STATE OF CALIFORNIA

STATE BOARD OF EQUALIZATION

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TO COUNTY ASSESSORS:

INFORMATION REGARDING THE ASSESSMENT OF PETROLEUM PROPERTIES

We are frequently asked questions about the assessment of petroleum properties. To assist those who may have similar questions, we have prepared the enclosed petroleum assessment guidelines, answers to some recent questions we have received, and some examples of petroleum property appraisals under Proposition 13.

Please refer any inquiries to Ray Rothermel of this division (916) 445-4982.

Sincerely,

Verne Walton

Verne Walton, Chief
Assessment Standards Division

VW:ebv
Enclosures

A. PETROLEUM ASSESSMENT GUIDELINES

1. Subsurface non-retrievable oil well equipment and the hole in the ground have value as long as the property is capable of producing oil or gas. These represent a considerable original investment and are part of the total property value.

2. Ordinarily, in a development well, the value of the well (well is defined as the subsurface retrievables and non-retrievables) and related production equipment have a first year value equal to their cost new.

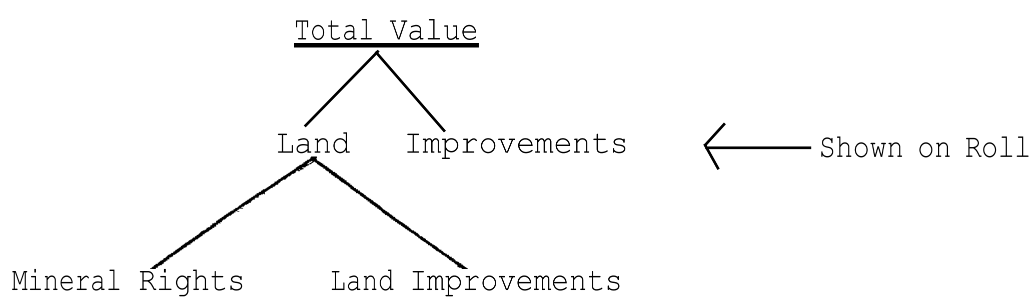
3. The value of the well and related production equipment declines over time as the reserves decline; however, this fact is not recognized under Proposition 13, but is recognized under Proposition 8.

4. Salvageable equipment value cannot decline below its current salvage value.

5. Ordinarily, as added reserves are recognized due to economics or other factors, the life of the equipment and the well is extended. With this extended life, the present worth is increased. However, this increase cannot be recognized under Proposition 13.

6. Under the provisions of Proposition 13, the addition and removal of reserves must be reflected in the current year's taxable value.

7. Under current law, the mineral rights and non-retrievable portions of the well are all considered "land."



8. In 1975 (prior to Proposition 13 valuation), the value enrolled as land included the mineral rights, the non-retrievables in the well, and the hole in the ground. Generally, no value was developed for the "hole" separate from the mineral rights as they were considered part of one economic unit.

9. If property (reserves) removed and property (reserves) added is to be reflected in mineral rights, then the value attributed to mineral rights must be separated from the value attributed to the "hole" and non-retrievables.

10. If a well is abandoned (plugged off) but the reserves are not altered, then the value of the well and its equipment, except for salvageables, must be removed from the roll.

11. Since the value of the "hole" and non-retrievables was not separated from reserves for the roll in 1975 (or other base years prior to 1979), there is no prohibition to the assessor's making such an allocation. However, there are two restrictions on this allocation:

    (a) The sum of the value allocated to the "hole" and non-retrievables in the base year, plus the value attributed to the mineral rights in the base year, must equal the total amount enrolled as "land" in the base year (this assumes surface land is enrolled separately).

    (b) The value ascribed to the "hole" cannot exceed RCN as of the base year, discounted by the factor obtained by dividing the remaining proved reserves by the ultimate reserves, both as of the base year. (Ultimate reserves is defined as the oil which a property is expected to produce in its lifetime on the date the estimate is made.)

12. In years subsequent to the base year, depleted mineral reserves are removed at last year's average value, in accordance with Rule 468, and new reserves are added at a value determined in accordance with Rule 468.

13. The mineral property value, determined under Proposition 13, is the taxable value until such time as the full market value falls below that taxable value, at which time the provisions of Proposition 8 take effect.

B. QUESTIONS AND ANSWERS PERTAINING TO THE APPRAISAL OF OIL AND GAS PROPERTIES

1. QUESTION: Where a mineral interest owner (lessor) has a royalty interest and transfers ownership of the interest, is this interest separately assessable?

   ANSWER: A leasehold interest (lessee) in a mineral right is, for all intents and purposes, according to case law, equivalent to a fee interest and ordinarily is considered to extend into perpetuity. Transfers of such interests must be reported to the assessor. The remaining royalty interest <u>is not separately assessable and therefore would not be separately appraised, nor would it be appraised upon transfer</u>. Accordingly, such transfers need not be reported by the taxpayer. However, the reversionary interest in the mineral rights, if it has value, is separately assessable and such transfers are subject to reporting.

2. QUESTION: If an underassessment was made on a mineral property in 1975, may the base year value be modified?

   ANSWER: If 1975 was a periodic appraisal year (which is true of most mineral properties), and the county made a value judgment based on all the data asked for and submitted in that year, the base year value cannot be modified.

3. QUESTION: Is the beginning of an enhanced recovery project (secondary or tertiary recovery) a change in use?

   ANSWER: No. A changed use does not occur when an enhanced recovery project is begun on a producing oil property.

4. QUESTION: When an enhanced recovery project is begun, is the base year the year the project is begun?

   ANSWER: The base year for an enhanced recovery project is the year the project is begun even though production from it may not peak until some point in the future years. Estimates of added reserves, future production, and prices are made in the base year. Only those reserves directly attributable to the enhanced recovery project shall be considered "new." Remaining old reserves should be valued using their old factored base year value taking into consideration additions and deletions in accordance with Rule 468.

5. QUESTION: If some other technique for valuation is used, such as the dollar-per-daily barrel or dollar-per-daily-net-dollar approach, how do you account for depletion?

ANSWER: These methods should only be used for marginal properties where reserves cannot be reliably established with available data. In such cases, depletion cannot be allowed.

6. QUESTION: If an overestimate of reserves was made in the base year, should they be deducted in the current assessment year?

ANSWER: Yes. Non-existent property cannot be taxed.

7. QUESTION: Does the invocation of a unitization agreement constitute a change in ownership?

ANSWER: No. Unitization agreements provide only for the development and/or operation of a group of individually operated leases by an operating company and they do not involve a change in ownership.

C. EXAMPLES

1. 1979 Oil Property Appraisal with a 1975 Base Year and No New Reserves

Basic Data:

1975 Total Market Value	$ 7,900,000
"Land" Value	6,900,000
Mineral Right Value	5,650,000
Land Improvement Value (Hole and Non-retrievables RCLND)	1,250,000
"Improvement" Value (Surface Equipment and Retrievables RCLND)	1,000,000
Cumulative Production to 1975 - Barrels	15,000,000
Original Reserves - Barrels	20,000,000
Number of Wells	10
Average Well Depth - Feet	5,000
1975 Hole Drilling and Associated Costs per Well (RCN)	250,000
Production 1975-1979 - Barrels	800,000
RCN Non-retrievables	2,500,000

1975 RCLND - Hole

$$(10 \times \$250{,}000) \times \frac{5{,}000{,}000}{20{,}000{,}000} = 625{,}000$$

1975 RCLND - Non-retrievables

$$(\$2{,}500{,}000^{1/}) \times \frac{5{,}000{,}000}{20{,}000{,}000} = 625{,}000$$

Land Improvement Total $1,250,000

<u>Current Market Value and Estimated Reserves</u>[2/]

Current Market Value - Total Property	$18,000,000
Current Reserve Estimate - Barrels	4,200,000

<u>Taxable Value of Reserves Remaining</u>

Base Year's Taxable Value of Reserves	5,650,000
Current Year's Value of Removed Reserves	904,000

$$\frac{\$5{,}650{,}000 \text{ Prior Year's Reserves}}{5{,}000{,}000 \text{ Bbls.}} = \$1.13$$

$1.13 x 000,000 Bbls. = $904,000

1979 Value of Reserves Remaining $ 4,746,000

<u>1979 Values</u>

Value of Reserves Remaining x 1.0824	5,137,070
Land Improvement Value x 1.0824	1,353,000
Improvement Value x 1.0824	1,082,400
Total 1979 Taxable Value	$7,572,470

1/ This figure represents the total RCN of non-retrievables excluding the hole value.

2/ This step is necessary as a Proposition 8 test.

The 1979 taxable value would be enrolled as $6,490,070 for "Land" and $1,082,400 for "Improvements."

Note: This example could also be done by working with the prior "base year" values, i.e., 1978, accounting for depletion for that one year and applying the 2-percent CPI factor.

2. 1979 Oil Property Appraisal with New Reserves

Basic Data:

1975 Total Market Value	$ 7,900,000
"Land" Value	6,900,000
Mineral Right Value	5,650,000
Land Improvement Value (Hole and Non-retrievables RCLND)	1,250,000
"Improvement" Value (Surface Equipment and Retrievables RCLND)	1,000,000
Cumulative Production to 1975 - Barrels	15,000,000
Original Reserves - Barrels	20,000,000
Number of Wells through 1978	10
Average Well Depth - Feet	5,000
1975 Hole Drilling and Associated Costs per Well (RCN)	250,000
Production 1975-1979 - Barrels	1,000,000
New Wells Drilled in 1978	2
1978 Hole Drilling and Associated Costs per Well (RCN)	350,000
Production 1979 - Barrels	200,000
1975 RCLND - Hole	
$(10 \times \$250{,}000) \times \frac{5{,}000{,}000}{20{,}000{,}000} =$	625,000
1975 RCLND - Non-retrievables	
$(\$2{,}500{,}000^{1/}) \times \frac{5{,}000{,}000}{20{,}000{,}000} =$	625,000
1975 Land Improvement Total	$1,250,000

Current Market Value and Estimated Reserves

Current Market Value - Total Property	$24,000,000
Current Reserve Estimate - Barrels	6,000,000

Current Value of Taxable Reserves

Current Market Value - Total Property	$24,000,000
Less Current Market Value - Land Improvements and Improvements	5,177,090

1/ This figure represents the total RCN of non-retrievables excluding the hole value.

Land Improvements:

1979 RCLND - 10 Old Holes

$$(10 \times 350,000) \times \frac{6,000,000}{22,000,000} = \$\ 954,450$$

1979 RCN - 2 New Holes
2 X $350,000 = 700,000

1979 RCLND Non-retrievables - 10 Old Holes

$$(\$3,200,000^{1/}) \times \frac{6,000,000}{22,000,000} = 872,640$$

1979 RCN Non-retrievables - 2 New Holes

2 x $375,000[1/] = 750,000

Sub-total $3,277,090

Improvements:
1979 Surface Equipment and Retrievables
RCLND = 1,900,000

Total $5,177,090

Current Value of Taxable Reserves $18,822,910

Volume of New Reserves

Current Reserve Estimate - Barrels	6,000,000
Less Prior Year's Reserves Adjusted for Production 4,200,000 Less 200,000 - Barrels	4,000,000
New Reserves - Barrels	2,000,000

Prior Year's Taxable Value of Reserves Remaining

Prior Year's Taxable Value of Reserves	5,137,070
Prior Year's Value of Removed Reserves $5,137,070 - Prior Year's Reserves 4,200,000 Bbl. = $1.22/Bbl. x 200,000 Bbl.	244,000
Prior Year's Taxable Value of Reserves Remaining	$ 4,893,070

Value of New Reserves

Quantity of New Reserves - Barrels	2,000,000
Current Market Value of New Reserves $18,822,910 - Current Volume of Reserves 6,000,000 Bbl.= $3.14/Bbl. 2,000,000 Bbls. x $3.14 =	$ 6,280,000

1/ This figure represents the total RCN of non-retrievables excluding the hole value.

Current Full Cash Value Base for Reserves

Prior Year's Taxable Value of Reserves Remaining	$ 4,893,070
x CPI Factor Not to Exceed 2 Percent	1.02
Current Taxable Value of Reserves Remaining	4,990,931
Current Taxable Value of New Reserves	6,280,000
Current Full Cash Value Base for Reserves	$11,270,931

Value of "Land Improvements" and "Improvements"

1975 Taxable Value $2,250,000 x 1.0824	2,435,400
1978 Added "Land Improvements" and "Improvements"	1,450,000
	$ 3,885,400

Total Property Taxable Value	$15,156,331

For Proposition 8 test, this value is lower than market value, so it must be enrolled.