INTERNAL REVENUE SERVICE

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March 30, 2000

LEGEND:

A = B = <u>C</u> D = <u>E</u> = $\underline{\mathbf{f}}$ = G = h = <u>i</u> i = <u>k</u> = 1 =

Dear

In a letter dated April 5, 1999, you requested the Service's determination that your enhanced oil recovery projects in the \underline{A} and \underline{B} fields qualify for the credit under § 43 of the Internal Revenue Code. Specifically you requested rulings that:

- 1. The recovery method commenced by \underline{D} is a qualified tertiary recovery method not described in section 1.43-2(e)(2) of the Income Tax Regulations or in a revenue ruling, and;
- 2. the project is a qualified tertiary recovery project provided it otherwise meets the requirements of § 43(c)(2) of the Income Tax Code, including the requirement that the project be certified by a petroleum engineer.

According to your submission the facts are as follows.

 \underline{D} is a wholly owned subsidiary of \underline{C} . \underline{D} owns and operates certain interests in the state of \underline{E} . \underline{D} plans to use the method described herein on a two field pilot project scheduled to commence in \underline{f} . The method involves the injection of dry non-native hydrocarbon gas into nearly depleted oil reservoirs in the \underline{G} trend.

Two projects, comprising the \underline{A} and \underline{B} fields, will receive the non-native hydrocarbon injection. The \underline{A} and \underline{B} fields were originally undersaturated oil reservoirs which were discovered in \underline{j} . Over time the oil production rate declined with declining reservoir pressure and decreasing oil column thickness as a secondary gas cap formed. The fields are currently near depletion with one well in each field still producing. Each project targets the residual gas cap oil and the remaining oil zone oil.

Rented non-native hydrocarbon gas will be injected into the \underline{A} and \underline{B} reservoirs to increase the reservoirs' pressure. Horizontal wells will be drilled for production. When a project is finished the rented gas will be returned to its owner. It is anticipated that implementation of the projects will result in recovery of an additional $\underline{k}\%$ of the original oil in place in the \underline{A} field and $\underline{l}\%$ in the \underline{B} field. The higher reservoir pressure is expected to drive the oil to the producing wells. There is also expected to be a vaporization of intermediate hydrocarbons where the gas contacts the oil.

Your submission contains a copy of the Petroleum Engineers Certification of an Enhanced Oil Recovery Project for each project. The engineer states that with each project there will be more than an insignificant increase in the ultimate amount of crude oil recovered.

Section 43(a) provides a credit in an amount equal to 15% of certain costs paid or incurred by a taxpayer in connection with a qualified enhanced oil recovery project.

Section 43(c)(2) defines the term "qualified enhanced oil recovery project" to mean any project that: (1) involves the application (in accordance with sound engineering principles) of one or more qualified tertiary recovery methods (as defined in § 193(b)(3)) that reasonably can be expected to result in a more than insignificant increase in the amount of crude oil that ultimately will be recovered; (2) is located within the United States (within the meaning of § 638(1); and (3) with respect to which the first injection of liquids, gases, or other matter commences after December 31, 1990.

Section 1.43-2(e)(1) of the Income Tax Regulations defines the term "qualified tertiary

recovery method" to mean any one or combination of the tertiary recovery methods described in § 1.43-2(e)(2) or a method not described in § 1.43-2(e)(2), which has been determined by revenue ruling to be a "qualified tertiary recovery method." A taxpayer may request a private letter ruling that a method not described in section 1.43-2(e)(2) or in a revenue ruling is a qualified tertiary recovery method. Generally methods identified in revenue rulings or private letter rulings will be limited to those methods that involve the displacement of oil from the reservoir rock by modifying the properties of the fluids in the reservoir or providing the energy and drive mechanism tp force the oil to a production well.

Section 1.43-2(e)(3) states that cyclic gas injection and horizontal drilling do not qualify . Cyclic gas injection is the increase or maintenance of pressure by injection of hydrocarbon gas into the reservoir from which it was originally produced.

Your petroleum engineer has certified that the injection of non-native hydrocarbon gas will vaporize some of the otherwise unrecoverable gas in the secondary gas cap and that the increase in pressure will drive the oil to the production wells. Section 1.43-2(e)(1) of the regulations states that a qualified method generally is limited to methods that involve the displacement of oil from the reservoir rock by modifying the properties of the fluids in the reservoir or that provide the energy and drive mechanism to force the oil to a production well. Your proposed project does both.

The plan to inject rented hydrocarbons resembles the cyclic gas injection, an excluded method under section 1.43-2(e)(3), in that in both cases hydrocarbon gas is being injected into the reservoir. Cycling is a primary method for recovering condensate from a gas condensate reservoir by maintaining the original pressure of the reservoir to prevent retrograde condensation. This method is introduced early in the life of the field. (See Manual of Oil and Gas Terms, Howard R. Williams and Charles J. Meyers, 1987, Matthew Bender, page 215. Also see section 1.613A-7(k)). In this case, the reservoirs are not condensate reservoirs and the gas is not being injected to prevent retrograde condensation..

The planned drilling of horizontal wells alone would not qualify the \underline{A} and \underline{B} projects as section 1.43-2(e)(3) excludes horizontal drilling as a qualified method. However the costs of the horizontal wells will qualify if the project is a qualified project for other reasons.

You have represented that more than an insignificant increase in ultimate recovery will be obtained, the project is within the United States and first injection occurs after December 31, 1990 as required under § 43(c)(2).

Based on these facts we conclude:

- 1. The recovery method commenced by \underline{C} in the \underline{A} and \underline{B} fields is a qualified tertiary recovery method not described in section 1.43-2(e)(2) of the Income Tax Regulations or in a revenue ruling, and;
- 2. the \underline{A} and \underline{B} projects are qualified tertiary recovery projects provided they otherwise meets the requirements of $\S 43(c)(2)$ of the Income Tax Code, including the requirement that the project be certified by a petroleum engineer.

This ruling is limited to the Taxpayer's request under § 1.43-2(e)(1) and is limited to the \underline{A} and \underline{B} projects. Except as specifically ruled on above, we express or imply no opinion concerning the federal income tax consequences of the facts of this case under any other provisions of the Code. Specifically, we express or imply no opinion whether the project implemented by the Taxpayer otherwise meets the requirements of a qualified enhanced oil recovery project under § 43 and the regulations

This ruling is directed only to the taxpayer who requested it. Section 6110(k)(3) of the Code provides that it may not be used or cited as precedent.

A copy of this ruling should be attached to your tax return filed for the year in which the transaction covered by this ruling is consummated. A copy is enclosed for this purpose.

Sincerely yours,

Joseph H. Makurath
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