

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-9-73		OCT 26 1973	
Company Inexco Oil Company				Connection None		O. G. C.	
Pool Catclaw Draw <i>Morrow</i>				Formation Morrow "C-2" Sand		UNITARTESIA, OFFICE	
Completion Date 10-12-73		Total Depth 11,050'		Plug Back TD 10,940'		Elevation 3361' KB	
Farm or Lease Name Arco Federal Com.				Well No. 1			
Csg. Size 5-1/2"	Wt. 17.00	d 4.892	Set At 11,050'	Perforations: 10,908' to 10,914' & From 10,918' To 10,923'			
Tbg. Size 2-7/8"	Wt. 6.5	d 2.441	Set At 10,617'	Perforations: From Open To Ended		Unit Sec. Twp. Rge. D 20 21S 26E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,598'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 183° @ 10,511'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 10,911'		H -	G _g 0.595	% CO ₂ 1.19	% N ₂ 0.22	% H ₂ S 0.00	Prover Meter Run X
Taps F							

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	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							3173		PACKER	96.0 Hrs.
1.	4	X	1.50	600	57	89	2830	73		12/64
2.	4	X	1.500	600	89	92	2671	74		14/64
3.	4	X	2.250	600	29	90	2333	75		17/64
4.	4	X	2.250	600	41	89	2053	76		20/64
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	10.84	186.96	613.2	0.9732	1.296	1.039	2655.8
2	10.84	233.61	613.2	0.9706	1.296	1.038	3306.4
3	25.64	133.35	613.2	0.9723	1.296	1.039	4476.4
4	25.64	158.56	613.2	0.9732	1.296	1.039	5327.6
5.							

NO.	P _r	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.	0.90	549	1.58	0.927	733.14	45.9	0.595	XXXXXX	679	348
2.	0.90	552	1.59	0.929						
3.	0.90	550	1.58	0.927						
4.	0.90	549	1.58	0.927						
5.										

P _c 4054.2 P _c ² 16436.5					(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 5.369$		(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 3.125$	
NO.	P _t ²	P _w	P _w ²	P _c ² - R _w ²				
1	-	3657.2	13375.1	3061.4				
2	-	3491.2	12188.5	4248.0				
3	-	3134.2	9823.2	6613.3				
4	-	2790.2	7785.2	8651.3				
5								

Absolute Open Flow 8299 Mcfd @ 15.025				Angle of Slope 55° 52'		Slope, n 0.678	
Remarks: * BHP @ (-7550') 10,911' used for pressure calculations 0.99 bbl. condensate produced during 4.5 hr. test.							
Approved By Commission:		Conducted By: COLEMAN PET. ENG. CO.		Calculated By: JOE A. COLEMAN PE 2208 NM		Checked By: <i>Terry W. Ellstrom</i> Terry W. Ellstrom	

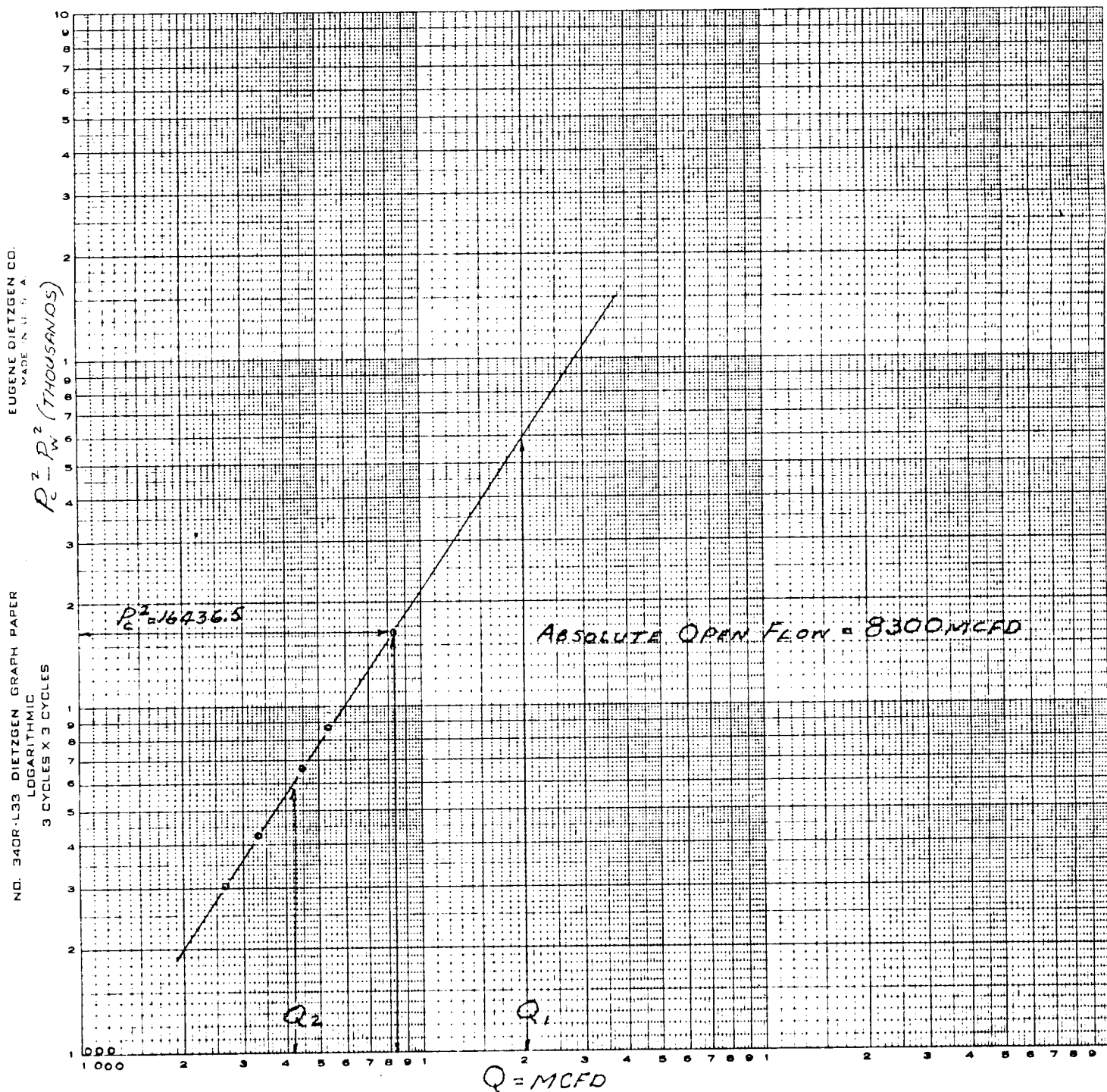
COMPANY INEXCO OIL COMPANY

WELL ARCO FEDERAL, NO.1

LOCATION Unit D, Sec 20 21s 26 e

COUNTY EDDY NEW MEXICO

DATE OCTOBER 9, 1973



$$Q_1 = 20000 \text{ MCFD}; \log Q_1 = 4.30103$$

$$Q_2 = 4200 \text{ MCFD}; \log Q_2 = 3.62325$$

$$n = 0.67778 = 0.678$$