

RESUME REPORT  
on the  
CROWN MINING PROPERTY  
Humboldt County, Nevada

Mr. Chas. Oster  
Reno  
Nevada

Dear Mr. Oster:

This report is based upon my preliminary examination of the property and the reports by A. H. Howat, E. M. and also Roy A. Hardy, E. M., who built the 500-ton mill and mined Crown and Big King Open Pits.

The objective of this report is to outline mining operations to start production and also to indicate areas where exploration should disclose new orebodies that will materially increase Crown property ore resources.

Crown property comprises 21 mineral claims in Gold Run Mining District, Humboldt County, Nevada, and is 12 miles by road from railroad at Golconda which is 16 miles over U. S. Highway 40 from the supply center at Winnemucca, Nevada.

The property is equipped with a modern 500-ton flotation-cyanide mill which operated for only one year when, in 1942, the U. S. Government closed all silver-gold mines with its L-208 Order. Sierra Pacific Power Company's 60,000-volt power line extends to the property. Adequate water for all purposes is supplied by Layson Creek and deeper mine workings. The property is equipped with an electric driven 800-cu. ft. per min. compressor.

The veins are essentially gold-silver, high amenable to established mill process. The ore occurs in vein lodes measuring from 15 to 60-feet width. Ore shoots along the lodes and their intersections provide wide areas for Open Pit mining which should be first procedure to put the property back into production.

The vein-lodes are divided into three systems dominated by No. 2 Vein coursing NW for more than 2700-feet and containing most of the mine developments. Its NW extension beyond Layson Creek is known as "Crown area" and its SE extension known as "Recovery area".

The lodes comprise: (1) NE coursing No. 1 Vein and Big Vein in Crown area and Margharita and Alsace veins in Recovery area. (2) NW coursing No. 2 Vein which extends through both Crown and Recovery areas. (3) N-S coursing vein opened by Playter Shaft of Crown area and No. 4 Vein in Recovery area.

Howat describes the various ore showings in the Crown area as follows: North-South vein in Playter shaft "is said to have exposed two shoots of ore, one of a length of 100-ft. width not known, said to average \$10 per ton in gold (\$17.50 today), the other 40-ft. in length, width unknown, said to average \$19.00 per ton in gold" (\$33.15 today). "On the 200 ft. level the crosscut driven westerly from the shaft passed through 20-ft. of ore, said to average \$8.00 per ton" (\$14.00 today) then entered an ore zone of different strike from that of the 20-ft. of ore mentioned. In my opinion, my deductions being made solely from conditions as shown on the surface and reports of Mr. Playter, the 20-ft. of ore referred to lies within the North-South Vein and upon passing through this vein, the crosscut entered the footwall side of the No. 1 Vein. In other words the crosscut has penetrated the two veins at or near their intersection. "

"The samples taken prior to driving the south drift (Crown Adit) indicated an average of about 50% of the value in gold and 50% in silver. Samples recently taken from the South drift show values of \$18 per ton (\$28 today) for the ore area a width of 5.5 feet, the gold value being in excess of 70% of the total value per ton. "

In the Recovery area Howat describes the following: "On Recovery Hill a vertical shaft was sunk to a depth of 100-feet. (Discovery Shaft on map.) At the 50-ft. level, a crosscut was driven and a nominal amount of drifting done. The crosscut exposes 10 ft. of ore averaging \$10.07 (\$17.65 today). Surface cuts indicate an ore shoot 360-feet in length, 14 feet width with an average value of \$10.00" (\$17.00 today). "The shaft is not in shape to permit examination being made below the 50-ft. level. Mr. Playter states that for 35-feet below the 50 ft. level the shaft exposes ore showing the dip characteristic to the vein, the entire 35-feet showing fair values in gold and silver, i. e., \$4.00 to \$5.00 per ton" (\$7 to \$8.75 today). "The Margharita Vein, at the west side of andesite intrusion previously mentioned, shows a width of from 12-ft. to 15-ft. and while no defined ore shoot has been exposed, the vein is mineralized wherever opened" (Hardy notes \$8.50 values in a surface tunnel).

Howat recaps the ore disclosures as follows:

	<u>Above Adit</u>	<u>Adit to 346 level</u>	<u>Total</u>
Recovery Shot	77,560	116,310	195,650
Crown Shoot	53,072	130,450	191,522
North-South vein (Playter)		21,000	
	<u>130,612</u>	<u>275,760</u>	<u>406,372</u>

"Although the ore shoots have not been developed to the extent that permits of a close sampling to determine average value of the ore, I am of the opinion that an average value of \$10.00 per ton will be maintained" (\$17.50 today). "The South drift, Adit level, has, within the past ten days penetrated 20-ft of ore (on strike of the vein) which when sampled over a width of 5-feet, the width of the heading, gave average values of \$18.00 per ton, 70% of the value being in gold" (\$28.00 today). "The report comes to me that the drift does not expose the full width of the higher grade ore, the ore showing to be in the hanging wall side of the drift."

"Based on a value of \$10.00 (\$17.50 today) per ton, assuming a tonnage of 400,000 tons the gross value of the mine would be \$4,000,000" (\$7,000,000 today).

Hardy reports "The Crown orebody was mined to the 100-foot level as was the Recovery orebody, leaving unmined considerable ore above the 100 Level as well as the ore mentioned in A. H. Howat's report on page 25 from the adit level to the 346-foot level approximately 275,000 tons."

In my opinion the areas that have not been opened as yet should contain extensive orebodies not included in the above. In the Recovery area surface cuts show ore running \$3.75 to \$19.55 over the Recovery orebody, a surface tunnel on Margharita vein runs \$8.50 per ton and the Big King Pit is reported to have mined ore equivalent to \$6-\$7 per ton at present prices. In the Crown area a surface cut north of the Open Pit assays \$10.30 per ton across 24-feet and the Crown Pit is reported to have averaged equivalent of \$8-\$9 ore at present prices. The best ore should form at or near the various vein intersections and branchings in the areas shown on the map.

The proposed mining plan starts with (1) extending Crown Open Pit 300-feet or more in indicated \$8-\$9 gold and silver values. (2) Extend Big King Open Pit 150-feet or more to andesite dike in ore said

to run \$6-\$7 gold-silver per ton. (3) Begin Recovery Open Pit about 300-feet north of New Recovery Shaft in ore indicated @ \$8-\$10 gold-silver per ton. Later extend this cut northerly into the zone of juncture of Margharita vein with No. 2 Vein. (4) During the Crown Open Pit operation drive Adit Tunnel drift around workings mined down to the tunnel level in Crown Pit to get to the Playter Shaft orebodies averaging \$17.50-\$33.15 at today's prices.

It is recommended that the company start with Open Pit operations (this can be done by contract) and put the mine into production within about four months showing substantial profits. At the same time work can be started at the Playter and Recovery shaft to open the higher grade ores down below. The cost of the above work and to put the mill in operating condition should not exceed \$200,000.00.

Arthur Lakes  
Consulting Engineer

Reno, Nevada  
September 14, 1964

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--- Tunnel --- Surface Cut --- Open Cut

# MAP OF PART OF CROWN MINES

Showing Lodes described by  
A. H. Howat, E.M. in 1921

Additions from later Maps

SCALE: 200-Ft. to 1-in.

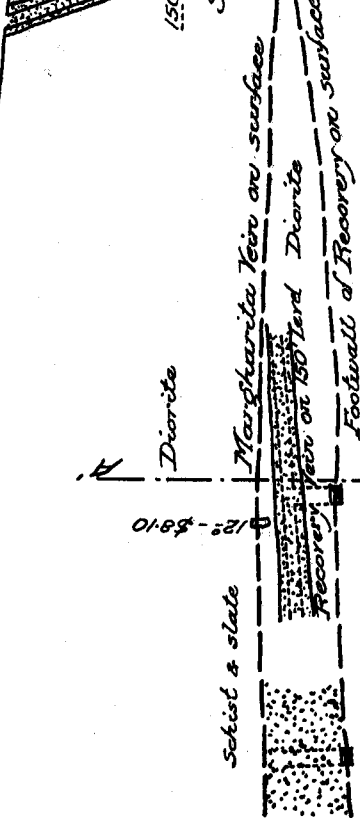
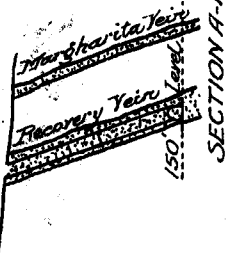
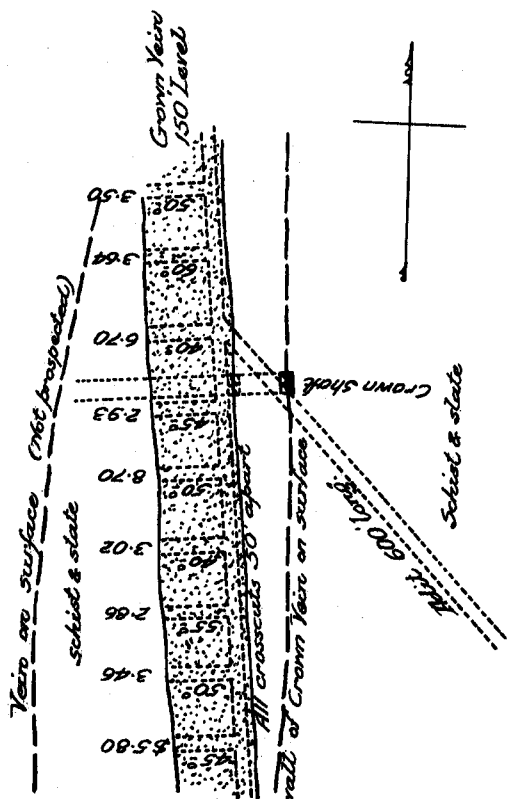
Arthur Lakes, 1964

--- Proposed production area

--- Mining Engineer

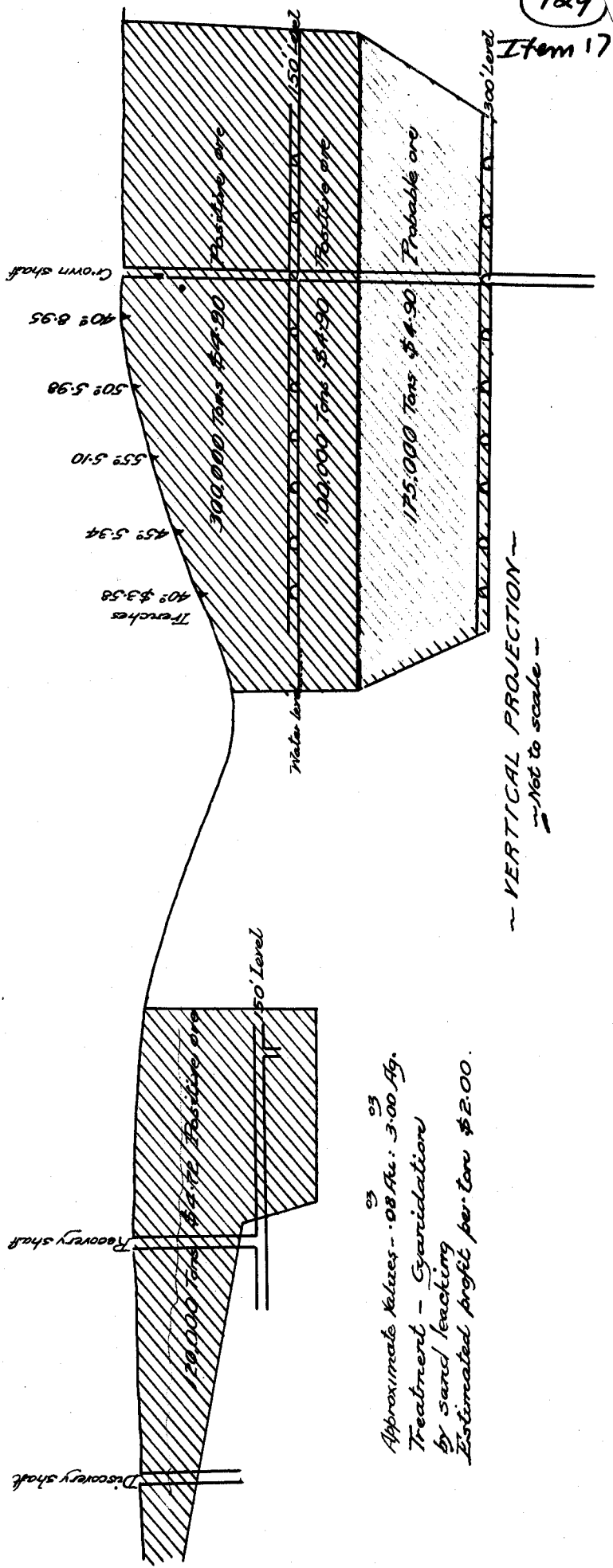
2120 0015

Diorite



PLAN  
Not to scale

ADELAIDE - CROWN MINE  
HUMBOLDT COUNTY  
NEVADA



Approximate Values - .08 Au. 3.00 Ag.  
Treatment - Cyanidation  
by sand leaching  
Estimated profit per ton \$2.00.

VERTICAL PROJECTION  
Not to scale

ROY A. HARDY  
RENO, NEVADA

Post Office Box 2498  
Reno, Nevada

August 4, 1964

Mr. Charles Oster  
Reno, Nevada

Subject: Adelaide-Crown Mine, Humboldt County, Nevada

Dear Mr. Oster:

I am enclosing several reports on the above-subject property - one by A. M. Howat who was with United States Smelting Company and the others by Albert Burch and W. J. Loring, both well-known Mining Engineers of wide experience.

The picture these engineers give of the Adelaide-Crown geology and ore bodies have not changed except that the Crown ore body was mined to the 100-foot level, as was the Recovery ore body, leaving unmined considerable ore above the 100-foot or adit level as well as the ore mentioned in A. M. Howat's report on Page 25 from the adit level to the 346-foot level, approximately 275,000 tons.

The economics worked out in their reports would not hold today, 30 years later, as can be readily understood.

Late in 1940, an all slime cyanide plant of 400-500 tons capacity of steel construction was put on stream, but the war years played havoc with a steady operation. Value of the ore milled checked the reports and the metallurgy was satisfactory. A high tension power line was built from Golconda, 12 miles distant. However, in 1942, the Government closed all silver-gold mines with its L-208 Order. The Adelaide-Crown mine has remained closed with only a watchman on the property.

In addition to the all-steel mill building and all-steel cyanide tanks, the mill is fully equipped for fine grinding in 8-foot and 7-foot ball mills together with Crowe-Merrill precipitation and refining facilities. There is an all-steel combination mine office, warehouse, and assay office.

The property consists of 21 mining claims. Adjoining the Adelaide-Crown on the north is the Gomes property which has stirred up considerable interest with its nickel prospects indicated in drill holes over a large area. Gomes' report of these drill holes are included with the above-mentioned reports on the Adelaide-Crown mine.

Best regards,

Very sincerely,

*Roy A. Hardy*

Roy A. Hardy

RAH:v  
Encs.

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Item 17

CROWN MINES PROPERTY

SCALE 200 ft to 1 in

2120 0015

