Drawer 1857
Roswell, New Mexico 88201

January 16, 1974

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JAN 22 1974

O. C. C.
ARTESIA, OFFICE

El Paso Natural Gas Company
Attention: Mr. A. L. Truex
P. O. Box 1492
El Paso, Texas 79999

Gentlemen:

Enclosed are two approved copies of communitization agreement No. Com. Agr.-sW-814 involving 160 acres of land in Federal leases New Mexico 8420-A and 0554467, Eddy County, New Mexico.

The agreement communitizes all rights as to dry gas and associated liquid hydrocarbons producible from the Wolfcamp formation in the SW¼ sec. 20, T. 22 S., R. 22 E., N.M.P.M., and is effective as of November 1, 1973.

You are requested to furnish all interested principals with appropriate evidence of this approval.

Sincerely yours,

CARL C. TRAYWICK
Acting Area Oil and Gas Supervisor

cc:
BLM, Santa Fe (w/cy agr.)
Artesia (w/cy agr.)
File (2)

JMonro:lh

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NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AT ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

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O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special				Test Date: 1-10-74	
Company: El Paso Natural Gas Company		Connection: El Paso Natural Gas Company			
Pool: Rocky Arroyo		Formation: Wolfcamp		Unit	
Completion Date: 11-8-73	Total Depth: 9750	Plug Back TD: 6056	Elevation	Farm or Lease Name: Patterson A	
Csg. Size: 5½ / Wt.: 17 / d / Set At: 6056		Perforations: From 5764 To 5861		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7 / d / Set At: 5691		Perforations: From To		Unit: N / Sec.: 20 / Twp.: 22 / Rge.: 22	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: None		County: Eddy	
Producing Thru: Tbg.	Reservoir Temp. °F: 130 @ 5691	Mean Annual Temp. °F	Baro. Press. – P_a: 13.2	State: New Mexico	
L: .	H	Gg: .693 Assumed	% CO_2	% N_2	% H_2S / Prover / Meter Run: 4 / Taps: 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						1565		1574		48 Hrs.
1.	4	x 1.250	420	4	78	1180	30	1566		1 hr.
2.	4	x 1.250	425	9.6	84	970	42	1560		1 hr.
3.	4	x 1.250	435	16.8	90	823	41	1550		1 hr.
4.	4	x 1.250	450	24.0	86	565	41	1542		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	41.63	433.2	.9831	1.201	1.045	384
2.	7.469	64.86	438.2	.9777	1.201	1.045	594
3.	7.469	86.77	448.2	.9723	1.201	1.043	789
4.	7.469	105.44	463.2	.9759	1.201	1.046	965
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.65	538	1.39	.915
2.	.66	544	1.40	.916
3.	.67	550	1.42	.919
4.	.69	546	1.41	.914
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure 669 P.S.I.A. _____ P.S.I.A.
Critical Temperature 388 R _____ R

P_c 1567.2 P_c^2 2519.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1579.2	2493.9	25.3
2		1573.2	2475.0	44.2
3		1563.2	2443.6	75.6
4		1555.2	2418.6	100.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 25.0417$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 8.792$

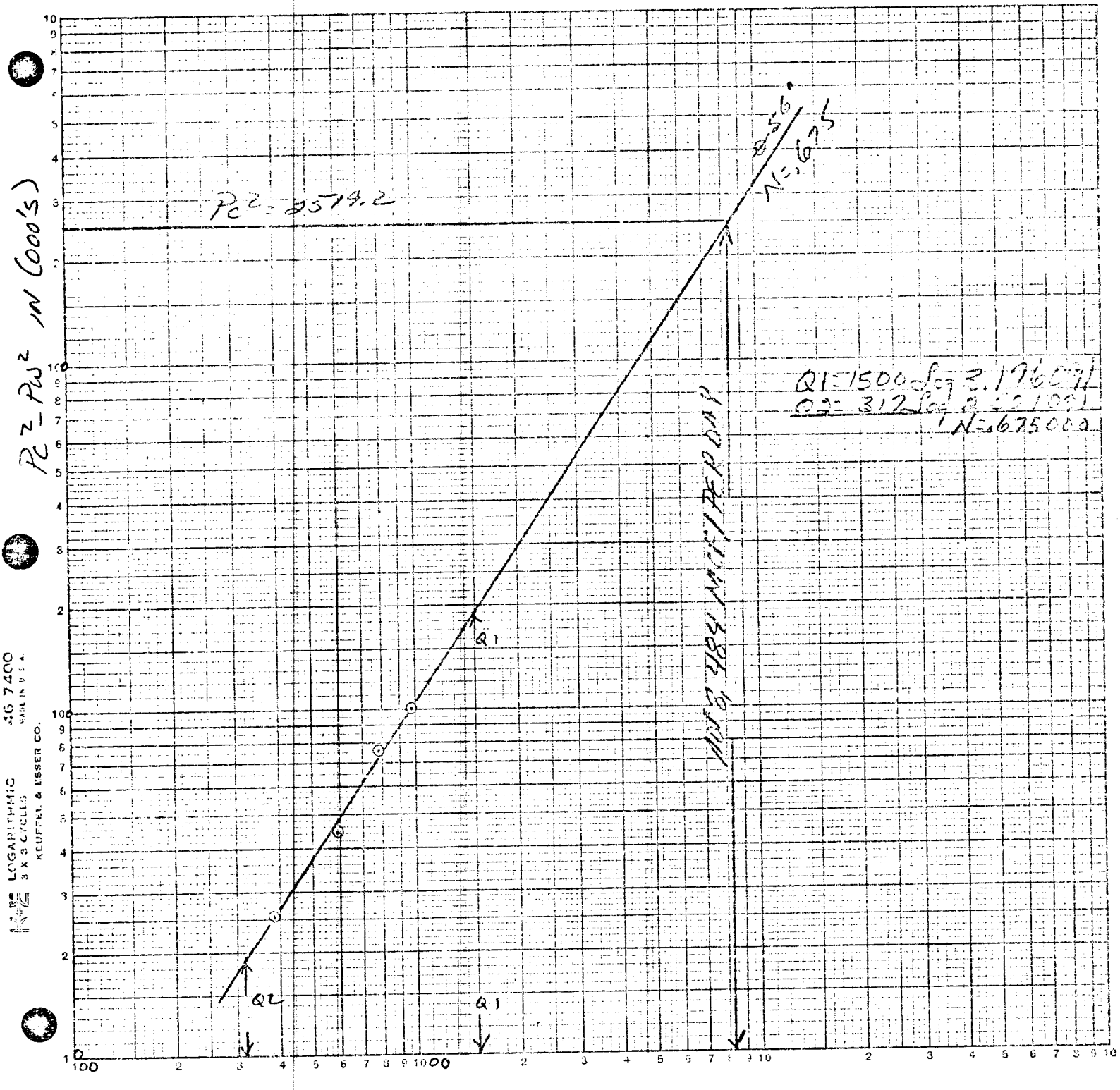
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 8.484$

Absolute Open Flow 8.484 Mcfd @ 15.025 Angle of Slope θ 56 Slope, n .575

Remarks: Trace of Fluid (TSTM)

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Reggie Reston	Reggie Reston	

EL PASO NATURAL GAS COMPANY
Patterson A No. 1
Eddy County, New Mexico
January 9, 1974



$Q = MCF/PD$