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PRINTED: 03/18/2003

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SILVER TIP MINE

ALTERNATE NAMES:
GERONIMO PROJECT

COCHISE COUNTY MILS NUMBER: 635

LOCATION: TOWNSHIP 22 S RANGE 32 E SECTION 26 QUARTER SE
LATITUDE: N 31DEG 28MIN 52SEC LONGITUDE: W 109DEG 02MIN 41SEC
TOPO MAP NAME: GUADALUPE CANYON - 15 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
GOLD LODE

BIBLIOGRAPHY:
ADMMR SILVER TIP MINE FILE
MCINTYRE, D H "VOLCANIC GEOL. S PELONCILLO
MTNS, AZ, NM" USGS BULL 1671, P 17

SILVER TIP MINE COCHISE COUNTY

HEM WR 6/17/88: The Silvertip Mine (file) Cochise County is reported to be no longer of interest to Westmont Mining as a disseminated gold prospect. Although geochemically anomalous values of arsenic and mercury were found in the altered volcanics, the drilling was reported to have found little gold but instead "interesting amcunts of molybdenum."

SILVER TIP COCHISE COUNTY

MG WR 4/5/85: Nicor Mineral Ventures, 2659 G Pan American NE, Albuquerque, NM 87107 owns the GER claim group covering the Silver Tip mine (Cochise Co. Superior Oil Co. Minerals Division has proposed to drill six reverse circulation rotary holes on this property beginning in December, 1984.

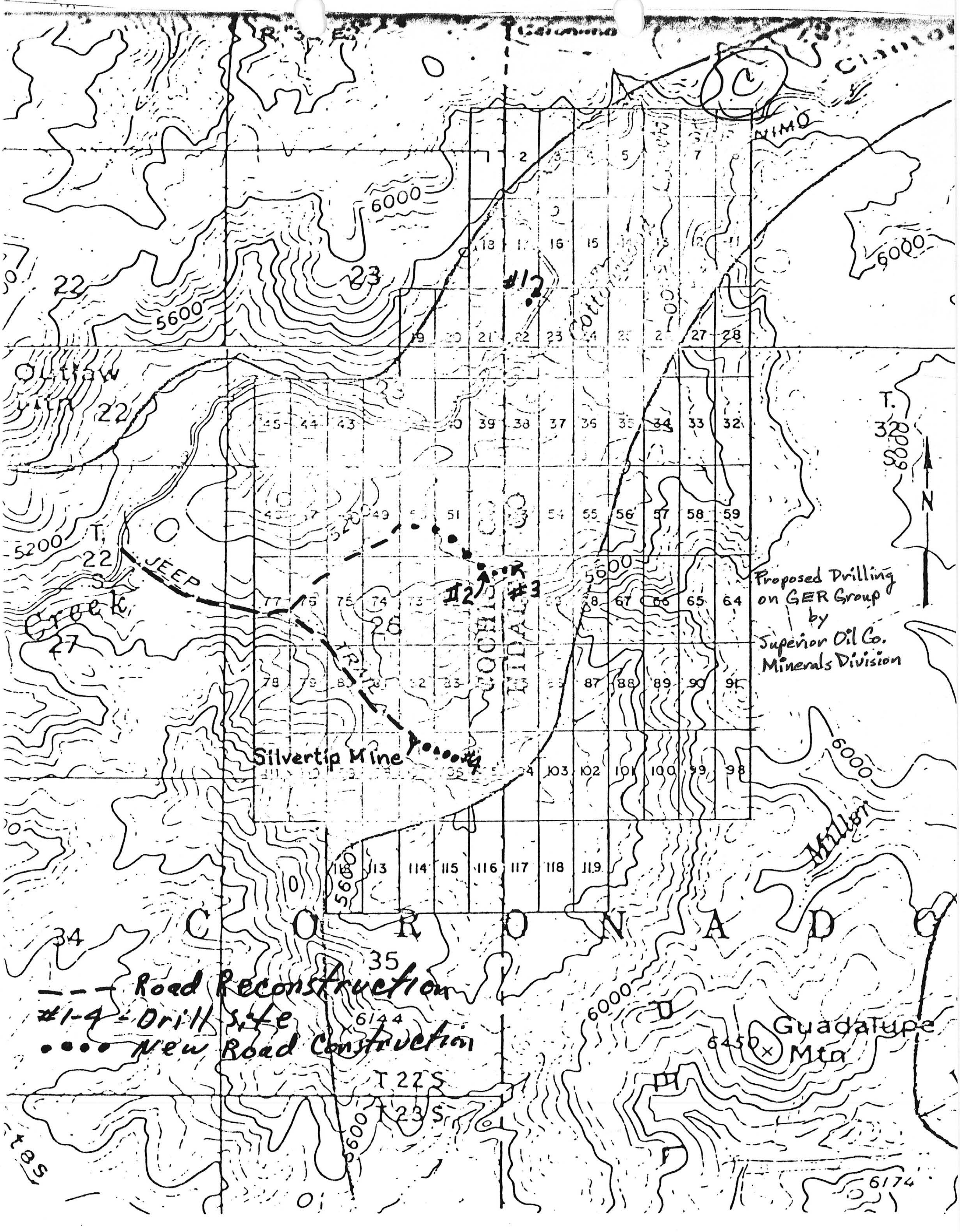
MG WR 4/19/85: The Minerals Division of Superior Oil Co. completed its drilling program in the Silver Tip mine (Cochise Co) area, during early 1985.

NJN WR 9/2 /85: Discussed Nicor Minerals (c) ventures activities in Arizona with geologist Gary Parkinson. He reports their only activity in Arizona has been at the Geronimo Project. Located in extreme southeastern Arizona, Cochise County, they have nearly 3 miles of altered midcene volcanics that exhibit some good geochemical anomalies for precious metals. Recent activity has included a reverse circulation rotary drilling project with joint venture partner Superior Minerals.

SILVERTIP MINE GWI WR 11/1/65 COCHISE CO.

Sec. 26 T32S, R32E.

A Mr. Shearer once owned and operated the Silvertip Mine. He drove a tunnel SW on the vein from the bottom of the creek bed. It appears to be quartz vein, may be large enough to be worth examining. Supposed to have contained values mostly silver and some gold. (GWI Note 11/1/65)


Proposed Drilling
on GER Group
by
Superior Oil Co.
Minerals Division
Road Reconstruction
#1-4 - Drill Site
New Road Construction
Silvertip Mine
JEEP
TRAIL
#1
#2
#3
#4
C O R O N A D O
Guadalupe
Mtn
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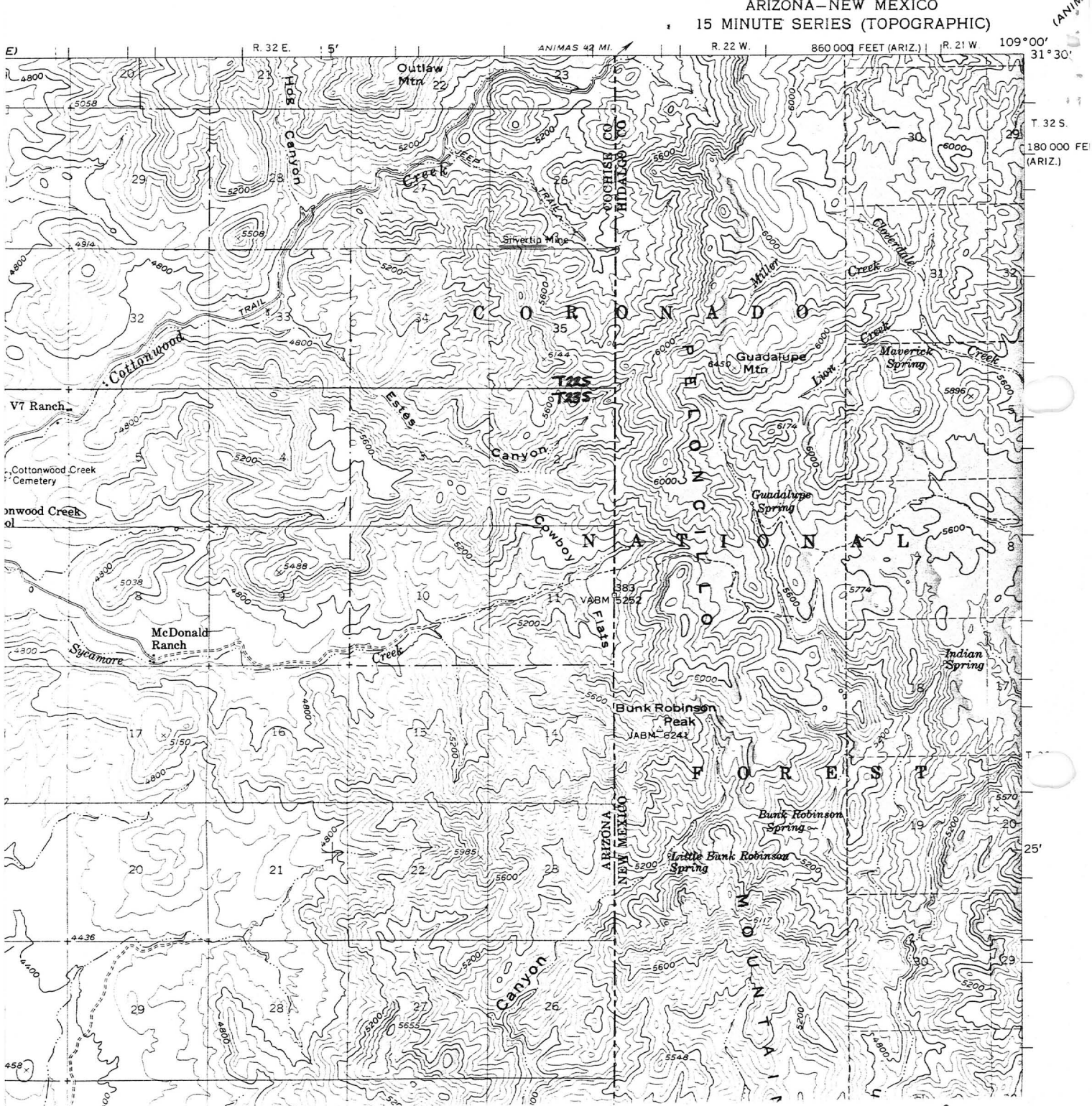
6144
6174
6000
5600
5200
T 22 S
T 23 S
T.
22
S.
Creek
Miller
N



Guadalupe Canyon 15' Quad.

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

RECEIVED
JUN 2 3 1969
DEPT. MINERAL RESOURCES

1. Information from: John Facey
   Address:
2. Mine: Silver Tip
3. No. of Claims - Patented
   Unpatented 1
4. Location: 22 ~~23~~ 25
5. Sec 26 Tp ~~22S~~ Range 32E
6. Mining District
7. Owner: Joe Groom, Animas New Mexico 6mi south on ranch.
8. Address: W.A. "Walter" Swaggart Box 1127 Douglas (Lives at Mud Springs Ranch)
9. Operating Co.:
10. Address:
11. President:
12. Gen. Mgr.:
13. Principal Metals: Gold
14. No. Employed:
15. Mill, Type & Capacity:
16. Present Operations: (a) Down ☐ (b) Assessment work ☒ (c) Exploration ☐
    (d) Production ☐ (e) Rate tpd.
17. New Work Planned:
18. Miscl. Notes:

Date: 5-26-69

(Signature) (Field Engineer)

No Copy needed. Info for you files

GERONIMO PROJECT

GERONIMO PROJECT REPORT

January 18, 1985

KARL M. EMANUEL

NICOR MINERAL VENTURES, INC.

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SUMMARY AND CONCLUSIONS

The Geronimo Project encompasses an area of pronounced argillic and solfataric alteration within the late Oligocene Geronimo Trail caldera. The area was geologically mapped and found to contain a nested series of subvolcanic domes within a north-south trending volcanogenic graben. This same structural depression has controlled veining and diking, which follows the west margin of the graben for over two miles. The complex appears to be exposed at a very high structural level, and to have had no more than 200 m of erosion. Sampling has shown the presence of weak Pb, Zn, Ag and Hg geochemical patterns within altered areas; these patterns may reflect concealed mineralization at depth. The target is envisioned as an epithermal vein or stockwork system along the west side of the dome complex, with potential replacements within near-surface, prevolcanic carbonate basement rocks (<200m depth).

The Geronimo prospect is currently joint ventured with Superior Minerals, who is the operator and is currently performing exploration on the property. The results of their sampling and 3600 feet of drilling will be received in early February and will be discussed in a subsequent report.

INTRODUCTION

LOCATION

The Geronimo (GER) prospect is situated in the southern Peloncillo Mountains of Arizona and New Mexico. The area is located approximately 28 miles northeast of Douglas, Arizona. The GER claimblock straddles the state line at a point 10 miles north of the Mexican border (Figure 1), and access is by 34 miles of graded dirt road (The Geronimo Trail Road) from Douglas.

PROPERTY DESCRIPTION

The Geronimo property consists of 108 lode claims (GER) staked by NICOR during February 1983. The claimblock (Figure 2) straddles the Arizona-New Mexico state line; a total of 59 claims are located in New Mexico, with the remaining 49 being wholly within Arizona. There are no underlying patented claims; and the entire area of alteration and mineralization is controlled by NICOR. The area abuts the Bunk Robinson Roadless area on the east and is within the Coronado National Forest.

The property was joint ventured to Superior Minerals in September, 1984. Preliminary mapping and sampling done by NICOR prior to this agreement forms the basis for this report.

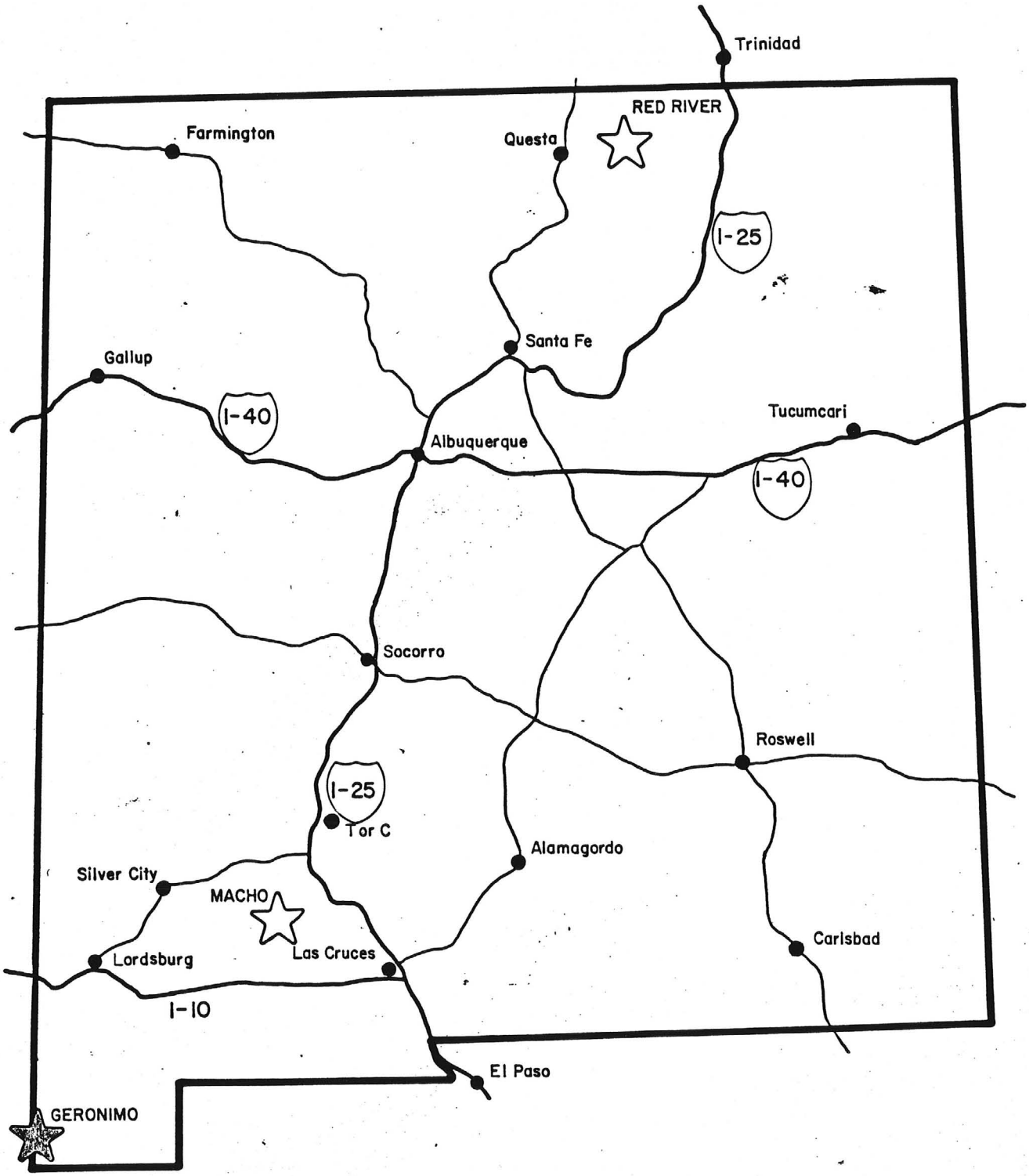
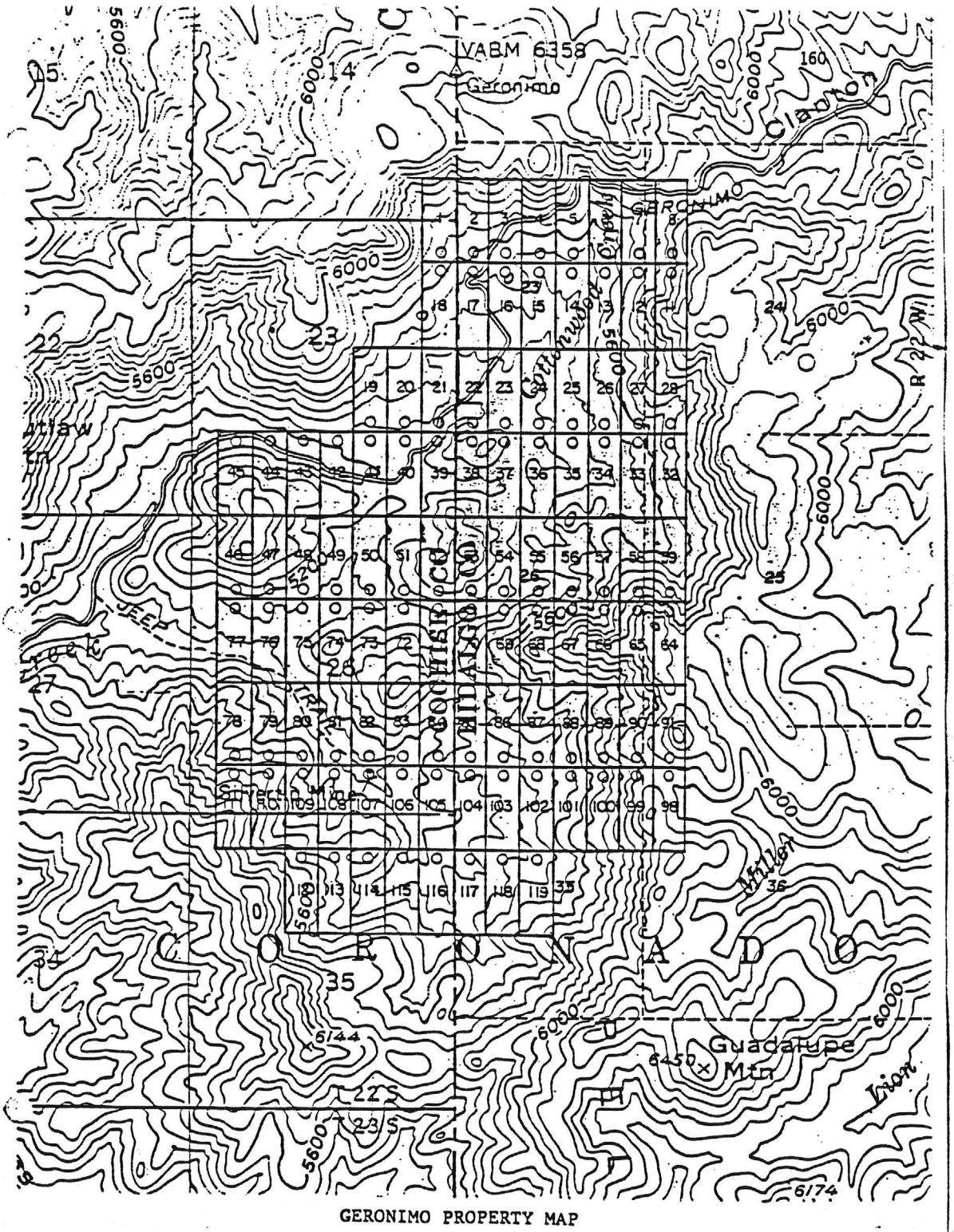


Figure 1

NEW MEXICO LOCATION MAP



GERONIMO PROPERTY MAP

Figure 2

HISTORY

Little is known about the past production from the area, but all indications suggest that it has been minor. The GER claims do not fall within a recognized mining camp, but the area has been referred to as the Silver Tip district by Elston and Erb (1979). Except for this brief note, and a similarly short description in Hayes and others (1982), the area has not been described in the literature. The earliest known mineral claims within the district date from the early 1930's. These claims were filed by Barnes and Holder; many of their claim monuments and locations are still visible on the property. It was probably during this period that limited mining was done on the Silver Tip vein (Plate I). The Silver Tip structure is a 1 to 10 foot thick silicified zone that follows a zone of rhyolite diking. No production records are available for this mine, but judging from the known extent of the workings, no more than two to three thousand tons were extracted. The grade of this "ore" is not known, but the values were principally in silver. Silver occurs as a bromide mineral. The low grade material in waste piles and on the surface peripheral to stopes runs 1 to 4 opt silver; production probably averaged closer to 10 opt silver and may have been shipped to Douglas or Bisbee as smelter flux. The area has seen little activity since the 1930's, and was completely open for minerals location when NICOR acquired the area in 1983.

GEOLOGY

The Peloncillo Mountains, in which the Geronimo claims lie, were probably elevated to their present topographic position by mid- to late Tertiary basin and range faulting. The region is characterized by extensive accumulations of Oligocene to Miocene age silicic volcanic and volcaniclastic rocks. Deal and others (1978) and Erb (1979) suggest that a large volcanic cauldron was centered within or near the area. The Baker Canyon fault, six miles southwest of the claimblock, is believed to be part of the ring fracture system for this cauldron. Elston and Erb (1979) have referred to this volcanic edifice as the Geronimo Trail Cauldron, and suggest that it is of late Oligiocene age.

The Geronimo Trail Cauldron is part of a regional cluster of mid-Tertiary calderas that covers most of southwestern New Mexico and southeastern Arizona. This volcanic field is comparable in size to the San Juan and Mogollon fields of Colorado and New Mexico, but is not as deeply dissected. The Geronimo Trail Cauldron is noteworthy in that it is exposed at a very shallow structural level (<200 m).

Rhyolite tuff is the dominant rock type within the GER Prospect area, whereas elsewhere in the southern Peloncillos silicic flows are more prevalent. Rhyolite tuff and rhyolite flow breccias (Hog Canyon Breccia of Erb, 1979) form the basal part of the

volcanic sequence within the region immediately adjacent to the GER property.

The Hog Canyon Breccia is overlain by a series of dacitic to quartz latitic lavas and tuffs, volcanic breccias and epiclastic rocks. These upper volcanics are Oligocene to Miocene in age. Small remnants of Plio-Pleistocene olivine basalt and basaltic andesite cap some of the higher hills within the region.

The pre-volcanic rocks in the southern Peloncillo Mountains are generally composed of Paleozoic or Mesozoic carbonate rocks that have been variably shattered and baked by the superjacent volcanism. Within the claimblock area, limestone conglomerates of probable Cretaceous age (Hell to Finish Ls.) constitute the only exposures of pre-volcanic rocks.

Local Stratigraphy

The following lithologies were recognized and mapped within the GER claimblock. The rock names used herein are descriptive and do not take mesostasis chemistry and mineralogy into consideration. Most of the volcanic units mapped encompass a wide range of textures and mineralogy, but were distinctive enough to map as continuous units. Complex interfingering of units was observed in many areas, and many of the units appear to have been deposited on highly irregular topographic surfaces. The following stratigraphy is therefore tentative, but is applicable in

most areas. The overall geology is shown on Plate I with the indicated cross sections presented on Plate II.

Ls

Scattered outcrops of white to bluish grey micritic limestone conglomerate are exposed in the west central part of the prospect. The clasts are sub- to well-rounded, vary from 1 cm to 20 cm in size, and are typically grain supported. The matrix, where unsilicified consists of uniform fine-grained grey micrite. Many exposures of this unit are either silicified or mildly argillized. Recrystalization of the matrix micrite is common.

The limestone is exposed in an E-W trending zone of discontinuous outcrops. The pattern may represent a prevolcanic topographic ridge exposed beneath a thin volcanic cover. The ridge trends into the area of nested intrusive domes and is probably less than 100 m below the surface at the area of intersection. Blocks of highly silicified grey limestone(?) have weathered out of the intrusive complex in the area of intersection, and may represent inclusions of silicified carbonates.

The age of the limestone conglomerates has not been fixed. It is probably the Hell to Finish Ls of lower Cretaceous age, which is distinctly conglomeratic and is widely exposed in southwestern New Mexico.

Tab

The oldest volcanic rock type exposed in the map area is dark green to grey andesite breccia. The rock has an aphanitic ground mass with 15 to 20% felted plagioclase phenocrysts. The unit is generally chloritized and appears to be a flow breccia. Exposures of Tab are limited to canyon bottoms in the central part of the map area. The rock is unconformably overlain by tuff and rhyolite flow breccia, and has been intruded by rhyolite east of the Silver Tip mine.

Trt

Unit Trt is a white to buff colored rhyolite crystal tuff with less than 10% quartz and biotite phenocrysts. Unit Trt displays a wide range of textures, but is generally platy and friable in outcrop. The rock locally appears to contain silty horizons, and may have been partially deposited in water. Interbeds of sedimentary rocks are particularly prominant to the northwest of the prospect area, where opalized lake beds appear to interfinger with Trt. Lenses and discontinuous layers of densely welded tuff of similar compositon also occur within the platy rhyolite tuff. Surface oxidation and argillic alteration have locally affected biotite phenocrysts and resulted in a characteristic iron staining along layering.

Trb

Reddish to purple rhyolite(?) breccia and interlayered purple tuff breccia and tuff are widely exposed within the western half of the prospect. Most of the phenocrysts in these rocks are composed of angular quartz and K-feldspars with lesser biotite. The rock displays a complex interfingering of numerous textural varieties and is generally more tuffaceous towards the northwest part of the prospect. Trb appears to conformably overlie Trt in the central part of the prospect, but intertongues with Trt on a large scale to the west and north. This unit may be correlative with the Hog Canyon Breccia (27.1 m.y.) of Erb (1979), but may also be derived locally. The Hog Canyon Breccia (Tb) occurs on the extreme north end of the map area, along the Clanton Draw road. More detailed work is needed to determine this unit's statigraphic relationships to the Hog Canyon and other rock units in the area.

Tir

Unit Tir is composed of pink to purplish grey quartz biotite rhyolite. The rock is best exposed in the northern half of the prospect. Unit Tir contains rounded quartz phenocrysts, and varies from dense to platy in outcrop. This rhyolite is compositionally very similar to associated intrusive varieties (see below: unit Tri). The rhyolite has been arched and intruded by a younger dome (Tri) near the center of the prospect (Plate I), and

by dikes of the same composition elsewhere. Many exposures of Tir define foliation arches and could represent slowly extruded exogeneous domes.

Tri

Unit Tri composed of pink to purple quartz biotite rhyolite with locally abundant rounded quartz phenocrysts. The rock is highly pyritized (1-4% av; locally 10%) and argillically altered and intrudes both itself and older rocks. Intrusive domes of Tri have arched the volcanic section and resulted in a north trending group of five nested bodies (Plate IA). A large swarm of Tri dikes intrude the domes and older volcanics in a north trending zone that runs the entire length of the map area. Dikes of Tri also outline a circular zone of intense alteration and downfaulting of unit Trt into the hood zone of a Tri dome (Plate I, II). Both domes and dikes display local evidence of fluidization. Rounded inclusions of altered Trt and less commonly units Tab and Trb are found within the rhyolite. These inclusions are typically mantled by thin crusts of pyrite with lesser quartz, giving the unit a characteristic knobby outcrop pattern. Local thin zones of brecciation are seen along the margins of domes and dikes; these zones are typically cemented by very fine-grained pyrite and silica.

Ta

A few exposures of dark grey platy andesite to basaltic andesite are seen directly overlying units Tir and Tri. This rock is generally aphanitic to subporphyritic and contains abundant plagioclase laths and dark glassy inclusions (<1 cm). The zone is always less than 20 m thick and appears to grade upwards into dacitic flows (see below). Where Ta overlies Tir or Tri, it is generally fresh appearing and unaltered. Within the area of nested Tri domes, however, Ta exposures are arched and tilted and locally appear to have been truncated by the intrusive.

Td

Unit Td appears to be transitional with the underlying platy andesite. It is characterized by thick massive exposures rimming the basin in which the prospect lies. The unit is composed of reddish purple aphanitic flows of dacite(?) with large (up to 1 cm) ragged pink phenocrysts of K-feldspar.

Qc

This unit consists of recent colluvium.

STRUCTURE

Because of the massive character and altered condition of many of the map units, structures were difficult to map in the field. Units Trt and Ta provided most of the bedding altitudes,

whereas dikes and domes showed flow foliations near their margins and provided information on the geometries and orientations of the various intrusives. Many outcrops were severely altered and provided only generalized information. Most of the intrusive domes and dikes show a strong northeast orientation. Further, most dikes dip west and appear to define a graben that has localized the emplacement of the domes. Some dikes also outline the margins of individual domes. Rhyolite diking, silicification and veining occurs along the western edge of the graben zone, and has an overall N20E, 70 to 90 W orientation.

A large arcuate high angle fault trends N40 E across the western part of the map and intersects the graben structure on the north edge of the property. This fault could represent the ring fracture zone of the Geronimo Trail Cauldron. At the area of intersection of these two trends, a fissure vein occurs within the graben. This structure is three to eight feet wide and can be followed for over 1500 feet to the south. The vein trends N20 E and dips steeply to the west. The Silver Tip vein structure follows the same trend, but occurs within a circular zone of intrusion that probably represents an underlying dome complex. The Silver Tip vein is one to ten feet wide and can be traced for a little over 500 feet along strike.

ALTERATION

Alteration within the GER claimblock is widespread. It varies from mild argillic in fringe areas to advanced argillic in the ring-like zone of diking and collapse shown on cross section B-B' (Plate II). Alteration is strongly controlled by proximity to rhyolite dome structures and diking. Mild argillic alteration is characterized by the development of white clays in the matrix of the host rock. There is incipient to marked destruction of biotite phenocrysts, but some biotite is always recognizable. Fractures and surfaces within mildly altered areas are generally coated with iron and/or manganese oxides.

Moderate argillic alteration is defined by the development of clays and/or sericite after phenocysts of plagioclase and K-spar. Biotites are skelital and outlined by ferrunginous ghosts. The matrix in this style of alteration contains abundant clays and iron oxides. Most of the iron appears to be derived from the oxidation of biotite and small amounts of pyrite (less than 1%). Disseminated pyrite and secondary jarosite are locally important parts of the alteration assemblage.

Advanced argillic alteration is very localized. It occurs in close proximity to many of the domes and dikes of intrusive rhyolite. Advanced stages of alteration are characterized by an

abundance of sericite, clays, iron oxides and pyrite (1-5%). All phenocrysts of biotite and plagioclase are destroyed or replaced entirely by sericite. Most K-feldspars are ragged and are partly to completely sericitized. Alunite may be present in some of the highly altered patches along dikes and dome margins, but was not positively identified., Secondary(?) anhydrite and gypsum are common in rock fractures, soils and drainages within advanced argillic areas; some of the sulfates may be of hypogene origin.

MINERALIZATION

The mineralization on the Geronimo prospect is characterized by high angle silicified dikes and fault structures. These zones are 1 to 20 feet wide, highly pyritic, and can be traced on the surface for up to 1500 feet. Numerous silicified veins and dikes were mapped throughout the prospect area. The most highly mineralized structures appear to be along the northwest flank of the intrusive complex. There are three areas of mineralization along this trend. A three to eight foot wide silicified zone, hereafter referred to as the Rhyolite vein, occurs at the north end of the main mineralized zone. The vein is composed of silicified rhyolite with numerous crosscutting quartz veinlets. Pyrite is abundant within the structure (up to 10%) and a prominant zone of advanced argillic alteration occurs along the vein's east side.

In the middle part of the area is a prospect with disseminated galena and pyrite in an altered rhyolitic dike (the Galena Pit). The dike occurs along the same trend as the Rhyolite vein, and is partially silicified along the margins. Sulfides occur disseminated within an eight foot zone against the dike's hangingwall. The third mineralized area is at the Silver Tip Mine. This vein is one to ten feet in width and consists of silicified and brecciated rhyolite. The host may be a thin rhyolitic dike. The vein is vuggy, moderately pyritic (up to 5%) and is composed of

two splays less than 500 feet long. Silver metalization is associated with a bromide mineral (bromargyrite) that was identified in polished section.

GEOCHEMISTRY

A recent study by the USGS indicated the presence of anomalous lead, zinc, barium and fluorine in stream sediments and seepages within the claim area (Watts and others, 1983). The results of surface sampling by NICOR are summarized in Table 1. Rock chip sampling indicated low (<.07 ppm Au, <1.0 ppm Ag) precious metal values in altered rocks, but sporadic base metals and mercury (0.03 to 2.8 ppm).

Most of the gold-bearing altered rocks are in the area of the Rhyolite vein. This structure is locally anomalous in gold (0.01 to 0.07 ppm Au) and mercury (0.15 to 1.2 ppm Hg); work done by Superior indicates that altered tuff adjacent to the structure is also anomalous in Hg and Au (0.01 ppm+ Au, 1.0 ppm+ Hg).

Base metal anomalies were noted along the dike exposed at the Galena pit. Lead and zinc in this structure are in excess of 0.1% combined with up to 73 ppm silver and 0.05 ppm gold (K738, K812, F958). The Silver Tip structure shows 0.21 to 0.62 ppm gold and 3.1 to 8.5 ppm silver (G555, G556, K263, K264) within the vein. Low levels of gold (<0.03 ppm) were also noted in adjacent altered tuff (K266). One sample of opalized lake bed sediments (K689) was collected from just northwest of the map area. This sample returned 0.04 ppm gold, 1.7 ppm silver and 190 ppm arsenic. This was the highest arsenic value on the

property. Arsenic and antimony values were typically less than 20 ppm and 8 ppm respectively throughout most of the prospect. A sample from the Galena Pit structure, however, ran 40 ppm arsenic and 200 ppm antimony.

TABLE 1. ASSAYS

	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Sb (ppm)	As (ppm)	Hg (ppm)	Description
K263	0.62	8.5	-	-	-	-	-	-	Alt'd rhy dike - Silver Tip
K264	0.21	3.8	-	-	-	-	-	-	Upper shaft dump - Silver Tip
K265	0.10	0.7	-	-	75	<2	<10	0.03	6' chip - Silver Tip portal
K266	0.03	0.2	-	-	-	-	-	-	6' chip - alt'd volc ash
K267	<.03	0.4	-	-	-	-	-	-	6` chip - alt'd volc ash
K268	<.03	0.5	-	-	-	-	-	-	8' chip - alt'd volc ash
K269	0.03	0.2	-	-	-	-	-	-	8' chip - alt'd Rhy.
K270	<0.3	0.3	-	-	-	-	-	-	silic Rhy.
K617		-	-	-	-	-	-	-	10' chip - Silic. Rhy (Map?)
K618	<.01	0.2	-	-	-	-	-	-	adit dump - silic, Rhy vein
K619	0.05	<.1	-	-	-	-	-	-	adit dump - silic, Rhy vein
K620	<.01	<.1	-	-	-	-	-	-	Alt'd Rhy - Shaft, Rhy vein
K621	<.01	<.1	-	-	-	-	-	-	Alt'd Rhy intrusive
K622	0.03	<.1	-	-	-	-	-	-	Alt'd Rhy; abund opaline veinlets
K623	<.01	<.1	-	-	-	-	-	-	Silic Rhy; Rhy vein

Table 1. Assays (Continued)

	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Sb (ppm)	As (ppm)	Hg (ppm)	Description
K624	0.07	<.1	-	-	-	-	-	-	Silic adjacent Tuff; Rhy vein
K625	<.01	0.2	-	-	-	-	-	-	Silic adjacent Tuff; Rhy vein
K684	.01	<.1	-	-	-	<2	<10	1.20	Silic Rhy; Rhy vein
K685	.03	0.7	-	-	75	<2	<10	0.15	Silic Rhy; Rhy vein
K686	.02	0.5	-	-	-	<2	<10	0.07	8' chip - Silic Rhy
K687	.02	0.3	-	-	-	<2	<10	0.03	50' chip - highly argillized tuff
K688	.02	0.2	-	-	-	<2	<10	0.05	15' chip - argill; silic Rhy intrusive
K689	.04	1.7	-	-	-	<2	190	0.04	Opal bearing lake beds
K736	<.01	<.1	-	-	-	<2	<10	0.08	10' chip - Rhy alt'd dike
K737	<.01	<.1	-	-	-	<2	<10	0.09	10' chip - Rhy alt'd dike
K738	0.05	73	-	-	1350	200	40	1.8	8' chip - Galena Pit area hangingwall
K739	<.01	0.30	-	-	-	6	<10	0.5	Ls.
K740	<.01	0.35	-	-	20	<2	<10	0.44	10' chip - Alt'd Rhy dike
K741	<.01	2.2	-	-	-	8	<10	0.19	10' chip - Alt'd Rhy dike
K742	<.01	2.1	-	-	-	<2	<10	0.03	8' chip - Silic Ls.
K743	<.01	1.1	-	-	-	<2	30	0.06	Alt'd Ls silic & argill.

Table 1. Assays (Continued)

	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Sb (ppm)	As (ppm)	Hg (ppm)	Description
K811	<.01	<.1	-	-	-	-	-	-	py Rhy/vein material
K812	.06	24	-	-	-	-	-	-	5' chip in Galena Pit
G551	0.03	0.83	-	-	-	<2	<10	0.19	Alt'd & silic Rhy
G552	<.01	0.30	-	-	-	<2	<10	0.19	Alt'd & silic w/Qtz-Py veining
G553	<.01	0.17	-	-	-	<2	<10	0.38	Altered Rhy.
G554	0.02	0.23	-	-	-	<2	<10	0.04	Silver Tip: 14' chip across Portal
G555	0.44	3.1	-	-	-	6	20	0.13	Silver Tip; Qtz from dump
G556	0.54	4.3	-	-	20	6	20	2.4	Silver Tip vein
F494	<.01	0.1	45	7	8	-	-	-	Qtz-py cemented Rhy breccia
F495	<.01	0.1	50	5	6	-	-	-	Qtz-py cemented Rhy breccia
F496	<.01	0.1	80	15	8	-	-	-	Silic. Rhy/vein - pyritic
F497	<.01	0.1	65	5	6	-	-	-	Pyritic fluidized Rhy dike
F498	<.01	0.3	18	10	5	-	-	-	Silicified Rhy?/Ls?
F451	.05	0.4	60	5	30	-	-	-	Vein structures in Rhy
F952	<.01	0.2	35	7	8	-	-	-	Silic Rhy/vein
F953	<.01	0.2	52	15	13	-	-	-	Silicified Dacite(?)
F954	<.01	0.1	23	12	7	-	-	-	Vein along Rhy dike

Table 1. Assays (Continued)

	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Sb (ppm)	As (ppm)	Hg (ppm)	Description
F955	<.01	0.3	58	3	8	-	-	-	Vein along Rhy dike
F956	<.01	0.3	8	6	22	-	-	-	Adv. argill alt. Tuff
F957	<.01	0.1	26	6	11	-	-	-	Silic. zone in Rhy intrusive
F958	<.01	1.0	225	490	32	-	-	-	Altered dike above Galena pit
F959	<.01	0.1	20	9	15	-	-	-	Altered dike wall rocks

COSTS

The following is a summary of the costs on the Geronimo project to date:

50 man days @ $231.8/day	=	$11,574.04
108 lode claims @ $83.00/claim	=	$ 8,963.70
54 assays	=	$ 1,409.86
Legal survey	=	$ 151.00
Total		$22,098.60

ACKNOWLEDGEMENTS

Much of the work done on the Geronimo prospect was done prior to the Authors involvement in the project. I would like to acknowledge W.S. Dubyk of the Tucson office whose preliminary work on the area outlined the major units present and the structural controls on intrusion and mineralization. I would also like to acknowledge N.A. Archibald, who helped map and sample the area. Thanks also to Ms. Pat Palmer for the typing and Ms. Beverly Morgan for drafting the plates.

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(602) 622-4836

REPORT OF ANALYSIS

JOB NO. UGH 045
March 22, 1985
PROJECT NO. E 01017
21963 TO 22091

NICOR MINERAL VENTURES
Attn: Mr. Karl M. Emanuel
2341 So. Friebus, Suite 12
Tucson, Arizona 85713

Analysis of 13 Pulp Samples

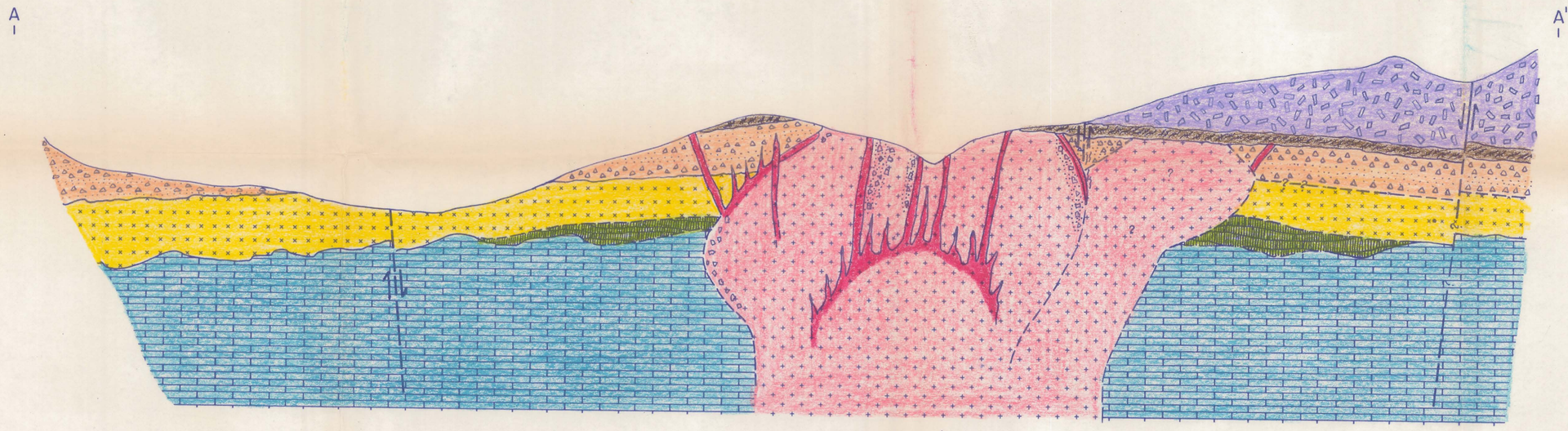
ITEM	SAMPLE NUMBER	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	Hg (ppm)
1	21963	5.	10.	90.	<2.	.04
2	21964	<5.	5.	35.	<2.	.17
3	21965	5.	15.	70.	2.	1.60
4	21965-A	5.	10.	80.	2.	1.50
5	21966	5.	10.	30.	<2.	.47
6	21967	15.	5.	125.	2.	.06
7	22086	5.	5.	55.	<2.	.01
8	22087	190.	40.	90.	235.	.24
9	22087-A	165.	40.	85.	225.	.22
10	22088	10.	10.	65.	6.	.01
11	22089	10.	5.	60.	6.	.01
12	22090	5.	5.	55.	2.	<.01
13	22091	5.	5.	50.	<2.	<.01

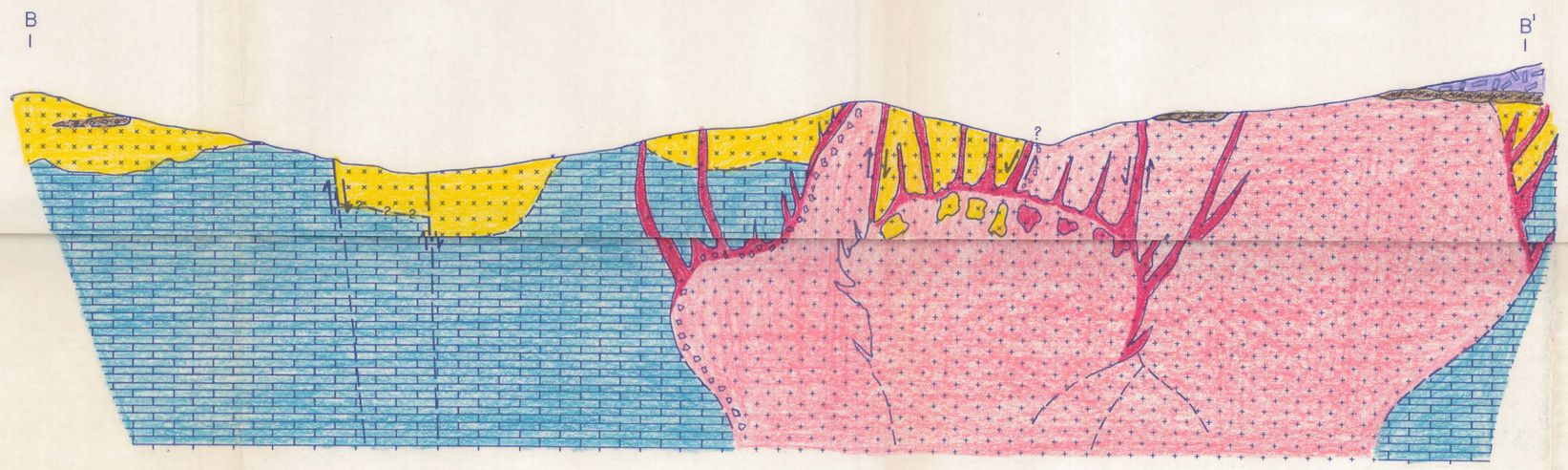
Ger-3 310

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122





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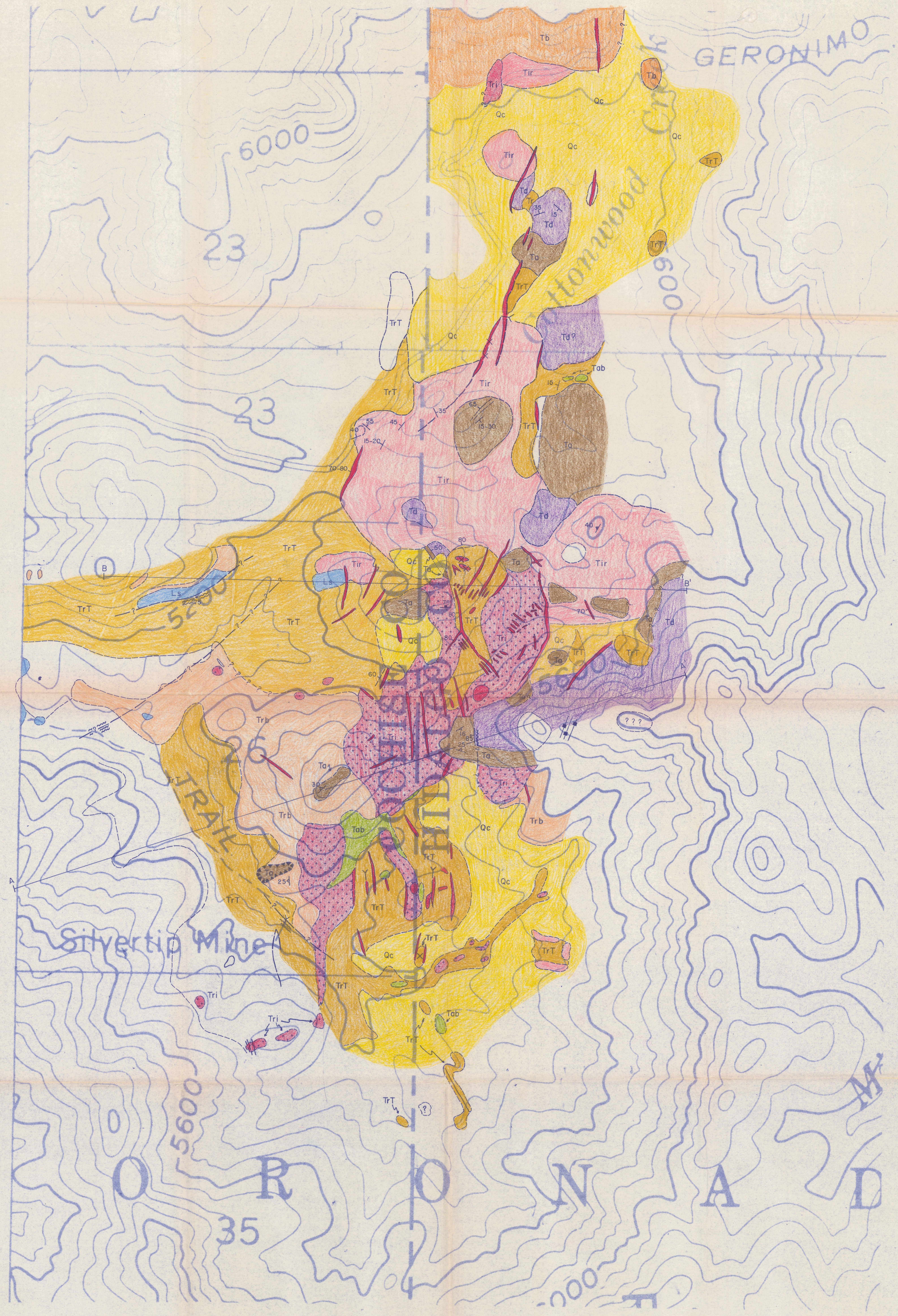
GERONIMO PROJECT;
PLATE II; CROSS SECTIONS
A-A' AND B-B'

SCALE 1"= 500'	DRAWN B. Morgan	DATE 12/4/84

EXPLANATION

- POLYPHASE RHYOLITIC INTRUSIVE COMPLEX
- DACITIC FLOWS AND ASHFLOWS
- ANDESITE FLOWS
- RHYOLITIC FLOW BRECCIAS
- RHYOLITIC TUFF
- ANDESITIC TO DACITIC FLOW BRECCIA
- MICRITIC LIMESTONE CONGLOMERATE
- BRECCIA
- SILICIC AND SOME PYRITIC ALTERATION



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GEOLOGIC MAP OF
THE GERONIMO J.V.

SCALE: 1" = 500'	DRAWN: B. Morgan	DATE: 12/28/84

EXPLANATION:

- Qc QUATERNARY COLLUVIUM
- Tri POLYPHASE RHYOLITIC INTRUSIVE COMPLEX
- Tir POSSIBLE FLOWS
- Td DACITE FLOWS & ASHFLOWS
- Ta ANDESITE FLOWS
- Trb RHYOLITIC FLOW BRECCIAS
- TrT RHYOLITIC TUFF
- Tab ANDESITIC TO DACITIC FLOW BRECCIA
- Tb TERTIARY RHYOLITE FLOW BRECCIA (HOG CANYON BRECCIA?)
- Ttb TUFFACEOUS RHYOLITE BRECCIA; INTERFINGERS WITH Tb
- Ls MICRITIC LIMESTONE CONGLOMERATE
- VEIN

N