

Components of a Generic Mineral Property Annual Cash Flow

<u>Calculation</u>	<u>Component</u>
1	Gross Income/Revenue from Mineral Product Sales
2	Less Revenue from Hedging, Forward Sales, Futures, Commodity Loans [?]
3	Less Royalties ¹
4	<u>Less</u> Sales Taxes
5	Equals ^A Gross Income from Mining (may not = IRS definition)
6	Less Direct/Controllable Operating Costs ²
7	Less Applicable Indirect/Noncontrollable Operating Costs ³
8	Less Expensed Exploration, Development, Reclamation Costs
9	<u>Less</u> Property and/or Severance Taxes
10	Equals ^A Net Operating Income Before D D & A, Debt Service and Taxes
11	Less Interest on Debt
12	Less Depreciation Allowance ⁴
13	<u>Less</u> Amortization Allowance ^{4, 5}
14	Equals ^A Net Operating Income before Depletion
15	Less Depletion Allowance ⁶
16	Less Net Operating Loss Forward
17	<u>Plus</u> Revenue from Hedging, Forward Sales, Futures, Commodity Loans
18	Equals ^A Net Taxable Income ⁷
19	<u>Less</u> State Income Tax
20	Equals ^A Net Federal Taxable Income ⁷
21	<u>Less</u> Federal Income Tax
22	Equals ^A Net Income/Profit after Taxes ⁷
23	Plus Depreciation Allowance
24	Plus Amortization Allowance ⁵
25	Plus Depletion Allowance ⁶
26	Plus Expensed Exploration, Development, Reclamation Costs
27	Plus Interest on Debt ⁸
28	Plus Debt Principal Amount ⁸
29	<u>Plus</u> Net Operating Loss Forward (a business entity tax credit)
30	Equals ^A Operating Cash Flow ⁹
31	Less Replacement Capital Expenditures ¹⁰
32	<u>Plus/Less</u> Working/Operating Capital Changes ¹¹
33	Equals ^A Net Annual Operating Cash Flow/ Net Operating Income ⁹
34	Times Annual Discount Rate Factor
35	Equals Cumulative Discounted Cash Flow over Mine Life or Holding Period
36	Plus Salvage Value of Plant, Equipment and Inventory (appropriately discounted)
37	Plus Cash Value of Working/Operating Capital Account (appropriately discounted)
38	Plus Final Reclamation Cost (appropriately discounted)
39	<u>Plus</u> Reversion Value of Property (appropriately discounted) ¹²
40	Equals Appraised Value of the Total Property ¹³

- A) A Net Revenue (NRI), Net Proceeds (NPI), Net Profits (NPI) and/or Net Working (NWI) interest can be based on any of these, or other defined, values.
- ?) Royalty owners and/or other interest holders may or may not be entitled to some percentage of these revenues.
- 1) A royalty is generally considered to be based on a gross revenue amount. A Net Smelter Return (NSR) royalty is based on the gross revenue the mine receives from the smelter.
 - 2) Direct/Controllable Operating Costs include, but may not be limited to: Mine labor & equipment cash costs and Processing labor & equipment cash operating costs: crushing, grinding, physical & chemical recovery, heap leaching, smelting, refining, stockpile and processing rehandling.
 - 3) Includes property specific Sales, General & Administrative Expense (SG&A) and an appropriate amount for corporate overhead expense.
 - 4) Return/Recapture of Investment (ROFI) by GAAP, Tax Schedule or other method that is consistent with the definition of value being sought and the purpose and intended use of the appraisal.
 - 5) Amortization Allowance includes but may not be limited to: Within and adjacent to active mine area exploration and development, prestripping and certain on-going reclamation expenses. Generally does not include off-site expenditures. Amortization is any deduction other than depreciation or depletion allowed over a period of years.
 - 6) Depletion Allowance: Is a tax deduction that is allowed to be taken by mineral property owners due to the exhaustibility of their primary source of income - the mineral reserve.
The IRS recognizes two types of depletion allowance calculations: cost or unit depletion and statutory or percentage depletion. The taxpayer must calculate both types and must use the larger of the two.
 - 7) Return on Investment (RONI) pre-tax or post-tax
 - 8) Debt Service, both principal and interest, is a financing cost, not an operating cost
 - 9) Includes both Return On and Return Of Investment
 - 10) Replacement Capital Expenditures to maintain operation but not to improve or expand.
 - 11) Working/Operating Capital is used as the cash amount required to allow the property to operate effectively before the receipt of initial income and between the periods of receipt of income from mineral product sales.
 - 12) Reversion Value of the Property is the pre-tax amount left over from the sales price after subtracting selling expenses, mortgage payoff balances and any prepayment penalties (pre-tax net realizable value?).
 - 13) Appraised Value of the Total Property should be interpreted to mean the present value of the particular cash flow that is appropriate for the required definition of value and purpose and intended use of the appraisal.

Components of Generic Conventional Income Property Annual Cash Flow¹

<u>Calculation</u>	<u>Component</u>
	Potential Gross Income
Less	Vacancy and Collection Allowance
Plus	Miscellaneous Income
Equals	Effective Gross Income
Less	Current Operating Expenses ²
Less	Replacement Reserve (Capital Item Maintenance)
Equals	Net Operating Income
Less	Debt Service (Mortgage Principal and Interest) ³
Equals	Before Income Tax Cash Flow (Cash Throw-Off)
Less	Depreciation
Equals	Income Before State and Federal Income taxes
Less	State Income tax
Equals	Income Before Federal Income taxes
Less	Federal Income tax
Equals	Income After State and Federal Income taxes
Plus	Depreciation
Equals	After Income Tax Cash Flow
Times	Annual Discount Rate Factor
Equals	Cumulative Discounted Cash Flow over Holding Period
Plus	Reversion Value of Property (appropriately discounted)
Equals	Appraised Value of the Property

- 1) Adapted from Friedman and Ordway, 1988, Income Property Appraisal and Analysis
- 2) Current Operating Expenses Include but may not be limited to:
Utilities, Repairs, Pool Maintenance, Management Fee, Payroll, Payroll Taxes,
Supplies, Advertising, Legal, Accounting, Property Taxes, Miscellaneous Expenses
- 3) Debt Service (P & I) are financing costs, not operating costs.