

Dolomite Mines, Southern Inyo Mountains, Inyo County, California

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Acknowledgement and Disclaimer

The information in this paper is taken largely from published and public sources. I have reproduced this material and present it pretty much as we found it, not trying to harmonize discrepancies in mine or geologic descriptions. I have changed verb tenses for readability and have used some paraphrase. I have expanded abbreviations or special characters with full text (e.g. feet instead of ft., inches instead of “) Italics indicate quotations. Authors of the original information are indicated at the end of each paragraph. Paragraphs without a citation are our own materials. The maps in this report have been compiled and rectified from digital and paper copies of original sources that were made at different scales and in different geographic projections. Therefore, many of the maps had to be adjusted or stretched. They do not fit perfectly. Most are accurate to within 100 feet, but reproduction and projection errors can be as much as 300 feet for some maps. PLSS means Public Land Survey System. That survey data was obtained from the U.S. Bureau of Land Management website.

MRDS, 2011, Mineral Resources Data System, U.S. Geological Survey, <https://mrdata.usgs.gov/mrds/>. This database relies on records that, in many cases, are inaccurate or imprecise. For example, if a report describes a mine as being in “Section 9”, with no other information, MRDS plots the mine location in the center of the section. If a mine is reported in “SW ¼” of a section, MRDS plots the mine in the center of that SW quarter-section. Where I could confidently adjust an MRDS location of a mineral deposit to features identifiable in aerial photographs or topographic maps, I did so.

Help me make this report better. If you have any photographs, memories or reports for this mine that you can share, please send them to yosoygeologo@gmail.com so that I can incorporate that information and material into this paper.

Italics are quotations.

Location:

There are several mines in the Dolomite Mines group. These are located at these coordinates:

NAME	COMMODITY	TRS	Latitude	Longitude
Lakeview Talc Mine	Talc-Soapstone	16S 37E Sec. 04 MDM	36.57135	-117.95925
Lakeview Quartzite Deposit	Silica	16S 37E Sec. 04 MDM	36.57496	-117.96064

White Quarry	Limestone, Dimension	16S 37E Sec. 04 MDM	36.57186	-117.95782
Inyo Pit and Mill	Calcium	16S 37E Sec. 11 MDM	36.56056	-117.92262
Lenbec Talc Mine	Talc-Soapstone	16S 37E Sec. 04 MDM	36.57496	-117.95422
Lakeview Quarries	Silica, Talc-Soapstone	16S 37E Sec. 04 MDM	36.57496	-117.95422
Mcllroy property	Asbestos, Talc-Soapstone	16S 37E Sec. 14 MDM	36.53643	-117.91703

The Dolomite mine is at the western edge of the Southern Inyo Mountains an the eastern flank of Owens Lake. The Carson and Colorado Railroad passed through Dolomite on the way to Keeler.

Inyo Marble Company. Location : Along the southwestern flank of the Inyo Range from 2 to 8 miles northwest of Keeler in sections, 4, 10, 11, 13, 14, 24, 25, T. 16 S., R. 37 E., M.D.M., (projected) and sections. 19, 30, 31, T. 16 S., R. 38 E., M.D.M. (projected). Ownership: Inyo Marble Company, D. H. Dunn, president, 728 E. 29th St., Los Angeles, owns 24 association placer claims. Of these, patents have been issued for 140 acres in sections 4, 320 acres in sees. 10 and 11, 200 acres in section 14, 120 acres in section 24 and 40 acres in section 25, all in T. 16 S., R. 37 E., M.D.M. (projected) and 200 acres in section 19 and 120 acres in section 30, both in T. 16 S., R. 38 E., M.D.M. (projected; Logan, 1947) The property is leased to Dolomite Products, Inc., Mr. H. Matt, 510 W. Garfield, Glendale 4, California (Norman and Stewart, 1951:100)

Former Names

Inyo Marble Quarry, Brooklyn Talc Mine, Lakeview Talc Mine

History

Logan (1947) wrote the following history of the Dolomite (Inyo Marble) Mines:

Inyo Marble Company's deposits have been described in many Division of Mines reports since 1888, when the original company of this name began work. The marble is found on the southwest side of the Inyo Range from just east of Swansea on the narrow-gauge Nevada & California Railroad on the northeast side of Owens Lake, northwestward for several miles, rising steeply on the northeast from an elevation of 3700 feet. The railroad runs along the east side of the valley within less than 1 mile of the deposit for the entire distance (Logan, 1947:244).

Work by the original Inyo Marble Company began in 1888. Near the surface the marble was found to be shattered, but later work made it possible to take out blocks weighing from 15 to 18 tons each. The early work was on a dense, white marble, about 3 miles northwest of Swansea. A little south of this a bed of white, yellow, gray, and black marble was found. About half a mile north, a quarry was opened in yellow marble, and a quarry of black marble, used for floor tiling was also worked. Marble production in Inyo County was recorded in Division of Mines reports from 1894-98 ; from 1903-07 inclusive, and in 1913-14. The total for these periods was 78,400 cubic feet valued at \$219,300, all believed to have come from this property. Later production of marble in the county continued irregularly until 1930, but details are concealed. During the early periods of production at least up to 1908, the rough marble was shipped north over the railroad to Truckee where the old company had a marble sawing and dressing plant. The marble was used in the Mills Building and others in San Francisco (Logan, 1947:244).

Sometime later, prior to 1916, the claims were idle and were allowed to lapse. They were relocated by the present owners who also took the name Inyo Marble Company. They filed on 24 association claims of 160 acres each. Of these, they have obtained patents for 320 acres in sections 10 and 11, 120 acres in section 24, and 40 acres in section 25, all in T. 16 S., R. 37 E., M. D.; also 200 acres in section 19 and 120 acres in section 30, both in T. 16 S., R. 38 E., M. D. (Logan, 1947:244).

The E Clampus Vitus historical monument dedicated June 17, 2006 at Dolomite reads:



Figure 1. Historical monument at Dolomite. https://noehill.com/inyo/poi_dolomite_mine.asp accessed March 3, 2024.

In 1862 this high quality deposit of dolomitic limestone was discovered. Its remote location delayed development until 1883, when the Carson & Colorado Railroad was constructed. In 1885, Drew Haven Dunn filed a mining claim and the Inyo Marble Company began quarrying operations. The property was purchased in 1959 by Premiere Marble Products. They produced dolomite marble in several colors and its final product is widely used in terrazzo flooring, roofing, landscaping and chemical filters.

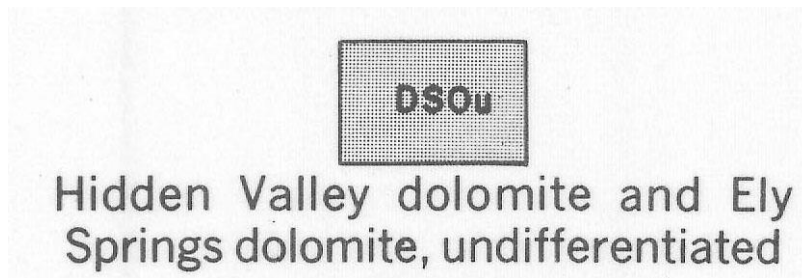
Premiere Marble was purchased by its present owner Federal White Aggregates, in 1992 and continues operations to this day. It is the largest dolomite marble mine in the United States. A recent survey of the mines [sic] potential revealed that the dolomite deposit is approximately seven miles long and 1,400 feet deep, giving it a virtual unlimited supply for many years to come. Plant superintendent, Manuel Castro has generously donated these large white dolomite rocks for Slim Princess Chapter's historic plaques for the past 35 years.

The beautiful white dolomite with golden flecks at the Dolomite mines was use for building stone and tombstones. It was also used to make the white grains in the sidewalk stars on the Hollwood walk of fame.



Geology

The host formation Ordovician to Devonian Hidden Valley Dolomite and Ely Springs Dolomite. The beautiful white dolomite on the Federal White Aggregate quarries were bleached by dacite dikes that cut through these formations at the mine sites (Merriam, 1963; Jennings, 1958).



The Dolomite mines are listed in MRDS (2011) as talc-soapstone, silica, limestone, calcium and asbestos deposits.

1890

In 1890, H De Groot wrote:

Every one of these blocks was pure white, fine-grained, very uniform in texture, and, so far as could be seen, without a crack or flaw. The largest one particularly, containing eighty-four cubic feet and therefore weighing nearly fifteen thousand pounds, was a most beautiful block, and if as good and sound throughout as it looks on the surface, would make a fine piece of statuary marble (De Groot, 1890)

I conclude that where such blocks as these have been obtained under such circumstances, from such a little hole as that upper quarry is, it is more than probable that on further development this quarry can furnish perfectly sound blocks of any size that can be handled. And if this prove true, the quantity is inexhaustible, for the whole southwestern

flank of the mountains for a considerable distance there is made of marble (DeGroot, 1890).

The present openings furnish almost exclusively white marble; but only a few hundred yards distant from them there are very heavy masses of a grayish, streaked and mottled marble, filled with dendritic markings, which take a fine polish, and is also a hard and handsome stone. The "ground mass" of this mottled marble varies somewhat in color, being sometimes very white; while in other places it is more or it is tinged with varying light shades of yellow and green. It also is generally fine-grained and compact, and can probably be obtained in blocks of very large size, though it is not yet sufficiently opened up to satisfactorily prove its condition (DeGroot, 1890).

1947

Logan (1947) said this about the geology and chemistry of the Dolomite (Inyo Marble) Mines:

Most of the marble produced here has been white dolomite, fine grained and dense. W. A. Goodyear who wrote of the deposit in 1890 (see De Groot, H. 1890, pp. 215-218) considered that it had possibilities as statuary marble because of its uniform white color and texture where it opened 200 feet above the foot of the mountain. An analysis made in 1890 by the State Mining Bureau showed 54.25 percent CaCO₃, 44.45 percent MgCO₃ and 0.60 percent iron and silica, indicating a nearly pure dolomite (Logan, 1947:244)

1951

Norman and Stewart wrote this about the geology of the Dolomite (Inyo Marble) Mines:

Silurian and Devonian dolomite in a series of Paleozoic marine metasediments has been exploited along a belt half a mile wide and six miles long. The history of the deposit has been summarized by Logan (1947) (Norman and Stewart, 1951:100)

Several colors of dolomite are available for terrazzo chips but the principal production in recent years has been white for roofing granules. Chemical analyses of the marble show the material to be nearly a pure dolomite (Norman and Stewart, 1951:100)



Figure 2. SPNGRR locomotive 18 leaving Dolomite. From Nordell Collection

Mineralogy

MRDS (2011) lists minerals as quartz, quartzite, tremolite, limonite and mica

Development

1947

From 1915 until recently, dolomite has been produced and sold to soda, plants around Owens Lake, and some has been shipped to Los Angeles for use in steel furnace lining and flux, and for stucco dash and terrazzo. Due to expiration of patent rights to another process for making sodium carbonates, firms that formerly used dolomite and limestone to produce CO₂ gas for carbonation are said to have been turning to the use of the formerly restricted process and are no longer burning lime. The quarry that served these plants reached a length of 1000 feet or more, and employed 35 men 20 years ago. At that time, considerable work was also done on the Golden Yellow quarry. This marble is golden yellow, brown, and white. It was exposed for a distance of 150 feet and a height of 200 feet. Six quarries in all were opened. Besides: an air compressor and crushing plant, the main (Alco) quarry was equipped with derricks and marble saws (Logan, 1947:245).

1951

The dolomite is mined in open cuts and hauled by truck to the crushing and screening plant at Dolomite Siding on the Keeler branch of the Southern Pacific railroad. The crude ore is crushed in a 9- by 12-inch jaw crusher. Crushed ore is passed through a trommel to a multideck vibrating screen. The normal roofing granule size is minus 4- plus 10-mesh. If terrazzo material is being made, the sizes are (Norman and Stewart, 1951:100):

Trade size No. 4 minus 4- plus 6-mesh

Trade size No. 6 minus 6- plus 8-mesh

Trade size No. 8 minus 8- plus 10-mesh

Some minus 32-mesh to pan dolomite has been sold for use in rock wool manufacture. Other uses include plaster sand and chicken grit. The screened product is bagged in 100-pound bags and hauled by truck or railroad to the Los Angeles area. Plant capacity is 300 to 400 tons per month. Since November 1948 the property has been operated under lease by the Dolomite Products, Inc., H. Matt, president, 510 W. Garfield, Glendale 4, California. The company plans to enlarge the plant capacity to 300 tons per week. Ten men are employed (Norman and Stewart, 1951:100)

PHOTOGRAPHS



Figure 3. Although the above building at Dolomite appears to be authentic, it is not. It was originally built as a set for the movie, "Nevada Smith", starring Steve McQueen. Digital Desert; <https://digital-desert.com/dolomite> accessed March 3, 2024.



Figure 4. Abandoned building at Dolomite. From https://quarriesandbeyond.org/states/ca/quarry_photo/ca-inyo_dolomite_photos_2.html accessed March 3, 2024.



Figure 5. Dolomite quarry. View from old townsite. From https://quarriesandbeyond.org/states/ca/quarry_photo/images/ca-inyo_co/3040_dolomite_building_lookng_towards_dolomite_qurry.jpg accessed March 3, 2024.



Figure 6. White dolomite at the McIlroy prospect. Photo from July, 2023 by Gregg Wilkerson.



Figure 7. Boulder of white dolomite from Federal White Aggregate Quarry, July 2023.

REFERENCES

Bowles, Oliver, 1955, The asbestos industry: U.S. Bureau of Mines Bulletin 552, p. 25.

De Groot, H., 1890, Inyo County, California Mining Bureau Report. 10, pp. 209-218.

Greene, Linda I, 198, U.S. National Park Service, Historic Preservation Branch, Pacific Northwest/Western Team, Denver Service Center, Death Valley – Historic Resource Study – A History of Mining, Volume I (Parts 1 and 2): part 2: III.C.2.g).

Jennings, C.W., 1958, Geologic map of California : Death Valley sheet: California Division of Mines and Geology, Geologic Atlas of California GAM-04, scale 1:250,000.

Knopf, Adolf, 1914, Mineral resources of the Inyo and White Mountains, California: USGS Bulletin 540-B: 120; <https://pubs.usgs.gov/publication/b540B>

Logan, Clarence A., 1947, Limestone in California, California Journal of Mines and Geology, vol. 43, pp. 242, 244-245.

Merriam, Charles Warren, 1963, Geology of the Cerro Gordo mining district, Inyo County, California, U.S. Geological Survey Professional Paper 408, Plate 2: Southern part of the New York Buttes Quadrangle.

Minedat.org, 2024, Snowcaps Mine (Sunshine Snowcaps Mine), Kearsarge, Kearsarge Mining District, Inyo Mts (Inyo Range), Inyo Co., California, USA;
<https://www.mindat.org/loc-78882.html> accessed March 3, 2024.

MRDS, 2011, Mineral Resource Data System, U.S. Geological Survey;
<https://mrdata.usgs.gov/mrds/>

Murdoch, Joseph and Robert W. Webb, 1966, Minerals of California, Centennial Volume (1866-1966): California Division Mines & Geology Bulletin 189: 280.

Norman, L.A., and Stewart, R.M., 1951, Mines and mineral resources of Inyo County: California Journal of Mines and Geology, v. 47, no. 1, p. 98.

Rapp, J.S., M.A. Silva, C.T. Higgins, R.C. Martin and J.L. Burnett, 1990, Mines and Mineral Producers Active in California 1988-1989, California Division of Mines and Geology, Special Publication 103, 160 p. and map.

Streitz, Robert, and Stinson, M.C., 1974, Geologic map of California: Death Valley sheet: California Division of Mines and Geology, Geologic Atlas of California GAM-04, scale 1:250,000.

U.S. Geological Survey (2005), Mineral Resources Data System (MRDS): U.S. Geological Survey, Reston, Virginia, Local File ID 10252247.

Ver Planck, 1961, Quartzite in California, California Division of Mines and Geology Bulletin 187, 58 p.

MAPS

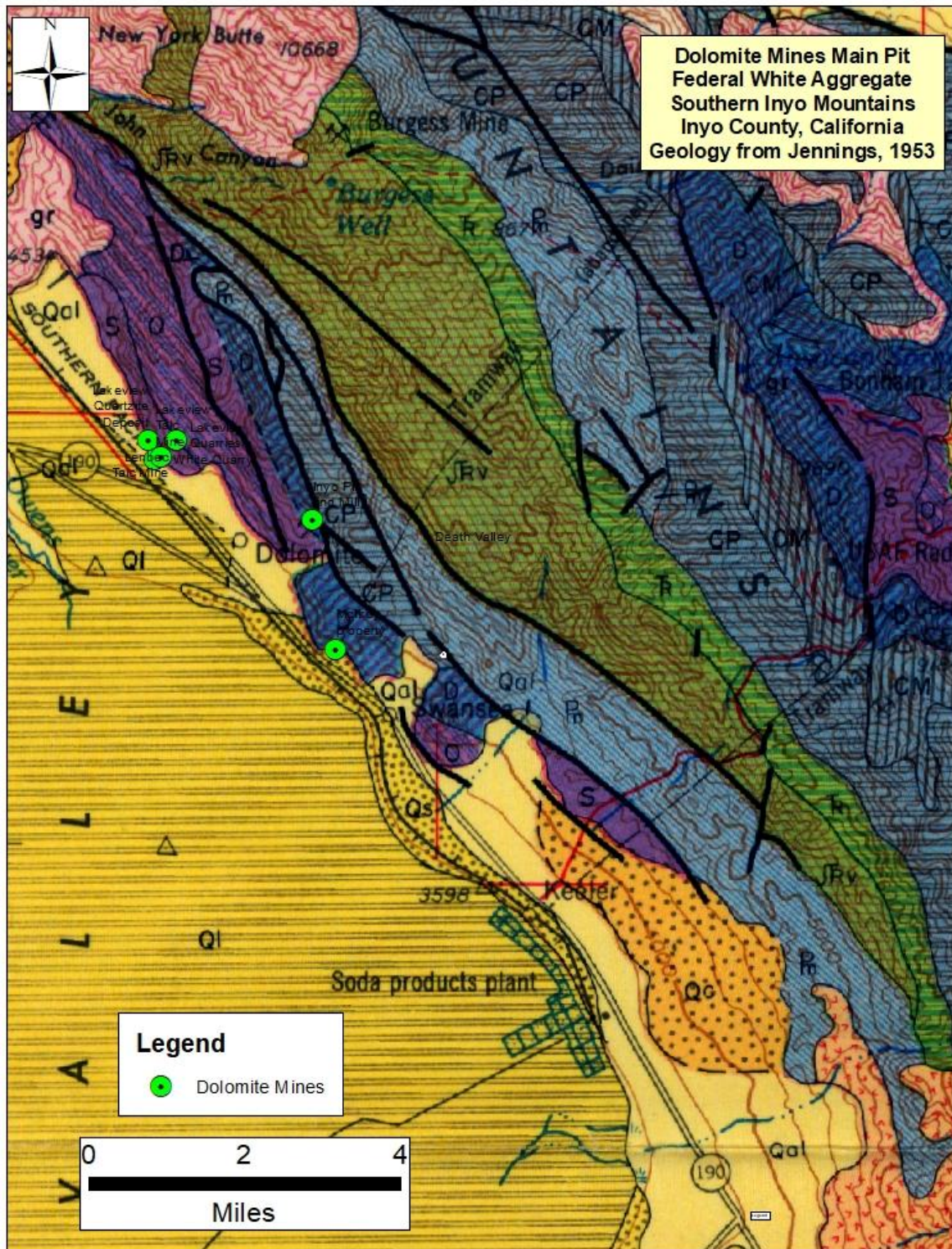


Figure 8. Regional geologic map of the Dolomite Mines. From Jennings, 1953.

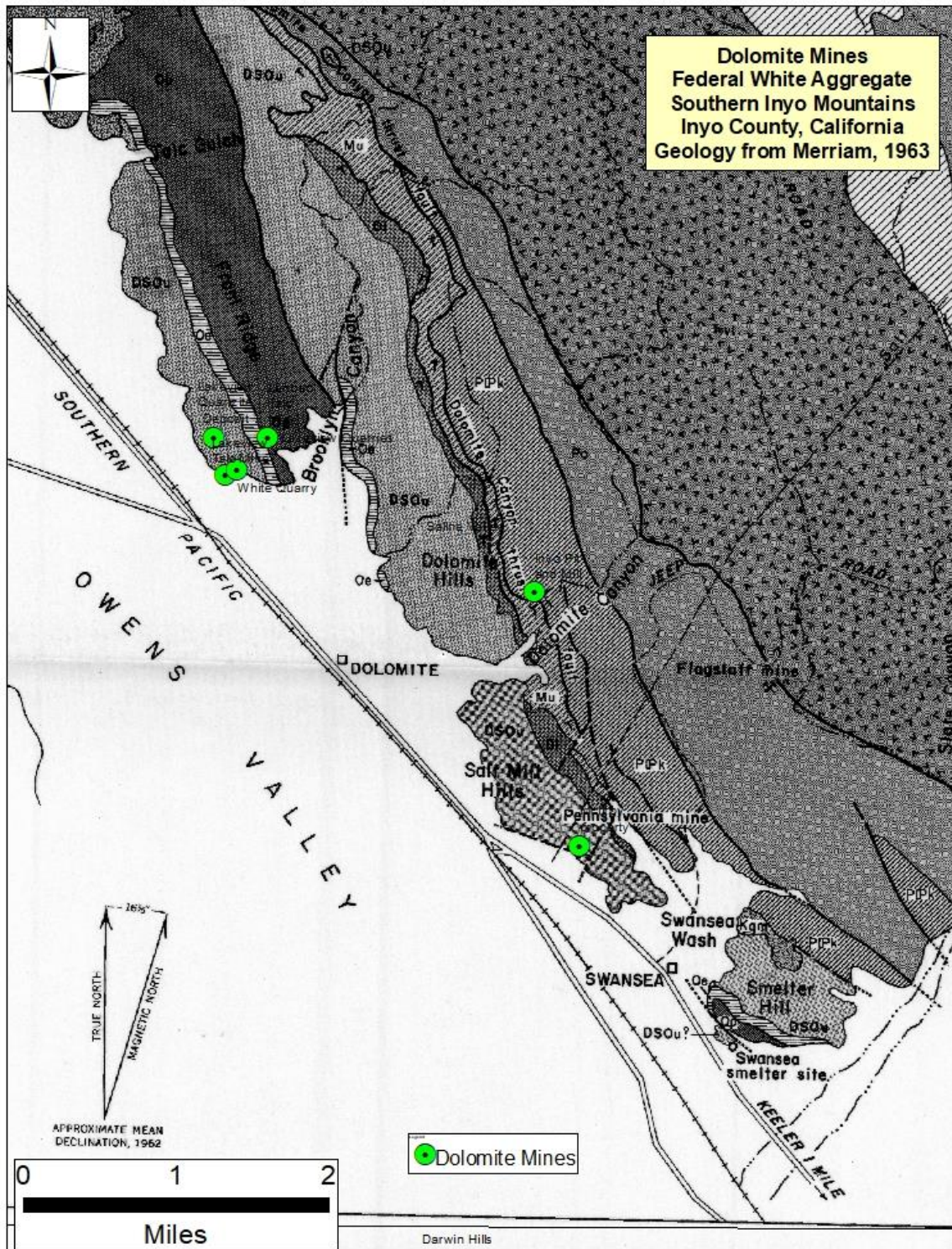


Figure 9. Areal geologic map of the Dolomite Mines. From Merriam, 1963.

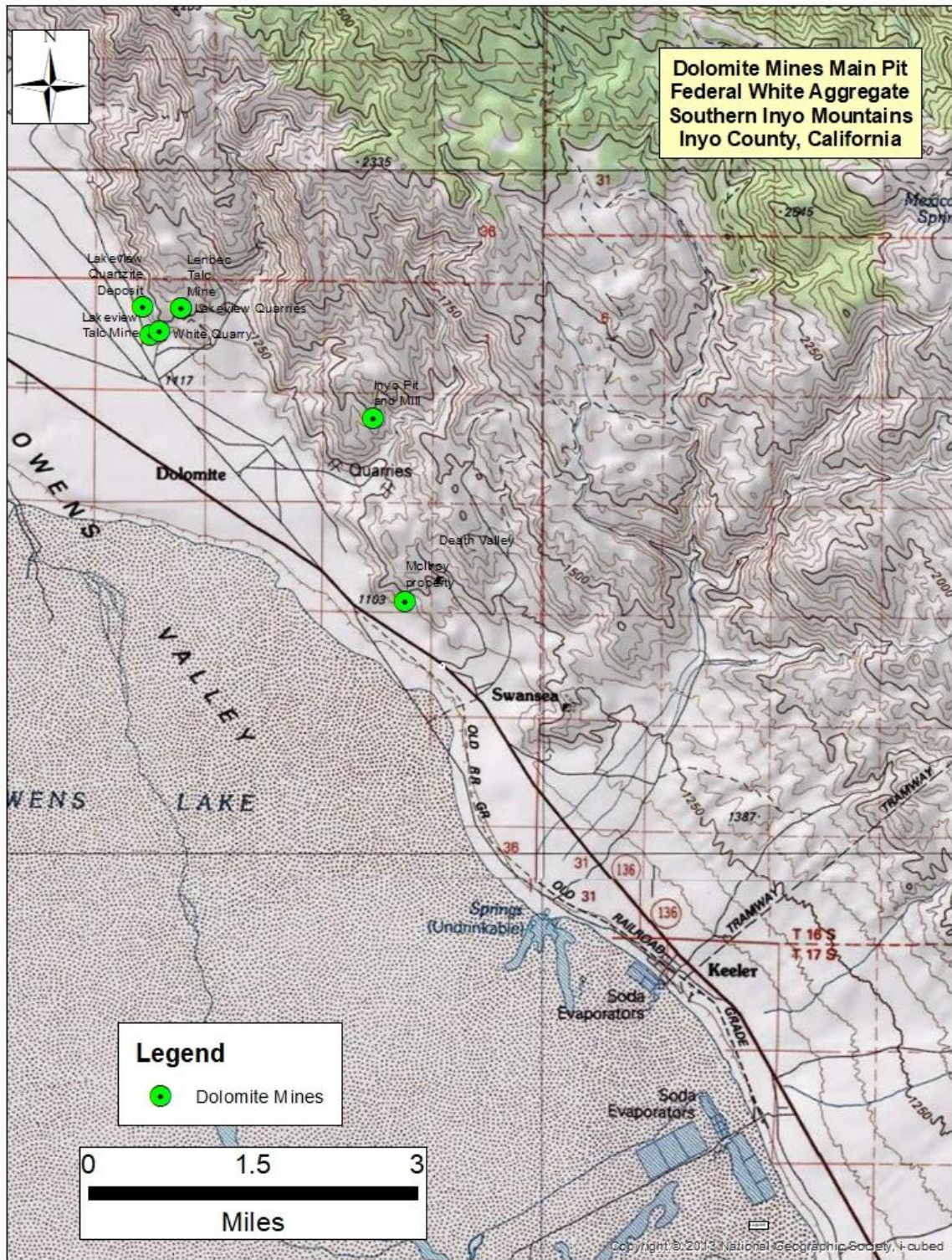


Figure 10. Topographic map of the Dolomite Mines.



Figure 11. Aerial photograph of the main pit for the Dolomite Mines.