SCHULTZ Com B #6

SW/SW 16-29N-10W

MONTHLY GAS PRODUCTION ALLOCATION FORMULA

GENERAL EQUATION

$$Qt = Qftc + Qpc$$

WHERE:
- **Qt** = Total Monthly Production (Mcf / Month)
- **Qftc** = Fruitland Coal (ftc) Monthly Production (Mcf / Month)
- **Qpc** = Pictured Cliffs (pc) Monthly Production (Mcf / Month)

Rearranging the Equation to Solve for **Qftc**:

$$Qftc = Qt - Qpc$$

Any Production Rate Over What is Calculated for the Pictured Cliffs (Qpc), Using the Applied Formula is Fruitland Coal Production (Qftc).

The Pictured Cliffs (Qpc) Formation Production Formula is:

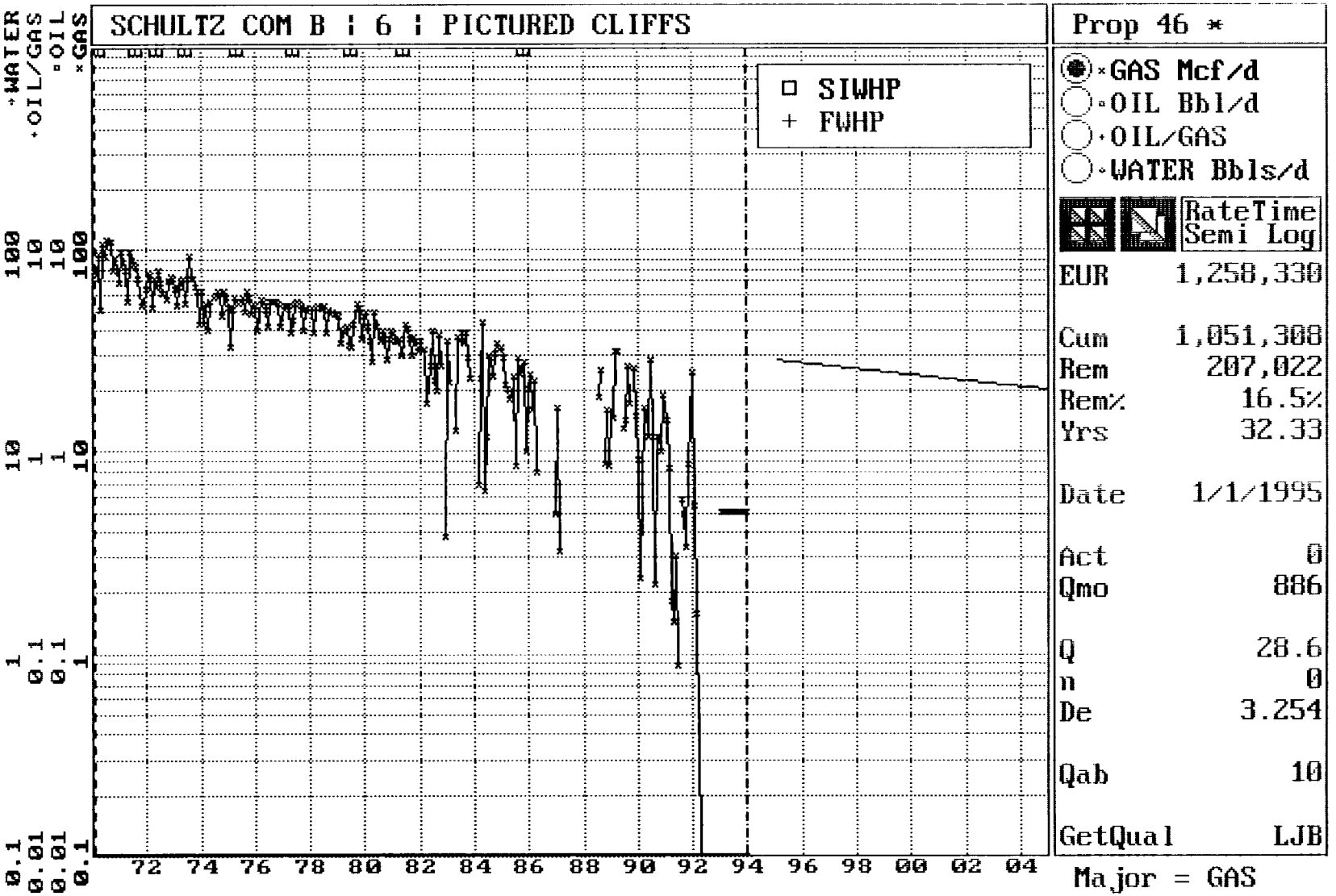
$$Qpc = Qpci \times e^{-(Dpc) \times (t)}$$

WHERE:
- **Qpci** = Pictured Cliffs Initial Monthly Rate = **886 Mcf/M** (Determined from the attached decline curve)
- **Dpc** = Pictured Cliffs Monthly Decline Rate Calculated from Decline Curve and Material Balance Analysis:
- **Dpc** = **(0.0027/M)**

THUS: **Qftc** = **Qt - Qpci X e^{-(0.0027) X (t)}**

NOTE: **(t)** is in Months

REFERENCE: Thompson, R. S., and Wright, J. D., "Oil Property Evaluation", pages 5-2, 5-3, 5-4.



Prop 46 *

- *GAS Mcf/d
- *OIL Bbl/d
- *OIL/GAS
- *WATER Bbls/d

RateTime Semi Log

EUR	1,258,330
Cum	1,051,308
Rem	207,022
Rem%	16.5%
Yrs	32.33
Date	1/1/1995
Act	0
Qmo	886
Q	28.6
n	0
De	3.254
Qab	10
GetQual	LJB

Major = GAS