STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 3-4-94

Company: TEXAS INDEPENDENT EXP.	Connection: LLANO (PIPELINE)		
Pool: S. Carlsbad Atoka	Formation: ATOKA	Unit:	
Completion Date: 2-23-94	Total Depth: 12300	Plug Back TD: 11910	Elevation:	Farm or Lease Name: MOBIL 21 STATE
Csg. Size: 5.5 / Wt.: 17.2 / d: 4.892 / Set At: 12300	Perforations: From 11430 To 11440			Well No.: #1
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.441 / Set At: 11150	Perforations: From - To -			Unit: C / Sec.: 21 / Twp.: 23 / Rge.: 27
Type Well – Single – Bradenhead – G.G. or G.C. Multiple: SINGLE (GAS)		Packer Set At: 11150		County: EDDY
Producing Thru: TBG. (GAS)	Reservoir Temp. °F: 174 @ 11435	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NEW MEXICO
L: 11435 / H: 11435	Gg: 0.580	% CO_2: 0.630	% N_2: 1.396	% H_2S: 0.00	Prover: 0.00	Meter Run: 2.0	Taps: FLG

FLOW DATA / TUBING DATA / BHP 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	BHP Press. p.s.i.g.	BHP Temp. °F	Duration of Flow
SI									
1.	2.0 x 1.25	630	41	85	3923	60	4877	174	72 +
2.	2.0 x 1.25	630	36	60	2839	60	3595	174	1.0
3.	2.0 x 1.25	640	72	69	2629	60	3338	174	1.0
4.	2.0 x 1.25	645	88	89	2180	60	2784	174	1.0
5.					1720	60	2202	174	1.0

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	8.120	162.39	643.2	0.9768	1.313	1.041	1761
2.	8.120	152.17	643.2	1.000	1.313	1.051	1705
3	8.120	216.86	653.2	0.9915	1.313	1.048	2402
4.	8.120	240.67	658.2	0.9732	1.313	1.041	2600
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.95	545	1.58	0.923
2.	0.95	520	1.50	0.906
3.	0.97	529	1.53	0.910
4.	0.98	549	1.59	0.923
5				

Gas Liquid Hydrocarbon Ratio: DRY GAS Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: 0.580 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 675 P.S.I.A. P.S.I.A.
Critical Temperature: 346 R R

P_c 4890.2 P_c^2 23.91

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1		3608.2	13.02	10.89
2		3351.2	11.23	12.68
3		2797.2	7.82	16.09
4		2215.2	4.91	19.01
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.258$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.208$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3034$

Absolute Open Flow: 3034 Mcfd @ 15.025 Angle of Slope θ: Slope, n: 0.821

Remarks: CHOKE SIZES = 7/64 FIRST RATE, 8/64 SECOND, 10/64 THIRD, 11.5/64 FORTH

Approved By Division	Conducted By:	Calculated By:	Checked By:
	KELTIC SERVICES	JIM SMITH	