

NORTH AMERICAN METALS CORP.
GOLDEN BEAR PROJECT
VERTICAL LONGITUDINAL SECTION

FIG. 4.1

825918 4-3
 104K/02
 1988

SECTION 5

SECTION 6

BEAR MAIN ZONE IDEALIZED CROSS SECTION

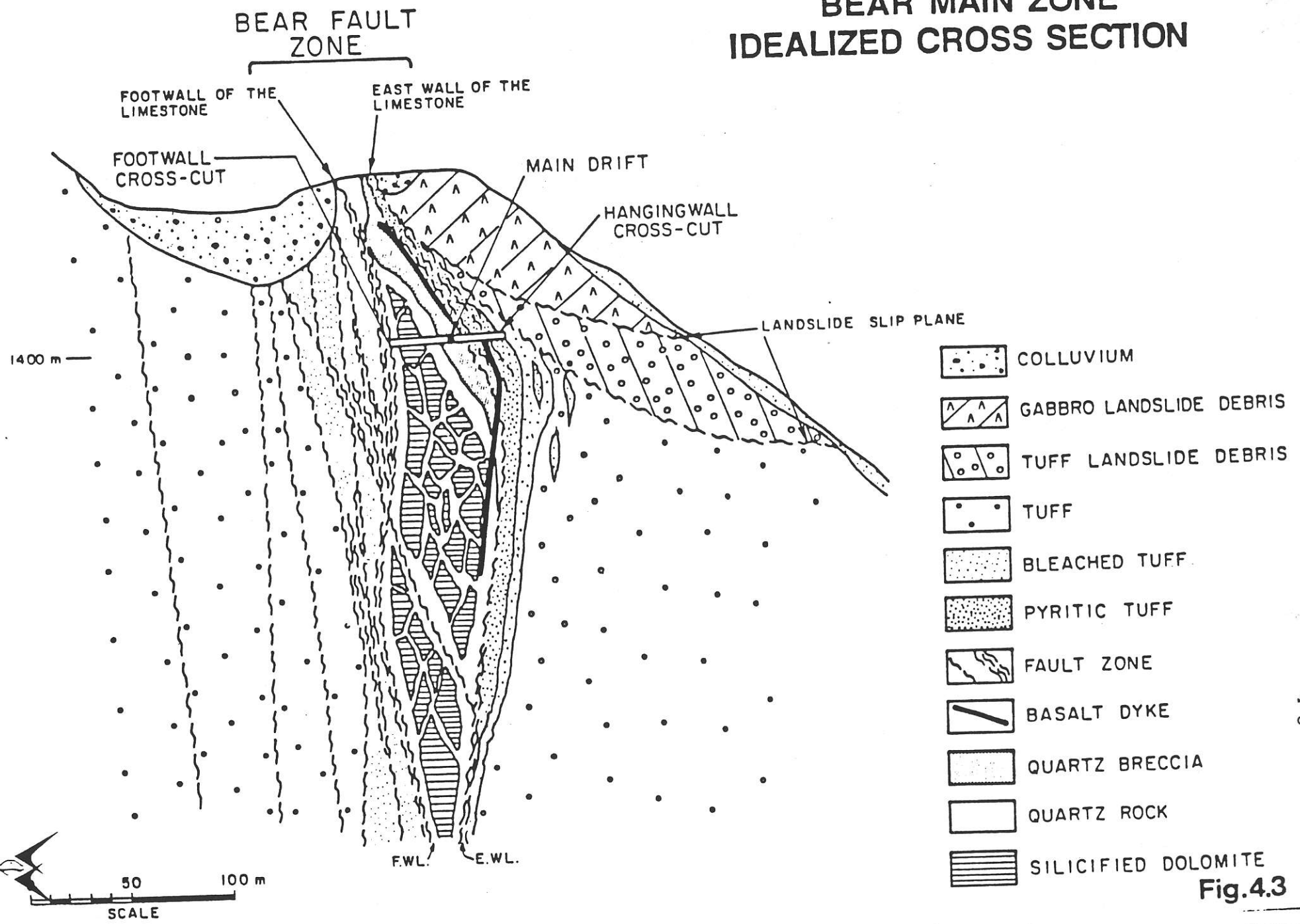
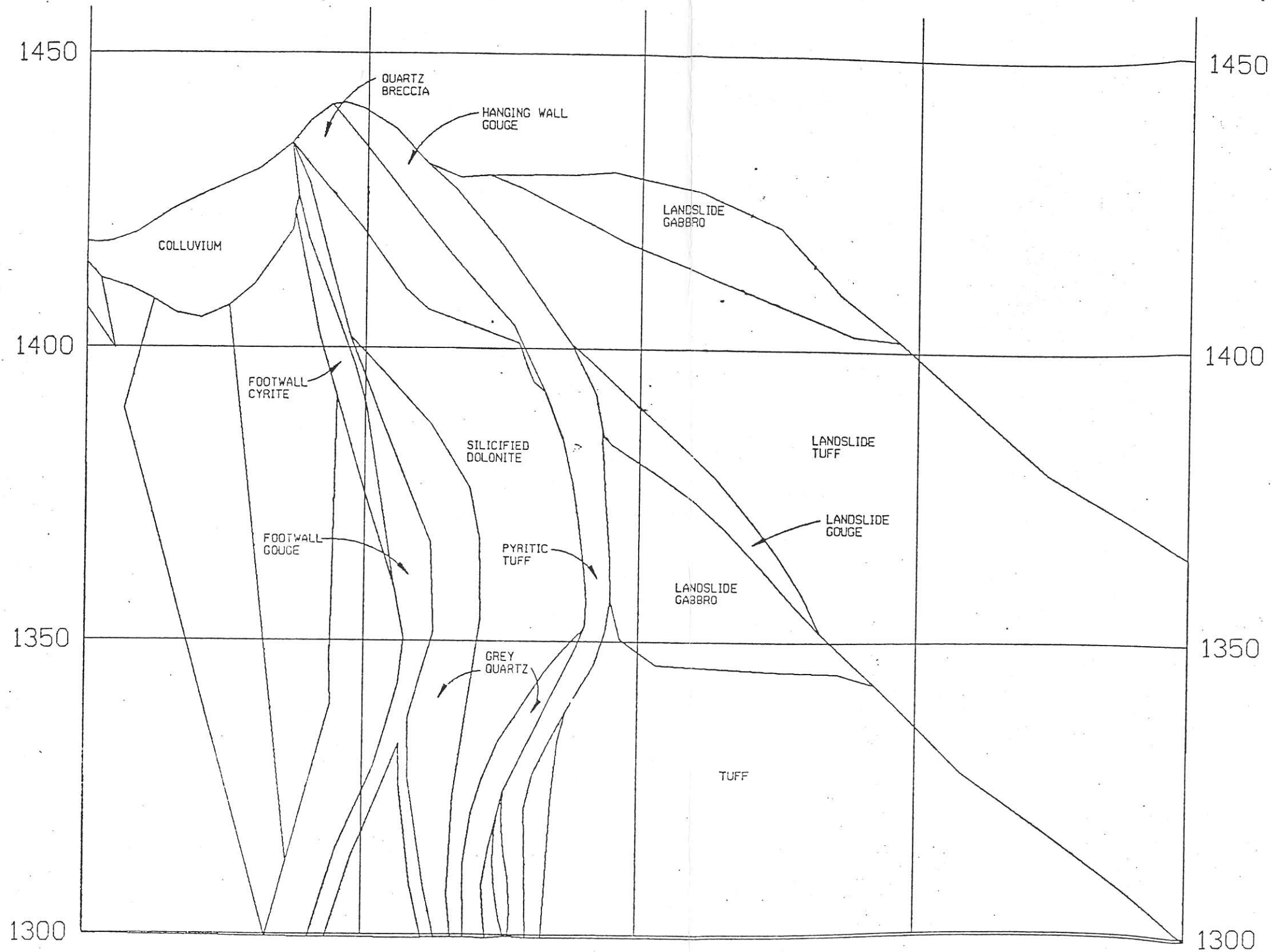


Fig.4.3



NORTH AMERICAN METALS B.C. INC.
GOLDEN BEAR PROJECT

GEOLOGICAL SECTION
SHOWING PIT



WRIGHT ENGINEERS LIMITED
VANCOUVER CANADA

1477 100 1218

Fig.4.4

DATE: 1977

NORTH AMERICAN METALS CORP.
GOLDEN BEAR PROJECT
BEAR DEPOSIT
 1400m LEVEL PLAN

BY: J.P.F./rwr

JAN., 1987

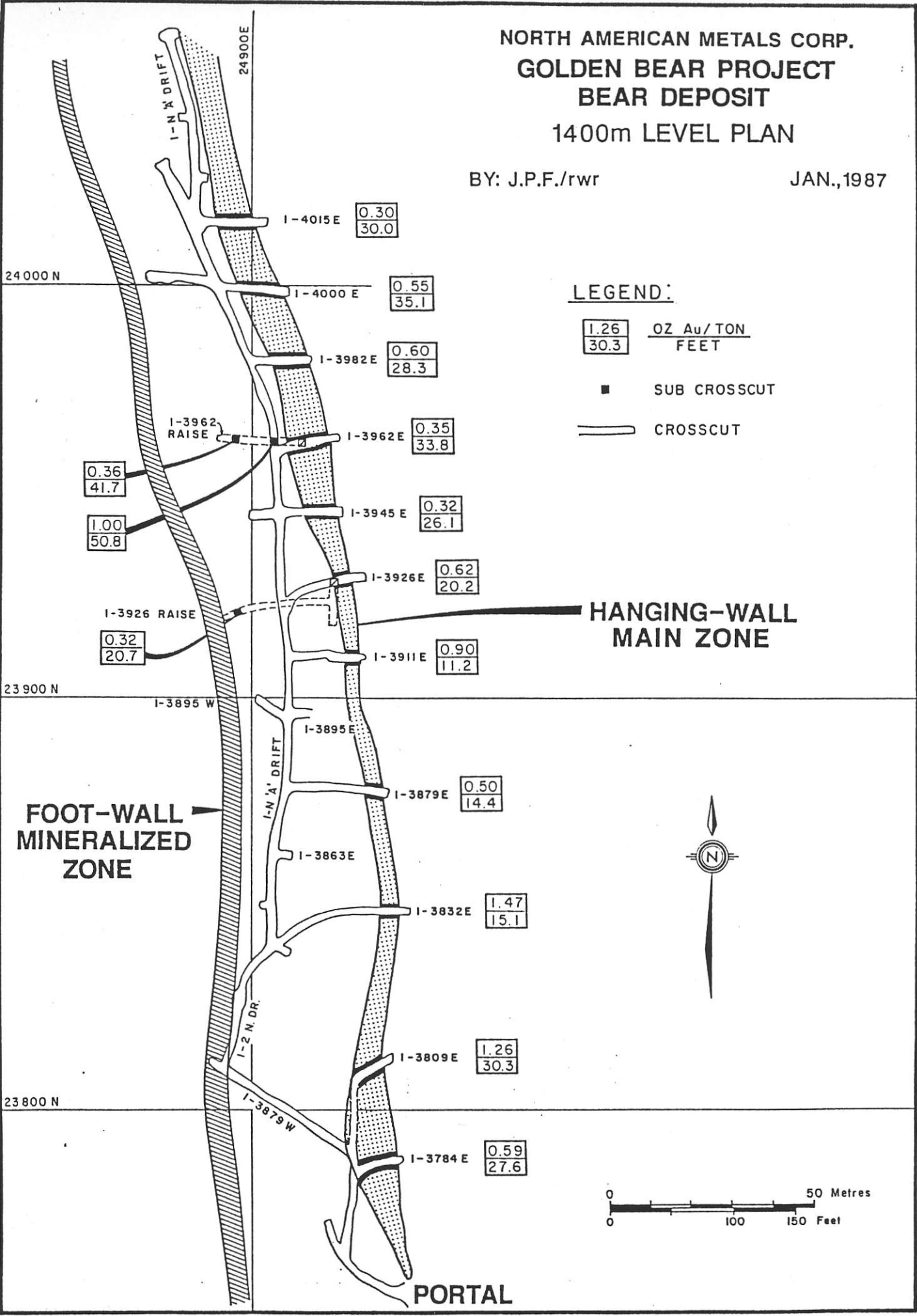


TABLE 4.7

4-17 DATE: JULY 19E

PROJECT: GOLDEN BEAR
PROJECT ID: 1477
FILE ID: 1477MINV

MINERAL INVENTORY REPORT

CATEGORY PROBABLE

| Min Code | Type of Ore Material | Cut off Grade | Tonnes | Percent of Total | Au Grade G/t | Contained Grams |
|-----------------|---------------------------|---------------|---------|------------------|--------------|-----------------|
| +1400ML | | | | | | |
| 80 | Hanging Wall Gouge | 3.00 | 1,000 | .3% | 41.63 | 41,630 |
| 40 | Hanging Wall Pyritic Tuff | 3.00 | 5,000 | 1.4% | 17.82 | 89,100 |
| 30 | Quartz Breccia | 3.00 | 6,000 | 1.6% | 6.24 | 37,440 |
| 20 | Silicified Dolomite | 3.00 | 6000 | 1.6% | 4.16 | 24,960 |
| 45 | Footwall Pyritic Tuff | 3.00 | 2000 | .5% | 6.1 | 12,200 |
| 85 | Footwall Gouge | 3.00 | 87000 | 23.5% | 8.55 | 743,850 |
| Sub-Total | | | 107,000 | 28.9% | 8.87 | 949,180 |
| -1400ML +1360ML | | | | | | |
| 80 | Hanging Wall Gouge | 3.00 | 2,000 | .5% | 11.39 | 22,780 |
| 40 | Hanging Wall Pyritic Tuff | 3.00 | 3,000 | .8% | 9.27 | 27,810 |
| 30 | Quartz Breccia | 3.00 | 2,000 | .5% | 16.12 | 32,240 |
| 20 | Silicified Dolomite | 3.00 | 91000 | 24.6% | 4.36 | 396,760 |
| 45 | Footwall Pyritic Tuff | 3.00 | 3000 | .8% | 8.99 | 26,970 |
| 85 | Footwall Gouge | 3.00 | 17000 | 4.6% | 10.54 | 179,180 |
| 41 | Landslide Pyritic Tuff | 3.00 | 14000 | 3.8% | 7.42 | 103,890 |
| 81 | Landslide Gouge | 3.00 | 55000 | 14.9% | 10.88 | 599,400 |
| Sub-Total | | | 187,000 | 50.5% | 7.42 | 1,389,020 |
| -1360ML | | | | | | |
| 80 | Hanging Wall Gouge | 3.00 | 0 | .0% | 0.00 | 0 |
| 40 | Hanging Wall Pyritic Tuff | 3.00 | 5,000 | 1.4% | 10.86 | 54,300 |
| 30 | Quartz Breccia | 3.00 | 1,000 | .3% | 10.06 | 10,060 |
| 20 | Silicified Dolomite | 3.00 | 34000 | 9.2% | 4.13 | 140,420 |
| 45 | Footwall Pyritic Tuff | 3.00 | 4000 | 1.1% | 9.4 | 37,600 |
| 85 | Footwall Gouge | 3.00 | 1000 | .3% | 4.11 | 4,110 |
| 41 | Landslide Pyritic Tuff | 3.00 | 1000 | .3% | 5.97 | 5,970 |
| 81 | Landslide Gouge | 3.00 | 30000 | 8.1% | 6.36 | 190,800 |
| Sub-Total | | | 76,000 | 20.5% | 5.83 | 443,260 |
| TOTAL DEPOSIT | | | | | | |
| 80 | Hanging Wall Gouge | 3.00 | 3,000 | .8% | 21.47 | 64,410 |
| 40 | Hanging Wall Pyritic Tuff | 3.00 | 13,000 | 3.5% | 13.17 | 171,210 |
| 30 | Quartz Breccia | 3.00 | 9,000 | 2.4% | 8.86 | 79,740 |
| 20 | Silicified Dolomite | 3.00 | 131,000 | 35.4% | 4.29 | 562,140 |
| 45 | Footwall Pyritic Tuff | 3.00 | 9,000 | 2.4% | 8.53 | 76,770 |
| 85 | Footwall Gouge | 3.00 | 105,000 | 28.4% | 8.83 | 927,140 |
| 41 | Landslide Pyritic Tuff | 3.00 | 15000 | 4.1% | 7.32 | 109,850 |
| 81 | Landslide Gouge | 3.00 | 85000 | 23.1% | 9.22 | 780,000 |
| TOTAL | | | 370,000 | 100.0% | 7.51 | 2,780,460 |



TABLE 5.5

GOLDEN BEAR JOINT VENTURE - PRODUCTION DATA

UNDERGROUND

| UNDERGROUND LOCATION (ORE ZONE) | TOTAL TONNES | GRAMS Au/ TONNE | AVERAGE SLOPE WIDTH | TONNES SANDFILL @ 47.00 % OF TOTAL TONNES | NUMBER SLOT RAISES REQUIRED | TONNES ORE PER SLOT RAISE TONNE | TONNES ORE/ SHIFT | TONNES SANDFILL /SHIFT | TOTAL SHIFTS ORE | TOTAL SHIFTS SANDFILL | TOTAL SHIFTS SLOT RAISES | TOTAL SET SHIFTS | TOTAL SHIFTS REQUIRED | AVERAGE TONNES ORE/SHIFT | AVE TONNES PER CREW SHIFT | ORE CREW MANNING | SANDFILL CREW MANNING | PRODUCTION MAN-SHIFTS REQUIRED | SANDFILL MAN-SHIFTS REQUIRED | ORE TONNES PER MANSHIFT |
|---------------------------------|--------------|-----------------|---------------------|---|-----------------------------|---------------------------------|-------------------|------------------------|------------------|-----------------------|--------------------------|------------------|-----------------------|--------------------------|---------------------------|------------------|-----------------------|--------------------------------|------------------------------|-------------------------|
| 1300 | | | | | | | | | | | | | | | | | | | | |
| GH 1XC 1301 | 23,678 | 18.85 | 5.07 | 11,128 | 16 | 21.11 | 94.43 | 206.32 | 250.74 | 53.94 | 25.44 | 64 | 394.12 | 60.08 | 71.72 | 2 | 3 | 552.37 | 161.81 | 33. |
| 7H 1XC 1302 | 28,883 | 20.51 | 4.61 | 13,575 | 16 | 25.75 | 94.43 | 206.32 | 305.87 | 65.80 | 25.44 | 64 | 461.10 | 62.64 | 72.73 | 2 | 3 | 662.61 | 197.39 | 33. |
| SH 3XC 1303 | 23,789 | 22.16 | 2.72 | 11,181 | 16 | 21.21 | 69.01 | 162.8 | 344.72 | 68.68 | 25.44 | 64 | 502.84 | 47.31 | 54.21 | 2 | 3 | 740.32 | 206.03 | 25. |
| 4H 1XC 1304 | 31,414 | 37.33 | 4.29 | 14,785 | 16 | 28.01 | 84.31 | 188.34 | 372.60 | 78.39 | 25.44 | 64 | 540.44 | 58.13 | 65.94 | 2 | 3 | 796.09 | 235.18 | 30. |
| 1305 | 12,247 | 14.35 | 4.85 | 5,756 | 16 | 10.92 | 94.43 | 206.32 | 129.69 | 27.90 | 25.44 | 64 | 247.03 | 49.58 | 66.91 | 2 | 3 | 310.27 | 83.70 | 31. |
| 1306 | 12,469 | 16.30 | 2.79 | 5,860 | 24 | 7.41 | 69.01 | 162.8 | 180.68 | 36.00 | 38.16 | 96 | 350.84 | 35.54 | 48.93 | 2 | 3 | 437.69 | 107.99 | 72. |
| 1K 3H 1401 | 56,897 | 26.08 | 8.96 | 26,742 | 24 | 33.82 | 84.31 | 188.34 | 674.86 | 141.99 | 38.16 | 96 | 951.00 | 59.83 | 66.55 | 2 | 3 | 1426.03 | 425.66 | 0. |
| 6H 2XC 1402 | 69,957 | 18.80 | 10.28 | 32,880 | | | 84.31 | 188.34 | 829.76 | 174.58 | | | 1004.34 | 69.65 | 69.65 | 2 | 3 | 1659.52 | 523.73 | 32. |
| SH 1403 | 32,624 | 10.12 | 4.94 | 15,333 | 15 | 31.03 | 94.43 | 206.32 | 345.48 | 74.32 | 23.85 | 96 | 539.65 | 60.45 | 73.54 | 2 | 3 | 738.66 | 222.95 | 33. |
| 1H 1441 | 12,180 | 9.87 | 5.26 | 5,725 | 15 | 11.58 | 84.31 | 188.34 | 144.47 | 30.40 | 23.85 | 6 | 204.72 | 59.50 | 61.30 | 2 | 3 | 336.64 | 91.19 | 28. |
| TOTALS | 304,138 | 20.94 | 6.59 | 142,945 | | | | | 3,579 | 752 | 251 | 614 | 5,196 | | | | | | | |

OPEN PIT

| OPEN PIT BENCH ELEVATION | ORE TONNES | ORE GMS/TONNE | LOW GRADE WASTE TONNES | LOW GRADE WASTE GMS/TONNE | ROCK WASTE TONNES | RUBBLE WASTE TONNES | TOTAL WASTE TONNES | TONNES HI GRADE PER DAY | TONNES LOW GRADE PER DAY | TONNES ROCK WASTE PER DAY | TONNES RUBBLE PER DAY | TOTAL DAYS ORE | TOTAL DAYS LOW GRADE | TOTAL DAYS WASTE | TOTAL DAYS RUBBLE |
|--------------------------|------------|---------------|------------------------|---------------------------|-------------------|---------------------|--------------------|-------------------------|--------------------------|---------------------------|-----------------------|----------------|----------------------|------------------|-------------------|
| 1543 | | | | | | 55 | 55 | 700 | 258 | 770 | 3,600 | | | | 0 |
| 1537 | | | | | | 4,155 | 4,155 | 700 | 258 | 770 | 3,600 | | | | 1 |
| 1531 | | | | | | 6,952 | 6,952 | 700 | 258 | 770 | 3,600 | | | | 2 |
| 1525 | | | | | | 10,222 | 10,222 | 700 | 258 | 770 | 3,600 | | | | 3 |
| 1519 | | | | | | 17,500 | 17,500 | 700 | 258 | 770 | 3,600 | | | | 4 |
| 1513 | | | | | | 28,517 | 28,517 | 700 | 258 | 770 | 3,600 | | | | 8 |
| 1507 | | | | | | 37,902 | 37,902 | 700 | 258 | 770 | 3,600 | | | | 11 |
| 1501 | 380.16 | 15.32 | | | 418 | 58,584 | 59,002 | 700 | 258 | 770 | 3,600 | 1 | | 1 | 16 |
| 1495 | 3168.00 | 12.35 | | | 3,485 | 73,017 | 76,502 | 700 | 258 | 770 | 3,600 | 5 | | 5 | 20 |
| 1489 | 4278.78 | 9.36 | | | 4,707 | 80,005 | 84,712 | 700 | 258 | 770 | 3,600 | 6 | | 6 | 22 |
| 1483 | 7092.36 | 9.44 | 594.00 | 3.49 | 7,802 | 88,097 | 95,899 | 700 | 258 | 770 | 3,600 | 6 | | 6 | 22 |
| 1477 | 9240.66 | 10.71 | 1480.05 | 3.38 | 10,165 | 95,330 | 105,495 | 700 | 258 | 770 | 3,600 | 10 | | 10 | 24 |
| 1471 | 10393.02 | 8.46 | 1589.94 | 4.06 | 11,432 | 101,803 | 113,235 | 700 | 258 | 770 | 3,600 | 13 | 2 | 13 | 26 |
| 1465 | 14348.00 | 7.66 | 792.00 | 4.06 | 15,783 | 101,161 | 116,944 | 700 | 258 | 770 | 3,600 | 15 | 6 | 15 | 28 |
| 1459 | 12967.00 | 7.82 | 3890.70 | 4.41 | 14,264 | 107,102 | 121,366 | 700 | 258 | 770 | 3,600 | 20 | 3 | 20 | 28 |
| 1453 | 15635.00 | 9.53 | 6138.00 | 4.00 | 17,199 | 103,756 | 120,954 | 700 | 258 | 770 | 3,600 | 19 | 15 | 19 | 30 |
| 1447 | 15515.00 | 10.59 | 8490.24 | 3.77 | 17,067 | 110,257 | 127,324 | 700 | 258 | 770 | 3,600 | 22 | 24 | 22 | 29 |
| 1441 | 20644.00 | 14.39 | 10618.08 | 4.14 | 22,708 | 107,296 | 130,004 | 700 | 258 | 770 | 3,600 | 22 | 33 | 22 | 31 |
| 1435 | 27883.00 | 15.52 | 9220.86 | 4.37 | 30,671 | 96,984 | 127,655 | 700 | 258 | 770 | 3,600 | 29 | 41 | 29 | 30 |
| 1429 | 28949.00 | 18.37 | 7714.74 | 4.14 | 31,844 | 93,541 | 125,385 | 700 | 258 | 770 | 3,600 | 40 | 36 | 40 | 27 |
| 1423 | 30686.00 | 20.73 | 6490.77 | 4.02 | 33,755 | 84,841 | 118,595 | 700 | 258 | 770 | 3,600 | 41 | 30 | 41 | 26 |
| 1417 | 29456.00 | 19.72 | 10015.00 | 4.23 | 32,402 | 76,156 | 108,558 | 700 | 258 | 770 | 3,600 | 44 | 25 | 44 | 24 |
| 1411 | 22776.00 | 21.94 | 13470.00 | 4.43 | 25,054 | 71,826 | 96,880 | 700 | 258 | 770 | 3,600 | 42 | 39 | 42 | 21 |
| 1405 | 18667.00 | 22.41 | 13738.00 | 4.38 | 20,864 | 55,722 | 76,585 | 700 | 258 | 770 | 3,600 | 33 | 52 | 33 | 20 |
| 1399 | 13230.03 | 25.37 | 11318.00 | 4.35 | 14,553 | 39,945 | 54,498 | 700 | 258 | 770 | 3,600 | 27 | 53 | 27 | 15 |
| 1393 | 13361.70 | 23.34 | 8988.87 | 4.19 | 14,698 | 19,463 | 34,161 | 700 | 258 | 770 | 3,600 | 19 | 44 | 19 | 11 |
| 1387 | 16268.34 | 15.21 | 3460.71 | 4.05 | 16,268 | 1,155 | 17,423 | 700 | 258 | 770 | 3,600 | 23 | 35 | 23 | 5 |
| 1381 | 6012.60 | 16.06 | 230.67 | 3.93 | 6,013 | 728 | 6,741 | 700 | 258 | 770 | 3,600 | 13 | 1 | 13 | 0 |
| TOTALS | 321,252 | 16.37 | 118,241 | 4.20 | 351,149 | 1,671,873 | 2,023,021 | | | | | 459 | 459 | 456 | 464 |