

Perforations: From OPEN To ENDED

Unit	Sec.	Twp.	Rge.
M	33	3S	25E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE

Packer Set At: NONE

County: ~~CHAVES~~ DeBaca

Producing Thru: TUBING

Reservoir Temp. °F: 105° 3565

Mean Annual Temp. °F: 60°

Baro. Press. – P_a: 13.2

State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3565	3565	0.698	2.13	15.14	0	2.0	0	

FLOW DATA

NO	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	B.H.P. DATA Press. p.s.i.g.	CHOKE	Duration of Flow
SI							550	78			99 HRS.
1.	2.00	X	0.187	95	0	69	512	70	0	5/64	1 HR
2.	2.00	X	0.187	120	0	70	462	72	0	6/64	1 HR
3	2.00	X	0.187	130	0	71	417	70	0	7/64	1 HR
4	2.00	X	0.187	145	0	69	364	69	0	8/64	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	0.60	0	108.2	0.9915	1.1972	1.0079	78
2	0.60	0	133.2	0.9905	1.1972	1.0097	96
3	0.60	0	143.2	0.9896	1.1972	1.0104	104
4	0.60	0	158.2	0.9915	1.1972	1.0116	115
5							

NO	P_t	Temp. °R	T_t °F	Z
1	0.17	529	1.54	0.984
2	0.20	530	1.54	0.981
3	0.22	531	1.54	0.980
4	0.24	529	1.54	0.977
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/Bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator Gas 0.698 XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

Critical Pressure 651 P.S.I.A. _____ P.S.I.A.

Critical Temperature 344 R _____ R

P_c 562.1 P_c^2 316.

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1	276	525	275	41
2	226	475	225	91
3	185	430	185	131
4	142	377	142	174
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.8184$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3505$

Post FO-2 10-22-82 Pump + BK

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 155.$

Absolute Open Flow 155. Mcfd @ 15.025

Angle of Slope θ 63.3

Slope, n 0.503

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	DON BENNETT	BENNETT – CATHEY	