UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

EXPLOSIVES LICENSE

License № 127954

Date issued December, 11th, 1917.

THIS Purchasers LICENSE is hereby granted to Volcan Land and
(Class of license.)
Water Company

Address 924-8th, St., San Diego, San Diego, California,
(City.) (County.) (State.)

under Act of Congress Approved October 6, 1917 (Public No. 68, 65th Congress).

Van. H. Manning
Director of Bureau of Mines.

By J B McLee
(Licensing officer.)

At San Diego, San Diego, California
(City.) (County.) (State.)

Not transferable. Void if licensee should leave employ of company or corporation named in this license.
This license does not take the place of any license or permit required by Federal, State, municipal, or local laws or ordinances.

Application No., 29

6—

PUBLIC—No. 68—65TH CONGRESS.

H. R. 3932.

An act to prohibit the manufacture, distribution, storage, use, and possession in time of war of explosives, providing regulations for the safe manufacture, distribution, storage, use, and possession of the same, and for other purposes.

Approved October 6, 1917.

RIGHTS CONFERRED ON LICENSEE OF VARIOUS LICENSES.

SEC. 9. That from and after forty days after the passage and approval of this act every person authorized to sell, issue, or dispose of explosives shall keep a complete itemized and accurate record, showing each person to whom explosives are sold, given, bartered, or to whom or how otherwise disposed of, and the quantity and kind of explosives, and the date of each such sale, gift, barter, or other disposition, and this record shall be sworn to and furnished to the Director of the Bureau of Mines, or his authorized representatives, whenever requested.

SEC. 10. That the Director of the Bureau of Mines is hereby authorized to issue licenses as follows:

(a) Manufacturer's license, authorizing the manufacture, possession, and sale of explosives and ingredients.

(b) Vendor's license, authorizing the purchase, possession, and sale of explosives or ingredients.

(c) Purchaser's license, authorizing the purchase and possession of explosives and ingredients.

(d) Foreman's license, authorizing the purchase and possession of explosives and ingredients, and the sale and issuance of explosives and ingredients to workmen under the proviso to section five above.

(e) Exporter's license, authorizing the licensee to export explosives, but no such license shall authorize exportation in violation of any proclamation of the President issued under any act of Congress.

(f) Importer's license, authorizing the licensee to import explosives.

(g) Analyst's, educator's, inventor's, and investigator's licenses authorizing the purchase, manufacture, possession, testing, and disposal of explosives and ingredients.

Section 14 of the act provides:

"That it shall be unlawful for any person to represent himself as having a license issued under this act, when he has not such a license, or as having a license different in form or in conditions from the one which he in fact has, or without proper authority make, cause to be made, issue or exhibit anything purporting or pretending to be such license, or intended to mislead any person into believing it is such a license, or to refuse to exhibit his license to any peace officer, Federal or State, or representative of the Bureau of Mines."

NOTE.—Any license made in error shall be marked "Void" and returned to the office of the Director of the Bureau of Mines, Washington, D. C. The stub appertaining thereto shall likewise be marked "Void." e—xxx

MINES

From the files of Ed Fletcher, the following letters were removed to the alphabetized correspondence files:

Correspondence concerning mines, mining and minerals in area:

BATISTE, Celeste to Fletcher, 9/12/49
Fletcher to CASE, E.W., 8/4/17
CASE, Hobart to Fletcher, 6/11/17
CASE, S.T. to Fletcher, 6/14/17
CLARKSON CHEMICAL LABORATORY to Fletcher, 7/25/53
HAWK, Glen to Fletcher, 7/14/49, 7/14/49
PRAY, A.W.
    Ellis to Pray, 6/15/17, 7/6/17
    Pray to Ellis, 6/27/17
    Escondido Nat'l Bank to Ellis (re: Pray), 6/27/17
    Ellis to Fletcher, 7/6/17
SKEATS, E.M.
    Ellis to Skeats, 7/10/17
    Skeats to Ellis, 7/11/17
TROTTER, J.W.
    Fletcher to Trotter, 6/5/29
    Trotter to Fletcher, 6/17/29
W.P. FULLER & CO.
    Ellis to WP Fuller & Co., 6/15/17, 6/8/17
    Fuller & Co. to Fletcher, 8/15/17

THE CALIFORNIA MINE

SAN DIEGO CO., CALIFORNIA

This, the firstaccount that has ever been written ofthis extraordinary deposit of lowgrade gold ore, deals briefly with its outstanding features, especially its enormous extent in which it surpasses every known gold mine in America.

Imagine a tract of hilly country covering fully 150 acres, all of which is gold bearing, and the depth ofwhich must be very great, judging by the character of the rock and its usual mode of occurrence. The rock is rhyolite, being a member of the ancient lava formation which is so strongly developed in this region. Other rocks of this family surround the rhyolite and beyond them to the East rises the granite batholith which forms the main country rock. Basalt bounds the auriferous tract on the Northwest. So far as known none of the surrounding formations are gold-bearing.

The rhyolite intrusion is felsitic in its central part, being structureless and homogeneous, of a grey or pink tint, having a conchoidal fracture, while around the periphery it has a tendency to assume a porphyritic structure and is somewhat granular in appearance. As a whole it is moderately hard and somewhat tough. Everywhere it contains gold and pyrite without a trace of other mineralization. So far as examined it does not show a trace of other sulphides. There is no lead, no copper, no zinc, nor other metals. The almost total absence of silver, also, adds to the uniqueness of this remarkable gold deposit, while favoring to some extent its metallurgical treatment.

The California Mine lies in the midst of hills, which here and there attain the dignity of mountains. The highest ridges in the rhyolite area rise to 300 feet above sealevel, the lowest depths shown in theravine which bisects it are about 85 feet above that level. The relief is therefore about 200 feet, and it is to this depth, we may say, that nature has

developed this great mine. Twenty million tons of ore are in plain sight on the central part of the area and can be measured up, all of it lying above the drainage level of the creek which courses through the gorge. The banks rising in this manner provide wonderfully convenient means of mining, which no doubt will be done by means of steam or electric shovels working on successive terraces, as at Bingham and elsewhere.

Just below the mine the creek canyon widens out, and the stream makes its way through a flat valley to the Pacific Ocean, six miles away. Favorable sites for milling plants and for tailing disposal exist near the mine, and such is the characterof the terrane that a railway may be cheaply constructed, joining the mine with the main line of the Santa Fe Ry., which closely follows the coast. Good wagon roads approach the mine from several directions, and even now automobiles are brought quite to the edge of the deposit.

The pyrite is evenly disseminated through the ore, and constitutes two to three per cent. of it. It is wholly in rather fine grains, and no massive pyrite exists there. The gold is presumed to be held wholly within the unaltered sulphide, but in certain areas which have escaped denudation, oxidation of the pyrite has set the gold free and changed the compact rhyolite to an iron-stained and kaolinized mass of a yellowish or reddish complexion, soft and readily eroded. This oxidized material is usually no more than a few feet in depth, although in one or two instances the weathering and oxidation have followed down fault planes to the creek level.

The average gold contents is two dollars per ton or a little more, as shown by the assay returns herewith. The assays range from a trace to seven or eight dollars per ton. We note no particular area as barren nor as exceptionally rich. For a sample showing a trace of gold may have been taken alongside of one of average richness or better. As the ore is of average value throughout when viewed in a large way, and as it all looks alike, there would be no opportunity for selective mining, so far as can now be seen.

Several methods of ore treatment suggest themselves, the most feasible of which seems to be cyanidation, following fine grinding, or flotation in one of its modifications might be considered, although this would appear to involve smelting of the concentrates and possibly cyanidation of the tailing. These matters can be easily settled by a few mill tests, which need not detain us long, the ore being of such simple composition. It is well to bear in mind that the disposal of the waste cyanide liquor, and in case of smelting, of the sulphur fumes, are problems to be settled first; although there should be no great difficulty in finding a proper solution.

From what has been said it will be clear that this deposit demands to be worked on a large scale in order to be profitable. As to its extent and value per ton it ranks with such mines as though of Bingham, Chuquicamata and the Alaska Juneau, while in facilities for working it surpasses them in some respects. Thus, there is no over burden to take care of, nor, so far as can now be seen there is no valueless material to discard. On the same scale of working, say of 10,000 to 40,000 tons a day the California Mine should befully as productive as they.

The great question as to how deep it goes down must remain unanswered. No hold of over a yard in depth has ever been sunk on this ground, and the only ore that has been removed is merely that taken as assay samples. The rhyolite mass looks like a great eruptive dike or neck: out there areno signs of a crater or anything otherwise suggestive of its origin. It is clearly not a flow, but must have a deep-seated origin, as is shown by the diverse directions of dip and strike in certain restricted parts of the mass. Both pyrite and gold are clearly primary.

The important matters of water and power now present themselves. The creek before mentioned flows a considerable stream during the rainy season, but goes dry or nearly so for three or four months in the year. Additional supplies can be had from a public water system two miles away, at the present rate of 7 cents per 1000 gallons.

Power lines intersect the region in every direction furnishing current

at low rates.

Fuel oil can behad at 75 cents to one dollar per barrel.

The samples and assays quoted herein were taken and made by or under the direction of the undersigned.

There is no perceptible reason why this ore could not be quarried out, crushed and cyanided as cheaply as it is done elsewhere in the world. On a scale of 10,000 tons a day the cost of breaking down and transporting should not exceed 25 cents per ton, and milling and cyaniding an additional 35 cents. Adding the overhead costs the total should not exceed70 cents, while the recovery on two-dollar rock of this character should reach 90%, or $1.80 per ton. A clear dollar per ton could safely be counted as profit. The ore in sight, therefore, should yield a total profit of $20,000,000 produced by the treatment of the ore above the drainage level. What there may be below that level, no one knows, but there may be billions of tons, as anyone might conjecture.

(signed) herbert Lang, M. E.

PHONES:
OFFICE, MAIN 1078
RESIDENCE, HIL. 5910-J

D. A. LOEBENSTEIN
CIVIL ENGINEER
U. S. MINERAL SURVEYOR

707 E STREET

LAND AND MINING SURVEYS
A SPECIALTY

Boulder Creek Mining Claims

SAN DIEGO, CALIFORNIA, September 2,1926

Mr.G.H.Moyer,
San Diego,Calif.

Dear Sir:-

In regard to a survey for patent of some 12 mining claims in the Boulder Creek District,I submit the following rough estimate of costs:-

Surveying, field and office work,self and 2 assts. not to exceed	$ 1000.00
U.S.Surveyor ,San Francisco, fees approx .	300.00
Cost of area patented approx 200 acres @ 5$\frac{3}{4}$00	1000.00
Transportation and board and lodging for party of 3 xx&xxx approx .	60.00
	$ 3360.00

If additional help is required for brushing out lines you are to provide same at your expense.
You are to provide transportation for party of 3 to and from the work and also board and lodging while engaged on the work.
You are to provide suitable monuments for corners of claims.
Option:-

Party in field at $ 35.00 per day,Office at $ 25.00 per day. Transportation,board and lodging for party to be provided.Extra help to be provided if needed for brushing out lines.

Yours truly
D.A.Loebenstein

D.A.Loebenstein,
U.S.Mineral Surveyor.

CHARLES HOOPES, CONSULTING ENGINEER
J. H. MACK, CIVIL ENGINEER

PHONE MAIN 3593
552 SPRECKELS BLDG.

HOOPES AND MACK
CIVIL ENGINEERS

HYDROGRAPHY
TOPOGRAPHY
SURVEYS
REPORTS
ESTIMATES
DESIGNS

SPECIALTIES
SEWERS
SEWAGE DISPOSAL
FOUNDATIONS
TEREDO PROOF
CONSTRUCTION

SAN DIEGO, CALIF., Sept. 2/26.

Mr. George H.Moyer,

San Diego, Calif.,

Dear Sir;

In re licensed survey of mining claims in Boulder Creek, San Diego, Calif., I would say that the estimated expense of surveying and preparing maps, descriptions etc. added to the fee to the U.S.Govt. and incidental expenses will be about $2000.00 or about $200.00 per claim .

The major portion of this amount will be, of course, for the Govt. fee. The survey cost will depend upon the conditions found upon the ground and the difficulties encountered in making land ties etc.

Yours very truly,

Charles Hoopes

November 26, 1917

Col. Ed Fletcher,
Office.

Dear Sir:-

Subject: Road to Feldspar Mine.

As per your request I accompanied Messrs. W. S. Kelly and M. C. Turner to Mesa Grande and vicinity east and looked over the possibility of building a construction road to the Volcan Conduit line via the Feldspar Claim of the above. I examined also the mineralization of this claim and respectfully submit the following:

Road

A road constructed so as to serve the above claim would serve the Baum Conduit survey to some extent. It is very probable that it would be so located as to be of no material value since it would serve but a small length of line. This is the only proposed work of the Volcan which would be of any value whatever. The mine is located 200 or 300 feet straight above it on a steep mountainside. The road built to serve this claim would start at or near the forks of the road shown on the 1903 edition of the Ramona Quadrangle sheet, Section 19, Township 11 South, Range 2 East and would run westerly toward the west quarter corner of this section. It would be about 1 mile in length and have a down grade from 10 to 20% and would cost about $3,000.

In case either the Baum or Hawgood tunnels were built into Temescal Valley, the road Mr. Angel proposed to perfect would be of a great deal more service. This road is about 1½ miles north of the proposed Turner road and drops into the Temescal Valley at the tunnel portals.

Feldspar Mine

Feldspar Mine shown to us by Mr. W. S. Kelly yesterday was located by Mr. D. B. Northrup, 771 - 22nd St., San Diego, on June 5, 1917. The location was witnessed by Mr. Kelly, whose address is Earl Apartments, 5th and San Julian St., Los Angeles. The portal of the location tunnel is about 300 feet south of and 200 ft. above a deep ravine bearing south 85° west and running through the center of the northwest quarter of the southwest quarter of Section 19, Township 11 South, Range 2 East, S.B.M. It enters the north side of a sharp nose projecting from the main mountain mass and runs a little west of south and is about 50 feet long and lies 200 feet below the crest. Deposit dips 35° toward the south and the strike of the outcrop is north 66° west and dips 40° from the horizontal on the mountain side, a feature which would make it hard to mine.

The deposit consists essentially of a metamorphosed granite dike intruded into the diorite ground mass (Specimen 1) containing an aggregate of coarsely crystaline minerals as it is found in granite. The mouth of the tunnel was started in a small pocket of Feldspar (See Specimen 2) and these pockets occurred in various places along the outcrop and formed possibly 5% of the vein matter. About 20 or 25% of this deposit consisted of a curious intergrowth of a quartz and Feldspar such that a cross fracture of the blades of quartz would suggest cuneiform characters. This material is called graphic granite.

Specimen 3 is typical of the tunnel graphic granite and Specimen 4 is typical of the outcropping graphic granite. The balance of this vein matter consists of quartz.

Specimen 5 is typical of the quartz. In this dike black tourmaline plays the role of mica. The black tourmaline crystals are not shattered and some of them are 4 or 5 inches in diameter and 18 inches long.

Chemistry

Feldspar is a double sylicate of aluminum and in this case associated with potassium which may be partially replaced with sodium or lime. The analysis may ordinarily run:-

K_2O - 5 to 6%

Na_2O - 3%

CaO - 2%

Conclusions

Unless the analysis of the graphic granite can be shown to be of value, the deposit will be of no great commercial interest due to the limited amount of the purer Feldspar aggregate in the dike.

Yours very truly,

TPE:K

Location NW¼ of SW¼ Sec 19

T 11 S R 2 E SBM

Trail Portal

300 feet south of and

200 feet about a deep

ravine running

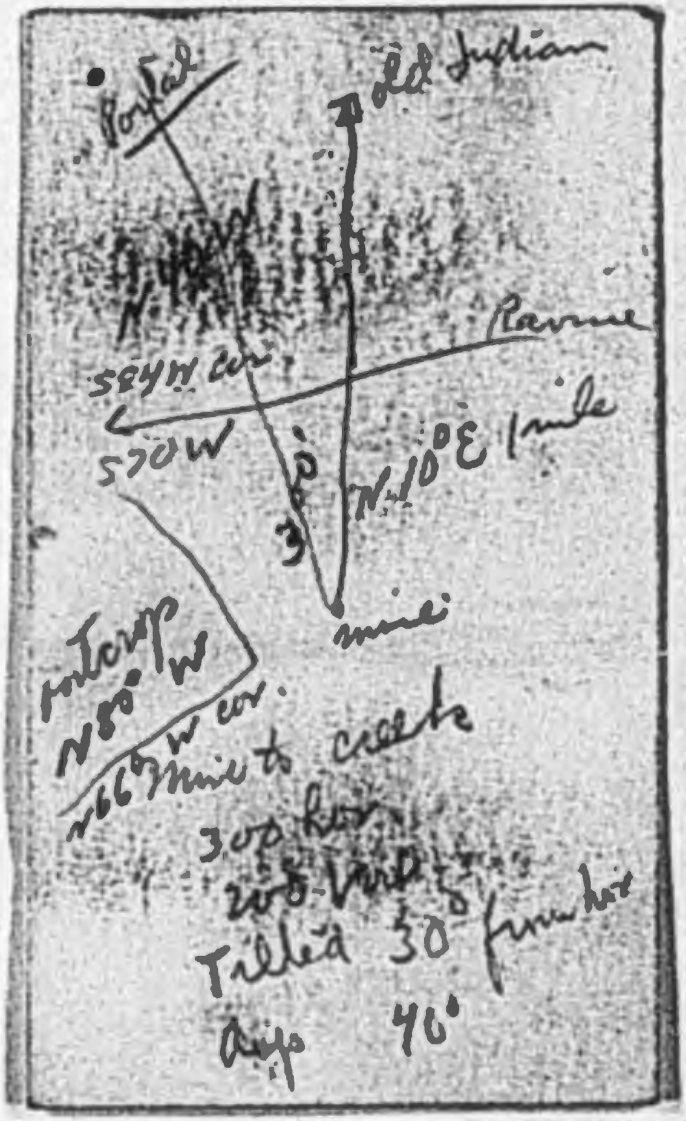
S 85 W thru the center of

said 40 ac.

Dip 35°

Outcrops Dips 40° Strike

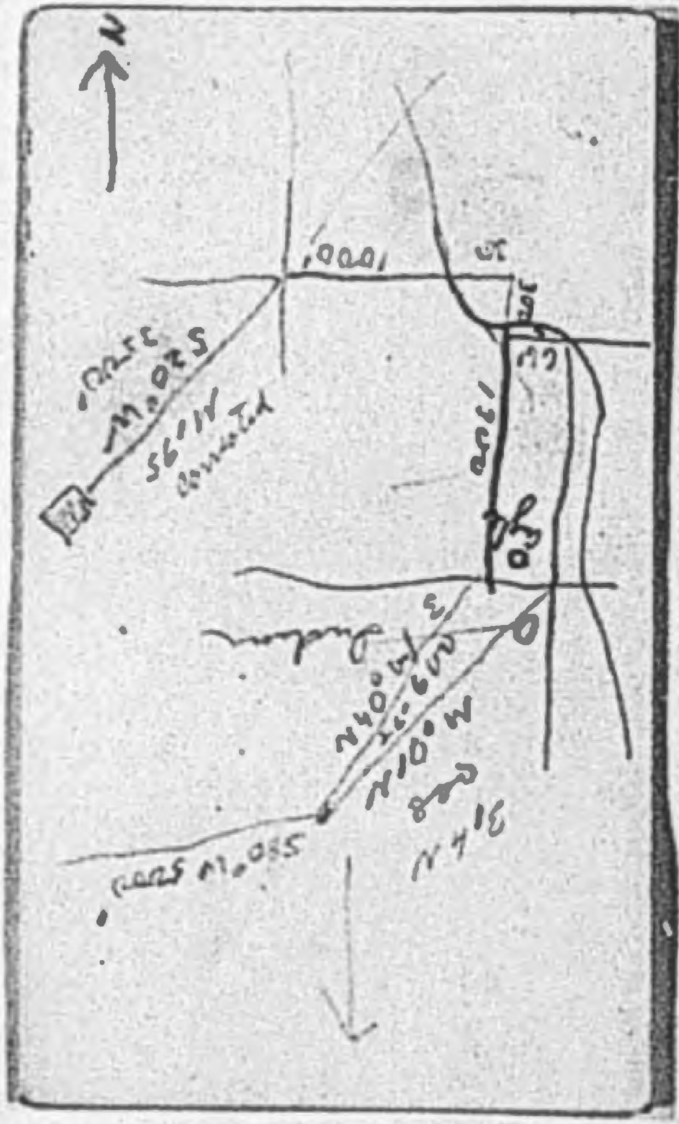
N 66° W



Located
2013 Northrop
771-22nd St
SLO.

W.S. Kelley
Los Angeles.
The Earl
5th & San
Julian Sts

June 3, 1917.



Nov 26, 1917

Col Ed Fletcher

Office

SUBJECT: ROAD TO FELDS PAR MINE

As per your request I accompanied Messrs W.S. Kelly and M.C. Tromes to Mesa Grande vicinity yesterday and ~~looked over the~~ possibilities of building a construction road via their Feldspar claim. I also examined the mineralization of said claim and respectfully submit the following :-

ROAD The road constructed so as to serve the above said claim should start ~~at~~ approximately at ~~or near the~~ forks of the road shown ~~six sections 19 T~~ on the 1903 Edition of the Ramona Quadrangle Sheet in Sec 19 T11S R2E and run westerly in a line to the west quarter corner of said section. This road would be about one mile long, and range from 10 to 20 percent in grade and cost $3000.

metamorphosed granite intrusions

a dike

very coarsely crystalline aggregate of the same minerals that constitute granite

These are called pegmatite and in them is the home of graphic granite, the curious intergrowth of quartz + feldspar such that a cross fracture of the blades of quartz suggests cuneiform characters. Black tourmaline, plays the role of mica

K_2O 5.5% Na_2O 3% CaO 2%

Double Silicate of Aluminum with an Potassium which may be partially replaced with sodium. I should say about 5% you may expect an analysis of the feldspar you may run

K_2O 5.5% Na_2O 3% CaO 2%

Ed Fletcher Papers

1870-1955

MSS.81

Box: 63 Folder: 16

Business Records - Land Companies - Volcan Land and Water Company - Stone and Timber Act Applications and Mining - Feldspar mine report and miscellaneous