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A RECONNAISSANCE GEOLOGIC EXAMINATION OF THE BIG BUCK,
EL TESORO, AND ENCANTO CLAIMS, HARSHAW MINING DISTRICT
SANTA CRUZ COUNTY, ARIZONA

by

Wm. Hovey Smith, Geologist

for

William and Beth Lane

April 1973
HEINRICHS GEOEXPLORATION COMPANY
Mineral Exploration Consultants and Contractors
P.O. Box 5964 Tucson, Arizona

GEOEX Job #810

A RECONNAISSANCE GEOLOGIC EXAMINATION OF THE BIG BUCK,
EL TESORO, AND ENCANTO CLAIMS, HARSHAW MINING DISTRICT
SANTA CRUZ COUNTY, ARIZONA

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A RECONNAISSANCE GEOLOGIC EXAMINATION OF THE BIG BUCK,
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INTRODUCTION

The 18 unpatented lode mining claims owned by William and Beth Lane and 11 unpatented lode mining claims owned by Mr. John Keck and optioned by the Lanes, were reconnaissance mapped and sampled at the request of Mr. and Mrs. Lane. Work began March 19 and was completed March 23, 1973. The purposes of this examination were to determine the general type and character of mineralization in order to guide further work, and to determine if these claims are potentially patentable.

CONCLUSIONS AND RECOMMENDATIONS

Indications of three types of copper mineralization were found on the claims. Vein, contact metamorphic, and disseminated porphyry mineralization exist or are potentially present. Exploration has been insufficient to determine if any occurrences have economic potential. There appears to be little or no lead-silver mineralization on these claims.

Patent considerations are covered in more detail in a separate report. Few if any of the claims appear definitely patentable at this time because of poor markings of claim boundaries and lack of sufficient exposures of mineralization. Except perhaps for the small pit on the southern portion of the leased claims, and the "Pyrite Adit", the strength of mineralization or mineral character, is in our opinion insufficient for purposes of patent. Depending on current patent examination practice and the individual examiner, it is conceivable that one or more claims could eventually be patented.

However, better quality discovery evidence is definitely recommended before risking the cost to patent. Such discovery evidence can best be obtained by technically supervised core drilling.

The most attractive exploration potential is for a concealed porphyry copper deposit. Strong pyritization of the intrusive may be part of a pyrite halo near a porphyry deposit. The presence of copper in the contact rocks and veins is a possible indication that the intrusive is copper-bearing. The aggregate 29 claims combined with open ground to the west cover enough property to make this area sufficiently large for porphyry investigation.

Exploration for a porphyry target should include induced polarization coverage to most efficiently delineate the sulfide zones, followed by deep drilling. Adequate geophysical coverage would cost approximately \$8,000.00. Total drilling expenses would depend on the number of holes and their depth. A minimum of two holes having a depth of 1,000 feet each are recommended. This would cost approximately \$25,000.00.

Such an exploration program would be best handled by an established mining or exploration company. We recommend that these claims be kept in good standing and that they be optioned to a company able to properly complete the needed exploration.

GEOLOGY

A medium grained altered granite porphyry is the dominant rock type in the study area (figure 1). This porphyry has intruded and metamorphosed

diorite and sediments south of the claims, and has been intruded by rhyolite in a small area near the corner of sections 25, 26, 35, and 36. Alteration of the porphyry has argillized the feldspars, destroyed the mafic minerals, and introduced pyrite in veinlets and disseminations. The unaltered rock probably consisted of predominantly potassic feldspar and quartz with less abundant plagioclase, and accessory biotite.

Vein Mineralization

Prominant shear zones cut the altered porphyry. The largest is located slightly east of the claims in the southwest corner of section 25. This zone has 10 feet of broken quartz and porphyry fragments with strong sericitic alteration. A vein has been explored by the "Pyrite Adit" on the Big Buck claims (figure 2), a heavily iron stained vein was found in the S. W. 1/4 of the S. E. 1/4 of section 26, and a sericitized shear zone found on Big Buck #2 claim.

The "Pyrite Adit" has one vein and two barren shear zones explored by approximately 650 feet of workings (figure 2). The principal vein, which is best exposed in the partly caved west lateral, consist of two feet of massive pyrite in the hanging wall and one foot of pyrite in the foot wall separated by clay gouge. Near the vein the wall rocks are argillized, but walls are silicified in another shear zone.

This adit was mapped because of possible similarities between it and the nearby Three R Mine. This mine produced significant copper from rich chalcocite ore shoots in northerly striking veins. Although the adit has similar mineralization and does contain chalcocite, sulfide bearing zones are thin and copper distribution is erratic (figure 2).

Table 1. "Pyrite Adit" samples

sample no.	analytical results		
	Au oz/ton	Ag oz/ton	Cu percent
2	Trace	0.05	Trace
3	0.005	0.15	0.05
4	0.005	0.20	0.14
5	Trace	0.05	0.11
6	Trace	0.05	0.02
7	Trace	0.05	Trace
8	0.01	0.25	2.11
9	0.01	0.10	0.08
10	0.02	0.35	4.95

Some copper in these samples is derived from chalcocite, but much is from secondary chalcantinite which encrusts portions of the vein. Copper content does not appear to be related to high pyrite content. Sample no. 9 from the thickest part of the vein contained only 0.08 percent copper in a sample with 90 percent pyrite; however, sample no. 10 reported 4.95 percent copper from a less pyrite rich part of the vein. This vein does not appear to contain significant gold or silver values.

The iron stained vein on Big Buck no. 1 was explored by a short adit and shallow pits. The iron staining was probably caused by oxidization of large amounts of pyrite. One assay sample taken from this adit contained a trace of gold and 0.03 percent copper (sample 38 Appendix).

A shear zone with strong sericitic alteration was tested by a short adit which is high on the hill-slope on Big Buck no. 2 claim. Despite the strong alteration, the adit dump contained only 0.02 percent copper (sample 17 Appendix).

Although small amounts of copper mineralization were found in the veins and shear zones on the property, they do not appear to offer much economic potential.

Contact Metamorphic Mineralization

The claims held under option from Mr. John Keck south of the Big Buck claims, have contact metamorphic copper mineralization which is best exposed on the hill near the center of section 35. Here, malachite and azurite are found in a small pit as surface pain on fractured hornfels. Most of this secondary copper is derived from chalcopyrite-bearing quartz veins. These veins are irregular, small, have strong sericitic alteration, and appear to be best developed in a dark hornfels. These veins do not start in the porphyry, but do extend through the hornfels; hence, their presumed contact metamorphic and/or pneumatolytic origin.

The western part of the hill is largely quartzite with a few similar mineralized zones near the quartzite-hornfels contact. Hornfels on the eastern portion of the hill contains more epidote closer to the porphyry and is apparently unmineralized. Mineralization appears to be confined to a relatively narrow belt of dark hornfels between the granite porphyry-hornfels contact to the east and the quartzite to the west.

Another block of hornfels is exposed to the north and is separated from the hill just described by granite porphyry. These rocks are similar except that quartzite is not present. A pit in the stream bed has exposed massive pyrite in dark hornfels. The walls of the pit were covered, and the relationships between the pyrite and hornfels was not observed. An "ore pile" containing approximately 60 percent pyrite was sampled, and although clumps of chalcopyrite and bornite were occasionally observed, the sample contained 0.12 percent copper (sample 6 Appendix).

Mineralization at both these localities appears to be of insufficient grade to be of economic importance; however, if a comprehensive exploration program is conducted, induced polarization and shallow drilling should be done to further evaluate this mineralization. To do this, three rotary drill holes could be drilled on the ridge near the present pit in the center of section 35. The first hole should be placed near the quartzite-hornfels the second near the pit, and the third in hornfels near the porphyry-hornfels contact. Three holes should also be drilled in the north area. The first should be placed on the ridge nose northeast of the pit in the stream bed, the second near the pit, and the third near the old shaft southeast of the pit. A depth of 200 feet for each of these holes should be sufficient. Rotary drilling cost would be approximately \$4.50/foot.

An older diorite was found partly assimilated into the porphyry on claims east of the optioned claims in the central portion of section 35. Traces of copper mineralization were found around old workings near the former cabin site. Scattered core from several boxes was found near the cabin's foundation. The deepest depth tab that was found indicated that the hole was drilled to a depth of at least 822 feet. A 15 pound sample was taken of the scattered unsplit core and analyzed. This sample contained 0.03 percent copper (sample 13 Appendix). Most of the core was altered pyritized granite porphyry, which probably contained about two percent pyrite as visually estimated.

Porphyry Potential

The widespread alteration and pyritization of the granite porphyry

and the presence of copper in vein deposits and contact rocks is tenuous evidence of a concealed porphyry copper deposit. As a further test of this possibility, a geochemical traverse was made over the central part of the Lane claims (sample 7 - 36 Appendix). Random chips were taken of exposed rock along a traverse approximately 200 feet long. These were composited into a single sample. The 19 samples contained an average of 58 ppm copper. This value is not high enough to indicate that chalcopyrite is associated with the abundant pyrite in the altered porphyry. Where small veins were included in the samples, values on the order of 100 ppm copper were reported.

Although no conclusive evidence of definite porphyry mineralization was obtained, its possible existence is suggested by the widespread alteration and pyritization. Further investigation based on porphyry possibilities appears to offer the best potential for economic mineral development on the properties as the known vein and contact metamorphic deposits are small and low grade.

REFERENCES

Schrader, Frank C., 1915, Mineral deposits of the Santa Rita and Patagonia Mountains Arizona: U. S. Geological Survey Bulletin 582, 373 p.

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APPENDIX

Sample Data Sheets

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JOB NUMBER: 810
 AREA: Lane Claims
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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 19, 1973	1	Float	Au= Trace Cu=0.01 (118ppm)	Geology & Sample Location	SW 1/4, NW 1/4 Section 25 T22S, R15E	Altered and iron stained granite rubble collected for 100' in saddle. A N.76°E. 6" silicified zone strikes through saddle. (Small geochem. sample)
March 20, 1973	2	Rock Chip	Au= Trace Ag=0.05 Cu=Trace	Adit Map	NW 1/4, SW 1/4 Section 25 T22S, R15E	Altered granite porphyry from 3' wide section of walls and roof 50' from portal.
"	3	"	Au=0.005 Ag=0.15 Cu=0.05	"	"	Altered granite porphyry cut for 10' from wall opposite shaft.
"	4	"	Au=0.005 Ag=0.20 Cu=0.14	"	"	Altered granite porphyry with numerous small quartz-pyrite veinlets which have chalcalthite on adit walls.
"	5	"	Au= Trace Ag=0.05 Cu=0.11	"	"	Two foot chip sample from roof. Pyrite in irregular masses with moderate chalcalthite staining along pyrite veinlets.
"	6	"	Au= Trace Ag=0.05 Cu=0.02	"	"	Six foot sample cut along wall of shear zone which adit parallels. Silicified granite porphyry occasional pyrite crystals.
"	7	"	Au= Trace Ag=0.05 Cu= Trace	"	"	From back at end of east lateral. Silicified granite porphyry enclosing pyrite-bearing vein. Striking N53°W dipping 50°N. About 0.5% pyrite in sample.
"	8	"	Au=0.01 Ag=0.25 Cu=2.11	"	"	From roof of E. lateral 4" heavily chalcalthite encrusted pyrite vein. Vein is crushed with few small euhedral crystals. Sample contains about 60% pyrite.

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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 20, 1973	9	Rock Chip	Au=0.01 Ag=0.10 Cu=0.08	Adit Map	NW 1/4, SW 1/4 Section 25 T22S, R15E	West lateral: irregular bands of pyrite - a 6" band on hanging wall and a 3' band on foot-wall separated by clay gouge. Pyrite is ground by fault movement. High grade sample is approximately 90% pyrite.
"	9 cont.					
"	10	"	Au=0.02 Ag=0.35 Cu=4.95	"	"	Walls and roof east of pit in floor of west lateral. Band of pyrite tapering from 1' to 2". Exposure chalconthite covered.
March 21, 1973	11	"	Au=0.005 Ag=0.20 Cu=0.42	Geology & Sample Location	NW 1/4, SE 1/4 Section 35 T22S, R15E	Malachite and azurite stained hornfels in and near pit on hill top N.E. of cabin. Some malachite and less common azurite on fracture surfaces in hornfels with strong sericitically altered areas.
"	12	"	Au=0.02 Ag=1.65 Cu=4.35	"	"	Ore pile from above. Quartz (minor) veins and veinlets with abundant sericite on vein walls. Specularite and epidote were identified in veins with some chalcopyrite. Estimated copper content 3%.
"	13	"	Au= Trace Ag=0.15 Cu=0.03	"	NE 1/4, SW 1/4 Section 35 T22S, R15E	Scattered core in fresh dozer cut near hill top. Probably site of cabin shown on topographic map. Core is of granite porphyry with common veinlets and disseminations of pyrite and less abundant chalcopyrite. Core appeared to be of a single hole at least 822' deep. Core was not split.
"	13 Cont.					
"	14	Dump	Ag= Trace Cu=0.05 (540 ppm)	Geology & Sample Location	NW 1/4, NE 1/4 Section 35 T22S, R15E	Dump of small adit with an estimated length of 20'. Argillic alteration trending N5°E. No quartz observed, but small quantity pyrite seen on dump. (Small geochem. sample)

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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 21, 1973	15	Dump	Au=0.005 Ag=0.25 Cu=0.02	Geology & Sample Location	NW 1/4, NE 1/4 Section 35 T22S, R15E	Collapsed N30°E trending adit which is collared in hornfels and probably ends in altered granite porphyry. No copper staining seen on dump.
"	16	"	Au= Trace Ag=0.15 Cu=0.12	"	NE 1/4, NW 1/4 Section 35 T22S, R15E	"Ore piles" near stream. Hornfels highly impregnated with pyrite and including dark green chlorite. Occasional malachite staining. Chalcopyrite and less common bornite observed
	16 Cont.					in masses to 1/2". Estimated copper content 1.0% or less.
March 22, 1973	17	"	Au=0.005 Ag=0.20 Cu=0.02	"	SE 1/4, SE 1/4 Section 26 T22S, R15E	S41°E trending adit driven into highly sericitically altered granite porphyry. Light malachite staining near portal with heavily limonite stained fractures.
"	18	Rock Chip	Ag= Trace Cu=0.01 (88ppm)	Geology & Sample Location	NW 1/4, SW 1/4 Section 25 T22S, R15E	Approximately 300' long rock chip sample of granite porphyry which is iron stained along fractures. (Small geochem. sample)
"	19	"	Ag= Trace Cu=0.01 (69ppm)	"	"	Approximately 200' long rock chip sample of granite, feldspars weathered to clay some heavily iron stained quartz veins. (Small geochem. sample)
"	20	"	Ag= Trace Cu=0.01 (90ppm)	"	"	Approximately 350' long rock chip sample of granite, description as in #18. (Small geochem. sample)
"	21	"	Ag= Trace Cu=0.01 (74ppm)	"	SW 1/4, SW 1/4 Section 25 T22S, R15E	Approximately 200' long rock chip sample of granite, description as in #18. (Small geochem. sample)

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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 22, 1973	22	Rock Chip	Ag= Trace Cu=0.01 (68ppm)	Geology & Sample Location	SW 1/4, SW 1/4 Section 25 T22S, R15E	Approximately 200' long rock chip sample of granite, description as in #18. (Small geochem. sample)
"	23	"	Ag= Trace Cu=0.01 (57ppm)	"	"	Approximately 200' long rock chip sample of granite, some strongly veined material outcropping 20'-60' wide in bedding-like ledges up-down slope. (Small geochem. sample)
"	24	"	Ag= Trace Cu=0.01 (58ppm)	"	"	Approximately 200' long rock chip sample of granite, quartz veins prominent, highly weathered feldspars give spongy appearance abundant iron staining. (Small geochem. sample)
"	25	"	Ag= Trace Cu=0.01 (51ppm)	"	"	Approximately 200' long rock chip sample of granite, strong outcrop, description same as #24. (Small geochem. sample)
"	26	"	Ag= Trace Cu= Trace (45ppm)	"	"	Approximately 100' long rock chip sample of granite, description as in #24, outcrop forms cliffs within 200' of top of ridge on N.E. wall of Kane Canyon. (Small geochem. sample)
"	27	"	Ag= Trace Cu= Trace (46ppm)	"	SE 1/4, SE 1/4 Section 26, T22S, R15E	Approximately 100' long rock chip sample, fine grained, light gray igneous rock with quartz and feldspar, fine grained groundmass apparently few mafic minerals present. Weathers to craggy, coarse, mottled tan-brown with sharp angular fracture patterns on surface. (Small geochem. sample)
"	27 Cont.					
"	28	"	Ag= Trace Cu=0.01 (53ppm)	"	"	Approximately 300' long rock chip sample, description as in #27, but more feldspar present until finally in contact with granite. Contact diffuse and pieces of granite are included in the other rock. (Small geochem. sample)

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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 22, 1973	29	Rock Chip	Ag= Trace Cu=0.01 (61ppm)	Geology & Sample Location	SE 1/4, SE 1/4 Section 26 T22S, R15E	Approximately 250' long rock chip sample of granite description as in #18. (Small geochem. sample)
"	30	"	Ag= Trace Cu= Trace (46ppm)	"	"	Approximately 250' long rock chip sample of granite description as in #18. (Small geochem. sample)
"	31	"	Ag= Trace Cu= Trace (46ppm)	"	"	Approximately 200' long rock chip sample of granite, description as in #18. (Small geochem. sample)
"	32	"	Ag= Trace Cu= Trace (46ppm)	"	"	Approximately 200' long rock chip sample of granite, description as in #18. (Small geochem. sample)
"	33	"	Ag= Trace Cu= Trace (46ppm)	"	SW 1/4, SE 1/4 Section 26 T22S, R15E	Approximately 250' long rock chip (with some float) sample of granite as in #18, with a 20' wide strong silicified breccia vein, vuggy with very strong iron stains and apparent mineralization, outcropping (Small geochem. sample)
"	34	Rock Chip and Float	Ag= Trace Cu= Trace (48ppm)	"	"	Approximately 250' long float and rock chip sample of granite as in #18, with some brecciated vein material. (Small geochem. sample)
"	35	Float	Ag= Trace Cu=0.01 (54ppm)	"	"	Approximately 300' long sample of float and alluvium. (Small geochem. sample)
"	36	Float	Ag= Trace Cu=0.01 (54ppm)	"	"	Approximately 300' long sample of float and alluvium. (Small geochem. sample)

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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 22, 1973	37	Rock Chip	Ag= Trace Cu=0.01 (63ppm)	Geology & Sample Location	SW 1/4, NW 1/4 Section 25 T22S, R15E	In stream valley. Much shearing in a N10°E direction with heavy hematite staining. Common pyrite casts in rocks.
"	38	"	Au=Trace Ag=0.10 Cu=0.03	"	SW 1/4, SE 1/4 Section 26 T22S, R15W	N68°W trending adit 137' long. Driven to explore prominent iron stained vein outcrop. End of adit is in altered granite porphyry. Sample taken of heavily iron stained brecciated zone
"	38 Cont.	"				25' from back of adit. Walls and roof sampled over 6'.
"	39	Dump	Ag= Trace Cu=0.01 (56ppm)	"	"	Dump from pit 14' deep exposing vein sampled in previous sample. Pit is on vein below road. Highly altered granite porphyry in walls of 6' to 12' wide vein. (Small geochem. sample)
"	40	Float	Ag= Trace Cu=0.02 (166ppm)	"	"	Manganese stained alluvium over granite porphyry. (Small geochem. sample)
"	41	Dump	Ag= Trace Cu=0.01 (51ppm)	"	"	Dump in pit 5x4x7 feet in heavily iron stained and cemented alluvium. Probably a transported gossan from vein at (39) but there may be a local source. (Small geochem. sample)
"	42	Float	Ag= Trace Cu= Trace (43ppm)	"	SW 1/4, NE 1/4 Section 26 T22S, R15E	Surface rubble of granite porphyry exposure in pediment. Some veining in exposure. (Small geochem. sample)
"	43	Dump	Ag= Trace Cu=0.01 (61ppm)	"	NE 1/4, SW 1/4 Section 35 T22S, R15E	Adit in quartzite exposing few small veinlets and pluton dikelets. Adit about 25' long.

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Heinrichs GEOEXploration Company, a company incorporated under the laws of Arizona with home office in Tucson, was engaged by William and Beth Lane to perform the following work on the claims listed below in the Harshaw Mining District:

1. Reconnaissance map, on a scale of 1 inch to 1000 feet, the geology of the Big Buck 1, 2, 3, 4, 5, and 6; Encanto 1, 2, 3, and 4; and El Tesoro 1, 2, 3, 4, 5, 6, 9, and 10 claims. This mapping to include such nearby areas as to facilitate geologic interpretation (figure 1).
2. To map and sample the principal underground workings on the Big Buck no. 3 claim (figure 2).

Location of this work with respect to the points of discovery and boundaries of the respective claims is indicated on the maps from survey data supplied by the claim holders and from topography and land control information given on published governmental sources on the area.

The work was done by Wm. Hovey Smith, a graduate professional geologist (B. S. University of Georgia 1963, M. S. University of Alaska 1970), under the direction of Walter E. Heinrichs, Jr., Registered Professional Engineer with over thirty years experience. Field work was started March 19, 1973, and completed March 23, 1973. The total cost of this examination specifically expended on the above mentioned claims was not less than \$1,800.00.

The purpose of this initial geological examination was to determine the character and type of mineralization in order to guide further work.

GEOLOGY

The dominant rock type is a medium grained altered granite porphyry (figure 1). This porphyry has intruded and metamorphosed diorite and sediments south of the claims, and has been intruded by rhyolite in a

Report of Geological Survey

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small area at the corner of sections 25, 26, 35, and 36. Alteration of the porphyry has argillized the feldspars, destroyed the mafic minerals, and introduced pyrite in veinlets and disseminations. The unaltered rock probably originally consisted of predominantly potassic feldspar and quartz with less abundant plagioclase, and accessory biotite.

Prominent shear zones cut the altered porphyry. The largest is located slightly east of the claims in the southwest corner of section 25 and consists of quartz and sericitized porphyry fragments. A vein which is explored by an old adit ("Pyrite Adit" figure 2) was mapped. This adit has approximately 650 feet of workings on a single level. One vein and two barren shear zones were explored. The principal vein in the west lateral contains two feet of massive pyrite in the hanging wall and one foot of pyrite along the foot wall separated by clay gouge. The wall rocks are argillized. Other shear zones exposed by the workings contain no mineralization.

SAMPLING AND ANALYSIS

A total of 43 samples were taken; 16 were 15 pound samples analyzed for gold, silver, and copper by Jacobs Assay Office (Registered Assayer Tucson, Arizona); and the remainder were two pound geochemical samples analyzed for silver and copper.

Nine samples were taken from the "Pyrite Adit" and sample locations are shown on figure 2.

Table 1. "Pyrite Adit" samples

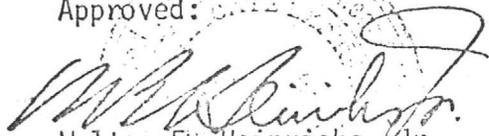
sample no.	analytical results		
	Au oz/ton	Ag oz/ton	Cu percent
2	Trace	0.05	Trace
3	0.005	0.15	0.05
4	0.005	0.20	0.14
5	Trace	0.05	0.11
6	Trace	0.05	0.02
7	Trace	0.05	Trace
8	0.01	0.25	2.11
9	0.01	0.10	0.08
10	0.02	0.35	4.95

These samples indicate the presence of copper mineralization in portions of the vein exposed in the underground workings. Chalcocite was observed on the adit dump and chalcantite is common in portions of the vein.

A series of 20 geochemical samples were taken through the center of the claim group. These samples contain an average of 85 ppm copper. Copper is also present in amounts up to 4.35 percent in mineralized hornfels and diorite south of the claims.

Wm Hovey Smith
Wm. Hovey Smith
Geologist
Heinrichs GEOEXploration Co.

Approved:



Walter E. Heinrichs, Jr.
President
Heinrichs GEOEXploration Company

GEOEX Job #810
WHS: oek
4/11/73
P.O. Box 5964
Tucson, AZ 85703

SCALE: 1" = 50'

EXPLANATION

ROCK UNITS

	ALLUVIUM
	GRANITE PORPHYRY
	ARGILLIZED GRANITE PORPHYRY
	SILICIFIED GRANITE PORPHYRY
	PYRITE CONCENTRATIONS IN VEINS

MAP SYMBOLS

	CONTACT
	STRIKE & DIP OF VEIN
	SAMPLE LOCATION
	SHAFT
	PORTAL
	PIT

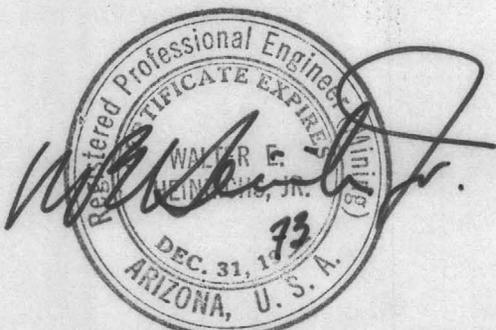
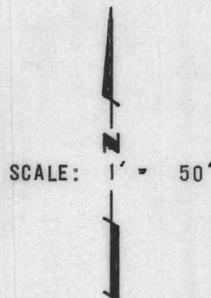
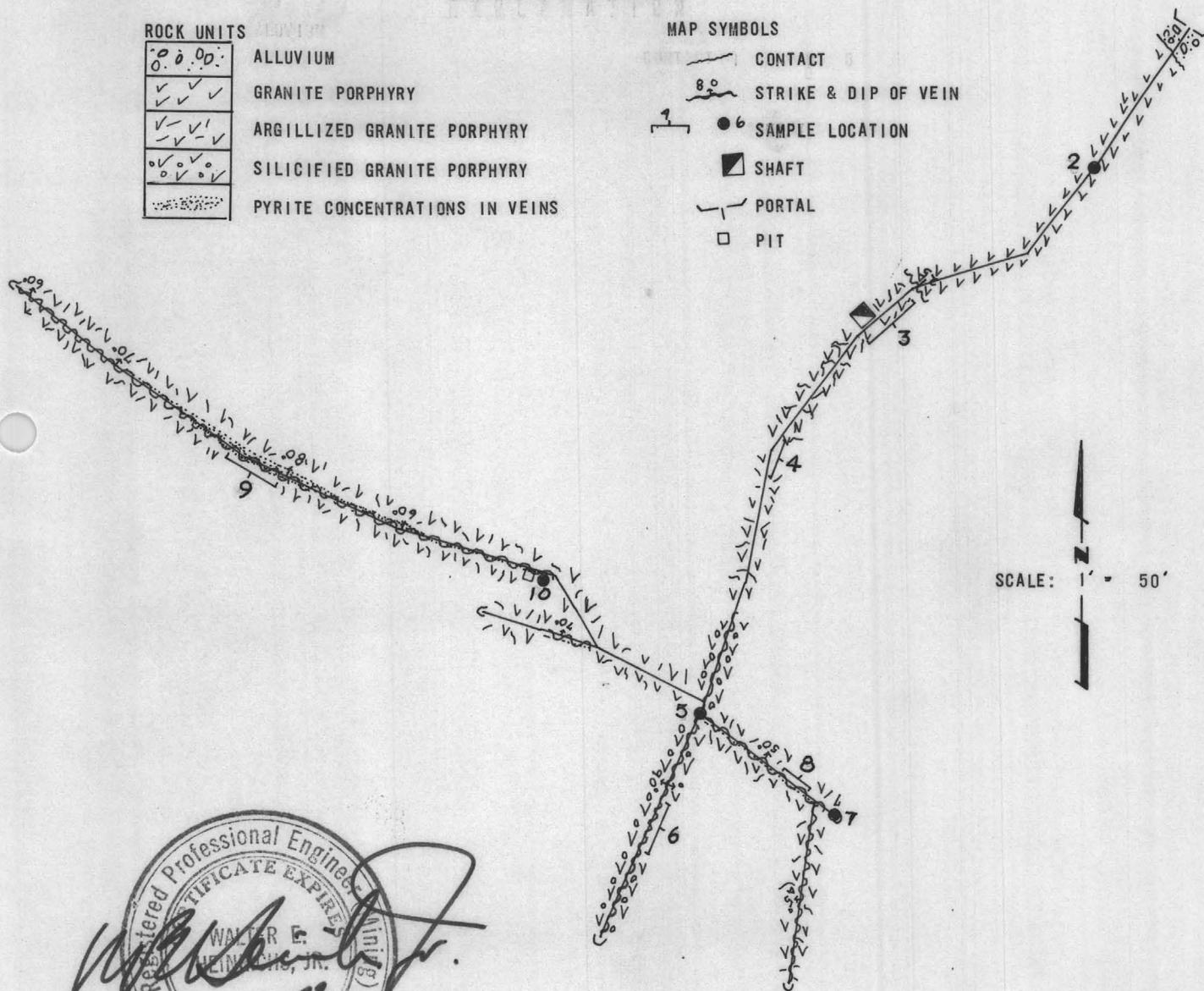


FIGURE 2

A RECONNAISSANCE GEOLOGIC EXAMINATION OF THE BIG BUCK,
EL TESORO, AND ENCANTO CLAIMS, HARSHAW MINING DISTRICT
SANTA CRUZ COUNTY, ARIZONA

by

Wm. Hovey Smith, Geologist

for

William and Beth Lane

April 1973
HEINRICHS GEOEXPLORATION COMPANY
Mineral Exploration Consultants and Contractors
P.O. Box 5964 Tucson, Arizona

GEOEX Job #810

A RECONNAISSANCE GEOLOGIC EXAMINATION OF THE BIG BUCK,
EL TESORO, AND ENCANTO CLAIMS, HARSHAW MINING DISTRICT
SANTA CRUZ COUNTY, ARIZONA

T A B L E O F C O N T E N T S

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Introduction-----	1
Conclusions and recommendations-----	1
Geology-----	2
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Contact metamorphic mineralization-----	5
Porphyry potential-----	6
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I L L U S T R A T I O N S

Figure 1. Geology and sample location map-----	following page 1
Figure 2. Geologic map "Pyrite Adit"-----	3

T A B L E S

Table 1. "Pyrite Adit" samples-----	Page 4
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A RECONNAISSANCE GEOLOGIC EXAMINATION OF THE BIG BUCK,
EL TESORO, AND ENCANTO CLAIMS, HARSHAW MINING DISTRICT
SANTA CRUZ COUNTY, ARIZONA

INTRODUCTION

The 18 unpatented lode mining claims owned by William and Beth Lane and 11 unpatented lode mining claims owned by Mr. John Keck and optioned by the Lanes, were reconnaissance mapped and sampled at the request of Mr. and Mrs. Lane. Work began March 19 and was completed March 23, 1973. The purposes of this examination were to determine the general type and character of mineralization in order to guide further work, and to determine if these claims are potentially patentable.

CONCLUSIONS AND RECOMMENDATIONS

Indications of three types of copper mineralization were found on the claims. Vein, contact metamorphic, and disseminated porphyry mineralization exist or are potentially present. Exploration has been insufficient to determine if any occurrences have economic potential. There appears to be little or no lead-silver mineralization on these claims.

Patent considerations are covered in more detail in a separate report. Few if any of the claims appear definitely patentable at this time because of poor markings of claim boundaries and lack of sufficient exposures of mineralization. Except perhaps for the small pit on the southern portion of the leased claims, and the "Pyrite Adit", the strength of mineralization or mineral character, is in our opinion insufficient for purposes of patent. Depending on current patent examination practice and the individual examiner, it is conceivable that one or more claims could eventually be patented.

However, better quality discovery evidence is definitely recommended before risking the cost to patent. Such discovery evidence can best be obtained by technically supervised core drilling.

The most attractive exploration potential is for a concealed porphyry copper deposit. Strong pyritization of the intrusive may be part of a pyrite halo near a porphyry deposit. The presence of copper in the contact rocks and veins is a possible indication that the intrusive is copper-bearing. The aggregate 29 claims combined with open ground to the west cover enough property to make this area sufficiently large for porphyry investigation.

Exploration for a porphyry target should include induced polarization coverage to most efficiently delineate the sulfide zones, followed by deep drilling. Adequate geophysical coverage would cost approximately \$8,000.00. Total drilling expenses would depend on the number of holes and their depth. A minimum of two holes having a depth of 1,000 feet each are recommended. This would cost approximately \$25,000.00.

Such an exploration program would be best handled by an established mining or exploration company. We recommend that these claims be kept in good standing and that they be optioned to a company able to properly complete the needed exploration.

GEOLOGY

A medium grained altered granite porphyry is the dominant rock type in the study area (figure 1). This porphyry has intruded and metamorphosed

diorite and sediments south of the claims, and has been intruded by rhyolite in a small area near the corner of sections 25, 26, 35, and 36. Alteration of the porphyry has argillized the feldspars, destroyed the mafic minerals, and introduced pyrite in veinlets and disseminations. The unaltered rock probably consisted of predominantly potassic feldspar and quartz with less abundant plagioclase, and accessory biotite.

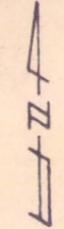
Vein Mineralization

Prominent shear zones cut the altered porphyry. The largest is located slightly east of the claims in the southwest corner of section 25. This zone has 10 feet of broken quartz and porphyry fragments with strong sericitic alteration. A vein has been explored by the "Pyrite Adit" on the Big Buck claims (figure 2), a heavily iron stained vein was found in the S. W. 1/4 of the S. E. 1/4 of section 26, and a sericitized shear zone found on Big Buck #2 claim.

The "Pyrite Adit" has one vein and two barren shear zones explored by approximately 650 feet of workings (figure 2). The principal vein, which is best exposed in the partly caved west lateral, consist of two feet of massive pyrite in the hanging wall and one foot of pyrite in the foot wall separated by clay gouge. Near the vein the wall rocks are argillized, but walls are silicified in another shear zone.

This adit was mapped because of possible similarities between it and the nearby Three R Mine. This mine produced significant copper from rich chalcocite ore shoots in northerly striking veins. Although the adit has similar mineralization and does contain chalcocite, sulfide bearing zones are thin and copper distribution is erratic (figure 2).

GEOLOGY & SAMPLE LOCATION MAP
of
LANE CLAIMS, SANTA CRUZ COUNTY, ARIZONA
for
MR. & MRS. WM. LANE
by
HEINRICHS GEOEXPLORATION COMPANY
Job number 810-73 March 1973



EXPLANATION

Rock Units

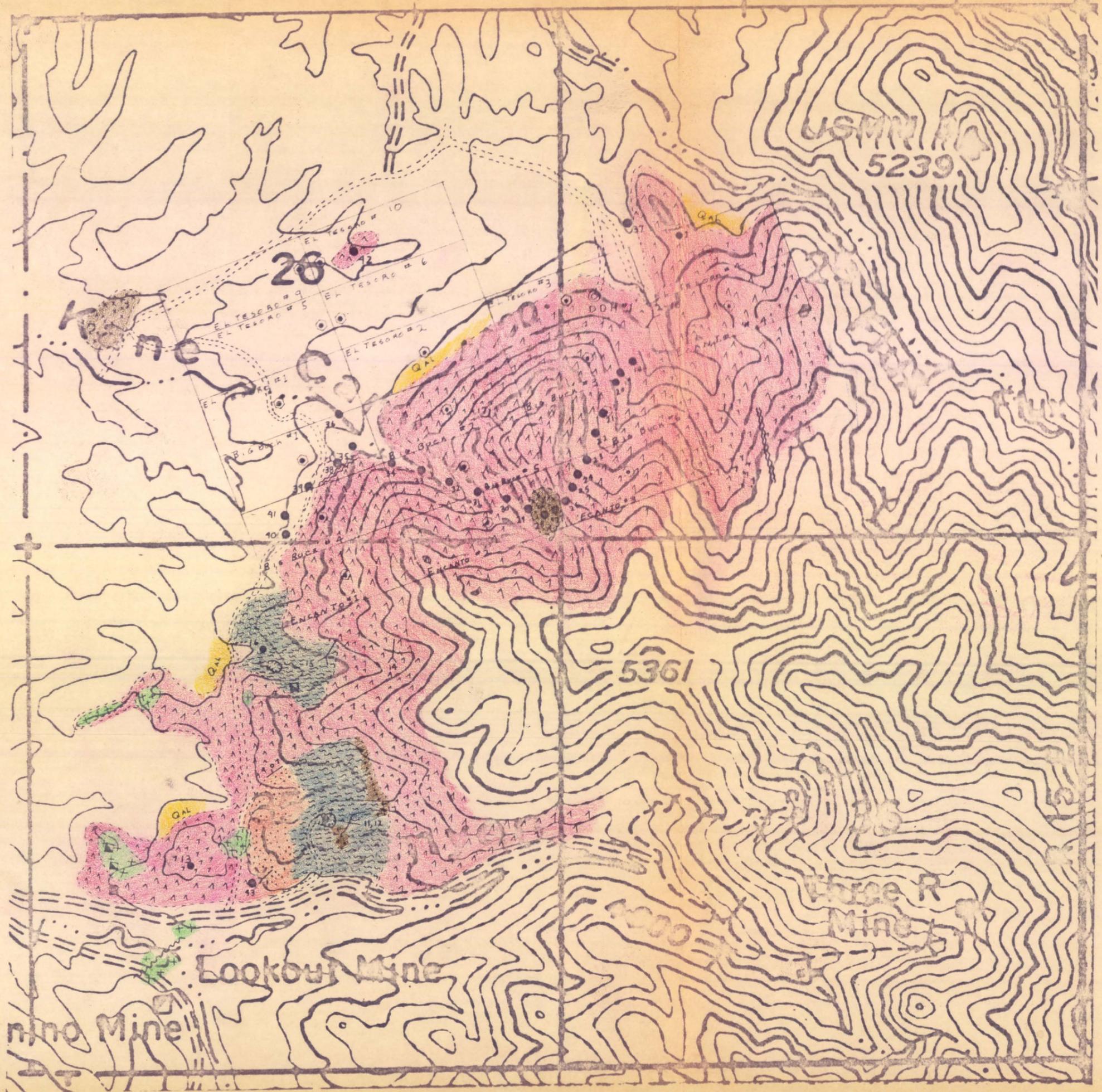
	Alluvium
	Rhyolite
	Granite Porphyry
	Hornfels
	Quartzite
	Diorite

Map Symbols

	Contacts
	Vein or altered breccia
	Strike & Dip of beds
	Old shaft
	More recent shaft
	Adit
	Pit
	Sample location with number
	Roads (Location approximate)
	Discovery monuments

FIGURE 1

M. G. Heinrichs Jr.
73



EXPLANATION

ROCK UNITS

	ALLUVIUM
	GRANITE PORPHYRY
	ARGILLIZED GRANITE PORPHYRY
	SILICIFIED GRANITE PORPHYRY
	PYRITE CONCENTRATIONS IN VEINS

MAP SYMBOLS

	CONTACT
	STRIKE & DIP OF VEIN
	SAMPLE LOCATION
	SHAFT
	PORTAL
	PIT

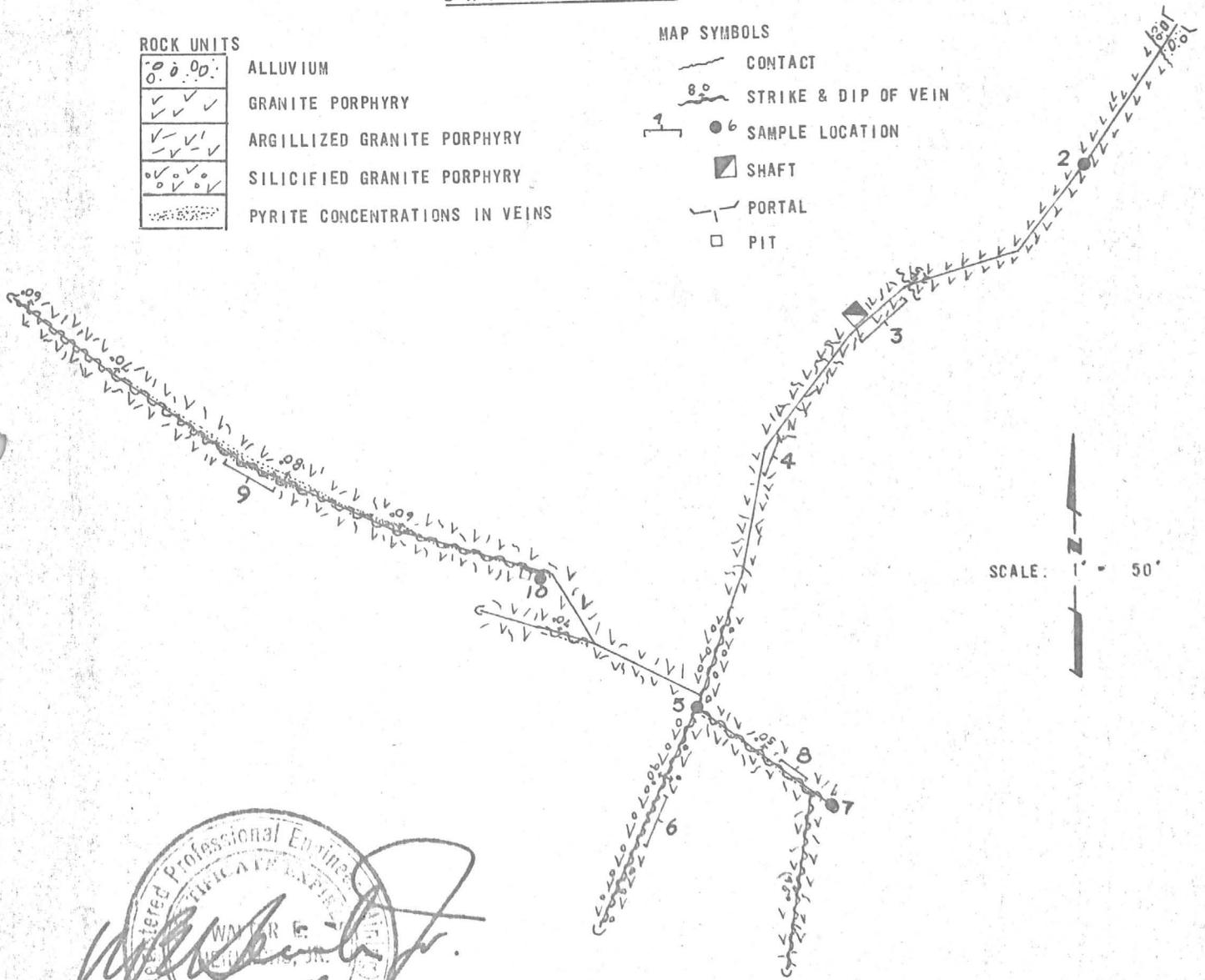


FIGURE 2

Table 1. "Pyrite Adit" samples

sample no.	analytical results		
	Au oz/ton	Ag oz/ton	Cu percent
2	Trace	0.05	Trace
3	0.005	0.15	0.05
4	0.005	0.20	0.14
5	Trace	0.05	0.11
6	Trace	0.05	0.02
7	Trace	0.05	Trace
8	0.01	0.25	2.11
9	0.01	0.10	0.08
10	0.02	0.35	4.95

Some copper in these samples is derived from chalcocite, but much is from secondary chalcantinite which encrusts portions of the vein. Copper content does not appear to be related to high pyrite content. Sample no. 9 from the thickest part of the vein contained only 0.08 percent copper in a sample with 90 percent pyrite; however, sample no. 10 reported 4.95 percent copper from a less pyrite rich part of the vein. This vein does not appear to contain significant gold or silver values.

The iron stained vein on Big Buck no. 1 was explored by a short adit and shallow pits. The iron staining was probably caused by oxidization of large amounts of pyrite. One assay sample taken from this adit contained a trace of gold and 0.03 percent copper (sample 38 Appendix).

A shear zone with strong sericitic alteration was tested by a short adit which is high on the hill-slope on Big Buck no. 2 claim. Despite the strong alteration, the adit dump contained only 0.02 percent copper (sample 17 Appendix).

Although small amounts of copper mineralization were found in the veins and shear zones on the property, they do not appear to offer much economic potential.

Contact Metamorphic Mineralization

The claims held under option from Mr. John Keck south of the Big Buck claims, have contact metamorphic copper mineralization which is best exposed on the hill near the center of section 35. Here, malachite and azurite are found in a small pit as surface ~~pit~~strain on fractured hornfels. Most of this secondary copper is derived from chalcopyrite-bearing quartz veins. These veins are irregular, small, have strong sericitic alteration, and appear to be best developed in a dark hornfels. These veins do not start in the porphyry, but do extend through the hornfels; hence, their presumed contact metamorphic and/or pneumatolytic origin.

The western part of the hill is largely quartzite with a few similar mineralized zones near the quartzite-hornfels contact. Hornfels on the eastern portion of the hill contains more epidote closer to the porphyry and is apparently unmineralized. Mineralization appears to be confined to a relatively narrow belt of dark hornfels between the granite porphyry-hornfels contact to the east and the quartzite to the west.

Another block of hornfels is exposed to the north and is separated from the hill just described by granite porphyry. These rocks are similar except that quartzite is not present. A pit in the stream bed has exposed massive pyrite in dark hornfels. The walls of the pit were covered, and the relationships between the pyrite and hornfels was not observed. An "ore pile" containing approximately 60 percent pyrite was sampled, and although clumps of chalcopyrite and bornite were occasionally observed, the sample contained 0.12 percent copper (sample 6 Appendix).

• Mineralization at both these localities appears to be of insufficient grade to be of economic importance; however, if a comprehensive exploration program is conducted, induced polarization and shallow drilling should be done to further evaluate this mineralization. To do this, three rotary drill holes could be drilled on the ridge near the present pit in the center of section 35. The first hole should be placed near the quartzite-hornfels the second near the pit, and the third in hornfels near the porphyry-hornfels contact. Three holes should also be drilled in the north area. The first should be placed on the ridge nose northeast of the pit in the stream bed, the second near the pit, and the third near the old shaft southeast of the pit. A depth of 200 feet for each of these holes should be sufficient. Rotary drilling cost would be approximately \$4.50/foot.

An older diorite was found partly assimilated into the porphyry on claims east of the optioned claims in the central portion of section 35. Traces of copper mineralization were found around old workings near the former cabin site. Scattered core from several boxes was found near the cabin's foundation. The deepest depth tab that was found indicated that the hole was drilled to a depth of at least 822 feet. A 15 pound sample was taken of the scattered unsplit core and analyzed. This sample contained 0.03 percent copper (sample 13 Appendix). Most of the core was altered pyritized granite porphyry, which probably contained about two percent pyrite as visually estimated.

Porphyry Potential

The widespread alteration and pyritization of the granite porphyry

and the presence of copper in vein deposits and contact rocks is tenuous evidence of a concealed porphyry copper deposit. As a further test of this possibility, a geochemical traverse was made over the central part of the Lane claims (sample 7 - 36 Appendix). Random chips were taken of exposed rock along a traverse approximately 200 feet long. These were composited into a single sample. The 19 samples contained an average of 58 ppm copper. This value is not high enough to indicate that chalcopyrite is associated with the abundant pyrite in the altered porphyry. Where small veins were included in the samples, values on the order of 100 ppm copper were reported.

Although no conclusive evidence of definite porphyry mineralization was obtained, its possible existence is suggested by the widespread alteration and pyritization. Further investigation based on porphyry possibilities appears to offer the best potential for economic mineral development on the properties as the known vein and contact metamorphic deposits are small and low grade.

REFERENCES

Schrader, Frank C., 1915, Mineral deposits of the Santa Rita and Patagonia Mountains Arizona: U. S. Geological Survey Bulletin 582, 373 p.

Wm. Hovey Smith
 Wm. Hovey Smith
 Geologist

Approved: *W. E. Heinrichs, Jr.*
 Walter E. Heinrichs, Jr.
 President



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APPENDIX

Sample Data Sheets

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JOB NUMBER: 810
 AREA: Lane Claims
 Page 1 of 6



DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 19, 1973	1	Float	Au= Trace Cu=0.01 (118ppm)	Geology & Sample Location	SW 1/4, NW 1/4 Section 25 T22S, R15E	Altered and iron stained granite rubble collected for 100' in saddle. A N.76°E. 6" silicified zone strikes through saddle. (Small geochem. sample)
March 20, 1973	2	Rock Chip	Au= Trace Ag=0.05 Cu=Trace	Adit Map	NW 1/4, SW 1/4 Section 25 T22S, R15E	Altered granite porphyry from 3' wide section of walls and roof 50' from portal.
"	3	"	Au=0.005 Ag=0.15 Cu=0.05	"	"	Altered granite porphyry cut for 10' from wall opposite shaft.
"	4	"	Au=0.005 Ag=0.20 Cu=0.14	"	"	Altered granite porphyry with numerous small quartz-pyrite veinlets which have chalcanthite on adit walls.
"	5	"	Au= Trace Ag=0.05 Cu=0.11	"	"	Two foot chip sample from roof. Pyrite in irregular masses with moderate chalcanthite staining along pyrite veinlets.
"	6	"	Au= Trace Ag=0.05 Cu=0.02	"	"	Six foot sample cut along wall of shear zone which adit parallels. Silicified granite porphyry occasional pyrite crystals.
"	7	"	Au= Trace Ag=0.05 Cu= Trace	"	"	From back at end of east lateral. Silicified granite porphyry enclosing pyrite-bearing vein. Striking N53°W dipping 50°N. About 0.5% pyrite in sample.
"	8	"	Au=0.01 Ag=0.25 Cu=2.11	"	"	From roof of E. lateral 4" heavily chalcanthite encrusted pyrite vein. Vein is crushed with few small euhedral crystals. Sample contains about 60% pyrite.

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JOB NUMBER: 810
 AREA: Lane Claims
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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC. - TWSP. - RANGE	DESCRIPTION
March 20, 1973	9	Rock Chip	Au=0.01 Ag=0.10 Cu=0.08	Adit Map	NW 1/4, SW 1/4 Section 25 T22S, R15E	West lateral: irregular bands of pyrite - a 6" band on hanging wall and a 3' band on foot-wall separated by clay gouge. Pyrite is ground by fault movement. High grade sample is approximately 90% pyrite.
"	9 cont.					
"	10	"	Au=0.02 Ag=0.35 Cu=4.95	"	"	Walls and roof east of pit in floor of west lateral. Band of pyrite tapering from 1' to 2". Exposure chalcalthite covered.
March 21, 1973	11	"	Au=0.005 Ag=0.20 Cu=0.42	Geology & Sample Location	NW 1/4, SE 1/4 Section 35 T22S, R15E	Malachite and azurite stained hornfels in and near pit on hill top N.E. of cabin. Some malachite and less common azurite on fracture surfaces in hornfels with strong sericitically altered areas.
"	12	"	Au=0.02 Ag=1.65 Cu=4.35	"	"	Ore pile from above. Quartz (minor) veins and veinlets with abundant sericite on vein walls. Specularite and epidote were identified in veins with some chalcopyrite. Estimated copper content 3%
"	13	"	Au= Trace Ag=0.15 Cu=0.03	"	NE 1/4, SW 1/4 Section 35 T22S, R15E	Scattered core in fresh dozer cut near hill top. Probably site of cabin shown on topographic map. Core is of granite porphyry with common veinlets and disseminations of pyrite and less abundant chalcopyrite. Core appeared to be of a single hole at least 822' deep. Core was not split.
"	13 Cont.					
"	14	Dump	Ag= Trace Cu=0.05 (540 ppm)	Geology & Sample Location	NW 1/4, NE 1/4 Section 35 T22S, R15E	Dump of small adit with an estimated length of 20'. Argillic alteration trending N5°E. No quartz observed, but small quantity pyrite seen on dump. (Small geochem. sample)

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JOB NUMBER: 810
 AREA: Lane Claims
 Page 3 of 6



DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 21, 1973	15	Dump	Au=0.005 Ag=0.25 Cu=0.02	Geology & Sample Location	NW 1/4, NE 1/4 Section 35 T22S, R15E	Collapsed N30°E trending adit which is collared in hornfels and probably ends in altered granite porphyry. No copper staining seen on dump.
"	16	"	Au= Trace Ag=0.15 Cu=0.12	"	NE 1/4, NW 1/4 Section 35 T22S, R15E	"Ore piles" near stream. Hornfels highly impregnated with pyrite and including dark green chlorite. Occasional malachite staining. Chalcopyrite and less common bornite observed
"	16 Cont.	"				in masses to 1/2". Estimated copper content 1.0% or less.
March 22, 1973	17	"	Au=0.005 Ag=0.20 Cu=0.02	"	SE 1/4, SE 1/4 Section 26 T22S, R15E	S41°E trending adit driven into highly sericitically altered granite porphyry. Light malachite staining near portal with heavily limonite stained fractures.
"	18	Rock Chip	Ag= Trace Cu=0.01 (88ppm)	Geology & Sample Location	NW 1/4, SW 1/4 Section 25 T22S, R15E	Approximately 300' long rock chip sample of granite porphyry which is iron stained along fractures. (Small geochem. sample)
"	19	"	Ag= Trace Cu=0.01 (69ppm)	"	"	Approximately 200' long rock chip sample of granite, feldspars weathered to clay some heavily iron stained quartz veins. (Small geochem. sample)
"	20	"	Ag= Trace Cu=0.01 (90ppm)	"	"	Approximately 350' long rock chip sample of granite, description as in #18. (Small geochem. sample)
"	21	"	Ag= Trace Cu=0.01 (74ppm)	"	SW 1/4, SW 1/4 Section 25 T22S, R15E	Approximately 200' long rock chip sample of granite description as in #18. (Small geochem. sample)

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JOB NUMBER: 810
 AREA: Lane Claims
 Page 4 of 6



DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
March 22, 1973	22	Rock Chip	Ag= Trace Cu=0.01 (68ppm)	Geology & Sample Location	SW 1/4, SW 1/4 Section 25 T22S, R15E	Approximately 200' long rock chip sample of granite, description as in #18. (Small geochem. sample)
"	23	"	Ag= Trace Cu=0.01 (57ppm)	"	"	Approximately 200' long rock chip sample of granite, some strongly veined material outcropping 20'-60' wide in bedding-like ledges up-down slope. (Small geochem. sample)
"	24	"	Ag= Trace Cu=0.01 (58ppm)	"	"	Approximately 200' long rock chip sample of granite, quartz veins prominent, highly weathered feldspars give spongy appearance abundant iron staining. (Small geochem. sample)
"	25	"	Ag= Trace Cu=0.01 (51ppm)	"	"	Approximately 200' long rock chip sample of granite, strong outcrop, description same as #24. (Small geochem. sample)
"	26	"	Ag= Trace Cu= Trace (45ppm)	"	"	Approximately 100' long rock chip sample of granite, description as in #24, outcrop forms cliffs within 200' of top of ridge on N.E. wall of Kane Canyon. (Small geochem. sample)
"	27	"	Ag= Trace Cu= Trace (46ppm)	"	SE 1/4, SE 1/4 Section 26 T22S, R15E	Approximately 100' long rock chip sample, fine grained, light gray igneous rock with quartz and feldspar, fine grained groundmass apparently few mafic minerals present. Weathers to craggy, coarse, mottled tan-brown with sharp angular fracture patterns on surface. (Small geochem. sample)
"	27 Cont.					
"	28	"	Ag= Trace Cu=0.01 (53ppm)	"	"	Approximately 300' long rock chip sample, description as in #27, but more feldspar present until finally in contact with granite. Contact diffuse and pieces of granite are included in the other rock. (Small geochem. sample)

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JOB NUMBER: 810

AREA: Lane Claims

Page 5 of 6



DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWP.-RANGE	DESCRIPTION
March 22, 1973	29	Rock Chip	Ag= Trace Cu=0.01 (61ppm)	Geology & Sample Location	SE 1/4, SE 1/4 Section 26 T22S, R15E	Approximately 250' long rock chip sample of granite description as in #18. (Small geochem. sample)
"	30	"	Ag= Trace Cu= Trace (46ppm)	"	"	Approximately 250' long rock chip sample of granite description as in #18. (Small geochem. sample)
"	31	"	Ag= Trace Cu= Trace (46ppm)	"	"	Approximately 200' long rock chip sample of granite, description as in #18. (Small geochem. sample)
"	32	"	Ag= Trace Cu= Trace (46ppm)	"	"	Approximately 200' long rock chip sample of granite, description as in #18. (Small geochem. sample)
"	33	"	Ag= Trace Cu= Trace (46ppm)	"	SW 1/4, SE 1/4 Section 26 T22S, R15E	Approximately 250' long rock chip (with some float) sample of granite as in #18, with a 20' wide strong silicified breccia vein, vuggy with very strong iron stains and apparent mineralization, outcropping (Small geochem. sample)
"	34	Rock Chip and Float	Ag= Trace Cu= Trace (48ppm)	"	"	Approximately 250' long float and rock chip sample of granite as in #18, with some brecciated vein material. (Small geochem. sample)
"	35	Float	Ag= Trace Cu=0.01 (54ppm)	"	"	Approximately 300' long sample of float and alluvium. (Small geochem. sample)
"	36	Float	Ag= Trace Cu=0.01 (54ppm)	"	"	Approximately 300' long sample of float and alluvium. (Small geochem. sample)

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JOB NUMBER: 810
 AREA: Lane Claims
 Page 6 of 6



DATE	SAMPLE NO.	TYPE	ANALYSIS		MAP REF.	SEC.-TWSP.-RANGE	DESCRIPTION
			Ag= Trace Cu=0.01 (63ppm)	Geology & Sample Location			
March 22, 1973	37	Rock Chip	Ag= Trace Cu=0.01 (63ppm)	"	SW 1/4, NW 1/4 Section 25 T22S, R15E	In stream valley. Much shearing in a N10°E direction with heavy hematite staining. Common pyrite casts in rocks.	
"	38	"	Au=Trace Ag=0.10 Cu=0.03	"	SW 1/4, SE 1/4 Section 26 T22S, R15W	N68°W trending adit 137' long. Driven to explore prominent iron stained vein outcrop. End of adit is in altered granite porphyry. Sample taken of heavily iron stained brecciated zone	
	38 Cont.					25' from back of adit. Walls and roof sampled over 6'.	
"	39	Dump	Ag= Trace Cu=0.01 (56ppm)	"	"	Dump from pit 14' deep exposing vein sampled in previous sample. Pit is on vein below road. Highly altered granite porphyry in walls of 6' to 12' wide vein. (Small geochem. sample)	
"	40	Float	Ag= Trace Cu=0.02 (166ppm)	"	"	Manganese stained alluvium over granite porphyry. (Small geochem. sample)	
"	41	Dump	Ag= Trace Cu=0.01 (51ppm)	"	"	Dump in pit 5x4x7' feet in heavily iron stained and cemented alluvium. Probably a transported gossan from vein at (39) but there may be a local source. (Small geochem. sample)	
"	42	Float	Ag= Trace Cu= Trace (43ppm)	"	SW 1/4, NE 1/4 Section 26 T22S, R15E	Surface rubble of granite porphyry exposure in pediment. Some veining in exposure. (Small geochem. sample)	
"	43	Dump	Ag= Trace Cu=0.01 (61ppm)	"	NE 1/4, SW 1/4 Section 35 T22S, R15E	Adit in quartzite exposing few small veinlets and pluton dikelets. Adit about 25' long.	

Original sent to Lanier.

Report of Geological Survey

A RECONNAISSANCE GEOLOGIC EXAMINATION OF THE BIG BUCK, EL TESORO, AND ENCANTO CLAIMS, HARSHAW MINING DISTRICT SANTA CRUZ COUNTY, ARIZONA

Heinrichs GEOEXploration Company, a company incorporated under the laws of Arizona with home office in Tucson, was engaged by William and Beth Lane to perform the following work on the claims listed below in the Harshaw Mining District:

1. Reconnaissance map, on a scale of 1 inch to 1000 feet, the geology of the Big Buck 1, 2, 3, 4, 5, and 6; Encanto 1, 2, 3, and 4; and El Tesoro 1, 2, 3, 4, 5, 6, 9, and 10 claims. This mapping to include such nearby areas as to facilitate geologic interpretation (figure 1).
2. To map and sample the principal underground workings on the Big Buck no. 3 claim (figure 2).

Location of this work with respect to the points of discovery and boundaries of the respective claims is indicated on the maps from survey data supplied by the claim holders and from topography and land control information given on published governmental sources on the area.

The work was done by Wm. Hovey Smith, a graduate professional geologist (B. S. University of Georgia 1963, M. S. University of Alaska 1970), under the direction of Walter E. Heinrichs, Jr., Registered Professional Engineer with over thirty years experience. Field work was started March 19, 1973, and completed March 23, 1973. The total cost of this examination specifically expended on the above mentioned claims was not less than \$1,800.00.

The purpose of this initial geological examination was to determine the character and type of mineralization in order to guide further work.

GEOLOGY

The dominant rock type is a medium grained altered granite porphyry (figure 1). This porphyry has intruded and metamorphosed diorite and sediments south of the claims, and has been intruded by rhyolite in a

small area at the corner of sections 25, 26, 35, and 36. Alteration of the porphyry has argillized the feldspars, destroyed the mafic minerals, and introduced pyrite in veinlets and disseminations. The unaltered rock probably originally consisted of predominantly potassic feldspar and quartz with less abundant plagioclase, and accessory biotite.

Prominant shear zones cut the altered porphyry. The largest is located slightly east of the claims in the southwest corner of section 25 and consists of quartz and sericitized porphyry fragments. A vein which is explored by an old adit ("Pyrite Adit" figure 2) was mapped. This adit has approximately 650 feet of workings on a single level. One vein and two barren shear zones were explored. The principal vein in the west lateral contains two feet of massive pyrite in the hanging wall and one foot of pyrite along the foot wall separated by clay gouge. The wall rocks are argillized. Other shear zones exposed by the workings contain no mineralization.

SAMPLING AND ANALYSIS

A total of 43 samples were taken; 16 were 15 pound samples analyzed for gold, silver, and copper by Jacobs Assay Office (Registered Assayer Tucson, Arizona); and the remainder were two pound geochemical samples analyzed for silver and copper.

Nine samples were taken from the "Pyrite Adit" and sample locations are shown on figure 2.

Table 1. "Pyrite Adit" samples

sample no.	analytical results		
	Au oz/ton	Ag oz/ton	Cu percent
2	Trace	0.05	Trace
3	0.005	0.15	0.05
4	0.005	0.20	0.14
5	Trace	0.05	0.11
6	Trace	0.05	0.02
7	Trace	0.05	Trace
8	0.01	0.25	2.11
9	0.01	0.10	0.08
10	0.02	0.35	4.95

These samples indicate the presence of copper mineralization in portions of the vein exposed in the underground workings. Chalcocite was observed on the adit dump and chalcantite is common in portions of the vein.

A series of 20 geochemical samples were taken through the center of the claim group. These samples contain an average of 85 ppm copper. Copper is also present in amounts up to 4.35 percent in mineralized hornfels and diorite south of the claims.

Wm. Hovey Smith
Wm. Hovey Smith
Geologist
Heinrichs GEOEXploration Co.

Approved:

W. E. Heinrichs, Jr.
Walter E. Heinrichs, Jr.
President ⁷³
Heinrichs GEOEXploration Company

GEOEX Job #810
WHS:oeK
4/11/73
P.O. Box 5964
Tucson, AZ 85703

COSE LEAF NO. 37

J. L. DARLING CORP.

WATERPROOF

It is the name

Wm. LANE
Job 810

17474
17293.6

171

17625.

50

17575 STANT

Monday Mileage

Big Buck 1, 2, 3, 4, 5, 6

ECANTO 1 & 2

1 KERR-MCGEE CORP

7/SEPT/70 JOSE No 1A

CLAIMS E.W. - N.S. SEC 25

4500'

N35W / N15°W, N5W, N76E,

1 GEOCHEM SAMPLE FROM

SADDLE. OF ~~Angled~~ ALT

AND IRON STAINED GRANITE RUBBLE

PICKED FROM SURFACE 100'

LONG N76E SPLICED ZONE

STRIKE THROUGH MIDDLE OF SADDLE

S32°W
ADIT N32°E SAMPLE

No 2 ALTERED GRANITE Porphyry

From walls 3' wide, both

WALL AND ROOF

N35°E 33'

N72E-37' - Turning point

on old survey peg

N47°E 22' No 3 ALT D 6T

POR OPPOSITE shaft 3'

breast height OVER 2' WIDTH

LENGTH OF 10'

N35°E 44' FROM ADIT TO

SAMPLE SITE ⁴ NUMEROUS SKULLS

@ 12' pg. BEFORE VENTURE WHICH

YIELD CALCANTHINE ON ~~VEIN~~

ON FACE OF OPID. CONGLICANT.

~~PIE~~ IS STILL STRONG.

SECONDARY CLAY MINERALS ABUNDANT
CONSTITUENT OF WALLS.

SAMPLE 4 4' FROM FLOOR

OVER 2' WIDTH OVER LENGTH

OF 10' FROM E WALL TO Pk

py CONTENT @ .5%

N8E 4' / N18E 42' (5)

Rock chip FROM ROOF

VEIN OVER 2' py IN

IRREG MASSES MODERATE

~~TO~~ CALCANTHINE staining
along py VEINETS.

N22°E - 50'

N 22° E 50'

6. Sample, along 6'
OF END OF S. HIERSE
SHEAR ZONE along which adit
is driven. Occasional
small py crystals ~~more~~
~~strongly~~ Malachite. or calc
conchoidal workings py.

N 53° W 45'

7 Sample at END OF
Flattened from back S. HIERSE
~~Plat~~ ~~of~~ ~~the~~ ~~Pyrite~~
~~vein~~ ~~malachite~~ with py-
rite? ~~vein~~ has distinct
hanging wall N 53° W dip
Nat 50° IN CENTER OF ~~vein~~
~~is~~ only about 15% pyrite
vein material.

• N7°E 55' on lateral
SHEAR SURFACE WHICH DIP TO W

• No 8 From 4" heavy
calcantite incrustated py
VEIN IN ROOF. Py is crushed
WITH FEW ~~dist~~ chert crystals
AVERAGE SIZE OF @ 60% py

N62W 36'

• N31°W 25'

• 9 W. DIRT Irreg bands
OF py 1, 6" thick on hanging wall

• 1, 1' TO 3' THICK ON FOOTWALL
SEPARATED BY CHL. ROUGH
PYRITE IS GROUND TO ANTHONITE
SAMPLE @ 90% Py. [high grade]

10 From Watts and Roof

Immediately E of p.T in flash

of ADIT 1' to 2' thick

band of ^{VERY} py heavily indurated
marked with calcification

11 From ~~flash~~ blasted hornfels

ON AND NEAR p.T on hill top

N.E of Cabin. MODERATE amt

malachite and less common

azurite on fracture surfaces

hornfels = GRANITE Porphyry ^{some beds in p.T} ^{strongly SERICITIZED} ^{accompanied by STRONG} ^{calcification}

contact is in saddle 300'

E. of p.T. As contact is

approached grade of metamorphism

increases & EPIDOTE is more

abundant.

12. High grade one from above

- Strong sericitization with thin Qtz veins - Sphalerite - Epidote and Malachite Est. content 3% Occasional Qtz fragments contain chloropyrite

P.T. is on eastern part of hill mass overlooking small cabin near center section 35. Eastern portion of hill hornfels ~~with~~ cut by small dikes. Western 1/2 of hill quartzite some indication of sericitic alt ~~along~~ near Qtzite - hornfels contact. / Strike of hornfels @ E-W steep dip. / Sericitic alt & veining ^{apparently} irregular along fractures in hornfels

13 Sample of ~~hard~~ ^{SCATTERED} CORE ON
h.t. N70W of Cabin. Core is
of GRANITE Porphyry with
COMMON py DISSEMINATIONS
AND VEINETS CONTAINING
py AND ep. Hike to 822'
ON H.t. DARKER DIORITE DIKE?

~~CORE~~ EXPOSED IN CUTS. LESS
ABUNDANT OR STAINING THAN ON
H.t.

N55°E Dip 90° NW

14 Dump (small bag) of small
COVED adit. Adit probably has ~~width~~
LENGTH of about 20' N5°E

NO VEIN MATERIAL SEEN ALTERNATION
ORG. H.C. Py. ~~is~~ small

• QUANTITIES IN DUMP

15 Dump Sample collapsed
A.D.T strike N30°E. A.D.T

is into hornfels and apparently
through hornfels and into
argillaceous altd. granite porphyry
on other side. No Cu staining
on dump.

16 ^{DUMP} Hornfels highly impregnated
with pyrite chlorite including
very dark green chlorite abundant
occasional malachite staining

occasional
~~malachite~~ ep. & BM in masses to
1/2". ^{EST} Arcu content @ 0.75%

17 S41°E ADIT DRIVEN
into highly ^{sericitic} ~~original~~ altered
Qtz porphyry ADIT WITH
light copper staining near
portal dump ^{heavy} limonite stained
fractures with iridescent
limonite.

18- 37 ^{Smooth-leekhem} JOE-SAMPLE NOS.

38. ADIT N68°W 137' LONG
TO EXPLORE PROMINENT OULEROODPING
gossamer VEIN END OF
ADIT IN ALT. GRANITE
porphyry. Start of adit in
ALTERED DIKE SAMPLE
#38 Rock Chip TAKEN
OF BRECCIATED ZONE 25'
FROM BACK OF ADIT. WALK

AND ROOF SAMPLED OVER

6'

39 Small sample from

14' pit on ^{DUMP} VEIN ~~sample~~ sampled

in sample 38. Pits on vein

below road. vein is near

vertical ~~where~~ ^{or} perhaps dipping

steeply to W. Highly oxid.

Granite Porphyry heavily iron

stained. In outcrop vein is

apparently 6-12' wide. ^{Final}

is Granite Porphyry.

40 Small sample from

Manganese stained albionite

overlying Granite Porphyry

covered. Fragments of

weathered Manganese stained

~~of~~ Porphyry fragments

41 P.T 6x4x7' in heavy
Fe stained & cemented a heavy.

"TRANSPORTED GOSAN" MAY BE
DERIVED ULTIMATELY FROM VEIN
SAMPLED - 38 & 39 OR MAY HAVE
A CLOSER SOURCE ~~NEAR~~ AT ROAD.

NUMEROUS WEATHERED RE AND SOME
FROCKED Qtz. FRAGMENT'S ON DUMP.

42 SURFACE RUBBLE ON PHOTOMIC
OUTCROP IMPEDIMENT SOME
VEINING IN EXPOSURE

37 Rock Chip IN STRIKE AND
BED. MUCH SHEARING N-10°E -
WITH HEAVY Fe STAINING. LOCAL
ARGILLIC? ALTERATION. COMMON
PYRITIC COATS IN ROCKS.

LOOKOUT MINE N 65° E

VEIN IN DIORITE STRONG

PROPHYTIC ALTERATION

MINE

N 55 W TRENDING

VEIN IN DIORITE PROPHYTIC ALT.

CHLORITE & CALCITE IN ROCKS CALCITE

COMMON VEIN MATERIAL.

43 S.B.

ADIT DRIVEN INTO QUARTZITE

SAMPLE OF DUMP ADIT STRIKEN 25° E

Few small veins and

DUMPLETS of pyrite 2' long

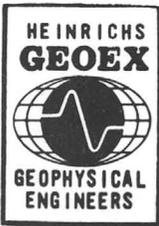
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FEET





HEINRICHS GEOEXPLORATION COMPANY
 P.O. BOX 5964 TUCSON, ARIZONA 85703
 PHONE: 602/623-0578 CABLE: GEOEX, TUCSON

DIRECTION _____ HOLE NO. _____
 INCLINATION _____ PROPERTY _____
 STARTED _____ LOCATION _____
 COMPLETED _____ COLLAR COORD: N _____ E _____
 SCALE: _____ DEPTH _____ COLLAR ELEVATION _____
 DATE _____ NOTES BY _____ SHEET _____ OF _____

LITH- OLOGY	MIN- ERAL	ROCK TYPE - GEOLOGY	SURV.	% CORE RECV'D	CORE ASSAYS				
					SECT.				
77 77 77 77 77	Box #7								
		100 MISSING							
77 77 77 77	Box #9	WEATHERED CORE FRACTURE DENSITY @ 1/1"							
77 77 77	Box #10	WEATHERED LIMONITE FILLED FRACTURES MORE ALTERED							
77 77 77	Box #11	Highly FRACTURED 10 micrometers/1"							
77 77 77	Box #12								
77 77 77	Box #13								
77		1' ALTERED VOLCANIC DIKE NOW ENTIRELY clay MINERALS WITH LIMONITE VEINETS. ENTIRE CORE WEATHERED.							

El Paso Natural Gas Company

El Paso, Texas

May 13, 1973

Mr. Wm. Hovey Smith
Geologist
Heinrichs Geoexploration Company
806 West Grant Road
Tucson, Arizona 85703

RECEIVED
GEOLOGY

May 13 1973



RECEIVED TUCSON ARIZONA 5/20/73

FOUR: (AR-A 102) -13-0576

Dear Mr. Smith:

I am returning the report on the land property which you recently submitted with description of Bx 141, 1973.

We are unable to schedule an examination of the property at this time. Should it still be available this fall, we would like to look at it at that time.

I suggest you contact us again about the late of November and we will give permanent availability.

Very very truly,

John R. Reynolds
Manager of Exploration
Mining Division

JRR:leb

HEINRICHS GEOEXPLORATION COMPANY
 Box 59664, Tucson, Arizona 85703
 Ph: (602) 623-0578

JOB NUMBER: 810
 AREA: Lane Chams
 Page 1 of

DATE SAMPLE NO. TYPE ANALYSIS MAP REF. SEC.-TWP.-RANGE DESCRIPTION



DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWP.-RANGE	DESCRIPTION
MARCH 19	1	TR FLIGHT	Ag TR Ag 0.01 Cu 0.01 C118 ppm	Geology & SAMPLE LOCATION	SW 1/4, NW 1/4 SEC 25 T 22S R 15 E	ALTERED AND IRON STAINED GRANITE RUBBLE COLLECTED FOR 100' IN SADDLE. A.N. 76E. 6" SKINNED ZONE SKINNES THROUGH SADDLE. [Small geochem sample]
MARCH 20	2	Rock chip	Ag TR Ag 0.05 Cu TR	ADIT MAP	NW 1/4, SW 1/4 SEC 25 T 22S R 15 E	ALTERED GRANITE Porphyry From 3' wide SECTION OF WALLS AND ROOF 60' FROM PORTAL.
"	3	"	Ag 0.005 Ag 0.15 Cu 0.05 C118 ppm	"	"	ALTERED GRANITE Porphyry CUT FOR FROM WALL OPPOSITE SADDLE.
"	4	"	Ag 0.005 Ag 0.20 Cu 0.14	"	"	ALTERED GRANITE Porphyry WITH NUMEROUS SMALL QUARTZ-PYRITE VEINLETS WHICH HAVE CHALCANTHITE FROM ADIT WALLS.
"	5	"	Ag TR Ag 0.05 Cu 0.11	"	"	TWO FOOT CHIP SAMPLE FROM ROOF VEIN IN IRREGULAR MASSES WITH MODERATE CHALCANTHITE STAINING ALONG PYRITE VEIN LETS.
"	6	"	Ag TR Ag 0.05 Cu 0.02	"	"	SIX FOOT SAMPLE CUT ALONG WALL OF SHEAR ZONE WHICH PARALLEL TO SKINNED GRANITE Porphyry OCCASIONAL PYRITE CRYSTALS.
"	7	"	Ag TR Ag 0.05 Cu TR	"	"	FROM BACK AT END OF E. LATENTIAL. SKINNED GRANITE Porphyry ENCLOSING PYRITE VEIN. STRIKING N53W DIPPING 50° N. ABOUT 0.5% PYRITE IN SAMPLE.
"	8	"	Ag 0.01 Ag 0.25 Cu 2.11	"	"	FROM ROOF OF E. LATENTIAL 4" HEAVILY CHALCANTHITE ENCRUSTED PYRITE VEIN. VEIN IS CRUSHED WITH FEW SMALL ENCLAVED CRYSTALS. SAMPLE CONTAINS ABOUT 60% PYRITE.

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JOB NUMBER: 810
 AREA: Lane Chams
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DESCRIPTION



DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC.-TWP.-RANGE	DESCRIPTION
March 20	9	Rock chip	Au 0.01 Ag 0.10 Cu 0.08	A.D.T. MAP	NW 1/4 SW 1/4 SEC 25 TRS R 15E	WEST LATERAL: IRREGULAR BANDS OF PYRITE - A 6" BAND ON HANGING WALL AND A 3' BAND ON FOOTWALL SEPARATED BY clay gouge. Pyrite is ground by fault movement. High grade sample is approximately 90% pyrite.
"	10	"	Au 0.02 Ag 0.35 Cu 4.95	"	"	Walls and roof east of pit in floor of west lateral. Band of pyrite tapering from 1' to 2". Exposure exposure calcareous. Covered.
March 21	11	Rock chip	Au 0.005 Ag 0.20 Cu 0.42	Geology & Sample location	NW 1/4 SE 1/4 SEC 35 TRS R 15E	MAKACHITE AND AZURITE STAINED HORNFELDS IN AND NEAR PIT ON HILL-TOP N.E. OF CABIN. SOME MAKACHITE AND LESS COMMON AZURITE ON FRACTURE SURFACES IN HORNFELDS AND WITH STONING SERICITIC SERICITIC AND ALTERED AREAS.
"	12	"	Au 0.02 Ag 1.65 Cu 4.35	"	"	ARE PHE FROM ABOVE. QUARTZ (MINOR) VEINS AND VEINLETS WITH ABUNDANT SERICITE ON VEIN WALLS. SPECULARITE & EPIDOTE AND WERE IDENTIFIED IN VEINS WITH SOME CHALCOPYRITE. ESTIMATED COPPER CONTENT 3%.
"	13	"	Au TR Ag 0.15 Cu 0.03	"	NE 1/4 SW 1/4 SEC 36 TRS R 15E	SCATTERED CORE IN FRESH BOXER CUT NEAR H.I.H. TOP. PROBABLY SITE OF CORN CABIN SHOWING TOPOGRAPHIC MAP. CORES OF GRANITE PORPHYRY WITH COMMON VEINLETS AND DISSEMINATIONS OF PYRITE AND LESS ABUNDANT CHALCOPYRITE. CORE APPEARED TO BE OF A SINGLE HOLE AT LEAST 8" DEEP. CORE WAS NOT SPHERICAL.

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JOB NUMBER: 810
 AREA: LAURE CHAUSS
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DATE: SAMPLE NO. TYPE ANALYSIS MAP REF. SEC. - TWSP. - RANGE DESCRIPTION



DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC. - TWSP. - RANGE	DESCRIPTION
March 21	14	Strip DUMP	Ag TA Cu 0.05 (540 ppm)	Geology and SAMPLE LOCATION	NW 1/4 NE 1/4 SEC 35 TRS R 15E	DUMP OF SMALL ADIT WITH AN ESTIMATED LENGTH OF 30'. ARGILLIC ALTERATION TENDING N. 50E. NO QUARTZ OBSERVED) BUT SMALL QUANTITY PYRITE SEEN ON DUMP. [small green sample]
"	15	"	Ag 0.005 Ag 0.25 Cu 0.02	"	"	Collapsed COLLAPSED N 300E TENDING ADIT WHICH IS COLLARED IN HORNSH AND PROBABLY ENDS IN ALTERED Granite Porphyry. GRANITE
"	16	"	Qu IR Ag 0.15 Cu 0.12	"	NE 1/4 NW 1/4 SEC 35 TRS R 15E	NO COPPER STAINING SEEN ON DUMP " ONE PILES" NEAR STREAM. HORNSH highly IMPREGNATED WITH PYRITE AND INCLUDING DARK GREEN EKORITE. Abundant Occasional malachite staining. Chalcopryite and less common boronite observed in masses to 1/2". ESTIMATED COPPER CONTENT 10% or k.
March 22	17	"	Ag 0.005 Ag 0.20 Cu 0.02	"	SE 1/4 SE 1/4 SEC 26 TRS R 15E	S 410E TENDING ADIT DRIVEN INTO HIGHLY SERICITICLY ALTERED GRANITE PORPHYRY. HIGHLY MALACHITE STAINING NEAR PORTAL WITH HEAVILY HEMONITE STAINED FRACTURES.

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JOB NUMBER: 810
 AREA: LAURE CHAUMS
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DATE SAMPLE NO. TYPE ANALYSIS MAP REF. SEC. - TWP. - RANGE DESCRIPTION

DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC. - TWP. - RANGE	DESCRIPTION
Mar 22 1973	18	Rock Chip	Ag TA Cu 0.01 (88 ppm)	Geology AND Sample Location	NW 1/4 SW 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx. 300' long rock chip sample of granite, feldspars with weathered to clay some heavily iron-stained Small geochem sample iron stained along fractures [Small geochem sample]
"	19	Rock Chip	Ag TA Cu 0.01 (69 ppm)	"	NW 1/4 SW 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18. [Small geochem sample]
"	20	"	Ag TA Cu 0.01 (90 ppm)	"	NW 1/4 SW 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18 [Small geochem sample]
"	21	"	Ag TA Cu 0.01 (74 ppm)	"	NW 1/4 SW 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18 [Small geochem sample]
"	22	"	Ag TA Cu 0.01 (68 ppm)	"	NW 1/4 SW 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18 [Small geochem sample]
"	23	"	Ag TA Cu 0.01 (57 ppm)	"	NW 1/4 SW 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18 [Small geochem sample]
"	24	"	Ag TA Cu 0.01 (58 ppm)	"	NW 1/4 SW 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18 [Small geochem sample]
"	25	"	Ag TA Cu 0.01 (51 ppm)	"	NW 1/4 SW 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18 [Small geochem sample]



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JOB NUMBER: 810
 AREA: Kaive Chams
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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC. - TWSP. - RANGE	DESCRIPTION
Mar 22 1973	26	Rock chip	Ag TR Cu TA (45 ppm)	USED LOGG HAND SAMPLE LOCATION	SE 1/4 Sec. 25, T. 22 S., R. 15 E.	Approx 100' long rock chip sample of granite, description as in #24 outcrop forms cliffs within 200' of top of ridge on N.E. wall of Kaive Canyon. [SMALL] PECKEM SAMPLE
Mar 22 1973	27	Rock chip	Ag TR Cu TA (46 ppm)	"	SE 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 100' long rock chip sample, fine grained, light gray igneous rock with quartz and feldspar, fine grained groundmass apparently mafic minerals present. Weathers to craggy, coarse mottled tan-brown with sharp, angular fracture patterns on surface. [SMALL] PECKEM SAMPLE
"	28	"	Ag TR Cu TA (53 ppm)	"	SE 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 300' long rock chip sample, description as in # 27, but more feldspar present until finally in contact with granite. Contact diffuse and pieces of granite are included. [SMALL] PECKEM SAMPLE
"	29	"	Ag TR Cu TA (61 ppm)	"	SE 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 250' long rock chip sample of granite, description as in # 18 [SMALL] - - -]
"	30	"	Ag TR Cu TA (46 ppm)	"	SE 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 250' long rock chip sample of granite, description as in # 18 [SMALL] - - -]
"	31	"	Ag TR Cu TA (46 ppm)	"	SE 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18 [SMALL] - - -]
"	32	"	Ag TR Cu TA (46 ppm)	"	SE 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 200' long rock chip sample of granite, description as in # 18 [SMALL] - - -]

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JOB NUMBER: 810
 AREA: Lower Chavis
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DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC. - TWSP. RANGE	DESCRIPTION
Mar 22 1973	33	Rock chip	Ag TA Cu TA (46 ppm)	Geology and Sample Location	SW 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 250' long rock chip (with some float) sample of granite as in #18, with a 20' wide strong silicified breccia veins, vuggy with very strong iron staining and a parent mineralization, outcropping. [Smack - - -]
Mar 22 1973	34	Rock chip	Ag TA Cu TA (48 ppm)		SW 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 250' long float & rock chip sample of granite as in #18 with some brecciated vein material. [Smack - - -]
Mar 22 1973	35	Float	Ag TA Cu 0.01 (54 ppm)	"	SW 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 300' long sample of float and alluvium [Smack - - -]
"	36	Float	Ag TA Cu 0.01 (54 ppm)	"	SW 1/4 Sec. 26, T. 22 S., R. 15 E.	Approx. 300' long sample of float and alluvium [Smack - - -]
March 22	37	Rock chip	Ag TA Cu 0.01 (63 ppm)	"	SW 1/4 Sec. 25, T. 22 S., R. 15 E.	IN STREAM VALLEY. MUCH SHEARING IN A NIDE DIRECTION WITH HEAVY HERCYNITE STAINING. COMMON PYRITE CISTS IN ROCKS.
"	38	Rock chip	Ag TA Cu 0.10 (103 ppm)	"	SW 1/4 Sec. 26, T. 22 S., R. 15 W.	N 68° W TRENDS ADIT 137' LONG - DRIVEN TO EXPLORE PROMINENT IRON STAINED VEIN OUTCROPS. END OF ADIT 15' IN ALTERED GRANITE PONDING. SAMPLE TAKEN OF HEAVILY IRON STAINED BRECCIATED ZONE 25' FROM BACK OF ADIT, WALLS AND ROOF SAMPLED OVER 6'.

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JOB NUMBER: 810
 AREA: LAUREL CREEK
 Page 7 of



DATE	SAMPLE NO.	TYPE	ANALYSIS	MAP REF.	SEC. - TWSP. - RANGE	DESCRIPTION
March 22	39	DUMP	Ag TA Cu 0.01 (66 ppm)	Geology and Sample Location	SW 1/4 SE 1/4 SEC 26 T 22S R 15E	# DUMP FROM PIT 14' DEEP EXPOSING VEIN SAMPLED IN PREVIOUS SAMPLE. PIT IS ON VEIN BELOW ROAD. HIGHLY ALTERED GRANITE PORPHYRY IN WALKS OF 6' TO 12' WIDE VEIN. [Small geochem sample]
"	40	FLOAT	Ag TA Cu 0.02 (166 ppm)	"	SW 1/4 SE 1/4 SEC 26 T 22S R 15E	MANGANESE STAINED ALUVIUM overlying OVER GRANITE PORPHYRY. [Small geochem sample]
"	41	DUMP	Ag TA Cu 0.01 (51 ppm)	"	11	DUMP IN PIT SIXTY' IN HEAVILY IRON STAINED AND CEMENTED ALUVIUM. PROBABLY A TRANSPORTED GOSSAN FROM VEIN AT [39] BUT THERE MAY BE A LOCAL SOURCE. [Small geochem sample]
"	42	FLOAT	Ag TA Cu TA (43 ppm)	"	SW 1/4 NE 1/4 SEC 26 T 22S R 15E	SURFACE RUBBLE OF GRANITE PORPHYRY & EXPOSURE IN PEDIMENT. SOME VEINING IN EXPOSURE. [Small geochem sample]
"	43	DUMP	Ag TA Cu 0.01 (66 ppm)	"	NE 1/4 SW 1/4 SEC 35 T 22S R 15E	ADIT IN QUARTZITE EXPOSING FEW SMALL VEINETS AND PHYLONIKETS. ADIT ABOUT 75' LONG.

abundant iron staining.
(about 200' long) granite

(25) Rock chip - granite,
descr. same as # 24
(about 200' long) outcrops
strongly

(26) Rock chip - granite,
same as # 24, out-
crops cliffy on **N.E.**
wall of Kane Canyon
within 200' of top.
(~100' long)

(27) Rock chip - Rock type
changes: fine grained,
lt. gray, qtz. present +

feldspar, few phenocrysts &
None large, no mafic
minerals present in megascopic
quantity but some iron
staining indicates may
have once been.

Weathers to craggy, coarse,
mottled brown-tan with
angular sharp patterns on
surface. Fractures
well, (~100' long)

Sta.

Time

N-E

N-W

Ave.

X S

M

(2) Val

(3) 1+2

(4) Dirur.

3+4+5+6
AZ

Rem.

Const. (S)

Base

Normal (S)

Day to Day (S)

Pg.....

Line.....

Oper:.....

Asst.....

3/22/73

Date: / /

TR.MK. REG. U.S. PAT. OFF.

PRINTED BY LEFAX, PHILA. 7, PA., U.S.A.

SPEC. FORM L-1620.

Const. (s)	Base	Normal (s)	Day to Day (s)	Sta.	Time	N-E	N-W	Ave.	X S	M	Val	Diur.	Rem.
											(2)		
											(3)		
											1+2		
											(4)		
													3+4+5+6
											AZ		

(28) Rock chip (~300' long)

Description same as # 27 but feldspar increases down hill until at end of # 28 it apparently grades into granite. The two rock types are mixed near ~~contact~~ ^{very} diffused contact, xtls. become very coarse again.

(29) Rock chip (~250') granite description same as #18

(30) Rock chip (~250') granite desc. same as # 18

(31) Rock chip (~200') granite same as #18

(32) " " "

(33) Rock chip + float -
 (~250' long) granite - few
 outcrops. At end of #
 33 - strong silicified
 breccia vein - outcrops
 strongly - vuggy - apparently
 mineralized - strong
 iron stains. 20' wide,
~~N~~ traceable on N.
 side of stream, but
 appears to be offset to
 W.

(34) float & rock chips
 (~250' long) partly granite
 and partly brecciated
 vein material,

(35) float & Alluvium
 of Granite (#18) (~
 300' long)

(36) " " "

Sta.

Time

N-E

N-W

Ave.

X S

M

(2) Val

(3) 1+2

(4) Dur.

3+4+5+6
AZ

Rem.

Const. (s)

Base

Normal (s)

Day to Day (s)

1435 S. 10th AVE.

INTERNATIONAL
GEOX

Cable: GEO

Jacobs Assay Office



PHONE 622-0813

P. O. BOX 1889

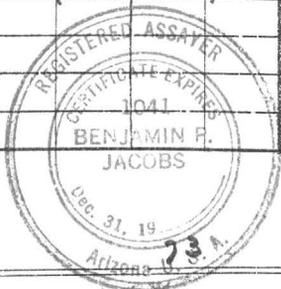
REC'D APR 3 1973 Registered Assayers

Certificate No. 59099 BOX 5954 TUCSON, ARIZONA 85703

TUCSON, ARIZONA 85702 Apr 2 1973

Sample Submitted by Mr. *Thomas Jacobs Geo exploration Co Job # 810*

SAMPLE MARKED	OZS-per TON		% Cu	SAMPLE MARKED	OZS-per TON		% Cu
	Au	Ag			Au	Ag	
# 2	Trace	0.05	Trace	# 11	0.005	0.20	0.42
3	0.005	0.15	0.05	12	0.02	1.65	4.35
4	0.005	0.20	0.14	13	Trace	0.15	0.03
5	Trace	0.05	0.11	# 15	0.005	0.25	0.02
6	Trace	0.05	0.02	16	Trace	0.15	0.12
7	Trace	0.05	Trace	17	0.005	0.20	0.02
8	0.01	0.25	2.11	* 38	Trace	0.10	0.03
9	0.01	0.10	0.08				
10	0.02	0.35	4.95				



* Gold Figured \$35.00 per oz. Troy

Charges \$ 76.00

Very respectfully,

Ben F. Jacobs



Certificate No. 39098

TUCSON, ARIZONA 85702

April 2nd 1973

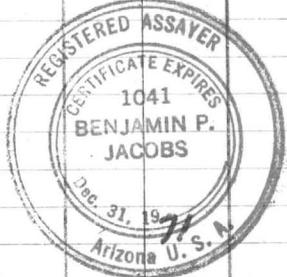
1973

Sample Submitted by Mr.

Helmreichs Geoexploration

Job. 810

SAMPLE MARKED	GOLD		SILVER	COPPER	LEAD	PERCENT	
	Grain	Weight	Grain	Weight	Grain	Weight	Wt. Assay
21							
# 1	LESS-		\$ SILVER	Copper.			
			PPM	PPM			
14	"		370	118			
18	"		500	540			
19	"		500	88			
20	"		500	69			
21	"		500	90			
22	"		500	74			
23	"		500	68			
24	"		500	57			
25	"		500	58			
26	"		500	51			
27	"		500	45			
28	"		500	46			
29	"		500	53			
30	"		500	61			
31	"		500	46			
32	"		500	46			
33	"		500	46			
34	"		500	48			
35	"		500	54			
36	"		500	54			
37	"		500	63			
# 39	"		500	56			
40	"		500	166			
41	"		500	57			
42	"		500	43			
43	"		500	61			



* Gold Figured 0.1000 per cent assay

Very respectfully,

Ben P. Jacobs

Charges \$ 81.00

April 24, 1973

Re: 810

Mr. Harold Courtwright
Chief Geologist
American Smelting & Refining Co.
1130 North 7th
Tucson, Arizona 85705

Dear Mr. Courtwright:

I recently examined 29 unpatented lode claims in the Harshaw District in Santa Cruze County. These claims are owned by private parties who asked our company to determine if any mining company was interested in exploring these claims. It is probable that an option purchase agreement could be worked out which would allow a several months free examination.

The claims are located approximately 6 miles from Red Mountain, and are easily accessible from Patigonia. There is access road through the lower part of the claims, but about 50 percent of the claims are in an area of rugged relief.

Granite porphyry is the dominant rock type. The porphyry has been argillicly altered throughout the claims, and commonly contains pyrite in veinlets and disseminations. There are a few copper-bearing veins on the property; and there is copper associated with hornfels and an older diorite intrusive. Based on a single geochemical traverse, copper values at the surface do not appear to be sufficiently high to indicate the presence of chalcopyrite associated with the near surface pyrite.

These claims appear to have some potential for a deep copper porphyry ore body as the common pyrite and argillic alteration seen at the surface may be the expression of a deep porphyry system.

-
Mr. H. Courtwright
April 24, 1973
Page Two

The owners of these claims do not have the resources to properly evaluate this possibility. If you are possibly interested in these claims, I will send you a copy of my report or discuss the property with you over the telephone.

Sincerely yours,

Heinrichs GEOEXploration Co.

Wm. Hovey Smith
Geologist

WHS:oek

LAW OFFICES OF
LESHER & SCRUGGS, P.C.
3773 EAST BROADWAY
TUCSON, ARIZONA 85716

EDWARD W. SCRUGGS
ROBERT O. LESHER
E. F. RUCKER
WILLIAM KIMBLE
WILLIAM S. LINDAMOOD
D. THOMPSON SLUTES
JAMES M. SAKRISON
MONTE C. CLAUSEN
JOHN A. WASLEY
MICHAEL J. GOTHREAU

TELEPHONE 795-1470
AREA CODE 602

April 9, 1973

**HEINRICHS
GEOEX**

Cable: GEOEX



REC'D APR 10 1973 REC'D

Mr. Wm. Hovey Smith
Heinrichs Geoexploration Company
P. O. Box 5964
Tucson, Arizona 85703

BOX 5964 TUCSON, ARIZONA 85703

Phone: (AREA 602) 623-0578

Re: Job #810

Dear Mr. Smith:

Enclosed please find Notices of Location which you
requested this date.

Sincerely,

LESHER & SCRUGGS, P.C.


John A. Wasley

JAW:cm
Encls.

NOTICE OF LOCATION

INDEXED

DOCK 031 PAGE 529

NOTICE IS HEREBY GIVEN That the El Tesoro # 1 Mining Claim was located by Mr. & Mrs. Robert & Kathy Papotto, Mr. & Mrs. Jose & Helen Mendoza on this 1st day of May 19 61 for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is east and west and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/4 miles due south of the town of Patagonia, Arizona

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 feet in a easterly direction to the easterly center end monument, or stake, and 750 feet in a westerly direction from the aforesaid monument, or stake, to the westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Robert Papotto
Kathy Papotto
Mr. & Mrs. Jose Mendoza
Helen
Locator

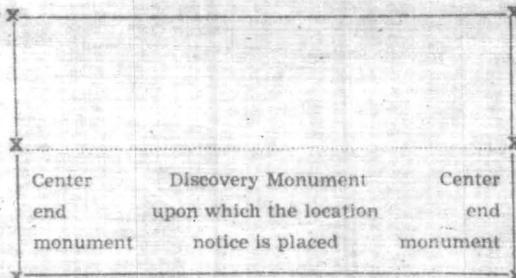
How to fill out a location notice:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1946 for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.

How to fill out a location notice:



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

PFISER & TUCSON OFFICE SUPPLY CO. - TUCSON

STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2395

I hereby certify that the within instrument was filed and recorded at the request of Robert Papotto July 17, A. D. 1961 at 10:17 A. M. DOCKET No. 37 Page 529. Witness my hand and official seal the day and year aforesaid.

G. ESPINOSA MORENO, County Recorder
By Deputy County Recorder

NOTICE OF LOCATION

INDEXED

DOCK 031 PAGE 530

NOTICE IS HEREBY GIVEN That the El Tesoro # 2 Mining Claim was located by Mr. & Mrs. Robert & Kathy Papotto, Mr. & Mrs. Jose & Helen Mendosa on this 1st day of May, 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is east and west. and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/4 miles due south of the town of Patagonia, Arizona.

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 feet in a easterly direction to the easterly center end monument, or stake, and 750 feet in a westerly direction from the aforesaid monument, or stake, to the westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Robert Papotto
Kathy Papotto
Mr. & Mrs. Jose Mendosa
Helen Locator

How to fill out a location notice:

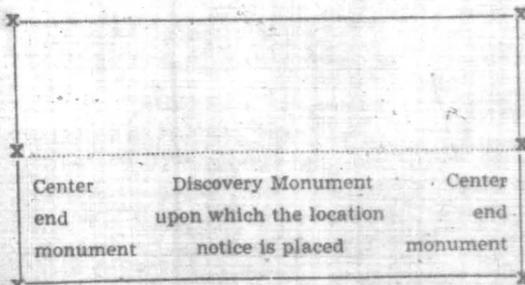
NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June, 1946, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.

PRISER'S TUCSON OFFICE SUPPLY CO.—TUCSON

How to fill out a location notice:



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2396

I hereby certify that the within instrument was filed and reported at the request of Robert Papotto, July 17 A. D., 1961 at 10:47 A. M. Page 530

Witness my hand and official seal the day and year aforesaid

G. ESPINOSA MORENO, County Recorder

By Deputy County Recorder

NOTICE OF LOCATION

INDEXED
DOCK 031 PAGE 531

NOTICE IS HEREBY GIVEN That the El Tesoro # 3 Mining Claim was located by Mr. & Mrs. Robert & Kathy Papotto, Mr. & Mrs. Jose & Helen Mendoza on this 1st day of MAY, 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is east and west and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/4 miles due south of the town of Patagonia, Arizona

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 feet in a easterly direction to the easterly center end monument, or stake, and 750 feet in a westerly direction from the aforesaid monument, or stake, to the westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Robert Papotto
Kathy Papotto
Mr. & Mrs. Jose Mendoza
Helen Locator.

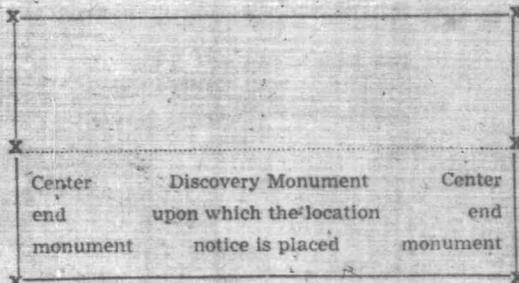
How to fill out a location notice:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June, 1946, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.

How to fill out a location notice:



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

FRISER & TUCSON OFFICE SUPPLY CO. - TUCSON

STATE OF ARIZONA) 68.
County of Santa Cruz)

NO. 2397

I hereby certify that the within instrument was filed and recorded at the request of Robert Papotto July 17, A. D., 1961 at 10:17 AM DOCK NO. 31 Page 531

Witness my hand and official seal the day and year above signed.

G. Espinoza By: Stephen Moore Deputy County Recorder

NOTICE OF LOCATION

INDEXED

BOOK 031 PAGE 532

NOTICE IS HEREBY GIVEN That the El Tesoro # 4 Mining Claim was located by Mr. & Mrs. Robert & Kathy Papotto, Mr. & Mrs. Jose & Helen Mendoza on this 1st day of May, 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is east and west and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/4 miles due south of the town of Patagonia, Arizona.

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 feet in a easterly direction to the easterly center end monument, or stake, and 750 feet in a westerly direction from the aforesaid monument, or stake, to the westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Robert Papotto
Kathy Papotto
Mr. & Mrs. Jose Mendoza
Helen
Locator

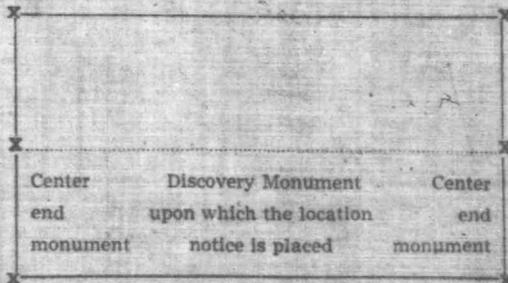
How to fill out a location notice:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June, 1946, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.

How to fill out a location notice:



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

FRISER'S YUCCON OFFICE SUPPLY CO.—TUCSON

STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2398

I hereby certify that the within instrument was filed and recorded at the request of Robert Papotto, July 17, 1961 at 10:17 A.M. DOCKET NO. 331 PAGE 532

Witness my hand and official seal the day and year aforesaid.

G. ESPINOSA MORENO, County Recorder

Deputy County Recorder

NOTICE OF LOCATION

INDEXED
Originally known as
the Hilda Mine

NOTICE IS HEREBY GIVEN That the Encanto # 4 Mining Claim was located by Mr. & Mrs. Robert & Kathy Papotto, Mr. & Mrs. Jose & Helen Mendoza on this 1st day of May, 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and West and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/4 miles due south of the town of Patagonia, Arizona

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 feet in a easterly direction to the easterly center end monument, or stake, and 750 feet in a westerly direction from the aforesaid monument, or stake, to the westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Robert Papotto
Kathy Papotto
Mr. & Mrs. Jose Mendoza
Helen Locator.

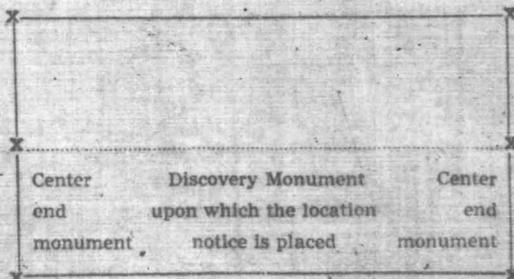
How to fill out a location notice:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June, 1946, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.

How to fill out a location notice:



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

PRISER'S TUCSON OFFICE SUPPLY CO.—TUCSON

STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2402

I hereby certify that the within instrument was filed and recorded at the request of Robert Papotto, July 17, 1961 at 10:44 AM. BOOK NO. 31 Page 536.
Witness my hand and official seal this day and year aforesaid.

G. Espinosa Moreno
G. ESPINOSA MORENO, County Recorder

By _____
Deputy County Recorder

NOTICE OF LOCATION

DOCK 031 PAGE 127

NOTICE IS HEREBY GIVEN That the Big Buck # 3 Mining Claim was located by José L. Mendoza on this 1st day of May 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East & West and is situated in the Hershaw Mining District Santa Cruz County, Arizona, about 3 1/4 Miles South of the town of Patagonia Arizona

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 ft. Easterly feet in a Easterly direction to the Easterly center end monument, or stake, and 750 ft. feet in a Westerly direction from the aforesaid location monument, or stake, to the Westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

José L. Mendoza
Locator.

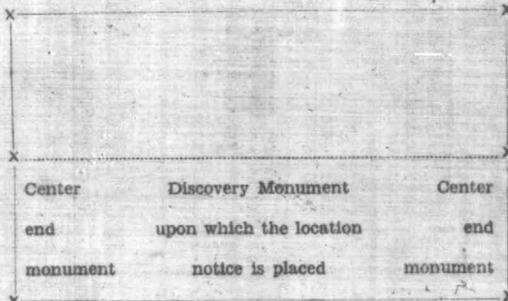
How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTSON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTH-EAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

RECORDED FROM

STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2042

I hereby certify that the within instrument was filed and recorded at the request of

José L. Mendoza June 23 1961 at 9:47 A.M. DOCKET NO. 31 Page 127.

Witness my hand and official seal the day and year aforesaid.

G. ESPINOSA, County Recorder

By Mary Lou Laine
Deputy County Recorder

NOTICE OF LOCATION

DOCK. 031 PAGE 126

NOTICE IS HEREBY GIVEN That the Big Buck #2 Mining Claim was located by Jose E. Mendoza on this 1st day of May 1961 for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and West and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/2 miles due south from the town of Patagonia.

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 ft Eastwardly feet in a Eastwardly direction to the Eastwardly center end monument, or stake, and 750 ft feet in a Westwardly direction from the aforesaid location monument, or stake, to the Westwardly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end-monuments, or stakes, making the claim in the form of a parallelogram.

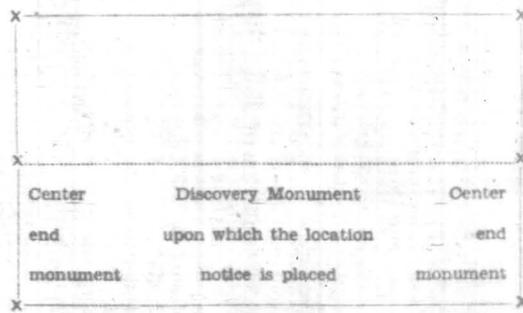
Jose E. Mendoza

Locator.

How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTSON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTH-EAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

JOHN DOE, RICHARD ROE, Locators.

RECORDED FROM WILDE'S RECORDS, ARIZONA

STATE OF ARIZONA) SS. County of Santa Cruz) I hereby certify that the within instrument was filed and recorded at the request of Jose E. Mendoza June 23 1961 at 9:47 AM. DOCKET NO. 31 Page 126. Witness my hand and official seal the day and year aforesaid. G. ESPINOSA County Recorder By Mary Lou Lamy Deputy County Recorder

NOTICE IS HEREBY GIVEN That the Big Buck #1 Mining Claim was located by Jose E. Mendoza on this 1st day of May 1961, for mining purposes. Said claim is 1800 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and West and is situated in the Hinsshaw Mining District Santa Cruz County, Arizona, about 3/4 miles Due South of the town of Patagonia Ariz

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 ft Easterly feet in a Easterly direction to the Easterly center end monument, or stake, and 750 ft feet in a Westerly direction from the aforesaid location monument, or stake, to the Westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Jose E. Mendoza

Locator.

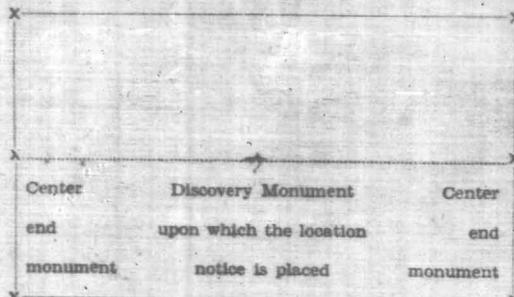
How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1950, for mining purposes. Said claim is 1800 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTSON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTH-EAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE.
RICHARD ROE,
Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

REORDER FROM
WILDE'S
NOGALES, ARIZONA

STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2040

I hereby certify that the within instrument was filed and recorded at the request of

Jose E. Mendoza June 23 1961 at 9:47 AM. DOCKET NO. 31 Page 125.

Witness my hand and official seal the day and year aforesaid.

G. ESPINOZA, County Recorder

By Mary Lou Daiming
Deputy County Recorder

NOTICE OF LOCATION

DOCK 031 PAGE 128

NOTICE IS HEREBY GIVEN That the Big Buck # 4 Mining Claim was located by Jose S. Mendoza on this 1st day of May 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and west and is situated in the Harrison Mining District Santa Cruz County, Arizona, about 3 1/4 miles due South of the town of Patagonia, Ariz

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 ft Easterly feet in a Easterly direction to the Easterly center end monument, or stake, and 750 ft feet in a Westerly direction from the aforesaid location monument, or stake, to the Westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Jose S. Mendoza
Locator.

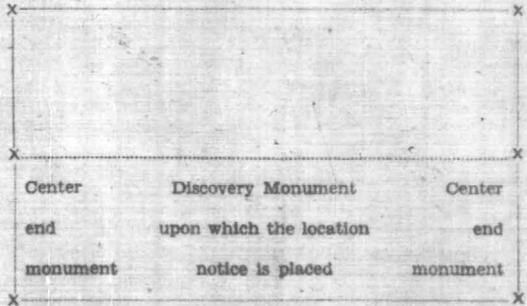
How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTSON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

REORDER FROM
Wilde Stationers
NOGALES, ARIZONA

STATE OF ARIZONA) SS. NO. 2043
County of Santa Cruz)

I hereby certify that the within instrument was filed and recorded at the request of Jose S. Mendoza June 23 1961 at 9:47 AM. DOCKET NO. 31 Page 128.
Witness my hand and official seal the day and year aforesaid.

G. ESPINOSA MORENO, County Recorder

By Mary Lou Sainy
Deputy County Recorder

NOTICE OF LOCATION

DOCK 031 PAGE 129

NOTICE IS HEREBY GIVEN That the Big Buck # 5 Mining Claim was located by Jose S. Mendoza on this 1st day of May 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and West and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/2 Miles South of the town of Patagonia, Ariz

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)
 This claim runs from the discovery monument, or stake on which the notice is posted, 750 ft Easterly feet in a Easterly direction to the Easterly center end monument, or stake, and 750 ft feet in a Westerly direction from the aforesaid location monument, or stake, to the Westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Jose S. Mendoza
 Locator.

How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION
 Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTSON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTH-EAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.
JOHN DOE,
RICHARD ROE,
 Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

RECORDER FROM
 Wilde Stationers
 NOGALES, ARIZONA

STATE OF ARIZONA) SS. NO. 2044
 County of Santa Cruz)

I hereby certify that the within instrument was filed and recorded at the request of Jose S. Mendoza June 29 1961 at 9:47 A.M. DOCKET NO. 31 Page 129
 Witness my hand and official seal the day and year aforesaid.

G. ESPINOSA MORALES, County Recorder
 By Mary Lou Dainiz Deputy County Recorder

NOTICE OF LOCATION

DOCK 031 PAGE 130

NOTICE IS HEREBY GIVEN That the Big Buck # 6 Mining Claim was located by Jose S. Mendez on this 1st day of May 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and West and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/2 miles due South of the town of Patagonia, Ariz

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 ft Easterly feet in a Easterly direction to the Easterly center end monument, or stake, and 750 ft feet in a Westerly direction from the aforesaid location monument, or stake, to the Westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Jose S. Mendez
Locator.

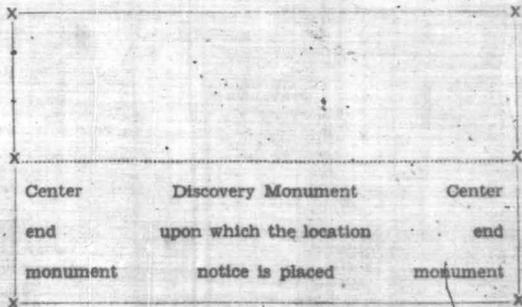
How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTSON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTH-EAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to and do your location work at any time within 90 days from date of location.

RECORDED FROM
Wilde Stationers
NOGALES, ARIZONA.

STATE OF ARIZONA
County of Santa Cruz

NO. 2045

I hereby certify that the within instrument was filed and recorded at the request of

Jose S. Mendez June 13, 1961 at 9:47 AM. DOCKET NO. 31 Page 130

Witness my hand and official seal the day and year aforesaid.

G. ESPINOSA-MORENO, County Recorder

By Mary Lou Dainy
Deputy County Recorder

NOTICE OF LOCATION

INDEXED

BOOK 031 PAGE 533

NOTICE IS HEREBY GIVEN That the Encanto # 1 Mining Claim was located by Mr. & Mrs. Robert & Kathy Papotto, Mr. & Mrs. Jose & Helen Mendoza on this 1st day of May 19 61, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and West and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/4 miles due south of the town of Patagonia, Arizona

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 feet in a Easterly direction to the Easterly center end monument, or stake, and 750 feet in a Westerly direction from the aforesaid monument, or stake, to the Westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

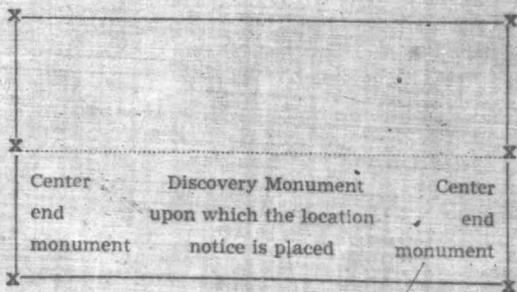
Robert Papotto
Kathy Papotto
Mr. & Mrs. Jose Mendoza
Helen Locator.

How to fill out a location notice:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1946, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

PRISER'S TUCSON OFFICE SUPPLY CO.—TUCSON

STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2399

I hereby certify that the within instrument was filed and recorded at the request of Robert Papotto, July 17, 1961 at 10:17 A.M. Book No. 318 Page 533

Witness my hand and official seal the day and year aforesaid.

G. Espinosa Moreno
G. ESPINOSA MORENO, County Recorder

By *[Signature]* Deputy County Recorder

NOTICE OF LOCATION

INDEXED

DOCK 031 PAGE 534

NOTICE IS HEREBY GIVEN That the Encanto # 2 Mining Claim was located by Mr. & Mrs. Robert & Kathy Papotto, Mr. & Mrs. Jose & Helen Mendoza on this 1st day of May, 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and West and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/4 miles due south of the town of Patagonia, Arizona

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 feet in a Easterly direction to the Easterly center end monument, or stake, and 750 feet in a Westerly direction from the aforesaid monument, or stake, to the Westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Robert Papotto
Kathy Papotto
Mr. & Mrs. Jose Mendoza
Helen
Locators

How to fill out a location notice:

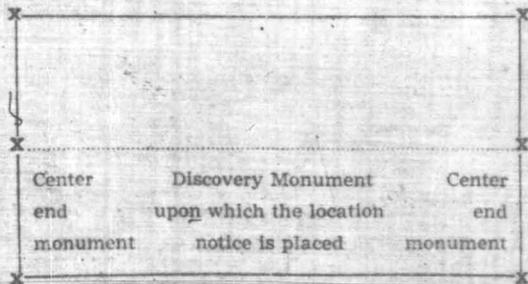
NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June, 1946, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.

FRISER'S TUCSON OFFICE SUPPLY CO. - TUCSON

How to fill out a location notice:



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2400

I hereby certify that the within instrument was filed and recorded at the request of Robert Papotto July 17, A. D., 1961 at 10:17 A.M. DOCKET NO. 397 Page 534.

Witness my hand and official seal the day and year aforesaid:

G. ESPINOSA MORENO, County Recorder

By Deputy County Recorder

NOTICE OF LOCATION

DOCK. 031 PAGE 535

NOTICE IS HEREBY GIVEN That the Tract No. 3 Mining Claim was located by Mr. & Mrs. Robert & Kathy Papotto, Mr. & Mrs. Jose & Helen Mendosa on this 1st day of May 1961, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is East and West

and is situated in the Maricopa Mining District Santa Cruz County, Arizona, about 3 1/4 miles due south of the town of Patagonia, Arizona

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 750 feet in a Easterly direction to the Easterly center end monument, or stake, and 750 feet in a Westerly direction from the aforesaid monument, or stake, to the Westerly center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

Robert Papotto
Kathy Papotto
Mr. & Mrs. Jose Mendosa
Helen Locator.

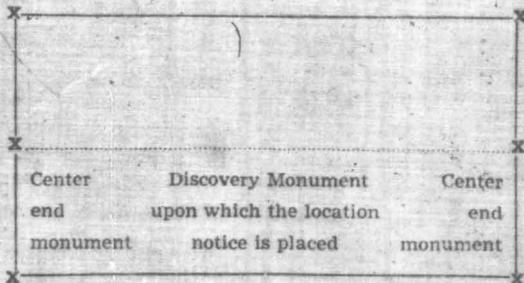
How to fill out a location notice:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1946, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTHEAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.

How to fill out a location notice:



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

FRISER'S TUCSON OFFICE SUPPLY CO.—TUCSON

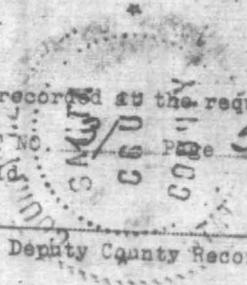
STATE OF ARIZONA) SS.
County of Santa Cruz)

NO. 2401

I hereby certify that the within instrument was filed and recorded at the request of Robert Papotto July 17 A. D., 1961 at 10:17 AM. DOCKET NO. 3/61 Page 535
Witness my hand and official seal the day and year aforesaid

G. ESPINOSA MORENO, County Recorder

By G. Espinosa Moreno Deputy County Recorder



LAW OFFICES OF
LESHER & SCRUGGS, P.C.
3773 EAST BROADWAY
TUCSON, ARIZONA 85716

EDWARD W. SCRUGGS
ROBERT O. LESHER
E. F. RUCKER
WILLIAM KIMBLE
WILLIAM S. LINDAMOOD
D. THOMPSON SLUTES
JAMES M. SAKRISON
MONTE C. CLAUSEN
JOHN A. WASLEY
MICHAEL J. GOTHREAU

TELEPHONE 795-1470
AREA CODE 602

HEINRICH'S
GEOEX

Cable: GEOEX



April 5, 1973

REC'D APR 6 1973 REC'D

BOX 5964 TUCSON, ARIZONA 85706
Phone: (AREA 602) 623-0578

Mr. Wm. Hovey Smith
Heinrichs Geoexploration Company
P. O. Box 5964
Tucson, Arizona 85703

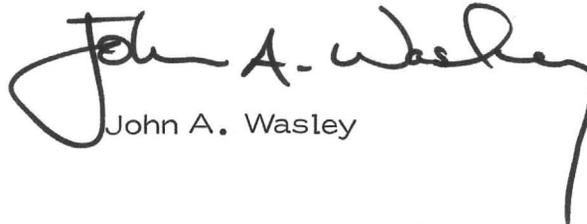
Re: Job #810

Dear Mr. Smith:

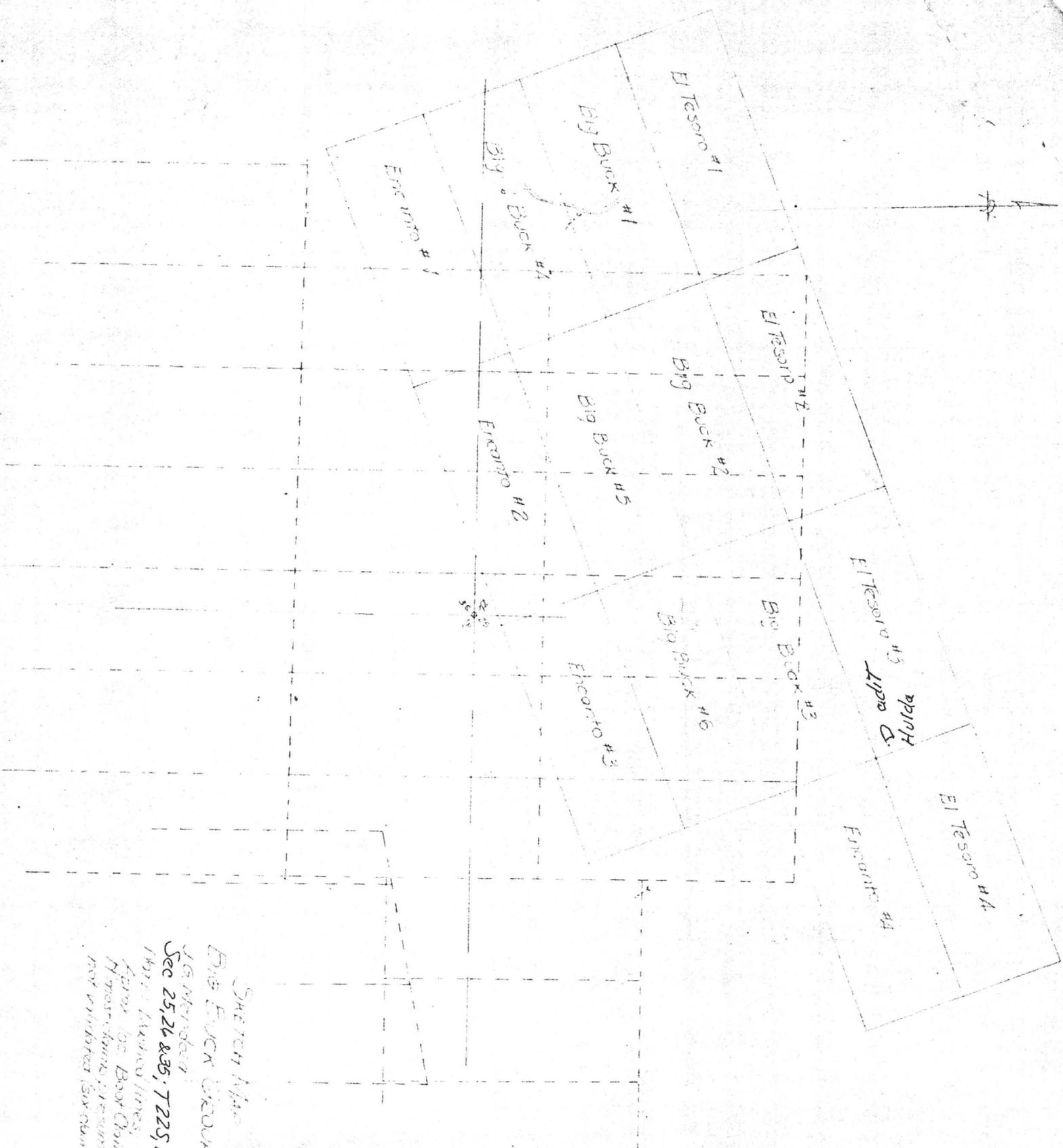
As requested, I am enclosing a copy of the Sketch
Map of the Big Buck Group. This sketch is sent to you at the
request of Mrs. William Lane.

Very truly yours,

LESHER & SCRUGGS, P.C.


John A. Wasley

JAW:cm
Encl.



Sweeten Hill
 Big Buck Group
 15
 Sec 25, 26 & 35, T22S, R4E, Arizona
 1897
 Approx. location lines
 Approx. 300 foot chains
 Approx. 1/2 mile (approx. 1/2
 not indicated (six chains)

Armada

Patent Considerations

Comparison of Mr. John A. Wasley's summary of patent procedure with the current Bureau of Land Management requirements show no significant changes in requirements or procedure. Mr. Wasley's review is relatively complete from a legal and procedural point of view.

During my examination of the claims an attempt was made to play the "Devil's Advocate" in order to determine what points could be found which would possibly prevent these claims from being patented, and the following major deficiencies were recognized:

1. There must be a discovery of such a quantity and nature of mineralization that the deposit has a good possibility of being economically mineable under present conditions. A small mineralized occurrence such as scattered copper staining is not sufficient proof of a potentially economic mineral deposit. The burden of proof rests with the property owner. This proof must be sufficient to convince a skeptic that a potentially economic mineral deposit is present. This is not how the law reads, but this is how it is administered in fact. Failure of this test is the most common cause of refusal for patent.

2. The claim "locations must be distinctly marked on the ground such that boundaries can be readily traced." The claim boundaries are not easily traceable, and some of the claim notices were missing.

To satisfy the first point, only those claims with the most abundant and obvious indications of mineralization should be considered potentially patentable. These claims should be mapped on a scale of one inch equals one hundred feet, and probably one or more drill holes should be drilled to prove that the surface mineralization extends to depth. Then patent should be applied for only when sufficient information has been gathered to insure success.

To correct the second point, a white painted four foot high board with at least one side four inches wide should be placed at each monument. This board should have a metal tag on which is inscribed the claim name and position of the monument (i.e. Big Buck No. 5 N. E. corner, S. W. end center etc.). This particular type of monument is not specifically required; but they are helpful, make a good impression on the claim examiner, and are evidence that the owners are serious about complying with the letter and intent of the law. All non-pertinent monuments should be removed. As part of the annual assessment work, each monument should be inspected, lines brushed where necessary, and missing notices replaced.

It would be desirable to do the above work on any claims that might be potentially patentable the assessment year prior to applying for patent in order to keep the annual cost at a reasonable level.

At the present time there are no claims which I can recommend as being ready for initiation of patent proceedings. The claims which appear to have most potential for patent are those which you have under option in the northeast 1/4 of Section 35.

WHS:oek
Heinrichs GEOExploration Co.
P.O. Box 5964 Tucson, AZ 85703
3/29/73
cc: Mr. & Mrs. W. Lane
cc: GEOEX

by: Wm. Hovey Smith
Geologist

LAW OFFICES OF
LESLER & SCRUGGS
111 EAST BROADWAY
TUCSON, ARIZONA 85710

EDWARD W. BERGER
ROBERT O. LEUBER
E. J. RUCKER
WILLIAM KIMBLE
WILLIAM S. LINDANOOD
D. THOMPSON SUTLER
JAMES M. SARRISON
MONTE C. CLAUSEN
JOHN A. WASLEY

TELEPHONE 725-1450
AREA CODE 602

April 13, 1972

Mr. and Mrs. William Lane
4803 Via Entrada
Tucson, Arizona 85718

Re: Mining Claims - Santa Cruz County

Dear Mr. and Mrs. Lane:

The purpose of this letter is to outline patent procedures pursuant to your request.

The initial step in a patent application is to obtain an official survey. The application for the survey must be filed with the state director of the cadastral engineering office for the state in which the claim is situated. The application must be made in writing and signed by the applicant. The application should contain the name of the applicant, the name of the location, the state, county, and mining district wherein it is located and, if upon surveyed lands, the section, the township, and the range. As the applicant may select any authorized United States Mineral Surveyor the application should designate the surveyor to be appointed. The application must be accompanied by an original and three copies of the original, and the amended location notice or certificate of the claim for which the survey is to be ordered, all duly certified by the officer charged by the state with recording such notices or certificates. The survey and plat of mineral claims required to be filed in the proper land office with application for patent must have been made subsequent to the recording of the location of the claim. The survey will be required in all cases except for placer claims located on surveyed lands and which conform to legal subdivisions. Upon receipt of the application for survey, the office of the cadastral engineer in which the work of preparing the plat and field notes to be furnished the applicant is done will require a deposit to apply to the cost of such work. The amount of the deposit will vary in individual cases, according to type and number

Mr. and Mrs. William Lane

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April 13, 1972

of claims. After the filing of the application for survey and the payment of the required deposit the Bureau of Land Management will issue the order for survey to the mineral surveyor specified by the applicant. A certified copy of the location certificate will accompany the order. The mineral surveyor may not be assisted in making the survey by the applicants, attorneys, or parties in interest. The duty of the mineral surveyor ceases when he has executed the survey and returned the field notes and preliminary plat with his report, to the cadastral engineer. He is not permitted to prepare for the applicant the papers in support of his application for patent. The applicant is required, in all cases, to make his own arrangements with the mineral surveyor of his choice for the payment of his services and those of his assistants in making the survey. This applies to both the original survey for patent and any amended surveys. After approval of the preliminary plat, field notes and certificate of improvements by the Bureau of Land Management, the applicant will receive two copies of the approved field notes and three copies of the plat. If the cadastral engineer refuses to approve the survey, the applicant has the right to appeal to the Director of the Bureau of Land Management, and from him to the Secretary of the Interior.

The Bureau of Land Management does not furnish nor does it require any certain form of application for patent. However the applicant must file an application in duplicate together with certain supporting proofs. The application must contain that information required by law to obtain a patent. For your information I have enclosed herewith a form denominated "Application For Patent" but this is merely a suggested form. The purpose of the blank spaces in the form is self evident in most instances. The application must be signed by the applicant or his agent before any officer authorized to administer oaths in the land district in which the claim is located.

Prior to filing the application for patent, the applicant is required to post a copy of the plat or survey in a conspicuous place upon the claim, together with notice of his intention to apply for a patent therefor. This posting should be done in the presence of at least two witnesses. This notice and plat should be fastened to some board or building and be covered with a transparent material

Mr. and Mrs. William Lane

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April 13, 1972

so it will be plainly visible and at the same time be protected from the weather. This notice must remain on the claim during the entire period of publication. After posting the plat of survey and notice of application in a conspicuous place upon the claim, the applicant must file with the proper land office a copy of such plat and the field notes of survey of the claim, accompanied by the statement of at least two credible disinterested witnesses that such plat and notice are posted conspicuously upon the claim. Upon receipt of an application for a mineral patent and supporting proofs required, if no reason appears for rejecting the application, the manager will, at the expense of the applicant publish a notice of such application for the period of 60 days in a newspaper published nearest to the claim and so designated by the manager. The published notice is signed by the manager of the land office, not by the applicant.

With the application for patent, the following supporting proof must be submitted also:

- Two copies of each of Final Plats and approved
Field Notes and one copy of:
 - Notice of Application for United States Patent (to
be posted in the land office);
 - Proof of Posting Notice and Diagram on the Claim;
 - Affidavit of Citizenship;
 - Publisher's Agreement;
 - Publication Notice;
 - Abstract of Title, or Certificate of Title.

The above constitute what is commonly referred to as the "first papers". When the period required for publication is complete, the following documents must be filed with the land office:

- Proof that Plat and Notice Remain Posted on the
Claim During Time of Publication;

Mr. and Mrs. William Lane

-4-

April 13, 1972

Proof of Publication;

Statement of Fees and Charges;

Application to Purchase.

The above constitute what is commonly referred to as the "second papers". I will be happy to provide you with detailed information regarding any or all of the above documents. The application to purchase is to be signed by the applicant and filed; and payment of the purchase price for land is made at that time.

Proof of possessory right in the applicant for patent is a requirement and may be shown in several ways. The preferred means and the one which should be used whenever possible is an abstract of title duly certified. When an abstract is not available, a Certificate of Title may be used. The applicant should also file a document, under seal of the court having jurisdiction of mining cases within the judicial district embracing the claim, that no suit or action of any character whatever is pending that involves the right of possession to any portion of the claim applied for, and that there has been no litigation before said court affecting the title to said claim or any part thereof for a period equal to the time fixed by the statute of limitation for mining claims in the state other than that which has been finally decided in favor of the applicant. It is the present practice of the Bureau of Land Management to suspend the patent proceedings until the applicant or applicants have obtained a full possessory title or right to the mining claim.

When a patent is issued, the grantee acquires all of the estate of the United States in the surface, and all beneath, save what is excepted by mining statutes. That patented becomes private property over which the Government no longer exercises control. The exclusive right to possession and enjoyment of the surface included within the limits of the property patented is however subject to pre-existing easements.

I have prepared this letter at the risk of over-simplification

LAW OFFICES OF
LESHER & SCRUGGS

Mr. and Mrs. William Lane

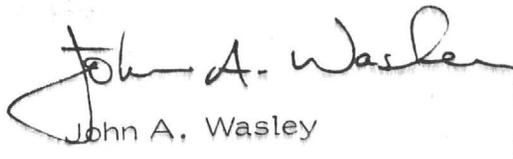
-5-

April 13, 1972

to give you a general idea of the proceedings necessary in order to acquire a patent to mining lands. If I can be of further service in this regard, please do not hesitate to contact me.

Sincerely,

LESHER & SCRUGGS



John A. Wasley

JAW:cm
Encl.

P. S. Please be advised that the Mineral Deed to the Unpatented Mining Claims was recorded in Santa Cruz County, Docket 139, page 486-489.

John

MINERAL DEED
UNPATENTED MINING CLAIM

THIS DEED made this 31 day of MARCH, 1972,
between JOHN H. KECK and MARY KECK, husband and wife, of
Tucson, Pima County, Arizona, JOSE G. MENDOZA and HELEN A.
MENDOZA, husband and wife, of Patagonia, Santa Cruz County,
Arizona, the Grantor, and WILLIAM LANE and BETH LANE,
husband and wife, of Tucson, Pima County, Arizona, the Grantee:

WITNESSETH:

That the Grantor for and in consideration of NINE THOUSAND
FIVE HUNDRED DOLLARS (\$9,500.00) and other valuable considera-
tion, receipt of which is acknowledged, does hereby sell and convey
to the Grantee all those certain mining claims situate in the Harshaw
Mining District, County of Santa Cruz, State of Arizona, the Orig-
inal Location Notice of said claims having been recorded in the of-
fice of the recorder of Santa Cruz County, and more particularly
described as follows:

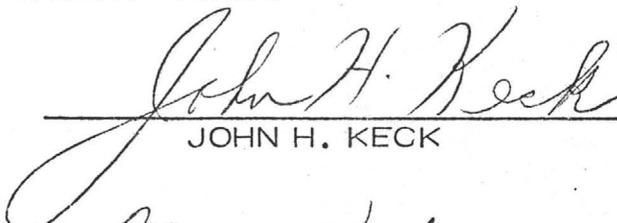
1. Big Buck #1, Book 031, Page 125, May 1, 1961;
2. Big Buck #2, Book 031, Page 126, May 1, 1961;
3. Big Buck #3, Book 031, Page 127, May 1, 1961;
4. Big Buck #4, Book 031, Page 128, May 1, 1961;
5. Big Buck #5, Book 031, Page 129, May 1, 1961;
6. Big Buck #6, Book 031, Page 130, May 1, 1961;
7. Encanto #1, Book 031, Page 533, May 1, 1961;
8. Encanto #2, Book 031, Page 534, May 1, 1961;

9. Encanto #3, Book 031, Page 535, May 1, 1961;
10. Encanto #4, Book 031, Page 536, May 1, 1961;
11. El Tesoro #1, Book 031, Page 529, May 1, 1961;
12. El Tesoro #2, Book 031, Page 530, May 1, 1961;
13. El Tesoro #3, Book 031, Page 531, May 1, 1961;
14. El Tesoro #4, Book 031, Page 532, May 1, 1961.

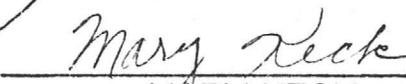
Together with all and singular the mines and minerals within the lines of said claim, their dips, spurs and extralateral rights, and all dumps, severed ore, fixtures, improvements, rights and appurtenances thereunto in anywise appertaining.

And the Grantor hereby covenants for himself, his heirs and assigns that the above-described premises are free and clear of all liens and incumbrances; that the described claim was located in accordance with the applicable provisions of federal and state law and has been maintained against relocation by the requisite amounts of annual assessment work; and that he will warrant and defend the title specially against all persons claiming by, through or under him.

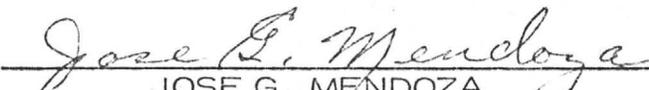
IN WITNESS WHEREOF, the Grantor hereunto set their hands the day and year first above written.



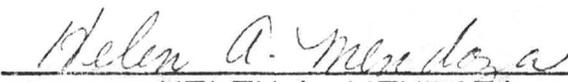
JOHN H. KECK



MARY KECK



JOSE G. MENDOZA



HELEN A. MENDOZA

NOTICE OF LOCATION

DOCK 142 PAGE 59 MICROFILMED

NOTICE IS HEREBY GIVEN That the El Tesoro # 5 Mining Claim was located by William Clay Lane on this 25th day of March 1972 for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is Easterly & Westerly and is situated in the Harshaw Mining District Santa Cruz County, Arizona, about 3 1/2 miles Due South of the Town of Patagonia Ariz

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.) This claim runs from the discovery monument, or stake on which the notice is posted, 1450 feet in a Westerly direction to the West of center end monument, or stake, and 50 feet in a Easterly direction from the aforesaid location monument, or stake, to the East of center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

William Clay Lane Locator.

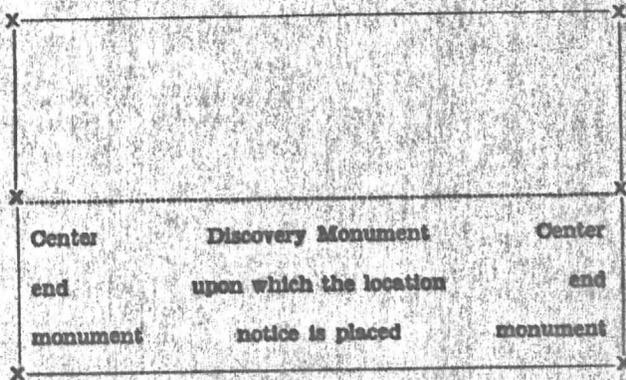
How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTSON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTH-EAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE, RICHARD ROE, Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

STATE OF ARIZONA, County of Santa Cruz - SS. I do hereby certify that the within instrument was filed and recorded at the request of JOSE MENDOZA on MAY 19 1972 A. D., 1972 at 3:39 o'clock P. M. Docket No. 142 Page 59 FEE NO. 17920

WITNESS my hand and official seal the day and year first above written. G. ESPINOSA MORENO, COUNTY RECORDER

By: [Signature]

NOTICE OF LOCATION

INDEXED

MICROFILMED

DOCK 142 PAGE 60

NOTICE IS HEREBY GIVEN That the El Tesoro # 6 Mining Claim was located by William Clay Lane on this 25th day of March 1972, for mining purposes. Said claim is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the center of said vein or deposit, from end to end of said claim. The general course of this claim is Easterly + Westerly and is situated in the Huachua Mining District Santa Cruz County, Arizona, about 3 1/4 miles Due South of the town of Patagonia Ariz.

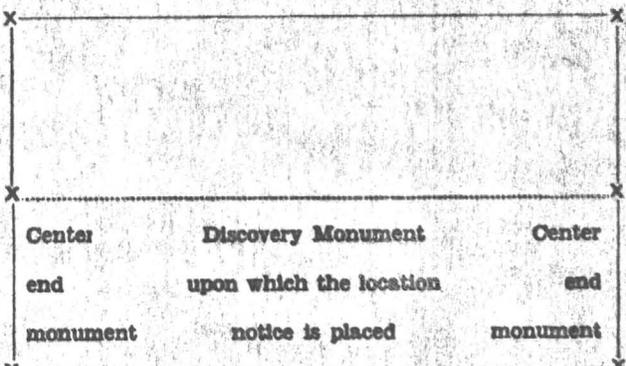
(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)
 This claim runs from the discovery monument, or stake on which the notice is posted, 1450' feet in a Easterly direction to the East of center end monument, or stake, and 50' feet in a Westerly direction from the aforesaid location monument, or stake, to the West of center end monument or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

William Clay Lane
 Locator.

How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION
 Notice is hereby given that the ...COPPER KING... Mining Claim was located by ...JOHN DOE AND RICHARD ROE... on this the ...11th... day of ...June... 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is ...NORTH AND SOUTH... and it is situated in the ...WRIGHTSON... mining district ...SANTA CRUZ... County, Arizona, about ...TWO MILES... ...SOUTH-EAST FROM ROCK PEAK... This claim runs from the discovery monument or stake, upon which the notice is posted ...750... feet in a ...SOUTHERLY... direction to the ...SOUTHERLY... center end monument, or stake, and ...750... feet in a ...NORTHERLY... direction from the aforesaid location monument, or stake, to the ...NORTHERLY... center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.



**JOHN DOE,
 RICHARD ROE,**
 Locators.

Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.
 You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

FEE NO. 17921

STATE OF ARIZONA, County of Santa Cruz - SS.
 I do hereby certify that the within instrument was filed and recorded at the request of JOSE MENDOZA on MAY 18 1972 A. D., 1972 at 3:39 o'clock P. M. Docket No. 142 Page 60
 Records of Santa Cruz County, Arizona.

WITNESS my hand and official seal the day and year first above written.
G. ESPINOSA MORENO, COUNTY RECORDER

By G. Espinosa Moreno

NOTICE OF LOCATION

INDEXED MICROFILMED
DOCK 142 PAGE 61

NOTICE IS HEREBY GIVEN That the Al Tesoro #9 Mining

Claim was located by William Clay Lane

on this 25th day of March 1972, for mining purposes. Said claim

is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side

of the center of said vein or deposit, from end to end of said claim. The general course of this claim is Easterly

& Westerly

and is situated in the Harshaw Mining District

Santa Cruz County, Arizona, about 3 1/4 miles Due South

of the town of Patagonia Ariz

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a

mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 1450'

feet in a Westerly direction to the West of center

end monument, or stake, and 50' feet in a Easterly direction from

the aforesaid location monument, or stake, to the East of center end monument

or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and

300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

William Clay Lane
Locator.

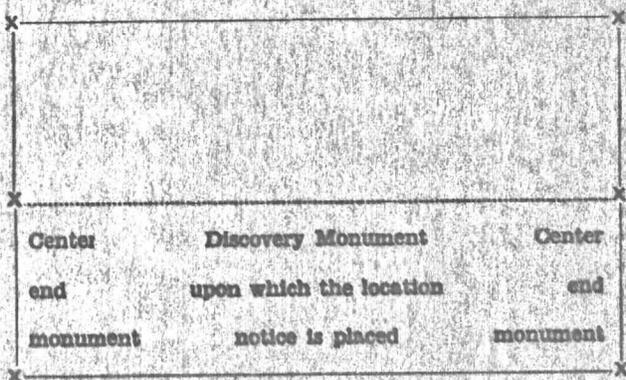
How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION

Notice is hereby given that the COPPER KING Mining Claim was located by JOHN DOE AND RICHARD ROE on this the 11th day of June 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is NORTH AND SOUTH and it is situated in the WRIGHTSON mining district SANTA CRUZ County, Arizona, about TWO MILES SOUTH-EAST FROM ROCK PEAK. This claim runs from the discovery monument or stake, upon which the notice is posted, 750 feet in a SOUTHERLY direction to the SOUTHERLY center end monument, or stake, and 750 feet in a NORTHERLY direction from the aforesaid location monument, or stake, to the NORTHERLY center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE
Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

FEE NO. 17922

STATE OF ARIZONA, County of Santa Cruz - SS.
I do hereby certify that the within instrument was filed and recorded at the request of JOSE MENDOZA
on MAY 12 1972 A. D., 1972 at 3:39 o'clock P. M. Docket No. 142 Page 61
Records of Santa Cruz County, Arizona.

WITNESS my hand and official seal the day and year first above written.
G. ESPINOSA MORENO COUNTY RECORDER

By G. Espinosa Moreno

NOTICE OF LOCATION

INDEXED

MICROFILMED

DOCK 142 PAGE 62

NOTICE IS HEREBY GIVEN That the E. L. Tesoro #10 Mining

Claim was located by William Clay Lane

on this 25th day of March 19 72, for mining purposes. Said claim

is 1500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side

of the center of said vein or deposit, from end to end of said claim. The general course of this claim is Easterly

& Westerly

and is situated in the Hurshaw Mining District

Santa Cruz County, Arizona, about 3 1/4 miles Due South

of the Town of Patagonia, Ariz

(Write on above lines the distance and direction the claim is from some permanent and natural object, such as a mountain, peak, stream, etc.)

This claim runs from the discovery monument, or stake on which the notice is posted, 1450'

feet in a Easterly direction to the East of center

end monument, or stake, and 50' feet in a Westerly direction from

the aforesaid location monument, or stake, to the West of center end monument

or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making the claim in the form of a parallelogram.

William Clay Lane
Locator.

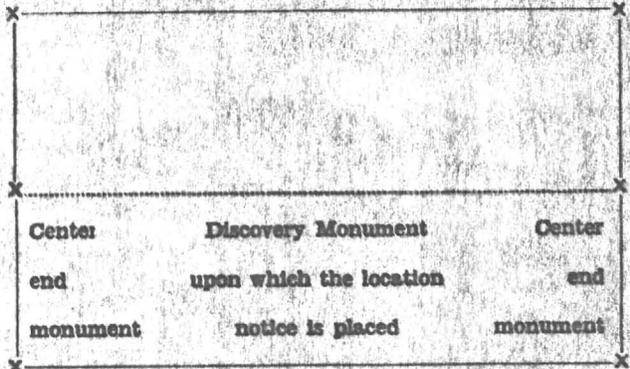
How to fill out a location notice:

How to monument a claim:

NOTICE OF LOCATION

Notice is hereby given that the ...COPPER KING... Mining Claim was located by ...JOHN DOE AND RICHARD ROE... on this the ...11th... day of ...June... 1950, for mining purposes. Said claim is 1500 feet in length along this vein or deposit of mineral-bearing rock in place, and 300 feet in width on each side of the center of said vein or deposit from end to end of claim. The general course of this claim is ...NORTH AND SOUTH... and it is situated in the ...WRIGHTSON... mining district ...SANTA CRUZ... County, Arizona, about ...TWO MILES... ...SOUTH-EAST FROM ROCK PEAK... This claim runs from the discovery monument or stake, upon which the notice is posted ...750... feet in a ...SOUTHERLY... direction to the ...SOUTHERLY... center end monument, or stake, and ...750... feet in a ...NORTHERLY... direction from the aforesaid location monument, or stake, to the ...NORTHERLY... center end monument, or stake, and is also marked by two corner monuments, or stakes, at each end of said claim, one on each side of and 300 feet from the center end monuments, or stakes, making claim in the form of a parallelogram.

JOHN DOE,
RICHARD ROE,
Locators.



Stone monuments must be three feet high. Stakes must be four feet above ground and substantial, no thickness is specified.

You can record as soon as you locate if you desire to, and do your location work at any time within 90 days from date of location.

FEE NO. 17923

STATE OF ARIZONA, County of Santa Cruz - SS.

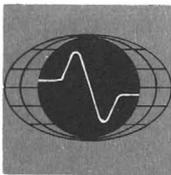
I do hereby certify that the within instrument was filed and recorded at the request of JOSE MENDOZA on MAY 12 1972 A. D., 1972 at 3:39 o'clock P M. Docket No. 142 Page 62

Records of Santa Cruz County, Arizona.

WITNESS my hand and official seal the day and year first above written.

G. ESPINOSA MORENO, COUNTY RECORDER

By G. Espinosa Moreno
Deputy



HEINRICHS GEOEXPLORATION COMPANY

806 WEST GRANT ROAD, TUCSON, ARIZONA 85703, P.O. BOX 5964, PHONE: (602) 623-0578

March 13, 1973

HEINRICHS
GEOEX

Cable: GEOEX



Mr. & Mrs. William Lane
4803 Via Entrada
Tucson, Arizona

REC'D MAR 26 1973 REC'D

BOX 5964 TUCSON, ARIZONA 85703

Phone: (AREA 602) 623-0578

Re: Job #810

Dear Mr. Lane:

This letter of agreement will serve to establish the terms under which GEOEX will contract the work discussed today on the Big Buck 1, 2, 3, 4, 5, 6; Encanto 1, 2; and El Tesoro 5, 6, 9, and 10 claims in the Harshaw Mining District of Arizona.

GEOEX will complete a reconnaissance geologic map of the above claims on a scale of 1 inch to 1,000 feet, do such geologic and geochemical sampling necessary to determine the character of mineralization, and present a report to the owners with recommendations for further work on the property. This work will be done in order to fulfill the annual assessment requirements. In addition to the above, GEOEX will examine the current procedures for patent of lode claims and review the proposed patent procedure by Mr. John A. Wasley of Leshar and Scruggs.

Our contract rates for a two man geologic crew to consist of a Geologist and Assistant Geologist will be \$200.00 per field work day plus expenses. Definite expenses are \$33.00 per diem living expenses, \$15.00 per day plus \$0.15 per mile for a 4 wheel drive truck. Miscellaneous supplies and communications will be billed at our invoice cost plus 15 percent.

A normal work schedule in the field is based on a five day week of eight hours per day. Overtime accumulated for work done in excess of 8 hours per day in the field or office and/or 5 days per week may be charged at 15% of the daily base rate per overtime hour plus expenses as above.

Mr. & Mrs. W. Lane
March 13, 1973
Page Two

Standby time due to inclement weather or client request will be charged at half the daily rate plus expenses as above.

Data reduction, drafting, and clerical work done in Tucson is billed at \$10.00 per hour. Report writing will be billed at \$150.00/day. This last figure will include work done by both the Geologist and Assistant Geologist in report preparation.

We estimate the cost of the above described work will be \$3,000.00 and will not be greater than \$4,000.00.

GEOEX will save Mr. & Mrs. William Lane harmless from all Workmen's Compensation liability, public liability, and property damage liability incurred by GEOEX employees. All property permits, brushing, and trespass liability and related costs which are incurred on behalf of Mr. & Mrs. William Lane will be chargeable to Mr. & Mrs. William Lane at GEOEX's invoice cost plus 15 percent. All special insurance premiums, bonds, fees, duties, licenses, taxes, trespass permits, and related special fees, if any, will be billed to Mr. & Mrs. William Lane at GEOEX's invoice cost plus 15 percent.

Payments are due on presentation. Billings may be submitted weekly with final payment due on presentation of final report.

Your understanding and approval of the above may be indicated by signing and returning the attached copy of this letter to us together with \$500.00 advance payment.

Our crew is scheduled for the week of March 19.

Sincerely yours,
Heinrichs GEOEXploration Co.

Wm. Hovey Smith
Wm. Hovey Smith, Geologist

WHS:oek
cc: John A. Wasley

Date: March 13, 1973

Accepted by: Latherine A. Lane

Title: _____



HEINRICHS GEOEXPLORATION COMPANY

806 WEST GRANT ROAD. TUCSON, ARIZONA 85703. P.O. BOX 5964. PHONE: (602) 623-0578

August 8, 1972

**Mr. Grant House
R. R. 1
Payson, Illinois 62360**

**Re: Property Examination near
Patagonia, Santa Cruz County,
Arizona GEOEX Job # 730**

Dear Mr. House:

This letter is a report on the one day property examination made with you on July 19, 1972, on the 14 unpatented Federal lode mining claims you and your partners own about 4 miles SSW of Patagonia, Santa Cruz County, Arizona. These claims lie in portions of Sections 25, 26, 35 and 36 in Township 22S, Range 18E, Gila and Salt River Meridian in the Palmetto and Harshaw Mining Districts. Some time was also spent on an adjoining property to the south on which you have an option.

Geographically, the investigated area is on the northwestern slope of the Patagonia Mountains in moderately rugged terrain at an average elevation of about 4500 feet above sea level.

Geologically, the inspected area is mainly granite porphyry except for a small outcrop of metasediments (largely hornfels and quartzite) in the optioned area, and Quaternary alluvium in the lower ground away from the mountain flank to the west and northwest.

The granite rock is fractured and altered, in places quite strongly, and looks bleached in some areas and is iron stained in others. Seritization is the most obvious type of alteration observed.

In the granite, the observed mineralization is mainly in and near shear zones and breccia zones several feet to several tens of feet in width striking generally north-south. The mineralization is strongly pyritic where fresh, but shows some copper staining in places. There are workings in the north part of the area in a tributary of Flux Canyon that were briefly inspected. These explore a brecciated shear zone which may be the northward extension of the Three R Mine shear zone.

The observed mineralization shows similarities to the Three R mineralization and there is some possibility that detailed exploration might

disclose similar high grade copper lenses at depth. The Three R Mine, one of the better past producers in the district, had considerable production of 10% copper sulfide ore and, reportedly, there are associated large tonnages of lower grade copper mineralization still remaining. Recent major company exploration efforts at the Three R Mine have reportedly been somewhat successful in developing low grade tonnage, but apparently not quite enough grade, tonnage, and continuity to support a viable operation at this time.

The large scale alteration and iron staining on your claims suggests that, in addition to high grade copper lens or vein type possibilities in the breccia and shear zones, there may also be low grade "porphyry" type mineralization possibilities at depth. No obvious widespread surface evidence of copper was noted, however, but this doesn't rule out improvement with depth. Often a high iron (pyritic) "halo" will surround or be in proximity to a copper bearing zone.

In the optioned area to the south, additional altered and iron stained granite was seen, but perhaps the most significant mineralization in this area is associated with the small outcrop of hornfels and quartzite meta-sediments. These rocks have been strongly mineralized mainly with pyrite, but copper staining is fairly abundant.

Several hundred tons of this copper stained material have been stockpiled near the exposure, apparently for leaching and/or milling tests. The grade of this material is not known, but it is visually estimated at 1 to 3% copper. If the pyrite itself carries some copper, the grade could be somewhat higher. Regardless, it probably isn't economically mineable unless proven to be present in a fairly large quantity - say a few hundred thousand tons or if it is very easily leachable.

We believe that your property has some potential for an economic discovery of copper. To test this possibility, it will probably take a major exploration effort involving in various degrees: geologic mapping, geophysics, geochemistry, sampling and a considerable amount of drilling.

Therefore, we suggest that you hold on to your claims, keeping up the annual assessment work, and try to interest a mining company or mining investment group to take an option on and explore your property. As to the optioned land to the south, not having any details on the agreement, it is difficult to make a recommendation. If the terms are reasonable, it is probably worth keeping so as to make a larger overall land package for presentation to others.

One important thing to do is to make available a property map showing the claims and their respective monuments plus showing the details of the optioned area, all relative to permanent locatable positions on the ground such as section corners, workings, topography and roads. Land ownership details of the adjoining ground would also be quite useful.

This information is critical for anyone attempting to work in the area and would be essential in negotiating any initial agreements.

With your permission, we would be interested in helping you promote this property. Several of our more or less permanent clients are interested

In taking on properties and doing sufficient initial exploration work to develop enough encouragement to hopefully interest a major production company into purchase and development. If you could make the property ownership details available to us as well as giving us guidelines on the type of option you would be willing to give, we could then approach these clients.

If you wish to do the exploration work yourselves, a minimum initial budget of from \$5000.00 to \$10,000.00 is suggested for preliminary surface geology, geochemistry and geophysics to locate possible drilling targets. An initial drilling budget of say \$50,000.00 would give about 4000 feet of drilling plus necessary assaying and core logging. This \$60,000.00 amount would be a typical small exploration budget assuming drilling is warranted after the preliminary surface work. Of course, if this initial drilling is encouraging, a much larger drilling program may then be in order. Some of the more economically successful drilling in this district has been deeper than 2000 feet below the surface and, if such is the case here, major drilling expenditures will be involved.

Respectfully submitted,
Heinrichs GEOEXploration Company



Chris S. Ludwig
Senior Geophysicist

APPROVED:



Walter E. Heinrichs, Jr.
President

P. O. Box 5964
Tucson, Arizona 85703