

<p style="text-align: center;"><i>14: Additional Tax Deductions</i></p>	<p style="text-align: center;"><i>Topics</i></p> <ul style="list-style-type: none"> <li>❖ Closer look at <ul style="list-style-type: none"> <li>➢ Section 179 expense</li> <li>➢ Depletion</li> <li>➢ Other depreciation procedures</li> </ul> </li> </ul>
<p style="text-align: center;"><i>14.2 Depletion</i></p>	<p style="text-align: center;"><i>Basics</i></p> <ul style="list-style-type: none"> <li>❖ <i>Depletion expense or allowance</i> is a deduction from TI due to producing a natural resource <ul style="list-style-type: none"> <li>➢ Oil or gas, timber, salt, and so forth</li> <li>➢ Depletes resource base and lessens value</li> </ul> </li> <li>❖ Not a cash flow, but causes cash flows due to tax savings</li> <li>❖ Two basic methods, cost and percentage depletion <ul style="list-style-type: none"> <li>➢ Choose method providing larger tax savings <ul style="list-style-type: none"> <li>▪ Except timber: cost depletion only</li> </ul> </li> </ul> </li> </ul>
<p style="text-align: center;"><i>Cost Depletion</i></p> <ul style="list-style-type: none"> <li>❖ Based on production and resource cost <ul style="list-style-type: none"> <li>➢ Estimate total lifetime production (TLP), such as 10,000 barrels of oil</li> <li>➢ Use the resource's cost (RC) to compute its <i>depletion rate</i>, such as dollars per barrel <math display="block">DR = RC / TLP</math> </li> <li>➢ If <math>P_j</math> is the production in year <math>j</math>, then <math display="block">D_j = P_j \times DR</math> </li> </ul> </li> </ul>	<p style="text-align: center;"><i>Example 14.3 Cost Depletion</i></p> <ul style="list-style-type: none"> <li>❖ Hap Camper found gold on mountain land purchased for \$120,000 <ul style="list-style-type: none"> <li>➢ Value of land was \$115,000, and extra \$5,000 paid for mineral rights</li> </ul> </li> <li>❖ TLP = 200 ounces and <math>P_1</math> equals 20 ounces <math display="block">DR = \\$25 = 5,000 / 200</math> <math display="block">D_1 = \\$500 = 20(25)</math> </li> <li>❖ The \$500 may be deducted from the revenues from the sale of the gold, along with other production expenses</li> </ul>

### Percentage Depletion

- ❖ Based on gross income (GI) from sale of resource, subject to an upper limit
- ❖ Trial, computed value
  - $Gl_j = \text{selling price} \times \text{production in yr } j$
  - Use table on next slide to obtain  $p$ , the percentage depletion allowance
  - Trial value is  $T_j = p Gl_j$
- ❖ Upper limit on  $T_j$  usually 50% of  $Gl_j$  minus  $EO$ , all expenses other than depletion
  - $UL_j = (0.50)(Gl_j - EO)$
  - $D_j = \min(T_j, UL_j)$

### Percentage Depletion Allowances

Natural Resource	%
Borax, carbon dioxide produced from a well, granite, limestone, marble, mollusk shells, potash, slate, and soapstone	14
Coal, lignite, sodium chloride	10
Gravel, sand, and stone (other than dimension or ornamental stone)	5
Oil and natural gas (small producers)	15
Sulphur and uranium	22
U.S. production of asbestos, lead ore, mica, nickel ore, and zinc ore	22
U.S. production of certain oil shale, copper, iron ore, gold, and silver	15

### Example 14.4 Percentage Depletion

- ❖ Percentage depletion @ \$365 per ounce
  - 1) Gross income ( $20 \times 365$ )                      7,300
  - 2) Percentage depletion allowance             $\times 0.15$
  - 3) T = trial computed depletion expense    1,095
  - 4) Expenses other than depletion            5,500
  - 5) TI = Gross income – Other expenses    1,800
  - 6) 50% TI     $\times 0.50$
  - 7) UL = Upper limit                                900
  - 8) Percentage depletion =  $\min(T, UL)$     \$900
- ❖ Hap's cost depletion is \$500
- ❖ Final  $D_1 = \$900 = \max(500, 900)$