

Department of Geology and Mineral Industries

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Senate Committee on Environment and Natural Resources Informational Meeting – Oil and Gas Resources in Oregon

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Oregon Department of Geology and Mineral Industries (DOGAMI) Testimony

The following testimony summarizes the status of natural gas exploration and development in Oregon, the previous and potential use of hydraulic fracturing technology and the coordination between state and federal agencies when hydraulic fracturing activities are proposed.

Status of Natural Gas Exploration and Development

Oregon has one producing gas field, located near the town of Mist in northwest Oregon. The Mist Gas Field has been producing natural gas since 1980. As the natural gas sandstone reservoirs become depleted some are used to store natural gas. The sandstone that contains the gas is very permeable and hydraulic fracturing has not been necessary to economically produce or store gas. Currently, there are 87 active well permits in the Mist Gas Field.

In 2012, following the discovery of economic quantities of natural gas from the Snake River Basin in western Idaho, exploration companies conducted seismic exploration in Oregon in the region between Vale, Ontario, and Nyssa. The Snake River Basin is believed to be a conventional natural gas resource, where the gas is contained in sandstone that can probably be developed without hydraulic fracturing the rock at depth. In 2018, DOGAMI issued three natural gas well permits in the Snake River Basin of northern Malheur County (location map attached). To date, these wells have not been drilled.

Use of Hydraulic Fracturing Technology

In 2014, the US Geological Survey published a national assessment of unconventional oil and gas potential, the type of resource where hydraulic fracturing is typically used. In Oregon, the potential for hydraulic fracturing activities is limited to coalbed methane reserves. The attached map, created with USGS data, shows areas in Oregon where coalbed methane gas reserves may exist. There is currently no active exploration for coalbed methane in Oregon.

Between 2005 and 2008, seven coalbed methane wells were hydraulically fractured in Coos County, south of Coos Bay. Two of the fractured wells were subsequently found by the permittee to be uneconomical for gas production and were plugged with cement and reclaimed in accordance with permit requirements. The remaining five wells are cased and sealed, with their permits active until the permittee determines if the wells will be developed or plugged with cement and reclaimed.

Coordination Between State Agencies

For drilling operations that propose hydraulic fracturing, DOGAMI, the Department of Environmental Quality and other state and federal natural resource agencies work together to ensure that resources are being developed in compliance with state law and that each agency's regulatory responsibilities are met. A DOGAMI fact sheet that outlines regulation and permitting of hydraulic fracturing in Oregon is attached.