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SHATTUCK DENN MINING CORP.
HUMBOLDT, ARIZ.

Aug 31, 1944.

MEMORANDUM ON TENNESSEE SCHUYLKILL MINE - CHLORIDE, Arizona.

Year 1943 Mined and milled 38,286 tons. Total cost $486,800
Sales, including Premium metal $747,778.
Freight, treatment etc. 177,840
Net sales 569,938.
Profit before depletion, Federal taxes etc. 87,000.
Net profit to surplus approximately 25,000.

Heads		Lead Cons	Zinc Cons
Au.	.036	0.32	.04
Ag.	2.0	21.0	2.4
Lead	3.7 %	43.	1.3
Zinc	5.9 %	--	51.9 %
	38286 tons	3015 tons	3100 tons.

Recoveries %

	Gold	Silver	Lead	Zinc
Lead Cons	60.9	87.7	91.7	6.1
Zinc Cons	8.4	9.5	2.8	71.1
Tailings	21.7	6.8	5.5	22.8

Estimating freight and treatment, it would appear that arnet smelter return of $6.39 per ton of head was made from both concentrates. Total return is $14.89, indicating about $8.50 per ton in premiums. The mine is operating at present under "C" zinc and "B" lead premiums. Total cost amounts to $12.72 per ton.

Cost items are as follows:

Miscellaneous taxes	2640.
Milling	84972.
Mining	304214
Overhead	48819.
Administration	38831.

Among the assets are:

Buildings	$ 190,911.
Staff House	5,449.
Office	5,125.
	201,485.
Depreciation	57,547
	143,938.
Mng. Prop. & Dev.	174,863
Less Depletion	106,535
	68,328
Supplies	17,916.

Liabilities.

Payable and Payroll		55,253
Trade Acc'pt.		10,930
Notes		21,194
Acc. Taxes		29,724
Reserve for Taxes		14,382
Cap. Stock	200,000	
Surplus (-)	52,883	
		147,107
		278,590

SHATTUCK DENN MINING CORP.
HUMBOLDT, ARIZ.

Aug 31, 1944.

MEMORANDUM ON TENNESSEE SCHUYLKILL MINE - CHLORIDE, Arizona.

Year 1943 Mined and milled 38,286 tons. Total cost $486,860

Sales, including Premium metal	$747,772.	
Freight, treatment etc.	177,840	
	569,932.	
Net sales		
Profit before depletion, Federal taxes etc.		87,072.
Net profit to surplus approximately		25,000.

Heads		Lead Cons	Zinc Cons
Au.	.036	0.32	.04
Ag.	2.0	21.0	2.4
Lead	3.7 %	43.	1.3
Zinc	5.9 %	--	51.9 %
	38286 tons	3015 tons	3100 tons.

Recoveries %

	Gold	Silver	Lead	Zinc
Lead Cons	60.9	87.7	91.7	6.1
Zinc Cons	8.4	9.5	2.8	71.1
Tailings	21.7	6.8	5.5	22.8

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Notes		21,194
Acc. Taxes		29,724
Reserve for Taxes		14,382
Cap. Stock	200,000	
Surplus (-)	52,893	
		147,107
		278,590.

This report was made for "Ethyl Corp" in 1938 when they were considering producing their own lead.
A.B.C.

(COPY)

REPORT
on
WRIGLEY MINE

LOCATION.

This property is located about 16 miles north-easterly from the town of Kingman, in the Wallapai mining district, county of Mohave, State of Arizona. The road to mine is a good graveled and graded highway except for the last two miles, which can easily be put in good shape. Kingman is on the main line of the Samta Fe Railway.

HOLDINGS.

This property consists of 6 lode mining claims held by United States patent. These claims are known as the Gold, Silver, Lead, Copper Antimony and Zinc.

GEOLOGY.

The country rock of this area is granite. This granite is the main component of the Cerbat Range.

Two veins are found on this property with a general course of about north 40 degrees west. A canyon between the two veins, indicate that the vein on the south west side of the canyon has been faulted from the top of the vein on the north east side. A further indication of this being a faulted segment is that a caved shaft on the southerly end of the property did not encounter the vein below a shallow depth.

It is quite probably that the main vein on the Wrigley property is a continuation of the IXL vein from which a large production of silver-lead ore was made.

ADJOINING PROPERTIES.

About one mile to the north is the C.O.D. Mine from which a large tonnage of silver-lead-zinc ores has been produced. About 2000 feet to the south-east is the IXL Mine which has produced a large tonnage of silver-lead-zinc ores. On the other side of the property to the south-west is the Keyston Mine, a large producer of silver ores.

ORE VALUES AND TONNAGE.

There is no ore of any value that has been developed.

Samples taken gave the following results:-

No.	Description	Width	Au. Osz.	Ag. Osz.	Pb%
442	Silver Claim, 100' E. of W. end Cut.	4'	0.01	0.4	None
443	Silver Claim, Shaft 20' Deep 8' feet Down on footwall side of shaft.	3'	0.01	1.2	7.0
444	Next to #443 toward hanging wall	2'	0.08	1.5	2.0

Samples taken gave the following results:- (Continued)

No.	Description	Width	Au. Ozs.	Ag. Ozs.	Pb. %
445	Xcut tunnel, 20' south shaft at depth 20'	4'	0.03	3.1	8.4
446	Lead claim, Cut near south west end	3'	0.12	0.9	9.5
447	Grab dump of 40' shaft near south east end of lead claim.		0.03	0.3	None
448	Open cut near southwest end of Zinc Claim	8'	0.03	1.1	2.0
449	Dump from deep shaft on Zinc Claim Oxidized material on small section dump		0.01	0.1	None

ORE VALUES AND TONNAGE. (continued)

Shipping ore can be sorted from samples 443 and 445. Samples 448 and 449 are from what is probably faulted segment of main vein. Sample 446 may be from same ore shute as samples rre and 445 or may be another ore shute.

Samples 443 and 445 were mainly galena. This was due to this zone being protected from oxidizing water by an overlying fault. Sample 446 was carbonate ore.

DEVELOPMENT.

Most of the work except for shallow cuts, shafts and tunnels was on the southwest vein or faulted segment of the north east vein. It is indicated that the shafts and inclines on this vein hit the fault zone at a shallow depth. This is indicated by the dumps. These workings were either caved or water level was close to the surface.

No depth has been attained at any point on the north east vein. The greatest depth attained at any point is in the cross-cut tunnel and this is about 20' vertically from the surface. Ore shows in this tunnel.

The deep shaft on the Zinc claim is caved at the surface. It is variously reported to be 200 feet and 400 feet deep. The dump would indicate from 800 to 1000 feet of work.

EQUIPMENT.

There is no equipment on the property.

OPERATING CONDITIONS.

The operating conditions in this area are good. It is close to the town of Kingman and the railway. Water is quite plentiful and enough water can probably be developed in the canyon for a mill. All equipment and supplies can be obtained from Kingman or Coast points.

A power line with Boulder Dam power is only a short distance from the property.

CONCLUSIONS.

I believe this property has merit and on development should be a good producer of lead and lead-zinc ores. All development should be on the north-east vein which is apparently the same vein as the IXL vein to the south-east.

RECOMMENDATIONS.

I believe steps should be taken to take over this property and development should be started as soon as equipment can be installed. Some ores taken out during the development period can be shipped to the smelter. In about 90 days a regular tonnage should be obtainable. This should increase to 50 or 100 tons per day of 20% or better lead ore.

Thos. L. Chapman, E. M.

WICKENBURG & PRESCOTT ORE MARKETS
J.W. "Jack" Branch
March 29, 1938

Settlement of Lot No. 183
Classification: Ore

Shipper: Charles S. Scholey, Trustee
Address: Prescott, Arizona

Net Weight of Lot 9688 lbs.
Moisture: 2.0 percent: 192 lbs.

Name of Claim: Wrigley
Mining District:
County:

Net dry weight: 9496 lbs.

Equivalent in tons(2000 lbs.): 4.748 Tons

PAYMENTS PER TON

	Assay		Amount paid for				Rate		Value
Gold:	0.04	ozs.	All	-	0.04	oz. at	$ 32.20	$	1.29
Silver:	8.7	ozs.	95%	-	8.265	oz. at	.64		5.29
Copper:		Pct.				lbs. at			
Lead:	24.0	Pct.			405.0	lbs. at	.031		12.56

Value per ton at shipping point $ 19.14

Freight Rateper ton: $ 4.50
Smelter-Treatment per ton: 6.00

$10.50 $ 10.50

Net smelter value per dry ton: $ 8.64

Total net smelter value of 4.748 Net Dry Tons at $ 8.64 $ 41.02

(Minimum $2.00 per ton) Brokerage: $9.50
Sampling-Assaying: 5.75

$ 15.25 $ 15.25

Approved by:

Net amount Due Shipper: $25.77

PRESCOTT ORE MARKET

July 12, 1938

Settlement for Lot No. 321
Classification: Ore

Shipper: Charles Scholey
Address: Prescott, Arizona

Net weight of Lot: 1432 lbs.
Moisture: 4.4 percent: 62 lbs.

Name of Claim: Zinc
Mining District: Wallapai
County: Mohave

Net dry weight: 1370 lbs.

Equivalent in tons (2000 lbs.): 0.785 Tons

PAYMENTS PER TON

	Assay		Amount Paid for		Rate		Value
Gold:	0.03	ozs.	All	- 0.03	oz. at	$32.20	.96
Silver:	7.90	ozs.	95%	- 7.50	oz. at	.64	$ 4.80
Copper:		pct.			lbs. at		
Lead:	36.0	Pct.		621.0	lbs. at	.03	18.63

Value per ton at shipping point: $24.39

Freight Rate per ton: $ 4.75
Smelter-Treatment per ton : 6.00

$ 10.75 $10.75

Net smelter value per dry ton $13.64

Total net smelter value of 0.785 Net Dry tons At $ 13.64 $10.71

Brokerage: $ 1.37
Sampling-Assaying: 4.00

$ 5.37 $ 5.37

Approved by:

Net amount Due Shipper: $ 5.34

EXHIBIT A

to
Application of

VICTORY MINES & MILLING COMPANY

to

RECONSTRUCTION FINANCE CORPORATION

for a

PRELIMINARY DEVELOPMENT LOAN

The Victory No.2 group of mines comprising the: ZINC, LEAD, COPPER, ANTIMONY, SILVER, GOLD are situated in the Stockton Hill Section of the Wallapai Mining District, Mohave County, Arizona. To describe the location more definitely, they are located in the I.X.L. Basin about midway between the C.O.D. and Banner group of mines, T.23 N., R. 17 W., G & S.R.M., Arisona. The railroad station is at Kingman which is 17 miles distant from the mines.

The road to the mines is in good, passable condition and will offer no difficulties to the transportation operation. There is very rarely snow enough in the winter time to interfere seriously with freighting.

EXHIBIT A

The mining property held by the applicant, Victory Mines & Milling Company, under lease and option to purchase consists of 6 patented lode mines, located in Sections 32 and 33, T. 23 N., R. 17 W., G. & S.R.M., Arizona, all embraced in U.S. Mineral Survey No.3333, the names of which and the books and pages where the United States patents thereof are to be found of record in the Office of the County Recorder of Mohave County, Arizona, being as follows, to wit:

NAME	BOOK OF DEEDS	PAGE
ZINC	28	347
COPPER	28	347
ANTIMONY	44	189
LEAD AND East ½ of SILVER	33	425
GOLD and West ½ of SILVER	33	426

EXHIBIT B (A)

to

Application of

VICTORY MINES & MILLING COMPANY

to

RECONSTRUCTION FINANCE CORPORATION

for a

PRELIMINARY DEVELOPMENT LOAN

Undoubtedly the ores which may be developed in the Victory No. 2 vein system will be of similar character to those found elsewhere in the Cerbat range. These ores contain in varying relative proportions in inverse order of abundance: gold, silver, copper, lead and zinc.

There are local variations in the lead zinc ratio. Experience in milling of ores of the Cerbat Range on both sides of the range such as Stockton Hill-Chloride Golconda sections, teaches that the ores of the several localities are equally amenable to selective flotation processes. The metallurgical methods involved in the treatment of ores from the Victory No. 2 group will be no problem, since the methods have been established by operations in other parts of the mining district. The structure of the veins on the Victory No. 2, in my opinion, is such that good bodies of milling ore may be disclosed by development work.

EXHIBIT B

to

Application of

VICTORY MINES & MILLING COMPANY

to

RECONSTRUCTION FINANCE CORPORATION

for a

PRELIMINARY DEVELOPMENT LOAN

Geology of the Victory No. 2 Group.

The prevailing rocks in the vicinity of the mines are broadly speaking members of the granitic series constituting the pre-Cambrian complex. Associated with the granitic rocks are various types of schists. The granitic rocks usually have a banded gneissoid structure. This granite was classified by Schrader (in Bulletin 397) as granite gneiss. This granite gneiss consitutes the greater part of the mountains in the Stockton Hill section. This basal granite has been intruded by various rocks such as granite porphyry, diabase quartz, monzonite and other unclassified.

The mineral bearing veins are fillings in the fissures, which almost always, in this vicinity, follow the lines of structural weakness at the contacts of the intrusive porphyries with the older granitic rocks. It would appear from the wide zones of rock brecciation and shearing and subsequent alteration that the points for mineral deposition may be anywhere within a zone 20 to 30 feet or more in width. The foot wall of the vein or fracture zone is at various points: Granite gneiss, monzonite and a rock of diorite nature provisionally classed as dioritic granite; these three classes are intruded by rocks given the field classification granite porphyry. These are medium grained to aphanitic in texture and are usually light colored and of a more acid type than th foot wall rocks. The type of the foot wall rock seems to have no bearing on the width of the vein, most of the fracturing evidently being in the granite porphyries. The outcrops show quartz and strongly altered granitic rocks extensively kaolinized and bleached. The water level stands relatively high in this neighborhood, being from 20 to 40 feet from the surface. The quartz of the outcrops shows oxides or iron and manganese; at places shows evidence of leaching by its honeycomb structure and by the presence of pyrite casts. Some of the quartz shows copper carbonate stains which indicate copper minerals at depth. All ores in the district contain some copper minerals, with the galena and zinc blend.

There are several parallel and cross veins within the boundaries of the group but, since only superficial work was done on them, no detailed study was made of them at the time of my examination of the property.

The evidence disclosed by the structure of the veins indicates rock movements of considerable magnitude. The wide zone of alteration and shearing indicates favorable condition for ore deposition.

The main vein can be easily traced by its outcrop through the claims of the Victory Group.

Copies from U.S. Bulletin No. 397

Stockton Hill District.
General Outline.
Location and History.

The Stockton Hill District joins the Cerbat district on the east, and is about parallel and co-extensive with it north and south, being situated on the opposite slope of the mountains. It is about four miles in width and but a little more than that in length. It ranges in elevation from 3500 ft. at the edge of the Wallapai Valley on the east to 5500 ft. at the crest of the range. The principal and oldest camp is Stockton Hill, situated in the foothills in the easterly part of the district, ten miles north of Kingman at an elevation of about 4800 ft. It dates from the early sixties, when the principal veins were first discovered and began to produce. In former days much of the ore was shipped to Sawnsea Wales but later was treated in the Mineral Park and Cerbat mills and shipped to the smelter in San Francisco and to New Mexico. At present ore is hauled by wagon to Berry or Kingman, whence it is shipped, mostly to Needles. The district is reported to have produced many million dollars worth of ore.

Topography & Geology

The topography shown in part in the sketch map (fig. 16) is generally rough, but the mines are nearly all accessible by wagon roads, mostly of easy grades. The drainage issues eastward into the Hualapai Valley mainly through several short side galleys or transverse washes - the Canyon Station, C.O.D., I.X.L. (known as the I.S.L. Basin from the width and open character of its middle part), Cupel Treasure Hill and Maywell.

In their upper parts most of the washes contract into V-shaped gulches; the country rock is of the pre-Cambrian gneiss and schist complex. It is reddish brown and iron stained and is intruded by dykes of granite porphyry, diabase and other rocks of mostly basic character. The schistosity trends about N. 30 degrees East and dips usually vertically or at a steep angle to the northwest.

Quoting from Bulletin 397
Mines in I.X. L. Basin:

I.X.L. Basin is an open-like basin shaped area situated in the upper part of I.X.L. Wash, about 1½ miles north of Stockton Hill. It contains several small mines and prospects, about all of which are situated on the same vein or lode. The principal mines (1906) are the K.P. and the J.F.T. The K.P. mine is located in the southern part of the basin on open ground at 4700 feet elevation. The mine is new. It is owned by Messrs. Kimberly and Potts, of Kingman. As the water level is at about 40 ft. below the surface the development consists of shallow shafts and surface openings.

The country rodk is the pre-Cambrian gneiss complex. The deposit forms a vein or lode about 65 ft. in width, which dips about 75 degrees N.E. and is reported to have a horizontal extent of nearly two miles, many locations being made on it. The gangue or filling of the fissure consists essentially of crushed or brecciated vein quartz and crushed and altered coarse granitic quartz and feldspar. The croppings consist of similar material, locally silicified and stained reddish brown and black by iron and manganese oxides. The lode carries a width of about seven feet of concentrated ore. The ore is low grade. It contains principally galena and is said to average about 60% lead. It contains some gold, silver and copper, the copper occuring as bornite and salco-pyrite.

The J.F.T. Mine, located in the upper or northwestern part of the basin, is said to be developed to a depth of about 200 feet. It is reported to have been a good producer, and its ore is said to contain copper, silver and gold.

EXHIBIT B

to
Application of

VICTORY MINES & MILLING COMPANY

to

RECONSTRUCTION FINANCE CORPORATION
for a

PRELIMINARY DEVELOPMENT LOAN

The principal developments on the Victory No. 2 group are: a four hundred foot double compartment shaft and a shaft one hundred fourteen feet deep. Besides these there are a number of shallow shafts and open cuts along the vein; all these shallow shafts are either caved or have water in them at 15 to 20 feet depths at this date.

The collar set and two sets below the collar set of the four hundred foot shaft were originally on filledground; the fill surrounding them has caved and blocks the shaft at the surface. The shaft could be recovered at nominal expense by replacing the caved sets. The water level at this point is about twenty feet below the surface. The shaft below the water, according to experience in the district, is most likely in good shape and the cost of recovering it should be very little more than the cost of pumping. Reports from persons who were familiar with the property at the time of the shaft was sunk agree that on the two hundred foot level there was a good showing of lead ore and that at the four hundred foot level the only work done was a seventy foot cross-cut which was not of sufficient lenght to penetrate the ore bearing vein.

I consider the opening of this shaft and drifting on the two hundred foot level and continuing the cross-cut on the four hundred foot as most essential development work. In the vicinity of the shaft, there are good indications for a body of lead zinc ore.

Work is now being done on the one hundred fourteen foot shaft, whose location is indicated on the accompanying map; the work consists in driving of a cross-cut to cut the quartz vein which shows an outcrop on the surface.

The samples taken were taken principally with the idea in view to test for the presence of lead at several points along the outcrop. In the shallow shaft in which Samples Nos. 2, 3 and 4 were taken was the only place where decent underground samples could be taken. The samples taken at the shaft were channel samples according to standard practice.

The topography of the vein outcrop is such that development must be done by shafts, cross-cuts and drifts as there is not sufficient difference, in surface elevations to make tunneling a practical method.

Quoting from Bulletin 397 on the Geology of the
Mineral Deposits of Mohave County:

C.O.D. Mine

The vein is well known as the C.O.D. Vein. It strikes 85 degrees West and dips about 80 degrees North, and is reported to be more than a mile in length and about six feet in average width. The gangue is mostly

Samples were all taken from the Victory No. 2 Group in I.X.L. Basin.
No. 1 - was from dump of tunnel on "Lead"claim
2 - " " shaft on "Silver" claim - sample 12" wide
3 - " " " " " " " 8" wide
4 - " " " " " " " lead streak
5 - " " cut 175' west of discovery shaft on "Zinc" claim
6 - " " pieces from dump of shaft, near discovery shaft "Copper" claim
7 - " " pieces on dump at discovery shaft "Zinc" claim

(S) S. S. Jones

CERTIFICATE OF ASSAY FROM LABORATORY
R. V. McALLISTER
Kingman, Arizona

H. Frank Nelson

July 11, 1942

Office Number	Owner's Mark	GOLD PER TON Ounces	GOLD PER TON Value	SILVER PER TON Ounces	SILVER PER TON Value	Total Value Gold & Silver
9965	#1	trace	----	0.80	0.28	0.28
9966	2	0.01	0.35	2.90	2.06	2.41
9967	3	0.01	0.35	3.80	2.70	3.05
9968	4	0.02	0.70	8.40	5.96	6.66
9969	5	0.01	0.35	2.20	1.56	1.88
9970	6	trace	----	0.50	0.35	0.35
9971	7	0.02	0.70	5.60	3.97	4.67

Lead Per cent	Zinc Per cent
2.60	1.30
19.10	1.20
32.90	1.50
78.10	0.90
10.10	2.50
1.00	trace
46.20	0.80

(S) R. V. McALLISTER, Registered Assayer

width and are mostly of considerable extent. The norrow shoots are said to be usually rich and the wider ones contain large bodies of milling an concentrating ore. At the 250 foot level the ore shoot is reported to vary from 5 to 7 feet in width and to have averaged about 250 dollars per ton. The ore contains, principally, silver sulphide and gold, with some galena and zinc blende, and below the 250 foot level a little calco pyrite. It is said to be less rich in the sulphide zone than in the oxide zone. Its run of mine roughly computed from October, 1885, to March 6, 1901, is about as follows: Silver 160. ounces and Gold 2. ounc to the ton; Lead 12 to 20%. The production is reported to be $1,300,000 of which silver alone amounted to $1,000,000.

Quoting from Bulletin No. 367.

Banner Group Mine.

Geology and ore deposits:

The country rock is light to iron gray, fine grained gneiss, in which the structure trends about N. 30 degrees East and dips steepley to the Northwest. Toward the veins on the footwall side the rock is red from oxidized pyrite. The fissure vein strikes N. 40 degrees West and dips about 80 degrees Northeast. The croppins consist principally of reddish-brown quartz. The vein averages about 7 or 8 feet in width; the ore varies from about 1 to 3 feet wide and usually occurs on the footwall side of the vein. In the face of the drift at the time of visit it was 2½ feet wide and associated with it on the hanging wall side was a foot or more of gangue composed principally of crushed and altered grantic material, which on being removed by blasting, leaves the intact ore bared in fine condition for loading on the cars. The shoot contains parellel seams of light colored material, which emphasizes the roughly banded character of the ore. The ore in places consists of pure galena, but usually it contains also zinc blende, calco-pyrite and pyrite. The gold in some of it amounts to several ounces a ton. The silver occurs in part as sulphide and native as masses of wire silver which interlace adjacent parts of the ore shoot. The amount of zinc increases in the deeper Northern portion of the mine.

Toward the northwest end of the surface workings occurs a large amount of reddish brown quartz ore, which seems to contain chiefly gold values. This probably represents of the body of rich gold ore reported to have been found in the surface openings of the mine. A short distance north of this locality galena and zinc blende ore with comb quartz and calco-pyrite seem to prevail.

The quotations from U.S.G.S. bulletin were made to establish the fact that there is a lead zinc district surrounding the Victory No.2 properties.

S.S. Jones

TENNESSEE-SCHUYKILL MINE REPORTS

Month 1943	Tons	Assays Hds Au.	Ag.	Pb.	Zn.	Operating Cost	Per Ton	Net Smelter Value Concts.	Per Ton	Value with Premiums A	B	C
Jan.	3990					$ 28329.00	7.10	$ 20034.00	5.02			
Feb.	2769	.05	1.7	3.4	7.8	25578.00	9.23	21017.00	7.59			
Mar.	3730	.044	2.0	4.3	8.3	29384.00	7.86	29918.00	8.02			
Apr.	3434	.03	2.0	4.2	6.6	24343.00	7.08	29059.00	8.46			
May	2690	.03	1.8	3.6	6.9	30390.00	11.30	17577.00	6.53			
June	3191	.02	1.6	3.1	5.2	33111.00	10.38	15797.00	4.95	$25884	35891	
July	3471	.03	1.7	2.8	5.2	38035.00	10.96	16810.00	4.84	27033	37387	
Aug.	3906	.03	1.9	3.3	6.7	39835.00	10.20	26443.00	6.74	42747	59247	67163
Sept.	3289	.04	2.1	3.4	6.8	37765.00	11.48	24321.00	7.39	38960	53599	60282
Oct.	3403	.03	2.3	3.4	6.4	46500.00	13.60	24143.00	7.09	38399	52655	58619
Nov.	2877	.03	2.1	2.8	6.8	44000.00	15.29	18412.00	6.39	29904	41395	46348
Dec.	2685	.04	2.5	4.8	7.2	43511.00	16.20	22812.00	8.50	36566	50320	55227
	39435					420781.00	10.67	266343.00	6.75			

1944												
Jan.	2298	.04	2.8	4.8	8.1	45459.00	19.78	19803.00	8.61	$32394	44985	49476
Feb.	1982	.04	2.8	4.6	8.1	41175.00	20.77	17794.00	8.98	29016.	40239	44421
Mar.	1978	.04	1.9	3.8	6.0	41911.00	21.19	12815.00	6.48	21210	29604	31767
Apr.	2683	.03	1.8	3.3	6.9	38808.00	14.46	15474.00	5.77	26803		42440
May	3019	.024	1.2	2.6	4.8	36464.00	~~20.78~~ 12.08	9716.00	3.22	17103		26174
June	2407	.032	1.9	3.5	6.7	36160.00	15.02	15035.00	6.24	25214		38890
July	2480	.030	1.5	3.3	5.8	38154.00	15.38	13942.00	5.62	23531		38772
Aug.	2170	.030	1.3	3.3	5.3	35114.00	16.18	11975.00	5.51	19867		32254
	19017					$ 313145.00	16.47	116554.00	6.13	$ 185138		$ 304194

9.73 Per Ton

NO._____

LEASE OF MINING CLAIM

TENNESSEE-SCHUYLKILL CORP.,

To

ROBERT H. BECK.

Dated October 11, 1939.

P.O. Box 1029

CARL G. KROOK
ATTORNEY AT LAW
KINGMAN ARIZONA

002
001
01
061

LEASE OF MINING CLAIM

from

Lessor: TENNESSEE-SCHUYLKILL CORPORATION, a corporation, of Chloride, Arizona, hereinafter called "lessor";

to

Lessee: ROBERT H. BECK, of the same place, hereinafter called "lessee".

Lessor hereby leases to the lessee a certain portion of the mine hereinafter described, for the term and upon the payment of rentals and upon the covenants and conditions following:

1. PROPERTY. All that portion of the SCHUYLKILL patented mine lying above the 900 ft. level therein, said SCHUYLKILL patented lode mining claim being situate in the Wallapai Mining District, Mohave County, Arizona, and the U. S. Patent thereof appears of record in Book 4 of Deeds, on page 652, in the office of the Recorder of said Mohave County, to which reference is made for a more particular description.

2. TERM. One year, beginning on October 11, 1939, and ending October 10, 1940, unless sooner abandoned or terminated, as herein provided, with the privilege of renewal for one year.

3. USE AND OCCUPANCY. (a) Lessee is granted the immediate possession of said premises and the right to explore, operate and work the same and to extract the ores therefrom above said 900 ft. level, subject to the payment of royalties as hereinafter provided.

   (b) Lessee shall commence active and continuous work upon said property immediately upon the date hereof, or as soon thereafter as is reasonably practical, and thereafter shall prosecute the same continuously and without interruption, unless prevented by causes over which the lessee has no control.

   (c) All work shall be performed in a minerlike fashion and in a manner necessary to good and economical mining so as to produce the largest amount of ore possible, with due regard, however, to the development, exploration and preservation of the premises as a workable mining property.

   (d) Cessation of operations of the premises by the lessee for ten (10) consecutive days at any one

time during the term of this lease, without the written consent of the lessor, and not the result of causes for which lessee is not responsible, shall constitute a ground upon which the lessor may in its discretion declare this lease at an end.

(e) Lessee shall well and sufficiently timber the workings at all points where proper and necessary in accordance with good mining and in compliance with the mining laws of the State of Arizona and the Rules and Regulations of the office of the State Mine Inspector, and shall repair all old timbering when it may become necessary, and the main workings shall be kept free of rubbish and debris and in good condition for continuous operation as a workable mine.

(f) All mine timbers, blocks and wedges shall be furnished by lessee at his own expense.

Track, ties, air and water pipe and ventilation pipe shall be furnished by lessor, and lessee is permitted to move the track and pipe-lines now in the workings of the leased premises from place to place as his operations may require.

Lessor shall furnish to lessee the use of the necessary drill steel, but lessee shall furnish his own drills and also small tools, such as picks, shovels, hammers, etc., and also shall furnish carbide, powder, caps and fuse at his own expense, and if lessee shall use individual electric batteries for lighting purposes he shall pay the rental therefor.

The SCHUYLKILL hoist and shaft equipment may be used by lessee without charge, except the charge for air as hereinafter provided, and except that he shall keep the hoist and said equipment in good repair and working order at all times during the life of this lease at his own expense.

4. <u>ROYALTY</u>. (a) Lessor shall at all times during the life of this lease have the exclusive right to the purchase of all ores mined by lessee in said leased property, and lessee shall not remove or dispose of any of the products of said premises in any other manner.

(b) As rental for the use and occupancy of said leased premises the lessee shall pay the lessor a royalty on all ores delivered to lessor of 15% of lessor's purchase price of the ore, which purchase price shall be computed on the following basis:

<u>Gold</u>: at $24.00 per ounce;
<u>Silver</u>: at $0.45 per ounce on present silver price;

Lead: no payment unless the grade runs 2% or over, and on ores of a grade of 2% or over payment will be made at the rate of 56% of the market price, less 1½¢ per lb.

Zinc: no payment unless grade 4% or over and then the price shall be governed by the market.

Lead and zinc to be paid for on a monthly market average as shown by the New York Engineering and Mining Journal.

5. MILLING, TRAMMING, SUPPLIES, ETC. Lessor agrees to mill lessee's ores, perform the necessary tramming, assaying and tool sharpening, and furnish material and supplies to the lessee during the life of this lease upon the terms and conditions following:

(a) Milling charge per dry ton, $2.50;

(b) Tramming from the ore shutes on the 900 ft. level and hoisting same to bin at 35¢ per ton;

(c) Air for drills proportionate to number of machines used in mine, at $1.00 per hour per drill. Lessee to furnish his own air drills.

(d) Air for SCHUYLKILL hoist at $1.00 per hour.

(e) Sharpening steel at 0.10 per bit, 0.35 per shanks. Steel to be delivered at and picked up at blacksmith shop.

(f) Assaying, gold and silver combined, at 0.30 per sample; lead at 0.30 per sample; zinc at 0.30 per sample.

(g) Powder, caps, fuse, timber, carbide and other material and supplies shall be sold by lessor to lessee at cost, plus 10%.

6. WASTE. Gob or waste produced by lessee will be accepted by lessor free of charge, if and when it can use the same in its own mining operations. If, however, it has no use for waste and the waste produced by the lessee has to be hoisted, then the same shall be subject to a charge for tramming and hoisting of 35¢ per ton.

7. DEVELOPMENT WORK. In the event the lessee finds that he has to perform certain exploratory and

development work, and the purchase price of the ores from such development work shall be between $6.00 and $8.00 per ton, then the royalty shall be reduced to 10%, but such reduction shall apply to development ores only and not to ores taken from stopes.

8. ARBITRATION. In the event of any dispute arising between lessor and lessee, such controversy shall be submitted to arbitration, each party selecting an arbitrator and the two arbitrators thus chosen shall select a third, and their findings shall be conclusive and binding upon the parties.

9. TERMINATION OF LEASE. This lease shall terminate on either of the following grounds:

(a) If the metal market drops below profitable operations either of the leased premises or lessor's mill.

(b) At the option of either party on sixty (60) days written notice.

(c) On the sale of lessor's SCHUYLKILL and TENNESSEE property, in which event the lessee shall be entitled to thirty (30) days written notice.

10. INSPECTION OF PREMISES. Lessor reserves the right through its authorized agents to enter upon said leased premises and the workings therein at all reasonable times for the purpose of inspection, survey, or taking samples therefrom, and in that behalf the lessee shall extend proper assistance, but the lessee shall not be put to any expense by reason thereof, nor shall he be held responsible for any personal injury sustained by lessor's agents without his fault.

11. ASSIGNMENT - SUBLETTING. This lease, or any renewal thereof, shall, at the option of the lessor, be forfeited and terminated if the term in whole or in part of the lease is assigned, transferred or set over by the act of the lessee, or by process or operation of law, or in any other manner whatsoever, or if any part of said leased premises is sublet, without the written consent of the lessor.

12. NON-LIABILITY OF LESSOR. Lessee shall at all times during the life of this lease keep said premises free and clear of all liens, claims and debts, and the lessor shall in no event be responsible for any labor or material bills incurred by lessee in connection with his operation of said leased premises, nor for any personal injury or damage that may be

sustained by the men employed by lessee, and if for any reason a claim or lien is filed against said premises on account thereof, or any suit shall be filed against the lessee for non-payment of same, or any suit shall be filed for the foreclosure of such lien, or any suit shall be filed against the lessor in connection with any such claim, such act or acts shall constitute a breach of this lease and subject the same to termination as for default.

13. COMPENSATION INSURANCE. Lessor shall not be liable for any loss, injury or damage to lessee, or his employees, or to his equipment or property used by him in connection with his operation under this lease, and the lessee shall at all times during the life of this lease comply with the provisions of the Workmen's Compensation Law of the State of Arizona, and, insofar as it may apply, with the Federal Social Security Act, and any law of the State of Arizona appertaining thereto.

14. EQUIPMENT - REMOVAL. All machinery, equipment and tools placed by lessee in or on said premises during the life of this lease shall be subject to removal by him within thirty (30) days from the date of the expiration of the term of this lease, or from the date of the termination of this lease by default or otherwise: PROVIDED, that all buildings and headframes, if any, and underground timbering and rails and pipe shall not be removed, but shall remain on said premises and belong to lessor. If such machinery, equipment and tools are not removed from the premises within said period of 30 days, then such failure of removal shall operate as a transfer of title to the lessor, and the lessor shall thereupon become and remain the owner thereof.

15. BROKEN ORE. Lessor reserves the title to any and all broken ores remaining on the premises or in the workings thereof on the expiration of the term of this lease, or on the termination thereor prior thereto in any manner, and lessee expressly waives any right, title, claim or interest therein.

16. REPRESENTATIONS. Lessee has entered into this lease relying on his own judgment or knowledge of said leased premises, and not upon any representations made by lessor's agents, employees or representatives, touching the merits, character or quality thereof.

17. SURRENDER OF POSSESSION. The lessee shall deliver to the lessor quiet and peaceable possession of

said leased premises in good order and condition, with all drifts, tunnels, or other passages thoroughly drained and cleared of loose rock and rubbish, without demand or further notice, on the expiration of the term of this lease, or any renewal thereof, or in the event of the sooner termination of this lease for any cause whatsoever.

18. DEFAULT. Upon the violation of any covenant, condition or provision herein contained, this lease shall at the option of the lessor expire and terminate, and the lessor, through its agents or representatives, may thereupon, after demand in writing, have possession, enter upon said premises, and dispossess all persons occupying the same, with or without force, and with or without process of law, or at the option of the lessor the lessee and all persons occupying said premises, or any part thereof, may be proceeded against as guilty of unlawful detainer.

IN WITNESS WHEREOF, said lessor and said lessee have executed this lease in duplicate this 11th day of October, 1939.

TENNESSEE-SCHUYLKILL CORPORATION

By Jacob Schoder
Mgr.
Lessor.

R H Beck
Lessee.

STATE OF ARIZONA)
) ss.
COUNTY OF MOHAVE)

The foregoing instrument was acknowledged before me this 11th day of October, 1939, by JACOB SCHODER, as manager of TENNESSEE-SCHUYLKILL CORPORATION, lessor, and by ROBERT H. BECK, lessee.

My commission expires July 15, 1943.

Earl G. Brock
Notary Public

PRODUCTION AND DEVELOPMENT
A COMPARISON OF 1942 AND 1943

	1941	1942	1943	1943-1942
TONNAGE	45,150	40,055	38,286	95.6%
COST PER TON				
Mining	.073	$ 5.9022	$ 7.9456	134.6%
Milling		$ 1.4800	$ 2.2239	150.3%
AVERAGE HOURLY RATE FOR MINERS		$ 0.869	$ 1.141	131.3%
GRADE OF MILL HEADS				
Gold	.073	0.063 oz.	0.036 oz.	57.1%
Silver	2.92	2.28 oz.	2.01 oz.	96.6%
Lead	5.3	4.19%	3.70%	88.3%
Zinc	5.53	5.16%	5.91%	105.3%
GRADE OF LEAD CONCENTRATE				
Gold		0.475 oz.	0.320 oz.	67.4%
Silver		16.34 oz.	21.35 oz.	130.7%
Lead		36.72%	43.08%	117.3%
Zinc		4.50%	4.57%	101.6%
GRADE OF ZINC CONCENTRATE				
Gold		0.054 oz.	0.037 oz.	68.5%
Silver		2.41 oz.	2.36 oz.	97.9%
Lead		0.29%	1.28%	441.4%
Zinc		54.51%	51.87%	95.2%
GRADE OF TAILINGS				
Gold		0.008 oz.	0.009 oz.	112.5%
Silver		0.10 oz.	0.16 oz.	160.0%
Lead		0.11%	0.24%	218.2%
Zinc		1.08%	1.61%	149.1%
RECOVERY OF METALS IN LEAD CONCENTRATE				
Gold		83.2%	69.9%	84.0%
Silver		87.1%	83.7%	96.1%
Lead		97.4%	91.7%	94.1%
Zinc		9.1%	6.1%	67.0%
ZINC CONCENTRATE				
Gold		6.5%	8.4%	129.2%
Silver		9.0%	9.5%	105.6%
Lead		0.5%	2.8%	560.0%
Zinc		75.03%	71.1%	94.4%
TAILINGS				
Gold		10.3%	21.7%	210.7%
Silver		3.9%	6.8%	174.4%
Lead		2.1%	5.5%	261.9%
Zinc		15.6%	22.8%	146.2%
PRODUCTION				
Ozs. Gold		2.278.08	1.079.63	47.4%
Ozs. Silver		80.194.30	71.698.42	89.4%
TO LEAD SMELTER				
Lbs. Lead		3.267.120	2.597.879	79.5%
Lbs. Zinc		410,360	275.778	67.2%
TO ZINC SMELTER				
Lbs. Lead		17.760	79.306	446.5%
Lbs. Zinc		3.383.980	3.216.431	95.0%
TOTAL LBS. LEAD		3.284.880	2.677.185	81.5%
TOTAL LBS. ZINC		3,794.340	3.492.209	92.0%
FEET OF NEW DEVELOPMENT		1411	1025	72.6%
FEET OF REOPENING OLD WORKINGS		0	359	
FEET OF DIAMOND DRILLING		1482	460	31.0%

From Co. Report
Receivers end of 1943 31,609 Tons
Mining year value $8,577,612.52
at B premium prices

Yours very truly,

W. C. WIMER, *E. M.*

Map Furnished by TENNESSEE SCHUYLKILL CO.

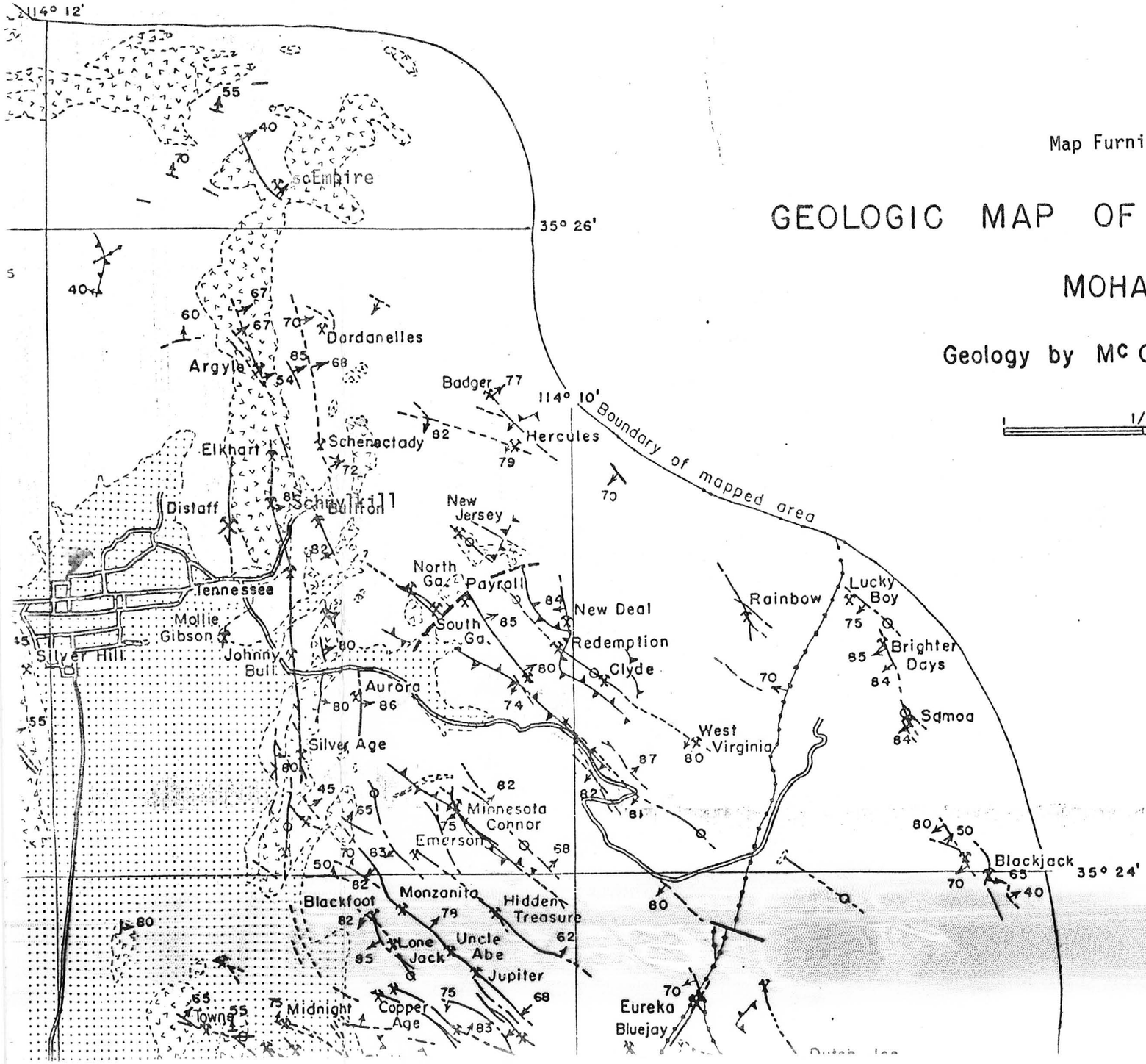
GEOLOGIC MAP OF THE WALLAPAI MINING DISTRIC

MOHAVE COUNTY, ARIZONA

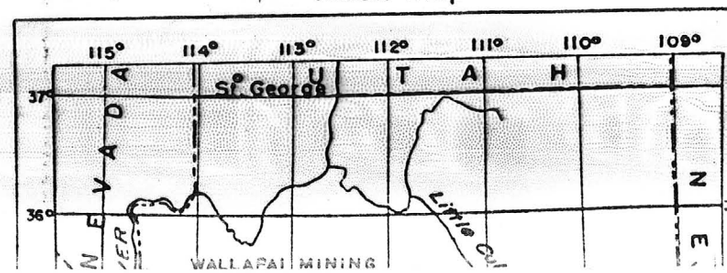
Geology by Mc Clelland G. Dings and Paul K. Sims

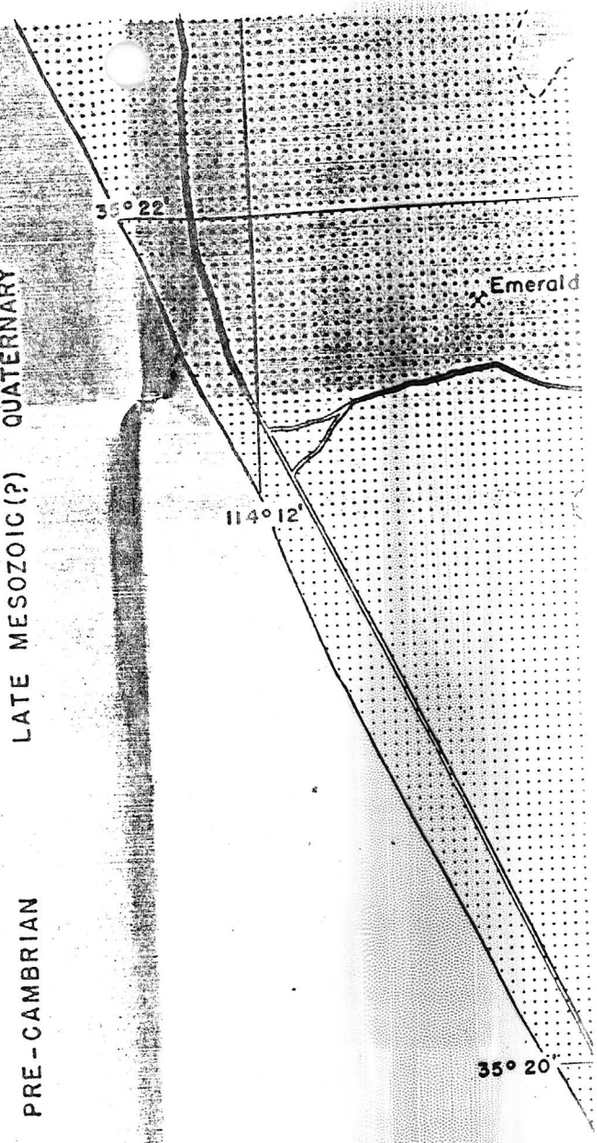
1/2 0 1 MILES

1943



Index Map





EXPLANATION

QUATERNARY

Alluvium

LATE MESOZOIC (?)

Gabbro

Granite

PRE-CAMBRIAN

Chiefly gneissoid granite (also includes some pegmatite, schist and gneiss)

Amphibolite (also includes minor bodies of hornblende schist, biotite schist, chlorite schist and diorite gneiss)

70

Rhyolite dike, showing dip

75

Intermediate to basic dike, showing dip

80

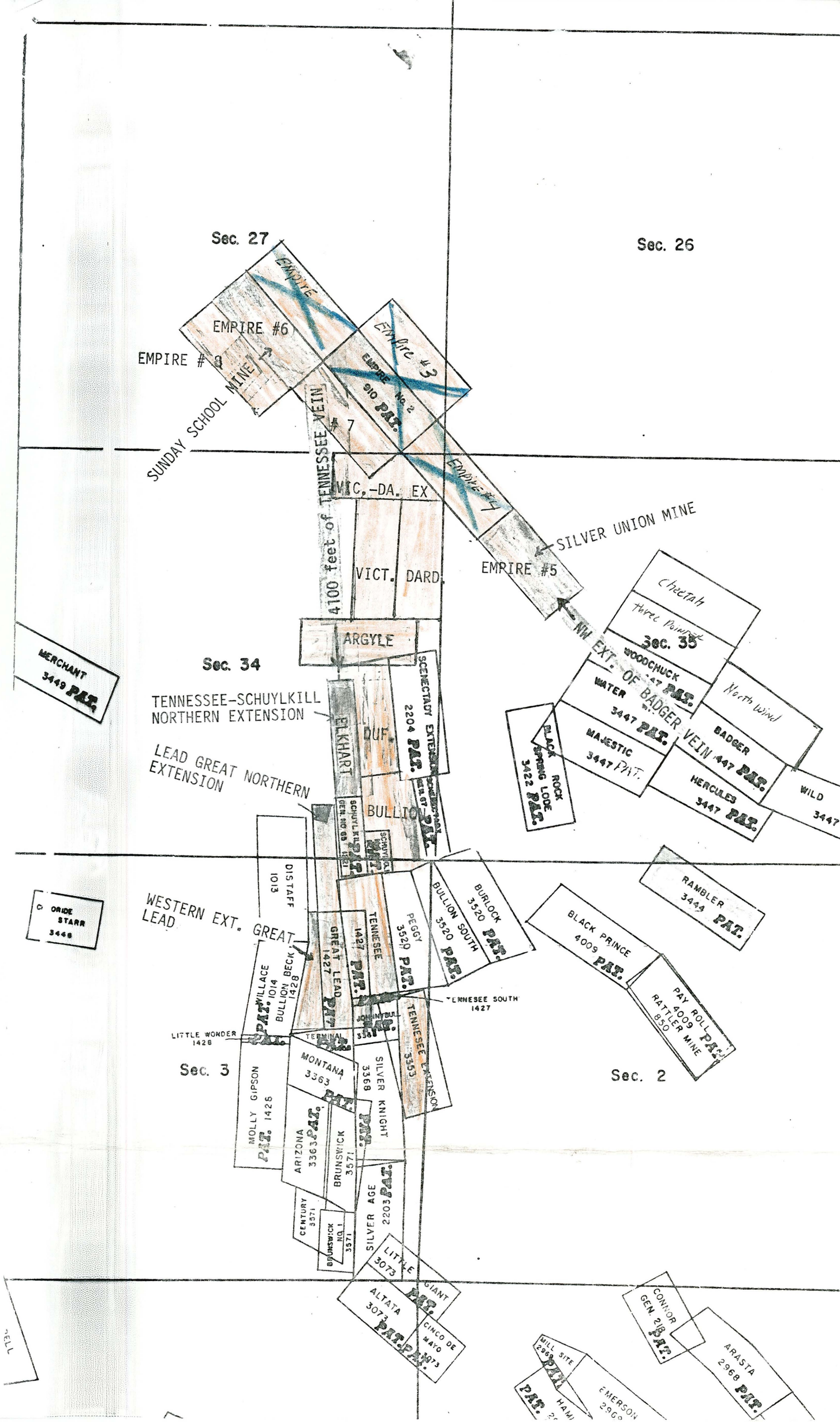
Vein, showing dip

Vein with vertical dip

Fault

Mine

Open pit turquoise mine


Sec. 27
Sec. 26
EMPIRE #6
EMPIRE #8
SUNDAY SCHOOL MINE
EMPIRE #3
EMPIRE No. 2
910 PAT.
TENNESSEE VEIN #7
VIC.-DA. EX
4100 feet of
VICT. DARD.
SILVER UNION MINE
EMPIRE #5
NW EXT. OF BADGER VEIN
Cheetah
Three Points
Sec. 35
WOODCHUCK
WATER
3447 PAT.
North Wind
BADGER
3447 PAT.
MAJESTIC
3447 PAT.
HERCULES
3447 PAT.
WILD
3447
BLACK SPRING LODE
ROCK
3422 PAT.
MERCHANT
3449 PAT.
ARGYLE
Sec. 34
TENNESSEE-SCHUYLKILL
NORTHERN EXTENSION
ELKHART
DUF.
SCENECTADY EXTENSION
2204 PAT.
LEAD GREAT NORTHERN
EXTENSION
BULLION
DISTAFF
1013
WESTERN EXT. GREAT
LEAD
GREAT LEAD
1427
TENNESSEE
1427 PAT.
PEGGY
3520 PAT.
BULLION SOUTH
3520 PAT.
BURLOCK
3520 PAT.
RAMBLER
3444 PAT.
BLACK PRINCE
4009 PAT.
PAY ROLL
4009 PAT.
RATTLER MINE
850
TENNESSEE SOUTH
1427
WILLACE
1014
BULLION BECK
1428
LITTLE WONDER
1428
TERMINAL
3588
TENNESSEE EXTENSION
3353
Sec. 3
Sec. 2
MONTANA
3363
SILVER KNIGHT
3368
MOLLY GIPSON
1426
ARIZONA
3363 PAT.
BRUNSWICK
3571
CENTURY
3571
BRUNSWICK NO. 1
3571
SILVER AGE
2203 PAT.
LITTLE GIANT
3073
ALTATA
3073 PAT.
CINCO DE MAYO
3073
CONNOR
GEN. 218 PAT.
ARASTA
2968 PAT.
MILL SITE
2968 PAT.
EMERSON
2968
PAT.