Phosphate Data From the Dairy Syncline Area, Caribou County, Southeastern Idaho

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ABSTRACT

Four exploratory holes were drilled to further assess the phosphate resources on unleased federal lands in the Dairy syncline area, Caribou County, southeastern Idaho. In this area along the eastern flank of the Aspen Range, the Permian Phosphoria Formation is exposed on the east and west limbs of a prominent asymmetrical fold known as the Dairy syncline. These data and those from industry will be used to determine phosphate.

The phosphate-bearing Meade Peak Phosphatic Shale Member of the Phosphoria Formation is exposed at the surface over a strike length of 3.8 miles (6.1 km) along the overturned west limb of the fold.

INTRODUCTION

PURPOSE

The U.S. Bureau of Land Management (BLM) evaluates unleased federal mineral resources as part of its minerals' management responsibilities. The Dairy syncline, classified under the authority of the Secretary of the Interior as within the Schmid Ridge Known Phosphate Leasing Area (KPLA), is subject to competitive leasing under the Mineral Leasing Act. The primary objective of the BLM mineral resource-evaluation program is to estimate phosphate reserves and determine fair-

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market value for mineral leasing. Data obtained by the program are also used in developing an inventory of the federal mineral estate for minerals/land-use management.

FIRST ORDER

Four exploratory holes were drilled to further assess the phosphate resources on unleased federal lands in the Dairy syncline area, Caribou County, southeastern Idaho. In this area along the eastern flank of the Aspen Range, the Permian Phosphoria Formation is exposed on the east and west limbs of a prominent asymmetrical fold known as the Dairy syncline. These data and those from industry will be used to determine phosphate reserves in anticipation of a future competitive phosphate lease sale.

The phosphate-bearing Meade Peak Phosphatic Shale Member of the Phosphoria Formation is exposed at the surface over a strike length of 3.8 miles (6.1 km) along the overturned west limb of the fold. Over much of the rest of the area, the shallow-dipping Meade Peak is overlain by extensive surface exposures.

SECOND ORDER

The U.S. Bureau of Land Management (BLM) evaluates unleased federal mineral resources as part of its minerals' management responsibilities. The Dairy syncline, classified under the authority of the Secretary of the Interior as within the Schmid Ridge Known Phosphate Leasing Area (KPLA), is subject to competitive leasing under the Mineral Leasing Act.

Third Order

Fourth order. As phosphate mining (in adjacent Dry Valley) has advanced towards the Dairy syncline, industry interest in the area has increased. This area, once considered relatively remote, is now of interest to reserve-hungry neighboring mining operations.

SECOND ORDER

The Dairy syncline area covers approximately 3,000 acres of federal land in the Caribou National Forest. It is in Caribou County, Idaho, along the east flank of