

- 1. To supplement the available geological evidence the development by driving exploratory headings on vein material is suggested in order to substantiate and prove a sufficient tonnage to depth.
- 2. Attempt has been made to develop the economics of a 30 ton pilot plant installation to facilitate on-site milling and concentrating of ore obtained from development headings.
- 3. The recommended programme which involves some 3,000 feet of drifting, cross-cutting, raising and some diamond drilling is designed to explore and develop a considerable tonnage depending on the extent of downward continuation of the surface exposures on which the work is suggested to be undertaken.
- 4. Initially some 450 feet of exploratory tunnel is recommended to be driven at an estimated cost of \$50,000.00. If sufficiently favourable results are encountered the exploratory work will be continued as advised in the recommended programme.

#### PROPERTY

The property consisting of a group of six Crown-granted mineral claims known as Hazelton Sunrise property is held under long term lease by Sunrise Silver Mines Limited.

The Sunrise claims with a total area of some 180 acres and the neighbouring claims of the Sunrise Silver property are Gutlined in Figure 1.

The listing of the claims and description of land comprising Hazelton Sunrise property form Appendix I:

## LOCATION OF PROPERTY

The property lies approximately 55° 21' latitude, 127° 29' longditude in the immediate proximity of Sunrise Silver property in the Omineca Mining Division of the Province of British Columbia.

Figure 2 shows the location of property situated on the north slope of Nine Mile Mountain, some 8 air miles northeast of New Hazelton, B.C.

New Hazelton served by the Canadian National Railways and Provincial Highway No. 16 is 177 miles by railroad, 187 miles by highway east of Prince Rupert and 48 miles by way of railroad or highway north of Smithers.

A scheduled air service operates between Vancouver and Smither. Also a scheduled jet service is available between Vancouver and Terrace which is <sup>35</sup> road miles southwest of New Hazelton.

The Hazeltons have a combined population of some 4,000 people and have the usual amenities and servicestypical in a locality of this size.

## ACCESS TO THE PROPERTY FROM NEW HAZELTON

The property is reached from New Hazelton by Nine Mile Mountain road, 13 miles to Silver Cup Basin at elevation 3,400 feet and an additional 1 mile of good four-wheel-drive road to the mine site where the bunkhouse facilities are available at an elevation of approximately 4,820 feet. From this point there is a good caterpillar tractor road leading to the "Main Vein" outcropping at an elevation of approximately 5,000 feet. The vein exposures between elevations of 4,700 and 5,200 feet are readily accessible from the Sunrise camp.

## CLIMATE

Recorded information concerning the general climate of the area at the altitude of Sunrise workings is not available. However, maximum and minimum temperatures could be expected to be varying between approximate annual limits of plus 85 and minus 55 degrees Fahrenheit. The latter could present freeze-up hazards in smooth running of operation and adequate preventative maintenance is essential.

Annual precipitation is in the order of 40 inches.

Maximum snowpack during the winter period, mainly from mid October to the end of April is in the 100 inch range.

The prevailing wind in the area is west-southwest.

## SURFACE FEATURES

The Nine Mile Mountain where the Sunrise property is situated has a lateral extent of 12 miles from east to west and is 8 miles from North to South. It is bounded on the north by the deeply cut Shegunia River Valley and Suskwa River Valley is on the southwest. A series of steep-walled basins have been formed by glacial cirques on the precipitous slopes confined to the north side of the mountain.

The mountain has a subdued, gently rounded profile with the highest point at an elevation of 5,745 feet. Timber line in the area is at an approximate elevation of 4,500 feet. The Sunrise property located on the north slope of the mountain has the vein exposures between elevations 4,700 and 5,200 feet.

## STRUCTURAL GEOLOGY OF THE AREA

Mesozoic rocks of the Hazelton group comprising of thick series of sedimentary and volcanic rocks play a predominant role in the structural geology of the Hazelton and Smithers areas. These interbedded sedimentary and volcanic rocks which occur in an apparently conformable succession range in age from pre-Middle Jurassic to Lower Cretaceous.

The sedimentary and volcanic rocks of the Hazelton group are invaded by numerous granodiorite and diorite stocks in both the Hazelton and Smithers areas. Most of the mineral deposits of the region either occur within or near these granite intrusions in the invaded rocks of the Hazelton group.

## ECONOMIC GEOLOGY

The deposits occur in veins along intersecting fault fissures, in coarsely grey granodiorite stock that intrudes the sediments along the north side of the mountain. The veins lie in a disturbed zone about 700 feet in width from north to south and laterally extends 2,500 feet in length from Sunrise property east across Leadking ground which now forms the property of Sunrise Silver Mines Limited.

The main fracture zone which lies between elevations of 4,700 and 5,200

feet, parallels the north contact of the granodiorite and intruded sedimentary rocks and its north border is within 500 feet south of the granodiorite contact.

E. O. Kindle, in the Geological Survey of Canada, Memoir 223, has well described the vein outcrops on the Sunrise Group as follows:-

"There are two intersecting sets of veins on the Sunrise property. One set strikes northeast and dips from 30 to 50 degrees southwest. The other set strikes east and dips from 10 to 40 degrees south. The veins range from 100 to 500 feet in length and from 3 inches to 4 feet in width. They commonly occur in parallel groups or may be arranged on echelon. Many of the veins consist of almost solid sulphide, but there is commonly an abundance of quartz gangue. The metallic minerals present, in order of their abundance, are:jamesonite, sphalerite, galena, cosalite, pyrite, arsenopyrite, argentite and tetrahedrite. The ore contains appreciable amounts of silver, lead, zinc, antimony and bismuth."

## HISTORY

- 1909 Quartz veins carrying abundant jamesonite, galena and sphalerite were discovered along the north slope of the Nine Mile Mountain.
- 1911 Hazelton Sunrise Mines Limited was organised and carried out some development work.
- 1915 A shipment totalling 74 tons of hand sorted ore was made in three lots to the Consolidated Mining and Smelting Company of Canada Limited at Trail, B.C. The photostats of the three final settlements form Appendix 'Ii' of the report.
- 1918 J. Erington secured an option and did some surface stripping on the property.
- 1920 American Smelting and Refining Company carried out further development work after securing an option in late 1919. An incline shaft

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was sunk on the "Main Vein" to a depth of 40 feet from a point at 5,020 feet elevation.

- 1923 Trethewey Brothers carried on development work for several seasons and were responsible for driving the main corss-cut adit 400 feet in the southernly direction at an elevation of 4,800 feet.
- 1927 Hazelton Sunrise Mines Limited extended the main adit to a total length of 750 feet with a 60 foot raise driven from the face at an angle of 45 degrees to the south. Further work mainly surface trenching carried out by this company in 1937 exposed several new veins on the property.
- 1966 Sunrise Silver Mines Limited acquired the property by way of lease from the Hazelton Sunrise Mines Limited, the registered owner of the property. An extensive work programme has been carried out over the past few years consisting of building an access road to the present camp site, camp construction with complete bunk-house facilities, trenching and surface sampling, drilling, blasting, bulldozing and surface stripping and a limited amount of geological mapping.

The diamond drilling programme was conducted in 1969. Ten holes were drilled from the surface with total drilled footage of 2,829 feet. D.D.H. SS#7 is reported to intersect two lenses a foot wide, one of which assayed silver, 19.1 ounces per ton; lead, 3.59 percent; zinc, 6.17 percent; bismuth, a trace; antimony, 0.91 percent.

During the latter part of 1970 a test shipment of 24 tons of crushed ore was made to Cominco Lead Smelter, Trail, B.C. A photostat of the final settlement forms Appendix III of the report.

Equipment and other assets on the property of Sunrise Silver Mines Limited are listed in the Appendix IV of the report.

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## DEVELOPMENT

#### SURFACE DEVELOPMENT

Surface strippings, trenches and cross-cuts have exposed a number of veins on the property. Among the several strong veins the most prominent is the main vein at an elevation of approximately 5,000 feet, which has been exposed almost continuously over a strike length of 750 feet.

In 1963 J. D. Mason P.Eng. carried out a preliminary sampling over a portion of the vein 345 feet long which assayed:- silver, 25.81 per ton; lead, 7.56 percent; sinc, 9.65 percent. These values were averaged over a width of 28.8 inches. The preliminary sampling plan of "Main Vein" by J. D. Mason P.Eng has been reproduced and forms Figure 3 of the report.

E. D. Kindle in the Geological Survey of Canada, Memoir 223, gives a detailed account of the exposed veins on the property. Most of these veins are shown in the accompanying plan (Figure 8, G.S.C. Memoir 223) which forms figure 4 of the report.

#### UNDERGROUND DEVELOPMENT

The underground development consists of exploratory adits or cross-cuts, an incline shaft and a raise driven in order to further explore at depths the veins exposed on the surface.

The upper adit, 6' x  $6_{2}^{1}$ ', slightly up-grade, at elevation 4,985 feet, is driven due south and measures 105 feet. A 3-inch quartz vein, intersected at 50 feet from the portal is considered to be the downward continuation of the "Main Vein" that outcrops 20 feet south of the portal at an elevation of 5,000 feet. The vein strikes east and dips 28 degrees south. The second vein, 4 12 inches in width comes in on the east wall at a point 50 feet from the portal. It strikes north east and dips 65 degrees southeast and is followed to within 15 feet of the face where it enters the west wall. This branch vein is described in the Geological Survey of Canada, Memoir 223, as composed of solid sulphides. A 6-inch channel sample taken across the vein then 65 feet from the portal assayed: silver, 33.27 ounces per ton, lead, 13.74 percent; zinc, 17.02 percent, antimony nil; arsenic, 1.35 percent; bismuth, nil.

The main adit, 4' x 6' slightly up-grade at elevation 4,800 feet is driven south for a length of 750 feet. Several short, lean quartz sulphide lenses have been encountered at intervals but, apparantly the adit is not driven far enough to intersect the downward continuation of the most important vein exposed on the surface. From the face of this main cross-cut is driven a 60 foot raise at an angle of about 45 degrees to the south showing a small amount of mineralisation at the back.

There is a short adit 5' x  $6\frac{1}{2}$ ' slightly up-grade, at elevation 4,760 feet driven south in a shear zone for a length of 32 feet. The vein with an average width of 18 inches running along west wall, strikes south and dips approximately 45 degrees east. Chips taken across the width of the vain at the face assayed: silver, 8.7 ounces per ton; lead, 4.12 percent, zinc, 3.70 percent.

Another exploratory adit, 6' x 7', slightly up=grade, at elevation 4,735 feet, is driven 117 feet southwest with a 50 foot cross-cut to the southeast at a point 55 feet from the portal.

An incline shaft with the shaft collar at elevation 5,020 feet is sunk on "Main Vein" to a depth of 40 feet. The shaft is now full of water. That the bottom of the shaft shows good ore is stated in the Minister of Mines Report - 1920.

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#### RECOMMENDED PROGRAMME

At the expense of acceptable exploratory and development risks the programme is designed as a direct and firm approach towards proving the ore potential and making possible the future extraction of the proven ore.

The proposed programme involves:-

1 Driving on vein a decline 8' x 8' at 10 percent gradient heading east from a point at extreme west end of the "Main Vein" exposed at approximate elevation of 5,000 feet.

The extreme east end of the decline or ramp would be determined by geological evidence of the physical dimensions of the "Main Vein" and the strata conditions exhibiting the occurance of the vein material.

- II Driving a raise 6' x 6' on vein from a convenient point in the decline to connect the inclined shaft driven 40 feet along the dip of the vein. This would provide a second access and help in ventilating the underground workings.
- III Continuing a ramping on vein at minus 10 percent gradient heading west from a point at extreme east end of the decline to a point extreme west end of the "Main Vein"
- IV Driving a raise 6' x 6' on vein at each end of the decline to develop block of ore confined between these two limits.
  - V Intersecting the possible downward continuation of the "Main Vein" with three diamond drill holes collared from the face of the main crosscut after actual survey has been carried on the property and underground workings have been correlated.
- VI The workings should be surveyed, mapped and sampled as the development work progresses and the results should be plotted.
- VII No immediate work is recommended in the adits at the lower elevations.

## NOTE: Decline or ramp refers to the exploratory tunnel.

## WORK PERFORMANCE AND COSTS ESTIMATES

It is suggested that initially some 450 feet of exploratory tunnel should be driven in order to explore and evaluate the vein material along its length at varying depth. With promise shown, the decline would be continued to further distances and greater depths.

The capital investment required for driving 450 feet of exploratory tunnel is estimated at \$50,000.00.

The anticipated timing involved for carrying out the above work is  $2\frac{1}{2}$  months.

## ESTIMATED COSTS

Estimated direct costs involved in driving 450 feet of exploratory tunnel are as follows:-

EXPLORATORY TUNNEL 450 FEET @ \$60 PER FT.	\$27,000.00
ADMINISTRATION, SUPERVISION & ENGINEERING	\$6,500.00
LEGAL & PROPERTY PAYMENTS	\$3,500.00
TRANSPORTATION, ACCOMODATION etc.	\$1,500.00
EQUIPMENT RENTAL, PLANT & ROAD	
MAINTENANCE	\$7,000.00
TOTAL	\$45,500.00
CONTINGENCIES	\$4,500.00
GRAND TUTAL	\$50,000.00

## ECONOMICS OF THE PROJECT

The exploration-development phase of the programme involves some 3,000 feet of drifting, crosscutting, raising and some diamond drilling. The works when completed could prove considerable tonnage of mineable ore provided similar vein widths and mineralisation are encountered at depth as exposed on the surface.

## MUCKING EQUIPMENT

LOAD-HAUL-DUMP unit (trackless) with bucket capacity, preferably 1 cu.yd. would be readily adaptable to the conditions laid out for development work and could be more usefully employed when it comes to actual mining.

## PILOT PLANT

As the development programme is recommended to be carried on ore, onsite milling and concentrating of the ore obtained from development headings would be far more economical than shipping of raw ore in bulk to a distant concentrator.

At present a 30-50 ton pilot plant may be considered for this purpose.

Pilot plant would facilitate metallurgical testing and determing milling requirements of different vein materials occuring on the property.

There are 200-300 tons of high grade ore stock piled at the mine site and some 20,000 tons of probable ore in place, sufficient to feed the pilot plant for a period of approximately 2 years.

## PILOT PLANT PERFORMANCE

It is expected that with a 30 ton pilot plant some 750 tons of ore will be processed per month. A better performance may be expected when optimum operating conditions are reached.

## ECONOMICS OF PILOT PLANT INSTALLATION

The fact can be well illustrated when the costs of producing concentrate and shipping it to a smelter are compared with the freight charges for shipping the ore to the same destination.

Assuming place of destination - Cominco Smelter, Trail, B.C.

Α.	Estimated milling cost for	producing (say)		
	75 tons per month of concen	itrate		
	(includes labour and materi	als)	H	\$6,000.00

Β.	Freight charges for 75 tons	per month of	
	concentrate (New Hazelton -	Trail) @	
	\$48.20 per ton when insured	against 50%	
	of its content value	= \$3	,615.00

C. Freight charges for 750 tons per month of ore (New Hazelton - Trail) @ \$27.38 per ton = \$20,535.00

D. Savings per month C - (A + B)= \$10,920.00

- E. Estimated cost of pilot plant including installation and housing = \$80,000.00
- F. Pay-back period for pilot plant = 8 months

approximately

Similar strategy can be applied for handling the two commodities between the plant site and New Hazelton which will further narrow down the payback period for the pilot plant.

NOTE: Concentrate is assumed at 10% of ore treated.

## SITE FOR PILOT PLANT

The present proposed site is located on the access road to the Sunrise Camp and mine site. This location is about 1 road mile below the present camp site at an approximate elevation of 3,610 feet. An area of 50' x 50' has already been levelled off and this could be further increased as required.

An adequate water supply is available from the Sunrise creek running east of the proposed site.

A good solid foundation with concrete floor is recommended before the pilot plant is installed.

A suitable site for the disposal of mill tailings should be established before milling commences.

Also refer to Appendix V.

## SURFACE MUCK HANDLING

The north slope below the "Main Vein" at 5,000 elevation, seems to' offer a slope angle which would approximately be the angle of repose of the muck to be handled on its way to the pilot plant. The writer believes that the slope could be gainfully employed by allowing muck to fall under the gravitational force through an open chute 4' x 4' cut into the surface of the slope. The muck would be collected approximately 1,400 feet below the dumping point at 5,000 elevation and from thereon could be trucked to the site of the pilot plant located at approximate elevation of 3,610 feet.

A more economical method for conveying ore from the bottom of chute to the pilot plant site would have to be designed. The whole matter should be thoroughly looked into by considering various possibilities and choosing the most feasible and economical method for conveying ore.

## CAMP SITE

Bunkhouse facilities now provided at the mine site would be more readily accessible and better utilized when established at the proposed plant site.

A maintenance shop should be provided to handle any minor repairs or breakdowns without an excessive loss of time.

## ROAD CONSTRUCTION AND MAINTENANCE

Certain portions of the access road have to be re-routed. A steady road maintenance programme is essential in the area.

# CONCLUSIONS

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- A detailed study of the previous reports available to date and a recent visit to the Sunrise property have prompted the author to believe that there exists a number of veins of potential economic interest.
- 2. The decline or ramp with various crosscuts and raises should fully expose the "Main Vein" and would identify any other crossvein(s) intersecting the "Main Vein". This would help in overall planning and developing a suitable scheme for future mining.
- 3. To facilitate on-site milling and concentrating of ore obtained from development headings and to carry out metallurgical testing and determining milling requirements of different vein materials present on the property, a pilot plant of 30-50 ton capacity may' be considered for this purpose during the initial exploration development phase of the programme.

# R E C O M M E N D A T I O N S

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- 1. A progressive development approach is advised to achieve the objective of proving up the natural resource which can further be exploited and utilised and to meet the challenge presented by the various mine-making possibilities existing on the property.
- 2. Development programme should be carried by driving drifts, crosscuts and raises on vein material.

Driving a decline 8' x 8' at 10 percent gradient, heading east from a point at extreme west end of the "Main Vein" exposed at approximate elevation of 5,000 feet should be given first priority.

- 3. The subject of pilot plant installation may be resolved in due course as the results of development-exploration programme and the economics of such installation may warrant.
- 4. In view of the aforenoted it is suggested that the recommended programme be undertaken and that underground development by driving an exploratory tunnel (decline) be commenced as soon as practical.

## CERTIFICATION

I, Kuldip S. Khunkhun, of 603-1260 Nelson Street, Vancouver 5, B.C., hereby certify:

That I am a graduate of the University of Leeds and have been granted the degree of Bachelor of Science in Mining.

That I am a member of the Association of Professional Engineers of the Province of British Columbia and of the Province of Ontario.

That I have no direct or indirect interest whatsoever in the securities of Sunrise Silver Mines Limited nor in the claims discussed in the accompanying report.

That the accompanying report is based on examination of the Hazelton Sunrise property and on information collected from various sources.

That I examined the subject property from September 17 to September 20, 1971.

PRESENTED OCTOBER 19, 1971.

Munkhun

K. S. Khunkhun, P.Eng.



THE LISTING OF THE CLAIMS AND DESCRIPTION OF LAND COMPRISING SUNRISE SILVER PROPERTY.

Lot 593, Cassiar District, known as the "Ethel" mineral claim Lot 594, Cassiar District, known as the "Sunset" mineral claim Lot 595, Cassiar District, known as the "Sunrise" mineral claim Lot 596, Cassiar District, known as the "Noonday" mineral claim Lot 597, Cassiar District, known as the "Hidden Treasure" mineral claim

Lot 599, Cassiar District, known as the "Ethel Fraction" mineral claim

APPENDIX II (a) Trail, D. C. Sapt. 2nd, 1915.

Our Serial No. 5374 Snippers Lot No. 1

THE CONSOLIDATED MINING & SMELTING CO. OF CANANDA, LIMITED

In account with

The Sunrise Mine New Hazelton, B. C.

COPY

Quotations August 15th, 1915.

Preliminary Settlement for ore.

Final Settlement to be made. Quotations ... Average October - 1915.

Arrived .. August 15th, 1915. No. Cars 1. No. Sacks 489. Veight Sacks 520 lbs. Gross Weight Ore 59.740 lbs. Moisture nil per cent.

Dry Weight Ore 59,740 lbs. Car Numbers 266,954.

ASSAY:

Gold - oza. per ton. Silver 122.4 oza. per ton. Copper - per cent leas Lead 49.5 p.c. Ainc 8.8 p.c. Fe. 8.4 Ins 9.6 CaO.8 s.14.9

QUOTATIONS: New York Silver 47625 New York Copper (elect).....less.....per lb..... Montreal Lead \$5.505....30.00 per 2,000 lbs. -^03905 per 100 lbs.

\* CONTENTS VALUE 1,654.15 -3656.09 Silver at 47625 for 95 p.c.-..... 29571 pounds Lead at 03905 per 1b. for100 p.c...... 1,039.28 Total Gross Value- -8 ... 2,693.43 Less Treatment at \$10.90 per ton- - -325.58 2,367.85 Less Freight- - -331.43. 2,036,42 Less 10 per cent 203.64 1,832.78 BASIS TREATMENT:

Pb 20.5 @ 10#	\$ 2.05
Base	8.50
· ·	\$10.50
Zn8 050¢	.40
	\$10.90

REMARKS:

THE CONSOLICATED MINIES & EMELTING CO. OF CAMPACT

APPENDIX II (b)

1

Our Gerici No. 5555 S ippers' # Lot No. 2.

Trail, B.C. Dept. 29th, 1915.

THE CONJULIDATED HINING & OMELTING CO. OF CARADA, LIMITED.

In account with

Sunrise Mine.

New Hazolton, B.C.

Quotations Sept. 22nd, 1915.

Froliminary Settlement for Ore.

Final Sottlement to be made. Quotations ---- -vorage - November 1915.

A fived Sept. 22'15. No. Cars - 1. No Sacks 480. Weight sacks 510 lbs. Grass Weight Ore - 58,330 lbs. Moisture - .2 per cent. Dry Weight Ore 58,213 lbs. Car Numbers 26636.

ASSATI

-

Gold -- Ozs. per Ton. Silver 114.6 Ozs. par Ton. Copper -- por Vent less. Lead 43.5 p.c. Line 13.4 p.c. Fe 8.27 Ins. 10.6 p.c. Val .87 5. 17.2 p.

CTOTATIONS:

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Less Freight

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# APPEnulX II (c)

Trail, D.C. Nov. 2n. 1915.

## Chir Jeriul No. 5730. Shippers' N Lot No. 3.

THE CONSCRIPTED MINING & SHELTING CO. OF CAMADA, LIVITED:

In \_count with

Sumino Ming.

Rey Baselton, DiC.

178.33

Lucations. Oot, 25, 1915.

Freliminary Lettlement for ors, Final Lettlement to be made, motations December 1915,

Arrived Oct. 25,1915. No.erro - 1. No.sacks 259. Weight sacks - 100. Gross Weight Ore 29765 108. Noisture .6 per cent. Dry Weight ore 29606 108. Car numbers 256926.

ASSAY:

Gold -- Osse per ton. Silver 86.2 Ozse per ton Copper -- per cont less---Tond 37.9 p.c. Zine 14.2 p.c. Fe 10.1 Ins 11.6 Cao .7 s 16.1 p.c.

QUOTITIONS: For York Milvor (48875' De York Copper (elect) - Loss - per 1b. Montrel Loud 5.71 Loss (30.00 per 2,000 lbs. 4.21 per 100 lbs.

 CONTINUE:
 V/ LUE:

 1276.02
 Silver at .4'875 for 95 p.c.
 592.47

 1221 pounds lead at 5.71 per 1b. for 90 p.c.
 592.47

 101.1 Prove value
 101.32

 Pop: tractiont it .13.00 per ton
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Less freight

Loss 10 per cent

Loss freight propaid on saoks returned to shipper 711.10 11.10 563.09

BACIC TREATLETT

25	32.	10	.10	\$3.21
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	75	:		13.00

THE CONCOLIDERED MINING & MEATING CO. OF GREEDE, LINITED:

the Jaim

# Lead Settlement-Fina.



APPENDIX III

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2,404 3,942	Lbs. Zinc	461 # m 38	% ],	923 498	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Ereight	10.732 6.962 t@\$ 14.19 elow	C./Ib. C./.Ib. Total Gross Va	lue s	104.29 1,125.03 341.12 783.91
2,404 3,942	Lbs. Zinc	401 # m 38	% ],	923 498	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Freight	10.732 6.962 t @ \$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va x <b>\$24.6</b> 0	lue s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91
2,404 3,942 Less	Lbs. Zinc	38 38 Royalty on \$	% ],	923 498 to	Ibs. @ Ibs. @ Less: Treatmen Details Bo Trucking Switching Freight	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va x \$24.60	lue s	104.29 1,125.03 341.12 783.91 615.00 168.91
2,404 3,942 Less	Lbs. Zinc % R	38 38 Royalty on \$	% ],	923 498 to	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Freight	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va x \$24.60	lue s	104.29 1,125.03 341.12 783.91 615.00 168.91
2,404 3,942 Less reatment F	Lbs. Zinc % R Rate	38 38	% ],	923 498 to	Ibs. @ Ibs. @ Less: Treatmen Details Bo Trucking Switching Freight	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va x \$24.60	lue s s s s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91
2,404 3,942 Less reatment F	Lbs. Zinc % R Rate	38 38 Royalty on \$	% ],	923 498 to	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Freight	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va x \$24.60	lue s s s s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91
2,404 3,942 Less reatment F Rase Charge on Zinc Pena	Lbs. Lead Lbs. Zinc % R Rate	38 38	% ],	923 498 to \$ 15	Ibs. @ Ibs. @ Less: Treatmen Details Bo Trucking Switching Freight	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va x \$24,60 Advanc	lue s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91
2,404 3,942 Less reatment F Rase Charge on Zinc Pena orsenic Antim	Lbs. Lead Lbs. Zinc % R Rate	401 # m 38 Royalty on \$ 2.7 @\$	1.25	923 498 to \$ 15 3	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Freight	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va <b>x \$24.</b> 60 Advanc	lue s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91 <u>-</u> 168.91
2,404 3,942 Less reatment f Rase Charge on Zinc Pena orsenic Antim Moisture Pena	Lbs. Lead Lbs. Zinc % R Rate Nty ony Penalty Ity	401 # m 38 Royalty on \$ 2.7 @\$	1.25	923 498 to \$ 15 3	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Freight	10.732 6.962 t @ \$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va <b>x \$24.</b> 60 Advanc Balance	lue s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91 <u>-</u> 168.91 <u>-</u> 140.00 <u>28.91</u>
2,404 3,942 Less reatment f Rase Charge on Zinc Pena orsenic Antim Moisture Pena xtra handling	Rate Ny Penalty	38 Royalty on \$ 2.7 @\$	1.25	923 498 to \$ 15 3	Ibs. @ Ibs. @ Less: Treatmen Details Bo Trucking Switching Freight	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va x \$24.60 Advanc Balance	lue s s s ed s e	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91 <u>-</u> 168.91 <u>-</u> 140.00 <u>28.91</u>
2,404 3,942 Less reatment F Rase Charge on Zinc Pena orsenic Antim Moisture Pena xtra handling aad credit/de	Lbs. Lead Lbs. Zinc % R Rate Ny ony Penalty Ity Ity Ity Ity	401 # m 38 Royalty on \$ 2.7 @\$ 25.0 @\$	1.25	923 498 to \$ 15 3 2.!	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Freight	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va x \$24.60 Advanc Balance	lue s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91 <u>140.00</u> <u>28.91</u>
2,404 3,942 Less reatment f Rase Charge on Zinc Pena orsenic Antim Moisture Pena xtra handling aad credit/de Silica Lime cred	Note that the second se	401 # m 38 Royalty on S 2.7 @\$ 25.0 @\$ 47.8 @\$	1.25 .10 .14	923 498 \$ 15 3 2.1 6.0	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Freight .00 .38	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va <b>x \$24.</b> 60 Advanc Balance	lue s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91 <u>-</u> 168.91 <u>-</u> 168.91 <u>-</u> 168.91
2,404 3,942 Less reatment F Rase Charge on Zinc Pena orsenic Antim Moisture Pena xtra handling ad credit/de Silica Lime credit otal Treatmen	Lbs. Lead Lbs. Zinc % R Rate Nate Nate Nate Nate Nationality Natio	401 # m 38 Royalty on \$ 2.7 @\$ 25.0 @\$ 47.8 @\$	1.25 .10 .14	923 498 \$ 15 3 2.9 6.0 \$ 14.	Ibs. @ Ibs. @ Less: Treatmen Details B Trucking Switching Freight .00 .38	10.732 6.962 t@\$ 14.19 elow Min. 25.0	C./Ib. C./.Ib. Total Gross Va × \$24.60 Advanc Balance	lue s	104.29 1,125.03 <u>341.12</u> 783.91 <u>615.00</u> 168.91 <u>-</u> 168.91 <u>-</u> 168.91 <u>-</u> 140.00 <u>28.91</u> /ag

APPENDIX IV cont.

## BUNKHOUSES

- 1. Fiue frame bunkhouses capable of housing 15-20 men.
- 2. One well equipped kitchen capable of serving 15-20 men.
- One dry-house equipped with 4 sinks, one shower and one washing machine.
- 4. Two small tool sheds.
- 5. One shack housing crusher plant near the Upper Adit.
- 6. One frame house at the proposed plant site.

#### APPENDIX IV

## EQUIPMENT AND OTHER ASSETS ON THE PROPERTY

## EQUIPMENT

- One Allis-Chambers HD-5 Bulldozer with balde and winch 1965 model - needs minor repairs.
- One Dodge four-wheel-drive half-ton pick-up 1964 model good condition.
- 3. One Ranger, 5 single piston tracked vehicle 1967 model good condition.
- One 350 diesel-powered front end loader on tracks with <sup>3</sup>/<sub>4</sub> Cu.Yd. bucket - 1969 model - good condition.
- 5. One air-driven jackhammer.
- 6. One gasoline-driven crusher-hammer mill unit rated at 50 tons per day in fair condition.
- One gasoline-driven Gruendler Roller Bearing Jaw Crusher, model 10..16A No. 19179 - excellent condition.
- One 26 ft. long conveyor, size 8" x 3<sup>1</sup>/<sub>4</sub> model AENLD excellent condition.
- 9. One Roller Screen 24" D x 90" good condition.
- One Northlite diesel powered lighting plant. Capacity 20-KVA good condition.
- One Jenhack 250 c.f.m. diesel powered compressor model 1969 excellent condition.