

SF
File #
122 Form C-122
Revised 9-1-65

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

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-01-79		NOV 7 1979	
Company MORALCO INC.				Formation AIR		O.C.C.	
Well HENSHAW Q-22-SA				Formation PENROSE		Field ARTESIA, OFFICE	
Completion Date 10-22-79		Total Length 3010		Flow Rate 2685		Owner or Lease Name DUNCAN FEDERAL	
Coq. Size 4 1/2	Wt. 9.5	d 3010	Set At 3010	Perforations From 2524 To 2534		Well No. # 1	
Coq. Size 2 3/8	Wt. J 55	d 2475	Set At 2475	Perforations From To		Unit M 11 16 30	
Type Well - Single - Brokenhead - G.G. or G.O. Multiple SINGLE GAS WELL				Fackor Set At NONE		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 100 @ 2529		Mean Annual Temp. °F 60*		State NEW MEXICO	
L 2475	H 2475	Gg .8206	% CO ₂ -----	% N ₂ 47.978	% H ₂ S -----	Prover 2"	Meter Run -----

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.	
SI							780		780	
1.	2	X	.750	4	65*		725	70*	725	70*
2.	2	X	.750	8	65*		651	70*	651	70*
3.	2	X	.750	13	65*		570	70*	570	70*
4.	2	X	.750	16	65*		464	70*	464	70*
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mgd
1	9.453		17.2	.9952	1.104	1.064	190.
2	9.453		21.2	.9952	1.104	1.068	235.
3	9.453		26.2	.9952	1.104	1.063	289.
4	9.453		29.2	.9952	1.104	1.055	320.
5							

NO.	P _t	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	DRY	Mol/Zol.
1.	2.95	525	1.76	.8846	A.P.I. Gravity of Liquid Hydrocarbons	-----	-----
2.	3.64	525	1.76	.8768	Specific Gravity Separator Gas	.8206	X X X X X X X X
3.	4.50	525	1.76	.8856	Specific Gravity Flowing Fluid	X X X X X	-----
4.	5.00	525	1.76	.8988	Critical Pressure	665-51-31	583 P.S.I.A.
5.					Critical Temperature	431-82-50	299 R

NO.	P _t 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	738.2	544.9	84.2	1.57	1.57
2	664.2	441.1	188.		
3	583.2	340.1	289.		
4	477.2	227.7	401.4		
5					

Absolute Open Flow 502.		Mol/LB 15.025		Angle of Slope 45*		Slope, n 1*	
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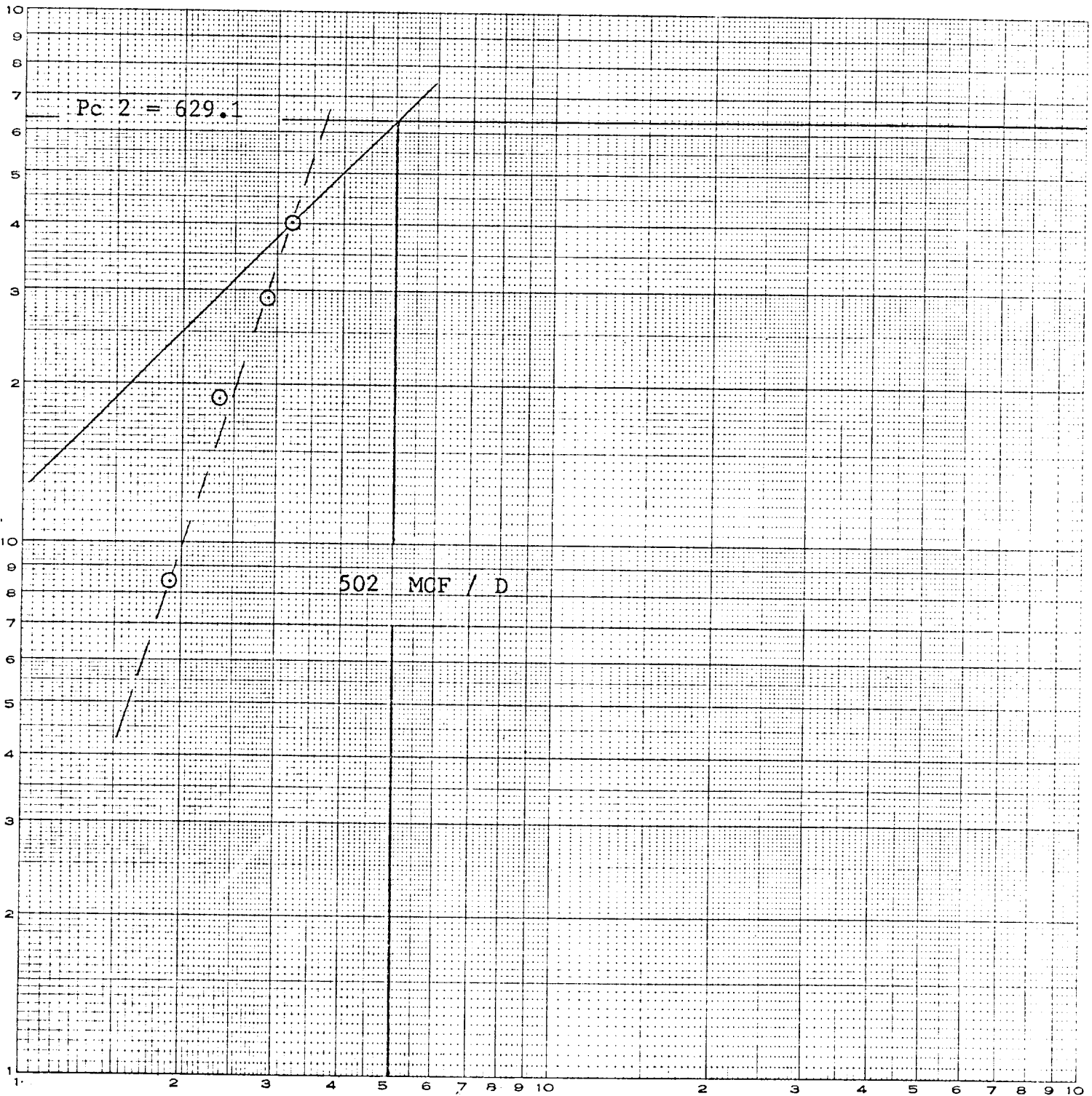
Remarks:

Approved by Commission:	Conducted by:	Calculated by:	Checked by:
	JOHN DAVIS	LARRY C. DAVIS	

COMPANY : MONTICO INC.
 LEASE : DUNCAN FEDERAL
 WELL NO. : # 1
 UNIT : 11/16/30
 COUNTY : EDDY
 STATE : NEW MEXICO
 DATE : NOVEMBER 1, 1979

DIETZGEN CORPORATION
MADE IN U.S.A.

NO. 341-L22 DIETZGEN GRAPH PAPER
 LOGARITHMIC
 2 CYCLES X 2 CYCLES



$$Q = \text{MCF} / D$$

$$N = 1^*$$

45* ANGLE DRAW THREW LAST RATE

NEW-TEX**LAB**P. O. BOX 1181
HOBBS, N.M. 88240No. 1867
Run No. 11-2-79
Date of Run 11-2-79
Date Secured 11-1-79**CERTIFICATE OF ANALYSIS**A Sample of Moroilco Inc.,
Secured from Davis Services
At Box 2033
Hobbs, N.M. 88240
Sampling conditions Press.
Temp.

Duncan Federal #1

Secured by
Time Date**FRACTIONAL ANALYSIS****Percentage Composition**

	MOL %	LIQ. %	G.P.M.
Carbon Dioxide	Nil		
Air			
Nitrogen	47.978		
Oxygen			
Hydrogen sulfide			
Hydrogen			
Methane	43.066		
Ethane	5.638	1.504	
Propane	2.134	.588	
Butanes			
Iso Butane	.230	.075	
N Butane	.488	.153	
Pentanes			
Iso-Pentane	.141	.051	
N Pentane	.147	.053	
Hexanes	.081	.033	
Heptanes	.097	.041	
Octanes			
TOTAL	100.000	2.499	

Calc. Sp. Gr. — 0.8206

Calc. A.P.I. —

Calc. Vapor Press. —

Sp. Gr.

Mol. Wt. 23.82

LIQUID CONTENT (GAL./MCF)Propane Calc. G.P.M. .588
Butanes Calc. G.P.M. .228
Pentanes Plus. G.P.M. .178
Ethane Calc. G.P.M. 1.504
RVP Gasoline G.P.M.

B.T.U. Cu. Ft. @ 14.696 P.S.I.A.

Dry Basis

Wet Basis

632
621

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**

