CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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11/01/96

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: ACQUISITION 1-5

ALTERNATE NAMES:
SILVER DIPPER

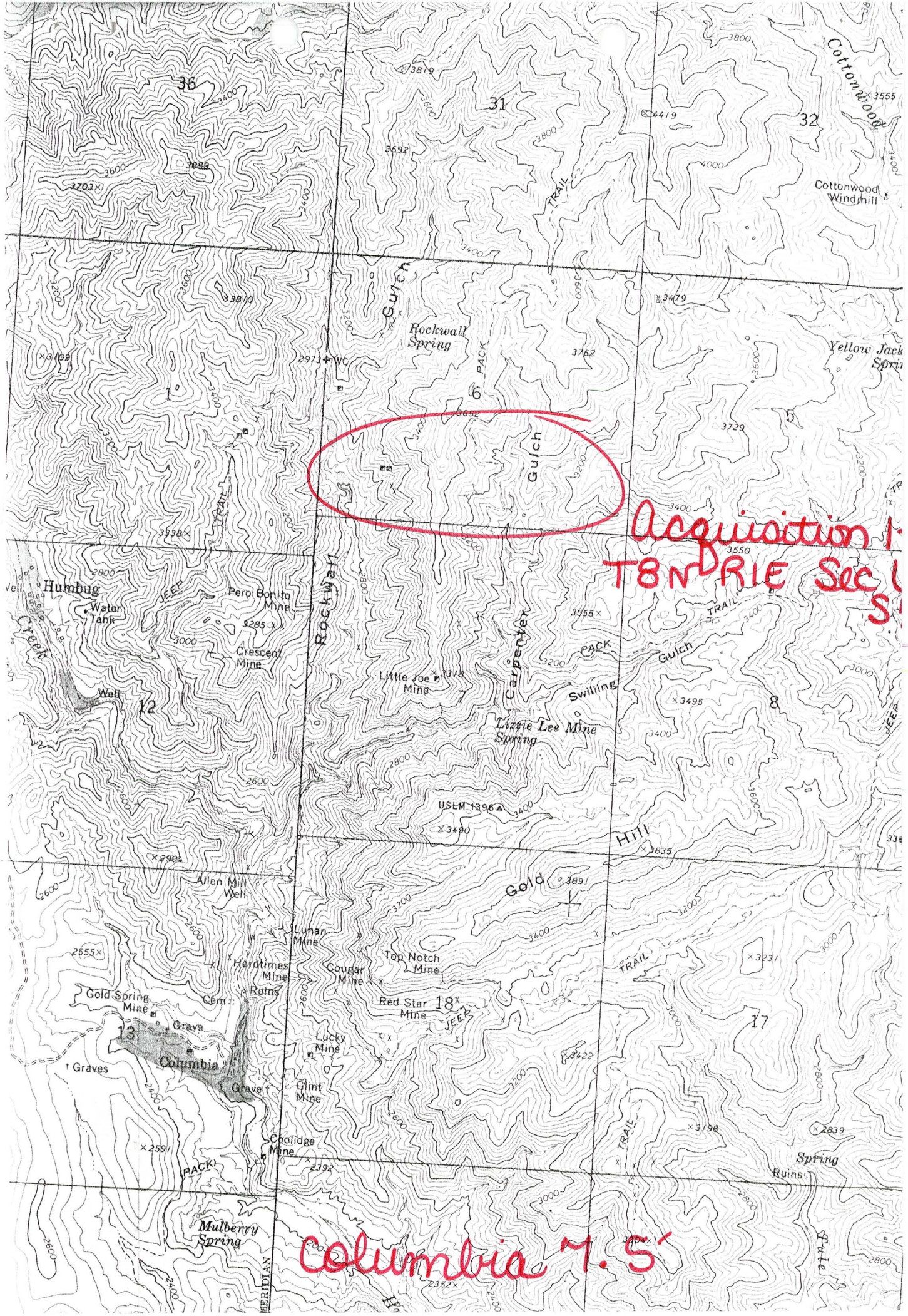
YAVAPAI COUNTY MILS NUMBER: 913B

LOCATION: TOWNSHIP 8 N RANGE 1 E SECTION 6 QUARTER S2
LATITUDE: N 34DEG 03MIN 34SEC LONGITUDE: W 112DEG 17MIN 51SEC
TOPO MAP NAME: COLUMBIA - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
AU
AG
PB

BIBLIOGRAPHY:
USGS COLUMBIA QUAD
BLM AMC FILE 87569
ADMMR CARD FILE
LINDGREN W. ORE DEPTS OF JEROME & BRADSHAW
MTN QUADS USGS BULL 782 1962 P 178
ADMMR ACQUISITION 1-5 FILE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T8N R1E Sec
Columbia 7.5'
Humbug
Water Tank
Pero Bonito Mine
Crescent Mine
Well
Rockwall Spring
Rockwall Gulch
Carpenter Gulch
Little Joe Mine
Lizzie Lee Mine Spring
Swilling
Pack Trail
Jeep Trail
Cottonwood Windmill
Yellow Jack Spring
USLM 1398
Hill
Gold
Allen Mill Well
Lunan Mine
Herdtimes Mine
Cougar Mine
Top Notch Mine
Red Star Mine
Gold Spring Mine
Cem.
Ruins
Grave
Columbia
Graves
Grave
Lucky Mine
Glint Mine
Coolidge Mine
Mulberry Spring
Spring
Ruins
Tule
Meridian
36
31
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ACQUISITION #1-S (A)

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ECONOMIC EVALUATION OF THE ACQUISITION MINE AREA TIP TOP MINING DISTRICT YAVAPAI COUNTY, ARIZONA

GEO-PROCESSING, INC.

Nicholas H Carouso

Nicholas H. Carouso
President

P.O. Box 1791
Prescott, Arizona 86302

March 25, 1984

ECONOMIC EVALUATION OF THE ACQUISITION MINE AREA
TIP TOP MINING DISTRICT
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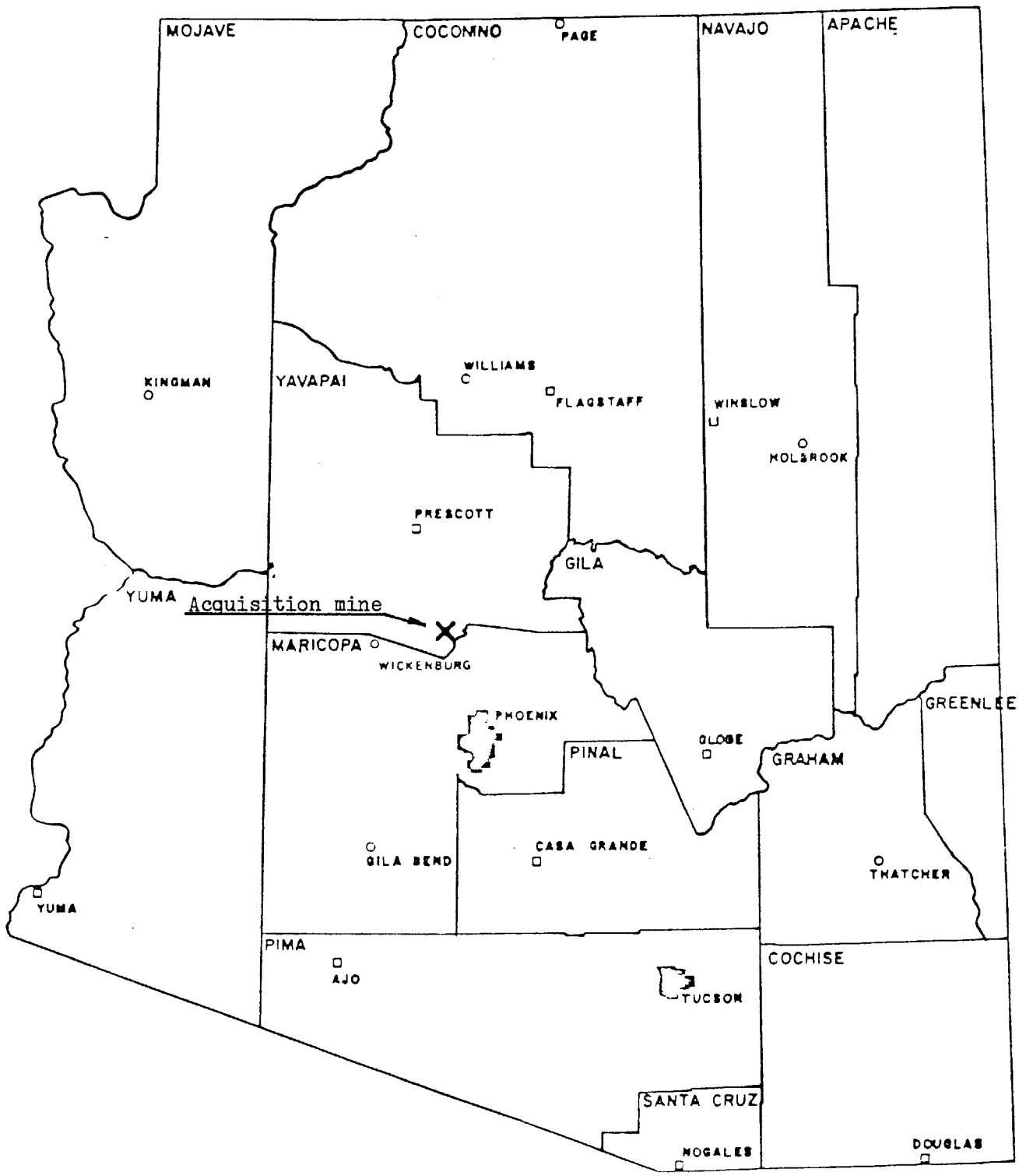
ARIZONA



SCALE IN MILES
0 10 20 50

LOCATION MAP-ARIZ.

ECONOMIC EVALUATION OF THE ACQUISITION MINE AREA
TIP TOP MINING DISTRICT
YAVAPAI COUNTY, ARIZONA

INTRODUCTION

The economic evaluation of the Acquisition and Carpenter unpatented mining claim groups was initiated at the request of the owner of the two mining claim groups, for the purpose of determining the economic potential of the area and also to determine the most cost effective method to recover the gold and silver values found in the ore.

The writer with the able assistance of Mr. Robert Poley Jr., a geologist specializing in precious metals exploration, conducted a detailed geologic and geophysical study of several favorable mineralized zones. The study which only covered about one-third of the overall potential of the two mining claim groups developed very favorable data, which without question, indicates that an economically viable mining operation is possible with a favorable cash flow expected.

Along with the economic ore reserve potential of the property, another advantage is that a mill is located on the property that with some additional equipment could be placed on line within a reasonably short period of time. The mill facilities were only partially used by the previous operators and thus remain mostly in new condition. The replacement cost for the purchase and implementation of the mill facilities is

estimated to be about $1,000,000. The mill, when completed with modifications should be able to treat at least 200 tons of ore per day. This will be more fully discussed under Milling in this report and will include limited metallurgical testing in conjunction with Geo-Analytical Laboratory.

The ore reserve potential of the area studied indicates that the gross dollar potential for each 100 feet in depth could be in the order of at least $25,000,000 in gold and silver values. It is expected that the depth of the ore zones will exceed 500 feet in depth, this was indicated by the Very Low Frequency Electromagnetic geophysical survey data, and is also suggested by geologic inference to the Tip Top mine, which was successfully mined to a depth of 800 feet. The gold and silver ore potential of this property will be discussed in detail within this report.

It is the opinion of the writer and his assistant that the Acquisition mine area offers a gold and silver ore potential which is seldom found in mining property evaluations and should prove to be a very successful mining venture, if properly implemented and operated.

PROPERTY AND OWNERSHIP

The Acquisition mining claim group consists of 21 unpatented lode mining claims and the Carpenter mining claim group consists of 22 unpatented lode mining claims all located on Federal Land (Bureau of Land Management) in Sections 5, 6,

7 and 8, Township 8 North, Range 1 East GSRBM, along Carpenter and Rockwall Gulches in the Tip Top Mining District of Yavapai County, Arizona.

The property is situated about 9 miles due west of Rock Springs, Arizona. Access to the property is by 18 miles of unimproved roads (the Tip Top mine road) from the Table Mesa Interchange on Interstate 17 and about 40 miles north of Phoenix, Arizona.

A comprehensive title search of the Yavapai County and Bureau of Land Management records was conducted and it was found that title of the property is valid.

A plat with a scale of 1:500 is included in this report which displays the boundaries of the two mining claim groups with locations of several of the favorable ore zones noted. The favorable ore zones will be covered in detail in the following sections of this report.

GEOLOGY

The mineralized quartz veins in the Acquisition mine area occur in igneous and metamorphic rocks of Precambrian age. The strike length of the associated structures and veins extends for almost 7000 feet locally. The subparallel nature and extensive strike length and promising assay results suggest economic deposits might be developed from a number of veins in the area.

The southern Bradshaw Mountains region lies within a belt

composed of Precambrian metamorphic and plutonic rocks which crop out from northwest to southeast across Arizona. This belt of Precambrian rocks is found south of the Colorado Plateau in the mountain region of the Basin and Range Province and the Transition Zone. Locally the area was intruded by Tertiary rhyolite dikes and mineralized quartz veins. The region was then covered by a sequence of Tertiary volcanics deposits. The Tertiary volcanics were then cut by Tertiary Basin and Range faulting and subsequently tilted. Within the Transition Zone the associated basins are not deep and sometimes bedrock crops out in the center of the basin.

A central metavolcanic region includes the Bagdad, Prescott-Jerome, New River, Cave Creek and Mazatzal districts. These districts include metasedimentary and metavolcanic rocks with associated massive sulfide deposits. The age of eruption of metavolcanic rocks in this area decreases from west to east.

The origin of ore deposits in this central metavolcanic area is considered to be either epigenetic or remobilized during and after deformation from an original syngenetic source.

The metavolcanic rocks probably are island arcs. Island arcs mark the site of new crust generated at a convergent plate boundary. These conclusions are based upon assumptions that true stratigraphy can be seen through isoclinal folding,

that metasomatism has not affected the concentrations of alkalies and silica in the rocks and that correct protoliths can be assigned to what are now metavolcanics and metasedimentary rocks.

The oldest of the major units, the Yavapai schist, comprises thinly foliated quartz-mica schist, quartz-mica-hornblende schist and gneiss, feldspathic hornblende gneiss, quartz-feldspar-mica gneisses, amphibolite, epidosite, impure quartzite, and a variety of migmatitic rocks. Most of these are rocks of middle metamorphic rank, as evidenced by the presence of hornblende, garnet, biotite and calcic plagioclase. In general they are silvery gray to very dark greenish gray and form darker more eroded surfaces that contrast with the lighter colored more resistant granitic rocks. Some of the quartzites and possibly quartz rich schists are of sedimentary origin. Most of the more mafic rocks, on the other hand, probably were originally volcanic flows and pyroclastic types.

The Yavapai schist, first described from the Bradshaw Mountains to the north is similar to the Vishnu schist exposed in other parts of the state. Its general characteristics have been summarized by Darton and some of its occurrences to the north and northeast described by Lindgren, Wilson, Anderson and others. They have shown that these rocks are divisible into stratigraphic and lithologic units that can be traced for

considerable distances.

Younger intrusive masses of porphyritic rhyolite, diorite and grabbo are present locally. Most of these masses are small with widths measuring tens to hundreds of feet. About 2000 feet is their maximum known exposed length. These younger intrusive rocks are similar to those described by Anderson from the Bagdad to Prescott-Jerome areas, where they are younger than the Yavapai schists and older than the principal Precambrian granitic rocks of the region.

Granitic intrusive rocks are very abundant and are the dominant host rocks over a large area to the north and east. The northern terminus of the Crazy Basin Quartz Monzonite is exposed southwest of Cleator. This batholith extends southward approximately thirty (30) kilometers. It is the preferred host for the emplacement of gold and silver rich quartz veins in the Acquisition mine area.

The most widespread type is a medium to pinkish gray, medium to coarse grained and even slightly porphyritic rock in appearance. It consists mainly of potash feldspar, quartz and plagioclase. Biotite is the most abundant dark constituent, a little hornblende is present locally. This granitic rock probably is correlative with the Bradshaw Granite (Crazy Basin Quartz Monzonite) which is widely exposed in areas to the north and northeast. It is one of the youngest of the Precambrian rocks in the district. The rock is relatively

unfoliated which indicates that this intrusive postdates the metamorphic and deformational events which affected all previously described units. Masses and dikes of pegmatite are abundant in both the granitic rocks and the older metamorphic rocks. Pegmatites are the portion of a large granitic intrusion that were not used in the initial formation of the bulk of the granite and then intruded the parent rock along zones of weakness. Generally, coarse-grained perthite and quartz with minor accessory minerals comprise the composition of the pegmatitic zones. The pegmatitic zones are usually parallel and adjacent to the main structural features and comprise the wallrock for most of the gold and silver bearing sulfide rich quartz veins.

To the north three episodes of deformation occurred in metavolcanic and metasedimentary rocks of the Bradshaw Mountains, during the Precambrian. A foliated greenschist facies resulted. The Crazy Basin Quartz Monzonite apparently intruded preexisting foliated and metamorphosed rocks as a diapir which caused local folding and faulting of the metamorphosed rocks, there by trapping the remaining xenoliths of Yavapai schists.

Regional metamorphism is not related to the Crazy Basin Quartz Monzonite. Local retrograde metamorphism or hydrothermal alteration is associated with the intrusive, the contact effects of the post tectonic intrusive are lost in

extent.

Several Tertiary Rhyolite Porphyry dikes crop out in the area between the Tip Top mine (3.5 miles to the east) and Rockwall Gulch. "Five branching rhyolite porphyry dikes were observed by Mr. Carl Barth. These dikes are intersected and faulted by seven or eight gold and silver veins striking north and northeast"; which probably refers to the Acquisition and Silver Dipper properties. These dikes are fairly narrow 10-15 feet wide, but they can be traced for a considerable distance. The rhyolite porphyry is considerably altered, forming dull buff outcrops, but phenocrysts of quartz and feldspar can be detected locally. The ground mass is reportedly fine granular quartz and sericitized alkalic feldspar.

The southern end of the Bradshaw Mountains is covered by a series of Tertiary lava flows, comprising volcanic agglomerates, andesite and basalt. The flows dip slightly southward and appear to have reached an altitude of 3000 feet. The post Tertiary erosion has incised the contact to a depth of 1000 feet. These units are observable a mile or so to the south of the Acquisition property. Basin and Range type faulting has cut the units and the underlying quartz monzonite as well.

Quartz veins and lenses are rather common and quite variable in appearance and composition. They have been worked for gold, silver, tungsten, copper and lead in several parts

of the district. Also present are somewhat thicker more irregular masses of pegmatitic quartz, most of which contain a little perthite and some of the accessory minerals that are typical of the less quartz rich pegmatites of the district.

The mineralized veins are typical gold-silver fissure veins, fairly straight with moderate width and fairly long strike length.

The veins are fairly abundant and continuous. Generally they are uniform in character, with the vein being strongly silicified and having well defined walls. Quartz is the dominant and almost only gangue mineral. Sometimes the veins occur as lenses or pods in sheared zones in the main structures or as parallel systems in the brecciated host. Brecciated mineralized and silicified wall rock commonly occurs adjacent to the veins. The veins range in strike from north to N70E but most lie between N40E to N60E. The dip is generally steep to the northwest to vertical with about 75NW being about average.

Vein width ranges from 1 inch or less to 6 feet but averages slightly less than a foot. Where the strike changes or the dip flattens, their thicknesses appear to be above average. The vein filling is chiefly milky-white quartz which is stained on weathered surfaces and in fractures, by limonite. Locally it contains vugs lined with quartz crystals and sometimes displays comb structures. The earlier quartz is

coarse comb quartz and the latter fine grained and mineralized. Sulfide minerals are fairly abundant. Wolframite, arsenopyrite, pyrite, sphalerite, bornite and galena comprise the ore with paragenesis in the order given.

Pyrite, galena and a steel gray sulfide occur as masses and as irregular grains intergrown with quartz in the veins. Bornite, chalcopyrite, arsenopyrite, tetrahedrite, gold and silver occur as minor yet important constituents of the veins. Some gold is free and may be megascopic, but also is derived from oxidized sulfide minerals. The primary source of silver is probably galena, but native silver, ruby silver, argentite and cerargyrite have been documented. Gold and silver are associated with sulfide minerals in almost all assay samples with appreciable gold and silver values. This spatial relationship suggests contemporaneous deposition. Most oxidized surface material has strong limonite and hematite stain. Limonite and hematite occur as coatings and fracture filling but more important as well developed boxwork after altered sulfides.

Adjacent to the quartz veins, limonite has stained the quartz monzonite and pegmatitic zones orangish and rusty brown. Generally mafic minerals are absent, and the plagioclase is sericitized and altered to albite. Farther from the veins chlorite has replaced biotite and hornblende, the plagioclase is saussuritized and quartz-epidote veins are

locally present. Most alteration of the granitic host is of the contact type rather than regional.

The veins are similar to ones found in some of the surrounding districts. The Tertiary gold-silver veins associated with granodiorite stocks of similar age in the northern Mt. Union Quadrangle also show some similarities. Spatial relationshp to Precambrian massive sulfide deposits should be also noted.

Most of the veins of the Acquisition mine area strike east-northeast about parallel to the Tip Top, Seventy-Six, Silver Dipper mines and Rockwall Gulch, and are of the same character, except that they carry more gold than silver. They are probably genetically connected with the Tertiary dikes of rhyolite porphyry, which were emplaced just prior to the deposition of the veins.

DESCRIPTION OF FAVORABLE PROSPECTS

Geologic plats, with a scale of 1:200, displaying the structural relationship of the mineralized vein systems and with their corresponding gold and silver values, can be found in APPENDIX I of this report.

EASTERN LONG VEIN

The Eastern Long Vein is on the eastern flank of Long Vein Ridge, near the top of the ridge. The Eastern Long Vein is well exposed in the sides of the most southwesterly shaft (Shaft #3) which is approximately 300 feet northeast of the

northern trace of the Western Long Vein. The Eastern Long Vein trends N50E cutting across a talus covered slope to the east of Long Vein Ridge saddle. The vein is exposed several more times in two other shafts and several outcrops. The Eastern Long Vein is traceable for approximately 400 feet north of Shaft #3, near Long Vein saddle.

The vein is hosted in a pegmatite zone of the Crazy Basin Quartz Monzonite. The host is weakly to moderately silicified along the contact and locally brecciated. The sheared and mineralized zone is up to six feet wide in places. Limonite, hematite and manganese stains and fracture fillings are strong adjacent to the mineralized zone. Sample 832 which assayed 0.038 oz/t gold and 4.940 oz/t silver was taken along an 18" silicified breccia zone on the footwall (eastern) side of the vein. Sample 831 is a select sample across the vein which assayed 0.381 oz/t gold and 21.01 oz/t silver. The vein at this point is approximately 18" wide. The combined width of these two samples is 3 feet.

The vein is strikingly similar to the Western Long Vein; and the description of mineralization, alteration and gross character are the same at both ends of the Eastern Long Vein. Slightly stronger alteration of the host rock was observed. Strong sericite, weak argillic and almost total absence of mafic minerals was noted on the northern and southern extent of the Eastern Long Vein, and sometimes occurring in the vein

itself, disrupting the semilayered appearance of the vein.

An outcrop of another vein, the Slab Vein, which is semiparallel and of the same character as the Eastern Long Vein was discovered approximately 125 feet southeast of Shaft #2. The exposure of the vein is poor, but large slabs of vein material are abundant and some possibly in place. It appears to be a subparallel vein to the Eastern Long Vein. The vein averages 6" in width and is represented by Sample 884 which assayed 0.510 oz/t gold and 22.53 oz/t silver.

More detailed VLF-EM surveys, sampling and especially overburden removal are recommended in the area of the Eastern Long Vein and Lower Eastern Long Vein to evaluate potenial reserves.

WESTERN LONG VEIN AND SEMIRADIAL VEIN BRECCIA ZONE

The Western Long Vein is on the western slope of Long Vein Ridge approximately 300 feet northeast of the adit driven in along the structure by Acquisition Mining Company. The vein is traceable for almost 400 feet to the north along the western slope of Long Vein Ridge.

The vein is first observable at the intersection of the Eastern Long Vein structure, the prominent silicified zenolith and the dark gray massive quartz lens with disseminated magnetite and/or hematite in the microcrystalline quartz. The vein is exposed on the eastern footwall of the road cut in an apparent fault contact, (Sample 854). The fault contact was

apparent at all three sample locations, comprising the footwall of the vein.

The following samples were taken across the vein:

Sample No.	Au oz/t	Ag oz/t	Sample Description
854	0.351	0.550	Most the oxidized silver gone
856	0.552	4.15	Prospect (bulk sample taken)
859	0.354	5.700	Prospects--200 ft. apart

The footwall is weakly to moderately silicified. The vein disappears under cover and is probably slightly offset by faulting at its northern observed extent. The vein strikes more northerly than northeast toward its northern exposure.

The vein is strongly silicified and ranges between 4-10 inches wide with up to a foot or more of brecciated, silicified and mineralized wall rock on each side of the vein in places. Within the vein the oxide to sulfide percentages average 30-70% respectively. Most oxidized surface material has strong hematitic and limonitic stain and strongly stained wall rock. Limonite and hematite occur as coating and fracture fillings, also as well developed boxwork after sulfides. Irregular masses of pyrite, veinlets and disseminated grains are observable at all three sample locations, as well as galena and a steel gray disseminated sulfide. Crosscutting quartz veinlets were observed. The quartz vein is vuggy with terminated quartz crystals lining cavities filled with limonitic from oxidized sulfides. The

more oxidized samples seem to have been leached of some of their silver values. This was determined from assay results.

Approximately northeast of Sample 856, a radial appearing swarm of mineralized silicified veins separated by brecciated mineralized and weakly to moderately silicified zones, were sampled and observed. The feldspars in the pegmatitic host are altered slightly to sericite. At its widest points the zone appears 150 feet wide, and 400 feet from north to south, with a sharp eastern boundary and cover to the west. The zone is strongly sheared and well mineralized. Numerous sulfide rich quartz veins up to 2.5 feet wide were sampled in this area. (See Geologic plats and description of assay samples). Part of the zone is covered by slope rubble which could be obscuring additional veins and structures. The existence of numerous subparallel and semiradial veins of similar character suggests this zone is of major interest for further evaluation.

SOUTHEAST FLANK VEIN (SILVER VEIN)

The SE Flank Vein or Silver Vein is on the southeastern slope of the Long Vein Ridge. It can be traced from a structure which is 50 feet east of Long Vein Adit to about 200 feet northeast of this point (Sample 845). The vein crops out and is traceable for 400 feet where it is covered by alluvial fill on the west slope of the gulch. The vein is poorly exposed and is generally covered by slope rubble. The dip of

the vein is shallower than veins near the top of the ridge, indicating some of the structures may intersect at depth. The vein strikes to the northeast and contours around the southeast slope of Long Vein Ridge. Approximately 200 feet along the vein it changes strike and diverges (Sample 843) with an identical vein having a more northerly strike trend S30W for 150 feet (Sample 844) where it disappears under cover. The Silver Vein pinches slightly after the intersection creating a stockwork effect in the host (Sample 842) with higher gold values. The vein swells again on a rubble slope (Sample 838) and is exposed for another 100 feet (Sample 839) and is covered before intersecting the ravine.

The average width of the vein is approximately 4" as it pinches and swells along strike. The host is well brecciated along the vein and many parallel limonite stained fractures occur along the vein, lamellar in appearance. Weak pervasive silicification of the brecciated host is accompanied by limonite stained outcrop near the vein.

The vein is strongly silicified with medium comb structure and abundant vugs with terminated quartz crystals. Pyrite and a silvery gray sulfide are abundant. Disseminated gray metallic flecks are also common.

Limonite and hematite are abundant in more oxidized samples as boxwork stain and fracture fillings.

It is interesting to note that the Silver Vein is the

most southeastern vein observed on Long Vein Ridge and closest to Swilling Gulch, Silver Dipper Group, where the silver to gold ratio is much higher than the Acquisition area.

The gold to silver ratio generally increases to the northwest perpendicular to the strike of the veins, and possibly to the southwest as well. The Western Long Vein has the highest gold to silver ratio of major veins on Long Vein Ridge and is the most northwestern vein observed on Long Vein Ridge. It is nearest to the Carpenter and Acquisition Veins; both having high gold to silver ratios.

EASTSIDE PROSPECT

A small dig was noted on the hillside about 500 feet southeast of Long Vein Ridge at approximately the same elevation as the saddle on Long Vein Ridge. A mineralized exposure occurs along a prominent structure trending N55E and dipping approximately 74NW. The structure is parallel to and similar to the Long Vein structure. A silicified fissure filling vein from 4"-6" thick along with sheared mineralized and altered wall rock is exposed. The host rocks is near a contact between Crazy Basin Quartz Monzonite and schist and gneiss of the Yavapai Schists. Parallel mineralized quartz veinlets occur with very strong limonitic boxwork in soft thick patches, and thick fracture fillings. The surrounding schist is sheared, altered and well mineralized. A sample was cut across the mineralized zone including about 50% altered

wall rock. The sample assayed 0.362 oz/t gold and 19.350 oz/t silver. Float similar in appearance to the aforementioned material can be traced southwestward for more than 200 feet. The structure continues over the next ridge to the south and appears to correlate with the Green Pool Vein from which a 1 foot sample across the vein assayed 0.613 oz/t gold and 0.950 oz/t silver.

The limonite stained zone on strike and northeast of the Green Pool Vein appear to continue as this structure. The zone along this structure is less resistant than the surrounding host rock and is generally covered, exposure is sometimes poor. More detailed sampling and a little mapping and possibly removal of the thin veneer of cover is recommended. Detailed VLF EM geophysical survey lines close to and between the prospects would be the most helpful data, and most cost effective.

BLANKET VEIN

The Blanket Vein and another shallow dipping thick and massive quartz vein on Long Vein Ridge could have possibly played important roles in ore control in the area from Rockwall Gulch to east of the Long Vein Ridge.

Anticlinal quartz veins of possibly Laramide origin could have acted as both physical and chemical barriers to the mineralized fluids rising along the near vertical fractures thereby initiating a chemical physical environment below the

tabular structures conducive to precious metal deposition. The appearance and geologic relationships on both low dipping structures support this hypothesis. Low angle faulting usually generated a series of low dipping fractures which when filled with quartz would have capped the area with subparallel quartz blankets. The Blanket Vein could be, just that, a blanket of sorts.

THE CARPENTER VEIN SYSTEM

In the northwest portion of the Acquisition property a parallel system of fairly wide gold rich mineralized quartz veins crop out. The veins have a sinuous trace trending NNE and appear to be cut by a fault at their northern extent.

The southern most visited exposure of the Carpenter Vein is exposed by a cut on the southern bank of an easterly draining wash. The vein is well exposed for approximately 8-10 feet vertically. The vein pinches right before reaching the surface and is blind from above. The vein widens to almost 2 feet or more at the floor of the cut and appears to continue to widen at depth. Sample 864 was taken across the vein approximately 6 feet above the floor where the vein is about 18" wide. The sample assayed 0.764 oz/t gold and 2.800 oz/t silver. The structural trace can be followed to the southwest for a considerable distance. To the northeast the vein is exposed intermittently for approximately 350 feet with an average width of approximately 1 foot or more. A shallow

shaft and a couple of small prospects were sampled and observed along the vein. Where the strike changes and dip flattens slightly the veins tend to thicken to 1.5 feet or more. The contacts and fault planes tend to flatten considerably to the southeast, attaining an attitude of 40 degrees northwest, 200 feet to the southeast. To the northwest, the strike of the beds tend to become more vertical on the Carpenter Vein system until approximately 200 feet to the north the rocks attain the general attitude of the area (N45E, 70NW).

Southeast of the Carpenter Vein, 60-80 feet, pieces of highly mineralized float were observed, and in the road cut approximately 100 feet below the Carpenter Vein, vein material appeared to be in place.

About 80 feet northwest of the Carpenter Vein shaft and perpendicular to strike another vein occurs which is strikingly similar to the Carpenter Vein. Its attitude, composition, textural and structural features are comparable. A caved shaft with a high grade ore pile and good vein exposure was observed. This vein is locally covered by a thin veneer of slope rubble. It should be readily exposed in the creek bed in the same manner as the Carpenter Vein.

Approximately 15-20 feet northwest of Sample 865 an outcrop covered partially with dirt from the road cut above was observed. It appears to be a subparallel vein to the

Carpenter Vein and separated by a moderately silicified slab of medium grained Crazy Basin Quartz Monzonite. The vein is covered to the north and south. Material from this vein comprised part of the sample which did not have an identifying number which assayed 2.90 oz/t gold and 3.15 oz/t silver. The sample without a reference number was a reference sample collected for descriptive purposes and was accidentally assayed. This vein should be exposed and more thoroughly sampled and inspected.

To the south of the southernmost prospect the vein is blind on the surface, but is structurally bound by fairly distinctive units traceable for 300 to 400 feet south of the prospect. The Upper Carpenter Vein should extend across the wash and be easily exposed in the same manner as the Carpenter Vein. The trace of structures adjacent to the Upper Carpenter Vein can be traced in the same manner as the Carpenter Vein. A closely spaced VLF-EM survey would help confirm the presence of sulfide rich veins below the surface on this hillside.

The assay values and vein width along with accompanying structures make this zone an important target. With the steepness of the hill and lack of appreciable overburden, high grade ore could be developed in appreciable quantities with a minimum of effort.

Detailing in sample locations, VLF-EM stations, and more detailed mapping to the southwest and the immediate area are

recommended to facilitate ore development and expanded reserves. Using the preexisting "Fault Adit" to access the mineralized zone should be evaluated.

SUMMARY OF STRUCTURES

A very prominent structural trend is evident between Rockwall Gulch to the west and the Tip Top mine to the east, and extending from Gold Hill near Humbug to a couple of miles northeast of the Acquisition mine area. The structural strike and dip of almost all units is generally parallel. The trend averages N45E and dips steeply to the northwest. The mineralized faults, Tertiary Rhyolite Porphyry Dikes, zenoliths of Yavapai Schist, pegmatites, and the trend of the Quartz Monzonite host are all basically parallel. Repeated activity along the strong structural features in basically the same direction, fairly common in this area, is an advantageous ore control feature. Reactivation of the fault zones since the Precambrian suggests major parallel zones of weakness which act as conduits for mobilized mineral rich fluids, associated spatially and temporally with Rhyolite Porphyry Dikes.

The Long Vein structure, traceable for about 7000 feet, exemplifies the character of the long strike length of the structures in this area. This feature coupled with the apparent depth of these structures make them extremely interesting targets for further exploration and development.

The Tip Top mine is almost 1000 feet topographically below the veins in the Acquisition mine area and went to almost 800 feet in depth, below this point. Most veins observed tended to increase in grade and widen the farther down the slopes they were traced. Generally the highest assay values were from the topographically lowest point of vein exposure. This suggests that the veins in this region are at the top of a system of precious metal mineralization, and would possibly thicken and increase in gold and silver values with depth. The richest portions of the Tip Top mine was in strongly silicified vein material.

The bearing and attitude of both mineralized and unmineralized structures on Long Vein Ridge suggests an environment where fluids flowed easily along fractures created by injection of material under Long Vein Ridge.

ASSAY DATA AND SAMPLE DESCRIPTION

Sample No.	Au/oz/t	Ag/oz/t	Sample Description
823	0.082	0.289	Jasperoid-Quartzite NE of Long Vein Ridge, disseminated hematite and magnetite
824	0.110	1.130	Qtz vein 1", near end of bulldozer cut on Long Vein Ridge
825	0.620	7.235	Shaft #1 on Long Vein Ridge dump select, 40' shaft, oxidized ore, boxwork, silver leached
826	0.064	0.872	3" Qtz vein on Assay Office hill
827	0.006	Tr	Yavapai schist, strongly altered chloritic FeOx Limonite, Hematite

			and Manganese
828	0.138	4.540	Prospect at end of dozer cut on Long Vein Ridge, Pegmatite with strong silicification and brecciated
829	0.100	2.240	Grab sample along 40' of road in Quartz monzonite, brecciated and quartz veinlets
830	0.490	141.510	40' NE of Shaft #1 Long Vein Ridge 12"-18" vein, abundant silvery sulfide, pyrite, ruby silver, yellow green oxide, veinlets, stockwork.
831	0.381	21.010	Shaft #2 across 18" layered vein, abundant silvery sulfide and pyrite
832	0.038	4.940	Shaft #2 18" adjacent wall rock on footwall side, brecciated, strong stain
833	0.130	0.930	Shaft #3 across argillic altered all minerals washed out
834	0.020	Tr	Strong FeO, Limonite & Hematite, Yavapai schist, similiar to 827, black mineral (Mn)?
835	0.066	11.600	150' south of Shaft #3, Pegmatite on Long Vein Ridge, strong limonite stain
836	0.182	12.180	Saguaro Vein, strong silicification nodular vein material, 2.5' wide, abundant pyrite and silver sulfide
837	0.362	19.350	Eastside Prospect 500' east of Long Vein Ridge, hematite and limonite boxwork, 4" vein
838	0.060	10.250	SE Flank Vein, north, nodular material, pyrite and gray-silvery sulfides
839	0.140	8.672	SE Flank Vein, northern extent,

			nodular material, abundant pyrite and metallic gray sulfide
840	0.042	10.584	Flat vein NE, very select small limonite pocket in mostly barren quartz vein, similar to Blanket Vein
841	0.044	9.579	SE Flank Vein, south, subparallel veinlets, 3' wide brecciated zone, limonite after pyrite, gray metallics
842	0.256	13.172	SE Flank Vein, south, qtz vein well mineralized, gray metallic sulfides, subparallel veinlets
843	0.076	11.842	Divergent Prospect sheared altered silicified abundant silvery sulfide & seritization
844	0.145	0.700	Divergent Vein, E extension 1-3" wide qtz vein brecciated and healed with mineral rich fluids, 80% oxidized, Pegmatitic zone, similar to 843 but oxidized with the silver leached out
845	0.134	2.050	W Divergent Vein in Pegmatite, qtz vein and breccia zone 5' wide & 100% oxidized, strong silicification, strong limonite stain, sheared host
846	0.035	0.250	Sheared and mineralized lens of Pegmatite Qtz Monz, strong limonitic stain, 2-4" thick
847	0.040	0.250	Qtz vein cutting pegmatite, 2-4" 80% oxidized pervasive silicification, limonite & hematite stain
848	0.013	0.100	Shear zone, weak argillic, strong sericite, well brecciated 3' wide sample cut, "Hematite zone", strong stain, manganese stain
849	0.001	<0.050	Jasperoid-Quartzite disseminated hematite & magnetite flecks

850	0.001	<0.050	Fault gouge, strongly altered and stained Yavapai Schist, weak silicification, 100% oxidized
851	0.012	1.300	S extension of SE Flank Vein, float 2-4" wide 50' east of Long Vein Adit
852	0.018	<0.05	Sheared silicified & mineralized, hematite stain, altered Quartz Monzonite
853	0.020	0.150	8' grab on south Long Vein across structure, strong stain, brecciated Quartz Monzonite and Yavapai Schist
854	0.351	0.550	West Long Vein, Road Cut exposure, strong hematite stain, abundant boxwork, pyrite
855	0.032	0.800	Argillic altered vein 1' wide, host brecciated, most minerals washed out of rock
856	0.552	4.150	West Long Vein 4"-6" quartz vein, layered & abundant pyrite and silvery sulfide
857	0.050	0.350	60' grab sample, rock chip across disseminated zone of discrete and diffuse veins in Pegmatitic host
858	0.020	0.650	Vein below west Long Vein, parallel silicified & mineralized zone
859	0.354	5.700	West Long Vein pegmatite & Yavapai Schist host, fault plane galena, pyrite & grey sulfides
860	0.095	0.500	North extension of W. Long Vein west flank, grab sample of select mineralized silicified float
861	0.015	0.250	Fault block vein 1 ft. wide rock chip sample, galena, pyrite

			boxwork, pervasive silicification
862	0.078	2.400	Vein in radial vein system pyrite and gray sulfide
863	0.016	0.250	Breccia grab sample
864	0.764	2.800	Carpenter Vein 18" cut select vein material, pyrite & gray metallic sulfides
865	1.976	5.150	Carpenter Prospect dump sample select silicified vein material
866	0.092	2.85	Carpenter north small adit across fault from Carpenter Veins
867	1.639	3.900	Carpenter shaft 6' wide brecciated and mineralized zone, 10" silicified vein, sample 12" cut, 10% wall rock, 30% oxidized, black & gray metallic sulfides and pyrite
868	0.018	<0.050	Shear zone Yavapai Schist, strong alteration brecciated, qtz veinlets 5' wide cut
869	0.020	<0.050	Across portal Green Pool Vein adit 5' cut across portal, same as 868 across wash, same structure?
870	0.166	0.250	Select dump sample at 869 site 2-4" qtz vein alternating bands of sulfides and qtz, weak Cu stain
871	0.613	0.950	Green Pool Vein 1' wide sample 90% sulfides, strong silicifiction Qtz Monz host, galena, pyrite, gray metallics, sample across western contact
872	Tr	<0.050	25' grab sample across strong altd. Yavapai series, muscovite, qtz veinlets, hematite, Mn, Limonite stain
873	0.005	<0.050	Sheared & altered Yavapai schist weak to mod. seritization, strong hematite

874	1.226	1.800	Check Dam Vein in ravine below leaching ponds, select vein material, 2-4" disseminated large sulfide grains, boxwork where altered, 50% oxidized
875	0.588	1.300	Same as above, 2-4" qtz vein with large dissem. sulfides approx. 300' north of 875, 50% oxidized boxwork
876	0.007	0.050	FeO--Limonite, Assay Office Vein Sheared and strongly stained qtz vein
877	0.003	0.050	Same as above, float 4-6" vein layered heavy limonite and hematite stain
878	Tr	<0.050	Road Juntion--4 way, Precambrian Pegmatitic Qtz vein in altd. schist, strong iron oxide coatings
879	0.050	1.716	Jasper breccia sample, strong limonite and hematite stain, resilicified
880	0.056	1.362	Vein on west flank of Long Vein Ridge, 4-6" wide vein, 4-6" sheared schist in pegmatitic host. Oxidized 100%
881	0.232	41.693	Same as above but to south 100', 4-6" vein yellow green stain, grey metallic sufides, pyrite, boxwork with 60-70% oxidized, strong silicification
882	0.156	9.129	West flank shaft of Long Vein Ridge, 15' shaft 2-4" qtz vein, 3' sheared and mineralized width, green yellow stain, grey metallics
883	0.058	0.801	Same as the above but more oxidized, 100' south, 100% oxidized, massive quartz, limonite cubes, leached of

			silver values
884	0.510	22.53	Slab Vein, below East Long Vein Shaft #3, 6" wide, abundant boxwork and gossan, 90% oxidized Pegmatitic host, yellow green oxide
885	0.038	1.708	Jojoba Vein, swell 12-18" wide, abundant sulfides, nodular vein material, adjacent qtz vein stockwork, sheared & brecciated
886	0.366	3.237	14" cut upper Carpenter Vein Pegmatitic host, 50% oxidized, parallel silicified shear zones
887	1.602	3.136	Upper Carpenter Vein Selected dump sample, massive qtz, grey metallic sulfides, pyrite, 15% oxidized, ore pile on dump
888	0.030	4.296	Float above upper Carpenter Vein, 100% oxidized, limonite after pyrite cubes, strong limonite stain, vein 2-4" wide, pegmatitic host

VERY LOW FREQUENCY ELECTROMAGNETIC SURVEY

PRINCIPLE OF OPERATION

The U.S. Navy VLF-transmitting stations operating for communications with submarines at sea, have a vertical antenna system. The antenna current is thus vertical, creating a concentric horizontal magnetic field around them. When these magnetic fields meet conductive bodies in the ground, there will be secondary fields radiating from these bodies. The instrument used for this type of survey, the EM-16, is simply a sensitive receiver covering the frequency bands of the

VLF-transmitting stations with means of measuring the vertical field components.

The receiver has two inputs, with two receiving coils built into the instrument. One coil has normally vertical axis and the other is horizontal.

The signal from one of the coils (vertical axis) is first minimized by tilting the instrument. The tilt-angle is calibrated in percentage. The remaining signal in this coil is finally balanced out by a measured percentage of signal from the other coil (horizontal coil), after being shifted (electronically) by 90 degrees. This coil is normally parallel to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation Pi/2-signal from the horizontal coil is a measure of the quadrature vertical signal. In other words, the vertical real-component (In Phase reading) indicates the structure and the Quadrature indicates how conductive the structure is.

VERY LOW FREQUENCY EM RESULTS AND INTERPRETATION

The graphs of the VLF-EM survey can be found in the Appendix of this report.

LONG VEIN RIDGE SURVEY

Fourteen (14) lines were run using 100 foot stations spaced 100 feet apart normal to the vein structures on Long Vein Ridge. The lines are plotted as overlay on the Geology

Plat.

Line 1, originated about 100 feet northeast of the northerly shaft on Eastern Long Vein, with 0+00 station over the vein. This line indicated that there are two vein structures both possibly shallow in depth and not strongly conductive. This correlates with the geology as we feel that there is a fairly flat fault with a northwesterly trend underlying this northern portion of the vein system and dipping to the southwest, therefore we are possibly looking at a truncated portion of the vein system.

Line 2, this line is similar to Line 1, however, the depth of the veins is greater over this truncated area.

Line 3, again this line is similar to Line 1 and 2, and the indication is that we are about out of the truncated portion of the vein system.

Line 4, which is south of the middle shaft on the Eastern Long Vein, now indicates that we have a deep conductive vein system, beyond the truncated portion of the vein system. The depth of the veins at this location is at least 500 feet in depth.

Line 5, indicates a depth in excess of 500 feet for the vein system with favorable conductivity.

Line 6, is similar to Line 5, indicating good structure and conductivity.

Line 7, indicates a slightly weaker but broader vein

system.

Line 8, the vein system is increasing in strength and still fairly broad.

Line 9, the vein system is becoming much stronger and conductive. Depth of the vein system is expected to be in excess of 500 feet.

Line 10, the vein system is becoming stronger and increasing in depth to possibly 700 feet or more.

Line 11, depth in excess of 500 feet with favorable conductivity indicated here.

Line 12, 13 and 14, all indicate that the vein system is still strong and continuing to the south, while still maintaining a depth at least 500 feet.

These lines appear to correlate well and substantiate the geology that the vein system on Long Vein Ridge continues in depth, similar to the Tip Top mine which was mined to a depth of 800 feet.

CARPENTER AREA SURVEY

Three (3) VLF-EM survey lines were run using 100 foot stations and spaced 100 feet apart normal to the central structures.

Line 0, was run over the area where the vein system gave assays of over an ounce of gold per ton. This is evident in the VLF-EM response. Also the VLF-EM response indicates that multiple veins can be expected on this ridge. The open end of

the curve at the 3+00W station on this line indicates that the line should be continued to the top of the ridge and possibly into Rockwall Gulch. The depth of the vein system, similar to the Long Vein Ridge vein system, carries to depth.

Lines 1S and 2S, both indicate possible multiple veins with favorable conductivity. These lines should also be continued to the west.

It was planned to run one or more VLF-EM survey lines from the western boundary of the Acquisition claim group to its eastern boundary. However, due to the time we felt was available and that the lines that were run correlated most favorably with the geology, the long survey lines can be completed in the future.

ACQUISITION AREA

A short VLF-EM line was run over the Acquisition Vein with a bearing of N15W to see if the survey data correlated with the known information of the old mine. This line was not normal to the trace of the vein, because we followed a road, however, it correlated well as far as structure and conductivity.

To summarize the data developed by the Very Low Frequency Electromagnetic Geophysical Survey, we can be quite certain that the vein systems have a predominantly northeasterly bearing as they couple well with U.S. Navy Station NAA, located at Cutler, Maine, and are structural highs with very

favorable conductivity. Depths of the veins to at least 500 feet, can be expected.

ESTIMATE OF ORE RESERVES

The Eastern Long Vein system and the Carpenter Vein system will be the two areas used for the estimate of ore reserves. However, it should be understood that this only covers about one-third of the potential ore reserves within the Acquisition and Carpenter mining claim groups.

The Eastern Long Vein Ridge has at least five (5) economic gold silver veins, along with minor veins which could furnish excellent heap leach ore. Each of the five (5) major veins on the Eastern Long Vein Ridge will be discussed individually. Tonnages will be calculated at 11 cubic feet per ton and grade of gold and silver will be estimated for the potential ore and the gross dollar potential determined. Gold and silver spot prices will be based on $395 per tr oz for gold, and $9.50 per tr oz for silver.

EASTERN LONG VEIN:

The Eastern Long Vein can be traced for a distance of 400 feet along surface and is expected to extend to a distance of at least 750 feet. If we take a conservative width of 1 foot for the vein and calculate the tonnage for a depth of 100 feet, we will have 6,818 tons of potential ore. The grade of the ore, based on the average of ten (10) samples along the vein, is 0.266 oz/ton gold and 20.35 oz/ton silver for a gross

dollar value of $298 per ton. Therefore, for each 100 feet in depth the gross dollar potential would be $2,031,818, and to the expected depth of 500 feet the gross dollar value could be $10,159,090.

SLAB VEIN:

The Slab Vein is below the Eastern Long Vein on the east flank of the ridge and the vein can be traced for about 600 feet. A conservative width of 0.5 foot for the vein should develop 2,730 tons of ore for each 100 feet in depth. The grade of this ore based on a large sample is 0.51 oz/t gold and 22.53 oz/t silver for a gross dollar value of $415 per ton. Therefore, for each 100 feet in depth a gross dollar potential would be $1,133,040, and to the expected depth of 500 feet the gross dollar value could be $5,665,200.

SAGUARO VEIN:

The Saguaro Vein can be traced for about 200 feet. The vein has a width of about 2.5 feet and assays 0.182 oz/t gold and 12.80 oz/t silver for a gross dollar value of $193 per ton. The expected tonnage to a depth of 100 feet would be 4,550 tons for a gross dollar value of $878,320 for each 100 feet in depth. If extended to 500 feet the gross dollar value would be $4,391,600.

SILVER VEIN:

The Silver Vein or Southeast Flank Vein can be traced for about 800 feet. The vein has a width of about 0.333 foot and

assays 0.112 oz/t gold and 8.356 oz/t silver for a gross dollar value of $124 per ton. The expected tonnage for 100 feet in depth is 2,420 tons with a gross dollar value of $299,390 for each 100 feet in depth. When extended to 500 feet the gross dollar value would be $1,496,941.

WESTERN LONG VEIN:

The Western Long Vein can be traced for about 400 feet. A conservative estimate of the vein width is 0.5 foot which assays 0.419 oz/t gold and 3.470 oz/t silver for a gross dollar value of $198 per ton. The expected tonnage for 100 feet in depth is 1,820 tons with a gross dollar value of $360,750 for each 100 feet in depth. If extended to 500 feet in depth the gross dollar value would be $1,803,750.

SEMIRADIAL VEIN BRECCIA ZONE:

The Semiradial Vein Breccia Zone could be a very favorable source of heap leach ore. An ellipsoid with a minor diameter of 150 feet and a major diameter of 400 feet could encompass this area. The average grade of five samples excluding vein material assayed 0.052 oz/t gold and 0.83 oz/t silver for a gross dollar of $28 per ton. The expected tonnage for this ellipsoid to a depth of 100 feet is 428,400 tons with a gross dollar of $12,102,300. This certainly could not be called waste.

EASTERN LONG VEIN RIDGE BLOCK LEACHING:

Another source of potential heap leaching material could

be the "waste" between the mineable veins on this ridge. To evaluate this concept, 26 samples were averaged, excluding mineable vein material, which gave a grade of 0.051 oz/t gold and 2.693 oz/t silver for a gross dollar value of $46 per ton.

If we assume a mineable length of 1500 feet with a width of 300 feet and a depth of 100 feet, the tonnage is 4,090,909 tons with a gross dollar value of $188,181,814.

This is not unrealistic to consider, because the mineable veins would be selectively mined as milling ore and the "waste" between the veins could be processed by heap leaching. Grades of 0.05 oz/t gold is considered ore grade in many areas such as in Nevada and Wyoming.

CARPENTER VEIN:

The Carpenter Vein which is in the northwestern portion of the property offers excellent ore potential. Three (3) parallel veins can be traced for a distance of 350 feet with average vein widths of 1.3 feet. Seven (7) samples averaged 0.868 oz/t gold and 3.687 oz/t silver for a gross dollar value of $378 per ton. Tonnage to a depth of 100 feet would be 12,409 tons, for the combined three (3) veins. The gross dollar value to a depth of 100 feet would be $4,690,602 and is extended to 500 feet in depth, as expected, the gross dollar value would be $23,453,010.

We are confident that the Carperter Vein system continues to the southwest for at least another 350 feet. If this

proves correct, then the potential ore reserves for this vein system could be doubled.

CARPENTER VEIN BLOCK LEACH:

It would not be unrealistic to consider the "waste" between the veins at the Carpenter Vein area to be favorable heap leaching material.

A block 350 feet long, 100 feet wide and 100 feet deep could develop 318,182 tons of heap leaching material. It also would not be unrealistic to consider the "waste" as having a value of 0.05 oz/t gold and 2.0 oz/t silver. Actually the gold value could be greater as this area favors high gold values. However, if we use 0.05 oz/t gold and 2.0 oz/t silver, this would give us a gross dollar value of $39 per ton. Therefore, to a depth of 100 feet the gross dollar potential could be $12,409,098. We feel quite certain that this mineralized zone could extend at least another 350 feet to the southwest, thus doubling the gross dollar potential.

The estimate of ore reserves would not be complete without mentioning the gold producing potential of the placer, especially, the colluvium below the veins within the drainages. The placer potential has not been tested, however, it is expected to have a favorable dollar potential.

SUMMARY OF POTENTIAL ORE RESERVES

The dollar value for gold and silver in this report is based on spot prices of $395 per troy oz for gold and $9.50

per troy oz of silver.

The Long Vein Ridge vein ore zone should have the potential of producing 27,173 oz of gold ($10,733,335) to a depth of 100 feet and 135,865 oz of gold ($53,666,675) to a depth of 500 feet; and 640,589 oz silver ($6,085,596) to a depth of 100 feet and 3,202,945 oz ($30,427,978) to a depth of 500 feet.

The Long Vein Ridge Block Leach Zone should have the potential of producing 208,636 oz of gold ($82,411,220) and 11,016,818 oz silver ($104,659,771) to a depth of 100 feet.

The Carpenter Vein Zone should produce 10,771 oz gold ($4,254,545) to a depth of 100 feet and 53,855 oz gold ($21,272,725) to a depth of 500 feet; and 45,752 oz silver ($434,644) to a depth of 100 feet and 228,760 oz ($2,173,220) to a depth of 500 feet.

The Carpenter Vein Block Leach zone could produce 9,545 oz gold ($3,770,275) and 1,398,728 oz silver ($13,287,916) to a depth of 100 feet.

This summary only covers less than one-third of the ore reserves potential of the property.

WATER DEVELOPMENT

Adequate water for mining, milling and potable uses should offer no problem at the Acquisition mine property.

There are many favorable sources of water within one-half of mile of the mill site that show good potential for easy

development and year round supply.

The sources are as follows: Acquisition Shaft, Long Vein Adit and the marshy area just south of the portal of the Long Vein Adit, Assay Office Pond (200 feet west of Long Vein Adit), Springs in Carpenter Gulch west of Long Vein Adit and approximately 1000 feet north of Assay Office Pond, Green Pool area below the confluence of Carpenter and Long Vein Gulches.

Ponds and catchments can be developed at these sites and possibly at other favorable sites. Pumps could be installed to supply one or two large water storage tanks located above the mill site and camp.

Water could be pumped into water trucks where the ponds or catchments have only small flows, thus allowing the ponds or catchments to recharge between drafts. The water trucks could then deliver the water wherever it is needed.

Recycling of mill water, as long as it was not detrimental to the process, will conserve the use of fresh water.

MINING METHODS DISCUSSED

SURFACE MINING

Surface mining would be the initial method of mining at this property. In the areas that were evaluated, the ore veins were usually exposed at the surface, and surface mining would be the most cost effective method to develop ore for an early cash flow.

With surface mining, the vein ore could be selectively mined and the material between the veins, which we feel would be economical to consider as heap leaching ore, could be mined simultaneously. This eliminates the problem of waste material handling, as this "waste" material would be placed on leach pads and processed for gold and silver values.

Another advantage of surface mining is that mutiple areas could be mined simultaneously without duplicating earth moving equipment. The D8L bulldozer could perform the heavy earth moving operation at several locations each day, and with several locations being worked simultaneously, the tonnage requirement of the processing plant should be effectively fulfilled.

UNDERGROUND MINING

The underground mining phase would be started at the same time as the surface mining phase, however, the surface operation should produce sufficient vein ore and "waste" leaching material for the processing plant to develop cash flow, while the underground development work is in progress.

The underground mining phase would require driving a decline haulageway crosscut at midpoint of either the Long Vein Ridge mineralized zone or the Carpenter Vein mineralized zone. This would reduce the cycle time for LHD's to transport ore and waste to the surface and it would also give two working faces (headings) for better utilization of manpower

and equipment.

The decline haulageway should have a dimension of at least 12 x 10 feet, or 120 square feet in area to accommodate the 2 cubic yard LHD. When the crosscut has intersected a vein, two drift headings, normal to the crosscut could be started.

The drift headings will have to be wide enough to allow clearance for the 1 cubic yard LHD. These drift headings would actually be secondary haulageways for the shrinkage stope mining method most applicable for this property. Therefore, the dilution expected while driving these haulage drifts, could be minimized by selectively mining the "waste" first then taking the ore. The "waste" would be combined with the surface operation "waste" and sent to the leach pads.

When the haulage drifts have been developed at least 100 feet either side the the main decline haulageway, stope preparation should commence. Stope raises would be spaced 100 feet apart, and short footwall crosscuts driven at 45-90 degrees to the vein to develop LHD drawpoints, and the drawpoints should be about 20 feet apart to facilitate an even draw of ore to maintain a level working area for the stoping crew.

Stope raises will be productive as the raises will be within the vein system. When the stopes are in operation, an inventory of broken ore will be available for the Mill

operation to stabilize its thruput.

The underground operation offers several benefits, such as, an inventory of broken ore for a stabilized Mill thruput, selective mining of the vein ore, and expansion of the ore reserves because it is expected that the veins will widen at depth, and the extraction of vein ore to a depth of 500 feet or more.

MINING EQUIPMENT REQUIREMENT

SURFACE MINING

The equipment requirement for the initial mining phase has been listed in the ACQUISITION MINE FINANCIAL ANALYSIS, which can be found in Appendix III of this report.

A Caterpillar D8L bulldozer was selected due to its design and closely parallels the effectiveness of the conventional D9 dozers. It has a new track assembly design that enables it to be safer on steep slopes.

The Caterpillar loaders, 980C and 988B, in conjunction with the 35 ton ore trucks, should be able to handle the tonnage requirements of the processing plant, both for vein ore and heap leaching ore.

The backhoe/loader could be used to selectively mine portions of the vein ore and also to assist in the material handling at the processing plant.

The Air Track Drill would be used to drill blast holes on the mine benches, and the drill cuttings would be assayed to

determine the grade of the heap leaching ore material. This drill could also be used to test the the ore body at depths of 100 feet or more, and also to test other favorable mineralized zones yet to be evaluated at this property.

The Caterpillar 12B grader, would be used to maintain favorable road conditions at the mine site and will pay for itself many times over, in tire wear and maintenance of rolling stock.

UNDERGROUND MINING

The equipment requirement for the underground mining operation is also listed in the ACQUISITION MINE FINANCIAL ANALYSIS found in APPENDIX III.

The equipment selected assures a cost effective underground mining operation. The underground operation is an important part of the the mining plan at this property, not only to supply a fexible inventory of broken ore for the Mill, but also to fully exploit the potential ore reserves at depth.

Rubber tire LHD's were selected to load, haul and dump the ore and waste material. LHD's have fast cycle time and can be readily moved to other workings at the property.

Ventilation, an important consideration in underground operations especially where diesel-powered equipment is used, has been carefully studied and sized.

The hand held drills were selected because most of the underground drilling will be in stopes.

With the copper industry here in Arizona at reduced operation, there should be experienced miners available for this project.

MILLING

The Mill or processing plant will be designed to be fexible with multiple process flows. The plant will utilize, gravity separation, flotation and slurry leaching beneficiation processes. These processes will be integrated to achieve the maximum recovery of the gold and silver values of the ore.

The existing processing plant, which was implemented by the previous operator and appears to have had very little use, is estimated to have a replacement cost of about $1,000,000, which includes the acquisition of the components (See APPENDIX VI for an abridged list of components), delivery to mine site, site preparation and installation. Photographs of the physical plant are also included in APPENDIX VI. The present installation was designed primarily as a slurry leach plant, and will require the installation of flotation and gravity system components and an expanded slurry leach system to achieve the desired integrated recovery system.

Metallurgical testing and flowsheet design is currently being conducted to determine the best method to beneficiate the gold and silver values in the ore. Preliminary testing indicates that the ore is amenable to cyanide leaching,

additionally, the Ammonium Thiosulfate reagent system has also given encouraging results.

The metallurgical testing and flowsheet design must address many variables found in most precious metal ores. Gold ores usually fall into three principal classes: Gold ores in which the sulfides have been extensively oxidized and where practically all of the gold is free, that is, liberated from the gangue; gold ores in which a portion of the gold is free, usually in metallic form, and the remainder being associated with sulfides such as pyrite and arsenopyrite, the majority of gold ores belong in this class; ores which contain their major value as minerals of base metals such as lead, zinc and copper. At the Acquisition mine we are primarily concerned with the first two classes of gold ores and a combination of concentration methods consisting of gravity, flotation and leaching will be practiced.

In general, clean metallic gold particles below 65 mesh size (0.0082") float readily and are usually amenable to leaching, however, metallic gold much coarser than 65 mesh is more difficult to float or leach and either amalgamation or gravity concentration must be considered.

Silver is usually found in ore as metallic silver, argentite, argentiferous galena, ceragyrite, proustite, pyrargyrite, stephanite, tetrahedrite and polybasite. The most important ores are the silver-bearing lead ores in which

the heavy mineral is principally argentiferous galena, usually associated with pyrite, sphalerite and rich silver bearing minerals such as the leachable silver halides, embolite, Ag(Cl,Br); bromyrite, AgBr; and iodobromite, Ag(Cl,Br,I); iodyrite, AgI.

Thus it can be seen that we are working with a complex mineral system, and to economically beneficiate the precious metals in the ore, a fexible integrated flowsheet must be developed and implemented within the existing processing plant.

The financial requirement to implement the desired integrated flowsheet is included in the ACQUISITION MINE FINANCIAL ANALYSIS which is included in APPENDIX III.

LEACH PAD OPERATION

The initial leach pad will be constructed adjacent to the Mill site as this will allow the use of a stacking conveyor coupled to the conveyor servicing the fine ore bin. The size of this leach pad will be 150 feet by 200 feet for an area of 30,000 square feet. When the leach pad is loaded to a height of 20 feet, the pad should contain about 26,000 short tons of minus 3/8 inch leaching "waste" ore. When the surface mining operation is in full production, the expected time to load this pad will be about 20 days.

The pad will be constructed on a graded and well compacted base with 2 1/2 inches of hot rolled asphalt, 1/4

inch of asphalt and chopped rubber as a membrane, 2 1/2 inches of hot rolled asphalt and another 2 1/2 inch hot rolled asphalt layer. This type of pad construction is being used at the Smokey Valley mine in Nevada, and has proved very successful.

This pad must support heavy loading and unloading equipment and also the weight of the ore, which will be removed and reloaded about every 50 to 60 days, or when the effluent pregnant solution reaches an unprofitable level of concentration.

A second leach pad will be constructed at a predetermined site between the Long Vein Ridge and the Carpenter ore zone, and this leach pad will have a dimension of 200 feet by 600 feet and should hold about 130,000 tons of leaching "waste" ore.

The leach pad operation offers excellent cash flow potential at a small cost. The cost of mining the leach "waste" material is covered by the surface and underground mining operations, therefore, the cost of crushing, labor to install the reagent distribution system on the heaps, cost of reagents and of course the extraction of the precious metals from the pregnant effluent will be charged to the leaching "waste" ore operation.

ECONOMIC CONSIDERATIONS

The Acquisition mine project area offers excellent economic potential, both from surface mining and underground mining. Since the gold and silver veins crop out at the surface and that the area has favorable topography for surface mining techniques, it is felt that surface mining will be the first to develop ore for an early cash flow. Surface mining techniques are cost effective, because greater tonnages can be mined per shift at a much lower cost than underground mining techniques. However,the underground mining operation will be necessary to fully exploit the economic potential of the property, and will be started at the same time as the surface mining operation, but will not be able to supply the Mill with ore until the underground development work has been completed.

The gross dollar potential of the various mineralized zones that were investigated during the field evaluation of the Acquisition mine area, which only represents less than one-third of the ore potential of the entire group of claims, and based on gold at $395 per troy oz and silver at $9.50 per troy oz, is expected to be $21,500,000 for the vein ore to a depth of 100 feet and $107,600,000 to a depth of 500 feet; and for leach dump ore, $204,000,000 to a depth of 100 feet. The vein ore reserve estimate is based on very conservative width of veins as observed at the surface, however, we expect the veins to double or triple in width at depth. This widening of

the veins can be observed at the Carpenter vein, where it pinches and is blind at the surface but widens to about 2 feet approximately 10 feet below the surface, and also appears to continue to widen at depth. Therefore, the potential of the vein ore could be $60,000,000 to a depth of 100 feet; or $300,000,000 to a depth of of 500 feet.

ACQUISITION MINE FINANCIAL ANALYSIS spreadsheets, which are included in APPENDIX III, offer an excellent opportunity to change variables such as daily mining and milling tonnages, grade of ore and spot price of gold and silver.

As an example, if we take a daily mining tonnage of 50 tons per day of vein ore, and a spot price of gold at $395 per oz and silver at $9.50 per oz, the Net Annual Cash Flow for vein ore would be about $800,000, and for heap leaching ore about $570,000, with a combined Net Annual Cash Flow of $1,370,000. However, when a more realistic daily mining tonnage of 200 tons per day with a corresponding 133 tons per day milled is considered, and using the above spot prices for gold and silver, the estimated combined Net Annual Cash Flow would be $8,004,000. Even when one takes a 50% confidence factor as to the grade of ore, and reduces the gold content to 0.264 oz/ton and silver to 4.573 oz/ton the Net Annual Cash Flow would still be $4,605,000, which is greater than the Total Estimated Capital Investment.

When both the surface and underground mining operations

are producing ore, 300 tons per day mined and 200 tons per day milled, along with the heap leaching ore, should be a continuing production schedule. Therefore, with the above spot prices for gold and silver, the estimated combined Net Annual Cash Flow would be about $12,500,000, and if gold goes to $500 per oz and silver to $15 per oz, as expected by the experts, the estimated combined Net Annual Cash Flow would be $17,800,000.

The cost of mining the heap leaching ore is included in the vein ore production, because it has to be moved to obtain the vein ore. Therefore, the only costs that would be applied to the heap leaching ore would be the crushing, labor to place the reagent distribution system on the heaps, cost of reagent and the recovery of the precious metals from pregnant effluent. The benefits from heap leaching can be viewed as analogous to the "waste" submilling material, heap leached by the major copper producing companies, which has been named "sweet copper" by many in the copper industry.

CONCLUSIONS AND RECOMMENDATIONS

The economic evaluation of the Acquisition mine project area indicates that this area has a tremendous potential for success. Excellent Net Annual Cash Flow determinations were estimated from less than one-third of the potential ore reserves, which certainly justifies the capitalization and implementation of this project.

During the economic evaluation, it was decided that the unclaimed area to the northwest of the northwesterly boundary of the Acquisition mining claim group should be prospected. This was done and several interesting mineralized zones were observed. This resulted in locating additional unpatented lode claims named "Wallrock". The name was derived from reversing the name Rockwall Gulch, which is the area where the Wallrock mining claims are located. It is expected that the Wallrock mining claim group will further enhance the ore potential of the Acquisition mine project area. When results are available, an addendum will be prepared for this report.

The Cash Flow potential of the Acquisition mine property is exceptional for such a moderate estimated Capital Investment. The growth potential is excellent, especially when one considers the entire Acquisition mine project area, and if one considers that the economic evaluation covers less than one-third of the cash flow potential of this property. Therefore, it is strongly recommended that the economic evaluation program be a continuing effort from the inception of the mining and processing operations.

It appears that the Acquisition mine project has all the ingredients for success, however, every effort should be made to select experienced management and operating personnel to implement an effective operational plan for mining and processing of the ore.

For a modest Capital Investment, a long term Net Annual Cash Flow should be assured.

APPENDIX

APPENDIX I

GEOLOGIC PLATS

APPENDIX II

VERY LOW FREQUENCY ELECTROMAGNETIC SURVEY PLATS

APPENDIX III

ACQUISITION mINE FINANCIAL ANALYSIS

CONDENSED VERSION OF FINANCIAL ANALYSIS

APPENDIX VI

LIST OF EQUIPMENT AT MINE SITE

PHOTOGRAPHS OF MILL SITE AND EQUIPMENT

APPENDIX V

DISCLAIMER

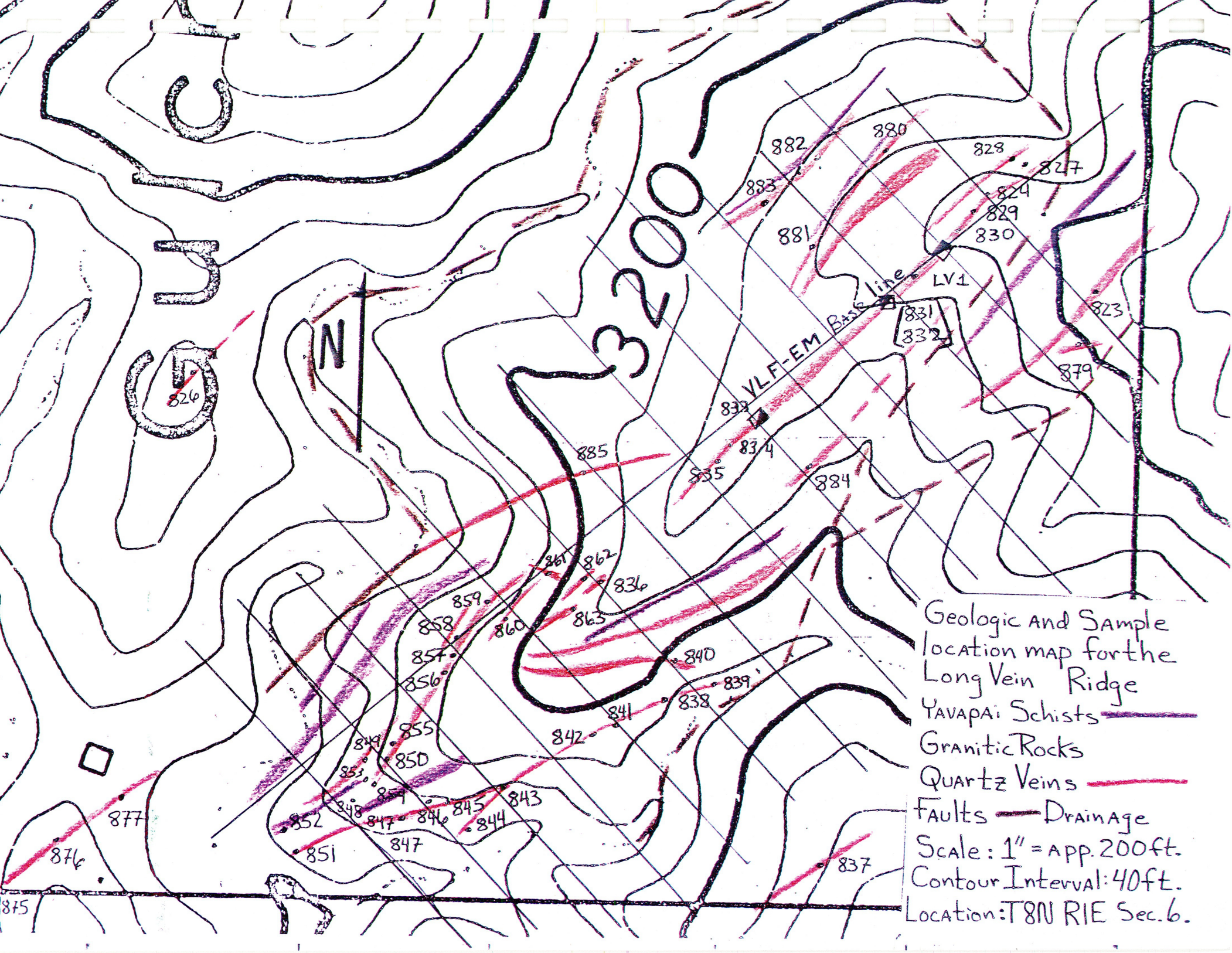
RESUMES

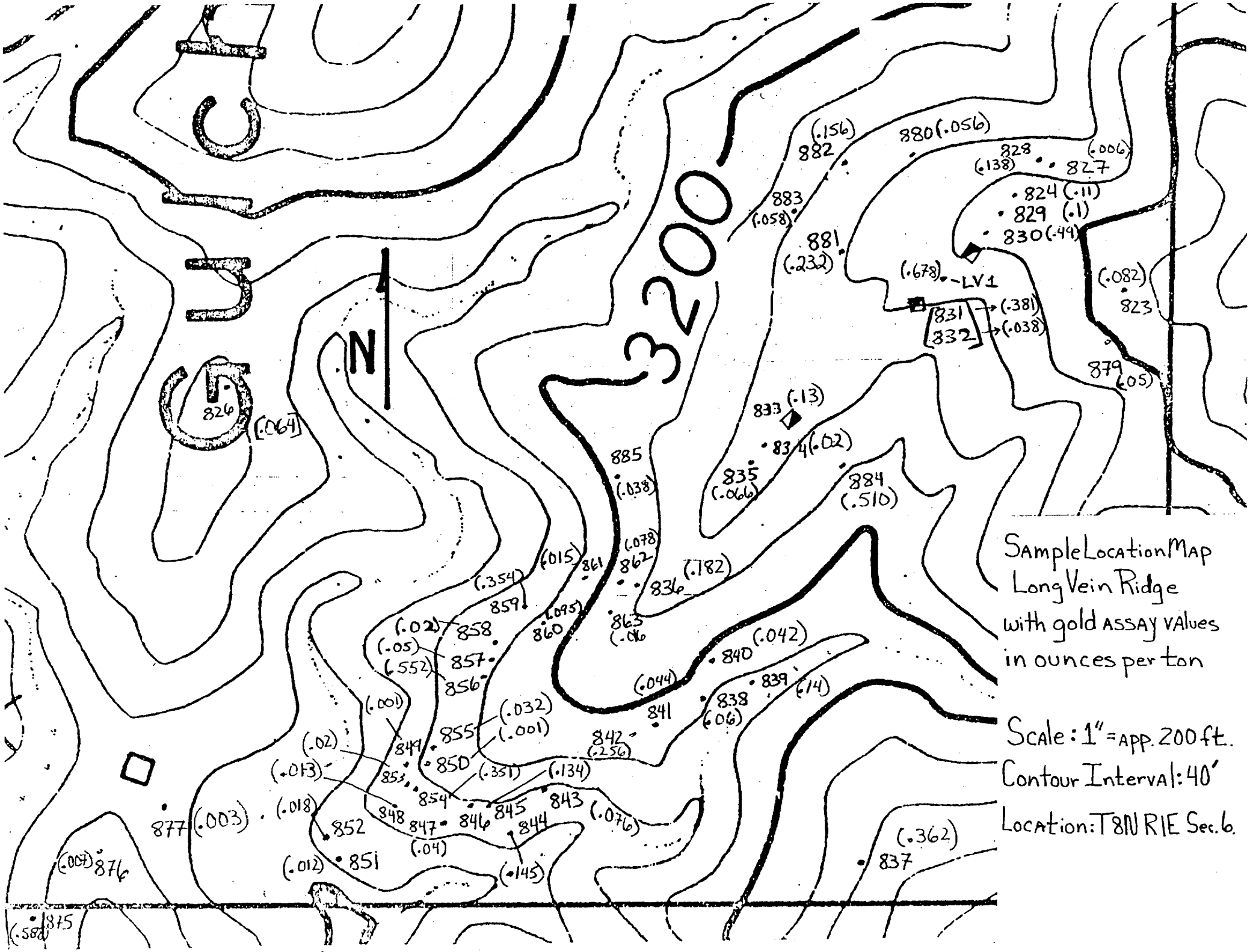
JACKET

PLAT 1:500 SCALE, DISPLAYING CLAIM BOUNDARIES AND MINERALIZED ZONES

APPENDIX I

GEOLOGIC PLATS, with a scale of 1:200, displaying the structural relationship of the mineralized vein systems and their corresponding gold and silver values.


3200
N
VLF-EM Base line
LV1
826
827
828
829
830
831
832
823
824
879
880
881
882
883
884
885
835
834
833
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
876
877
875
Geologic and Sample location map for the Long Vein Ridge
Yavapai Schists
Granitic Rocks
Quartz Veins
Faults
Drainage
Scale: 1" = app. 200ft.
Contour Interval: 40ft.
Location: T8N R1E Sec. 6.

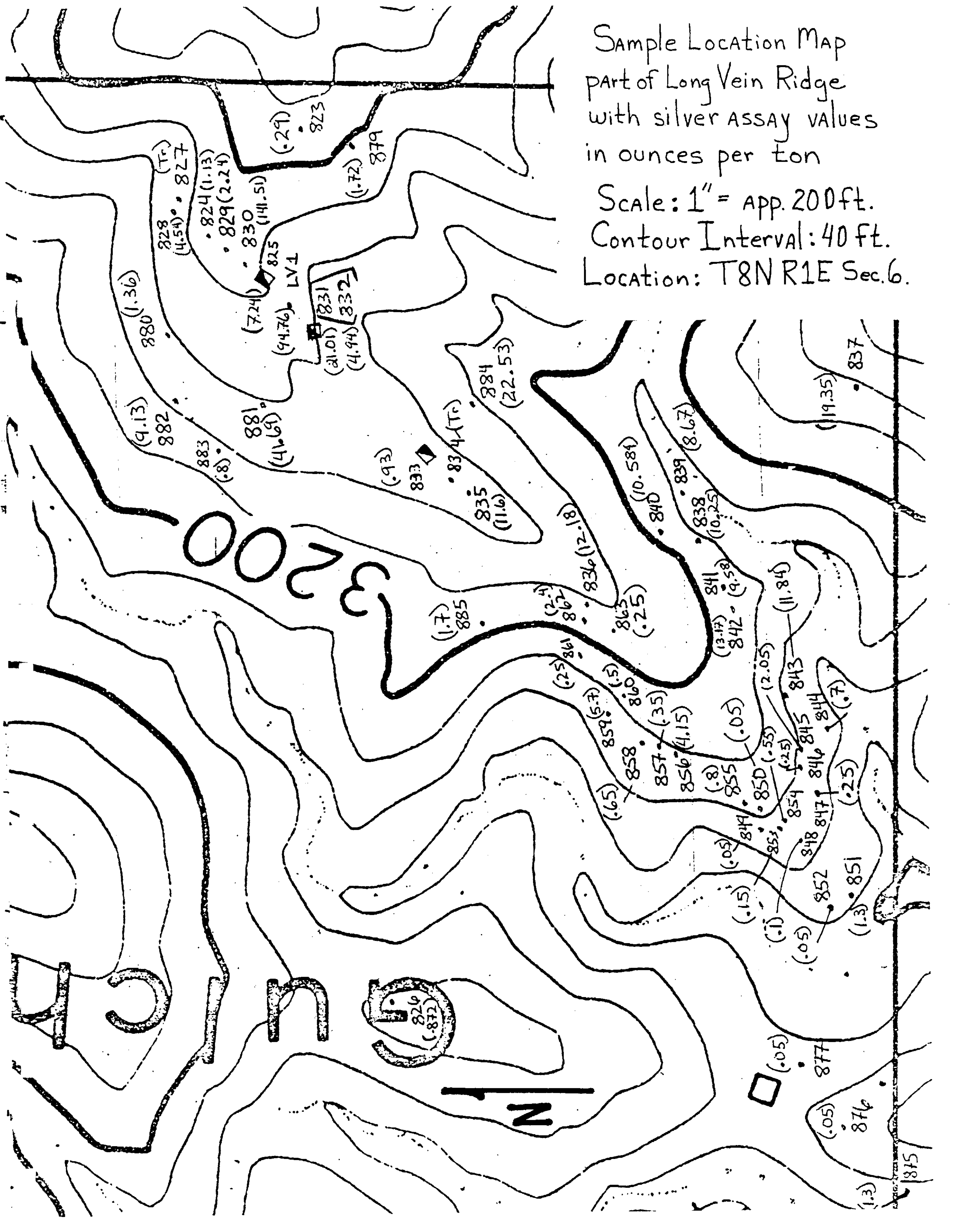


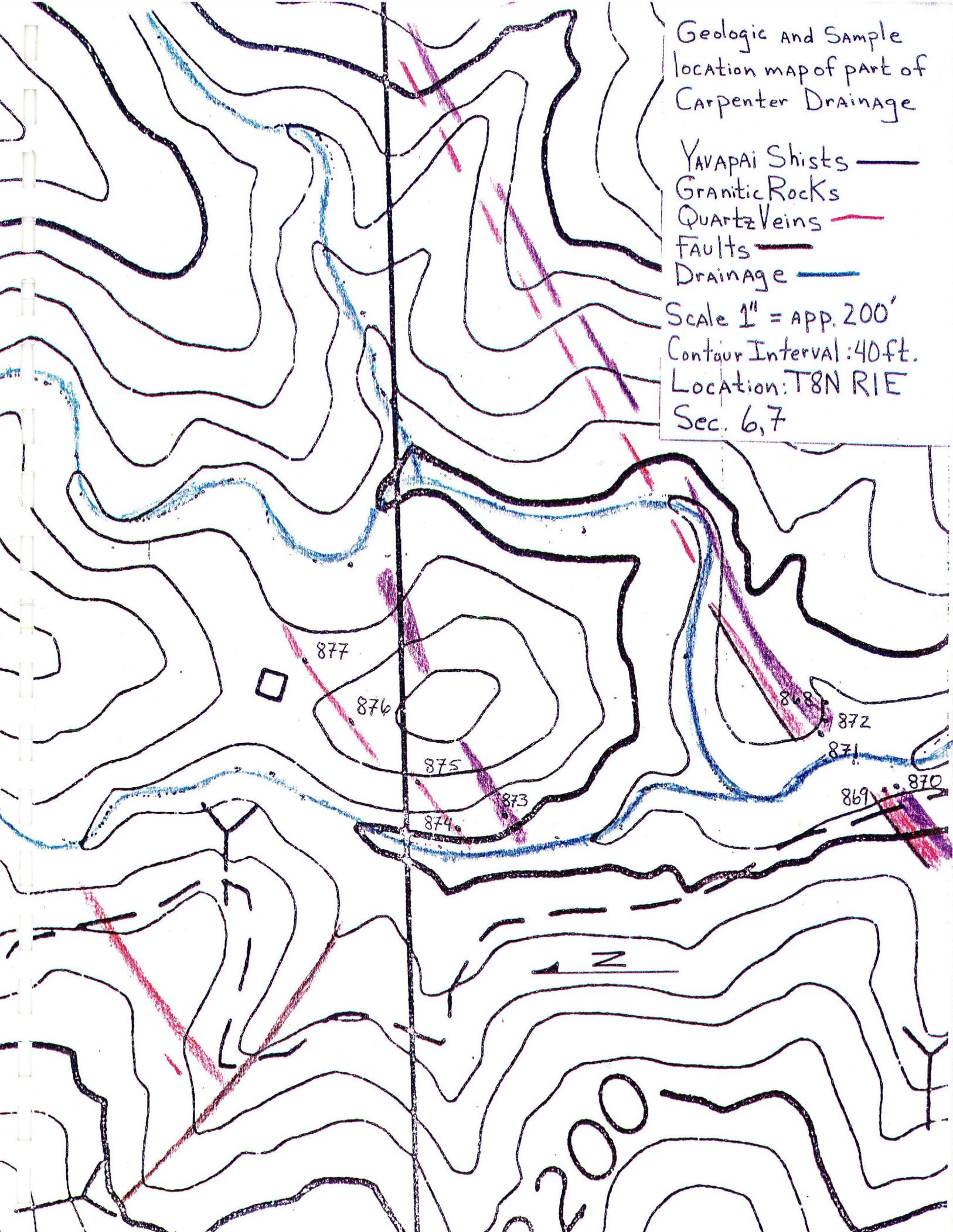
Sample Location Map
Long Vein Ridge
with gold assay values
in ounces per ton

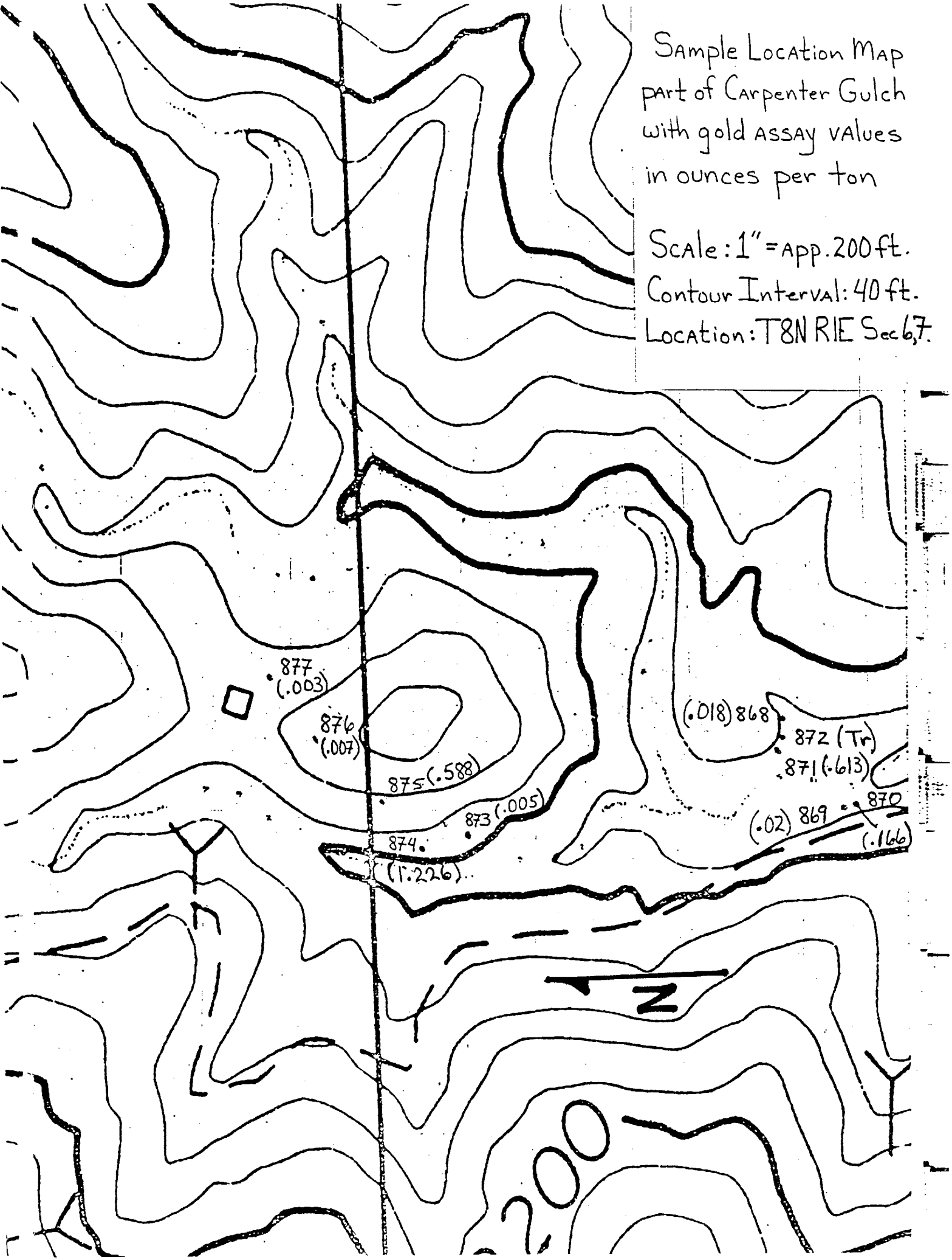
Scale: 1" = app. 200 ft.
Contour Interval: 40'
Location: T8N R1E Sec. 6.

Sample Location Map
part of Long Vein Ridge
with silver assay values
in ounces per ton

Scale: 1" = app. 200 ft.
Contour Interval: 40 ft.
Location: T8N R1E Sec. 6.

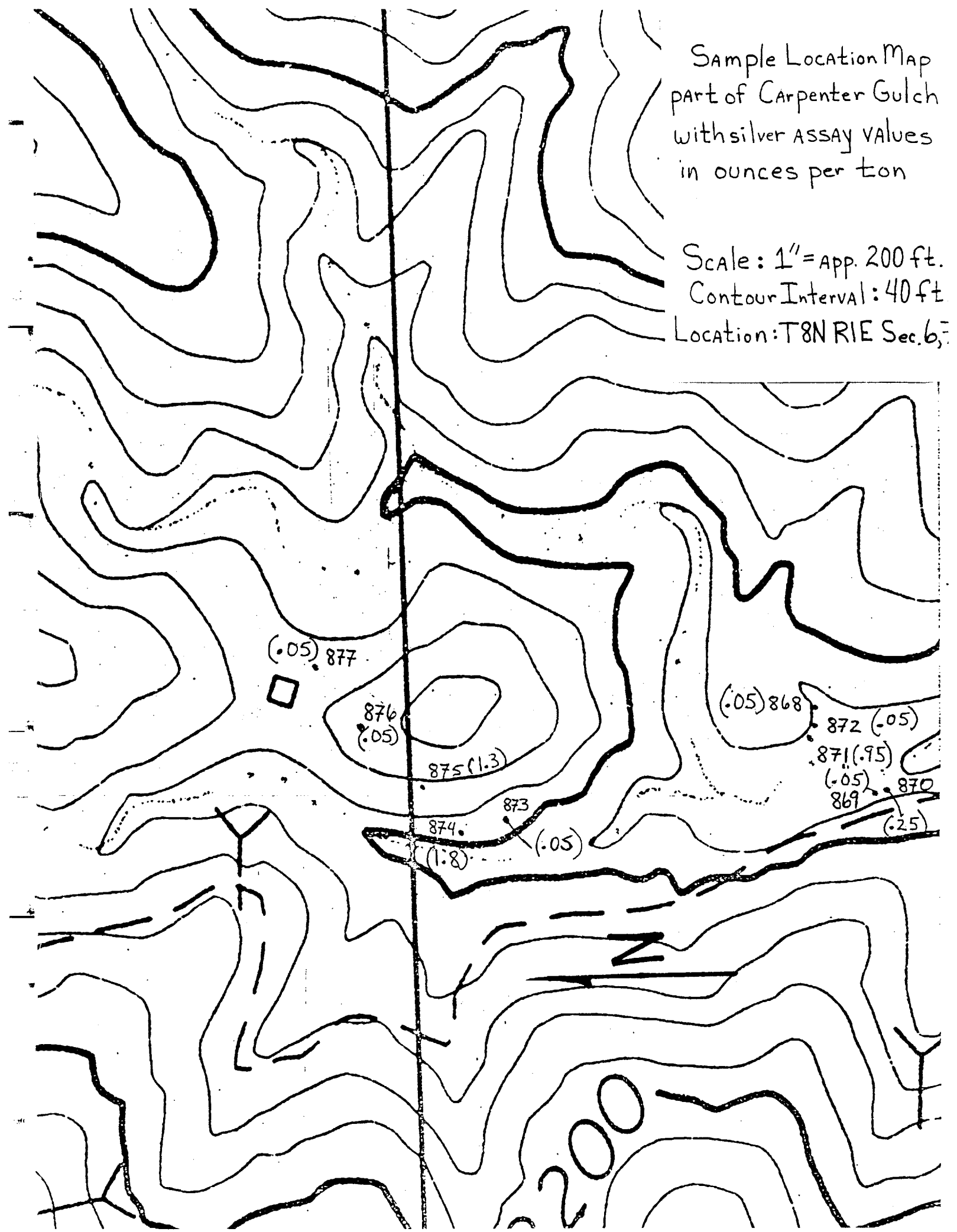



Geologic and Sample location map of part of Carpenter Drainage
Yavapai Shists
Granitic Rocks
Quartz Veins
Faults
Drainage
Scale 1" = app. 200'
Contour Interval: 40 ft.
Location: T8N R1E
Sec. 6, 7
877
876
875
874
873
872
871
870
869
868
N
200



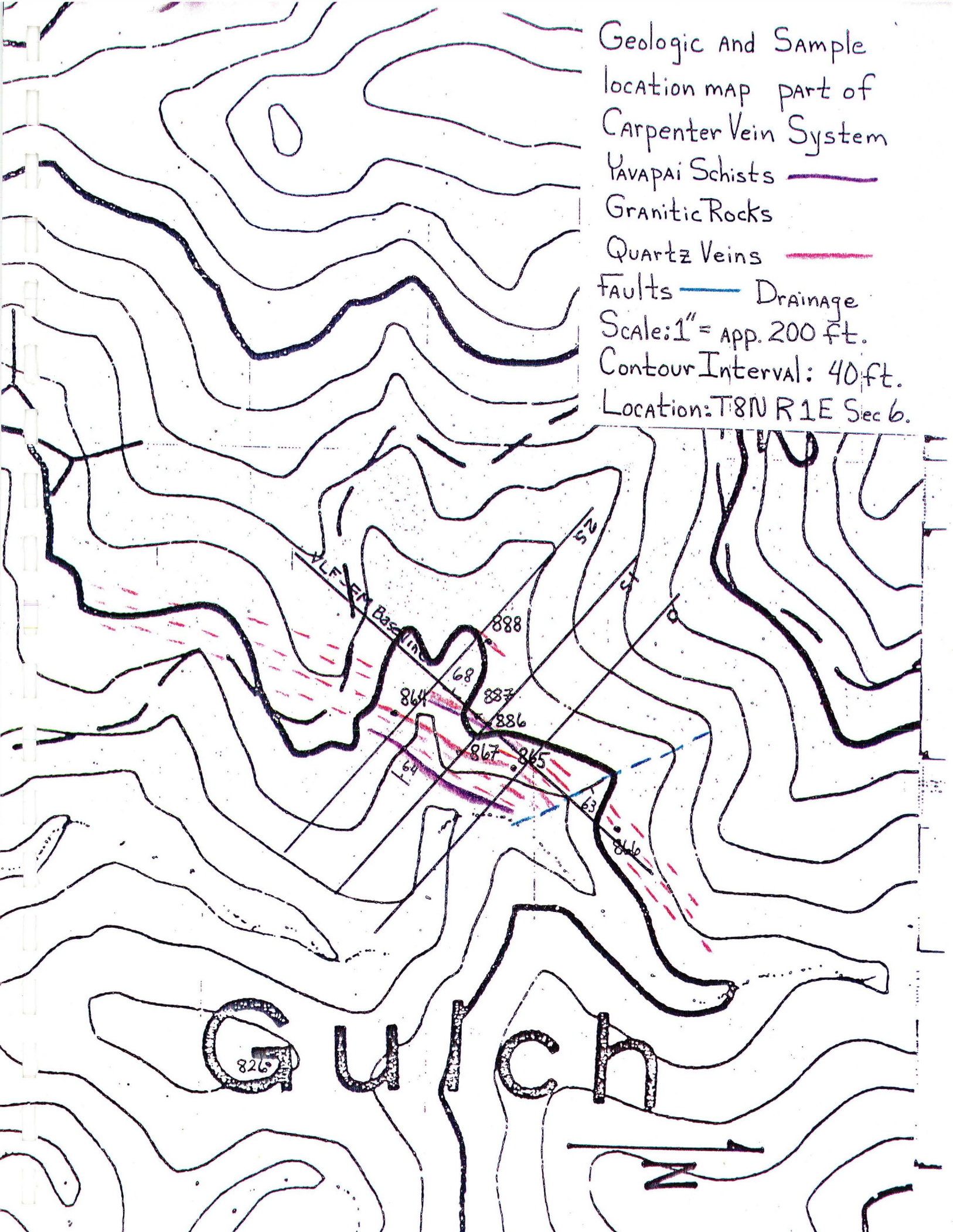
Sample Location Map
part of Carpenter Gulch
with gold assay values
in ounces per ton

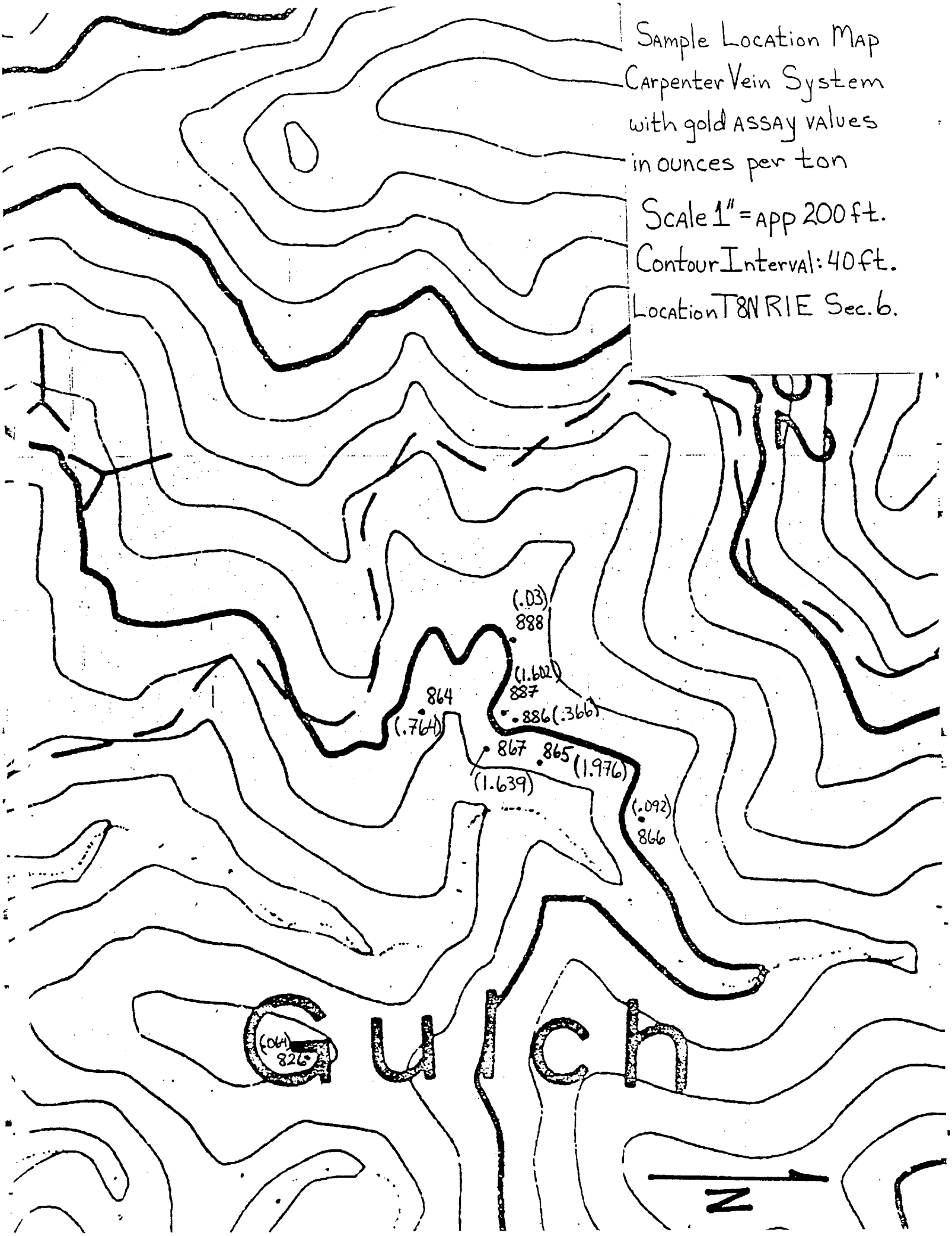
Scale: 1" = app. 200 ft.
Contour Interval: 40 ft.
Location: T8N R1E Sec 6, 7.

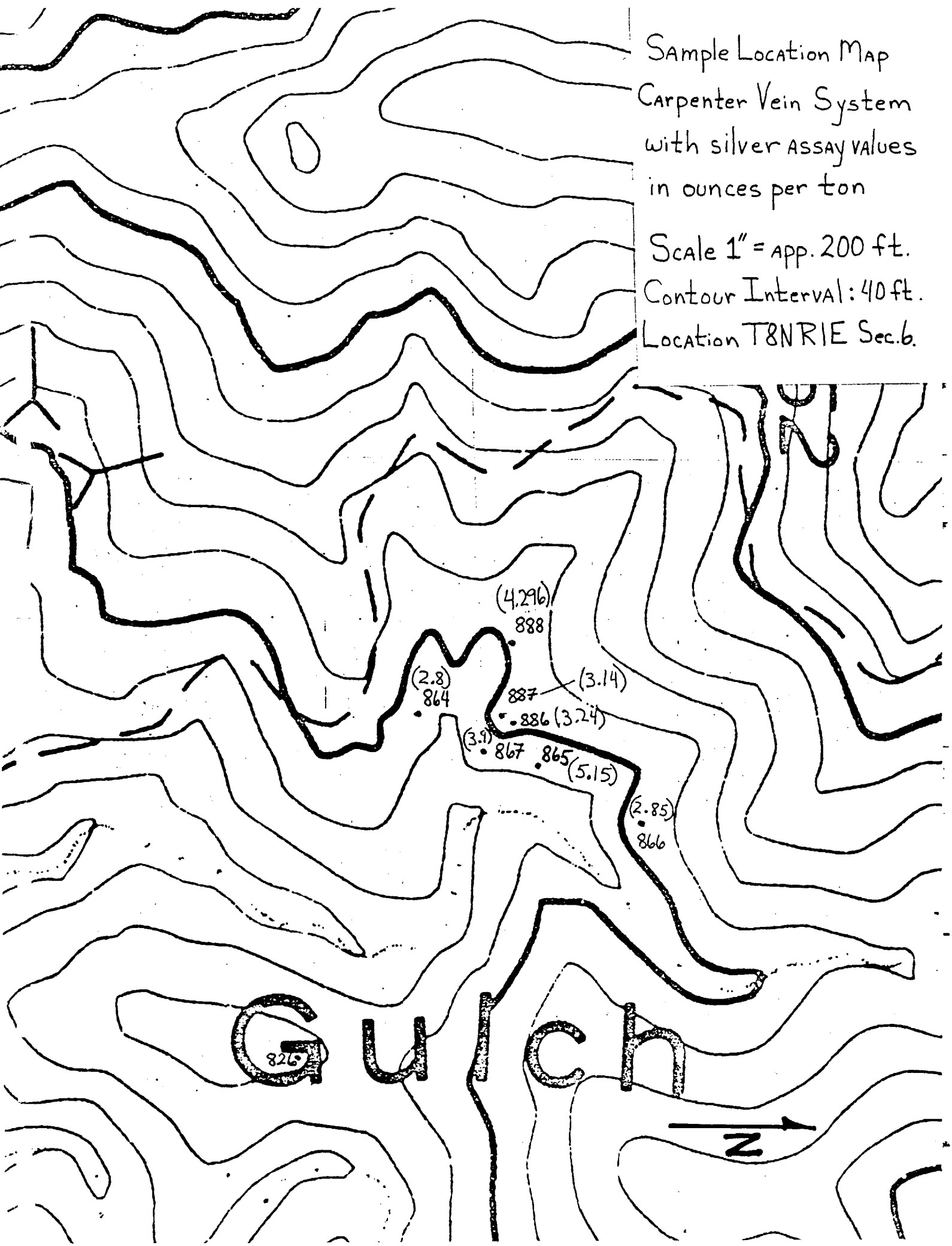


Sample Location Map
part of Carpenter Gulch
with silver assay values
in ounces per ton

Scale: 1" = app. 200 ft.
Contour Interval: 40 ft
Location: T8N R1E Sec. 6,


Geologic And Sample
location map part of
Carpenter Vein System
Yavapai Schists
Granitic Rocks
Quartz Veins
Faults
Drainage
Scale: 1" = app. 200 ft.
Contour Interval: 40 ft.
Location: T8N R1E Sec 6.
ALF-EM Baseline
SZ
888
68
884
886
867
865
64
63
866
826
GULCH
N


Sample Location Map
Carpenter Vein System
with gold assay values
in ounces per ton
Scale 1" = app 200 ft.
Contour Interval: 40 ft.
Location T8N R1E Sec. 6.
(.03)
888
(1.602)
887
886 (.366)
864
(.764)
867
865
(1.976)
(1.639)
(.092)
866
(.064)
826
GULCH
N


Sample Location Map
Carpenter Vein System
with silver assay values
in ounces per ton
Scale 1" = app. 200 ft.
Contour Interval: 40 ft.
Location T8N R1E Sec. 6.
(4.296)
888
(2.8)
864
887
(3.14)
886
(3.24)
(3.9)
867
865
(5.15)
(2.85)
866
826
GULCH
N

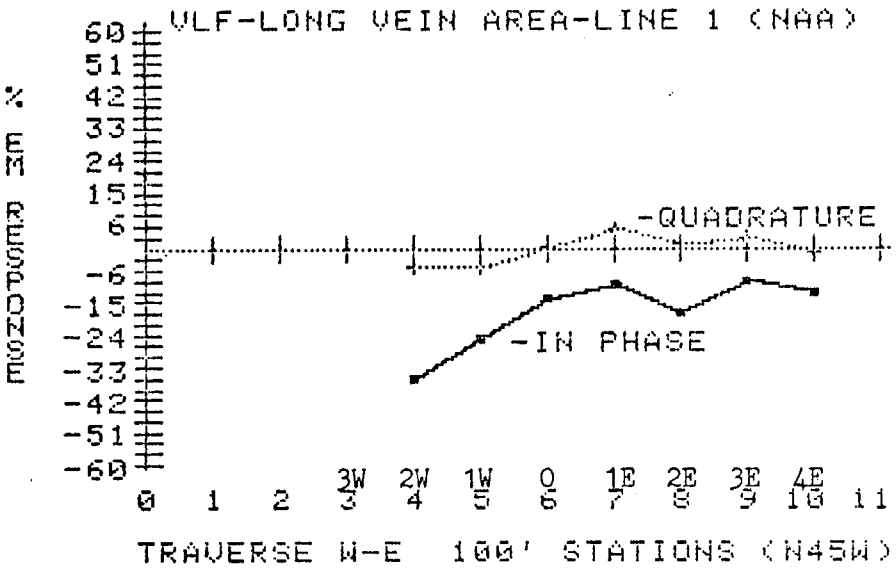
APPENDIX II

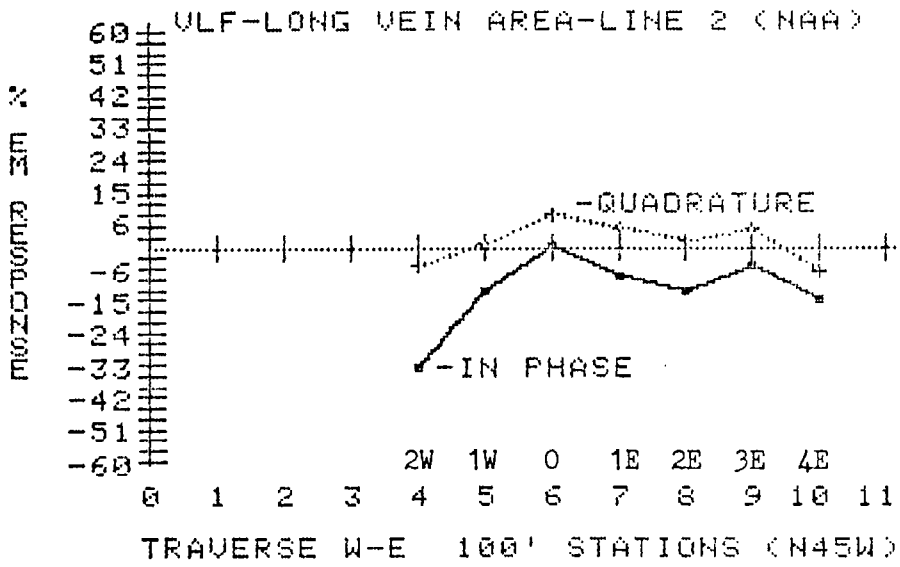
VERY LOW FREQUENCY ELECTROMAGNETIC SURVEY PLATS

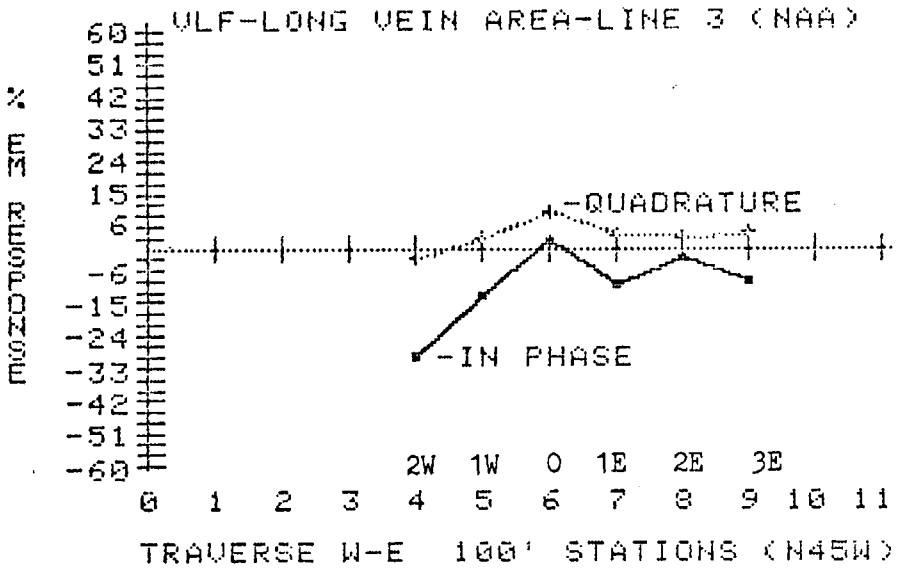
LONG VEIN RIDGE SURVEY

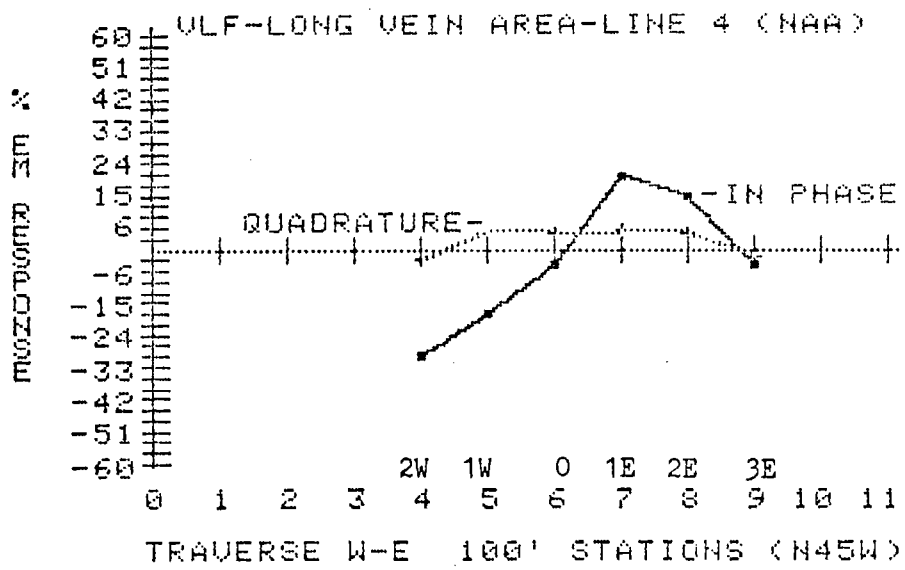
CARPENTER AREA SURVEY

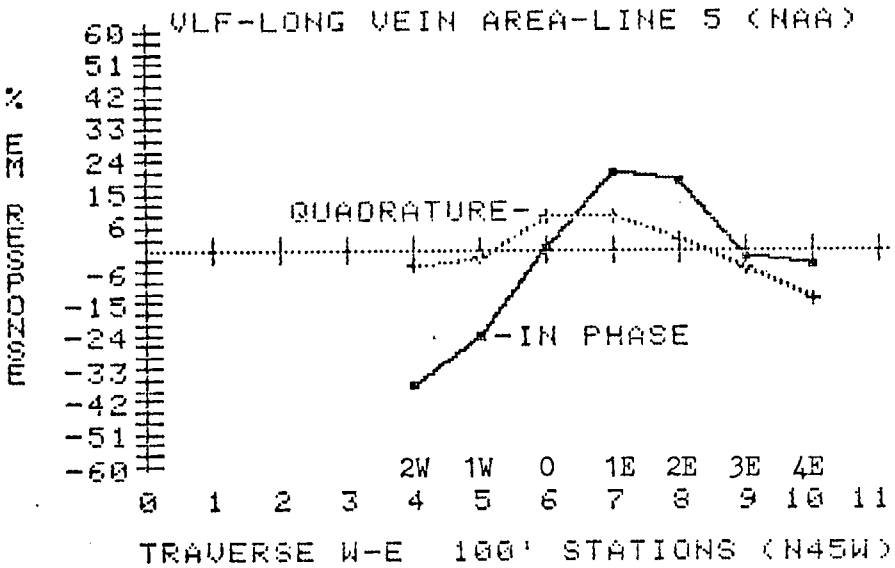
ACQUISITION MINE SURVEY

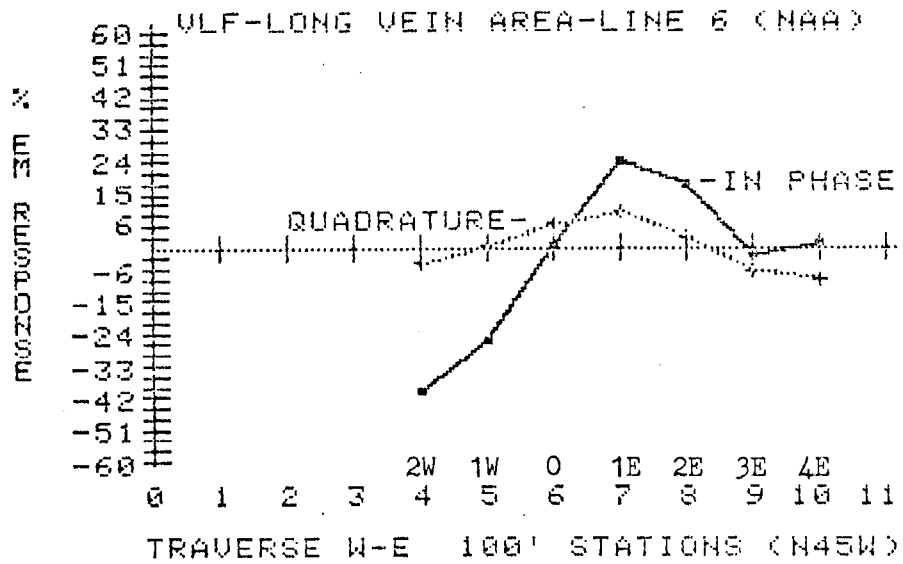

VLF-LONG VEIN AREA-LINE 1 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-QUADRATURE
-IN PHASE
0 1 2 3W 2W 1W 0 1E 2E 3E 4E
3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

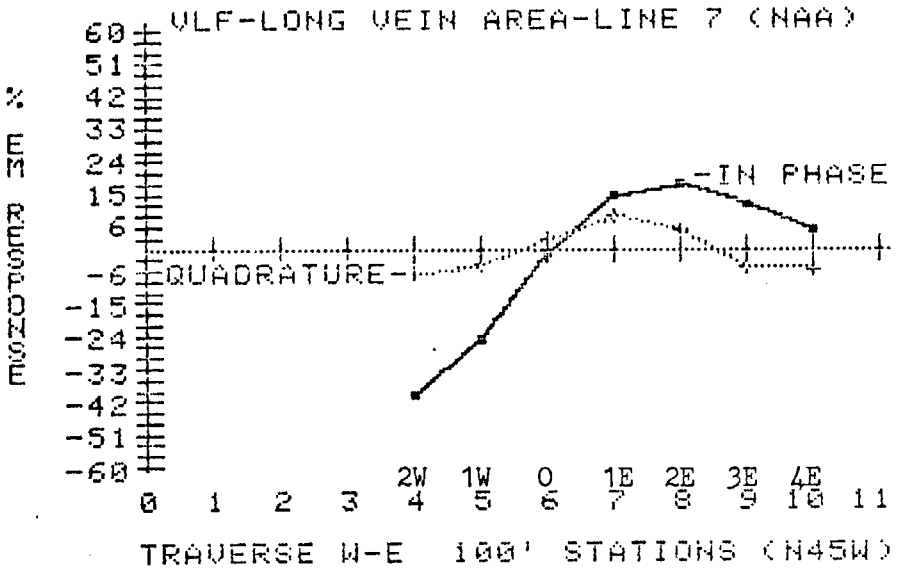

VLF-LONG VEIN AREA-LINE 2 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-QUADRATURE
-IN PHASE
2W 1W 0 1E 2E 3E 4E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

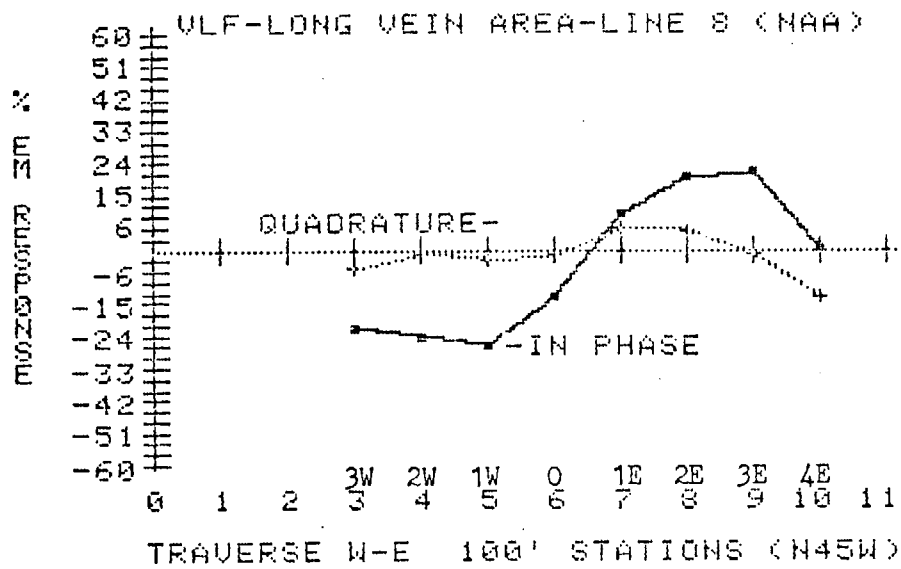

VLF-LONG VEIN AREA-LINE 3 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-QUADRATURE
-IN PHASE
2W 1W 0 1E 2E 3E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

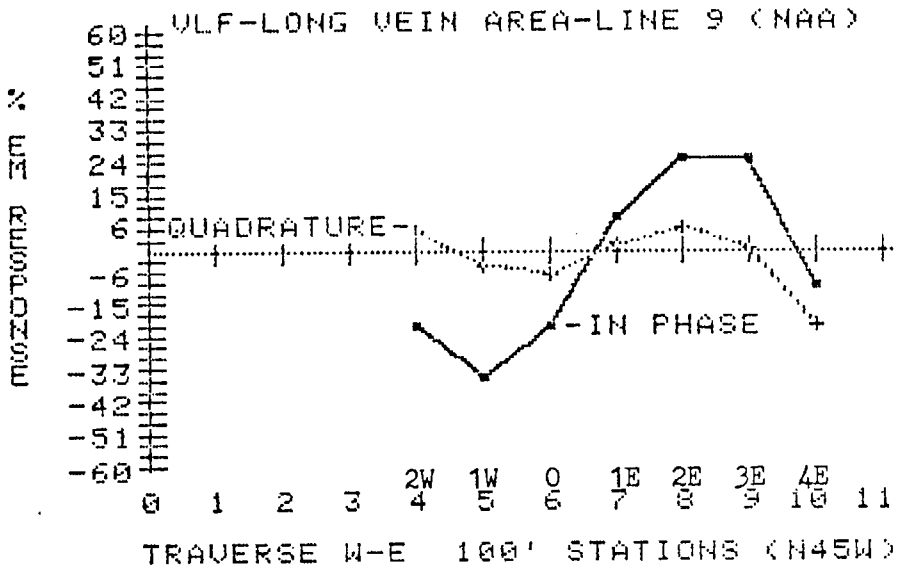

VLF-LONG VEIN AREA-LINE 4 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
QUADRATURE-
-IN PHASE
2W 1W 0 1E 2E 3E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

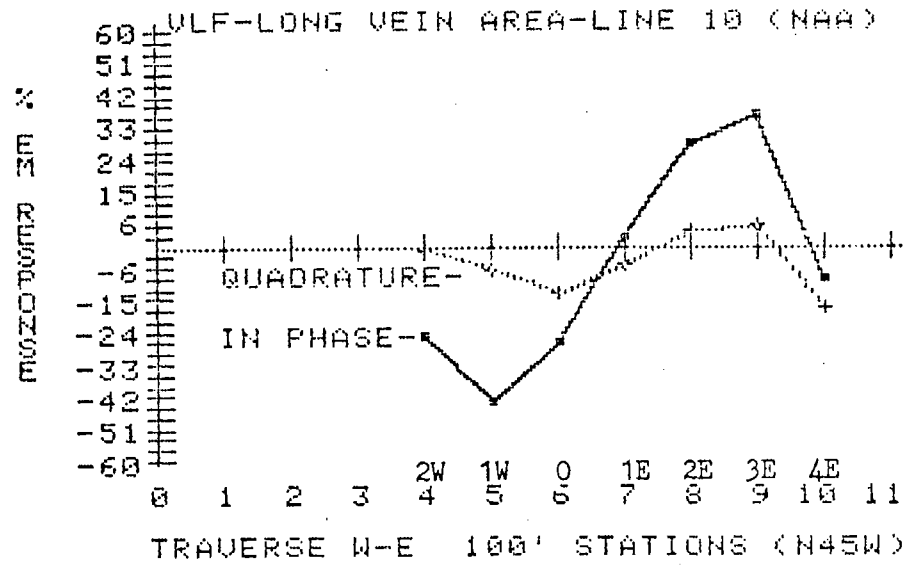

VLF-LONG VEIN AREA-LINE 5 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
QUADRATURE-
-IN PHASE
2W 1W 0 1E 2E 3E 4E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

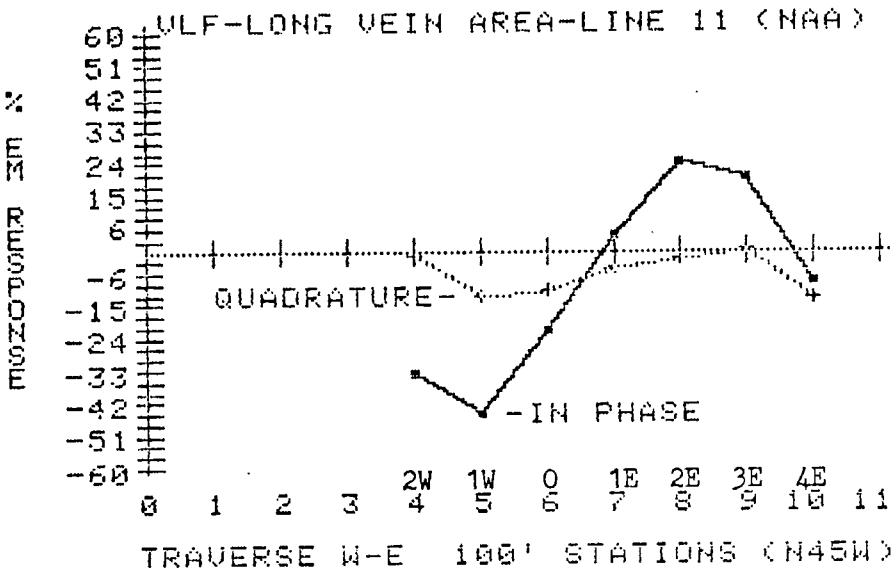

VLF-LONG VEIN AREA-LINE 6 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-IN PHASE
QUADRATURE-
2W 1W 0 1E 2E 3E 4E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

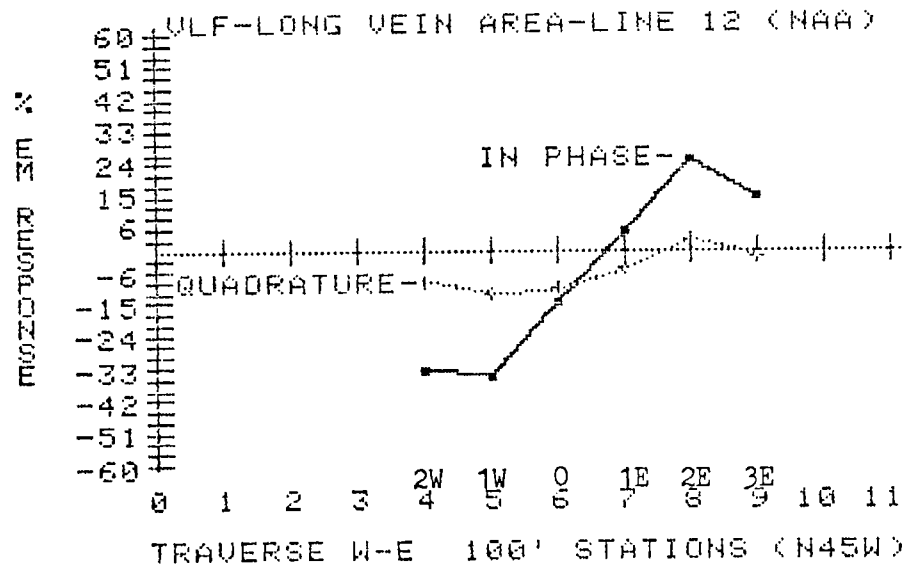

VLF-LONG VEIN AREA-LINE 7 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-IN PHASE
QUADRATURE-
2W 1W 0 1E 2E 3E 4E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

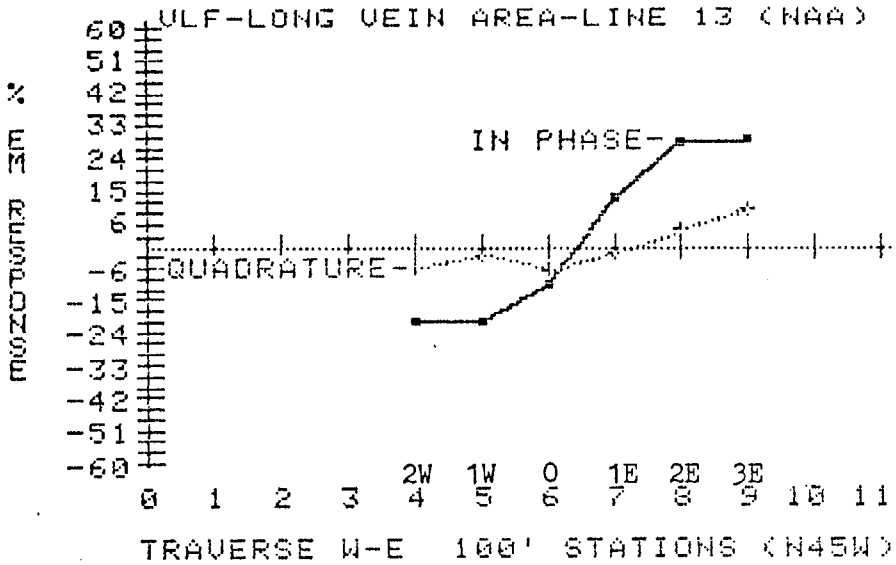

VLF-LONG VEIN AREA-LINE 8 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
QUADRATURE-
-IN PHASE
3W 2W 1W 0 1E 2E 3E 4E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

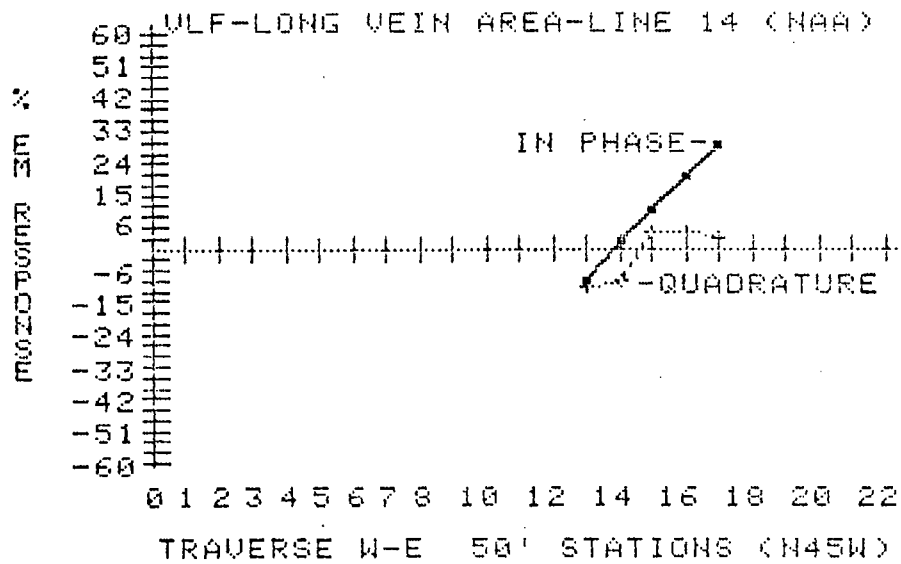

VLF-LONG VEIN AREA-LINE 9 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
QUADRATURE-
-IN PHASE
+
2W 1W 0 1E 2E 3E 4E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)

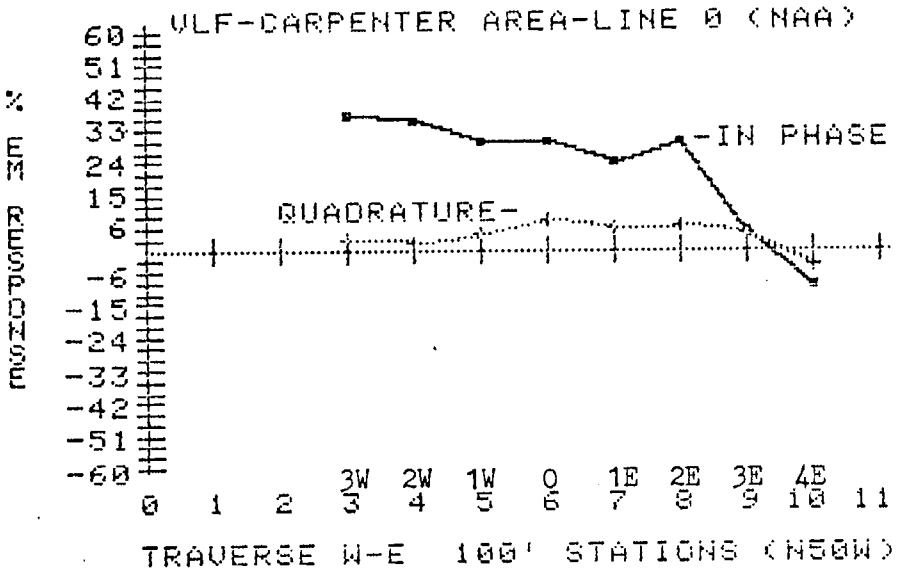

VLF-LONG VEIN AREA-LINE 10 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
QUADRATURE-
IN PHASE-
+
2W 1W 0 1E 2E 3E 4E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)


VLF-LONG VEIN AREA-LINE 11 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
QUADRATURE-
-IN PHASE
2W 1W 0 1E 2E 3E 4E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)


VLF-LONG VEIN AREA-LINE 12 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
IN PHASE-
QUADRATURE-
2W 1W 0 1E 2E 3E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)


ULF-LONG VEIN AREA-LINE 13 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
IN PHASE-
-QUADRATURE
2W 1W 0 1E 2E 3E
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N45W)


ULF-LONG VEIN AREA-LINE 14 (NAA)
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
IN PHASE-
-QUADRATURE
0 1 2 3 4 5 6 7 8 10 12 14 16 18 20 22
TRAVERSE W-E 50' STATIONS (N45W)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60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-IN PHASE
QUADRATURE-
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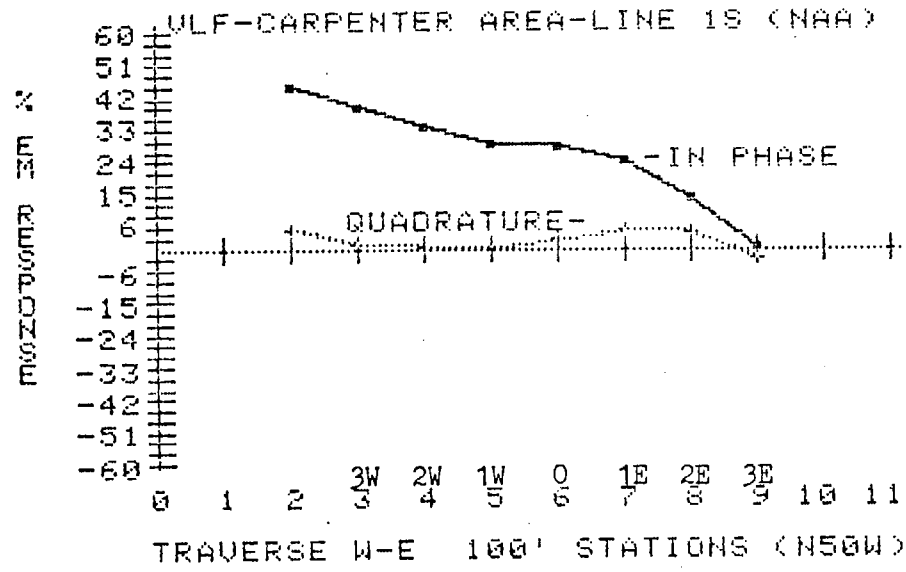
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N50W)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60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-IN PHASE
QUADRATURE-
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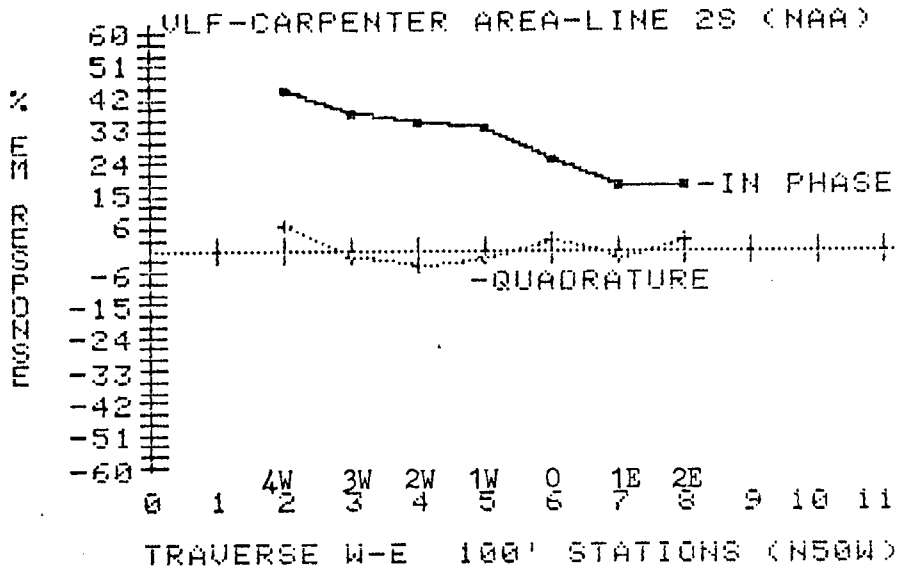
0 1 2 3 4 5 6 7 8 9 10 11
TRAVERSE W-E 100' STATIONS (N50W)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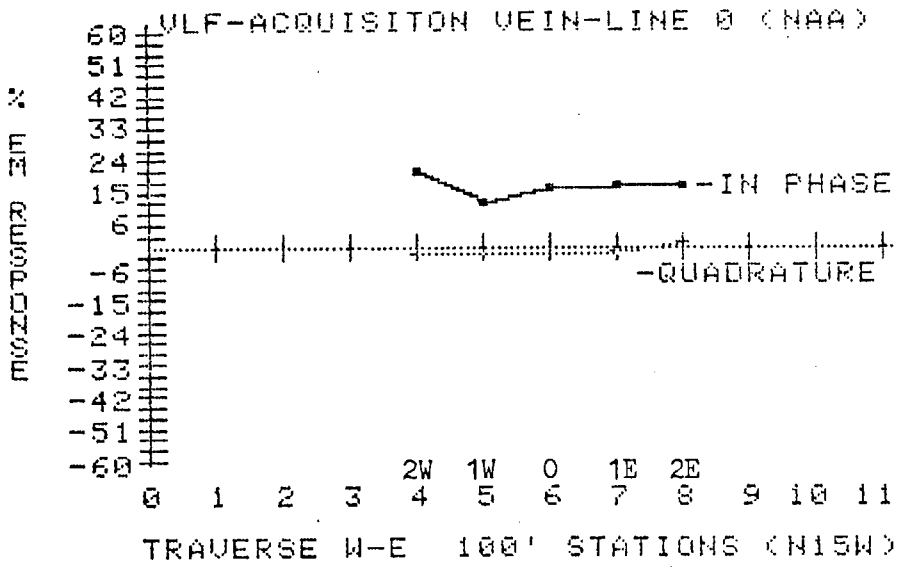
60
51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-IN PHASE
-QUADRATURE
0 1 4W 2 3W 3 2W 4 1W 5 0 6 1E 7 2E 8 9 10 11
TRAVERSE W-E 100' STATIONS (N50W)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51
42
33
24
15
6
-6
-15
-24
-33
-42
-51
-60
-IN PHASE
-QUADRATURE
0 1 2 3 2W 4 1W 5 0 6 1E 7 2E 8 9 10 11
TRAVERSE W-E 100' STATIONS (N15W)

APPENDIX III

ACQUISITION MINE FINANCIAL ANALYSIS

MINE PRODUCTION: 300 TPD vein ore; 2,000 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $12,425,982.

MINE PRODUCTION: 200 TPD vein ore; 1,333 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $8,003,544.

CONDENSED VERSION OF FINANCIAL ANALYSIS

MINE PRODUCTION: Vein ore:
300 TPD to 50 TPD vein ore,
Leach ore:
2,000 TPD to 333 TPD leach ore.

GRADE OF ORE: Vein ore:
0.528 oz/t to 0.264 oz/t gold,
9.145 oz/t to 4.573 oz/t silver.
Leach ore:
0.051 oz/t gold; 2.520 oz/t silver.

SPOT PRICE: $395/oz to $1000/oz gold;
$9.50/oz to $30/oz silver.

NET ANNUAL CASH FLOW: $1,369,888 to $37,288,840.

MINE PRODUCTION: 300 TPD vein ore; 2,000 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $12,452,982.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	300	2,000
TONS MINED/MO.	6,000	40,002
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	200	40,002
TONS PROCESSED/MO.	6,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	395.00	395.00
SILVER	9.50	9.50
GROSS $/TON	295.44	44.01
GROSS $/DAY	53,178.75	
(90% RECOVERY)		
GROSS $/MONTH	1,595,362.50	
LEACH--GROSS $/MO.		616,114.80
(35% RECOVERY)		
COST/TON	40.30	
(MINING & MILLING)		
EXPENSES:		
SURFACE OPERATION:	775.00	
EQUIP. OPERATOR	125.00	
EQUIP. OPERATOR	125.00	
EQUIP. OPERATOR	125.00	
EQUIP. OPERATOR	100.00	
EQUIP. OPERATOR	100.00	
EQUIP. OPERATOR	100.00	
EQUIP. OPERATOR	100.00	
UNDERGROUND OPERATION:	900.00	
MINER	125.00	
MINER	125.00	
MINER	125.00	
MINER	125.00	
HELPER	100.00	
HELPER	100.00	
HELPER	100.00	
HELPER	100.00	

MILL OPERATION:	1,340.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
EQUIP. OPERATOR	80.00
EQUIP. OPERATOR	80.00
EQUIP. OPERATOR	80.00
GENERAL:	1,130.00
ENGINEER	125.00
GEOLOGIST	125.00
LAB. TECHNICIAN	100.00
LAB. TECH. ASS'T.	80.00
MECHANIC	125.00
MECHANIC HELPER	100.00
ELECTRICIAN	125.00
COOK & HELPER	100.00
COOK & HELPER	100.00
SUPERINTENDENT	150.00
NUMBER OF EMPLOYEES:	42
TOTAL LABOR COST/MO.:	96,300.00
OVERHEAD (PAYROLL):	33,705.00
INSUR. WORK/COMP/MO.:	7,704.00
CAPITAL EQUIP. COSTS:	
SURFACE MINING EQUIP.:	
DOZER--D8L	342,000
LOADER--988B	340,000
LOADER--980C	247,000
GRADER--CAT 12	150,000
TRUCK--35 TON	75,000
TRUCK--35 TON	75,000
LOADER/BACKHOE	45,000
AIR TRACK DRILL	100,000
ATD COMPRESSOR (825 CFM)	60,000
WATER TRUCK	25,000

UNDERGROUND MIN. EQUIP.:		
LHD 1 CU. YD.	50,000	
LHD 2 CU. YD. (AT MINE SITE)		
VENTILATION FACILITIES	15,000	
DRILL--JACKLEG	3,100	
DRILL--JACKLEG	3,100	
DRILL--JACKLEG	3,100	
DRILL--JACKLEG	3,100	
DRILL-STOPER	2,600	
DRILL STEEL, ETC.	15,000	
SERVICE LINES	5,000	
SAFETY EQUIPMENT	5,000	
COMPRESSOR (335 CFM)	26,000	
COMPRESSOR (750 CFM)	42,000	
GENERATOR (75 KW)	15,000	
GENERAL EQUIPMENT:		
GENERATOR (150 KW)	22,000	
GENERATOR (150 KW)	22,000	
GENERATOR (15 KW)	8,000	
WELDER AND TORCH	4,400	
LABORATORY FACILITIES	50,000	
HOUSING	200,000	
SERVICE BLDGS.	50,000	
MILL FACILITIES	400,000	
LEACH PAD FACILITIES	150,000	
CAPITAL EQUIPMENT COST:	2,553,400	
ENGINEERING & CONSTR.	112,500	
CONTINGENCY 20%	533,180	
WORKING CAPITAL	799,770	
TOTAL EST. CAP. INVEST.:	3,998,850	
OPERATING SUPPLIES:		
MINING:		
SURFACE	1,200.00	
UNDERGROUND	800.00	
MILLING:	1,200.00	
GENERAL:	1,470.00	
COST/DAY SUPPLIES:	4,670.00	
COST/MO. SUPPLIES:	104,100.00	100,005.00
CONTINGENCY 15%	15,615.00	
TOTAL EXPENSES/MO.:	241,809.00	
TOTAL EXPENSES/YR.:	2,901,708.00	
DEPLETION ALLOW./MO.:	239,304	
DEPRECIATION ALLOW./YR.:	255,340	

ESTIMATED RESERVES (TONS) (ESTIMATE IS <33% OF EXPECTED POTENTIAL ORE)		
VEIN ORE:		
100' DEPTH	30,747	
500' DEPTH	153,735	
LEACH DUMP ORE:		
100' DEPTH		4,409,091
==========		
CASH FLOW		
==========		
GROSS REVENUE	19,144,350	7,393,378
OPER. COSTS	2,901,708	1,200,060
NET REVENUE	16,242,642	6,193,318
DEPRECIATION	255,340	
	15,987,302	
DEPLETION (15% GROSS)	2,871,653	1,109,007
PRE-TAX NET	13,115,650	5,084,311
STATE TAX (10%)	1,311,565	508,431
	11,804,085	4,575,880
FED. TAX (50%)	5,902,042	2,287,940
	5,902,042	2,287,940
DEPRECIATION	255,340	
DEPLETION	2,871,653	1,109,007
ANNUAL CASH FLOW	$9,029,034.78	$3,396,946.60

MINE PRODUCTION: 200 TPD vein ore; 1,333 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $8,003.544.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	200	1,333
TONS MINED/MO.	4,000	26,668
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	133	26,668
TONS PROCESSED/MO.	4,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	395.00	395.00
SILVER	9.50	9.50
GROSS $/TON	295.44	44.01
GROSS $/DAY (90% RECOVERY)	35,452.50	
GROSS $/MONTH	1,063,575.00	
LEACH--GROSS $/MO. (35% RECOVERY)		410,743.20
COST/TON (MINING & MILLING)	55.45	
EXPENSES:		
SURFACE OPERATION:	775.00	
EQUIP. OPERATOR	125.00	
EQUIP. OPERATOR	125.00	
EQUIP. OPERATOR	125.00	
EQUIP. OPERATOR	100.00	
EQUIP. OPERATOR	100.00	
EQUIP. OPERATOR	100.00	
EQUIP. OPERATOR	100.00	
UNDERGROUND OPERATION:	900.00	
MINER	125.00	
MINER	125.00	
MINER	125.00	
MINER	125.00	
HELPER	100.00	
HELPER	100.00	
HELPER	100.00	
HELPER	100.00	

MILL OPERATION:	1,340.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
EQUIP. OPERATOR	80.00
EQUIP. OPERATOR	80.00
EQUIP. OPERATOR	80.00
GENERAL:	1,130.00
ENGINEER	125.00
GEOLOGIST	125.00
LAB. TECHNICIAN	100.00
LAB. TECH. ASS'T.	80.00
MECHANIC	125.00
MECHANIC HELPER	100.00
ELECTRICIAN	125.00
COOK & HELPER	100.00
COOK & HELPER	100.00
SUPERINTENDENT	150.00
NUMBER OF EMPLOYEES:	42
TOTAL LABOR COST/MO.:	96,300.00
OVERHEAD (PAYROLL):	33,705.00
INSUR. WORK/COMP/MO.:	7,704.00
CAPITAL EQUIP. COSTS:	
SURFACE MINING EQUIP.:	
DOZER--D8L	342,000
LOADER--988B	340,000
LOADER--980C	247,000
GRADER--CAT 12	150,000
TRUCK--35 TON	75,000
TRUCK--35 TON	75,000
LOADER/BACKHOE	45,000
AIR TRACK DRILL	100,000
ATD COMPRESSOR (825 CFM)	60,000
WATER TRUCK	25,000

UNDERGROUND MIN. EQUIP.:			
LHD 1 CU. YD.		50,000	
LHD 2 CU. YD.	(AT MINE SITE)		
VENTILATION FACILITIES		15,000	
DRILL--JACKLEG		3,100	
DRILL--JACKLEG		3,100	
DRILL--JACKLEG		3,100	
DRILL--JACKLEG		3,100	
DRILL-STOPER		2,600	
DRILL STEEL, ETC.		15,000	
SERVICE LINES		5,000	
SAFETY EQUIPMENT		5,000	
COMPRESSOR (335 CFM)		26,000	
COMPRESSOR (750 CFM)		42,000	
GENERATOR (75 KW)		15,000	
GENERAL EQUIPMENT:			
GENERATOR (150 KW)		22,000	
GENERATOR (150 KW)		22,000	
GENERATOR (15 KW)		8,000	
WELDER AND TORCH		4,400	
LABORATORY FACILITIES		50,000	
HOUSING		200,000	
SERVICE BLDGS.		50,000	
MILL FACILITIES		400,000	
LEACH PAD FACILITIES		150,000	
CAPITAL EQUIPMENT COST:		2,553,400	
ENGINEERING & CONSTR.		112,500	
CONTINGENCY 20%		533,180	
WORKING CAPITAL		799,770	
TOTAL EST. CAP. INVEST.:		3,998,850	
OPERATING SUPPLIES:			
MINING:			
SURFACE		800.00	
UNDERGROUND		800.00	
MILLING:		800.00	
GENERAL:		1,470.00	
COST/DAY SUPPLIES:		3,870.00	
COST/MO. SUPPLIES:		84,100.00	66,670.00
CONTINGENCY 15%		12,615.00	
TOTAL EXPENSES/MO.:		221,809.00	
TOTAL EXPENSES/YR.:		2,661,708.00	
DEPLETION ALLOW./MO.:		159,536	
DEPRECIATION ALLOW./YR.:		255,340	

ESTIMATED RESERVES (TONS) (ESTIMATE IS <33% OF EXPECTED POTENTIAL ORE)		
VEIN ORE:		
100' DEPTH	30,747	
500' DEPTH	153,735	
LEACH DUMP ORE:		
100' DEPTH		4,409,091
CASH FLOW		
GROSS REVENUE	12,762,900	4,928,918
OPER. COSTS	2,661,708	800,040
NET REVENUE	10,101,192	4,128,878
DEPRECIATION	255,340	
	9,845,852	
DEPLETION (15% GROSS)	1,914,435	739,338
PRE-TAX NET	7,931,417	3,389,541
STATE TAX (10%)	793,142	338,954
	7,138,275	3,050,587
FED. TAX (50%)	3,569,138	1,525,293
	3,569,138	1,525,293
DEPRECIATION	255,340	
DEPLETION	1,914,435	739,338
ANNUAL CASH FLOW	$5,738,912.65	$2,264,631.07

MINE PRODUCTION: 300 TPD vein ore; 2,000 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $12,425,982.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	300	2,000
TONS MINED/MO.	6,000	40,002
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	200	40,002
TONS PROCESSED/MO.	6,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	395.00	395.00
SILVER	9.50	9.50
GROSS $/TON	295.44	44.01
GROSS $/DAY (90% RECOVERY)	53,178.75	
GROSS $/MONTH	1,595,362.50	
LEACH--GROSS $/MO. (35% RECOVERY)		616,114.80
COST/TON (MINING & MILLING)	40.30	
CASH FLOW		
GROSS REVENUE	19,144,350	7,393,378
OPER. COSTS	2,901,708	1,200,060
NET REVENUE	16,242,642	6,193,318
DEPRECIATION	255,340	
	15,987,302	
DEPLETION (15% GROSS)	2,871,653	1,109,007
PRE-TAX NET	13,115,650	5,084,311
STATE TAX (10%)	1,311,565	508,431
	11,804,085	4,575,880
FED. TAX (50%)	5,902,042	2,287,940
	5,902,042	2,287,940
DEPRECIATION	255,340	
DEPLETION	2,871,653	1,109,007
ANNUAL CASH FLOW	$9,029,034.78	$3,396,946.60

MINE PRODUCTION: 300 TPD vein ore; 2,000 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $500/oz gold; $15.00/oz silver.
NET ANNUAL CASH FLOW: $17,791,739.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	300	2,000
TONS MINED/MO.	6,000	40,002
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	200	40,002
TONS PROCESSED/MO.	6,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	500.00	500.00
SILVER	15.00	15.00
GROSS $/TON	401.18	63.20
GROSS $/DAY	72,211.50	
(90% RECOVERY)		
GROSS $/MONTH	2,166,345.00	
LEACH--GROSS $/MO.		884,844.24
(35% RECOVERY)		
COST/TON	40.30	
(MINING & MILLING)		
CASH FLOW		
GROSS REVENUE	25,996,140	10,618,131
OPER. COSTS	2,901,708	1,200,060
NET REVENUE	23,094,432	9,418,071
DEPRECIATION	255,340	
	22,839,092	
DEPLETION (15% GROSS)	3,899,421	1,592,720
PRE-TAX NET	18,939,671	7,825,351
STATE TAX (10%)	1,893,967	782,535
	17,045,704	7,042,816
FED. TAX (50%)	8,522,852	3,521,408
	8,522,852	3,521,408
DEPRECIATION	255,340	
DEPLETION	3,899,421	1,592,720
ANNUAL CASH FLOW	$12,677,612.95	$5,114,127.69

MINE PRODUCTION: 300 TPD vein ore; 2,000 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $1,000/oz gold; $30.00/oz silver.
NET ANNUAL CASH FLOW: $37,288,839.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	300	2,000
TONS MINED/MO.	6,000	40,002
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	200	40,002
TONS PROCESSED/MO.	6,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	1,000.00	1,000.00
SILVER	30.00	30.00
GROSS $/TON	802.35	126.40
GROSS $/DAY (90% RECOVERY)	144,423.00	
GROSS $/MONTH	4,332,690.00	
LEACH--GROSS $/MO. (35% RECOVERY)		1,769,688.48
COST/TON (MINING & MILLING)	40.30	
CASH FLOW		
GROSS REVENUE	51,992,280	21,236,262
OPER. COSTS	2,901,708	1,200,060
NET REVENUE	49,090,572	20,036,202
DEPRECIATION	255,340	
	48,835,232	
DEPLETION (15% GROSS)	7,798,842	3,185,439
PRE-TAX NET	41,036,390	16,850,762
STATE TAX (10%)	4,103,639	1,685,076
	36,932,751	15,165,686
FED. TAX (50%)	18,466,376	7,582,843
	18,466,376	7,582,843
DEPRECIATION	255,340	
DEPLETION	7,798,842	3,185,439
ANNUAL CASH FLOW	$26,520,557.50	$10,768,282.39

MINE PRODUCTION: 300 TPD vein ore; 2,000 TPD leach ore.
GRADE OF ORE: 0.264 oz/t gold; 4.573 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $7,328,961.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	300	2,000
TONS MINED/MO.	6,000	40,002
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	200	40,002
TONS PROCESSED/MO.	6,000	
GRADE OF ORE (OZ/T):		
GOLD	0.264	0.051
SILVER	4.573	2.520
SPOT PRICE ($ U.S.):		
GOLD	395.00	395.00
SILVER	9.50	9.50
GROSS $/TON	147.72	44.01
GROSS $/DAY	26,590.23	
(90% RECOVERY)		
GROSS $/MONTH	797,706.90	
LEACH--GROSS $/MO.		616,114.80
(35% RECOVERY)		
COST/TON	40.30	
(MINING & MILLING)		
CASH FLOW		
GROSS REVENUE	9,572,483	7,393,378
OPER. COSTS	2,901,708	1,200,060
NET REVENUE	6,670,775	6,193,318
DEPRECIATION	255,340	
	6,415,435	
DEPLETION (15% GROSS)	1,435,872	1,109,007
PRE-TAX NET	4,979,562	5,084,311
STATE TAX (10%)	497,956	508,431
	4,481,606	4,575,880
FED. TAX (50%)	2,240,803	2,287,940
	2,240,803	2,287,940
DEPRECIATION	255,340	
DEPLETION	1,435,872	1,109,007
ANNUAL CASH FLOW	$3,932,015.49	$3,396,946.60

MINE PRODUCTION: 300 TPD vein ore; 2,000 TPD leach ore.
GRADE OF ORE: 0.264 oz/t gold; 4.573 oz/t silver.
SPOT PRICE: $500/oz gold; $15.00/oz silver.
NET ANNUAL CASH FLOW: $10,870,526.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	300	2,000
TONS MINED/MO.	6,000	40,002
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	200	40,002
TONS PROCESSED/MO.	6,000	
GRADE OF ORE (OZ/T):		
GOLD	0.264	0.051
SILVER	4.573	2.520
SPOT PRICE ($ U.S.):		
GOLD	500.00	500.00
SILVER	15.00	15.00
GROSS $/TON	200.60	63.20
GROSS $/DAY	36,107.10	
(90% RECOVERY)		
GROSS $/MONTH	1,083,213.00	
LEACH--GROSS $/MO.		884,844.24
(35% RECOVERY)		
COST/TON	40.30	
(MINING & MILLING)		
CASH FLOW		
GROSS REVENUE	12,998,556	10,618,131
OPER. COSTS	2,901,708	1,200,060
NET REVENUE	10,096,848	9,418,071
DEPRECIATION	255,340	
	9,841,508	
DEPLETION (15% GROSS)	1,949,783	1,592,720
PRE-TAX NET	7,891,725	7,825,351
STATE TAX (10%)	789,172	782,535
	7,102,552	7,042,816
FED. TAX (50%)	3,551,276	3,521,408
	3,551,276	3,521,408
DEPRECIATION	255,340	
DEPLETION	1,949,783	1,592,720
ANNUAL CASH FLOW	$5,756,399.47	$5,114,127.69

MINE PRODUCTION: 200 TPD vein ore; 1,333 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $8,003,543.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	200	1,333
TONS MINED/MO.	4,000	26,668
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	133	26,668
TONS PROCESSED/MO.	4,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	395.00	395.00
SILVER	9.50	9.50
GROSS $/TON	295.44	44.01
GROSS $/DAY (90% RECOVERY)	35,452.50	
GROSS $/MONTH	1,063,575.00	
LEACH--GROSS $/MO. (35% RECOVERY)		410,743.20
COST/TON (MINING & MILLING)	55.45	
CASH FLOW		
GROSS REVENUE	12,762,900	4,928,918
OPER. COSTS	2,661,708	800,040
NET REVENUE	10,101,192	4,128,878
DEPRECIATION	255,340	
	9,845,852	
DEPLETION (15% GROSS)	1,914,435	739,338
PRE-TAX NET	7,931,417	3,389,541
STATE TAX (10%)	793,142	338,954
	7,138,275	3,050,587
FED. TAX (50%)	3,569,138	1,525,293
	3,569,138	1,525,293
DEPRECIATION	255,340	
DEPLETION	1,914,435	739,338
ANNUAL CASH FLOW	$5,738,912.65	$2,264,631.07

MINE PRODUCTION: 200 TPD vein ore; 1,333 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $500/oz gold; $15.00/oz silver.
NET ANNUAL CASH FLOW: $11,580.716.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	200	1,333
TONS MINED/MO.	4,000	26,668
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	133	26,668
TONS PROCESSED/MO.	4,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	500.00	500.00
SILVER	15.00	15.00
GROSS $/TON	401.18	63.20
GROSS $/DAY (90% RECOVERY)	48,141.00	
GROSS $/MONTH	1,444,230.00	
LEACH--GROSS $/MO. (35% RECOVERY)		589,896.16
COST/TON (MINING & MILLING)	55.45	
CASH FLOW		
GROSS REVENUE	17,330,760	7,078,754
OPER. COSTS	2,661,708	800,040
NET REVENUE	14,669,052	6,278,714
DEPRECIATION	255,340	
	14,413,712	
DEPLETION (15% GROSS)	2,599,614	1,061,813
PRE-TAX NET	11,814,098	5,216,901
STATE TAX (10%)	1,181,410	521,690
	10,632,688	4,695,211
FED. TAX (50%)	5,316,344	2,347,605
	5,316,344	2,347,605
DEPRECIATION	255,340	
DEPLETION	2,599,614	1,061,813
ANNUAL CASH FLOW	$8,171,298.10	$3,409,418.46

MINE PRODUCTION: 200 TPD vein ore; 1,333 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $1000.00/oz gold; $30.00/oz silver.
NET ANNUAL CASH FLOW: $24,578,781.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	200	1,333
TONS MINED/MO.	4,000	26,668
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	133	26,668
TONS PROCESSED/MO.	4,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	1,000.00	1,000.00
SILVER	30.00	30.00
GROSS $/TON	802.35	126.40
GROSS $/DAY	96,282.00	
(90% RECOVERY)		
GROSS $/MONTH	2,888,460.00	
LEACH--GROSS $/MO.		1,179,792.32
(35% RECOVERY)		
COST/TON	55.45	
(MINING & MILLING)		
CASH FLOW		
GROSS REVENUE	34,661,520	14,157,508
OPER. COSTS	2,661,708	800,040
NET REVENUE	31,999,812	13,357,468
DEPRECIATION	255,340	
	31,744,472	
DEPLETION (15% GROSS)	5,199,228	2,123,626
PRE-TAX NET	26,545,244	11,233,842
STATE TAX (10%)	2,654,524	1,123,384
	23,890,720	10,110,457
FED. TAX (50%)	11,945,360	5,055,229
	11,945,360	5,055,229
DEPRECIATION	255,340	
DEPLETION	5,199,228	2,123,626
ANNUAL CASH FLOW	$17,399,927.80	$7,178,854.92

MINE PRODUCTION: 200 TPD vein ore; 1,333 TPD leach ore.
GRADE OF ORE: 0.264 oz/t gold; 4.573 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $4,605,530.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	200	1,333
TONS MINED/MO.	4,000	26,668
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	133	26,668
TONS PROCESSED/MO.	4,000	
GRADE OF ORE (OZ/T):		
GOLD	0.264	0.051
SILVER	4.573	2.520
SPOT PRICE ($ U.S.):		
GOLD	395.00	395.00
SILVER	9.50	9.50
GROSS $/TON	147.72	44.01
GROSS $/DAY (90% RECOVERY)	17,726.82	
GROSS $/MONTH	531,804.60	
LEACH--GROSS $/MO. (35% RECOVERY)		410,743.20
COST/TON (MINING & MILLING)	55.45	
CASH FLOW		
GROSS REVENUE	6,381,655	4,928,918
OPER. COSTS	2,661,708	800,040
NET REVENUE	3,719,947	4,128,878
DEPRECIATION	255,340	
	3,464,607	
DEPLETION (15% GROSS)	957,248	739,338
PRE-TAX NET	2,507,359	3,389,541
STATE TAX (10%)	250,736	338,954
	2,256,623	3,050,587
FED. TAX (50%)	1,128,312	1,525,293
	1,128,312	1,525,293
DEPRECIATION	255,340	
DEPLETION	957,248	739,338
ANNUAL CASH FLOW	$2,340,899.79	$2,264,631.07

MINE PRODUCTION: 200 TPD vein ore; 1,333 TPD leach ore.
GRADE OF ORE: 0.264 oz/t gold; 4.573 oz/t silver.
SPOT PRICE: $500/oz gold; $15.00/oz silver.
NET ANNUAL CASH FLOW: $6,966,573.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	200	1,333
TONS MINED/MO.	4,000	26,668
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	133	26,668
TONS PROCESSED/MO.	4,000	
GRADE OF ORE (OZ/T):		
GOLD	0.264	0.051
SILVER	4.573	2.520
SPOT PRICE ($ U.S.):		
GOLD	500.00	500.00
SILVER	15.00	15.00
GROSS $/TON	200.60	63.20
GROSS $/DAY	24,071.40	
(90% RECOVERY)		
GROSS $/MONTH	722,142.00	
LEACH--GROSS $/MO.		589,896.16
(35% RECOVERY)		
COST/TON (MINING & MILLING)	55.45	
CASH FLOW		
GROSS REVENUE	8,665,704	7,078,754
OPER. COSTS	2,661,708	800,040
NET REVENUE	6,003,996	6,278,714
DEPRECIATION	255,340	
	5,748,656	
DEPLETION (15% GROSS)	1,299,856	1,061,813
PRE-TAX NET	4,448,800	5,216,901
STATE TAX (10%)	444,880	521,690
	4,003,920	4,695,211
FED. TAX (50%)	2,001,960	2,347,605
	2,001,960	2,347,605
DEPRECIATION	255,340	
DEPLETION	1,299,856	1,061,813
ANNUAL CASH FLOW	$3,557,155.78	$3,409,418.46

MINE PRODUCTION: 100 TPD vein ore; 667 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $395/oz gold; $9.50/oz silver.
NET ANNUAL CASH FLOW: $3,581,105.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	100	667
TONS MINED/MO.	2,000	13,334
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	67	13,334
TONS PROCESSED/MO.	2,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	395.00	395.00
SILVER	9.50	9.50
GROSS $/TON	295.44	44.01
GROSS $/DAY	17,726.25	
(90% RECOVERY)		
GROSS $/MONTH	531,787.50	
LEACH--GROSS $/MO.		205,371.60
(35% RECOVERY)		
COST/TON	100.90	
(MINING & MILLING)		
CASH FLOW		
GROSS REVENUE	6,381,450	2,464,459
OPER. COSTS	2,421,708	400,020
NET REVENUE	3,959,742	2,064,439
DEPRECIATION	255,340	
	3,704,402	
DEPLETION (15% GROSS)	957,218	369,669
PRE-TAX NET	2,747,185	1,694,770
STATE TAX (10%)	274,718	169,477
	2,472,466	1,525,293
FED. TAX (50%)	1,236,233	762,647
	1,236,233	762,647
DEPRECIATION	255,340	
DEPLETION	957,218	369,669
ANNUAL CASH FLOW	$2,448,790.53	$1,132,315.53

MINE PRODUCTION: 100 TPD vein ore; 667 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $500/oz gold; $15.00/oz silver.
NET ANNUAL CASH FLOW: $5,369,692.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	100	667
TONS MINED/MO.	2,000	13,334
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	67	13,334
TONS PROCESSED/MO.	2,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	500.00	500.00
SILVER	15.00	15.00
GROSS $/TON	401.18	63.20
GROSS $/DAY (90% RECOVERY)	24,070.50	
GROSS $/MONTH	722,115.00	
LEACH--GROSS $/MO. (35% RECOVERY)		294,948.08
COST/TON (MINING & MILLING)	100.90	
CASH FLOW		
GROSS REVENUE	8,665,380	3,539,377
OPER. COSTS	2,421,708	400,020
NET REVENUE	6,243,672	3,139,357
DEPRECIATION	255,340	
	5,988,332	
DEPLETION (15% GROSS)	1,299,807	530,907
PRE-TAX NET	4,688,525	2,608,450
STATE TAX (10%)	468,853	260,845
	4,219,673	2,347,605
FED. TAX (50%)	2,109,836	1,173,803
	2,109,836	1,173,803
DEPRECIATION	255,340	
DEPLETION	1,299,807	530,907
ANNUAL CASH FLOW	$3,664,983.25	$1,704,709.23

MINE PRODUCTION: 50 TPD vein ore; 333 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $395/oz gold: $9.50/oz silver.
NET ANNUAL CASH FLOW: $1,369,886.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	50	333
TONS MINED/MO.	1,000	6,667
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	33	6,667
TONS PROCESSED/MO.	1,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	395.00	395.00
SILVER	9.50	9.50
GROSS $/TON	295.44	44.01
GROSS $/DAY (90% RECOVERY)	8,863.12	
GROSS $/MONTH	265,893.75	
LEACH--GROSS $/MO. (35% RECOVERY)		102,685.80
COST/TON (MINING & MILLING)	191.81	
CASH FLOW		
GROSS REVENUE	3,190,725	1,232,230
OPER. COSTS	2,301,708	200,010
NET REVENUE	889,017	1,032,220
DEPRECIATION	255,340	
	633,677	
DEPLETION (15% GROSS)	478,609	184,834
PRE-TAX NET	155,068	847,385
STATE TAX (10%)	15,507	84,739
	139,561	762,647
FED. TAX (50%)	69,781	381,323
	69,781	381,323
DEPRECIATION	255,340	
DEPLETION	478,609	184,834
ANNUAL CASH FLOW	$803,729.46	$566,157.77

MINE PRODUCTION: 50 TPD vein ore; 333 TPD leach ore.
GRADE OF ORE: 0.528 oz/t gold; 9.145 oz/t silver.
SPOT PRICE: $500/oz gold; $15.00/oz silver.
NET ANNUAL CASH FLOW: $2,264,179.

	VEIN ORE	LEACH ORE
OPERATING DAYS/MO.	20	20
TONS MINED/DAY	50	333
TONS MINED/MO.	1,000	6,667
OPERATING DAYS/MO.	30	30
TONS PROCESSED/DAY	33	6,667
TONS PROCESSED/MO.	1,000	
GRADE OF ORE (OZ/T):		
GOLD	0.528	0.051
SILVER	9.145	2.520
SPOT PRICE ($ U.S.):		
GOLD	500.00	500.00
SILVER	15.00	15.00
GROSS $/TON	401.18	63.20
GROSS $/DAY	12,035.25	
(90% RECOVERY)		
GROSS $/MONTH	361,057.50	
LEACH--GROSS $/MO.		147,474.04
(35% RECOVERY)		
COST/TON	191.81	
(MINING & MILLING)		
CASH FLOW		
GROSS REVENUE	4,332,690	1,769,688
OPER. COSTS	2,301,708	200,010
NET REVENUE	2,030,982	1,569,678
DEPRECIATION	255,340	
	1,775,642	
DEPLETION (15% GROSS)	649,904	265,453
PRE-TAX NET	1,125,739	1,304,225
STATE TAX (10%)	112,574	130,423
	1,013,165	1,173,803
FED. TAX (50%)	506,582	586,901
	506,582	586,901
DEPRECIATION	255,340	
DEPLETION	649,904	265,453
ANNUAL CASH FLOW	$1,411,825.83	$852,354.62

APPENDIX IV

LIST OF EQUIPMENT AT MINE SITE

PHOTOGRAPHS OF MILL SITE AND EQUIPMENT

ACQUISITION MINE EQUIPMENT AT SITE

Cedarapids Portable Crushing Plant, complete with 26" x 6' reciprocating plate feeder, 12" x 35" roller bearing jaw crusher, 4' x 4' double deck horizontal vibrating screen, 24" x 20' underconveyor with elevating drum renovator, 20" x 42" diameter roller bearing crushing rolls; powered by Cat. D17000 Diesel Engine; all mounted on tandem axle trailer.

30" x 60' Portable Truss Frame Conveyor, with gearmotor drive.

Kolberg Portable Bin Assembly, seven 5' x 5' bins.

24" x 40' Channel Frame Conveyor, with gearmotor drive.

30" x 45' Truss Frame Conveyor, with gearmotor drive.

24" x 60' Portable Conveyor, with gearmotor drive.

7'x 6' Allis-Chalmers Ball Mill, grate discharge, scoop feeder, spur gear and pinon drive.

15" x 15' long custom made Spiral Classifier.

60" dia. Eriez 1-Deck Screen. Unused condition with extra screen.

Eight (8) complete Slurry Agitation Tanks with reduction gear impeller drives, approximately 3000 gallon capacity each, appear unused

1800 gallon Pregnant solution tank.

1800 gallon Thickening Tank.

1800 gallon Deairing Tank.

Ten (10) Carbon Columns, capacity 414 gallons with carbon baskets.

Jib Crane, to handle carbon baskets.

3" air operated Feed Pump.

220/440 volts Metering Pump.

Valves, piping and electrical switches and wiring for the above items.

Laboratory building (trailer), almost new condition.

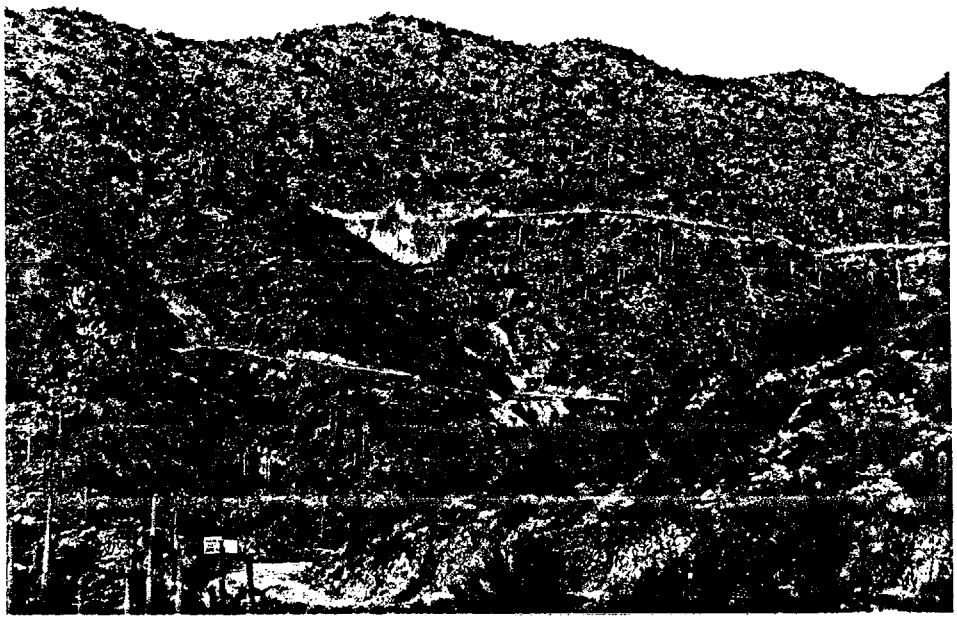
Fruehauf 40' Van Trailer.

2 cubic yard Jarvis Clark LHD.

Note: Most major items are installed on concrete foundations.

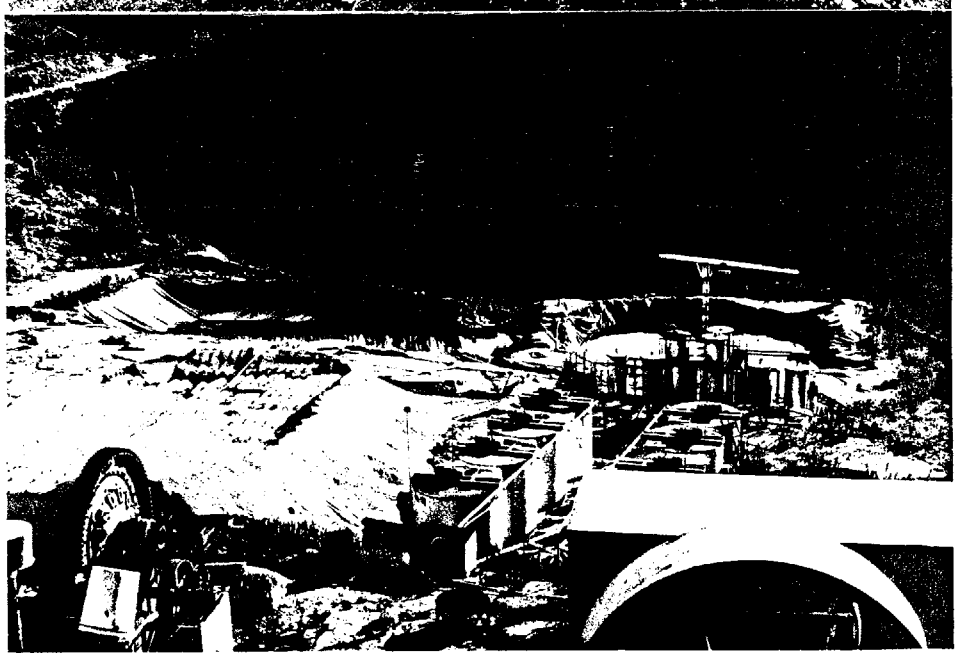
UPPER ADIT: BLANKET VEIN

LOWER ADIT: LITTLE JOE



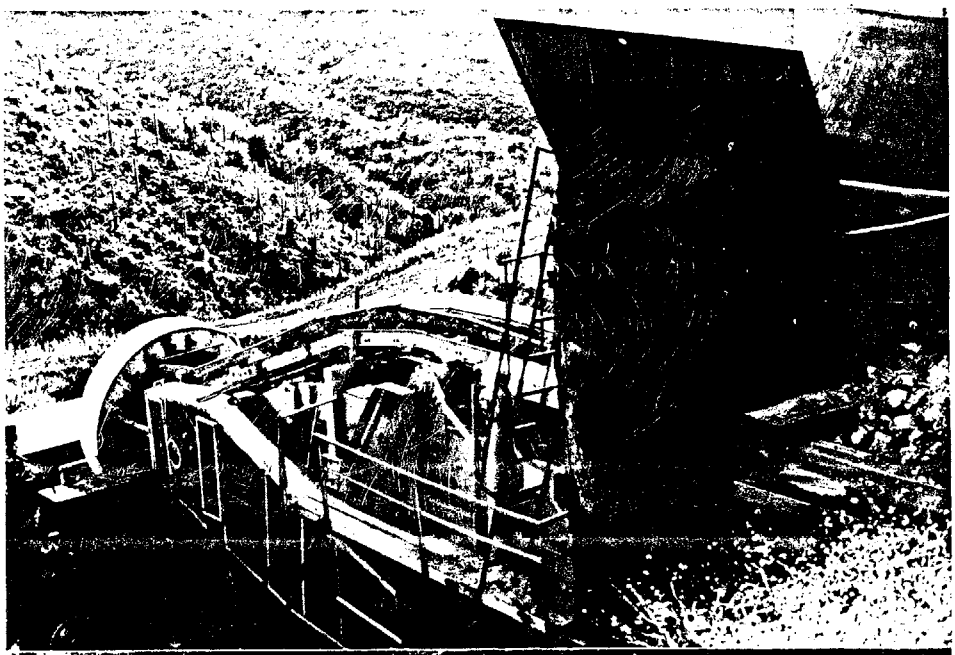
ACQUISITION MILL SITE

SLURRY LEACHING PLANT

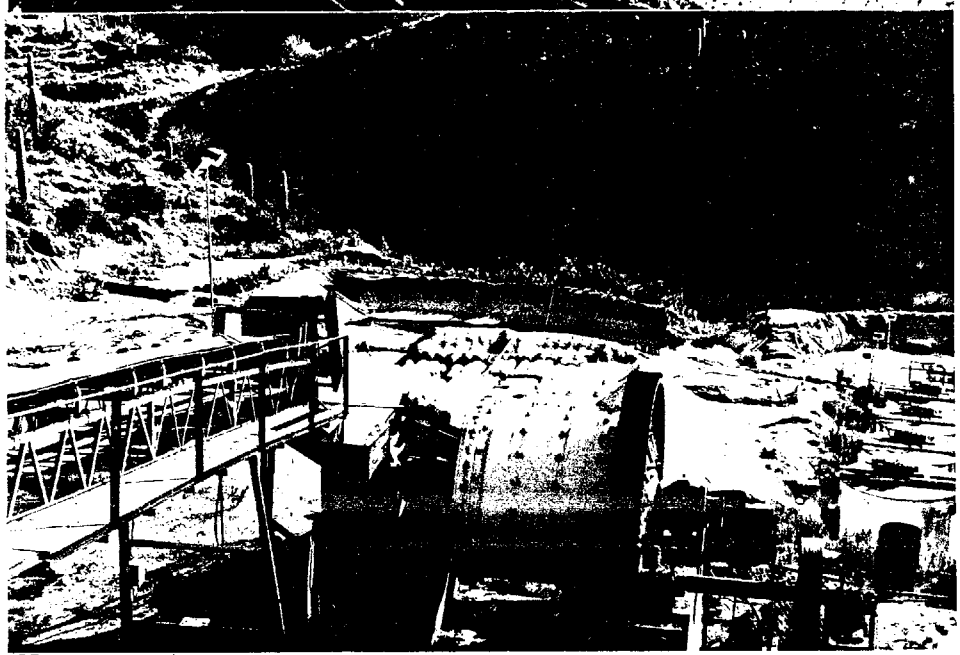


CEDARAPIDS PORTABLE

CRUSHING PLANT



ALLIS-CHALMERS BALL MILL



KOLBERG PORTABLE BIN

ASSEMBLY

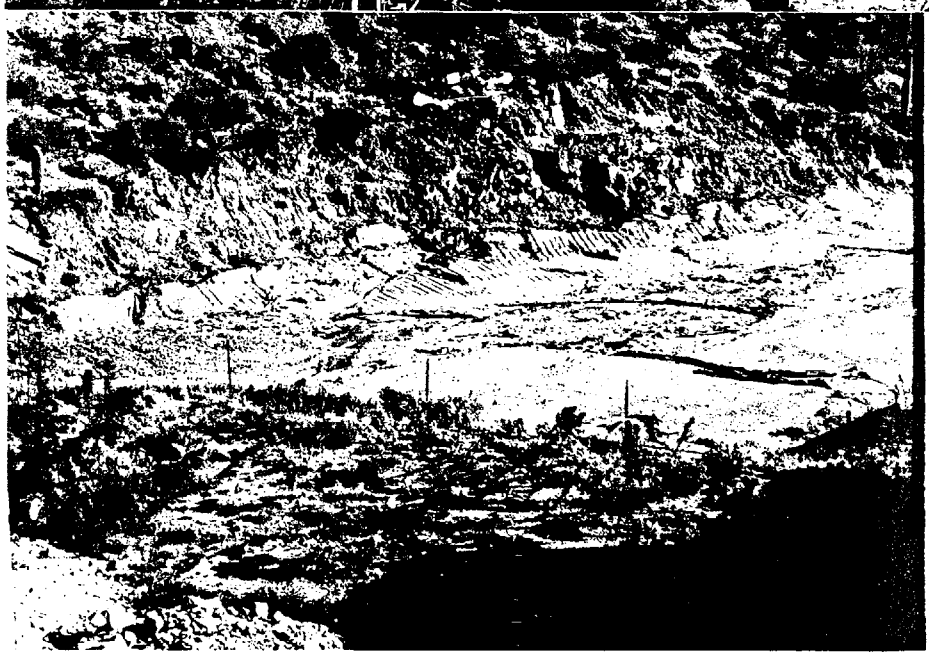

KOLBERG

AQUISITION MILL SITE

SLURRY AGITATION TANKS

SITE OF LEACH PAD

26,000 TONS CAPACITY
WHEN COMPLETED



APPENDIX V

DISCLAIMER

RESUMES:

NICHOLAS H. CAROUSO

ROBERT F. POLEY, JR.

DISCLAIMER

I, Nicholas H. Carouso, President, Geo-Processing, Inc., DO HEREBY CERTIFY:

That the information, opinions, and recommendations within this report are based on personal observations and evaluations of the Acquisition mine area during January through March 1984, and with the able assistance of Mr. Robert F. Poley, Jr.

That I own no interest in the Acquistion and Carpenter unpatented lode mining claims, nor do I expect to receive any such interest.

Nicholas H. Carouso

Nicholas H. Carouso
President
Geo-Processing, Inc.
P.O. Box 1791
Prescott, Arizona 86302
(602) 778-7153

March 25, 1984

NAME: NICHOLAS H. CAROUSO

BIRTHDATE: March 25, 1920

BIRTHPLACE: Oakland, California

MILITARY SERVICE: U. S. Navy, W. W. II, Honorable Discharge

SOCIAL SECURITY No. 552-16-6455

MARITAL STATUS: Married, (wife, Barbara Elizabeth Carouso) and 3 children (Mark, age 27 years; Joan, age 24 years; Valerie, age 20 years).

DEGREES: B.A., 1950; M.S., 1959, Dept. of Mineral Technology, Mining, College of Engineering, Univ. of California; and credits toward Ph.D. program, Univ. of Arizona.

PROFESSIONAL SOCIETIES: Member, American Institute of Mining, Metallurgical and Petroleum Engineers;
Member, Arizona Geological Society;
Member, American Radio Relay League

LISTED IN: Who's Who in Finance and Industry, Marguis; Dictionary of International Biography, Vol. 10, London, England; Critical Reader, and made significant changes in the Third Edition of "Economic Mineral Deposits", by M. L. Jensen and A. M. Bateman, 1979.

PROFESSIONAL EXPERIENCE

Aug. '65 - Present

PRESIDENT AND MEMBER OF BOARD OF DIRECTORS of GEO-PROCESSING, INC.
Consulting and management in the mining and metallurgical fields, this includes utilization of exploration techniques, such as: geochemical; geophysical (extensive use of the Very Low Frequency electromagnetic geophysical instrumentation for exploration and evaluation of mineralized zones); geological; drilling; development of mining properties, both surface and underground; and the testing of the metallurgical characteristics of mineralized materials encountered; and extensive use of computers, word processing and engineering. Emphasis on gold, silver, mercury and copper.

Hydrometallurgical process research and development, for both precious and base metals--idea through patent stage. This includes placer gravity concentrating equipment, design and fabrication.

Consulting mining engineer on two open pit gold/silver mines in Nevada.

Recently located several gold placer deposits, in California, and Wyoming.

Currently, mining consultant for several gold placer properties in California, Wyoming and Alaska. Also conducting an extensive precious metal exploration program, which includes: locating new properties and acquisition of existing properties, which will be available to clients.

MANAGEMENT SUPERVISOR of BONANZA-MJV, Joint Venture exploration project. The Bonanza-MJV claim group was initiated by myself after a comprehensive exploration effort conducted in the Superior, Ray and Globe areas, of Arizona, at my own expense. The Bonanza claim group area offered the best potential of producing an economically feasible property. The initial joint venture effort was self financed and incorporated Induced Polarization and Resistivity, Magnetics, Geochemical and Geological surveys all in a coordinated exploration program. Subsequent drilling gave very encouraging results. During 1976, a detailed Very Low Frequency electromagnetic survey was conducted and the results of this survey correlated well with previously developed data. During this past year bulldozer cuts have exposed multiple closely spaced veins carrying economic values in silver, this could prove to be a very successful open pit operation.

OCEAN ENGINEERING CONSULTANT -consulting for OCEAN RESOURCES, INC., San Diego, California, in geophysical exploration of the ocean bottom. Research and development studies in the processing of manganese sea nodules. I was involved in the early work on these nodules which resulted in a basic process patent.

METALLURGICAL CONSULTANT -consulting in the field of extractive and process metallurgy.

Conducted process development studies at Discom Inc., a subsidiary of Talley Industries, Inc., Mesa, Arizona, resulting in favorable process modification to produce thin computer disks.

Conducted feasiblity studies for the processing of manganiferous silver ores from the Tombstone, Arizona area.

Aug. '63 - Aug. '65

CONCENTRATOR METALLURGICAL ENGINEER (Chief Metallurgist)
KENNECOTT COPPER CORPORATION, Ray Mines Division, Hayden, Arizona.
Resigned this position to enter private business.

The functions of this position were the responsibility of a department head in maintaining optimum metallurgical performance of the concentrator and production control of the mines plant, supervision of the concentrator metallurgical department staff, and metallurgical process development and plant design. Instrumentation (process control) systems research and design emphasized. Designed X-ray on stream analysis system and supervised its successful completion and operation. Active in laboratory and plant research and testing of a new concept for recovery of molybdenite from copper sulphide concentrates. Designed and supervised the installation of an ore-water ratio system for fine crushing mill circuit. Assisted Precipitation Plant personnel at the mine in a consulting capacity. Conducted preliminary studies on leaching characteristics of copper silicate ore which eventually resulted in the construction of a $35,000,000 plant to process this ore. Conducted computer feasibility study for computer controlled process control of fine grinding and flotation circuits which resulted in the development of a working mathematical model. Completed comprehensive progress report of this feasibility study with definite recommendations. Acting Concentrator Superintendent when required.

Kennecott Copper Corporation company consultant - required to visit other Kennecott copper properties to assist in process modification.

CONSULTANT concurrent with the above position, active part time consulting in the mining industry.

Sept. '61 - '63

TEST ENGINEER "A" (Senior Metallurgist)
Kennecott Copper Corporation, Ray Mines Division, Hayden, Arizona.
Promoted to Concentrator Metallurgical Engineer (Chief Metallurgist).

The engineering functions for this position were to design process control systems (automation), to research and develop transducers for measurement of process variables, to prepare proposals, to act as staff supervisor for the installation of the proposed systems and to conduct engineering evaluation studies of new metallurgical processes. Research and development of new reagents for metallurgical processes.

CONSULTANT concurrent with the above position, active part time consulting in the mining industry.

Dec. '59 - Sept. '61

PLANT PRODUCTION ENGINEER (Product Engineer)
EITEL-McCULLOUGH, INC., San Bruno, California.
Resigned this position to reside in a warmer climate for my son's health, and to return to the mining industry.

Engineering responsibility, staff and line, for the manufacture of Klystron Amplifier tubes. This position required background in chemistry, metallurgy and electronics, especially from a process engineering standpoint. Good public relations with production personnel required. Responsible for the preparation of process manuals and initiation of design modifications. Engineering supervision for raw material procurement to electronic testing of the finished product. Acting Liaison Engineer between research and development, and production.

June '59 - Oct. '59

GEOPHYSICAL ENGINEER
PHELPS DODGE CORPORATION, EXPLORATION OFFICE, Douglas, Arizona.
Resigned to return to California to assist parent during illness.

This position included both geophysical field surveying and office reduction and plotting of data. Geophysical surveying methods used were: induced polarization, both dipole-dipole and depth probing, self polarization, resistivity, electromagnetics, audio frequency magnetics and ground magnetometer surveys. Extensive placer exploration in Southern California.

Sept. '57 - '59

SENIOR RESEARCH ENGINEER
BERKELEY RESEARCH COMPANY, Berkeley, California.
Employed while working on M. S. degree.

This position required a knowledge of chemistry, physics, metallurgy and electronics. Idea development in industrial processes and instrumentation, from idea to patent stage. Supervision of the research laboratory. Experience in wetting of Aluminum Oxide with Nickel, Cobalt, etc.

GRADUATE RESEARCH ENGINEER
This position was concurrent with employment at Berkeley Research Co., and graduate work for M. S. degree. Supervision of two graduate students in metallurgy, in conducting beneficiation studies on manganese sea nodules for Scripps Institute of Oceanologly. The studies were successful and eventually resulted in a basic process patent.

Apr. '56 - Sept. '57

RESEARCH CHEMIST
U. S. Bureau of Mines, RARE and PRECIOUS METALS EXPERIMENTAL STATION, Reno, Nevada.
Resigned to return to University of California to complete M. S. degree started at University of Nevada, Mackay School of Mines, Reno, Nevada.

Constructed and operated a pilot plant for the separation and purification of rare earths by the ion exchange method. Pound lots of high purity (99.99%) rare earths were produced for reduction to the metal state and subsequent testing of alloy characteristics. Chemical engineering and metallurgy main emphasis.

Sept. '55 - April '56

SELF EMPLOYED
CAROUSO LABORATORIES, Concord, California and Carson City, Nevada.
Terminated business to return to school for post graduate degree.

General testing laboratory, chemical and metallurgical. Designed and manufactured a surveying instrument, electronic geophysical equipment and core drill bits (tungsten carbide and alloys). Designed and constructed a core drill rig and used it to drill geochemical and geophysical anomalies. Contract mineral exploration surveys and mining development. Emphasis on copper, silver and mercury.

April '53 - Sept. '55

PROFESSIONAL REPRESENTATIVE
RIKER LABORATORIES, INC., Los Angeles, California.
Resigned to become self employed.

This position pertained to public relations and sales promotion of new products.

April '50 - March '53

RESEARCH CHEMIST
UNIVERSITY OF CALIFORNIA, Berkeley, California.
Resigned to gain experience in the public relations field.

This position pertained to classified research projects, conducted for the U. S. Navy. "Secret" clearance required.

Early experience, prior to military service and completion of bachelor's degree, was in mechanical design and fabrication in the tool and die industry: this included working experience with various types of machine shop equipment, and acting in a supervisory capacity as Production foreman over thirty precision machine operators. Early experience was also in the mining and metallurgical fields, assisting my father, who was very active in rare earths research.

Nicholas H. Carouso
P.O. Box 1791
Prescott, Arizona 86302
(602) 778-7153

October 11, 1982

ROBERT F. POLEY, JR.
2020 Rockford Drive
Prescott, Arizona 86301
Tel: (602) 445-0356

Personal Data

Born 12/26/55, Prescott, Arizona. Height: 6'0". Weight: 165 lbs. Health: Excellent. Age: 25. Single, male. Willing to travel.

Career Objective

To obtain a challenging position with an aggressive firm conducting exploration and reconnaissance projects in the Southwestern U.S. Interested in precious metals, massive sulfides, porphyry systems, strategic metals, and economic minerals. Would like further training and education with an opportunity to return to school. Want to pursue a challenging career in exploration geology.

Education

Bachelor of Science Degree in Geology. Major courses include the following: (See attached sheet.) Degree date: May 1980. Grade Point Average in major work: B+. Bachelor of Science Degree in Geology from the University of Arizona, Tucson, Arizona which was attended from 8/77 to 5/80. Also attended Yavapai College in Prescott, Arizona from 8/74 to 5/77 majoring in Geology. Attended University of Arizona Geology Field Camp summer 1979.

Honors

Honors Convocation 1978 University of Arizona Department of Geosciences. Academic Fee Waiver 1977 University of Arizona, Scholastic Art Award, Deans List Yavapai College, VNB Art Sponsor Award, Academic Fee Waiver Yavapai College, Student Art Exhibits Awards, Scholastic Arts Finalist.

Hobbies

Backpacking, hiking, fishing, hunting, mineral collecting, woodworking, camping, gardening, trail riding, swimming, cooking, and hand-tool design and manufacture.

Interests

Current Events, Geology of the Western Cordillera, Precious metals exploration, Disseminated Au-Ag in volcanogenic and Carlin-type settings, Strategic metal, Economic minerals, Solar Technology, Prehistoric Southwestern culture and artifacts, Pegmatite mineralization, Geology of the Great Basin.

Work Experience

Firm: AMAX Exploration Inc. Address: 130 S. Scott Ave., Tucson, Arizona 85701 Tel: (602) 622-3854
District Manager: Charles P. Miller Supervisor: Nick Nuttycombe; Geologist
Job Title: Junior Geologist
Job Description: Participated in a dump and intrusive sampling program in Nevada which covered many different districts and a wide variety of geologic settings. Sampled, described geologic setting, mineralization, alteration, and mineralogy.
Supervised sampling program; assigned sampling areas and daily activities for six samplers and one expediter in central Nevada. Scheduled moves and made arrangements for accomodations in new districts. Did maintenance and field repair on four wheel drive vehicles, dirt bikes, travel trailers, generators, etc. Mapped geology, structure, lithology and alteration for projects. Constructed geochemical contour maps of anomalous values. Prepared data for computer evaluation. Used computer-digitizer to record samples and do computer statistical analysis to determine anomalous values which were computer plotted. Computer tested for geochemical correlations. Preliminary drafting of project maps, cross-sections, geochemical maps, sample locations and diagrams. Assembled project libraries and conducted library and literature searches for new areas of interest. Helped with layout and staking of claim-blocks, recording of information, courthouse research, amending of notices, and planning and overseeing of assessment work. Helped pick drill sites, layout of access roads and construction of drill pad. Involved in sampling and recording of drill cuttings and core. Wrote reports and evaluations to accompany mapping and sampling projects. Attended International Gold and Silver Conference in Reno, Nevada during May 1981, representing AMAX Exploration Inc. Observed fluid inclusion research and have taken samples for fluid inclusion work. Was involved in projects from initial recon sampling, extensive sampling, mapping, evaluation and drilling. Have been exposed to numerous volcanogenic and Carlin-type disseminated Au-Ag deposits, porphyry and stockwork Cu-Mo settings, skarns, massive sulfides, and vein-type mineralization. Traveled extensively in Arizona, Nevada, California, and New Mexico.
Length of Employment: 6-1-80 to 8-16-81.
Reason for Leaving: Company wide reduction in workforce especially in exploration, due to a dramatic decrease in company profits resulted in the termination of employment.

Experience 1/1/74 to 6/1/80

Jeweler-Sculptor: Own and operated a small contemporary jewelry business specializing in gold and silver jewelry set with precious and semi-precious stones, and small stone sculptures. Duties included designing, estimating cost and time, obtaining raw materials, manufacturing, marketing as well as other aspects of manufacturing and business management used in running a small business. Repair and consignment work was also done. Techniques of fabrication, casting, forging, lapidary, inlay and sculpture were commonly utilized. This business paid for my college expenses and paid rent on a house with a shop.

Rockwall Spring

Yellow Jacket Spring

Gulch

Rockwall Gulch

MINERALIZED ZONE

ACQUISITION CLAIM GROUP

CARPENTER VEIN SYSTEM

MINERALIZED ZONE

ACQUISITION MINE

BRECCIA ZONE

LOW RIDGE

EASTSIDE PROSPECT

MILL SITE

SILVER DIPPER CLAIM GROUP

TRAIL

MINERALIZED ZONE

BLANKET VEIN

GREEN POOL

CARPENTER

TRAIL

MINERALIZED ZONE

MINERALIZED ZONE

Rock Gulch

PATENTED

Little Joe Mine

Tizzie Lee Mine Spring

Swilling

USLM 1396

Hill

ACQUISITION MINE AREA

INCLUDES
THE ACQUISITION CLAIM GROUP,
CARPENTER CLAIM GROUP, AND A
PORTION OF THE WALLROCK CLAIM GROUP

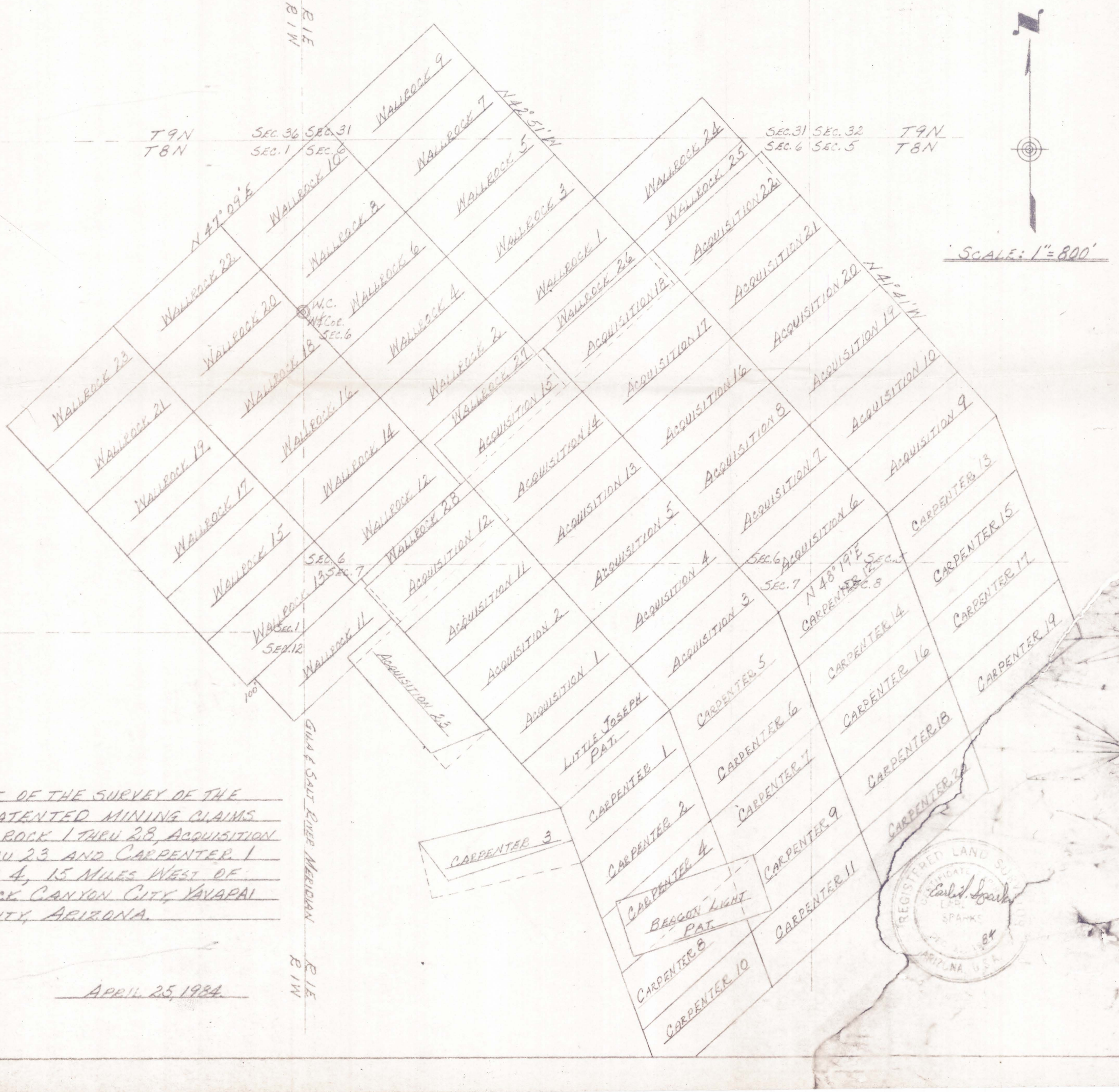
IN SECTIONS 5, 6, 7 AND 8,
TOWNSHIP 8 NORTH, RANGE 1 EAST GSRBM
IN TIPTOP AND HUMBUG MINING DISTRICTS
YAVAPAI COUNTY, ARIZONA

DISPLAYING MINING CLAIM BOUNDARIES,
MINERALIZED ZONES AND
VERY LOW FREQUENCY EM SURVEY LINES

SCALE: 1" = 500'

MARCH 25, 1984

NHC



PLAT OF THE SURVEY OF THE UNPATENTED MINING CLAIMS WALLROCK 1 THRU 28, ACQUISITION 1 THRU 23 AND CARPENTER 1 THRU 4, 15 MILES WEST OF BLACK CANYON CITY, YAVAPAI COUNTY, ARIZONA.

APRIL 25, 1984

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
Earl L. Sparks
EARL L. SPARKS
84
ARIZONA, U.S.A.

KAP WR 4/15/83: Fred Lorette reported firms named Black Thunder Ltd. and Imfamay Ltd. have leased the Silver Dipper (lease-purchase agreement) from him and is operating two drill rigs on the property. Pat Imerson is reported to be a principal in the companies. Larry Reeves is the geologist.

NJN WR 7/15/83: Bob Languth reported he is negotiating with Valley Bank to buy what remains of the carbon in pulp plant at the Acquisition Mine.

NJN WR 5/25/84: Nick Carruso (c) visited and reported he has prepared a report on the Acquisition Mine (file) Yavapai County for Carl Anderson of Tampa, Florida. Mr. Anderson has recently purchased the property from Fred Lorette (c). Mr. Carruso's opinion of the property's potential was favorable.

NJN WR 9/21/84: Nick Carouso (c), Prescott consultant, visited and reported that the next time he visits he will supply our office with copies of his reports on the Fat Jack (f) and Acquisition Mine (f) both located in Yavapai County.

NJN WR 2/14/86: Nick Carouso (c) visited and donated reports on the Cross-roads Claims (f) and Acquisition 1-5 (f), both located in Yavapai County.

ACQUISITION 1 - 5

YAVAPAI COUNTY
TIP TOP DISTRICT

Sections 6 & 7, T8N, R1E

KP WR 10/23/79: Mr. John Sanders (card) reported that he and Fred Lorette (card) have located five claims, the Acquisition 1 - 5 in Sections 6 & 7, T8N, R1E, Tip Top Mining District, Yavapai County. The claim group adjoins the Little Joseph Patent (MS 1832). The claims cover outcrops of gold, silver, and lead mineralization. According to Mr. Sanders, small workings exist in a number of places on the vein. These locations may be on the same property as the Acquisition Mining Company held which was discussed in the USGS Bulletin 782, page 178.

JHJ Memo 1/12/81: Fred Lorette of Mayer has sold his Acquisition Claims. He also owns the Lane Mine.

7/14/81 Phone call to A. Turney. Gentlemen asked if we had any information on the Acquisition Mining Company. He said that he had been hired as a chemist for them and that they were going to being operating around the first of August, 1981.

Telephone Call 11/6/81 to Mr. Jett: Mr. Gabriel reported the Aquisition is driving a drift. A Mr. Norman Telfer has been hired for metallurgical work. A Mr. John Clinton of Phoenix is reportedly on management staff. Acquisition Mining Co. Ltd. is the name of the Company.

RRB WR 10/16/81; Talked to Owen Speck of the Acquisition while at Iron King Assay office. He reports that they are about to complete the installation of a new recovery system for gold and silver at the Acquisition.

RRB WR 12/11/81: A rockhound reported that he visited the Acquisition Mine, Yavapai County and found Sloan Lucas on the property. Mr. Lucas said that he "did everything" but that he couldn't show them the property then because he was expecting 20 investors from Houston.

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kap wr 7/2/82: Doug Lindsey of D. W. Jacquays Mine Supply Company reportded that the Acquisition, Tip Top District, Yavapai County has either shut down or gone under.

IZONA DEPARTMENT OF MINE L RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: Sloan Lucus

   Address: 3300 N. Central, Suite 1740, Phoenix 85012, phone 266-4282

2. Mine: Acquistion 3. No. of Claims - Patented ____

   Unpatented 5 (maybe more)

4. Location: NW of Tip Top and NE of Columbia

5. Sec 6 & 7 Tp 8N Range 1E 6. Mining District Tip Top, Yavapai County

7. Owner: ____

8. Address: ____

9. Operating Co.: Acquistion Mines Limited

10. Address: 3300 N. Central, Suite 1740, Phoenix, AZ 85012

11. President: ____ 12. Gen. Mgr.: ____

13. Principal Metals: Silver, lead, gold 14. No. Employed: 12

15. Mill, Type & Capacity: Experimental heap leach

16. Present Operations: (a) Down ☐ (b) Assessment work ☐ (c) Exploration XX
    (d) Production ☐ (e) Rate ____ tpd.

17. New Work Planned: Continued exploration and predevelopment underground along the vein. Driving drifts 9' X 9' on narrow veins 1' to 2' wide and diluting to 9 feet.

18. Miscl. Notes: Mineralization is reported to be argentiferous auriferous galena in quartz veins.

Date: April 20, 1982 Ken A. Phillips
(Signature) (Field Engineer)

COMMODITY INFORMATION

*COMMODITIES PRESENT C10: AU, AG, CU
*ORE MINERALS C30: GOLD
COMMODITY SUBTYPES C41:
*GEN. ANALYTICAL DATA C43: Ag
COM. INFO. COMMENTS C50:

* SIGNIFICANCE

PRODUCER		NON-PRODUCER	
MAJOR PRODUCTS	MAJOR: AU	MAIN COMMODITIES PRESENT	C11:
MINOR PRODUCTS	MINOR: AG, CU	MINOR COMMODITIES PRESENT	C12:
POTENTIAL PRODUCTS	POTEN:		
OCCURRENCES	OCCUR:	OCCURRENCES	OCCUR:

*PRODUCTION

PRODUCER	NON-PRODUCER
PRODUCTION (YES) (circle) PRODUCTION SIZE (SML) MED LGE (circle one)	PRODUCTION UND NO (circle one)

EXPLORATION OR DEVELOPMENT

*STATUS

PRODUCER	NON-PRODUCER
STATUS AND ACTIVITY A20: 4	STATUS AND ACTIVITY A20:

*DISCOVERER L20:
*YEAR OF DISCOVERY L10: *NATURE OF DISCOVERY L30: B *YEAR OF FIRST PRODUCTION L40: 1913 *YEAR OF LAST PRODUCTION L45: 1938
*PRESENT/LAST OWNER A12:
*PRESENT/LAST OPERATOR A13: ACQUISITION MINING COMPANY
EXPL./DEV.COMMENTS L110: LOCATED IN CARPENTER GULCH

DESCRIPTION OF DEPOSIT

*DEPOSIT TYPE(S) C40: VEIN
DEPOSIT FORM/SHAPE M10: TABULAR

*DEPTH TO TOP	M20:	*UNITS M21:		*MAXIMUM LENGTH	M40:	*UNITS M41:	
*DEPTH TO BOTTOM	M30:	*UNITS M31:		*MAXIMUM WIDTH	M50:	*UNITS M51:	
*DEPOSIT SIZE	M15: (SMALL) M15: MEDIUM M15: LARGE (circle one)			*MAXIMUM THICKNESS	M60:	*UNITS M61:	
*STRIKE	M70: ENE			*DIP	M80: STEEPLY		
DIRECTION OF PLUNGE	M100:			*PLUNGE	M90:		

DEP. DESC. COMMENTS M110:

DESCRIPTION OF WORKINGS

*Workings are: SURFACE M120 UNDERGROUND (M130) BOTH M140 (circle one)

*DEPTH BELOW SURFACE	M160:	*UNITS M161:		*OVERALL LENGTH	M190:	*UNITS M191:	
*LENGTH OF WORKINGS	M170: 414	*UNITS M171: FT		*OVERALL WIDTH	M200:	*UNITS M201:	
				*OVERALL AREA	M210:	*UNITS M211:	

DESC. OF WORK. COM. M220: ADIT TUNNEL 414 FT LONG ON ACCIDENT MINE

GEOLOGY

*AGE OF HOST ROCK(S)	K1:	P.R.O.T., T.E.R.T., U/PB ZIRCON = 1720 MILLION YEARS; UNDATED, PROBABLY PALEOCENE
HOST ROCK TYPE(S)	K1A:	QUARTZ MONZONITE; RHYOLITE PORPHYRY
*AGE OF IGNEOUS ROCK(S)	K2:	P.R.O.T., T.E.R.T., AS LINE K1
IGNEOUS ROCK TYPE(S)	K2A:	QUARTZ MONZONITE; RHYOLITE PORPHYRY
AGE OF MINERALIZATION	K3:	C.R.E.T.-P.A.L.E.O., UNDATED, PROBABLY PALEOCENE
PERT. MINERALS (NOT ORE)	K4:	QUARTZ, PYRITE
ORE CONTROL/LOCUS	K5:	FAULTING, SHEARING
MAJ. REG. TRENDS/STRUCT.	N5:	FOLIATION IN PRECAMBRIAN XENOLITHS (QUARTZ-MICA SCHIST) TRENDS N40E TO N50E
TECTONIC SETTING	N15:	
SIGNIFICANT LOCAL STRUCT.	N70:	VEINS PARALLEL RHYOLITE PORPHYRY DIKES AND FOLIATION IN PRECAMBRIAN XENOLITHS
SIGNIFICANT ALTERATION	N75:	
PROCESS OF CONC./ENRICH.	N80:	OXIDATION AT NEAR SURFACE
FORMATION AGE	N30:	
FORMATION NAME	N30A:	
SECOND FM AGE	N35:	
SECOND FM NAME	N35A:	
IGNEOUS UNIT AGE	N50:	P.R.O.T., U/PB ZIRCON = 1720 MILLION YEARS
IGNEOUS UNIT NAME	N50A:	CRAZY BASIN QUARTZ MONZONITE
SECOND IG. UNIT AGE	N55:	C.R.E.T.-P.A.L.E.O., UNDATED
SECOND IG. UNIT NAME	N55A:	RHYOLITE PORPHYRY DIKES
GEOLOGY COMMENTS	N85:	DEPOSIT IS QUARTZ VEIN IN PROTEROZOIC QUARTZ MONZONITE. VEINS ARE NORMALLY PARALLEL AND ADJACENT TO CRET-PALEO RHYOLITE DIKES.

GENERAL COMMENTS

GENERAL COMMENTS GEN:

* GENERAL REFERENCES

REFERENCE 1 F1 < USGS BULL 782, 178-179 ; ke file MILS p. 7926 >

REFERENCE 2 F2 < USBM- ABSMT FILE DATA p 178-179 >

REFERENCE 3 F3 < MILS LOCATION DATA >

REFERENCE 4 F4 < >

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

*RECORD NUMBER B10 < >
*RECORD TYPE B20 < X, 1, M >
DEPOSIT NUMBER B40 < >
*REPORT DATE G1 < 8, 1, 2 > YR. MO.
*INFORMATION SOURCE B30 < 1, 2 >
*FILE LINK IDENT. B50 < USBM- 004 025 0072 >

*REPORTER(SUPERVISOR) G2 < DEWITT, ED H. > (last, first, middle initial) ( ) (last, first, middle initial)

*REPORTER AFFILIATION G5 < USGS >
*SITE NAME A10 < ACQUISITION MINE >
SYNONYMS A11 < OCCIDENT GROUP (?) >

LOCATION

MINING DISTRICT/AREA A30 < HUMBUG DISTRICT >
COUNTY A60 < YAVAPAI >
*STATE A50 < AZ >
*COUNTRY A40 < U.S. >
PHYSIOGRAPHIC PROV A63 < 1, 2, >
DRAINAGE AREA A62 < 1, 5, 0, 7, 0, 1, 0, 2, >
*LAND STATUS A64 < 0, 0, >
QUADRANGLE NAME A90 < COLUMBIA (1, 9, 6, 9,)>
*QUADRANGLE SCALE A100 < 2, 4, 0, 0, 0 >
SECOND QUAD NAME A92 < ( ) >
SECOND QUAD SCALE A91 < >
ELEVATION A107 < 3, 1, 5, 0, F, T >

UTM

NORTHING A120 < 3, 7, 6, 9, 3, 1, 0 >
EASTING A130 < 3, 8, 0, 3, 8, 0 >
ZONE NUMBER A110 < +, 1, 2 >

*ACCURACY

ACCURATE ACC (circle)
ESTIMATED (EST) X MILS LOCATION DATA ONLY. UTM TO ADIT ON WEST FORK OF CARPENTER GULCH

GEODETIC

*LATITUDE A70 < - - N >
*LONGITUDE A80 < - - W >

CADASTRAL

TOWNSHIP(S) A77 < 0, 0, 8, N >
*RANGE(S) A78 < 0, 0, 1, E >
SECTION(S) A79 < 06 >
SECTION FRACTION(S) A76 < SE OF SW, SW OF SE >
MERIDIAN(S) A81 < GILA AND SALT RIVER >

POSITION FROM NEAREST PROMINENT LOCALITY A82 < 1.4 MILES EAST-NORTHEAST OF SITE OF HUMBUG >
LOCATION COMMENTS A83 < 0.6 MILES NORTH OF LITTLE JOSEPH MINE. USGS BULL 782 SHOWS ACQUISITION MINE AT SITE OF LITTLE JOSEPH MINE. MILS SAYS LOCATION IS TO THE NORTH. NOT KNOWN WHETHER OCCIDENT GROUP IS SYNONYM OR NOT FOR ACQUISITION MINE >

ESSENTIAL INFORMATION
ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

Copies to R.B
Wlm. Dept
4/3/81
JCP

3/28/81 Acquisition LTD

With Fred Lorette (632-7623) I visited the Little Joe, etc. claim area being explored by Acquisition LTD, a (reported) group of doctors and maybe other high tax bracket Texans reconnoitered by Texas promoter Randy Davies. Hale Tagnani has done engineering for Acquisition which company has purchased a big block of bona fide gold claims, has built good roads and is currently drilling. Neal Marriott of Houston, a tax attorney, has put this package together and, at this point, one cannot be sure if the group is serious about getting into production or spending money for tax advantage — or, of course, both. (They win even if the project is not viable).

This property is in western Top Top District which is just across the divide* between Agua Fria and Humbug drainages, which divide separates high silver low gold on the east to high gold low silver on the west. In Sec. 7 & 8, T8N, R7E.

With Tagnani being the group's local counsel and mining engineer, I doubt that there will be any work available to MS, but I will talk to Hale about it. (Maybe some test work? Maybe some plant design?)

JCP
Jack Pierce

* This divide may be the division location between Top Top and Humbug Mining Districts.

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA 85007
602/255-3791

MEMORANDUM

To: Files

From: John H. Jett, Director

Subject: Acquisition Claims, Yavapai County, Tip Top Mining District

Date: January 12, 1981

Mr. Joe T. Stockdale, Box 614, Elfrieda, Arizona 85610, was in the office January 12, 1981. He stated Fred Lorette of Mayer has sold his Acquisition Claims. Mr. Lorette also owns Lane Mine. He has recently been cleaning out the tunnel and doing some assaying. Mr. Stockdale is interested in leasing the Lane Mine.

Mr. Stockdale reported he is trying to operate Great American Mine. He stated Phelps Dodge would take 450 TPM of ore.

JHJ:mw

cc: DMR Tucson