



BRISTLECONE MINING CO.

2525 Sharon Way; Reno, NV 89509; (702) 826-2838

PAIUTE PROJECT

Washoe County Nevada

October, 1987

TABLE OF CONTENTS

<u>Summary And Recommendations</u>	1
<u>Introduction</u>	1
<u>Location and Ownership</u>	1
<u>History</u>	4
<u>Geology</u>	7
Regional Geology.....	7
Paiute Geology.....	9
<u>1984 Sample Results</u>	11
<u>1984 Drilling</u>	11
<u>1986 Geochemistry</u>	18
<u>Fluid Inclusion Survey</u>	19
<u>Conclusions</u>	20

LIST OF FIGURES

Fig. 1, Conceptual Model.....	2
Fig. 2, Location Map.....	3
Fig. 3, 1983 Au Geochemistry.....	5
Fig. 4, 1983 Ag Geochemistry.....	6
Fig. 5, Geologic Setting.....	8
Fig. 6, 1984 Au Geochemistry.....	12
Fig. 7, 1984 Ag Geochemistry.....	13
Fig. 8, Drill Hole 84-1.....	14
Fig. 9, Drill Hole 84-2.....	15
Fig. 10, Drill Holes 84-3,4.....	16
Fig. 11, Drill Holes 84-5,6.....	17

Summary And Recommendations

The Paiute property is a tertiary volcanic hosted epithermal (fossil hot spring) prospect. The main target at the Paiute property is the Paiute fault zone, a 4,000' long shear zone which varies from 50' wide on the west end to 750' wide on the east. The Paiute fault zone contains several east striking, north dipping normal faults. These faults are characterized by pervasive alteration, quartz stockwork veining and significant gold/silver mineralization. Channel sampling returns gold values up to .33 ounces per ton over 5' widths. Chip sampling indicates gold values up to .23 ounces per ton over 20' widths. Silver values range up to 11 ounces per ton but in general are on a 1:1 ratio with gold.

Limited shallow (200' vertically) drilling has returned erratic medium to high grade gold values in the hanging wall portion of the fault zone. Drill information coupled with lithogeochemical and fluid inclusion studies indicate that the level of erosion on the Paiute fault zone is well above the boiling zone and that the gold/silver anomalies on the property represent leakage above a series of blind ore shoots (Fig 1).

A recommended program for continued exploration of the Paiute fault zone should consist of a 5,000' program of deep (800') rotary drilling to explore for blind bonanza type deposits, and acquisition of the neighboring Secret Canyon property. The cost of this program is estimated at \$100,000 U.S.

Introduction

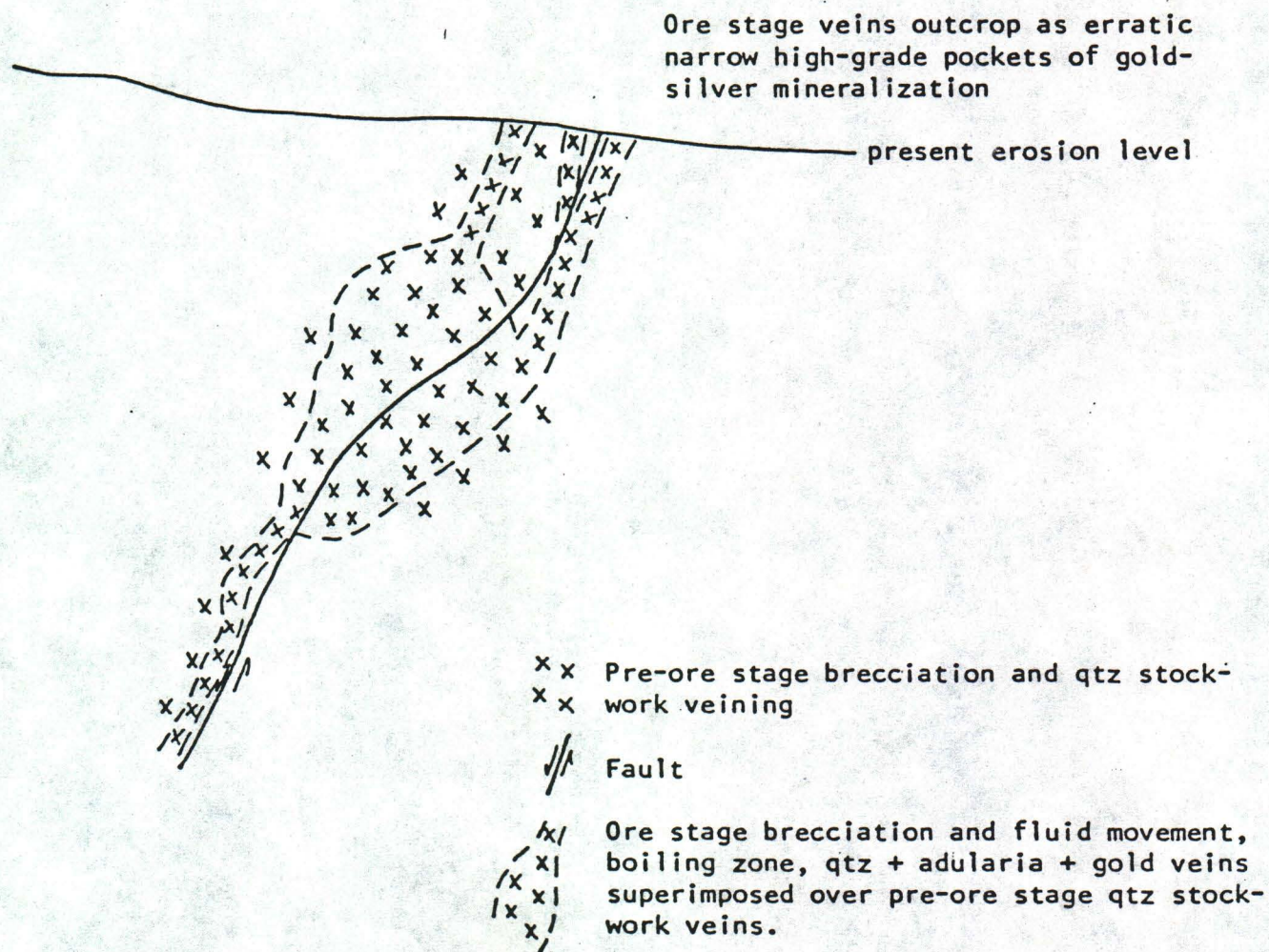
The Paiute property was acquired by Bristlecone Mining Co. in July of 1987 under an option agreement with Denison Mines (U.S.) Inc. Bristlecone Mining Co. is seeking a joint venture partner to fund a \$100,000 work program. This expenditure would earn the venture partner a 50% interest in the property. Bristlecone Mining would retain a 10% position with Denison retaining a 40% interest.

Location and Ownership

The Paiute claim block consists of 79 unpatented lode claims located in sections 7,8,9,16,17 and 18, T22N, R23E, MDB&M. The claims are on the east flank of the Pah Rah Range in Washoe County, Nevada, some 30 miles northeast of Reno. The northern boundary of the claims is adjacent to the Pyramid Lake Paiute Indian Reservation. Topographic coverage is provided by the Nixon (1957) 15' and the Pah Rah Mtn. (1985) 7.5' quadrangles (Fig. 2). The claims are held by Bristlecone Mining Co. under an Option Agreement dated July 1st, 1987 with Denison Mines (U.S.) Inc. The option provides for a 60% earn in for Bristlecone upon the expenditure of \$100,000 towards exploration and development of the property. Upon completion of the earn in, Denison must contribute 40% of all additional funds or suffer dilution.

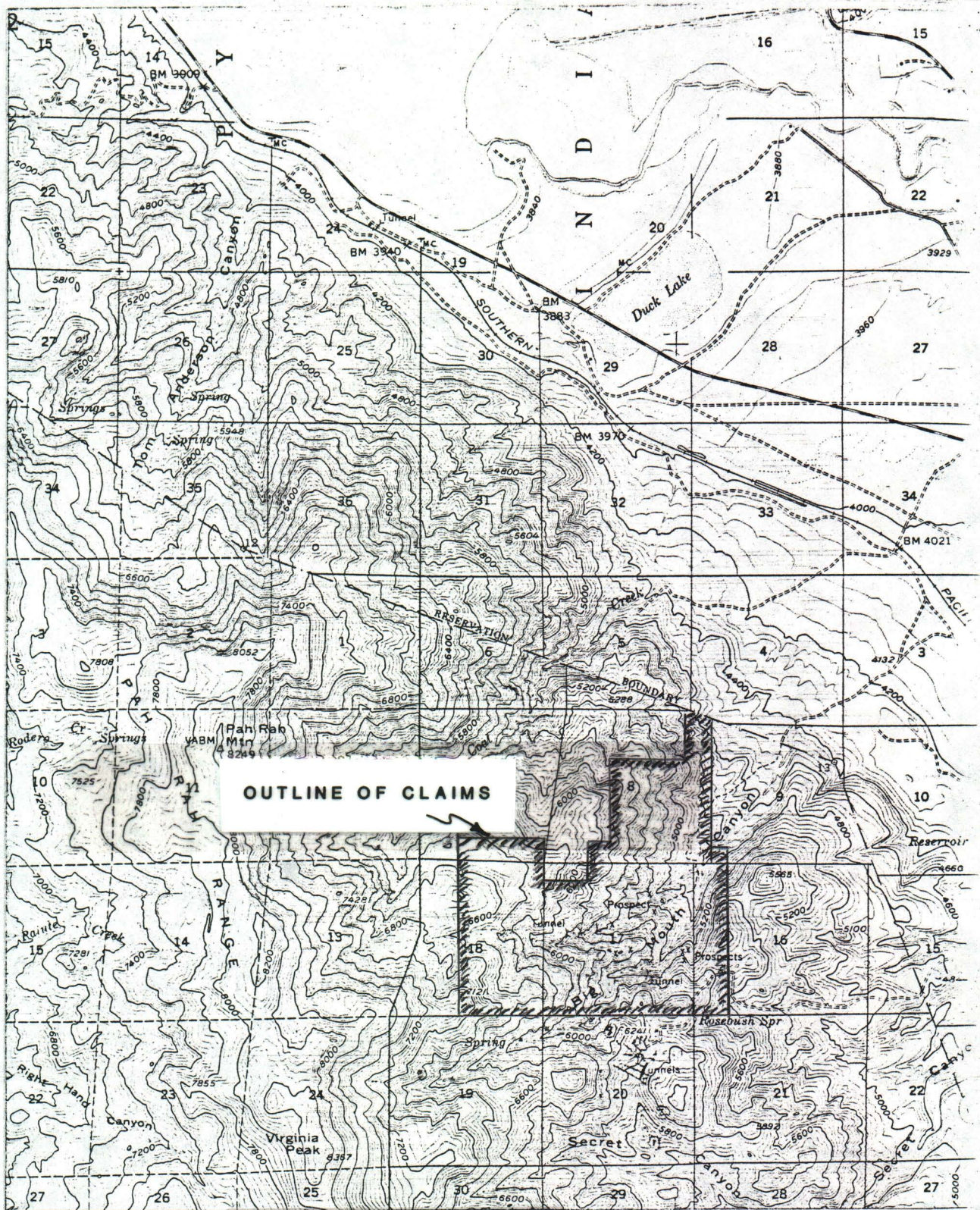
Fig. 1

CONCEPTUAL MODEL



- 1) Local intrusive activity; heat source for geothermal convective system.
- 2) High-angle normal faulting (pre-ore); creates open fractures.
- 3) Pre-ore stage propylitic alteration. Qtz deposition in fractures effectively seals the plumbing system. Hydrothermal solutions trapped, unable to precipitate ore mineralization because lithostatic pressure greater than hydrostatic pressure. Solutions unable to boil.
- 4) Subsequent fault movement. Greatest concentration of stress at flexure in fault plane; creates good system of open fractures. Hydrostatic pressure exceeds lithostatic pressure. Hydrothermal fluids move upward, boil, and precipitate ore minerals. Greatest concentration of ore minerals in the areas of best plumbing. Ore shoots thus confined to the area of the greatest concentration of stress on the fault plane. Brecciation along straight portion of fault above ore shoots; poor development of open fractures. Leakage of thin, erratic ore stage qtz + adularia + gold veins, possibly sub-ore grade due to small size and erratic distribution. grades of these veins may reflect grade of mineralization at depth?

Fig.



Location Map

1:62,500

History

The first claims in Big Mouth Canyon were located in 1860. Past production is unknown as production records were included with the Olinghouse Mining District production. Old workings exist as prospect pits, shallow adits and winzes worked for high grade pockets. Some stamp mill tailings remain in the bottom of the north fork of Big Mouth Canyon below some of the larger dumps.

The Paiute claims were staked by Denison Mines (U.S.) Inc. in August and September of 1981. 97 claims were staked based on widespread alteration, silicification, and the presence of numerous underground workings and prospect pits. Eight grab samples were taken from dumps with values ranging up to 0.11 opt Au and 0.17 opt Ag.

In 1982, an airborne photogrammetric survey was flown over the area.

Exploration work in 1983 consisted of geologic mapping on a scale of 1"=500' and the collection of 169 geochemical samples. This work outlined two areas of widespread gold and silver mineralization (Fig. 3,4). The first area is the Paiute fault zone, an east west trending structure which can be traced for over 4,000' on surface. This zone is up to 750' wide on the east end and pinches down to approximately 50' wide on the western end. The second area is on the ridge north of Big Mouth Canyon where several parallel northwest trending faults form an argillized and silicified zone approximately 500' on a side. Both areas exhibit good structural preparation and significant precious metal anomalies. Anomaly thresholds for the samples were as follows;

Gold (<.5 ppm)	158 samples		
mean	standard deviation		anomaly threshold
.045 ppm	.077 ppm		.20 ppm
Silver (<2 ppm)	131 samples		
mean	standard deviation		anomaly threshold
.29 ppm	.31 ppm		.91 ppm

Anomaly thresholds were calculated as the mean plus two standard of deviations. Values representing obvious anomalies (>.5ppm Au, >2ppm Ag) were not considered.

Sixteen claims bordering the Secret Canyon patent claims at the southern end of the property were dropped in 1983.

Exploration work performed in 1984 consisted of detailed litho-geochemical sampling and shallow angle core drilling on the eastern 1/3 the Paiute fault zone. The work was concentrated around one of five anomalies identified in 1983. A total of 327 channel samples were collected along a 1500' portion of the Paiute fault zone. The width of the stockwork in this area varies from 150' to 750'. Continuous exposures of mineralized bedrock were channel sampled perpendicular to strike. In areas

Fig. 3

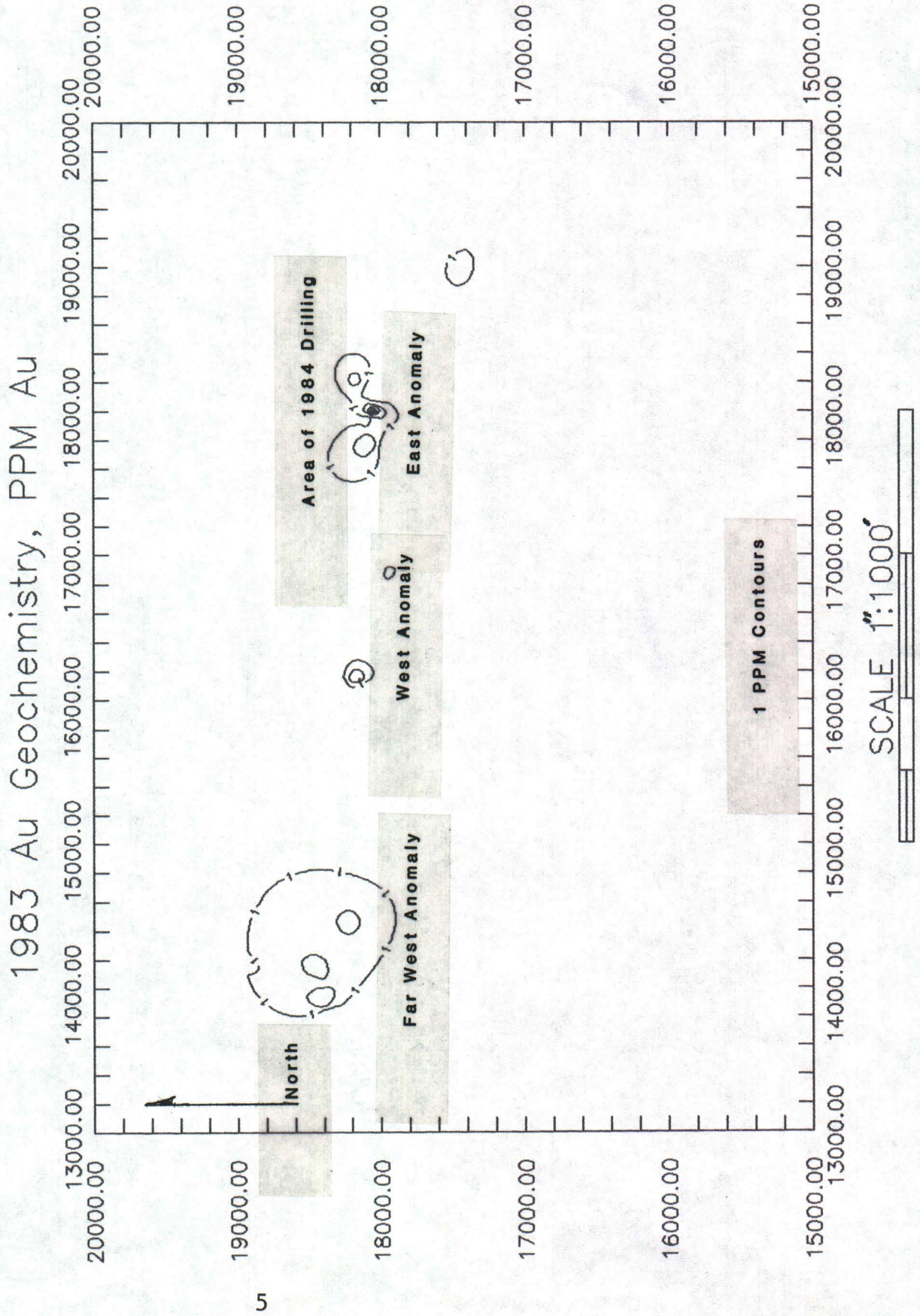
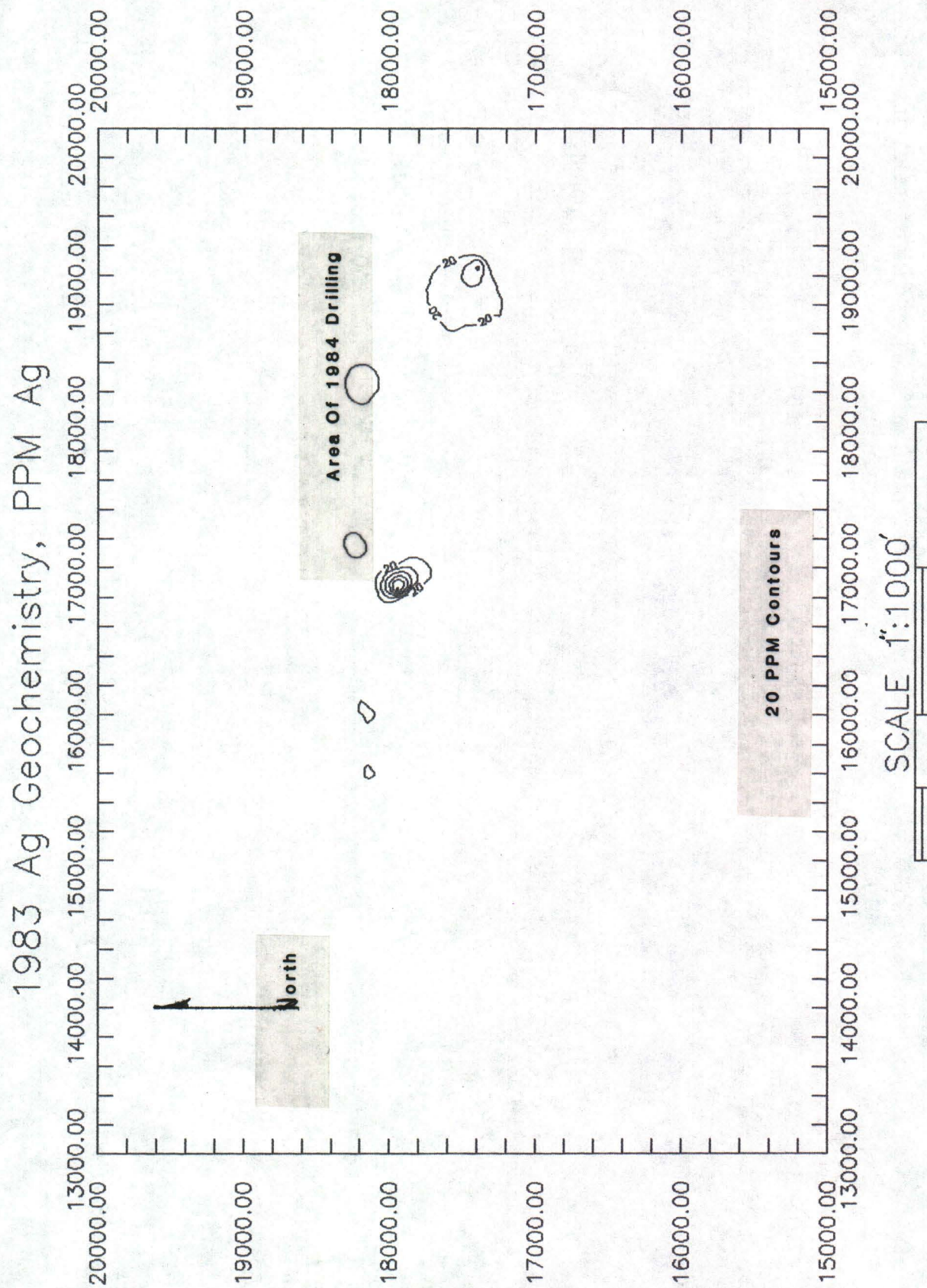


Fig. 4



of poor exposure, all available outcrop was sampled. All samples were fire assayed for gold and silver. The results disclosed two areas of mineralization with erratic high grade values throughout. The first area is on the far east end of the Paiute fault zone and another is 1,200' to the west.

Six core holes were drilled in 1984 in a fan array on the eastern anomaly. Total footage drilled was 1,700'. Results of the drilling mirrored the surface geochemical results demonstrating the existence of a wide, strongly altered and quartz stockwork veined mineralized zone containing narrow high grade zones of gold/silver mineralization.

Work during 1985 consisted of interpretation of the previous four years work, assaying of samples and report writing.

In 1986 lithogeochemical and fluid inclusion surveys were undertaken. 75 samples were taken and analyzed for 29 elements. An additional 24 samples were collected and heating and freezing measurements were conducted. Assay results tend to confirm previous anomalies in the Paiute fault zone and to the north while the fluid inclusion results indicate a boiling zone at depth.

1987 work by Bristlecone consisted mainly of road repair with some check sampling in the Paiute fault zone and preliminary mapping and sampling in the Secret Canyon area. Check sampling returned values of up to .226 opt Au over a ~~20'~~ width. One chip sample from an adit in Big Mouth Canyon returned values of .08 opt Au and 5.4 opt Ag across the full width of the adit (5'). Sampling in the Secret Canyon area returned values as high as 1.09 opt Au from dumps.

Geology

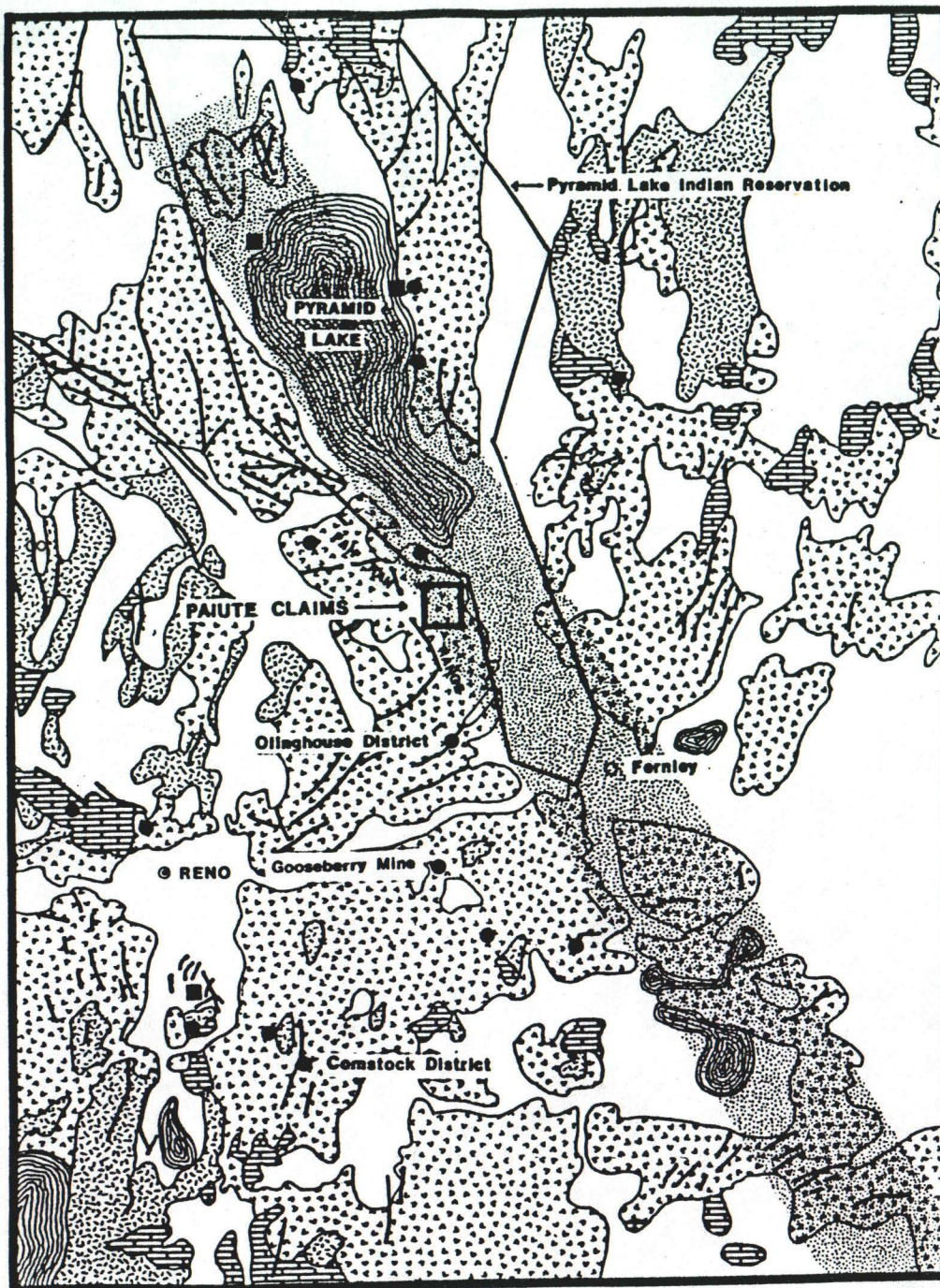
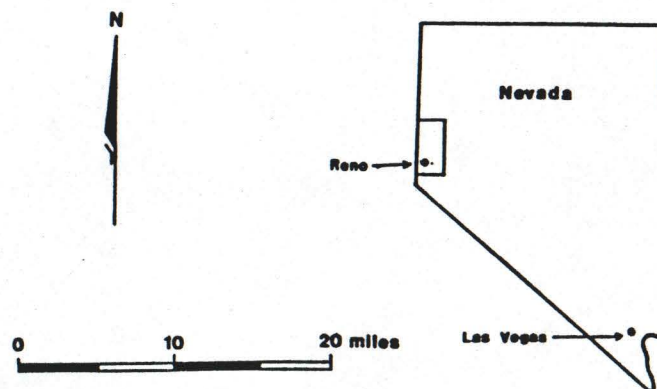
Regional Geology

The east flank of the Pah Rah range, the location of the Paiute claims, displays a northwest trend and is complexly faulted (Fig 5). Small exposures of metamorphic rocks and granodiorite of Mesozoic age are exposed on the west flank of the range. The balance of the range is underlain by a thick sequence of tertiary volcanics. The volcanics range in age from Oligocene to Pliocene and vary in composition from basalt to rhyolite. Four volcanic units have been mapped in the Pah Rah range. The oldest is the Pah Rah formation which outcrops to the north of the Paiute claims in Coal Creek Canyon and consists of andesites and mudflow breccias. The Hartford Hill Rhyolite conformably overlies the Pah Rah formation. This unit consists predominantly of ash fall and ash flow tuffs of rhyolitic composition and is the host unit for the mineralization on the Paiute claims. Unconformably overlying the Hartford Hill are basalts and andesites of the Pyramid formation. These rocks constitute the eastern boundary of the Paiute claims. The Kate Peak formation conformably overlies the Pyramid sequence and consists of felsic to

GEOGRAPHIC AND GEOLOGIC SETTING PAIUTE CLAIMS

LEGEND

- Mining districts
- Major active hydrothermal systems
- ▨ Volcanics
- ▩ Intrusives
- ▧ Sedimentary
- Alluvium
- ▤ Walker Lane alteration zone



intermediate volcanic flows and breccias and occur to the south of the property. A small Kate Peak rhyolite intrusive occurs in Coal Creek Canyon and a larger intrusive occurs to the north of Rosebush Spring, east of the claims.

Two major fault systems are present in the Pah Rah range, a northwest trending system and an east-northeast trending system. The northwest system is a structural element of the Walker Lane fault zone. The east-northeast system represents younger splays and wrench faults associated with the Walker Lane. The tertiary rocks generally strike northwest and dip gently to the southwest.

Paiute Geology

The Paiute claim block is underlain by the Hartford Hill Rhyolite except for the eastern boundary which is underlain by the Pyramid formation. Both units are Miocene in age.

The Hartford Hill Rhyolite can be divided into three members on the Paiute claims. The lower member, which is the host for known mineralization on not only the Paiute claims but also in the Olinghouse District ten miles to the south, is a monotonous sequence of welded, grey to purple, felsic lapilli tuff and lithic tuff. The unit contains thin beds of volcanogenic sandstone and conglomerate. This unit has an exposed thickness of 700' on the Paiute claims and has undergone pervasive propylitic alteration. The middle member is a welded, grey, crystal tuff of felsic composition overlain by a thin layer of purple lapilli tuff. This unit is 200' thick and is commonly bleached and argillized to a white siliceous rock with goethite stained fractures. The upper member of the Hartford Hill Rhyolite is 500' thick and is composed of purple, welded lapilli tuffs and agglomerate with intercalations of lithic tuff. This unit is unaltered.

The Pyramid formation unconformably overlies the Hartford Hill Rhyolite on the eastern margin of the claims. This unit consists of unaltered basalt and andesite flows.

A prominent structural feature on the property is the Paiute fault zone. It is a sinuous, east-west trending zone of roughly parallel normal faults which have served as the locus for gold/silver mineralization. The fault zone dips from 65° to 85° to the north and exhibits approximately 400' of vertical displacement. This fault zone pinches to a single fault structure on the west end and can be traced for over 4,000' on surface.

The lithic tuffs within the fault zone have undergone variable amounts of silicification, propylitization, argillization and phyllic alteration. Besides quartz, the veins contain significant amounts of adularia, calcite, pyrite, hematite, barite, clay and gypsum. Silicified rocks along the faults grade outwards into a zone of argillic alteration, then into unaltered tuffs. Argillic alteration also occurs along north-northeast

trending faults where no silicification is present. The width of the altered areas vary from one foot to several hundred feet. The argillically altered tuffs on the property appear white because the feldspars have been altered to clay and the biotite has been destroyed. The brown weathering is due to varying amounts of goethite in the rocks. Narrow calcite veins occur in two localities, at the tunnel in the SE $\frac{1}{4}$ of section 17 near samples 83077 & 78, and in the NE $\frac{1}{4}$ of section 17. Silicification occurs as stockwork quartz and quartz-pyrite veinlets in argillized tuffs and less frequently as silica replacement of the tuffs. All gold/silver mineralization occurs in silicified tuffs.

The Paiute fault in section 17 is silicified and explored by several prospect pits and adits. Samples from the dumps contain significant values of gold and silver. The silicified zone at the fault consists of quartz stockwork veins and silica replacement of the tuffs and varies from four feet wide at sample 83103 to several hundred feet wide near samples 83094-99. At sample 83106, the argillic zone widens to 140' and contains some quartz veinlets. The fault splits into three roughly parallel structures in the center of section 17. The altered zone associated with these faults is several thousand feet long and up to 750 feet wide. This zone contains many significant geochemical anomalies, particularly on the west end where several northwest trending and northeast trending faults intersect the Paiute fault. This structural intersection forms a pod of silicified tuffs 600' long and 150' wide. All of the rock samples from this zone were geochemically anomalous in gold and silver. The Paiute fault zone is cut off on the eastern end by a northwest trending fault.


The rock chip samples from many of the northwest trending faults that cross the ridge north of Big Mouth Canyon contain gold/silver anomalies. In one area the faults are close enough together to form a zone of silicified and argillized tuffs approximately 500' long by 500' wide. Most of this zone is covered.

Further up the ridge to the northwest, other east trending and northwest trending faults with narrow silicified zones outcrop. Rock chip samples from these zones also carry anomalous gold/silver values. Prospect pits also explore three north-south trending silicified faults on the south side of Big Mouth Canyon in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ section 17. Two of these samples exhibit anomalous values.

The Paiute fault zone has localized a broad, multi episodic network of complexly cross cutting stockwork veining. There are several episodes of cross cutting quartz veining due to periodic fault movements. Late stage, high grade gold-quartz-adularia veins are superimposed over previous stages of veining, filling open fractures and cementing brecciated veins. The ore stage quartz gangue within ore shoots is commonly very fine grained, contains significant amounts of adularia and displays platy

quartz pseudomorphs after calcite which indicates that the level of erosion may not be advanced enough to expose the boiling horizon and the erratic, high grade nature of the outcropping mineralization may represent primary leakage above deep ore shoots. Field observations imply that gold-silver mineralization is confined to quartz veins or gouge zones bordering quartz stockwork zones. The silicified and propylitized wall rocks, exclusive of quartz veins, appear to be barren. Drill core and outcrop examination indicates that later stage quartz veins carry the significant precious metal values. The Paiute fault zone appears to have exerted important control over the localization of mineralization into discreet shoots. Ore shoots localized by intense shattering may be isolated from one another by long strike lengths of relatively less fractured, pre-ore stage vein filling. During ore stage quartz deposition, where the density of open fractures is high, the density of high grade quartz-gold-adularia veinlets can constitute ore. A favourable structural feature in the Paiute fault zone, 1,200' west of drill hole 84-1 may indicate a zone of high probability for an ore shoot. A 1,200' strike length separates hole 84-1 from a gentle flexure coincident with a fault intersection. A broad area of stockwork veining 700' wide with coincident gold/silver anomalies and silicification and propylitic alteration occurs here. Outcrop between the drill area and this favorable zone is poor but strongly propylitized and silicified outcrops do occur. These factors point to the possibility of a 1,200' length of continuous mineralization.

1984 Sample Results

Results of the 1984 rock chip sampling program disclosed two broad areas of low grade gold mineralization with erratic, high grade values (Fig. 6,7). The first area is on the far east end of the Paiute fault zone and was the target for later drilling. The second area was 1,200' to the west. The mineralization in the drilling area averages 150' wide and can be traced 500' on strike where it is then covered by overburden. Sample 84015 was a horizontal channel perpendicular to strike that assayed 0.33 opt Au across 5'. A small vein cut in sample 84015 was selectively sampled and it was discovered that a small  thick white quartz vein cross cut all other veins and assays 2.9 opt Au. All samples with high grade gold values have recognizable quartz veins that cut earlier stockworks.

1984 Drilling

Results of the 1984 drilling program mirrored the results of the detailed rock geochemistry survey (Fig. 8,9,10,11). The two programs both demonstrate the existence of a wide, strongly altered and quartz stockwork-veined zone that contains narrow high grade zones of gold/silver mineralization. Significant gold values intercepted in drill holes fall into two distinct clusters, one in the hangingwall portion of the fault zone and the other near the footwall. The gold silver mineralization associated with the hanging wall is fairly well defined and

Fig. 6

1984 Au Geochemistry, OPT Au

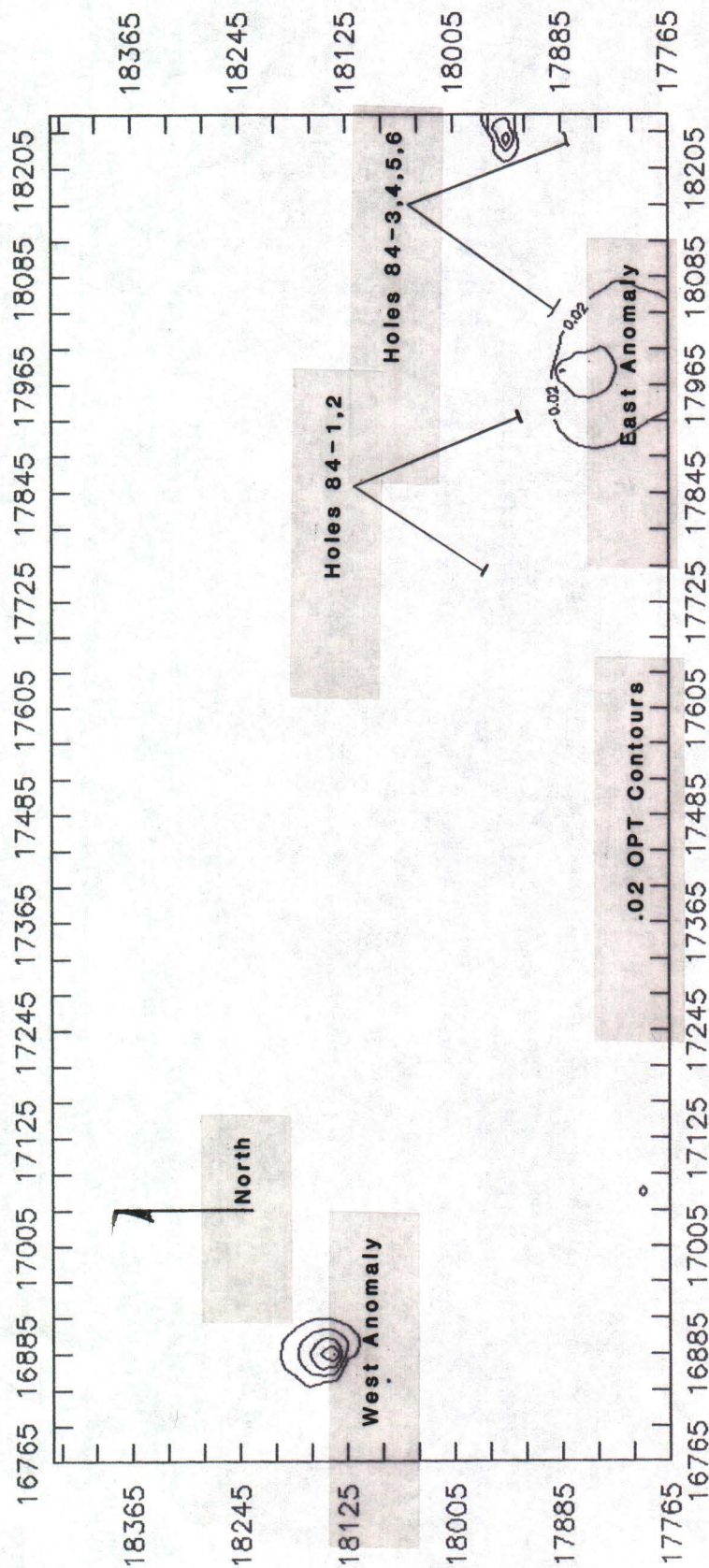


Fig. 7

1984 Ag Geochemistry, OPT Ag

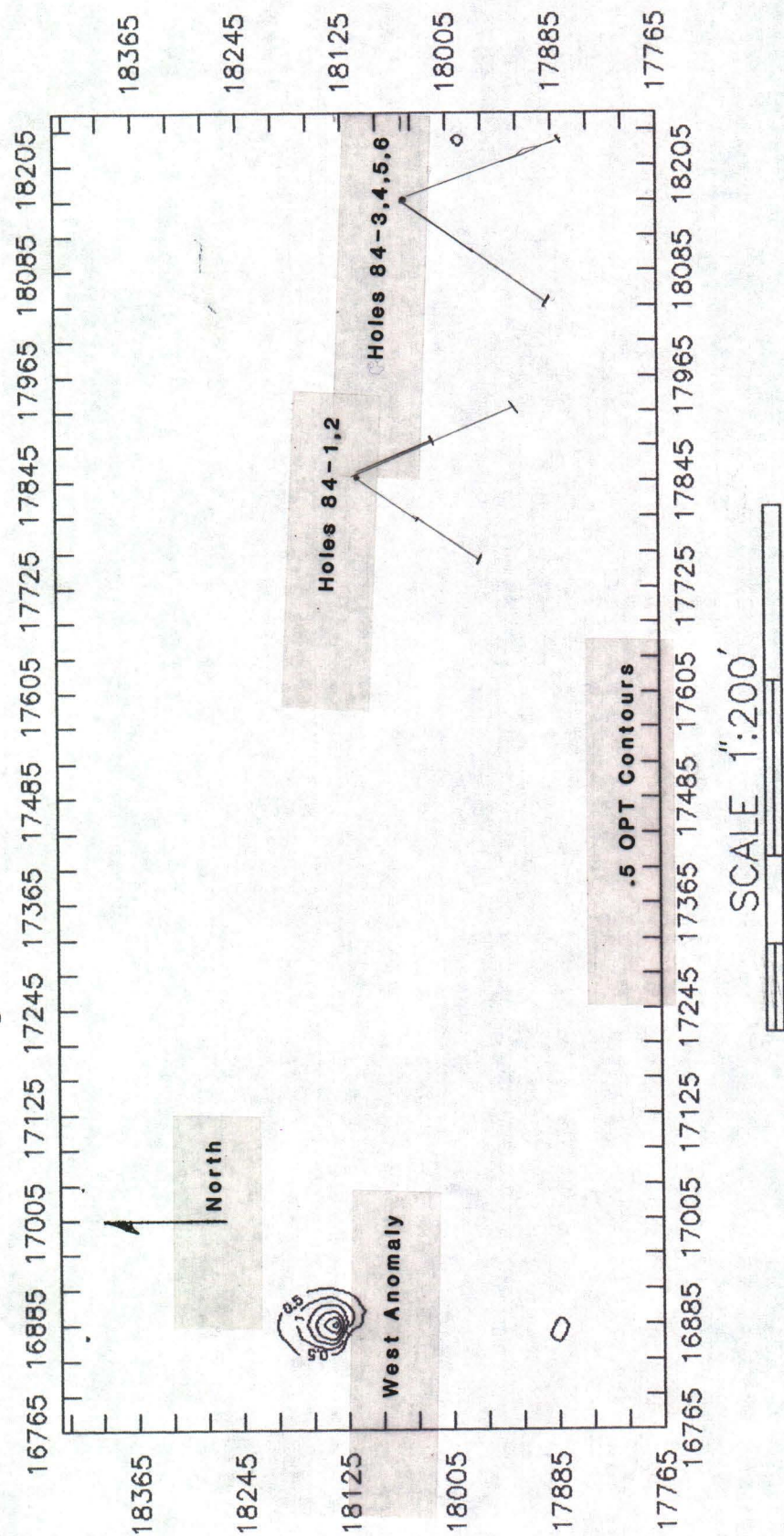
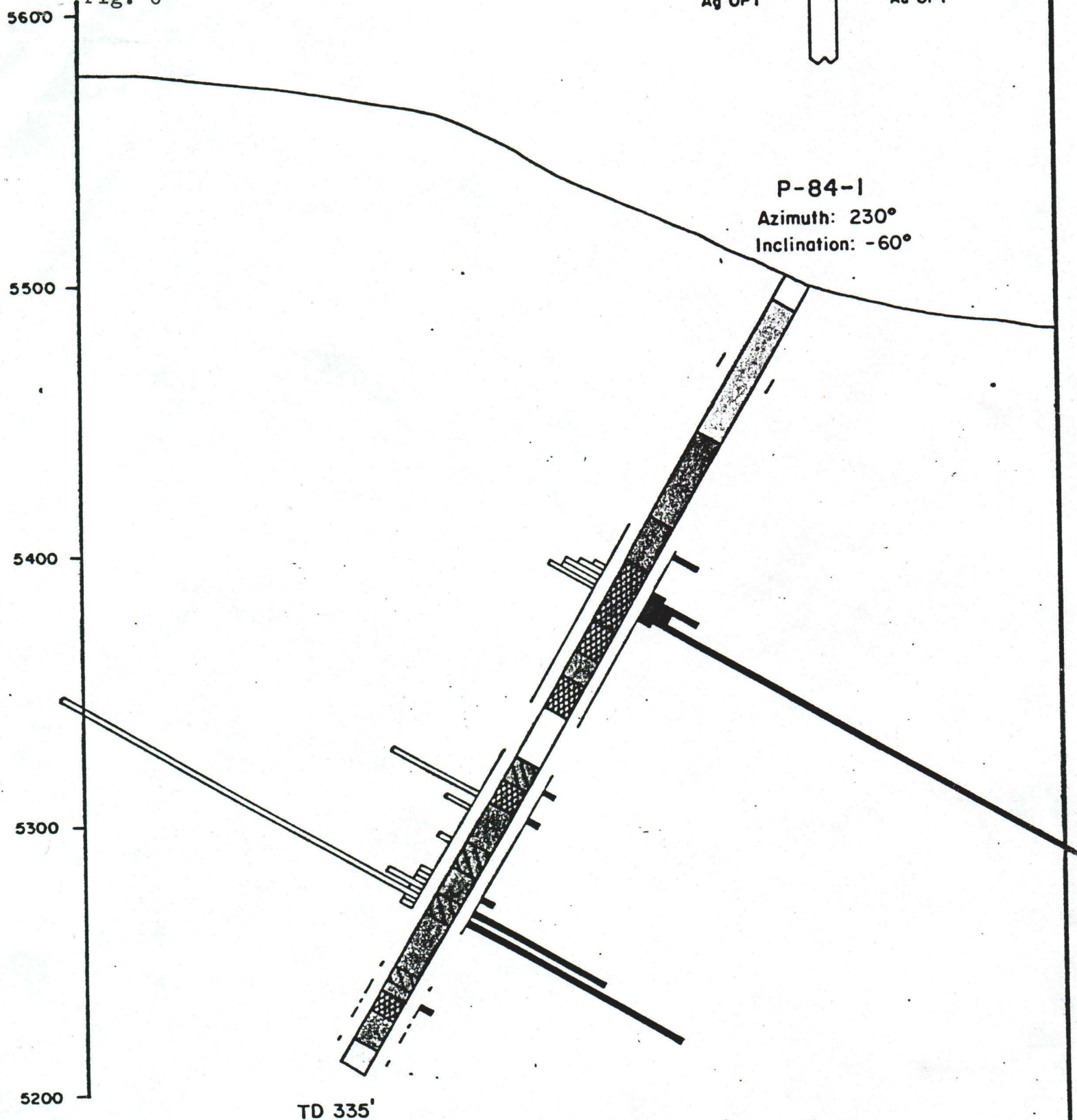
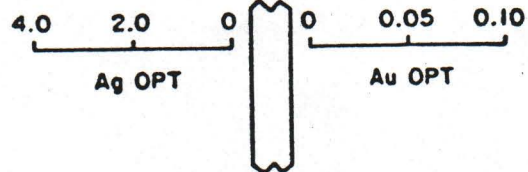







Fig. 8



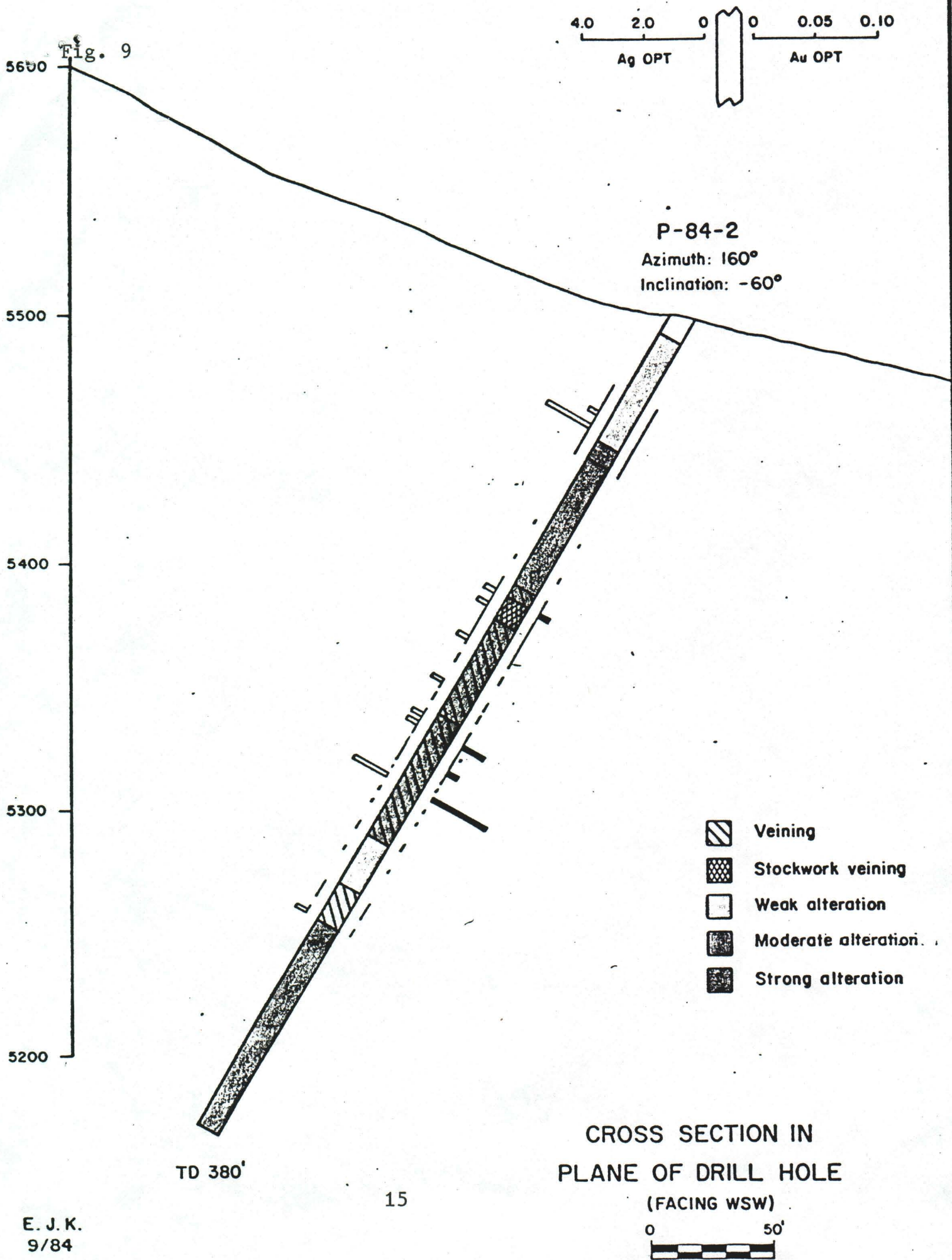
-  Veining
-  Stockwork veining
-  Weak alteration
-  Moderate alteration¹⁴
-  Strong alteration

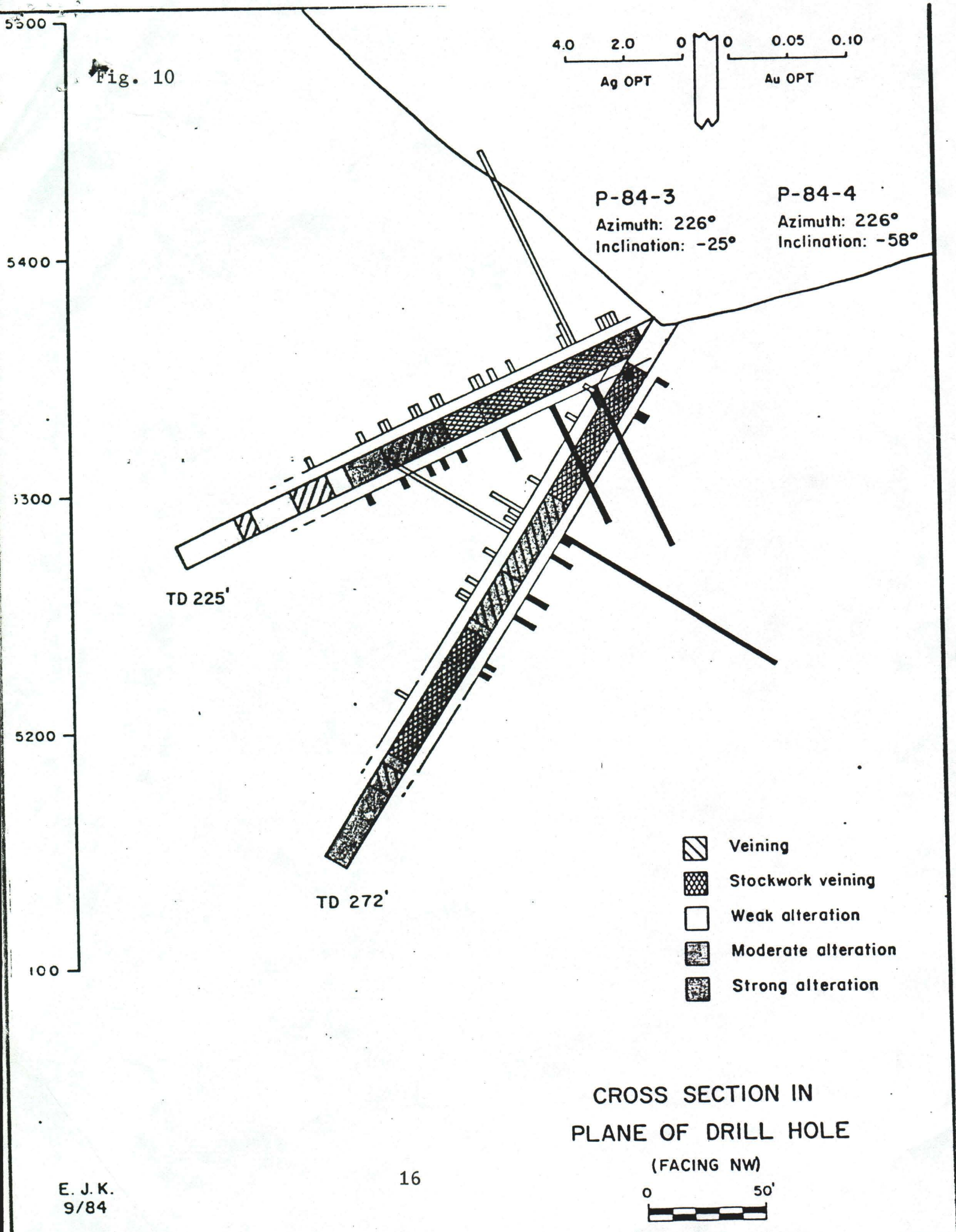
CROSS SECTION IN
PLANE OF DRILL HOLE
(FACING NW)



E. J. K.
9/84

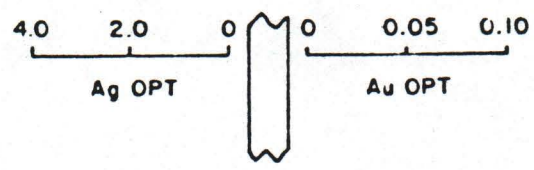
Fig. 9





5500

Fig. 11



P-84-6
Azimuth: 164°
Inclination: -26°

P-84-5
Azimuth: 164°
Inclination: -58°

5400

5300

TD 215'

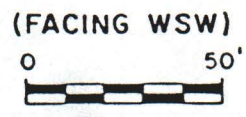
5200

TD 266'

5100

- Veining
- Stockwork veining
- Weak alteration
- Moderate alteration
- Strong alteration

CROSS SECTION IN
PLANE OF DRILL HOLE
(FACING WSW)



characterized by quartz stockwork veining, pyritization, propylitic and argillic-phyllic alteration and high background gold/silver values. The footwall zone of mineralization grades into barren, weakly altered rock. The degree of quartz veining and level of precious metals values are generally lower in the footwall region, as compared to the hanging wall. Drilling suggests that zones of strong alteration and stockwork veining, when plotted in cross section, show a decrease in true width with an increase in depth. The mineralized zone at the east end of the Paiute fault zone is 150' wide on surface but narrows to 85' in hole 84-3, 46' in 84-4, 42' in 84-6 and 27' in 85-5. With increasing depth below the surface, there is a notable decrease in the quantity of silicic alteration associated with the quartz-stockwork veining.

The significant intercepts were as follows;

Hole	Interval	True Width	Au (opt)	Ag (opt)
84-1	110-112	1.1'	.021	.02
	128-136	4.3'	.111	1.06
	134-136	1.1'	.370	1.39
	222-224	1.1'	.008	2.85
	262-264	0.1	.111	1.09
	266-268	1.1	.181	11.95
84-23	36-38	1.7	.151	6.98
	56-58	1.7	.114	.14
	78-80	1.7	.033	.21
84-4	96-98	1.4	.210	1.05
	106-108	1.4	.018	4.89
84-2	56-58 218-220	1.3 1.3	.001 1046	6.37 1.20
<u>1986 Geochemistry</u>				

A lithogeochemical survey was undertaken to confirm and delineate mineralized zones in the Paiute fault zone. A total of 75 lithogeochemical samples were collected for geochemical analysis. They were analyzed for Au and Ag by fire assay, As, Sb and Tl by selective method and a package of 24 elements by ICP-ES. Fifteen unmineralized samples were collected to determine background values. Thirteen of these samples were collected from the lower member of the Hartford Hill Formation and 2 from the middle and upper members. Even though these samples appear unaltered in hand specimen, all may be slightly altered. Sixty altered samples were collected from the lower and middle members. The background samples mean value, standard of deviation and threshold value for As, Ba, K, Sb, Sr, Tl, K/Tl, Ba/Tl and Tl/Sr were calculated. Threshold values were calculated as the mean plus 2 standard deviations.

Element		mean	s.d.	n	threshold
As	ppm	6.2	3.9	15	14.0
Ba	ppm	1279	270	15	
K	%	4.27	.705	15	
Sb	ppm	.887	.583	15	2.05

Sr	ppm	391	191	15	
Tl	ppm	.567	.052	6	
K/Tl		6.83	.751	6	5.33
Ba/Tl		24.0	5.25	6	13.5
Tl/Sr		14.0	8.03	6	30.1

At the Paiute property at least two levels of erosion are present. The highest level is represented by bleaching (argillization) and the lower level by silicification and propylitization. The vertical zonation of trace elements in a steeply dipping orebody is from top to bottom:

Ba-(Sb,As,Hg)-Cd-Ag-Pb-Zn-Au-Cu-Bi-Ni-Co-Mo-U-Sn-Be-W

Sampling data at the Paiute property shows that Ba, Sb, As, Tl, Ag, Pb, Zn, and Au are anomalous while other elements are not. This strongly suggests that the level of erosion is well above a potential ore zone.

The mean background value of As is 6.2 ppm, standard deviation of 3.9 ppm and a threshold value of 14.0 ppm. Arsenic as a pathfinder delineates a potential mineralized zone in section 8, in the far west zone and in the NE $\frac{1}{4}$ of section 17. As appears to be anomalous in the areas where the least erosion has occurred indicating the upper levels of hydrothermal activity.

Antimony has a mean background value of .887 ppm, standard of deviation of .553 ppm and a threshold value of 2.05 ppm. Antimony anomalies indicate potential mineralization in the far west zone. Sb in general appears to delineate widespread alteration.

K/Tl x 10,000 has a mean background value of 6.83, a standard of deviation of 0.751 and a threshold value of 5.33. The ratio confirms mineralization in the east and west zones and potential mineralization in the far west zone and in section 8.

Ba/Tl x 100 has a mean background value of 24.0, standard of deviation of 5.25 and a threshold value of 13.5. This ratio confirms the east, west and far west zones and indicates potential mineralization in section 8.

Tl x 10,000/ Sr has a mean background value of 14.0, standard of deviation of 8.03 and a threshold value of 30.1. This ratio delineates six potential mineralized zones, the east, west, far west and three zones in section 8.

Fluid Inclusion Survey

Heating and freezing measurements were made on 80 fluid inclusions. Due to the small size of the fluid inclusions and the intense fracturing of the vein material, all inclusions were classified as secondary. All 80 fluid inclusions were liquid rich. Some vapor rich inclusions were observed however they were too small (<4 um) to record heating and freezing measurements.

Temperature of homogenization of the vapor phase to liquid ranged from 135.3°C to 288.7°C with a mean of 227°C. Equivalent weight percent NaCl ranged from .18% to 4.0% with a mean of 1.3%. The volume % vapor ranged from 3% to 52%. The fluid inclusion data showing a wide temperature range and variable phase ratios strongly indicates a boiling zone at depth.

Conclusions

The Paiute claims are being evaluated for deposits of high-grade vein or stockwork mineralization. Ore will probably occur in multiple shoots with ore grades averaging 0.3 to 0.5 opt Au and 2 to 5 opt Ag, with a real possibility that the shoots could run greater than 1 opt Au. Surface sampling and shallow drilling at the Paiute indicate many of the characteristics of Comstock type high-grade vein hosted mineralization including a) a broad zone of propylitized volcanics, b) an extensive, structurally controlled mineralized zone, c) episodic stockwork quartz-adularia veins and breccias and d) high-grade gold and silver values.

To date only a small portion of the lateral and vertical extent of the mineralized zone has been tested. Only the upper 150' along a 400' strike length of the vein system has been tested by drilling. The drilling indicated reasonable continuity for gold and silver bearing structures. Exploration work along a 1,200' strike length of the Paiute fault zone west of the 1984 drilling indicates a zone of high probability for an ore shoot and should be the next target for drilling.

Other targets have been delineated by the 1986 lithogeochemical sampling program and the 1987 check sampling along the Paiute fault zone and in other areas.

Crawford Consulting
Mineral Exploration and Development

460 1/2 W. Winnemucca Blvd.
P.O. Box 2502
Winnemucca, Nevada 89445

(702) 623-0202

June 26, 1990

Dennis Laprairie
Laprairie Mining Limited

2525 Sharon Way
Reno, Nevada 89509

Dear Dennis:

Enclosed please find a copy of the property examination report which I did for Peter Tegart on the Pauite property. I haven't included copies of the maps (property and general geology; airphoto interpretation) which were in it that I got from you since you already have the originals. I wrote the report prior to receiving the assay results, so they are not specifically discussed.

Hope that it can be of some help.

sincerely,

A handwritten signature in dark ink, appearing to read 'Sheila Crawford', with a stylized, cursive script.

Sheila Crawford

enc: Pauite property report

Crawford Consulting
P.O. Box 2502
Winnemucca, Nevada 89445

PROPERTY REPORT

Requested by: Peter Tegart, Cheni Gold Mines Inc.

Date of Report: January 18, 1990

Property Name: Paiute

Commodity: Gold, silver

Current level of exploration: grassroots, several surface showings, minor drilling on one showing.

Basis of this report (property exam/library search, etc.): property examination on January 14, 1990 with Dennis LaPrairie of LaPrairie Mining, Ltd. and Bristlecone Mining Co. Examination of file material and discussion with Dennis and Jules LaPrairie. Samples are being submitted for assay.

Location

County: Washoe

State: Nevada

Country: U.S.A.

Mining District: Olinghouse District

Township: 22N **Range:** 23E **Section(s):** 7,8,16-18 **Meridian:** Mt. Diablo

Geographic Location: Big Mouth Canyon, Pah Rah Range

Access: Interstate 80 to Wadsworth Exit (25 miles east of Reno), then north on Route 34 toward Pyramid Lake approx 15 miles. Unmarked dirt road to Big Mouth Canyon. Jeep roads on property. Access may be difficult in wet weather.

Topography/Climate/Land Use: Terrain is moderate to rugged - showings occur along sides of canyon. Outcrop exposure is excellent. Climate is semi-arid, with cold winters and hot summers. Vegetation consists of sagebrush and juniper. Some cattle grazing. Federal land-Bureau of Land Management jurisdiction. Access road between highway and gate crosses Indian Reservation land. Company has a permit to cross land. No serious impediments to mining and exploration.

Claim Owner: Denison Mines (U.S.) Inc., optioned to Bristlecone Mining Co. Inquiries should be directed to Jules LaPrairie, president of Bristlecone Mining, 2525 Sharon Way, Reno, Nevada 89509; phone (702) 826-2838.

Claim Status: Contiguous block of unpatented mineral lode claims covering approximately 2.2 square miles, on federal BLM land. Adjoins patented claims to the south, two 40 acre private lots and reservation land at the far north end of the claim block. No inholdings are indicated on the map. Road building was carried out in the past year and the operators indicate that the assessment requirements have been met and the claims are in good standing. I have not checked title on the claims.

Reserves: No reserves blocked out.

Past Production: Several small adits, pits and shallow shafts occur on the property. County report says that a few small shipments of gold/silver ore were supposedly made. Claims were originally located in 1860.

Geology: Gold and silver mineralization occurs in quartz-chalcedony stringers within fault-bounded alteration zones. Alteration consists of varying degrees of propylitization, argillization and silicification. The most continuous area of alteration and faulting is approximately 3500' long and 200 to 500' feet wide. Argillized and silicified rocks show up as light to rust colored anomalies on color airphotos of the area. The host rock is welded and non-welded tuff of the Hartford Hill Rhyolite Formation. Composition of this formation ranges from quartz latite to alkaline rhyolite. Age dating ranges from 22.7-22.8 my, and it is unconformably overlain by the Alta Formation, which is the host formation of the Comstock lode.

Exploration History: Recent exploration consists of surface sampling and drilling by Dennison Mines and Bristlecone Mining. Only one of the showings has been drilled to date: Dennison carried out some shallow diamond drilling, and City Gold of Calgary, Alberta, who leased the property in 1988, drilled one 800' hole on the same showing. The vein which was being tested appears to be narrow and subeconomic. On surface, the vein averages .33 oz/ton gold across 5 feet.

None of the other showings have been drill-tested. A road was partially completed to the north side of the canyon, where most of the alteration occurs. Values on veining in these zones are reported to be as much as .23 oz/ton gold across 20 feet. Bristlecone recently did a study of the airphoto lineations and color anomalies (see attached copy of transparency overlay). A ground check on these anomalies confirms that these do represent alteration zones, some of which contain the quartz veins and gold/silver mineralization.

A few samples were taken of the veining and alteration zones on the north side of the canyon, and are being submitted for assay. At least two stages of quartz veining can be identified in the samples. The veins contain minor amounts of oxidized and unoxidized pyrite, together with dark grey patches and streaks. Fluid inclusion studies carried out by Dennison indicate that at least some of the area occurs above the "boiling zone" of the epithermal model.

Engineering/Metallurgy: None to date.

Recommendations and Comments: The gamble on this property is whether or not the patchy veining and alteration on surface come together to make mineable ore at depth. These types of systems have the potential to make bonanza type gold-silver orebodies. This property is at a very preliminary stage of exploration, with no drilling carried out on what appears to be the main mineralized area. The exposure is very good along the side of the canyon and it does not look like there is any economic potential at surface. However, it is possible that the altered zones are upper apophyses of the hydrothermal system. Evidence includes the weak, two-stage quartz-chalcedony veining which might occur on the periphery of a system (as opposed to complex veining and breccia pipes in the heart of the system) and some of the fluid inclusion data. Dennis LaPrairie also pointed out that the lack of placer gold in the area could mean that the rocks have not been eroded down to the ore level, whereas in other parts of the Olinghouse District, extensive placers have been formed and only the roots of the lodes remain.

This property is worth considering at the grassroots level. A program of detailed mapping and sampling could be carried out together with a level survey of the altered and mineralized zone. In order to drill the zone, the road from the south side of the canyon needs to be carried across. This would entail some drill and blast and probably several switchbacks - the road could be designed to incorporate the drill sites. Disturbance on the property to date is minimal and the work can probably be carried out within the 5-acre disturbance limit. Diamond drilling is recommended to determine structural controls on alteration and veining, and for testing the structures at depth. Reverse circulation drilling can also be used above the water table.

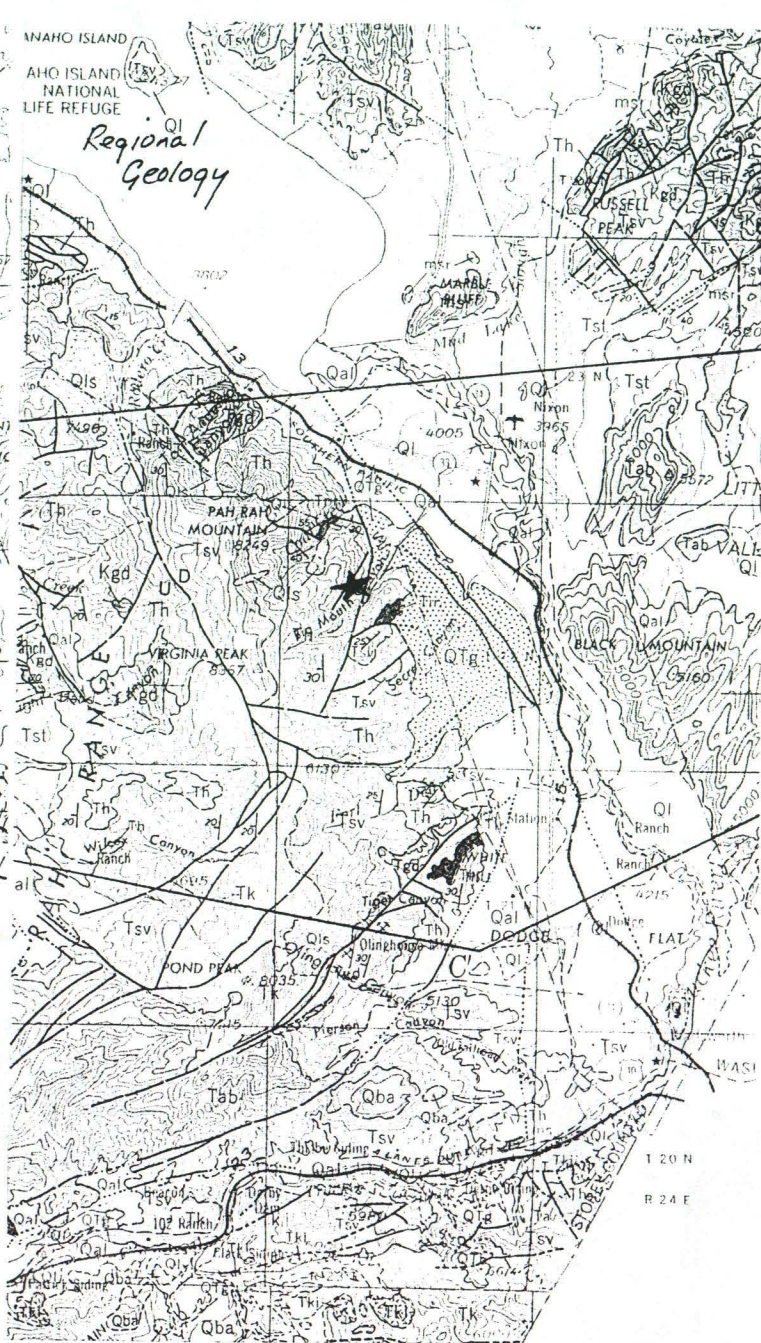
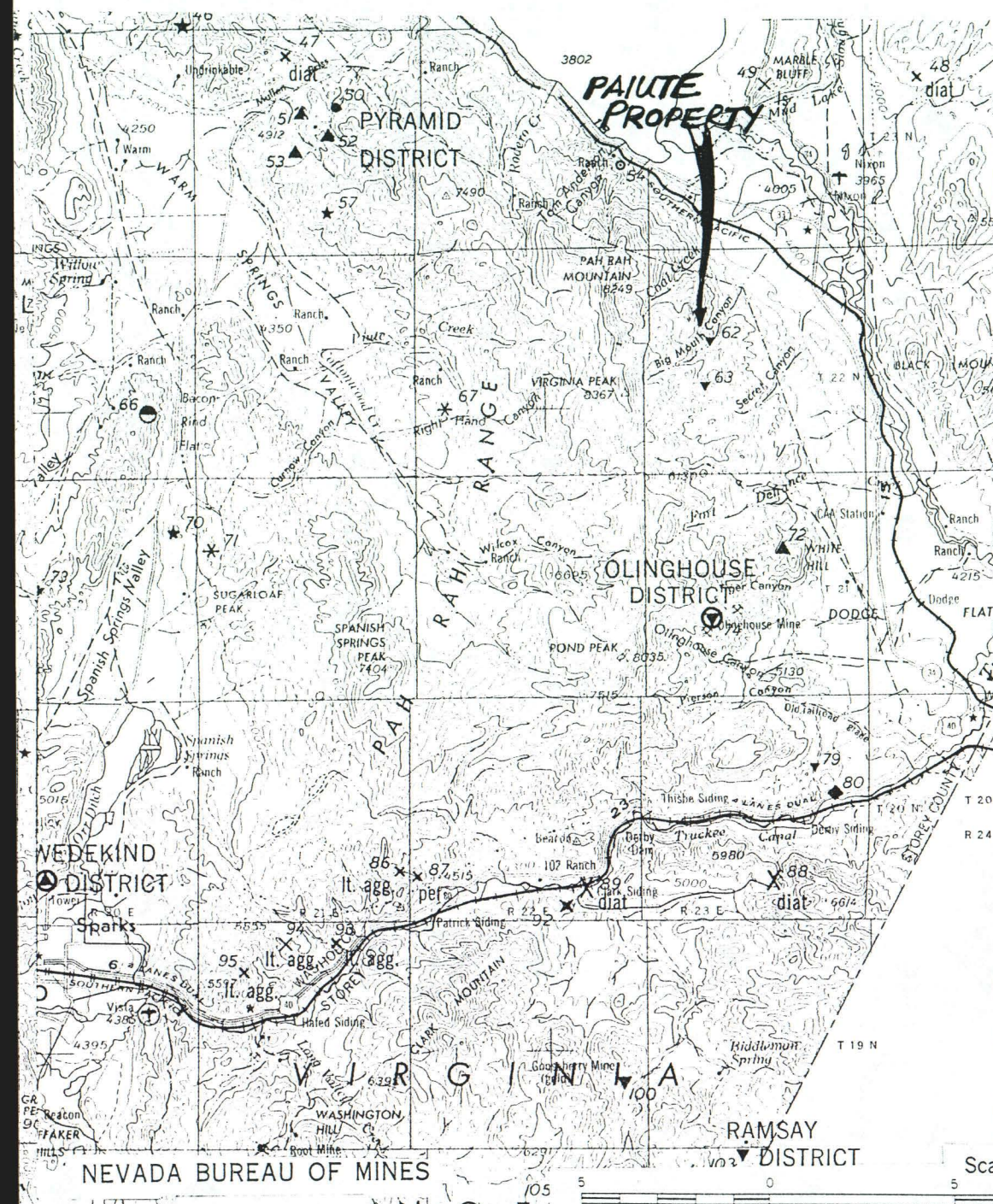
Description of Rock Samples

Paiute Property, Washoe County, Nevada January 14, 1990

submitted for assay at Bondar-Clegg 1-19-90, Bondar Clegg Lab Report No. R90-10080

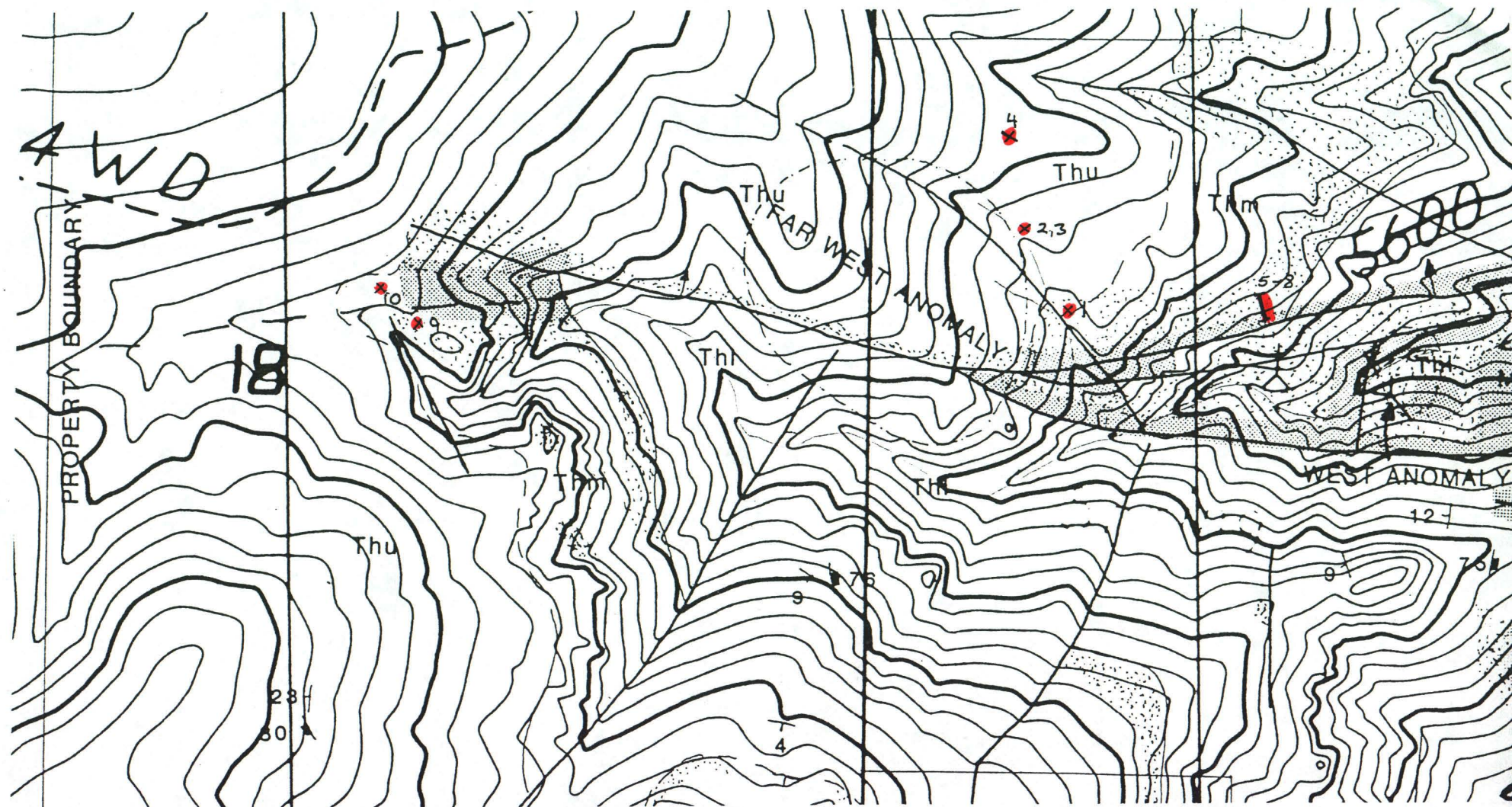
Location map is in property examination report

Sample No.	Location	Description
P-SC-90-1	Main alteration zone, north side Big Mouth Canyon	grab; Hartford rhyolite tuff, partly silicified with vuggy qtz. veins, partly argillized and propylitized, celadonite
P-SC-90-2	"	grab; rhyolite tuff, with grey, sl. banded to vuggy qtz. veins xcut by later veinlets; silic., argill.
P-SC-90-3	"	grab; rhyolite tuff with quartz breccia; arg. tuff fragments in vuggy qtz matrix (20%). Limonite.
P-SC-90-4	"	grab; rhyolite tuff; argillized, hanging wall of main zone, Mn oxides
P-SC-90-5	"	chip 10' (0-10' south to north) outcrop- footwall of main alt'n zone, rhyolite, mod. argill. with 2-5% vuggy qtz. vn.; limonite 1% dissem & in fractures.
P-SC-90-6	"	chip 10' (10-20' as above) rhyolite, sl. argillized & limonitic, <2% qtz vns.
P-SC-90-7	"	chip 5' (20-25' as above) argill. to silic. rhyolite tuff with 20% qtz veining, minor pyrite
P-SC-90-8	"	grab of quartz vein in P-SC-90-7 area; qtz stockwork in sil. to arg. rhyolite tuff, 1% diss. pyrite, dark grey patches, celadonite in tuff.
P-SC-90-9	West zone, north Big Mouth Canyon	grab, old trench, rhyolite tuff, replacement argillization and silicification.
P-SC-90-10	"	grab, rhyolite tuff; bleached, argillized, Mn oxides on fractures and in vugs. Weak veining - clay mineral.



BULLETIN 70,

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS



Sample Locations: SC-P-90-1 to 10.
Pauite property. January 14, 1990

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)



Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

CHENI GOLD MINES INC.
MS. SHEILA CRAWFORD
CRAWFORD CONSULTING
PO BOX 2502
WINNEMUCCA, NV 89445

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)



Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: R20-10080.0 (COMPLETE)

REFERENCE INFO: PAIUTE

CLIENT: CHENI GOLD MINES INC.
PROJECT: PAIUTE

SUBMITTED BY: CRAWFORD
DATE PRINTED: 16-FEB-90

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Ag	Silver	10	0.5 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
2	As	Arsenic	10	5 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
3	Bi	Bismuth	10	2 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
4	Co	Cobalt	10	1 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
5	Cr	Chromium	10	1 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
6	Cu	Copper	10	1 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
7	Mn	Manganese	10	1 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
8	Mo	Molybdenum	10	1 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
9	Ni	Nickel	10	1 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
10	Pb	Lead	10	2 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
11	Sb	Antimony	10	5 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
12	Se	Selenium	10	5 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
13	W	Tungsten	10	10 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
14	Zn	Zinc	10	1 PPM	HN03-HCL HOT EXTR	Ind. Coupled Plasma
15	Hg	Mercury	10	0.05 PPM	HN03-HCL HOT EXTR	Cold Vapour AA
16	Ba	Barium	10	20 PPM		X-RAY Fluorescence

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR RFD ROCK	10	2 -150	10	ASSAY PREP	10

REMARKS: OVERLIMITS TO FOLLOW

REPORT COPIES TO: MR. PETER TEGART
MS. SHEILA CRAWFORD

INVOICE TO: MR. PETER TEGART

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 16-FEB-90

REPORT: R90-10080.0

PROJECT: PATUTE

PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	As PPM	Bi PPM	Co PPM	Cr PPM	Cu PPM	Mn PPM	Mo PPM	Ni PPM	Pb PPM	Sb PPM
R2 P-SC90-1		20.5	163	<2	2	69	2	10	671	2	229	11
R2 P-SC90-2		12.1	53	<2	<1	47	3	9	109	<1	130	<5
R2 P-SC90-3		>500.0	149	<2	<1	65	10	9	248	3	226	9
R2 P-SC90-4		<0.5	<5	<2	1	36	1	858	3	<1	14	<5
R2 P-SC90-5		1.2	26	<2	<1	24	4	35	7	2	47	8
R2 P-SC90-6		0.7	<5	<2	1	18	4	34	2	4	20	<5
R2 P-SC90-7		4.3	36	4	<1	40	1	15	64	<1	49	<5
R2 P-SC90-8		15.2	82	<2	2	54	5	22	142	2	87	<5
R2 P-SC90-9		<0.5	8	<2	1	108	2	30	<1	3	5	6
R2 P-SC90-10		0.7	9	8	<1	18	2	3710	<1	3	34	<5

Au Ag Mo Pb anomalous

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)



Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 16-FEB-90

REPORT: R90-10080.0

PROJECT: PAUTE

PAGE 1B

SAMPLE NUMBER	ELEMENT UNITS	Se PPM	W PPM	Zn PPM	Hg PPM	Ba PPM
------------------	------------------	-----------	----------	-----------	-----------	-----------

R2 P-SC90-1		<5	<10	13	0.20	310
R2 P-SC90-2		31	<10	7	0.45	130
R2 P-SC90-3		8	<10	35	1.05	710
R2 P-SC90-4		9	<10	16	0.15	600
R2 P-SC90-5		17	<10	14	0.50	1200

R2 P-SC90-6		<5	<10	24	0.15	1200
R2 P-SC90-7		12	<10	4	0.35	400
R2 P-SC90-8		<5	<10	6	0.15	310
R2 P-SC90-9		19	<10	2	0.15	240
R2 P-SC90-10		7	<10	60	0.45	790

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)



Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

CHENI GOLD MINES INC.
MS. SHEILA CRAWFORD
CRAWFORD CONSULTING
PO BOX 2502
WINNEMUCCA, NV 89445

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)



Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: R90-10080.4 (COMPLETE)

REFERENCE INFO: PAIUTE

CLIENT: CHEMT GOLD MINES INC.
PROJECT: PAIUTE

SUBMITTED BY: CRAWFORD
DATE PRINTED: 25-JAN-90

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	10	0.0002 OPT		Fire Assay

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	10	2 -150	10	ASSAY PREP	10

REPORT COPIES TO: MR. PETER TEGART
MS. SHEILA CRAWFORD

INVOICE TO: MR. PETER TEGART

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)



Geochemical
Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 25-JAN-90

REPORT: R90-100080.4

PROJECT: PAIUTE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT
------------------	------------------	-----------

R2 P-SC90-1	<0.002	
R2 P-SC90-2	0.009	
R2 P-SC90-3	<0.002	
R2 P-SC90-4	<0.002	
R2 P-SC90-5	0.003	

R2 P-SC90-6	<0.002	
R2 P-SC90-7	0.011	
R2 P-SC90-8	0.130	
R2 P-SC90-9	<0.002	
R2 P-SC90-10	<0.002	

NOVEMBER 15, 1989

PHOTOGEOLOGIC INTERPRETATION AND EXPLORATION RECOMMENDATION OF AND
FOR THE PIAUTE PROPERTY - WASHOE COUNTY, NEVADA

EXPLANATION OF PHOTOGEOLOGY MAP SYMBOLS

(T) Buff to light gray intermediate to rhyolitic tuffs of the Hartford Hill formation.

(LWT) Medium gray intermediate lithic (welded?) tuffs of the Hartford Hill formation.

(ST) Light gray to reddish brown silicified tuffs and argillized tuffs of the Hartford Hill formation.

LOCAL GEOLOGY

The geology within the area consist of a thick sequence of Hartford Hill intermediate to rhyolitic tuff units. The tuff units generally strike north-northeast and dip 10 to 20 to the west. The units are locally silicified and argillized (hatched areas) in association with faults striking west-northwest dipping generally 60 to 70 to the north.

RECOMMENDATIONS

Mineralization within the area occurs along or association with the west-northwest trending faults. Exploration programs should be concentrated near the fault systems by sampling the fault zones or drilling under and normal to the faulting. Drilling under and through the fault zones (hatched area) would also explore the possibility that the silicified and argillized zones are hydrothermal caps overlaying mineralized zones.