C-ISP File

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

C-12 55

RECEIVED
DEC 27 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 3-15-82	
Company: STEVENS OPERATING CO.			Connection: TO AIR		Unit
Pool: ~~Pecos Slope Abo~~			Formation: ABO		
Completion Date: 3-9-82	Total Depth: ~~4360'~~ 4330'		Plug Back TD: ~~4360'~~ 4330'	Elevation: 3584.6 G.L.	Farm or Lease Name: Paul Hicks Fed.
Csg. Size: 4½" / Wt.: 10.5# / d: 4.052 / Set At: ~~4360'~~ 4330'			Perforations: From ~~4039'~~ To ~~4094'~~		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: 1.995 / Set At: 3970'			Perforations: From OPENENDED To		Unit: E / Sec.: 14 / Twp.: 8S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: None		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 104° @4066'	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
4066'	4066'	.7343	6.8	10.6			2"	Prover

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							873	71°	873	Choke	24 Hrs.
1.	2"	x	.375	85		35°	866	71°	870	11/64	30 Min.
2.	2"	x	.375	375		51°	834	72°	850	15/64	1 Hr.
3.	2"	x	.750	215		45°	716	72°	800	OPEN	1 Hr.
4.	2"	x	.750	260		60°	303	69°	775		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	2.378		98.2	1.025	1.167	1.011	282
2	2.378		388.2	1.009	1.167	1.049	1140
3	9.453		228.2	1.015	1.167	1.028	2627
4	9.453		273.2	1.000	1.167	1.025	3089
5							

NO.	P_t	Temp. °R	T_r	Z
1	.15	495	1.37	.978
2.	.75	511	1.42	.909
3.	.42	505	1.40	.947
4.	.46	520	1.44	.952
5				

Gas Liquid Hydrocarbon Ratio: TSTM Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: ____ Deg.
Specific Gravity Separator Gas: .7343 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 679 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 361 R ____ R

P_c 892 P_c^2 796.

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		886	785	11
2		869	755	41
3		821	674	122
4		785	616	180
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.4222$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.7395$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 8,462$

Absolute Open Flow: 8462 Mcfd @ 15.025 | Angle of Slope θ: 55° 52 | Slope, n: .67790

Remarks: Calculated from Known Bottom Hole Pressures

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W.S.	W.S	M.K.