

0410 0097

PRELIMINARY EXPLORATION REPORT

ESMERALDA MINING CLAIM

AURORA MINING DISTRICT

MINERAL COUNTY, NEVADA

1991

by

EDMOND F. LAWRENCE

EXPLORATION GEOLOGIST

December 11, 1991

Reno, Nevada

PRELIMINARY EXPLORATION REPORT

ESMERALDA MINING CLAIM

AURORA MINING DISTRICT

MINERAL COUNTY, NEVADA

Purpose of Report

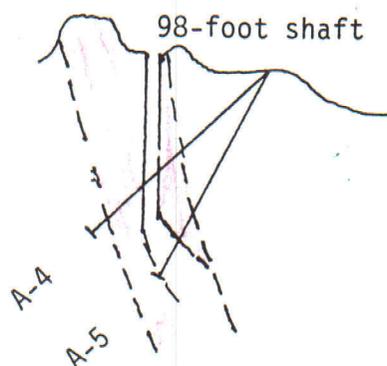
A detailed report, dated February 1, 1987, was submitted by Lawrence, at the request of Alexander von Hafften, describing the geologic, geochemical and geophysical surveys, that had been conducted over the Aurora area. Additional geochemical surveys were done over the south end of the Esmeralda claim, and the Ruth and South End claims in 1989. Based on this data thirteen holes were drilled in August and September of 1990. A detailed report was submitted by Lawrence, February 5, 1991 describing the results of this drilling program.

Drill Hole A-4 revealed significant amounts of gold (Fig. 1). The spatial association of this ore with the north end of the ore-shoot mined in the eighteen-sixties suggested the possibility of the continuation of this ore-shoot to the north (Fig. 2).

Eighteen holes were drilled by Gustin Corporation in October, 1991, using a Simco 5000 truck rig with reverse drilling for a total of 2,850 feet. Samples were taken every five feet, and all samples, a total of 383, were sent to Chemex Labs, Inc. in Sparks, Nevada. All of the samples were assayed for gold and silver using an one assay-ton with aqua regia digestion and A.A.

These holes were drilled from nine drill pads, with an array of two holes from each pad similar to the array for A-4 and A-5 as shown in Figure 1.

Looking N 10°E



Scale: 1 inch = 100 feet

ASSAY RESULTS

Drill Hole A-4	65 - 70 feet	0.067 oz/ton gold
	70 - 75 "	0.014 " "
	75 - 80 "	0.006 " "
	80 - 85 "	0.009 " "
	85 - 90 "	1.714 " "
	90 - 95 "	0.750 " "
	95 - 100 "	0.046 " "
	100 - 105 "	0.009 " "
	105 - 110 "	0.008 " "
	110 - 115 "	0.003 " "
	115 - 120 "	0.003 " "
	120 - 125 "	0.028 " "
From 85 to 100 feet averaged		0.837 oz/ton gold
"	65 to 100 "	0.372 " "
"	65 to 125 "	0.221 " "
Drill Hole A-5	90 - 95 feet	0.001 oz/ton gold
	95 - 97 "	0.001 " "
	97 - 112 "	Cavity - stoped out
	112 - 118 "	0.010 oz/ton gold
	118 - 120 "	Cavity

Figure 1. Cross-section Drill Holes A-4 and A-5.

Long section Esmeralda Vein Looking N 70°W

Scale: 1 inch = 100 feet

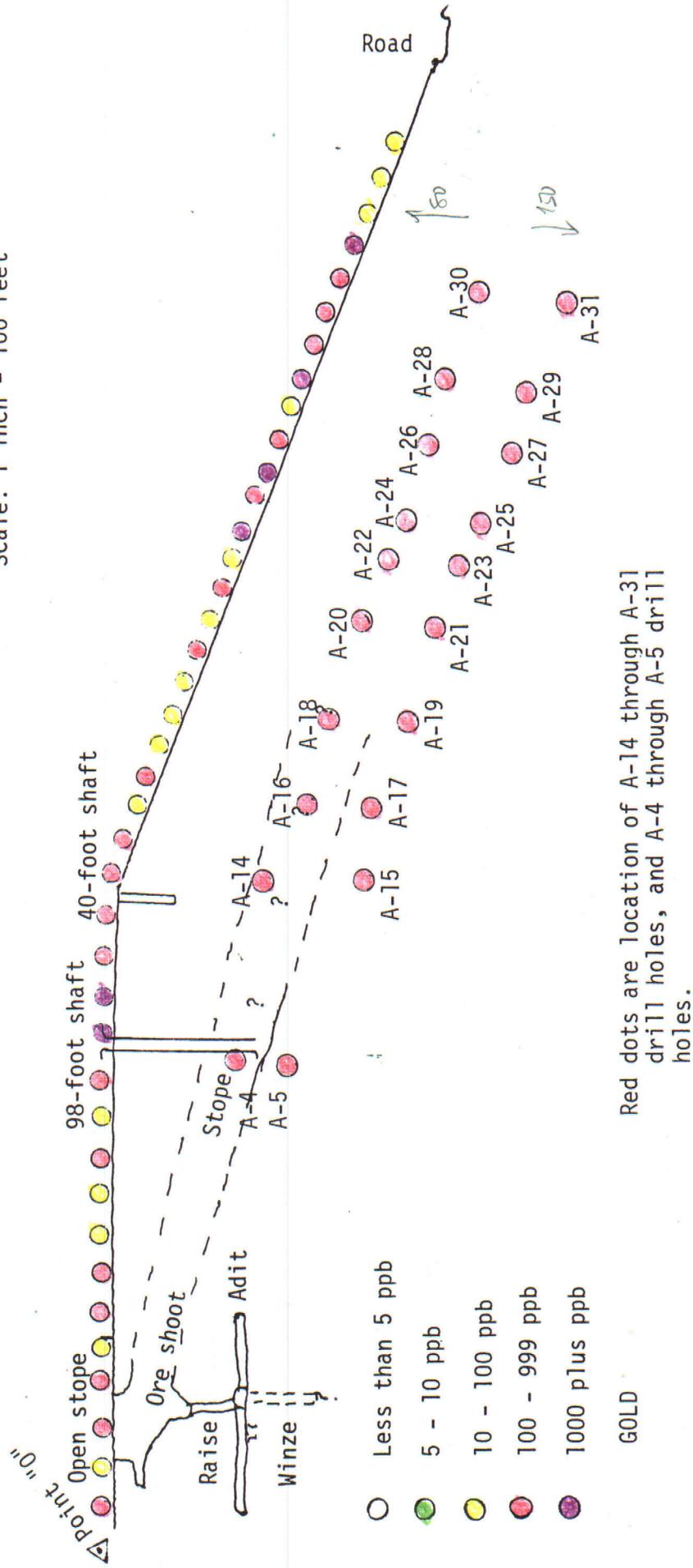


Figure 2. Long section Esmeralda Vein showing open stope and 98-foot shaft.

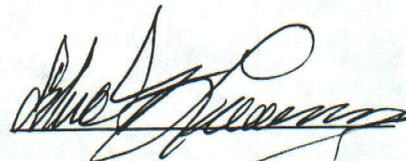


Drill Hole No.	Location Along Vein	Distance From Vein	Direction	Inclination	Total Depth
A - 14	425 feet	42 feet	S84°W	-50°	125 feet
A - 15	425 feet	45 feet	S84°W	-65°	175 feet
A - 16	475 feet	32 feet	N65°W	-50°	140 feet
A - 17	475 feet	33 feet	N70°W	-65°	135 feet
A - 18	544 feet	26 feet	N60°W	-47°	185 feet
A - 19	544 feet	29 feet	N60°W	-67°	185 feet
A - 20	625 feet	37 feet	N86°W	-50°	185 feet
A - 21	625 feet	34 feet	N86°W	-40°	135 feet
A - 22	675 feet	36 feet	N68°W	-40°	135 feet
A - 23	675 feet	35 feet	N68°W	-55°	165 feet
A - 24	725 feet	32 feet	N75°W	-50°	145 feet
A - 25	725 feet	35 feet	N75°W	-55°	145 feet
A - 26	780 feet	36 feet	S66°W	-40°	125 feet
A - 27	780 feet	39 feet	S66°W	-55°	155 feet
A - 28	830 feet	47 feet	N45°W	-40°	165 feet
A - 29	830 feet	50 feet	N45°W	-55°	185 feet
A - 30	890 feet	38 feet	N72°W	-40°	155 feet
A - 31	890 feet	42 feet	N72°W	-55°	185 feet

The "location along vein" is measured from Point "0" at the South end of the surface exposure of the Esmeralda vein as shown in Figure 2 and 3.

The results from a geochemical survey along the east side of the Esmeralda vein are shown in Figure 2. There are two veins striking northeasterly that intersects the Esmeralda vein. The first one intersects the Esmeralda vein at 325 feet northerly from Point "0". Drill Hole A-4 explored this area and showed significant amounts of gold (Fig. 1). A second vein that strikes N80°E and dips 65°S intersects the Esmeralda vein at 544 feet northerly from Point "0". Drill

Holes A-18 and A-19 were designed to test this intersection, however, assays showed only minor amounts of gold. A review of the attached assay reports for A-14 through A-31 failed to show any economic deposits of gold.

A handwritten signature in black ink, appearing to read 'Edmond F. Lawrence', written in a cursive style.

Edmond F. Lawrence  
Exploration Geologist



# Chemex Labs Inc.

Analytical Chemists \* Geochemists \* Registered Assayers  
 994 West Glendale Ave., Suite 7, Sparks,  
 Nevada, U.S.A. 89431  
 PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
 3898 WASHINGTON ST.  
 SAN FRANCISCO, CALIFORNIA  
 94118

Page Number : 3  
 Total Pages : 3  
 Certificate Date : 29-OCT-91  
 Invoice No. : 19123762  
 P.O. Number :

Project :  
 Comments: 2 CC: EDMOND F. LAWRENCE

## CERTIFICATE OF ANALYSIS A9123762

SAMPLE	PREP CODE	AU Oz/T	AG Oz/T						
A-2 175-180	208 294	0.002	0.06						
A-2 180-185	208 294	0.001	0.07						
A-14 055-060	208 294	0.003	0.07						
A-14 060-065	208 294	0.015	0.32						
A-14 065-070	208 294	0.020	0.93	15' 0.017					
A-14 070-075	208 294	0.015	0.65						
A-14 075-080	208 294	0.010	0.49						
A-14 080-085	208 294	0.004	0.32						
A-14 085-090	208 294	0.002	0.24						
A-14 090-095	208 294	0.002	0.06						
A-14 095-100	208 294	0.001	0.03						
A-14 100-105	208 294	0.001	0.03						
A-14 105-110	208 294	0.001	0.02						
A-14 110-115	208 294	0.001	0.03						
A-14 115-120	208 294	0.001	0.03						
A-14 120-125	208 294	0.001	0.02						
A-15 095-100	208 294	0.001	0.06						
A-15 100-105	208 294	0.014	0.65	10' 0.020					
A-15 105-110	208 294	0.026	0.45						
A-15 110-115	208 294	0.003	0.11						
A-15 115-120	208 294	0.003	0.14						
A-15 120-125	208 294	0.002	0.10						
A-15 125-130	208 294	0.002	0.15						
A-15 130-135	208 294	0.002	0.09						
A-15 135-140	208 294	0.001	0.09						
A-15 140-145	208 294	0.001	0.03						
A-15 145-150	208 294	0.001	0.03						
A-15 150-155	208 294	0.001	0.04						
A-15 155-160	208 294	0.001	0.03						
A-15 160-165	208 294	< 0.001	0.03						
A-15 165-170	208 294	< 0.001	0.02						
A-15 170-175	208 294	< 0.001	0.02						
A-16 030-035	208 294	0.003	0.11						
A-16 035-040	208 294	0.001	0.09						
A-16 040-045	208 294	0.001	0.03						
A-16 045-050	208 294	0.024	0.28	10' 0.019					
A-16 050-055	208 294	0.015	0.44						
A-16 055-060	208 294	0.008	0.15						
A-16 060-065	208 294	0.002	0.24						
A-16 065-070	208 294	0.001	0.14						

16 16

16 DUST - 0.0221  
 1 0.016 20  
 5-10'

CERTIFICATION: *Jandra M. Adams*



# Chemex Labs Inc.

Analytical Chemists \* Geochemists \* Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:   
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 2  
Total Pages : 3  
Certificate Date: 29-OCT-91  
Invoice No. : 19123762  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123762

SAMPLE	PREP CODE	AU oz/T	Ag oz/T						
A-16 070-075	208 294	0.004	0.05						
A-16 075-080	208 294	0.009	0.16						
A-16 080-085	208 294	0.002	0.02						
A-16 085-090	208 294	0.004	0.03						
A-16 090-095	208 294	0.001	< 0.01						
A-16 095-100	208 294	0.001	0.03						
A-16 100-105	208 294	0.002	0.02						
A-16 105-110	208 294	0.001	0.02						
A-16 110-115	208 294	0.001	0.02						
A-16 115-120	208 294	0.001	< 0.01						
A-16 120-125	208 294	0.001	< 0.01						
A-16 125-130	208 294	0.001	0.02						
A-16 130-135	208 294	0.001	< 0.01						
A-16 135-140	208 294	< 0.001	< 0.02						
A-17 070-075	208 294	0.007	0.60						
A-17 075-080	208 294	0.015	0.18	5' 0.015					
A-17 080-085	208 294	0.005	0.33						
A-17 085-090	208 294	0.004	0.14						
A-17 090-095	208 294	0.004	0.04						
A-17 095-100	208 294	0.002	0.07						
A-17 100-105	208 294	0.002	0.06						
A-17 105-110	208 294	0.002	0.02						
A-17 110-115	208 294	0.001	< 0.01						
A-17 115-120	208 294	0.002	0.04						
A-17 120-125	208 294	0.001	0.05						
A-17 125-130	208 294	0.001	0.04						
A-17 130-135	208 294	0.001	0.02						
A-18 025-030	208 294	0.001	0.02						
A-18 030-035	208 294	0.004	0.06						
A-18 035-040	208 294	0.013	0.41	5' 0.013					
A-18 040-045	208 294	0.003	0.04						
A-18 045-050	208 294	0.002	0.03						
A-18 050-055	208 294	0.002	0.03						
A-18 055-060	208 294	0.002	0.03						
A-18 060-065	208 294	0.001	0.03						
A-18 065-070	208 294	0.001	0.04						
A-18 070-075	208 294	0.001	< 0.01						
A-18 075-080	208 294	0.003	0.03						
A-18 080-085	208 294	0.002	< 0.01						
A-18 085-090	208 294	0.002	< 0.01						

CERTIFICATION: *Chandra M. Adam*



# Chemex Labs Inc.

Analytical Chemists \* Geochemists \* Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER

3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:  
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 3  
Total Pages : 3  
Certificate Date : 29-OCT-91  
Invoice No. : 19123762  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123762

SAMPLE	PREP CODE	AU oz/T	AG oz/T						
A-18 090-095	208 294	0.002	< 0.01						
A-18 095-100	208 294	0.001	0.04						
A-18 100-105	208 294	0.001	0.08						
A-18 105-110	208 294	0.001	0.08						
A-18 110-115	208 294	0.001	0.04						
A-18 115-120	208 294	0.003	0.06						
A-18 120-125	208 294	0.001	0.03						
A-18 125-130	208 294	0.001	0.04						
A-18 130-135	208 294	0.001	0.03						
A-18 135-140	208 294	0.001	0.04						
A-18 140-145	208 294	0.001	0.03						
A-18 145-150	208 294	0.001	< 0.01						
A-18 150-155	208 294	0.001	< 0.01						
A-18 155-160	208 294	0.001	< 0.01						
A-18 160-165	208 294	0.001	0.05						
A-18 165-170	208 294	0.001	< 0.01						
A-18 170-175	208 294	0.001	< 0.01						
A-18 175-180	208 294	0.003	0.07						
A-18 180-185	208 294	0.001	0.07						

CERTIFICATION: *Jarcho M. Adam*



# Chemex Labs Inc.

Analytical Chemists • Geochemists • Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:   
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 1  
Total Pages : 3  
Certificate Date: 30-OCT-91  
Invoice No. : 19123765  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123765

SAMPLE	PREP CODE	Au oz/T	Ag oz/T						
A-19 065-070	208 294	0.006	0.23						
A-19 070-075	208 294	0.006	0.40						
A-19 075-080	208 294	0.018	0.57	5' 0.018					
A-19 080-085	208 294	0.003	0.15						
A-19 085-090	208 294	0.003	0.12						
A-19 090-095	208 294	0.003	0.05						
A-19 095-100	208 294	0.003	0.02						
A-19 100-105	208 294	0.003	0.04						
A-19 105-110	208 294	0.002	0.05						
A-19 110-115	208 294	0.016	0.16	10' 0.015					
A-19 115-120	208 294	0.015	0.17						
A-19 120-125	208 294	0.003	0.10						
A-19 125-130	208 294	0.003	0.10						
A-19 130-135	208 294	0.002	0.09						
A-19 135-140	208 294	0.009	0.03						
A-19 140-145	208 294	0.001	0.04						
A-19 145-150	208 294	0.001	0.03						
A-19 150-155	208 294	0.001	0.03						
A-19 155-160	208 294	0.002	0.10						
A-19 160-165	208 294	0.001	0.08						
A-19 165-170	208 294	0.002	0.04						
A-19 170-175	208 294	0.002	0.05						
A-19 175-180	208 294	0.001	0.05						
A-19 180-185	208 294	0.001	0.04						
A-20 065-070	208 294	0.008	0.06						
A-20 070-075	208 294	0.007	0.04						
A-20 075-080	208 294	0.002	0.08						
A-20 080-085	208 294	0.004	0.11						
A-20 085-090	208 294	0.004	0.04						
A-20 090-095	208 294	0.003	0.10						
A-20 095-100	208 294	0.002	0.10						
A-20 100-105	208 294	0.001	0.12						
A-20 105-110	208 294	0.004	0.20						
A-20 110-115	208 294	0.009	0.14						
A-20 115-120	208 294	0.004	0.05						
A-20 120-125	208 294	0.016	0.16	15' 0.19					
A-20 125-130	208 294	0.017	0.08						
A-20 130-135	208 294	0.023	0.06						
A-20 135-140	208 294	0.001	0.04						
A-20 140-145	208 294	0.002	0.07						

CERTIFICATION: *Judith M. Adams*



# Chemex Labs Inc.

Analytical Chemists \* Geochemists \* Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:   
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 2  
Total Pages : 3  
Certificate Date: 30-OCT-91  
Invoice No. : 19123765  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123765

SAMPLE	PREP CODE	Au oz/T	Ag oz/T						
A-20 145-150	208 294	0.001	0.06						
A-20 150-155	208 294	0.002	0.05						
A-20 155-160	208 294	0.001	0.07						
A-20 160-165	208 294	0.001	0.03						
A-20 165-170	208 294	0.001	0.05						
A-20 170-175	208 294	0.002	0.06						
A-21 035-040	208 294	0.004	0.04						
A-21 040-045	208 294	0.022	0.09						
A-21 045-050	208 294	0.021	0.04						
A-21 050-055	208 294	0.004	0.03						
A-21 055-060	208 294	0.012	0.04						
A-21 060-065	208 294	0.003	0.04						
A-21 065-070	208 294	0.001	0.06						
A-21 070-075	208 294	0.001	0.03						
A-21 075-080	208 294	0.001	0.04						
A-21 080-085	208 294	0.001	0.06						
A-21 085-090	208 294	0.001	0.03						
A-21 090-095	208 294	0.002	0.10						
A-21 095-100	208 294	0.002	0.08						
A-21 100-105	208 294	0.002	0.04						
A-21 105-110	208 294	0.002	0.12						
A-21 110-115	208 294	0.001	0.05						
A-21 115-120	208 294	0.003	0.06						
A-21 120-125	208 294	0.003	0.07						
A-21 125-130	208 294	0.001	0.07						
A-21 130-135	208 294	0.022	0.09						
A-22 035-040	208 294	0.001	0.06						
A-22 040-045	208 294	0.004	0.08						
A-22 045-050	208 294	0.016	0.20						
A-22 050-055	208 294	0.010	0.17						
A-22 055-060	208 294	0.015	0.22						
A-22 060-065	208 294	0.004	0.11						
A-22 065-070	208 294	0.004	0.12						
A-22 070-075	208 294	0.003	0.11						
A-22 075-080	208 294	0.006	0.09						
A-22 080-085	208 294	0.003	0.07						
A-22 085-090	208 294	0.013	0.09						
A-22 090-095	208 294	0.002	0.04						
A-22 095-100	208 294	0.008	0.02						
A-22 100-105	208 294	0.008	0.04						

10' 0.021

10' 0.022

15' 0.014

CERTIFICATION: *Andrea M. Salam*



# Chemex Labs Inc.

Analytical Chemists • Geochemists • Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:   
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 3  
Total Pages : 3  
Certificate Date : 30-OCT-91  
Invoice No. : 19123765  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123765

SAMPLE	PREP CODE	Au oz/T	Ag oz/T							
A-22 105-110	208 294	0.002	0.05							
A-22 110-115	208 294	0.001	0.10							
A-22 115-120	208 294	0.002	0.07							
A-22 120-125	208 294	0.002	0.08							
A-22 125-130	208 294	0.003	0.04							
A-22 130-135	208 294	0.001	0.02							

CERTIFICATION: *Harold M. Adams*



# Chemex Labs Inc.

Analytical Chemists \* Geochemists \* Registered Assayers  
 994 West Glendale Ave., Suite 7, Sparks,  
 Nevada, U.S.A. 89431  
 PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
 3898 WASHINGTON ST.  
 SAN FRANCISCO, CALIFORNIA  
 94118

Project: Comments: 2 CC: EDMOND F. LAWRENCE

Page Number: 1  
 Total Pages: 3  
 Certificate Date: 30-OCT-91  
 Invoice No.: 19123767  
 P.O. Number:

## CERTIFICATE OF ANALYSIS A9123767

SAMPLE	PREP CODE	Au oz/T	Ag oz/T						
A-23 040-045	208 294	0.001	0.04						
A-23 045-050	208 294	0.001	0.03						
A-23 050-055	208 294	0.001	0.02						
A-23 055-060	208 294	0.001	0.03						
A-23 060-065	208 294	0.001	0.14						
A-23 065-070	208 294	0.007	0.09						
A-23 070-075	208 294	0.007	0.05						
A-23 075-080	208 294	0.002	0.05						
A-23 080-085	208 294	0.005	0.20						
A-23 085-090	208 294	0.002	0.05						
A-23 090-095	208 294	0.002	0.06						
A-23 095-100	208 294	0.002	0.06						
A-23 100-105	208 294	0.003	0.15						
A-23 105-110	208 294	0.004	0.10						
A-23 110-115	208 294	0.006	0.06						
A-23 115-120	208 294	0.005	0.15						
A-23 120-125	208 294	0.007	0.05						
A-23 125-130	208 294	0.002	0.02						
A-23 130-135	208 294	0.001	<						
A-23 135-140	208 294	0.003	0.04						
A-23 140-145	208 294	0.099	0.13						
A-23 145-150	208 294	0.015	0.14						
A-23 150-155	208 294	0.003	0.06						
A-23 155-160	208 294	0.002	0.07						
A-23 160-165	208 294	0.001	0.03						
A-24 055-060	208 294	0.015	0.33						
A-24 060-065	208 294	0.002	0.14						
A-24 065-070	208 294	0.002	0.13						
A-24 070-075	208 294	0.002	0.08						
A-24 075-080	208 294	0.001	0.03						
A-24 080-085	208 294	0.002	0.11						
A-24 085-090	208 294	0.001	0.04						
A-24 090-095	208 294	0.002	0.40						
A-24 095-100	208 294	0.001	0.09						
A-24 100-105	208 294	0.001	0.07						
A-24 105-110	208 294	0.004	0.08						
A-24 110-115	208 294	0.002	0.08						
A-24 115-120	208 294	0.001	0.09						
A-24 120-125	208 294	0.002	0.16						
A-24 125-130	208 294	0.002	0.12						

10' 0.057

5' 0.015

CERTIFICATION: *Janice M. Adam*



# Chemex Labs Inc.

Analytical Chemists \* Geochemists \* Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:   
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 2  
Total Pages : 3  
Certificate Date : 30-OCT-91  
Invoice No. : 19123767  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123767

SAMPLE	PREP CODE	Au oz/T	Ag oz/T						
A-24 130-135	208 294	0.002	0.09						
A-24 135-140	208 294	0.004	0.12						
A-24 140-145	208 294	0.002	0.08						
A-25 030-035	208 294	0.002	< 0.01						
A-25 035-040	208 294	0.001	0.11						
A-25 040-045	208 294	0.001	0.05						
A-25 045-050	208 294	0.002	0.05						
A-25 050-055	208 294	0.002	0.06						
A-25 055-060	208 294	0.003	0.07						
A-25 060-065	208 294	0.003	0.09						
A-25 065-070	208 294	0.001	0.03						
A-25 070-075	208 294	0.004	0.05						
A-25 075-080	208 294	0.016	0.12						
A-25 080-085	208 294	0.014	0.20						
A-25 085-090	208 294	0.005	0.24						
A-25 090-095	208 294	0.003	0.22						
A-25 095-100	208 294	0.003	0.32						
A-25 100-105	208 294	0.004	0.12						
A-25 105-110	208 294	0.003	0.11						
A-25 110-115	208 294	0.001	0.05						
A-25 115-120	208 294	0.003	0.04						
A-25 120-125	208 294	0.004	0.09						
A-25 125-130	208 294	0.001	0.06						
A-25 130-135	208 294	0.002	0.09						
A-25 135-140	208 294	0.001	0.07						
A-25 140-145	208 294	0.002	0.05						
A-26 045-050	208 294	0.001	0.07						
A-26 050-055	208 294	0.001	0.03						
A-26 055-060	208 294	0.014	0.24						
A-26 060-065	208 294	0.003	0.16						
A-26 065-070	208 294	0.003	0.11						
A-26 070-075	208 294	0.003	0.17						
A-26 075-080	208 294	0.003	0.10						
A-26 080-085	208 294	0.001	0.05						
A-26 085-090	208 294	0.001	0.06						
A-26 090-095	208 294	0.003	0.10						
A-26 095-100	208 294	0.003	0.11						
A-26 100-105	208 294	0.002	0.04						
A-26 105-110	208 294	0.003	0.03						
A-26 110-115	208 294	0.002	0.08						

10' 0.015

5' 0.014

CERTIFICATION: *Sandra M. Alan*



# Chemex Labs Inc.

Analytical Chemists • Geochemists • Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:  
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 3  
Total Pages : 3  
Certificate Date: 30-OCT-91  
Invoice No. : 19123767  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123767

SAMPLE	PREP CODE	Au oz/T	Ag oz/T						
A-26 115-120	208 294	0.002	0.06						
A-26 120-125	208 294	0.001	0.04						
A-27 060-065	208 294	0.007	0.13						
A-27 065-070	208 294	0.004	0.07						
A-27 070-075	208 294	0.002	0.02						
A-27 075-080	208 294	0.008	< 0.01						
A-27 080-085	208 294	0.003	0.03						
A-27 085-090	208 294	0.004	0.08						
A-27 090-095	208 294	0.001	0.09						
A-27 095-100	208 294	0.001	0.10						
A-27 100-105	208 294	0.002	0.13						
A-27 105-110	208 294	0.003	0.18						
A-27 110-115	208 294	0.001	0.05						
A-27 115-120	208 294	0.001	0.02						
A-27 120-125	208 294	0.003	0.10						
A-27 125-130	208 294	0.002	0.05						
A-27 130-135	208 294	0.002	0.06						
A-27 135-140	208 294	0.001	0.06						
A-27 140-145	208 294	0.002	0.02						
A-27 145-150	208 294	0.001	0.03						
A-27 150-155	208 294	0.001	0.05						

CERTIFICATION: *Andrea M Adams*



# Chemex Labs Inc.

Analytical Chemists • Geochemists • Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:   
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 1  
Total Pages : 3  
Certificate Date : 31-OCT-91  
Invoice No. : 19123768  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123768

SAMPLE	PREP CODE	Au oz/T	Ag oz/T						
A-28 055-060	208 294	0.003	0.03						
A-28 060-065	208 294	0.002	0.07						
A-28 065-070	208 294	0.008	0.28						
A-28 070-075	208 294	0.003	0.08						
A-28 075-080	208 294	0.001	0.11						
A-28 080-085	208 294	0.001	0.10						
A-28 085-090	208 294	0.001	0.10						
A-28 090-095	208 294	0.002	0.10						
A-28 095-100	208 294	0.001	0.10						
A-28 100-105	208 294	0.001	0.06						
A-28 105-110	208 294	0.001	0.06						
A-28 110-115	208 294	0.001	0.07						
A-28 115-120	208 294	0.001	0.09						
A-28 120-125	208 294	0.002	0.05						
A-28 125-130	208 294	0.001	0.04						
A-28 130-135	208 294	0.001	0.15						
A-28 135-140	208 294	0.001	0.10						
A-28 140-145	208 294	0.001	0.03						
A-28 145-150	208 294	0.001	0.03						
A-28 150-155	208 294	0.001	0.04						
A-28 155-160	208 294	0.001	0.05						
A-28 160-165	208 294	0.001	0.04						
A-29 060-065	208 294	0.007	0.04						
A-29 065-070	208 294	0.004	0.03						
A-29 070-075	208 294	0.004	0.13						
A-29 075-080	208 294	0.002	0.12						
A-29 080-085	208 294	0.003	0.07						
A-29 085-090	208 294	0.004	0.04						
A-29 090-095	208 294	0.002	0.02						
A-29 095-100	208 294	0.007	0.11						
A-29 100-105	208 294	0.012	0.23	51 0.012					
A-29 105-110	208 294	0.006	0.21						
A-29 110-115	208 294	0.002	0.18						
A-29 115-120	208 294	0.002	0.28						
A-29 120-125	208 294	0.001	0.10						
A-29 125-130	208 294	0.001	0.07						
A-29 130-135	208 294	0.001	0.07						
A-29 135-140	208 294	0.002	0.15						
A-29 140-145	208 294	0.001	0.06						
A-29 145-150	208 294	< 0.001	0.03						

CERTIFICATION: *Sandra Adams*



# Chemex Labs Inc.

Analytical Chemists • Geochemists • Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project: 2 CC: EDMOND F. LAWRENCE  
Comments:

Page Number: 2  
Total Pages: 3  
Certificate Date: 31-OCT-81  
Invoice No.: 19123768  
P.O. Number:

## CERTIFICATE OF ANALYSIS A9123768

SAMPLE	PREP CODE	AU Oz/T	Ag Oz/T						
A-29 150-155	208 294	0.001	0.26						
A-29 155-160	208 294	0.001	0.30						
A-29 160-165	208 294	0.001	0.10						
A-29 165-170	208 294	<	0.05						
A-29 170-175	208 294	0.001	0.08						
A-29 175-180	208 294	0.001	0.05						
A-29 180-185	208 294	<	0.13						
A-30 040-045	208 294	0.014	0.18						
A-30 045-050	208 294	0.017	0.56						
A-30 050-055	208 294	0.031	0.28						
A-30 055-060	208 294	0.003	0.12						
A-30 060-065	208 294	0.006	0.10						
A-30 065-070	208 294	0.011	0.06						
A-30 070-075	208 294	0.003	0.05						
A-30 075-080	208 294	0.003	0.03						
A-30 080-085	208 294	0.002	0.05						
A-30 085-090	208 294	0.002	0.12						
A-30 090-095	208 294	0.001	0.10						
A-30 095-100	208 294	0.001	0.06						
A-30 100-105	208 294	0.001	0.05						
A-30 105-110	208 294	0.001	0.03						
A-30 110-115	208 294	0.001	0.05						
A-30 115-120	208 294	0.001	0.11						
A-30 120-125	208 294	<	0.05						
A-30 125-130	208 294	0.001	0.06						
A-30 130-135	208 294	0.001	0.07						
A-30 135-140	208 294	<	0.06						
A-30 140-145	208 294	0.001	0.04						
A-30 145-150	208 294	<	<						
A-30 150-155	208 294	<	0.02						
A-31 055-060	208 294	0.012	0.13						
A-31 060-065	208 294	0.010	0.27						
A-31 065-070	208 294	0.002	0.05						
A-31 070-075	208 294	0.022	0.62						
A-31 075-080	208 294	0.049	1.01						
A-31 080-085	208 294	0.011	0.16						
A-31 085-090	208 294	0.062	0.15						
A-31 090-095	208 294	0.002	0.16						
A-31 095-100	208 294	0.002	0.23						
A-31 100-105	208 294	0.001	0.07						

45' 0.023

20' 0.036

CERTIFICATION *Judith M. O'Leary*



# Chemex Labs Inc.

Analytical Chemists \* Geochemists \* Registered Assayers  
994 West Glendale Ave., Suite 7, Sparks,  
Nevada, U.S.A. 89431  
PHONE: 702-356-5395

To: VON HAFFTEN, ALEXANDER  
3898 WASHINGTON ST.  
SAN FRANCISCO, CALIFORNIA  
94118

Project:  
Comments: 2 CC: EDMOND F. LAWRENCE

Page Number : 3  
Total Pages : 3  
Certificate Date: 31-OCT-91  
Invoice No. : 19123768  
P.O. Number :

## CERTIFICATE OF ANALYSIS A9123768

SAMPLE	PREP CODE	AU oz/T	AG oz/T							
A-31 105-110	208 294	0.001	0.05							
A-31 110-115	208 294	0.001	0.03							
A-31 115-120	208 294	0.001	0.10							
A-31 120-125	208 294	0.001	0.10							
A-31 125-130	208 294	0.001	0.10							
A-31 130-135	208 294	0.001	0.14							
A-31 135-140	208 294	< 0.001	0.03							
A-31 140-145	208 294	< 0.001	0.05							
A-31 145-150	208 294	< 0.001	0.08							
A-31 150-155	208 294	0.001	0.07							
A-31 155-160	208 294	< 0.001	0.06							
A-31 160-165	208 294	< 0.001	0.05							
A-31 165-170	208 294	< 0.001	0.03							
A-31 170-175	208 294	< 0.001	0.06							
A-31 175-180	208 294	0.001	0.05							
A-31 180-185	208 294	< 0.001	0.04							
OMCO-1 IZUO	208 294	< 0.001	< 0.01							

CERTIFICATION: *Andres M. Adam*

Survey No. 33

PLAT

OF THE

W. M. Sewell and J. Neidy's Mining

Claim on the

ESMERALDA LODE

Esmeralda Mining District, Esmeralda County, Nev.

Surveyed by

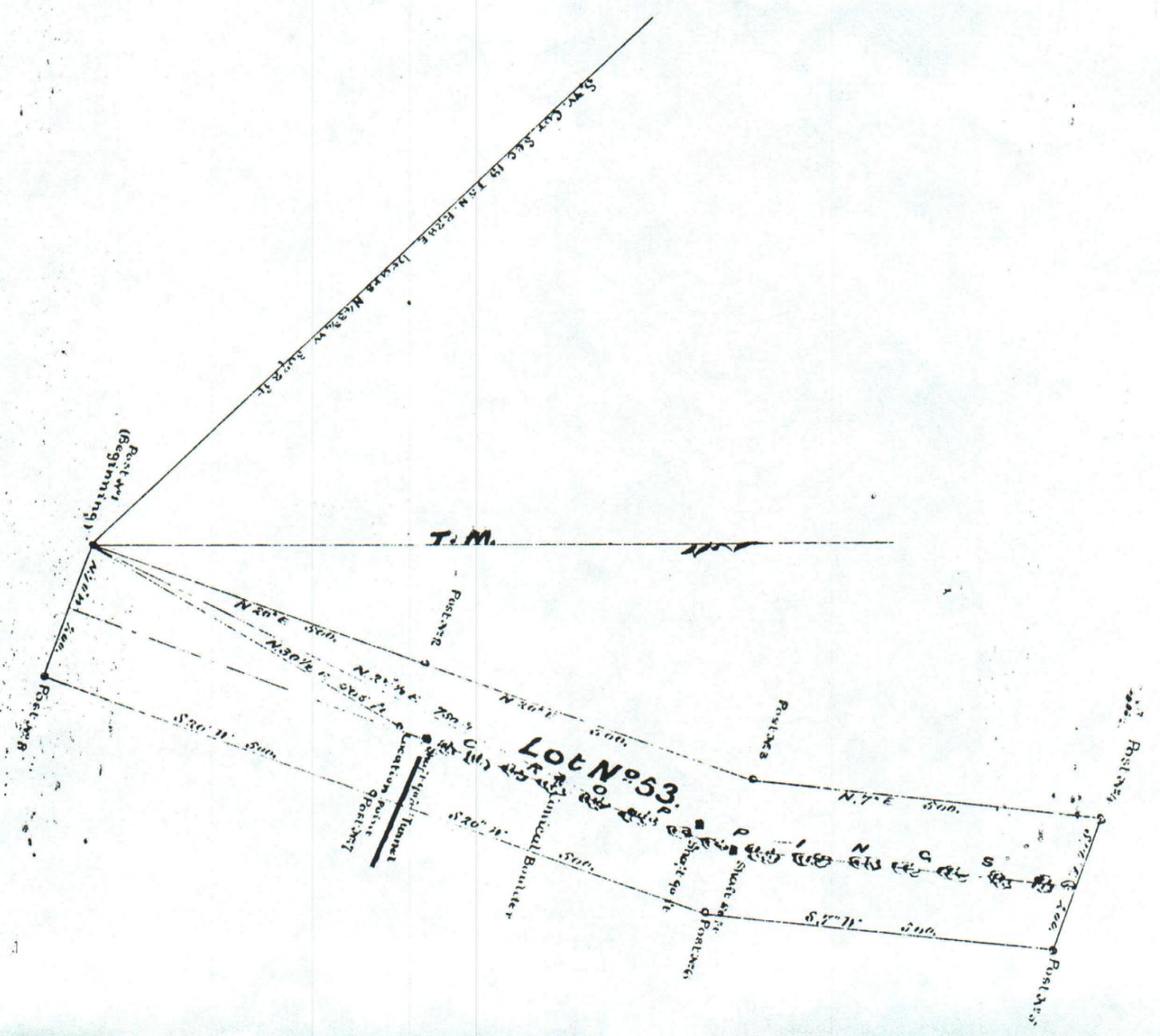
J. B. Hickey U. S. Deputy Surveyor,

September 1877

Containing 1.48 Acres.

Scale 800 feet to inch.

Variation N. East.

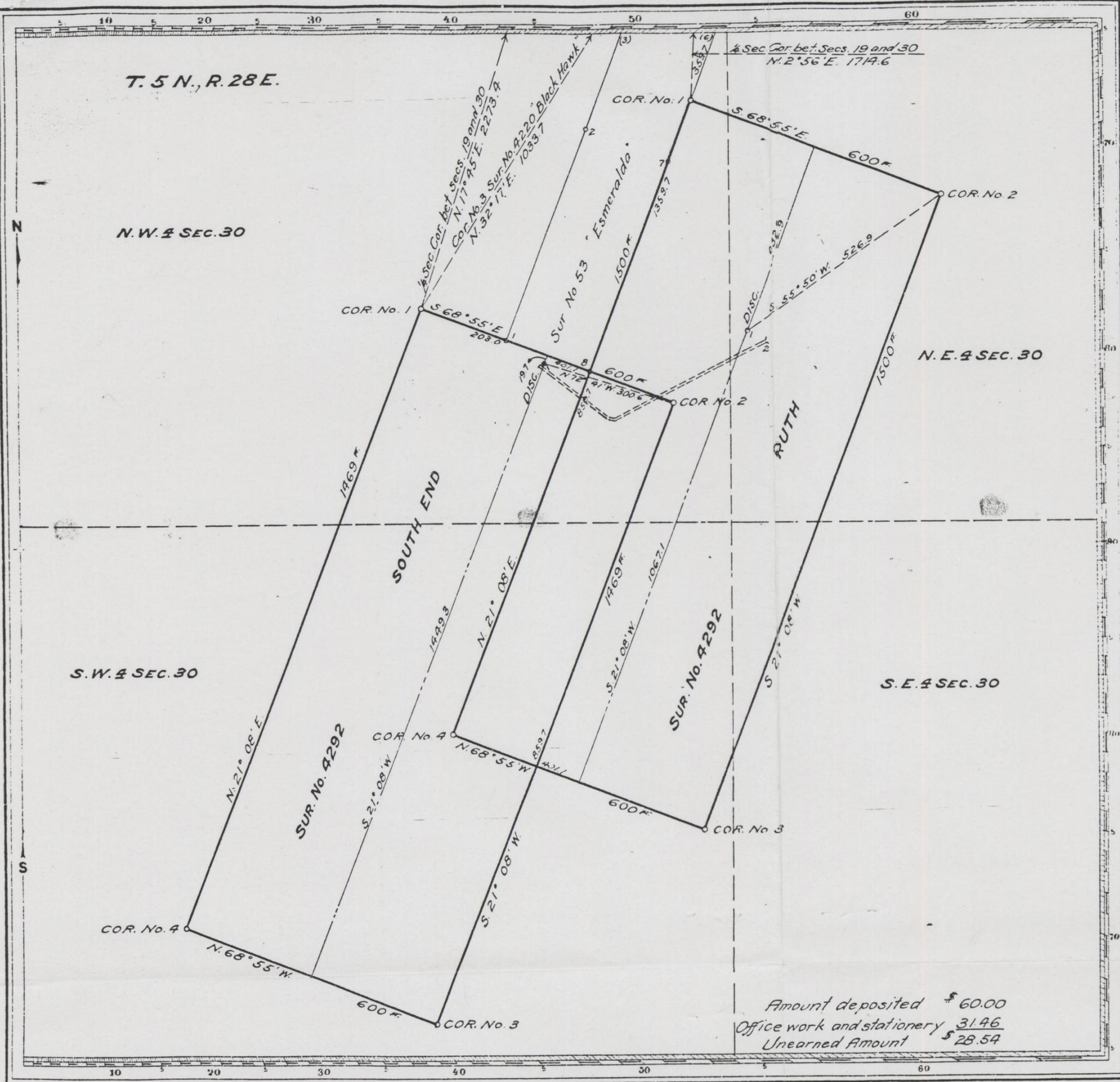


The original field notes of the survey of the *W. M. Sewell & J. Neidy's* Mining Claim from which this Plat has been made, have been examined and approved, and are on file in this office. And I hereby certify that they furnish such an accurate description of said *W. M. Sewell & J. Neidy's* Mining Claim, as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects and permanent monuments, as will perpetuate and fix the locus thereof. I further certify that the value of the labor and improvements upon the said Mining Claim, placed thereon by the applicants and grantors, is not less than five hundred dollars, and that said improvements consist of *sheds and a tunnel*.

And I further certify that this is a correct Plat of said *W. M. Sewell & J. Neidy's* Mining Claim or premises, made in conformity with said original Field Notes of Survey thereof.

U. S. Surveyor-General's Office, Virginia City, Nevada.  
 September 24<sup>th</sup> 1877

*J. B. Hickey*  
 U. S. Surveyor-General for Nevada.



HSP  
 Claim Located Ruth, May 25, 1905  
 South End, June 25, 1904  
 Mineral Survey No. 4292

~~EST. No.~~  
 Carson City Land District.  
**PLAT**  
 OF THE CLAIM OF  
 Aurora Consolidated Mines Company  
 KNOWN AS THE  
**RUTH and SOUTH END LODES**

In Esmeralda MINING DISTRICT,  
 Mineral COUNTY, Nevada  
 Containing an Area of \_\_\_\_\_  
 Scale of 200 feet to the inch.  
 Variation 17° 25' E.  
 MADE July 20-21, 1916 BY  
 Louis B. Spencer U.S. Mineral Surveyor.

The Original Field Notes of the Survey of the Mining Claim of  
 Aurora Consolidated Mines Company  
 known as the  
 "Ruth" and "South End" 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 descrip-  
 tion 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 its assigns, and that  
 said improvements consist of 1 shaft and 1 tunnel,  
 Value, \$6000.00

that the location of said improvements is correctly shown  
 upon this plat, and that no portion of said labor or im-  
 provements has been included in the estimate of expendi-  
 tures 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, *John B. Sullivan*  
 Reno, Nevada U.S. Surveyor General for  
 October 2, 1916 Nevada

Amount deposited \$ 60.00  
 Office work and stationery 31.46  
 Unearned Amount \$ 28.54