

82FSE030 BAYONNE 07

002581
PROPERTY FILE

82FSE030-07

THE BAYONNE GROUP (1 - 12)
NELSON MINING DIVISION
BRITISH COLUMBIA

by: George L. MILL, P.Eng.
August 8th, 1962.

The Bayonne Group of mineral claims lies in the Bayonne - Midge Creek area of the Nelson Mining Division of British Columbia. It is located on the south-westerly slope of John Bull Mountain and forms the westerly and south-westerly boundary of the Bayonne Mine holdings. The Bayonne Mine proper was an intermittent producer between the years 1935 and 1942 and again in 1945 and 1946. Resumption of operations at this property is now under consideration. The Bayonne Group comprises twelve claims held under location, recorded July 28th, 1962 and identifiable as follows:

Bayonne # 1	Record # 6992
2	6993
3	6994
4	6995
5	6996
6	6997
7	6998
8	6999
9	6700
10	6701
11	6702
12	6703

The location of this group relative to the Bayonne Mine holdings is shown on the accompanying map.

ACCESSIBILITY

Between the years 1925 and 1930 a wagon-road was built from Tye Siding up Cultus Creek for about six miles and from this a pack-trail extended through a low pass to Canyon Creek and up Canyon Creek to the Spokane Mine on Wall Mountain. This trail was later extended to the Bayonne. The Bayonne road, carried through to the mine in 1935, followed the same route from the end of the wagon-road. Tye Siding is on the Kettle Valley Branch of the Canadian Pacific Railway running along the west shore of Kootenay Lake. This wagon-road, approximately 23 miles in length, was used by trucks in summer and caterpillar tractors during the winter. As the new Salmo-Creston Highway, scheduled for completion within a year, will pass within five miles of the Bayonne Mine no consideration is being given to the possible rehabilitation of this access route and its present condition is not known. The claims, present access route and property location are indicated on the accompanying sketch-maps.

HISTORY OF THE ADJOINING PROPERTY (BAYONNE MINE)

The claims comprising the Bayonne Mine proper were staked between the years 1901 and 1905 and all are Crown granted. Prior to the year 1915 the vein system was explored on three horizons but

the property remained relatively inactive from that time to the year 1929. From 1929 to 1935 work was done intermittently but it was during this period that the road to the Spokane Mine was completed and eventually extended to the Bayonne in the summer of 1935. In the fall of that year a 36 ton shipment of high grade ore was made to the Trail smelter and control of the property then passed to Bayonne Consolidated Mines Limited.

Construction of a 60 ton cyanide plant and an underground development program were initiated in 1936 and the property brought into production in November of that year. Production was relatively continuous throughout the years 1937 and 1938 but was curtailed in 1939 in favor of an extensive exploration and development program. This program proved up sufficient ore to maintain continuous production from April 1940 to August 1942 at which time labor and material shortages forced cessation of operations for the duration of the war. The property remained inactive throughout 1943 and 1944 but was re-opened and renovated in the late summer of 1945. From that time to July 1946 development work was concentrated on the "A" vein. A shaft was sunk from No. 8 Level of the "A" vein and No. 9 Level opened. Milling operations were resumed but, once again, shortage of labor and materials forced closure in July, 1946. Between the years 1947 and 1951 various lessees removed some 1,000 tons of ore from the workings but there has been no activity on the property since that time. It is estimated that throughout its productive life, the Bayonne property processed or shipped a total of 85,000 tons of ore for a recovery of 40,000 ounces of gold and 95,000 ounces of silver. A single dividend in the amount of \$25,000.00 was paid in the year 1942. It should be noted that this production was achieved despite a severe transportation problem as well as the labor and material shortages prevalent during and immediately following the cessation of hostilities.

GEOLOGY

The Bayonne property lies near the southwest corner of a large area of intrusive rocks known as the Bayonne batholith. Rice, in Memoir 228, Geological Survey of Canada, comments on the highly variable nature of this batholith but classes its average composition as that of a fairly alkaline granodiorite. A striking feature of the rock in the immediate vicinity of the Bayonne holdings is the variation of grain size and color even within the confines of a single exposure.

The Bayonne vein system is a zone of fracturing striking north 60 to 80 degrees east with an almost vertical dip. Rice describes the wall-rock as "fine-grained, light-coloured, biotite hornblende granodiorite altered to a talc-carbonate rock for a distance of two to three feet on either side of the vein". The fracture zone tends to split into branches at various points, with the branches following the general strike or diverging at considerable angles. Generally speaking, however, it is fairly regular

as to strike and, depending on its width, is filled in whole or in part, with quartz. Where the zone is two feet or less in width it is usually filled with quartz but, where wider the quartz appears in two or even three veins separated by granodiorite. Where branches diverge, however, the zone may be as much as ten feet wide and still filled, across its total width, with quartz.

Referring again to Memoir 228 published in 1941 Rice states: "The bulk of the ore milled was mined from the oxidized zone which extends down the vein to a maximum depth of 450 feet. In this zone the sulphides have largely disappeared, their place being taken by limonite and minor amounts of secondary lead and zinc minerals. The bottom of this zone is characterized by a rather abrupt transition from highly oxidized and leached material to primary sulphides with little or no trace of oxidation or leaching."

Again Rice states: "The oxidized ore consists of an unattractive looking mass of limonite and rusty, honeycombed quartz. Yet this ore 150 feet from the surface averaged 1 to 2 ounces of gold a ton and assays as high as 12 ounces a ton have been obtained. Below the oxidized ore shoots there is a zone, apparently in primary ore, which assays from 0.5 to 1 ounce of gold a ton. This zone extends to a depth of 50 feet below the limit of oxidized ore. Below this zone again there is little or no change in the appearance of the ore, but the values drop to about 0.40 ounce gold a ton. The most plausible explanation of this rich zone is that some of the gold has come from the zone above and has been deposited in some form not yet recognized. The sulphite content of each ore shoot, however, appears to be decreasing at depth. Indeed, little or no commercial ore was encountered in No. 8 adit under productive shoots in the levels above. The change in gold content may, therefore, be due to zoning in the primary ore rather than enrichment of the sulphides." At the present time there are four known veins on the Bayonne holdings, namely the Main Vein, The "A" Vein, The South Vein and The North Vein. All four veins appear to converge in the vicinity of #2 Level Portal of the Main Vein as shown on the attached print. Prior to 1937 all mining activity was confined to the so-called Main Vein and, so far as can be ascertained, development of the "A" Vein was initiated in 1938 from crosscuts driven from the Main Vein. As Memoir 228 is based on field work done during the seasons 1936, 1937 and 1938 Rice's statement that "little or no commercial ore was encountered in No. 3 adit under productive shoots in the levels above" has reference to No. 8 Level on the Main Vein. As indicated on the attached print ore blocks of substantial grade remain to be extracted on both the No. 8 Level and No. 9 Level of the "A" Vein.

Gold and silver, which constitute the principal metals of economic value in the ore appear to be associated with sulphides, principally pyrite, galena and sphalerite.

PRESENT POTENTIAL OF THE BAYONNE MINE

As previously indicated the former operators of the Bayonne Mine were severely handicapped by labor and equipment shortages as well as extremely high transportation costs. After the cessation of operations in 1946 C. Rutherford P.Eng., Consulting Engineer, and R. B. King P.Eng., Mine Manager for Bayonne Consolidated Mines Ltd., estimated known reserves at the Bayonne Mine at 11,000 tons averaging 0.76 ounces gold per ton. For reference purposes maps outlining ore reserve blocks accompany this report. Following a recent examination of the Bayonne Mines the writer stated in his report dated July 26th, 1962: "It is felt that the chances of increasing this reserve tonnage are good as there are numerous locations, both underground and on surface, where exploration is fully warranted. Some of these are enumerated herewith:

1. The easterly, westerly and down-dip projection of the "A" Vein from the 9 AW drift.
2. The area lying above the 7 AE drift east of the 7 AIE stope.
3. The area lying above #6 Level of the Main Vein and below the 4 - 3 stope.
4. The area down-dip and east of the point of intersection of the veins.
5. The North Vein which appears to strike due west from the intersection point and on which a very small amount of surface trenching has been done.
6. The area lying south and southeast of the 8 AE Portal. This is considered as potential area for another vein.

The above list will undoubtedly be added to when access to underground workings is feasible. Based on available information, branch veins enter the hanging and footwall at numerous locations and geological mapping, where access is economically practical, might prove very informative. An appreciable amount of diamond drilling was done between 1936 and 1941 but, unfortunately, the records are not available. Most of the holes were drilled horizontally in an effort to locate parallel veins. As the vein material does not core readily its intersection by drilling may easily be reported as "lost core" unless sludge samples are taken.

Referring again to the reserve tabulation it is interesting to note that reserve blocks lying between the 8A and 9A drifts, though in the primary zone, show an average grade not much below the average of many blocks in the oxidized zone. The "A" Vein reserve contains 57% of the total reserve tonnage and 54% of the

total reserve ounces. The blocks said to be in the primary zone contain respectively 63% and 66% of the above percentages. It should be noted however that the two lowest blocks, namely Nos. 10 and 11, are below average grade.

Because past performance records are not available a cost comparison in the event of production is not possible but the following points are worthy of note:

1. With the advent of the new Salmo-Creston highway transportation costs will be greatly reduced.
2. Labor costs will be higher but improved techniques should offset the increase in the cost of materials.
3. Average grade of ore processed will be lower but recoveries should be substantially higher."

In the same report the writer concluded that the Bayonne property warrants further investigation for the following reasons:

1. The extent, grade and location of the reserve blocks outlined by Messrs. Rutherford and King on the accompanying maps.
2. The numerous underground locations which offer further exploration possibilities.
3. The possible eastward and westward extension of the vein fissures.
4. The limited amount of work done on the westward projection of the North Vein. A chip sample taken from an ore dump lying alongside a shallow shaft 200 feet north of #3 Level Portal assayed 1.42 ounces per ton.
5. The possibility of uncovering parallel veins by surface trenching.

POTENTIAL OF THE BAYONNE GROUP OF CLAIMS

The Bayonne Group straddles a valley the floor of which is approximately 400 feet below the lowest working level of the Bayonne Mine. The Bayonne vein system is a zone of fracturing striking South 60 to 80 degrees West with an almost vertical dip and the four known veins appear to converge at elevation 6700.

Any westerly projection of these veins along the present strike will enter the Bayonne Group. To the writer's knowledge no attempt has been made to trace this possible westward projection of the veins beyond the western boundary of the Bayonne Mine property. Also, should the work program now planned for the Bayonne Mine indicate down-dip possibilities a lower level adit would have to be driven. In all probability this adit would be collared on one of the claims of the Bayonne Group.

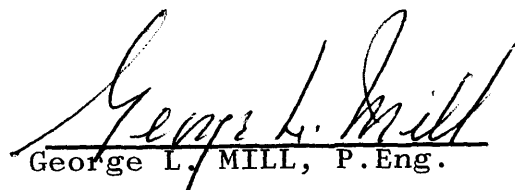
CONCLUSIONS AND RECOMMENDATIONS.

Due to its close proximity to, and the possible economic potential of, the Bayonne Mine the writer is of the opinion that the possible westerly projection of the zones of fracturing into one or more of the claims comprising the Bayonne Group should form part of the work program planned for the Bayonne Mine.

It is recommended, therefore, that, in conjunction with the work program outlined for the Bayonne Mine in the writer's report of July 26th, 1962 the following work be done on the Bayonne Group:

1. Prospect and map the area comprising the group, principally along the projected strike of the known veins on the Bayonne property.
2. Cut a series of trenches at right angles to the projection of these known veins.

Respectfully submitted,


George L. MILL, P.Eng.

2820 Brich Street,
Vancouver, B. C.

August 8th, 1962.

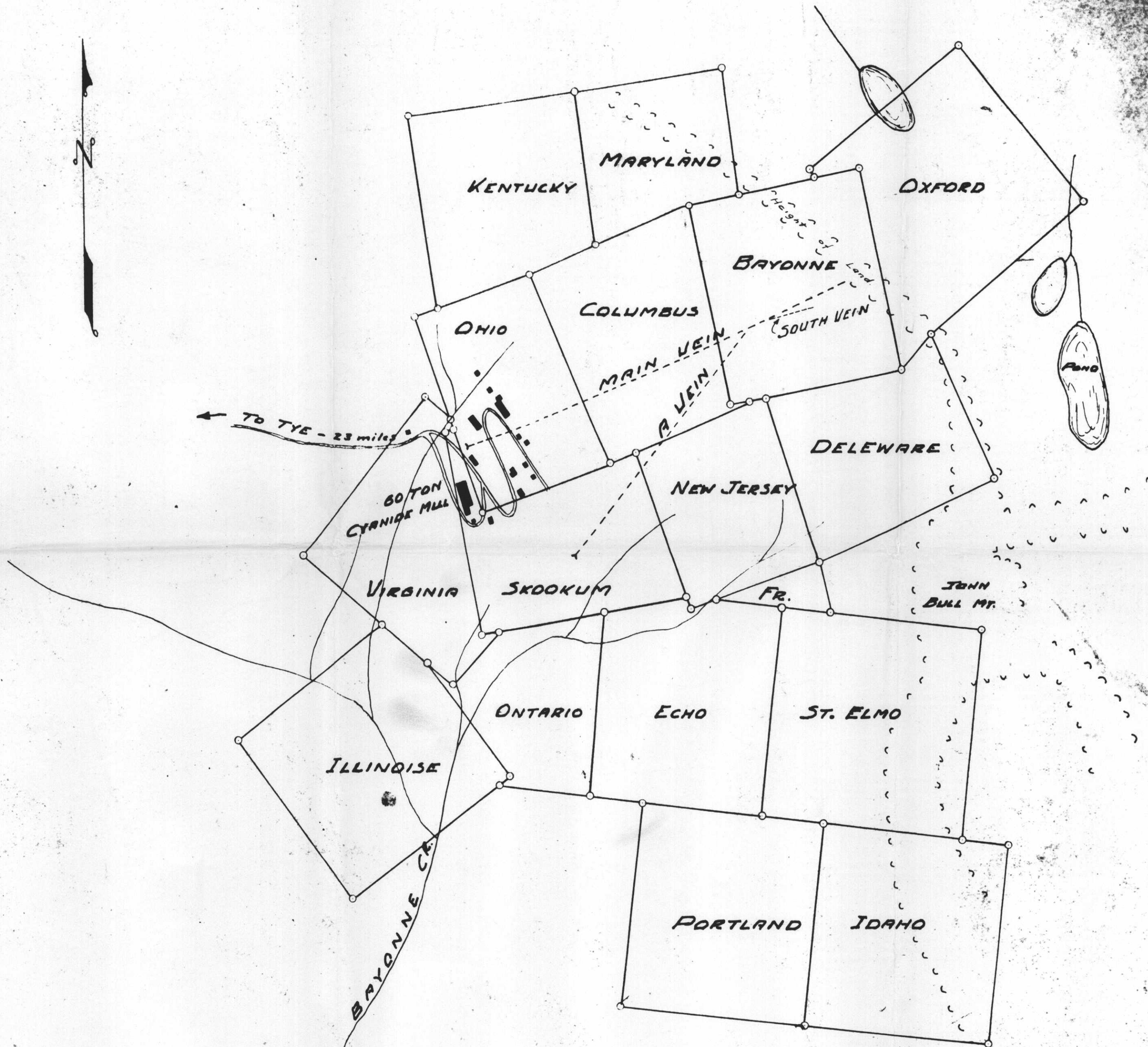
I, GEORGE L. MILL, HEREBY CERTIFY-----

1. That I reside at 2820 Birch St., Vancouver 9, B.C.
2. That I am a graduate of Queen's University, B.Sc., and a registered member of the Corporation of Professional Engineers of the Province of British Columbia.
3. That I have practised my profession for 31 years.
4. That I have no direct or indirect interest in the financing of this program nor any connection, financial or otherwise, with individuals involved in the financing of the program except as pertain- to fees for professional services rendered.
5. That I do not expect to obtain any such interest.
6. That information contained in this report is based on personal inspection of the property.

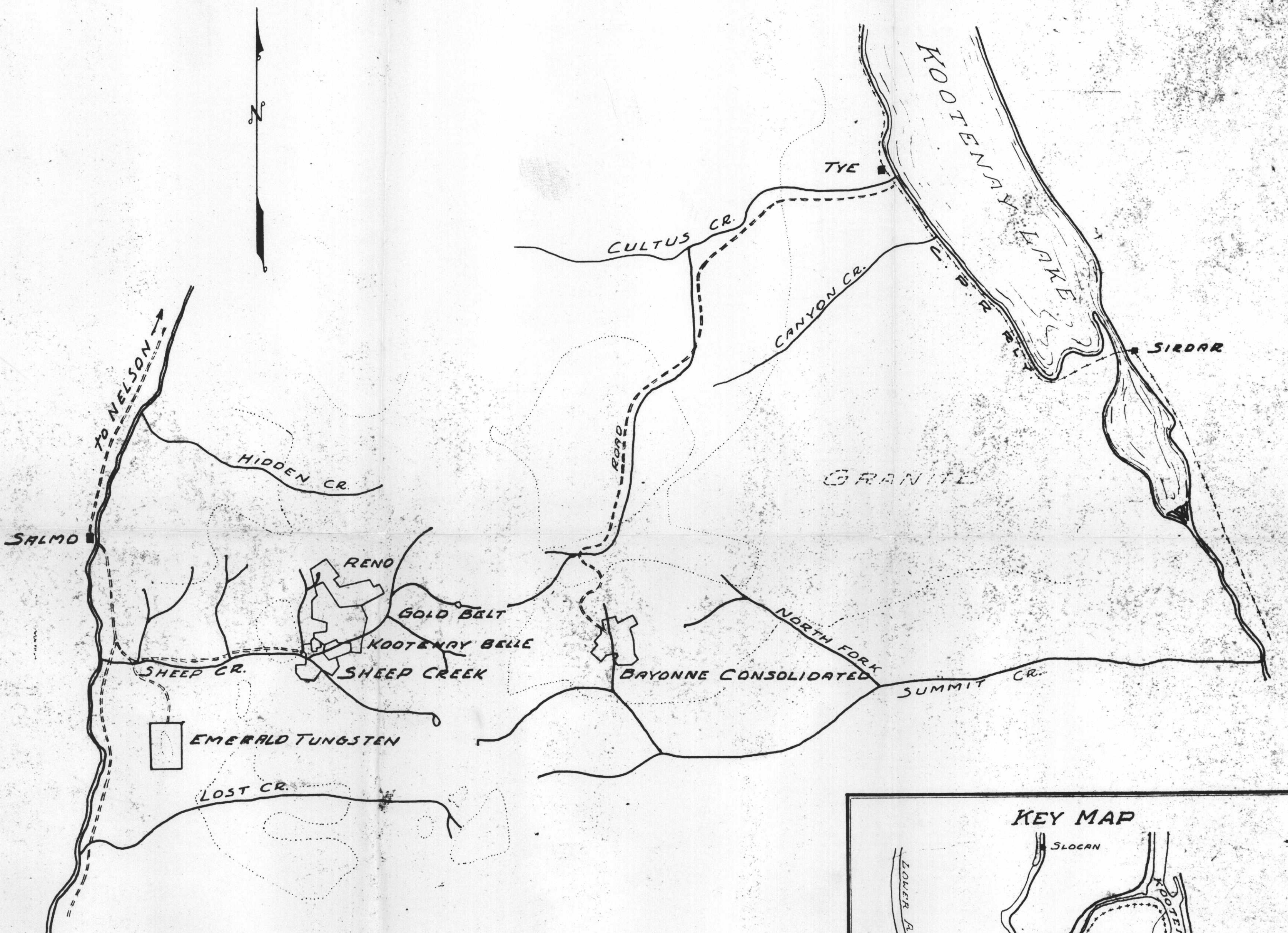

GEORGE L. MILL

To accompany report on the Bayonne Group.

Vancouver, B. C.
August 8th, 1962.

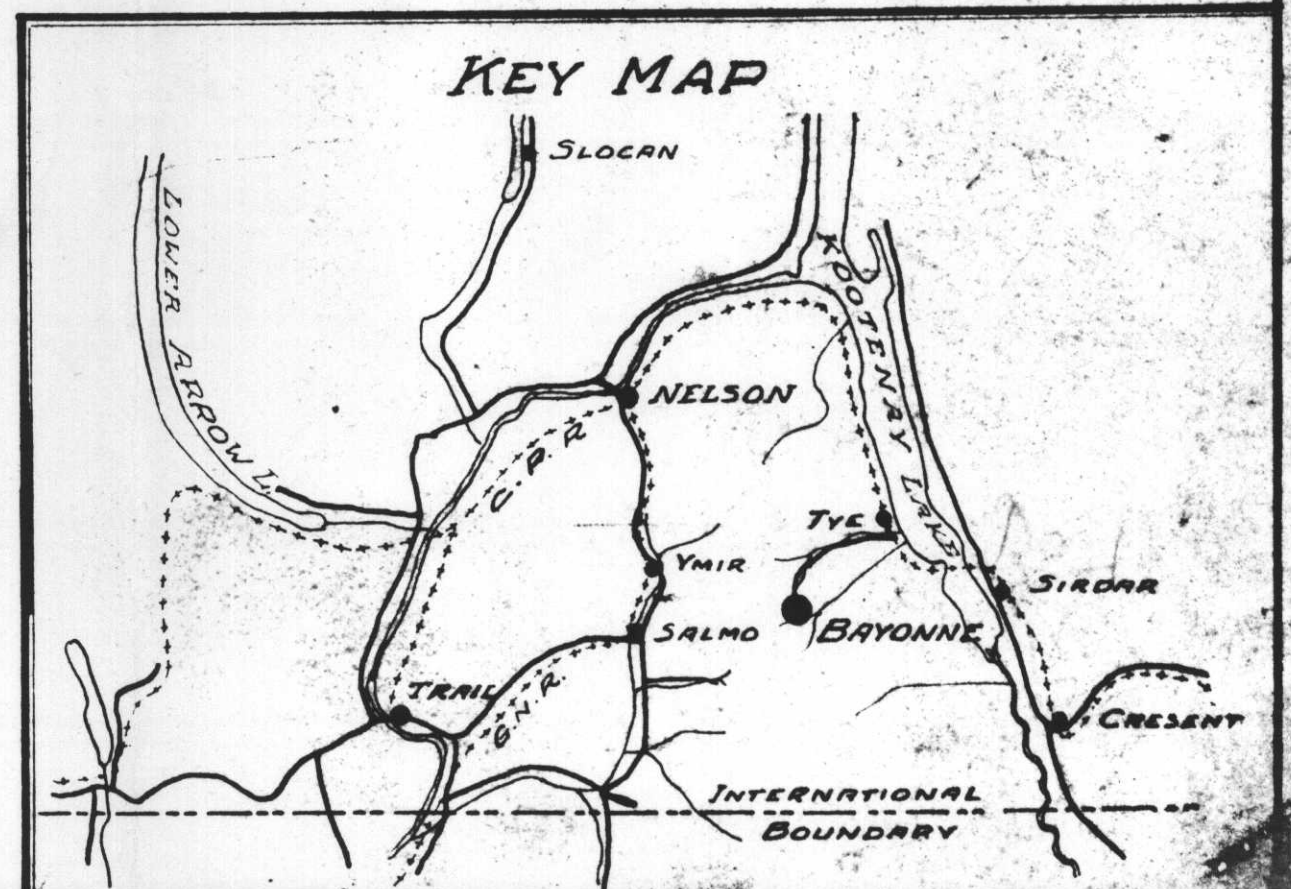


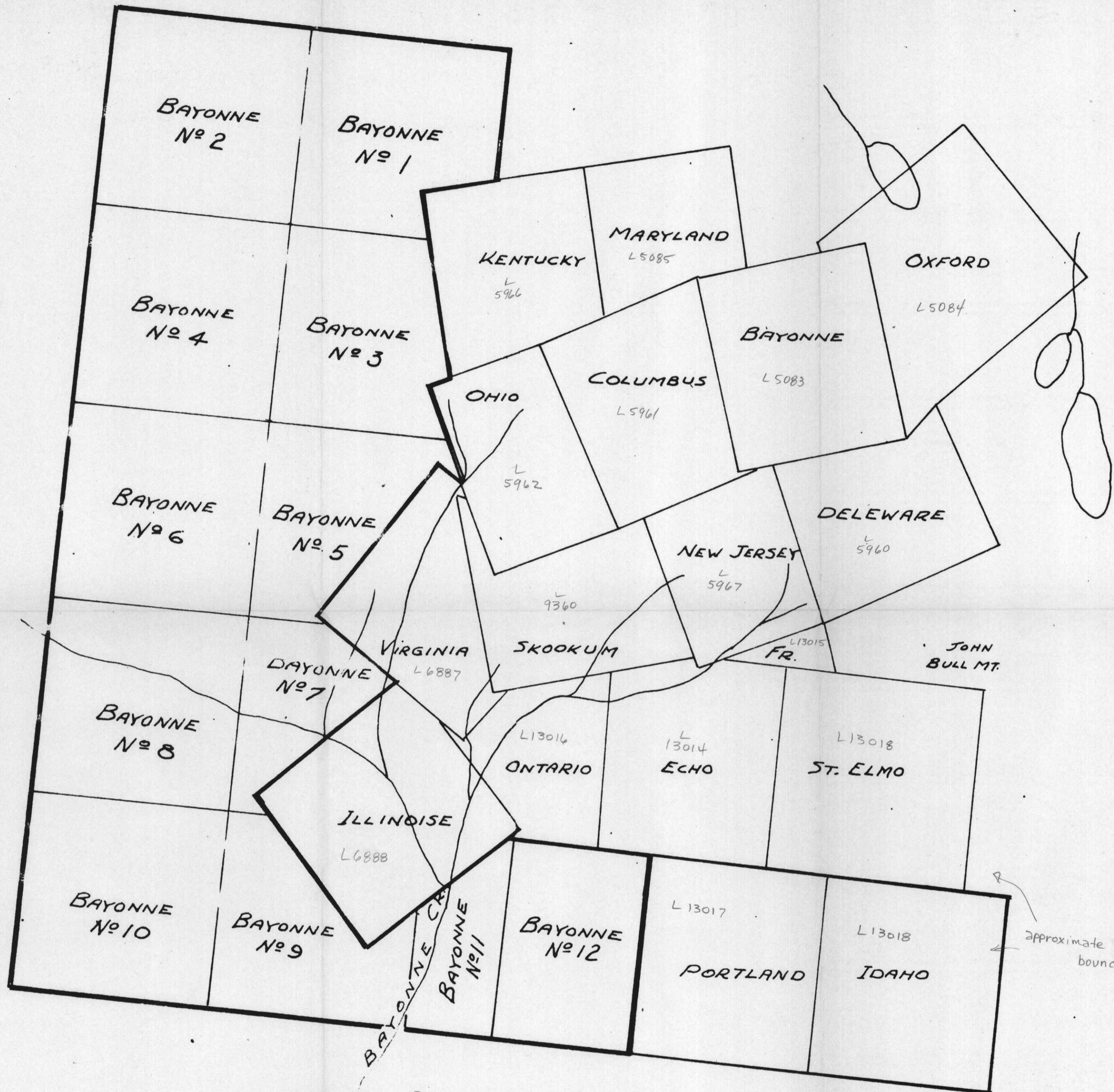
CLAIM MAP
 BAYONNE CONSOLIDATED MINES LTD
 SCALE 1" = 600



MAP
 showing
 MINING PROPERTIES
 SHEEP CREEK - BAYONNE AREA
 Scale 1" = 2 miles

82F/2W
 82F/SE - 30,31



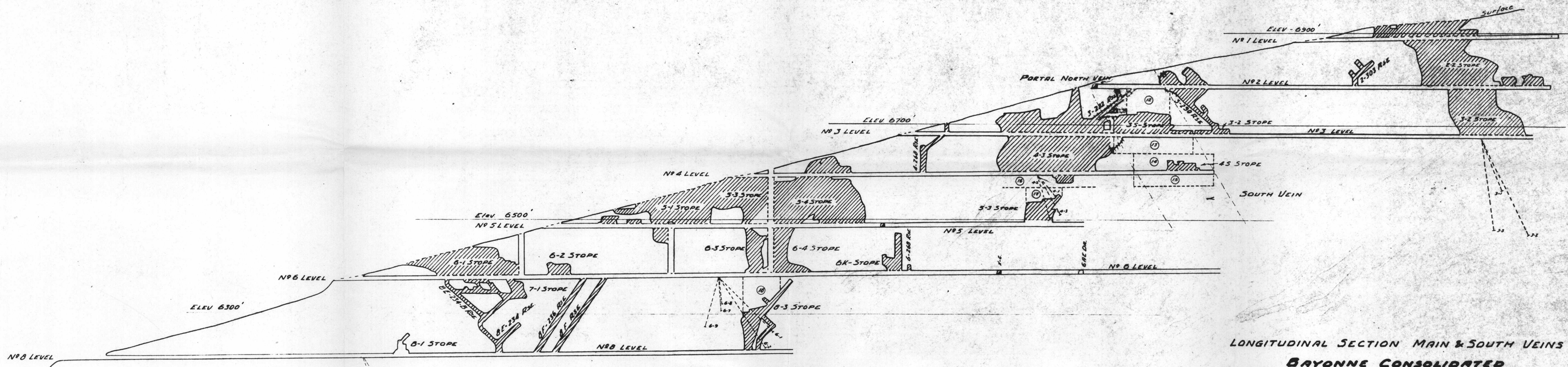


CLAIM MAP
 BAYONNE GROUP
 NELSON M.D.
 B.C.

Bayonne Group claims forfeited as of claim map to Nov./72.

82F/2W
 82F/SE-30,31

Scale 1" = 600'

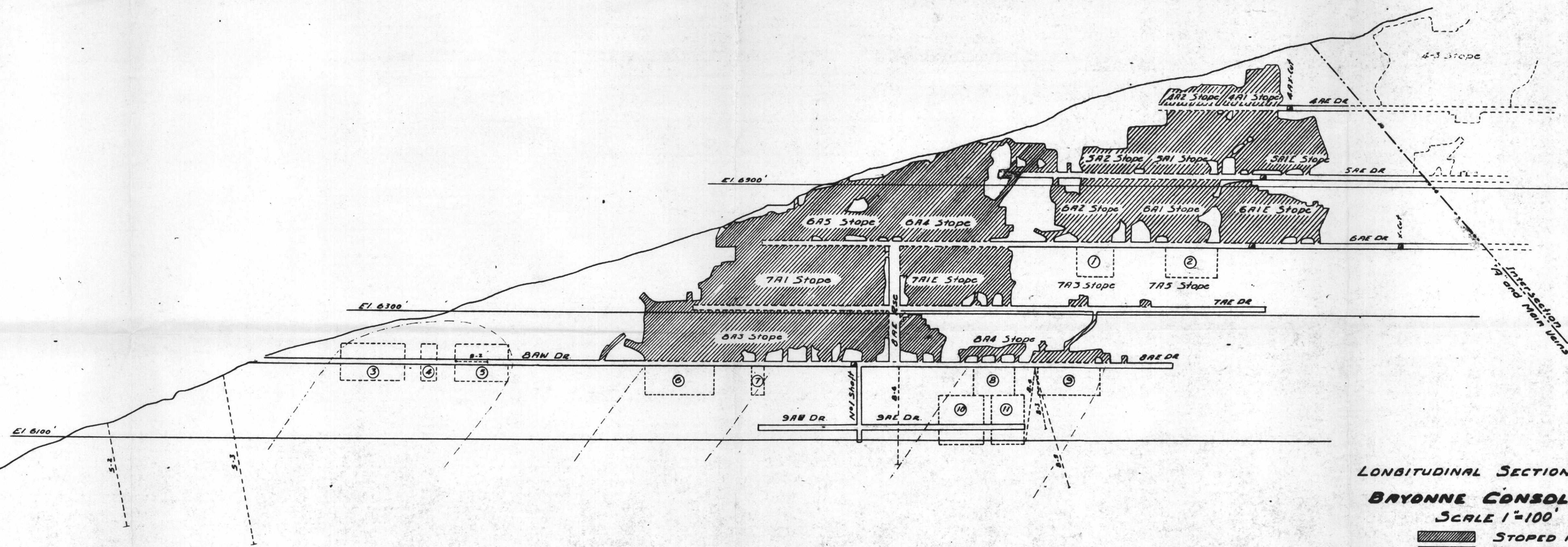


LONGITUDINAL SECTION MAIN & SOUTH VEINS

BAYONNE CONSOLIDATED
SCALE 1"=100'

- STOPPED AREA
- ORE RESERVES POSSIBLE

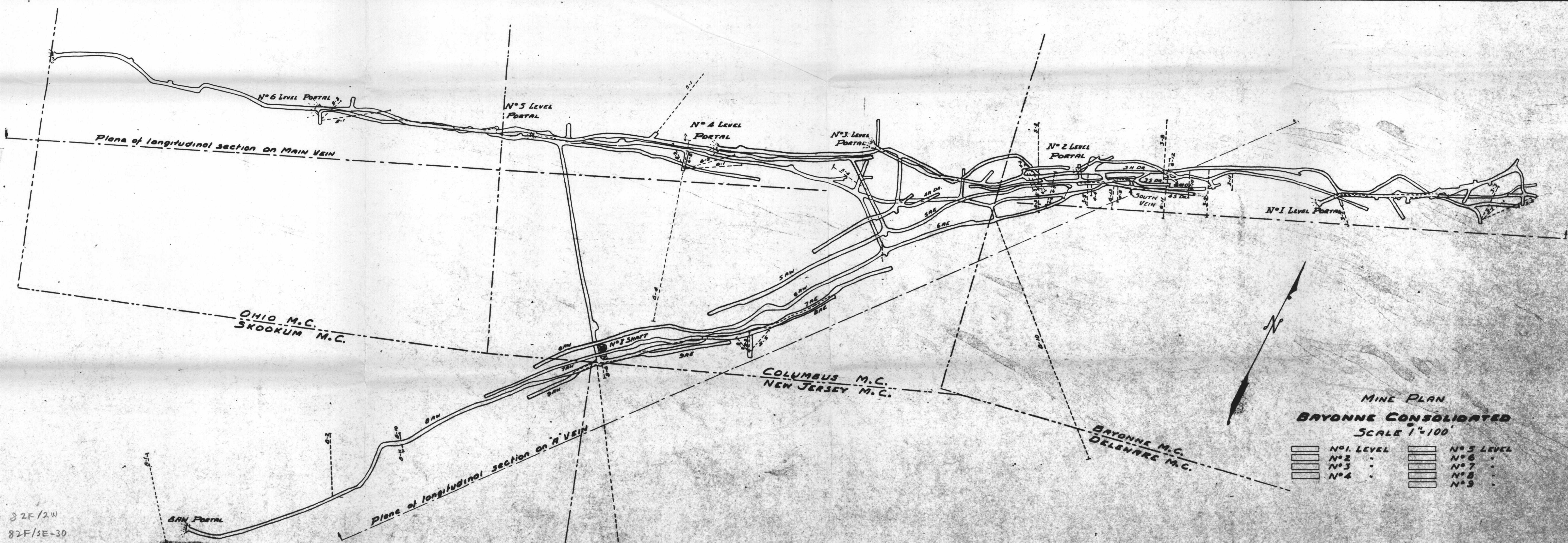
MR. R. 2021414D



LONGITUDINAL SECTION A VEIN

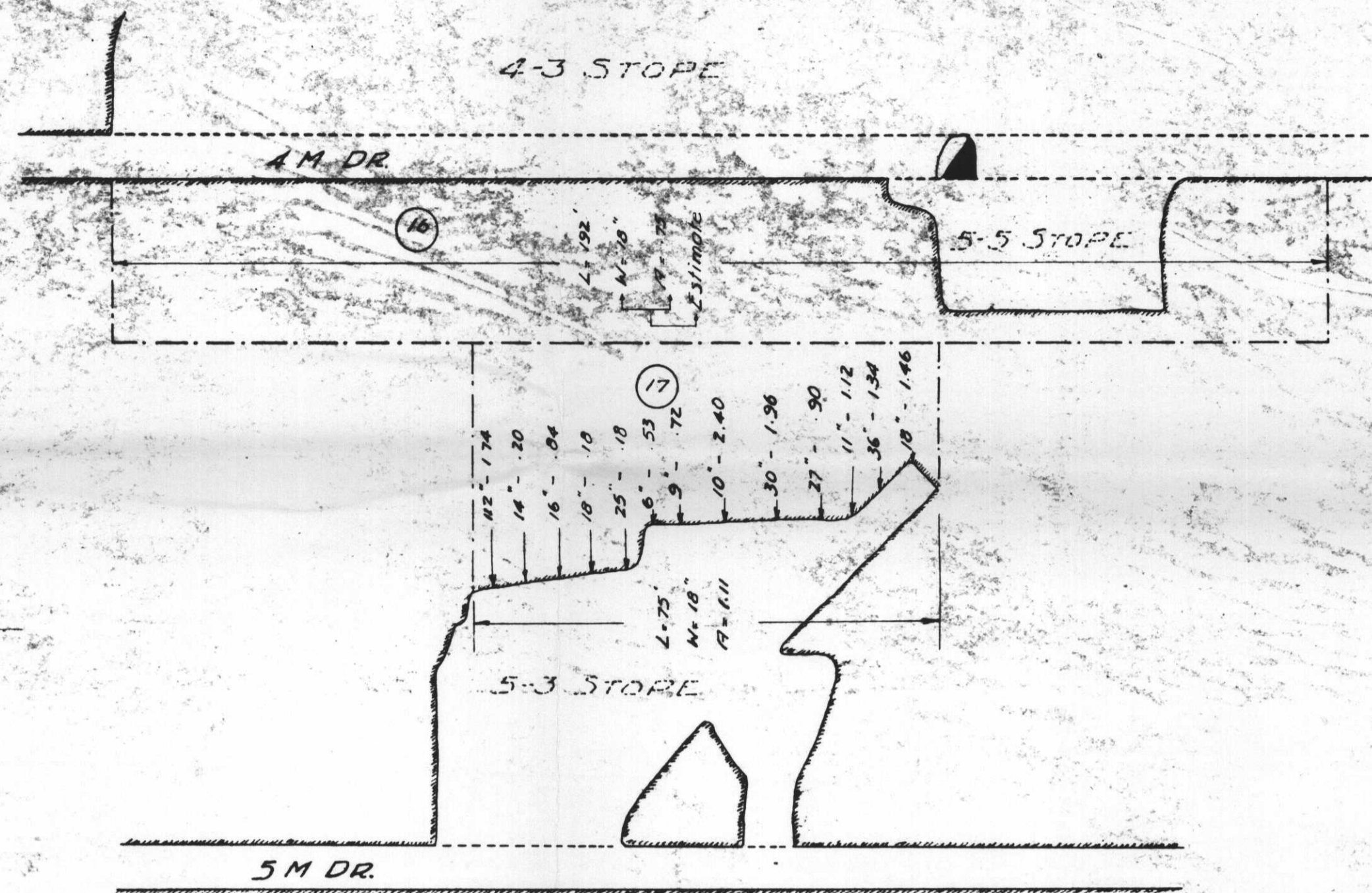
BAYONNE CONSOLIDATED
SCALE 1"=100'

- STOPPED AREA
- ORE RESERVES POSSIBLE

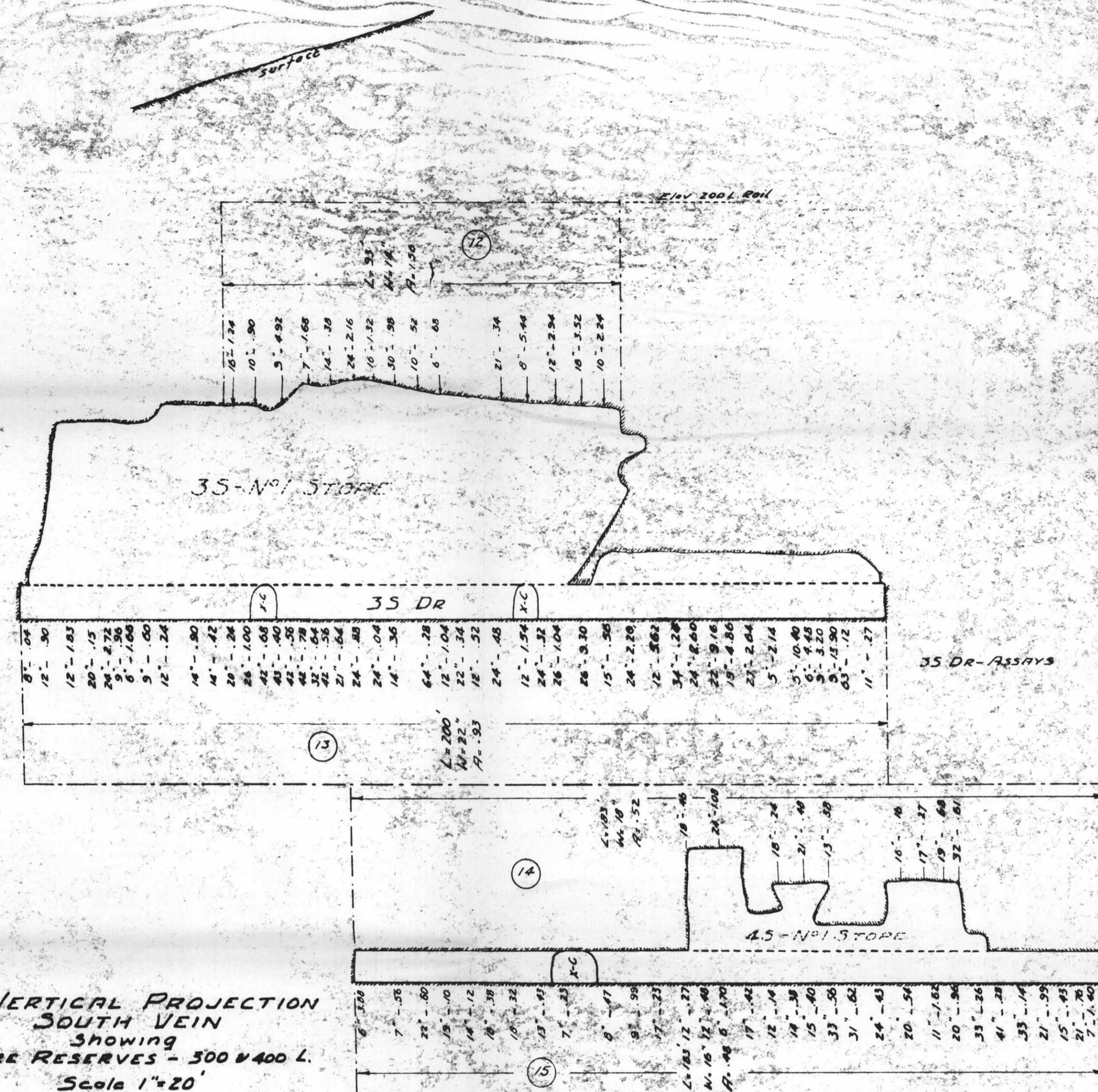


MINE PLAN
BAYONNE CONSOLIDATED
SCALE 1"=100'

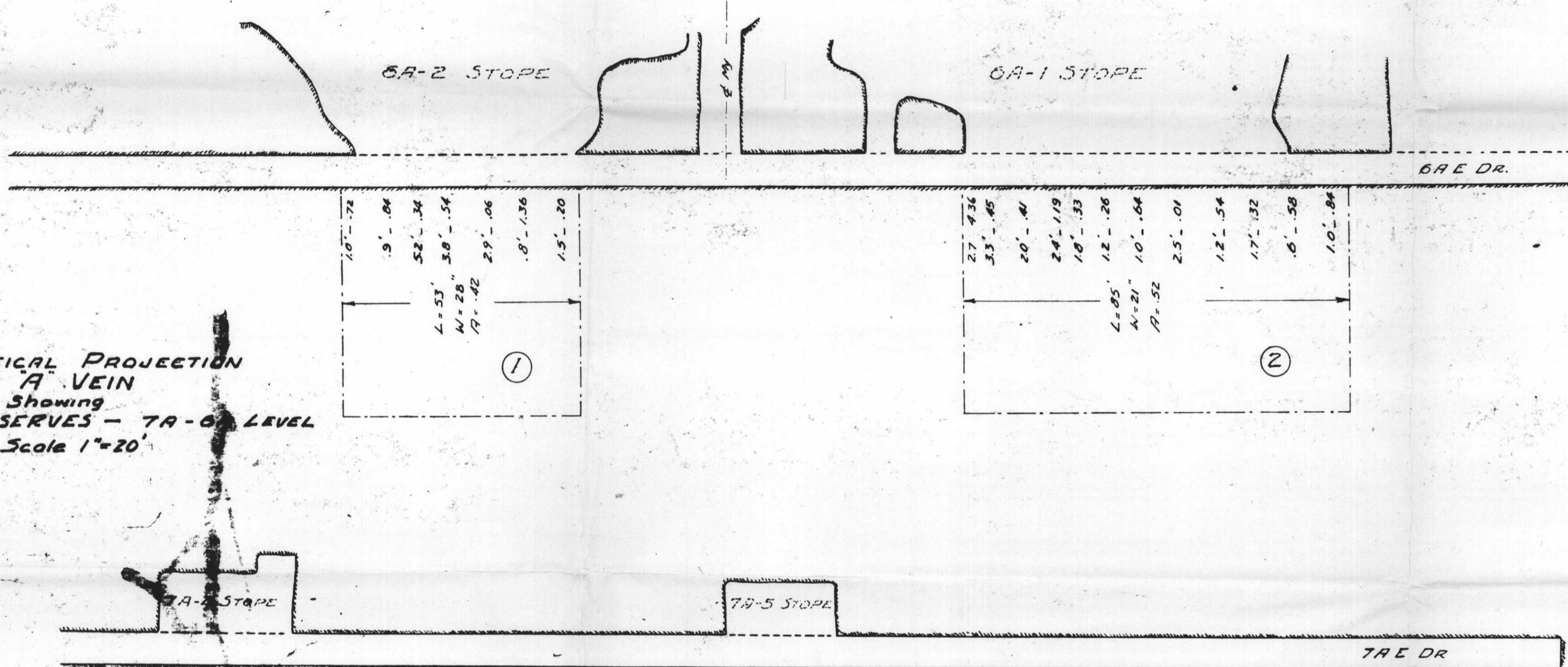
- N#1 LEVEL
- N#2 LEVEL
- N#3 LEVEL
- N#4 LEVEL
- N#5 LEVEL
- N#6 LEVEL
- N#7 LEVEL
- N#8 LEVEL
- N#9 LEVEL



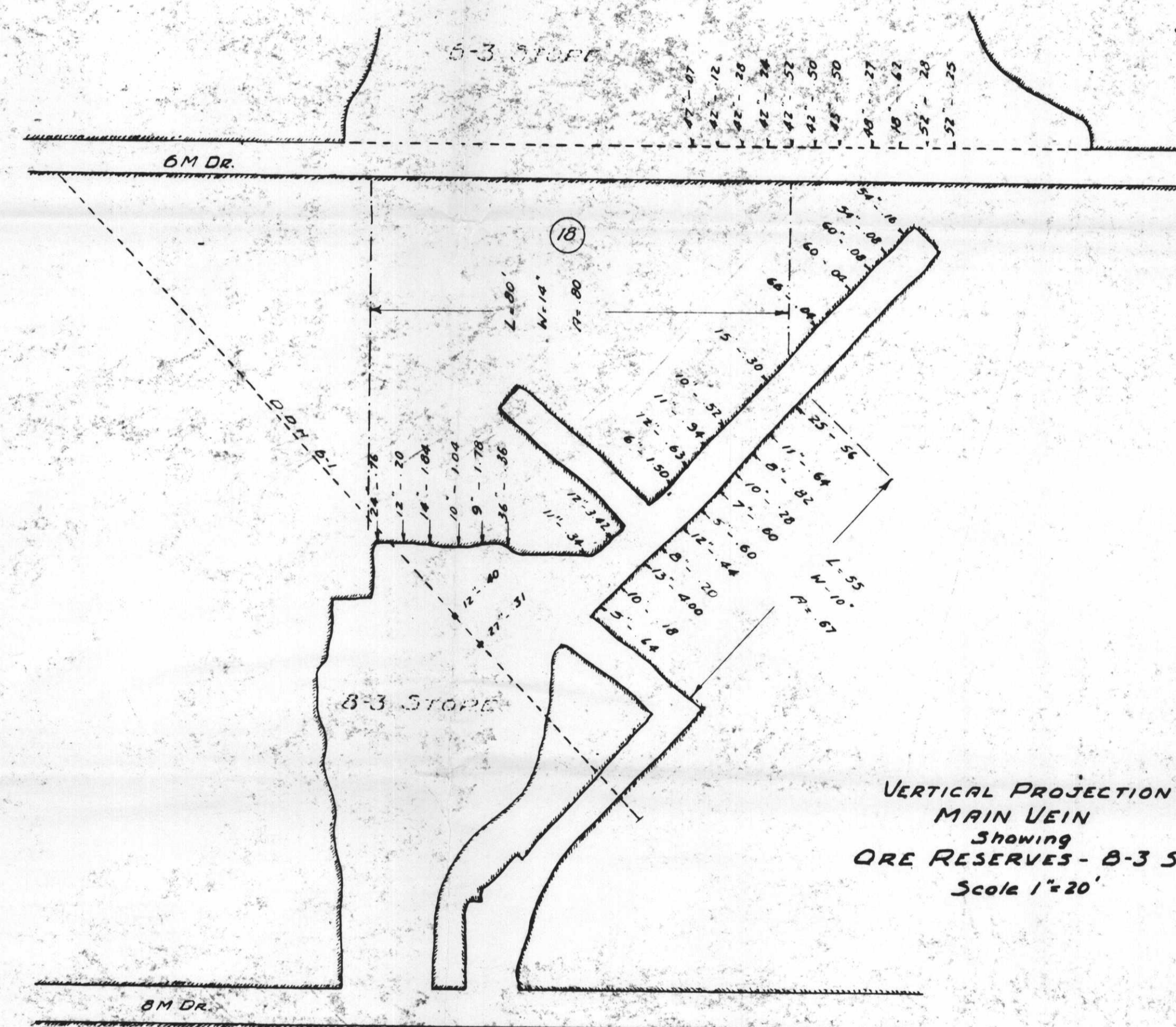
VERTICAL PROJECTION
MAIN VEIN
Showing
ORE RESERVES - 5:3 SLOPE
Scale 1"=20'



VERTICAL PROJECTION
SOUTH VEIN
Showing
ORE RESERVES - 3:5 SLOPE
Scale 1"=20'



VERTICAL PROJECTION
A VEIN
Showing
ORE RESERVES - 7A-6 LEVEL
Scale 1"=20'



VERTICAL PROJECTION
MAIN VEIN
Showing
ORE RESERVES - B-3 SLOPE
Scale 1"=20'

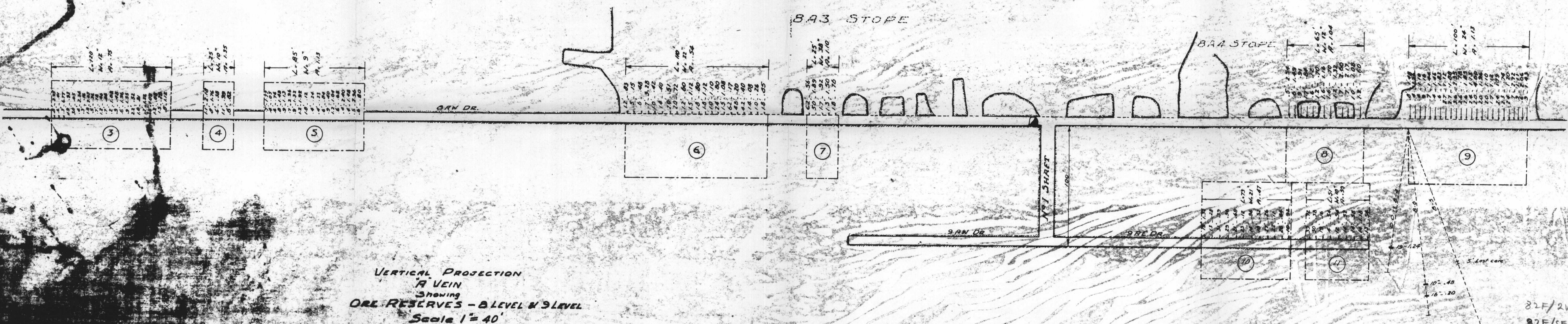
VEIN	BLOCK#	TONS	WIDTH	GRADE
A	1	600	28"	.42
A	2	700	21"	.52
A	3	600	12"	.75
A	4	100	10"	1.35
A	5	300	9"	1.13
A	6	1,000	22"	.54
A	7	400	38"	1.10
A	8	300	12"	1.04
A	9	300	24"	1.13
A	10	300	21"	.47
A	11	300	18"	.59
TOTAL		6,300	21"	.72

VEIN	BLOCK#	TONS	WIDTH	GRADE
SOUTH	12	500	14"	1.56
SOUTH	13	1,300	23"	.93
SOUTH	14	300	18"	.52
SOUTH	15	600	19"	.48
TOTAL		3,300	19"	.81
MAIN	16	700	18"	.75
MAIN	17	400	18"	1.11
MAIN	18	300	14"	.80
TOTAL		1,400	17"	.87

SUMMARY OF ORE RESERVES

VEIN	TONS	WIDTH	GRADE-OR.UNIT
A	6,300	21"	0.72
S	3,300	19"	0.81
MAIN	1,400	17"	0.87
TOTAL	11,000	20"	0.76

Note
In calculating Ore Reserves:-
1. All high erratic assays cut.
2. No allowance made for dilution.
3. Tons, widths & assays weighted.
4. No estimate made of possible ore



VERTICAL PROJECTION
A VEIN
Showing
ORE RESERVES - B LEVEL & 9 LEVEL
Scale 1"=40'