## **Internal Revenue Service**

Number: 200546011

Release Date: 11/18/2005 Index Number: 43.02-01

Department of the Treasury Washington, DC 20224

Third Party Communication: None Date of Communication: Not Applicable

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Refer Reply To: CC:PSI:B07 PLR-113346-05 Date: August 5, 2005

## LEGEND:

**Taxpayer** =

Partner =

Field Unit =

Formation

Intervals Location =

Year 1 = Date 1 =

<u>a</u> Date 2 =

Date 3 Year 2 = Date 4 =

Date 5 = Date 6 = Injectant =

Year 3 =

<u>C</u> =

<u>d</u> =

## Dear :

This letter responds to your letter, dated February 28, 2005, requesting a ruling under § 43 of the Internal Revenue Code.

The represented facts are as follows:

Partner is the tax matters partner of Taxpayer. Taxpayer is an accrual taxpayer utilizing a calendar taxable year. Taxpayer is engaged in the recovery of hydrocarbons from the Field, which is located within the Unit in Location. The producing reservoir is called the Formation, which is petrophysically divided into several zones and subzones. Partner is the operator of the Field.

The Unit was formed in Year 1. Production from the Field began in Date 1 from the Formation. A field-wide waterflood was implemented shortly thereafter. Production increased to a plateau production rate of <u>a</u> thousand barrels of oil per day (MBOPD) in Date 2. The plateau was maintained until Date 3, at which point production began to decline. The Field's peak production rate was <u>b</u> MBOPD in Year 2. A miscible water-alternating-gas (MWAG) process was certified as an enhanced oil recovery (EOR) project on Date 4. The MWAG project was implemented in specific zones in Date 5, with a significant ramp-up of the project occurring in Date 6.

Taxpayer intends to implement a project involving the injection of Injectant into the Intervals of the Formation in lieu of a conventional injectant. Except to a minor degree these intervals will not be affected by the MWAG project. Taxpayer will self-produce the injectant. The first injection of injectant will occur in Year 3. Taxpayer represents that the injection of the Injectant will affect the reservoir fluid by increasing the pH of the reservoir fluids, and by reducing the interfacial tension between the oil, reservoir rock, and water. The water wettability of the reservoir will also be increased. As a result, the injection of Injectant can result in a reduction in residual oil saturation by c/m of total pore volume, leading to an incremental recovery of d/mMBO of the original oil in place.

While the injection of Injectant will also provide energy and drive mechanisms similar to conventional waterflooding, the above-mentioned changes to the relative properties of the reservoir fluids do not occur with conventional waterflooding. Taxpayer represents

that the injection of Injectant achieves a result similar to surfactant or caustic flooding projects. Taxpayer has also provided a substantial amount of laboratory study and simulation data describing the benefits of the process in detail.

Taxpayer requests a ruling that the process of injecting Injectant, as described, is a qualified tertiary recovery method not described in § 1.43-2(e)(2) or in a revenue ruling for purposes of the § 43 enhanced oil recovery credit.

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 section 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 section 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 section 1.43-2(e)(2) or a method not described in section 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 to force the oil to a production well.

Section 1.43-2(e)(3)(i) states that waterflooding is not a qualified tertiary recovery method. Waterflooding is defined as the injection of water into an oil reservoir to displace oil from the reservoir rock and into the bore of the producing well.

Taxpayer represents that the recovery method under consideration changes the properties of the fluids in the reservoir by increasing the pH of the reservoir fluids, by reducing the interfacial tension between the oil, reservoir rock, and water, and by increasing the water wettability of the reservoir. The proposed recovery method also provides the energy and drive mechanism to force the oil to a production well. 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. This project does both.

The injection of the Injectant resembles waterflooding, an excluded method under § 1.43-2(e)(3). However, the proposed method causes changes in the properties of the fluids in the reservoir which do not occur with conventional waterflooding. Further, the proposed recovery method is not a conventional recovery method that was in use at the time § 43 was enacted.

Taxpayer has represented that the proposed project is within the United States and first injection will occur after December 31, 1990 as required under § 43(c)(2). Also, Taxpayer has 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, as well as review by Service experts, we conclude that the recovery method Taxpayer will implement at Field, is a qualified tertiary recovery method not described in § 1.43-2(e)(2) or in a revenue ruling, and therefore, the project using the method is a qualified tertiary recovery project provided it otherwise meets the requirements of § 43 and the regulations thereunder.

Except as expressly provided herein, we express or imply no opinion concerning the tax consequences of any aspect of any transaction or item discussed or referenced in this letter. 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 requesting it. Section 6110(k)(3) of the Code provides that it may not be used or cited as precedent. A copy of this letter must be attached to any income tax return to which it is relevant.

The rulings contained in this letter are based upon information and representations submitted by the taxpayer and accompanied by a penalty of perjury statement executed by an appropriate party. While this office has not verified any of the material submitted in support of the request for rulings, it is subject to verification on examination.

Sincerely,

Isl
Joseph H. Makurath
Senior Technician Reviewer, Branch 7
(Passthroughs & Special Industries)