(77)
Item 3

4590 0003

RENO OFFICE
RECONSTRUCTION FINANCE CORPORATION
FIELD REPORT

Docket No. B-ND-4533
Date Application Received - September 21, 1942
Date of Field Examination - March 30 - 31, 1943
Date of Report - April 8, 1943

NAME AND ADDRESS OF APPLICANT

Eugene Parker
Wells, Nevada

Former address: Black Forest, Nevada.
(P.O. at Black Forest discontinued April 1, 1943.)

CHARACTER OF PROJECT

To rehabilitate and put under production a small lead-silver mine.

LOCATION OF PROJECT

On east slope of Spruce Mountain near Black Forest, Elko County, Nevada.

APPLICANT'S INTEREST IN OR OWNERSHIP OF PROPERTY

Applicant owns 1/2 interest, and has lease and option on remaining half. He is of good character and capable of managing a small operation.

LOAN REQUESTED

Loan requested is $20,000.00

LOAN RECOMMENDED

Loan recommended is $5,000

COMMENTS OF EXAMINER

The mine is known locally as the Parker or Humbug Mine, the workings being on the Humbug No. 3 claim of a group of five claims.

This mine has been owned and operated by the Applicant for the past 10 years. It is developed by a shaft about 100 feet deep and a number of drifts and cross-cuts. The shaft is inclined 75° to the east, and is sunk on a well defined, vertical fissure that strikes due east. This is referred to as the East-West, or Shaft fissure.

There are three shallow shafts southwest of the main shaft that have been sunk on a north-south vertical fissure, which was the work of previous owners. Some ore was taken from each of these shafts near the surface. They are largely caved, and inaccessible now, and are of no importance to this project, except as may be noted hereafter.

The writer made a Brunton and tape survey of the main workings, the results of which are shown on the accompanying plat, in plan and cross section. The intricacies of the stope outlines or boundaries were not followed in detail, sufficient data only being taken to determine the general position and shape of the stopes.

The mine is equipped with a small hoist (16" x 20" drum) powered by a 4-cylinder Oldsmobile engine. There are 180 feet of 1/2 inch cable, a 500 lb. bucket, and a 1500 lb. car. During the last ten years the work has been done by the Applicant, assisted at times by his son or hired help. During the depression, he let leasers work in various parts of the mine, but lately has been working alone. The result of this is that the mine is filled with muck or gob to such an extent that many parts of it are inaccessible, particularly some of the stope faces where ore is supposed to be. Waste was disposed of in stopes, cross-cuts, and drifts wherever it was found convenient to do so.

Eight samples were taken, none of which represent any tonnage. Some were taken from pillars, some from drifts along fissures, others from stope faces where accessible. They represent the remnants of ore bodies that have been extracted, and give an idea of the range in values that may be expected in other ore bodies that may be uncovered.

The mine is situated on the top of a flat topped ridge that extends easterly from the base of Spruce Mountain. Its elevation is about 7000 feet, some 4000 feet below the highest point of the mountain, and about 1500 feet above the valley floors. It is reached by road from Wells, Nevada, 46 miles, or from Hogan siding on W.P.R.R. 17 miles. Roads need repair in places.

Limestone is the predominate rock formation. This is intruded by dikes and sills of granite porphyry, which vary greatly in width and attitude. None, however, were noted in the immediate vicinity of the mine, or in the workings. The limestone is cut by a vertical east-west fissure upon which the shaft is sunk. The strike of the limestone appears to be N 10° W, south of the shaft fissure, and N 30° W, north of it, dipping from 20° to 25° easterly. A series of fissures, co-inciding in strike with the limestone south of the shaft fissure, but with a vertical dip are a prominent feature. These fissures seem to have affected very little, if any, displacement of the limestone, but are undoubtedly important factors genetically in their relation to the ore occurrences.

It appears to the writer that there is one definite geological horizon in the limestone in which the ore occurs. This is a bed from 4 to 6 feet thick, which overlies a bed of similar proportions, locally called porphyry. This "porphyry", according to F. C. Schrader of the U. S. Geological Survey, is largely impure lime silicate, with calcite, diopside quartz, etc. (University of Nevada Bulletin, Volume XXV, No. 7, Spruce Mountain District, pages 20-21). There is a thin selvage of clayey matter on both walls of the limestone ore bed. An occasional bunch of ore occurs within the lime silicate bed. All the evidence tends to show a pre-mineral thrust fault along the silicate bed, with attendent shattering of the overlying limestone.

It seems clear to the writer that the locus of the ore zone is the limestone bed lying upon the lime silicate bed, locally called "porphyry". This is contrary to the opinion of both the Applicant and the Schrader bulletin. The principal ore bodies are shown to lie within the limestone bed at intersections with the fissures. The shallow shafts southwest of the main shaft are located approximately at points where the limestone bed should intersect the surface, and on a north-south vertical fissure. The shallow depth of the ore there, is thus accounted for.

Assays were taken as follows:

No. 1 - 32 foot level - E. of Sta. No. 1 12" thick flat (?) dip - near E-W fissure in limestone from piller - Au. .02 - Ag. 17.8 - Pb. 21.5.
Net value - $35.57

No. 2 - In small stope on E-W fissure west of Sta No. 1 - 32 foot level - Au. .03, Ag. 2.2, Pb. 9.0 - - 8" thick.
Net value $4.46

No. 3 - From 24 foot Level in winze 6 feet deep in fissure west of Sample No. 2 - 8 inches.
Au. trace - Ag. 20.0 oz., Pb. 17.4%-
Net value $27.64

No. 4 - From 38 foot level - south drift - 8" on hanging wall side. May be top of ore shoot.
Au. trace - Ag. 2.00 oz., Pb. 17.4%-
Net value $27.64

No. 5 - West edge of stope on 38' level near winze to 50' level - spotty bunches hanging wall side on N-S fissure - Au. .02, Ag. .9, Pb. 12%

No. 6 - Galena bunches in "porphry" footwall side - 38 foot level.
Au .01, Ag 4.6 oz., Pb 15.5%

No. 7 - 70 foot level. North drift - 12 inches on branch fissure - 55 feet north of shaft.
Au .02, Ag 2.8 oz., Pb 12.6%
Net Value $10.95

No. 8 - In fissure north drift, 70 foot level, 30 feet north of shaft - 4 inches
Au trace, Ag 4.8 oz., Pb 10.0%.

Special - A sample showing specks of galena in an otherwise oxidized Matrix from the 70 foot level.

The shaft was sunk inclined 75° East in the plane of a strong E-W fissure. It is said to be 120 feet deep, but is filled with muck up to the 93 ft. point. It contains a little ore distributed erratically down the fissure to the present bottom.

At 24 feet a drift was run from the shaft along the fissure east to its intersection with a N-S fissure 33 feet from the shaft at Sta. 1. Samples Nos. 2 and 3 were taken from this fissure on this fissure on this level. Ore was encountered at Sta. 1, which is within the "ore bearing bed." A winze 8 feet deep was sunk here and considerable stoping done north and south from this point, within the ore bearing bed, and a minor part within the silicate or "porphyry" bed underneath. A drift was continued east along the fissure from the winze, or 32 foot level, into the hanging wall of the ore bed, and is now filled with gob.

A drift was then pushed south along the footwall fissure of the ore bed for 35 feet. A little ore was exposed in this drift, but not enough to be of any consequence. At Sta. 2, the drift turned east and cross cut the bed to the fissure following the hanging wall side of the bed, thence south, where in a few feet, ore appeared and a winze was dropped down upon it 6 feet to a body of ore, which is on the 38 foot level. The drift was extended about 25 feet south on this level, and at its end a short cross cut run toward the hanging wall without any encouraging results. Stope on this level was productive of some fairly good ore. Samples 4, 5, and 6 were taken here. A drift was run N 30° W from Sta. 1, 32 foot level, supposedly along the fissure, but it is now filled with gob and inaccessible.

A level was driven from the 50 foot point of the shaft and headed for the territory below the stope on the 38 foot level. The bed was picked up on its foot wall side and drifted upon, north and south for about 30 feet. No ore of consequence was found. It should be noted that this drift is just below the ore bearing bed and no cross cut to the hanging wall side was made. The hanging wall fissure is the controlling factor in the levels above. On this level a fissure bearing N 20° E was picked up but showed no values, it being entirely in foot wall territory below the "ore bed." It may have been a factor in the producing ore on the 38 foot level above.

The 70 foot level comprises a drift run N 10° W from near the shaft. It follows a strong vertical fissure and has produced a couple of carloads of ore. The north half of the drift has been stoped, drift width up about 10 feet high. A minor fracture intersects it about 55 feet from the shaft, and Sample No. 7 shows some medium grade ore. The ore widths in this drift range from 4 to 14 inches wide. Samples 7 and 8.

The ore is the typical oxidized variety of lead ores, with an occasional occurrence of galena. The matrix is iron oxide, calcite, etc., with iron predominating. The silver content varies radically.

CONCLUSION

The Applicant officially applied for a $20,000 loan, but states emphatically to the writer that all he wants is sufficient captial to assure the wages of a couple of miners for 60 days, with a thousand

feet of lumber for new ladders, etc., and gasoline enough to cover that period of time. He is confident that he can produce 50 tons per month with one or two men after cleaning out the stopes and drifts, and extending faces not now accessible.

He also wants a one or two drill compressor. He says he has plenty steel, pipe, tools, jackhammer, etc. He has his own truck for hauling ore to railroad.

The ground stands well requiring very little timbering, and is not too hard for efficient drilling. All the work done to date has been done with hand steel. He estimates his total production to date at about 1000 tons.

It is the writer's belief that the property is capable of producing considerably more ore. The majority of the tonnage has been produced from the "ore bearing bed" at less than 50 feet depth. If future work were directed through an inclined shaft down the "friendly" bed, it is not illogical to assume that other ore bodies will be found. Schrader mentions several ore bearing "lodes" southeast of the shaft, which he thought could be tapped by tunneling 450 or 500 feet from the ravine southeast of the shaft. These are undoubtedly fissures which should intersect the bed within reach of the proposed incline. There was too much snow on the ground to permit a satisfactory surface examination at the time of my visit.

The northerly extension of the fissured zone on the 38 foot level to its intersection with the shaft fissure offers a reasonable expectation of ore occurring a few feet down the bed below the 32 foot stope.

The bed on the 50 foot level has not been cross cut to the hanging wall side, although it appears to be fissured.

The presence of so many fissures is not unusual in the Spruce Mountain district. Schrader mapped 57 such in one 600 foot stretch in the Black Forest Mine tunnel, which is about 1-1/2 miles west of this property.

It is recommended that sufficient funds be allotted to cover the cost of sinking an inclined shaft from the surface 200 feet down the ore bed, and the clearing out of muck and gob from the 32 foot level.

The estimated cost is as follows:

Material:		
1 - 2-drill compressor	$1500	
400 feet 12-pound rail 1000#	80	
Fish plates, bolts, spikes, etc.	20	
Lumber 4000 bd. feet	200	
Nails	20	
Repairs, parts, etc.	100	
Powder, fuse, caps, gas and oil	300	
Total material		$2,220
Labor for 90 days:		
3 miners at $8.00	$2160	
1 working foreman at $200 per month	600	
Total labor		2,760
TOTAL		$4,980

The Applicant states that he can get the two miners necessary from local supply if he can guarantee the wages. He and his son will make up the balance of the crew. The Applicant is entirely worthy and reliable; he does not want to borrow more money than is barely necessary to put the mine on production. Although I have included wages of himself and son in the cost estimate, he will probably

not use any more of it than is barely necessary for subsistance. He has his own housing facilities, and there is sufficient extra quarters available for needed help near by. There is no water at the mine, but a plentiful supply from springs within a half mile.

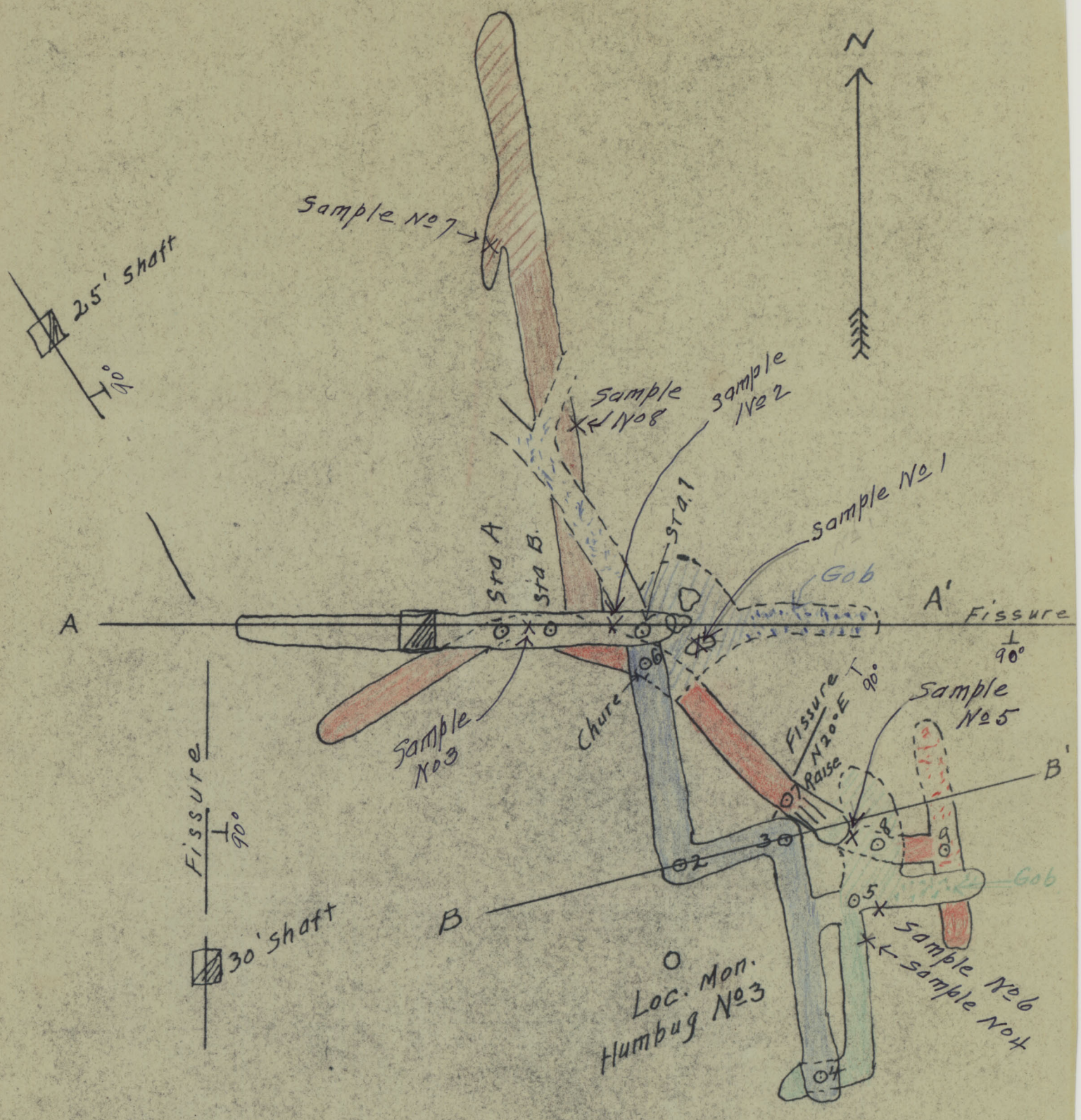
In listing the results of assays on samples I have added in some cases the "Net Value". This figure is not the assay value, but the value after freight, trucking, and treatment charges with all smelter deductions have been subtracted, but with 2.75 cents per pound added for lead. I have assumed that the iron will balance the silica penalty.

Sample No. 8, 4.6 oz ag, 15.5% Pb, is close to the average of samples taken, and represents a net value of $14.51. Allowing $7.00 for mining costs, leaves a balance of $7.50 per ton that may be applied on the loan. However, Sample No. 1 taken from a pillar in the stope on the 32-foot level is more nearly representative of the grade of ore mined in the stopes. The net value of this is $35.57, which leaves a good margin. This, however, is not expected in volume production, the anticipated range in grade being from $14.00 to $22.00 per ton net, less mining cost.

It is the opinion of the writer that a loan, up to $5000, has a very fair chance of resulting in the production of 150,000 pounds of lead in a reasonably short time, with the least possible draft on the labor market, or drain on materials.

Carl Stoddard.

CARL STODDARD
Engineer



PLAN

Parker Mine

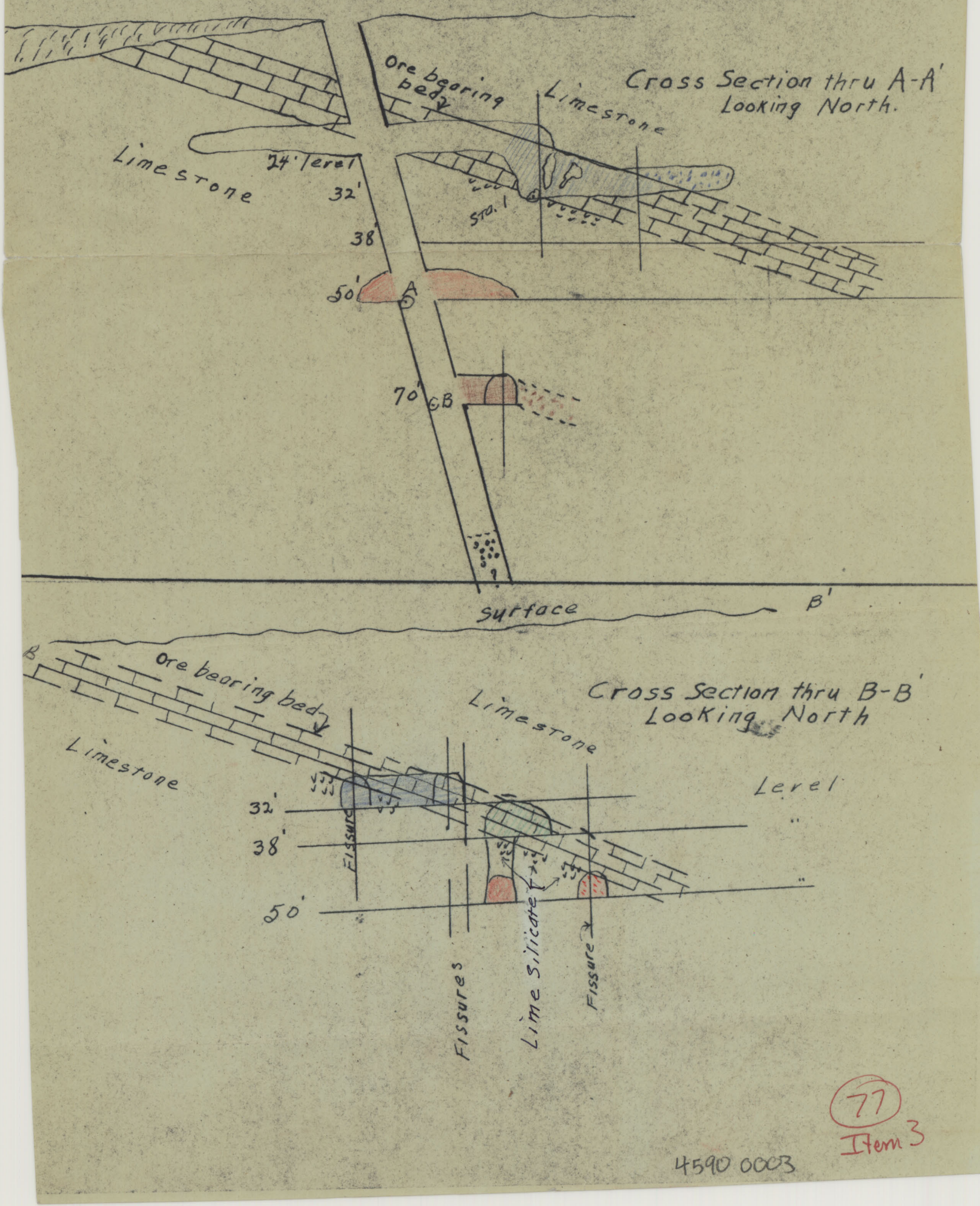
Black Forest, Elko County, Nev.

DOCKET No. B-ND-4533

March 30-31, 1943.

scale: 20 ft = 1 inch

0 20 40 ft.



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