

# Internal Revenue Service

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Date: July 20, 2005

## LEGEND:

Taxpayer =

Partner =

Field =

Unit =

Location =

Formation =

a =

b =

c =

d =

e =

f =

g =

h =

i =

j =

Process =

Sections =

k =

l =

Dear :

This letter responds to a letter from Partner on behalf of Taxpayer, dated January 13, 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. Field produces from Formation, at a depth of a to b feet true vertical depth sub sea, temperature ranging between c to d degrees Fahrenheit, and pressure ranging from e to f pounds per square inch absolute. Oil quality in the Field ranges from g to h degrees API, with a live oil viscosity ranging from i to more than j centipoises.

Taxpayer plans to utilize a water alternating gas (WAG) enhanced oil recovery (EOR) technique in the Field. The injectant to be used is the lean gas produced in the Unit, with a significant concentration of CO<sub>2</sub> and enriched with intermediate hydrocarbons, principally ethane and propane. Water injection has been and will continue to be utilized over the entire Field to maintain reservoir pressure, and will also provide the drive mechanism for the WAG. The injectant will be utilized as part of two separate methods in the Field. In the portion of the Field where the biodegradation of the oil is low, the reservoir chemistry is sufficient for the oil to be miscible with the injectant. Taxpayer has submitted a project certification for the portion of the Field where this miscible fluid displacement will be implemented, and has not included the miscible fluid displacement in this request.

The subject of this request is the use of the injectant in the Sections of the reservoir where the biodegradation of the oil is high, such that the reservoir chemistry prevents the oil from being miscible with the injectant under reservoir conditions. In these areas, Taxpayer intends to use the injectant as part of the Process. While the injectant does not develop miscibility with the reservoir oil, the multiple-contact condensing/vaporizing mass transfer mechanism between the CO<sub>2</sub> and the C<sub>2</sub>-C<sub>4</sub> rich gas with the reservoir oil causes a significant reduction in the reservoir oil viscosity.

Taxpayer represents that the Process will result in a similar amount of incremental recovery for moderate and high viscosity oil, within k percent, as with the miscible gas flood method. While the further enrichment of the injectant gas would achieve miscibility, the additional recovery attributable to achieving miscibility may not be as significant in highly viscous oil. Taxpayer's estimate of the total expected ultimate recovery for both the Process and the miscible fluid displacement is l MMB of the original oil in place. Taxpayer has utilized various laboratory experiments and simulations to demonstrate the expected benefits of the Process.

Taxpayer requests a ruling that the Process, 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 § 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)(2)(ii)(A) states that miscible fluid displacement is a qualified tertiary recovery method. Section 1.43-2(e)(2)(ii)(C) states that immiscible carbon dioxide displacement is a qualified tertiary recovery method. Section 1.43-2(e)(2)(ii)(D) states that immiscible nonhydrocarbon gas displacement, such as nitrogen, is a qualified tertiary recovery method. However, the Process does not match any of the qualified tertiary recovery methods described in § 1.43-2(e)(2).

Taxpayer represents that the recovery method under consideration changes the properties of the fluids in the reservoir by significantly reducing the viscosity of the oil. 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.

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,

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