NOV 3 1961

10 121

AMERICAN SMELTING & REFINING CO.
EAST HELENA PLANT
EAST HELENA, MONTANA

10-16-61

Form No. 1

Shipper: HARVEY EVANS
Mine: ESTES
Class: CONC. Shipping Point: SUNBEAM, IDAHO
Smelter Lot. No. 1349 Mine Lot No: 2

TRUCK 13.0 420

Assays	Gold Oz. Per Ton	Silver Oz. Per Ton	Wet Lead %	Copper %	Zinc %	Arsenic %	Antimony %	Bismuth %
A.S.& R.Co.	1.290	277.2	0	2.30	1.7			
Shipper	1.300	279.5						
Umpire								
Settlement	1.295	278.35						

45.32
359.07
16.56
4.93

Assay Deduction	Percent Pay	METAL	Pay Quotation	Quotation Deduction
	100	Gold	$31.81825	
	95	Silver	.91375	.01
		Lead		
1.0	100	Copper	.30350	.09

H_2O	Wet Weight	Dry Weight	Dry Tons	Wet Tons
130.00	420 420	365 365	182 182	210 210

Date of Arrival: OCTOBER 16, 1961

Settlement Assay		Total Content	Assay Ded.		Percent Pay		Pay Content	Pay Quotation	Quot. Ded.	Net to Shipper
129.50	Gold	.24			100.00		.24	31,818.25		7.64
27,835.00	Silver	50.85			95.00		48.31	913.75	10.00	43.66
	Lead									
230.00	Copper	8.40	100.00		100.00		4.75	303.50	90.00	1.01

Base charge - $10.50
Labor Diff - 1.45
$11.95

Dry Tons X Total Contract Deductions $11.95	ST 6	182.70 S	11.95	52.31 S
Sampling $10.00				2.18 ◇
Lbs. of Pb (Pay Content)				10.00 ◇
Lbs. of Cu. (Pay Content)	5.00			
Tons of Pb & Cu X Bullion Frt. Act. $27.17	PR	2.50 PR	27.17	.07 ◇
Tons of Pb & Cu X Bullion Frt. Cont. 26.97		2.50	26.97	.07
Sub-Total				40.13 S
Wet tons X Frt. Rate	ST 5			
Sub-Total				
Advances				
Hauling $18.00 Ton Lindberg Truck Lines	ST 5	210.00 S	18.00	3.78 ◇
Umpires Goodall's $11.00				11.00 ◇
Net Proceeds	10-16-61	Lot #2		25.35 *

1 42

AMERICAN SMELTING & REFINING CO.
EAST HELENA PLANT
EAST HELENA, MONTANA

9-29-61 Form No. 1

Shipper: HARVEY EVANS
Mine: ESTES
Class: CONC. Shipping Point: SUNBEAM, IDAHO
Smelter Lot. No. 1286 Mine Lot No: 1

TRUCK 2.9 12510

Assays	Gold Oz. Per Ton	Silver Oz. Per Ton
A.S.& R.Co.	1.750	405.7
Shipper	1.770	409.7
Umpire		
Settlement	1.76	407.7

Wet Lead %	Copper %	Zinc %	Arsenic %	Antimony %	Bismuth %
1.8	4.10	1.6	1.20	0.16	

Assay Deduction

Percent Pay	METAL	Pay Quotation	Quotation Deduction
100	Gold	$31.81825	
95	Silver	.91375	.01
	Lead		
	Copper		

H_2O	Wet Weight	Dry Weight	Dry Tons	Wet Tons
29.00	12510	12147	6073	6255
	12510	12147	6073	6255

Date of Arrival: SEPTEMBER 29, 1961

Settlement Assay		Total Content	Assay Ded.		Percent Pay		Pay Content	Pay Quotation	Quot. Ded.	Net to Shipper
176.00	Gold	10.69			100.00		10.69	31.818.25		340.14
40.770.00	Silver	2.476.21			95.00		2352.40	913.75	10.00	2125.98
180.00	Lead	218.65					00			
410.00	Copper	498.04	100.00		100.00		37656	303.50	90.00	80.40

Base charge - $10.50
Labor Diff - 1.33
$11.83

Conc. $394/wet ton
RKO 12/8/63

Dry Tons X Total Contract Deductions $11.83				2546525
Sampling $5.00	ST 6	6073615	1183	71.85 ◇
Lbs. of Pb (Pay Content)				5.00 ◇
Lbs. of Cu. (Pay Content)	377.00			
Tons of Pb & Cu X Bullion Frt. Act. $27.17	PR	188.50 PR	27.17	5.12 ◇
Tons of Pb & Cu X Bullion Frt. Cont. 26.97		188.50	26.97	508
Sub-Total				2469638
Wet tons X Frt. Rate	ST 5			
Sub-Total				500.00 ◇
Advances 9-28-61 $500.00				
Hauling	ST 5			
Umpires Goodalls $11.00				11.00 ◇
Net Proceeds				1958.63
	9-29-61	Lot #1		

NOV 3 1961

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AMERICAN SMELTING & REFINING CO.
EAST HELENA PLANT
EAST HELENA, MONTANA

10-16-61

Form No. 1

Shipper: HARVEY EVANS
Mine: ESTES
Class: CRUDE Shipping Point: SUNBEAM, IDAHO
Smelter Lot. No. 1350 Mine Lot No: 1

TRUCK 1-4 3690

Assays	Gold Oz. Per Ton	Silver Oz. Per Ton	Wet Lead %	Copper %	Zinc %	Arsenic %	Antimony %	Bismuth %
A.S.& R.Co.	0.730	83.2	0.40	0.70	1.4	0.30	0.16	
Shipper	0.740	84.2						
Umpire								
Settlement	0.735	84.0						

Assay Deduction	Percent Pay	METAL	Pay Quotation	Quotation Deduction
	100	Gold	$31.8 1825	
	95	Silver	.91375	.01
		Lead		
		Copper		

H_2O	Wet Weight	Dry Weight	Dry Tons	Wet Tons
14.00	3,690	3,638	1,819	1,845
	3,690	3,638	1,819	1,845

Date of Arrival OCTOBER 16, 1961

Settlement Assay		Total Content	Assay Ded.		Percent Pay		Pay Content	Pay Quotation	Quot. Ded.	Net to Shipper
73.50	Gold	1.34			100.00		1.34	31,818.25		42.64
8,400.00	Silver	152.81			95.00		145.17	913.75	10.00	131.20
40.00	Lead	14.55					.00			.00
70.00	Copper	25.47					.00			.00

Base Charge - $10.50
Labor Diff 1.45
$ 11.95

				173.84 S
Dry Tons X Total Contract Deductions $11.95	ST 6	1,819.17 S	11.95	21.74 ◇
Sampling $10.00				10.00 ◇
Lbs. of Pb (Pay Content)				
Lbs. of Cu. (Pay Content)				
Tons of Pb & Cu X Bullion Frt. Act.	PR			
Tons of Pb & Cu X Bullion Frt. Cont.				142.10 S
Sub-Total				
Wet tons X Frt. Rate	ST 5			
Sub-Total				
Advances				
Hauling $18.00 Ton Lindberg Truck Lines	ST 5	1,845.00 S	18.00	33.21 ◇
Umpires				
Goodalls $7.00				7.00 ◇
Net Proceeds	10-16-61	Lot #1-Inf.		101.89 *

Form SL-48 Revised 5M 11-55

1957

AMERICAN SMELTING AND REFINING COMPANY

8-10 WEST FIRST SOUTH
SALT LAKE CITY, UTAH

11-6-57 1957

PLANT LOT NO. 2956

GARFIELD PLANT, GARFIELD, UTAH 195

NAME OF SHIPPER Estes Gold Mines Inc c/o David Z Bell — PLANT LOT 2956

ADDRESS Po Box 476, Mackay Idaho — SHIPPERS LOT 1

SHIPPING POINT

MINE NAME Estes Gold Mines Inc — COUNTY CLASS CTS — SAMPLED BY GARFIELD

DATE RECEIVED	REC'D VIA	CAR INITIAL	CAR NUMBER	WEIGHTS GROSS WEIGHT	WEIGHTS CONTAINERS	WEIGHTS NET WET	MOISTURE %	MOISTURE POUNDS	NET DRY WEIGHT
10-22	TRUCK					5341	9.5	507	4834

METAL QUOTATIONS

GOLD	34.9125	PER OZ.
SILVER	.90625	PER OZ.
LEAD	.13V	PER LB.
COPPER	.2621	PER LB.

BASED ON WEEK ENDING 10-26 1957

ASSAYS

	Smelter	Shipper	Umpire	Settlement
GOLD OZ. PER TON	2.90	3.0	2.98	2.980
SILVER OZ. PER TON	4685	4722	4716	4716
LEAD %	.20	.210		.205
COPPER %	.53	.560	.545	.545
INS. %				
SiO_2 %	.26			.262
Fe-Mn %				
CaO %				
Zn %				
S %				
Al_2O_3 %				
Pb %				
Sb %				
Ni %				
Bi %				

VALUES PER TON

PAY CONTENT		Price	Credit	Frt. Value
2.980	35	31.X1925	94.82	29.80
448.12	1.29	.89625	401.54	608.36
.205	.158	.109	.80	6.95
DEDUCT .04# .19#	.36	.2211	.0211	39.34
GROSS VALUE 29.1945			517.21	

DEDUCTIONS	Debit
BASE	9.25
TRUCK SHIPMENT	1.00
SACKS	1.00
EXCESS VAL. OVER $ 500.	3.50
BULLION FRT. TAX	.05
LABOR	
TOTAL DEDUCTIONS	14.80
NET VALUE PER DRY TON	502.57
FRT. VALUE PER WET TON	XXX.XX / XXX.XX

The gold acquired in this material was held under Section 19 of the Provisional Gold Regulations of January 30 and 31, 1934, as amended, by the person from whom it was acquired by us.

DISTRIBUTION OF PROCEEDS

	Debit	Credit
TOTAL VALUE: 2.417 DRY TONS @ 502.57 PER TON		1214.71
LESS PLANT SAMPLING	20.00	
FREIGHT 26.705 WET TONS @ PER TON PLUS TRANSP. TAX		
HAULING, PAY Lindberg Truck Line Mackay Idaho	51.50	PAY
SAMPLING, PAY	6.00	
ASSAYING, PAY Chemical & Lab	4.00	
UMPIRE, PAY		
REPRESENTATION, PAY		
AMOUNT WITHHELD PENDING RECEIPT OF SILVER AFFIDAVIT		
ROYALTY		
BALANCE PAY SHIPPER Estes Gold Mines, Inc. c/o David Z Bell	1143.21	PAY

1957

FORM C.O. 77-2

UNITED STATES SMELTING REFINING AND MINING COMPANY

NINTH FLOOR NEWHOUSE BUILDING
P. O. BOX 1860 SALT LAKE CITY 10, UTAH

Salt Lake City, Utah, [redacted]

Purchased From [redacted]
Pay [redacted]

Shipping Point: [redacted]

Lot No. [redacted] Product [redacted] Mine [redacted] Gold License No.
Sampled by [redacted] Received [redacted] Sampled [redacted] Assayed [redacted]
Metal Quotations—Gold [redacted] Silver [redacted] Copper, N. Y. [redacted] Lead, N. Y. [redacted] Zinc

ASSAYS	GOLD OZS. PER TON	SILVER OZS. PER TON	COPPER %	LEAD %	INSOLUBLE %	IRON %	ZINC %	SULPHUR %	LIME %	[redacted]
[redacted]										
U. S. S. R. & M. Co.	[redacted]	[redacted]	[redacted]	[redacted]			[redacted]			
[redacted]										
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			[redacted]			
Umpire										
Less Non-Sulphide										
Settlement [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

CAR NOS.	NET WEIGHT	METAL VALUES		TREATMENT CHARGES	
[redacted]		Gold [redacted]	[redacted]		
		Silver [redacted]	[redacted]	Based on [redacted]	
		Copper	[redacted]	Deduction from [redacted] % lead	
[redacted]		Lead		[redacted]	
[redacted]		Zinc		Insoluble	
				Zinc, excess over [redacted] %	
				Iron, excess over [redacted] %	
				Zinc, excess over [redacted]	
				Iron [redacted]	
[redacted]				[redacted]	
Moisture [redacted] %	[redacted]	Total Metal Value	[redacted]		
Dry Weight	[redacted]	Less Treatment Charge	[redacted]	Net Treatment Charge	

Payment for [redacted] Dry Tons @ [redacted] Per Ton

			DEDUCTIONS
Freight (Value under [redacted] Per Ton)	Wet Tons @	Per Ton	
Surcharge 15%			
Federal Tax 3%			
Handling Charge			
Assay Charge			
Umpire Charge			
Matching Charge			
[redacted] Wet Tons @ [redacted] Per Ton			
[redacted] 3%			
[redacted] & Tax to [redacted]			
[redacted]			
[redacted]			
[redacted]			
[redacted]			
[redacted]			
Total Deductions			
Amount Withheld Pending Receipt of Silver Affidavit			
		Net Payment	

[redacted]

FORM C.O. 77-3

UNITED STATES SMELTING, REFINING AND MINING COMPANY

[illegible] FLOOR WAREHOUSE BUILDING

P. O. BOX 1660 SALT LAKE CITY 10, UTAH

Lake City, Utah [redacted]

Purchased From [redacted]

Pay [redacted]

Shipping Point [redacted]

Lot No. [redacted] Product [redacted] Mine [redacted] Gold Lessee [redacted]

Sampled by [redacted] Received [redacted] Sampled [redacted] Assayed [redacted]

Metal Quotations—Gold [redacted] Silver [redacted] Copper, N. Y. [redacted] Lead [redacted]

ASSAYS	GOLD OZS. PER TON	SILVER OZS. PER TON	COPPER %	LEAD %	INSOLUBLE %	IRON %	ZINC %	SULPHUR %	LIME %	%
U. S. S. R. & M. Co.	[redacted]	[redacted]	[redacted]	[redacted]						
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]						
Umpire										
Less Non-Sulphide										
Settlement	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

CAR NOS.	NET WEIGHT	METAL VALUES		TREATMENT CHARGES	
[redacted]		Gold [redacted]	[redacted]		
		Silver [redacted]	[redacted]	Based on	% Lead
		Copper	[redacted]	Variation from	% Lead
[redacted]		Lead		Labor	
		Zinc		Insoluble	
				Zinc, excess over	%
				Sol. excess over	%
				Alk. excess over	%
				Iron	
				Lime	
Total Weight	[redacted]				
Containers [redacted]	[redacted]				
Wet Weight	[redacted]				
Moisture [redacted] %	[redacted]	Total Metal Value	[redacted]		
Dry Weight	[redacted]	Less Treatment Charge	[redacted]	Net Treatment Charge	

Payment for [redacted] Dry Tons @ [redacted] Per Ton [redacted]

Freight (Value under [redacted] Ton) Wet Tons @ [redacted] Per Ton [redacted]

Surcharge 15%

Federal Tax 3%

Handling Charge

Assay Charge

Umpire Charge

Watching Charge

[redacted] Charge

[redacted] Wet Tons @ [redacted] Per Ton

Federal Tax 3%

Pay Hauling & Tax on [redacted]

Royalty:

[redacted]

Total Deductions [redacted]

Amount [redacted]

Copper, N. Y.

UNITED STATES SMELTING REFINING AND MINING COMPANY
NINTH FLOOR NEWHOUSE BUILDING
P. O. BOX 1980 SALT LAKE CITY 10, UTAH

Salt Lake City, Utah, November 16, 1956

Purchased From: [illegible] GOLD MINES, INC.
Pay: [illegible] GOLD MINES, INC. c/o DAVID S. HILL, MURRAY, IDAHO
MURRAY, IDAHO

Shipping Point:
Mine
Gold License No.
Sampled 11-9-56
Assayed 11-20-56

Lot No. [illegible]
Product [illegible] 10-30-56
Sampled by
Received
Final Quotations—Gold 34.9825 Silver 91.375 Copper, N. Y. 38.900 Lead, N. Y. Zinc

ASSAYS	GOLD OZS. PER TON	SILVER OZS. PER TON	COPPER %	LEAD %	INSOLUBLE %	IRON %	ZINC %	SULPHUR %	LIME %	%	LEAD %	ZINC %
U. S. S. R. & M. Co.	4.00	386.4	3.0	.8								
B & H	4.00	386.4	3.2	2.0								
Umpire												
Non-Sulphide												
Settlement	4.025	386.4	3.1	1.4	39.2	22.0	1.4	25.4	.2			

LOT NOS.	NET WEIGHT	METAL VALUES			TREATMENT CHARGES		DEBIT	CREDIT
[illegible]		Gold [illegible] % @ 34.9825	127	75				
		Silver 95 % @ 91.375	339	42	Based on	% Lead		
[illegible] to be used for		Copper	13	82	Variation from	% Lead		
[illegible] purposes in		Lead			Labor			
[illegible]		Zinc			Insoluble			
[illegible]					Zinc, excess over	%		
					Sul., excess over	%		
					As., excess over	%		
					Iron			
					Lime			
Total Weight	[illegible]							
Moisture 60 Sec.	[illegible]							
Net Weight	[illegible]							
Moisture 11.4%	[illegible]	Total Metal Value	496	99				
Dry Weight	[illegible]	Less Treatment Charge	32	00	Net Treatment Charge		113.86	
Payment for	2.449	Dry Tons @	464	99	Per Ton			[illegible]

			DEDUCTIONS	
Freight (Value under Per Ton)		Wet Tons @ Per Ton		
Federal Tax 3%				
Handling Charge		12-8-63 Copy to Bob Evans	10	00
Storage Charge			6	00
Sampling Charge				
Crushing Charge			5	00
Hauling Charge				
Trucking	5	Wet Tons @ [illegible] Per Ton	50	00
Federal Tax 3%			1	50
Freight Hauling & Tax to:	Lindberg Truck Line, Rodney, Idaho			
Smelter:				
[illegible] returned to shipper via Lindberg Truck Line - Collect (Bad Trip)				
Total Deductions			72	50
Amount Withheld Pending Receipt of Silver Affidavit				
		Net Payment	[illegible]	

77-2

UNITED STATES SMELTING REFINING AND MINING COMPANY

NINTH FLOOR NEWHOUSE BUILDING
P. O. BOX 1980 SALT LAKE CITY 10, UTAH

Salt Lake City, Utah, November 16, 1956

Purchased From [illegible] GOLD MINES, INC.
[illegible] GOLD MINES, INC., c/o DAVID B. BILL, McKAY, IDAHO

Shipping Point: McKAY, IDAHO

Product [illegible] Mine

Received 10-31-56 Sampled 11-8-56

Gold License No.

Assayed 11-9-56

Lead, N. Y.

Zinc

Quotations—Gold [illegible] Silver 91.375 Copper, N. Y.

ASSAYS	GOLD OZS PER TON	SILVER OZS PER TON	COPPER %	LEAD	INSOLUBLE %	IRON	ZINC	SULPHUR	LIME	[illegible]	[illegible]
R. & M. Co.	8.70	30.2									
"	8.65	30.85									
Umpire											
Non-Sulphide Tailings	.039	.12			97.2	5.1		1.6	.3	.45	
Settlement	8.9889	30.46									

LOS.	NET WEIGHT
[illegible]	
[illegible]	
[illegible]	

ROBERT K. EVANS
GEOLOGICAL ENGINEER

A Report On The

YANKEE FORK (Mc Fadden) MINE

Mt. Estes,

Custer County,

Idaho

ESTES GOLD MINES INC.

1963

ROBERT K. EVANS
GEOLOGICAL ENGINEER

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ECONOMIC CONSIDERATIONS ---------- 10
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RECOMMENDATIONS ---------- 11

MAPS AND SECTIONS — Exhibit No.

1" : 100' Claim map ---------- 1
1" : 100' Section ---------- 2
1" : 20' Yankee Fork (Mc Fadden) Mine map ---------- 3
1" : 20' Section through " " ---------- 4

APPENDIX

Report of assays, mill logs, smelter returns, abstract of lands involved and plats of mineral surveys.

ROBERT K. EVANS
GEOLOGICAL ENGINEER

SUMMARY

The purpose of this report is to present facts and opinions on the quantity and quality of known mineralization on the Yankee Fork-Montana vein, and on the likelihood of blocking out sufficient reserves to develop a paying mine.

Veins on Estes Gold Mines property are from two to ten feet in thickness and are associated with structures traceable for the entire length of the claims. Values vary from around $2.00 to $200.00/ton with an average of around $16.00. There is little ore now blocked out which can be mined profitably at todays metal prices. The Yankee Fork (Mc Fadden) vein, which is probably also the Montana vein, warrants exploration. There are two possible avenues of success: 1) to develop sufficient reserves of the present average value to warrant exploitation on a large scale, or 2) to seek out zones of higher grade material and mine selectively.

To the best of this writers knowledge, these mines and the immediate vicinity around them have not been carefully evaluated for over forty years.

Redevelopment of mining in this locale would be of profound benefit to the local economy.

INTRODUCTION

In September and October 1962, the writer examined the property for Merle Cables and Bill Forbes, both of Eureka, California. They desired to operate the mine and mill with a view to covering all or the major portion of their exploration costs from production. The writer advised them of the impractibility of this approach, but suggested that the property did warrant exploration. They dropped their option on the property, as the writer understands it, because their financing was not available to them on this basis.

Estes Gold Mines Inc., an Idaho Corporation and owners of the property, requested that the writer complete the evaluation of the property, and investigate the possibility of applying for an Office of Mineral Exploration Loan.

Two more days were spent on the property in the fall of 1963 for the purpose of tying in claim corners and conducting an inventory.

LANDS INVOLVED

Of primary interest in this report is the Fraction Lode, Mineral Patent 1118; the Yankee Fork Lode, Mineral Patent 1119; and the unpatented "Wagon Road" lode claim, all of which are contiguous and owned by Estes Gold Mines Inc. The Company also holds an unpatented mill site a short distance from the mining claims. The former of these at least are probably in T. 13 N., R. 15 E.

PHYSICAL FEATURES

The subject lands are located 18 air-miles north 35 east of the town of Stanley, Custer County, Idaho. For access by road from the town of Stanley, drive to the Sunbeam Store on the Yankee Fork of the Salmon River, north on the Yankee Fork to Eight Mile Creek, then westerly up the Eight Mile drainage to the mine. During the summer months the road is quite accessable by an ordinary passenger car.

The portal and buildings are located at about 8800 ft. elevation, right on the timber line, and on the edge of a cirque. There is sufficient fairly level ground available to provide space needed for economic exploration and/or exploitation.

There is very little activity in this area at the present time in any field of endeavor. Tourism is possibly the biggest source of revenue to local business in this immediate vicinity, followed by ranching. Ranching would be first in importance if a hundred mile radius were considered, followed by tourism and then mining.

The nearest railroad spur is at Mackay, Idaho, 117 miles south east of the mine. There is no public transportation into the area of the mine and no power facilities, There is sufficient water available at the mine for exploration, exploitation and milling requirements.

The climate at 8,800 ft. in this area is invigorating in the five or six summer working months. The balance of the year the mine portal as presently located would be isolated except by means of special equipment.

Regional identification of the lands is easily accomplished by use of U.S.G.S. Custer Quadrangel, Custer County, Idaho. The map was reprinted in 1946 from a 1922 edition; it's scale is 1:125,000. No legal subdivisions have been established in the area of the mine, but it is probably in T.13 N.,R.15E. Identification of the claims themselves is possible from the remaining "numbered" claim-corner survey stakes marking the boundries of the patented, as well as stakes marking the unpatented claims.

HISTORY OF THE AREA

Quote from a district report writen around 1881 on the Yankee Fork District: "In the rough mountainous region of Northern-Central Idaho, drained by the headwaters of Salmon River, and 190 miles northwest of Blackfoot (Utah & Northern Branch U.P.RY.) are the Yankee Fork Mines, which have recently been sending to the outer world such marvelously rich quartz as to attract the attention of mining men everywhere. Although rich gulches were first discovered there in 1870, they failed, on account of their isolation, to command general recognition, and not until 1875, when Mr. W.A. Norton located the now world-famous Charles Dickens quartz ledge, did real development of the region, which on many maps is still marked "unexplored country", begin.

Shortly after the discovery of the Charles Dickens, Curtis Estes found rich quartz float on Mount Estes, at the head of Jordon, and tracing it up discovered what is now known as the Charles Wain ledge. A few months after the discovery of the Charles Dickens, E.C.Dodge and others found the General Custer and Unknown Mines on Mt. Custer, about two miles east of Jordon Creek and on the south side of the Yankee Fork.

Early in the season of 1877, James Hooper and party discovered the more famous Montana ledge on Mt. Estes, which was soon followed by other rich strikes in the same locality. This season, also, explorations on Mt. Custer brought to light the Badger, Continantal, Summit, Lucky Boy and other veins carrying high-grade ores.

Many of the early-discovered quartz veins of the Y ankee Fork country contain high grade ores, and the miners had only to take out the vein matter, assort, sack and ship it to Salt Lake or other points, to put themselves in good circumstances. The cost of getting ore to market at that time was from $150.00,to $200.00 per ton, and as much of the ore shipped was worth from $500 to $350.00 per ton, the miners soon stepped from poverty to affluence.

Not less than 200 mineral locations have been made in the district scattered here and there through the hills for a distance of ten or twelve miles, but the most prominent ones are located in the three great belts that contain the bulk of the paying mines of Yankee Fork; namely, Norton Hill, Mt.Custer, and Mt. Estes."

Mines of Mt. Estes: " This belt of quartz ledges lies at the head of Jordon and Eight Mile Creeks, five miles north of Bonanza, and about the same distance from Custer. It contains some exceedingly rich veins, so rich, in fact, that their equal is seldom seen.

The first discovery, the Charles Wain, has produced of considerable shipping and much ore of other grades. There is a tunnel 150 feet in length on the vein, and from this a shaft down 75 feet, showing about 15 inches of first class ore, and three feet of medium. Selected quartz from the mine assays $500 to $800 / ton. Free gold and horn silver are not uncommon in the Wain.

Five hundred feet below the top of Mt. Estes, and at an altitude of 9500 feet, is the celebrated Montana Mine. . . . Joining the Montana on the southeast is the Hidden Treasure, 75 feet deep, showing a fine ore body yielding $50 to $250 per ton. The Yankee Fork, a vein four feet wide of which twelve inches sample $300 per ton," ....and others.

Since the discovery of the Charles Dickens ledge, the product of the camp has aggregated, including the ores shipped, about $2,000,000. The yield . . .(from the district) . . for the year 1881, will approximate $1,250,000. When we consider that there are only twenty stamps and one araster in the district, the product is astonishing"

Since 1955 the Yankee Fork (Mc Fadden) Mine has produced about 22.85 tons of dry concentrate which averaged $360.47/ton.(The present (1963) price of silver would raise this around $100/ton.) It is the writers understanding, based on discussions with Estes officials, that this was produced from around 650 tons of ore; if so it averaged around $16/ton.

Some time prior to that around 900 tons of ore was taken from the Clark stope. This was said to have assayed $200 to $300/ ton and with dilution, to have maintained $100 mill heads. This stope is between the 400 level and the 600 level. A $70/ ton channel was taken by this examiner in the 600 level just below the stope. The structures intersecting the Yankee Fork vein in this stope are noted on exhibits 2 and 3, and are suggested as targets of interest.

GENERAL GEOLOGY

Hundreds of feet of tuff caps the ridges around the head of Eight Mile Creek. At the base of this , at least in the area of the mine, there are alternating layers of sediments and volcanic agglomerate. Granitics are visible some distance to the east and are probably underlying the area of the mine as well.

GEOLOGY AND MINERALIZATION OF LANDS INVOLVED

Deposition of mineralization occurs along the fault contact between greenstone and tuff, and along fractures, in the tuffs, (possibly in the footwall too but it was too dirty to tell). The Yankee Fork vein is, for the most part, along a shear zone on the greenstone-tuff fault-contact. This zone dips at about 35 and is extremely altered, as is the country rock in most places adjacent to it. Throughout most of the area examined, fragmented quartz within this shear zone apparently carries the mineral values. The shear zone itself varies from two to four feet in thickness, with the observable fragmented quartz varying from eight inches to the entire thickness of the shear zone. The shear zone fragmented-quartz occurance of values is similar to that found in portions of the adjacent Charles Wain and the Montana Mines. In the lower two levels of the Yankee Fork Mine (these were put in by the present owners) the vein has developed into an eight to ten foot thickness of massive quartz with more uniform values. No other place on Mt. Estes observed by the examiner, except in this bottom sixty feet of the Yankee Fork winze, was an extensive strong vein such as this encountered. Mineral associations are gold, argentite, chalcopyrite, galena, sphalerite, and pyrite, occuring along and in proximity to the contact zones and accompanying shear zones.

MINERAL DEVELOPMENT WORK

The observed surface expressions of the veins shown on the accompanying exhibits had all been investigated in the past by means of trenches and pits. These were examined by the writer and many of them were again sampled.

Underground development work consists of about 3000 feet of drifting, 400 feet of (-) 35 winze, and an unknown amount of stoping, (unknown due to lack of immediate accessibility and to the amount of detail it was felt was warranted for the purpose of this report). The drifting is generally along the mineralized zones or fissure zones, or in a saw tooth pattern back and forth across them. The Yankee Fork vein has been developed underground along its strike for a length of 2200 feet. The winze on the Yankee Fork vein follows the fault-contact-vein very closely down to the last fifty feet, where the vein flattens somewhat and widens appreciably, and the winze is going into the footwall.

Note on exhibit 1 that the elevation of the 600 level of the Yankee Fork and the main haulageway of the Montana are on about the same elevation. Note also the strike and dip of this vein. Surface outcrops are very difficult to correlate because of the extent of the talus covered slopes. However between the outcrops and the underground correlations, evidence is so strong that this is one continuous vein, that there is little doubt left in the mind of this examiner. A few hundred feet below this on the south west slope there is another tunnel apparently on this major vein. At about 8000 ft. elevation also on the southwest slope of Estes, someone is reported to have put in 3000 ft. of haulageway to get under this Mc Fadden-

Montana vein. If sufficient tonnage is developed, this will be the logical way to exploit it. This would give an operator over 1300 ft. of back and if it "made", possibly a million and a third tons of ore. This haulageway just mentioned is said to be in good shape but gassey and was not examined by the writer. If it was not too expensive to complete, the $16/ton mineralized material allready proven would probably constitute ore.

SAMPLING DATA

One hundred and thirty-three sample points and values are shown on exhibit No.3 accompanying this report. The values are so erratic that only from sheer numbers of samples can a reasonably accurate average be obtained, and/or trends determined. Dr. Kirby's sample points in the mine were almost all marked and a well defined channel is still in evidence in most instances. Check samples were taken at a number of points to determine the creditability of his work. In the opinion of this examiner they deserve the same consideration that any carefully taken channel sample can be given in a precious metal deposit of this kind.

A summary by levels and location follows and the original assay certificates are in the appendix.

YANKEE FORK (Mc FADDEN) SAMPLES

Level	Channel	Assay No.	Length	Value	Sampled by:
800	46	2317	51"	$12.35	Evans
	47	2321	70	12.30	""
700	21	2313	70	11.60	"
	22	2311	36	3.62	"
	23	2320	75	25.70	"
	28	2318	84	14.90	"
	29	2306	66	7.00	"
	31	2312	54	4.92	"
	32	2304	65	10.70	"
	33	2307	66	7.25	"
	35	2303	65	7.38	"
	37	2305	54	4.27	"
	38	2308	70	3.62	"
	39	2319	67	168.50	"
	40	2314	74	8.69	"
	42	2309	73	8.88	"
	44	2323	72	3.62	"
	45	2322	70	3.62	"
	H.W.in stope	2366	62	54.80	"

ROBERT K. EVANS
GEOLOGICAL ENGINEER

Level	Channel	Assay No.	Length	Value	Sampled by:
700	1			9.79	Kirby
"	2			11.93	"
"	3			1.67	"
"	4			3.34	"
"	5			21.93	"
"	6			3.83	"
"	7			3.35	"
"	8			4.46	"
"	9			16.13	"
"	10			24.55	"
"	11			10.11	"
"	12			26.93	"
"	13			35.55	"
"	14			29.25	"
600	600-12	2340	72"	36.55	Evans
"				17.11	Kirby
"	600-42	2335	41	5.96	Evans
"				24.85	Kirby
"	600-48	2338	53	83.10	Evans
"				90.12	Kirby
"	Clark Fault #2	2352	45	12.30	Evans
"	" "" #3	2364	35	3.57	"
"	" " #4	2356	44	38.85	"
"	100' S.of winze	2365	8	10.50	"
"	4		32	5.83	Kirby
"	5		40	2.49	"
"	6		67	1.69	"
"	7		72	2.69	"
"	8		37	6.09	"
"	9		52	2.53	"
"	10		73	2.65	"
"	11		73	8.38	"
"	12 (checked by 2340)		72	17.11	"
"	13		67	18.48	"
"	14		56	13.55	"
"	15		54	9.82	"
"	16		49	20.03	"
"	17		50	5.25	"
"	18		41	1.54	"
"	19		38	2.29	"
"	20		52	1.26	"
"	21		48	9.37	"

Level	Channel	Assay No.	Length	Value	Sampled by:
600	22		51"	7.83	Kirby
"	23		34	7.21	"
"	24		39	.69	"
"	25		51	.49	"
"	26		54	4.98	"
"	27		54	1.36	"
"	28		?	1.17	"
"	40		24	15.73	"
"	41		40	19.46	"
"	42 (checked by 2335)		41	24.85	"
"	43		42	9.18	"
"	44		55	6.53	"
"	45		67	11.24	"
"	46		58	17.16	"
"	47		46	3.32	"
"	48 (checked by 2338)		33	90.12	"
"	49		36	13.38	"
"	50		30	5.00	"
"	51		40	4.42	"
"	52		42	1.59	"
"	53		47	5.52	"
"	54		?	1.93	"
"	55		44	1.99	"
"	56		44	2.16	"
"	57		44	.46	"
"	58		48	7.23	"
500	gob	2370		15.54	Evans
"		2350	36	3.76	"
400	gob	2375		2.98	"
Main Haulage-way	1	2361	74	5.18	"
	2	2333	57	12.60	"
	3	2348	62	6.49	"
	4	2362	38	4.87	"
	5	2371	42	3.36	"
	gob A	2359		5.23	"
	" B	2357		10.88	"
	" C	2373		2.85	"
	" B&C	2369		32.25	"
Above Old Haulage-way	"	2334		5.72	"
	"	2372		10.75	"

Level	Channel	Assay No.	Length 8	Value	Sampled by:
Dump	4	2277	27"	6.89	Evans
@	6	2278	36	1.15	"
Main	8	2279	?	2.69	"
Haulage-	10	2280	35	4.28	"
way	12	2281	28	4.14	"
	14	2287	?	5.15	"
	16	2282	23	4.60	"
	18	2283	25	3.22	"
	20	2284	28	2.65	"
	22	2285	28	4.61	"
	24	2343	26	4.95	"
	26	2386	24	3.44	"
Dump	1	2299	27	.63	"
@	3	2300	?	6.28	"
Old	5	2301	27	3.22	"
(upper) Haulage-way					

Surface sample on the southwest corner of the Fraction

11-1	2379	48"	211.00	"

Surface sample on the Charles Wain

5-1	2376	36	193.45	"

OPERATIONS

The mine and mill are completely equiped for operating at about 12 to 15 tons/shift.

Mining has been conducted by room and pillar method. The ground stands well and little timber is required. An air powered slusher scraper is employed to convey the ore, broked by blasting, to the level below. Hoisting to the main haulageway is accomplished by a Denver Engineering works electric powered hoist of 1500 lb. capacity. An air operated locomotive is used to transport the ore from the hoisting station to the surface.

Operating costs will be somewhat higher here than at most mines, by reason of its isolation. If the property is operated from the present haulageway as a small high grade mine, the operating cost will be even further augmented by limitations imposed by weather. If on the other hand, the lower haulageway on the south slope is extended under all of these claims, weather will not be important and the factor of isolation will be of much less importance.

ECONOMIC CONSIDERATIONS

Assuming that labor will average 60% of the total cost and that miners are available for $2.25/hour, a four man crew is going to cost about $90/day and the total operating cost will be around $150/day. Averaging 4 ft. of advance / shift in a 5' x 7' drift, this is about $38/ft. of advance. To deepen the winze, figuring 2 ft. of advance / shift and a 6' x 9' winse, the cost will be about $76 / ft. Rounding these figures off, in a upward direction to partially compensate for the location, this examiner feels that $40 / ft. of 5''x 7' drift, and $80 / ft. of 6' x 9' winze are realistic costs. These figures will apply to exploration and to exploitation too, if the latter is conducted on a small scale, with a view to mining selectively. Using a tonnage factor of 12, this means that mining costs alone will amount to $12.50 / ton. Operating the mine two shifts and the mill 3 shifts, it is possible that the milling and miscellaneous costs could be kept down to $6 / ton of ore. In the past, the ratio of concentration in the existing mill has been 60:1 with about a 90% recovery; $18.50 x 100/90 is $20.56 / ton of ore. Trucking costs in the past have been $18 / ton of concentrate. At the 60:1 ratio of concentration this is an additional 30¢ / ton of ore. The break-even point therefore, is about $21 / ton if the mine is operated on a small scale. If as a result of future exploration, sufficient tonnage is developed to warrant exploitation on a larger scale, 5 or 600 tons / day, this cost figure can be cut to around one third of the suggested amount.

CONCLUSIONS

1) Mount Estes is in a highly mineralized area.
2) The Yankee Fork (Mc Fadden) vein is a strong structure, possibly capable of producing large tonnages.
3) Gold and silver values are erratic but surprisingly persistant.
4) The possible quantity and quality of this mineralized zone warrants exploration.

RECOMMENDATIONS

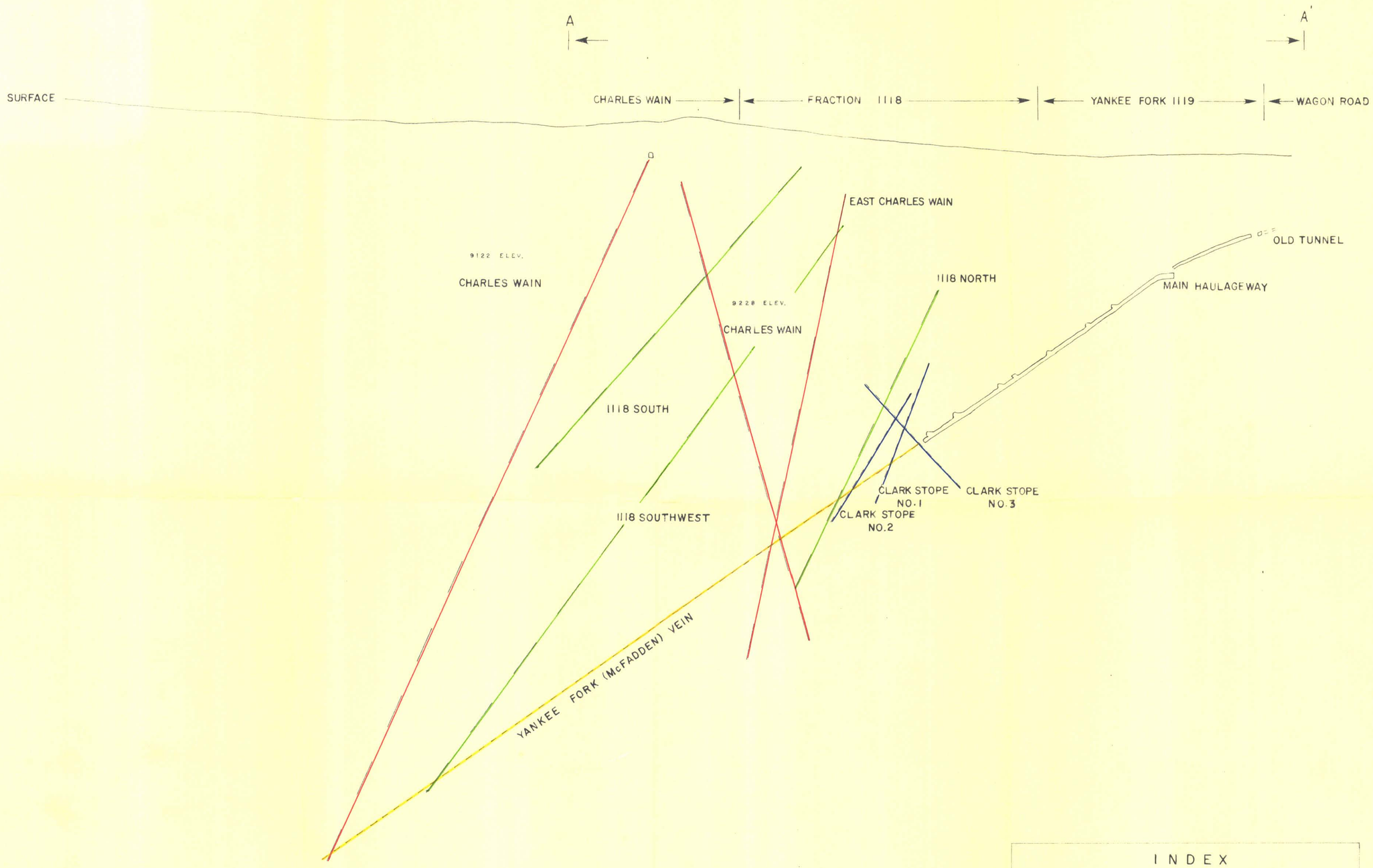
1) Risk capital should be solicited to explore the Yankee Fork and associated structures.
2) The area surrounding these key properties should be blanketed with mining claims in order to establish a buffer zone and thus protect the company from opportunists. Even though these new claims might in part, overlap existing locations, so long as our present mining laws are in effect, this is the only way your company can protect their interests. In those cases where your new locations might conflict with prior locations, it should be understood that these claims are being located with the understanding that they are subject to valid existing rights. By making this move, you will place these prior locators in the position where the responsibility will be theirs to prove their prior right, rather than yours, at some later date, to disprove it. This is a common practice in the mining industry today.
3) A land status map should be compiled.
4) Geologic mapping and studies should be conducted to determine the extent of the Yankee Fork and associated structures, and their relationship to each other.
5) The winze should be deepened at least 100 feet to intersect the closer structures shown on exhibit No.2.
6) Two drill holes, put in from the 700 level in a westerly direction, will investigate the six additional structures shown on exhibit No.2, to determine their strength, value, and possible point of intersection with the Yankee Fork structure.

With this knowledge of the area land status, extended geologic and engineering control, and detailed knowledge of the present Estes Gold Mines Inc. claims, the company should reappraise their position and plan the second stage of their mineral development program.

ESTES GOLD MINES INC.

CROSS SECTION LOOKING NORTHERLY

SCALE: 1" = 100'



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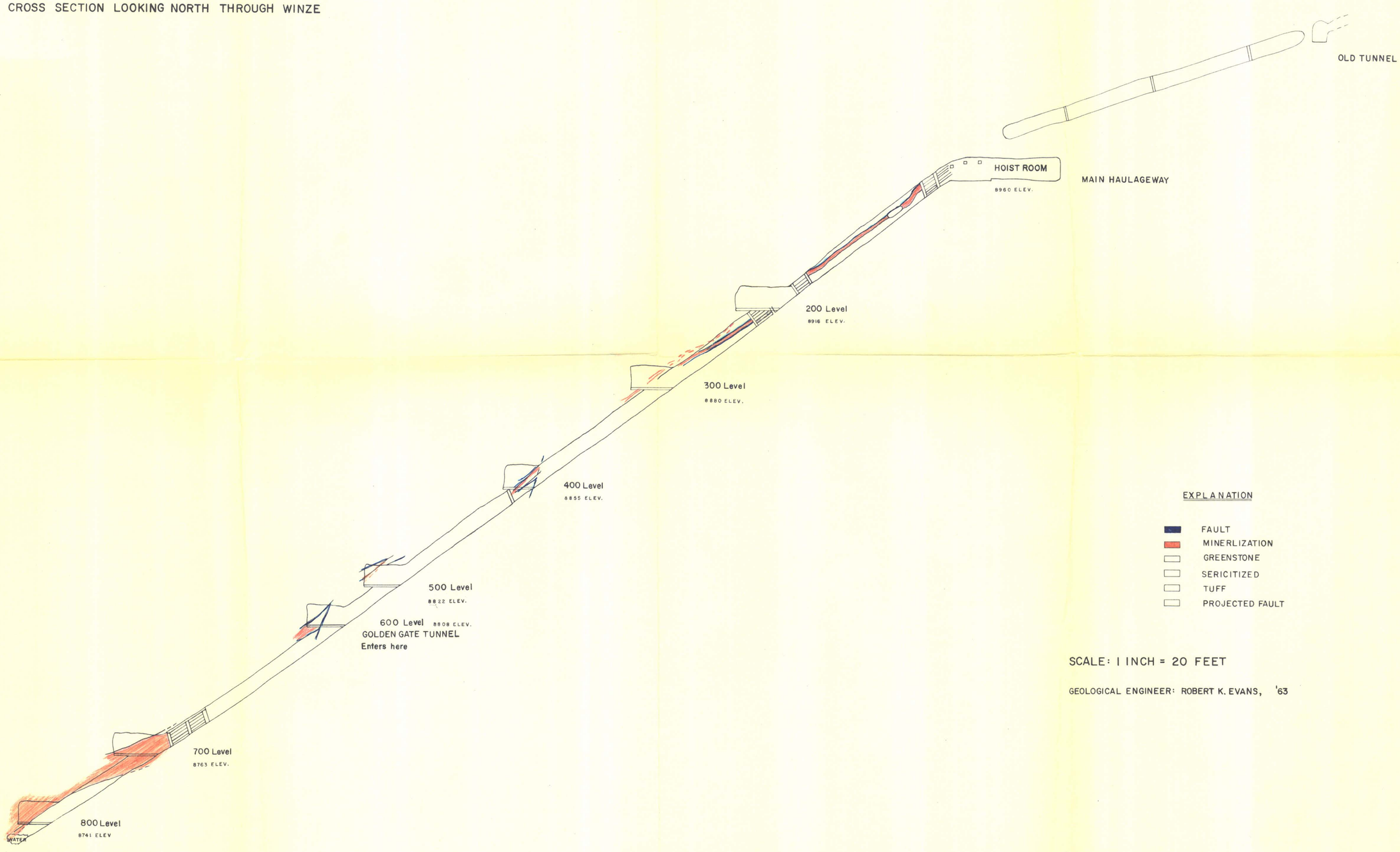
---- YANKEE FORK UNDERGROUND PROJECTIONS

—— OTHER PROJECTION

Geological Engineer: ROBERT K. EVANS '63

ESTES GOLD MINES INC.

CROSS SECTION LOOKING NORTH THROUGH WINZE



EXPLANATION

- FAULT
- MINERLIZATION
- GREENSTONE
- SERICITIZED
- TUFF
- PROJECTED FAULT

SCALE: 1 INCH = 20 FEET

GEOLOGICAL ENGINEER: ROBERT K. EVANS, '63

CARTO., V. EVANS

ESTES GOLD MINES INC.