## **Internal Revenue Service**

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March 19, 2004

## LEGEND:

Taxpayer = Reservoir = F = a = Year 1 = Year 3 = F = Taxpayer = Ta

Dear :

This letter responds to a letter, dated September 10, 2003, in which Taxpayer requests a ruling that the recovery method applied in connection with a project commenced in <u>a</u> is a qualified tertiary recovery method for purposes of § 43 of the Internal Revenue Code.

The facts and representations submitted are summarized as follows. Taxpayer is the owner of an operating interest in oil and gas property comprising a severely undersaturated Reservoir in State F. In Year 1, Taxpayer self-certified, for purposes of section 43 of the Code, a tertiary recovery project in the Reservoir where the first injection of miscible gas occurred in Year 2. The project used a miscible gas displacement method which is a qualified tertiary recovery method under § 1.43-2(e)(2)(ii) of the Income Tax Regulations. The method involved a cyclical injection of miscible enriched natural gas into the Reservoir alternating with the injection of water. In Year 3, the project was suspended due to a natural gas liquid pump failure.

After the equipment failure, Taxpayer started the current project in <u>a</u>, using water alternating gas injection into the Reservoir. Studies conducted by the Taxpayer in Year 3, showed that a significant amount of incremental oil recovery can be achieved by injecting lean gas alternating with water into the Reservoir.

Under the current project, lean hydrocarbon gas is injected into the Reservoir alternated with the injection of water. Because the Reservoir is severely undersaturated, it can absorb additional gas as lean gas is injected. Injection of lean gas into the crude oil in the Reservoir causes the reservoir oil to swell and significantly reduces the viscosity of the crude oil. Furthermore, the injection of lean gas is preferable to the injection of miscible gas for the Reservoir because of the high cost of natural gas liquids used in manufacturing the miscible injectant.

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 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 § 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 to force the oil to a production well.

Section 1.43-2(e)(3) states that waterflooding and cyclic gas injection 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.

You represent that the recovery method under the current project changes the properties of the under-saturated reservoir oil by swelling the oil and reducing its viscosity, a result that cannot be achieved by either waterflooding or mere gas cycling in a near-saturated reservoir. 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 project does both.

The water alternating gas injection resembles the cyclic gas injection, an excluded method under § 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* § 1.613A-7(k)). In this case, the reservoir is not a condensate reservoir and the gas is not being injected to prevent retrograde condensation.

You have represented that the project is within the United States and first injection occurs after December 31, 1990 as required under § 43(c)(2). Moreover, you have represented that the project involves the application (in accordance with sound engineering principles) of a recovery method which can reasonably be expected to result in a more than insignificant increase in the amount of oil that will ultimately be recovered.

Based on these facts, we conclude that the recovery method commenced by the Taxpayer in <u>a</u>, at the Reservoir, is a qualified tertiary recovery method not described in § 1.43-2(e)(2) or in a revenue ruling, and therefore, the current project using the method is a qualified tertiary recovery project provided it otherwise meets the requirements of § 43 and the regulations thereunder.

This ruling is limited to the Taxpayer's request under § 1.43-2(e)(1). 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 thereunder.

This ruling is directed only to the taxpayer who requested it. Section 6110(j)(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,

/s/

/s/

Joseph H. Makurath

Senior Technician Reviewer, Branch 7

Office of Associate Chief Counsel

(Passthroughs and Special Industries)