

**Carroll E. O'Radberry & Associates**ENGINEERS • CONSULTANTS
LOS ALTOS • CALIFORNIA

INCORPORATED

BY: CCM

W.O.:

885.1

MINERAL:

Marl

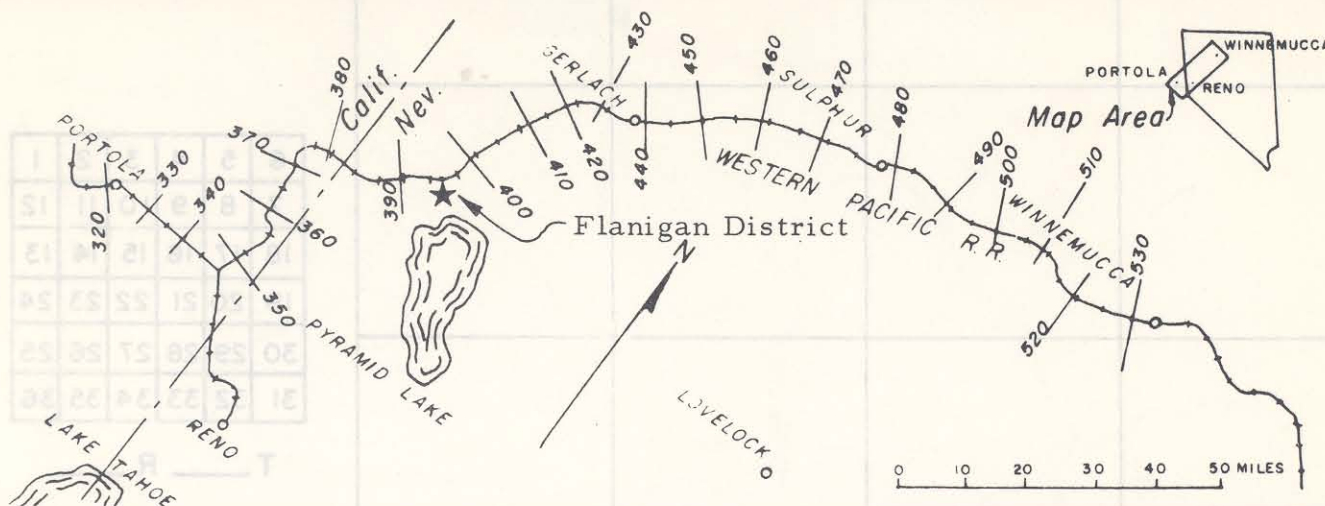
DATE: 8/3/64

MINERAL DEPOSIT ALONG WESTERN PACIFIC RAILROAD

PORTOLA TO WINNEMUCCA

PROPERTY NAME:

Flanigan District

**LOCATION:** Washoe County, Nevada

____ 1/4 OF ____ 1/4 OF SEC ____ TWP 27N RGE 19&20E

DISTRICT: Flanigan 4 miles NW of the "Needles" north
end Pyramid Lake**MILEPOST:** 390**POTENTIAL:**☐ LARGE☐ IMMEDIATE☐ MEDIUM☐ NEAR FUTURE☐ SMALL☐ DISTANT FUTURE☐ UNKNOWN

DESCRIPTION: Marl at Zenobia, Sand Pass and Sutcliffe and a clay deposit at Dusty Point NE of the Astor station on the SP Railroad. The marl or bog lime deposits occur as calcareous beds composed mainly of charra stems, a form of algae, and numerous gastropod shells, along with clay and diatomite as impurities. It accumulated in shallow embayments of the ancient Lake Lahontan. Humphrey (engineer Nevada Bureau of (over)

RESERVES:

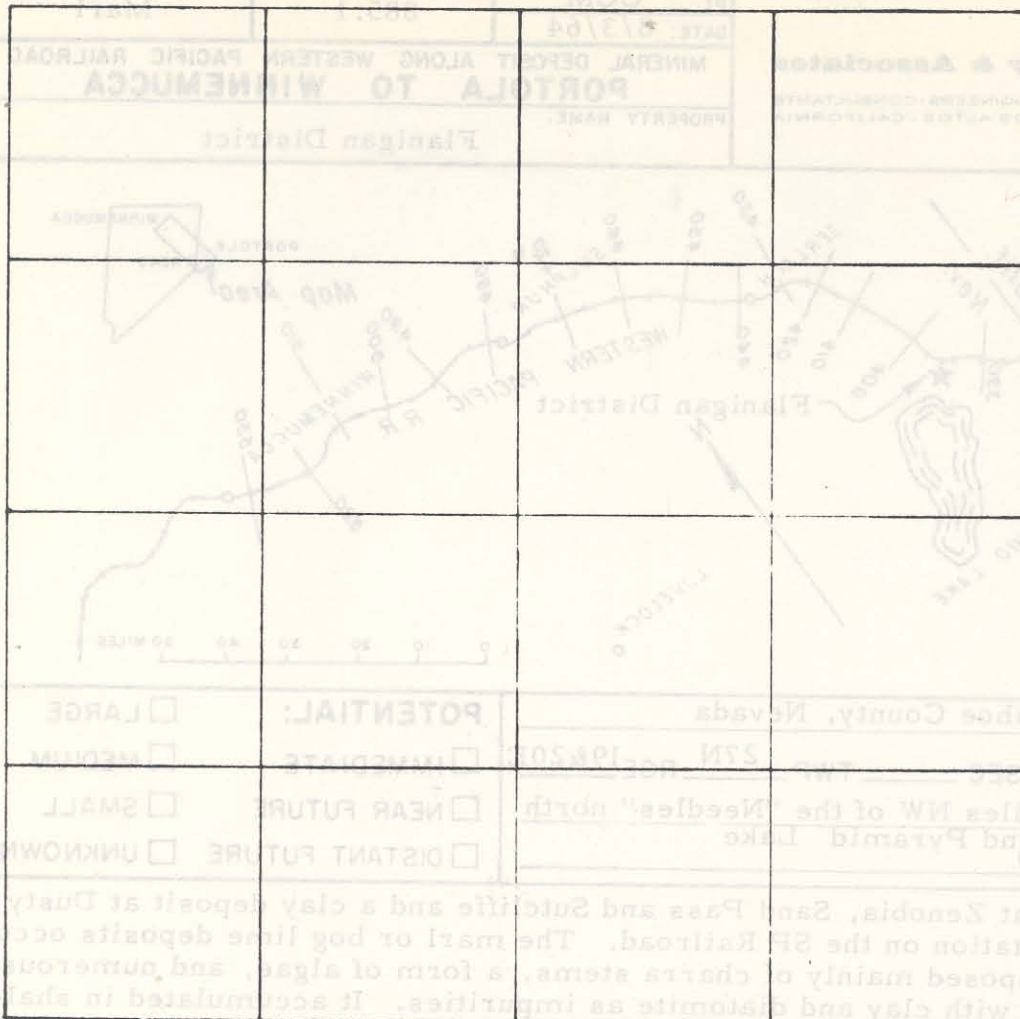
ACCESS: Road could be constructed across lake bed to reach Western Pacific Railroad 4 miles to the northwest at a point about 4 miles northeast of Flanigan. Property is close to Southern Pacific Railroad, Fernley-Lassen branch.

OWNERSHIP: Claims first discovered and located by Paul Butler in 1919.

SOURCES OF DATA: University of Nevada Bulletin 41, no. 9 (Geological and Mines Series No. 46) 1947, p. 62-64.

ECONOMICS:**CONCLUSIONS:**

THE WESTERN PACIFIC RAILROAD COMPANY



6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

T — R —

SECTION
SCALE: 1" = 1000'

Description (continued):

Mines) in 1945 found that the marl deposits were nearly all situated approximately 100 feet above the present level of Pyramid Lake and in valleys adjacent to that body of water. Some deposits have been deeply eroded since being exposed. The marl varies from seven to eleven feet in thickness and is intercolated with beds of hydrous silica in the form of diatomite. Both products are white and the silica must be carefully stripped from the lime to avoid dilution. The marl is noticeably heavier than the diatomite and can be recognized by the numerous small tube-like carbonate remnants of the charra plants which are contained in this deposit.

The marl can be mined to contain an average of 55 to 65 percent available calcium carbonate, and its mining, due to its softness, breaks it down to a powder thus not requiring crushing or grinding. Due to the organic origin of the Lahontan marl, its calcium carbonate content is readily available by rapid disintegration and solution in the soil, consequently it is a desirable neutralizer and soil conditioner.