# Geologic Map of the White Owl Quadrangle, Madison County, Idaho

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Qel/Qba Qel/Qyh Qel/Qbm 2 Qbcb Qel/Qbcb Qel/Qbb Qbb-Qel/Qyh Qel/Qbm Qel/Qyh Qel/Qyh <sup>1</sup>Department of Geology, Brigham Young University-Idaho, Rexburg, Idaho 83460-0510. **Base Map Credit** Shaded elevation from 10 m DEM. SCALE 1:24,000 <sup>2</sup>Idaho Geological Survey, University of Idaho, Topography by multiplex methods and by plane-table surveys, 1951. Aerial photographs taken 1946. Field checked 1951. Moscow, ID 83844-3014. <sup>3</sup>U.S. Geological Survey (deceased). Projection: Idaho coordinate system, east zone (Transverse Field work conducted 1978-2014. Mercator). 1927 North American Datum. Digital cartography by Jane S. Freed at the 10,000-foot grid ticks based on Idaho coordinate system, east KILOMETER

Contour interval 20 feet

UTM Grid and 2016 Magnetic North

1000-meter Universal Transverse Mercator grid ticks, zone 12.

Declination from NOAA National Geophysical Data Center.

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### SYMBOLS

- Contact: dashed where approximately located; dotted where concealed.

..... Normal fault: dotted where concealed.

Concealed vent. RB-4 • Geochemistry sample site.

3579B • Paleomagnetic sample site.

Well-basalt Water well-basalt: Water well showing lithology encountered below loess based on drillers log. Well is approximately located.

Well-basalt? Water well-basalt inferred: Water well showing lithology encountered below loess based on drillers log. Well is approximately located.

Water well-rhyolite: Water well showing lithology encountered below loess based on drillers log. Well is approximately located.

Water well-rhyolite inferred: Water well showing lithology encountered below loess based on drillers log. Well is approximately located.

#### EXPLANATION

See booklet for further details.

**ALLUVIAL UNITS** 

Qas Alluvium of Moody Creek and unnamed side streams (Holocene).

**EOLIAN UNITS** 

Qel Loess (late Pleistocene).

## **VOLCANIC ROCKS**

Basalts

**Basalt of Ards Farm (early Pleistocene)**—Shown as *Qel/Qba* where concealed by loess.

**Basalt of Canyon Creek Butte (early Pleistocene)**—Shown as *Qel/Qbcb* where concealed by loess.

Basalt of Bitters Butte (early Pleistocene)—Shown as Qel/Qbb where

**Basalt of Moody (early Pleistocene)**—Shown as *Qel/Qbm* where concealed by

Basalt of White Owl Butte (early Pleistocene)—Shown as Qel/Qbw where

Basalt of Sommers Butte volcanic rift zone (early Pleistocene)—Shown as Qel/Qbs where concealed by loess.

Basalt, unnamed and undivided (Pleistocene)—Shown as Qel/Qbu where

Basalt, undivided (early Pleistocene-Pliocene).

# Rhyolites

Huckleberry Ridge Tuff (early Pleistocene)—Shown as Qel/Qyh where concealed by loess.

Rhyolite of Long Hollow (Pliocene)—Shown as Qel/Trl where concealed by

Heise volcanic field rhyolites (Pliocene-late Miocene)—Cross section only.

Idaho Geological Survey's Digital Mapping Lab.

PDF (Acrobat Reader) map may be viewed online at

Map version 4-7-2016.

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QUADRANGLE LOCATION ADJOINING QUADRANGLES