

GOLD CRATER

BAKER The "Crater" BAKER

COPY

Baker County  
Reports by IB ~~Kiser~~  
KISER  
NSW

Dear Sir:

I have your letter of the 20th inst. I have made some drawings for you, along with a number of notations. Rather crude and offhand, but the contours are taken from quadrangle made by U. S. Geological Survey and are very near to true.

Please study every feature of this carefully.

Mr. Schuette of San Francisco, California, a renowned geologist and acknowledged authority on the geology of quicksilver, made an exhaustive study of the entire world's known deposits of that metal prior to the year 1930.

If you can get "Technical Publication #264, Feb. 1930, by C. N. Schuette, to the American Institute of Mining and Metallurgical Engineers, you will gain some worth-while information as to the importance of what we have in Baker County, Oregon.

This may be had at the Engineers' Club in New York or the Dept. of Interior in Washington.

Excerpts from his report:

"The largest and richest ore bodies of quicksilver the world over are due to a concentration of the primary mineralization during deposition, caused by favorable stratigraphy. It is clearly evident that a concentration of the primary mineralization took place in an open textured rock covered by a nonporous cap rock. Ore bodies, as distinguished from mere mineral occurrences, were formed because of these favorable stratigraphic features."

The entire report of Mr. Schuette makes a perfect graph of what we have.

In the drawings: Note the impervious lava cap rock; the pervious strata below; The 2 ridges joining at the peak of the dome, like this with the continuation of the main ridge running south across the grain of the slate to break like this to form the brecciated zone. The presence of the once boiling hot-spring coming out from under the lava; The presence of salicious scinter and opalite below the southeast and north-west borders of the lava; The presence of gigantic laccolith of Hornstone intrusion showing to the north; The fault in the lava which proves this large southerly cape of overlying rock had insufficient support from the semi-colloidal substance below, causing this great mass to break off the main flow and drop down onto the mush-like matter beneath, causing a squishing gush of the thickening mud, out through the mouth of the once boiling crater, carrying out onto both slopes of the ridge the heavier elements along with the lighter (gold, quicksilver and cinnabar) the heavier of which had previously dropped to and slid back down the steep foot-wall slope of the crater.

This would cause the stoppage of the free flow of steam and gases through the original outlet, build up pressure, which in turn would force the farther traveling sulphur and quicksilver gases toward the east and northwest extremities of the dome trap, which would account for the presence of cinnabar float at these outer points.

Millions of tons of the lighter elements of this extinct crater (silicious scinter) can now be seen for a mile or so down the gulches on both sides of the ridge from the crater's apex. The float gold and cinnabar, mixed with detris of the hillsides, only extends a few hundred feet below the rim of the crater. The gold and cinnabar shows considerable wear at these places, but the cinnabar at the east and northwest borders shows little or no wear.

This is a good geologist's idea of a perfect set-up.

I originally called this deposit a quicksilver, or cinnabar mine. I still call it that. The simple fact that gold is present does not detract from its value. A gold ore shoot of primary nature has no doubt intruded into this subteranean caldron and mixed its auriferous contents with this seething mass while the deposition was being made. Any native quicksilver present would readily take up with the gold where great heat and pressure were lacking, but greater heat and pressure would sublime the quicksilver and force it to take up with any sulphur present and form the mineral called sulphide of mercury (cinnabar).

You can't go wrong on the drilling if you place the first 3 holes within a hundred feet of the exact center of the dome.

It will be easy to find a drilling contractor to take the job of drilling the property, but you should have some one else to check and verify the findings.

Personally, I would place the first 3 holes something like this

N            - c = center of dome and bottom the ore if possible  
50  
  
c            75' E  
50'  
  
S

Will be glad to help in any way I can.

Yours very truly,

R. B. Kirzen

# COPY

Dear Sir:

Ansering yours of 7/29/46

Am enclosing a photo of the dome and a rough sheet of contour sketches that may answer some of your questions.

The greatest depth that would likely be needed for many years of operation can be reached with a tunnel on the north-west side of the dome giving upward of 1000 feet of depth with a tunnel 1600 feet long.

I think \$30.00 a foot would be tops in cost.

A shaft would cost less per foot of depth (about \$60 per foot) but you would be up against a perpetual cost of pumping out water, hoisting by power and higher elevation to reach your point of operation.

I warned you before that the cut-a-way sections are not accurate.

Any guess as to cost of a retort plant might be right. It would depend a lot on the richness of the ore and the amount of tonnage one would want to handle. Ore running less than  $\frac{1}{2}$  of one percent in mercury would require a large plant, probably costing near \$100,000.00 to pay good dividends. Rich ore has been handled profitably on plants costing less than \$20,000.00.

No one can figure cost of plant until the ore body has been explored.

You could make a pretty fair estimate on the plant from results of drilling before operating tunnel or shaft has been put in.

I once had the entire report of Mr. Schuette on quicksilver of the world, but don't know where it is now.

Probably is in storage with some other stuff.

Labor at Baker can always be had.

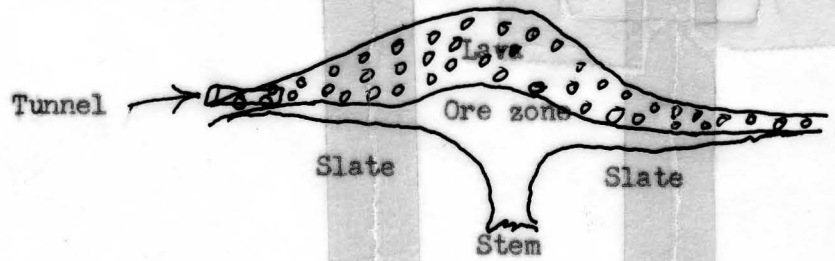
Total cost of drilling operations after all equipment and material is on the ground, would likely run about \$70.00 for 1 shift a day, about \$130.00 a day for 2 shifts, and \$180.00 a day for 3 shifts. They should average upwards of 20 feet of hole per shift of 8 hours. Would need a light service truck for handling supplies, and water to drill. 60 days drilling at full speed would require about \$900.00 worth of gas, oil, grease, coal, powder, etc. In all, roughly, about \$11,000.00 after equipment is on job, not counting cost of equipment or rental.

The photo was taken from west of the crater, southwest of the dome, looking northeast.

R. B. Kirzen

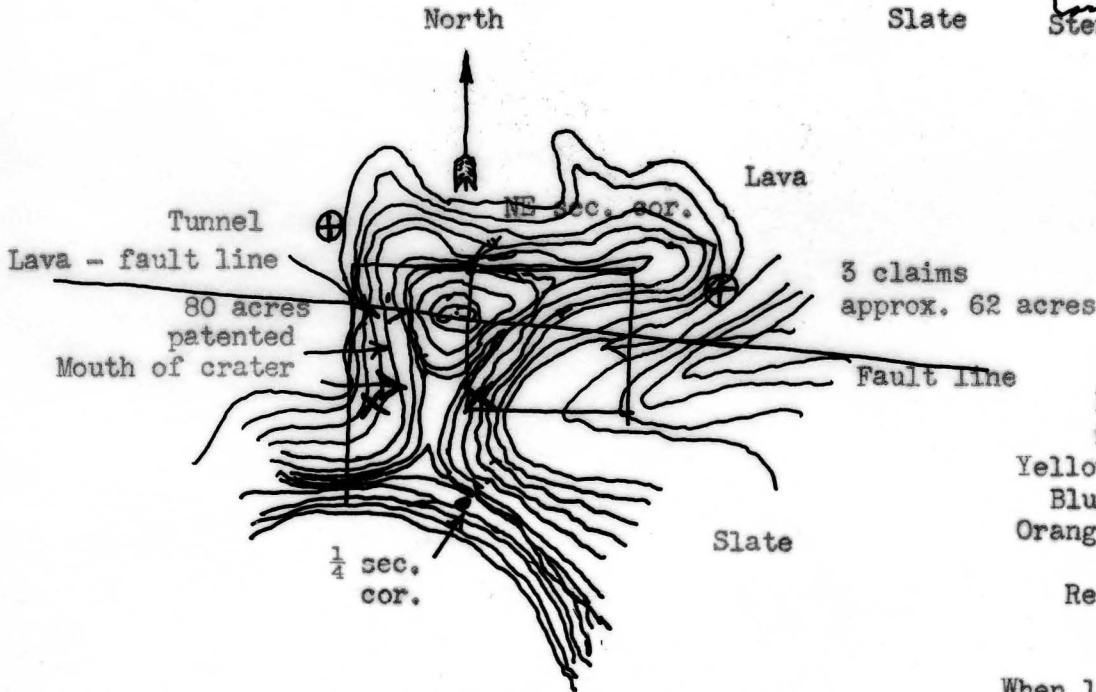
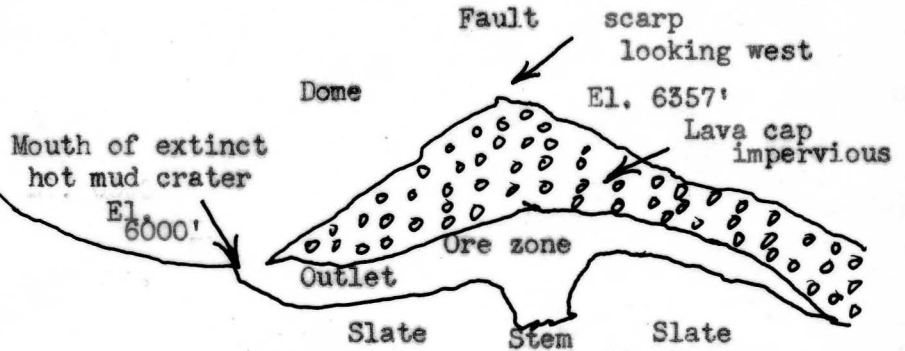
INTERNATIONAL GOLD CORP. PROPERTY  
Baker County, Oregon

Sectional view of dome looking north  
El. 6357'



Approximate - sectional views  
not on scale

Bald Mt.  
El. 6700'



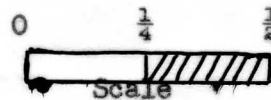
50' contours  
Crater = 6000' elev.  
Top of dome = 6357' elev.  
Bald Mountain  
El. 6700'

- X = cinnabar & gold float
- ⊕ = cinnabar float
- Yellow = lava cap
- Blue = Slate
- Orange = Mouth of crater and ore zone
- Red = Drill anywhere in this area.

When lava cap rock is penetrated the drill should be in "ore".

On west side of dome tunnel has been started here.

Topographical detail taken from  
U. S. Geological Survey



Drawn by R. B. Kirzen, Assoc. Eng. U.S.C.E., retired  
June 1946  
Los Angeles, California

# COPY

January 7, 1947

State Assay Office  
Baker, Oregon

RECEIVED  
FEB 4 1947

STATE DEPT OF GEOLOGY  
& MINERAL INDS.

Dear Mr. Wagner:

Thanks for your letter of December 30, 1946. It has been most helpful.

I am enclosing a money order in amount of \$2.00 to cover the following:

(List of Bulletins and etc. ordered.)

The property that I am interested in is that formerly owned by the Oregon Crater Corp. and now owned by the International Gold Corp. This Corp. has been inactive due to the lack of capital and in later years on account of the war. It was owned jointly by R. B. Kreizur who spent considerable time in that region in the late twenties and early thirties and whom you might know. He did quite a bit of chrome drilling on this property and the sixth hole struck seven feet of ore that assayed from 200 to 500 per ton. I have some assays that run 11.26 oz. gold, 6½ oz. silver and 0.47 % mercury. Additional drilling is required to determine the size of the ore body, method of mining, location for tunnel etc.

Although the property was assigned to the Corp. it is actually owned by R. B. Kreizur who now lives in Los Angeles and C. E. McAdow here in New York and now 87 years old. I am trying to get enough information together to enable me to get sufficient capital together to complete the preliminary development work. I figure it will require about \$25,000 to drill about three more holes. Kreizur thinks she knows where they should be placed.

I don't know how true it is but I understand that Wendell P. Hammon spent considerable time on this property while placer mining nearby. He supposedly claimed that this property should yield up to 200 million in gold, silver and mercury. Even for 10% of that it would be well worth developing.

Hammon died however before any specific deal could be worked out. He was to have gone in on a 50-50-basis so I'm given to understand. He and Mr. McAdow were partners in a mining venture in Colorado in 1916.

Kreizur estimates that it will require between 300 and 500 thousand dollars for tunneling and equipment.

My idea is to raise enough to have the additional drilling done by a reputable independent concern specializing in that type of work whose report, if favorable, would enable us to have the stock approved by the S.E.C. and then put enough in the hands of a promoter to raise capital for development. If you know the names of a few such drilling or survey companies I would appreciate having them.

# COPY

The 80 acres patented is the East Half of the Northeast quarter of Section 26, Township 11 S, Range 39.

The three claims ajoin on the east. I am enclosing an unofficial map of the property which may be of some help in locating the property in your mind at least. I am also forwarding a report by Kreizur when this property belonged to the Oregon Crater Corp. which might be of some interest to you.

If you have any information about this property which you think might be of some interest to me I would appreciate receiving it. If the property is worthy of development, and I think it is, I'd like to get started when the spring opens up, if it is not, I don't want to see anybody waste money on it.

I made the check out to you personally as I didn't know whether to make it out to the State of Oregon, State Dept. of Geology or otherwise. I hope it is satisfactory.

I am supposed to be Treasurer of the International Gold Corp. if and when it is re-organized so I am anxious to do what I can. I have some parties interested but don't know whether anything will develop with them.

Thanking you again for your kindness,

Very truly yours,

F. J. Deputy

1942 E. 29th St.

Brooklyn, N. Y.

# COPY

January 27, 1947

RECEIVED  
FEB 4 1947  
STATE DEPT OF GEOLOGY  
& MINERAL INDS.

Mr. F. J. Deputy  
1942 E. 29th St.  
Brooklyn, New York

Dear Mr. Deputy:

My inquiry to our Portland office revealed that they have no information there regarding your mine. I have talked with several local people who recall when Klezer was working there, but none had any first-hand information which might prove pertinent to you.

The best I can do for you under the circumstances is to make some comments on the region and on the report which you sent me.

I have very probably been on the property, though, without knowing it for what it was, as I have looked at other properties in the immediate vicinity and have also hunted around there. Thus, although I can not confirm many of the details mentioned in the report, I am acquainted with the region in a general and broader way.

Pine Creek and Stices Gulch, both contain gold bearing placer as stated in the report. This is especially so in the case of Pine Creek which has had a notable and somewhat spectacular recovery. No bedrock prospects, however, of any significance have ever been demonstrated to exist in the bedrock at the headwaters of these creeks, or for that matter few are known elsewhere in the Burnt River Schists or the Dooley rhyolites to the best of my knowledge or according to our present records.

The other outlying mining districts and mines mentioned in the report do exist as mentioned. This point however, is of significance only in a general way as the geologic conditions prevailing in these other districts are fundamentally different and distinct from the conditions prevailing in the Dooley Mt. Area. In this respect I direct your attention to the different bedrock types in these other districts as shown on the geologic maps you purchased.

I have no knowledge of any volcano or crater such as is mentioned in the report and I should be inclined to regard the occurrence of these features with skepticism. That is, their existence in the strictest sense of geologic definition.

Large areas of Dooley Mt. are made up of what is called the Dooley Rhyolite breccia and a flow banded red andesite, both of which are formations of a volcanic igneous origin, and both of which formations do occur on your claims as indicated on the geologic map of the Baker Quadrangle by Gilluly, U.S.G.S. Bulletin 879. It is undoubtedly the structural features connected with these rock types that has

Led to the use of the terms "volcanic" and "crater".

The significant point is that these formations do occur on your property as well as strong faults. Whether these faults have been mineralized to a valuable degree, or whether veins occur in the bedrock underlying these volcanic rocks is something I don't know. Even though no especially attractive prospects have been found heretofore in the immediate area, there is no reason to say that such don't occur---especially so until a definite source of the Stices Gulch and Pine Creek gold has been established.

Your conclusion that your prospecting money should be spent in confirming the reported drill data is sound and is about all I can say under the circumstances.

I hope that my comments here will prove of assistance to you. If there is any other way in which we can help you, don't hesitate to call on us, and if you make your trip to Baker I should like to visit the property with you.

Yours very truly,

N. S. Wagner  
Geologist

NSW/np

cc Mr. F. W. Libbey  
702 Woodlark Building  
Portland, Oregon



Oregon Crater Corporation -

Baker County, Baker Dist.

Present name *Gold Crater Mine*  
owned by *International Gold Corp*  
*407 S Deputy*  
*1942 E 29th*  
*Brooklyn, N.Y.*

Paterson, N. J.  
June 26, 1929

RECEIVED  
FEB 4 1947

To the  
BOARD OF DIRECTORS OF  
OREGON CRATER CORPORATION

STATE DEPT OF GEOLOGY  
& MINERAL INDS.

Gentlemen:-

The mining property of Oregon Crater Corporation is in Baker County, State of Oregon, about the center of the County and center of the Eastern Oregon mining and mineral district, and, approximately, two miles west and sixteen miles south of the city of Baker, at the head waters of the North Fork of Stice's Gulch and the head waters of Buffalo Gulch. It is in a low saddle at the top of a ridge between these two gulches - altitude 5900 feet - two thousand feet north of the peak of Bald Mountain, which is the highest point along what is known as Burnt River Range of the Blue Mountains. From the top of Bald Mountain - altitude 6800 feet - the drainage waters flow northerly to Powder River - five miles - and six miles southerly to Burnt River. The Burnt River Range runs, approximately, east and west at this point, but swings back to the northward at each end, forming a sort of horse-shoe. The Oregon Crater property is on a short spur ridge branching northward from the main divide; this spur runs north about 3000 feet before branching into three smaller ridges, easterly, westerly and northerly.

Throughout the Eastern Oregon mining district there are a large number of gold-quartz and gold-placer mines which have produced many millions of dollars. Taking the Oregon Crater property as a center, directly to the north, about eight miles, lies the famous Auburn Diggings, where the first gold in Eastern Oregon was found. About ten miles farther northward lies the Basley-Elkhorn gold mine. Four miles west of the Basley is the Bourne District with the B. & B., Columbia, North Pole, Cracker-Jack and Mountain View gold mines. A few miles west and north of Bourne are the Red Boy, Imperial, Belle of Baker and Ben Harrison gold mines and Monumental silver mine. About ten miles south of this district is the town of

Sumpter where gold was taken from the gravel and much dredging done. Sumpter is about fifteen miles northwest of the Oregon Crater property. Five or six miles south-west of Sumpter is the Greenhorn district and the famous Bonanza mine. A few miles farther west, on the head waters of the John Day River, are the Buffalo and Bear mines of gold, lead and silver. Ten miles southward of the Greenhorn are the Mt. Hastas mines. About eight miles southerly from the Oregon Crater property are the Mormon Basin mines, most noted of which are the Rainbow and Inter-Mountain gold mines, carrying considerable silver. Twelve or fourteen miles south-easterly from the Oregon Crater property is the Durkee gold district and six miles farther is the Bay Horse silver mine. About ~~sixteen~~ sixteen miles easterly, a little north, are the famous White Swan and Virtue gold mines. Thirty-five miles northeasterly from the Oregon Crater property is the great Eastern Oregon Copper belt. Throughout this whole district and near the quartz mines mentioned herein and near many others not mentioned above, are several hundred placer workings of note. The middle part of Baker County runs heavily to gold with some silver, also lead and silver, and easterly runs off to copper. The nearest rich workings to the Oregon Crater property are in Pine Creek, about two miles wouth-westerly, and in the main branch of Stice's Gulch, about two miles south-easterly. Both of these gulches are said to have produced several millions in gold.

The Oregon Crater property consists of 80 acres of patented land in Section 26, Township 11, South, Range 39, E.W. M. and two mining claims of, approximately 80 acres each, in Section 25. The 80 acres are made up of two 40 acre squares, 2640 feet north and south and 1320 east and west. The located mining claims are joined to the east side land of the patented land.

There is a contact of two separate and distinct geological formations running through about the center of the property, easterly and westerly, and crossing the ridge on which the property lies in the lowest part of the saddle. On the south side of the contact is Slate and on the North side is porphyrite-copal formation.

The contact seems to dip about seventy degrees to the north. The porphyritec-opal is a glassy rock formation. Some of it is nearly a pure porphyry with a well developed phenocryst, while deeper down and near the contact seems to be more opal than porphyry, and some seems to be of the jasper type. The layers of the perphyry, as seen at the top of knoll, about 1000 Feet to the north of the contact, has a dip of about twenty-five degrees to the north. This point is about 300 feet higher in elevation than in the bottom of the saddle and at the contact. The rock on the top of the knoll, has a grayish-white colored phenocryst and going down the hill toward the contact, the phenocrysts gradually become darker and redder, until they are a rich, bright red. The top porphyry has a cark blue to purple cast, while the more opal type graduated to pale blue, comtimes clouded and streaked with red. The bedding planes of the slate formation are standing about 70 degrees, dipping to the north and strike easterly and westerly. The strike of the slate lifts up on the east side of the ridge and points down on the west side. (To make this last statement plainer, the strike of the formation lifts upward toward the crest of the ridge on both sides.) This would indicate a perfect shear or brecciated zone at the crest of the ridge. Recent drilling operations have proven that some limestone, dolomite and pure opal exist in and along the contact at the crest of the ridge. Also, some of the slate at this point has become opalized to a great extent.

At the top of the spur ridge and at the contact between the two main formations, and at the shear point in the slate, is an extinct hot mid spring crater of the open mercurial type. This crater is composed of a stiff, sticky, gray, sandy mud and is funnel-like in shape. The crater is about six hundred feet across the top, easterly and westerly, and about 450 northerly and southerly. The crater is split in two parts at the surface by an isthmus of rock running north and south, but I believe the crater becomes one unit a few hundred feet down in the ground. It seems that the crater matter found an easier way out by bursting through the sides of the ridge near the surface and left a bridge of hard rock running across

the top of the crater. The walls of the crater, near the surface, seem to converge downward, toward a general center, along the lines of a French curve, and form a chimney. Such surveying as we have done indicates that the walls of the chimney, or pipe, become parallel at about 450 feet in depth and that the chimney should be about 100 feet in diameter at that depth. Although the crater matter is gray in color, as before mentioned, it is red at and near the walls. The red portion is about two to five feet thick.

The crater matter, which we call "atlas", contains a great variety of metals and minerals. Samples of the atlas, near the surface, gave a trace of gold, up to 80¢ in value, and from a trace of mercury up to one-fifteenth of one percent. The values, very gradually, gained a little, in both gold and mercury, until a depth of about 235 feet was attained, where extremely high grade ore was encountered. The drill penetrated the wall at 242 feet and the values ceased at this point. The writer made a number of field tests and microscopic examinations of the ore and estimates the ore to run on an average of \$500.00 to the ton in gold, silver and mercury. Several samples for assay were taken, by stockholders, on the property and the certificates of their assays shown to me, bear out strongly my estimates of values.

Careful study of the atlas matter under the microscope, with a magnifying power of from 50 to 500 times, in natural and acid tests, indicates the following mineralization:

Quartz and hydrous silica - transparent and glassy, brilliant, vitreous, resinous white, amber, yellow, gray, red and graduating tints; fracture - regular, irregular splintery, conchoidal and crystallization amorphous and varied; Iron - titanium, ilmenite, magnetite, hematite, pyrite and marcasite; Tin - cassiterite and native; Silver - freibergite, stibnite and native; Nickel - pyrotite; Copper - chalcoprite and native; Silver, Mercury, Lead, Antimony-tetrahedrite and stibnite; Mercury - cinnabar, Kleinite, montroydite, terlinguaite, several bituminous forms and native; Gold - stibnite (possibly), mispickel, pyrites and native; Lime; Gypsum; Sulphur;

Magnesium silicates and carbonates; Other rock forming minerals and acids.

The deposit was found by the writer after two years of tracing the cinnabar from the gulches below. On approaching within five to six hundred feet of the lip of the crater, or deposit, while tracing the cinnabar, gold was encountered. The tracing was performed by panning the soil and gravel on the mountain slopes and carefully examining the pannings under the microscope. After the gold was encountered it showed, in the pan, along with the cinnabar, right up to the very lip of the crater. This tracing was done on the Stice's Gulch side of the crater. Sampling was then conducted on the opposite side of the ridge (The Buffalo Gulch slope) with similar results. Various small holes, tunnels and shafts were then dug into the crater matter to outline the deposit and sample same for metals expected. Development work consisted entirely of hand dug holes, until the year 1928, when a drilling outfit was obtained and drilling operations were conducted on the property from the first of May until the fifth of November 1928. Seven holes were drilled into the crater and overhanging rock. The sixth hole penetrated the crater matter deep enough to encounter high values before striking the foot wall, Another - the seventh hole - was started late in the season and is now down 100 feet in the crater matter. This hole is so placed that it should reach to about 400 feet before striking the foot wall. If this last hole does not hit the foot wall under 400 feet, it should go through 150 feet of high grade ore.

There is one building on the property. This is the cook house. It is about 300 feet to the west of the crater and on the same level. Two tents are used as sleeping quarters for the men. One drilling outfit, mounted on a self-propelling truck and operated by gasoline. The drill is large enough to drill to a depth of 1000 feet. A spring of cold, clear water, enough for drilling operations and camp purposes, comes out of the side of Bald Mountain and 800 feet southwest of the center of the crater and about 40 feet higher in elevation than the camp.

A fairly good mountain road runs from the property, down the hills, in a northerly direction about five miles to Powder River. At this point it meets a well graded State highway and the Sumpter Valley Railway (narrow gauge). It is almost

level from his point into the City of Baker, a distance of eleven miles. The main line of the O.W.R.R. & N. runs through Baker. This Railroad is part of the Union Pacific System. Another State highway runs up Stice's Gulch to within four miles of the property, and a fairly good mountain road comes up to within two miles of the property on the east side. Two miles more of mountain road can easily be constructed to the proposed site of the tunnel, from which the deposit should be worked.

There is no timber that belongs to the 80 acres of the Corporation's patented land but there is nearly two million feet of good timber on the Corporation's located claims which can be used for mining and building purposes.

It is to be remembered that the Oregon Crater property is in a highly mineralized district. I believe that the bedding planes of the slate stood at about 40 to 45 degrees when the igneous flow occurred which covered up the slate. Subsequently, a volcanic movement pushed Bald Mountain up through the igneous rock and split the igneous rock in two parts. The volcanic movement, after striking the slate, followed the lines of least resistance, which was the bedding planes of the slate. At six to seven thousand feet deep the volcanic disturbances would be directly under the present contact and farther north of the contact and under the igneous rock when the last movement started. The heat from this volcanic movement and/or, from subsequent intrusive movements in the vicinity, would naturally heat the waters within the ground and drive the waters out by pressure. The hot and acid waters would carry the metals in solution until the water gained room enough to expand to the extent where the metals would recrystallize. The grain of the slate would naturally shear the escaping waters throughout the heated zone, toward the crest of the ridge and away from the heat center. The escaping waters could not escape in a lateral direction farther than the contact of the igneous rock, therefore the waters, with the metals in solution, followed the foot wall of the igneous rock and the shear ways of the slate rock, and since most of the escaping waters on the upward and northward side of the movement zone followed the same route, it eventually formed a general channel and wore out a large vent hole along these

lines. This, undoubtedly, made the chimney. As soon as the hot waters under pressure expanded enough so that the temperature was lowered to a point where the metals in solution recrystallized, the crystallization took place. If the expansion took place below the surface, the metals would crystallize below the surface of the ground and there would be little or no escape of the metals over the lip of the crater.

On the other side of the volcano (southward) there seems to be no general vent. The mountain is higher on that side, and distant about two miles to the igneous rock, and the heat would not be so intense as on the northward side, As a result the gold and other metals on that side seem to have reached nearer the surface through small and various vents and subsequent erosion has caused the metal on that side to work its way into the creek channels. Placer mining operations conducted on that side, in two main channels, have resulted in finding several million dollars worth of gold. It is my opinion that the gold found in the soil, a short distance below the lip of the crater was the result of the last struggles of the mud crater action after the waters were nearly exhausted and the mud was thick enough to lift the gold to the surface. Most of the gold in the crater, no doubt, settled back down in the crater after the boiling action ceased. The gold found in the soil below the lip of the crater was in various sizes, some being fairly large pieces, The gold encountered in the crater with the drill was all very fine, only visible under a 100 power microscope. The heavier gold, no doubt, will be found farther down. The lighter gold, or smaller pieces, would more likely settle slower than the coarser gold. I surmise, also, that the atlas matter would become richer as more depth was attained, until the density of the matter would become so great as to hinder the further settling of the heavier elements. I predict that the ore will reach its greatest richness between five and seven hundred feet of depth. Below that level I would expect the atlas matter to become leaner, however, as I would not expect to find any values outside of the crater walls, whenever the ore becomes too poor to work at a profit, it would be possible to immediately cease operating.

I recommend that further drilling operations be conducted on the property until the crater deposit is proven up to the extent of at least three additional holes, so placed as to actually block out certain tonnage and at least one hole, in the crater, to the depth of 600 feet. This is the depth at which I recommend a tunnel be driven from the mountain side into the deposit. As the drop of the mountain side is about one foot in three, this tunnel would be, approximately, 1800 feet in length. At the place where this tunnel should be started, in the north branch of Stice's Gulch, a good tunnel, dump, mill and building site can be had, easily accessible to the main highway.

I estimate the cost of proving up this property to the extent of not less than 600 feet of chimney depth, by drilling, etc., at between fifteen and twenty thousand dollars. My estimate on cost of tunnel and equipment is within fifty thousand dollars. I cannot estimate the cost of milling until the metallurgy of the ore is fully determined, however, it is my belief that a simple retort and a reduction plant is all that will be required. The concentrated ore, after the mercury has been retorted out, would probably be shipped to a smelter for extraction of the other metals that are worth saving. Unless something else shows up in the ore greater depth than has been attained so far, I surmise that gold and silver is all that would be returned from the smelter. The best place to extract mercury from the ore is at the mine. The Process is very simple and of low cost.

There is every indication of much wealth in the Oregon Crater Property.

Yours respectfully

(signed) R. F. Keizur



Karl Von Segemont - Sturman was born in Westfalin, Germany; finished his education at Jena University; was employed for several years by Phelps Dodge and Green Cananea Companies; was consulting metallurgist for several large Companies in the United States for a period of years and was for six years in China with the Kailan Mining administration.

Cincinnati, Ohio  
June 29, 1929

Oregon Crater Corporation,  
New York, N. Y.

Gentlemen:-

I have carefully read attached exposition of the pertinent characteristics of the Oregon Crater property, as prepared by Mr. Keizur, and have no hesitation in fully endorsing his sound interpretation of geological and mineralogical features involved.

My intimate association, extending over a period of several months, with exploratory drilling operations conducted at the mine, as well as independent scientific examinations and researches impartially performed by me at the instance of certain outside interests, have served to conclusively convince me that, both from a practical as well as academic viewpoint, that is, indeed, a remarkable property. Exceptional concentration and even phenomenal enrichment of mineralization at reasonable depth are invariable germane to deposits of this somewhat unusual type - a condition practically postulated by a logical interpretation of the formation and probable origin of a hot-spring crater deposit. The "White Cap Mine", of Manhattan, Nev., a gold, arsenic, antimony deposit, is an example in point that has come under my personal observation, as are certain quicksilver-gold mines in Southern Texas.

As a corollary to Mr. Keizur's geological observations, I desire to accentuate the significance of calcareous and dolomitic intrusions, repeatedly encountered during drilling work.

From a practical viewpoint, and in conformity with sound mine development principles, some additional drilling is recommended, in order to attain a greater depth and to actually block out a definite tonnage of commercial ore. In the end, this will prove itself the most economical mode of procedure, both for the purpose of provisionally establishing in concrete figures the commercial value of the mine, as well as for the object of obtaining empiric data to govern efficient exploitation by actual mining operations.

Respectfully,

(signed) Karl Von Segemont-Sturman.  
Chemical and Metallurgical Engineer.

What seems to be, and is called, "Slate Rock" fartheraway from this immediate zone is nearer a shale at this point. The shale is naturally brecciated along the crest of the ridges under the lava. This would allow free movement of the solutions up to the contact with the cap rocks.

The Oregon Crater deposit is in exceptionally rich and productive gold district.

The topography, stratigraphy and geology of this property is ideal for a large and rich deposit of quicksilver. Quicksilver is known to exist at and near the solfateric vent. Gold, along with quicksilver, is also known to exist in small quantities at the edge of the crater where the "slop-over" would naturally occur.

Gold was also found in the chimney of the crater in highly concentrated richness, along with a good showing of quicksilver, which seems to be a secondary enrichment by precipitation.

As shown by the topography, the prominent knoll, about 800 feet to the north of the apex, would indicate the probability of an inverted trough under the lava flow where the concavity, if such exists, would be an ideal condition for a tremendous dome-deposit of cinnabar. Recent discoveries strongly indicate that a receptacle of this nature does exist there.

A substantial drilling outfit will quickly determine the truth about the many outstanding and pertinent features pertaining to the interesting deposit.

March 10, 1930

(Signed) Raymond B. Keizur, Mgr.,

Oregon Crater Corporation.

Note:

This report on the Chimney Deposit was made when the property was controlled by the Oregon Crater Corporation. Through internal dissensions and other complications the corporation was unable and restrained from developing the property and put it into production, and thus the property has laid dormant for several years,

The Oregon Crater Corporation has now gone out of existence as it surrendered its Charter and also lost what title it had to the Chimney Deposit.

The title to this property passed into the hands of two parties who sold and deeded this Chimney Deposit property to the International Gold Corporation, and it is now known as the Gold Crater.

The International Gold Corporation is in no way connected with the O. C. Corporation, and the report herein is simply a description of the Chimney Deposit now known as the Gold Crater Property and owned by the International Gold Corporation.

This summary or report is under no consideration to be considered as an offer of any security or solicitation or offer to buy or sell any security or solicitation as a prospectus.