C-122 file

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JAN 19 1979
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 1-10-79

Company: Mc CLELLAN OIL CORP.	Connection: AIR		
Pool: ~~UNDESIGNATED~~ wildcat abo	Formation: ABO		Unit: F
Completion Date: 12-9-78	Total Depth: ~~4618~~ 4610	Plug Back TD: 4552	Elevation:
Farm or Lease Name: STATE " A R "			
Csg. Size: 4 1/2 / Wt.: 9.5 / d: / Set At: 4606	Perforations: From 4386 To 4456		Well No.: # 1
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 4338	Perforations: From To		Unit: F / Sec.: 31 / Twp.: 18 / Rge.: 23
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE	Packer Set At: 4338		County: EDDY
Producing Thru: TBG.	Reservoir Temp. °F: 117 @ 4338	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
4338	4338	.645	.156	1.226		2 "		

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							980				72 HRS.
1.	2	X	.250	62		32	930				1 HR.
2.	2	X	.250	70		24	862				1 HR.
3.	2.	X	.250	150		28	800				1 HR.
4.	2	X	.250	200		25	660				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	1.087		75.2	1.028	1.227	nil	103
2.	1.087		83.2	1.037	1.227	nil	115
3.	1.087		163.2	1.032	1.227	1.020	229
4.	1.087		213.2	1.035	1.227	1.028	303
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	.11	492	1.30	nil
2.	.12	484	1.28	nil
3.	.24	488	1.29	.961
4.	.32	485	1.28	.946
5.				

Gas Liquid Hydrocarbon Ratio: DRY Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .645 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 670 P.S.I.A. P.S.I.A.
Critical Temperature: 378 R R

P_c 993.2 P_c^2 986.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		943.3	889.8	96.6
2		875.3	766.2	220.2
3		813.7	662.1	324.3
4		674.3	454.7	531.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.855$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.482$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = .449$

Absolute Open Flow: 449 Mcfd @ 15.025 | Angle of Slope θ: 57.5 | Slope, n: .637

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	JOHN DAVIS	LARRY DAVIS	