

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

Form C-122
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 8-21-75					
Company SHELL OIL COMPANY			Connection E.P.N.G.						
Pool			Formation TUBB		Unit				
Completion Date		Total Depth 6629	Plug Back TD 6380	Elevation					
Farm or Lease Name Argo A									
Csg. Size 5 1/2	Wt. d	Set At 6629	Perforations: From 5968 To 6280		Well No. 2				
Thd Size 2 3/8	Wt. 4.7	Set At 5850	Perforations: From To		Unit Sec. Twp. Rje. E 22 21 37				
Type Well - Single - Brodenhead - G.G. or G.O. Multiple				Packer Set At 5850	County Lea				
Producing Thru TBG		Reservoir Temp. *F 132° 5850 est.	Mean Annual Temp. *F	Baro. Press. - P _a 13.2	State N.M.				
L 5850	H 5850	G _g .685	% CO ₂	% N ₂	% H ₂ S				
Prover			Meter Run 4	Taps 1.500					
FLOW DATA					TUBING DATA	CASING DATA	Duration of Flow		
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. *F	Press. p.s.i.g.	Temp. *F	Duration of Flow
SI							418		72 Hr.
1.	4 x 1.500			100	5.3	88	247		1 Hr.
2.	4 x 1.500			102	19.4	78	235		1 Hr.
3.	4 x 1.500			108	36.0	74	224		1 Hr.
4.	4 x 1.500			108	48.3	74	160		30 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	10.84	7.58	113.2	.9741	1.208	NIL	97		
2	10.84	14.50	115.2	.9831	1.208	NIL	187		
3	10.84	19.75	121.2	.9868	1.208	NIL	255		
4	10.84	22.88	121.2	.9868	1.208	NIL	296		
5									
NO.	P _r	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio ----- Mcf/bbl.				
1					A.P.I. Gravity of Liquid Hydrocarbons ----- Deg.				
2					Specific Gravity Separator Gas .685 X X X X X X X X X X				
3			NIL		Specific Gravity Flowing Fluid X X X X X X				
4					Critical Pressure 669 P.S.I.A. P.S.I.A.				
5					Critical Temperature 385 R R				
P _c 431.2 P _c ² 185.9									
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \underline{1.208}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{1.208}$				
1			67.9	118.0	ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{.358}$				
2			62.4	123.5					
3			57.8	128.1					
4			32.1	153.8					
5									
Absolute Open Flow 358 Mcfd @ 15.025					Angle of Slope 45		Slope, n 1.000		
Remarks: No fluid measured									
Approved By Commission:			Conducted By: R. Reston			Calculated By: J. B. Murray			Checked By:

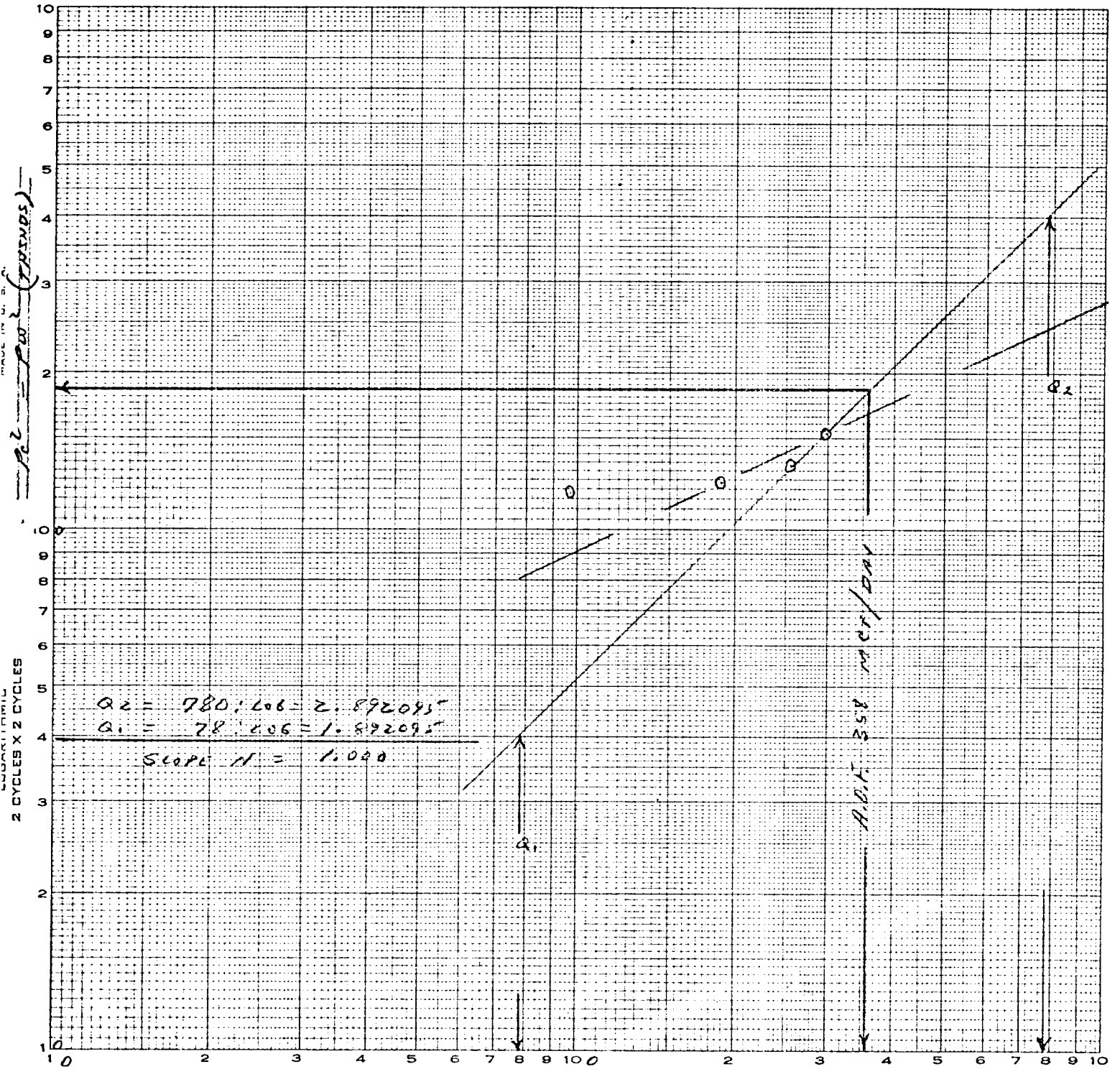
SHELL OIL COMPANY

AREA A No. 2

E-22-21-37

LEA COUNTY, NEW MEXICO

8-21-75



Q - MCF/DAY