

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

Form C-122
Revised 9-1-65

45F
File

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special						Test Date 4-8-82		1980 FNL	
Company RAULT PETROLEUM CORP.				Connection AIR NEW WELL				1980 FEL	
Pool UNDESIGNATED				Formation ABO				Unit	
Completion Date 4-9-82		Total Depth 4050		Plug Back TD 3100		Elevation 4409 KB		Farm or Lease Name EDDLEMAN FEDERAL	
Coq. Size 4.5	Wt. 10.5	d 4.052	Set At 4082	Perforations: From 2872 To 3003		Well No. 2			
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 2870-2910	Perforations: From OPEN To ENDED		Unit Sec. Twp. Rye. G 9 7S 22E			
Type Well - Single - Brdenhead - G.G. or G.O. Multiple SINGLE						Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 88 @ 2938		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 2938	H 2938	Gg .7107	% CO ₂ 9.054	% N ₂ 8.688	% H ₂ S	Prover 2.00	Meter Run	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							670	58	780		168 HRS
1.	2.00	X	.09375	405	0	54	583	54	722		1
2.	2.00	X	.09375	550	0	59	530	59	665		1
3.	2.00	X	.125	320	0	63	492	63	625		1
4.	2.00	X	.125	395	0	65	436	65	572		1
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 _{pv}	Rate of Flow Q, Mcfd
1	.1410	.00	418.2	1.006	1.186	1.036	73
2	.1410	.00	563.2	1.001	1.186	1.047	99
3	.2648	.00	332.2	.9971	1.186	1.027	107
4	.2648	.00	408.2	.9952	1.186	1.033	132
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	.60	514	1.45	.931						
2	.81	519	1.47	.913						
3	.48	523	1.48	.948						
4	.59	525	1.48	.937						
5										

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²
1	793.2	735.2	540.5	88.7
2	629.2	678.2	459.9	169.3
3		638.2	407.3	221.9
4		585.2	342.5	286.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.1946$

ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 196.2$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4861$

Post ID-2
12-17-82
Camp + BK

Absolute Open Flow	196.2	Mcfd @ 15.025	Angle of Slope @	63.25	Slope, n	.504
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Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission:	Conducted By: DON BENNETT	Calculated By: BENNETT-CATHEY	Checked By:
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6 A.M. ..

DIFF. IN. WATER

7 A.M.

8 A.M.

9 A.M.

10 A.M.

11 A.M.

NOON

1 P.M.

2 P.M.

3 P.M.

4 P.M.

5 P.M.

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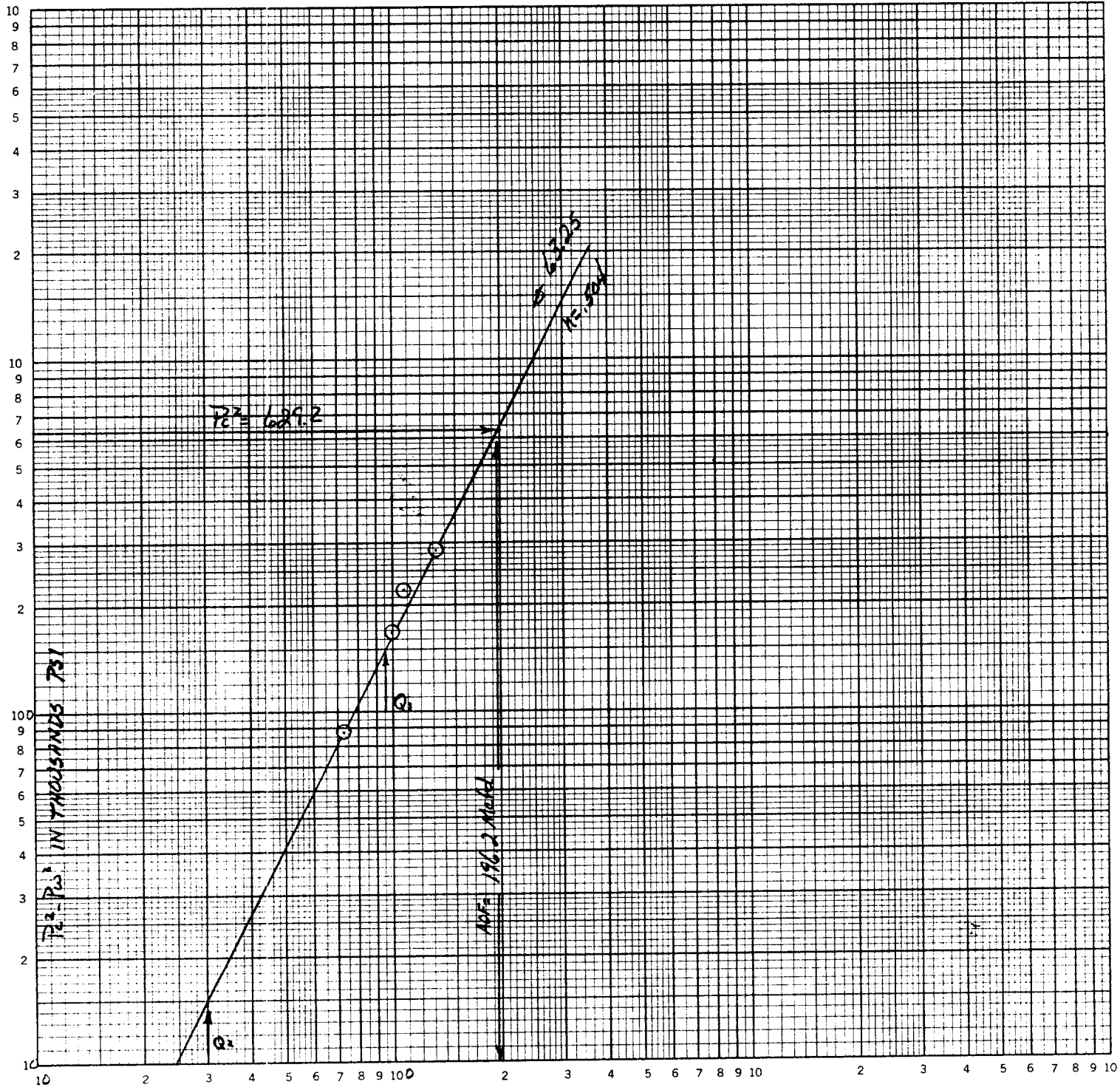
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TITONI 16100
 EDDLEMAN FEDERAL 2
 SEC 9 TWP 75 RGE 24E
 CHAVES COUNTY
 4-8-82

46 7400

K₀Σ LOGARITHMIC 3 X 3 CYCLES
 KEUFFEL & ESSER CO. MADE IN U.S.A.



$$\overline{AP}_1 \quad P_2 - P_w = 150$$

$$\overline{AP}_2 \quad P_2 - P_w = 15$$

$$Q_1 = 95.7$$

$$Q_2 = 30$$

$$\log Q_1 = 1.9811$$

$$\log Q_2 = 1.4771$$

$$n = .504$$

NEW-TEX LAB
P.O. BOX 1161
HOBBS NM 88241-1161
505-393-3561

ANALYSIS NUMBER: 7121
DATE OF RUN: 04/08/82
DATE SECURED: 04/08/82

ANALYSIS CERTIFICATE

SAMPLE IDENT: RAULT PETROL - EDELMANN FED #2

CLIENT: BENNETT & CATHEY INC
ADDRESS: BOX 787
CITY, STATE: ARTESIA NM 88210

SAMPLING PRESS: SAMPLING TEMP:

***** GAS ANALYSIS *****

	MOLE PERCENT	GAL/ MCF
NITROGEN	8.688	
CARBON DIOXIDE	9.054	
METHANE	78.323	
ETHANE	2.145	0.572
PROPANE	0.997	0.274
ISO-BUTANE	0.145	0.047
NORMAL BUTANE	0.382	0.120
ISO-PENTANE	0.059	0.022
NORMAL PENTANE	0.114	0.041
HEXANES	0.023	0.009
HEPTANES PLUS	0.070	0.032
TOTAL	100.000	1.117

PROPANE GPM:	0.27	BUTANES GPM:	0.17
ETHANE GPM:	0.57	PENTANES PLUS GPM:	0.10

SPECIFIC GRAV (CALC): 0.7107
MOLE WEIGHT: 20.59

HHV-BTU/CU FT	PRESSURE (PSIA)	WET	DRY
14.696		868	883
14.650		865	880
14.730		870	885
14.735		870	886

ANALYZED BY: DEANE SIMPSON

APPROVED BY:

