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Person To Contact:
, ID No.
Telephone Number:

Refer Reply To:
CC:PSI:B06
PLR-110848-21

Re:

Date:
October 25, 2021

LEGEND:

Taxpayer	=
Field	=
Location	=
a	=
b	=
c	=
d	=
e	=
f	=
x	=
y	=
Co-owner A	=
Co-owner B	=
Method	=
Injectant	=
Year A	=
Year B	=
Year C	=
Platform	=

Dear :

This letter responds to your letter, dated May 3, 2021, requesting a ruling under § 43 of the Internal Revenue Code.

FACTS

Taxpayer is an accrual taxpayer utilizing a calendar taxable year. Field is situated in Location. Field is operated by Taxpayer with a% equity; co-owners are Co-Owner A (b%) and Co-Owner B (c%). Ownership of Field is structured as an "elect-out" partnership for federal income tax purposes.

Field has an estimated d barrels of oil in place, and over e barrels of recoverable oil (gross). Taxpayer asserted that the existing development at Field cannot access a significant portion of the remaining resources. Therefore, Taxpayer intends to use Platform to continue the development of Field, allowing further access to over f barrels of oil equivalent (net). Initial production at Field from Platform is anticipated in Year C.

To support production at Field, Taxpayer determined that a waterflood injection was necessary to provide access to the reserves for Field. Furthermore, Taxpayer's engineers performed core flood tests using rock samples from Field and determined increased incremental reserves could be recovered through the use of Method.

Taxpayer represents that the use of Method will lead to changes in the reservoir fluids, the interaction between these fluids and the rock surfaces, and thus changes in the wettability of the reservoir rock.

Taxpayer has provided a substantial amount of literature, including laboratory study and simulation data showing that wettability alteration is the primary cause of the extra oil recovery using Method. Prior to extraction, oil reservoirs have contained crude oil for millions of years. Over time, the pore surface of these rocks develops an affinity for crude oil, mediated by the polar compounds within these oils and available cations in the reservoir brine. This preference for crude oil leads to oil being left behind during a conventional waterflood.

The level of preference of the rock surface for oil or water can be characterized as "wettability", and it depends on the composition of the brine contacting the oil. Taxpayer represents that, by carefully designing the composition of the water injected, the chemistry of the rock surface can be altered, leading to a decrease in the affinity of these pore surfaces for oil, i.e., make them more water-wet. This acts to reduce the adhesive force of the oil to the rock surface and oil which otherwise would have been trapped, may be produced.

Based on its work using Method, Taxpayer has estimated incremental reserves that can be recovered from Field through the use of Method, specifically with Injectant, is in the range of x million barrels of oil equivalent (gross), a range of y% increase versus base accessible reserves without the use of Method.

RULINGS REQUESTED

1. The use of Injectant is a qualified tertiary recovery method within the meaning of Treas. Reg. § 1.43-2(e).
2. Pursuant to Treas. Reg. § 1.43(d)(2), qualified enhanced oil recovery costs incurred by Taxpayer in Year A and Year B taxable years may be taken into account by Taxpayer in those taxable years, prior to first injection expected in Year C.
3. Pursuant to Treas. Reg. § 1.43-4(d)(3), qualified enhanced oil recovery costs incurred by Taxpayer may be taken into account on an amended return for the Year A and Year B taxable years, more than 36 months prior to first injection.

LAW AND ANALYSIS

Ruling 1

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(b)(1) provides that the amount of the credit determined under subsection (a) for any taxable year shall be reduced by an amount which bears the same ratio to the amount of such credit (determined without regard to this paragraph) as — (A) the amount by which the reference price for the calendar year preceding the calendar year in which the taxable years begins exceeds $28, bears to (B) $6.

Section 43(b)(3)(B) requires the Secretary to publish an inflation adjustment factor. The enhanced oil recovery credit under § 43 for any taxable year is reduced if the “reference price,” determined under § 45K(d)(2)(C), for the calendar year preceding the calendar year in which the taxable year begins is greater than $28 multiplied by the inflation adjustment factor for that year.

The term “inflation adjustment factor” means, with respect to any calendar year, a fraction the numerator of which is the Gross National Product (GNP) implicit price deflator for the preceding calendar year and the denominator of which is the GNP implicit price deflator for 1990.

Notice 2021-47, 2021-32 IRB 269, is the latest notice which publishes the § 45K(d)(2)(C) “reference price”.

Section 43(c)(2)(A) 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.

Section 1.43-3(a)(1) states that a petroleum engineer must certify, under penalties of perjury, that an enhanced oil recovery project meets the requirements of section 43(c)(2)(A). A petroleum engineer's certification must be submitted for each project. The petroleum engineer certifying a project must be duly registered or certified in any State.

Section 1.43-3(a)(2) states that the operator of an enhanced oil recovery project must submit a petroleum engineer's certification to the Internal Revenue Service Center, Austin, Texas, or such other place as may be designated by revenue procedure or other published guidance, not later than the last date prescribed by law (including extensions) for filing the operator's federal income tax return for the first taxable year for which the enhanced oil recovery credit is allowable.

Section 1-43-3(a)(3) states that the petroleum engineer's certification must contain the following information:

> The name and taxpayer identification number of the operator or the designated owner submitting the certification;
>
> A statement identifying the project, including its geographic location;
>
> A statement that the project involves a tertiary recovery method (as defined in section 43(c)(2)(A)(i)) and a description of the process used as including the descriptors noted in Section 1.43-3(a)(3)(i)(C)
>
> A statement that the application of a qualified tertiary recovery method or methods is expected to result in more than an insignificant increase in the

amount of crude oil that ultimately will be recovered including the descriptors noted in Section 1.34-3(a)(3)(i)(D); and

A statement that the petroleum engineer believes that the project is a qualified enhanced oil recovery project within the meaning of section 43(c)(2)(A).

Taxpayer represents that the increase in oil recovery at Field from using Method was due to an increase in the fractional flow of oil in the reservoir rock. Taxpayer submitted studies that postulated that the methodology behind this increase was from a multiple cation exchange, which increased the wettability of the reservoir rock by reducing the interfacial tension between the oil, reservoir rock, and water. The increase in wettability of the reservoir rock improves the displacement efficiency by reducing the residual oil saturation, thus increasing the fractional flow of oil through the 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. According to the statement submitted by Taxpayer, this project does both.

The Method resembles waterflooding, an excluded method under § 1.43-2(e)(3), in that in both cases water is injected into an oil reservoir to displace oil from the reservoir rock and into the bore of the producing well. However, the proposed method causes changes in the properties of the fluids in the reservoir which do not occur with conventional waterflooding.

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 represented by Taxpayer, 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. We note that §1.43-3 requires that the Taxpayer must submit a petroleum engineer's certification containing those items listed in that section not later than the date described in §1.43-3(a)(2), along with a copy of this letter ruling.

Rulings 2 and 3

Treas. Reg. § 1.43-4(d)(2) provides that, except as provided in Treas. Reg. § 1.43-4(d)(3), if the first injection of liquids, gases, or other matter occurs or is expected to

occur after the date the taxpayer files the taxpayer's federal income tax return for the taxable year with respect to which the costs are allowable, the costs may be taken into account on an amended return (or in the case of a Coordinated Examination Program taxpayer, on a written statement treated as a qualified return) after the earlier of (i) the date the first injection of liquids, gases, or other matter occurs; or (ii) the date the IRS issues a private letter ruling that provides that the taxpayer may take costs into account prior to the first injection of liquids, gases, or other matter.

Treas. Reg. § 1.43-4(d)(3) provides that if the first injection of liquids gases, or other matter occurs more than 36 months after the close of the taxable year in which costs are paid or incurred, the taxpayer may take the costs into account in determining the credit only if the IRS issues a private letter ruling to the taxpayer that so provides.

The Treasury Decision for the Enhanced Oil Recovery Credit, TD 8448, 57 FR 54917, 54919, noted that in the proposed regulations for the Enhanced Oil Recovery Credit costs may be taken into account in determining the amount of the credit only after first injection occurs. If first injection occurs on or before the date the taxpayer files a return for the year the credit is allowable for the costs, the taxpayer may claim the credit for the costs on the return. However, if first injection occurs after the return is filed, the taxpayer may claim the credit on an amended return for the year the credit is allowable for the costs. If first injection occurs more than 36 months after the close of the taxable year in which the costs are paid or incurred, the costs may not be taken into account in determining the credit for any taxable year.

However, commentators argued that deferring the credit until first injection has occurred penalizes both large-scale projects that require lengthy construction periods and operations with limited transportation opportunities. Commentators suggest that the 36-month limitation on claiming the credit for pre-injection costs should be eliminated or that the pre-injection "window" should be widened from 36 months to 48 months to take into account operational and technical parameters.

In response to the comments, the final regulations for the Enhanced Oil Recovery Credit allowed for more flexibility regarding costs paid or incurred prior to first injection. As in the proposed regulations, if first injection occurs on or before the date a taxpayer files a federal income tax return for the taxable year in which the costs are paid or incurred (the initial return), the costs may be taken into account on that return; and if first injection occurs later, the costs may be taken into account on an amended return. The final regulations add that if first injection occurs or is expected to occur after the initial return is filed (including at a time that is more than 36 months after the close of the taxable year in which the costs are paid or incurred), the taxpayer may include the costs in the credit base on a return filed before first injection if a private letter ruling is obtained.

Accordingly, Taxpayer may deduct qualified enhanced oil recovery costs paid or incurred in Year A and Year B while using Method at Field on their respective amended

Year A and Year B tax returns to the extent that the Enhanced Oil Recovery Credit is allowable in those years.

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 any particular item constitutes a qualified enhanced oil recovery cost.

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.

This letter is being issued electronically in accordance with Rev. Proc. 2020-29, 2020-21 I.R.B. 859. A paper copy will not be mailed to Taxpayer.

Sincerely,

Patrick S. Kirwan
Branch Chief, Branch 6
(Passthroughs & Special Industries)

cc: