



WHITNEY &amp; WHITNEY, INC.

MINING AND MATERIALS SPECIALISTS

TELEPHONE (702) 323-3050

35 N. EDISON WAY, #6  
P.O. BOX 11647  
RENO, NEVADA 89510

## MEMORANDUM

To: Mr. Mark E. Emerson, President  
Resource Exchange Corporation  
131 West 69th Street  
New York, NY 10023

From: William A. Fuchs, Geological Consultant

Date: January 18, 1988

Subject: Proposed Exploration Plan - Pyramid Precious  
Metals Property

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Introduction

As a follow-up to my letter report to you of October 7, 1987, I have designed an exploration plan for your Pyramid property in Washoe County, Nevada (Figure 1). The program is designed to carry the project through a first phase of drilling, and hopefully discovery, but does not include second phase exploration drilling or development drilling.

Conceptual Targets

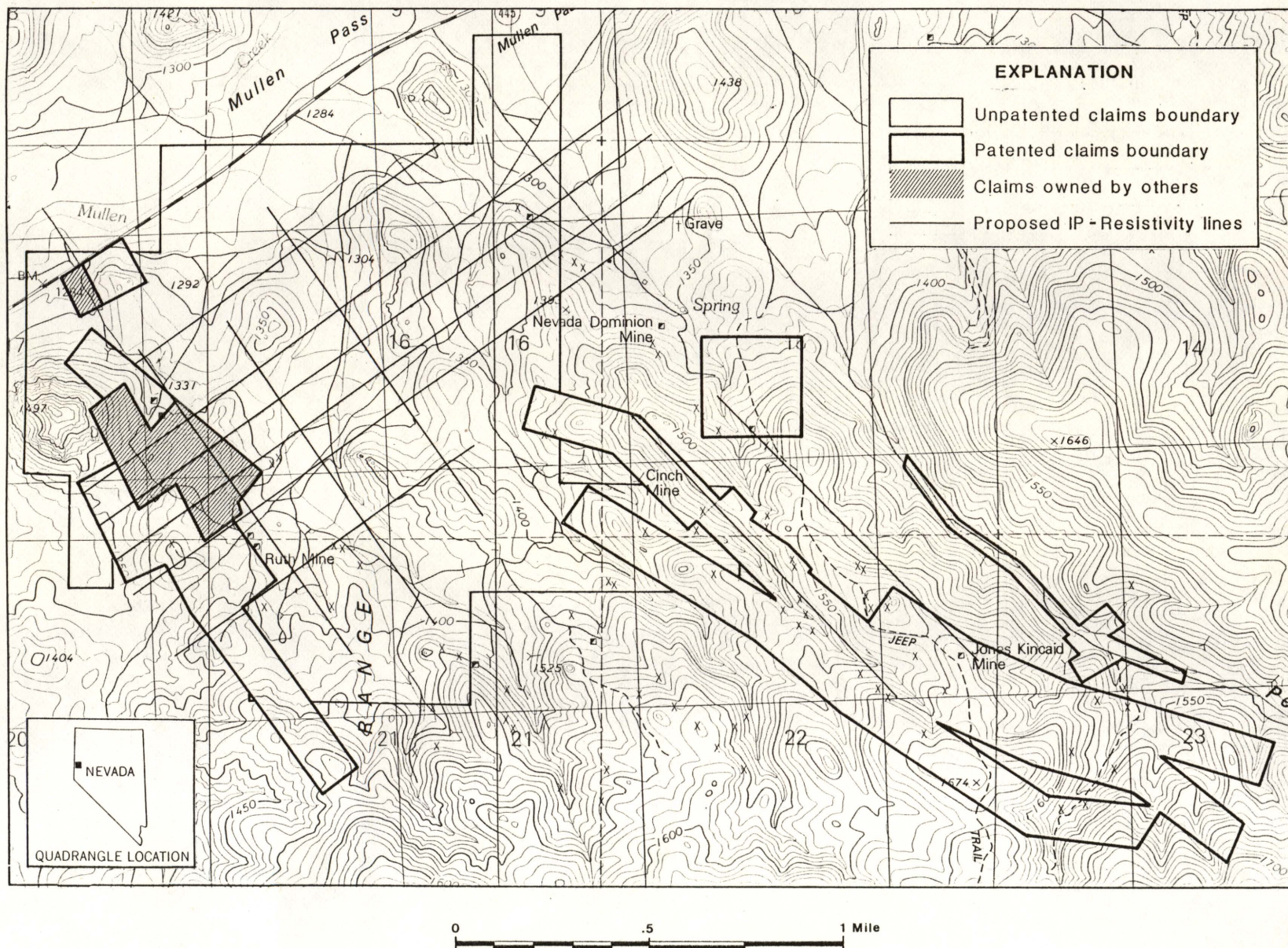
Details of the conceptual targets at Pyramid are given in my October 7, 1987 letter report. The Pyramid district is a Butte-type porphyry copper system. Although silver is clearly predominant over gold, the gold potential is significant. Given the exploration climate of the moment, exploration should concentrate on gold targets.

Four conceptual gold targets are present:

1. The high-level porphyry center
2. The central enargite-pyrite zone (which in actuality is peripheral to the porphyry center)
3. The intermediate tetrahedrite-sphalerite-galena-chalcopryrite-bornite-pyrite and outer galena-pyrite zones
4. Deep potassic-zone related gold in the porphyry center (not discussed in the October 7 letter report)



FIGURE 1. LOCATION MAP SHOWING PROPOSED IP - RESISTIVITY LINES





Some discussion of each of these targets is necessary:

1. The high-level porphyry center and its immediate periphery were the focus of Nielsen's exploration effort (1981 and 1982 private reports by Nielsen). Anomalous gold was found during that program, and the area merits further investigation. More detailed surface sampling should be conducted in the vicinity of gold anomalies indicated on Nielsen's geochemical map. Such sampling may result in viable drill targets. Because of the pervasive oxidized pyrite in the area, it is not clear whether geophysics will or will not be useful. Nielsen's maps show that the surface gold anomalies lie in areas of high limonite, but most of the high limonite area is not particularly anomalous in gold, and areas of highest pyrite may not be gold-bearing.

2. In the central enargite-pyrite zone (which merges into the area described above) the strong vein systems are the dominant mineralized features. Although breccia zones such as those found in the porphyry center may occur here, none have yet been found. Exploration should focus on the veins themselves, which have been copper-silver (with minor gold) producers in the past. The veins were not extensively explored in the old days and they have not been explored by modern methods, including drilling.

Following rock chip sampling, I would recommend induced polarization-resistivity surveys as an exploration method because this is a high sulfide system. Strike-parallel endline dipole-dipole surveys with a 250-foot dipole spacing can be used to detect hidden ore shoots to a depth of 500 feet (see Figure 1). This should be followed by strike-perpendicular IP-resistivity cross lines.

3. The intermediate and outer zones are grouped into one category for the purpose of gold exploration because the known mineral zonation does not include gold, and the gold plays in these two zones are likely to be similar. Exploration in this area should be given the highest priority. Initial sampling results here have been very encouraging and there appear to be stockwork quartz zones with open pit potential. Extensive shallow alluvial cover is likely to overlie hidden deposits.

The first priority is further rock chip sampling. IP-resistivity surveying should also work very well in this environment. As elsewhere in the district, the sulfide content of mineralized zones is high, indicating that IP will work. Resistivity will be useful in picking up silicified zones (resistors) and clay-altered zones



(conductors in most cases). As for the central zone, I recommend a 250-foot dipole spacing which should give a 500-foot search depth.

4. The potential for gold in the deeper potassic zone of the porphyry system was not considered in my October 7 letter report, but a recent paper by David Lowell identifies this zone as a potential target. The best examples of this type are the Dizon, Philex, and Lepanto deposits in the Philippines and the Dos Pobres deposit in Arizona. Deep drilling (1000 feet +) would be required to pursue this target. This exploration proposal does not include plans to explore this target. Hence, only three main targets will be explored.

#### Proposed Program

##### Stage 1: Surface rock chip sampling

A total of about 200 additional samples should be collected. I would recommend that 50 rock samples be collected from prospects and mineralized areas in the intermediate and outer zones, 50 samples from within the central vein area from the Cinch and Burrus mines southeastward to the Jones Kincaid, and 100 samples collected on a grid in the vicinity of gold anomalies detected by Nielsen peripheral to the porphyry copper center. It may be that the 100 samples collected on a grid will have to be soil samples. The assay method used (on rock or soil) should be able to detect gold in the parts per billion range. Elements assayed should include gold, silver, arsenic, antimony, and mercury.

##### Stage 2: Geophysics

Figure 1 shows proposed lines of induced polarization-resistivity. An endline dipole-dipole survey with 250-foot dipole spacing is recommended to give a 500-foot search depth. For the intermediate and outer zones 12.3 line-miles of surveying are planned, and for the central zone 4.7 line-miles are planned, giving a total of 17 line-miles.

In the central zone, two strike-parallel survey lines are shown. Three planned cross lines are not shown because their positions will be determined from the results of the strike-parallel lines.

Self-potential (SP), as an alternative to IP, should be evaluated early on in the geophysical program. Some IP anomalies give an SP response which is just as strong



or stronger than the IP. SP is much faster and less expensive than IP. However, SP response is very unpredictable - some sulfide bodies give an SP response, while others do not; the reasons for this are complex.

Also to be evaluated at the outset of the geophysical program is gradient IP-resistivity. Although gradient surveys do not give information on the target geometry or depth as well as endline dipole-dipole surveys, where applicable, they do give very good resolution and much better coverage for the dollar than dipole-dipole surveys.

### Stage 3: Drilling

A total of 7000 feet of reverse circulation drilling are planned. Holes will be both vertical and angle. The average planned hole depth is 300 feet because emphasis will be on open-pit potential. This will allow 20 to 23 drill holes (6 to 8 holes for each of the three target areas).

It is impossible to position the planned holes at this point. The results of the geochemical and geophysical surveys will be utilized to determine this. The figure of 7000 feet drilling derives from the fact that 6 to 8 300-foot drill holes per target area are probably the minimum that have a chance for success, and this limited number is probably sufficient only because geochemistry and geophysics will precede drilling. The IP-resistivity program for the central area of the unpatented claims (intermediate and outer zones) should be sufficient to detect any and all economic stockwork-type gold-silver deposits. The target is a deposit with a minimum of 2- to 5-million tons grading at least 0.05 oz Au/ton. Although many ore body configurations are possible, an example of a reasonable 2-million-ton stockwork gold body would be a circular gold ore zone 600 feet in diameter with a thickness of 100 feet. Examination of the IP-resistivity line network shows that only a fortuitous, unlucky placement of a 600-foot diameter body will be missed by a line in most of the network. Because IP and resistivity "see off-line", it is unlikely that any responsive body will go undetected down to the critical open-pittable depth of 300 feet.



Exploration Budget - Pyramid Project

A) Sampling

I Intermediate and outer zones

|                           |                          |          |
|---------------------------|--------------------------|----------|
| Sample collection         | 3.5 days @ \$225/day     | \$787.50 |
| Assaying (Au,Ag,As,Sb,Hg) | 50 samples @ \$24/sample | 1,200.00 |
| Mileage and expenses      | 4 days @ \$25/day        | 100.00   |

II Central zone

|                           |                          |          |
|---------------------------|--------------------------|----------|
| Sample collection         | 3.5 days @ \$225/day     | 787.50   |
| Assaying (Au,Ag,As,Sb,Hg) | 50 samples @ \$24/sample | 1,200.00 |
| Mileage and expenses      | 4 days @ \$25/day        | 100.00   |

III Porphyry area

|                           |                           |          |
|---------------------------|---------------------------|----------|
| Sample collection         | 5.5 days @ \$225/day      | 1,237.50 |
| Assaying (Au,Ag,As,Sb,Hg) | 100 samples @ \$24/sample | 2,400.00 |
| Mileage and expenses      | 6 days @ \$25/day         | 150.00   |

|                            |                     |          |
|----------------------------|---------------------|----------|
| Data plotting              | 8 days @ \$176/day  | 1,408.00 |
| Data check/interpretation  | 5 days @ \$225/day  | 1,125.00 |
| Report writing             | 2 days @ \$225/day  | 450.00   |
| Report assembly            | 1 day @ \$176/day   | 176.00   |
| Word processor             | 8 hours @ \$10/hour | 80.00    |
| Secretarial                | 3 days @ \$144/day  | 432.00   |
| Supplies and reproductions |                     | 350.00   |

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|          |             |
|----------|-------------|
| Subtotal | \$11,983.50 |
|----------|-------------|

|             |                 |
|-------------|-----------------|
| Contingency | <u>2,016.50</u> |
|-------------|-----------------|

|                |             |
|----------------|-------------|
| Total sampling | \$14,000.00 |
|----------------|-------------|



Page 7, Exploration Plan

B) Geophysics - IP-Resistivity

I Intermediate and Outer Zones

3-man crew @ \$1350/day  
250-foot dipole spacing, 5000-foot lines  
1.5 days/line

|  |                 |
|--|-----------------|
| 13 IP-resistivity lines (Figure 1) @ \$2025/line | \$26,325.00     |
| Geologist* 9 days @ \$225/day                    | <u>2,025.00</u> |
| Subtotal I                                       | \$28,350.00     |

II Central Zone

250-foot dipole spacing, 5000-foot lines  
2 days/line  
2 lines parallel to strike (Figure 1)  
3 lines cross strike (not plotted)

|                                      |                 |
|--------------------------------------|-----------------|
| 5 IP-resistivity lines @ \$2700/line | \$13,500.00     |
| Geologist* 5 days @ \$225/day        | <u>1,125.00</u> |
| Subtotal II                          | \$14,625.00     |

|                    |             |
|--------------------|-------------|
| Total for I and II | \$42,975.00 |
|--------------------|-------------|

|                                       |                 |
|---------------------------------------|-----------------|
| Mobilization/Demobilization           | 2,000.00        |
| Geophysical report 5 days @ \$350/day | 1,750.00        |
| Contingency                           | <u>2,275.00</u> |
| Total Geophysics                      | \$49,000.00     |

\*Geologist, to be present for decision-making, will conduct mapping or other functions on the property during surveying.



C) Drilling

Reverse circulation drilling @ \$10/foot, with assay,  
geologist, and other costs at \$10/foot (total of \$20/foot)

|   |               |
|---|---------------|
| Initial geological planning                   | 1,000.00      |
| Road building and site preparation            |               |
| Bulldozer work           15 days @ \$1000/day | 15,000.00     |
| Geological supervision 15 days @ \$225/day    | 3,375.00      |
| Mileage and expenses    15 days @ \$25/day    | <u>375.00</u> |
| Subtotal site prep/road building              | \$18,750.00   |

Drilling:

|   |                  |
|---|------------------|
| Mobilization and demobilization   | 1,000.00         |
| Direct drill costs - 7000 ft drilling @ \$10/ft                                       | 70,000.00        |
| Indirect drill costs (geological, assaying,<br>mileage, supplies) - 7000 ft @ \$10/ft | <u>70,000.00</u> |
| Subtotal drilling   | \$141,000.00     |
| Geological analysis and final report  | <u>4,000.00</u>  |
| Subtotal  | \$164,750.00     |
| Contingency   | <u>15,250.00</u> |
| Total Drilling  | \$180,000.00     |

|  |              |
|--|--------------|
| Total of A (Sampling)                                    | \$14,000.00  |
| Total of A and B (Sampling, Geophysics)                  | \$63,000.00  |
| Total of A, B, and C<br>(Sampling, Geophysics, Drilling) | \$243,000.00 |