



CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
520-770-3500
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

The following file is part of the

Reconstruction Finance Corporation Arizona Records

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

RECONSTRUCTION FINANCE CORPORATION
MINING DIVISION
REPORT OF SUPERVISING ENGINEER

Docket No: ND-6121
Applicant: W. L. Black
Date Authorization for
Examination Received: Feb. 18, 1946
Date of Examination: Feb. 20-21, 1946
Date of Report: March 4, 1946

1. NAME AND ADDRESS OF APPLICANT:

W. L. Black
P. O. Box 1028
Globe, Arizona

Correspondent: Same

2. CHARACTER OF PROJECT:

To develop lead, gold, silver property by sinking 50 feet and drifting 200 feet.

3. LOCATION OF MINE:

Probably in Section 10, T. 2 S., R. 15 E., Old Pioneer Mining District, Gila County, Arizona. On the Globe Quadrangle sheet the mine is approximately one mile south of Pinal Peak. The nearest railroad station is Globe, Arizona, approximately 15 miles by forest service road - good only in summer months. During the rest of the season the property is accessible via Dripping Springs Valley, approximately 45 miles. However the mine is about one mile by trail from camp and is accessible only by walking or riding horseback.

4. APPLICANT:

Mr. Black is about 40 years of age, and has worked as miner and contractor for some twenty years. He was the contractor that drove the Ord Mercury adit (Docket No. B-ND-4804). When contracting Mr. Black is an industrious chap and can do a good job, but it appears that he is rather lazy when working for himself.

5. LOAN REQUESTED:

\$4,000.00.

6. DESCRIPTION OF PROJECT:

A. General Features:

1. Applicant owns by right of location three unpatented mining claims and has been working these claims continuously for over one year. He has also equipped the property for continued operation. There are no other mine workings which are not confined within applicant's ownership.
2. Applicant has complied with state compensation and safety-first statutes and will comply on proposed project.

6. DESCRIPTION OF PROJECT:

- A. 3. No legal discrepancies.
4. Unimpeded right-of-way facilities for all operations.
5. No likelihood of surface or sub-surface trespass.

B. Existing Development:

1. Tunnel and underground shaft:

- a. Applicant has driven a 140 foot adit tunnel, 40 feet of crosscutting, 47 feet of underground shaft, and 150 feet of drifting on the 50 foot level. All these workings are represented on attached map. The workings were surveyed by compass and tape.

b. Sampling and assay data:

All samples were cut across the width of ore. No waste was added.

Sample No. 1 was cut across 4.5 inches of ore exposed in hanging wall streak. It consisted of 3 inches massive sulfide and 1.5 inches of quartz. Assay gave .96 oz. gold, 1.8 oz. silver, 1.3% copper, 21.76% lead and 6.65% zinc.

Sample No. 2 was cut across 9 inches of massive sulfide in foot wall streak. Appeared to be massive sphalerite and galena, no quartz. Assay gave 1.04 oz. gold, 2.6 oz. silver, 1.4% copper, 5.51% lead and 10.95% zinc.

Sample No. 3 was cut farthest east in drift, just before caved area and across 6 inches of massive sulfide, chiefly sphalerite and galena. Quartz stringers on outer edges of sulfide ore. Scattered pyrite and chalcopyrite. Assay gave 1.16 oz. gold, 3.2 oz. silver, .80% copper, 18.49% lead and 9.75% zinc.

Sample No. 4 cut in roof across 16 inches of shattered quartz with scattering of sulfides. Assay gave .60 oz. gold, 1.20 oz. silver, .75% copper, 1.15% lead and 2.35% zinc.

Sample No. 5 was cut across 26 inches of shattered quartz with scattering of sulfides, appear to be mostly pyrite. Assay gave .88 oz. gold, .70 oz. silver, .30% copper, 1.02% lead and .40% zinc.

Sample No. 6 was cut across 14 inches of massive sulfide ore 2 feet below floor of drift. Streak of ore was left in underhand stope 3 feet above floor of stope. Galena and sphalerite with pyrite. Assay gave 1.38 oz. gold, 4.3 oz. silver, 1.5% copper, 15.91% lead and 8.0% zinc.

6. DESCRIPTION OF PROJECT:

B. 1. b. Sample No. 7 was cut across 8 inches of massive sulfide ore 3 feet below floor of drift in underhand stope. Assay gave 1.84 oz. gold, 3.8 oz. silver, 1.6% copper, 11.08% lead and 4.05% zinc.

Sample No. 8 was cut across 15 inches of massive sulfide ore exposed in roof of drift. Assay gave 1.02 oz. gold, 5.4 oz. silver, 1.2% copper, 25.03% lead and 8.05% zinc.

Sample No. 9 was cut across 8 inches of massive sulfide ore exposed in roof. Appeared to consist mostly of sphalerite. Assay gave .92 oz. gold, 10.90 oz. silver, 1.25% copper, 38.62% lead and 14.45% zinc.

c. Condition and accessibility of mine workings:

The adit tunnel and shaft are in good working condition, but both ends of the drift on the 50 foot level are caved and will need cleaning out. Since most of the lower level is timbered, it is likely that the proposed deeper workings will need timbering too.

d. General features of deposit:

The ore deposit is about 1000 feet lower in elevation and approximately one mile south of Pinal Peak on the ridge that extends to Pioneer Basin.

The prevailing rock is the Madera diorite, a coarse grained, light grey intrusive rock. It intrudes the Pinal schist and in this area has almost completely engulfed the schist except for a few scattered roof pendants. The ore deposit to be described is in contact with one of these roof pendants.

The Pinal schist consists of schistose igneous material, quartzite beds and thin layers of conglomerate. However the Pinal schist, of the roof pendants containing the ore deposits, consists entirely of schistose quartzites that are standing on edge.

The intrusive of the diorite into the Pinal schist has caused some contact metamorphism as a number of areas showing epidote rock were observed along the trail. At the property, however, no contact metamorphism was observed, and from evidence seen underground the 35 to 40 foot thickness of Pinal schist appears as a downfaulted segment into the diorite. The ore is also associated with the faulting and is therefore later than the diorite and subsequent faulting; although quite likely it is the result of the diorite intrusion as there appear no later intrusive rocks in the area.

At the portal of the adit the ore consists of a narrow quartz stringer about 1.5 inches thick and drusy. The sulfides have been oxidized away, but apparently the gold has remained. On top of the ridge an open cut shows some

6. DESCRIPTION OF PROJECT:

- B. 1. d. lead carbonate with the quartz stringers. From the portal of the adit to the underground shaft the quartz stringer widens and pinches and shows little sulfide mineralization. The applicant sank the shaft 47 feet and about 15 feet from the 50 foot level struck a narrow streak of high grade sulfide ore. Drifting on this ore shows that it narrows and widens and twists in strike and dip. However, the high values continue as long as quartz or sulfide ore are present, as indicated by the sampling. The average width of the ore is about 1 foot and the length of the ore shoot 100 feet. The massive sulfide ore meanders in an altered fault zone about 4 feet in thickness.

The minerals consist of abundant galena and sphalerite with minor amounts of pyrite and chalcopyrite. Gangue minerals are quartz and a little carbonate, probably calcite. Precious metals include gold, which is rather high grade, and silver, which is rather low grade. The gold values are a little less in the quartz ore than in the sulfides. It may be associated with the galena.

C. Proposed Development:

1. Applicant proposed in his application to drive a 600 foot tunnel to get under the lowest workings. The greatest depth would be about 50 feet. After looking over the area, it would appear that the proposed tunnel might be as much as 1000 feet long. Therefore the applicant has abandoned that program and amends his application for a loan of \$6000.00 to drive a tunnel, to a loan of \$4000.00 to sink 50 feet in the shaft and drive 200 feet of drifts.
2. Expected capacity of operations:
 - a. Mining, 1 ton per day.
 - b. Drift development, 2 feet per day.
 - c. Local wage scale, prevailing for Globe district. However, applicant works only one Indian besides himself.

D. Equipment:

1. On property includes:

Portable air compressor, good shape.
Jackhammer
Air hoist and buckets
Mine car
300 feet track
200 feet water pipe
200 feet air pipe

2. Supplies recommended for purchase:

Additional track, pipe, steel, timber, tents and machinery repairs.

6. DESCRIPTION OF PROJECT:

E. Cost Estimations:

1. Mining	\$ 8.00 per ton
2. Development	8.00 per ton
3. Hauling	3.50 per ton
4. Freight	2.60 per ton
5. Smelter treatment	6.10 per ton
6. Total Cost Per Ton	\$28.20

F. Ore Reserves:

Nine samples were cut along a 100 foot length to estimate the grade of ore. The average grade and width of ore was estimated as follows:

No.	Width	Au.	In. x Au.	Ag.	In. x Ag.	Cu.	In. x Cu.	Pb.	In. x Pb.	Zn.	In. x Zn.
1	4.5"	.96	4.32	1.8	8.1	1.3	5.85	21.76	97.92	6.65	29.93
2	9"	1.04	9.36	2.6	23.4	1.4	12.60	5.51	49.59	10.95	98.55
3	6"	1.16	6.96	3.2	19.2	.8	4.80	18.19	110.88	9.75	58.50
4	16"	.60	9.60	1.2	19.2	.75	12.00	1.15	18.40	2.35	37.60
5	26"	.88	22.88	.7	18.2	.3	7.80	1.02	26.52	.40	10.40
6	14"	1.38	19.32	4.3	60.2	1.5	21.00	15.91	222.74	8.0	112.0
7	8"	1.84	14.72	3.8	30.4	1.6	12.8	11.08	88.64	4.05	32.40
8	15"	1.02	15.30	5.4	81.0	1.2	18.0	25.03	375.45	8.05	120.75
9	8"	.92	7.36	10.9	87.2	1.25	10.0	38.62	308.96	11.45	115.60
	<u>106.5"</u>		<u>109.82</u>		<u>346.9</u>		<u>104.85</u>		<u>1299.10</u>		<u>615.73</u>

Average width: $\frac{106.5}{9} = 11.8$ inches

Average gold: $\frac{109.82}{106.5} = 1.03$ ounces

Average silver: $\frac{346.9}{106.5} = 3.25$ ounces

Average copper: $\frac{104.85}{106.5} = .98\%$

Average lead: $\frac{1299.10}{106.5} = 12.2\%$

Average zinc: $\frac{615.73}{106.5} = 5.78\%$

Applicant intends to ship this ore to the lead smelter of the American Smelting and Refining Company of El Paso, Texas. Based on returns of similar ore shipped by Edwin F. Rippey, Docket No. ND-5530, the applicant will receive the following smelter value.

Gold - 1.03 oz. @ 32.81825	88625	\$33.80	33.80
Silver - 3.25 oz. less .5 oz = 2.75 oz. @ .69125		1.90	244
Lead - 12.2% less 1.5% = 10.7% x 90% x .05079		9.65	15.22
Copper - no pay			
Zinc - no penalty (less than 6%)			
Total payment for metals:		\$45.35	51.46

6. DESCRIPTION OF PROJECT:

F.	Total payment for metals:	\$45.35	57.46
	Total smelter deductions	<u>6.10</u>	6.10
	Net value per ton	\$39.25	45.36
			22.10
			<u>23.26</u>
 Costs:			
	Mining and development	\$16.00	
	Hauling	3.50	
	Freight	<u>2.60</u>	
	Total Costs	\$22.10	22.10
	Net profit:		\$17.15

Applicant should develop in a 50 foot depth, a 100 foot length of ore and one foot thickness, 550 tons of the above estimated value. Thus the applicant should receive approximately \$9400.00, more than enough to repay the loan. In addition, the applicant has between 30 and 40 tons of ore on the dump which should bring around \$1000.00 net as the mining has already been done.

7. EMPLOYMENT:

Applicant, his wife and one Indian have been working off and on the past year but at present only the applicant has been working. If the loan is granted, the applicant will rehire the Indian he had and possibly one other. They expect to work only on shift per day.

8. OBJECTIONS TO PROJECT:

There appear to be no objections to this project unless the deposit is classified as being too small and in an out-of-way place. A road is not feasible to build as it would take about two miles from Pioneer Pass.

9. COMMENTS OF SUPERVISING ENGINEER:

The applicant is an individual who has been working his three unpatented mining claims in a small way the past year. He has driven an adit tunnel, sunk a 47 foot shaft, drifted about 200 feet and mined between 30 and 40 tons of lead-gold ore. He owns a truck, two horses, two burros and all the equipment on the property. Also he has established a camp about one mile from the mine.

The ore deposit is small, narrow and on top of a ridge. It is accessible only by trail and all ore mined must be packed out. However, sampling of the small ore shoot has indicated that the ore is high grade and higher than anticipated, judging from past experiences with such individuals.

Applicants original program was to drive a long tunnel to get under the ore at no greater depth than would be obtained in sinking a 50 foot shaft. Besides, after looking over the surface, there is no indication that a vein or any ore would be encountered driving the long tunnel until the shoot was reached.

Assays on the samples show an average value of \$45.35 per ton, and after the expense of mining, hauling, freight and smelter deductions, a net profit of \$17.15 per ton. I have estimated from a 50 foot depth that

W. L. Black
Docket No. ND-6121

Report of Sup. Engr.
March 4, 1946

9. COMMENTS OF SUPERVISING ENGINEER:

there would be 550 tons of ore developed, a sufficient amount to repay the loan with some profit. There is also the added possibility of more ore being developed than estimated, as well as the possibility of less.

No other deposits like this are found in the Pinal mountains. No comparisons can be made. It is assumed however that the ore is the result of the intrusion of the Madera diorite into the Pinal schist, and thus pre-Cambrian in age.

From the data available it is recommended that the applicant be given consideration for a loan of \$4,000.00.

CAR:gmk

Attachments:
Assay Certificate
Map.

car
CHARLES A. RASOR
Supervising Engineer

CAR

RECONSTRUCTION FINANCE CORPORATION
MINING SECTION
PROGRESS REPORT

Borrower: W. L. BLACK
Docket No: ND-6121
Date of Visit: July 9, 1947
Date of Report: July 15, 1947

Since my last report, the Borrower has hauled down from the mine by burros 15 tons of ore. Borrower has cross-cut into hanging wall 15 feet and into foot wall approximately 30 feet to see if other vein exposed on surface had any mineralization. Only granitic rocks were encountered. At present the borrower intends to sink the winze down another 10 feet. If the vein does not widen, he expects to mine out the ore supporting the winze. There is probably 15 tons of ore supporting the winze, and when this is mined and shipped he expects to close up and return what money will be available after returns from the shipment.

CHARLES A. RASOR
Supervising Engineer

CAR:gmk

RECONSTRUCTION FINANCE CORPORATION
MINING SECTION
PROGRESS REPORT

Borrower: W. L. Black
Docket No: ND-6121
Date of Visit: May 6, 1947
Date of Report: June 2, 1947

My last report on the progress of this operation pointed out the width and grade of ore developed on the lowest level. Since then the Borrower has shipped a short car of ore from stoping operations. The gross value per ton on the 30-ton lot was \$92.41, a rather high figure. This figure was cut into sharply by steep penalties for zinc and sulphur. The original sampling showed a zinc content less than 6 percent, an amount not subject to penalties. However, the ore when shipped assayed 22 percent zinc. The next shipment of ore, which the Borrower is now mining, will be sent to the Eagle Picher mill south of Tucson. The hauling of this ore may amount to \$10.00 a ton, but the payments for zinc will more than pay for the hauling costs, and in addition there will be a saving of over \$6.00 a ton on freight.

The attached map shows the workings up-to-date. Borrower is mining ore from the block next to the shaft. Every evening when he comes off the mountain, he loads four burros with ore. A loading ramp has been built at the end of the road where the burros are unloaded. Here he weighs one or two loads on a platform scale to estimate the amount of ore hauled down. I attempted to get the Borrower to do this before, but apparently he did not see the light until after he started packing off the first car load of ore. He found that the burros could stand about two trips per day.

The Borrower has about 5 or 6 tons of ore on the platform toward his next shipment. His next shipment may amount to 40 tons, and will probably be the last. Although there is ore in the floor on the lowest level and the grade about normal, the width is too narrow and the vein dipping too flat for economical development.

The Borrower has employed only one other person in addition to himself. After the last withdrawal request for \$445.00, there remains in the account \$1181.20. At his past and present rate, this will last for two more months, a sufficient time to get out another shipment of ore.

CHARLES A. RASOR
Supervising Engineer

CAR:gmk
Attachment:
Map

CAR

RECONSTRUCTION FINANCE CORPORATION
MINING SECTION
PROGRESS REPORT

Borrower: W. L. Black
Docket No: ND-6121
Date of Visit: May 16, 1946
Date of Report: May 20, 1946

I left Phoenix, Arizona, May 14, 1946, to visit the Borrower, but was unable to make the visit until May 16, as the automobile broke down going over the mountain to the property.

Borrower has sunk the winze 26 feet below the 50-foot level and has timbered 20 feet. The ore is in the hanging wall of the winze and appears consistent with the results of the original examination. Also, Borrower has cut a number of pine trees for posts and stalls.

Labor is unavailable at present. The Borrower and one Indian are doing all the work, but now and then the Borrower's wife goes up the hill to run the tigger hoist.

Another scarce item is timber. Borrower is unable to secure a load of lagging, but must depend on obtaining a few feet at the local lumber yard in Globe, Arizona, at eight cents a running foot. There are a number of sawmills north of Globe, but most of the lumber enters the black market. Truckers on their own obtain a load of lumber and then peddle it in Phoenix, Arizona, by driving up to a contractor's job where new homes are under construction. The highest bidder gets the lumber.

After one month of operation it appears that the Borrower will have no difficulty sinking the winze. The first four feet below the level were soft and required heavy timbering, but the walls are now firm.

In another month the winze should be down the required fifty feet, at which depth drifting will start.

CAR
CHARLES A. RASOR
Supervising Engineer

CAR:gnk

RECONSTRUCTION FINANCE CORPORATION
MINING SECTION
PROGRESS REPORT

Borrower: W. L. Black
Docket No.: ND-6121
Date of Examination: August 15, 1946
Date of Report: August 22, 1946

An examination of the Borrower's project was made to bring his operations up to date and to check on the underground workings. Borrower had stated after four months' operation that the ore was narrow and not up to grade was expected from the new development.

After four months' operations the Borrower has spent \$2032 approximately for the following items:

Labor (Borrower and one helper)	\$1337.00
Timber	275.00
Gas and Oil	160.00
Supplies	160.00
Mule Feed	100.00
	<u>\$2032.00</u>

During the four months period the Borrower has sunk and timbered 46 feet of underground shaft and has drifted 104 feet in both directions from the bottom of the shaft. (See attached map). All timber, gasoline and oil, and other supplies for operating the mine had to be packed in over a steep mountain trail of one mile. The total cost of the development thus has cost \$13.50 per foot, a reasonable figure and one which indicates that the Borrower has been working diligently. If the ore had only continued its average thickness of one foot the operation could be considered successful.

Six samples were taken underground and their positions are noted on the map. Beyond No. 193, samples were not taken as the vein was only 1" wide. A sample was also taken from the dump and represents ore taken from the shaft; the first 26 feet below the 50 foot level. I mentioned this ore in my first progress report.

Sample No. 198 was taken in west face of drift 22 feet from shaft across 5 inches of massive sulfide ore. It assayed 1.12 ounces gold, 2.1 ounces silver, 1.5% copper, 2.52% lead and 9.5% zinc.

Sample No. 189 was taken in the floor of the shaft and cut across 9 inches of sulfide and quartz ore. It assayed 1.22 ounces gold, 1.8 ounces silver, 5.6% copper, 5.1% lead and 5.35% zinc.

Sample No. 190 was taken in the roof about 10 feet east of shaft across 5 inches of sulfide ore. It assayed .86 ounces gold, 1.2 ounces silver, 4.95% copper, 3.26% lead and 9.2% zinc.

Sample No. 191 was taken in the roof of drift about 20 feet east of shaft across 12 inches of soft quartz, gouge and pyritic ore. It assayed .36 ounces gold, .40 ounces silver, .65% copper, 1.36% lead and 2.4% zinc.

W. L. Black
Docket No. ND-6121

Progress Report
August 22, 1946

Sample No. 192 was taken in roof of drift about 32 feet east of shaft across 10 miles of quartz, gouge and pyritic mineralization. It assayed .12 ounces gold, .30 ounces silver, no copper, no lead and 1.65% zinc.

Sample No. 193 was taken in the roof of the drift about 45 feet east of shaft across 5 inches of solid sulfide ore. It assayed 1.08 ounces gold, 1.7 ounces silver, 1.1% copper, 3.87% lead and no zinc.

A sample No. 194 was taken from ore on the dump that came out of the shaft the first 26 feet. It is really massive ore. It assayed 1.02 ounces gold, 13.6 ounces silver, 1.8% copper, 31.9% lead and 18.9% zinc.

These samples indicate that the gold averages about 1.0 ounce in the massive sulfide ore, but that the metals of copper, lead and zinc are more erratic. Also, the width of the ore has decreased considerably in sinking the 46 foot inclined shaft. There is a change in dip of the shaft, which follows the vein, at the 26 foot depth. This far down the vein averaged its normal width of 12 inches, but below the change in dip the vein is about 5 inches wide.

Borrower will continue drifting west the rest of this month on funds from withdrawal request No. 5.

If no better ore is indicated, the Borrower intends to put in shoots and mine out the ore. There is about 60 tons of high grade ore on the dump and when this is increased to 100 tons the Borrower will hire a pack train to haul the ore to his camp, from which place he will have it trucked to Globe for shipment to the El Paso smelter.

My original estimate of 550 tons is now cut down to about 250 tons, but the value of the ore has increased about \$6.00 per ton over my original estimate because of an increase in price of silver and lead. The gross value of the ore is now approximately \$1.50 per ton without any premiums. I believe the Borrower can net about \$23.00 per ton and repay the loan.

Cor
CHARLES A. BASOR
Supervising Engineer

Attachments:
Assay Certificate
Map

ARIZONA TESTING LABORATORIES

ANALYTICAL AND CONSULTING CHEMISTS
ASSAYERS, MINING ENGINEERS

823 EAST VAN BUREN STREET

ASSAY CERTIFICATE

August 19

194

M F. C. A. Rasor, Supervising Engineer, Inc.,
325 Heard Building,
Phoenix, Arizona

PHOENIX, ARIZONA,

WE HAVE ASSAYED THE SAMPLES RECEIVED FROM YOU AND FIND THE RESULTS AS FOLLOWS:

GOLD FIGURED AT \$ 55.00 PER OUNCE.

SILVER FIGURED AT \$ 0.90 PER OUNCE.

LAB. FORM 2

LAB. NO.	SAMPLE	GOLD		SILVER		PERCENTAGES		
		OZ. PER TON	VALUE	OZ. PER TON	VALUE	COPPER	LEAD	
61419	#188	1.12	\$59.20	2.10	\$1.89	1.50%	2.52%	9.50%
20	#189	1.22	42.70	1.80	1.62	5.60%	5.10%	5.35%
21	#190	0.86	50.10	1.20	1.08	4.95%	3.26%	9.20%
22	#191	0.56	12.60	0.40	0.36	0.65%	1.36%	2.40%
23	#192	0.12	4.20	0.30	0.27	None	None	1.65%
24	#193	1.08	57.80	1.70	1.53	1.10%	3.87%	None
25	#194	1.02	55.70	15.60	12.24	1.80%	31.90%	18.90%
	W. L. Black ND 6121							

RESPECTFULLY SUBMITTED,

ARIZONA TESTING LABORATORIES

BY

Claude E. McLean

ASSAYER

CHARGES \$ 28.00

ARIZONA TESTING LABORATORIES

ANALYTICAL AND CONSULTING CHEMISTS
ASSAYERS, MINING ENGINEERS
823 EAST VAN BUREN STREET

ASSAY CERTIFICATE

M. F. C. A. Hasor, Supervising Eng. RPC., PHOENIX, ARIZONA, February 26 1946
325 Heard Building,
Phoenix, Arizona

WE HAVE ASSAYED THE SAMPLES RECEIVED FROM YOU AND FIND THE RESULTS AS FOLLOWS:

GOLD FIGURED AT \$ 36.00 PER OUNCE.

SILVER FIGURED AT \$ 0.70 PER OUNCE.

LAB. FORM 2

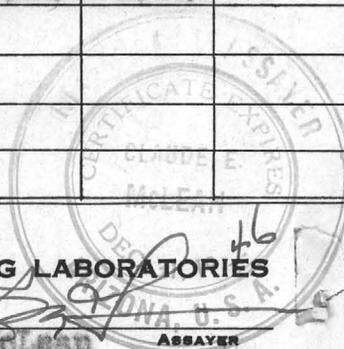
LAB. NO.	SAMPLE	GOLD		SILVER		PERCENTAGES		
		OZ. PER TON	VALUE	OZ. PER TON	VALUE	COPPER	LEAD	ZINC
59652	#1 4.5"	0.96	35.60	1.80	1.26	1.50%	21.76%	6.65%
53	#2 9" streak	1.04	36.40	2.60	1.82	1.40%	5.51%	10.95%
59654/3	6" streak	1.16	40.60	3.20	2.24	0.80%	18.49%	9.75%
55	#4 16" streak	0.60	21.00	1.20	0.84	0.75%	1.15%	2.35%
56	#5 26" Qtz ore	0.88	30.80	0.70	0.49	0.50%	1.02%	0.40%
57	#6 14" sulphide	1.38	48.30	4.30	3.01	1.50%	15.91%	8.00%
58	#7 8" "	1.84	64.40	3.80	2.66	1.60%	11.08%	4.05%
59	#8 15" streak	1.02	35.70	5.40	3.78	1.20%	25.03%	8.05%
60	8" streak 6" sulphide	0.92	32.80	10.90	7.63	1.25%	38.62%	14.45%
	W. L. Black Docket B-535 Phoenix							

RESPECTFULLY SUBMITTED,

ARIZONA TESTING LABORATORIES

BY Claude E. McLean ASSAYER

CHARGES \$ 36.00



No	width	Au		Ag		Cu		Pb.		Zn	
1	4.5"	.96	4.32	1.8	8.10	1.3	5.85	21.76	97.92	6.65	29.93
2	9"	1.04	9.36	2.6	23.4	1.4	12.60	5.51	49.59	10.95	98.55
3	6"	1.16	6.96	3.2	19.2	.8	4.80	18.49	110.88	9.75	58.50
4	16"	.60	9.60	1.2	19.2	.75	12.00	1.15	18.40	2.35	27.60
5	26"	.88	22.88	.7	18.2	.3	7.80	1.02	26.52	.40	10.40
6	14"	1.38	19.32	4.3	60.2	1.5	21.00	15.91	222.74	8.0	112.0
7	8"	1.84	14.72	3.8	30.4	1.6	12.8	11.08	88.64	4.05	32.40
8	15"	1.02	15.30	5.4	81.0	1.2	18.0	25.03	375.45	8.05	120.75
9	8"	.92	7.36	10.9	87.2	1.25	10.0	386.2	308.96	14.45	115.60
9	106.5		109.82		346.9		104.85		1299.10		615.73
	11.8	1.03		3.25		.98		12.2		5.78	

Thus the weighted average across 11.8 inches of ore is 1.03 oz gold, 3.25 oz silver, .98% copper, 12.2% lead and 5.78% zinc. This ore will be sent to the local smelter of the American Smelting and Refining Company at El Paso, Texas and on the basis of returns to Colonel F. Pappay, District No 14 D-5580 whose ore is similar, the applicant should receive the following smelter value.

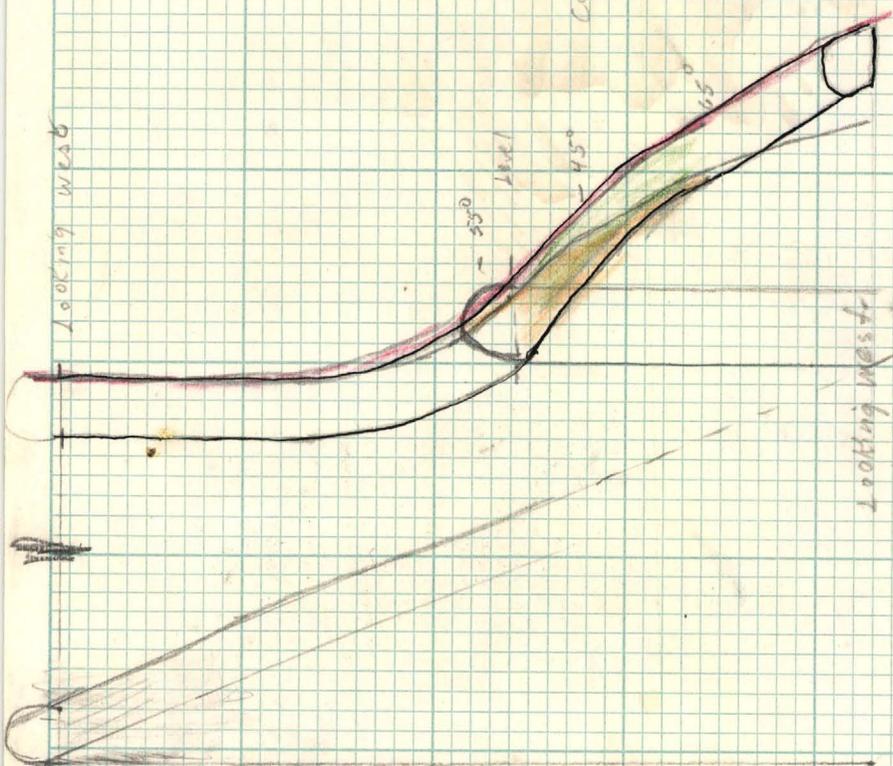
Gold, 1.03 oz at 32.81825	=	33.80
Silver 3.25 oz less .5 oz = 2.75 at .69125	=	1.90
Lead 12.2% less 1.5 = 10.7 x 90% x .05	=	9.65
Copper no pay		
		<u>\$ 45.35</u>
Total payment for metals	→	
Total smelter deductions		<u>6.10</u>
Net value per ton		\$ 39.25

Black
 May 16, 1946
 1" = 20'

Looking West

20' at 500

Contact between granite & shale
 and diposed with narrow of scum



Looking West

mostly
 1000's ft
 2000's
 3000's

NO 189
 4' granite

NO 190

NO 191

NO 192

NO 193

send blank
 sheets ahead

NO-188

N 67° 16'
 W 88° 39'
 5800 24
 77

Feb 20, 1946

Leaf 228 p. 17
Date 3/15/46
Leaves 5 1/2 S 8 1/2
Area 5 1/4 S 4 1/4

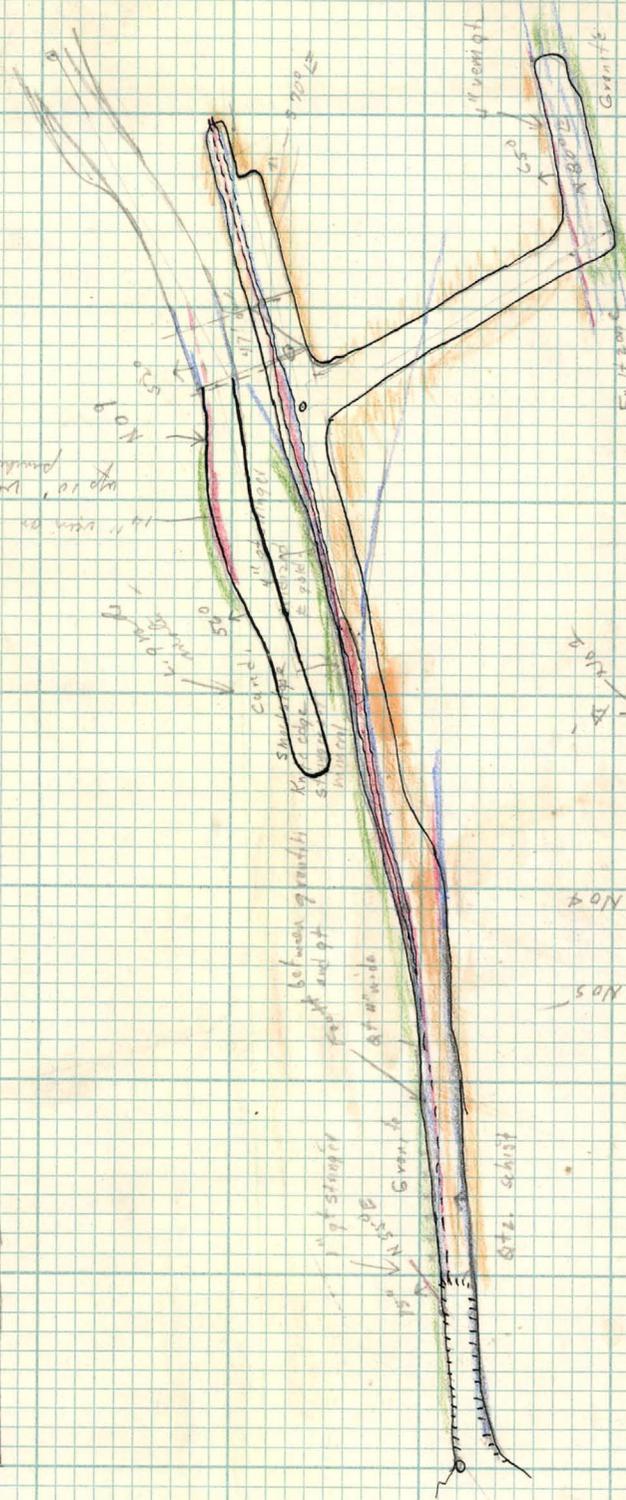
N600E 39'

14" vein on fault
up 10' vein fragment and on fault
possible and up 1'

N 85° E 58'
N 77° E 40'



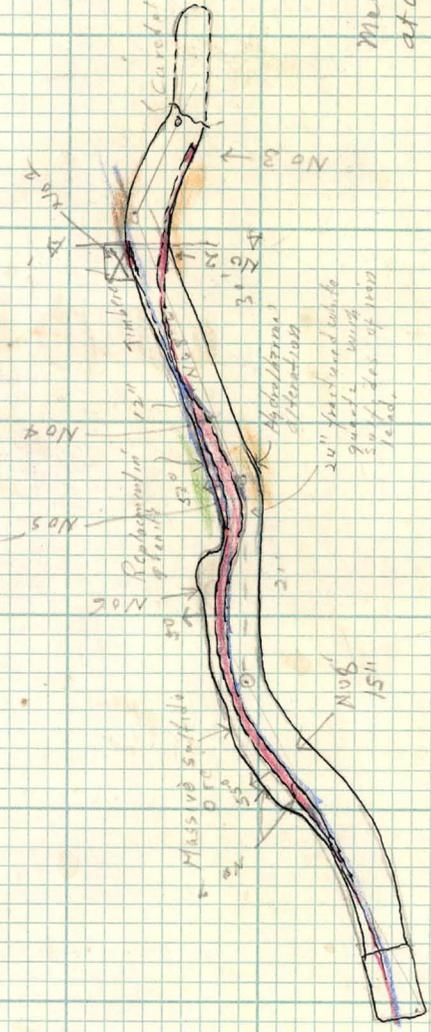
Microlog
Brown rosalia
Black Jack
Steel galena
pyrite matrix
chalcopyrite
cubic in
quartz in
trough where quartz
making most of vein



Fault zone has quartz
1/2 inch against quartz schist
and fault

May 4 1947

Medium Diorite under and quartz
at contact of diorite show is metamorphic
some of quartz and quartz
chlorite and dechloritization to coarse
brown sand away from contact
diabase products
on both diorite and quartz

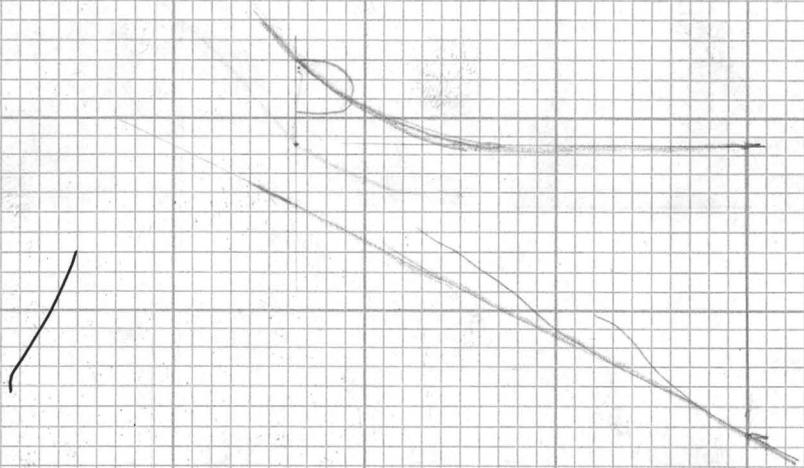


Feb 21 1946
4:30 PM
about 7:30 AM

W. L. Black

Feb 21, 1942

Map made by Sloan 1940
 From Camp at head of Pioneer
 Basin. Rock coarse grained
 hornblende granite that weathers
 to porous yellow soil that
 is dark colored. No thin
 old quartzite schists banded
 ribbon structure and cordlike
 joint schists. Some green
 epidote rock probably resulting
 from infiltration of granite
 at more old rocks down
 faulted into granite
 surface slope covered with
 granite boulders covering
 old rocks. Probably never
 open places up hill
 can follow contour between
 granite and old rocks
 west from mouth of tunnel
 cannot pick up formation
 that contains vein. Apparently
 the old rocks wedge out
 which follow the gully. Diagonal
 which form of yellow fossil
 contact between granite and old
 quartzite.
 E - vein traced on surface
 top of ridge 50' above
 base. Old rocks seen
 on surface between granite



No 1 4.5' width
 3" massive and fine
 1 1/2" medium grained
 schistose quartz
 with garnet and chlorite
 No 2 2" dark massive contact
 mostly schistose granite
 chlorite, quartz
 some mix of clay from 2.

No 3 6" massive yellow ore
 schistose - granite
 on boundaries sharp
 quartz and chlorite - scallier
 but schistose
 quantity as seen on rock
 ledge
 Agreement in color of ore
 zone

No 4 16" quartz ore shored
 from road. An magnet
 on 4. W.
 quartz ore with dark
 on 4. W. quartz and garnet
 in foliated bedding
 3' heavy schist

No 5 20" solid schistose steel
 schistose, green pyrite
 clay - 5' var. under hand
 slope 5' deep stream bed
 on wall from 11' to 12' dirt
 down -
 schist schistose ore

No 6 8" 11' below level of clay
 at walls level 4' or 5'
 few deep and below

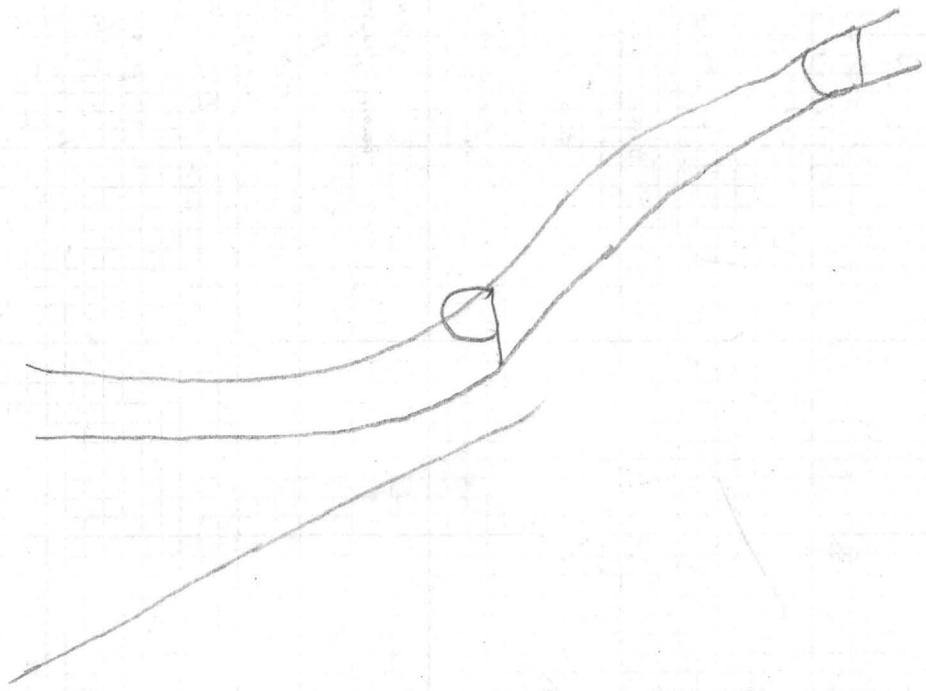
No 7 15" Roof above No 7
 9" rock pyrite 5' to 6'
 No 8 8' 10' width of schist

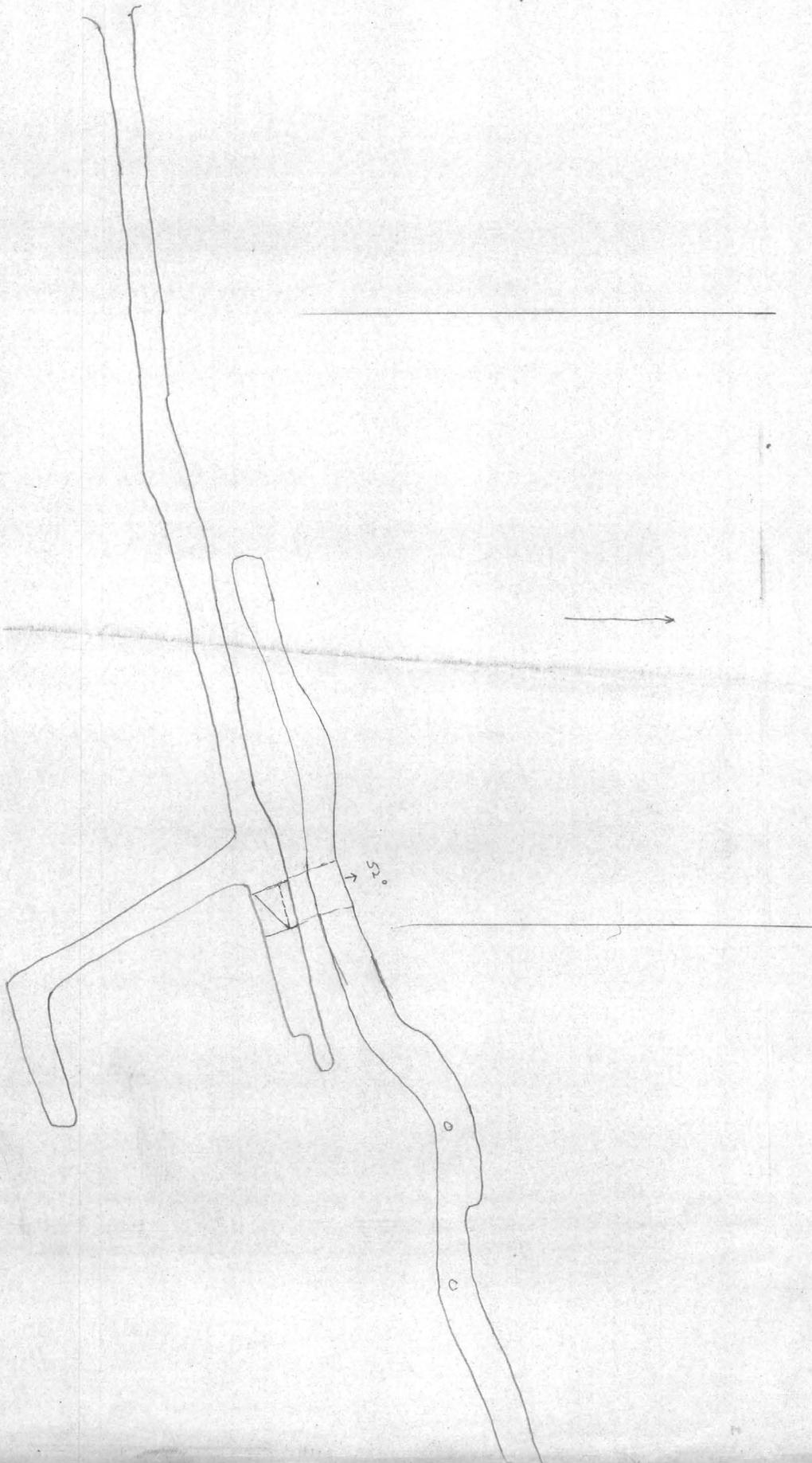
140 feet out -

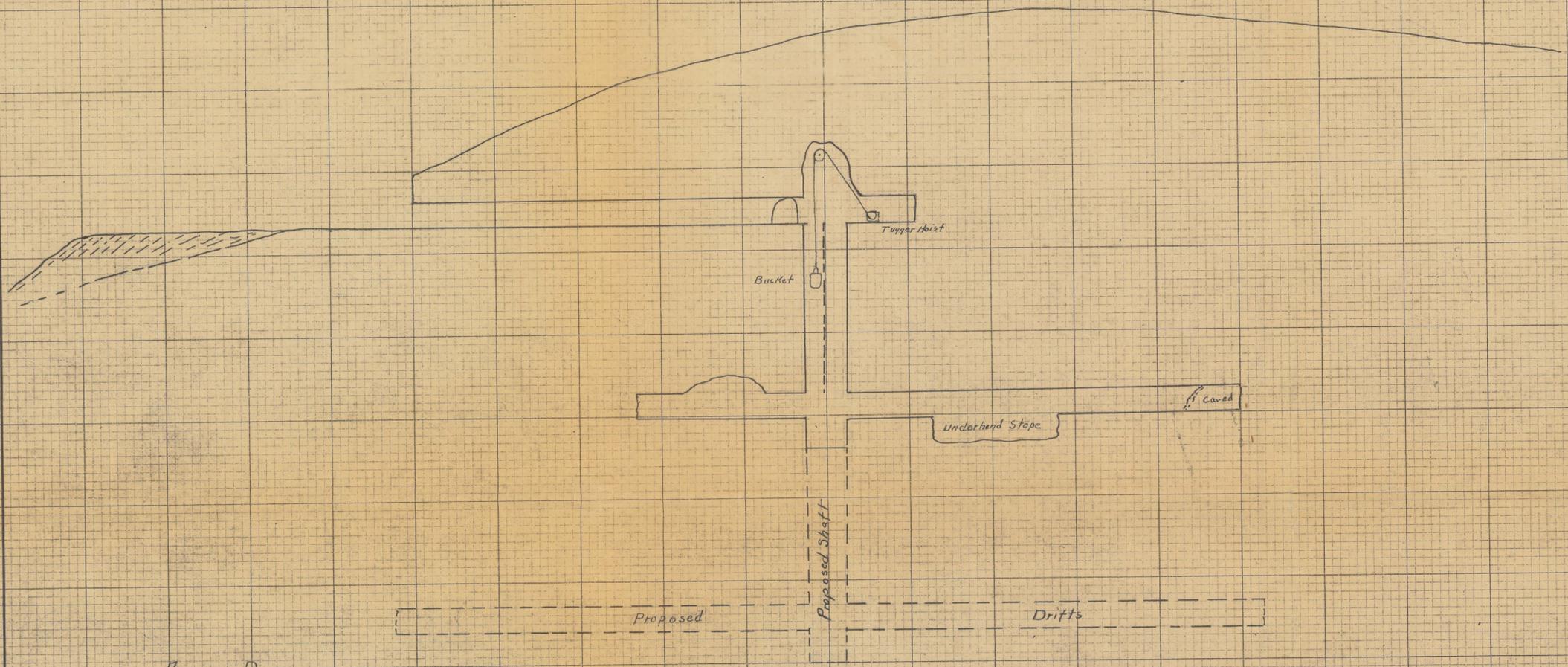
35 cross br.

47' winding

150



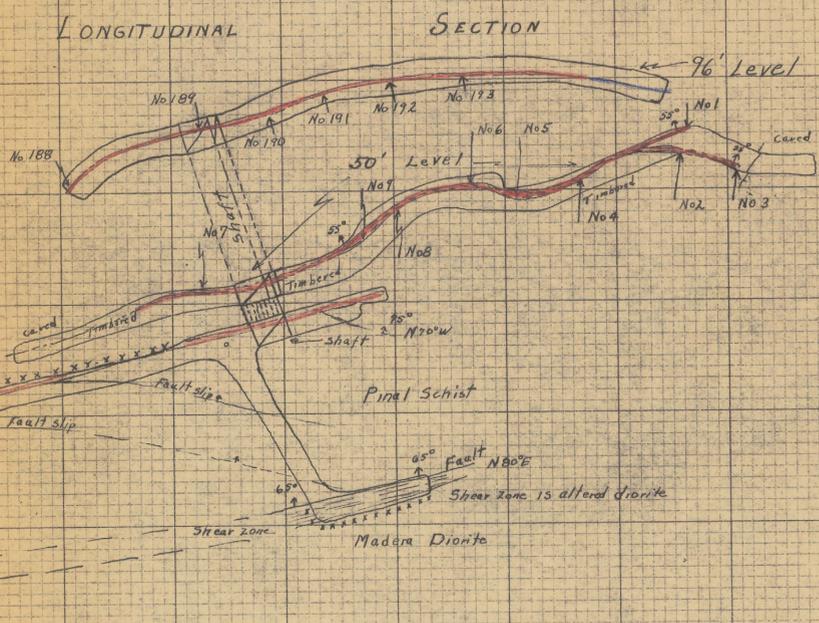




ASSAY DATA

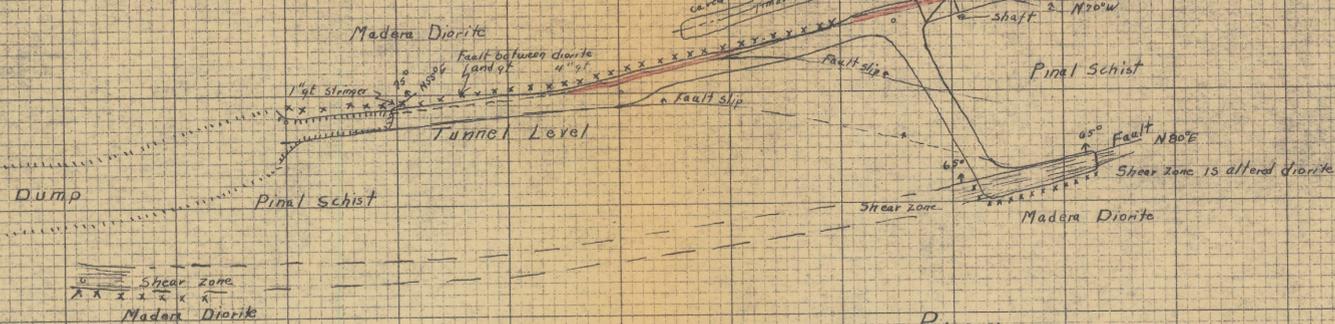
No	Width	Au oz	Ag oz	Cu %	Pb %	Zn %
No 188	5"	1.12	2.10	1.5	2.54	9.50
No 189	9"	1.22	1.80	5.60	5.10	5.35
No 190	5"	0.86	1.20	4.95	3.20	9.20
No 191	12"	0.36	0.40	0.65	1.36	2.40
No 192	10"	0.12	0.30	none	none	1.65
No 193	5"	1.08	1.70	1.10	3.87	none
No 194	Damp	1.02	13.60	1.80	31.90	18.90

Aug 15, 1946



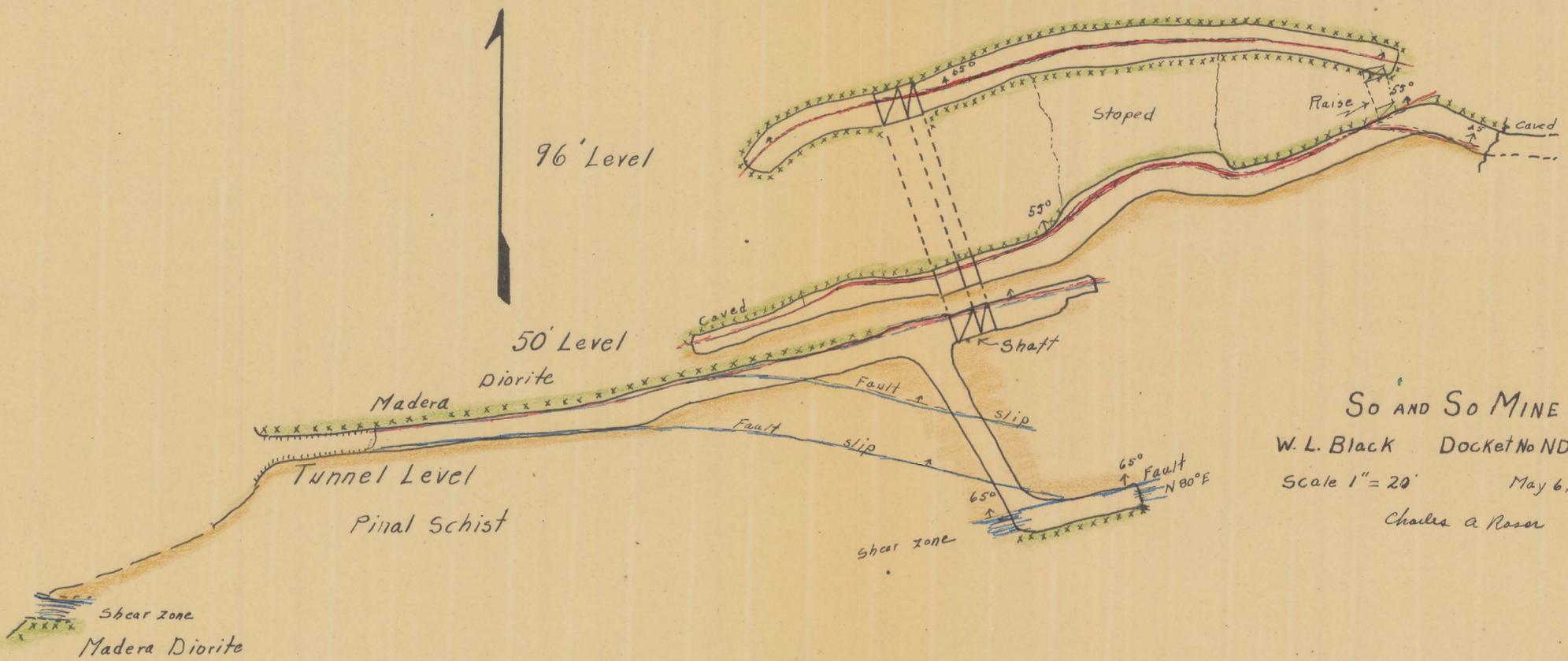
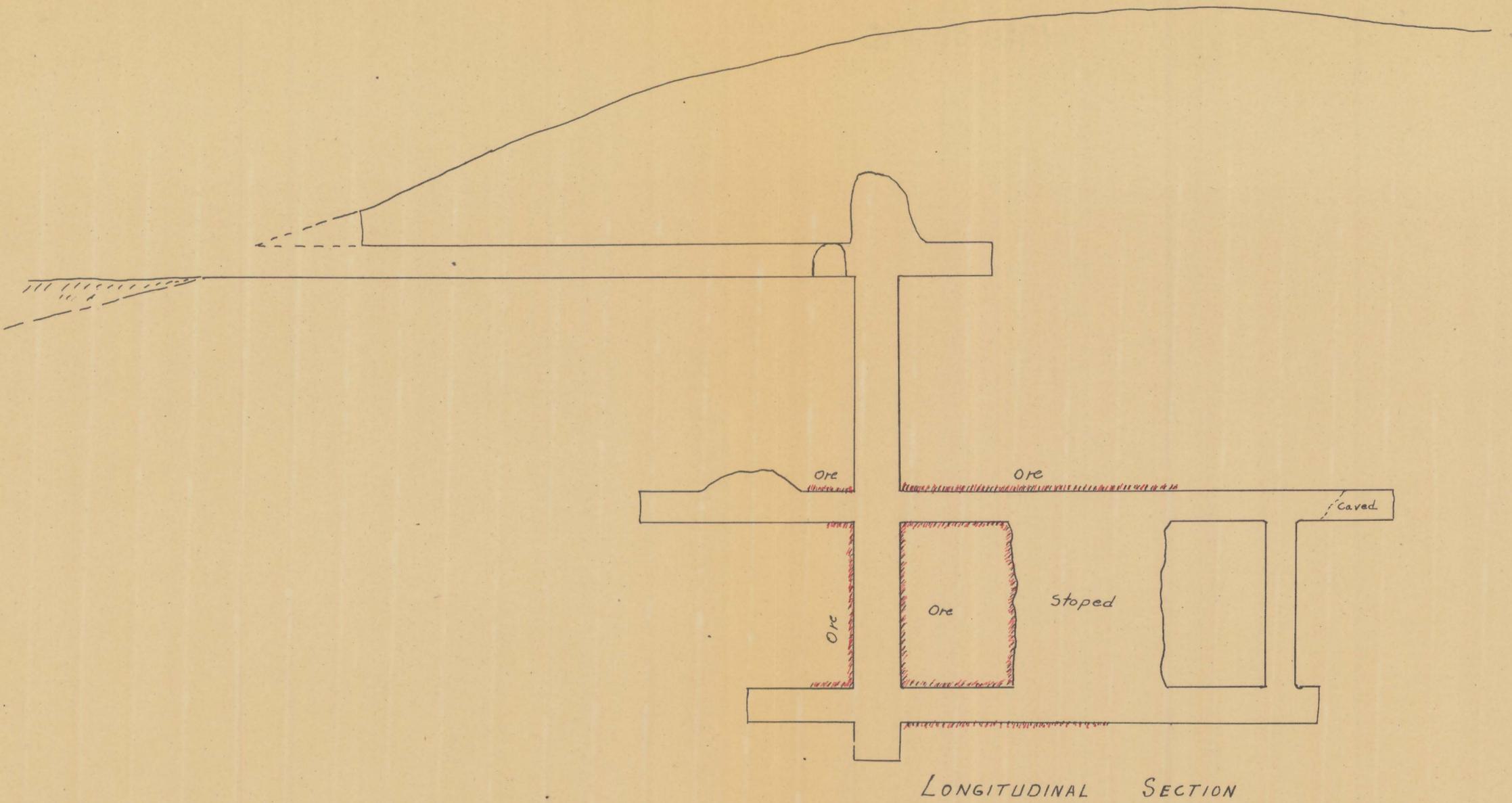
ASSAY DATA

No	Width	Au oz	Ag oz	Cu %	Pb %	Zn %
1	4.5"	.96	1.80	1.30	31.76	6.65
2	9"	1.04	2.60	1.40	5.31	10.95
3	6"	1.16	3.20	0.80	18.47	7.75
4	16"	0.60	1.20	0.75	1.15	2.35
5	26"	0.88	0.70	0.80	1.02	0.40
6	14"	1.38	4.30	1.50	15.91	8.00
7	8"	1.84	3.80	1.60	11.08	4.05
8	15"	1.02	5.40	1.20	35.03	8.05
9	8"	0.92	10.70	1.25	38.64	14.48

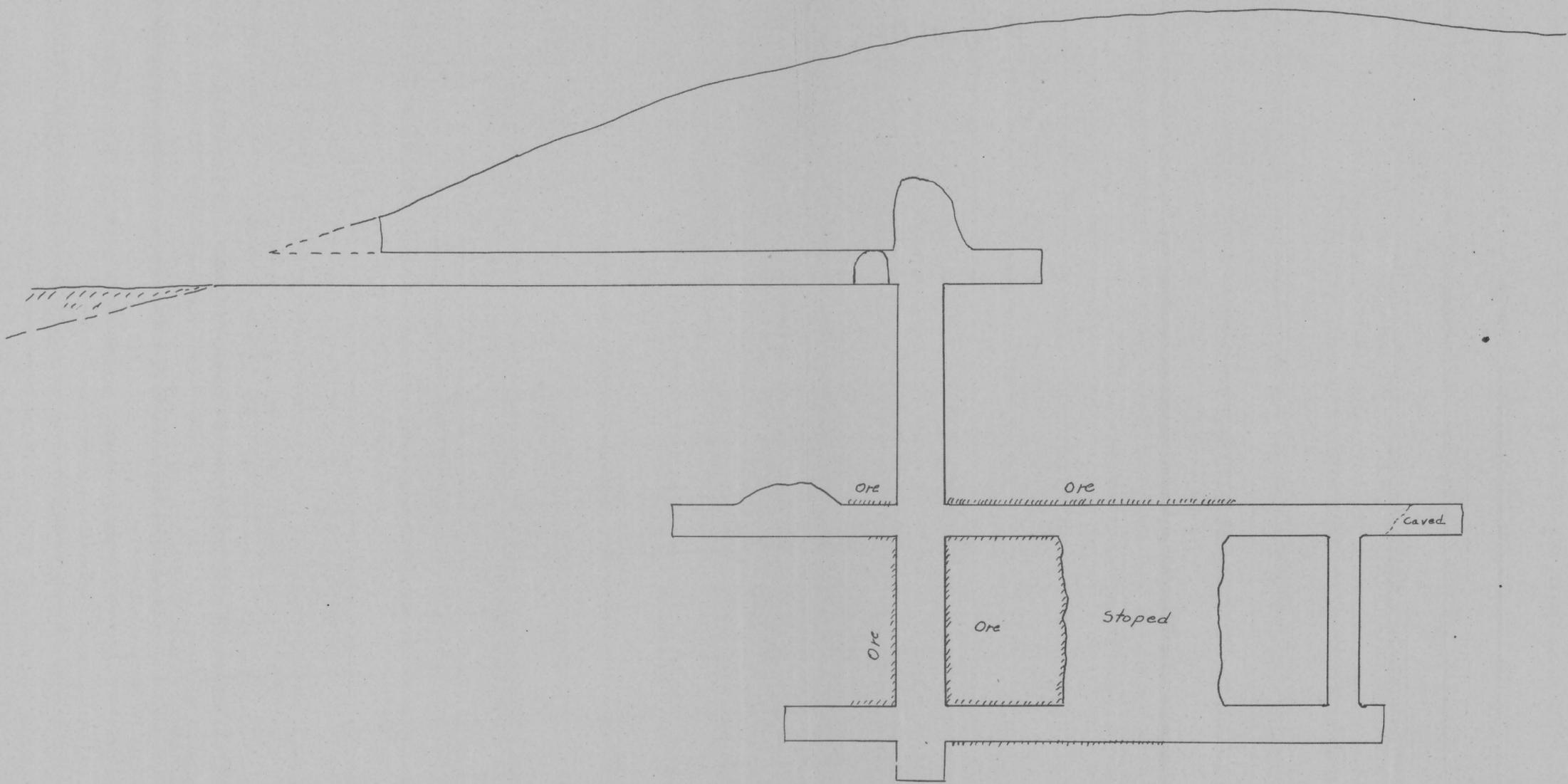


PLAN
 Scale 1" = 20'

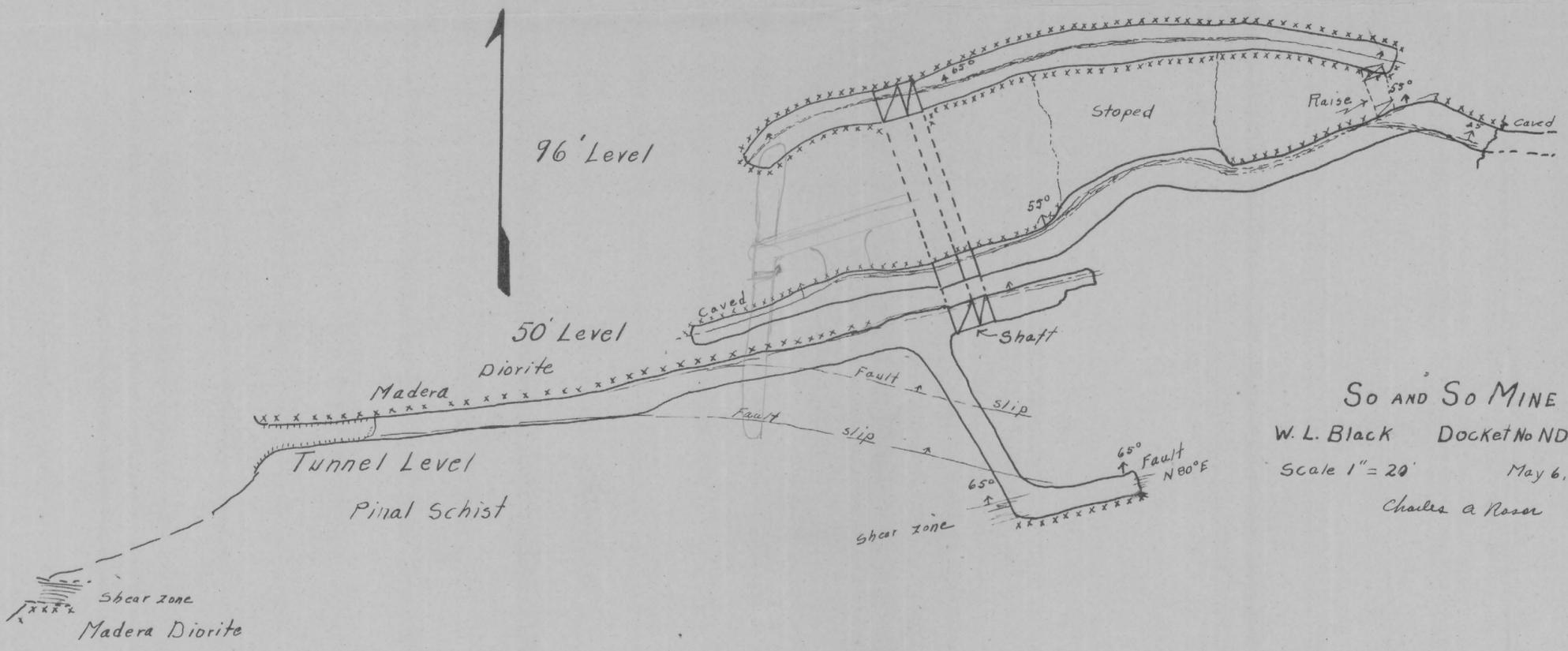
W. L. BLACK, DOCKET No ND-6121
 SCALE 1" = 20'
 FEBRUARY 20, 1946
 Charles A. Raas
 August 15 1946



SO AND SO MINE
 W. L. Black Docket No ND-6121
 Scale 1" = 20' May 6, 1947
 Charles A. Rosen



LONGITUDINAL SECTION



SO AND SO MINE
 W. L. Black Docket No ND-6121
 Scale 1" = 20' May 6, 1947
 Charles A. Ross