**Geologic Map of the North Trigo Peaks 7 ½ Quadrangle, La Paz County, Arizona**

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Arizona Geological Survey

Digital Geologic Map 123 (Slice-123)

December 2016

**Sheet 1 of 2**

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**Map Unit Descriptions**

- **Igneous and metasedimentary rocks**: These rocks are typically found in the lower volcanic sections and are characterized by their dark color and lack of visible fossils. They are mainly composed of mafic and feldspar minerals.

- **Metasedimentary rocks**: These rocks are formed from the metamorphism of sedimentary rocks. They are characterized by their foliated texture and can include schist, gneiss, and schistose dolostone.

- **Dolerite**: Dolerite is a mafic igneous rock, typically dark grey and fine-grained. It is composed of a feldspar matrix with intergrown pyroxene crystals.

- **Trachybasalt**: This is a tholeiitic basalt that contains phenocrysts of plagioclase and potassium feldspar. It is characterized by its dark green or black color.

- **Trachyte**: A gray to white, fine-grained rock containing phenocrysts of potassium feldspar and plagioclase.

- **Tuff**: Tuff is a volcaniclastic rock composed of volcanic ash, lapilli, and cinders. It can be fine- to coarse-grained and is often found in a variety of colors.

- **Volcanic breccia**: This is a rock composed of angular to subrounded fragments of volcanic rock, typically less than 64 mm in size, cemented by a volcanic matrix.

- **Pyroclastic flow deposits**: These deposits are formed by the rapid movement of hot volcanic gas and particles. They can range from fine- to coarse-grained and are often found in layers.

- ** lahars**: Lahars are mudflows that are typically deposited in low-lying areas. They can be composed of silt, sand, and pebbles.

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**Structure Symbols**

- **Fault, accretionary prism**: A fault is a fracture in the Earth's crust along which there has been relative motion. An accretionary prism is a wedge of sediment or volcanic material that has been thrust over another block of rock.

- **Contact, intrusive**: Intrusive contacts are formed when magma solidifies in the crust and infiltrates pre-existing rock. They are typically characterized by a sharp boundary between the two rock types.

- **Contact, sedimentary**: A contact between sedimentary rocks and volcanic rocks. The sedimentary rocks are typically deformed and metamorphosed.

- **Dolerite contact, discordant**: A contact between a dolerite intrusion and a pre-existing sedimentary rock. The contact is typically discordant and may be highly deformed.

- **Key bed, unconformity**: An unconformity is a surface of non-deposition that separates two layers of rock. Key beds are distinctive layers of rock that can be used for correlation.

**Correlation of map units**

- **Bullhead Formation**: The Bullhead Formation is a系列 of alluvial fan and terrace deposits that are typically younger than the Pleistocene. It is characterized by its gravel, sand, and silt deposits.

- **Surficial geologic units**: These units are typically younger than the Pleistocene and are composed of colluvium and talus. They are characterized by their fine-grained nature and can include sand, silt, and clay.

- **Quaternary deposits**: These deposits are typically younger than the Pleistocene and are composed of gravel, sand, and silt. They are characterized by their fine-grained nature and can include colluvium and talus.

**Contact, intrusive**

- **Sanidine Ar/Ar probability plot**: The plot is used to determine the age of volcanic rocks. It is based on the ratio of sanidine to argon in the sample.

- **K-Ar age determination**: The K-Ar age determination is used to determine the age of volcanic rocks. It is based on the ratio of potassium to argon in the sample.

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**Location of map area**

- **San Diego County, California**: This area is characterized by its coastal geography and is home to a variety of geologic features.

- **La Paz County, Arizona**: This area is characterized by its desert geography and is home to a variety of geologic features.

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**Additional Information**

- **Map scale**: The map has a scale of 1:24,000, which means that one inch on the map represents 24,000 inches on the ground.

- **Map units**: The map units are identified by different colors and symbols. These units are used to correlate different rock types and to identify geological features.

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**Acknowledgments**

This map was created by the Arizona Geological Survey and is based on data collected by the U.S. Geological Survey. The map is intended for educational and research purposes and is not to be used for legal or engineering purposes.