

Comparison Tables for Programs Used for the Economic Evaluation of Oil and Gas Production Proposals.
Part of a
Study and Thesis by Abel Dos Ramos, candidate for the degree of
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OPTIONS FOR THE USER

The user can customize the format of graphics
 The user can modify the decline curve on the graph
 The user can personalize the standard format of the reports
 It provides a help panel of easy access
 It allows to import data of public databases
 It provides a database of easy access
 It provides a graphic interface for easy data entry
 It allows data import and export to Excel
 It allows the software to be upgraded through Internet
 It allows to keep the data in a portfolio in Internet

Your assessment	GROUP 1			GROUP 2			GROUP 3						
	ARIES	QUICKLOOK	TOOL KIT	MICA	OGRE	PETROS2	PHDWin	PROPHET	TCW	PEEP	PETROVR	QUESTOR	TERAS
X	X	X	✓	✓	✓	✓	✓	?	X	✓	?	?	?
✓	X	X	✓	✓	✓	✓	✓	✓	X	✓	?	✓	?
X	X	X	✓	✓	✓	✓	✓	✓	X	✓	?	✓	✓
?	?	?	?	?	✓	?	✓	?	✓	?	✓	?	?
✓	X	?	✓	✓	?	✓	✓	✓	X	✓	?	?	X
✓	X	X	✓	✓	?	✓	✓	✓	✓	✓	?	✓	✓
✓	X	X	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	?
?	✓	✓	✓	✓	✓	✓	✓	✓	?	✓	✓	✓	✓
X	X	X	✓	X	X	X	X	X	X	X	X	X	X
✓	X	X	✓	X	X	X	X	X	X	X	X	X	X

X	X	X	✓	✓	✓	✓	✓	?	X	✓	?	?	?
✓	X	X	✓	✓	✓	✓	✓	✓	X	✓	?	✓	?
X	X	X	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓
?	?	?	?	?	✓	?	✓	?	?	✓	?	✓	?
?	✓	?	✓	?	✓	✓	?	?	X	✓	✓	✓	?
?	✓	?	✓	?	✓	?	✓	?	?	✓	?	?	?
X	X	?	✓	?	X	?	?	?	X	?	?	?	?
✓	X	X	✓	X	X	X	X	X	X	X	X	X	X

?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	?
?	X	✓	✓	✓	✓	?	✓	?	?	?	?	?	✓
?	X	✓	✓	✓	✓	?	✓	✓	?	✓	?	?	?
?	✓	?	✓	?	✓	✓	?	?	X	✓	✓	✓	?
X	X	?	✓	?	X	?	?	?	X	?	?	?	?
✓	X	X	✓	X	X	X	X	X	X	X	X	X	?

PREDICTION / CALCULATION OPTIONS

It allows the prediction the production
 It allows to calculate fluid properties
 It allows to calculate the volume of petroleum and gas in place
 It allows to establish scaling of prices, expenses and interests
 It allows to calculate the Fair Value of the Market of a property
 It provides several calculations of correlations

X	X	X	?	✓	✓	X	?	✓	✓	✓	✓	✓	?
?	?	?	?	✓	?	?	✓	?	?	✓	✓	✓	✓
X	X	X	X	✓	?	?	✓	✓	X	✓	✓	✓	✓
X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	?
?	?	?	✓	?	✓	?	?	?	✓	✓	?	✓	?
?	?	?	✓	?	✓	?	?	✓	?	?	✓	✓	✓
X	X	X	✓	X	X	X	X	X	X	X	X	X	✓
?	✓	?	✓	?	✓	?	✓	?	✓	✓	✓	✓	✓

OPTIONS OF ANALYSIS / DECISION MAKING

It allows to carry out Sensibility Analysis
 It allows to apply Monte Carlo simulation
 It allows to carry out Risk Analysis
 It allows to analyze adjustment of Production curve
 It allows to carry out analysis of the Decline curve
 It allows to carry out analysis of Cash Flow before and after Taxes
 It allows to carry out analysis of Decision Trees
 It allows to manage a Portfolio of Investments
 It allows to analyze different Scenarios ("What-if... ")
 It allows to establish the level of the focus of the evaluation

X	X	✓	X	X	X	?	X	X	?	?	✓	X	?
✓	X	✓	✓	✓	✓	?	?	?	✓	?	✓	✓	?
✓	X	✓	✓	✓	✓	?	?	?	?	✓	?	✓	✓
X	X	X	X	X	X	?	X	X	?	?	X	?	?
?	X	✓	✓	✓	✓	?	X	X	?	?	X	?	?

TECHNICAL / DESIGN OPTIONS

It allows the design or sizes of equipment
 It allows to determine the production rate
 It allows to determine pressure decline
 It allows the design or sizes of facilities
 It allows to determine the Minimum Flow of Gas for the artificial lift

It allows to calculate the Net Present Value (NPV)

It allows to calculate the Internal Rate of Return (RoR)

It allows to calculate the Cash Flow before and after Taxes

It allows to make combinations of Economic Indicators

It allows to model the Fiscal Regime

It allows to store the models as inputs for future uses

It allows to establish the conditions of Service Contracts

It allows to establish the conditions of Shared Profits Contracts

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
?	X	X	✓	?	✓	?	?	?	?	?	?	?	✓
X	X	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓
X	X	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓
X	X	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓
?	X	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓

?	X	X	X	?	✓	?	?	X	?	✓	✓	?	?
✓	X	X	✓	?	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	X	?	✓	✓	?	X	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?

ECONOMIC / LEGAL / FISCAL OPTIONS

It shows results in graphic type Claws
 It shows results in graphic type Profile of NPV
 It shows results in graphic type Histogram
 It allows to modify the Decline Curve in the screen
 It allows to visualize and to personalize the reports of results in screen
 It allows to personalize the format of graphics and reports
 It allows to obtain the best foreseen adjustment to the Production Data
 It allows to create reports on a monthly and yearly base
 It allows to store the reports in spreadsheet format
 It allows to store the reports in different formats (PDF, HTML, etc)
 The data shown in a decline curve can be seen on any plane
 (e.g., Appraised vs. Accumulated Production)
 Editions made to data in a graph are upgraded automatically in linked graphics
 It allows to export the graphics to the clipboard and to link them to other files
 It allows to keep the reports personalized as inputs for future use

GRAPHICS / REPORT OPTIONS

1. Price schedule and or fees for use of software to the public / to academic institutions.
2. Distributors / representatives
3. Technical support
4. Other related products
5. Additional Comment:

?	X	X	X	?	✓	?	?	X	?	✓	✓	?	?
✓	X	X	✓	?	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	X	?	✓	✓	?	X	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
✓	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?
?	X	X	✓	✓	✓	✓	?	X	✓	✓	✓	✓	?