RTC.

April 12, 1938

Mr. Errol MacBoyle

OLD BRUNSWICK MINE DEVELOPMENT WORK

Dear Sir:

In response to your request, I hereby submit a summary of development work that can be done at the Old Brunswick unit.

900 Level:

2D-4R is now approximately 75 feet above the 900 level. It was planned to drive to the 550 level and from that horizon drift over to the old anticline and prospect all structure adjacent. The raise, at present, is in waste but is on the 2 vein structure and may develop quartz.

6 XC is a heading that can be driven to pick up new vein found by diamond drilling to the north of north face of 4D.

8 XC: A heading from 21D in the footwall of 4 vein to be driven north to intersect extensive stringer zone picked up by diamond drilling.

4 XC: Extend present crosscut as previously planned to cut 18 vein.

12D: Extend a distance of at least two hundred feet east to develop ore.

670 LEVEL:

1D should be driven approximately four hundred feet east, probably in ore.

601D: Some drifting should be done to prove or disprove ore in this section. About twenty feet of vein here showed colors but was then cut out by thin bedding and has not been thoroughly prospected.

580 LEVEL:

1 XC: This heading could be driven from the present face to 16 vein, a distance of approximately 275 feet.

Mr. Errol MacBoyle,
Grass Valley, California.

April 12, 1938.

The development as shown would require twenty-four men and supplies as follows:

3 SAR stopers
6 DA-30 drifters
12 Sets air hose
12 Sets water hose
15 cars (10 on 900, 3 on 670 and 2 on 580)
1 Locomotive (has been ordered)
1 Ton drill steel

It would be necessary to use the Old Brunswick dry, as the New Brunswick dry is full at the present time. Two watchmen and a topman would be necessary on the surface and two bosses and one nipper in the mine.

Yours very truly,

J. F. Cowley,
Mine Superintendent

JFC/m

cc to H.M.W.
R.F.

# YEARLY DEVELOPMENT SUMMARY

MINE: Brunswick YEAR OF 1938

| LEVEL | LOCATION | DRIFT | RAISE | X-CUT | SIDING | RECAP | CU.FT | TOT.FTG. | NORTH | EAST |
|---|---|---|---|---|---|---|---|---|---|---|
| 580 | 1XC | | | 334 | | 200 | | | | |
| | 16D | 129½ | | | 20 | | | | | |
| | 616D | 41 | | | | | | | | |
| 800 | 16D | 159½ | | | | | | | | |
| | 616D | 420 | | | | | | | | |
| 900 | 16D | 472 | | | 81 | | 1050 | | | |
| | 116D | 72½ | | | | | | | | |
| | 216D | 134½ | | | 12 | | | | | |
| | 316D | 95½ | | | | | | | | |
| | 616D | 544½ | | | | | | | | |
| | 4D | 67½ | | | | | | | | |
| | 16D-1R | | 239 | | | | | | | |
| | -2R | | 364 | | | | | | | |
| | -3R | | 382½ | | | | | | | |
| | -4R | | 146 | | | | | | | |
| | 28D | 85½ | | | 10 | | | | | |
| | 628D | 194 | | | | | | | | |
| | 28D-1R | 5 | | | | | | | | |
| | 4XC | | | 13 | | | | | | |
| 1000 | 4D-9R | 99 | | | | | | | | |
| | 12D | 29 | | | | | | | | |
| | 112D | 121½ | | | | | | | | |
| | 12D-1R | | 57½ | | | | | | | |
| | 16D | 341½ | | | | | 65 | | | |
| | 216D | 221½ | | | | | | | | |
| | 616D | 228 | | | | | | | | |
| | 28D | 48½ | | | | | | | | |
| | 628D | 95½ | | | 4 | | | | | |
| | 2XC | | | 50½ | 4 | | | | | |
| | 6XC | | | 74 | 22 | | | | | |
| | 8XC | | | 55½ | | | | | | |
| | 32D-4R | | 92½ | | | | | | | |
| | 32D-5R | | 79½ | | | | | | | |
| 1030 | 4D | 80 | | | 6 | | | | | |
| 1080 | 4D-1R | | 10 | | | | | | | |
| 1100 | 4D | 70½ | | | | | | | | |
| | 4D-4R | | 76½ | | | | | | | |
| | 104D | 40 | | | 6 | | | | | |
| | 7D-2R | | 95½ | | | | | | | |
| | 8D | 20 | | | | | | | | |
| | 608D | 67 | | | | | | | | |
| | 9D | 43½ | | | | | | | | |
| | 16D | 20 | | | | | | | | |
| | 116D | 89 | | | | | | | | |
| | 216D | 76½ | | | | | | | | |
| | 616D | 39 | | | | | 65 | | | |
| | 16-4R | | 119½ | | | | | | | |
| | 5R | | 233½ | | | | | | | |
| | 6R | | 256 | | | | | | | |
| | 7R | | 320 | | | | | | | |
| | 12D-1R | | 22½ | | | | | | | |
| | 28D | 91½ | | | 25 | | | | | |

# YEARLY DEVELOPMENT SUMMARY

MINE: Brunswick YEAR OF: 1938

| LEVEL | LOCATION | DRIFT | RAISE | X-CUT | SIDING | RECAP | CU.FT. | TOT.FTG. | NORTH | EAST |
|---|---|---|---|---|---|---|---|---|---|---|
| | 628D | 208 | | | 46 | | | | | |
| | 32D-7R | | 92 | | | | | | | |
| | 1XC | | | 126 | | | | | | |
| | 8XC | | | 515½ | 10 | | | | | |
| | 10XC | | | 66 | | | | | | |
| 1200 | 602D | 14 | | | | | | | | |
| | 6D | 255½ | | | | | | | | |
| | 106D | 44 | | | | | | | | |
| | 206D | 136 | | | 34 | | | | | |
| | 606D | 466½ | | | | | | | | |
| | 16D | 397½ | | | | | | | | |
| | 116D | 79 | | | 12 | | | | | |
| | 216D | 45 | | | | | | | | |
| | 416D | 29 | | | 5 | | | | | |
| | 616D | 408½ | | | 5 | | | | | |
| | 16D-6R | | 98½ | | | | | | | |
| 1300 | 6D-1R | | 113 | | | | | | | |
| | 6D-3R | | 91½ | | | | | | | |
| | 6D-4R | | 86 | | | | | | | |
| | 616D | 38 | | | | | | | | |
| | 16D-6R | | 93 | | | | | | | |
| | 10D-1R | | 10 | | | | | | | |
| | 18D-1R | | 37 | | | | | | | |
| | 19D | 387 | | | | | | | | |
| | 20D | 207 | | | | | | | | |
| | 26D | 390 | | | 26 | | | | | |
| | 27D | 413½ | | | | | | | | |
| | 127D | 57 | | | | | | | | |
| | 227D | 94½ | | 44 | 29 | | | | | |
| | 627D | 573 | | | 25 | | | | | |
| | 27D-1R | | 144 | | | | | | | |
| | 27D-2R | | 309½ | | | | | | | |
| | 28D | 526 | | | 6 | | | | | |
| | 128D | 60 | | | | | | | | |
| | 628D | 540½ | | 5 | 81 | | | | | |
| | 630D | 252 | | | 20 | | | | | |
| | 28D-1R | | 182 | | | | | | | |
| | 2R | | 102½ | | | | | | | |
| | 3R | | 197½ | | 10 | | | | | |
| | 6XC | | | 211½ | | | | | | |
| 1450 | 1D | 230½ | | | | | | | | |
| | 601D | 965 | | | | | | | | |
| | 606D | 119 | | | | | | | | |
| | 16D | 273 | | | | | 95 | | | |
| | 616D | 255 | | | | | | | | |
| | 16D-1R | | 210½ | | | | | | | |
| | -2R | | 186 | | | | | | | |
| | 32D | 133 | | | | | | | | |
| | 132D | 36 | | | | | | | | |
| | 632D | 643 | | | | | 155 | | | |
| | 32-1R | | 78 | | | | | | | |
| | Sta.XC | | | 123½ | | | 10,974 | | | |
| | 1XC | | | 412½ | | | | | | |

# YEARLY DEVELOPMENT SUMMARY

MINE: Brunswick YEAR OF: 1938

| LEVEL | LOCATION | DRIFT | RAISE | X-CUT | SIDING | RECAP | CU.FT. | TOT.FTG. | NORTH | EAST |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2XC | | | 235 | | | | | | |
| | 4XC | | | 366½ | | | | | | |
| 1600 | 605D | 37 | | | 17 | | | | | |
| | 16D | 153½ | | | | | | | | |
| | 116D | 69 | | | 6 | | | | | |
| | 616D | 290 | | | | | | | | |
| | 16D-1R | | 146 | | | | | | | |
| | 29D | 145 | | | | | | | | |
| | 632D | 273 | | | 12 | | | | | |
| | 32-1R | | 67 | | | | | | | |
| | Fan Sta. | 24 | | | | | | | | |
| | Sta.XC | | | 85 | 27 | | 14,080 | | | |
| | Shaft Rs | | 113½ | | | | | | | |
| | 1XC | | | 335½ | | | | | | |
| | 2XC | | | 899½ | | | | | | |
| | 2XC-1Rs | | 23½ | | | | | | | |
| | Wz.Pkt.St | | | 26 | | | 4,260 | | | |
| | 1450 Sump | | | | | | 1,000 | | | |
| | | 13406 | 4979½ | 3978½ | 561 | 200 | | | | |

TOTAL ADVANCE: 22,925

TOTAL RECAPTURE: 200

TOTAL CUBIC FTGE: 30,809

TOTAL DIAMOND DRILL: 7,731

Grass Valley, California.

November 29, 1938

Mr. Albert Crase, General Manager,

Idaho Maryland Mines Corporation,

Grass Valley, California.

Dear Sir:

The following is a revised report of possible operations through the Old Brunswick Shaft.

SUMMARY:

Ship 324 tons per day to Idaho Mill; 60% of ore to come from stoping operations and 40% to come from development.

Recovery value of $7.00 plus per ton.

STOPING

| | Tons | Miners | Muckers | Timbermen | SAR | N-75 |
|---|---|---|---|---|---|---|
| (6 day basis) | 222 | 38 | 7 | 2 | 15 | 4 |
| DEVELOPMENT | | | | | | |
| (6 day basis) | 208 | 17 | 9 | | 8 | 6 |
| Misc. | | 29 Misc. | men | (Spares) | 7 | 4 |
| | 430 | 84 | 16 | 2 | 30 | 14 |
| | | (102 plus 7% off) | | | | |

Assume 25% of development is shipped as waste:

208 less 52 - 156 tons per day, 6 days per week.

222 stope tons/day " " "

378 tons per day " " " "

324 tons per day, 7 day basis.

| EQUIPMENT NECESSARY | | COST |
|---|---|---|
| 2 Motors | Mancha (Forbestown) | $1000.00 |
| | Small collecting motor | 300.00 |

| Equipment, Cont. | | Cost |
|---|---|---|
| 25 Cars | 1 ton mine cars | $4900.00 |
| 30 SAR Stopers @ $400 | | 12000.00 |
| 14 N-75 Leyners @ $415 | | 5800.00 |
| 60 Sets air hose, 3600 ft. | | 1250.00 |
| 60 Sets water hose, 4200 ft. | | 700.00 |
| 5 tons drill steel | | 1250.00 |
| 8 - 6' Aluminum bars | ) | |
| 6 Assorted length " | ) | |
| 12 Single arms | ) | 600.00 |
| 12 Saddle clamps | ) | |
| 10 Tugger hoists @ $325 | | 3250.00 |
| 1 Compressor (Forbestown) | | 5000.00 |
| 1 Mucking Machine (Forbestown) | | 2000.00 |
| addition to compressed air lines | | 2000.00 |
| **Shop Equipment at New Brunswick:** | | |
| 1 Lathe 16" x 10' | | 1300.00 |
| 1 Shaper (used) | | 800.00 |
| 1 Bit tempering furnace | | 2200.00 |
| 1 Hot Miller | | 1400.00 |
| 1 Swing Saw | | 300.00 |
| 1 Power Hack Saw | | 200.00 |
| **Small Tools:** | | |
| 60 picks | ) | |
| 60 shovels | ) | |
| 60 pinch bars | ) | |
| 60 Stillson wrenches | ) | |
| 24 Double jacks | ) | 750.00 |
| 60 Single jacks | ) | |
| 10 4' saws | ) | |
| 10 hand saws | ) | |
| 5 Jim crows | ) | |
| TOTAL | | 47000.00 |
| Less Forbestown | | 8000.00 |
| | | $39000.00 |

MONTHLY BUDGET:

| | | |
|---|---|---|
| Cr. 10,000 tons @ $7.00 | | $70,000 |
| Labor 2652 Shifts @ $7.00 | $18,564 | |
| Supplies @$.75 ton | 7,500 | |
| Mill @ $1.00 per ton | 10,000 | |
| Shops | 1,800 | |
| Power | 1,000 | |
| Overhead (already written off) | | |
| | $38,864 | |
| Surface Trucking | 2,250 | |
| | $41,114 | |
| Profit per month (before depreciation depletion and State and Fed. taxes.) | | $28,886 |

In examining the individual working places attached, you will note that no provision has been made for purely waste development, a report of which was sent to Mr. MacBoyle, April 12, 1938.

This included 900-2D-4Raise to the anticline.

900-8Xc to stringer zone north of the 21 Drift.

900-12Drift to known ore west of present face.

900-4Xc to 18 Vein.

670-601 Drift to explore west section of Brunswick vein.

670-1 Drift over known ore of doubtful grade on 900.

Additional waste headings would be the 300 - 1Xc to the 16 vein on that level, for which a skip pocket on the Old Brunswick shaft would have to be made.

580 - 2Xc from present face to the 28 Vein on that horizon, for which facilities for waste disposal are available. — Wait for 900-28-1R

Equipment for above and cost of operation have not been included in estimate.

During the past three months we have worked an average of 548 man shifts per month on the O.B. levels and the ore extraction averaged 2878 tons per month, or on a 26 day basis we averaged 22½ men per day and the extraction was 110 tons per day. By moving these same men to the N.B. levels with their equipment it will be possible to continue the N.B. at its average tonnage and hoist thru the N.B. shaft. The total tons from both shafts should average about 950 per day.

Some provision for change house and garages should be considered.

Yours very truly,

J. F. Cowley
Mine Superintendent

JFC/ b

| Place | Daily Tons | Miners | Muckers | T & H | SAR 120 | N-75 |
|---|---|---|---|---|---|---|
| | | STOPING | | | | |
| 670 Level 1 Stope | 18 | 4 | 1 | | 2 | |
| 670 " 2 Stope | 18 | 4 | 1 | | 2 | |
| 900 - 4D - 4S | 18 | 2 | 1 | | | 1 |
| 4D - 5S | 18 | 2 | 1 | | | 1 |
| 6D-- 2S | 20 | 4 | | | 2 | |
| 7D - 1S | 15 | 2 | 1 | | | 1 |
| 7D - 2S | 20 | 4 | | | 2 | |
| 32D - 2S | 20 | 4 | | | 2 | |
| 32D - 3S | 35 | 4 | 2 | 2 | 1 | 1 |
| 16D - 1S | 20 | 4 | | | 2 | |
| 16D - 2S | 20 | 4 | | | 2 | |
| | 222 | 38 | 7 | 2 | 15 | 4 |
| | | DEVELOPMENT | | | | |
| 5 Level 16D | 12 | 1 | 1 | | | 1 |
| 616D | 12 | 1 | 1 | | | |
| 800 Level 17D | 12 | 1 | 1 | | | 1 |
| 4D | 12 | 1 | 1 | | | 1 |
| 616D | 12 | 1 | 1 | | | 1 |
| 900 Level 616D | 12 | 1 | 1 | | | 1 |
| 216D | 12 | 1 | 1 | | | |
| 28D | 12 | 1 | 1 | | | 1 |
| 628D | 12 | 1 | 1 | | | |
| 580L -16D - 1R | 25 | 2 | | | 2 | |
| 900L -16D -4R | 25 | 2 | | | 2 | |
| 900L -28D - 1R | 25 | 2 | | | 2 | |
| 1D - 6R | 25 | 2 | | | 2 | |
| | 208 | 17 | 9 | | 8 | 6 |
| TOTALS | 430 | 55 | 16 | 1 | 23 | 10 |

Misc. Men

2 Supply Men

8 Motor Men

1 Pipe Man

1 Top Man

2 Skip Tenders

6 Timbermen & Helpers

2 Crushermen

2 Watchmen

5 Bosses.

IDAHO MARYLAND MINES CORPORATION

1939 ANNUAL SUMMARY OF DIAMOND DRILLING

IDAHO UNIT:

| Runner | Feet Drilled | Av. ft. / shift | Av. ft. / pull. |
|---|---|---|---|
| Owen | 4,608 | 27.9 | 4.98 |
| Hunt | 6,395 | 26.22 | 5.19 |
| H. Hawk | 3,321 | 25.45 | 5.07 |
| C. Hawk | 29 | - | - |
| | 14,353 | 26.52 | 5.08 |

BRUNSWICK UNIT:

| | | | |
|---|---|---|---|
| Owen | 2,942 | 31.1 | 7.6 |
| H. Hawk | 3,660 | 28.1 | 6.1 |
| C. Hawk | 8,300 | 30.9 | 5.7 |
| | 14,902 | 30.0 | 6.5 |

TOTAL DRILLING:

| | | | | Av. ft./bit |
|---|---|---|---|---|
| Owen | 7,550 | 29.1 | 5.9 | 128.3 |
| Hunt | 6,395 | 26.2 | 5.2 | 52.0 |
| H. Hawk | 6,981 | 26.8 | 5.6 | 54.8 |
| C. Hawk | 8,329 | 30.9 | 5.7 | 61.1 |
| | 29,255 | 28.2 | 5.6 | 66.7 |

BRUNSWICK

DEVELOPMENT WASTE 1938

| VEIN | WASTE HOISTED | WASTE GOBBED | TOTAL |
|---|---|---|---|
| 1 | 2171 | 41 | 2212 |
| 4 | 326 | 417 | 743 |
| 5 | 71 | | 71 |
| 6 | 325 | 6 | 331 |
| 7 | | 38 | 38 |
| 8 | | 18 | 18 |
| 9 | 82 | | 82 |
| 12 | 208 | 148 | 356 |
| 16 | 3198 | 1915 | 5113 |
| 19 | 827 | | 827 |
| 20 | 412 | | 412 |
| 26 | 803 | | 803 |
| 27 | 3119 | | 3119 |
| 28 | 322 | 275 | 597 |
| 29 | 468 | | 468 |
| 32 | 1517 | | 1517 |
| Stations and Pockets | 1584 | | 1584 |
| Shaft (Vert) | 4648 | | 4648 |
| X-C | 9216 | 3905 | 13121 |
| Total | 29297 | 6763 | 36060 |
| Total Waste) from stopes) | 30 | 538 | 568 |
| | 29327 | 7301 | |

UNDER GROUND RATES EFFECTIVE APRIL 1, 1937

UNDERGROUND RATES EFFECTIVE APRIL1, 1937

| Occupation | 1 Hour | 8 Hours |
|---|---|---|
| Diamond Drill | .87¼ | 6.98 |
| Jigger Boss | .81 | 6.48 |
| Shaft Miner | .81 | 6.48 |
| " Hoistman | .81 | 6.48 |
| UG Hoistman | .74 3/4 | 5.98 |
| Timberman | .74 3/4 | 5.98 |
| " Helper | .68½ | 5.48 |
| Miner | .72 | 5.76 |
| Motorman | .72 | 5.76 |
| " (Idaho) | .74 3/4 | 5.98 |
| " Swamper | .68½ | 5.48 |
| Mucker | .65½ | 5.24 |

## MILL RATES EFFECTIVE APRIL 1, 1937

| Occupation | 1 Hour | 8 Hours |
|---|---|---|
| Mill Boss | .81 | 6.48 |
| " Mechanic | .81 | 6.48 |
| " Operator | .74 3/4 | 5.98 |
| "Mechanic | .71 5/8 | 5.73 |
| "Mechanic | .68½ | 5.48 |
| "Helpers | .62¼ | 4.98 |
| Assayer Chief | .74 3/4 | 5.98 |
| Assayer | .65½ | 5.24 |

## SURFACE RATES EFFECTIVE APRIL 1, 1937

| Occupation | 1 Hour | 8 Hours |
|---|---|---|
| Foreman | .87½ | 6.98 |
| Draftsman | .81 | 6.48 |
| Mechanic | .74 3/4 | 5.98 |
| Machinist | .78 | 6.24 |
| Blacksmith | .81 | 6.48 |
| Blacksmith | .74 3/4 | 5.98 |
| Electrician | .74 3/4 | 5.98 |
| Electrician | .81 | 6.48 |
| Truck Driver | .68½ | 5.48 |
| Semi-Skilled | .65½ | 5.24 |
| Semi-Skilled | .62½ | 4.98 |
| Unskilled | .56 | 4.48 |
| " | .49 3/4 | 3.98 |
| " | .43½ | 3.48 |
| " | .37½ | 2.98 |

# IDAHO MARYLAND MINES

## PROPERTY - - ORIGIN

| | | | |
|---|---|---|---|
| Idaho Maryland | 1 | Underground | 1 |
| G.V. Bullion Mine & Alaska | 2 | Surface | 2 |
| Forbestown | 3 | Mills | 3 |
| | 4 | Cyanide Plant | 4 |
| | 5 | Commisary | 5 |
| Brunswick Mine | 6 | Engineering | 6 |
| | 7 | Mine Office | 7 |
| Fruit and Stock Ranches | 8 | Idaho Shaft #2 | 8 |
| Misc. Accts. Rec. | 9 | Distribution Cards | 9 |

| RANCHES | | TRUCKS | |
|---|---|---|---|
| Loma Rica | 1 | M & R and Misc. | 7 |
| Brunswick, Parson, Hopper | 2 | Driving | 8 |
| Macari, Mitchell, Conti | 3 | Load & Unload | 9 |
| | 4 | | |
| | 5 | | |
| | 6 | | |
| Airport | 7 | | |
| | 8 | | |
| | 9 | | |

## CODING OF LOCATIONS

### DESCRIPTION OF LOCATIONS

| | | |
|---|---|---|
| 1st | Column | Ore Body |
| Next 2 | Columns | Level |
| Next 1 | Column | Sub-Level |
| Next 3 | Columns | Drift or X Cut |
| Next 1 | Column | Description |
| Next 2 | Columns | No. of Description |
| Next 1 | Column | Station |

### STATIONS

| | |
|---|---|
| 1 | FAN STATIONS |
| 4 | Transformers |
| 5 | Shafts |
| 6 | Sumps |
| 7 | Ore Pockets |
| 8 | Waste Pockets |
| 9 | Pump Stations |

### DESCRIPTION

| | |
|---|---|
| 1 | Raises |
| 2 | Winzes |
| 3 | Stopes |
| 4 | D.Drill Holes |
| 5 | Shafts |
| 6 | Tunnels |

### DRIFT OR X CUT NUMBERS

| | |
|---|---|
| 000 | East Drifts |
| 600 | West Drifts |
| 700 | X Cuts |
| 800 | |
| 900 | Used when more than two drifts are oper. |

### SHAFTS

| | |
|---|---|
| 5-01 | Idaho Main |
| 5-02 | Idaho #2 |
| 5-03 | N Bruns. |
| 5-04 | O Bruns. |
| 5-05 | Bullions |
| 5-06 | Alaska |

### TENTHS OF HOURS

| | |
|---|---|
| 1/8 | .13 |
| 1/4 | .25 |
| 3/8 | .38 |
| 5/8 | .62 |
| 7/8 | .87 |
| 1/16 | .06 |
| 3/16 | .19 |
| 5/16 | .31 |
| 7/16 | .44 |
| 9/16 | .56 |
| 11/16 | .69 |
| 13/16 | .81 |
| 15/16 | .94 |

### CLASS OF LABOR

| | |
|---|---|
| 1 | Development & Extraction Oper. |
| 2 | Development Maintenance & Repairs |
| 3 | Development prior to Oper. Period |
| 4 | Capitalized Dev. During and after Oper. (Recapture) |

### SHIFTS

| | | |
|---|---|---|
| 1 | Day | 7:00 - 3:30 |
| 2 | Afternoon | 3:30 - 11:00 |
| 3 | Night | 11:00 - 7:00 |

BRUNSWICK NUMBERING SYSTEM

VEINS

| Vein | Type Location | |
|---|---|---|
| | 900-2XC HW + FW Vn. | |
| 1 | 580-1XC HW & FW Vn. | |
| 2 | Idaho 25 Vn. + 35 Vn (2000L) | N 80 W ⊥ |
| 3 | 6-3 (Idaho 63 Vn) | |
| 4 | 900-2XC | N 20 E |
| 5 | Between 1X + 16 Vn. | |
| 6 | 900L-2D FW of 32 Vn. | |
| 7 | 900L-2XC FW of 12 Vn. | |
| 8 | 900-1000-1100-1300 FW. of 9 Vn. | |
| 9 | 1100-3XC FW of 6 Vn. | |
| 10 | 1100-6XC FW of 9 Vn. | |
| 11 | Rev. dip. | |
| 12 | 990L- FW of 1 Vn N. of 2 Vn | |
| 13 | 900L-42D | |
| 14 | 1300L-4XC FW of 32 Vn | |
| | ~~1300 FW of 16 Vn.~~ | |
| 15 | 1300L HW of 6-3 | |
| 16 | 1300L-1XC-FW of 19 Vn | |
| 17 | 900L-4D FW of 7 Vn + 4 Vn. | |
| 18 | 1100L-6XC FW of 10 Vn | |
| 19 | 900L-3XC FW of old 24 Vn. U. Hill "Georgia" | |
| 20 | 1300-830D, 1600L-20D | N 60 W |
| 21 | ~~900L-17D FW split~~ 2300L-32D (2000-1D) | N 15 W |
| 22 | 1300L-1XC 900L-42D | N 20 W |
| 23 | ~~900L-4D HW~~ | |
| | now see 7D | |
| 24 | ~~1300L-1XC FW of 26 Vn~~ | |
| 25 | ~~1000L 1n FW of 10D~~ | |
| | now see 110D | |

reserved for crossings

| Vein | Type Location | |
|---|---|---|
| 26 | 1300-1XC FW of 27 Vn. | |
| 27 | 1300-1XC | |
| 28 | 1300-6XC F.W. of 18 Vn. | |
| 29 | 1600-1XC N 15 W. | |
| 30 | 1300-6XC links 28 to 31 Vn. | |
| 31 | 1600L-428D ← 2XC 900L-8XC | |
| 32 | 900L-2D FW of 1 Vn. S. of 2 Vn. | |
| 33 | 1600L-31D HW split. FW of 10 Vn | |
| 34 | 580-1XC FW of 16 Vn. | |
| 35 | 1450-4XC, 2000L-1D i.e. 2 Vn. | |
| 36 | 580-4XC, 600L Anticline | N 15 W |
| 37 | 1100-10XC FW of 28 Vn. | |
| 38 | 1200-4D FW of 18 Vn above 4 Vn. | |
| 39 | 2300 (2000-1D) | |
| 40 | 1450-6XC FW of 28 Vn | |
| 41 | 1450-6XC-8XC FW of 40 Vn. | |
| 42 | 900-2XC FW (FW) of 1 Vn N of 2 Vn | |
| 43 | | |
| 44 | | |
| 45 | | |
| 46 | | |
| 47 | | |
| 48 | | |
| 49 | | |
| 50 | | |

| | 1XC | 2XC | 3XC | 4XC | 5XC |
|---|---|---|---|---|---|
| 1600 | 10 to 16 D | 10 to 31 D | 31 to 22 | 31 to 28 | HW 631 D |
| 1740 | | | | | |
| 1880 | | | | | |
| 2020 | | | | | |
| 2160 | | | | | |
| 2300 | sta to 16 D | 31 to 33 | | 33 to 28 to | |
| 2440 | | | | | |
| 2580 | | | | | |
| 2720 | | | | | |
| 2860 | | | | | |
| 3000 | | | | | |
| 3140 | | | | | |
| 3280 | | | | | |
| 3420 | | | | | |

BRUNSWICK NUMBERING SYSTEM

LEVELS & CROSS-CUTS

| LEVEL | In H. W. of ~~I~~ any Vein 1 XC | 3 XC | 5 XC | 7 XC | In F. W. of ~~I~~ Any Vein 2 XC | 4 XC | 6 XC | 8XC | 10 XC |
|---|---|---|---|---|---|---|---|---|---|
| 70 1D | | | | | | | | | |
| 140 1D | | | | | | | | | |
| 300 1D | | | | | FW of 1D | | | | |
| 380 1D | | | | | | | | | |
| 460 1D | | | | | | | | | |
| 490 | HW of 1D-1R | | | | | | | | |
| 550 1D | | | | | | | | | |
| 580 | 1D to 16D | | | | sta to 7V. | 16D to 36D | 4D to | | |
| 600 36D | | | | | | | | | |
| 670 | 1D to 3 | | | | | | | | |
| 700 | 16D to 116D | | | | | | | | |
| 730 1D | | | | | | | | | |
| 750 | 16D to 116D | | | | | | | | |
| 800 | FW of 7D | | | | 900-2D-3R | | | | |
| 840 | | | | | | | | | |
| 900 | sta. to 16D | 1D to 19D | 1D W. of O.B. | 28D to Ind. sh. | 1D to 4D | FW of 6D FW of 10D | FW of 17D | 4D to 31D | FW of (23) 7D |
| 980 7D 23D | | | | | | | | | |
| 990 12D | | | | | | | | | |
| 1000 | HW of 32D | 18D-1R | | | FW of 4D-1S | FW of 9D | FW of 4D | | |
| 1080 4D | | | | | | | | | |
| 1100 | sta to 19D 16D | 2D to 9D | | | 1D to 2D | 2D to 12D | 9D to 18D | HW of (32D) 6·3 | FW of 28D |
| 1200 | sta. to 1D | | | | | | | | |
| 1250 4D | | | | | | | | | |
| 1270 1D | | | | | | | | | |
| 1300 | sta to 27D | 16D to 15D | 18D to 2D-2R | | 1D to 2D-2R | sta to 18D | 18D to 28D | | |
| 1400 | sta to 1D | | | | | | | | |
| 1450 | 1D(Wz) to 19D | 28D to 30D | | | 1D to 32D | 32D to 28D | 28D to 41D | | |

# NEW BRUNSWICK STANDARD WHISTLE CALLS

| CALL FOR | LONG | SHORT | LONG |
|---|---|---|---|
| Watchmen | 1 | | |
| Shaft supply men | 2 | | |
| Master Mechanic | 3 | | |
| Electrician | 1 | 1 | |
| Foreman's office | 1 | 2 | |
| Supt's office | 1 | 3 | |
| First Aid man | 2 | 1 | |
| Assay office | 2 | 2 | |
| O. B. Hoist | 2 | 3 | |
| Crusher man | | 1 | 1 |
| Warehouse | | 2 | 1 |
| Mill Supt. | | 3 | 1 |
| Employment officer | | 1 | 2 |
| Construction foreman or member of crew | | 2 | 2 |
| Personnel Mgr. | 1 | 1 | 1 |
| Truck Driver | 1 | 2 | 1 |
| Pumpman | 1 | 3 | 1 |
| | 2 | 1 | 1 |
| | 2 | 2 | 1 |

| PROPERTY | DATE: ORIGIN | DATE: SHIFT | DATE: DAY | DATE: MONTH | LOCATION: ORE BODY | LOCATION: LEVEL | LOCATION: SUB. | LOCATION: DRIFT OR X CUT | LOCATION: DESCRIP. | LOCATION: NUMBER | LOCATION: STATION | MAN NO. | OCCUPATION | JOB NO. | OP. OR M.&R. | ACCOUNT | TIME | AMOUNT | DRILLING: MACHINE NO. | DRILLING: DRILLING HOURS | DRILLING: NO. HOLES | DRILLING: FT. HOLES | DRILLING: NO. DRILLS | POWDER: CLASS | POWDER: STICKS USED | POWDER: FEET OF FUSE | ORE | WASTE | MATERIAL USED: CLASS | MATERIAL USED: SUB. CLASS | MATERIAL USED: UNIT | MATERIAL USED: QUANTITY OR LENGTH | MATERIAL USED: AMOUNT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |

| 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |

IBM 523940

LICENSED FOR USE UNDER PATENT 1,772,492

IDAHO MARYLAND MINES CO. — LABOR

Idaho Maryland Mines Corp.

RESUME OF ORE RESERVE ESTIMATE, JAN. 1, 1939

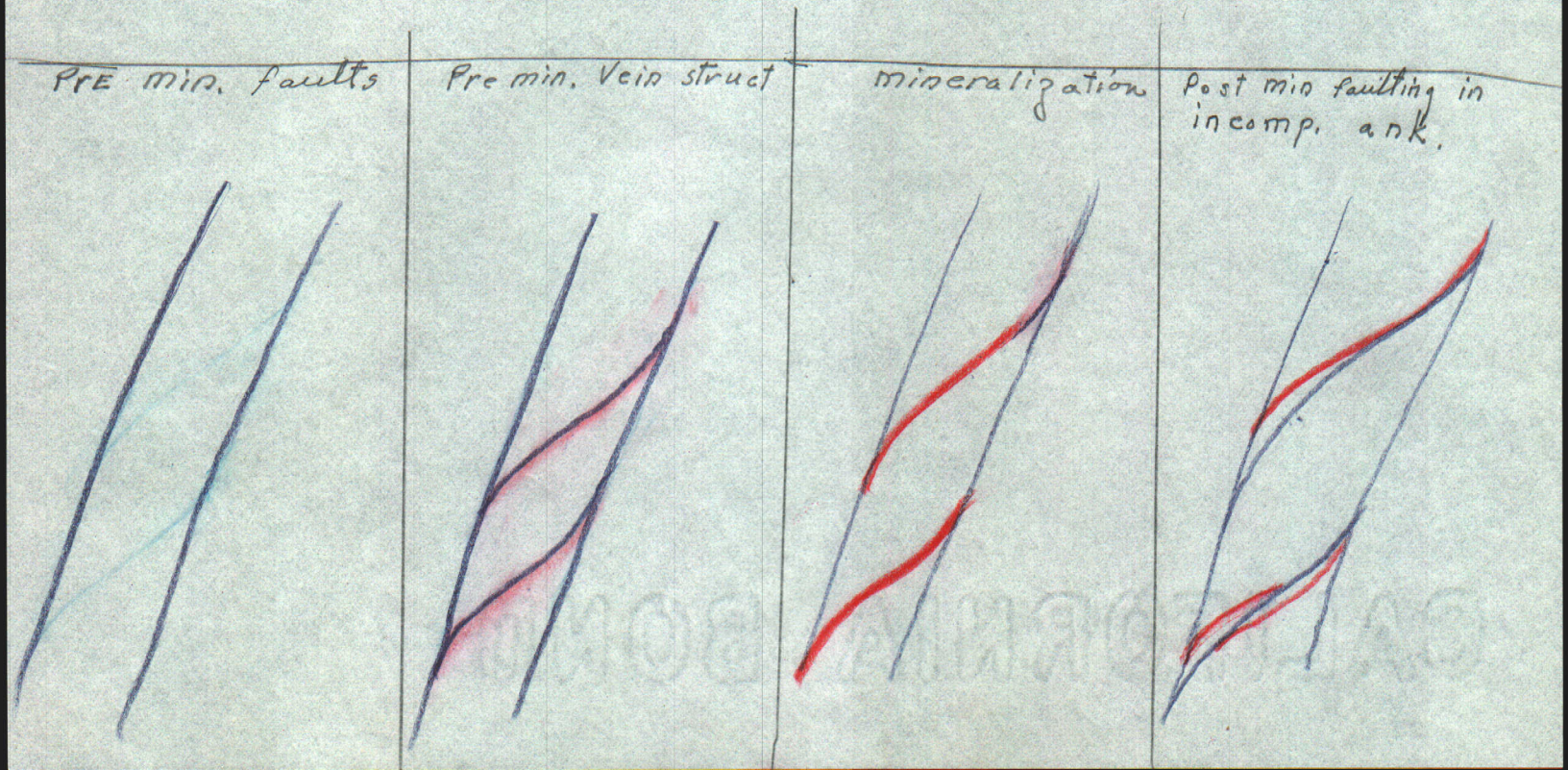
BRUNSWICK UNIT

| Vein No. | Ore Extracted in 1938 Tons | % | Tons Developed 1938 | Net Change in Reserve | Ore Reserve Jan. 1, 1939 |
|---|---|---|---|---|---|
| 1 | 5521 | 2.5 | 15,077 | + 9556 | 90,756 |
| 2 | 41 | | 41 | | 21,115 |
| 3 | | | | | 100 |
| 4 | 19024 | 8.7 | | - 19024 | 12,331 |
| 5 | | | | | 10,000 |
| 6 | 33342 | 15.2 | 14,386 | - 18956 | 47,054 |
| 7 | 5621 | 2.6 | | 5621 | 27,332 |
| 8 | 1217 | .6 | 271 | - 946 | 5,824 |
| 9 | 162 | .07 | 63 | - 99 | 2,181 |
| 10 | 2206 | 1.0 | | - 2206 | 20,944 |
| 11 | | | | | 1,000 |
| 12 | 18246 | 8.4 | 10,102 | - 8144 | 6,756 |
| 14 | | | | | 260 |
| 16 | 52521 | 24.1 | 122,101 | + 69580 | 116,815 |
| 17 | | | | | 7,660 |
| 18 | 334 | .16 | 147 | - 187 | 36,843 |
| 19 | 360 | .16 | 403 | + 43 | 263 |
| 20 | 119 | .06 | 119 | | 690 |
| 21 | | | | | 1,360 |
| 22 | | | | | 940 |
| 23 | | | | | 110 |
| 24 | | | | | 30 |
| 25 | | | | | 80 |
| 26 | 362 | .16 | 3,372 | + 3010 | 3,770 |
| 27 | 3617 | 1.7 | 14,287 | + 10670 | 10,970 |
| 28 | 11426 | 5.2 | 53,116 | + 41690 | 41,690 |
| 29 | 198 | 0.08 | 198 | | |
| 30 | 1023 | .5 | 3,653 | + 2630 | 2,630 |
| 32 | 62807 | 28.8 | 57,887 | - 4920 | 66,400 |
| 42 | | | | | 20,770 |
| Union Hill | | | | | 100 |
| TOTAL | 218147 | 100. % | 295,223 | + 77076 | 556,774 |

crossings

The following are confirmed by only a few observed occurrences of fault and vein intersections, all of which, however, are similar.

Ribboning occurs along the vein parallel to the fault at their intersection. If ribboning is admitted to be the expression of some of the intra-mineral movements then it is evident that the fault is intra mineral. In some cases the fault may be pre-mineral and this can usually be determined in the field. In the case of a pre mineral fault there is no use looking for an offset vein. There may be an offset structure which may carry ore. If the Idaho may be put in any of the above conditions then extensive development for lost veins is unnecessary. The faults may be looked upon as parent structures rather than wolves. In selected areas they may have their post mineral paths determined by the veins, in others the controlling factor may be the wall rock which now have a reduced competency. In any area the post movement will follow the lines of least resistance which may or may not be along pre-existing veins. Further such movement may be subject to such variable control that all the expressions will be observed in a single stope. The only difference between a fault and a vein is that a fault has no ore. The reason should be structural.



PARAFINE MODEL #1. Cut on Morehouse, 27V - 16V - 1 V- 28V & - I.3V- 6-3 Idaho 1V

1.- 6-3 as a buttress

A.- Morehouse underthrust normal to 6-3
This gives a little movement on the S end and much movement on the N end with the E block moving S
Veins have horizontal movement - N blodk to west
27Vein wedge: s end up, N end down

B.- Morehouse underthrust 45° N to 6-3
About as "A" except there is movement along entire length of 6-3

C.- Morehouse underthrust 45° S to 6-3
Normal faulting with large openings at depth on 6-3

2.- Morehouse as buttress block

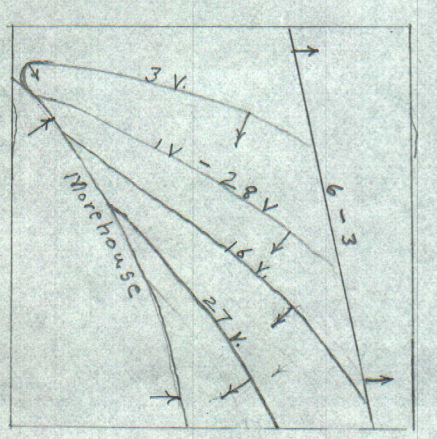
A.- north or south compression - no vein movement

B.- Compression due west
Veins reverse up to east - some hinge
Normal movement on bowl
More movement on N end of 6-3 than on S end

C.- Compression 45° SW
Horizontal on bowl unless Spring Hill makes a graben - then not much (Normal bowl)
Reverse on veins - more movement at 6-3 end
6-3 to S

D.- Compression 45° NW
Movement up bowl
Veins up to left - reverse - N side to E
27 Vein wedge hinges at west end
6-3 to N

In all cases S veins have more Shearing movement



# ELEVATIONS OF MINE LEVELS, IDAHO MARYLAND MINES CORP.

| Idaho #1 | |
|---|---|
| Col. | 2523 |
| 300 | 2216 |
| 400 | 2110 |
| 500 | 2019 |
| 600 | 1922 |
| 700 | 1828 |
| 800 | 1728 |
| 900 | 1636 |
| 1000 | 1547 |
| 1500 | 959 |
| 2000 | 420 |

| Ida 16-2Wz | |
|---|---|
| 2000 | 420 |
| 2100 | 315 |
| 2300 | 131 |

| Idaho #2 | |
|---|---|
| Col. | 2668 |
| Md. | 2615 |
| 500 | 2144 |
| 600 | 1991 |
| 700 | 1915 |
| 800 | 1816 |
| 850 | 1729 |
| 900 | 1653 |
| 1000 | 1575 |
| Sump | 1543 |

| Ida 2 1Wz | |
|---|---|
| 2000 | 430 |
| 2070 | 360 |
| 2140 | 288 |
| 2190 | 244 |
| 2320 | 104 |
| 2430 | 0 |

| Ida.3-1 Wz. | |
|---|---|
| 1000 | 1579 |
| 1050 | 1489 |
| 1100 | 1389 |
| 1200 | 1293 |
| 1300 | 1203 |
| 1400 | 1110 |
| 1500 | 968 |
| 1600 | |

| Canyon Wz. | |
|---|---|
| 1000 | 1550 |
| 1100 | 1445 |
| 1200 | 1330 |
| 1400 | 1081 |
| 1500 | 968 |
| 1600 | 825 |
| 1700 | 688 |
| 1800 | 586 |
| 1900 | 497 |
| 2000 | 414 |
| 2100 | 315 |
| 2350 | 125 |

| Idaho 3-3 Rs | |
|---|---|
| 1100 | 1394 |
| 1200 | 1293 |
| 1300 | 1199 |
| 1400 | 1104 |
| 1450 | 1039 |
| 1500 | 964 |
| 1600 | 858 |
| 1700 | 786 |
| 18-1 | 763 |
| 1800 | 712 |
| 1900 | 658 |
| 1950 | 575 |
| 1970 | 562 |
| 1980 | 532 |
| 2000 | 438 |

| Dorsey Wz. | |
|---|---|
| 1600 | 842 |
| 1700 | 735 |
| 1800 | 678 |
| 1900 | 645 |
| Sump | 605 |

| Brunswick Main | |
|---|---|
| Collar | 2753 |
| 300 | 2463 |
| 530 | 2213 |
| 580 | 2179 |
| 670 | 2080 |
| 700 | 2062 |
| 800 | 1962 |
| 900 | 1874 |
| 1000 | 1774 |
| 1100 | 1649 |
| 1200 | 1545 |
| 1300 | 1448 |
| 1400 | 1360 |

3280 ?

| Old Brunswick | |
|---|---|
| Collar | 2851 |
| Drain T | 2737 |
| 70 | 2670 |
| 140 | 2615 |
| 300 | 2448 |
| 380 | 2365 |
| 490 | 2261 |
| 580 | 2169 |
| 670 | 2077 |
| 800 | 1946 |
| 900 | 1846 |

| Union Hill | |
|---|---|
| Collar | 2661 |
| 300 | 2405 |
| 600 | 2186 |
| 800 | 2019 |
| 1000 | 1813 |
| 1200 | 1617 |

# ELEVATIONS OF MINE LEVELS, IDAHO MARYLAND MINES CORP.

| Idaho #1 | |
|---|---|
| Col. | 2523 |
| 300 | 2216 |
| 400 | 2110 |
| 500 | 2019 |
| 600 | 1922 |
| 700 | 1828 |
| 800 | 1728 |
| 900 | 1636 |
| 1000 | 1547 |
| 1500 | 959 |
| 2000 | 420 |

| Ida 16-2Wz | |
|---|---|
| 2000 | 420 |
| 2100 | 315 |
| 2300 | 131 |

| Idaho #2 | |
|---|---|
| Col. | 2668 |
| Md. | 2615 |
| 500 | 2144 |
| 600 | 1991 |
| 700 | 1915 |
| 800 | 1816 |
| 850 | 1729 |
| 900 | 1653 |
| 1000 | 1575 |
| Sump | 1543 |

| Ida 2 1Wz | |
|---|---|
| 2000 | 430 |
| 2070 | 360 |
| 2140 | 288 |
| 2190 | 244 |
| 2320 | 104 |
| 2430 | 0 |

2668

| Ida.3-1 Wz. | |
|---|---|
| 1000 | 1579 |
| 1050 | 1489 |
| 1100 | 1389 |
| 1200 | 1293 |
| 1300 | 1203 |
| 1400 | 1110 |
| 1500 | 968 |
| 1600 | |

| Canyon Wz. | |
|---|---|
| 1000 | 1550 |
| 1100 | 1445 |
| 1200 | 1330 |
| 1400 | 1081 |
| 1500 | 968 |
| 1600 | 825 |
| 1700 | 688 |
| 1800 | 586 |
| 1900 | 497 |
| 2000 | 414 |
| 2100 | 315 |
| 2350 | 125 |

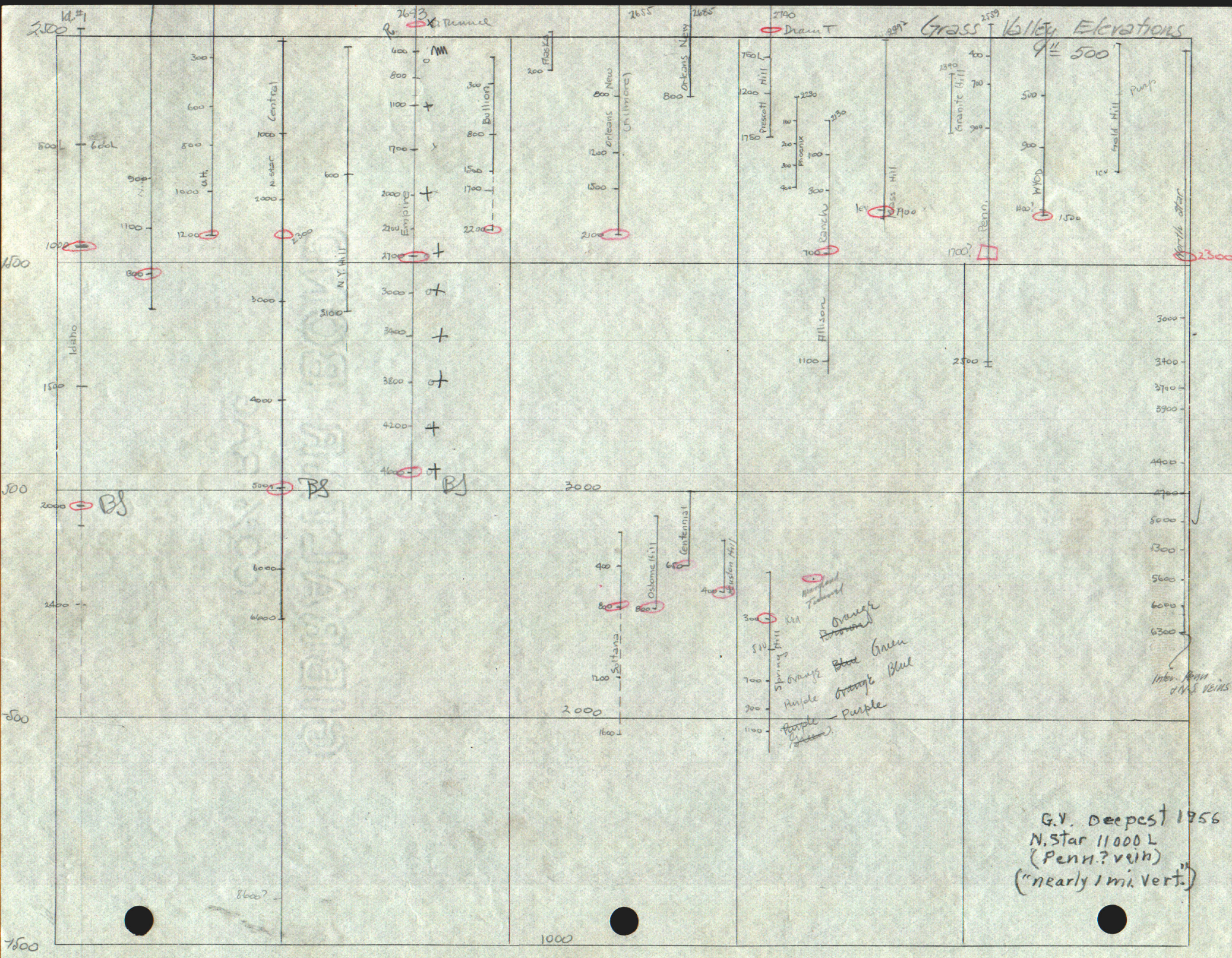
| Idaho 3-3 Rs | |
|---|---|
| 1100 | 1394 |
| 1200 | 1293 |
| 1300 | 1199 |
| 1400 | 1104 |
| 1450 | 1039 |
| 1500 | 964 |
| 1600 | 858 |
| 1700 | 786 |
| 18-1 | 763 |
| 1800 | 712 |
| 1900 | 658 |
| 1950 | 575 |
| 1970 | 562 |
| 1980 | 532 |
| 2000 | 438 |

| Dorsey Wz. | |
|---|---|
| 1600 | 842 |
| 1700 | 735 |
| 1800 | 678 |
| 1900 | 645 |
| Sump | 605 |

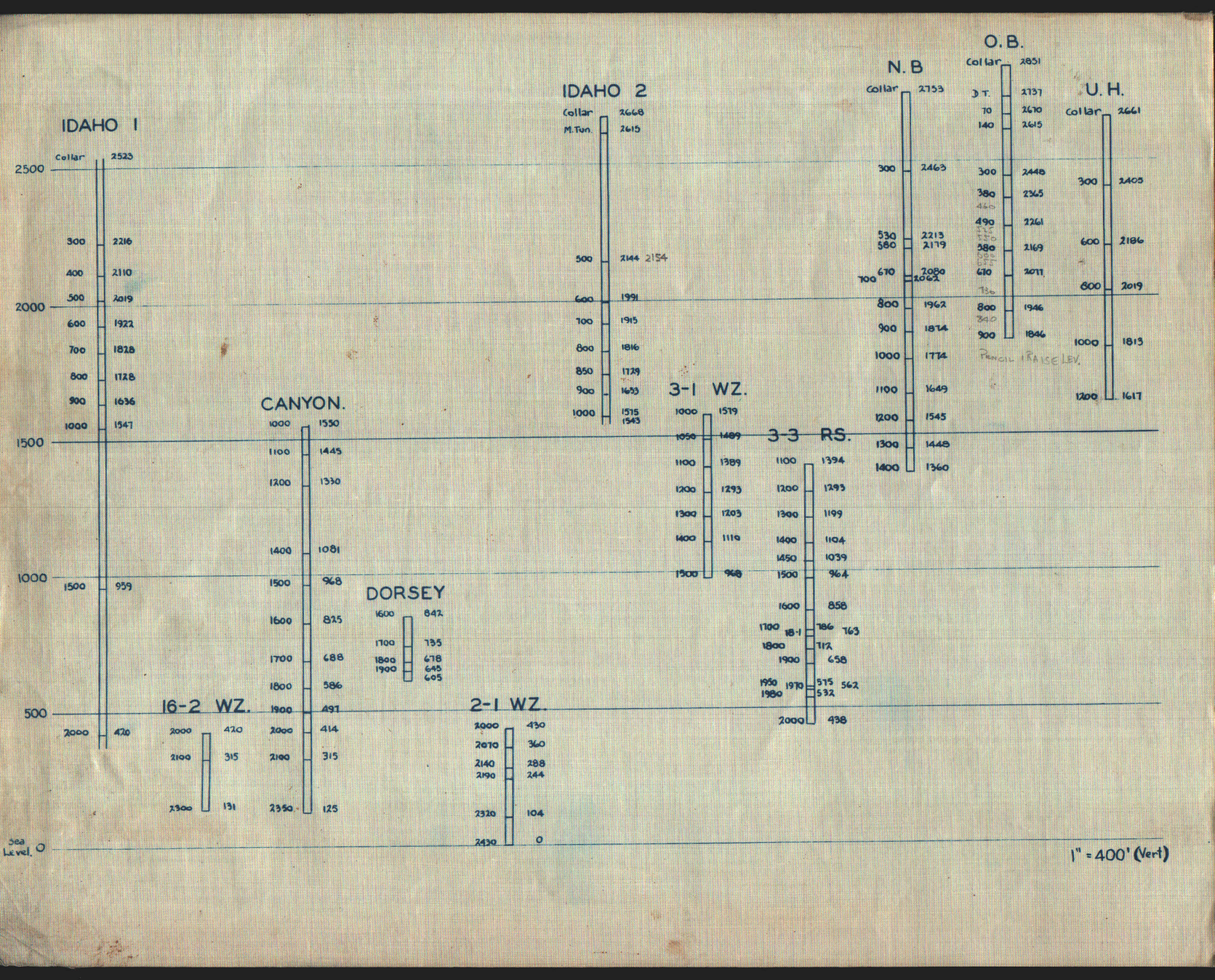
| Brunswick Main | |
|---|---|
| Collar | 2753 |
| 300 | 2463 |
| 530 | 2213 |
| 580 | 2179 |
| 670 | 2080 |
| 700 | 2062 |
| 800 | 1962 |
| 900 | 1874 |
| 1000 | 1774 |
| 1100 | 1649 |
| 1200 | 1545 |
| 1300 | 1448 |
| 1400 | 1360 |

| Old Brunswick | |
|---|---|
| Collar | 2851 |
| Drain T | 2737 |
| 70 | 2670 |
| 140 | 2615 |
| 300 | 2448 |
| 380 | 2365 |
| 490 | 2261 |
| 580 | 2169 |
| 670 | 2077 |
| 800 | 1946 |
| 900 | 1846 |

| Union Hill | |
|---|---|
| Collar | 2661 |
| 300 | 2405 |
| 600 | 2186 |
| 800 | 2019 |
| 1000 | 1813 |
| 1200 | 1617 |




FORM 138. 5M. 3-37


IDAHO 1
Collar 2523
300 2216
400 2110
500 2019
600 1922
700 1828
800 1728
900 1636
1000 1547
1500 959
2000 420
CANYON.
1000 1550
1100 1445
1200 1330
1400 1081
1500 968
1600 825
1700 688
1800 586
1900 497
2000 414
2100 315
2350 125
16-2 WZ.
2000 420
2100 315
2300 131
DORSEY
1600 842
1700 735
1800 678
1900 645
605
2-1 WZ.
2000 430
2070 360
2140 288
2190 244
2320 104
2430 0
IDAHO 2
Collar 2668
M.Tun. 2615
500 2144 2154
600 1991
700 1915
800 1816
850 1729
900 1633
1000 1515
1543
3-1 WZ.
1000 1519
1050 1489
1100 1389
1200 1293
1300 1203
1400 1110
1500 968
3-3 RS.
1100 1394
1200 1293
1300 1199
1400 1104
1450 1039
1500 964
1600 858
1700 18-1 786 763
1800 712
1900 658
1950 1970 575 562
1980 532
2000 438
N. B
Collar 2753
300 2463
530 2213
580 2179
670 2080
700 2062
800 1962
900 1874
1000 1774
1100 1649
1200 1545
1300 1448
1400 1360
O. B.
Collar 2851
D.T. 2737
70 2670
140 2615
300 2448
380 2365
460
490 2261
580 2169
670 2071
736
800 1946
840
900 1846
PENCIL 1 RAISE LEV.
U. H.
Collar 2661
300 2405
600 2186
800 2019
1000 1813
1200 1617
2500
2000
1500
1000
500
Sea Level. 0
1" = 400' (Vert)

I. M. M. CORP.

BRUNSWICK MINE - YEARLY PRODUCTION BY VEINS

Vertical Scale: 1 in. = 100,000 Tons

Reserve includes Assured, Probable and Possible Ore.

Reserve includes only ore available for stoping.

| VEIN - | 1 | 2 | 4 | 5 | 6&9 | 7 | 10 | 12 | 16 | 27 | 28 | 30 | 32 | MISC. (Totals less than 1%) | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1934 | R 100<br>P 10,654 | ---<br>1,792 | ---<br>2,409 | ---<br>1,565 | | | | | | | | | | (UH) 100<br>(3V) 127 | 200<br>16,547 |
| | 64% | 11% | 15% | 9% | | | | | | | | | | 1% | 100% |
| 1935 | R 53,790<br>P 24,214 | 10,671<br>7,895 | 14,900<br>27,515 | 58,700<br>856 | 1,457 | 1,038 | | 5,790 | | | | | 5,209 | 200<br>(42V)1,979 | 138,261<br>75,953 |
| | 32% | 10% | 36% | 1% | 2% | 1% | | 8% | | | | | 7% | 3% | 100% |
| 1936 | R 54,921<br>P 19,158 | 14,050<br>11,203 | 45,400<br>55,579 | 57,844 | 4,300<br>29,244 | 7,000<br>13,457 | 3,366 | 8,000<br>18,901 | 2,667 | | | | 21,200<br>44,937 | 4,500<br>8,701 | 217,215<br>207,222 |
| | 9% | 5% | 27% | | 14% | 7% | 2% | 9% | 1% | | | | 22% | 4% | 100% |
| 1937 | R 106,545<br>P 16,475 | 26,640<br>3,525 | 69,390<br>33,755 | 11,500 | 85,210<br>31,735 | 32,800<br>11,449 | 8,560<br>4,833 | 29,200<br>10,625 | 9,450<br>18,815 | | | | 151,230<br>70,060 | 28,310<br>19,013 | 558,835<br>220,285 |
| | 7% | 2% | 15% | | 14% | 5% | 2% | 5% | 9% | | | | 32% | 9% | 100% |
| 1938 | R 81,200<br>P 5,521 | 21,115 | 31,355<br>19,024 | 10,000 | 68,290<br>33,504 | 32,953<br>5,621 | 23,150<br>2,206 | 14,900<br>18,246 | 47,235<br>52,521 | 300<br>3,617 | 11,426 | | 71,320<br>62,807 | 77,250<br>3,654 | 479,698<br>218,147 |
| | 2% | | 9% | | 15% | 3% | 1% | 8% | 24% | 2% | 5% | | 29% | 2% | 100% |
| 1939 | R 90,756<br>P 9,030 | 21,115<br>2,423 | 12,331<br>20,495 | | 49,235<br>9,702 | 27,332<br>11,497 | 20,944 | 6,756<br>4,577 | 116,815<br>68,642 | 10,970 | 41,690<br>66,730 | 26,30<br>22,297 | 66,400<br>49,075 | 89,797<br>26,332 | 556,771<br>290,800 |
| | 3% | 1% | 7% | | 3% | 4% | | 1% | 24% | | 23% | 8% | 17% | 9% | 100% |
| 1940 | R 83,841 | 19,220 | 31,785 | | 44,728 | 20,373 | | 2,281 | 141,255 | 11,320 | 145,653 | 31,703 | 68,412 | 144,202 | 744,773 |
| 1941 | | | | | | | | | | | | | | | |

R - Ore Reserve on Jan.1

P - Production for Year.

IDAHO MARYLAND MINES CORPORATION

BRUNSWICK UNIT

* STOPING AREA AND EXTRACTION BY VEINS FOR YEARS 1934 TO 1939 INC.

| VEIN | AREA STOPED SQ. FT. | % OF TOTAL | STOPE TONS ORE | % OF TOTAL | |
|---|---|---|---|---|---|
| 1 | 116,000 | 7.9 | 51,598 | 8.1 | wide |
| 2 # | 16,000 | 1.1 | 5,277 | 0.8 | narrow |
| 4 | 250,000 | 17.0 | 119,644 | 18.7 | w |
| 5 | 1,000 | 0.1 | 666 | 0.0 | n |
| 6 | 158,000 | 10.7 | 67,173 | 10.5 | average |
| 7 | 65,000 | 4.4 | 29,867 | 4.7 | w |
| 10 | 32,000 | 2.2 | 3,940 | 0.6 | n |
| 12 | 70,000 | 4.8 | 45,136 | 7.1 | W |
| 16 | 235,000 | 16.0 | 80,819 | 12.6 | N |
| 17 | 1,000 | 0.1 | 6,479 | 1.0 | W |
| 18 | 1,000 | 0.1 | 896 | 0.0 | N |
| 28 | 108,000 | 7.3 | 37,947 | 5.9 | N |
| 30 | 16,000 | 1.1 | 11,783 | 1.9 | W |
| 32 | 400,000 | 27.2 | 180,077 | 28.1 | W |
| TOTAL | 1,469,000 | 100.0 | 641,302 | 100.0 | |

actually wide but tonnage is low due to full shrinkage stopes

* For Veins over 1,000 sq. ft.

\# Includes 1000L-32D-6S

6/5/40 RMS

I. M. M. CORP.

BRUNSWICK MINE - YEARLY PRODUCTION BY VEINS

Vertical Scale: 1 in. = 100,000 Tons

Reserve includes Assured, Probable and Possible Ore.

Reserve includes only ore available for stoping.

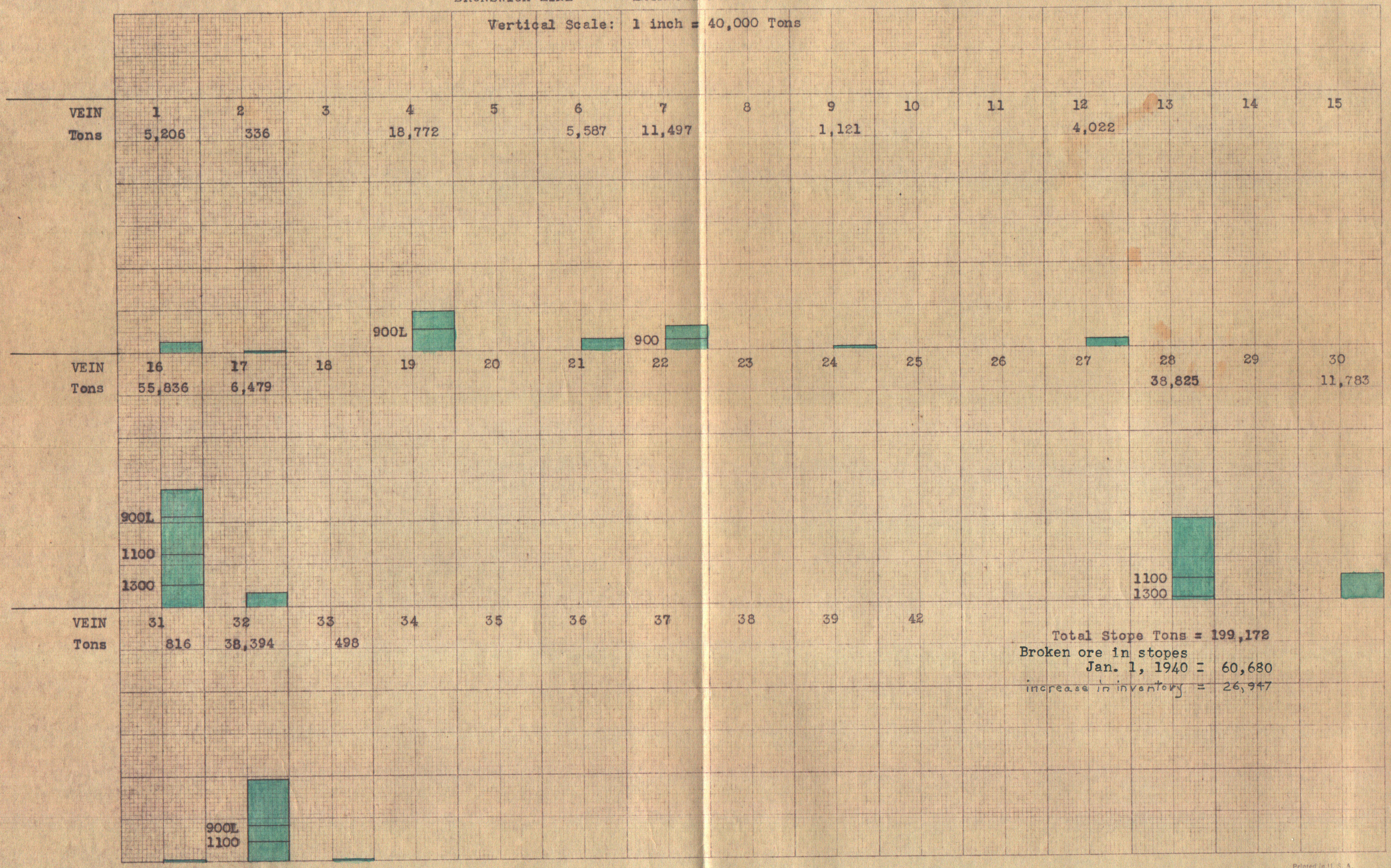
| VEIN - | 1 | 2 | 4 | 5 | 6&9 | 7 | 10 | 12 | 16 | 27 | 28 | 30 | 32 | MISC. (Totals less than 1%) | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1934 | R 100<br>P 10,654 | ---<br>1,792 | ---<br>2,409 | ---<br>1,565 | | | | | | | | | | (UH) 100<br>(3V) 127 | 200<br>16,547 |
| | 64% | 11% | 15% | 9% | | | | | | | | | | 1% | 100% |
| 1935 | R 53,790<br>P 24,214 | 10,671<br>7,895 | 14,900<br>27,515 | 58,700<br>856 | 1,457 | 1,038 | | 5,790 | | | | | 5,209 | 200<br>(42V)1,979 | 138,261<br>75,953 |
| | 32% | 10% | 36% | 1% | 2% | 1% | | 8% | | | | | 7% | 3% | 100% |
| 1936 | R 54,921<br>P 19,158 | 14,050<br>11,203 | 45,400<br>55,579 | 57,844 | 4,300<br>29,244 | 7,000<br>13,457 | 3,366 | 8,000<br>18,901 | 2,667 | | | | 21,200<br>44,937 | 4,500<br>8,701 | 217,215<br>207,222 |
| | 9% | 5% | 27% | | 14% | 7% | 2% | 9% | 1% | | | | 22% | 4% | 100% |
| 1937 | R 106,545<br>P 16,475 | 26,640<br>3,525 | 69,390<br>33,755 | 11,500 | 85,210<br>31,735 | 32,800<br>11,449 | 8,560<br>4,833 | 29,200<br>10,625 | 9,450<br>18,815 | | | | 151,230<br>70,060 | 28,310<br>19,013 | 558,835<br>220,285 |
| | 7% | 2% | 15% | | 14% | 5% | 2% | 5% | 9% | | | | 32% | 9% | 100% |
| 1938 | R 81,200<br>P 5,521 | 21,115 | 31,355<br>19,024 | 10,000 | 68,290<br>33,504 | 32,953<br>5,621 | 23,150<br>2,206 | 14,900<br>18,246 | 47,235<br>52,521 | 300<br>3,617 | 11,426 | | 71,320<br>62,807 | 77,250<br>3,654 | 479,698<br>218,147 |
| | 2% | | 9% | | 15% | 3% | 1% | 8% | 24% | 2% | 5% | | 29% | 2% | 100% |
| 1939 | R 90,756<br>P 9,030 | 21,115<br>2,423 | 12,331<br>20,495 | | 49,235<br>9,702 | 27,332<br>11,497 | 20,944 | 6,756<br>4,577 | 116,815<br>68,642 | 10,970 | 41,690<br>66,730 | 26,30<br>22,297 | 66,400<br>49,075 | 89,797<br>26,332 | 556,771<br>290,800 |
| | 3% | 1% | 7% | | 3% | 4% | | 1% | 24% | | 23% | 8% | 17% | 9% | 100% |
| 1940 | R 83,841 | 19,220 | 31,785 | | 44,728 | 20,373 | | 2,281 | 141,255 | 11,320 | 145,653 | 31,703 | 68,412 | 144,202 | 744,773 |
| 1941 | | | | | | | | | | | | | | | |

R - Ore Reserve on Jan.1

P - Production for Year.

BRUNSWICK MINE - EXTRACTION BY VEINS - 1939

Vertical Scale: 1 inch = 40,000 Tons




Total Stope Tons = 199,172

Broken ore in stopes

Jan. 1, 1940 = 60,680

increase in inventory = 26,947

# 1938

## Idaho — Brunswick

| | Year | Per Ton | Per Oz Fine | Year | Per Ton | per oz |
|---|---|---|---|---|---|---|
| Tonnage Produced from Development | 31189 | | | 67230 | | |
| " " Extraction | 82070 | | | 150917 | | |
| Total Mined | 113259 | | | 218147 | | |
| Fine Oz. of gold recovered | (67988.7437) | | | 49279.1015 | | |
| ~~" " " " per ton of ore~~ | | 0.6003 | | | .2259 | |
| **Operating Income** | | | | | | |
| Amalgamation Bullion | 1,834,614.70 | × 16198 | | 1075692.99 | × 4931 | |
| Less Mint Charges | 724981 | 064 | | 492113 | 023 | |
| Net | 182736489 | 16134 | | 107077131 | 4908 | |
| Cyanide Bullion | 54330039 | 4797 | | 64132359 | 2940 | |
| Less Mint Charges | 255753 | .023 | | 290444 | 013 | |
| Net | 54074286 | 4774 | | 63841915 | 2927 | |
| Total Mint Settlement from Bullion sales. | 236810775 | 20908 | | 170919046 | 7835 | |
| **Direct Operating Cost** | | | | | | |
| Development | 37858969 | 12139 | | 36000102 | 5355 | |
| Extraction | 40259788 | 4906 | | 35508276 | 2353 | |
| Total Mining Cost | 78118757 * | 6897 | 11.49 | 71509378 * | 3278 | 10.09 |
| Milling Cost per special statement | 13779044 | 1217 | | 14560043 | 667 | |
| Total Direct Operating Cost | 91897801 | 8114 | | 86068421 | 3945 | |
| **Direct Operating Profit** | 144912974 | 12794 | | 84850625 | 3890 | |
| Administrative & general (I 55% Br. 45%) | 1116880.00 | 986 | | 8069337 | 370 | |
| Insurance, Compensation | 1264800 / 689820 | 112 / 609 | Bonus | 630200 / 416378 | 029 / 191 | Bonus |
| Taxes + other insurance | 599594.44 | 529 | | 392314.44 | 180 | |
| Total Operating expense | 11721965 | 10350 | 17.24 | 10285478.0 | 4715 | 20.83 |
| Net Operating Profit before Depreciation | 119591610 | 10558 | | 68064266 | 3120 | |
| Depreciation on Plant | 750000.00 | 662 | | 192000.00 | 088 | |
| Profit before State & Fed. Taxes | 11209161.0 | 9896 | | 6614426.6 | 3023 | |
| **Capital Additions** | | | | | | |
| Mine + Mill Bldgs + Construction | 208839 | | | 481746 | | |
| " " Machinery + Equip | 3439308 | | | 2545558 | | |
| Total Capital Additions | 6517345 | | | 7363.04 | | |
| See sheet | | | | | | |

× not included
iron 8334.70 each shaft
Total 1666940 (should be Br.)

Sm Chg 556.90
Slag 33179.87
Sm Chg 90893
Matte 7209.28
Sm Chg 23256

~~* Inc~~
~~Br 100726~~
~~I 911.12~~

Value of Combined Property $700,000

# Ore Reserve Estimate

## Brunswick 16 Vein August 19, 1938

| Location | Block | Average Height | Average Length | Average Width | Tons Reserve | Tons Extraction | Total Tons |
|---|---|---|---|---|---|---|---|
| 1450-1300 | Excluding Possible F.W. | 205 | 370 | 4 | 5400 | | |
| 1300-1100 | 13-12 W of 5R △ | 95 | 100 △ | 4 | 2700 | | |
| | E of 5R △ | 95 | 75 △ | 4 | 1900 | | |
| | 12-11 W of 5R | 115 | 220 | 4 | 7200 | | |
| | 12-11 E of 5R HW | 115 | 185 | 4 | 6100 | 5409 -25.5 | |
| | 13-11 Below 1100 link | 25 △ | 130 | 4 | 900 | 3868 -35 | |
| | W-1R | 230 | 40 △ | 4 | 2600 | | |
| | 1R-4R HW | 230 | 245 | 4 | 16100 | | |
| | 1R-4R FW | 230 | 70 △ | 4 | 4600 | | |
| 1100-1000 | W of 6R | 110 | 170 | 4 | 5300 | 68 -25 | |
| | 6R-3R | 110 | 280 | 4 | 8800 | 1431 | |
| | E of 3R-HW | 110 | 100 △ | 4 | 3100 | 1090 | |
| | Link | 110 | 65 | 4 | 2000 | 31 | |
| 1000-900 | W of 6R HW | 105 | 150 | 4 | 4500 | 1089 | |
| | FW | 105 | 175 △ | 4 | 5300 | | |
| | 6R-3R | 105 | 280 | 4 | 8400 | | |
| | E of 3R | 105 | 50 △ | 4 | 1500 | | |
| 900-800 | E-1R | 95 | 90 | 4 | 2400 | | |
| | 1R-2R | 95 | 150 | 4 | 4100 | | |
| Above 900 | 2R-3R | 250 | 150 | 4 | 10700 | 1208 | |
| | W-3R | 190 | 45 △ | 4 | 2400 | 14134 | |
| Above 800 | 1R-2R | 140 | 150 | 4 | 6000 | | |
| | E-2R | 100 | 20 △ | 4 | 600 | | 112,600 |

Estimate extraction 2500 tons for Aug.

res. Est. Extract

2600
11,166
+1,966
9,200

Total