C-105 File

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 1-3-85	
Company: McCLELLAN OIL CORP. ✓			Connection: AIR		
Pool: [illegible]			Formation: ABO		Unit
Completion Date: 12-19-84	Total Depth: 4690		Plug Back TD: 4562	Elevation: 3995 GL	Farm or Lease Name: TYRELL Fed Com
Csg. Size: 4½ / Wt.: 10½ / d: / Set At: 4582			Perforations: From 4257 To 4377		Well No.: #2
Tbg. Size: 2⅜ / Wt.: / d: / Set At: 4183			Perforations: From OPEN To ENDED		Unit: G / Sec.: 13 / Twp.: 10S / 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: [illegible]	Mean Annual Temp. °F:	Baro. Press. – P_a: 13.2		State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.68					3	PIPE

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							920		940		
1.	3		1.25	200	8	26	870		940		1 Hr.
2.	3		1.25	200	33	28	709		810		"
3.	3		1.25	200	47	39	539		640		"
4.	3		1.25	200	51	44	385		505		"
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	8.403	41.299	213.2	1.0344	1.2127	1.0285	448
2.	8.403	83.878	213.2	1.0312	1.2127	1.0279	906
3	8.403	100.102	213.2	1.0208	1.2127	1.0260	1068
4.	8.403	104.275	213.2	1.0157	1.2127	1.0252	1168
5.							

NO.	P_t	Temp. °R	T_r	Z
1				
2.				
3.				
4.				
5				

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

P_c 1092.2 P_c^2 1193

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1059.2	1122	71
2		876.2	768	425
3		676.2	457	736
4		532.2	283	910
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.311

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.092

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1275

Post ID-2
2-1-85
comp + BH

Absolute Open Flow 1275 Mcfd @ 15.025 | Angle of Slope θ 72 | Slope, n 1.092

Remarks: BOTTOM HOLE PRESSURES RECORDED W/AMERADA TYPE GAUGE.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	KELTIC SERVICES	KELLY	