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THE NEVADA PROJECT

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Howard M. Kincheloe
KINCHELOE FINANCIAL SERVICES
2136 Calle De Vida
Tucson, Ariz. 85715
886-0066

INTRODUCTION

Gold bars can be produced and inventoried tax free until sold. These bars can be used to secure loans. Loan proceeds are not taxed. Gold increases steadily in value each year, greater than loan interest and inflation combined. Silver shares this same feature. We produce and refine both metals.

We plan to expand our operations: build a mill to produce concentrates in Nevada where we have acquired mines, ore in dumps, plenty of water for concentration and recovery of values. The mill - crushing, grinding, classifying, materials handling equipment, concentrators, and tailings desposal - will cost about $1,000,000.

As in mines all over the world, there are no mysteries here. We claim no secrets unavailable to others. What makes this property so very attractive is a simple fact: today gold is worth nearly 30 times as much as when the mines shut down. Old timers made no mistakes. But their $5/ton waste rock (in dumps) has become our $150/ton mill feed. Thus we have a 2-year supply of ore on top of the ground already mined from which we can recover some 76,000 oz. of gold and 580,000 oz. of silver ($47 million present value) without including underground mine potential, great though it may be.

We propose a limited partnership within which distribution can be made without tax impact. The limited partner will loan to the partnership $1,000,000 holding all equipment as chattel. Loan will be repaid @ 40% of all production until repayment is complete. The general partner will conduct all operations: ore development, mining, mill construction, ore hauling from dumps and outlying properties, produce a bulk mineral concentrate, safeguard and transport values to refinery, refine gold and silver. All costs will be met from production . At point of repayment and henceforth thereafter 10% of all metal produced shall be internally distributed to limited partner. These distributions are <u>not</u> in liquidation, are <u>not</u> for all or part of a partnership interest and are <u>not</u> the distributive share of income of the partnership as income has not been realized.

Basically, after speedy repayment of mill money to limited partner distributed concentrates will be reduced to metal and refined into separate bars of gold and silver while in posses sion of partnership, and at no cost to limited partner. Clearly, through out the life of our Nevada operation the limited partner is to receive 10% of all metal produced with no tax impact and before any costs whatever are levied...after repayment of entire investment and healthy profit. (See <u>Distribution of Metal</u> for details.)

HISTORY, OWNERSHIP AND EARLY OPERATIONS

At peak operation the Montgomery Shoshone Mining Co. of New York acquired all adjoining claims which cover Montgomery Mountain and the Montgomery Shoshone fault. These patented mining properties were owned outright along with two adjoining millsites about 5 mi. distant on the Amargosa River. The millsites went unused when adequate water was encountered at lower levels in the mine.

The Montgomery Shoshone Mines Co. was issued patent #46272 on 9 March 1908 based on Mineral Survey 2471 A&B controlled by U.S.L.M. 175. The patent deeded the following six properties:

Name of Location	Date of Location
Shoshone Lode	6 September 1904
Shoshone #2 Lode	24 September 1904
Shoshone #3 Lode	24 September 1904
Indian Johnnie	24 September 1904
Little Fraction Lode	18 February 1905
Shoshone Mill Site	23 May 1905

The Shoshone Polaris Mining Co. was issued patent #46273 dated 16 January 1908 based on Mineral Survey 2510 A&B controlled by U.S.L.M. 175 deeding the following four properties:

Name of Location	Date of Location
Polaris Lode	25 September 1904
Del Monte Lode	15 December 1904
Del Monte Fraction	25 April 1905
Polaris Mill Site	6 May 1905

Bullfrog - Red Oak Company obtained patent #46274 on 3 Feb. 1908. Patent was based on Mineral Survey 2385, deeding the following:

Name of Location	Date of Location
Red Oak Lode	23 December 1904
Red Oak Fraction Lode	21 February 1905

Bullfrog Red Oak Mining Company applied for patent on 26 September 1907 using mineral survey 3297, Red Oak Tunnel Lode No. 1 located 1 June 1907.

The Providence Mining Company of Bullfrog was issued patent #46911 on 13 April 1908 based on Mineral Survey 2470 (U.S.L.M. 175). The patent deeded the following four mining claims:

Name of Location	Date of Location
Greenhorn Lode	18 October 1904
Providence Lode	21 October 1904
Oro Grande Lode	21 October 1904
Shoshone Extension Lode	18 February 1905

The Montgomery Mountain Mining Company of Bullfrog obtained patent #43178 on 25 January 1909 based on Mineral Survey 2426 tied to U.S.L.M. 175 granting deeds to the following three patented mining claims:

Name of Location	Date of Location
Greenhorn Lode	19 October 1904
Providence Lode	21 October 1904
Oro Grande Lode	21 October 1904
Shoshone Extension Lode	18 February 1905

The Montgomery Mountain Mining Company of Bullfrog obtained patent #43178 on 25 January 1909 based on Mineral Survey 2426 tied to U.S.L.M. 175 granting deeds to the following three patented mining claims:

Name of Location	Date of Location
Three Peach Lode	11 January 1905
Polaris Fraction Lode	3 March 1905
Inaugural Fraction Lode	4 March 1905

Originally remote, the mines shipped only high grade ore to distant smelters for treatment while accumulating waste piles of material too low in grade to justify high shipping and treatment, costs of the day. Geologically favorable and now easy of access, these groups we have purchased outright lie mainly astride the Montgomery-Shoshone fault passing through a saddle between Montgomery Mountain and Black Peak on the SE rim of the Bullfrog Hills Caldera midway between Las Vegas and Tonapah off U.S. 95. The main (Shoshone) Shaft and "glory hole" are 3 mi. from Beatty via new road we built in November connecting at the edge of town with the paved highways coming from Death Valley, Calif. Even though our initial interest is based on ready recovery of values in dump ore and abundance of water in the main shaft, altogether these year-round properties include two principle mines, a 2,000 ft. tunnel along the fault more than a dozen open shafts of undetermined depth and drifting, and two 5-acre millsites on the Amargo River.

MINING LEASE AND OPTION TO PURCHASE
A G R E E M E N T

THIS AGREEMENT, made and entered into this 11 day of October, 1978, by and between ROBERT A. REVERT of 5106 Sawyer Avenue, Las Vegas, Nevada 89108, Party of the First Part, hereinafter referred to as the Lessor, and Willis R. Dees 120 W. Broadway, Tucson, AZ 85701, Party of the Second Part, hereinafter referred to as Lessee,

W I T N E S S E T H :

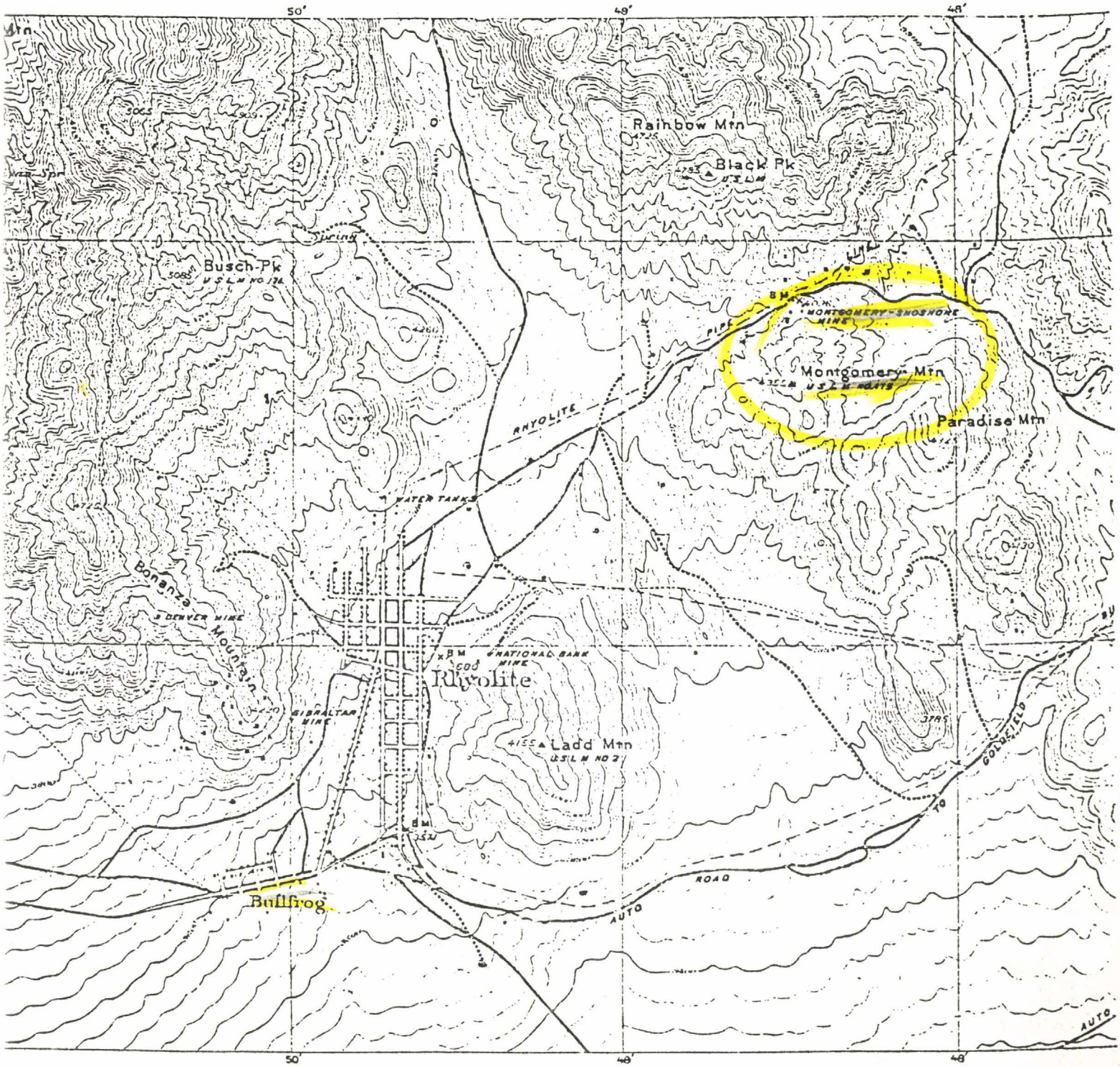
For and in consideration of the premises and the covenants and agreements of the respective parties hereto, herein set forth, it is mutually covenanted and agreed by and between the parties hereto as follows:

1. Definitions.

It is hereby agreed that certain words and phrases used throughout this Agreement shall be defined or construed as follows:

A. "Mining claims", as used herein means the hereinafter described patented lode mining claims, which said mining claims are more particularly described as follows:

NAME OF CLAIMS	U. S. MINERAL SURVEY NO.	PATENT NO.
POLARIS FRACTION	2426	41378
INAUGURAL FRACTION	2426	41378
THREE PEACHES	2426	41378
LITTLE FRACTION	2471	46272
INDIAN JOHNNIE	2471A	46272
SHOSHONE	2471A	46272
DELMONTE FRACTION	2510A	46272



Scale 1/24000

1 Mile

1 Kilometer

Contour interval 20 feet.

Datum is mean sea level.

1906

PRE-RAILROAD ERA

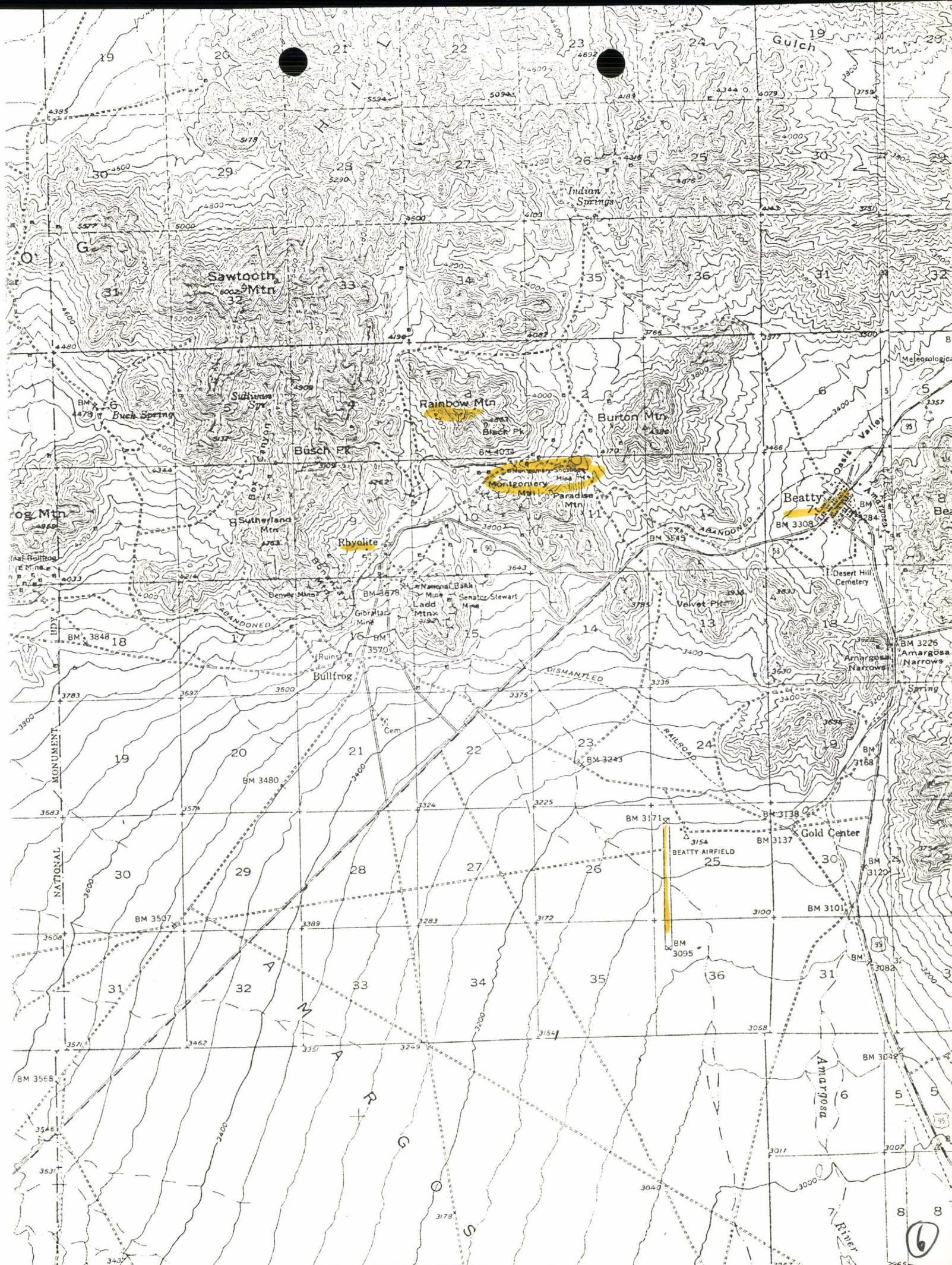
Cuth

4

BULLFROG QUADRANGLE
NEVADA—CALIFORNIA
15 MINUTE SERIES (TOPOGRAPHIC)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF
BUREAU OF


Gulch
Indian Springs
Sawtooth Mtn
Meteorologica
Sullivan Spr
Buck Spring
Rainbow Mtn
Black Pk
Burton Mtn
Busch Pk
Montgomery Shoshone Mine
Montgomery Mtn
Paradise Mtn
Beatty
Oasis
Valley
Amargosa
Sutherland Mtn
Rhyolite
ABANDONED
Desert Hill Cemetery
Denver Mine
National Bank Mine
Senator Stewart Mine
Ladd Mtn
Gibraltar Mine
Velvet Pk
Amargosa Narrows
Bullfrog
(Ruins)
DISMANTLED
RAILROAD
Cem
Gold Center
BEATTY AIRFIELD
MONUMENT
NATIONAL
AMARGOSA
RANGE
Amargosa
River
Spring

6

Scotty's Junction
Windmill
SARCOBATUS
FLAT
SARCOBATUS FLAT
Old railroad grade
ESMERALDA COUNTY
NYE COUNTY
CALIFORNIA
NEVADA
INYO COUNTY
OBSIDIAN BUTTE
TOLICHA PEAK
WAHGUY PEAK
GRAPHITE PEAK
Ranch
Qal
QTal
Tb
Tp
Tr
Tw
Tt
Tth
Qp
Qb
Jt
pCs
pCw
37°00'
117°00'
15'
T 7 S
T 8 S
T 9 S
T 10 S
T 11 S
R 42 E
R 43 E
R 44 E
R 45 E

7

Mineral Survey No. 2470

Carson City Land District.

PLAT

OF THE CLAIM OF

The Providence Mining Company of Bull Frog

KNOWN AS THE

SHOSHONE EXTENSION, GREENHORN, PROVIDENCE & OREGRANDA LODES

IN Bull Frog MINING DISTRICT, Nye COUNTY, Nevada

Containing an area of 60.678 Acres.

Scale of 300 feet to the inch.

Variation 16°30' East

SURVEYED April 15-17, 1906 BY

William J. Moran U.S. Deputy Mineral Surveyor,

The Original Field Notes of the Survey of the Mining Claim of The Providence Mining Company of Bull Frog known as the Shoshone Extension, Greenhorn, Providence and Oregranda Lodes

upon which this plat has been made under my direction have been examined and approved, and are on file in this Office; and I hereby certify that they provide such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimant ——— or his grantors, and that said improvements consist of 3 shafts, 5 cuts and 1 shaft, crosscut and drift. Value, $525.00

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

U.S. Surveyor General's Office.

Reno, Nevada

May 12, 1906

U.S. Surveyor General for Nevada

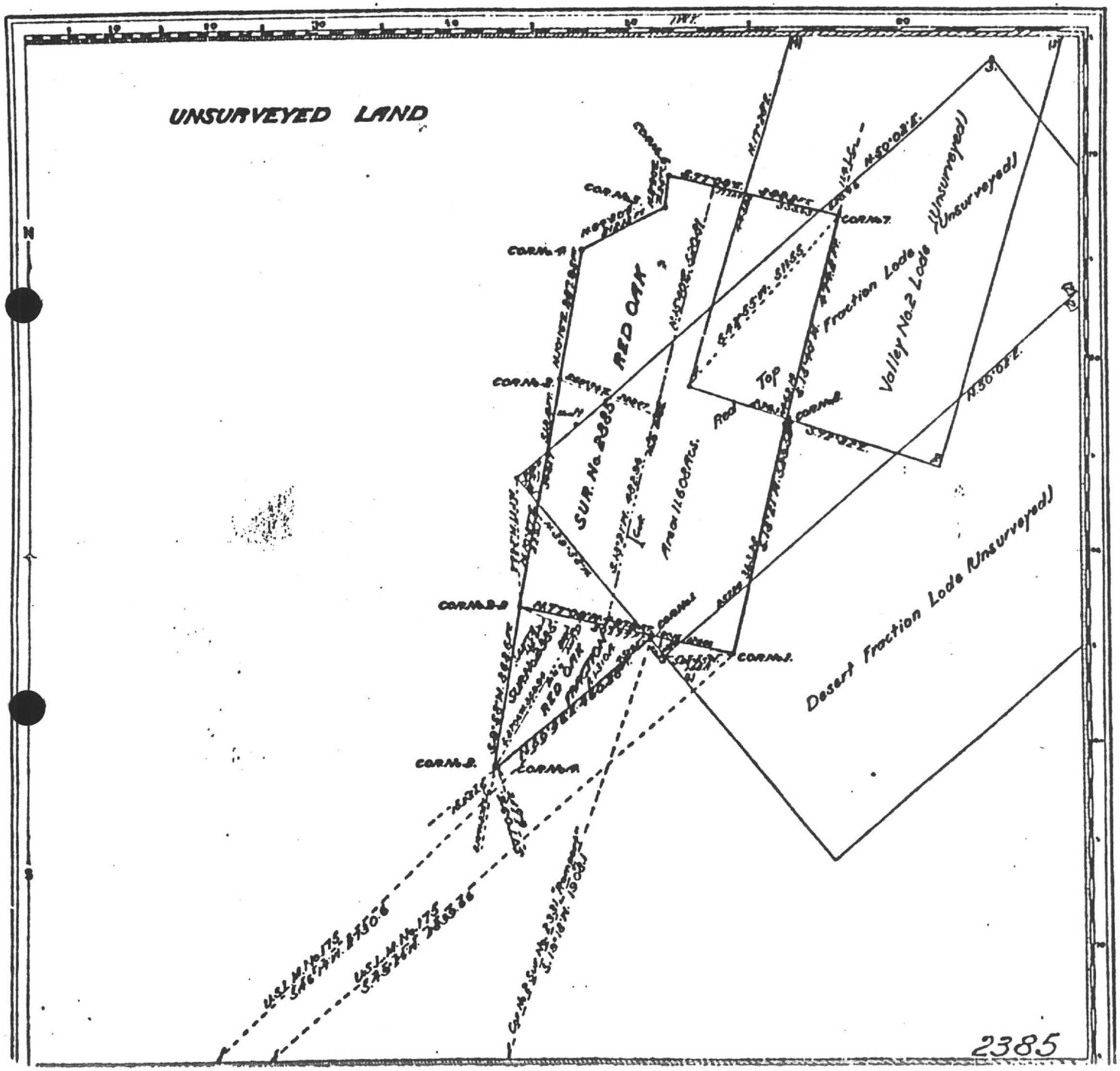
Name of Location	Located	Filed
Shoshone Extension	Feb. 5, 1905	———
Greenhorn	Oct. 12, 1904	Feb. 5, 1905
Providence	" 21, "	———
Oregranda	" " "	Feb. 5, 1905

202521

V.D.

(4-675)

Pat. #46274 - Feb 3 1908



Claim Located Red Oak, December 23, 1904
Red Oak Fraction, February 21, 1905.
Mineral Survey No. 2385

~~Lot No.~~

Carson City Land District.

PLAT

OF THE CLAIM OF

Bullfrog-Red Oak Company
KNOWN AS THE

RED OAK AND RED OAK FRACTION LODES

IN Bull Frog MINING DISTRICT,
Nye COUNTY, Nevada.
Containing an Area of 12.918 Acres.
Scale of 200 feet to the inch.
Variation 16°15' East.
SURVEYED Aug. 2-Sept. 5, 1905. BY

J. Herbert Knapp U.S. Deputy Mineral Surveyor,

The Original Field Notes of the Survey of the Mining Claim of Bullfrog-Red Oak Company, known as the "Red Oak" and "Red Oak Fraction" Lodes,

from which this plat has been made under my direction, have been examined and approved, and are on file in this Office; and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate, and fix the location thereof.

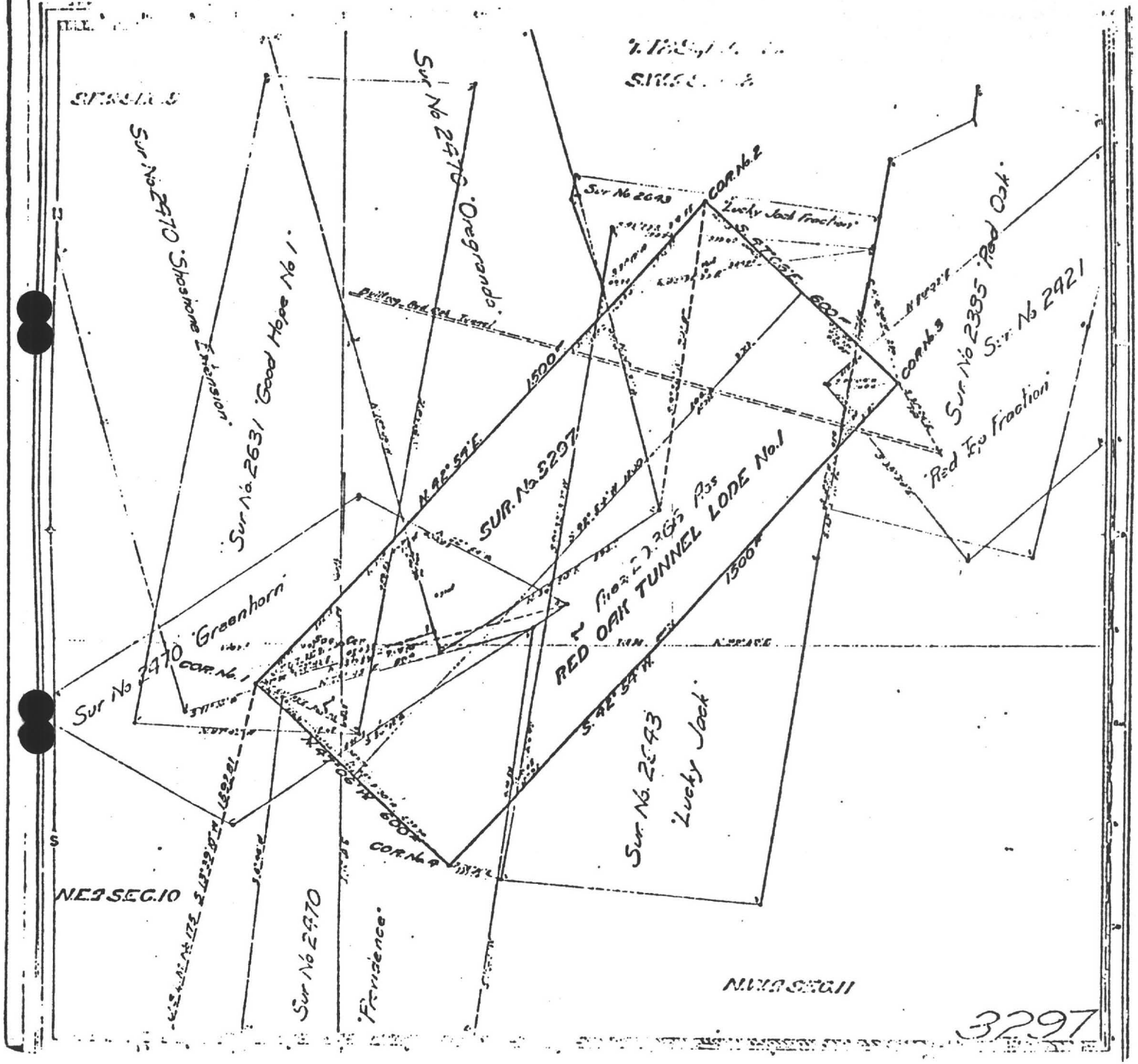
I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimant ——— or its grantors, and that said improvements consist of 2 Holes, 1 Cut and 1 Shaft. Total Value, $1200.00

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

U.S. Surveyor General's Office.
Reno, Nevada
April 21, 1906

Matthew Kyle
U.S. Surveyor General, Nevada.



(10)

Claim ... June 1 ...

Mineral S... No ...

Carson City Land District.

PLAT

OF THE CLAIM OF

Bullfrog Red Oak Mining Company

KNOWN AS THE

RED OAK TUNNEL LODE No 1 LODE

IN Bullfrog MINING DISTRICT,

Nye COUNTY, Nevada

Containing an area of 20 366 Acres.

Scale of 200 feet to the inch.

Variation 16°10' East

SURVEYED September 27 to 1907. BY

William B Wilkins U.S. Deputy Mineral Surveyor

The Original Field Notes of the Survey of the Mining Claim of Bullfrog Red Oak Mining Company known as the Red Oak Tunnel Lode No 1 Lode

from which this plat has been made, and under my direction have been examined and approved, and are on file in this Office, and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if survey, enabled into a patent, amply suffice to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimant — or his grantors, and that said improvements consist of 536 ft of a Tunnel.

Value $8,000.00

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

William Ogle

Surveyor General for Nevada

Reno, Nevada

March 19 ... Nevada

Pat. # 43178 - Jan. 25, 1909

Mineral Survey No. 2426

~~Serial No.~~

Carson City Land District.

PLAT

OF THE CLAIM OF

The Montgomery Mountain Mining Company of Bullfrog

KNOWN AS THE

POLARIS FRACTION, THREE PEACH AND INAUGURAL FRACTION LODES

IN Bull Frog Nye COUNTY, Nevada TERRITORY

Containing an Area of 29884 Acres.

Scale of 200 feet to the inch.

Variation 16° 20' East

SURVEYED September 24 & 1905 BY

P.E.L. Collier U.S. Deputy Mineral Surveyor

Upon Original Field Notes of the Survey of the Mining Claim of The Montgomery Mountain Mining Company of Bullfrog known as the Polaris Fraction, Three Peach and Inaugural Fraction Lodes

I, from which this plat has been made under my direction, have been examined and approved, and are on file in this Office, and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the location thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim for claimant —— or his grantors, and that said improvements consist of 1 Tunnel 60 ft. 1 Shaft, the usual Buildings and 2 Adits. Value $500.00

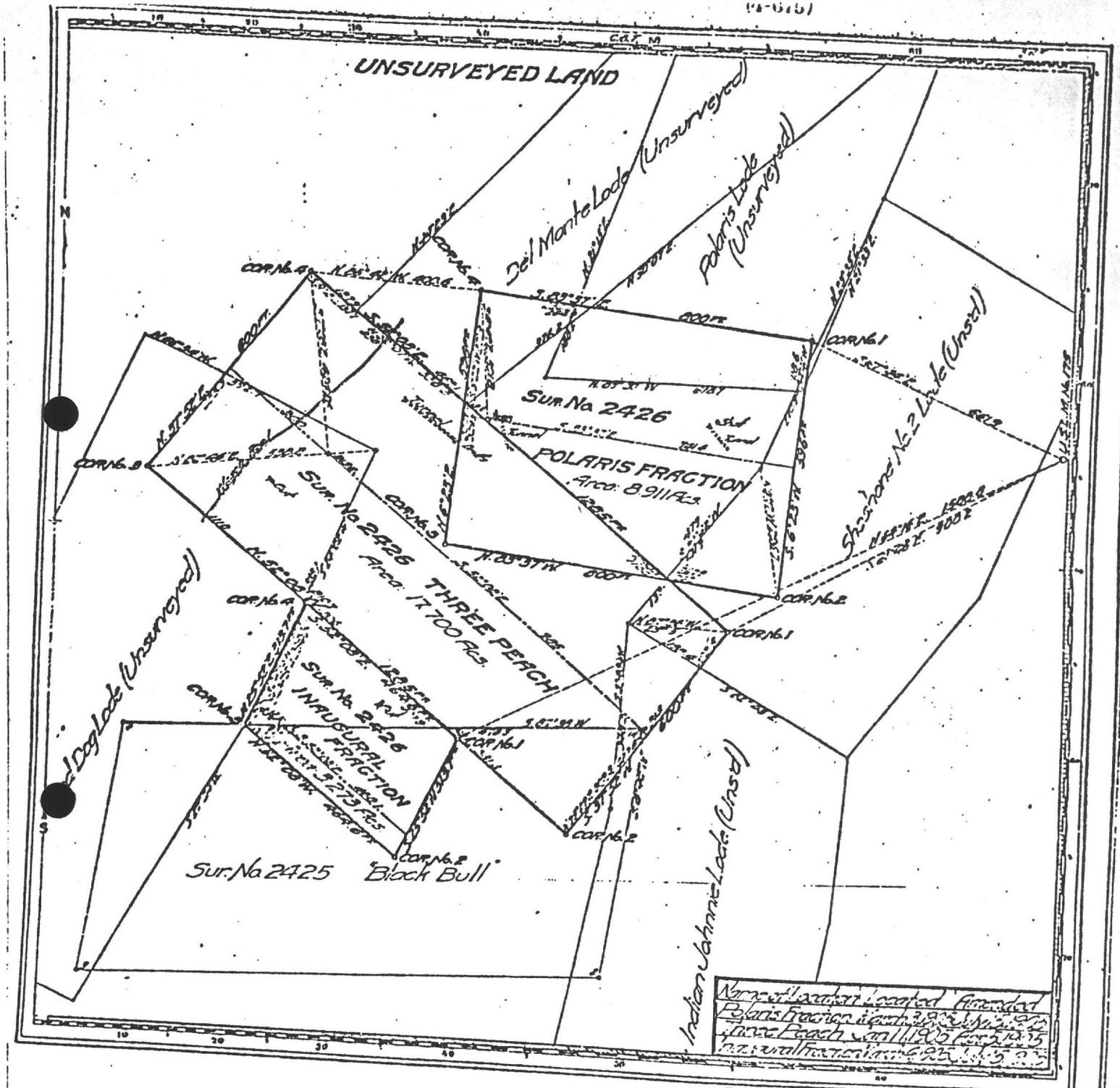
that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

U.S. Surveyor General's Office. Matthew Byle

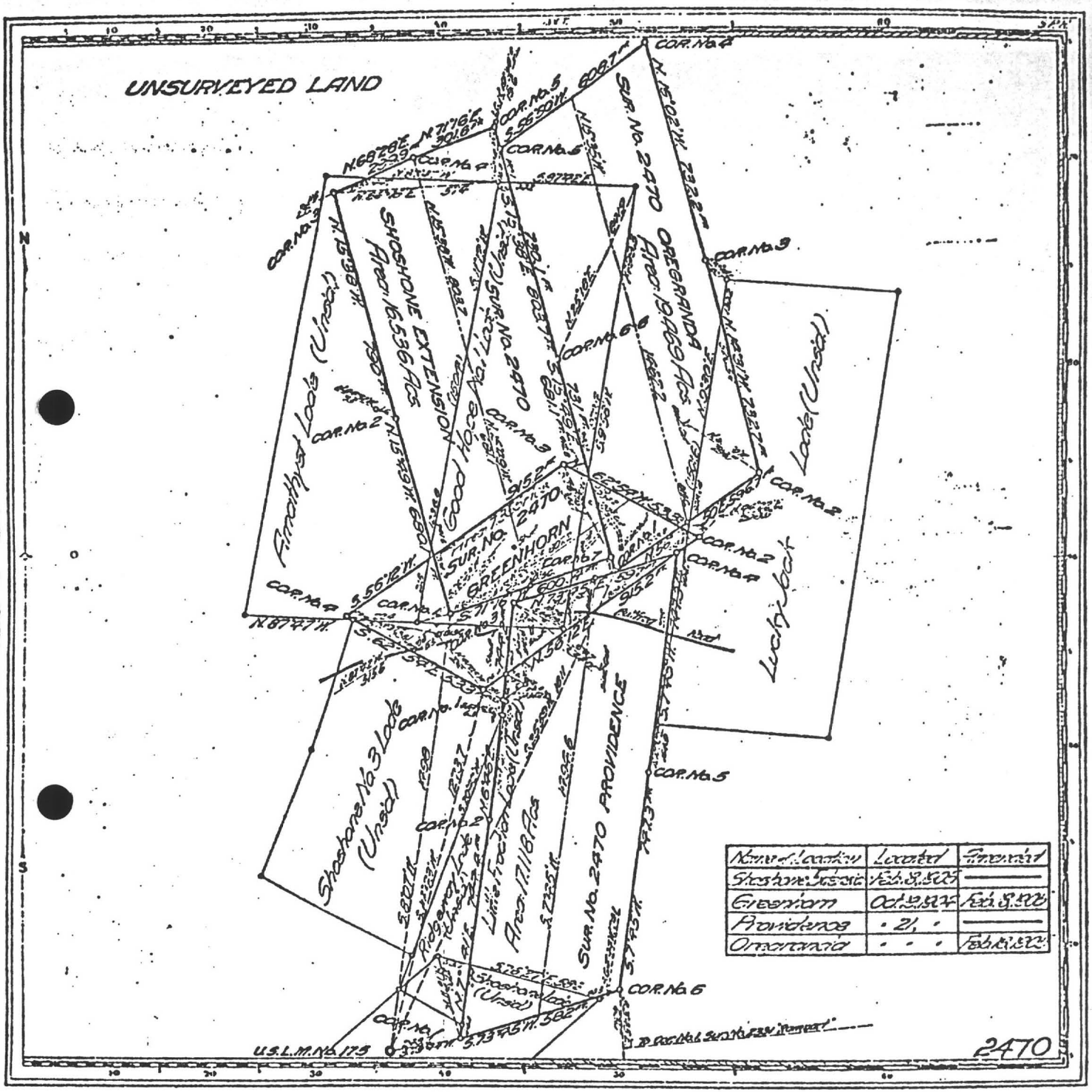
Reno, Nevada U.S. Surveyor General

April 14 1906 Nevada



202488

2426



Name of Location	Located	Surveyed
Shoshone Extension	Feb. 8. 1905	—
Greenhorn	Oct. 12. 1904	Feb. 8. 1905
Providence	" 21, "	—
Oregranda	" " "	Feb. 8. 1905

Mineral Survey No. 2470

Carson City Land District.

PLAT

OF THE CLAIM OF

The Providence Mining Company of Bull Frog

KNOWN AS THE

SHOSHONE EXTENSION, GREENHORN, PROVIDENCE & OREGRANDA LODES

IN Bull Frog MINING DISTRICT.

Nye COUNTY, Nevada

Containing an Area of 60.678 Acres.

Scale of 300 Feet to the inch.

Declination 16.30 East

SURVEYED April 15-17, 1906 BY

William J. Moran U.S. Deputy Mineral Surveyor,

The Original Field Notes of the Survey of the Mining Claim of The Providence Mining Company of Bull Frog known as the Shoshone Extension, Greenhorn, Providence and Oregranda Lodes

upon which this plat has been made under my direction have been examined and approved, and are on file in this Office; and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the lines thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimant ——— or its grantors, and that said improvements consist of 3 shafts, 5 cuts and 1 shaft, crosscut and drift, Value, $815.00

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

U.S. Surveyor General's Office.

Reno, Nevada

May 15 1906

Matthew Kyle

U.S. Surveyor General for Nevada

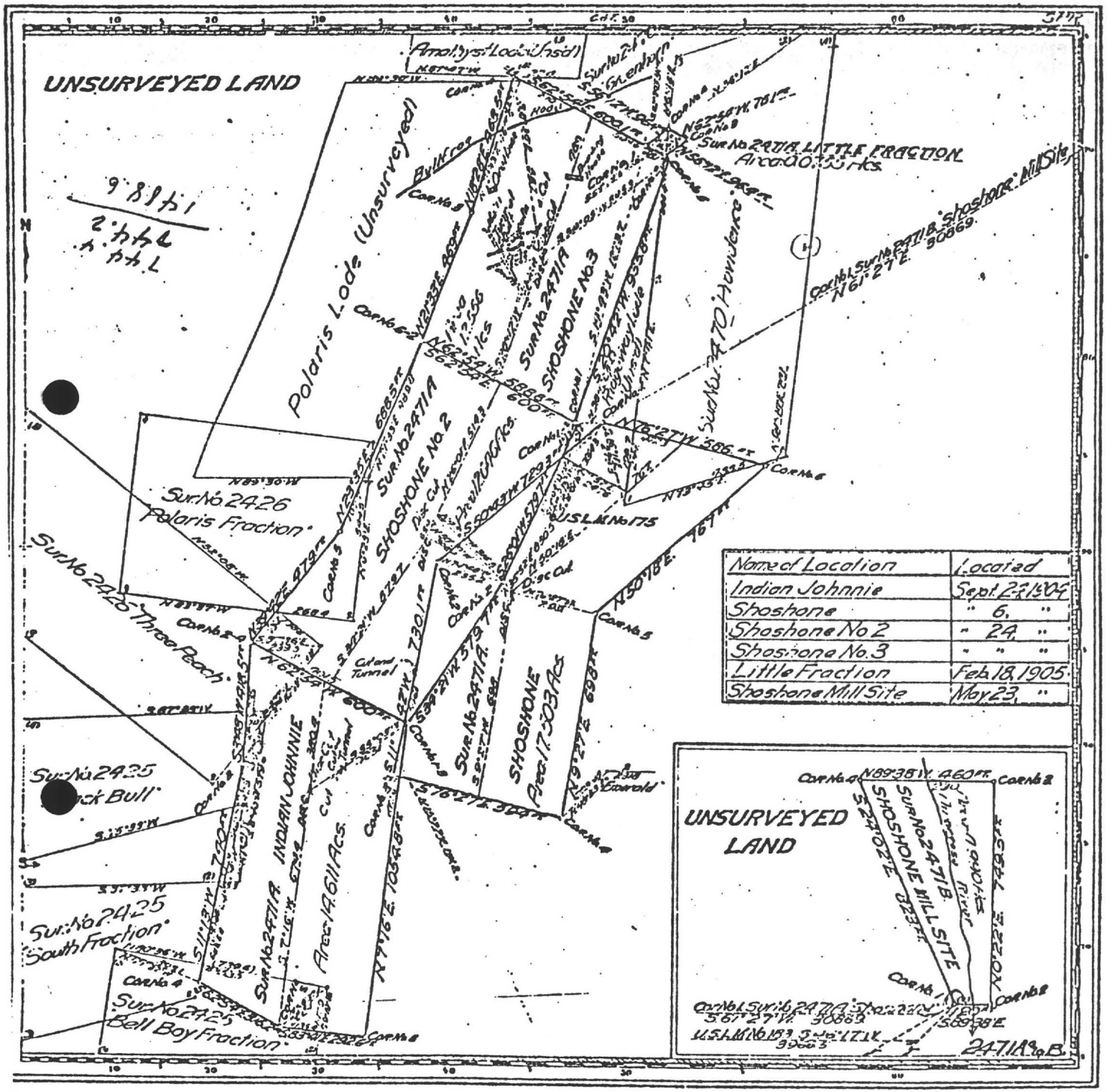
202521

V.D.

(4-676)

Pat. #41372 - Mar. 9 1908

119



Name of Location	Located
Indian Johnnie	Sept. 22, 1904
Shoshone	" 6, "
Shoshone No. 2	" 24, "
Shoshone No. 3	" " "
Little Fraction	Feb. 18, 1905
Shoshone Mill Site	May 23, "

Mineral Survey No. 2471A & B.

~~Lot No.~~

Carson City Land District.

PLAT

OF THE CLAIM OF

The Montgomery Shoshone Mines Company

KNOWN AS THE

INDIAN JOHNNIE, SHOSHONE, SHOSHONE No. 2, SHOSHONE No. 3 AND LITTLE FRACTION LODES AND SHOSHONE MILL SITE

IN Bull Frog MINING DISTRICT,

Nye COUNTY, Nevada

Containing an area of 57.391 + 4.990 Acres.

Scale of 300 feet to the inch.

Variation 16° 30' East

SURVEYED April 17-20, 1906 BY

William J. Moran, U.S. Deputy Mineral Surveyor.

The Original Field Notes of the Survey of the Mining Claim of The Montgomery Shoshone Mines Company known as the Indian Johnnie, Shoshone, Shoshone No. 2, Shoshone No. 3 and Little Fraction Lodes and Shoshone Mill Site

from which this plat has been made under my direction have been examined and approved, and are on file in this Office and I hereby certify that they provide such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the location thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimant ——— or his grantors, and that said improvements consist of 7 cuts, 1 cut and tunnel and 1 tunnel, cross cuts, shaft and drifts

——— Value $18,855.00

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

T. C. Vernon General Office.

Reno, Nevada.

May 19, 1906.

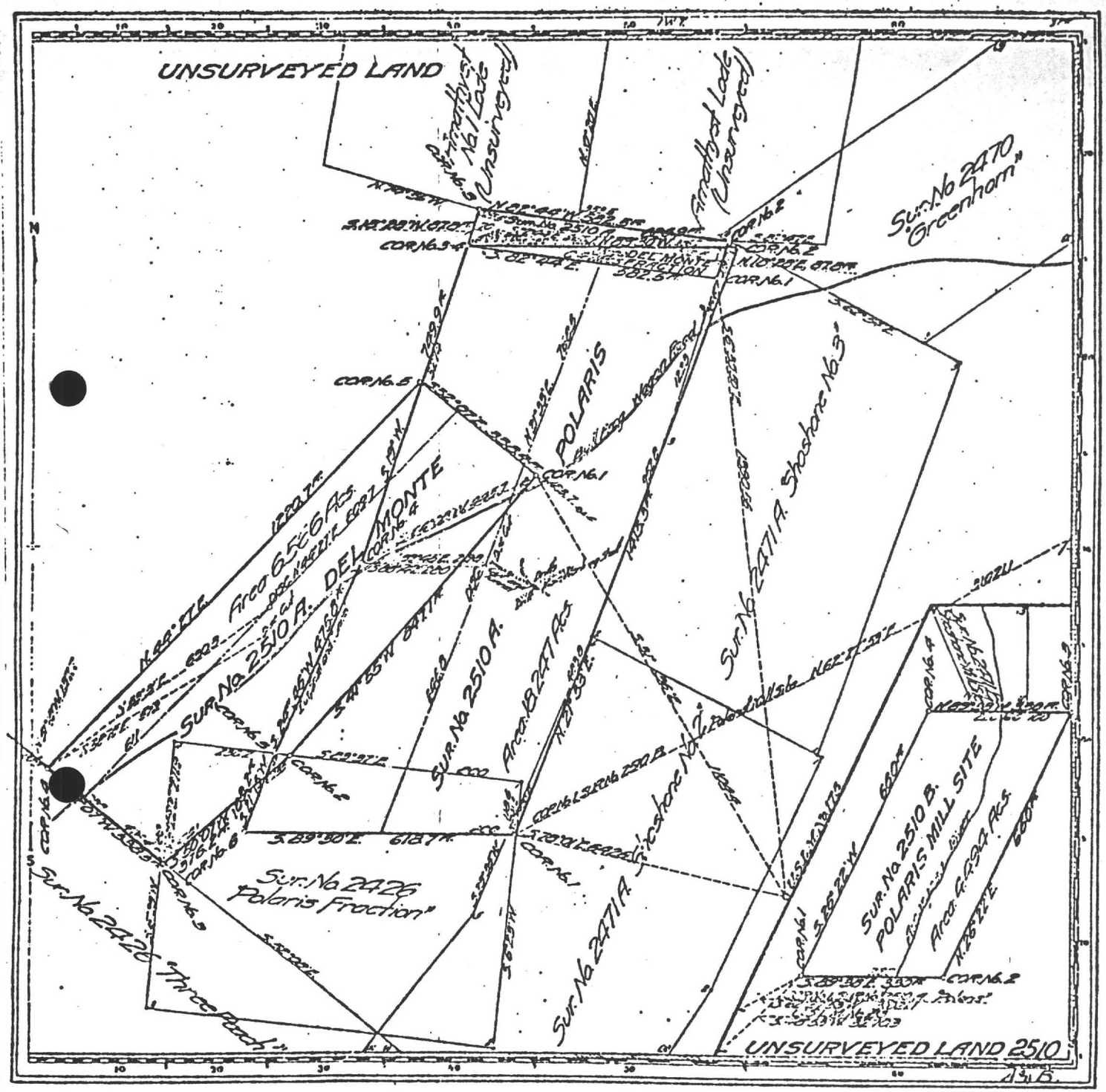
T. C. Vernon General Land Office

Nevada.

202522

V. P.

(4-875)



Stat. 4875 Dec 16 1908

Claim Located Polaris Sur. 2510 Del Monte, Del Monte Fraction Sur. 2510 Polaris Mill Site

Mineral Survey No. 2510 A and B

Carson City Land District.

PLAT

OF THE CLAIM OF

The Shoshone Polaris Mining Company

KNOWN AS THE

POLARIS, DEL MONTE AND DEL MONTE FRACTION LODES AND POLARIS MILL SITE

IN Bull Frog MINING DISTRICT.

Nye COUNTY, Nevada

Containing an area of 25.284 and 4.994 Acres.

Scale of 200 feet to the inch,

Variation 16.30 East

SURVEYED April 12-15, 1906 BY

William J. Moran U.S. Deputy Mineral Surveyor

The Original Field Notes of the Survey of the Mining Claim of The Shoshone Polaris Mining Company known as the Polaris, Del Monte and Del Monte Fraction Lodes and Polaris Mill Site

from which this plat has been made under my direction, have been examined and approved, and are on file in this Office; and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the situs thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimant ——— or his grantors, and that said improvements consist of 2 cuts, 1 cut and tunnel, 1 shaft and 1 shaft, tunnel, drifts and air Value: $500.00

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof; and the same is hereby approved.

U.S. Surveyor General's Office. Reno, Nevada May 19 1906

Matthew Kyle U.S. Surveyor General for Nevada

202557

HISTORICAL MINE PRODUCTION

Old records at Mackay School of Mines (Reno) confirm conflicting production statistics, support newspaper articles and stock promotions of the day.

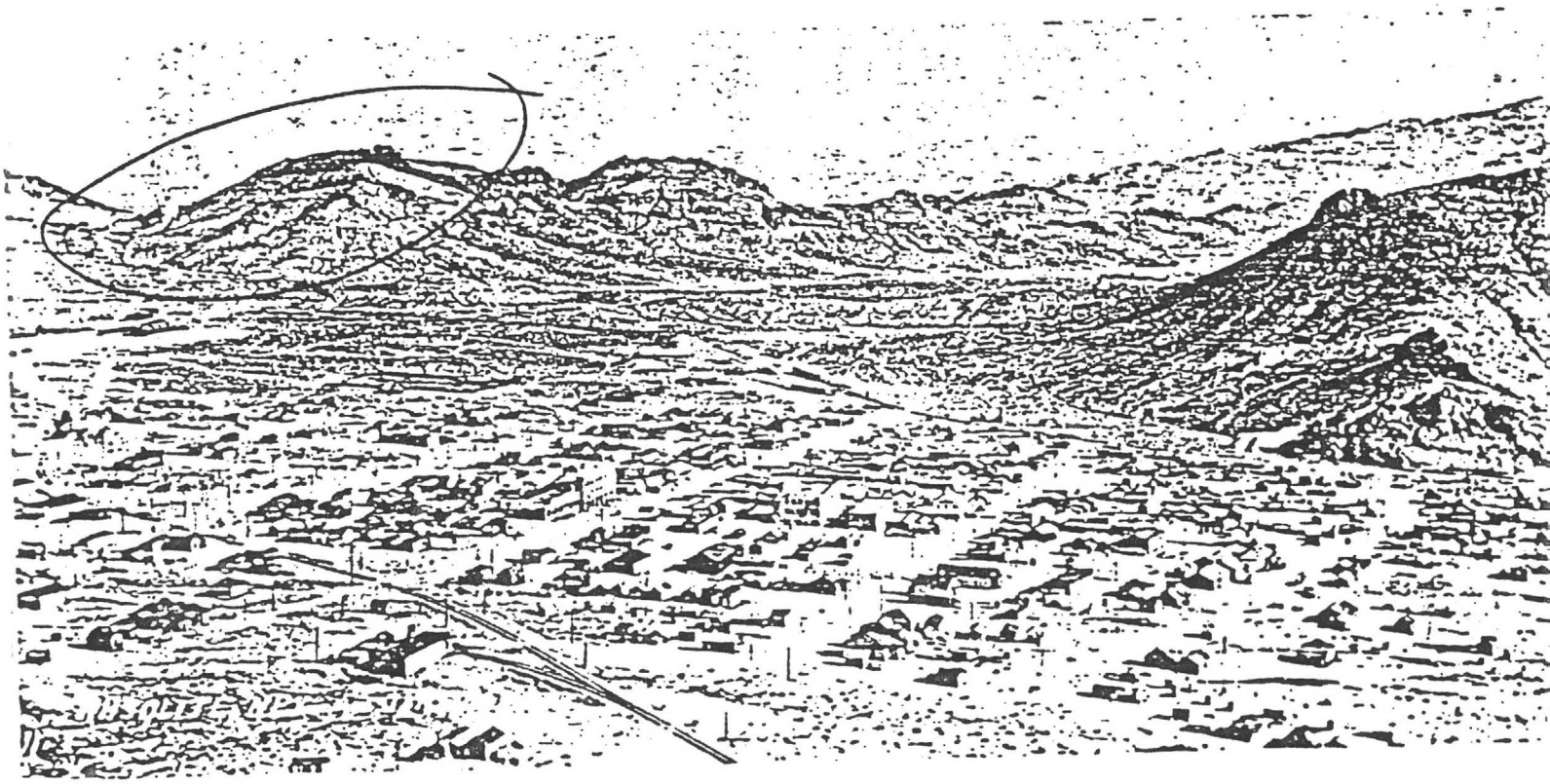
Nowhere is doubt cast on the veracity of Ransome's 1910 statement in U.S.G.S.Bul 407. concluding gold output from the Montgomery-Shoshone Mine exceeded combined production from all other mines in the Bullfrog Mining District. Contemporary pictures of Rhyolite and of the operating mine and mill, complete with railroad cars and siding (see following pages) says more than "the plan of principle workings" connecting lower levels between Montgomery-Shoshone and Polaris (pp.15,15A). After this map was finished the mine produced and the mill operated four more years. Underground workings are presumed to have been extended. Unreported dumps are evident. The mill consumed 30,000 gallons of water per day, pumped from the lower levels of the mine (now flooded). No water was recovered for re-use (see mill report, pp. 16-18). Coarse tailings (-10 mesh) were carried from the millsite in a stream of water and can be followed today through the course of a dry wash to an alluvial plain 5 mi. distant. Mute testimony to ample water.

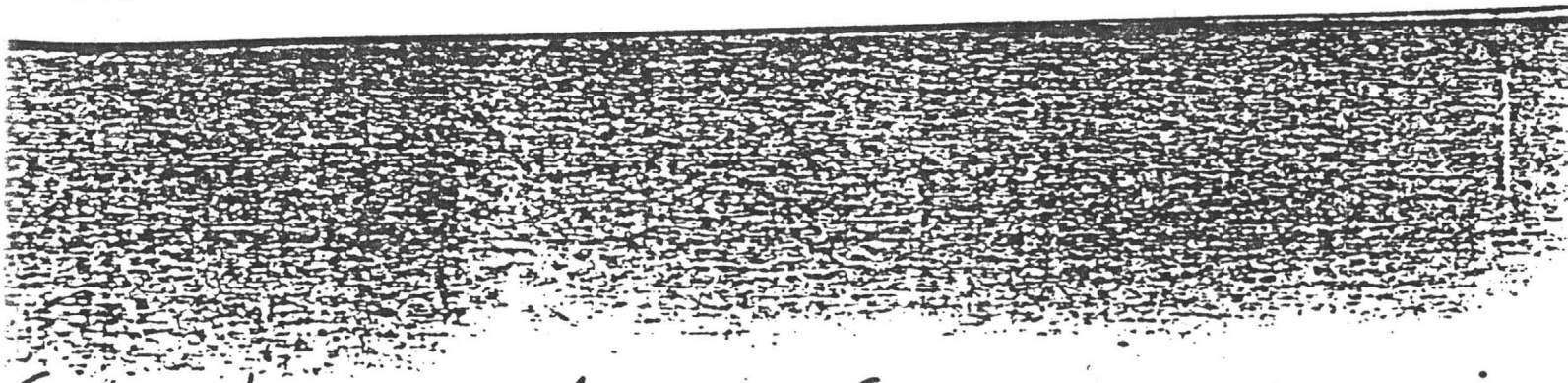
Statistics abound. Degree of confidence in actual figures showing total gold and silver produced depends upon whose facts are accepted. Much gold was produced and silver. Exactly how much we cannot know.

Integrity aside, given values range from a low $1.4 million (@ $16/oz.) in gold alone, to "millions and millions of ounces in both gold and silver" - suiting convenience of the water at hand. A shadow of doubt is cast on facts of record by manipulations of "Charles M. Schwab, the New York steel king." Late in 1906, Mr. Schwab "merged" local holdings with a producing Montgomery-Shoshone, then he loaned the company enough funds to build a mill, gaining control of the mine. A firstrate "cyenide mill began operation in the summer of 1907" and was reported in Engineering & Mining Journal, 22 January 1910 (w/o mention of Charles M. Schwab). Meanwhile the Rhyolite Herald editorially explained (Sept. 1910) the Montgomery-Shoshone Mining Co. of New York had nearly repaid indebtedness to Mr. Schwab and the company would soon declare a dividend. Management changed. Optimistic forecast of gold reserves entered the annual report to stockholders. Gold and silver slumped. The company ceased operations in 1911. No taxes were paid thereafter.

Unpublished facts provide less emotional indication of silver production. Assay notes (see mill sheets at School of Mines) of one Johnson show daily gold-silver ratio for 160 days in 1907 to have averaged 1:25.4. With such a quantity of silver during this period (and following?) it is unseemly that all three local newspapers variously published at Rhyolite (microfilm reels of all issues of these newspapers are on file at the library, Univ. of Nev. Las Vegas) noticed gold bullion shipments to the mint but never mentioned production of silver bullion or a silver shipment from the new mill.

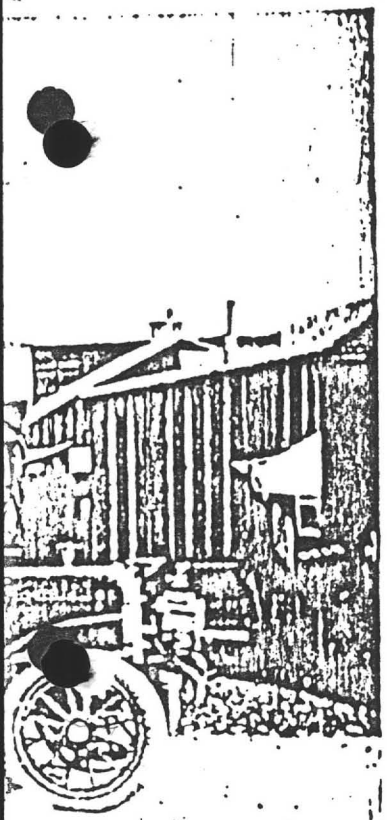
In May 1905 the three-month-old town of Rhyolite was a sea of tent houses. The camp grew rapidly and substantially, and by January 1908 (below) the town's expansion was just about completed. The tracks of the Las Vegas & Tonopah Railroad enter from mid-foreground and lead to the depot, where a smoking engine has stopped. The tracks then lead past the freight yards before disappearing into the hills in the mid-background. From the depot Golden Street extends through the heart of town past the John S. Cook Bank building at its intersection with Broadway Street. On the far side of town is the depot of the Bullfrog Goldfield Railroad. *(Top: Marion Schendel Collection; bottom: Mrs. H. H. Heisler Collection)*

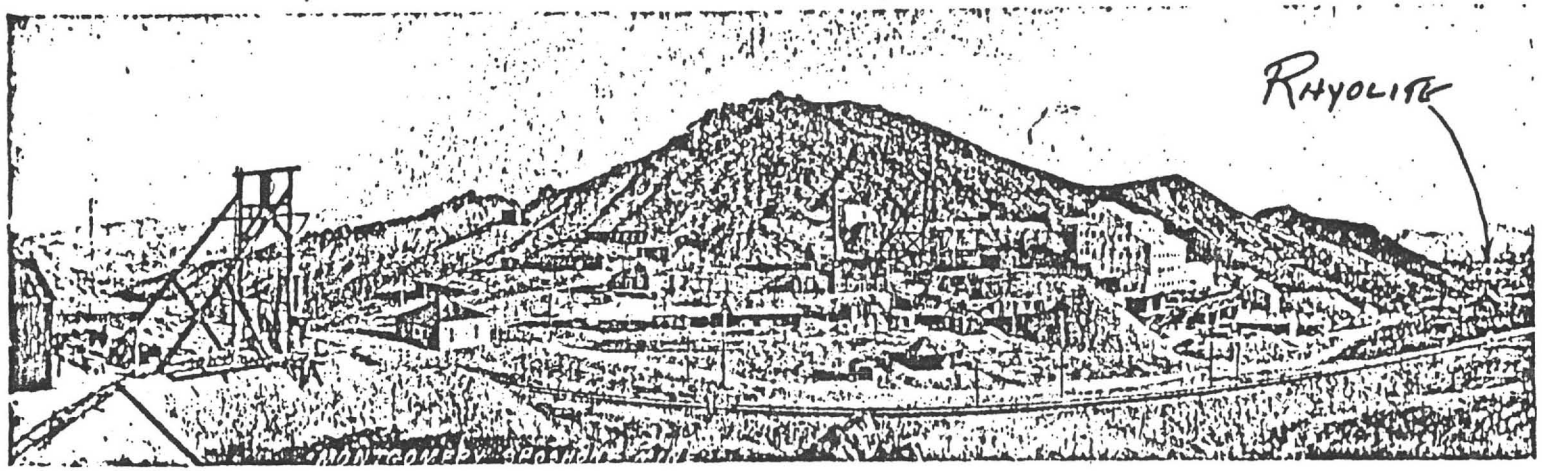




SHOWING LOCATION OF MONTGOMERY-SHOSHONE MINES & MILL

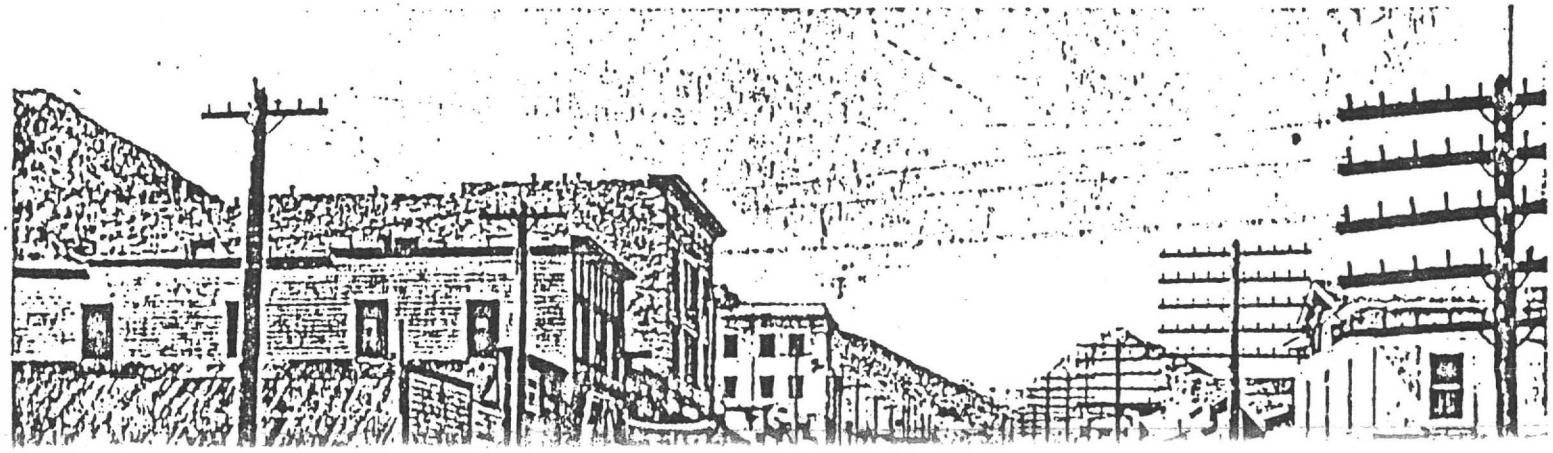
SCHEDULE D



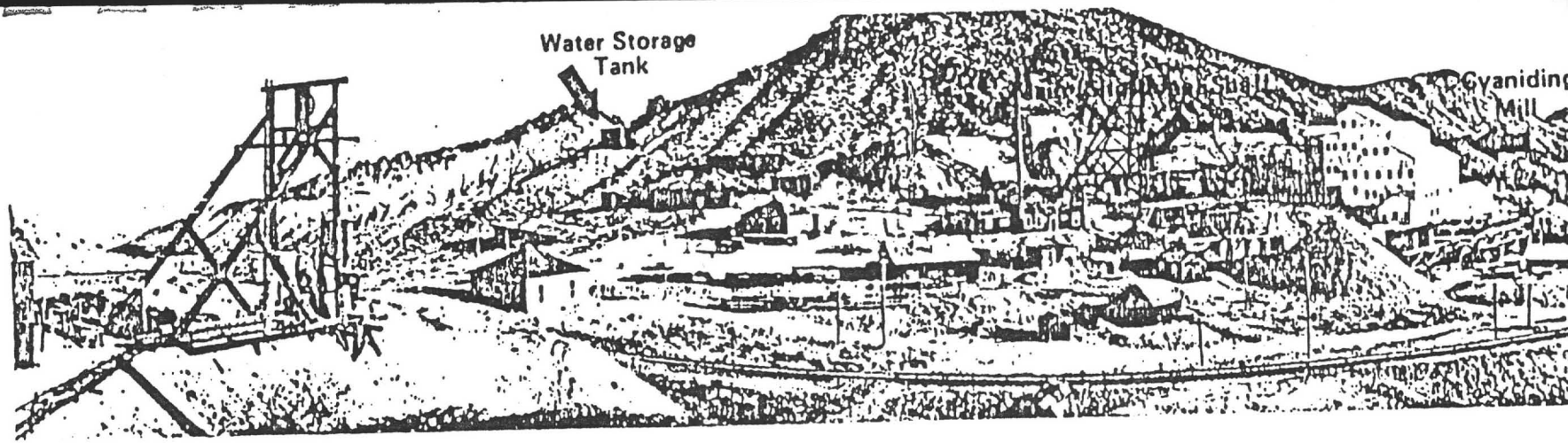


The Bullfrog district's richest mine was the Montgomery-Shoshone, which produced nearly $1.4 million. Its 200-ton cyanide plant ran for three years.

On Independence Day 1908 (middle), volunteer firemen pull hose carts down Rhyolite's Golden Street. Posters on the left advertise the coming of the Barnum & Bailey circus, which on the morning of its arrival (below) paraded through the town. The band played such spirited songs as "There Will Be a Hot Time in the Old Town Tonight" to arouse interest for performances later that day. *(Three photos: Mrs. H. H. Heisler Collection)*

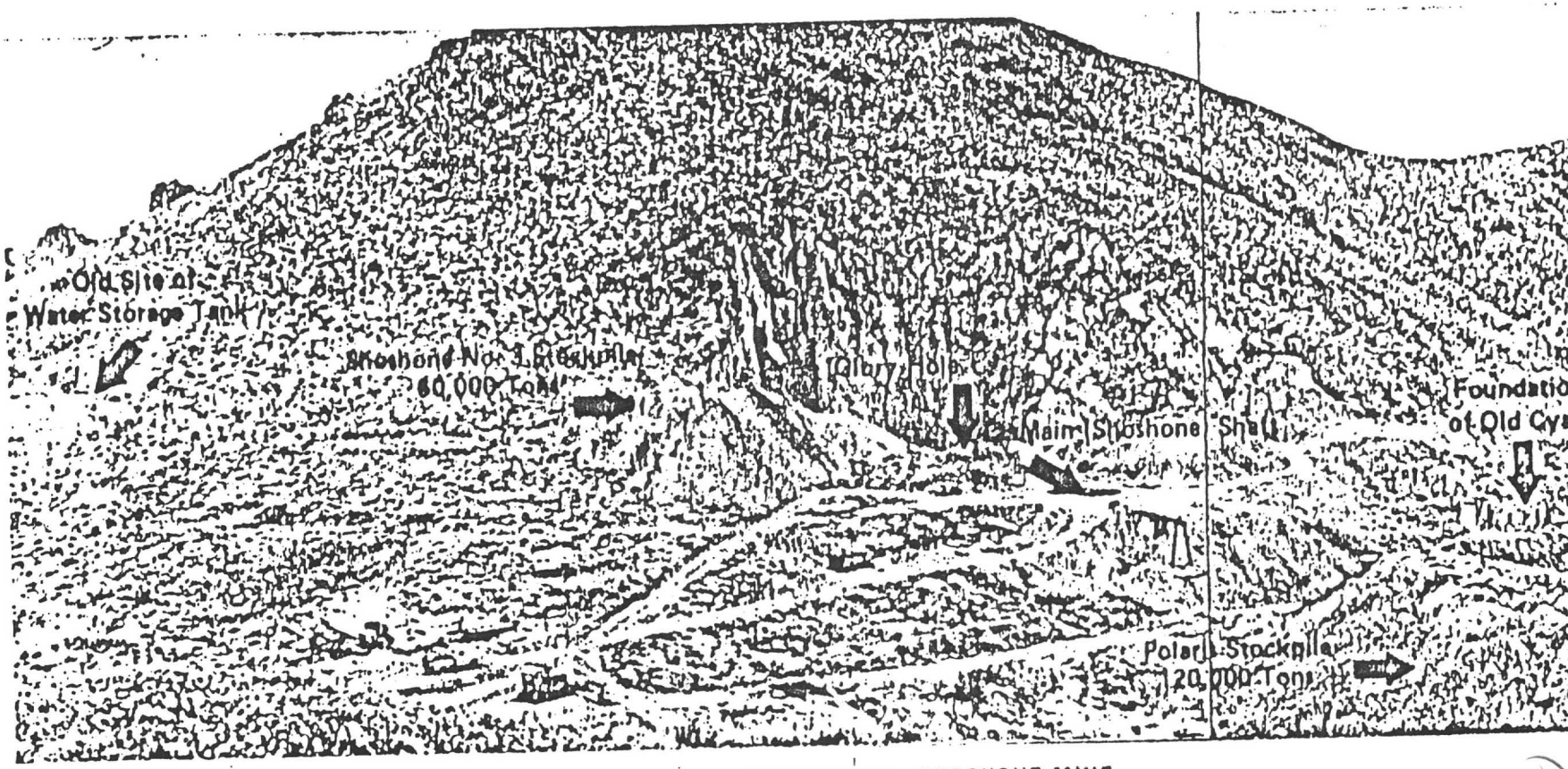


...les Schwab Inspected



MONTGOMERY - SHOSHONE MINE

JUNE 1907



MONTGOMERY - SHOSHONE MINE

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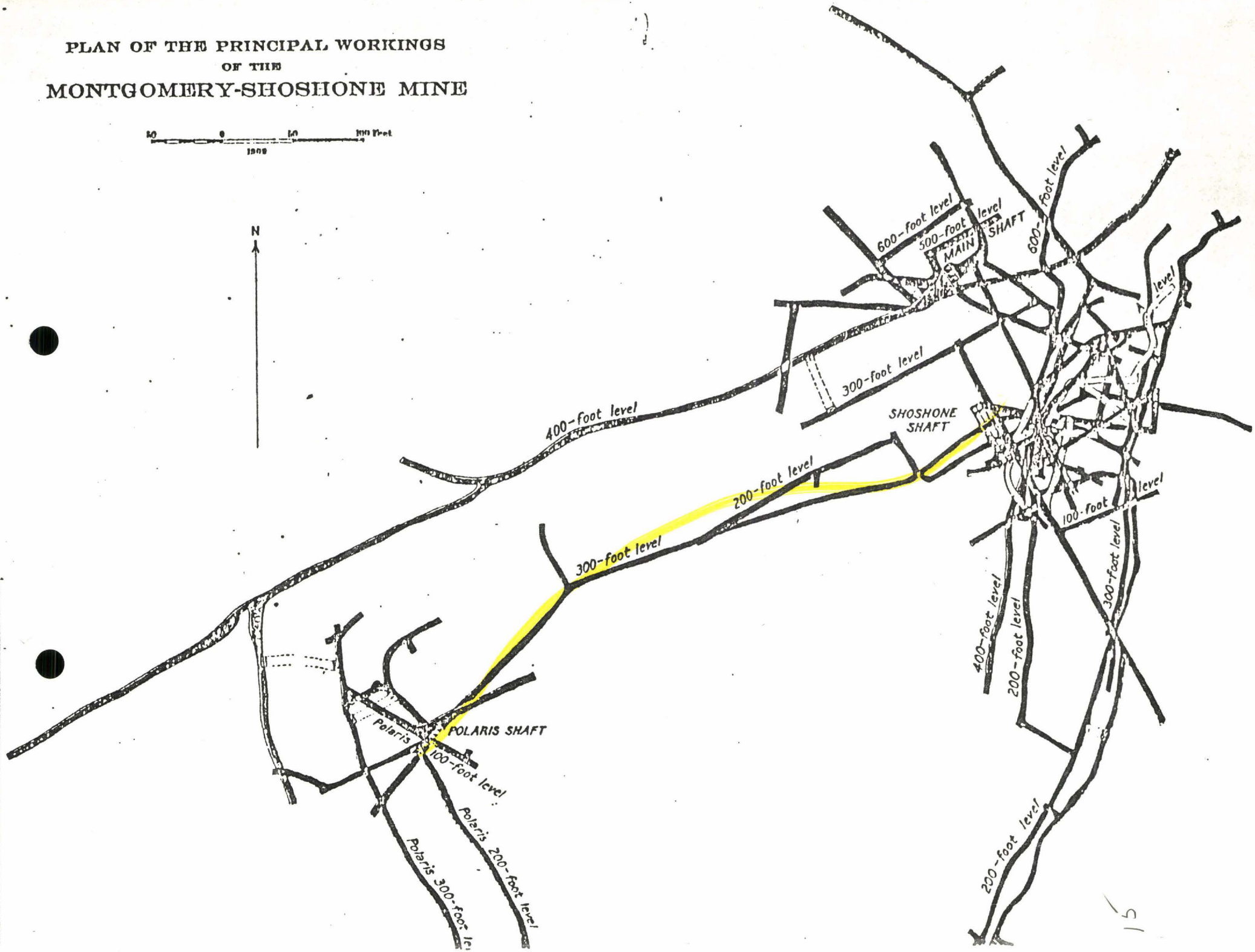
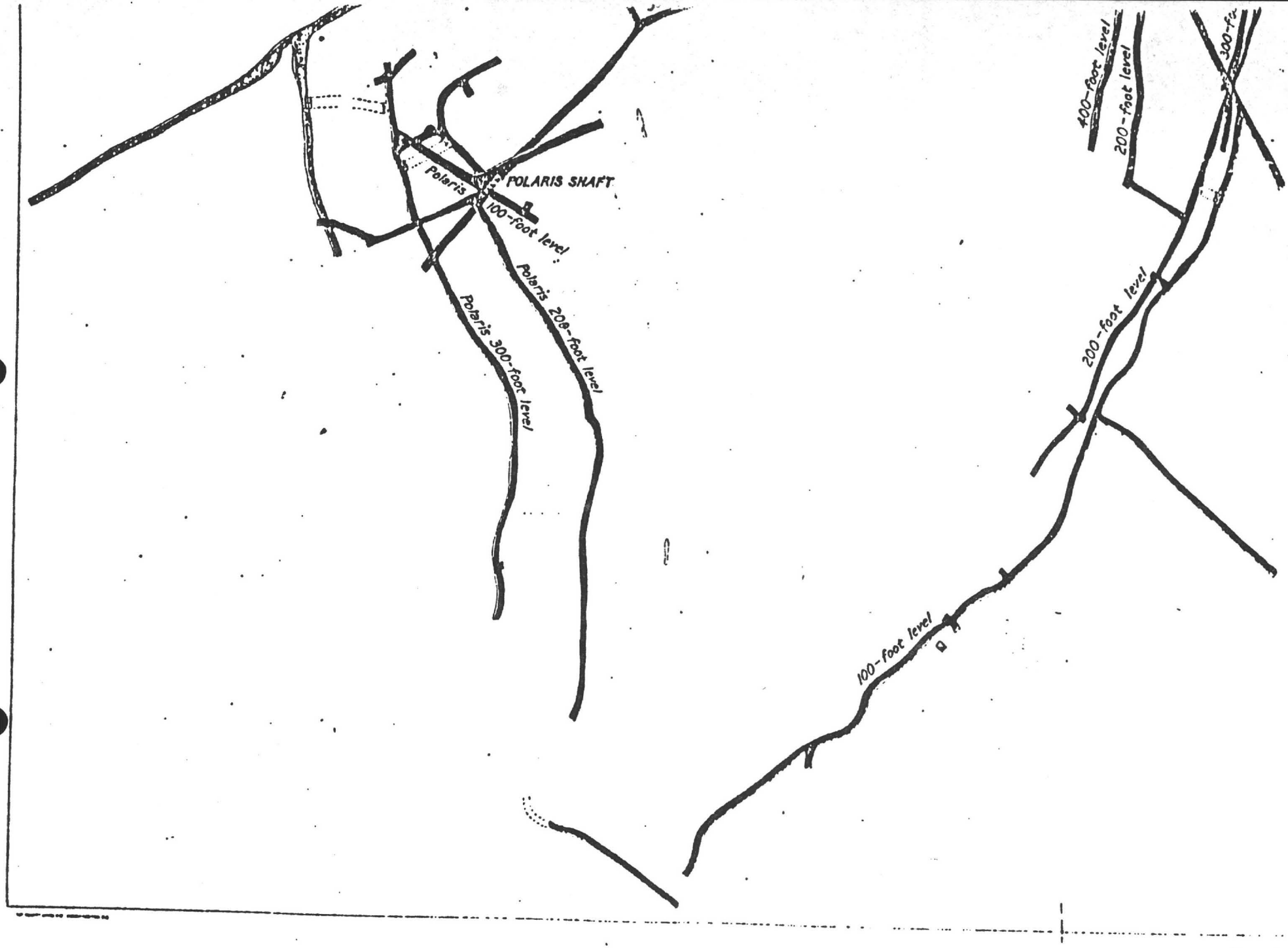
PLAN OF THE PRINCIPAL WORKINGS
OF THE
MONTGOMERY-SHOSHONE MINE




Polaris
POLARIS SHAFT
100-foot level
Polaris 208-foot level
Polaris 300-foot level
400-foot level
200-foot level
200-foot level
100-foot level

Cyaniding the Montgomery-Shoshone Mill

Sands, Slimes and Concentrates Cyanided Separately; Crushing by Rolls and Chilean Mills; No Amalgamation at This Nevada Mill

BY P. EDWIN VAN SAUN*

The mill of the Montgomery-Shoshone Mines Company is situated at Rhyolite, Nev., and has been in operation since the summer of 1907. It is treating about 6000 tons per month of that company's ores, which average $10 to $12 per ton and carry silver and gold in a ratio of about 12:1. The milling costs average about $2.25 per ton. The ores occur both as oxides and sulphides in quartz stringers in the matrix of rhyolite.

The treatment is based in general on crushing to pass through 30-mesh screens and separating the sand and slime products, which are concentrated on tables and vanners respectively, the ratio of concentration being about 200:1. The crushed product is thus divided about equally into what is here termed, for convenience of reference, sands and slimes. These two products are then cyanided separately. The concentrates are ground in tube mills and separately cyanided by agitating, settling and decanting.

Since building, the mill has been modified to suit variations in the ores. The tests previous to designing the plant indicated that crushing to pass a 16-mesh screen would give most economical results in extraction and produce the proper balance between sands and slimes. Subsequent development of the mines, however, resulted in finding that the gold and silver were more finely divided than was evidenced at first, and that finer crushing was needed to effect quicker and closer extraction. For accomplishing this two 6-ft. chilean mills were installed to follow the 42x14-in. rolls previously in use.

By this means, as well as through corresponding changes in the slime department to meet the conditions, the saving has been maintained, under the management of John G. Kirchen and superintendence of E. M. Kirchen, at a combined average of about 90 per cent. for the sand and slime treatment, and from 97 to 99 per cent. in the treatment of the concentrates. It is therefore interesting to note the present mode of operation which has been evolved to treat successfully this class of ore.

Crushing and Concentration

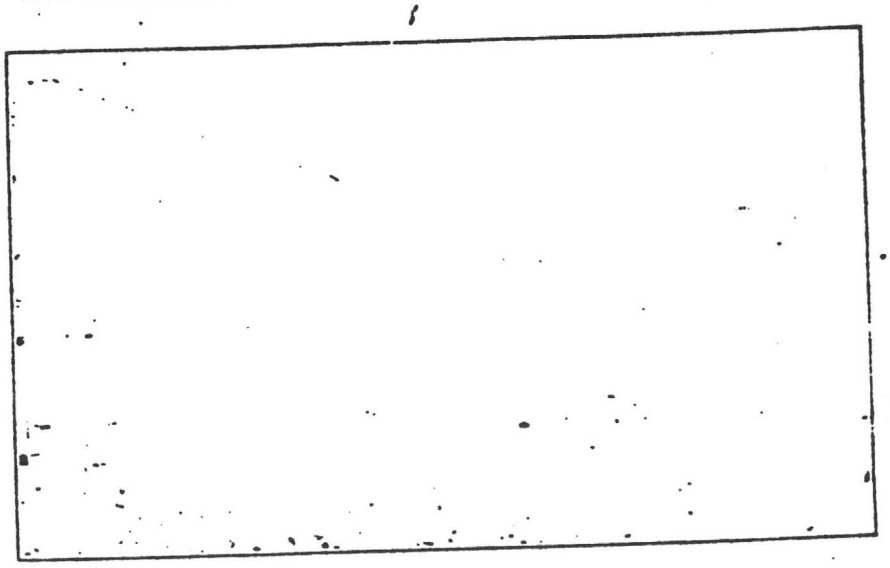
The ore is hoisted by cage from a vertical shaft and trammed to the mine-run bin. Referring to the accompanying flow diagram, it is then broken in a Blake crusher to pass a 2-in. ring and elevated to the mill-feed bin, from which a plunger feeder uniformly delivers it to the No. 1 roughing roll, set to effect a reduction of about 4 : 1. From this roll it is elevated to revolving screen No. 1 with ¼-in. perforations. The oversize returns to the same roll and the undersize passes to roll No. 2. From this roll it is elevated to two revolving screens, Nos. 3 and 4, fitted with 6-mesh cloth, water being added. The oversize product is returned to roll No. 2, and the through product flows to the dewatering screen. This screen is fitted with 30-mesh cloth and takes out that portion of the product already crushed sufficiently fine, and removes the surplus water.

From the dewatering screen the oversize is fed to roll No. 3, and elevated to two revolving screens, Nos. 4 and 5, fitted with 30-mesh cloth. The crushing is thus evenly divided between the rolls so as to effect the maximum reduction commensurate with their capacity at each stage. The oversize from screens Nos. 4 and 5 is delivered to two chilean mills. The through product and that crushed to pass 30 mesh in the chilean mills and the undersize from the dewatering screen, are delivered to two mechanical classifiers which separate the sands from the slime product.

The sands are fed to seven concentrating tables. The slime product is delivered to six 8-ft. cone settling tanks, from which the thickened pulp is concentrated on ten 6-ft. smooth-belt vanners. The treatment of the sand tailings, slime tailings and concentrates is carried out separately and will be referred to in sequence.

Treatment of Sand Tailings

The tailings flow by gravity launder from the concentrating tables, and after being partially dewatered are discharged into either of two sand-collecting tanks, each of these tanks being provided with three roller-blind decanting gates, arranged so that the water will flow over continuously as the tanks are filled. The surplus water is elevated by centrifugal pump to two cone-bottom clarifying tanks, the clear overflow water from which is pumped to the main storage tank.



Montgomery-Shoshone Mill, Rhyolite, Nevada

When either of the two collecting tanks is filled with sand the central plug gate is drawn and the contents discharged by means of the excavator to belt conveyer No. 1, running beneath the tanks. This is run in such direction as to discharge to the incline-belt conveyer, No. 2, which raises and delivers the sand to conveyer No. 3, placed alongside and above the tanks and discharging by use of a tripper to any of the five leaching tanks. The product is spread uniformly over the area of the tank by a distributor.

The intervals of treatment of the sand product are as follows: Time of filling each collecting tank, 2 days; time of treatment with strong solution in the five leaching tanks, per tank, 1 to 5 days; time of treatment with weak solution, per tank, 6 days; total time of treatment, per tank, 10 to 11 days. No water wash is

*Chief engineer, Mill and Smelter Engineering Company, 118 Liberty street, New York.

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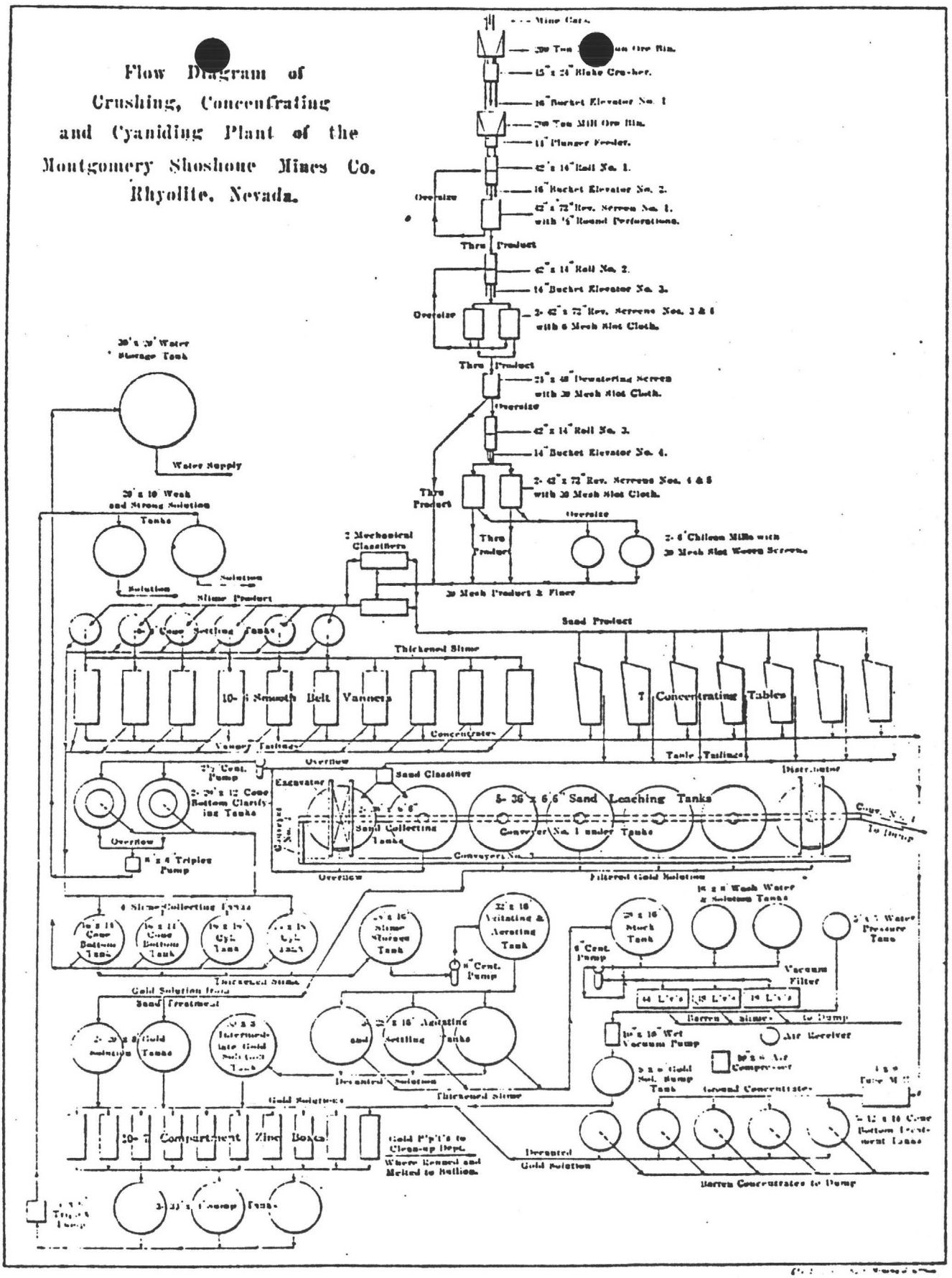
SCHEDULE F



(17)

FLOW SHEET, MONTGOMERY-SHOSHONE MILL, RHYOLITE, NEVADA

used. The five leaching tanks are fitted with the usual construction of filter bottom, consisting of canvas and cocoa-matting laid over a false bottom of wooden grilling. The filtered solutions flow by gravity to the two gold-solution tanks.

When the treatment in any of the leaching tanks is completed the central plug gate is withdrawn and the excavator discharges the contents on belt conveyer No. 1. This conveyer is now run in the opposite direction from that in the previously described operation of filling, so that in this case it delivers the leached sand to conveyer No. 4 and thence to the dump.

Slime Treatment

The slimes from the vanner tailings overflow from the six cone settling tanks, and the settled products from the two clarifying tanks are together delivered to four slime-collecting tanks from which the thickened product is delivered to the slime-storage tank. From this it is transferred by a 6-in. centrifugal pump to the agitating and aërating tank where it is agitated for four hours with solution consisting of 1.2 to 1.4 lb. sodium cyanide, 0.2 lb. lead acetate and 6 lb. lime per ton of ore. After agitation the product is transferred to the three agitating and settling tanks where it is settled for 15 hours and decanted to the gold-solution tank as indicated. The slime is then diluted with weak solution, agitated and transferred to the filter-stock tank.

The vacuum-filter plant consists of 140 filter leaves, each 5x10 ft., in three tanks. It is operated in the usual manner by the return system with solution and water washes. The intervals of operation are as given in an accompanying table.

TIME REQUIRED IN FILTER PLANT.

Filling	15 min.
Forming 1½ in. cake	40 min.
Displacing slime product back to stock tank	20 min.
Filling and washing with solution	115 min.
[illegible]	20 min.
Removing solution	10 min.
Filling with wash water	25 min.
Washing and dripping cake	[illegible]
Total time per cycle of operation	4 hrs. 25 min.

The gold solution withdrawn by the vacuum pump is delivered to the sump tank provided for it.

Treatment of Concentrates

The table and vanner concentrates resulting from a 24-hour run are charged together into the 1[illegible]-ft. closed-type tube mill, where they are ground continuously for about 20 hours in cyanide solution. The ground product is then run into any one of the five cone-bottom treatment tanks. In each of these tanks the product [illegible] about 28 days' treatment by [illegible] compressed air, settling and decantation [illegible] replacement with fresh solution [illegible] the material is [illegible] about four hours and allowed [illegible] clear solution is then decanted [illegible] and agitated for about six hours, when the slime is allowed to settle and the clear solution again decanted. This is done continuously until the tank is needed for a fresh charge of concentrates. After final washing and decanting the barren product is run to dump without further treatment.

The extraction by this method of treatment of the concentrates is stated to be close to 90 per cent. The consumption of cyanide does not seem to be excessive—in fact, since this method has been employed the total consumption is not noticeably greater than before the concentrates were cyanided.

The decanted gold solution resulting from the treatment of concentrates, and those from the vacuum filter, decantation of slime-settling tanks and sand treatment are run through ten 7-compartment zinc-shaving precipitating boxes from which the solution is delivered to any of three sump tanks. From the latter it is pumped to either of the two weak and strong solution tanks, and is there re-standardized.

The cleanup is made by the usual method, employing an acid tank for dissolving fine zinc, washing, filtering in gravity sand filter and drying in cast-iron muffles. The precipitate is mechanically mixed with the necessary fluxes and melted to bullion in an oil-fired tilting furnace. An ozone generator has been installed to facilitate extraction, but as yet insufficient data have been obtained to afford trustworthy conclusions.

Buena Fe Mining Company

The Buena Fe Mining Company has acquired a number of *antiguas* situated on what is known as the Cerro del Torro, about midway between the cities of San Luis Potosi and Aguascalientes, Mexico. The distance by wagon road to San Luis Potosi, the shipping point, is about 65 miles. Running across the mountain is a series of parallel veins, striking approximately east and west. The country rocks are shale and slate, capped by rhyolite, a flow subsequent to the formation of the veins.

Mining was going on here before the earliest time recalled by the oldest inhabitants. The ore was sorted and shipped on burros to Guanajuato, a distance of about 100 miles, where it was treated by the patio process. About 20 years ago the Salvador mine was operated by a Mexican company. When water level was reached a tunnel 500 m. long was driven past the vein, and from that a vertical shaft was sunk by means of a *malacate* and by that means the water level was lowered about 60 ft., but then an increased flow checked further progress. Through 120 horses were at one time in use, in 30-min. shifts, four at a time. After all the available high-grade ore had been shipped, operations ceased.

The present company has completed a 2-compartment incline shaft on the vein and has installed a 40-h.p. gasolene hoist (Fairbanks Morse) driving an Ingersoll Rand compressor on the surface. The shaft is now timbered to a depth of 300 ft., and still has 50 ft. to go to reach water level. Work was started in August, 1909, and the hoist was installed Nov. 1. A 60-h.p., 3-cylinder, Westinghouse producer-gas engine is now being installed to drive an electric generator, the current to drive electric track pumps (Goulds); with these, in connection with bailing skip, no trouble in handling water is anticipated.

The vein matter is quartz, the silver occurring in the form of *plata verde* or horn silver. The shale on either side of the quartz often contains silver for a distance of several feet. According to F. B. Irvine, the general manager, the ore left by the ancients carries 20 to 150 oz. silver per ton and $1 to $5 gold. The extraction by cyanide process should approach 90 per cent. A 25-ton cyanide plant is to be installed.

Two other of the old mines are now in process of development; the Concepcion, about one mile distant from the Salvador, is a larger and more promising vein, but has not been developed to a depth of more than 150 ft. A 25-h.p. gasolene hoist (Western) will operate the compressor. The Providencia mine, midway between the Salvador and Concepcion, outcrops higher up the mountain, and was profitably mined for many years through a series of irregular shafts and winzes along the vein, the ore being packed up "pigeon ladders" on the backs of peons. A Mexican company drove a tunnel a kilometer long to tap the vein at a depth of only 350 ft. and left some milling ore above tunnel level. A small gasolene hoist has just arrived here to sink from tunnel level.

The scanty supply and high price of wood and the prohibitive cost of coal hauled 65 miles from the railroad has prevented the use of steam for power or hoists, and the necessity of economy in fuel led to the selection of producer-gas engines for power purposes, to run on native charcoal laid down here at $25 per metric ton. The fact that the hoists were scattered over a large area led to the selection of gasolene hoists, which are proving very economical. They are quite a rarity in this region where electric power is so widely available. Freighting costs are low, the minimum rates being $5 and $5.50 per ton respectively for hauls of 60 and 65 miles.

A 1500-h.p. producer-gas plant is to be installed here by Thomas R. Bremner, who installed the power plant at San Luis Potosi.

Exhaustive tests will be made to determine the relative economy and consumption of various kinds of fuels.

MINING SINCE COMPANY DEMISE

All mines in the area closed shortly after the New York company passed out of existence. Gold sold for $16/oz. and silver was hardly worth milling. Patented mining claims reverted to Nye County in lieu of unpaid taxes. Over the years various individuals of record have purchased claims separately, sometimes in groups. Mining and ore production for the district has been minor, sporadic, and generally unrecorded.

No significant shipments of gold or silver ores from this district found entry in official record since Rhyolite's decline. Perhaps some should have. The following information is taken from original (shippers copy) settlement sheets returned by American Smelting and Refining Company.

During the five-year period 1936-41 a Beatty mine operator named L.J. Bacoccina contracted with Thomas H. Crawford, California owner of Polaris and Del Monte claims, to mine (with crew of 4) and ship ore to the Garfield Refinery of AS&R in Salt Lake. Some 30-odd irregular shipments were made, barely profitable until 1940, when two small shipments totalling 85 tons average 300 oz. Au/ton. Then a single shipment of 90 tons averaged 1,000 oz. Au/ton; settlement was made by AS&R on 95,422 troy ounces of gold. (This single shipment contained more gold than is credited by Nevada Bureau of Mines to the entire production of the Shoshone mill.) Crawford and Bacoccina quarreled. Bacoccina, in poor health, died. Shortly thereafter the War Production Board issued Order 208, a time when virtually all gold and silver mines in the U.S. shut down.

Polaris did not reopen.

Gilbert Landis (Nye County deputy sherriff for Beatty until retirement) had been on the Polaris mine crew, now lives on the Piute Reservation near Schurz, Nev. Mr. Landis confirmed (on 3/17/79) this shipment was from a "new vein" brought to the surface through the Shoshone shaft since underground ore in the Polaris was then (as now) inaccessible via any Polaris adit.

PRELIMINARY EVALUATION OF THESE PROPERTIES

Eyewitness accounts place thousands of tons of ore beyond reach in Polaris & Shoshone slopes. Local stories respect rich ore untouched in Bacoccina high-grading. But in no instance can underground ore be examined readily sampled. Hence we tentatively disregarded all underground potential of all claims in determining suitability of this project to fill our need for immediate concentrates in Tucson. First, there must be sufficient gold and silver in old dumps to return investment; second, values must be amenable to simple gravity concentration; third, there must be enough water for on-site treatment.

Water. Flowsheets in technical journals of the day support published references to pumping from the main shaft as much as 30,000 gal/day new water to operate a 300-ton stamp-cyanide mill several years. In our spinner circuit we require 30-40% less water per ton of crude ore milled than Old Timers needed. To reach the mine water we built a heavy equipment road to the mine, moved a crane to the main shaft, and lowered two men in an escape capsule to a point where passage was denied at 360 Ft. down the shaft. Access around obstruction to the fourth level disclosed 2 cages in place were covered by burned timbers and topped with a few hundred tons of muck sloughed from the collar and drifts above. Water stood 25 ft. below the bottom of the cages.

Ore in dumps. More than 500,000 tons of dump material is accessible to the millsite. Some dumps are too low in grade to treat profitably, thus do not constitute ore. Altogether in this district we have adequate millheads to selectively feed a grade of ore to a 500-tpd operation that will yield 6kg(n200oz) of gold each day in the form of concentrate rich enough to treat at our plant in Tucson.

A conspicuous dump near a deep shaft on the Providence contains insufficient values to warrant cost of milling. Likewise, the Lucky Jack mine dump (adjoining Greenhorn SE boundary) is relatively barren. Several small dumps on various claims result from open cuts and exploration shafts; these have been included in projected mill tonnage only where presumed return justifies treatment costs.

Sampling and Testing Procedure. Augered material was taken at fixed intervals normal to the slope at the knee of each dump run whenever possible. Enough sample was taken to be able to concentrate the values and determine recovery of both gold and silver in each type of host rock rather than settle for mere assays alone.

When a representative sample had been assured, muck collected from each dump was separately ground to pass through a 20-mesh screen. The ground pulp was then divided into two almost equal parts using a finer (usually 48 or 60-mesh) screen; each sized fraction was separately passed through a centrifugal concentrator @ 30% pulp density. Average recovery of gold in fine fractions was above 96%; coarse fraction average recovery, 92%. Although all coarse concentrates were lower in value,

most would be acceptable in grade at Tucson. Recovery of nearly 2% more gold (on the average) by grinding all oversize pulp to pass 60-mesh is indicated. Finer grinding should be adopted provided additional costs on plant scale do not exceed $400/day and slimes do not result from overgrinding.

Outlying Properties. Mineralization in the Bullfrog Hills is more conspicuous around the periphery of the 10X13 mile eliptical area defined by the caldera. We have taken options on four former producing mines along the rim: The Pioneer, Mayflower, Gold Bar, and Quartette; three are easy hauls to the millsite. Another, the Clara, is unpatented (6 claims, no dump) and is currently high-graded by a prospector who last Christmas sold us hand-cobbed gold specimens. At present we plan only to work dumps on these properties but the Gold Bar and Quartette were known for rich paystreaks long after district activety ceased.

Approximately 225,000 tons of dump material on the surface of our patented mining claims can be treated at a profit in a simple gravity circuit. Over 75,000 oz. gold and 580,000 oz. silver can be simultaneously recovered.

CALCULATED TONNAGE & MEASURED VALUE OF DUMPS

CLAIM	EST. TONS	AVG.OZ./TON GOLD	AVG.OZ./TON SILVER	OZ.TO BE RECOVERED GOLD	OZ.TO BE RECOVERED SILVER
Shoshone Lode (Disc.)	900	0.33	0.98	300	880
"	1,000	0.21	2.22	200	2,200
"	1,700	0.23	1.93	385	3,280
" (w. slope)	2,200	0.20	0.87	450	1,900
" (from tunnel)	2,000	0.19	0.86	390	1,700
Shoshone #2	250	0.18	0.75	40	190
"	200	0.20	0.83	40	160
Shoshone #3	60,000	0.38	2.70	23,140	162,360
	1,000	0.31	3.31	300	3,300
Indian Johnnie	2,570	0.22	3.00	580	7,700
	300	0.42	3.49	125	1,040
	500	0.18	3.05	90	3,050
Polaris Lode	120,000	0.32	1.93	38,520	293,000
Bacoccina	1,100	0.43	4.12	480	4,500
Tailings Pile	13,600	0.08	0.23	1,100	3,100
Polaris Fraction	350	0.22	3.01	70	1,050
Three Peach Lode	450	0.11	0.83	50	375
" (tunnel)	2,300	0.26	0.91	600	2,100
Inaugural Fraction	3,000	0.27	1.10	810	3,300
Greenhorn Lode	680	0.11	0.64	75	430
Red Oak Lode	1,000	0.18	0.86	180	860
(tunnel)	4,000	0.17	0.70	680	2,800
Quartette Lode	5,000	1.21	13.01	6,050	65,000
"	500	1.86	14.73	930	7,365
Ace #2	2,000	0.44	4.96	880	9,900
				76,465	581,460

THE OPERATING GROUP

A modest gold and silver refining facility at Tucson International Airport is the prinicple concern of Metal Center, Inc. a subchapter S corporation held by few principles. The plant produced gold and silver bars to industry standards. Interruption of our primary source of concentrates sent us in search of dependable domestic raw material this resulted last year in evaluation, option and purchase of subject Nevada properties. The bulk gravity concentrate flowing from the Shoshone mill will make ideal feed for the Tucson plant.

We propose forming a limited partnership to own and operate the Nevada project and have placed into Metco, Inc., a Nevada corporation, all mines and properties containing gold and silver values. Metco, Inc. will be the general partner and the partnership will not be taxed as a corporation.

Our proposal contemplates the high probability that the limited partnership will acquire metal by virtue of its activities. The metal is an asset of the partnership and until sold there is no tax impact upon the partners. We consider a pro-rata distribution of these assets. Income has not been realized.

Officers and directors of our corporation are quite ordinary people unknown outside their professional province. The company, as such, is young. But involved individuals have established long track records in the mining industry and with metal refiners. References of Edson L. Whipple:

1) Engelhard Industries. Call John Blackwell, Engelhard Ind., Hayward, California 415/782-9982 (shipments now go to their new plant at Engelhard Industries West, Inc., Anaheim, Cal. - metal was formerly flown to Engelhard in Newark, N.J.).
2) David W. Seed, president, Delta Smelting & Refining Co. Ltd., Vancouver, B.C. phone 604/273-2771.

Willis R. Dees, V. Pres. & Director, is an attorney specializing in mining law in Tucson, Arizona, where he has procticed for 28 years. Please call his number 602/624-2301, to determine references he may wish to give

THE PLAN

We are constructing a 500-ton mill at the mine. Production of concentrates will begin about 120 days following delivery of crushing and concentrating equipment. Full production will be achieved during a 30-day run-in period after the plant goes on-stream. Concentrates from surface inventory of measured ore will yield about 6 kg. of gold and 45 kg. of silver each day of operation.

Cost of the entire mill facility - crushing, grinding, sizing, materials handling equipment, concentrators, and tailings disposal - will be $984,460 as shown on the following pages.

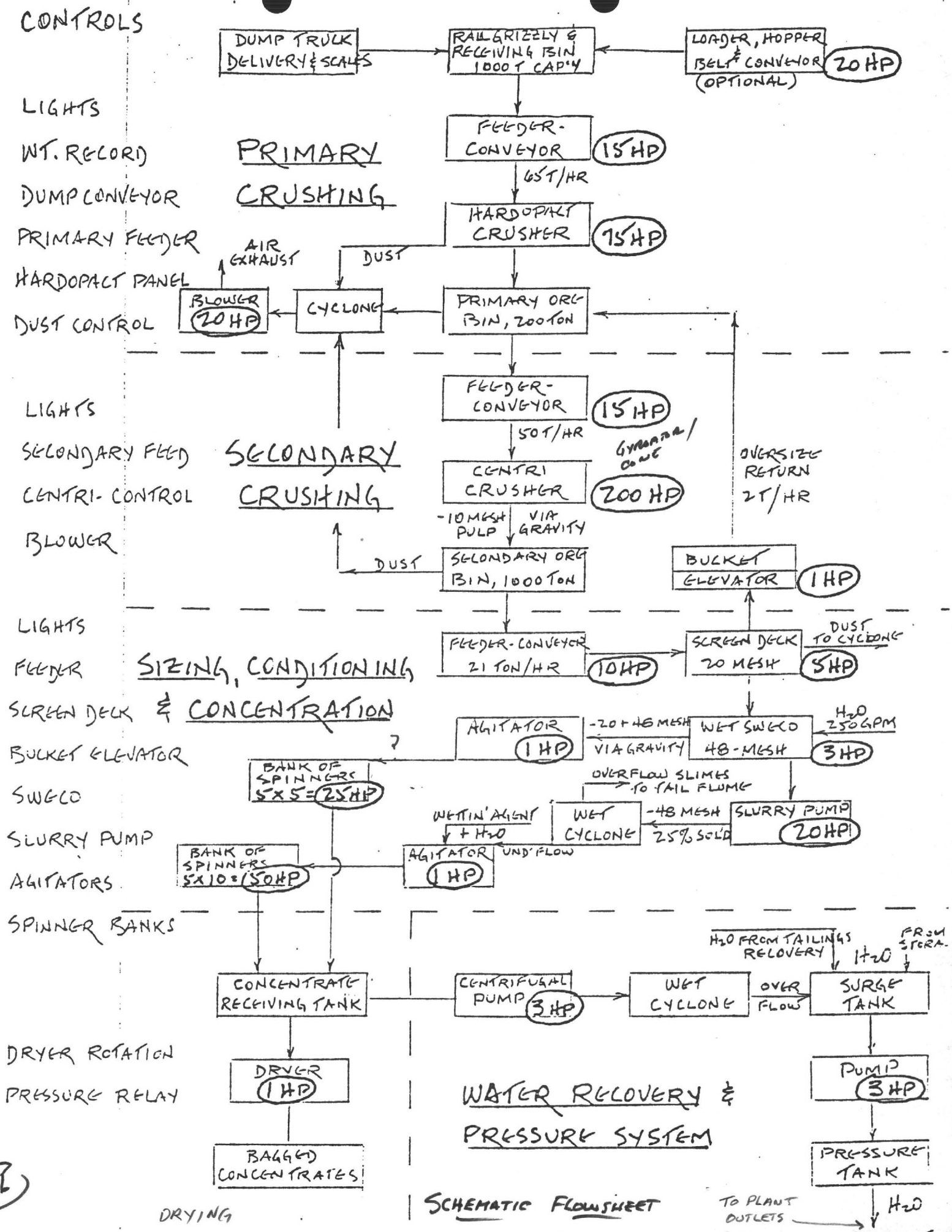
Limited partner will loan $1,000,000 holding all equipment on the property as chattel. Loan will be repaid at the rate of 40% of all concentrates produced by the mill. Total loan amount should be returned in less than two months of full operation.

Upon repayment to the limited partner of the loan (and interest) and return of the chattel to the general partner, one-tenth of the total concentrate produced at the mill (about $12,200/day, current value) will thereafter be directed to the limited partner in the form of good delivery bars with no tax impact. What is offered is a 10% gross metal override, in perpetuity, after full repayment of invested capital.

Capability will encompass accessible dumps in about two years thereafter we will mill mine-run crude ore to be developed underground at Shoshone and Polaris and on nearby optioned properties in the district. This partnership agreement is to include all future production from properties currently under lease as well as mining properties to be acquired in the district as operations continue.

This facility is designed so amount of milled crude ore can be doubled by merely adding 20% to the capital investment and working an additions shift in the crushing and grinding plant. And future ore is likely to be richer. It stands to reason prior operators did not discard their best ore. Therefore underground production, when it begins, will be richer than present dumps. Amount of metal produced next year will increase appreciably.

ORE REDUCTION MILL - 500 TONS/DAY



MILL EQUIPMENT LIST - 500 TONS/DAY

$144,700	PRIMARY CRUSHING	
	TRUCK RAMP & RECEIVING BIN	$ 27,500
	TRUCK SCALES	7,500
	GRIZZLY & ROCK HANDLING	4,200
	PRIMARY ORE BIN	25,000
	FEEDER-CONVEYOR, CONTROLS	36,000
	HARDOPACT CRUSHER	42,000
	DRIVE, CONTROLS	2,500
$158,400	SECONDARY CRUSHING & GRINDING	
	CENTRI FEEDER-CONVEYOR, CONTROLS	14,500
	SCREEN	7,600
	CYCLONE, DUCTWORK, BLOWER	8,400
	SECONDARY ORE BIN	30,000
	CENTRI CRUSHER, M-45, MOTOR CONTROLS MOUNTING ETC.	68,000
	SECONDARY ORE BIN & CRUSHER MOUNTING	30,000
$ 62,100	SIZING & CONDITIONING	
	FEEDER-CONVEYOR	27,500
	SCREEN DECK	14,000
	BUCKET ELEVATORS, BINS	5,700
	SLURRY PUMPS, WET CYCLONES, TANKS, VALVES, PIPING, AGITATORS, ETC.	14,900
$109,100	CONCENTRATING	
	SPINNER BANK (15) ALL SIZES	96,000
	RECEIVING TANK, CENT PUMP, CYCLONE	4,400
	COMPRESSOR	2,800
	DRYER	2,100
	SURGE TANK, PUMP, PRESSURE SYSTEM	3,800
$ 12,600	TAILINGS DISPOSAL & DEWATERING	
	FLUMES, PIPING, CONDUIT, SHEET PLASTIC, ETC.	6,000
	WATER RECOVERY, PUMP, PIPE	6,600
$ 29,960	WATER SYSTEM	
	SUBMERSIBLE PUMP, MOTOR, STARTER, CABLES, ETC.	6,160
	STORAGE TANK, PIPE, VALVES, FITTINGS	23,800
$ 60,500	MILL BUILDINGS	
	FOUNDATIONS, FOOTINGS, LEVELS, ABUTMENTS	32,000
	WALLS, TRUSSES, SUPPORTS, ROOF	28,500
$ 50,000	SHOP & LAB	
	BUILDING	20,000
	EQUIPMENT	15,000
	LAB	15,000

$ 43,000	ENERGY	
	DIESEL-ELECTRIC GENERATOR, 65 KVA (used)	$ 5,500
	DIESEL-ELECTRIC GENERATOR, 300 KVA (used)	22.500
	SYNCHRONIZER-DISTRIBUTION	4,500
	INSIDE LIGHTS	5,300
	OUTSIDE LIGHTS	3,700
	COMMUNICATIONS	2,000
$ 96,800	EXCAVATION, HAULING, ROLLING STOCK, SERVICE EQUIP.	
	BULLDOZER, CAT D8 (used)	55,000
	DUMP TRUCKS, MACK 12-yd (used)	18,000
	TRACK LOADER, RIPPER, HD 11G (used)	9,500
	PICK-UPS (2 used)	6,800
	SERVICE RIG, BOOM, ETC	7,500
$ 67,300	MINE REFURBISHING: SHOSHONE, POLARIS	
	COLLAR	17,500
	BEAMS	4,800
	HOIST (used)	22,500
	GALLOWS FRAME (used), PULLEY, ORE CAR, WIRE ROPE	22,500
	RETIMBERING, ORE CHUTES, WORKING STATIONS, ETC..	future
	MUCKING MACHINES, TRACK & TIES, MINE CARS, STEEL, ETC.	future
	ORE DEVELOPMENT	
	SURFACE DRILLING, DRIFTING, SINKING CUTS, ETC...	future
	ROADS, BENCHING	future
$150,000	CONTINGENCY & MISCELLANEOUS:	

Cash outlay for these units, were they to be purchased individually and installed separately, would come to $834,460. Occasional units can be discounted for cash; some with cash in hand, may be found in good used condition @ 50% or 60% of new quote, as indicated. About $150,000 in contract labor not included above could have this mill in full operation 120 days after site preparation. Estimated daily operating cost is $2,280.

Mill capacity might be doubled to 1,000 tons/day of crude ore input, with corresponding increase in recovered gold and silver, by additionally spending almost $25,000 in concentrating equipment and merely adding another work shift to crushing and grinding. Daily total operating cost: $3,250

MILL OPERATING COSTS - 500 TONS/DAY

	DAILY	MONTHLY
SUPERVISION (pro-rated)	$69.43	$ 2,083
PRIMARY CRUSHER OPERATORS (2)	64.50	1,925
SECONDARY CRUSHER OPERATORS (2)	64.50	1,925
SCREENING & PULP PREPARATION (6)	192.00	5,760
SPINNER OPERATORS (3)	96.00	2,880
QUALITY CONTROL & ASSAYER	50.00	1,500
DEWATERING, DRYING & PACKAGING	50.00	1,500
HEAVY EQUIPMENT OPERATORS (2)	100.00	3,000
MECHANIC	50.00	1,500
ELECTRICIAN	50.00	1,500
F.I.C.A.		1,445.03
NEVADA INDUSTRIAL COMMISSION		1,183.36
FUEL, DIESEL 15,000 GALS./MO.	400.00	12,000
GASOLINE	28.33	850
TRAVEL & ENTERTAINMENT		200
SUPPLIES, TOOLS AND APPARATUS	16.66	500
MINERAL PROPERTIES		1,000
TRANSPORTATION OF CONCENTRATE		5,000
REFINING COSTS		4,500
TELEPHONE & COMMUNICATIONS		400
INSURANCE		300
LEGAL & ACCOUNTING		500
ALLOWANCE FOR DEPRECIATION, MACHINERY & EQUIP		8,333
RESERVE FOR ORE DEVELOPMENT		3,000
CONTINGENCIES		3,000
TOTAL PROJECTED MONTHLY OPERATING COST		$65,784.39

PRODUCTION & DISTRIBUTION OF METAL

All listed and scheduled equipment has been located and priced, can be delivered without delay. Following site preparation, approximately 4 mo. are allowed for basic construction and installation of equipment. Full production will be achieved during a 30-day run-in period. After a month of operatin (averaging half capacity in table below) 6 kg gold and 45 ig silver will be recovered in bulk concentrate each calander day of the year until our 2-yr. supply of ore (mine dumps) is exhausted. Prior to that time underground mining is expected to commence; new ore reaching our mill thereafter will be considerable richer than ore from mine dumps although it will then cost more to develope and mine underground reserves than had been in moving surface waste piles to the mill.

INVESTMENT PAYBACK MINE DUMPS ONLY

	1ST MONTH	2ND MONTH	3RD MONTH	4TH MONTH
PRODUCTION, GOLD	90 kg	180 kg	180 kg	180 kg
, SILVER	675 kg	1,350 kg	1,350 kg	1,350 kg
DISTRIBUTION TO	40% of AU, AG	40% of Au +	578.7 oz +	578.7 oz
LIMITED PARTNER	($696,587 +	($521,978 +	4,340 oz +	4,340 oz
MILL COERATING COSTS	$ 65,784	$ 65,784	$ 65,784	$ 65,784
MINE PAYMENTS, GOLD	520.8 oz	1,041.66oz	1,041.66oz	1,041.66oz
SILVER	3,906.2 oz	7,812.45oz	7,812.45oz	7,812.45 oz
PLANT INV., GOLD	981.87oz	2,194.34oz	3,933.34oz	3,933.34 oz
SILVER	9,114.53oz	31,250.1 oz	31,250.1 oz	31,250.1 oz

Thus, at the end of 4 mo. actual operation limited partner will have been repaid ($1,217,574; example assumes $400 gold, $20 silver) and enjoy a "bonus" of more than 1,000 oz of gold and a dozen COMEX 1,000 oz. fine silver bars. Income has not been realized. And the partnership can continue through out the productive future of the district with the limited partner receiving regular distribution of one-tenth of all metal produced. Total operations cost - developing and mining ore, through refining ghe gold and silver bars (not included in table above) - are to be subtracted from Plant Inventory, <u>after</u> distribution is made to limited partner.

1068 (1/70)

First American Title Company of Nevada

1800 E. DESERT INN ROAD, LAS VEGAS, NEVADA 89109 · (702) 731-4131

November 13, 1978

WILLIS DEES
120 W. Broadway
Tuscon, Arizona 85701

RECEIVED
NOV 15 1978
MAY, DEES & BARASSI

Your No.
Our Order No. LV-609031-NYE
Form of Policy Coverage Requested: CLTA

In response to the above referenced application for a policy of title insurance, this Company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy of Title Insurance in the form specified above, describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said policy form.

This report (and any supplements or amendments thereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of October 24, 1978 at 7:30 a.m.

Jean Maurer
JEAN MAURER TITLE OFFICER

Title to said estate or interest at the date hereof is vested in:

12 claims

ROBERT REVERT

The estate or interest in the land hereinafter described or referred to covered by this Report is:

FEE

At the date hereof exceptions to coverage in addition to the printed exceptions and exclusions contained in said policy form would be as follows:

1. Taxes for the fiscal year July 1, 1978 to June 30, 1979, including any secured personal property taxes, a lien, not yet due or payable.

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FIRST AMERICAN

First American Title Company of Nevada

1800 E. DESERT INN ROAD, LAS VEGAS, NEVADA 89109 · (702) 731-4131

December 1, 1978

WILLIS DEES
120 W. Broadway
Tucson, Arizona 85701

Your No.
Our Order No. LV-609032-NYE
Form of Policy Coverage Requested:

In response to the above referenced application for a policy of title insurance, this Company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy of Title Insurance in the form specified above, describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said policy form.

This report (and any supplements or amendments thereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of November 15, 1978 at 7:30 a.m.

Jean Maurer
JEAN MAURER
TITLE OFFICER

Title to said estate or interest at the date hereof is vested in:

ROBERT A. REVERT

The estate or interest in the land hereinafter described or referred to covered by this Report is:

FEE

At the date hereof exceptions to coverage in addition to the printed exceptions and exclusions contained in said policy form would be as follows:

1. Taxes for the fiscal year July 1, 1978 to June 30, 1979, including any secured personal property taxes, a lien, not yet due or payable.

(3v)

FIRST AMERICAN

First American Title Company of Nevada

1800 E. DESERT INN ROAD, LAS VEGAS, NEVADA 89109 · (702) 731-4131

December 4, 1978

WILLIS DEES
120 W. Broadway
Tucson, Arizona 85701

Your No.
Our Order No. LV-609032-NYE (AMENDED)
Form of Policy Coverage Requested:

In response to the above referenced application for a policy of title insurance, this Company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy of Title Insurance in the form specified above, describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said policy form.

This report (and any supplements or amendments thereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of November 15, 1978 at 7:30 a.m.

Jean Maurer
JEAN MAURER TITLE OFFICER

Title to said estate or interest at the date hereof is vested in:

ROBERT A. REVERT, as to Parcel 1;
THOMAS H. CRAWFORD, as to Parcel 2

The estate or interest in the land hereinafter described or referred to covered by this Report is:

FEE

At the date hereof exceptions to coverage in addition to the printed exceptions and exclusions contained in said policy form would be as follows:

1. Taxes for the fiscal year July 1, 1978 to June 30, 1979, including any secured personal property taxes, a lien, not yet due or payable.

DATED: AUGUSUT , 1975

BETWEEN:

VERNON BRADLEY

OF THE FIRST PART,

AND:

MINEX, INC.,

OF THE SECOND PART.

SUB-LEASE AND OPTION

WARNER & THOMPSON
Barristers & Solicitors
202 - 640 West Hastings St.
Vancouver, B. C.
V6B 1P8