5290 0019 March, 1961 Mr. Morris Engel, Provident Hamilton Corporation 1138 South Badford Street Los Angeles 35, California Dear Morrisi In accordance with your request, I have completed an up-to-date Evaluation Report of the Mamilton Corporation holdings. I am very familiar with the Corporation as I have been in constant association with Hamilton since the Company's inception of nearly five years ago. Following the letter, you will find the enclosed report. Sincerely yours, Sam Bida, R.M. 33:011

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MINING ENGINEER'S REPORT
ON
THE HAMILTON CORPORATION MINES
March, 1961

MINING ENGINEER'S REPORT

THE HAMILTON CORPORATION MINES

Ву

Sam Bida, E.M., P.E.

Registration 1327

#### INTRODUCTION

The White Pine Mining District, (Hamilton), has been a prolific producer of high-grade silver ores. The production of the district has been estimated to be between \$40,000,000 to \$70,000,000. This was derived from the shallow surface workings and principally from Treasury Hill. The ore occurred as a bedding replacement of favorable host limestone formation. This activity had taken place prior to 1890. After this, there was a general dying down of the district to the present times. In 1956, Hamilton Corporation was organized with a program to explore the possibilities of determining the downward continuation of the ore.

Hamilton Corporation obtained by leases, options to purchase, and purchases, most of the claims that were thought to be on the main mineralizing fissure in the district. These also were thought to hold the most promise. The fissure system has a strike of nearly East and West and can be traced from Treasury Hill to the Zadow property, a distance of about three miles.

Work was begun by the Hamilton Corporation on the Oro fissure. Later in 1958, the place of development was moved on to the Onetha vein. This was done at the request of D.M.E.A. geologists and engineers in order to enable Hamilton Corporation to obtain a loan for exploration. This work developed approximately 11,000 tons of ore with a gross value of about \$625,000. See Appendix 3A. The present shipments originate from this section.

A tentative value of \$500,000 is set on the Hamilton Corporation holdings at Hamilton, in the White Pine Mining District. See Appendix 5.

Hamilton Corporation has assets of \$1,396,255. These are mining claims in the Hamilton Mining District, tentative estimate of \$500,000 (See Appendix 1); beryllium mining claims in the Mount Washington Mining District, tentative estimate of \$130,000. See Appendix 2. The gross value of ore developed in the Onetha Mine is \$739,420. See Appendix 3A. Equipment at the Onetha Mine in Hamilton is worth \$26,835. See Appendix 4. An estimate of the indebtedness, claims, etc. is \$120,000, giving Hamilton Corporation an adjusted total assets figure of \$1,276,255. See Appendix 5.

I think very highly of the White Pine Mining District and believe it is one of the undeveloped mineral provinces left in the Western United States.

## HISTORY

get.

There have been numerous engineer's reports and geological reports written on Hamilton, White Pine Mining District.

The most recent of these is the one by Mr. Fred Humphreys, Doctor of Geology, of Stanford University. The report details the geology as to structure, giving us a stratagraphic column of the rocks throughout the entire district. It goes into the ore occurrances along the different fissures in the area together with the mineralization ore genesis and so forth.

The general consensus of opinion of the White Pine Mining District was that it was a bedding replacement area. Most of the work was directed toward finding bedding type deposits.

The Treasury Hill silver ore beds occurred in the guillmete formation, the top of the Nevada Limestone of the Devonian Era. This formation was capped by the Pilot Shale of the early Mississippian Era. The general elongation of the remnant replacable bed North-South has given the impression of North-South mineralization. The bed has numerous fractures East-West and North-South, making it somewhat difficult to discern the origin of the mineralization, if only this bed were apparent. The Treasury Hill ore occurring as pods were quite shallow and confirmed principally to this horizon. On looking over the area at the time of our first interest in the region, I found that most of the recently productive mines align themselves along in an East-West course from Treasury Hill to the Zadow Mining Property. These mines did not have as high grade silver bearing ores but carried additional values in lead and zinc, revealing a semblance of mineral zoning.

The Hamilton Corporation work is the most constructive in the District. The exploration had been conducted on the East-West fissures proving that the ore goes to depth on this pattern and also proving that the basic ores, lead-zinc-copper, have a direct relationship to the higher epi-thermal silver occurrances. The quantity of silver mined in the shallow workings should have a direct bearing on the quantity of the more basic ores that can be expected.

It was found in recent correlation of assays that the sulphide ores carry more silver than the oxidized portions of the vein. From this, it is believed that the deeper ores will carry more silver value.

### TENOR

The average grade of the ore has been computed in Appendix 3A and it might be generally stated that the direct shipping ore comprises about two-elevenths of the total ore developed. This ore will average about 20 per cent lead per ton, two and one-half per cent zinc per ton, one per cent copper per ton, six ounces silver per ton and .0125 ounces gold per ton, having a gross value of \$61.45 per ton. The lower grade ore will average about 10 per cent lead per ton, 10 per cent zinc per ton, one per cent copper per ton, five ounces silver per ton and .0125 ounces gold per ton, having a gross value of \$55.79 per ton.

The values as noted in the above figures are quite close. The inability to make a separation between the lead and the zinc, the lower grade ore, as is designated above, does not bring a true value as a direct smelting ore.

Assays taken on the other mines of the Hamilton Corporation's holdings run from a few ounces to over 100 ounces silver per ton. There could be no definite block ore tonnage given on these ore sections as they are not developed.

B

On the explored property the Onetha vein shows that the better ore sections occur along the more brecciated areas, fissure intersections, the more favorable host formations and the flatter vein areas.

The ore on the Onetha vein carries as good a value to the depth explored as was evidenced at the outcrops.

The walls at the lower levels being loose brecciated limes stone seem to show more movement than was apparent at the upper levels. This may be due to a downward joining of some of the minor fissuring.

The vein has a strike from North 70 degrees East, to East and West and dips slightly to the North 80 degrees. The strike of the vein corresponds very well to the general strike of the most productive systems in this region. This deposit could be classified as a mesothermal type with ore expectations to continue downward to the limitations of mining.

The epithermal Treasury Hill silver ore deposits indicate the upper reaches of mineralization showing that most of the ore horizons should still lie deeper than these surface deposits.

#### ORE DEPOSITS

The Onetha Mine has an estimated blocked ore section of 13,000 tons having a gross value of \$739,420. No other sections were computed. It should be remembered, however, that this is only a small portion of the Hamilton corporation mines.

## GEOLOGY

Rocks of the region are limestones, shales, and quartzites. The rocks in the vicinity of the Onetha Mine are the limestones of Silurian and Devonian Age. Treasury Hill is located in the Nevada Limestone of the Devonian Age. West of the Onetha, we again have the Devonian limestone outcrops. About two and one-half miles West of the Onetha shaft, a North-South block of Cambrian Limestone is exposed. The East side, the Zadow property, is the downthrow side of the North-South fault. The ore appears to terminate against this fault. A quartzite member is exposed at the Belmont Mine in the Northwest part of the mining district. The replaceable bed members are located near the top of the Nevada Limestone of the Devonian Era. The beds have a slight inclination about 15 to 20 degrees Easterly and strike Northeast Southwest. The general attitude of the bedding is about the same throughout this particular region.

The Westmost part, White Pine Mountain, west of the Zadow property has intrusions of granitic rocks that may have some distant relationship to the formation of the ore deposits.

The area had been broken by North-South trending mountain building faults. Later in Jurassic time, it was broken again Easterly and Westerly and mineralized along this fault pattern. Again, at a later time, it had reoccurrant movement along the North-South faults. This is evidenced by some drag ore in some of these faults.

# MINERALIZATION

Mineralization is believed to have occurred during Jurassic time, with possible reoccurrant secondary mineralization. The principal ore mineral is cerrusitye, the lead carbonate

with the yellow silver mineral cerargyrite. Other ore minerals are anglesite, smithsonite, malachite, azurite, galena, chalcopyrite, sphalerite and the lead oxides, zinc oxides, silver salts, and other related minerals. The gangue minerals are minor quartzing, silicification, calcite and iron oxides. GENERAL: LOCATION AND ACCESSIBILITY The property is located in the White Pine Mining District, sometimes known as the Hamilton Mining District, in White Pine County, Nevada. It may be reached by traveling 40 miles West on the Ely-Eureka Highway, then traveling South 10 miles on a gravel and dirt road to the ghost town of Hamilton, then turing toward Sherman Town South, a distance of three miles. The present workings are located on the West drainage of Treasury Hill. The mine is accessible throughout most of the year. CLIMATE AND PRECIPITATION

The climate of the area could be classified as semi-arid with a medium snowfall in the higher elevations.

## TOPOGRAPHY

The Hamilton area can be generally classified as being rugged and mountainous.

# ALTITUDE

The elevation at the present working site is about 7,000 feet above sea level.

# HYDROGRAPHY

There are no streams in this locality. Water is obtained from local springs.

# VEGETATION

The area is covered by sparce growth, pinion pine, spruce,

fir, cedar and mahogany. The lower regions are covered by desert grasses and sagebrush.

There is no mining timber available locally.

## WATER

Water for processing ores at Hamilton would have to be developed by drilling.

## BUILDINGS

Hoist house - Compressor building - One bunkhouse.

## TRANSPORTATION

Ely is serviced by the Nevada Northern Railroad, a subsidiary of Kennecott Copper Corp. The region is also serviced by two trucking firms and is connected to the outside by the United Airlines and Lewis Brothers Stages. Hamilton has no transportation facilities.

Hamilton Corporation does, however, have its own trucking arrangement. They haul their ore to the railhead at Ely. From Ely, it is shipped to the United States Smelting & Refining Company at the Salt Lake City Plant.

## OPERATION

Hamilton Corporation was organized in 1956. Shortly thereafter, in August, Hamilton Corporation drove a cross-cut adit into the Oro vein. This vein was explored for a distance of about 400 feet.

On August 30, 1958, a D.M.E.A. loan was granted to Hamilton Corporation. A shaft site was selected on the Onetha Mine and sinking was begun in October the same year. A 160 foot shaft was put down. From the 140 foot level, a tunnel was driven on the Onetha vein, a distance of 700 feet. This developed the present ore block.

Currently, the Hamilton Corporation is shipping about one carload of ore per week averaging 30 to 35 per cent lead per ton and running about five ounces of silver per ton. The ore is being shipped to the Salt Lake City Smelter.

The mine is being operated on a split-check leasing basis.

GENERAL (Continued)

MINING EQUIPMENT

See Appendix 4.

# CONCLUSIONS

The Hamilton area, the White Pine Mining District, holds great promise to become a very worthwhile mineral province.

Sam Bida, E.M. P.E. License No. 1327

## THE MOUNT WASHINGTON BERYLLIUM GOOURRANCE

The potential of the Beryllium in the Kount Vashington Mining District is one that we can only measure by comparison of the known beryllium occurrances at the Pole Canyon Kine. The mine is presently being operated by the Anaconda Mining Co.

My examination of the workings of the Pole Canyon Hine show an estimated developed tonnage of about 40,000 tons of about one per cent BeO. This, of course, is note one than has been found anywhere in the world in one locality. The property at the Pole Canyon Mine has yet been only little explored. The primary ore mineral is phenacite, BeSio, assaying to 46 per cent BeO.

The ore occurrances at the Mount Vashington District are in a lime member 30 to 40 feet thick. This member lies near the top of the Cambrian quartzite. The member is known as the Pioche Lime and is covered by the Pioche Shale, both also of Cambrian Age. The bed is a porcus, sandy limestone.

The bed trends from where it is visable, a place a few miles South of the Pole Canyon Mine, to North across the Vern Jepson ground, the Fenkite ground and North of Hount Washington, then across the range into Snake Valley along its flank Southward. The entire bed is not ore. However, prespecting along the major part of the exposed sections show beryllium occurrances of worthwhile nature.

The Fenkite Group of claims, optioned from the Wheeler Mountain Beryllium Corporation to the Hamilton Corporation, should be some of the best ground in this area.

The claims are located on the upper-most part of the anticlinal fold, thereby giving the gases, solutions, a better chance for collection and blocking. APPENDIX

The Hamilton Corporation owns or has under Contract the following Real Estate in the White Pine County Mining District: All of these parcels are located in the Hamilton. Townsite in the NE 1 of Section 18 and in the SE 2 of Section 18 and in the NW 2 of Section 18 and in the NW 2 of Section 17 and in the SW 2 of Section 17, Township 16 N., Range 58 E.: M.D.B. & M.

B 20 FT. OF LOTS 1 & 2. Block 24.

LOTS 4. 5. 6 & 7, Block 24.

W 25 FT. OF LOTS 1, 2 & 3, Block 7.

W 70 FT. OF THE N & OF LOT 2 AND ALL OF LOT 3, Block 24.

LOTS 19 & 20, Block 15.

LOT 2, Block 16.

LOTS 1, 2 & 3, Block 8.

LOT ON MAIN STREET, on corner of Dun & Mill Street in Hamilton.

LOTS 14, 15 & 16, Block 7.

SIX LOTS IN FEATHERIST, one known as the Zanini lot.

LOT 2, Block 20.

LOTS 4. 5 & 40, Block 34.

LOT 18 & 32, Block 15 .:

LOTS 16, 17 & 30, Block 36.

LOT 1 & 34, Block 37.

LAND IN FEATHERSTONE BLOCK

LOTS 1. 2. 15 & 16. Block 14.

The Hamilton Corporation owns or has under Contract the following water rights in the White Pine County Mining District:

SPRING, on Breadstreet.

TWO SPRINGS & WATER RIGHTS, one-half mile North of Smokey Hill.

Spirito, in Teatherstone

The Hamilton Corporation owns and has under Contract approximately 500 acres of mining ground in the White Pine Mining District of White Pine County, Nevada. The description of this ground is as follows:

WEST ONETHA: Patent Survey No. 4031, legal description: S & NE & N & SE & Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

ONETHA: Patent Survey No. 50 and 83, legal description: SE 2 NE 2 & NE 2 SE 2, Section 25, Township 16 N., Range 57 E and also the SV 2 NW 3 & NW 2 SW 2, Section 30, Township 16 N., Range 58 E.: M.D.B. & M. Two-thirds control Hamilton Corp.

ORO: Patent Survey No. 46, legal description: SE 2 NW 2 & SV 2 NE 2, NE 2 SW 2, NW 2 SE 2, Section 25, Township 16 N., Range 57 E.: N.D.B. & M.

CANYON: Unpatented mining claim, legal description: N & SE &, Section 25, Township 16 N., Range 57 E.: M.D.B. & M. Recorded at the White Fine County Courthouse, Ely, Nevada in Book 190 page 67

ISAACS #1: Located 7/27/59 and recorded at the White Pine County Courthouse, Ely, Nevada, in Book 221, page 261. The legal description of this claim is as follows: It is located in the N tof the SW tof the SW tof the SE tof Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

ISAACS #2: Located 7/27/59 and recorded at the White Pine County Courthouse, Ely, Nevada in Book 221, page 260. The legal description of this claim is as follows: It is located in the N & of the SW & of Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

CEDAR RIDGE: Located 6/15/35 and recorded at the White Pine County Courthouse, Ely, Nevada in Book 119, page 347. The legal description of this claim is as follows: It is located in the SW 2 of the NW 2 of Section 30, and the SE 2 of the NW 2 of Section 30, Township 16 N.; Range 68 E.: M.D.B. & M.

MILWAUKEE: Patent Survey No. 51 & 84, legal description of this claim is as follows: It is located in the SE 2 of the NE 2 of Section 25, and the SW 2 of the NW 2 of Section 30, Township 16 N., Range 67 E., and Township 16 N., Range 68 E.: N.D.B. & M.

ROCCO LEDGE: Patent Survey No. 2000. The legal description of this claim is as follows: It is located in the SE & of the SE & of Section 23, Township 16 N., Range 57 E.: M.D.B. & M.

ROCCO LEDGE \$2: Patent Survey No. 2000, legal description: SE 2 of the SE 2 of Section 25, and the SW 2 of the SW 2 of Section 24, Township 16 N., Range 57 E.: M.D.B. & M.

PROTECTION: Patent Survey No. 4050, legal description:
SN t of the SE t of Section 23, and NE t of the NE t of Section
26, Township 16 N., Range 57 R.: M.D.B. & H.

MEX: Patent Survey No. 4205, (One-half interest), legal description: NE 4 of the NE 2 of Section 26, Township 16 N., Range 57 E.: M.D.B. & M.

STAFFORD: Patent Survey No. 88, legal description:

NE 1 of the SW 2 of Section 30, and the NW 2 of the SE 2 of
Section 30, Township 16 N., Range 58 E.: M.D.B. & M.

GENESSEE: Patent Survey No. 64, legal description:

NW 1 of the SE 2 of Section 30, and the SW 2 of the NE 2 of
Section 30, Township 16 N., Range 58 E.: M.D.B. & M.

SWENT WATER: Patent Survey No. 103, legal description:

NE 1 of the RE 2 of Section 30, and the SE 2 of the SE 2 of
Section 19, Township 16 E., Range 58 E.: M.D.B. & M.

HIDDEN TREASURE: Patent Survey No. 101, legal description:

(NW 1 of the NW 1 of Section 29, and the SW 2 of the SW 2 of
Section 20, Township 16 N., Range 58 E.: M.D.B. & M.

FIRST EXTENSION (SO.) HIDDEN TREASURE: Patent Survey No. 58, legal description: NE 2 of the NE 2 of Section 30, and the NW 2 of the NW 2 of Section 29, Township 16 N., Range 58 E.: M.D.B. & N.

BULLION: Patent Survey No. 89, legal description:

NE 1 of the NE 1 of Section 30, Township 16 N., Range 58 E.;

M.D.B. & M.

CHARTER OAK: Patent Survey No. 87B, legal description:
3 % of the NE % of Section 18, Township 16 N., Range 57 E.:
1. M.D.B. & M.

HARMONY: Located 9/20/48 and recorded at the White Pine County Courthouse, Ely, Nevada, in Book 148, page 108. The legal description of this claim is as follows: It is located in the NE; of the SW 2 of Section 26, Township 16 N., Range 57 E.: M.D.B. & M.

NIMISIS: Located 9/20/48 and recorded at the White Pine County Courthouse, Ely, Nevada, in Book 64, pages 477 & 478. The legal description of this claim is as follows: It is located in the S & of the NV & of Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

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NEMISIS Al: Located 9/20/48 and recorded at the White Pine County Courthouse, Ely, Nevada, in Book 64, pages 477 & 478. The legal description of this claim is as follows: It is located in the SE to of the NE to of Section 26, and the SW to of the NW to of Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

NEMISIS #2: Located 9/20/48 and recorded at the White Pine County Courthouse, Ely, Nevada, in Book 64, pages 477 & 478. The legal description of this claim is as follows: It is located in the SE & of the NV & of Section 26, and the SV & of the NV & of Section 25, Township 16 N., Range 57 E.; M.D.B. & M.

META: Located 9/20/48 and recorded at the White Pine County Courthouse, Ely, Nevada, in Book 88, page 122. The legal description of this claim is as follows: It is located in the SW & and the SE & of the NW & of Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

FLORENCE: Located 8/27/59 and recorded at the White Pine County Courthouse, Bly, Hevada, in Book 221, page 272. The legal description of this claim is as follows: It is located in the S & of the NW & of the SW & of Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

FLORENCE #1: Located 8/27/59 and recorded at the White Pine County Courthouse in Ely, Nevada, in Book 221, page 275. The legal description of this claim is as follows: It is located in the N & of the NW & of the SW & of Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

SHERMAN TOWN: Located 8/27/59 and recorded at the White Pine County Courthouse, Ely, Nevada, in Book 221, page 274. The logal description of this claim is as follows: It is located in the E & of the NW & of the SE & of Section 36, and the SW & of the NE & of Section 36, Early & M.D.B. & M.

SHERMAN TOWN \$1: Located 8/27/59 and recorded at the White Pine County Courthouse, Bly, Nevada, in Book 221, page 275. The legal description of this claim is as follows: It is located in the W & of the NW & of the SE & of Section 36, and the NE & of the NE & of Section 36, and the SW & of Section 36, and the SW & of the NW & of Section 36, and the SW & of the NW & of Section 36, Township 16 N., Range 57 E.: M.D.B. & M.

SHERMAN TOWN MILLSITE: Located 10/28/59 and recorded at the White Pine County Courthouse, Mly, Nevada, in Book 221, page 337. The legal description of this claim is as follows: It is located in the SW i of the SE i of Section 36, Township 16 N., Range 57 E.: N.D.B. & M.

OH JOE: Patent Survey No. 60, legal description: NE 2 of the NE 7 of Section 25, Township 16 N., Range 57 E., and the NW 2 of the NW 2 of the NW 2 of Section 30, Township 16 N., Range 58 E.: M.D.B. & M.

COMPENSATION & GOOD LUCK: Patent Survey No. 59 A., legal description: NW a and the SW t of the SE t of Section 25, Township 16 N., Range 57 E.: M.D.B. & M.

The Hamilton Corporation owns or has under Contract the following buildings in the White Pine County Mining District. (Little value)

TWO HOUSES, near the cyanide plant.

TWO CABINE, on the corner of Dun & Treasure Street.

STORE BUILDING, on Lots 14, 15, & 16, Block 7.