AUG 28 1978

O. C. C.
ARTESIA, OFFICE

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: 8/15/78	SPUD DATE: 7-16-78
Company: McClellan Oil Corporation ✓		Connection: None		
Pool: Sams Ranch Grayburg		Formation: Premier Sands		Unit: ØN
Completion Date: 8-10-78	Total Depth: 1825	Plug Back TD:	Elevation: 3594.1 GL	Farm or Lease Name: McClellan Federal
Csg. Size: 4½ / Wt.: 9.5 / d: / Set At: 1790		Perforations: From 1790 To 1825		Well No.: 1
Tbg. Size: None / Wt.: / d: / Set At:		Perforations: From To		Unit: ØN / Sec.: 11 / Twp.: 14 / Rge.: 28
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: None		County: Chaves
Producing Thru: Csg.	Reservoir Temp. °F: @	Mean Annual Temp. °F:	Baro. Press. – P_a: 13.2	State: New Mexico
L: 1790 / H: 1790	Gg: .716 (Assumed)	% CO_2:	% N_2:	% H_2S: / Prover: / 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	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI	6" Positive Cks.				991				72 hrs.
1.	1/8	901	82		901				20 Min.
2.	9/64	882	84		882				60 Min.
3.	11/64	824	84		824				60 Min.
4.	13/64	710	78		710				60 Min.
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	.2618		914.2	.9795	1.182	1.096	304
2.	.3346		895.2	.9777	1.182	1.094	379
3.	.5090		837.2	.9777	1.182	1.088	536
4.	.7208		723.2	.9831	1.182	1.075	651
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.37	542	1.37	.832
2.	1.34	544	1.38	.835
3.	1.25	544	1.38	.845
4.	1.08	538	1.36	.865
5.				

Gas Liquid Hydrocarbon Ratio: None Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Gas Deg.
Specific Gravity Separator Gas: .716 (Assu.) xxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx
Critical Pressure: 668 P.S.I.A. P.S.I.A.
Critical Temperature: 395 R R

P_c 1004.2 P_c^2 1008.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			835.8	172.6
2			801.4	207.0
3			701.0	307.4
4			523.2	485.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.280$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.958$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.586$

Absolute Open Flow: 1.586 Mcfd @ 15.025 Angle of Slope θ: 47.5 Slope, n: .913

Remarks:

Approved by Commission: Conducted By: Calculated By: ✓ Checked By:

McCLELLAN OIL CORPORATION
McClellan Federal No. 1
O-11-14-28
Chaves County, New Mexico
August 10, 1978