NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 10-4-78	
Company: CITIES SERVICE OIL CO.			Connection: TO AIR		
Pool			Formation: GLORIETA		Unit: L
Completion Date: 10-4-78	Total Depth		Plug Back TD: 5539'	Elevation	Farm or Lease Name: STATE "P"
Csg. Size: 5 1/2" / Wt. / d / Set At: 7170'			Perforations: From 5152' To 5487'		Well No.: 2
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: 5057'			Perforations: From OPEN To END		Unit: L Sec.: 32 Twp.: 22S Rge.: 38E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 4995.5		County: LEA
Producing Thru: TUBING	Reservoir Temp. °F: 125° @ 5057'	Mean Annual Temp. °F	Baro. Press. – P_a: 13.2		State: NEW MEXICO
L: .5057'	H: 5057'	Gg: .680	% CO_2: 0	% N_2: 2.31	% H_2S / Prover: 2" / Meter Run / Taps

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							289				
1.	2	x	1/2	25		72	257				72 HRS
2.	2	x	1/2	41		75	232				45 MIN
3.	2	x	3/4	20		74	184				45 MIN
4.	2	x	3/4	21		74	89				60 MIN
5.											60 MIN

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	4.279		38.2	.9887	1.213	NIL	196
2.	4.279		54.2	.9859	1.213	NIL	277
3.	9.453		33.2	.9868	1.213	NIL	376
4.	9.453		34.2	.9868	1.213	NIL	387
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.06	532	1.38	NIL
2.	.08	535	1.39	NIL
3.	.05	534	1.39	NIL
4.	.05	534	1.39	NIL
5.				

Gas Liquid Hydrocarbon Ratio – Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.
Specific Gravity Separator Gas .680 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 669 P.S.I.A. ____ P.S.I.A.
Critical Temperature 385 R ____ R

P_c 302.2 P_c^2 91.3

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		271.7	73.8	17.5
2		248.4	61.7	29.6
3		204.5	41.8	49.5
4		116.6	13.6	77.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.844$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.455$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = .547$

Absolute Open Flow 547 Mcfd @ 15.025 Angle of Slope θ 58.5 Slope, n .613

Remarks: NO FLUID MADE DURING TEST

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
John W. Runyan	JOHN WEST ENG. CO.		M.C.T.