

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

Form C-122
Revised 9-1-65

RECEIVED

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C-122 file*

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11/6/78		MAR 1 1979	
Company Inexco Oil Company				Connection None		O. C. C. UNIT - OFFICE	
Pool <i>Mildent</i> Undesignated				Formation Atoka			
Completion Date 11/6/78		Total Depth 9375'		Plug Back TD 8658'		Elevation 3910'	
Casing Size 4 1/2"		Wt. 11.6		Set At 4.000		8735'	
Tubg. Size 2 3/8"		Wt. 4.6		Set At 1.995		8390'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8390'		Form or Lease Name Long Box Unit #1	
Producing Thru Tubing		Reservoir Temp. °F 168 @ 8388'		Mean Annual Temp. °F 60		Para. Press. - P _g 13.2	
L 8581'		H -		G _g 0.625		% CO ₂ 0.829	
				% N ₂ 1.736		% H ₂ S -	
				Prover -		Meter Run 4"	
						F	

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2822	57	PACKER		43.0 hrs
1.	4 6/64	1.250	750	9	79	2390	58				1.25
2.	4 8/64	1.250	750	15	84	2160	59				1.00
3.	4 10/64	1.250	750	20	86	1905	60				1.25
4.	4 13/64	1.250	750	31	86	1335	60				1.50
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	82.88	763.2	0.9822	1.265	1.059	814.51
2	7.469	107.00	763.2	0.9777	1.265	1.057	1044.76
3	7.469	123.54	763.2	0.9759	1.265	1.056	1202.90
4	7.469	153.82	763.2	0.9759	1.265	1.056	1497.73
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Dry Gas _____ Mcf/LbL.	
1	1.14	539	1.51	.892	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2	1.14	544	1.52	.895	Specific Gravity Separator Gas _____ XXXXXXXXXX	
3	1.14	546	1.53	.897	Specific Gravity Flowing Fluid _____ XXXXXX	
4	1.14	546	1.53	.897	Critical Pressure _____ 672 _____ P.S.I.A. _____ P.S.I.A.	
5					Critical Temperature _____ 358 _____ R _____ R	

P _c 3573.2 P _c ² 12767.8				
NO.	P _r	P _w	P _w ²	P _c ² - P _w ²
1		3031.2	9188.2	3579.6
2		2739.2	7503.2	5264.6
3		2424.2	5876.7	6891.1
4		1714.2	2938.5	9829.3
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.299$

AGF = C $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1764$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.178$

Absolute Open Flow	1764	Mcf/d @ 15.025	Angle of Slope @ 58° 1'	Slope, n 0.624
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Remarks: Bottom hole Pressure @ (-4671) 8581' Used for Pressure Calculations

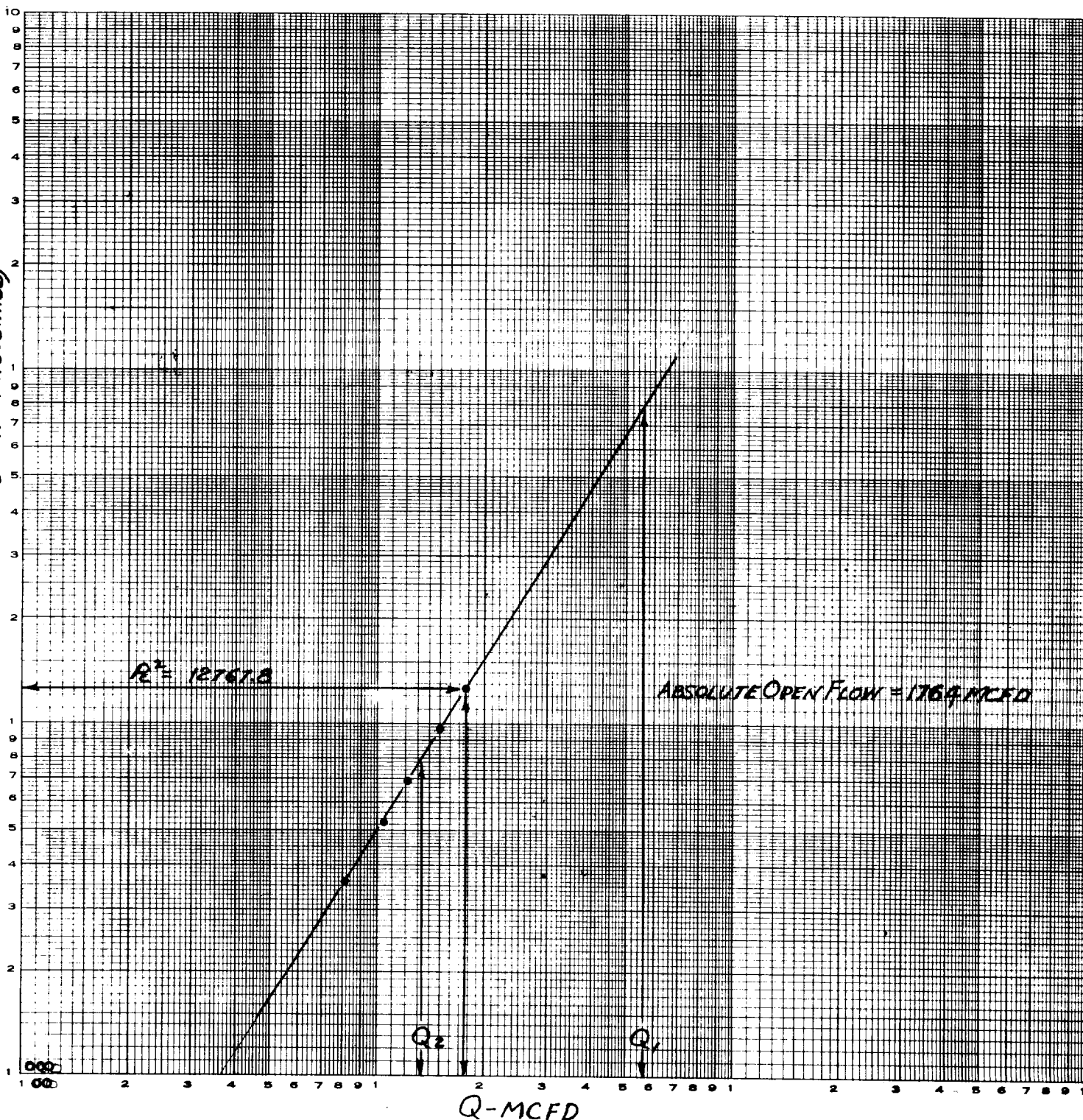
Approved by Commission:	Conducted By: JARREL SERVICES, INC.	Calculated By: Joe A. Coleman	Checked By: <i>[Signature]</i> Joe A. Coleman
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COMPANY: INEXCO OIL COMPANY
 WELL: Long Box Unit, No.
 LOCATION: H 30 20s 24e
 COUNTY: Eddy
 DATE: November 6, 1978

EUGENE DIETZGEN CO.
 MADE IN U. S. A.

NO. 340R-L33 DIETZGEN GRAPH PAPER
 LOGARITHMIC
 3 CYCLES X 3 CYCLES

$P_e^2 - P_w^2$ (THOUSANDS)



$$Q_1 = 5600 \text{ MCFD}; \log Q_1 = 3.74819$$

$$Q_2 = 1330 \text{ MCFD}; \log Q_2 = 3.12385$$

$$n = 0.62434 = 0.624$$



UNICHEM
INTERNATIONAL

Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

CERTIFICATE OF ANALYSIS

No. 8019
Run No. _____
Date of Run 11-7-78
Date Secured _____

A Sample of Inexco - Long Box Unit #1
Secured from Jarrel Services
At Box 1654 Secured by _____
Hobbs, NM 88240 Time _____ Date _____
Sampling conditions _____ Press _____
Temp. _____

FRACTIONAL ANALYSIS

Percentage Composition

MOL % LIQ. % G.P.M.

Carbon Dioxide	.829	
Air		
Nitrogen	1.736	
Oxygen		
Hydrogen sulfide		
Hydrogen		
Methane	88.273	
Ethane	5.327	1.421
Propane	1.609	.443
Butanes		
Iso Butane	.272	.089
N-Butane	.586	.184
Pentanes		
Iso-Pentane	.375	.137
N-Pentane	.463	.167
Hexanes	.344	.141
Heptanes Plus	.186	.079
Octanes		
TOTAL	100.000	2.661

Calc. Sp. Gr. — 0.6253
Calc. A.P.I. — _____
Calc. Vapor Press. — _____ PSIA
Sp. Gr. _____
Mol. Wt. 18.91

LIQUID CONTENT (GAL./MCF)

Propane Calc. G.P.M.	.443
Butanes Calc. G.P.M.	.273
Pentanes Plus. G.P.M.	.524
Ethane Calc. G.P.M.	1.421
— RVP Gasoline G.P.M.	
B.T.U./Cu. Ft. @ 14.696 P.S.I.A.	
Dry Basis	1117
Wet Basis	1097
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