



*Amended NSL-4750(BHL)(SD)*

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

March 6, 2005

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

Director

Oil Conservation Division

**Marathon Oil Company**  
**P. O. Box 3487**  
**Houston, Texas 77253-3487**

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

***Administrative Order NSL-4750-A (BHL) (SD)***

Dear Mr. Mick:

Reference is made to the following: (i) your application dated December 8, 2004 addressed to the New Mexico Oil Conservation Division's ("Division") Chief Engineer, Mr. Richard Ezeanyim, but was not filed with the Division as received until January 18, 2005 (*administrative application reference No. pSEM0-501842016*); and (ii) the Division's records in Santa Fe, including the file on Division Administrative Order NSL-4750 (BHL) (SD) and AMENDED Administrative Order NSL-4750 (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 Well No. 41 (API No. 30-015-32539) to be recompleted with a horizontal drainhole within an existing standard 298.02-acre spacing and proration unit within the Indian Basin-Upper Pennsylvanian Associated Pool (33685) comprising Lots 1 through 8 (E/2 equivalent) of Section 21, 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. 24 (API No. 30-015-31266), located on the surface 685 feet from the North line and 2073 feet from the East line (Unit B) of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, and was directionally drilled to and completed within the Indian Basin-Upper Pennsylvanian Associated Pool at a standard sub-surface location within Lot 6 (NW/4 SE/4 equivalent), or Unit "J" of Section 21;

(ii) Indian Hills Unit Well No. 28 (API No. 30-015-31267), located on the surface 218 feet from the South line and 660 feet from the East line (Unit P) of Section 16, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, and was directionally drilled to and completed within the Indian Basin-Upper Pennsylvanian Associated Pool at a standard sub-surface location within Lot 2 (NW/4 NE/4 equivalent), or Unit "B" of Section 21;

(iii) aforementioned Indian Hills Unit Well No. 41 (API No. 30-015-32539), located on the surface 199 feet from the South line and 524 feet from the East line (Unit P) of Section 16, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, and was directionally drilled to and completed within the Indian Basin-Upper Pennsylvanian Associated Pool at a standard sub-surface location within Lot 4 (SE/4 NE/4 equivalent), or Unit "H" of Section 21; and

(iv) Indian Hills Unit Well No. 45 (API No. 30-015-32338), located on the surface 806 feet from the North line and 1010 feet from the East line (Unit B) of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, and directionally drilled with a horizontal drainhole, a portion of which is considered to be non-standard for the subject spacing and proration unit, terminating at a standard sub-surface location within Lot 8, or Unit "P" of Section 21, see Division Administrative Orders NSL-4750 (BHL) (SD), dated June 18, 2002, and AMENDED Administrative Order NSL-4750 (BHL) (SD), dated April 23, 2004.

It is the Division's understanding that: (i) the subject Indian Hills Unit Well No. 41 was spud on November 1, 2003 and directionally drilled in a conventional manner to a total depth of 8,800 feet (MD), or 8,457 feet (TVD); and (ii) the resulting bottomhole location for the well bore is 1770 feet from the North line and 1251 feet from the East line (Lot 4/Unit H) of Section 21.

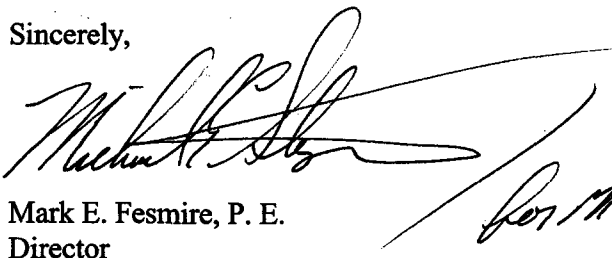
The intended recompletion of this well will be to plug-back and set a whip-stock at a depth 8,325 feet, or 8,001 feet (TVD), at a sub-surface location within the Indian Basin-Upper Pennsylvanian Associated Pool 1641 feet from the North line and 1203 feet from the East line (Lot 4/Unit H) of Section 21, kick-off in a southwesterly direction, build-up to a 94 to 94.5 degree angle, and continue drilling horizontally for approximately 1,400 feet to a targeted end-point that is unorthodox 2450 feet from the North line and 2350 feet from the East line (Lot 3/Unit G) of Section 21.

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. 41 within the E/2 equivalent of Section 21, is hereby approved. Further, the aforementioned well and 298.02-acre stand-up 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. 24, 28, 41, and 45. Furthermore, Marathon is permitted to produce the allowable assigned the subject 298.28-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.

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

MES/ms

cc: New Mexico Oil Conservation Division - Artesia  
U. S. Bureau of Land Management - Carlsbad  
File: NSL-4750 (BHL) (SD)  
AMENDED NSL-4750 (BHL) (SD)