CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the Grover Heinrichs Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

E+E MANAGEMENT CORPORATION
PHOENIX · SAN FRANCISCO

August 26, 1971

Mr. Paul Eimon
Manager of Exploration
Essex International
1704 W. Grant
Tucson, Arizona 85705

Dear Mr. Eimon:

Enclosed is the copy of Art Blucher's report on the Morgan Property, as promised in our phone conversation.

I found our discussion on Essex International very interesting. It is not difficult to see your interest in vertical integration when one looks at the long range demand and supply situation facing the copper industry. Hopefully, we can be of service to you.

We will look forward to hearing from you shortly after the Labor Day weekend.

Respectfully yours,

E+E MANAGEMENT CORPORATION

Wayne Erickson

Wayne Erickson
President

la

Enclosure: Blucher Report

PHOENIX: 7244 EAST INDIAN SCHOOL ROAD • SCOTTSDALE, ARIZONA 85251 • (602) 947-4308

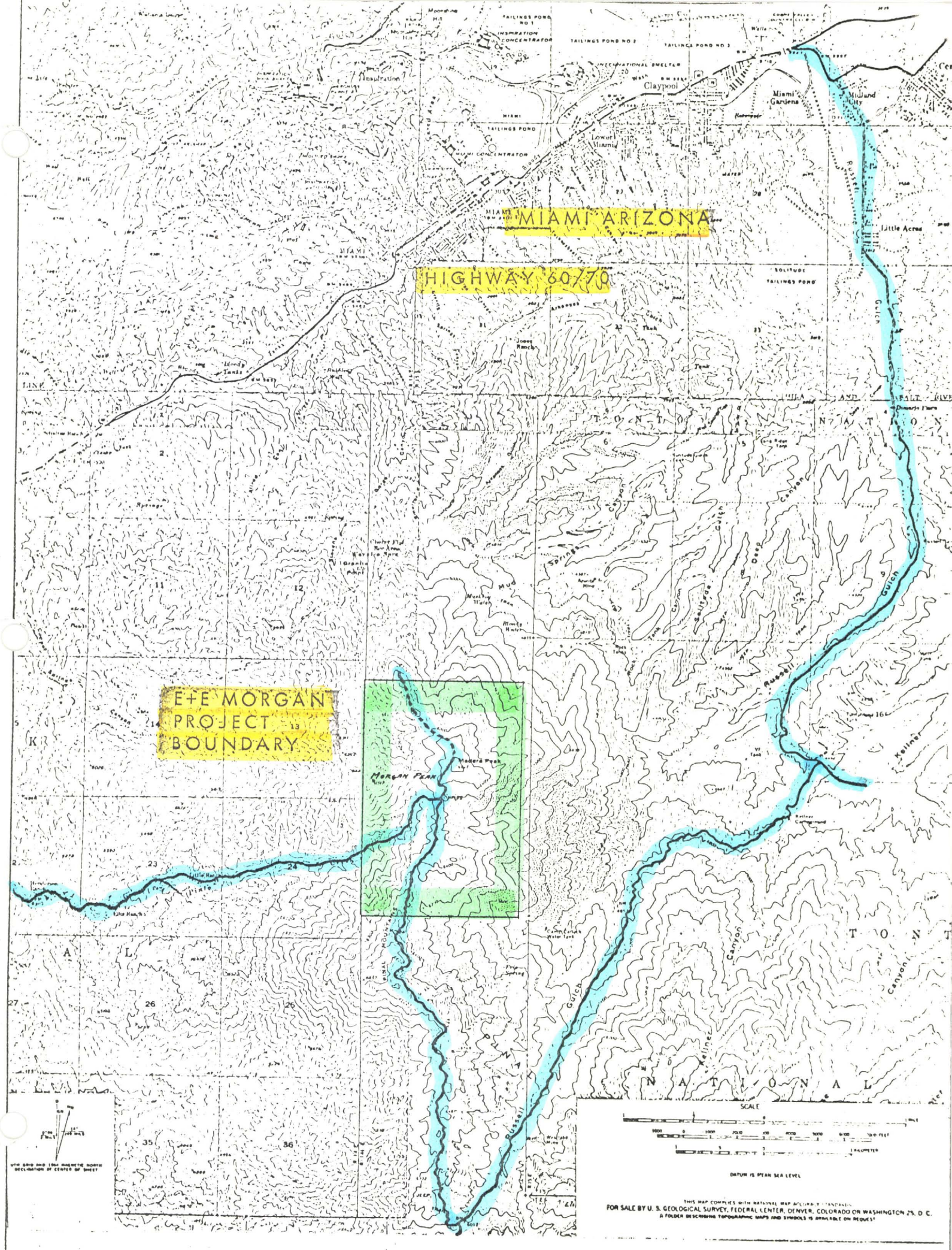
GEOLOGIC REPORT

MORGAN PROSPECT

Gila County, Arizona

Arthur G. Blucher
Mining Geologist

February 23, 1970


MIAMI ARIZONA
HIGHWAY 60/70
E+E MORGAN
PROJECT
BOUNDARY
Claypool
Miami
Lower Miami
Miami Gardens
Midland City
Little Acres
Inspiration
TAILINGS POND NO 1
TAILINGS POND NO 2
TAILINGS POND NO 3
INTERNATIONAL SMELTER
INSPIRATION CONCENTRATOR
MIAMI CONCENTRATOR
MIAMI TAILINGS POND
SOLITUDE TAILINGS POND
Russell Gulch
Deep Canyon
Mud Spring Canyon
Keller Canyon
Keller Campground
Madera Peak
MORGAN PEAK
Lake Hawkins
Cobb Canyon Water Tank
Canyon
Canyon
Gulch
Gulch
Russell
Russell
Gulch
T O N T O
N A T I O N A L
SCALE
DATUM IS MEAN SEA LEVEL
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, FEDERAL CENTER, DENVER, COLORADO OR WASHINGTON 25, D. C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

INDEX

INTRODUCTION 1

SUMMARY AND CONCLUSIONS 1

REGIONAL SETTING 2

- Geology 2
- Mineralization 2
- Alteration 3
- Post-Mineral History and Secondary Enrichment..... 3

GEOPHYSICAL CONSIDERATIONS 4

RECOMMENDATIONS 4

- Index Map .....
- Regional Map .....
- Geologic Mineralization Map .....
- Drill Hole Logs .....
- Photos .....

ARTHUR G. BLUCHER
MINING GEOLOGIST
3149 EAST PRINCE ROAD
TUCSON, ARIZONA 85716
793-2762

February 23, 1970

E + E Management Corporation
132 East Stetson
Scottsdale, Arizona 85251

MORGAN PROSPECT
Gila County, Arizona

Gentlemen:

Following is my report on the preliminary examination of your property.

INTRODUCTION

The Morgan Prospect is located about 65 miles east of Phoenix, Arizona. It spans the high ground between the Gila and Salt River drainage systems. At an elevation of about 6000 feet the topography is rugged and timbered or brush-covered. It can be reached by good dirt road off highway 60-70. (See Att.A).

This is a region from which there has been extracted several billion dollars worth of copper. These ore deposits have been associated with lateral apices of a Laramide intrusive termed the Schultz Granite. (See Att.B.) The Morgan Prospect is on a relatively unexplored apex of this intrusive.

There is here, without doubt, a major mineral deposit. Its exploitation is a matter of timing and economic factors.

SUMMARY AND CONCLUSIONS

Your preliminary drilling has encountered primary copper values equal to or exceeding the grade of the protore of the major producers of the district. (See Att. D.) Certainly there is here several hundreds of millions of tons of material at a grade of about 0.3% Cu with minor amounts of molybdenite and precious metals.

Surface geologic studies have failed in finding significant evidence in the leached capping of appreciable secondary enrichment. However, in the untested ground beneath Morgan Peak there might be a strong chalcocite zone not reflected in the oxidized zone. This is discussed below under Secondary Enrichment.

Further exploration is discussed below under RECOMMENDATIONS.

REGIONAL SETTING

Although the geologic history of the region is quite complex when considered in detail, it can be stated simply as follows:

At the beginning of late Precambrian time the land surface was fairly even and consisted of schist and granite.

Upon this surface there was discontinuous deposition of sedimentary and volcanic rocks from late Precambrian until the present time. During Precambrian and Paleozoic time there was little deformation or faulting and the depositional environment was miogeosynclinal.

Active crustal movement and vulcanism beginning in Mesozoic time continued well into Tertiary time and was accompanied by the intrusion of diabase, granite, and later porphyrys. Associated with the later intrusive rocks were hydrothermal solutions bearing copper mineralization.

Vertical faulting, uplift, and erosion during middle and late Tertiary time resulted in the secondary enrichment of some of these mineral deposits by downward percolating copper solutions. This was followed by the deposition of conglomerates and by the extrusion of a great thickness of volcanic rocks.

GEOLOGY AND MINERALIZATION

Geology

At Morgan Peak the Schultz Granite of Laramide age has intruded Precambrian Pinal Schist and Madera Diorite. The diorite near the contact has developed gneissic textures in the zone of mineralization, probably due to regional metamorphic stresses along the eastern boundry of the Schultz Granite intursive. Lineation of the gneiss is east-west and the dip averages 45 degrees south. There also may exist roof pendants of Pinal Schist. These gneissic rocks are cut by quartz porphyry dikes, probably differentiates of the Schultz Granite. (See Att. C.)

Mineralization

Mineralization is as chalcopyrite in irregular thread-like veinlets and occasionally as vugs or discrete grains. (See Att. E.) For the most part pyrite is sparse or absent. These veinlets are a sub-parallel conjugate system trending generally north 75 degrees east and north 15 degrees west. They dip nearly vertically. Some chalcopyrite occurs in thicker quartz veinlets with strikes and dips of about the same angles. Occasional molybdenite occurs along the quartz veinlets. Muck from the winze in the better mineralized zone in one of the old tunnels shows some chalcocite replacing pyrite and chalcopyrite. However, most of the core shows no chalcocite.

This mineralization is part of a zone of alteration about 2-1/2 miles long by 1 mile wide and elongated east-west. The most favorable part lies near E + E western property limits.

Alteration

Hydrothermal alteration at Morgan Peak consists mainly of silicification and sericitization. There is little or no kaolinitic or other form of argillic alteration as in most porphyry copper deposits. This unique aspect is displayed in the leached capping and accentuated by the relatively low degree of primary mineralization and the high ratio of chalcopyrite to pyrite.

One of the problems in the interpretation of this alteration is that it is difficult to separate mineralogic changes due to metamorphism from those due to alteration from hydrothermal solutions. Some of the sericite is quite coarse-grained. This, when intergrown with coarse quartz and feldspar, resembles pegmatitic textures. In other cases sericite plating parallel with gneissic banding is typical of regional metamorphic effects. Similarly, the distribution and texture of quartz is probably the result of several geologic processes.

The problem here is whether we are dealing with an apically truncated or deeply truncated volume of hydrothermally altered and mineralized rock. The presence of fine crystals of comb quartz in some open veinlets suggests low temperature - low pressure conditions. The absence of a wide zone of argillic alteration suggests the contrary. Detailed logging of the drill holes suggests an increase in alteration with depth. A search of the professional literature has found no comparable situation of conflicting data.

It is my feeling that the zoning of alteration at Morgan Peak indicates an increase in degree with increasing depth.

Post-Mineral History and Secondary Enrichment

About two-thirds of the large-tonnage disseminated copper deposits presently being exploited depend for economic grade on the process of secondary enrichment--- that is, the existence of secondary chalcocite deposited by downward percolating copper solutions produced by the oxidation and leaching of primary ore.

In the opinion of most geologists familiar with this type of deposit, the erosional environment necessary for the development of such enriched blankets of secondary chalcocite was that of an arid climate, deep oxidation, and a fluctuating water table. These conditions occurred in the Southwestern United States, Southern Peru, and Northern Chile during late Tertiary time. In these areas some oxidation, leaching, and secondary enrichment is taking place during present geologic time.

The Morgan Prospect is in a region in which the geologic history, after primary mineralization, was particularly suited to the processes of secondary enrichment. It is probable that a zone of primary mineralization such as this enjoyed the benefit of secondary enrichment at some time. The question we face here is whether or not uplift and erosion have removed this blanket.

N. P. Petersen, USGS, has pointed out that area distribution of the oldest rocks of this region---Pinal Schist and coarse-grained Precambrian granite---may give a clue

to the oldest major structures of the region. If a N 70 degree E bearing line is drawn between Hewitt Ridge in the west and Ramboz Peak in the east, it will be seen that all of the coarse Precambrian granite (not including the Madera Diorite) lies to the north of this line, and most of the Pinal Schist lies to the south of the line. He also states that the reverse of this relationship, that is, Pinal Schist on the north and granite on the south, occurs along a similar line drawn through Ray, Arizona, to the south of the area.

When considering whether or not the western end of the Morgan Prospect---proven to be well mineralized by your drilling---has the post mineral history which would allow and preserve a zone of secondary enrichment, these structural problems are important.

In Southern Arizona there are two distinct types of major post-mineral fault structures. The first of these is horizontal to flatly dipping such as the Mission Fault or San Manuel Fault. The second is the generally north-south trending, nearly vertical type normal fault such as the Concentrator Fault at Superior or the Miami Fault north of the Morgan Prospect. Both of these have displacement in excess of 2500 feet.

It can readily be seen what effect such faulting would have regarding the development and preservation of a chalcocite blanket here.

An analysis in detail of the relationship of the present erosional surface at the Morgan Prospect to that which existed in late Tertiary time is beyond the scope of this examination. A study of previous work by Ransome and Petersen of the USGS suggests the possibility that the block between Morgan Peak and the secondarily enriched deposits at Miami may be down-faulted along a north 20 degree east line roughly coinciding with the Miami Fault and tilted upward toward the east. Should this be the case there might exist at Morgan Peak a secondary zone not yet truncated and removed by erosion. Although the limonites in the capping do not indicate that they are the product of oxidized chalcocite ore, the high Cp-Py ratio (see Att. D) of the protore, or other special geologic circumstances may explain this condition.

GEOPHYSICAL CONSIDERATIONS

This mineral suite and this rock environment should be ideal for the application of induced polarization geophysical methods. However, the results of IP work to date do not coincide with drilling results. It may be in order to have an analysis made by a second geophysical firm of the data which Geoex gathered.

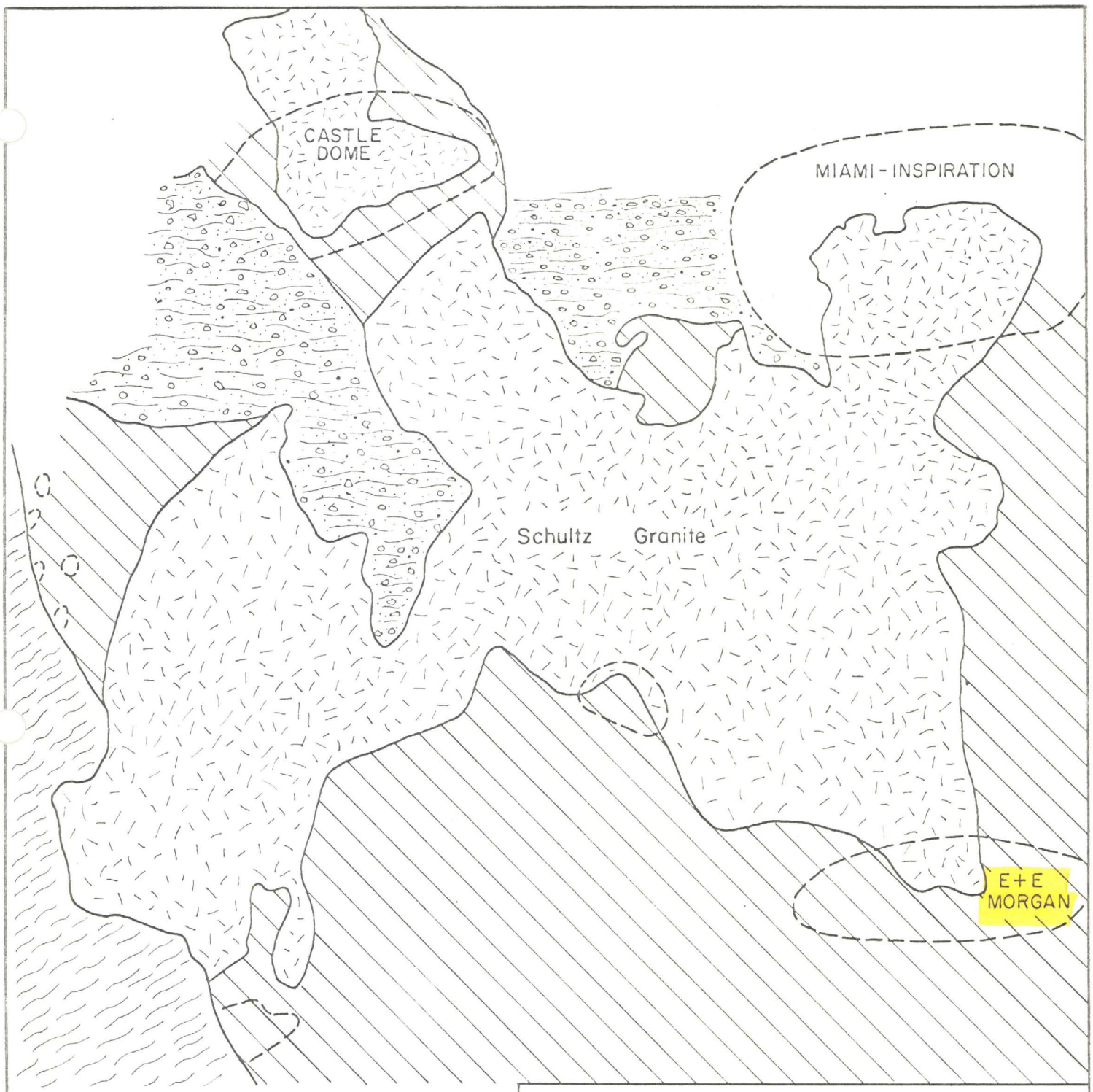
RECOMMENDATIONS

I recommend that this property be further explored by drilling. As the focal point of primary mineralization is quite near to the western boundary of the property, consideration should be given to the possibility of a joint enterprise with the adjacent property owners.

Sincerely yours,

Arthur G. Blucher

mh



Post-Mineral Conglomerate

Post-Mineral Ignimbrite

Major Erosion Surface

Pre-Mineral Rocks

Schultz Granite

Zone of Hydrothermal Alteration

N

E + E MANAGEMENT CORPORATION

Morgan Project — Gila County, Arizona

REGIONAL MAP

Showing

Rock Relationships and Major Zones of Alteration

Scale: 1" = 62500"

0 1 2

SCALE IN MILES

by: A.G. Blucher — date: March 3, 1970

ARTHUR G. BLUCHER
MINING GEOLOGIST
3149 EAST PRINCE ROAD
TUCSON, ARIZONA 85716
793-2762

March 4, 1970

E + E Management Corporation
132 East Stetson
Scottsdale, Arizona 85251

Gentlemen:

Attached is the log of your Morgan Prospect DDH #1. Following is the summary.

This hole is collared in diorite gneiss at an elevation of 6154 feet at coordinates 50280 N - 50039 E. It penetrated 180 feet of oxidized and leached capping with red, yellow, and brown iron oxides indicative of primary pyrite-chalcopyrite mineralization. In the sulfide zone between 180 feet and 300 feet copper values averaged slightly less than 0.1% copper. From 300 feet to 500 feet averaged slightly more than 0.1% copper. From 500 feet to 560 feet the grade was about 0.15%. From 560 to 600 feet low core recovery and intense alteration suggests a major shear zone. The core recovered averages 0.23% copper. From 600 feet to the bottom of the hole at 670 feet values average 0.13% Cu.

Arthur G. Blucher

mh

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	670 Ft.	Date Started	10/21/69
Drill Hole No.	1	Inclination	⊖ 90°	Date Finished	11/6/69
Location	50280 N-50039 E	Sampler	Jacobs Assay	Logged by	A.G. Blucher
Collar Elev.	6154				

Depth (Ft.)	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
14-18.5	0.10		0.004	0' - 180' -	Sparse yellow	Spotty -	90%
18.5-23.5	0.11		Trace	Oxidized and	and brown	moderate to	
23.5-28.5	0.11		Trace	part oxide	iron oxides.	intense	
28.5-33	0.10		0.002	and leached	Occasional	sericite and	
33-38	0.08		0.003	gneissic	remnant	silica.	
38-42.5	0.04		Trace	diorite and	pyrite. Little		
				quartz	or no limonite		
44.5-50.5	0.09		Trace	diorite. Varies	after chalco-		
50.5-55	0.06		Trace	from medium	cite. 90% of		
55-59	0.08		Trace	grained to	mineraliza-		
59-63.5	0.07		0.002	schistose	tion on		
63.5-68	0.03		Trace	textures. At	fractures &		
68-72.5	0.09		0.005	87' fault	veinlets. 10%		
72.5-77	0.10		Trace	gouge and	dissemination.		
77-82	0.06		0.002	breccia. After	140' to 200'		
8[illegible]7	0.05		0.003	110' grain	occasional		
8[illegible]1.5	0.06		0.002	size increases	chalcocite.		
91.5-96.5	0.04		0.002				
96.5-100.5	0.12		0.011				
100.5-105	0.18		0.008				
106-110	0.07		Trace				
110-115	0.13		Trace				
115-120	0.07		Trace				
120-124	0.10		0.005				
124-129	0.07		Trace				
129-133	0.11		0.003				
133.5-137.5	0.09		Trace				
137.5-142	0.17		0.075				
142-147	0.10		0.027				
147-151	0.06		0.006				
151-155.5	0.09		0.007				
155.5-160	0.18		0.002	At 155'			
160-165.5	0.14		0.010	2' fault			
165.5-169	0.03		0.013	gouge.			
169-173.5	0.04		0.002				
173.5-178	0.08		Trace				
178-182	0.05		0.002	Oxide			
1[illegible]185.5	0.07		Trace	Sulfide.			+80%
186.5-191.5	0.06		0.010	Fine to			
191.5-195	0.16		0.003	medium			
195-198	0.03		Trace	grained			
198-200	0.17		0.014	diorite gneiss.			

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	670 Ft.	Date Started	10/21/69
Drill Hole No.	1	Inclination	⊖ 90°	Date Finished	11/6/69
Location	50280 N-50039 E	Sampler	Jacobs Assay	Logged by	A.G. Blucher
Collar Elev.	6154				

Depth (Ft.)	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
203.5-208.5	0.03		0.002	Moderate	Very weak	Moderate-	
208.5-213.5	0.02		Trace	dipping	pyrite and	increase in	
213.5-218	0.05		Trace	lineation.	chalcopyrite.	chlorite.	
218-222.5	0.07		Trace	After 250		Quartz	
222.5-227	0.05		0.009	grain size		banding is	
227-232	0.10		0.011	decreases.		meta-	
232-237	0.06		0.005	Some seg-		morphic.	
237-241	0.04		0.004	ments may			
241-245.5	0.03		0.002	be Pinal			
245.5-249.5	0.04		Trace	Schist. Sparse	Fair		
249.5-253.5	0.28		0.034	yellow iron	chalcopyrite		
253.5-258	0.08		0.005	oxide at	at 250'.		
258-263	0.15		0.005	300'.			
263-268	0.10		0.006				
268-273	0.11		Trace				
[illegible]-277.5	0.12		0.002				
277.5-282.5	0.05		Trace				
282.5-286	0.29		0.014				
286-291	0.05		0.012				
291-295.5	0.04		0.002				
295.5-300	0.06		Trace				
300-304	0.21		0.016				
304-308	0.09		0.002				
308-312	0.12		0.007				
312-317	0.11		0.005				
317-322	0.04		0.007				
322.5-327	0.04		0.019				
327-332	0.03		0.006				
332-337	0.09		0.002				
337-342	0.18		0.006				
342-346	0.07		0.006		Chalcopyrite		
346-350	0.09		0.007		gradually		
350-355	0.14		Trace		increases.		
355-360	0.10		0.007				
360-365	0.06		0.002				
369-374	0.06		0.005				
[illegible]-377.2	0.03		Trace				
[illegible].5-381.5	0.06		Trace				
381.5-386	0.08		0.005				
386-391	0.10		0.002				
391-396	0.08		Trace				
396-401	0.14		Trace				

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	670 Ft.	Date Started	10/21/69
Drill Hole No.	1	Inclination	⊖ 90°	Date Finished	11/6/69
Location	50280 N-50039E	Sampler	Jacobs Assay	Logged by	A.G. Blucher
Collar Elev.	6154				

Depth (Ft.)	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
401-406	0.10		0.005	Same.		Same.	
406-410.5	0.14		0.004				
410.5-415	0.14		0.002				
415-419.5	0.10		0.005				
419.5-423.5	0.06		Trace				
423.5-428	0.03		Trace	Fault gouge	Good moly		
428-433	0.09		0.013	in breccia	at 428'.		
433-436.5	0.08		0.003	at 430'.			
436.5-440	0.10		0.002				
440-444.5	0.12		0.010				
444.5-449	0.11		0.004				
449-453.5	0.19		Trace				
453.5-458	0.11		0.009				
458-462.5	0.10		0.004				
462.5-467	0.06		Trace				
467-473	0.20		Trace				
473-477	0.14		0.002				
477-482	0.10		Trace				
482-487	0.10		Trace				
487-491.5	0.07		0.002				
491.5-496	0.07		Trace				
496-501	0.07		Trace		After 500'		75%
501-506	0.12		0.005		chalcopyrite		
506-511	0.14		0.002		increasing -		
511-516	0.10		Trace		mostly on		
516-520	0.17		Trace		vertical		
520-524	0.17		0.003		veinlets.		
524-529	0.14		Trace				
529-534	0.14		0.004				
534-538.5	0.09		0.005				
538.5-543	0.12		0.005				
543-548	0.17		0.006				
548-553	0.16		Trace				
553-557	0.16		0.007				
561-563	0.25		Trace	563' - 568'			
568-573	0.18		0.002	no core -			
573-578.5	0.29		Trace	Fault?			
578-594	0.43		0.041	580' - 598'			60% ±
594-602	0.42		0.029	Fault gouge			
602-607	0.20		0.005	& breccia.			

E + E MORGAN PROJECT

Exploration Drilling Log

Property: MORGAN
Total Depth: 670 Ft.
Date Started: 10/21/69
Drill Hole No.: 1
Inclination: ⊖ 90°
Date Finished: 11/6/69
Location: 50280 N-50039 E
Sampler: Jacobs Assay
Logged by: A.G. Blucher
Collar Elev.: 6154

Depth (Ft.)	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
607-612	0.14		0.013	Coarse	Fair	Same.	
612-617	0.21		0.068	grained	chalcopyrite.		
617-622.5	0.32		0.024	gneiss.	No pyrite.		
622.5-630	0.13		0.002	598' - 670'			70%
630-638	0.09		Trace	Fine grained			
638-643	0.04		Trace	gneiss.			
643-648	0.16		0.002				
648-654	0.08		0.002				60%
654-660	0.10		Trace				
660-665	0.05		0.014				
665-670	0.03		Trace	Bottom of hole.			

ARTHUR G. BLUCHER
MINING GEOLOGIST
3149 EAST PRINCE ROAD
TUCSON, ARIZONA 85716
793-2762

March 4, 1970

E + E Management Corporation
132 East Stetson
Scottsdale, Arizona 85251

Gentlemen:

Attached is the log of your Morgan Prospect DDH #2. Following is the summary.

This drill hole was collared in quartz diorite porphyry at coordinates 49820 N. 50460 E. It encountered 79 feet of oxidized and partly oxidized leached capping. Below 79 feet there is weak sulphide mineralization to a depth of about 530 feet which averages less than 0.05% copper and 0.005% molybdenum. From 530 to 570 feet copper values average about 0.2%. Thereafter the grade ranges from 0.03% to 0.4% copper and averages about 0.1%. Except for textural variations the rock throughout is essentially the same. The hole bottomed at 787 feet. The collar elevation is 5967.

Arthur G. Blucher

Arthur G. Blucher

mh

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	787 Ft.	Date Started	11/14/69
Drill Hole No.	2	Inclination	⊖ 90°	Date Finished	12/20/69
Location	49820 N-50460 E	Sampler	Jacobs Assay Ariz.Test.Lab.	Logged by	A.G. Blucher
Collar Elev.	5967				

Depth	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
44-48	0.07		0.008	Quartz diorite porphyry. Variable texture. Fine to medium grained. Oxidized and leached.	Partly oxidized. Brown & yellow limonite on fractures. Occasional pyrite remnants. Very rare molybdenite.	Sparse quartz veinlets. Biotite moderately altered to chlorite(?) Feldspars cloudy from incipient sericitization.	80-100% overall, but erratic.
48-53	0.03		0.002				
53-58	0.04		Trace				
58-63	0.07		0.003				
63-68	0.04		Trace				
68-73.5	0.02		0.003				
73.5-79	0.03		Trace				
79-82.5	0.03		Trace	Same - After 80' the rock texture is gneissic. Lineation cuts axis of core at an angle of about 40 - 60 degrees. Only occasionally is the rock texture porphyritic. For the most part it is equigranular.	Sulfide zone weak to moderate pyrite. Very weak chalcopyrite. Fine grained magnetite common. Less than 3% total sulfide minerals. At 120', 145', 160', & 187' there is fair chalcopyrite. Very little disseminated mineralization almost all on fractures or veinlets. Rare molybdenite.	Moderate to abundant coarse sericite. Not typical of alteration products. After 140' increasing sericite & qtz veinlets. Biotite completely altered to sericite or other silicates. Not identifiable with a hand lens. Occas gypsum veinlets.	90% ±
82.5-86	0.07		0.002				
86-94	0.04		Trace				
94-103	0.03		Trace				
103-112	0.02		0.003				
112-121	0.02		Trace				
121-126	0.03		Trace				
126-131	0.05		0.002				
131-138	0.02		Trace				
138-145	0.03		Trace				
145-149.5	0.03		0.002				
149.5-154	0.02		Trace				
154-158	0.04		0.002				
158-162	0.11		0.003				
162-167	0.03		Trace				
167-172	0.02		Trace				
172-176.5	0.02		0.002				
176.5-181	0.03		Trace				
181-184.5	0.03		0.003				
184.5-188	0.02		0.002				
188-193	0.03		Trace				
193-198	0.02		0.002				
198-202.5	0.02		0.005				
202.5-207	0.05		0.002	Same, but alteration is increasing. Same quartz diorite gneiss	No increase. No magnetite. After about 270' the degree of mineralization decreases. With	Sericite, silica, to partly sericitized feldspars. After about 270' the degree of alteration	90% ±
207-212	0.03		Trace				
212-216.5	0.04		Trace				
216.5-221	0.02		0.002				
221-225.5	0.02		0.003				
225.5-230	0.03		Trace				
230-235	0.02		Trace				
235-240	0.04		0.002				

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	787 Ft.	Date Started	11/14/69
Drill Hole No.	2	Inclination	⊖ 90°	Date Finished	12/20/69
Location	49820 N-50460 E	Sampler	Jacobs Assay Ariz. Test. Lab.	Logged by	A.G. Blucher
Collar Elev.	5967				

Depth	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
240-248	0.06		0.003		pegmatitic textures there is occasional strong pyrite. At 309' fair moly with strong silicification. Decrease in mineralization continues. Less than 1% total sulfides (py & cp)	diminishes - some biotite & feldspar is almost fresh. With depth the grain size of phenocrysts increases. At 304' the texture is almost pegmatitic. After about 430' alteration again increases. Silicified bands increase.	
248-252.5	0.03		Trace				
252.5-257	0.02		Trace				
257-261.5	0.03		0.005				
261.5-266	0.06		0.002				
266-271.5	0.03		0.003				
271.5-277	0.03		0.003				
277-280	0.02		0.002				
280-284.5	0.03		0.004				
284.5-289	0.03		0.004				
289-293	0.04		Trace				
293-298.5	0.03		Trace				
298.5-303	0.03		0.005				
303-308	0.05		0.002				
308-313	0.03		0.014				
3-318	0.03		0.002				
318-322.5	0.02		Trace				
322.5-327	0.02		Trace				
327-331.5	0.03		Trace				
331.5-336	0.08		0.021				
336-340.5	0.05		0.002				
340.5-345	0.06		Trace				
345-349.5	0.03		Trace				
349.5-354	0.02		0.003				
354-359	0.02		Trace				
359-364	0.03		Trace				
364-367.5	0.02		Trace				
367.5-371	0.06		0.003				
371-376	0.04		Trace				
376-381	0.03		Trace				
381-387	0.02		Trace				
387-393	0.02		0.006				
393-397	0.04		Trace				
397-401	0.03		Trace				
409-413.5	0.02		0.012				
413.5-418	0.04		0.009				
3-423	0.03		0.006				
423-428	0.03		0.002				
428-432.5	0.10		0.003				
432.5-437	0.06		0.004				
437-442	0.03		0.007				
442-447	0.02		0.010				

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	707 Ft.	Date Started	11/14/69
Drill Hole No.	2	Inclination	⊖ 90°	Date Finished	12/20/69
Location	49820 N-50460 E	Sampler	Jacobs Assay Ariz. Test. Lab.	Logged by	A.G. Blucher
Collar Elev.	5967				

Depth	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
447-452	0.02		0.003				
452-457	0.05		0.011				
457-463	0.03		0.002				
463-468.5	0.06		0.012				
468.5-473	0.05		0.002				
473-478	0.06		0.003				
478-483	0.06		Trace				
483-488	0.04		0.002				
488-497	0.05		Trace				
497-506	0.03		0.005	Light colored diorite porphyry.			
				Fault gouge, breccia.	Post - mineral fault (?)		< 50
[illegible]-515	0.04		Trace	Quartz diorite porphyry and med. to coarse grain quartz diorite. Variable grain size and increasing gneissic textures. At 536' pegmatitic texture with strong pyrite. At 553' pegmatite. At 557' a 1 ft. thick basic dike.	Very weak - less than 1% tot. sulfides except in pegmatitic zones. After 530' occasional good chalcopyrite.	Intensely altered. Abundant sericite, chlorite, and silica.	90+
515-524.5	0.04		0.002				
524.5-529	0.09		Trace				
529-533	0.03		0.005				
533-538	0.13		Trace				
538-543	0.12		0.009				
543-547.5	0.16		Trace				
547.5-552	0.07		Trace				
552-558	0.28		0.004				
558-562	0.47		0.017				
562-567	0.32		0.008	Medium grained quartz diorite porphyry. Even textures. No gneiss.	Very weak pyrite. Occasional good chalcopyrite on quartz veinlets.	Moderate - biotite to chlorite - weak to moderate sericite and silica.	90% +
567-572	0.12		Trace				
[illegible]-577	0.03		Trace				

E + E MORGAN PROJECT

Exploration Drilling Log

Property: MORGAN
Total Depth: 787 Ft.
Date Started: 11/14/69
Drill Hole No.: 2
Inclination: ⊖ 90°
Date Finished: 12/20/69
Location: 49820 N-50460 E
Sampler: Jacobs Assay Ariz. Test. Lab.
Logged by: A.G. Blucher
Collar Elev.: 5967

Depth	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
577-582	0.06		Trace	Quartz diorite & quartz diorite porphyry - irregular grain size and variable gneissic textures. At 682' & 687' small dikes similar to 489' - 504'.	Mainly pyrite. At 633' fair chalcopyrite. At 661' fair chalcopyrite.	Strong alteration. After 670' much coarse grained sericite and silicification.	85% +
582-586.5	0.11		0.013				
586.5-591	0.25		0.023				
591-596	0.15		Trace				
596-601	0.08		0.006				
601-605.5	0.17		Trace				
605.5-610	0.12		0.014				
610-614.5	0.13		0.002				
614.5-619	0.07		0.015				
619-623.5	0.03		Trace				
623.5-628	0.09		0.007				
628-632.5	0.22		0.003				
632.5-637	0.09		0.008				
637-641.5	0.05		0.002				
641.5-646	0.09		0.002				
[illegible]-650.5	0.06		Trace				
650.5-655	0.02		Trace				
655-658	0.01		Nil				
658-663	0.15		Nil				
663-668	0.05		Nil				
668-673	0.03		Nil				
673-677	0.03		Nil				
677-682	0.03		Nil				
682-687	0.38		Nil				
687-692	0.14		Nil				
692-697	0.02		Nil				
697-702	0.03		Nil	Fine to medium grained diorite gneiss After 721' grain size increases. At 770' narrow basic dike. Same gneiss to bottom of hole.	Weak veinlet pyrite and chalcopyrite. Same. At about 740' good veinlet chalcopyrite - little pyrite. At 748' & 753' fair chalcopyrite. Pyrite is with gypsum veinlets and chalcopyrite with quartz veinlets.	Moderate. Increase in sericite.	90% +
702-707	0.03		Nil				
707-712	0.05		Nil				
712-716	0.02		Nil				
716-721	0.01		Nil				
721-726	0.05		Nil				
726-731	0.05		Nil				
731-736	0.01		Nil				
736-741	0.13		Nil				
741-745	0.21		Nil				
745-750	0.09		Nil				
[illegible]-761	0.04		0.001				
761-766	0.12		0.002				
766-773.5	0.12		Nil				
773.5-778.5	0.06		Nil				
778.5-783	0.12		Nil				
783-787	0.01		Nil				

ARTHUR G. BLUCHER
MINING GEOLOGIST
3149 EAST PRINCE ROAD
TUCSON, ARIZONA 85716
793-2762

March 4, 1970

E + E Management Corporation
132 East Stetson
Scottsdale, Arizona 85251

Gentlemen:

Attached is the log of your Morgan Prospect DDH #3. Following is the summary.

This hole was collared in quartz diorite gneiss at an elevation of 6059 feet at coordinates 49680 N - 49630 E. It encountered 75 feet of oxidized and leached capping. Below this minor amounts of chalcopyrite and molybdenite, and occasional chalcocite, assayed about 0.25% Cu and 0.006% Mo. From about 180 feet to the bottom of the hole at 702 feet primary copper values range from 0.03% to 0.4%, and average 0.1%.

Arthur G. Blucher

mh

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	726 ft.	Date Started	1/8/70
Drill Hole No.	3	Inclination	⊖ 90°	Date Finished	2/4/70
Location	49680 N-49630 E	Sampler	Ariz.Test.Lab.	Logged by	A.G. Blucher
Collar Elev.	6059				

Depth	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
20-25	0.06		0.020	Diorite & quartz-diorite gneiss - oxidized & leached - Brown & yellow. Limonites on fractures.	The limonitic products are typical of oxidized pyrite and chalcopyrite. No risidual sulfides were seen- Sparse copper ox.	Oxidized & leached	70% +
25-30	0.07		0.004				
30-34.5	0.07		0.004				
34.5-39	0.08		0.002				
39-43.5	0.13		0.008				
43.5-48	0.04		0.02				
48-53	0.08		0.006				
53-57	0.15		0.02				
57-61.5	0.28		0.004				
61.5-66	0.07		0.008				
66-70.5	0.23		0.004				
70.5-75	0.14		0.002				
75-79	0.34		0.002	Same formation - Sulfide zone- Gouge & breccia @ 83' & 100'- partial oxidation @ 120' & 130' -149' - Gneissic banding flat to 50 degrees - after 130' grain size decreases - much of the rock has almost a diabasic texture.	Few disseminated sulfides - weak pyrite - fair chalcopyrite on quartz vienlets - Chalcocite partially replaces chalcopyrite and some of the pyrite- Ratio of chalcopyrite to pyrite about 1:1 - Total sulfides about 2% by weight. After 160' there is no chalcocite & total Cu decreases. Total sulfides increase gradually. After 260' total sulfides decrease.	Strong sericite, moderate chlorite, & spotty silicification. No apparent magnetite. Chlorite & sericite zones have graditional limits. Silicification decreases after 130'. At 150' silica again increases.	
79-83	0.25		0.002				
83-87.5	0.70		0.005				
87.5-92	0.15		0.001				
[illegible]-97	0.36		0.002				
97-102	0.30		0.003				
102-106	0.14		0.005				
106-111	0.12		0.006				
111-114.5	0.08		0.004				
114.5-120	0.27		0.005				
120-125	0.17		0.005				
125-130	0.27		0.006				
130-134.5	0.12		0.005				
134.5-139	0.09		0.006				
139-143.5	0.19		0.006				
143.5-148	0.13		0.004				
148-152.5	0.22		0.010				
152.5-157	0.21		0.010				
157-161	0.30		0.006				
161-166	0.49		0.012				
166-171	0.21		0.004				
171-176	0.17		0.004				
176-181	0.18		0.011				
181-187	0.10		0.009				
187-191	0.08		0.004				
191-196	0.05		0.005				
[illegible]-201	0.12		0.004				
201-206	0.08		0.003				
206-211	0.17		0.004				
211-215	0.15		0.004				
215-220	0.31		0.008				
220-225	0.13		0.006				

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	726 ft.	Date Started	1/8/70
Drill Hole No.	3	Inclination	⊖ 90°	Date Finished	2/4/70
Location	49680 N-49630 E	Sampler	Ariz.Test.Lab.	Logged by	A.G. Blucher
Collar Elev.	6059				

Depth	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
225-230	0.10		0.005				
230-234	0.25		0.007	Medium to course - grained quartz diorite gneiss with pegmatitic zones. At 308' minor gouge & breccia. The rock is still intensely altered diorite & quartz diorite with varying degrees of gneissic texture.	Spotty & weak mineralization @ 292', 294' & 306' chalcopyrite on fractures & veinlets. At 311', 315', 317', 322', 324', 329' & 331' good chalcopyrite on veinlets but little or no mineralization in between. 345' - 347' very good chalcopyrite, disseminated & on veinlets. Very little pyrite.	Abundant sericite & silica. Spotty chlorite & partly altered biotite. After 330' silicification increases. After 340 silica decreases. Overall the rock is intensely sericitized & silicified. Abundant chlorite.	85% +
234-239	0.05		0.004				
239-243	0.27		0.008				
243-248	0.13		0.006				
248-253	0.12		0.005				
253-258	0.05		0.003				
258-264	0.05		0.003				
264-269	0.03		0.002				
269-274	0.25		0.003				
274-279	0.06		0.003				
279-284	0.16		0.009				
284-288	0.31		0.006				
288-292	0.34		0.003				
292-297	0.15		0.002				
297-302	0.04		0.003				
[illegible]-307	0.14		0.003				
307-311	0.07		0.002				
311-316	0.24		0.005				
316-321	0.15		0.009				
321-326	0.20		0.004				
326-331	0.10		0.009				
331-335	0.20		0.010				
335-340	0.13		0.004				
340-345	0.32		0.005				
345-349	0.19		0.004				
349-354	0.38		0.007				
354-359	0.11		0.004	Fine to medium - grained diorite gneiss - Banding is nearly flat to 40 degrees - 300' to 400' distorted, high angle gneissic banding.	Weak mineralization. Very little pyrite. Chalcopyrite @ 359', 363' & 366' - 380' to 384' strong chalcopyrite in vugs & veinlets - Sparse pyrite.	- Intense alteration - Sericite, silica, chlorite.	90% ±
359-363	0.13		0.003				
363-367	0.16		0.004				
367-372	0.13		0.003				
372-377	0.13		0.003				
377-382	0.27		0.004				
382-386	0.12		0.002				
386-391	0.13		0.005				
391-396	0.13		0.003				
396-400	0.35		0.003				
400-405	0.06		0.002				
[illegible]-410	0.03		0.002				
410-415	0.04		0.002				
415-420	0.30		0.016	Fine grained gneiss-nearly flat banding	Weak mineralization. Little	Moderate to weak quartz-sericite.	
420-424	0.19		0.008				
424-429	0.03		0.004				

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	726 Ft.	Date Started	1/8/70
Drill Hole No.	3	Inclination	⊖ 90°	Date Finished	2/4/70
Location	49680 N-49630E	Sampler	Ariz.Test.Lab.	Logged by	A.G. Blucher
Collar Elev.	6059				

Depth	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
429-434	0.06		0.008		pyrite.	Partial	
434-439	0.24		0.006		Chalcopyrite	chloritiza-	
439-444	0.25		0.004		occasionally	tion.	
444-449	0.16		0.012		on fractures.		
449-453	0.18		0.004		Good chal-		
453-458	0.10		0.002	After about	copyrite @		
458-463	0.14		0.008	450' gneissic	440' & 442		
463-468	0.15		0.004	textures are	Chalcopyrite		
468-473	0.10		0.002	less	mineraliza-		
473-478	0.13		0.006	pronounced.	tion in-		
478-482	0.15		0.004		creases.		
482-487	0.13		0.002	Same to 560'	Almost no		
487-491	0.19		0.002	with occa-	pyrite.		
491-496	0.14		0.006	sional zones	Fairly even		
496-501	0.42		0.004	of coarse	chalcopyrite		
[illegible]-505	0.19		0.002	crystalline	as vugs &		
[illegible]-510	0.38		0.012	quartz.	veinlets to		
510-515	0.02		0.004		the bottom	Alteration	
515-519	0.04		0.004		of the hole.	is spotty.	
519-524	0.04		0.003				
524-529	0.18		0.004				
529-534	0.11		0.007				
534-540	0.25		0.006				
540-545	0.12		0.003				
545-550	0.18		0.007				
550-554	0.24		0.003				
554-559	0.21		0.004				
559-563	0.28		0.005				
563-568	0.07		0.007				
568-573	0.13		0.003	After 560'			
573-577	0.15		0.004	the dip of			
577-580	0.08		0.020	gneissic			
580-585	0.19		0.004	banding			
585-590	0.20		0.003	increases.			
590-596	0.20		0.009				
596-601	0.09		0.003				
601-606	0.08		0.001				
[illegible]-611	0.12		0.004				
[illegible]-616	0.04		0.003				
616-621	0.17		0.005				
621-626	0.01		0.003				
626-630	0.09		0.004	Same to 653'.		Alteration	
630-635	0.14		0.008			increases.	

E + E MORGAN PROJECT

Exploration Drilling Log

Property: MORGAN
Drill Hole No.: 3
Location: 49680 N - 49630 E
Collar Elev.: 6059
Total Depth: 726 Ft.
Inclination: ⊖ 90°
Sampler: Ariz.Test.Lab.
Date Started: 1/8/70
Date Finished: 2/4/70
Logged by: A.G. Blucher

Depth	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
635-640	0.15		0.010				
640-644	0.09		0.003				
645-650	0.16		0.006		At 648' good moly.		
650-654	0.17		0.005	653' - 660' diabase.	Very weak.	Weak to moderate.	75% ±
654-659	0.32		0.010				
659-663	0.22		0.003	At 660' thick zone of gouge & breccia. Rock is diorite gneiss.	Mineralization decreases. Occasional primary hematite.	Strong sericite. Moderate kaolin & silica.	90% ±
663-668	0.16		0.003				
668-673	0.09		0.002				
673-678	0.02		nil				
678-683	0.01		nil				
683-689	0.02		0.001				
689-695	0.03		nil				
695-701	0.05		nil				
701-707	0.09		nil				
7-716	0.06		nil				
716-721	0.06		0.003	721' - 726' fault gouge & breccia. Same rock.	Finely divided chalcocite in gouge?	Intense.	
721-726	0.21		0.020				

ARTHUR G. BLUCHER
MINING GEOLOGIST
3149 EAST PRINCE ROAD
TUCSON, ARIZONA 85716
793-2762

March 4, 1970

E + E Management Corporation
132 East Stetson
Scottsdale, Arizona 85251

Gentlemen:

Attached is the log of your Morgan Prospect DDH #4. Following is the summary.

This hole was collared in strongly altered quartz diorite gneiss at an elevation of 6226 feet at coordinates 49699 N - 49223 E. It cut about 320 feet of oxidized and leached capping with limonites indicative of moderate to strong primary mineralization. The sulphides encountered were in the main part chalcopyrite but the overall degree of mineralization was relatively weak. In this zone copper values fluctuated from 0.02% to 0.76% copper, averaging 0.14% copper. The last three samples averaged more than 0.4% Cu which may be significant, as alteration was increasing with depth. It bottomed at a depth of 465 feet.

Arthur G. Blucher

Arthur G. Blucher

mh

E + E MORGAN PROJECT

Exploration Drilling Log

Property	MORGAN	Total Depth	464 Ft.	Date Started	2/6/70
Drill Hole No.	4	Inclination	⊖ 90°	Date Finished	2/16/70
Location	49699 N-49223 E	Sampler	Ariz.Test.Lab.	Logged by	A.G. Blucher
Collar Elev.	6226				

Depth (Ft.)	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
10-16	0.01		0.001	Fine to	Brown &	Weak	90% ±
16-22	0.02		0.001	medium	yellow iron	quartz -	
22-27	0.06		0.002	grained	oxides.	sericite-	
27-32	0.06		0.001	gneiss.	Moderate	chlorite	
32-37	0.06		0.004		amounts of		
37-43	0.05		0.002		black Mn-		
43-47	0.05		0.002	At 46' fault	Cu oxides.		
47-52	0.06		0.003	gouge &			
52-57	0.05		0.002	breccia.			
57-62	0.05		0.002				
62-67	0.06		0.002				
67-78	0.03		0.001				
78-85	0.03		0.002				
85-92	0.07		0.003	After 90'	After 95'		
92-97	0.09		0.002	grain size	mineraliza-		
97-102	0.20		0.003	increases.	tion increase.	Alteration	
[illegible]-107	0.17		0.002	Dip of band-	Fairly com-	increasing.	
107-112	0.18		0.003	ing is plus	mon quartz		
112-117	0.06		0.001	50°.	veinlets with		
117-121	0.09		0.002		limonite &		
121-126	0.13		0.001		malachite.		
126-131	0.11		0.001				
131-136	0.19		nil				
136-141	0.09		nil				
141-146	0.09		0.001		After 200'		
146-151	0.09		0.001	Occasional	occasional		
151-156	0.08		0.001	coarse	relict sulfides.		
156-163	0.08		0.002	grained	Random		
163-168	0.09		0.008	textures.	oxide filled		
168-173	0.09		0.004		veinlets &		
173-178	0.10		0.005		fractures.		
178-183	0.13		0.004		Estimated		
183-188	0.19		0.002		6-8% total		
188-192	0.13		0.001		sulfides be-		
192-197	0.07		0.001		fore oxida-		
197-203	0.16		0.002		tion.About		
203-208	0.45		0.006		90% on		
208-213	0.28		0.003		veinlets.		
[illegible]-218	0.09		0.001				
[illegible]-224	0.09		0.001				
224-231	0.07		0.001				
231-239	0.14		0.001				
239-244	0.07		0.001				

E + E MORGAN PROJECT

Exploration Drilling Log

Property: MORGAN
Total Depth: 464 Ft.
Date Started: 2/6/70
Drill Hole No.: 4
Inclination: ⊖90°
Date Finished: 2/16/70
Location: 49679 N - 49223 E
Sampler: Ariz. Test. Lab.
Logged by: A.G. Blucher
Collar Elev.: 6226

Depth (Ft.	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
244-246	0.07		0.001			Sericite-	
246-253	0.09		0.001	At 251'&		kaolinite -	
253-258	0.06		0.001	260' fault		chlorite	
258-263	0.10		0.001	gouge &		with	
263-268	0.11		0.001	breccia.		moderate	
268-272	0.14		0.001			silicifica-	
272-277	0.14		0.001			tion.	
277-282	0.09		0.001				
282-287	0.17		0.002				
287-292	0.16		0.002				
292-297	0.19		0.003				
297-302	0.06		0.002		After 312'		
302-308	0.10		0.002		limonites		
308-313	0.13		0.003		decrease.		
313-318	0.07		0.002		Fracturing		
[illegible]-323	0.13		0.001	Oxide.	decreases.		
323-328	0.07		0.001*l.t	Sulfide zone.	Weak		90% ±
328-333	0.18		0.001		chalcopyrite		
333-337	0.04		0.001		& pyrite.		
337-342	0.02		0.011		Occasional		
342-347	0.13		0.001		fair moly.		
347-352	0.24		0.001				
352-356	0.09		0.002				
356-359	0.05		0.005			Below 350'	
359-363	0.07		0.003			silicifica-	
363-368	0.11		0.001	Diorite		tion	
368-372	0.34		0.007	gneiss.		increases to	
372-377	0.03		0.002	Moderately		bottom of	
377-382	0.03		0.001	dipping		hole.	
382-387	0.06		0.001	banding.			
387-391	0.03		0.001				
391-396	0.05		0.001				
396-401	0.16		0.001				
401-406	0.21		0.007				
406-411	0.16		0.002				
411-416	0.15		0.002				
416-422	0.11		0.002				
[illegible]-427	0.11		0.002				
[illegible]7-432	0.03		0.001				
432-437	0.13		0.001				
437-442	0.14		0.001				
442-447	0.07		0.001				
447-453	0.09		0.002				

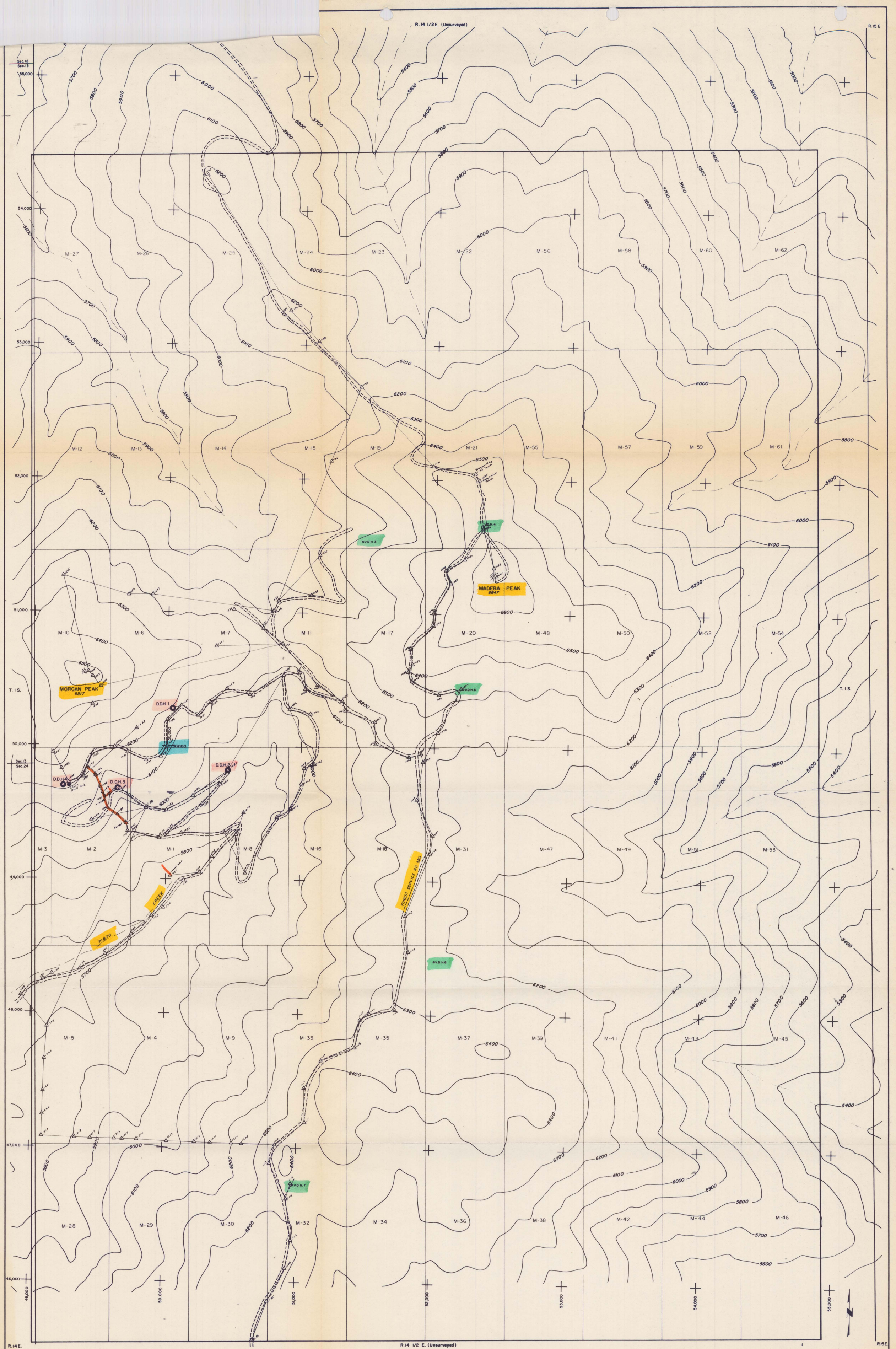
*l.t. = less than

E + E MORGAN PROJECT

Exploration Drilling Log

Property: MORGAN
Total Depth: 464 Ft.
Date Started: 2/6/70
Drill Hole No.: 4
Inclination: ⊖ 90°
Date Finished: 2/16/70
Location: 49699 N - 49223 E
Sampler: Ariz.Test.Lab.
Logged by: A.G. Blucher
Collar Elev.: 6226

Depth (Ft.)	% Cu	Other	MO %	Rock Type	Minerals	Alteration	% Recovery
453-458	0.10		0.003	Same.			
458-464	0.38		0.004	Very broken.			
464-465	0.76		0.002				


R.14 1/2 E. (Unsurveyed)
R.15 E.
R.14 E.
T. 1 S.
Sec. 12
Sec. 13
Sec. 24
MADERA PEAK
6647
MORGAN PEAK
6517
D.D.H. 1
D.D.H. 2
D.D.H. 3
D.D.H. 4
V.D.H. 3
V.D.H. 4
V.D.H. 5
V.D.H. 6
V.D.H. 7
PINTO
CREEK
FOREST SERVICE RD. 580
M-1
M-2
M-3
M-4
M-5
M-6
M-7
M-8
M-9
M-10
M-11
M-12
M-13
M-14
M-15
M-16
M-17
M-18
M-19
M-20
M-21
M-22
M-23
M-24
M-25
M-26
M-27
M-28
M-29
M-30
M-31
M-32
M-33
M-34
M-35
M-36
M-37
M-38
M-39
M-41
M-42
M-43
M-44
M-45
M-46
M-47
M-48
M-49
M-50
M-51
M-52
M-53
M-54
M-55
M-56
M-57
M-58
M-59
M-60
M-61
M-62
LEGEND
Road
Trail
Intermittent Stream
M-9 Claim Name (M=Morgan)
D.D.H. Diamond Drill Hole
V.D.H. Validation Drill Hole
Survey Station
Underground Survey Station
Coordinate Grid Intersections
0 100 200 400
SCALE IN FEET
Contour Interval = 100'
E + E MANAGEMENT CORPORATION
TOPOGRAPHIC MAP
MORGAN PROJECT
T. 1 S., R. 14 1/2 E.
Gila County, Arizona
by:
date: March 19, 1970