

JONES LIMESTONE QUARRY

LOWER APPLEGATE

JOSEPHINE

Controlling interest acquired by T. T. Leonard and H. B.  
Jorgenson (September 1945)

Lower Applegate District  
Josephine County

**MAR 9 1939**

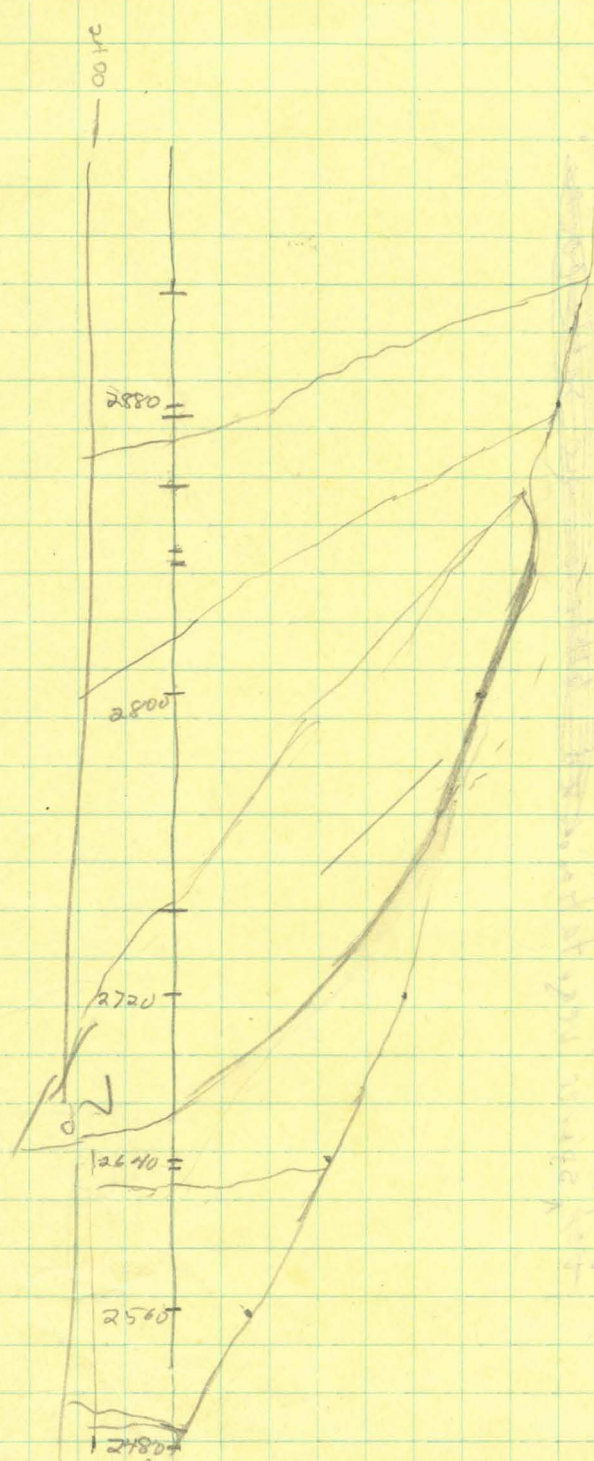
Name: Jones Quarry (Limestone)

Owner: F. I. and R. C. Bristol, Grants Pass, Oregon.

Location: On ridge north of Munger's Creek, a tributary to Williams Creek. 24 miles by road to Grants Pass and in Sec. 31, T. 38 S., R. 5 W. This Quarry is shown as Marble Quarry on the Grants Pass Topo. Sheet.

Area: 3 unpatented placer claims held by location, 60 acres. Elevation 2500 feet. No equipment. Road to the property. It is said that there are two kinds of marble at this Quarry; white and black and white.

Informant: F. I. Bristol. February 15, 1939.



*Faint handwritten notes on the right side of the page, including a vertical line and illegible text.*

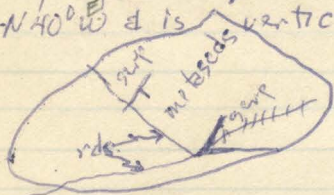
8-28-59

Jones L.S. quarry rd.  
creek crossing mi = 52.2  
elev. = 2320 (set altimeter)  
float mixture brown soil  
with fragments metacols,  
Talcylor <sup>metacols</sup> serp (?) with <sup>small</sup> sulphide needles,  
chert & impure quartzite & marble  
meta sed. predominate, then serp  
type rock & few boulders marble

(Meet T.T. Leonard & talk re Jones & Dallas lime incl. # planned cascade cement Co)  
52.2 = spur road 2370A.  
heading → N45°W & have  
10° raise first 200'

grade of main road is 5° (7%)  
rock in place at junction is <sup>90'</sup> width of  
ms.

(quartzite & gneiss) striking about N28°E  
& N60° dip near vert. <sup>To 30°E</sup> Jointing & strikes N28°W  
& dips 45° N. Ms. is surrounded  
by serpentine → E contact strikes  
N40°W & is vertical



going out spur across section  
40' ms  
40' serp, then ms float including gneiss  
contact all talcylor serp & quartzite

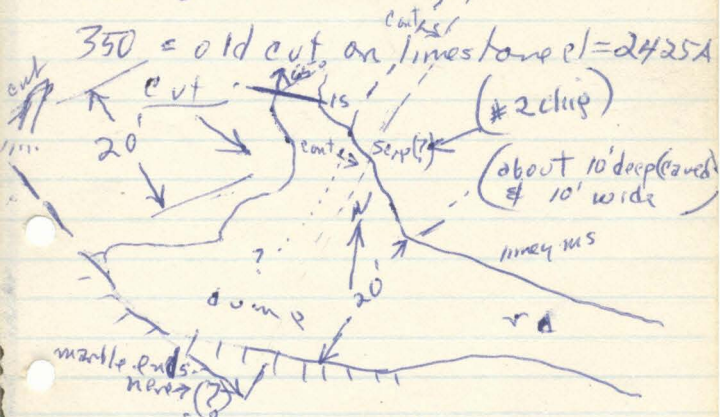
210' = outcrop quartzite  
fractured apparent strike =  
N40°E dip 45°SE

qtzite is relatively pure & fine grained

240' = talcy serp flt & wollastonite or  
tremolite rock (see chip #1)

260' = banded mantle float in  
dnew road → N57°W  
grade flattens to 5° float mixed  
with qtzite & gneissic frag. mcs.

230' get impure limey mcs



strike of mantle appears to be  
N33°E & dip near vert  
(may not be impl. sep.)

fault(?) upper end of cut strikes  
→ N70°W & dips N65°

(3)

Jones marble

continuing to pass across section  
410' = small cut in marble  
gray with small 1 to 6"  
thick lenses white quartz  
segregations?

cut is about 15' long & 5' deep

→ N40°E 8' above level of main cut  
& 40' west

strike of marble as seen from  
qtz inclusions = N 10°<sup>20°E</sup> & dip 60°

to 78°E

Has appears to be edge of  
marble get mixed with  
marble float edge of marble  
outcrop strikes → N  
(with slope)

south termination must  
be just below cut at end of  
spur road.

53' ms float argillite? (#3 chips)

675' hit marble gulch at 2430A

~~flow~~ N35°W → up stream

predom float in gulch is

serp #4

(time to quit for now)

elev. main quarry bench = 2630A

(4)

Jones marble 9-10-59

Distance at S Marble Gulch ~~to~~ crossing  
is 56.55

56.60 = spur road to send out

56.69 = gully & curve on rd  
mapping from spur to gully:

elev. at spur = 2350 (A). road  $\rightarrow$  E  
on 10% grade (5.7')

rock at  $y$  = serp to  $y + 50'$

Then gentle gully of  $ms$  (?)

contact = gully + 10' at large  $F$  in  
 $ms$  (?) is fine grained gray ~~metasand~~<sup>in part</sup>  
gneissic of schistose as  $Ms$

$y + 200$  = turn  $\uparrow$  new heading

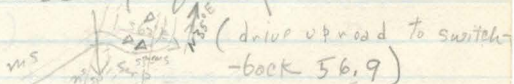
to gully 56.69  $\rightarrow$  N 37° E, 7% grade

Metasand (?) at  $y + 215$  strike about  
N 10° E & dip 65° SE (?) (apparent),

$y + 375$  = gully 56.69 = 2390 (A)

to here is gneiss & phyllite ( $ms$ ) with  
minor amt heavy serp impregnated  $ms$

(?) is bench or nose below  
road made up of serp.



Map between 56.69 & 56.9: (875')

Gully 56.69 + 130' = curve. To curve

$\rightarrow$  S 62° E, beyond curve = N 55° E.

% grade  $\approx$  8 to 10°

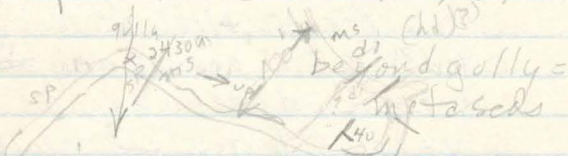
rock = landslide debris of mixed serp  
or, ~~g~~ gtrite, & gneiss ( $ms$ )

bulk of rock below surface  
except is serp sax in red soil to  
lower point of curve ~~gully~~ +100 then  
phyllitic ms & quartz incl. (?)

Gully 56.69 + 400' = Gully 2430A

To here largely serp with incl.  
& flt. of ms road heads  
down → 545° W at 10%

& up → 551° E at 9% grade



including sch, ar, ms?

- ms { 56.69 + 650 = fine gr. like (?) like hd?
- " + 770 = schist striking
- N 35° E & dipping 40° SE (good)

To car at switchback 56.9 get  
940' (?) elev = 2490 (A) lunch  
2490 (A) 1 PM.

curve has spiral shape  
ie comes back toward self → N 50° W  
has about 60' dia. Then

road heads → N 33° W. From

switchback curve ± 100 i.e.

Quartzitic rock in N side from 30' NW  
of dog leg where trailer was parked  
to 45' (about 15 to 20' wide)



(5)

Jones Marble 9-10-59 PM

Then ms; an sch, qtz

Drive to 57.17 = Gully 2600 (A)

+ 100' map from switchback 56.9

To car = 1230' stretch:

switchback + 100' MS strike N35°E

2nd dip 60°SE fair

switchback 56.9 + 200 = in roads about

100' apart + 255 = fine dark gray

dioritic type alt or dike?

56.9 + 360' = dark gray "birdseye purple"

#4 appears to be metamorphic origin (?) road → N30°W 9%

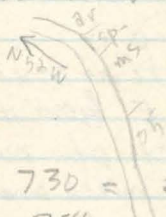
at 490' = hard serp contact rx.

vert contact? → N50°E?

50' serp then 50' MS incl then

20' more serp to 600' = slight

turn road → N52°W



then argillite to

680' then sheared serp

700' = gully in sp

road turns → N80°W

730 = argillite again

780 = red soil & serp float

820 bend in rd at gully? →

580°W

900 to 970 = incl 3 ms (aq) then red sax

serp 935 rd turns to → N75°W

1030 rd turns → N63°W

(still bold serp sax)

1150 = gully <sup>(2600A)</sup> rd turns to  
→ S50°W.

To car 1235 (checks)

Drive to main quarry bench  
(57.2 mi) elev = 2640(A).

Gully 2600 A + 150 = Y #  
turn of road left branch

(abandoned) goes straight &  
rt branch <sup>uv</sup> <sup>us</sup> → N75°W to quarry  
bench <sup>200</sup> <sup>100</sup> <sup>150</sup> = Serp contact  
at 150 →

about N20°E? dip SE?

to west is highly fractured &  
stabilized ms. (note) is broad  
contact zone containing Serp to  
180'. at 250' = spur rd to

→ N80°E at junct. =

qtzite & or qtzite strikes

N10°E & dips 80°E (good if in place)

300' near contact of marble  
large boulders CaCO<sub>3</sub> & mixed brown  
soil

335 = edge quarry of branching rd  
to upper levels → N65°E

quarry bench → around  
nose of marble ridge from  
E to W starting at Y for 0

(6) Jones marble 9-10-59 PM

$0 + 60' = 10''$  seam green  
metased? or dike striking  $N 10^{\circ} W$   
& dipping about  $80^{\circ} E$

190' = wedge quarry bench  
where patch of quartzite or quartz  
crops out it is about 20' wide.  
Marble on W side quartz banding  
strikes  $N 37^{\circ} E$  & dips  $72^{\circ} SE$   
marble forms bluffs to west & appears  
about 275' wide at this point

9-11-59 AM

el checked at junc Kincaid rd &  
Wms Hwy (1477) then at  
junc Chrom rd & Marble road where

Crosses S. Marble gulch = 2160

should be 2320 according to  
Map ?? Map must have  
some errors at this area

Mi at ck = 208.72

Main Quarry bench 2450(A)

Go to S. Marble gulch at 2410(A)

el at junc. of ~~streams~~ gullies right  
fork is main one. float in  
left or S. fork is argillite, quartzite,  
serp and metaols. The right is larger  
however at present both are dry  
most abundant rock in right

Foot is Serp. Other rocks mentioned  
in L.fk. are present and in addition  
vein quartz is present in the R.fk. gully  
and on the E bank.

Main rock to E is fine gr. tuff  
green serp like rock (#5)

proceed E starting at forks as 0

0 + 125' →  $565^{\circ}E$  - qtz float ends

150' = talcy schist metased.

qtzite & ? mv or meta-ss?

float

200' = talcy. ms

300' = serp(?) like #5. This  
could be greenstone i.e. metacols

Note some hd float.

now heading  $540^{\circ}E$ .

400' = edge or near edge of marble  
heading about  $545^{\circ}E$

550 in marble bluffs

strike of <sup>thin</sup> qtz layers:  $N30^{\circ}E$

dip  $50^{\circ}SE$ .

600 = west edge of quarry bench

2450(A) (set) as was about 20' higher)

#

start mapping road to upper  
part of deposit.

At quarry bench 2450(A) = 9.44,

Road heads →  $N70^{\circ}E$  for 60

7

Jones Marble 9-11-59 PM

Then  $N55^{\circ}E$  for 80', a V grad for 140' is about 14% ( $8^{\circ}$ )

Rock is marble float in brown soil  
Then metabeds then serp float at 140.

Road heads  
Then  $N27^{\circ}E$  at  $12\frac{1}{2}^{\circ}$  or 23% grade for 200'

now in serp

At car

mi = 9.51

Drive up to

(pack down)

from 350' road trends  $N60^{\circ}E$  at 14% or  $8^{\circ}$  for 150' is to 500'

(still serp soil)

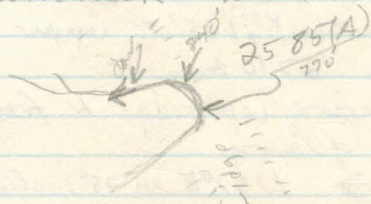
Then road  $\rightarrow N48^{\circ}E$  on the same grade for 270' or 770' total at switchback 9.6 on ridge, (100' Dia)

Rock changes from red soil & serp soil to gray soil and mv? or 2

(at 700') hard serp contact rock

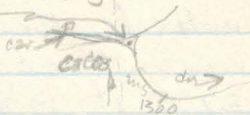
grade increases to about 30% or 16' in

switchback where curves to NW



From 840' road heads  $S80^{\circ}W$  for 60' (900) = car so drive on up again

To upper quarry site  
 elev at junc of rds at  
 switchback just below end rd is  
 2665 (A)



dist Back to 900' is 445' from elev.  
 Geol at 900' deep to a soil  
 with rock fragments composed of  
 a talcy schist (From 900 to 1060  $\rightarrow$   $587^{\circ}W$   
<sup>120' grade or 20%</sup>)  
 Begin to get argillite float at  
 1000

from 1060 float is all argillite road  $\rightarrow$   
 $N80^{\circ}W$  for 60' then  $\rightarrow$   $N83^{\circ}W$   
 & flattens out to  $11^{\circ}$  for 175'

At 1280 see little quartzite float  
 mostly soil some argillite &  
 marble

from 1300' road curves right  
 to  $N20^{\circ}W$  (100' diam) & steepens to  
 $14^{\circ}$  or  $25\%$  for 95' to 2665 (A)  $\nearrow$   
 then (in mantle)  $N65^{\circ}W$  ~~to~~  $75^{\circ}$

To car then  <sup>$N45^{\circ}W$</sup>  125' to upper quarry  
 bench 2710 A

Measuring up ridge N from  
 upper quarry

100'  $\rightarrow$   $N27^{\circ}E$  on  $25^{\circ}$  incline

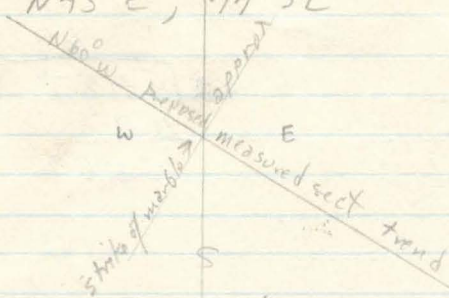
strike of marble =  $N35^{\circ}E$   $45^{\circ}SE$  good

Then 100'  $\rightarrow$   $N30^{\circ}E$   $17^{\circ}$  incline to 2770 (A)

8

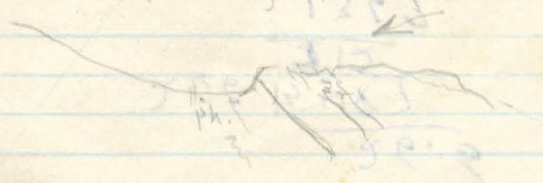
North

Strike of marble at this point on ridge  
is  $N43^{\circ}E$ ,  $44^{\circ}SE$



Off set 10' to ridge & measure  
up to 90' & run into biggest  
rattler's den have ever seen  
Probably many snakes saw 3  
& heard others, really shook me!

walk out to saddle i.e. N edge  
of lime at 2800 ft is  
about 500' from upper quarry  
site. In saddle is phyllitic m<sup>sch</sup>  
talc. w sericite striking  $N65^{\circ}E$   
& dipping steeply SE ( $25^{\circ}?$ ).  
Edge of marble has ~~not~~ <sup>15'</sup> back-  
drop on ridge forming saddle



4-18-62 Jones Marble  
to 2280 on chrome Rd  
S from S marble Gulch  
narrow zone of soapstone  
crops out in road about  
4 feet wide (?). strike is about  
N10°E.

To here has been float  
(consisting of serpentine, metaseds  
(argillite gneiss) and minor diorite  
like dike rock.)

Talc + 50' = quartzite outcrop  
east side of ancient fir tree (on road)  
Fir + 20' = contact of ms with serp.  
serpentine (weathered ~~into~~ olivine)  
is about 20' wide on road. Then  
more ms (qtzite etc)

Fir + 200' = another talc zone  
similar to one back down road  
about 100 yds, ~~no~~  
instead this is east edge of 70'  
wide serp body west contact  
has similar talcy alt.

Then more metaseds in part mixed  
with talcy sed's. Then to  
curve in rd 2400 (A) is serpentine  
zone about 200+ feet wide

Then gneissic metaseds  
& also a serp mixed  
2500 = meta ss blocky fractured  
ss return to vehicle



back to main rd distance  
= 2200 feet  
elev at culvert = 2240 A at 12:30

Drive up to quarry bench 2530  
altimeter reads 2530 ?!  
so set 100' higher!  
#

Drive up to upper bench  
see two big rattlesnakes in  
crevasses in Marble  
check geol on upper rd  
at upper switchback head  
east down to N. Marble gulch  
hit gulch at 2550 A in  
serp. M.S. & serp float between  
#

Up N. Marble gulch through  
not a andesite, serpentine, quartzite,  
gneiss, more serpentine, argillite  
ite at 2880 is gold prospect  
head of gulch. Old mine car wheels  
and axels, home made wheel barrow  
Dump mixture of chloritized M.S.  
serp. very little qtz

→ NW Caved tunnel in argillite strike =  
N65°E, dip 50°NW

Water coming out of caved tunnel  
open end of caved shaft about  
Mineralization assoc. w serp. and  
or contact.

Two old cabins above

## CRIB MINERAL RESOURCES FILE 12

## RECORD IDENTIFICATION

RECORD NO..... MOI3772  
 RECORD TYPE..... XIN  
 COUNTRY/ORGANIZATION. USGS  
 FILE LINK ID..... CENSV  
 DEPOSIT NO..... DDGM 100-347  
 MAP CODE NO. OF REC..

## REPORTER

NAME..... LEE, W  
 DATE..... 74 01  
 UPDATED..... 81 03  
 BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

## NAME AND LOCATION

DEPOSIT NAME..... JONES MARBLE DEPOSIT

COUNTRY CODE..... US  
 COUNTRY NAME: UNITED STATES

STATE CODE..... OR  
 STATE NAME: OREGON

COUNTY..... JOSEPHINE  
 DRAINAGE AREA..... 17100309 PACIFIC NORTHWEST  
 PHYSIOGRAPHIC PRDV..... 13 KLAMATH MOUNTAINS  
 LAND CLASSIFICATION..... 49

QUAD SCALE            QUAD NO OR NAME  
 1: 62500            OREGON CAVES

LATITUDE            LONGITUDE  
 42-13-22N            123-20-08W

UTM NORTHING        UTM EASTING        UTM ZONE NO  
 4674350.            472300.            +10

TWP..... 38S  
 RANGE..... 05W  
 SECTION.. 31  
 MERIDIAN. W.M.

POSITION FROM NEAREST PROMINENT LOCALITY: NE1/4

## COMMODITY INFORMATION

COMMODITIES PRESENT..... MBL

ANALYTICAL DATA (GENERAL)  
99+ % CaCO3

EXPLORATION AND DEVELOPMENT  
STATUS OF EXPLOR. OR DEV. 5

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:  
CHEMICAL SEDIMENTARY  
FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA  
SIZE OF DEPOSIT..... SMALL  
MAX LENGTH..... 1500 FEET LONG  
MAX WIDTH..... 200 FEET WIDE  
MAX THICKNESS..... 200 FEET THICK

DESCRIPTION OF WORKINGS  
SURFACE

COMMENTS (DESCRIP. OF WORKINGS):  
THREE QUARRY LEVELS

CUMULATIVE PRODUCTION (ORE, COMMOD., CONC., OVERBUR.)

ITEM	ACC	AMOUNT	THOUS. UNITS	YEAR	GRADE, REMARKS
15 MBL		SMALL		1950-1980	

RESERVES AND POTENTIAL RESOURCES

ITEM	ACC	AMOUNT	THOUS. UNITS	YEAR	GRADE OR USE
1		ESTIMATED 5 MILLION TONS			RESERVE

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... PERM-TRI  
HOST ROCK TYPES..... METASEDIMENTS

LOCAL GEOLOGY

NAMES/AGE OF FORMATIONS, UNITS, OR ROCK TYPES  
1) NAME: APPLIGATE GROUP  
AGE: PERM-TRI

## CRIB MINERAL RESOURCES FILE 12

## RECORD IDENTIFICATION

RECORD NO..... MO13773  
 RECORD TYPE..... XIN  
 COUNTRY/ORGANIZATION. USGS  
 FILE LINK ID..... CONSV  
 MAP CODE NO. OF REC..

## REPORTER

NAME..... LEE, W  
 DATE..... 74 01

## NAME AND LOCATION

DEPOSIT NAME..... BRISTOL QUARRY

*Former: Jones Marble Quarry*

COUNTRY CODE..... US  
 COUNTRY NAME: UNITED STATES

STATE CODE..... OR  
 STATE NAME: OREGON

COUNTY..... JOSEPHINE

QUAD SCALE  
 1:

QUAD NO OR NAME  
 OREGON CAVES

LATITUDE  
 42-13-28N

LONGITUDE  
 123-20-08W

UTM NORTHING  
 4674550.

UTM EASTING  
 472300.

UTM ZONE NO  
 +10

TWP..... 38S  
 RANGE..... 05W  
 SECTION.. 31  
 MERIDIAN. W.M.

POSITION FROM NEAREST PROMINENT LOCALITY: W1/2 NE1/4

## COMMODITY INFORMATION

COMMODITIES PRESENT..... MBL

## EXPLORATION AND DEVELOPMENT

STATUS OF EXPLDR. OR DEV. 8

COMMENTS(DESCRIPTION OF DEPOSIT):

LENS OF MARBLE IS ABOUT 1700 FEET LONG AND 300 FEET WIDE, AND 200 FT. THICK.

PRODUCTION  
YES

ANNUAL PRODUCTION (ORE, COMMOD., CONC., OVERBURD.)

PRODUCTION COMMENTS.... SMALL AMOUNTS USED FOR HEADSTONES.

GEOLOGY AND MINERALOGY

GEOLOGICAL DESCRIPTIVE NOTES. DEPOSIT IN LENTICULAR INTERBED IN THE HIGHLY DEFORMED AND METAMORPHOSED ROCKS OF THE APPLIGATE GROUP OF UPPER TRIASSIC AGE. ROCK HAS BEEN COMPLETELY RECRYSTALLIZED TO A GRANULAR WHITE MARBLE.

GENERAL COMMENTS

FORMERLY KNOWN AS JONES MARBLE DEPOSIT.

GENERAL REFERENCES

1) ORE BIN, VOL. 24, NO. 10, P. 157

# State Department of Geology and Mineral Industries

80  
"Jorg"  
"GEORGE" BLEECK *as of 9/80*

1069 State Office Building  
Portland 1, Oregon

## JONES LIMESTONE QUARRY

## LOWER APPLGATE DISTRICT

~~T. T. LEONARD~~

Owner: F. I. Bristol and Mrs. F. I. Bristol, Rogue River, Oregon *and T. T. Leonard, Salem, OR.*

Location:  $W\frac{1}{2}$  NE $\frac{1}{4}$  sec. 31, N $\frac{1}{2}$  SE $\frac{1}{4}$  sec. 31, T. 38 S., R. 5 W.

Area: Three placer claims, two of which have their long direction north-south on the  $W\frac{1}{2}$  NE $\frac{1}{4}$  sec. 31, T. 38 S., R. 5 W., and one has its long direction east-west on the N $\frac{1}{2}$  SE $\frac{1}{4}$  of the same section. *Claims were amended by Bleeck about 1984.*

History: The quarry was originally worked by Al and Lum Jones (deceased) as a source of monumental stone. They made a living for 30 years, quarrying the stone, and dressing it by hand at their home. The claims were purchased by Bristol, from the Jones Brothers, they are held by location filed at Grants Pass, Oregon.

Winchell 1/ reported on this limestone deposit in 1914 as follows:

"For several years a deposit of marble about 4 miles west of Williams has been exploited by a man named Jones, so that the deposit has come to be known as the Jones marble quarry. It is in section 31, T. 38 S., R. 5 W., at an elevation of about 2650 feet, as measured by barometer. The limestone here strikes N. 45° E., and dips about 65° SE. The rock is a variegated marble in this opening, being white and blue; in some places it is stained by limonite derived from the alteration of pyrite. The marble forms a lens which is about 2000 feet long and about 300 feet wide as a maximum. At the northeast end it is cut off abruptly; at the southwest end it tapers to a point. It forms a cliff on the side away from the dip, that is, on the northwest side. It contains argillaceous streaks and "knots" in some places. It is said to be on railroad land."

"This deposit has been used under very unfavorable conditions. It is about an eighth of a mile from the nearest wagon road, and it is about six miles from the place where the stone cutting and polishing has been done. Naturally the results have not been satisfactory, although the stone is of good quality."

"An analysis of this marble made by R. C. Wells (U. S. G. S. Bull. 419, p. 209, 1910) of the U. S. Geological Survey resulted as follows:

### Composition of Marble near Williams.

SiO <sub>2</sub>	-----	0.13
Al <sub>2</sub> O <sub>3</sub> + Fe <sub>2</sub> O <sub>3</sub>	-----	0.38
MgO	-----	none
CaO	-----	55.55
H <sub>2</sub> O	-----	0.26
CO <sub>2</sub>	-----	43.63
		99.95

"The analysis shows that the marble is over 99 percent pure calcite."

Hodge reported on the same property in 1936 as follows: 2/

"This quarry is about 24 miles by road south of Grants Pass in sec. 31, T. 38 S., R. 5 W., 4 miles west of Williams by poor dirt road. Plate 57."

"The marble outcrops at 3400 feet elevation. The quarried blocks have been rolled down the steep hill to the old chromite road below, where it was loaded onto trucks and wagons. By this slow and laborious method only small amounts have been taken out."

"The lower outcrops show a very pleasing black and white variegated marble, but that from higher up the hill varies from gray to white. It appears to be quite pure. The limestone occurs as beds of variable thickness, from 6 inches to upwards of 100 feet, in schists and slates. The general strike is about N. 40° E., the dip 45° SE., nearly parallel to the mountain slope. The ridge summit is a bare limestone hogback forming a 50 foot cliff. In places there are numerous knots of pyrite and quartz which replace the limestone. Utilization of these deposits would necessitate construction of a tram one-third to one-half mile long and reconstruction of about three miles of road. The total truck haul to Grants Pass would be 26 miles."

The property is idle, spring 1940.

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Vertical difference in elevation between the low and highest points of limestone outcrops on the claims is 550', so that an average thickness of 100', and an average tonnage of 10,000,000 is not out of reason. The owners claim a reserve of 5,000,000 tons, which on the basis of our figures would permit 50 percent inclusions of shaly material. Should the rock be used for paper-mill rock, or exceptionally high-grade consumers, the estimate of 5,000,000 tons is still reasonable.

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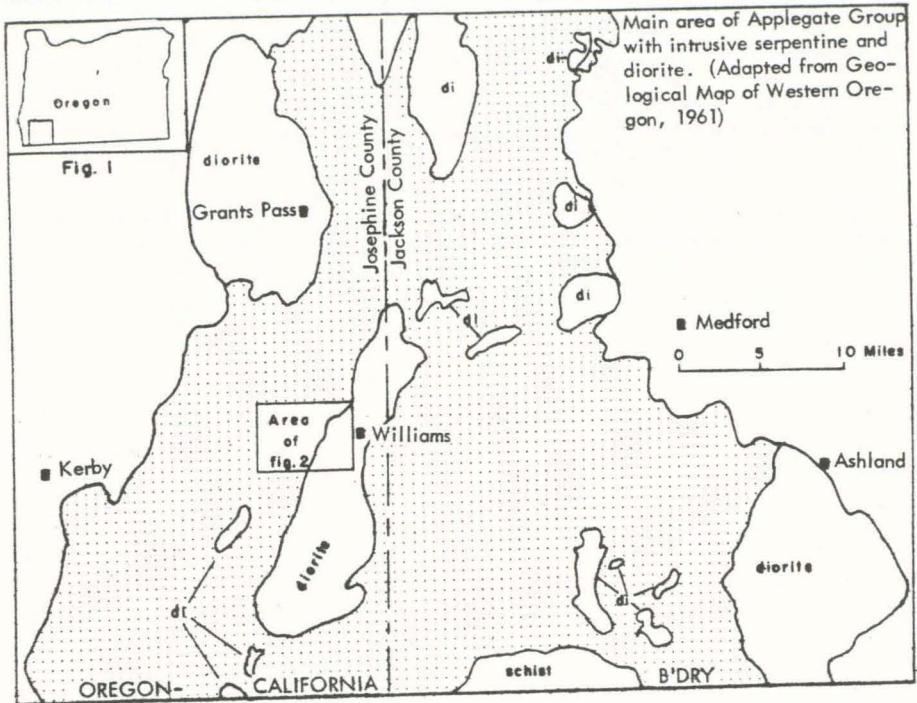
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Report by: Ray C. Treasher, 3/15/40.



The former reported that about 5,000 tons were ground and shipped agricultural lime in 1939-40.

Geologic setting

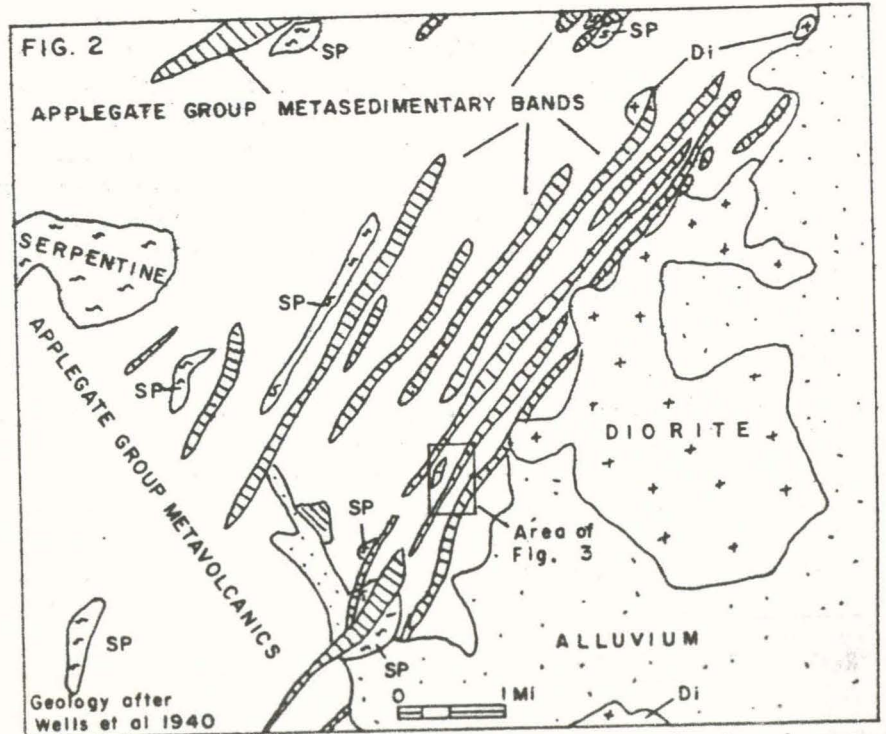
The area is mountainous and covered by fairly dense forest. Marble stands in relief with very little soil cover and sparse vegetation. The deposit is a lenticular interbedded in the highly deformed and metamorphosed rocks of the Applegate Group of Upper (?) Triassic age. In addition to marble, rock types of the Applegate Group in the area include argillite, quartzite, sandstone, schist, gneiss, and metamorphosed and lavas. The metavolcanic rocks are difficult to recognize and distinguish, owing to metamorphism. Wells and others (1940) mapped the entire portion of the Applegate Group as metavolcanics (Figure 2). The area mapped in this study (Figure 3) appears to be underlain largely by metamorphosed sediments.

The marble deposit is less than a mile west of an elongate stockwork of diorite that underlies the Williams Valley, extends north across the Grants Pass Valley, and south into the rugged Sugarloaf-Grayback area of the Siskiyou Mountains. The area is also intruded by numerous sill-like bodies of serpentine which appear to be more or less conformable to the foliation of the rocks of the Applegate Group. Later dikes of dioritic composition, probably related to the Williams diorite stock, are less common than the serpentine. Variable talcky alteration is found in the narrow serpentine bodies and along contacts of the larger bodies. Soapstone that is suitable for carving has been found in such areas.

Just to the south of the marble deposit, there is a band of limy quartzite as much as 400 feet wide. It contains numerous lenses and thin beds of recrystallized limestone which has similar texture to the Josephine marble deposit. Although this limy quartzite layer has no surface connection with the marble deposit, it is parallel to it and may represent a folded limb of the same sedimentary horizon. The quartzite grades from a normal granular quartzite to a very fine-grained, banded chert that may have originated as a non-clastic precipitate more or less contemporaneous with the deposition of the limestone that later was converted to marble.

Structure

The layered rocks of the Applegate Group strike north to north-northwest and generally dip at high angles. Dips to the southeast are the most common in the area mapped. The attitude of the sill-like serpentine bodies



Geologic Map of a Portion of the Grants Pass Quadrangle

# ● The Ore Bin ●

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The ORE BIN  
Volume 24, No. 10  
October, 1962

## JONES MARBLE DEPOSIT, JOSEPHINE COUNTY, OREGON

By Len Ramp\*

### Introduction

The economic geology of the Jones marble deposit is part of a larger study designed to gain more detailed information about the sedimentary portion of the extensive Upper (?) Triassic Applegate Group rocks (Figure 1) of southwestern Oregon. Detailed mapping in areas that contain limestone are thought to be the best possible sources for stratigraphic and structural evidence, and because nearby diorite intrusives may have been favorable host rocks for mineralization.

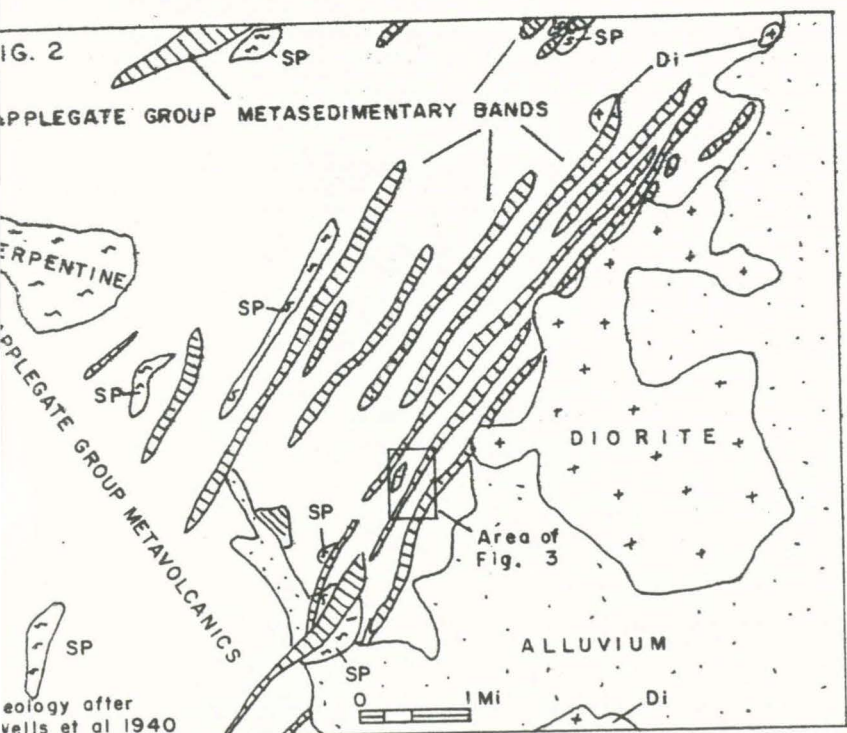
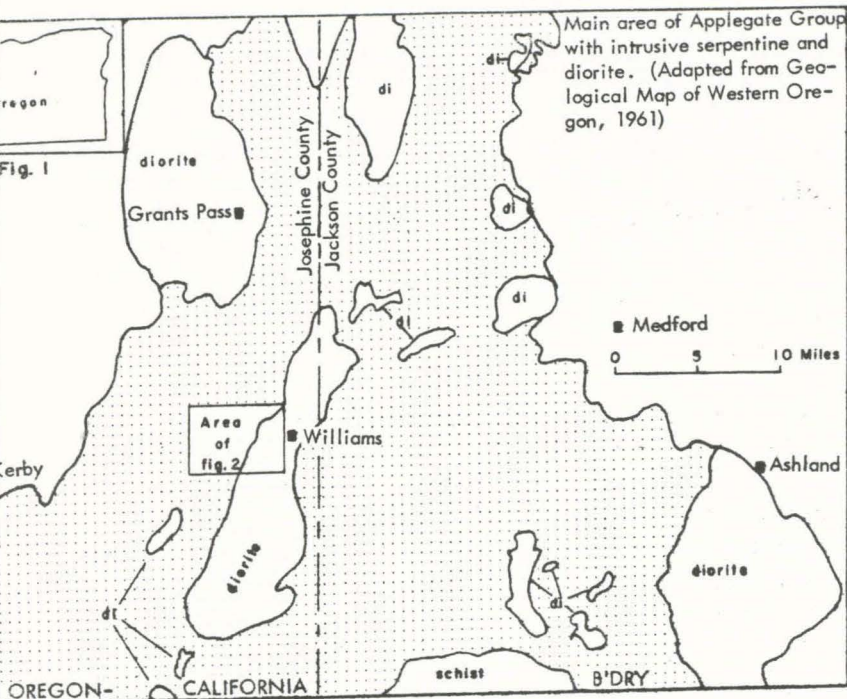
### Location

The Jones marble deposit is located 4 miles west of Williams and 16 miles due south of Grants Pass, Oregon, in the NE $\frac{1}{4}$  sec. 31, T. 38 S., R. 5 W. (Fig. 1). The deposit lies between 2,300 and 2,900 feet elevation on the nose of a north-trending ridge. From Grants Pass it can be reached via Oregon highway 238 for 13 miles, south on Water Gap road 6 miles to Williams, then west on Kincaid road 3 miles to Marble Gulch and up the mine road about 1 mile. Total distance from the deposit to the railroad at Grants Pass is 23 miles. The area is on the Oregon Caves quadrangle 15-minute topographic map.

### History

The deposit has been described by Winchell (1914), Hodge (1937), and Treasher (1952). According to Treasher, "The quarry was originally worked by Al and Lum Jones (deceased) as a source of monumental stone. They made a living for 30 years, quarrying the stone and dressing it by hand at their home." In 1934 the deposit was purchased by F.I. Bristol. Present owners are Mr. Bristol, Grants Pass, and T. T. Leonard, Salem.

\*Resident Geologist, State of Oregon Dept. Geology & Mineral Ind.



Geologic Map of a Portion of the Grants Pass Quadrangle

The former reported that about 5,000 tons were ground and shipped for agricultural lime in 1939-40.

### Geologic setting

The area is mountainous and covered by fairly dense forest. The marble stands in relief with very little soil cover and sparse vegetation. The deposit is a lenticular interbed in the highly deformed and metamorphosed rocks of the Applegate Group of Upper (?) Triassic age. In addition to marble, rock types of the Applegate Group in the area include argillite, quartzite, sandstone, schist, gneiss, and metamorphosed tuffs and lavas. The metavolcanic rocks are difficult to recognize and distinguish, owing to metamorphism. Wells and others (1940) mapped the greater portion of the Applegate Group as metavolcanics (Figure 2). The area mapped in this study (Figure 3) appears to be underlain largely by metamorphosed sediments.

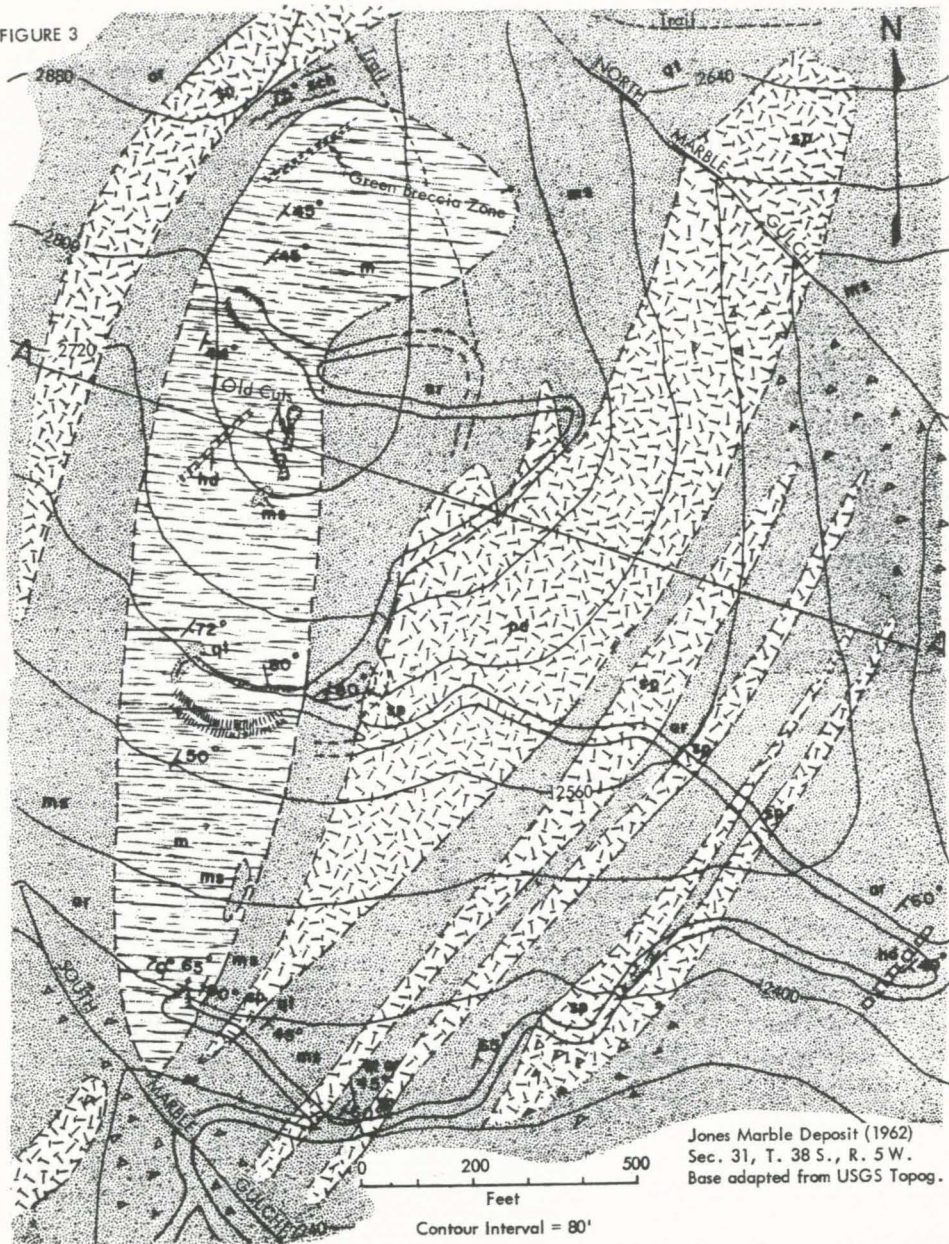
The marble deposit is less than a mile west of an elongate stock of diorite that underlies the Williams Valley, extends north across the Applegate Valley, and south into the rugged Sugarloaf-Grayback area of the Siskiyou Mountains. The area is also intruded by numerous sill-like serpentine bodies which appear to be more or less conformable to the deformed rocks of the Applegate Group. Later dikes of dioritic composition, probably related to the Williams diorite stock, are less common than the serpentine. Variable talcky alteration is found in the narrow serpentine bodies and along contacts of the larger bodies. Soapstone that is suitable for carving has been found in such areas.

Just to the south of the marble deposit, there is a band of limy quartzite as much as 400 feet wide. It contains numerous lenses and thin interbeds of recrystallized limestone which has similar texture to the Jones marble deposit. Although this limy quartzite layer has no surface connection with the marble deposit, it is parallel to it and may represent a folded limb of the same sedimentary horizon. The quartzite grades from a normal granular quartzite to a very fine-grained, banded chert that may have originated as a non-clastic precipitate more or less contemporaneous with the deposition of the limestone that later was converted to marble.

### Structure

The layered rocks of the Applegate Group strike north to northeast and generally dip at high angles. Dips to the southeast are the most common in the area mapped. The attitude of the sill-like serpentine bodies

FIGURE 3

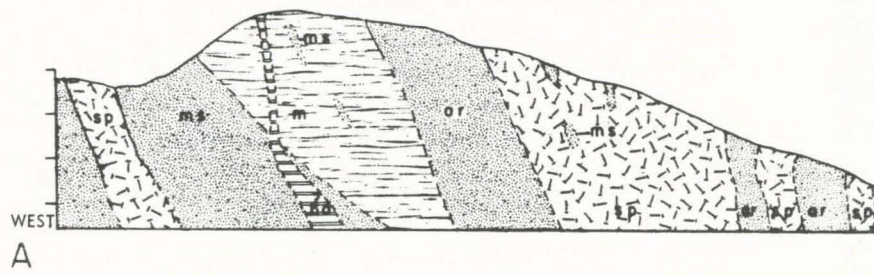


Jones Marble Deposit (1962)  
 Sec. 31, T. 38 S., R. 5 W.  
 Base adapted from USGS Topog.

EXPLANATION

- |  |                           |  |   |  |                |
|--|---------------------------|--|---|--|----------------|
|  | HORNBLLENDE DIORITE       |  | MARBLE  |  | LANDSLIDE AREA |
|  | SERPENTINE AND PERIDOTITE |  | METASEDIMENTARY ROCK OTHER THAN MARBLE -<br>INCLUDES ARGILLITE, QUARTZITE, ETC. |  |                |

SECTION A-A' ACROSS MARBLE DEPOSIT



appears to be controlled by this predominant structural trend. This is interpreted as a series of tight, isoclinal folds resulting in repeated exposures of a given horizon at various places across the section from west to east.

The marble deposit

The body of marble is lens shaped and is believed to be a squeezed segment of a former more extensive thin bed of limestone. The rock has been completely recrystallized to a granular white marble, with occasional gray streaks which give it a pleasing, variegated appearance. Individual calcite crystals in the marble range from 1/3 mm in diameter to 1 mm. The average diameter of the crystals is about 1 mm.

Important impurities in the deposit consist of occasional small lenses of quartzite and argillite and a hornblende diorite dike about 6 feet wide. Small streaks and knots of quartz occur at various places, usually aligned with the trend of the main body. A few sparse scatterings of pyrite also occur in the mass.

The lens or canoe-shaped body of marble is about 1,700 feet long and 300 feet wide, tapering rapidly at both ends. Residual layers, such as streaks of impurities or gray banding within the marble, dip from 45° to vertical. These layers appear to dip more steeply near the southern margin than at the upper or northern end of the deposit. Also, dips observed at the western margin are generally less than those observed near the eastern margin. This implies a pinching of the deposit at depth as illustrated in cross-section A-A'.

A rough calculation of the available tonnage is based on the following rectangular average dimensions: length, 1,500 feet; width, 200 feet; depth, 200 feet. Using a value of 12 cubic feet per ton, there are 5 million tons indicated in the deposit.

Marble from the deposit is of high purity. Winchell (1914) quotes an analysis of this marble by R.C. Wells (1910), which showed 99.14 per cent calcium carbonate and no magnesia. Analyses of 3 samples taken by a former department field engineer, E.A. Youngberg, in 1945 from eastern, western, and southern quarries on the Jones marble deposit all showed similar results. An average\* of the analyses is listed below:

Silica (SiO <sub>2</sub> )	0.71	Calcium carbonate (CaCO <sub>3</sub> )	98.54
Iron (Fe <sub>2</sub> O <sub>3</sub> )	0.08	Magnesium carbonate (MgCO <sub>3</sub> )	1.11
Alumina (Al <sub>2</sub> O <sub>3</sub> )	0.24	Phosphorus (P)	0.02

#### Possible utilization

The purity of the Jones marble deposit makes it acceptable for most uses. Stone for building purposes and monuments has already been produced in small amounts from this deposit. Possible use of the marble as rubblestone in walls in modern architecture offers a market for a limited yearly tonnage.

The Jones deposit has recently been considered as a possible source of lump lime for pulp and paper manufacturing. This use may be feasible, since there are pulp plants as close as Coos Bay and Springfield. Use of the powdered product as an opaque white filler in paint, paper, etc., may also be practicable.

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\* \* \* \* \*

\* Average of P-4113, P-4114, and P-4115. L. L. Hoagland, assayer-chemist, State of Oregon Dept. Geology and Mineral Industries.

## TO HOARD GOLD IS NOW FASHIONABLE IN GERMANY

### Three ways to that type of expensive saving Reasons and background for hoarding

In the U.S.A. reserves of gold are diminishing, but at the same time in Europe are increasing. In the Federal Republic of Western Germany gold is eagerly asked for at all bank counters. Its shine tempts and we believe in its steady value. The private purchase of gold, which in the past, has no connection whatsoever with technical currency questions, because gold is with us just an article of merchandise. The gold which is freely traded in our country is mainly mined in the Union of South Africa. But also many other countries sell gold.

At the present time more gold than ever is purchased. In a Swiss financial paper the following note appears: "It is remarkable as to the reasoning of the German gold hoarders, whose attitudes and experiences find their reasons in experiences of times of war and turbulent aftertimes that they, without any regard to the comparatively high price, buy gold coins."

Indeed, it had not happened for a long time that in the Federal Republic public gold coins and gold bars were bought in such large quantities during these last weeks. The small savers especially are eager buyers.

Gold purchases were usually only transacted in times of war. People do not like to part without good reason with stock and shares, or liquidate their savings. It seems that there is an important motive for the present "rush into gold" in finding that during these last months there was plenty of talk about the diminishing purchasing power of the D-mark\*\*; the calls and warnings of our Finance Minister have, without doubt, caused more interest among the population than was expected.

To "keep gold in a stocking" seems to be fashionable today. The gold purchaser has three possibilities: gold coins, gold medals, and gold bars. The latter is the simplest. Added to this, bars can be had, in general, at a cheaper quotation. The smallest bar (10 grams) costs 55 DM, the 100 gram bar 4800 DM. The heavier the bar, the relatively cheaper the purchase price.

\*Translation by Rudolph Zobl, Accountant, Oregon State Dept. Geology and Mineral Industries, of an article by Ernst Guenther Eack, economic contributor, Bonn, Germany, printed in Welt Am Sonntag, Frankfurt/Main, Sept. 9, 1962.

\*\*Value of D-Mark as of Oct. 1, 1962, about 25 cents American.

JONES LIMESTONE QUARRY

LOWER APPELEGATE DISTRICT

Owner: F. I. Bristol and Mrs. F. I. Bristol, Rogue River, Oregon.

Location:  $W\frac{1}{2}$   $NE\frac{1}{4}$  sec. 31,  $N\frac{1}{2}$   $SE\frac{1}{4}$  sec. 31, T. 38 S., R. 5 W.

Area: Three placer claims, two of which have their long direction ~~east-west~~ north-south on the  $W\frac{1}{2}$   $NE\frac{1}{4}$  sec. 31, T. 38 S., R. 5 W., and one has its long direction east-west on the  $N\frac{1}{2}$   $SE\frac{1}{4}$  of the same section.

History: The quarry was originally worked by Al and Lum Jones (deceased) as a source of monumental stone. They made a living for 30 years, quarrying the stone, and dressing it by hand at their home. The claims were purchased by Bristol, from the Jones Brothers, they are held by location filed at Grants Pass, Oregon.

Winchell 1/ reported on this limestone deposit in 1914 as follows:

"For several years a deposit of marble about 4 miles west of Williams has been exploited by a man named Jones, so that the deposit has come to be known as the Jones marble quarry. It is in section 31, T. 38 S., R. 5 W., at an elevation of about 2650 feet, as measured by barometer. The limestone here strikes N. 45° E., and dips about 65° S.E. The rock is a variegated marble in this opening, being white and blue; in some places it is stained by limonite derived from the alteration of pyrite. The marble forms a lens which is about 2000 feet long and about 300 feet wide as a maximum. At the northeast end it is cut off abruptly; at the southwest end it tapers to a point. It forms a cliff on the side away from the dip, that is, on the northwest side. It contains argillaceous streaks and "knots" in some places. It is said to be on railroad land."

"This deposit has been used under very unfavorable conditions. It is about an eighth of a mile from the nearest wagon road, and it is about six miles from the place where the stone cutting and polishing has been done. Naturally the results have not been satisfactory, although the stone is of good quality."

"An analysis of this marble made by R. C. Wells (U. S. G. S. Bull. 419, p. 209, 1910) of the U. S. Geological Survey resulted as follows:

Composition of Marble Near Williams.

SiO <sub>2</sub> .....	0.13
Al <sub>2</sub> O <sub>3</sub> + Fe <sub>2</sub> O <sub>3</sub> .....	0.38
MgO.....	none
CaO.....	55.55
H <sub>2</sub> O.....	0.26
CO <sub>2</sub> .....	43.63
	<u>99.95</u>

"The analysis shows that the marble is over 99 percent pure calcite."

Hodge reported on the same property in 1936 as follows: 2/

"This quarry is about 24 miles by road south of Grants Pass in sec. 31, T. 38 S., R. 5 W., 4 miles west of Williams by poor dirt road. Plate 57."

"The marble outcrops at 3400 feet elevation. The quarried blocks have been rolled down the steep hill to the old chromite road below, where it was loaded onto trucks and wagons. By this slow and laborious method only small amounts have been taken out."

"The lower outcrops show a very pleasing black and white variegated marble, but that from higher up the hill varies from gray to white. It appears to be quite pure. The limestone occurs as beds of variable thickness, from 6 inches to upwards of 100 feet, in schists and slates. The general strike is about N. 40° E., the dip 45° S.E., nearly parallel to the mountain slope. The ridge summit is a bare limestone hogback forming a 50 foot cliff. In places there are numerous knots of pyrite and quartz which replace the limestone. Utilization of these deposits would necessitate construction of a tram one-third to one-half mile long and reconstruction of about three miles of road. The total truck haul to Grants Pass would be 26 miles".

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Mining Facilities: The deposit is in the foothills of the "Oregon Caves" country and as such, an elevation of 3400 feet means very little snow. It is doubtful if snow would close operations for more than a few days each year. Timber is plentiful; Douglas fir, yellow pine, and madronna being most common. The conifers frequently attain a three foot diameter.



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