

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special										Test Date 7/24/79	
Company Mobil Oil Corporation					Connection None						
Pool Basin Dakota					Formation Dakota					Unit	
Completion Date 7/3/79			Total Depth 6900'		Plug Back TD 6765		Elevation		Form or Lease Name Jicarilla Otero Com		
Csg. Size 5 1/2	Wt. 15.5	d	Set At 6894	Perforations: From 6627' To 6765'				Well No. 1			
Tbg. Size 2 3/8"	Wt.	d	Set At 6682	Perforations: From open Ended				Unit m	Soc. 22	Twp. 24N	Range 5W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single							Packer Set At 6590'		County Rio Arriba		
Producing Thru 769		Reservoir Temp. °F 165		Mean Annual Temp. °F 50		Baro. Press. - P _a 12.2		State New Mexico			
L 6682	H -	G _g .7311	% CO ₂ .596	% N ₂ .770	% H ₂ S -0-	Prover .75"	Meter Run 2"	Taps			

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
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	
SI							969	82	-0-	-	170 hrs
1.	2" x .75"			45		102°	118	74	-0-	-	3 hrs
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _{tc}	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		57.2	.9619	.9060	1.008	.622
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.087	562	1.11	.935	8640	38.4	.7311	XXXXXX	657	505
2.										
3.										
4.										
5.										

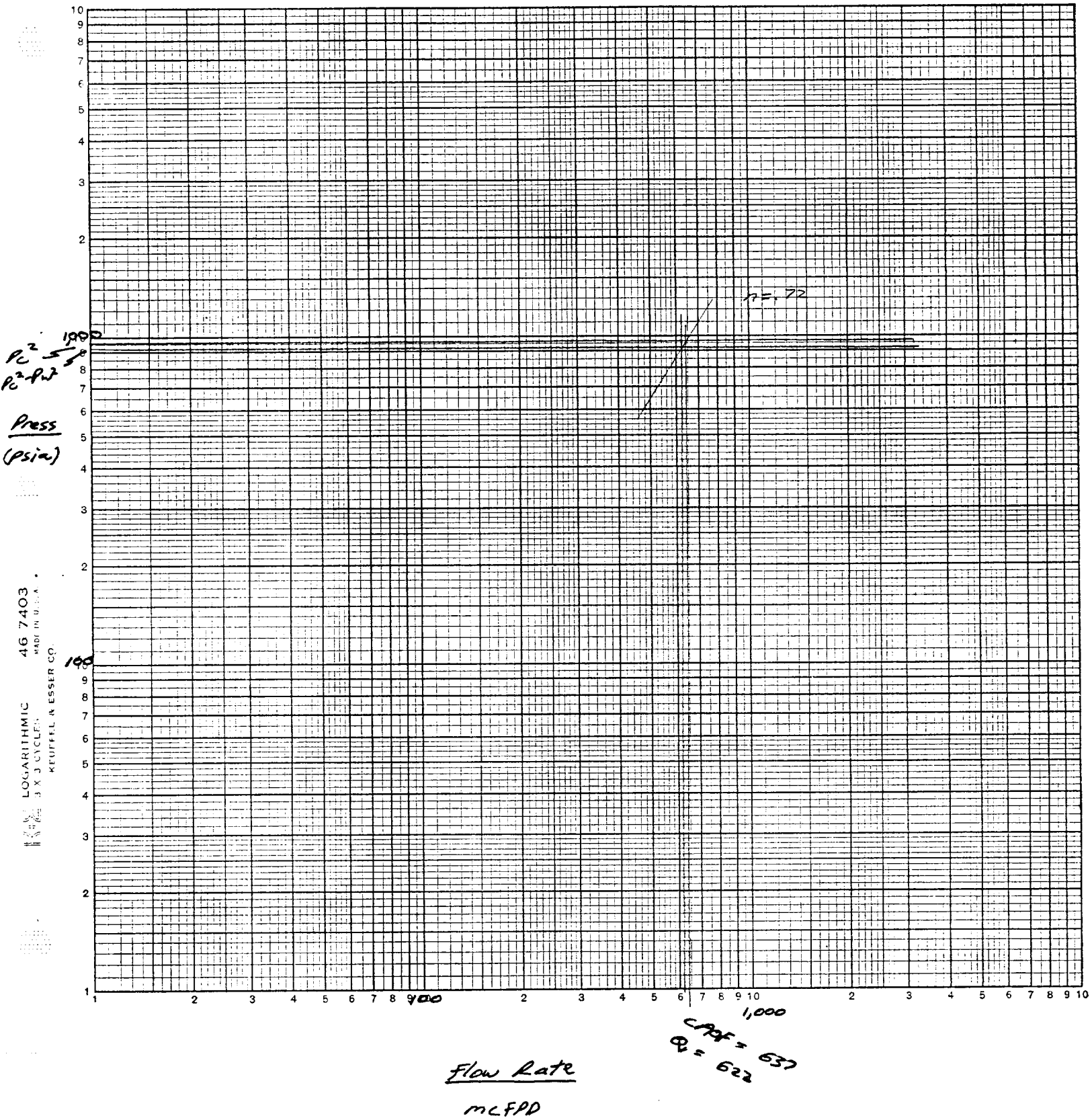
NO.	P _t ²	P _w ²	P _w ²	P _t ² - P _w ²	(1) $\frac{P_t^2}{P_t^2 - P_w^2} =$	(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n =$
1			30.9	931.85	1.033	1.02
2						
3						
4						
5						

Absolute Open Flow		637	Mcf @ 15.025	Angle of Slope	.72
--------------------	--	-----	--------------	----------------	-----

Remarks: P_w determined using work sheet C-122D

Approved By Commission	Conducted By: <u>K.D. Jones</u>	Calculated By: <u>A.D. George</u>	Checked By:
------------------------	---------------------------------	-----------------------------------	-------------

Mobil Oil Corporation
Jicarilla Otero Com #1
Basin Dakota Field
Rio Arriba County, N.M.



NEW-TEX LAB

P. O. BOX 1161
HOBBS, N.M. 88240

CERTIFICATE OF ANALYSIS

No. 1551
Run No. _____
Date of Run 8-7-79
Date Secured _____

A Sample of Otero Unit #1
Secured from Mobil Oil Corporation Att. Mr. A.J. Alcott
At Box 1800 Secured by _____
Hobbs, N. M. 88240 Time _____ Date 7-24-79
Sampling conditions _____ Press _____
Temp. _____
Dakota Basin

FRACTIONAL ANALYSIS

Percentage Composition

	MOL %	LIQ. %	G.P.M.
Carbon Dioxide	.596		
Air			
Nitrogen	.770		
Oxygen			
Hydrogen sulfide			
Hydrogen			
Methane	76.718		
Ethane	12.978		3.461
Propane	5.938		1.635
Butanes			
Iso-Butane	.998		.326
N-Butane	1.297		.408
Pentanes			
Iso-Pentane	.293		.107
N-Pentane	.265		.096
Hexanes	.083		.034
Heptanes	.064		.027
Octanes			
TOTAL	100.000		6.094

Calc. Sp. Gr. — 0.7311
Calc. A.P.I. — _____
Calc. Vapor Press. — _____ PSIA
Sp. Gr. _____
Mol. Wt. 21.18

LIQUID CONTENT (GAL./MCF)

Propane Calc. G.P.M. 1.635
Butanes Calc. G.P.M. .734
Pentanes Plus. G.P.M. .264
Ethane Calc. G.P.M. 3.461
RVP Gasoline G.P.M. _____
B.T.U./Cu. Ft. @ 14.696 P.S.I.A.
Dry Basis 1257
Wet Basis 1235
Sulfur Analysis by Titration
Gr./100 Cu. Ft. _____
Hydrogen Sulfide _____
Mercaptans _____
Sulfides _____
Residual Sulfur _____
Total Sulfur _____

Run by Deane Simpson Checked by _____ Approved by Deane Simpson

Additional Data and Remarks