NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

SF File 22

RECEIVED
DEC 3 - 1979

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 11/26/79

O. C. C.
ARTESIA, OFFICE
RECEIVED
NOV 29 1979
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Company: Delta Drilling Company	Connection: None			Unit:
Pool: ~~Undesignated~~ South Culebra Bluff Atoka	Formation: Atoka			Lease or Lease Name: Amoco Federal
Completion Date: 11/26	Total Depth: 11900	Plug Back T.D.: 11858 11860	Elevation: 2992 GL	Well No.: 1
Csg. Size: 7" / Wt.: 26 / d: 6.276 / Set At: 11900	Perforations: From 11604 To 11640			Unit: I / Sec.: 11 / Twp.: 23 / Rge.: 28
Tbg. Size: 2 7/8" / Wt.: 6.5 / d: 2.441 / Set At: 11423	Perforations: From Open To End			
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 11400			County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 189 @ 11475	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
11475	11475	0.586	0.476	2.305	–		4	Flg.

	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					5490				48 hrs.
1.	4 X 1.250	630	9	93	4925				1 hr
2.	4 X 1.250	630	16	94	4565				1 hr
3.	4 X 1.250	630	23	97	4105				1 hr
4.	4 X 1.250	630	44	93	3085				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	7.469	76.08	643.2	.9697	1.306	1.038	747
2	7.469	101.45	643.2	.9688	1.306	1.038	995
3	7.469	121.63	643.2	.9662	1.306	1.038	1190
4	7.469	168.23	643.2	.9697	1.306	1.038	1652
5							

NO.	P_t	Temp. °R	T_f	Z
1	.96	553	1.61	.928
2	.96	554	1.61	.928
3	.96	557	1.62	.929
4	.96	553	1.61	.928
5				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: 0.5857 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 669 P.S.I.A. – P.S.I.A.
Critical Temperature: 344 R – R

P_c 5503.2 P_c^2 30285.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		4941.1	24414.5	5870.7
2		4581.3	20988.3	9296.9
3		4123.6	17004.1	13281.1
4		3104.1	9635.4	20649.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.467$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.276$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.108$

Absolute Open Flow: 2108 Mcfd @ 15.025
Angle of Slope θ: 57.5
Slope, n: .637

Remarks: No Fluid made during Test
* Equivalent Length
Top of 7" Liner @ ~~10800'~~

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	JARREL SERVICES, INC.	R. Reston	Joe A. Coleman