



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Marathon Oil Company**

**P. O. Box 3487**

**Houston, Texas 77253-3487**

**October 8, 2004**

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

**Attention: Mark Mick**  
**Operations Engineer**  
*msmick@marathonoil.com*

***AMENDED Administrative Order NSL-4918 (BHL) (SD)***

Dear Mr. Mick:

Reference is made to the following: (i) your application filed with the New Mexico Oil Conservation Division ("Division") on July 14, 2004 (*administrative application reference No. pSEM0-419649056*); and (ii) the Division's records in Santa Fe, including the file on Division Administrative Order NSL-4918 (BHL) (SD): all concerning Marathon Oil Company's ("Marathon") request for an exception to Rule 2 (b) of the "*Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool*", as promulgated by New Mexico Oil Conservation Division ("Division") Order Nos. R-9922, R-9922-A, R-9922-B, R-9922-C, R-9922-D, and R-9922-E and the "*General Rules and Regulations for the Associated Oil and Gas Pools of Northwest New Mexico and Southeast New Mexico*," as promulgated by Division Order No. R-5353, as amended, for Marathon's existing Indian Hills Unit Gas Com. Well No. 56 (API No. 30-015-32878) to be recompleted with a horizontal drainhole within an existing standard 337.95-acre stand-up spacing and proration unit within the Indian Basin-Upper Pennsylvanian Associated Pool (33685) comprising Lots 1, 6, 7, 8, 13, and 14 and the E/2 NE/4 (E/2 equivalent) of Irregular Section 29, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico.

This application has been duly filed under the provisions of: (i) Division Rule 104.F; (ii) Division Rule 1207.A; (iii) 111.C (2); and (iv) Rule 2 (c) of the aforementioned associated oil and gas pool rules.

This unit is currently simultaneously dedicated to Marathon's:

- (i) Indian Hills Unit Well No. 14 (API No. 30-015-30624), located at a standard 2300 feet from the South line and 2000 feet from the East line (Lot 8/Unit J) of Irregular Section 29;
- (ii) Indian Hills Unit Well No. 27 (API No. 30-015-31406), located on the surface 503 feet from the North line and 2310 feet from the West line (Lot 2/Unit C) of Irregular Section 29, and completed within the Indian Basin-Upper Pennsylvanian Associated Pool (33685) at a bottom-hole location that is 1313 feet from the North line and 1332 feet from the East line (Lot 1/Unit B) of Irregular Section 29;

(iii) Indian Hills Unit Gas Com. Well No. 47 (API No. 30-015-32536), located on the surface 2316 feet from the South line and 2004 feet from the East line (Lot 8/Unit J) of Irregular Section 29, and completed within the Indian Basin-Upper Pennsylvanian Associated Pool (33685) at a standard sub-surface location within the SE/4 SE/4 equivalent (Lot 14/Unit P) of Irregular Section 29; and

(iv) aforementioned Indian Hills Unit Well No. 56, which well was initially drilled in September, 2003 from a surface location 453 feet from the South line and 350 feet from the West line (Unit M) of Section 21, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, and directionally drilled to the west-southwest to a total depth of 8,310 feet (MD), or 8,088 (TVD), at a bottom-hole location 176 feet from the North line and 1185 feet from the East line (Unit A) of Irregular Section 29, see Division Administrative Order NSL-4918 (BHL) (SD), dated July 16, 2003.

It is the Division's understanding that Marathon now intends to abandon the current Upper Pennsylvanian completion within its Indian Hills Unit Well No. 56 and recomple by plugging back to a depth of 7,860 feet (MD), kick-off in a southwesterly direction, build angle in excess of 90 degrees, and continue drilling horizontally a distance of approximately 1,500 feet. The targeted end or bottom-hole location of this drainhole at 9,606 feet (MD) is proposed to be within Lot 1 (Unit B) of Irregular Section 29 also at an unorthodox subsurface location that will be approximately 913 feet from the North line and 2633 feet from the East line of Irregular Section 29. This new high angle/horizontal directional wellbore is expected to intersect the top of the Upper-Pennsylvanian interval at an approximate depth of 7,870 feet (MD), or 7,661 feet (TVD) at a point 176 feet from the North line and 1185 feet from the East line (Unit A) of Irregular Section 29. The proposed well will be unorthodox in that its entry into the Upper-Pennsylvanian interval and throughout most of the lateral drainhole will be closer then the standard setback distance of 660 from the South line of Irregular Section 29.

By the authority granted me under the provisions of Division Rule 104.F (2) and the applicable provisions of the special rules governing the Indian Basin-Upper Pennsylvanian Associated Pool, the above-described recompletion resulting in an unorthodox sub-surface location for the Indian Hills Unit Well No. 56 within the E/2 equivalent of Irregular Section 29, is hereby approved. Further, the aforementioned well and 337.95-acre spacing and proration unit will be subject to all existing rules, regulations, policies, and procedures applicable to the Indian Basin-Upper Pennsylvanian Associated Pool.

Furthermore, Marathon is hereby authorized to simultaneously dedicate production attributed to the Indian Basin-Upper Pennsylvanian Associated Pool from the aforementioned Indian Hills Unit Wells No. 14, 27, 47, and 56. Furthermore, Marathon is permitted to produce the allowable assigned the subject 337.95-acre spacing and proration unit from all four wells in any proportion. Finally, Marathon shall comply with all provisions of Division Rule 111 applicable in this matter.

Marathon Oil Company  
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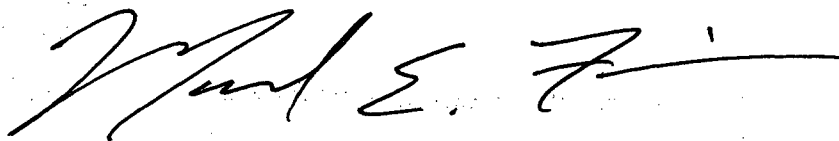
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AMENDED Administrative Order NSL-4918 (BHL) (SD)

The Division's original Administrative Order NSL-4918 (BHL) (SD), dated July 16, 2003, shall be placed in abeyance until further notice.

Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,



Mark E. Fesmire, P. E.  
Director

MEF/ms

cc: New Mexico Oil Conservation Division - Artesia  
U. S. Bureau of Land Management - Carlsbad

File: NSL-4918 (BHL) (SD) - Division administrative application reference No. pKRV0-316332201