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property file
RJ

DEPCO, Inc.

MINERALS DIVISION

MEMO TO: J. B. Imswiler

DATE: January 14, 1981

FROM: N. L. Archbold

SUBJECT: Reconnaissance of Gold Basin District, Mohave County, Arizona

Location:

In White Hills about ten miles northeast of the White Hills mining district. See southeast corner of Senator Mountain 15' quad and southwest corner of Garnet Mountain 15' quad.

Reference:

U. S. Geological Survey Bulletin 397, p. 118-127.

Notes On My Investigations (see numbers on accompanying sheets):

1. Senator Mine, NW¼ sec. 14, T. 28 N., R. 19 W.
Two parallel bodies of brecciated quartz about 300 feet long and 100 feet wide trend northward on the surface. Lowest tunnel on east side trends about S 60° W for 300 feet and passes through quartz body into sheared, chloritized granite in the footwall. Brecciated quartz body lies in hanging wall of fault that dips about 30° east. The quartz body probably lies along a thrust fault. Down-dip extension might present a drilling target if my samples show any gold or silver values.

SAMPLE NO.	DESCRIPTION	ppm Au	Ag
H-8	Chloritized granite off dump of lower tunnel on east side of mines. Somewhat cheared with minor coatings of hematite.	-.1	-1
H-9	Red, stained brecciated quartz and granite from dump of small pit just south of H-8.	.1	-1
H-10	Red, stained, brecciated quartz from dump just above H-8.	1.7	1

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2. Owens Mine, NW¼ sec. 1, T. 28 N., R. 19 W.
Several pits and shallow shafts. Geology is not immediately obvious, but it looks like a system of mafic dikes cutting Precambrian gneiss with argillic alteration and brecciation. Minor veins of specularite and some secondary copper minerals. Possible intrusive center that should be mapped and sampled if values show up in my one sample.

SAMPLE NO.	DESCRIPTION	~~ppm~~ OUNCES Au	Ag
H-11	Argillized, brecciated gneiss with limonitic stockworks and traces of Cu minerals. From pit at north end of ridge.	.2	-1

3. Fry Mine, NE¼ sec. 25, T. 28 N., R. 29 W.
Vertical shaft without much exposed. Probably a N 20° W zone in granite.

SAMPLE NO.	DESCRIPTION	~~ppm~~ OUNCES Au	Ag
H-12	Brecciated granite with limonitic coatings and shears at mouth of prospect adit in wash southeast of main shaft.	.1	-1

4. Name Unknown, SE corner sec. 19, T. 28 N., R. 18 W.
Mine with mill. Brecciated quartz body trends easterly in gneiss. Does not appear to hold much potential.

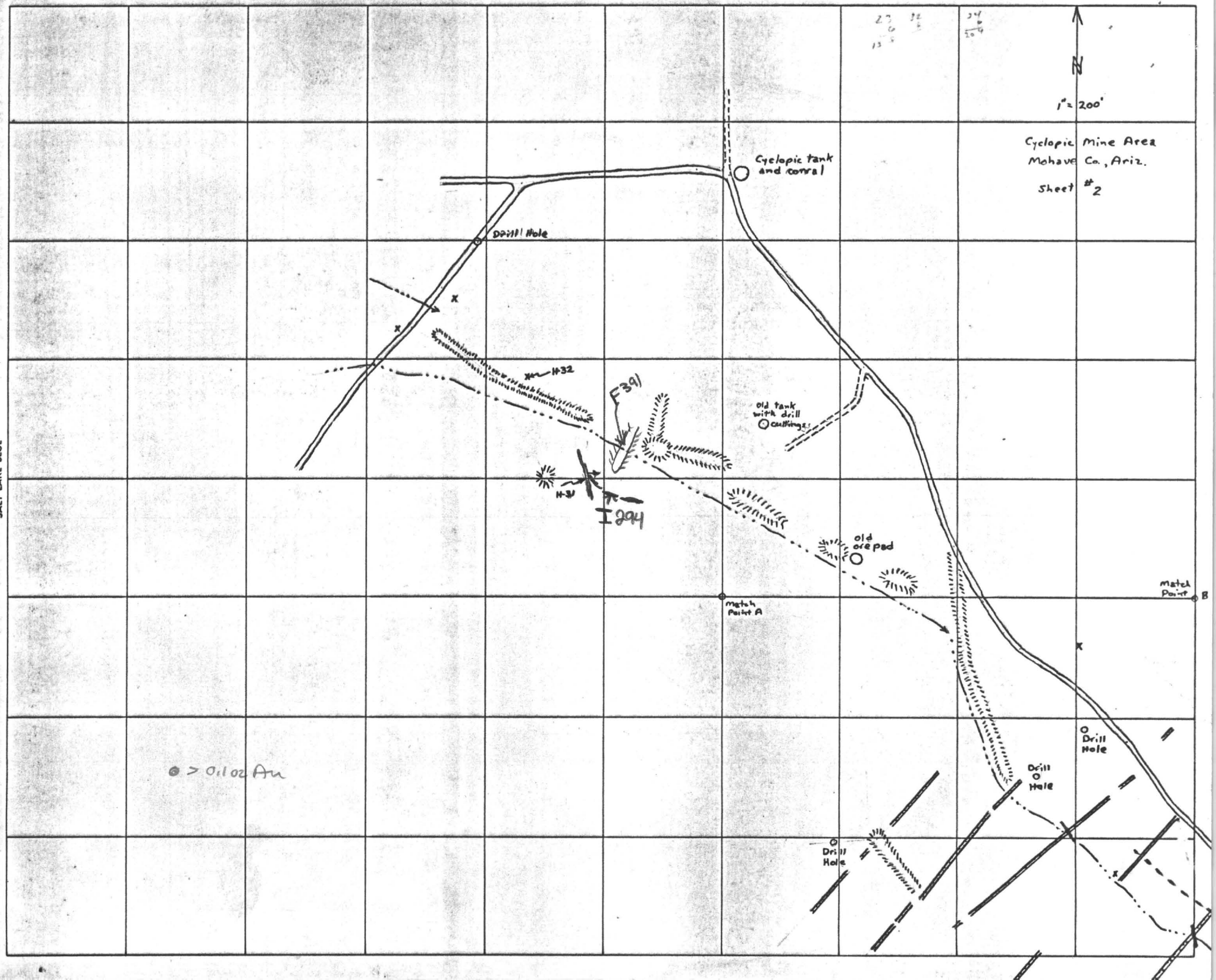
5. Name Unknown, NW¼ sec. 5, T. 28 N., R. 18 W.
Minor quartz lenses in gneiss strike about north-south and dip east.

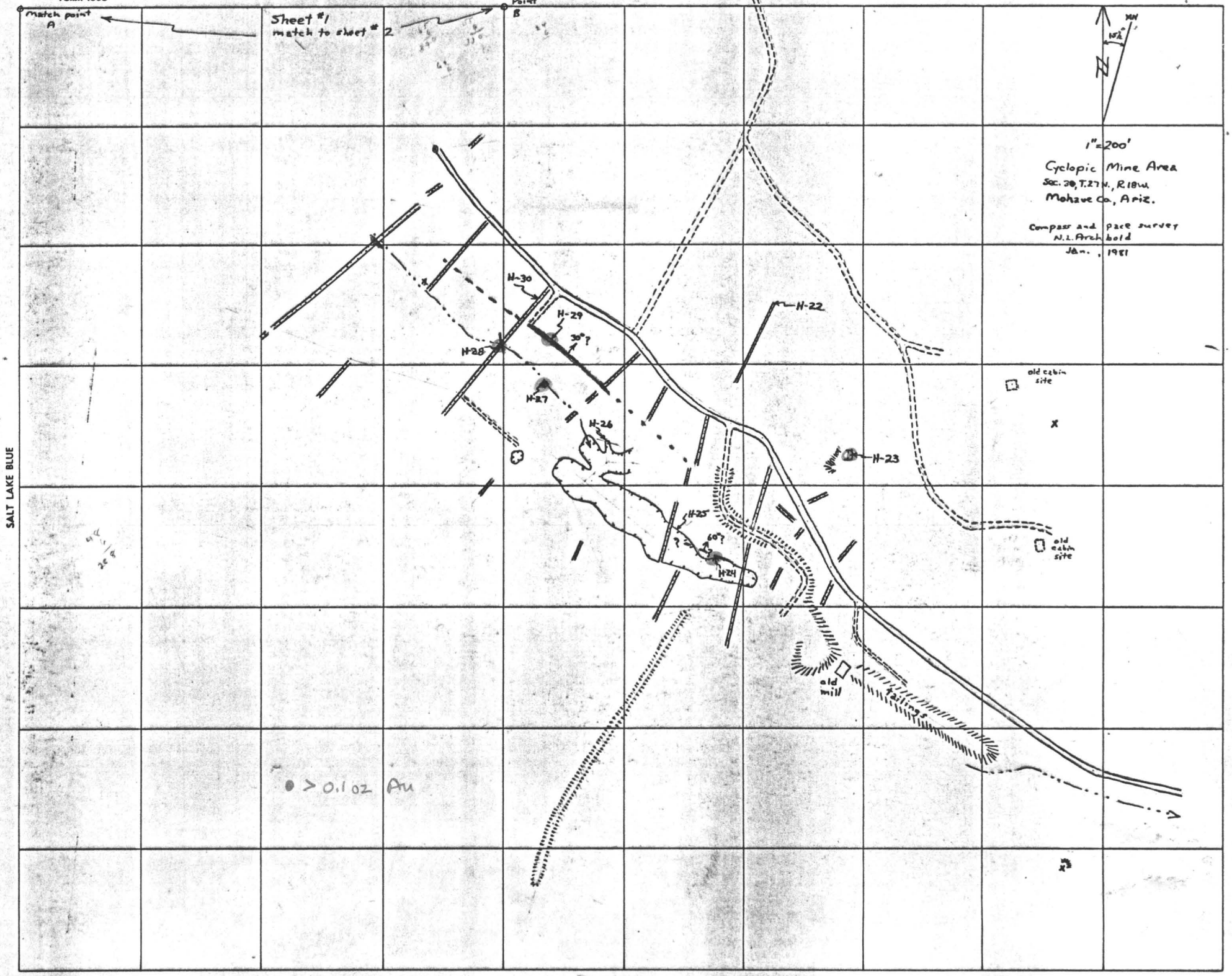
6. Cyclopic Mine, sec. 30, T. 27 N., R. 18 W.
This area appears to have some potential for an open-pit precious metal deposit. Most previous work looks to have been open-pit mining for placer gold and trenching to test for placer gravels. I did, however, note four drill holes to test bed rock. Schrader (USGS Bull. 397) reports shafts and drifts to a depth of 70 feet with 1,000 feet of underground work, but none of this is evident today. Schrader reported that "The altered granite for a width of 100 feet or more bordering the deposit is also said to contain $2 to $4 a ton in gold, ..."

My investigation and sketch map (attached) indicate a zone, at least 1500 feet long, that trends about N 50° W along the course of a wash. The zone seems to be at least 100 feet wide, but exposures are very poor and it is difficult

FORM 1006

SALT LAKE BLUE




FORM 1006
match point A
Sheet #1 match to sheet # 2
Match Point B
SALT LAKE BLUE
1"=200'
Cyclopic Mine Area
Sec. 30, T. 27 N., R 18 W.
Mohave Co., Ariz.
Compass and pace survey
N.L. Archibold
Jan., 1981
H-30
H-29
30°?
H-28
H-27
H-26
H-22
H-23
H-25
66°?
H-24
old cabin site
old cabin site
old mill
tailings
> 0.1 oz Au

to distinguish between weathered rock and caliche-cemented gravel. The zone might widen to the northwest, and float indicates that it extends farther northwest from the map area. Fundamentally, the "ore" zone looks to be a fault that dips about 30° northeast and contains sporadic lenses of thoroughly brecciated quartz that has been re-cemented with silica and Fe oxides. Neither the hanging wall nor the footwall is well exposed, but rocks a short distance northeast of the vein zone are sheared, red granitic gneiss that is probably cut by one or more mafic dikes. There have been numerous backhoe cuts across the zone. I assume these were to test for placer values, because virtually none of them expose bedrock. If my samples show any values, the district should be examined in closer detail. In any event, the owners of the property should be contacted to obtain more data about the property. Signs on the property indicate the current owners are T. King and R. Wyman in Boulder City, phone (702) 293-4178. Records in the Clark County Courthouse should be checked to ascertain the true ownership. Numerous "Yucca" claims were staked by King and Wyman in 1975. A 1971 report by J. Tingley (in DEPCO files) reports one sample that contained 0.248 ounces of gold per ton.

SAMPLE NO.	DESCRIPTION	ppm Au	Ag
H-22	Sheared, weathered granite from end of trench. Looks argillized and chloritized. Some limonite and hematite films.	-0.1	1
H-23	Brecciated granite gneiss. Somewhat sheared and chloritized. Minor veinlets of limonite.	7.0	4
H-24	Crushed quartz from hematite-stained zone in pit (subcrop of vein?).	3.4	2
H-25	Partly weathered, sheared and altered granite(?) and mafic dike(?) with quartz in face of pit.	-0.1	-1
H-26	Argillized, hematite-stained material from fault(?). This is C-horizon material.	0.2	-1
H-27	Brecciated quartz and Fe-oxide from bottom of wash. This looks like vein material, but could be "float" in gravel or ferricrete.	4.4	6
H-28	Vein material. Highly brecciated quartz re-cemented with silica and Fe oxides.	7.4	7

SAMPLE NO.	DESCRIPTION	ppm Au	ppm Ag
H-29	Vein material. Very hard, brecciated quartz re-cemented with quartz and Fe oxides. Random chips from vein that looks to be about six feet thick. This is best outcrop.	3.4	2
H-30	Sheared, argillized and chloritized granite gneiss. Sample from backhoe trench. This is in hanging wall of vein zone.	-0.1	-1
H-31	Vein material and mylonite. Probably represents quartz lense in fault zone.	2.8	2
H-32	Red granite gneiss and bleached(?) equivalent. Sheared, with minor quartz and Fe oxide veinlets.	-0.1	-1

7. Evan Mines, SE corner sec. 29, T. 28 N., R. 18 W.
Three-foot wide quartz vein in gneiss strikes N 25° E, dips 60° E. No particular potential.

8. Lee, P, and LM Mine, NW¼ sec. 4, T. 27 N., R. 18 W.
Area mostly covered. Brecciated, iron-stained granite with some quartz material. No obvious single structure.

SAMPLE NO.	DESCRIPTION	OUNCES Au	OUNCES Ag
H-13	Silicified, brecciated and iron-stained granite off dumps. Some vein quartz.		

9. Covered by Crutch claims, sec. 10, T. 28 N., R. 18 W.
Five-foot wide fracture zone with minor quartz in gneiss. Vein strikes N 50° W and dips 55-70° northeast.

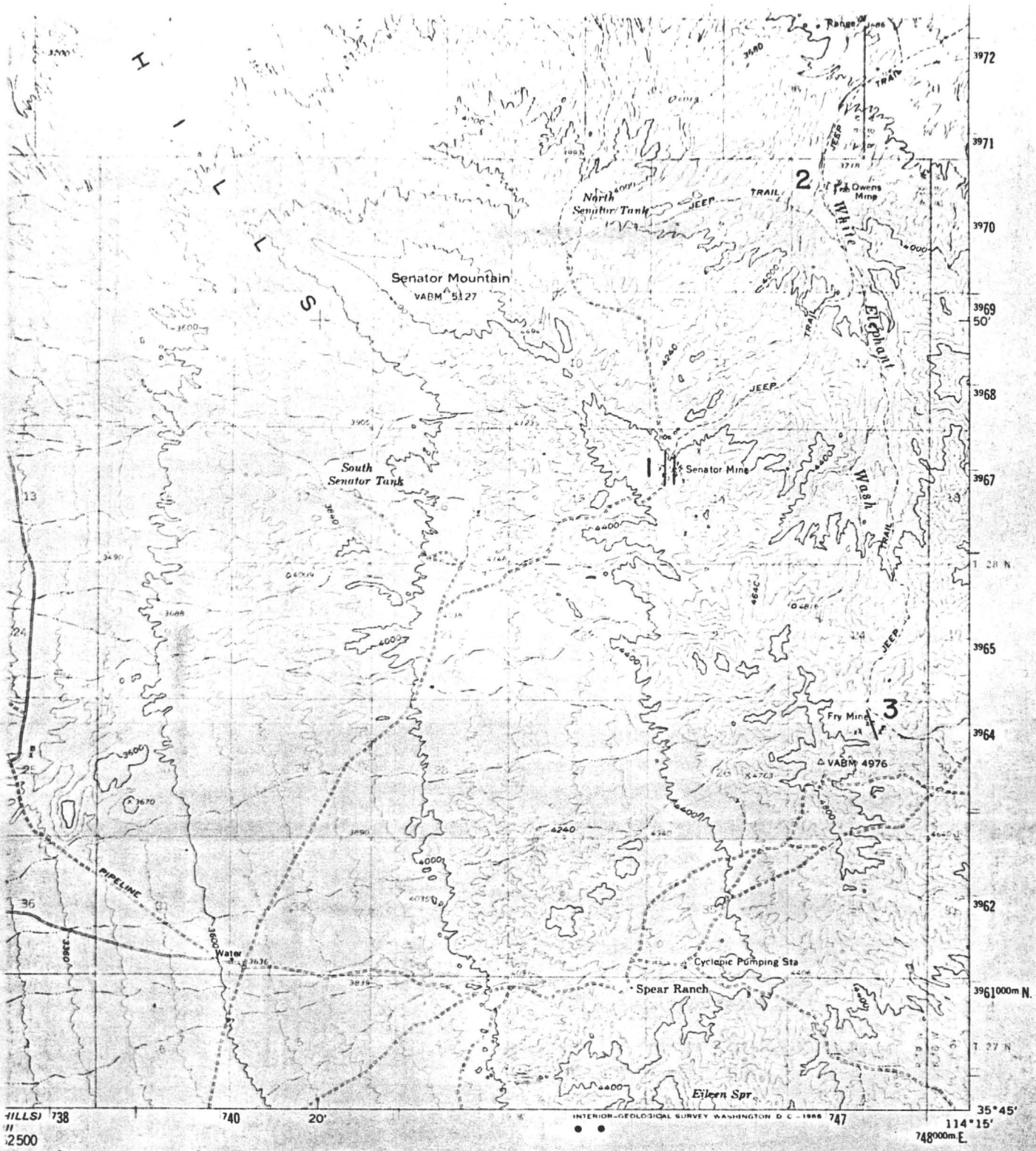
10. Name Unknown, sec. 16, T. 28 N., R. 18 W.
Minor milky quartz in shear zone that strikes easterly and dips 25° south.

11. Excelsior Mine, NW¼ sec. 22, T. 28 N., R. 18 W.
Mine is well described by Schrader in USGS Bull. 397. Vein appears to strike N 50° E, dip 45° northwest.

12. Eldorado Mine, SE¼ sec. 21 and SW¼ sec. 22, T. 28 N., R. 18 W. Mine is described by Schrader. Currently the site of a small heap-leaching operation. I talked with Bob Toporowski, who is a partner in the operation. He tells me they are attempting to work a flat-lying vein (25°). This is probably the structure called the "blanket" vein by Schrader.

Recommendations:

The district appears to hold little promise for a large tonnage operation. The Cyclopic Mine might be the single exception. The reason is not clear to me, but in February of 1980, much of the area was covered by the "Crutch" group of claims. I saw at least 250 claims in the group. The claims were located by a contract staker but reportedly belong to Santa Fe Mining Company. Inspiration Development Company staked a number of claims in 1978 and 1979.



INTERIOR—GEOLOGICAL SURVEY WASHINGTON D C—1966

2500

4 MILES
12000 15000 18000 21000 FEET
5 KILOMETERS

VAL 80 FEET
SEA LEVEL

ROAD CLASSIFICATION

Medium-duty — Light-duty

Unimproved dirt

ARIZONA

QUADRANGLE LOCATION

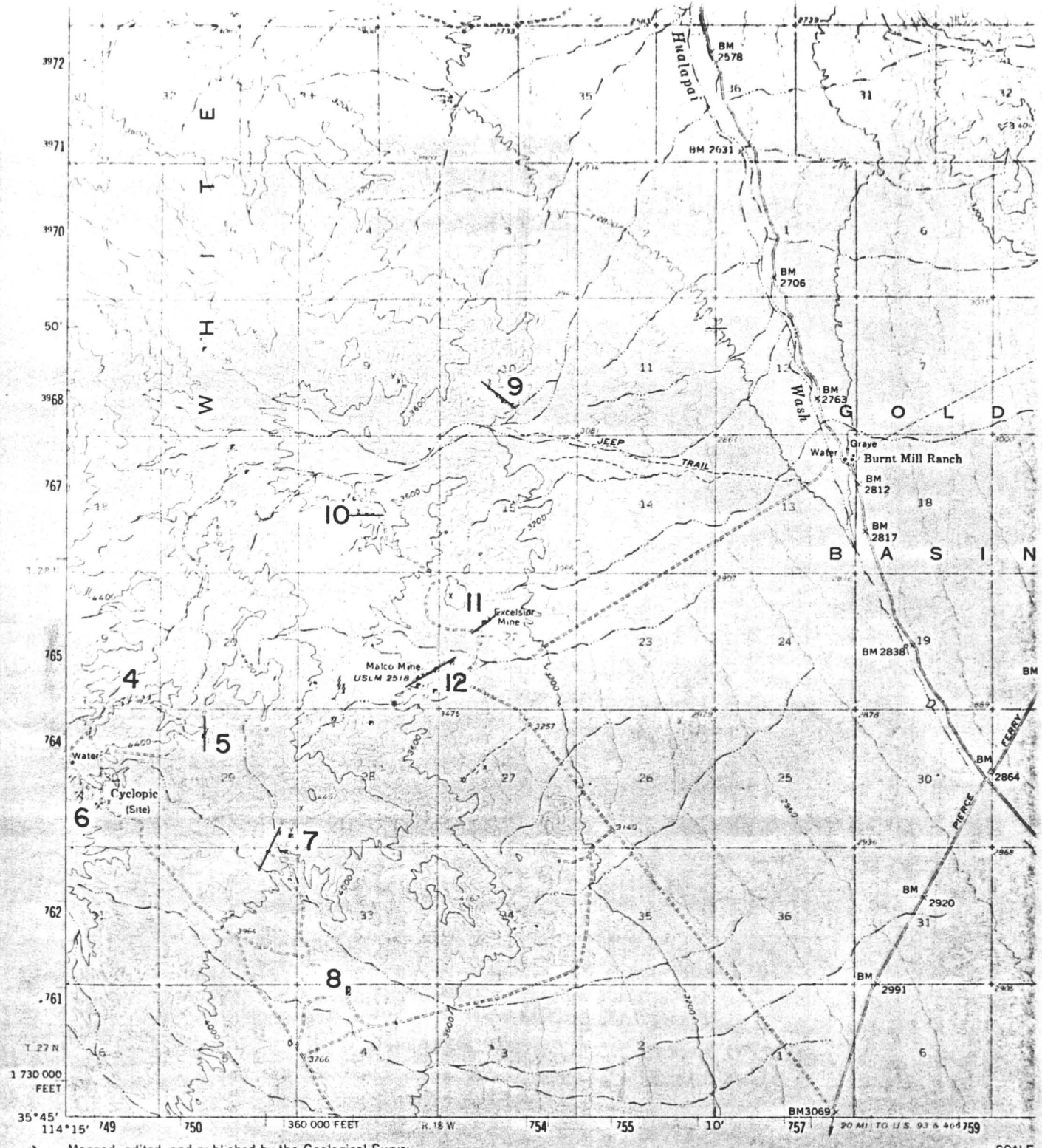
SENATOR MOUNTAIN, ARIZ.

N3545—W11415/15

1960

AMS 3155 IV—SERIES V798

L MAP ACCURACY STANDARDS
COLORADO 80225 OR WASHINGTON, D. C. 20242
ND SYMBOLS IS AVAILABLE ON REQUEST



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1958. Field check 1960

Underwater contours compiled from USDA maps
and later sedimentation studies

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, west zone
1000-meter Universal Transverse Mercator grid ticks,
zone 11, shown in blue

Land lines unsurveyed in parts of T. 29 N.–R. 18 W.,
and T. 30 N.–Rs. 17 and 18 W.

GN MN
1°41
30 MILS
15½°
276 MILS

UTM GRID AND 1960 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE

3000 0 3000 6000

CONTOUR INT
DOTTED LINES REPRES
DATUM IS ME

THIS MAP COMPLIES WITH NAT
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENV
A FOLDER DESCRIBING TOPOGRAPHIC MA

Garnet Mtn 15' Quad

rite.[a] It is said to be less rich in the sulphide zone in the lower part of the mine than in the oxide zone near the surface. Its run of mine, roughly computed from a record of the output from October 10, 1885, to March 6, 1901, is about as follows: Silver 160 ounces and gold 2 ounces to the ton; lead, 12 to 20 per cent.

Production.—The production is reported to be $1,300,000, that of silver alone amounting to about $1,000,000; and several thousand dollars' worth of medium-grade ore are said to now lie on the dump. The output was mostly made between the autumns of 1885 and 1892. During this period 3,687 tons of ore are reported, according to smelter return sheets, to have contained about 402,000 ounces of silver, 1,180 ounces of gold, and 515,760 pounds of lead. Later, about 1900 to 1902, about 17,550 ounces of silver, 180 ounces of gold, and 114,360 pounds of lead are said to have been obtained from 330 tons of concentrates.

MINES OF CANYON STATION WASH.

In Canyon Station Wash, about a mile north of C. O. D. Wash, there are reported to be several small mines, of which the most important seem to be the Baden-Baden, King, and Queen mines, said to be owned by Lewis Davidson, of Kingman.

MINES IN "TOP OF STOCKTON HILL" AREA.

The "top of Stockton Hill" is situated in the northwestern part of the district, at the crest of the range, between the northern part of the Cerbat district on the west and the heads of I. X. L. and C. O. D. washes on the east. The mines include the Cincinnati, Miner's Hope, Blue Bell, Fountain Head, Brown, and others, the most important of which seems to be the Cincinnati. It is situated near the crest of the range about midway between Lane Springs and I. X. L. basins. It has not been worked for many years, but is regarded as a good property.

GOLD BASIN DISTRICT.

GENERAL FEATURES.

The Gold Basin mining district, of which Basin is the post-office, is situated in the eastern part of the White Hills (fig. 18). It extends over a hilly area about 6 miles in diameter, sloping to Hualpai Wash on the east, and ranges from 2,900 to 5,000 feet in elevation. The northeastern portion, where most of the mines are situated, is rugged, being marked by longitudinal faul[t] carps and scored by

[a] The mine is said to contain no copper above the 200-foot level, but in an opening about half a mile west of the mine and about 500 feet above it, on what is thought to be the same C. O. D. vein, the ore, which here occurs in a milk-white quartz gangue, contains chiefly bornite and chalcopyrite, with some zinc blende, and about $20 in gold to the ton.

several deep transverse washes, of which the principal ones are Banker, O. K., and Cyclopic, situated about 2 miles apart. The nearest railway station is Hackberry, 40 miles to the south, with which connection is made by stage line. Colorado River lies 16 miles to the north. Mineral was first discovered here early in the seventies, but remoteness from the base of supplies, together with scarcity of fuel and water, renders operations expensive and has materially retarded developments. Nevertheless, considerable progress has been made and much ore has been produced and worked in arrastres and mills.

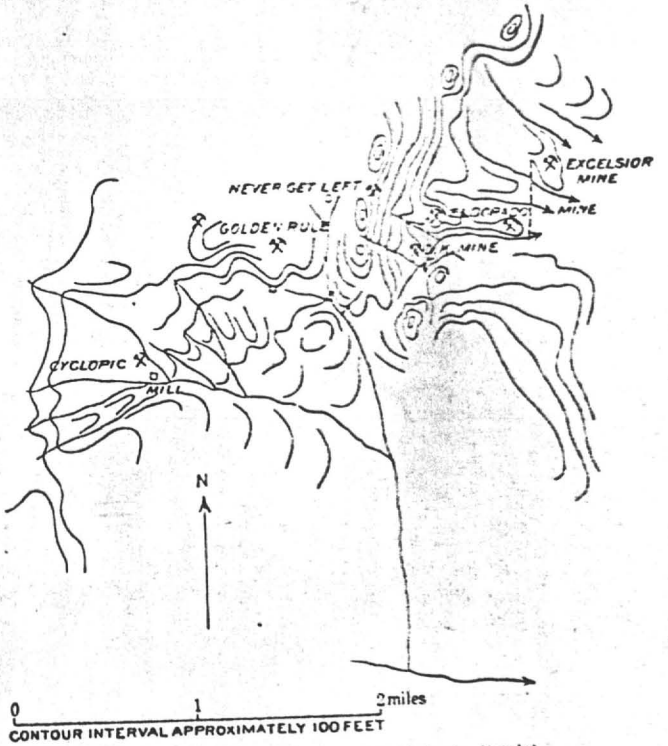


FIGURE 18.—Sketch map of Gold Basin district.

The deposits occur mainly in fissure veins in the pre-Cambrian crystalline rocks. The veins dip southeastward or northwestward, mainly at angles of 40° or 70°. The gangue is quartz, in places with siderite, and the metal is gold, mostly free milling, but it is associated with lead or copper ores, copper stain being a good indication of the gold values. Pyrite, chalcopyrite, galena, molybdenite, and wolframite are found, but the ore is largely oxidized, the water level not having been reached. Among the oxidized products are limonite, malachite, cerusite, and vanadinite.

The district contains about half a dozen small mines and about an equal number of good-looking prospects. The relative location of the most important is shown in the small sketch map (fig. 18). The principal mines are the Eldorado, Excelsior, Golden Rule, Jim Blaine, Never-get-left, O. K., and Cyclopic. The production of the district is given as more than $100,000, most of which came from the Eldorado mine.

ELDORADO MINE.

Location and history.—The Eldorado mine is located in the high foothills in the eastern part of the district, at about 4,000 feet elevation and 1,000 feet above Hualpai Wash, which is about 2 miles distant. The mine is reached by wagon road, over which most of the ore was hauled to the Basin or O. K. mill, 4 miles distant in Hualpai Valley. This mill, which was burnt while in operation in August, 1906, contained 10 stamps and a cyanide plant.

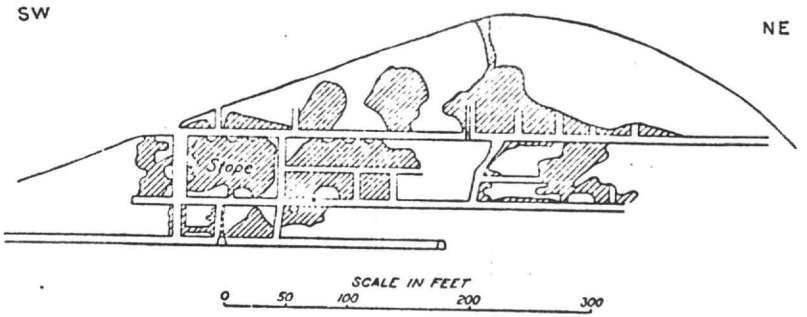


FIGURE 19.—Longitudinal section of Eldorado mine, showing stopes.

The mine was discovered late in the seventies and produced the first bullion taken from the district, much of its ore being at first worked in arrastres. It is owned by the Arizona-Minnesota Gold Mining Company, of Minneapolis. The production is reported to be $65,000, of which $5,000 was produced prior to 1902.

Developments.—The mine is developed principally by about 2,000 feet of tunnels and drifts and 40,000 cubic feet of stopes on three levels, aggregating probably about 90,000 cubic feet of underground work and distributed approximately as shown in the accompanying diagram (fig. 19). The lower tunnel trends about N. 33° E. and strikes the vein at about 200 feet in from the mouth. From this point the drift extends about 200 feet to the northeast.

Geology.—The country rock is a reddish schistose medium-grained granite. On the northeast, however, as shown at the surface and in the bottom of the mine, this rock gives way to a dark friable biotite granite. The contact between the two rocks dips about 30° W. It is usually sharp and is probably a fault plane, which seems to cut off the vein on the northeast.

Veins and ores.—The deposit is a fissure vein, which strikes about N. 50° E. and dips 65° SE. It is continuous from the apex at the crest of the ridge to the contact in the lower tunnel of the mine and is stoped out through most of this extent. The walls are fair, but not regular. The vein averages several feet and the ore shoot about 20 inches in width. It contains iron-stained, free-milling gold-quartz ore, and is reported to average from $12 to $15 a ton in gold. The other associated minerals are malachite, lead carbonate, and vanadinite, the last occurring locally as incrustations of crystals one-fourth inch in maximum length. The principal mill treatment given to the ore was crushing, plate amalgamation, and cyanidation.

Just northwest of the apex of the vein above described and about 80 feet above it is the blanket vein, which is exposed for a length of 600 feet and a width of about 100 feet and which has contributed largely to the output of the mine. It dips about 25° E.

O. K. AND EXCELSIOR MINES.

The O. K. and Excelsior mines were discovered and located by three prospectors, Patterson, Rowe, and Fox, early in the eighties. They worked the ores in arrastres and hauled some to the 4-stamp mill at Grass Springs. In 1886 the O. K. was sold to a Kansas City company, which at once put up the O. K. mill in Hualpai Valley and ran it intermittently from 1887 to 1890. The mill burned down in 1893, but was rebuilt in 1896 and operated by lessees for a time, and then again shut down. It started once more early in 1902 and ran intermittently until 1906, when it burned down while in operation. The water used at the mills was piped from the springs or water tunnels in the upper part of Grand Wash Cliffs, 7 miles to the northeast. The mines are now owned by the Arizona-Minnesota Gold Mining Company.

O. K. mine.—The O. K. mine is about half a mile south of the Eldorado mine and about 100 feet below it, on the opposite side of O. K. Wash. The mine is developed mainly by adit drifts, winzes, and stopes on four levels. There is about 1,600 feet of underground work, distributed approximately as shown in the section (fig. 20). The production is reported to be about $25,000.

The country rock is a dark biotite granite, about the same as that which occurs in the bottom of the Eldorado mine. The strike is N. 30° E., with dip vertical. Slickensides pitch northeast-east toward the mouth of the drifts at angles of about 35°.

The vein trends N. 65° E., but curves to the north in its course and dips about 75° NW. It averages about 18 inches in width and is

composed mainly of seamed, gold-bearing limonite-stained quartz, said to average about $10 in gold to the ton. The hanging wall of the fissure is regular, but rough. Small faults 2 to 6 feet in throw occur, locally accompanied by overlap and enlargement of the vein. The ore favors the hanging wall, but where the vein overturns on the third level and the hanging wall becomes the foot wall the ore, nearly 1 foot thick, occurs in the foot-wall side.

The ore is free milling, but not so much so as the Eldorado ore, the gold being associated with cerusite. The principal other associated minerals are limonite, hematite, siderite, galena, molybdenite, and wolframite.

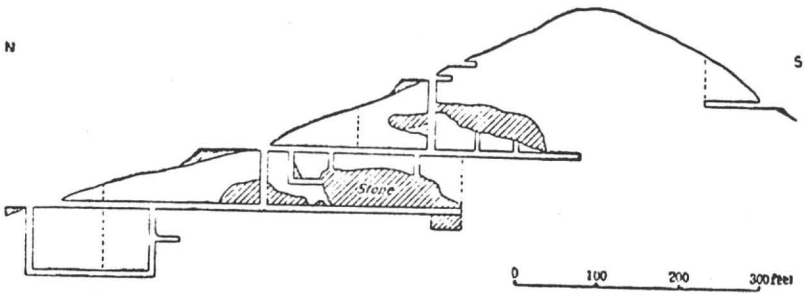


FIGURE 20.—Longitudinal section of O. K. mine, showing stopes.

Excelsior mine.—The Excelsior mine is about a mile northeast of the Eldorado and O. K. mines, in the low foothills near the edge of Hualpai Valley and about 500 feet above it, on the north side of O. K. Wash. The mine is developed to a depth of about 100 feet, principally by inclined shafts, drifts, and stopes, aggregating 500 feet of underground work. The production is reported to be $5,000.

The country rock is a coarse reddish granite associated with black amphibolite schist. The vein dips about 45° NW. It is from 1 to 4 feet in width and is locally occupied by gouge only. The ore shoot contains deeply iron-stained gold-bearing quartz or ore. It varies from three-fourths to 1 foot in width and occurs mainly on the hanging wall. The ore is said to be cyaniding ore, only a small percentage of the values yielding to amalgamation.

MASCOT MINE.

The Mascot, formerly the Old Homestake mine, is situated north of the Excelsior mine in the foothills at the edge of Hualpai Wash, and is said to contain a vein only 3 inches in width, which, however, is reported to be very rich. It is owned by the Arizona-Minnesota Gold Mining Company.

NEVER-GET-LEFT MINE.

The Never-get-left mine is located in the upper part of a cliff or fault scarp that overlooks the Eldorado mine on the east, from which it is but a few hundred yards distant. It is situated at about 4,500 feet elevation, or 1,600 feet above Hualpai Valley. It is owned by Henry Paully, of Basin, and is developed principally by an adit drift, shallow shafts, and open cuts, aggregating several hundred feet of work.

The country rock is dark gneissoid schist. The structure dips about 50° W., but the principal deposit dips about 30° N. It has a width of 6 or 8 feet and contains mainly iron-stained or copper-stained crushed gold-bearing quartz. The country rock is greatly disturbed by jointing, fracturing, and faulting, and its true character is somewhat doubtful. The mine has been a small producer for some years and was shipping ore in April, 1906.

GOLDEN RULE MINE.

Location and history.—The Golden Rule mine is about 1 mile west of the Never-get-left mine, at the extreme head of O. K. Wash, at about 4,550 feet elevation. It was discovered in the early eighties by Robert Patterson and Saul Rowe, who hauled some of the ore to the Grass Springs mill. Subsequently they leased the mine to Mr. Quackenback, and in 1900 sold it to the present owner, the Arizona-Minnesota Gold Mining Company. This company did but little development work on it till 1906. From May 15 to November 1 it was operated with a force of ten men, but was closed on the latter date. The production of the mine is estimated to be about $5,000, most of which came from the blanket vein.

Development.—The mine is developed by a 75-foot shaft, about 300 feet of drift, stopes, and a 25° incline about 100 feet long and 20 to 40 feet in width, the incline being on the south, where the deposits occur in the form of a blanket vein. The workings are contained within a horizontal distance of about 700 feet and a vertical distance of about 100 feet. The mine is handicapped by lack of water, which has to be hauled from the Cyclopic mine or from Basin, in Hualpai Valley.

Geology and ore deposits.—The country rock is the pre-Cambrian gneiss and schist. The fissure vein containing the principal part of the deposits strikes N. 20° E. and dips about 70° ESE. The croppings, which in part are prominent, form a reef of iron-stained, firmly cemented quartz breccia. The vein is best exposed in the north drift. It is about 2½ feet in average width and contains gold-bearing normal vein quartz, locally crushed, recemented, and iron-stained. Associated with it on either side is a sheet of pale grayish or whitish

gouge. The vein is said to yield good values throughout, the average being about $10 in gold to the ton, but the honeycombed quartz is the richest part of it.

At 120 feet in from the mouth of the drift the vein is abruptly cut off by a fault, immediately beyond which occurs a dark schistose rock that may be an intrusive. Near the fault the vein enlarges to about 12 feet in width, the enlargement being mainly on the foot-wall side and containing much honeycombed quartz, and the ore, greatly increased in quantity, is said to contain higher values. Some of it averaged about $100 a ton in a large chamber, from which much ore has been removed.

The fault hades north at an angle of about 10°. It is a normal one and the lost portion of the vein has risen toward the southeast. The amount of throw was not determined, but it is probably not very great. Beyond the fault the drift extends about 100 feet on the projected course of the vein which, however, has not been found.

On the south the deposits occur in a blanket vein, which is 3 to 5 feet thick, dips about 25° SE., and is probably a portion of the vein in the north drift, for it straightens up in that direction toward the top of the hill. The blanket portion has been mined over an area of about 100 feet along the strike and a breadth of 35 feet down the dip, and it probably produced good values.

CYCLOPIC MINE.

Location and history.—The Cyclopic mine is located in the southeastern part of the district, about 5 miles southwest of the Eldorado mine, near the head of Cyclopic Wash, at about 4,500 feet elevation, on open ground. It was discovered in the early eighties by Patterson, Rowe, and Glen, and about 1896 it was leased to a Seattle company. In 1901, with the Golden Rule mine, it was sold to Robbins & Walker, of Minneapolis, who milled some ore. The coarse tailings still on the ground are said to contain about $7 in gold to the ton. Since 1904 the mine has been owned by the Cyclopic Gold Mining Company, of Denver. A considerable amount of bullion is said to have been produced, but the exact amount was not ascertained.

Developments.—The mine is developed mainly by shallow, mostly inclined shafts, drifts, and crosscuts to a maximum depth of about 70 feet, but most of the workings do not extend below 30 feet. The developments probably aggregate about 1,000 feet of work.

As the mine is located in a broad wash, some of the workings have become filled with wash débris at times of flood. The principal equipments are an Ellspass mill, operated by a 26-horsepower engine, and a cyanide plant. The water supply is pumped by a small gasoline plant from the west side of the range, several miles distant.

Geology.—The country rock is a medium-grained coarsely porphyritic granite. It outcrops in association with the deposits and forms the foothills immediately on the southwest. Paralleling this rock, the wash, and the deposits on the northeast, and constituting the ridge on which the office and other buildings stand, is a fine-grained reddish granitic rock, with which is associated some of the same biotite granite that underlies the Eldorado mine. In contact with the deposits, particularly to the northwest, there is also a coarse red pegmatite.

Deposits.—The deposits are ill defined and not well understood. They consist of gold-bearing iron-stained breccias and sands of vein quartz, in a few places somewhat resembling conglomerate. This material is cemented by silica and iron oxide, but is in part loosely coherent. It trends from a point near the mill N. 57° W. up the wash and is contained in, and for the most part seems to occupy, an area three-fourths of a mile in length by about 200 feet or more in width. Prominent reefs of silicified iron-stained breccia several or more feet in width outcrop several feet above the surface. They are in practically all respects identical with the croppings of the Golden Rule and other veins that have been described. They do not, however, as a rule, continue in depth in the manner of a fissure vein, nor seem to have any definite fissure wall, but usually at a short distance below the surface give way to less firm material having an imperfect synclinal structure. In the northern part, the pseudovein croppings dip toward each other and their attitude suggests that they may be synclinal limbs of the same vein deposit.

From the principal openings near the mill in the southeastern part of the deposit the croppings representing the main or Cyclopic vein extend N. 57° W. They are continuous for the first 400 feet and are accompanied by some underlying vein quartz or ore and show ore in sight at both ends of the 400-foot excavation. Between this vicinity, however, and the northwest limits of the deposits, the croppings of the vein are interrupted, and some pits and cuts have failed to find ore there.

The croppings of the other vein extend without interruption from a point about one-fourth of a mile northwest of the principal opening for a distance of 350 feet to the northwest. They are nearly parallel with the main vein, from which they are about 350 feet distant.

The ore thus far has been derived mostly from these veins, but crosscuts 80 feet or more in length have been run in a considerable portion of the deposits between them and report fair values, which, however, seem to occur in lines or zones paralleling the deposit. Practically no mining has been done below a depth of about 30 feet. Near this level there is reported to occur a bed of red clay or gouge, which was formerly supposed to mark the lower limit of the ore, but

ore is said to have been found below it. The altered granite for a width of 100 feet or more bordering the deposit is also said to contain $2 to $4 a ton in gold.

The ore is of low grade, and is said to mill on the average from $7 to $8 a ton in gold, and to cyanide well. It contains also a little silver and a trace of copper, the latter occurring chiefly as malachite and not in sufficient amount to interfere with the cyanidation. The company is reported to have recently computed about 1,000,000 tons of ore in sight.

GOLD BELT MINE.

The Gold Belt mine is located on the southeast side of Banker Wash, at about 5,000 feet elevation. It is owned by Henry Paully. The country rock is an amphibolite schist, dipping about 30° W. At the western of the two principal openings the deposits are contained in a blanket vein of quartz 15 feet thick, inclining gently eastward, but thinning out in a distance of about 30 feet. The eastern opening shows two quartz blanket veins, each 2 to 6 feet in thickness, dipping gently westward and separated by a 4-foot dike of some volcanic rock that seems to be basalt, but is altered beyond identification.

The ore is said to be of two grades, the lower grade yielding from $4 to $7 in gold to the ton and the better grade from $16 to $20 to the ton and some as high as several hundred dollars a ton, that occurring in the porous or honeycombed quartz being the best. The deposit is reported to have produced a few hundred dollars' worth of ore.

SENATOR MINE.

The Senator mine is located some distance beyond the border of the Gold Basin district, about 7 miles northwest of the Eldorado and Golden Rule mines and about 7 miles south of Colorado River, on a low round hill at the southeast base of a prominent landmark known as "Senator Mountain." The mine was discovered late in the eighties by John Burnett, who in 1892 sold it for $14,000 to Senator Page, of Los Angeles, who in turn sold it to a Colorado company. The company at once installed a 10-stamp mill on Colorado River, 2 miles below Salt Springs, operated the mine and mill for about six months, and then suspended. Later the property was acquired by or leased to the Salt Springs Mining Company, which operated it about a month in 1903 and shut down, the ore being of too low grade to pay for its haulage to the mill, 7 miles distant, and for bringing supplies from Hackberry and Kingman, 50 and 60 miles distant, respectively. The mine is reported to have been abandoned since then.

The mine is developed principally by open work, cuts, and adit drifts. The deposits are said to be nearly flat lying and similar in character to those of the Cyclopic mine (p. 125), but they form a

larger body. The ore is said to be similarly low in grade, averaging about $3 in gold to the ton. According to Comstock,[a] the deposits exhibit structural features resembling those of "brecciated fusion" and "cooling lamination" and in origin seem to be associated with igneous intrusion.

DEPOSITS AT SALT SPRINGS.

The Salt Springs mine is about 7 miles northeast of the Senator mine and several miles south of Colorado River, in the first canyon west of Hualpai Wash. It is owned by the Salt Springs Mining Company, which is said to include members of the Arizona-Minnesota Gold Mining Company. The country rock is granite. The gold ore is said to occur sporadically in quartz bodies, and its downward limit is usually indicated by copper-stained quartz.

Other properties in this district are the Smuggler-Union group, the Eureka mine, and the Lutley group.

WHITE HILLS DISTRICT.

GENERAL DESCRIPTION.

LOCATION AND HISTORY.

The White Hills district is located about 28 miles north of Chloride, in the western border of the White Hills, at about 3,000 feet elevation. It comprises an area about 2 miles in diameter and is a part of the Indian Secret mining district, so named because the knowledge of the presence of its mineral was for a long time withheld from the whites by the Indians.

The first discovery of mineral in the district by white men was made by Henry Shaffer in May, 1892, through the aid of an Indian known as Hualpai Jeff, who exhibited a piece of rich silver ore at Gold Basin and showed Shaffer its source, where the Indians procured the supply of red iron oxide with which they adorned their faces. The locality is at the site of the Hidden Treasure mine.

After making several locations, Shaffer reported the discovery at Gold Basin and was soon joined by John Burnett and John Sullivan, who also located what later proved to be some of the best mines. The trio began work and were soon shipping very rich ore, some averaging $1,000 a ton. The camp soon became the largest in the region and reached its zenith in 1894, with a population of 1,200. Within a short time the camp was owned by one company, the White Hills Mining Company, of which the chief men were R. T. Root and D. H. Moffatt, of Denver. A 10-stamp mill was built early in 1904; in

[a] Comstock, Theodore B., Geology and vein phenomena of Arizona: Trans. Am. Inst. Min. Eng., vol. 30, 1900, pp. 1048–1049.

Property file

DEPCO, Inc.

MINERALS DIVISION

MEMO TO: J. B. Imswiler

DATE: January 22, 1981

FROM: D. F. Simpson

SUBJECT: Reconnaissance of Mines in the Lost Basin Range. Garnet Mountain 15' Quadrangle. Mohave County, Arizona.

References:

Arizona Bureau of Mines Bulletin 137.
State of Arizona Bureau of Geology and Mineral Technology Bulletin 168

On January 5, 1981 and on January 6, 1981 I made a brief reconnaissance of mines and prospects in the Lost Basin Range, Mohave County, Arizona. These include the Golden Mile mine, Bluebird mine, Climax mine, and the King Tut placer mine. These small mines explored quartz veins in granitic gneiss. The Lost Basin Range is approximately 50 miles north of Kingman, Arizona and can be reached via highway 93 out of Kingman.

Golden Mile Mine

The geology consists of quartz veins in schists and gneiss. Three shallow shafts and four adits explore a north-trending quartz vein and vein system. The quartz vein was poddy and up to five feet in thickness. There were inclusions of chlorite-schist wall rock in some zones of the quartz vein. Locally, pyrite cubes were observable in both the quartz vein and the wall rock. The vein system can be traced for approximately 1200 feet but mineralization is not apparent along its total length. Unless mineralization of the wall rock is indicated by my sampling, this property probably has little economic value.

SAMPLE #	DESCRIPTION
I 65	Fe-stained white quartz and chloritic schist. 10' chip sample crosses 6' quartz vein and 4' of wall rock with numerous white quartz veinlets.
I 66	10' vertical chip sample across white, poddy quartz vein. Minor sulfide-some cubes to ¼".
I 67	Sample of wall rock at I 66 location. Fe-stained chloritic schist and white quartz vein material. Some minor sulfides. 5' chip sample across outcrop.
I 68	10' vertical chip sample across 6' quartz pod and 4' of chloritic schist wall rock. There are schist inclusions in the white quartz pod.

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I 69 Sample across series of intersection 6" to 3' quartz veinlets. Wall rock is chloritic schist with minor sulfides.

Bluebird Mine

The geology of the Bluebird mine is similar to that of the Golden Mile mine and consists of quartz veins in granitic gneiss. A tunnel of approximately 200 feet explores a quartz vein which trends N 30° W and dips 61° SW. The vein is up to 5 feet thick and sulfides are visible in the vein material and the gneissic wall rock. Numerous prospects in the hills around the Bluebird also explore small quartz veins and veinlets. Approximately one mile east of the mine a rhyolite dike intrudes the granitic gneiss. Most of the area is covered and could be of interest if my sampling shows any mineralization. The quartz veins of the area probably have little value to DEPCO.

SAMPLE #		DESCRIPTION
I 70	1.28 ppm Au	White quartz vein material and siliceous "schisty" material which contains talc and chlorite. Both have visible pyrite cubes. 5' horizontal chip sample across outcrop.
I 71	4.90 ppm Au	Sample off small ore pile (?) of quartz vein material with major Fe-stains. Some pyrite casts and cubes.
I 72		Sample of gneiss and schist country rock with minor disseminated pyrite. 200' away from mine workings. Random grab sample of float.
I 73		Random grab sample across bulldozer cut. Gneiss, schist, and white quartz vein material. All have minor Fe-stains.
I 74		White quartz vein material and Fe-stained chloritic schist. Also some coarse crystalline granite.
I 75		5' chip sample across outcrop of white, rhyolite dike. Minor sulfides and slight argillic alteration. Contains fragments of granitic country rock.
I 76		Random sample of quartz pod and country rock. White quartz with minor sulfides and Fe-stained schist with white quartz veinlets.
I 77	1.49 ppm Au	White quartz, gossan, and gneissic material with white quartz veinlets. Brown, purple, and Fe-stains. Random grab sample of chips near prospect.
I 78		Random grab sample off dump has mostly Fe-stained white quartz with some gneiss country rock.
I 79		Talcos and chloritic fault zone material with minor Fe-stain and pyrite cubes. 5' horizontal chip sample across adit roof.

Climax Mine

The Climax mine workings explored shear zones and quartz veins in granite gneisses. The major structure trends N 15° E and dips 65° W into the hillside. A major zone of gouge material and white quartz can be traced for approximately 500 feet along strike. There has been minor argillic alteration and pyrite and copper stains are very minor. Unless gold and/or silver values could be proven to increase down dip, the Climax mine doesn't have the size to be a major ore body. There has been recent bulldozer work around the mine and there are two small heap-leaching pads within one mile of the mine.

SAMPLE #	DESCRIPTION
I 90	10' chip sample across fractured zone of white quartz vein material and silicified granite country rock. Pink-red-Fe-stains.
I 91	Sheared and brecciated intrusive and highly altered quartz and country rock. Argillic alteration. Major red stains and minor copper stains.
I 92	Random grab sample of country rock float. Pale green to white medium crystalline, quartz rich, meta-granitic rock. Very minor disseminated pyrite.

King Tut Placer Mine

The King Tut placer mine produced gold valued at $23,510 from 1934 to 1942. The gold deposits were reportedly less that two to three feet thick and were found in arroyo bottoms. The gold nuggets were very ragged and carried attached quartz, indicating a local origin. For this reason I walked up some of the streams above the placer mine looking for a possible source of the gold. Approximately ½ mile above the mine I found a hill of highly fractured and iron stained granitic-gneiss country rock. There were several shallow shafts and prospects on the more intensely altered rock. There was also major copper staining of the rock. Intruding the gneiss were several bodies of white, coarse crystalline granite. Off one of these bodies I got a reading of 300 c.p.s. on my scintillometer. Southward, along the range front, I found more of the iron stained and brecciated granite indicating a structure of considerable length. This structure was traceable for at least ¼ of a mile. At one location there were four recent drill holes and major bulldozer work. The land also has many lode and placer claims on it. If my sampling indicates any gold mineralization, this prospect would be of high interest.

SAMPLE #		DESCRIPTION
I 80		Stream sediment sample.
I 81	1.70 ppm Au	Very dark brown, vuggy, aphanitic, Fe-stained jasperoid. Sample is a select grab of float in wash.
I 82	20 ppm Ag 2499 ppm As	5' chip sample across contact between 20' quartz pod with dis-

seminated pyrite and green chlorite schist with major Cu-stains.

I 83	1.28 ppm Au 90 ppm Ag 202 ppm As	Jasperoid and green to brown schist with major Fe-stains and minor Cu-stains. 300 c.p.s. on scintillometer. Random grab sample from dumps and ground on hillside.
I 84	2.5 ppm Ag 36 ppm As	5' chip sample across zone of altered schist, jasperoid, and clay. All are Fe-stained with minor Cu-stains.
I 85	3.1 ppm Ag 344 ppm As	Altered schist and jasperoid with clay and Cu-stains. Random grab sample of chips across bulldozer cut.
I 86		Fe-stained diabase with some pyrite cubes. Also minor white quartz veinlets. Random grab sample across bulldozer cut.
I 87		Stream sediment sample.
I 88		Stream sediment sample.
I 89		Stream sediment sample.

property file: S. Ariz. & Nevada general recon (DFS)

EFCO LABORATORIES
2819 W. Ruthrauf Road
TUCSON, ARIZONA 85703
Phone (602) 887-4241
P. O. Box 5526

what do these anomalies represent ?

Laboratory Analysis Report

DEPCO, Inc.
390 Freeport Blvd. Suite 12
Sparks, Nevada 89431

David Simpson

REPORT NO. 810421
DATE SUBMITTED 1/8/81
DATE REPORTED 1/20/81

Sample Number	PPM Silver	PPM Gold	PPM Arsenic	PPM Antimony
I- 53	<1.0	<0.10	45	73
54	<1.0	<0.10	39	69
55	<1.0	<0.10	3	72
56	<1.0	<0.10	7	54
57	<1.0	<0.10	16	55
58	<1.0	<0.10	11	57
59	<1.0	<0.10	6	61
60	<1.0	<0.10	6	37
61	<1.0	<0.10	1	38
62	<1.0	<0.10	<1	45
63	<1.0	<0.10	5	29
64	<1.0	<0.10	5	53
65	<1.0	<0.10	7	54
66	<1.0	<0.10	2	36
67	<1.0	<0.10	2	54
68	<1.0	<0.10	2	50
69	1.5	<0.10	3	52
70	1.4	1.28	9	41
71	1.2	4.90	4	38
72	<1.0	<0.10	4	32
73	<1.0	<0.10	<1	42
74	<1.0	<0.10	2	34
75	<1.0	<0.10	4	47
76	<1.0	<0.10	10	34
77	1.4	1.49	1	43
78	<1.0	<0.10	3	37
79	1.9	<0.10	5	35
80	<1.0	<0.10	9	37
81	20.	1.70	2499	36
82	<1.0	<0.10	18	23

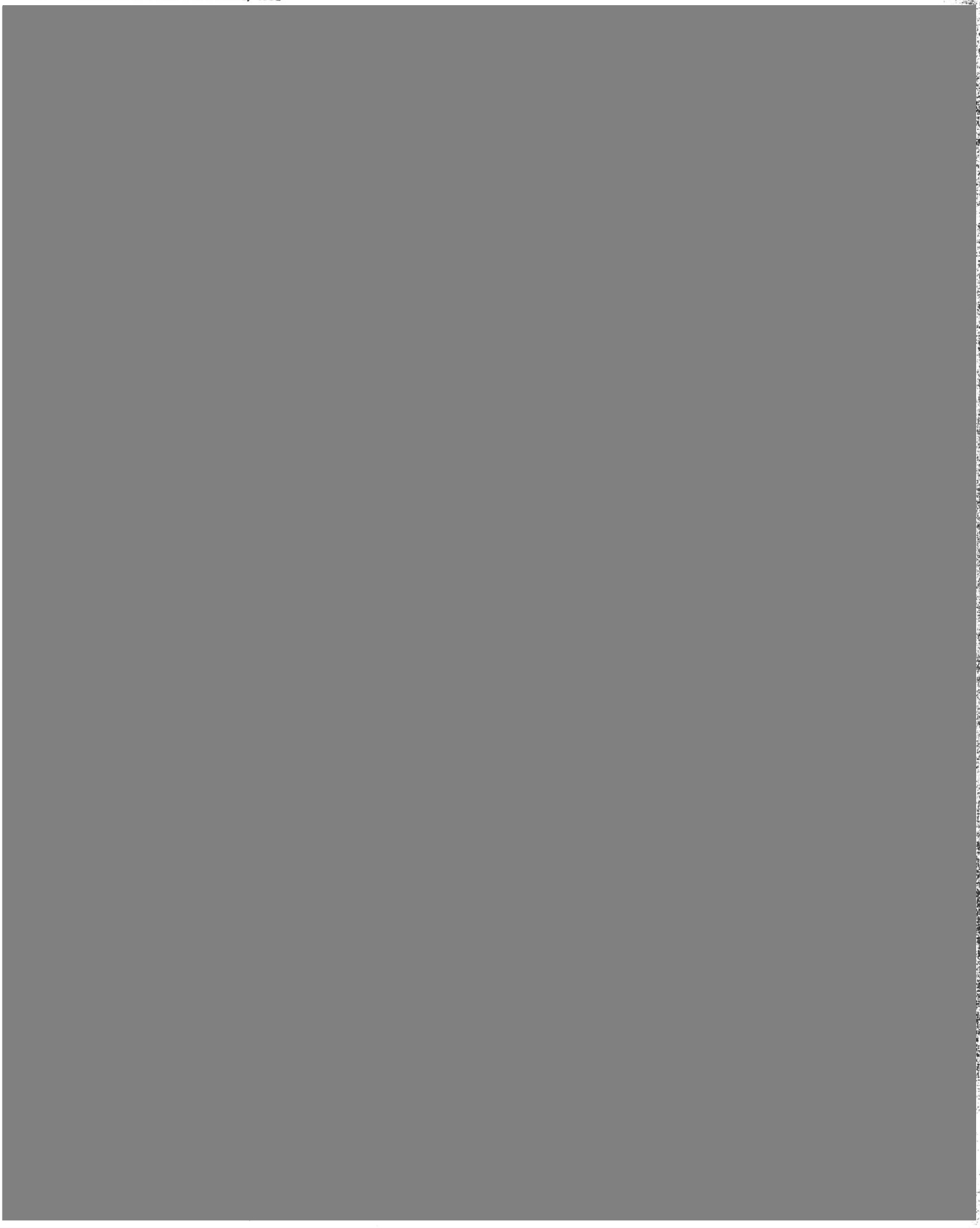
A Division of Arizona Feeds

XXXXXXXXXXXXXXXXXXXXXXXXX
Signed

Sample Number	PPM Silver	PPM Gold	PPM Arsenic	PPM Antimony
I- 83	9.0	1.28)	202	42
84	2.5	<0.10	36	36
85	3.1	<0.10	344	28
86	<1.0	<0.10	8	32
87	<1.0	<0.10	3	32
88	<1.0	<0.10	4	31
89	<1.0	<0.10	4	39
90	<1.0	<0.10	5	12
91	<1.0	<0.10	4	28
92	<1.0	<0.10	2	22

Signed

GSA Condill



DEPCO, Inc.

MINERALS DIVISION

MEMO TO: J. B. Imswiler DATE: January 14, 1981

FROM: N. L. Archbold

SUBJECT: Reconnaissance of Gold Basin District, Mohave County, Arizona

Location:

In White Hills about ten miles northeast of the White Hills mining district. See southeast corner of Senator Mountain 15' quad and southwest corner of Garnet Mountain 15' quad.

Reference:

U. S. Geological Survey Bulletin 397, p. 118-127.

Notes On My Investigations (see numbers on accompanying sheets):

1. Senator Mine, NW¼ sec. 14, T. 28 N., R. 19 W.
Two parallel bodies of brecciated quartz about 300 feet long and 100 feet wide trend northward on the surface. Lowest tunnel on east side trends about S 60° W for 300 feet and passes through quartz body into sheared, chloritized granite in the footwall. Brecciated quartz body lies in hanging wall of fault that dips about 30° east. The quartz body probably lies along a thrust fault. Down-dip extension might present a drilling target if my samples show any gold or silver values.

SAMPLE NO.	DESCRIPTION	Au ppm	Ag
H-8	Chloritized granite off dump of lower tunnel on east side of mines. Somewhat cheared with minor coatings of hematite.	-.1	-1
H-9	Red, stained brecciated quartz and granite from dump of small pit just south of H-8.	.1	-1
H-10	Red, stained, brecciated quartz from dump just above H-8.	1.7 = 1,050	1

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2. Owens Mine, NW¼ sec. 1, T. 28 N., R. 19 W.
Several pits and shallow shafts. Geology is not immediately obvious, but it looks like a system of mafic dikes cutting Precambrian gneiss with argillic alteration and brecciation. Minor veins of specularite and some secondary copper minerals. Possible intrusive center that should be mapped and sampled if values show up in my one sample.

SAMPLE NO.	DESCRIPTION	~~OUNCES~~ PPM Au	Ag
H-11	Argillized, brecciated gneiss with limonitic stockworks and traces of Cu minerals. From pit at north end of ridge.	.2	-1

3. Fry Mine, NE¼ sec. 25, T. 28 N., R. 29 W.
Vertical shaft without much exposed. Probably a N 20° W zone in granite.

SAMPLE NO.	DESCRIPTION	~~OUNCES~~ PPM Au	Ag
H-12	Brecciated granite with limonitic coatings and shears at mouth of prospect adit in wash southeast of main shaft.	.1	-1

4. Name Unknown, SE corner sec. 19, T. 28 N., R. 18 W.
Mine with mill. Brecciated quartz body trends easterly in gneiss. Does not appear to hold much potential.

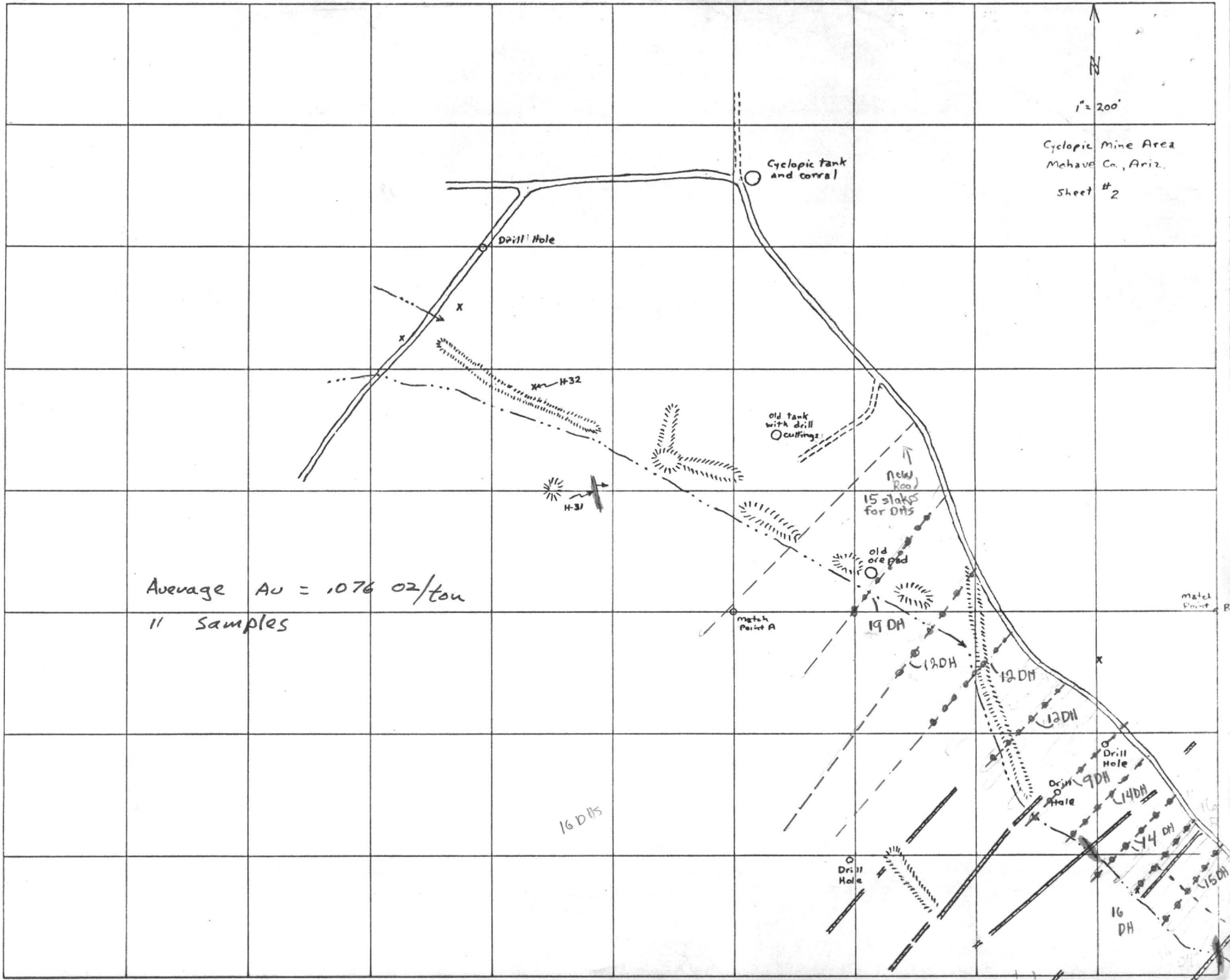
5. Name Unknown, NW¼ sec. 5, T. 28 N., R. 18 W.
Minor quartz lenses in gneiss strike about north-south and dip east.

6. Cyclopic Mine, sec. 30, T. 27 N., R. 18 W.
This area appears to have some potential for an open-pit precious metal deposit. Most previous work looks to have been open-pit mining for placer gold and trenching to test for placer gravels. I did, however, note four drill holes to test bed rock. Schrader (USGS Bull. 397) reports shafts and drifts to a depth of 70 feet with 1,000 feet of underground work, but none of this is evident today. Schrader reported that "The altered granite for a width of 100 feet or more bordering the deposit is also said to contain $2 to $4 a ton in gold, ..."

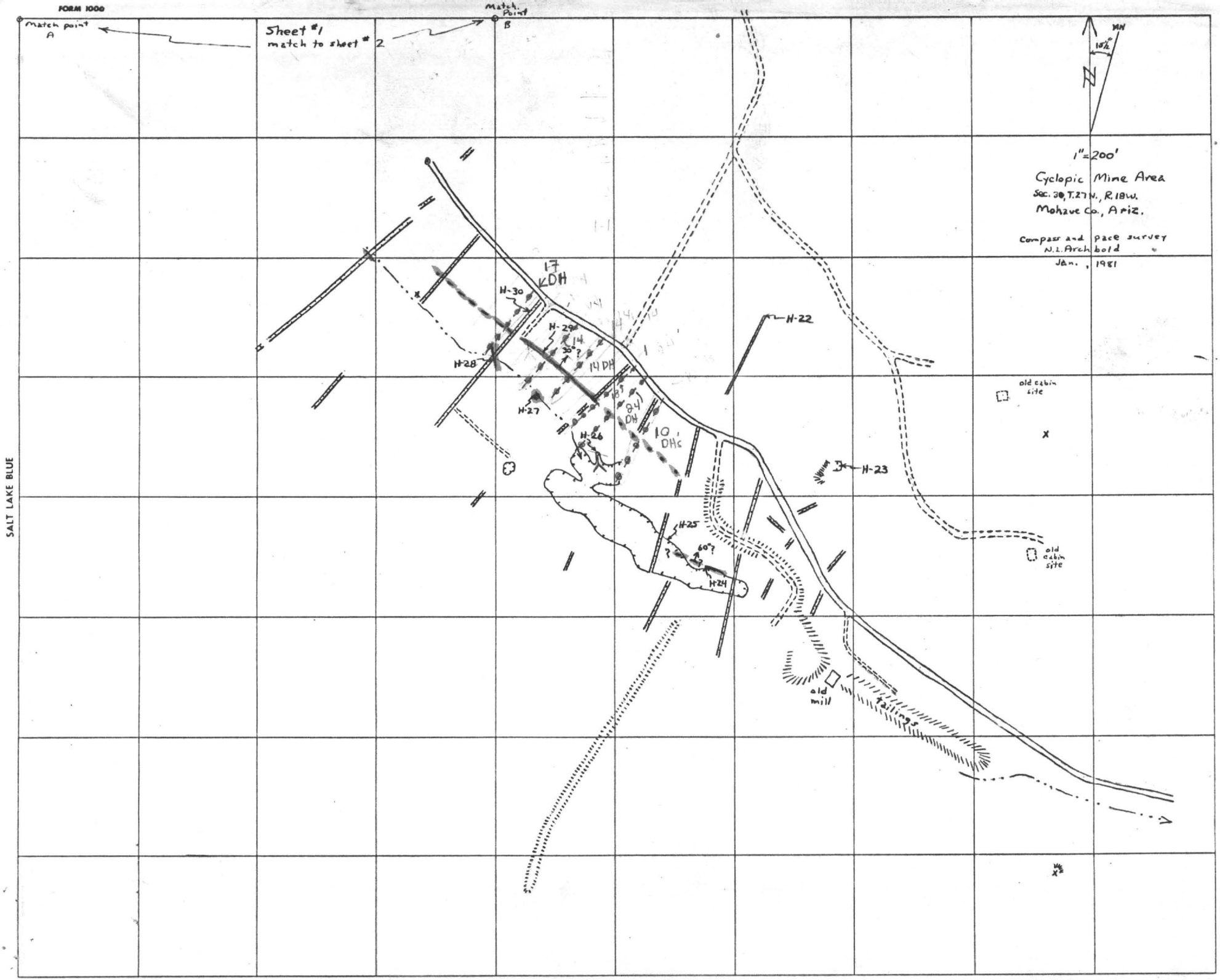
My investigation and sketch map (attached) indicate a zone, at least 1500 feet long, that trends about N 50° W along the course of a wash. The zone seems to be at least 100 feet wide, but exposures are very poor and it is difficult

FORM 1006

SALT LAKE BLUE



FORM 1000


Match point A
Sheet #1 match to sheet # 2
Match Point B
SALT LAKE BLUE
MN
15½°
N
1"=200'
Cyclopic Mine Area
Sec. 30, T. 27 N., R. 18 W.
Mohave Co., Ariz.
Compass and pace survey
N.I. Archibold
Jan., 1981
17 LDH
H-30
H-29
14
35°?
14 DH
H-28
H-27
84' DH
10' DHc
H-26
H-22
H-23
H-25
60°?
H-24
old cabin site
old cabin site
old mill
Tailings

to distinguish between weathered rock and caliche-cemented gravel. The zone might widen to the northwest, and float indicates that it extends farther northwest from the map area. Fundamentally, the "ore" zone looks to be a fault that dips about 30° northeast and contains sporadic lenses of thoroughly brecciated quartz that has been re-cemented with silica and Fe oxides. Neither the hanging wall nor the footwall is well exposed, but rocks a short distance northeast of the vein zone are sheared, red granitic gneiss that is probably cut by one or more mafic dikes. There have been numerous backhoe cuts across the zone. I assume these were to test for placer values, because virtually none of them expose bedrock. If my samples show any values, the district should be examined in closer detail. In any event, the owners of the property should be contacted to obtain more data about the property. Signs on the property indicate the current owners are T. King and R. Wyman in Boulder City, phone (702) 293-4178. Records in the Clark County Courthouse should be checked to ascertain the true ownership. Numerous "Yucca" claims were staked by King and Wyman in 1975. A 1971 report by J. Tingley (in DEPCO files) reports one sample that contained 0.248 ounces of gold per ton.

SAMPLE NO.	DESCRIPTION	ppm Au	Ag
H-22	Sheared, weathered granite from end of trench. Looks argillized and chloritized. Some limonite and hematite films.	-0.1	1
H-23	Brecciated granite gneiss. Somewhat sheared and chloritized. Minor veinlets of limonite.	7.0 =.204	4
H-24	Crushed quartz from hematite-stained zone in pit (subcrop of vein?).	3.4 =.099	2
H-25	Partly weathered, sheared and altered granite(?) and mafic dike(?) with quartz in face of pit.	-0.1	-1
H-26	Argillized, hematite-stained material from fault(?). This is C-horizon material.	0.2	-1
H-27	Brecciated quartz and Fe-oxide from bottom of wash. This looks like vein material, but could be "float" in gravel or ferricrete.	4.4 = .128	6
H-28	Vein material. Highly brecciated quartz re-cemented with silica and Fe oxides.	7.4 =.216	7

SAMPLE NO.	DESCRIPTION	ppm Au	Ag
H-29	Vein material. Very hard, brecciated quartz re-cemented with quartz and Fe oxides. Random chips from vein that looks to be about six feet thick. This is best outcrop.	3.4 = .099	2
H-30	Sheared, argillized and chloritized granite gneiss. Sample from backhoe trench. This is in hanging wall of vein zone.	-0.1	-1
H-31	Vein material and mylonite. Probably represents quartz lense in fault zone.	2.8 = .081	2
H-32	Red granite gneiss and bleached(?) equivalent. Sheared, with minor quartz and Fe oxide veinlets.	-0.1	-1

7. Evan Mines, SE corner sec. 29, T. 28 N., R. 18 W.
Three-foot wide quartz vein in gneiss strikes N 25° E, dips 60° E. No particular potential.

8. Lee, P, and LM Mine, NW¼ sec. 4, T. 27 N., R. 18 W.
Area mostly covered. Brecciated, iron-stained granite with some quartz material. No obvious single structure.

SAMPLE NO.	DESCRIPTION	p.p.m. ~~OUNCES~~ Au	Ag
H-13	Silicified, brecciated and iron-stained granite off dumps. Some vein quartz.	1.9 = .055	1

9. Covered by Crutch claims, sec. 10, T. 28 N., R. 18 W.
Five-foot wide fracture zone with minor quartz in gneiss. Vein strikes N 50° W and dips 55-70° northeast.

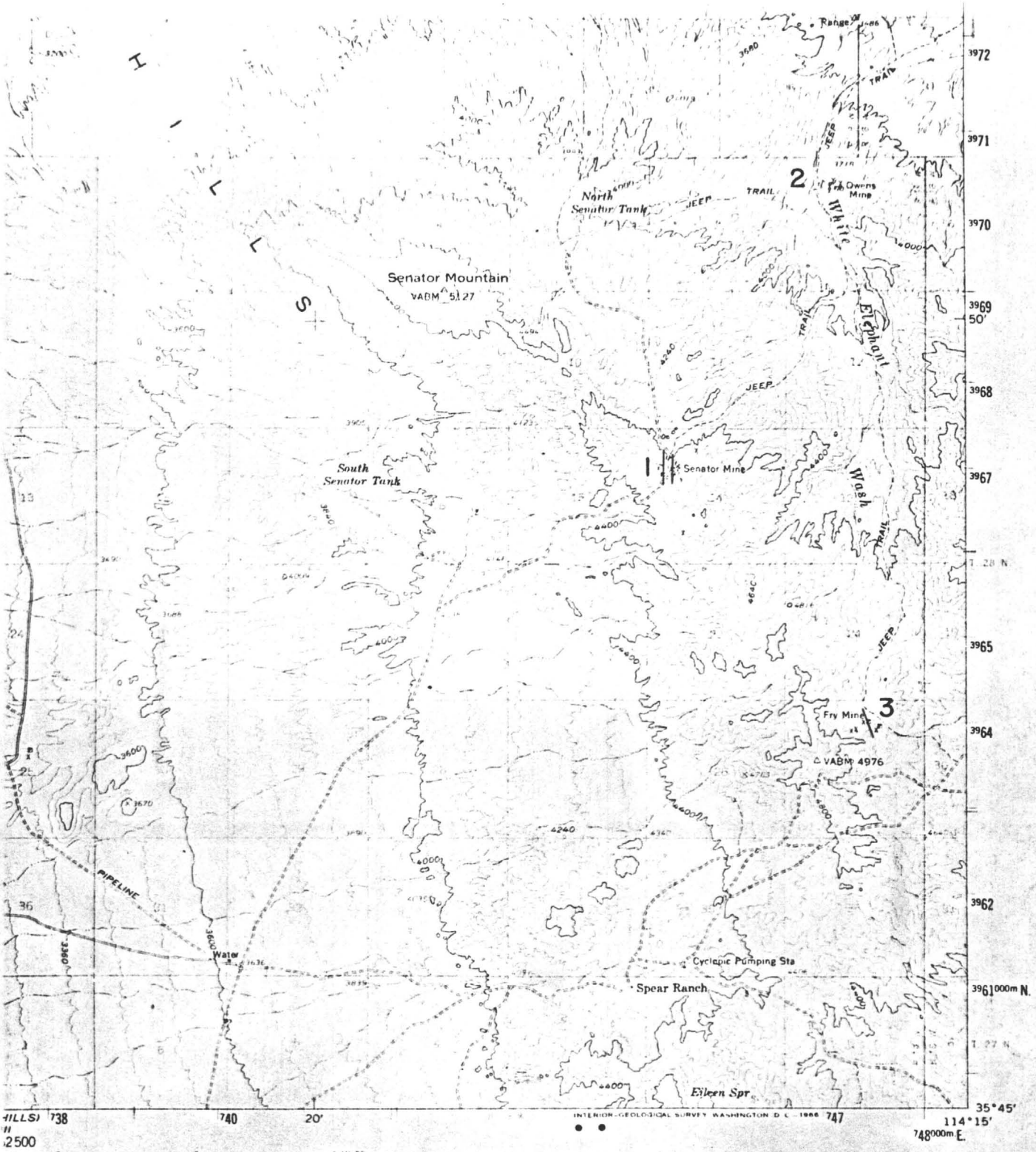
10. Name Unknown, sec. 16, T. 28 N., R. 18 W.
Minor milky quartz in shear zone that strikes easterly and dips 25° south.

11. Excelsior Mine, NW¼ sec. 22, T. 28 N., R. 18 W.
Mine is well described by Schrader in USGS Bull. 397. Vein appears to strike N 50° E, dip 45° northwest.

12. Eldorado Mine, SE¼ sec. 21 and SW¼ sec. 22, T. 28 N., R. 18 W. Mine is described by Schrader. Currently the site of a small heap-leaching operation. I talked with Bob Toporowski, who is a partner in the operation. He tells me they are attempting to work a flat-lying vein (25°). This is probably the structure called the "blanket" vein by Schrader.

Recommendations:

The district appears to hold little promise for a large tonnage operation. The Cyclopic Mine might be the single exception. The reason is not clear to me, but in February of 1980, much of the area was covered by the "Crutch" group of claims. I saw at least 250 claims in the group. The claims were located by a contract staker but reportedly belong to Santa Fe Mining Company. Inspiration Development Company staked a number of claims in 1978 and 1979.



INTERIOR—GEOLOGICAL SURVEY WASHINGTON D. C.—1960

2500

2 3 4 MILES

12000 15000 18000 21000 FEET

3 4 5 KILOMETERS

VAL 80 FEET
SEA LEVEL

ROAD CLASSIFICATION

Medium duty — Light duty

Unimproved dirt

ARIZONA

QUADRANGLE LOCATION

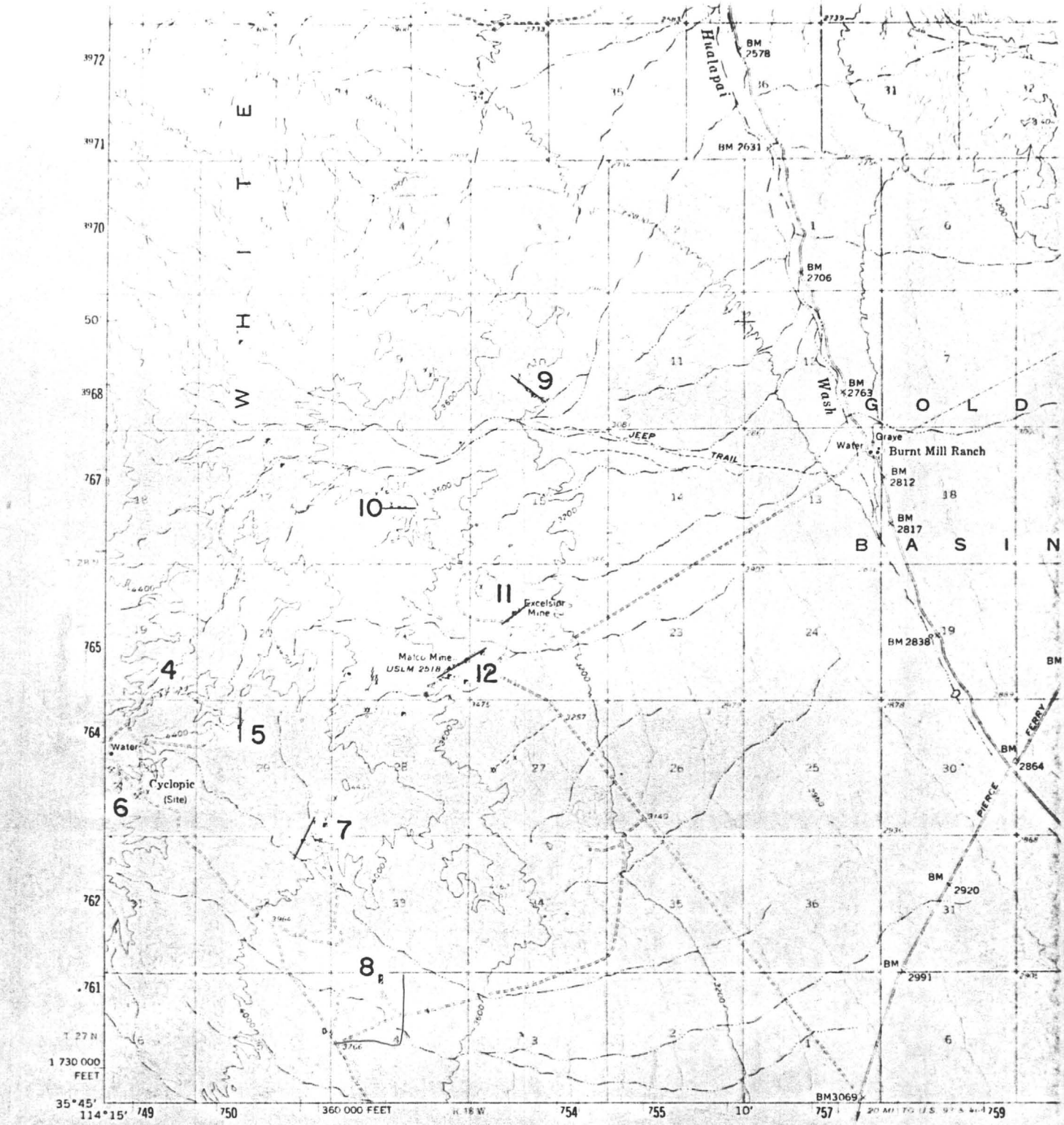
SENATOR MOUNTAIN, ARIZ.

N3545—W11415/15

1960

AMS 3155 IV—SERIES V798

L MAP ACCURACY STANDARDS
COLORADO 80225 OR WASHINGTON, D. C. 20242
ND SYMBOLS IS AVAILABLE ON REQUEST



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1958. Field check 1960

Underwater contours compiled from USDA maps
and later sedimentation studies

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, west zone
1000-meter Universal Transverse Mercator grid ticks,
zone 11, shown in blue

Land lines unsurveyed in parts of T. 29 N.–R. 18 W.,
and T. 30 N.–Rs. 17 and 18 W.

(WHITE HILLS)
3155 III

GN MN
1°41
30 MILS
15½°
276 MILS

UTM GRID AND 1960 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE

CONTOUR INT
DOTTED LINES REPRES
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THIS MAP COMPLIES WITH NAT
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENV
A FOLDER DESCRIBING TOPOGRAPHIC MA

Garnet Mtn 15' Quad

rite.[a] It is said to be less rich in the sulphide zone in the lower part of the mine than in the oxide zone near the surface. Its run of mine, roughly computed from a record of the output from October 10, 1885, to March 6, 1901, is about as follows: Silver 160 ounces, and gold 2 ounces to the ton; lead, 12 to 20 per cent.

Production.—The production is reported to be $1,300,000, that of silver alone amounting to about $1,000,000; and several thousand dollars' worth of medium-grade ore are said to now lie on the dump. The output was mostly made between the autumns of 1885 and 1892. During this period 3,687 tons of ore are reported, according to smelter return sheets, to have contained about 402,000 ounces of silver, 1,180 ounces of gold, and 515,760 pounds of lead. Later, about 1900 to 1902, about 17,550 ounces of silver, 180 ounces of gold, and 114,360 pounds of lead are said to have been obtained from 330 tons of concentrates.

MINES OF CANYON STATION WASH.

In Canyon Station Wash, about a mile north of C. O. D. Wash, there are reported to be several small mines, of which the most important seem to be the Baden-Baden, King, and Queen mines, said to be owned by Lewis Davidson, of Kingman.

MINES IN "TOP OF STOCKTON HILL" AREA.

The "top of Stockton Hill" is situated in the northwestern part of the district, at the crest of the range, between the northern part of the Cerbat district on the west and the heads of I. X. L. and C. O. D. washes on the east. The mines include the Cincinnati, Miner's Hope, Blue Bell, Fountain Head, Brown, and others, the most important of which seems to be the Cincinnati. It is situated near the crest of the range about midway between Lane Springs and I. X. L. basins. It has not been worked for many years, but is regarded as a good property.

GOLD BASIN DISTRICT.

GENERAL FEATURES.

The Gold Basin mining district, of which Basin is the post-office, is situated in the eastern part of the White Hills (fig. 18). It extends over a hilly area about 6 miles in diameter, sloping to Hualpai Wash on the east, and ranges from 2,900 to 5,000 feet in elevation. The northeastern portion, where most of the mines are situated, is rugged, being marked by longitudinal faults, carps and scored by

[a] The mine is said to contain no copper above the 200-foot level, but in an opening about half a mile west of the mine and about 500 feet above it, on what is thought to be the same C. O. D. vein, the ore, which here occurs in a milk-white quartz gangue, contains chiefly bornite and chalcopyrite, with some zinc blende, and about $20 in gold to the ton.

several deep transverse washes, of which the principal ones are Banker, O. K., and Cyclopic, situated about 2 miles apart. The nearest railway station is Hackberry, 40 miles to the south, with which connection is made by stage line. Colorado River lies 16 miles to the north. Mineral was first discovered here early in the seventies, but remoteness from the base of supplies, together with scarcity of fuel and water, renders operations expensive and has materially retarded developments. Nevertheless, considerable progress has been made and much ore has been produced and worked in arrastres and mills.

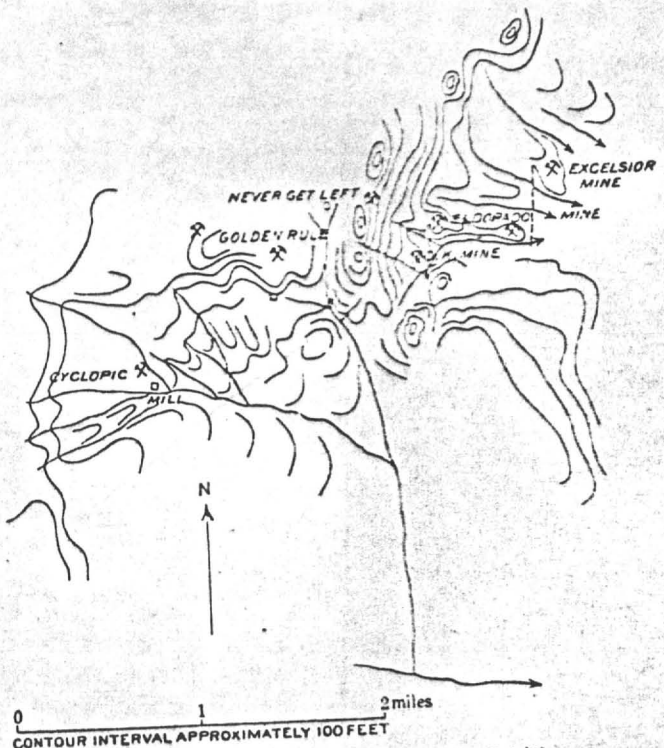


FIGURE 18.—Sketch map of Gold Basin district.

The deposits occur mainly in fissure veins in the pre-Cambrian crystalline rocks. The veins dip southeastward or northwestward, mainly at angles of 40° or 70°. The gangue is quartz, in places with siderite, and the metal is gold, mostly free milling, but it is associated with lead or copper ores, copper stain being a good indication of the gold values. Pyrite, chalcopyrite, galena, molybdenite, and wolframite are found, but the ore is largely oxidized, the water level not having been reached. Among the oxidized products are limonite, malachite, cerusite, and vanadinite.

The district contains about half a dozen small mines and about an equal number of good-looking prospects. The relative location of the most important is shown in the small sketch map (fig. 18). The principal mines are the Eldorado, Excelsior, Golden Rule, Jim Blaine, Never-get-left, O. K., and Cyclopic. The production of the district is given as more than $100,000, most of which came from the Eldorado mine.

ELDORADO MINE.

Location and history.—The Eldorado mine is located in the high foothills in the eastern part of the district, at about 4,000 feet elevation and 1,000 feet above Hualpai Wash, which is about 2 miles distant. The mine is reached by wagon road, over which most of the ore was hauled to the Basin or O. K. mill, 4 miles distant in Hualpai Valley. This mill, which was burnt while in operation in August, 1906, contained 10 stamps and a cyanide plant.

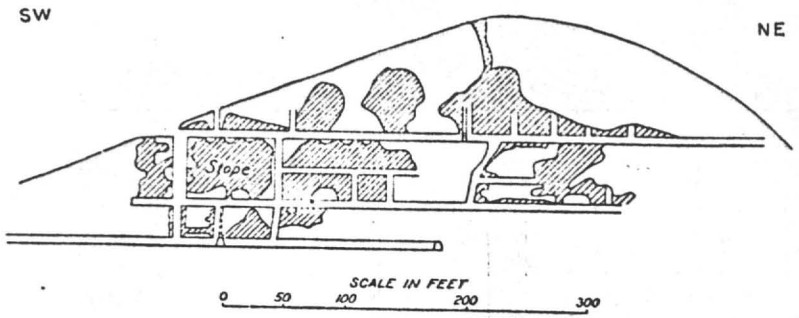


FIGURE 19.—Longitudinal section of Eldorado mine, showing stopes.

The mine was discovered late in the seventies and produced the first bullion taken from the district, much of its ore being at first worked in arrastres. It is owned by the Arizona-Minnesota Gold Mining Company, of Minneapolis. The production is reported to be $65,000, of which $5,000 was produced prior to 1902.

Developments.—The mine is developed principally by about 2,000 feet of tunnels and drifts and 40,000 cubic feet of stopes on three levels, aggregating probably about 90,000 cubic feet of underground work and distributed approximately as shown in the accompanying diagram (fig. 19). The lower tunnel trends about N. 33° E. and strikes the vein at about 200 feet in from the mouth. From this point the drift extends about 200 feet to the northeast.

Geology.—The country rock is a reddish schistose medium-grained granite. On the northeast, however, as shown at the surface and in the bottom of the mine, this rock gives way to a dark friable biotite granite. The contact between the two rocks dips about 30° W. It

is usually sharp and is probably a fault plane, which seems to cut off the vein on the northeast.

Veins and ores.—The deposit is a fissure vein, which strikes about N. 50° E. and dips 65° SE. It is continuous from the apex at the crest of the ridge to the contact in the lower tunnel of the mine and is stoped out through most of this extent. The walls are fair, but not regular. The vein averages several feet and the ore shoot about 20 inches in width. It contains iron-stained, free-milling gold-quartz ore, and is reported to average from $12 to $15 a ton in gold. The other associated minerals are malachite, lead carbonate, and vanadinite, the last occurring locally as incrustations of crystals one-fourth inch in maximum length. The principal mill treatment given to the ore was crushing, plate amalgamation, and cyanidation.

Just northwest of the apex of the vein above described and about 80 feet above it is the blanket vein, which is exposed for a length of 600 feet and a width of about 100 feet and which has contributed largely to the output of the mine. It dips about 25° E.

O. K. AND EXCELSIOR MINES.

The O. K. and Excelsior mines were discovered and located by three prospectors, Patterson, Rowe, and Fox, early in the eighties. They worked the ores in arrastres and hauled some to the 4-stamp mill at Grass Springs. In 1886 the O. K. was sold to a Kansas City company, which at once put up the O. K. mill in Hualpai Valley and ran it intermittently from 1887 to 1890. The mill burned down in 1893, but was rebuilt in 1896 and operated by lessees for a time, and then again shut down. It started once more early in 1902 and ran intermittently until 1906, when it burned down while in operation. The water used at the mills was piped from the springs or water tunnels in the upper part of Grand Wash Cliffs, 7 miles to the northeast. The mines are now owned by the Arizona-Minnesota Gold Mining Company.

O. K. mine.—The O. K. mine is about half a mile south of the Eldorado mine and about 100 feet below it, on the opposite side of O. K. Wash. The mine is developed mainly by adit drifts, winzes, and stopes on four levels. There is about 1,600 feet of underground work, distributed approximately as shown in the section (fig. 20). The production is reported to be about $25,000.

The country rock is a dark biotite granite, about the same as that which occurs in the bottom of the Eldorado mine. The strike is N. 30° E., with dip vertical. Slickensides pitch northeast-east toward the mouth of the drifts at angles of about 35°.

The vein trends N. 65° E., but curves to the north in its course and dips about 75° NW. It averages about 18 inches in width and is

composed mainly of seamed, gold-bearing limonite-stained quartz, said to average about $10 in gold to the ton. The hanging wall of the fissure is regular, but rough. Small faults 2 to 6 feet in throw occur, locally accompanied by overlap and enlargement of the vein. The ore favors the hanging wall, but where the vein overturns on the third level and the hanging wall becomes the foot wall the ore, nearly 1 foot thick, occurs in the foot-wall side.

The ore is free milling, but not so much so as the Eldorado ore, the gold being associated with cerusite. The principal other associated minerals are limonite, hematite, siderite, galena, molybdenite, and wolframite.

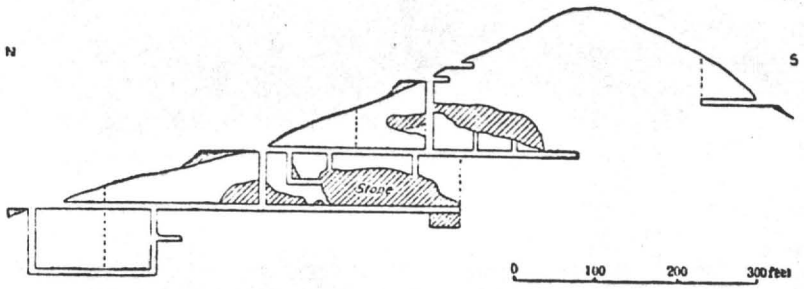


FIGURE 20.—Longitudinal section of O. K. mine, showing stopes.

Excelsior mine.—The Excelsior mine is about a mile northeast of the Eldorado and O. K. mines, in the low foothills near the edge of Hualpai Valley and about 500 feet above it, on the north side of O. K. Wash. The mine is developed to a depth of about 100 feet, principally by inclined shafts, drifts, and stopes, aggregating 500 feet of underground work. The production is reported to be $5,000.

The country rock is a coarse reddish granite associated with black amphibolite schist. The vein dips about 45° NW. It is from 1 to 4 feet in width and is locally occupied by gouge only. The ore shoot contains deeply iron-stained gold-bearing quartz or ore. It varies from three-fourths to 1 foot in width and occurs mainly on the hanging wall. The ore is said to be cyaniding ore, only a small percentage of the values yielding to amalgamation.

MASCOT MINE.

The Mascot, formerly the Old Homestake mine, is situated north of the Excelsior mine in the foothills at the edge of Hualpai Wash, and is said to contain a vein only 3 inches in width, which, however, is reported to be very rich. It is owned by the Arizona-Minnesota Gold Mining Company.

NEVER-GET-LEFT MINE.

The Never-get-left mine is located in the upper part of a cliff or fault scarp that overlooks the Eldorado mine on the east, from which it is but a few hundred yards distant. It is situated at about 4,500 feet elevation, or 1,600 feet above Hualpai Valley. It is owned by Henry Paully, of Basin, and is developed principally by an adit drift, shallow shafts, and open cuts, aggregating several hundred feet of work.

The country rock is dark gneissoid schist. The structure dips about 50° W., but the principal deposit dips about 80° N. It has a width of 6 or 8 feet and contains mainly iron-stained or copper-stained crushed gold-bearing quartz. The country rock is greatly disturbed by jointing, fracturing, and faulting, and its true character is somewhat doubtful. The mine has been a small producer for some years and was shipping ore in April, 1906.

GOLDEN RULE MINE.

Location and history.—The Golden Rule mine is about 1 mile west of the Never-get-left mine, at the extreme head of O. K. Wash, at about 4,550 feet elevation. It was discovered in the early eighties by Robert Patterson and Saul Rowe, who hauled some of the ore to the Grass Springs mill. Subsequently they leased the mine to Mr. Quackenback, and in 1900 sold it to the present owner, the Arizona-Minnesota Gold Mining Company. This company did but little development work on it till 1906. From May 15 to November 1 it was operated with a force of ten men, but was closed on the latter date. The production of the mine is estimated to be about $5,000, most of which came from the blanket vein.

Development.—The mine is developed by a 75-foot shaft, about 300 feet of drift, stopes, and a 25° incline about 100 feet long and 20 to 40 feet in width, the incline being on the south, where the deposits occur in the form of a blanket vein. The workings are contained within a horizontal distance of about 700 feet and a vertical distance of about 100 feet. The mine is handicapped by lack of water, which has to be hauled from the Cyclopic mine or from Basin, in Hualpai Valley.

Geology and ore deposits.—The country rock is the pre-Cambrian gneiss and schist. The fissure vein containing the principal part of the deposits strikes N. 20° E. and dips about 70° ESE. The croppings, which in part are prominent, form a reef of iron-stained, firmly cemented quartz breccia. The vein is best exposed in the north drift. It is about 2½ feet in average width and contains gold-bearing normal vein quartz, locally crushed, recemented, and iron-stained. Associated with it on either side is a sheet of pale grayish or whitish

gouge. The vein is said to yield good values throughout, the average being about $10 in gold to the ton, but the honeycombed quartz is the richest part of it.

At 120 feet in from the mouth of the drift the vein is abruptly cut off by a fault, immediately beyond which occurs a dark schistose rock that may be an intrusive. Near the fault the vein enlarges to about 12 feet in width, the enlargement being mainly on the foot-wall side and containing much honeycombed quartz, and the ore, greatly increased in quantity, is said to contain higher values. Some of it averaged about $100 a ton in a large chamber, from which much ore has been removed.

The fault hades north at an angle of about 10°. It is a normal one and the lost portion of the vein has risen toward the southeast. The amount of throw was not determined, but it is probably not very great. Beyond the fault the drift extends about 100 feet on the projected course of the vein which, however, has not been found.

On the south the deposits occur in a blanket vein, which is 3 to 5 feet thick, dips about 25° SE., and is probably a portion of the vein in the north drift, for it straightens up in that direction toward the top of the hill. The blanket portion has been mined over an area of about 100 feet along the strike and a breadth of 35 feet down the dip, and it probably produced good values.

CYCLOPIC MINE.

Location and history.—The Cyclopic mine is located in the southeastern part of the district, about 5 miles southwest of the Eldorado mine, near the head of Cyclopic Wash, at about 4,500 feet elevation, on open ground. It was discovered in the early eighties by Patterson, Rowe, and Glen, and about 1896 it was leased to a Seattle company. In 1901, with the Golden Rule mine, it was sold to Robbins & Walker, of Minneapolis, who milled some ore. The coarse tailings still on the ground are said to contain about $7 in gold to the ton. Since 1904 the mine has been owned by the Cyclopic Gold Mining Company, of Denver. A considerable amount of bullion is said to have been produced, but the exact amount was not ascertained.

Developments.—The mine is developed mainly by shallow, mostly inclined shafts, drifts, and crosscuts to a maximum depth of about 70 feet, but most of the workings do not extend below 30 feet. The developments probably aggregate about 1,000 feet of work.

As the mine is located in a broad wash, some of the workings have become filled with wash débris at times of flood. The principal equipments are an Ellspass mill, operated by a 26-horsepower engine, and a cyanide plant. The water supply is pumped by a small gasoline plant from the west side of the range, several miles distant.

Geology.—The country rock is a medium-grained coarsely porphyritic granite. It outcrops in association with the deposits and forms the foothills immediately on the southwest. Paralleling this rock, the wash, and the deposits on the northeast, and constituting the ridge on which the office and other buildings stand, is a fine-grained reddish granitic rock, with which is associated some of the same biotite granite that underlies the Eldorado mine. In contact with the deposits, particularly to the northwest, there is also a coarse red pegmatite.

Deposits.—The deposits are ill defined and not well understood. They consist of gold-bearing iron-stained breccias and sands of vein quartz, in a few places somewhat resembling conglomerate. This material is cemented by silica and iron oxide, but is in part loosely coherent. It trends from a point near the mill N. 57° W. up the wash and is contained in, and for the most part seems to occupy, an area three-fourths of a mile in length by about 200 feet or more in width. Prominent reefs of silicified iron-stained breccia several or more feet in width outcrop several feet above the surface. They are in practically all respects identical with the croppings of the Golden Rule and other veins that have been described. They do not, however, as a rule, continue in depth in the manner of a fissure vein, nor seem to have any definite fissure wall, but usually at a short distance below the surface give way to less firm material having an imperfect synclinal structure. In the northern part, the pseudovein croppings dip toward each other and their attitude suggests that they may be synclinal limbs of the same vein deposit.

From the principal openings near the mill in the southeastern part of the deposit the croppings representing the main or Cyclopic vein extend N. 57° W. They are continuous for the first 400 feet and are accompanied by some underlying vein quartz or ore and show ore in sight at both ends of the 400-foot excavation. Between this vicinity, however, and the northwest limits of the deposits, the croppings of the vein are interrupted, and some pits and cuts have failed to find ore there.

The croppings of the other vein extend without interruption from a point about one-fourth of a mile northwest of the principal opening for a distance of 350 feet to the northwest. They are nearly parallel with the main vein, from which they are about 350 feet distant.

The ore thus far has been derived mostly from these veins, but crosscuts 80 feet or more in length have been run in a considerable portion of the deposits between them and report fair values, which, however, seem to occur in lines or zones paralleling the deposit. Practically no mining has been done below a depth of about 30 feet. Near this level there is reported to occur a bed of red clay or gouge, which was formerly supposed to mark the lower limit of the ore, but

ore is said to have been found below it. The altered granite for a width of 100 feet or more bordering the deposit is also said to contain $2 to $4 a ton in gold.

The ore is of low grade, and is said to mill on the average from $7 to $8 a ton in gold, and to cyanide well. It contains also a little silver and a trace of copper, the latter occurring chiefly as malachite and not in sufficient amount to interfere with the cyanidation. The company is reported to have recently computed about 1,000,000 tons of ore in sight.

GOLD BELT MINE.

The Gold Belt mine is located on the southeast side of Banker Wash, at about 5,000 feet elevation. It is owned by Henry Paully. The country rock is an amphibolite schist, dipping about 30° W. At the western of the two principal openings the deposits are contained in a blanket vein of quartz 15 feet thick, inclining gently eastward, but thinning out in a distance of about 30 feet. The eastern opening shows two quartz blanket veins, each 2 to 6 feet in thickness, dipping gently westward and separated by a 4-foot dike of some volcanic rock that seems to be basalt, but is altered beyond identification.

The ore is said to be of two grades, the lower grade yielding from $4 to $7 in gold to the ton and the better grade from $16 to $20 to the ton and some as high as several hundred dollars a ton, that occurring in the porous or honeycombed quartz being the best. The deposit is reported to have produced a few hundred dollars' worth of ore.

SENATOR MINE.

The Senator mine is located some distance beyond the border of the Gold Basin district, about 7 miles northwest of the Eldorado and Golden Rule mines and about 7 miles south of Colorado River, on a low round hill at the southeast base of a prominent landmark known as "Senator Mountain." The mine was discovered late in the eighties by John Burnett, who in 1892 sold it for $14,000 to Senator Page, of Los Angeles, who in turn sold it to a Colorado company. The company at once installed a 10-stamp mill on Colorado River, 2 miles below Salt Springs, operated the mine and mill for about six months, and then suspended. Later the property was acquired by or leased to the Salt Springs Mining Company, which operated it about a month in 1903 and shut down, the ore being of too low grade to pay for its haulage to the mill, 7 miles distant, and for bringing supplies from Hackberry and Kingman, 50 and 60 miles distant, respectively. The mine is reported to have been abandoned since then.

The mine is developed principally by open work, cuts, and adit drifts. The deposits are said to be nearly flat lying and similar in character to those of the Cyclopic mine (p. 125), but they form a larger body. The ore is said to be similarly low in grade, averaging about $3 in gold to the ton. According to Comstock,[a] the deposits exhibit structural features resembling those of "brecciated fusion" and "cooling lamination" and in origin seem to be associated with igneous intrusion.

DEPOSITS AT SALT SPRINGS.

The Salt Springs mine is about 7 miles northeast of the Senator mine and several miles south of Colorado River, in the first canyon west of Hualpai Wash. It is owned by the Salt Springs Mining Company, which is said to include members of the Arizona-Minnesota Gold Mining Company. The country rock is granite. The gold ore is said to occur sporadically in quartz bodies, and its downward limit is usually indicated by copper-stained quartz.

Other properties in this district are the Smuggler-Union group, the Eureka mine, and the Lutley group.

WHITE HILLS DISTRICT.

GENERAL DESCRIPTION.

LOCATION AND HISTORY.

The White Hills district is located about 28 miles north of Chloride, in the western border of the White Hills, at about 3,000 feet elevation. It comprises an area about 2 miles in diameter and is a part of the Indian Secret mining district, so named because the knowledge of the presence of its mineral was for a long time withheld from the whites by the Indians.

The first discovery of mineral in the district by white men was made by Henry Shaffer in May, 1892, through the aid of an Indian known as Hualpai Jeff, who exhibited a piece of rich silver ore at Gold Basin and showed Shaffer its source, where the Indians procured the supply of red iron oxide with which they adorned their faces. The locality is at the site of the Hidden Treasure mine.

After making several locations, Shaffer reported the discovery at Gold Basin and was soon joined by John Burnett and John Sullivan, who also located what later proved to be some of the best mines. The trio began work and were soon shipping very rich ore, some averaging $1,000 a ton. The camp soon became the largest in the region and reached its zenith in 1894, with a population of 1,200. Within a short time the camp was owned by one company, the White Hills Mining Company, of which the chief men were R. T. Root and D. H. Moffatt, of Denver. A 10-stamp mill was built early in 1904; in

[a] Comstock, Theodore B., Geology and vein phenomena of Arizona: Trans. Am. Inst. Min. Eng., vol. 30, 1900, pp. 1048–1049.

A.B.M. Bull 137

O. K. MINE[100]

The O. K. mine, about ½ mile south of the Eldorado, was located in the early eighties. In 1886, a Kansas City company bought the property and built the O. K. mill in Hualpai Valley. This mill was operated intermittently until 1906, when it was destroyed by fire. Its ten stamps and cyanide plant were operated on water that was piped from springs in the Grand Wash Cliffs, 7 miles farther northeast. The O. K. Mine is reported to have produced $25,000 worth of gold.

The country rock is dark biotite granite. The vein strikes northeastward, dips about 75° NW., and averages about 18 inches in width. It is composed mainly of iron-stained quartz with cerussite, siderite, galena, and molybdenite. The gold is commonly associated with cerussite.

Underground workings include about 1,600 feet of adit drifts, winzes, and stopes on four levels.

CYCLOPIC MINE

The Cyclopic mine is near the head of Cyclopic Wash, about 40 miles from Chloride. It was located during the eighties and has been intermittently worked by several concerns. In 1901, Robbins and Walker milled some of the ore. In 1904, the Cyclopic Gold Mining Company acquired the mine and later produced considerable bullion. During several years prior to 1921, intermittent production was made with a small cyanide mill. For some years after early 1923, the property was held by the Gold Basin Exploration Company. Intermittent production was made during 1932-1934.

The deposit occurs within a gently dipping brecciated zone in granite. This zone, as explored, extends to depths of 15 to 80 feet below the surface, and occurs discontinuously within an irregular northwestward-trending area about a mile long by 200 feet wide. In places, it is overlain by 5 to 15 feet of sand and gravel. The ore consists of brecciated fragments of coarse-textured grayish vein quartz and country rock, more or less firmly cemented by iron oxide and silica. In places, it is cut by irregular stringers of quartz. About 1,000 tons of ore that were recently mined are reported to have contained $4 in gold per ton. The gold is very fine grained.

$ 35 Au
.11 oz/ton

Developments on the property include several open cuts and a 55-foot shaft; several old shafts from 40 to 50 feet deep; an old 300-foot incline that passed through the ore zone; and several hundred feet of old drifts and stopes, mostly within 30 feet of the surface.

OTHER PROPERTIES

The *Excelsior, Mascot, Never-get-left, Golden Rule, Gold Belt,*

[100] Abstracted from Schrader, work cited, pp. 121-22.

Will Wilkinson has
complete thesis w/maps

GEOLOGIC INVESTIGATION OF THE APACHE ORO MINING CLAIMS, LOST BASIN RANGE, MOHAVE COUNTY, ARIZONA

by

Alfred J. Deaderick

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science in Geology

New Mexico Institute of Mining and Technology

Socorro, New Mexico

May, 1980

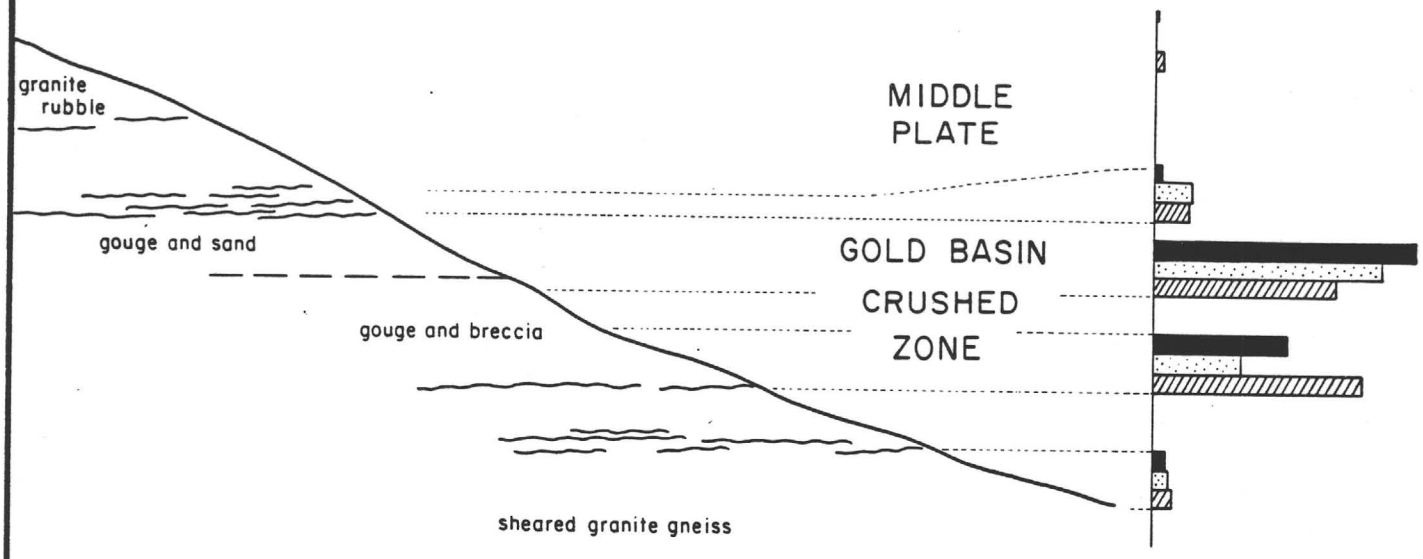
TABLE 1

Quaternary	Alluvium
Pliocene (?)	Basalt and conglomerate
Listric faulting----------	
Late Miocene (?)	Sandstone
	Rhyolitic tuff
	Fanglomerate
Gold Mineralization	
Listric faulting----------GOLD BASIN CRUSHED ZONE----------	
Miocene (USGS dates on similar Middle Tertiary volcanics and intrusives are 10-20 my)	Quartz latite welded tuff
	Andesite
	Lamprophyre
	Porphyritic granite
Cretaceous	Granite, alaskite
Precambrian	Granite, gneissic granite and granodiorite, granite gneiss, amphibolite, gneiss.

Table 2

Generalized Sequence of Rock Units at Gold Basin

Lithotectonic Unit	Structural Features	Rock Units Affected
Upper Plate	structurally rotated cohesive fault blocks and slivers.	Fanglomerate Ryolitic tuff Sandstone Andesite Porphyritic biotite granite Layered gneiss
----------Sub-horizontal zone of Shearing----------		
Middle Plate	thoroughly shattered and sheared rocks.	Lamprophyre White Hills granite Fine-grained quartz-biotite granite Porphyritic biotite granite Granite gneiss Layered gneiss Gneissic granodiorite Gneissic granite
Crushed Zone	crushed rock material and gouge	
----------Major Sub-horizontal Zone of Shearing and Coalesced Faults----------		
Lower Plate	competent unsheared rocks.	Lamprophyre and Latite porphyry White Hills granite Alaskite Leucogranite Porphyritic biotite granite Layered gneiss Gneissic granite



EXPLANATION

BAR GRAPH OF RELATIVE ASSAYS

VALUES ARE AN AVERAGE OF 2 or 3 SAMPLES TAKEN AT SIMILAR STRATIFORM POSITIONS

Au, 1" = 5.0 ppm
Hg, 1" = 1.0 ppm
W, 1" = 50.0 ppm

FIGURE 2

DIAGRAMMATIC SECTION ILLUSTRATING THE DISTRIBUTION OF GOLD IN THE GOLD BASIN CRUSHED ZONE MOHAVE COUNTY, ARIZONA

DIAGRAM IS BASED ON GENERALIZED GEOLOGIC AND SAMPLE DATA FROM THE NE¼ OF SECTION 25, T. 28 N., R. 19 W.

SCALE: 1" = ~50'

APPENDIX A

ROCK UNITS
GOLD BASIN DISTRICT
MOHAVE COUNTY, ARIZONA

Quaternary	Alluvium (Qal)	
Tertiary	Fanglomerate and conglomerate (Tfg)	Unsorted bouldery fanglomerate made up dominantly of cobbles and boulders of gneiss and granite set in a coarse sandy matrix. The unit includes a similar conglomerate that was derived from eroded and disintegrated fanglomerate.
	Rhyolitic tuff (Tr)	White, unwelded, fine-to-medium-grained rhyolitic ash flow tuff intimately associated with the fanglomerate.
	Andesite (Ta)	Medium-grained, dark grey hornblende andesite.
	Sandstone (Ts)	Fine-grained, light grey bedded arkosic sandstones.
	Lamprophyre (Tl)	Fine-to medium-grained, dark brown or greenish brown, intrusive dikes and sills characterized by phenocrysts and fragments of hornblende and plagioclase in a fine-grained matrix with a roughly equivalent content of amphibole and plagioclase. The rock is commonly fragmental or brecciated, exhibiting outlines of milled fragments or angular fragments of amphibole, and is generally altered to chlorite and siderite.
	Latite porphyry (Tl)	Light gray intrusive porphyry exhibiting small phenocrysts of feldspar (20%) in a dense gray aphanitic groundmass.
	White Hills granite (Twgr)	Light-gray to white coarse-grained leucocratic biotite granite (5% biotite) characterized by prominent one to two inch long feldspar crystals. This granite is <u>not</u> foliated, cut by pegmatites, or lamprophyre and is common south and west of the Cyclopic Mine.

Cretaceous	Leucogranite (Kg)	Medium to coarse-grained, light gray or white, biotite and biotite-muscovite granite that contains numerous pegmatite and aplite dikes over a large area adjacent to the low-angle shear zone at Gold Basin. The granite is altered to an alaskite (Kagr) which exhibits numerous quartz veinlets and muscovite as the only mica.
Precambrian	Quartz-Biotite granite (PC-fgr)	Fine-grained, dark gray-green, quartz-rich holocrystalline biotite granite. Quartz (30%) and biotite (10%) are prominent constituents.
	Biotite granite (PC-bgr)	Coarse-grained, equigranular biotite granite containing 10 to 15% biotite. The granite has been weakly metamorphosed and varies from non-foliated to severely foliated.
	Gneissic granodiorite (PC-gd)	Medium to coarse-grained, dark-colored gneissic granodiorite with 30% or more former ferro-magnesian minerals.
	Gneiss (PC-gn)	Layered gneissic metasedimentary and meta-volcanic rocks that exhibit epidote-amphibolite to amphibolite rank metamorphism. Included in the mapped unit are fine-grained quartz-biotite-feldspar gneiss, coarse-grained garnet-feldspar-amphibole gneiss and medium to coarse-grained granitic gneiss.
	Gneissic biotite granite (PC-gngr)	Coarse-grained, gneissic, intensely foliated tan to pink granite characterized by prominent K-feldspar, biotite and quartz.

APPENDIX B.

SCREEN TEST
GOLD BASIN PROJECT
MOHAVE COUNTY, ARIZONA

A bulk sample weighing over twenty-five pounds was collected from an exposure of the "Crushed Zone" prospect pit in the NE NW of Section 25, T. 28 N., R. 19 W. Several previous samples of the crush and gouge zone from this prospect ran 3.5 ppm to 7 ppm gold.

The bulk sample was crushed and ground in a pulping mill and screened into three size fractions, coarse (+20 mesh), middle (<20:+60 mesh) and fine (<60 mesh). Assay results for gold, silver and several pathfinder elements on these fractions are shown on the following table. Detailed examinations of each size fraction did not disclose any gold particles, but gold was observed during microscopic examination of the panned heavies from the fine fraction. The gold observed consisted of a delicate crystalline particle in a soft white clay matrix. The panned heavy concentrate from 6 pounds of fines consisted of a few grams of hematite and goethite after fine-grained pyrite, too little to assay.

The analytical data show that gold and silver are slightly concentrated in the more siliceous coarse (+20 mesh) screen fraction with 60-percent of the total gold in this fraction. The data indicates that gold permeates the gouge and crushed material, probably occurring as free gold and/or auriferous pyrite and the mineralization has resulted from pervasive soaking of the crushed zone by epigenetic hydrothermal fluids.

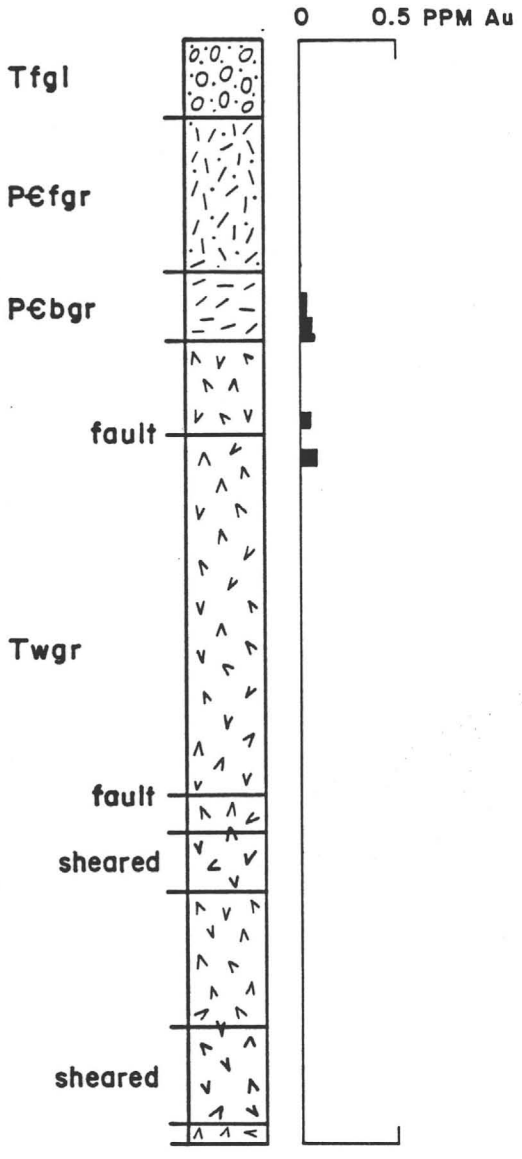
Screen Test, Bulk Sample From Crushed Zone*

Sample Number	Screen Mesh	% Fraction	% Total Au in Fraction	Au ppm	Ag ppm	W ppm	As ppm	Sb ppm	Hg ppm
2799	-	-		2.13	1.1	79	20	2	2.03
2799A	+20	49.7	61%	3.02	3.5	43	18	2	1.66
2799G	<20 +60	32.4	26%	1.95	1.4	54	23	2	1.04
2799C	<60	17.9	13%	1.78	0.7	61	23	2	1.65

*Testing results from USBRC, Anaheim, California

RDH GB-1

Elevation 4640'



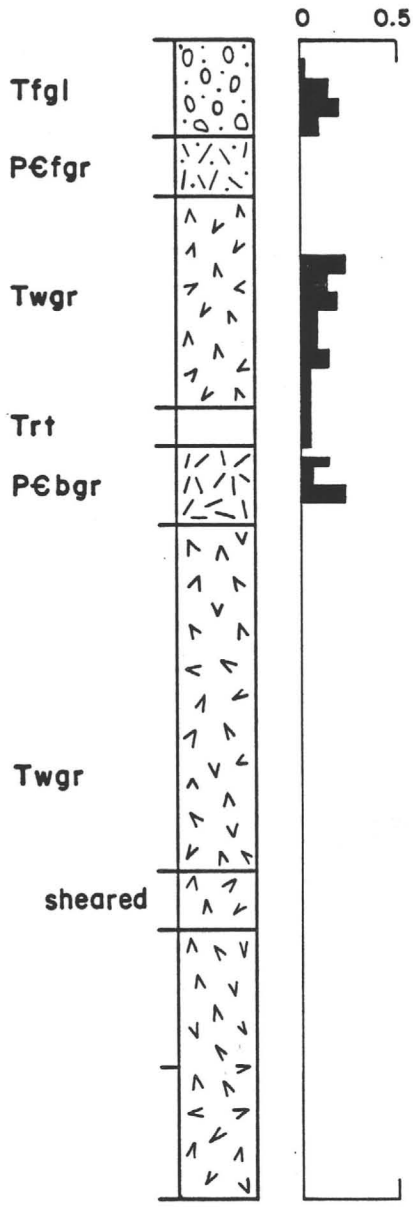
155 - 160 quartz-rich fault breccia

LOWER PLATE

T.D. 570'

RDH GB-2

Elevation 4800'



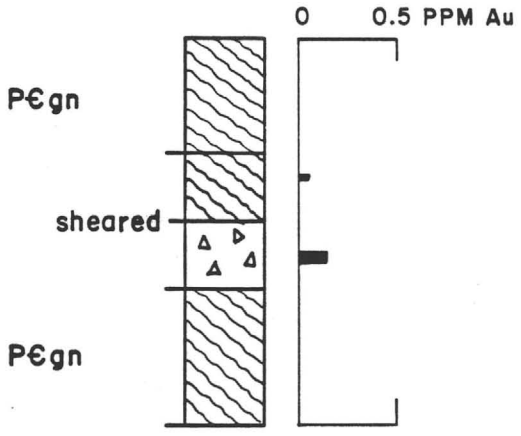
LOWER PLATE

530' water 5 gpm

T.D. 600'

RDH GB-3

Elevation 4480'



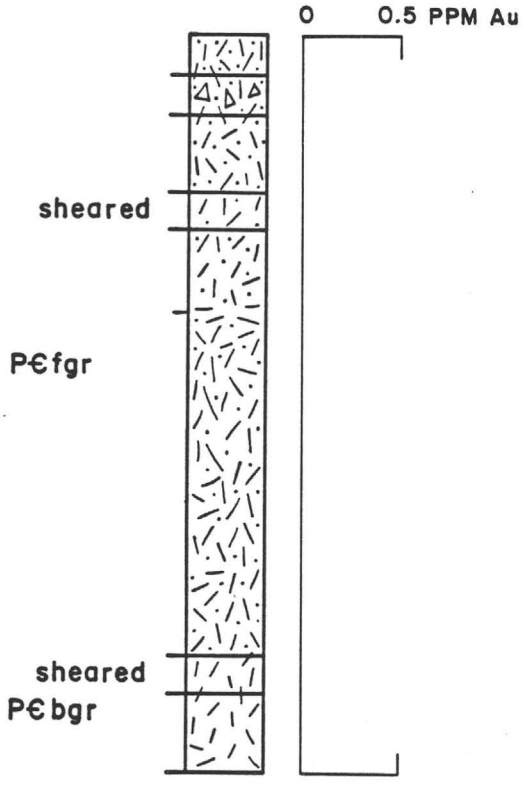
CRUSH ZONE

LOWER PLATE

T.D. 200'

RDH GB-4

Elevation 4420'

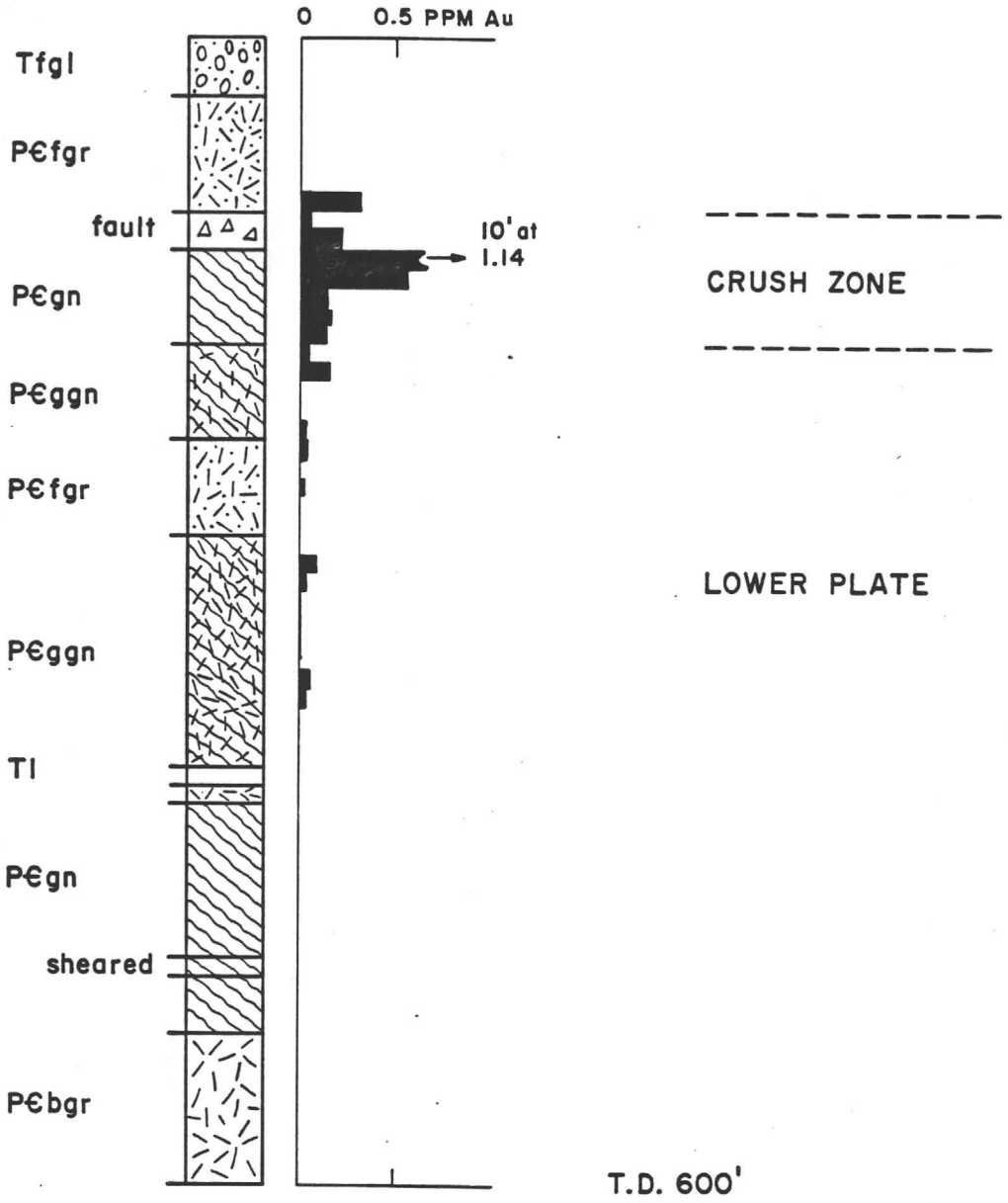


CRUSH ZONE

140' chloritic alteration

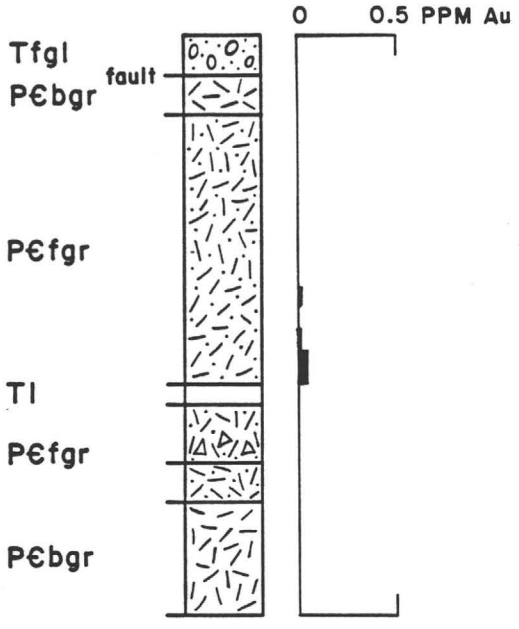
T.D. 380'

RDH GB-5
Elevation 4560'



RDH GB-6

Elevation 4550'



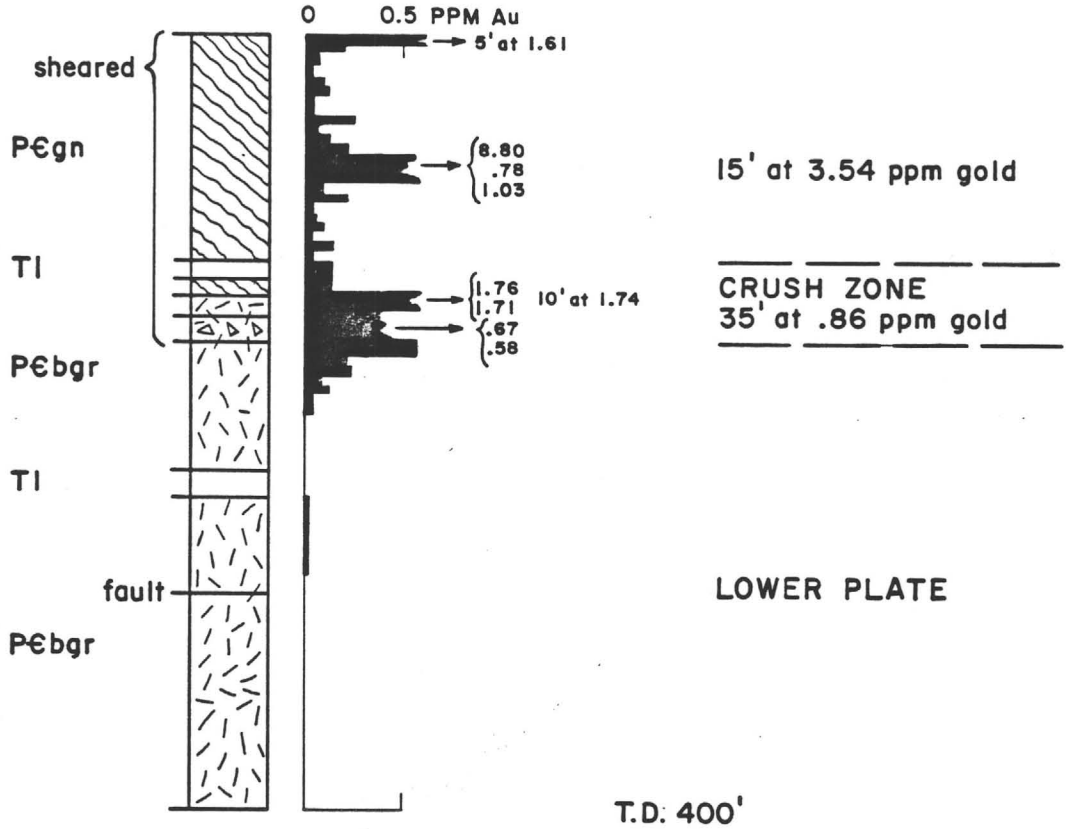
CRUSH ZONE

LOWER PLATE

T.D. 300'

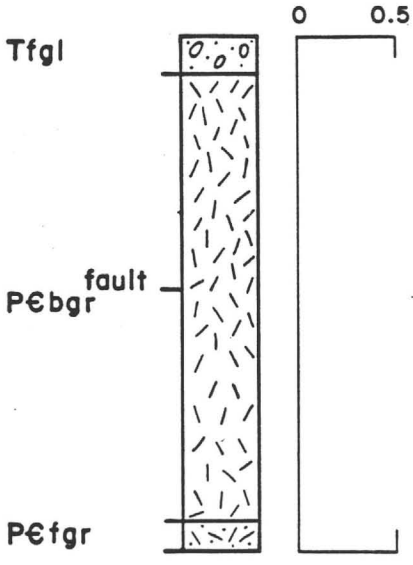
RDH GB-7

Elevation 4500'



T.D. 400'

RDH GB-8
Elevation 4450'



CRUSH ZONE

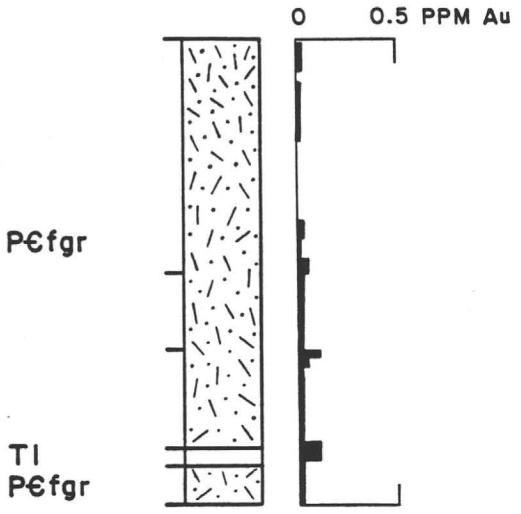
fine-grained black alteration in feldspars

LOWER PLATE

T.D. 265'

RDH GB-9

Elevation 4450'



CRUSH ZONE

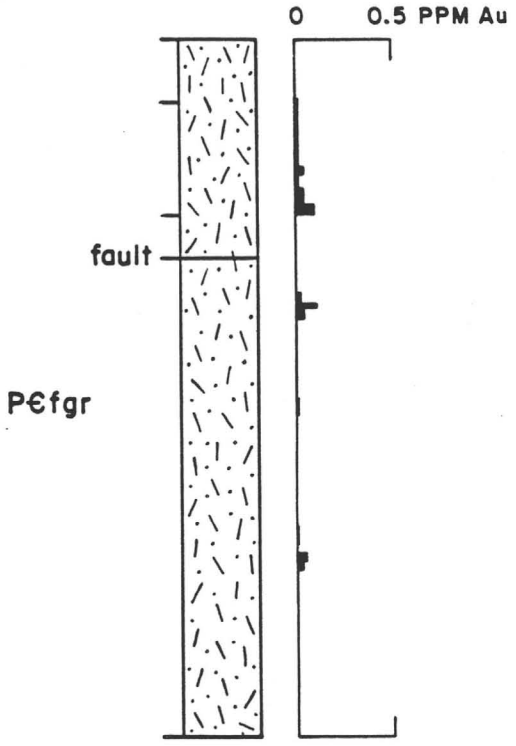
chloritic alteration

LOWER PLATE

T.D. 240'

RDH GB-10

Elevation 4600'



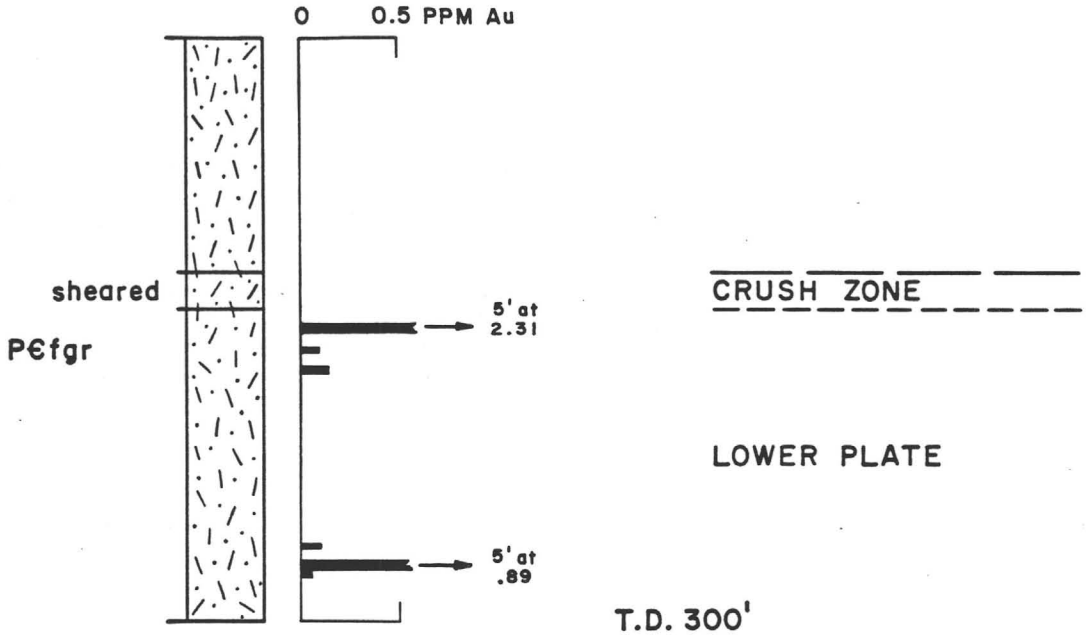
CRUSH ZONE

LOWER PLATE

T.D. 360'

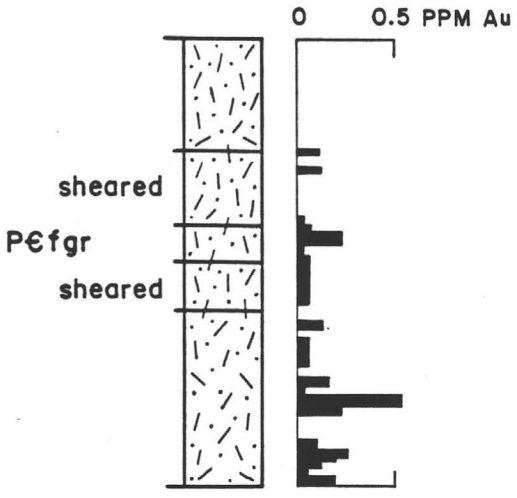
RDH GB-11

Elevation 4560'



RDH GB-12

Elevation 4550'



CRUSH ZONE

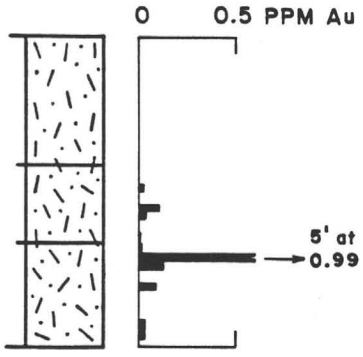
chloritic alteration with purple fluorite

LOWER PLATE

T.D. 230'

RDH GB-13

Elevation 4480'



P€fgr

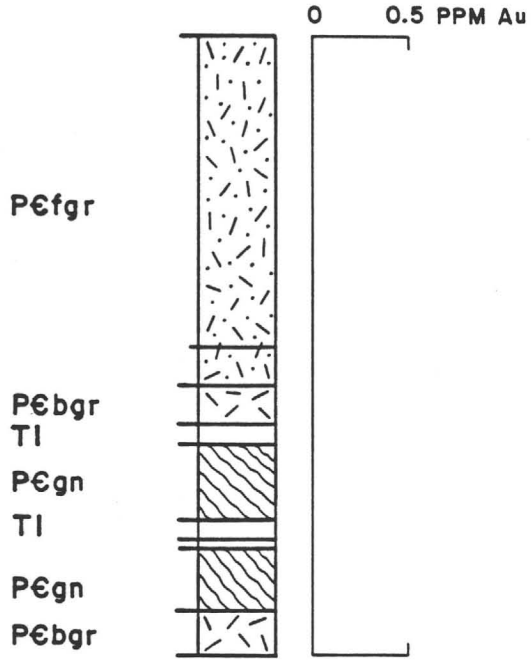
CRUSH ZONE

LOWER PLATE

T.D. 160'

RDH GB-14

Elevation 4700'

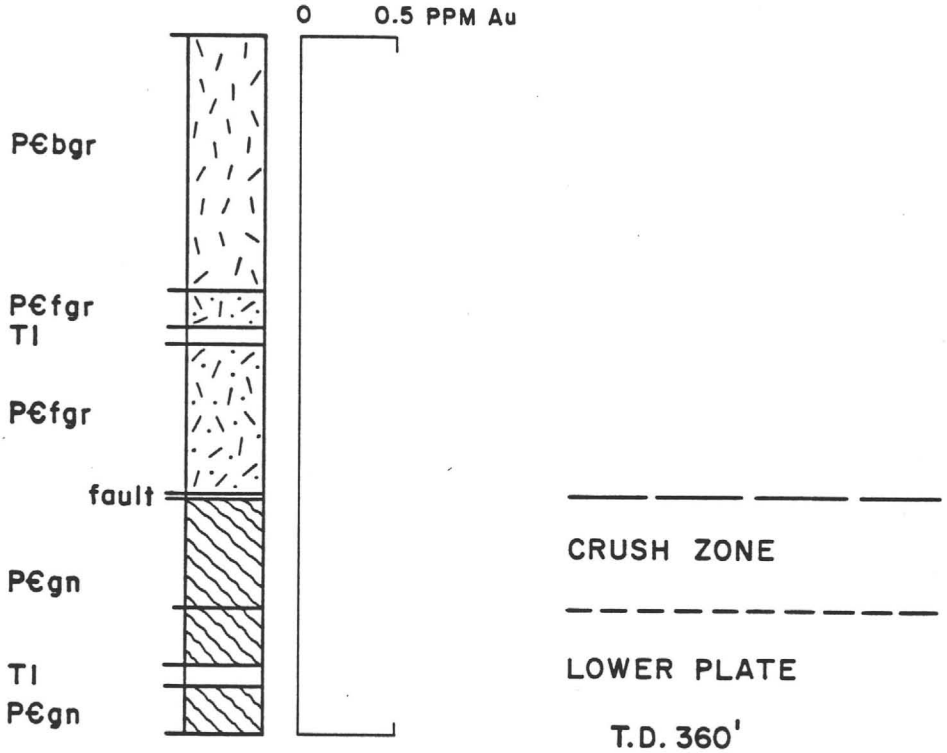


CRUSH ZONE

LOWER PLATE

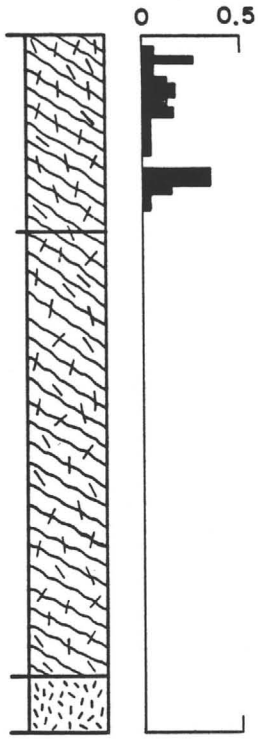
T.D. 320'

RDH GB-15
Elevation 4780'



RDH GB-16

Elevation 4780'



CRUSH ZONE ?

chloritic alteration

LOWER PLATE

T.D. 360'

X-315 Representative dump sample C N ½ Sec 22 T 26N R 21 W Dark greyish green aphanitic to locally micro porphyritic plagioclase biotite(?) hornblende - pyroxene rock. Larger Xtals are typically blocky (½-2mm) pyrox? Rocks locally exhibit slight foliation. Stringers of white massive qtz that locally is comb structured, occur (0.1 - 10 cm) w/ abundant hematite small veinlets & irrig. patches of qtz. hemitite occur sporadically through rock.

X-316 4' chip sample taken along back hoe trench (see map for locality). Light grey-green to light grey-red colored, microcrystalline, aphanitic rock. Probably andesite? Sample contains small calcite sub to anhedral crystals which occur along fracture fillings. (< 10 mm, ave 1-2 mm) Irregular black splotches (~2mm) occur throughout the sample (pyroxene?)

X-317 7' chip in open trench same as (X-315) dk greenish aphanitic rock w/ less tendency to be porphyritic. ~5-10% of rock composed of irreg. patches of qtz.-hem & stringers of qtz (<1mm). Some minor shearing & brecciation noted The matrix appears to be hemitite rich

X-318 6' chip sample taken along trench (see map for locality) Light grey-green to light grey-red color, microcrystalline, aphanitic rock. Probably andesite? Irregular black splotched (pyroxene?) (~2mm) occur throughout the sample. Parts of the sample contain some minor brecciation, as well as numerous white to hemitite red stained qtz veinlets and qtz. blobs.

X-319 6' Chip in open trench at portal of small adit. Same as X-315 somewhat granular f.g. green to redish brown rock w/ a few % prox. phenos. (.1-2 mm); matrix contains abund hem. stain & local micas, as well as occassional Cu Ox stain (mal & chrys.) Shearing & minor brecciation noted. Stringers of qtz. occur throughout rock → but 10" zone in middle of chip is composed brecciated host & white massive to comb struct. qtz. as abund earthy hem & some Cu Ox's (chrys) minor blk phase noted w/ Cu Ox's (Tetrahedrite?)

10" zone 3% Ox .5% Cu bulk

X-320 Representative Dump Sample (see map for locality) 50% of sample is same as X-316 Similar rock type as X-316 also hosts Cu Ox bearing zone which comprises 30 % of sample Cu occurs as mostly chrysocolla and some malachite. Cu minerals make up 3-5% of ore bearing sample portion. 20% of sample is porphyritic with numerous biotite & muscovite phenos (<8 mm 3-4 mm ave) and altered mica veinlets which run throughout the sample. The groundmass in this portion is aphanitic, grey in color, with some hematite red stain coloring.

X-321 Same as X 315 Representative dump sample. Dk green to redish brown mottled rock; contains prox (.1-2 mm) phenos & felted hb or mica (?) rich matrix. Irreg. patches of hem qtz form 3-4 % of sample, white glassy to f.g. patches of qtz. also occur, general sub parallel to a faint foliation exhibited by host. Some zones (>10 cm) composed of mixture of brecciated host & white qtz. Cemented by qtz-calcite and FeOx's Some of calcite is black & from v.f.g. to 4 mm.

X-322 Somewhat select dump (see map for location) Latite porphry. Numerous small (1-3 mm ave) phenos of K and plagioclase feldspars. Groundmass composed of green grey and black aphanitic material. Some minor FeOx staining. Well cemented Qtz breccia in part. also few calcite filled fracture filling veinlets.

Mocking Bird Mtn.

X-323 NW¼ Sec 4 T 27 R 18 W (W end map area) Reddish v.f.g. hematite stained granite intruded by coarse grained propyllitized granite small veinlets of qtz & FeOx cut across this fn. gr lithology. Irregular masses of very coarse gn. granite (up to 20 mm grains qtz. & k-spar) intrude this rock.

X-324 6' vert. Chip in prospect pit, same local as X-323 (see Map) Brecciated coarse gr. granite and white qtz. w/ clasts frm 2-20 cm; matrix is v.f.g. qtz.-hem mass; some of granite frag appear propylitized altered; argillic alteration (kaolinite) is common w/ hem along fractures & as bulk alterations of granite rock.

X-325 6' chip in prospect pit (see map for locality) Autobrecciated coarse gn. propyllized granite and white massive qtz w/ <1% sulfide limonitic psudomorphs. Matrix of breccia is qtz and hematite. Much of granite is shot through w/ small veinlets of qtz. Limonite is abundant along fractures and on surfaces; and most of rock is hematite flooded. Masses of white massive qtz are up to 8 cm across; locally rocks are kaolinized

X-326 3' chip sample - see map for locality - Moderate to well cemented brecciated granite w/ qtz veinlets running through. Clasts composed mostly of white qtz plus few mafic minerals. Groundmass composed of fn grained material stained hemititic red. The highly altered, moderately cemented areas contain high % of propalitized green minerals and have limonitic staining.

X-327 Representative dump sample - see map for location. Brecciated granite shot through w/ (<10 mm) white qtz. veinlets. Moderate alteration to kaolinite and some propalization minerals. Minor FeOx staining.

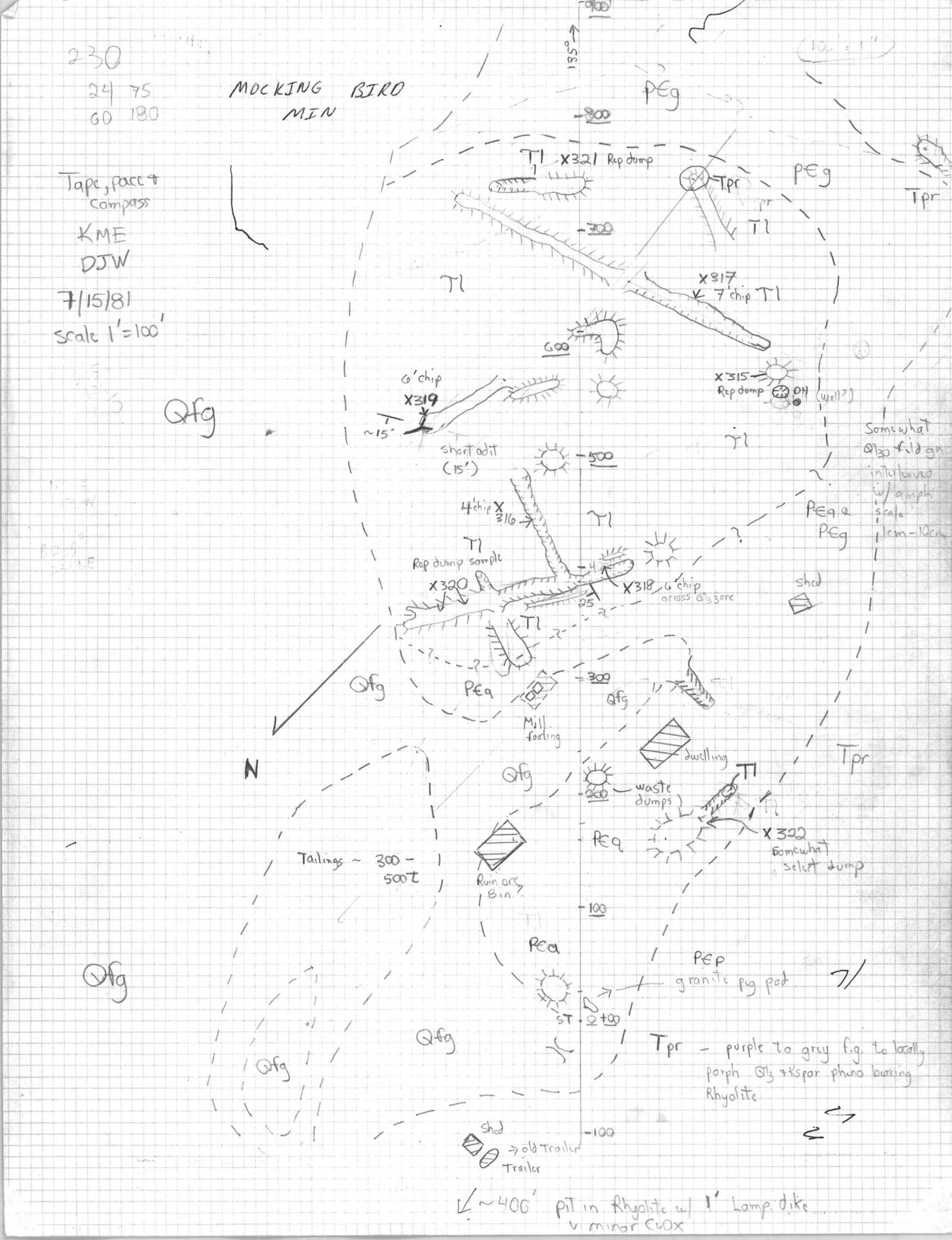
X-328 2' chip in prospect pit (See map for locality) Auto brecciated propyllitized granite fragments of propyllized granite up to 2 cm long are surrounded by matrix of glassy clear qtz., Purple flourite & limonite & hematite. Hemitite - qtz. - Fluorite also occurs bulk replacement & disseminations & as veinlets fillings. Fl ~ 3%

X-329 1' chip N side main incline portal N½ SW¼ Sec 26 T 10 N R 5 W Yarnel 7.5' & Congress 7.5' Arizona. Composite sample ~50% white massive qtz. w/ spongey zones & surfaces locally; contains py 2-3% sub to anhedral pyrite (1-7 mm, 2 mm ave) FeOx staining on fractures & porous zones. ~50% sample sheated (1-5 mm) against vein chlorite-sericite granite containing ~2-5% py (1-4 mm) eu-subhedral. FeOx stain prominant zone 1-3" thick

X-330 Rep dump sample - spoils piles near old shaft (location marked on map) Massive to glassy white qtz w/ irreg pyrite content from 0-5% (ave ≤ 1%) (0.1-15 mm); minor specularite generally associated w/ limonitized py & a few large (1-4 cm) rhombs of brownish white calcite; FeOx on fractures; jarosite stain near masses of pyrite

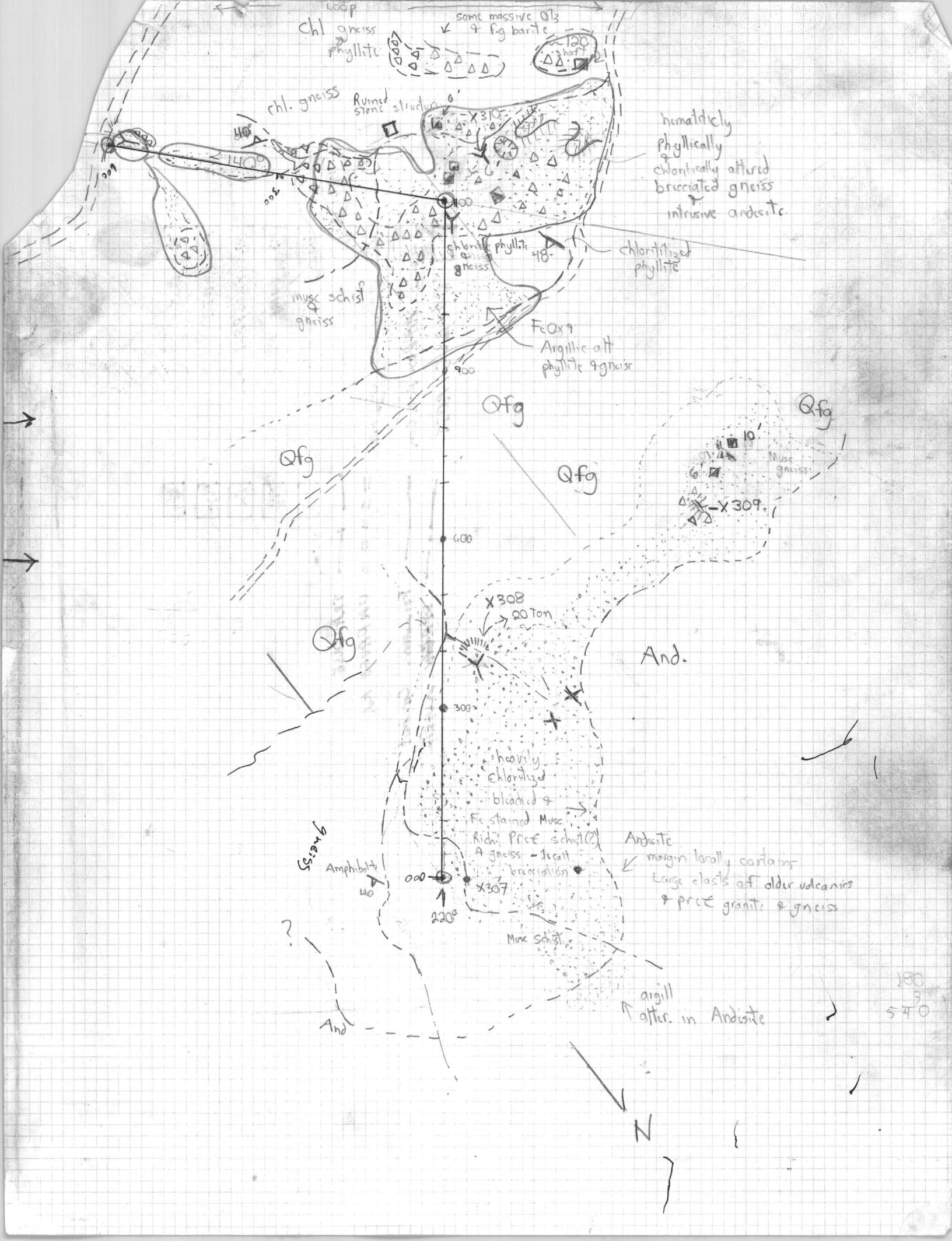
X-331 2' chip sample. See map for location. Vesicular basalt, highly UNaltered with abundant FeOx staining. Abundant amygdules filled w/ secondary $CaCO_3$; fluorite ?, and Mg Oxide.

X 332 1 mile N of Crown King (unsurveyed) 1 mile SE of Crown King Mine, Crown King 7.5', Arizona Select grab sample - Glassy white qtz w/ intergrown brown calcite which locally forms banded comb structures up to 8 mm in length (calcite) 60% massive calcite-py-arsenopy (?)-sph(?) impregnated wall rocks. These aggregates are v.f.g. (Largest calcites & sph ~2 mm, py-arsenopy ≤ 0.1 mm [py : arsenopy 2:1]


230
24 75
GO 180
MOCKING BIRD MIN
Tape, pace & compass
KME
DJW
7/15/81
scale 1'=100'
N
135°
Tl
X321 Rep dump
Tpr
PEg
X317
7' chip Tl
600
6' chip
X319
~15'
short adit (15')
X315
Rep dump
OH (well?)
Somewhat @130 fld gn interleaved w/ amph
scale 1cm=10cm
500
4' chip X316
Rep dump sample
X320
X318
6' chip across @130 zone
shed
95
PEq
Qfg
Mill footing
300
dwelling
waste dumps
200
X322
Somewhat select dump
Tailings ~ 300 - 500'
Ruin are Bin?
100
PEp
granite pg pod
ST
Shed
old Trailer
Trailer
Tpr - purple to grey f.g. to locally porph Qz ±ksp phno bearing Rhyolite
~40G' pit in Rhyolite w/ 1' Lamp. dike
v. minor CuOx

P & LM Mine Area

KME
&
DJW
5-16-81


Loop
Chl gneiss
phyllite
some massive Qtz
& f.g barite
~120' half
chl. gneiss
Ruined stone structure
X310
hematitically
phyllically
& chloritically altered
brecciated gneiss
intrusive andesite
140°
40°
chlorite phyllite
& gneiss
48°
chloritized phyllite
musc schist
& gneiss
FeOx's
Argillic alt
phyllite & gneiss
900
Qfg
Qfg
Qfg
Qfg
10'
Musc gneiss
X309
600
X308
20 Ton
And.
300
heavily
chloritized
bleached &
Fe stained Musc
Rich Prec schist(?)
& gneiss - Hcatt
brecciation
Andesite
margin locally contains
large clasts of older volcanics
& prec granite & gneiss
Amphibolite
40
000
X307
220°
Musc Schist
argill
alter. in Andesite
And
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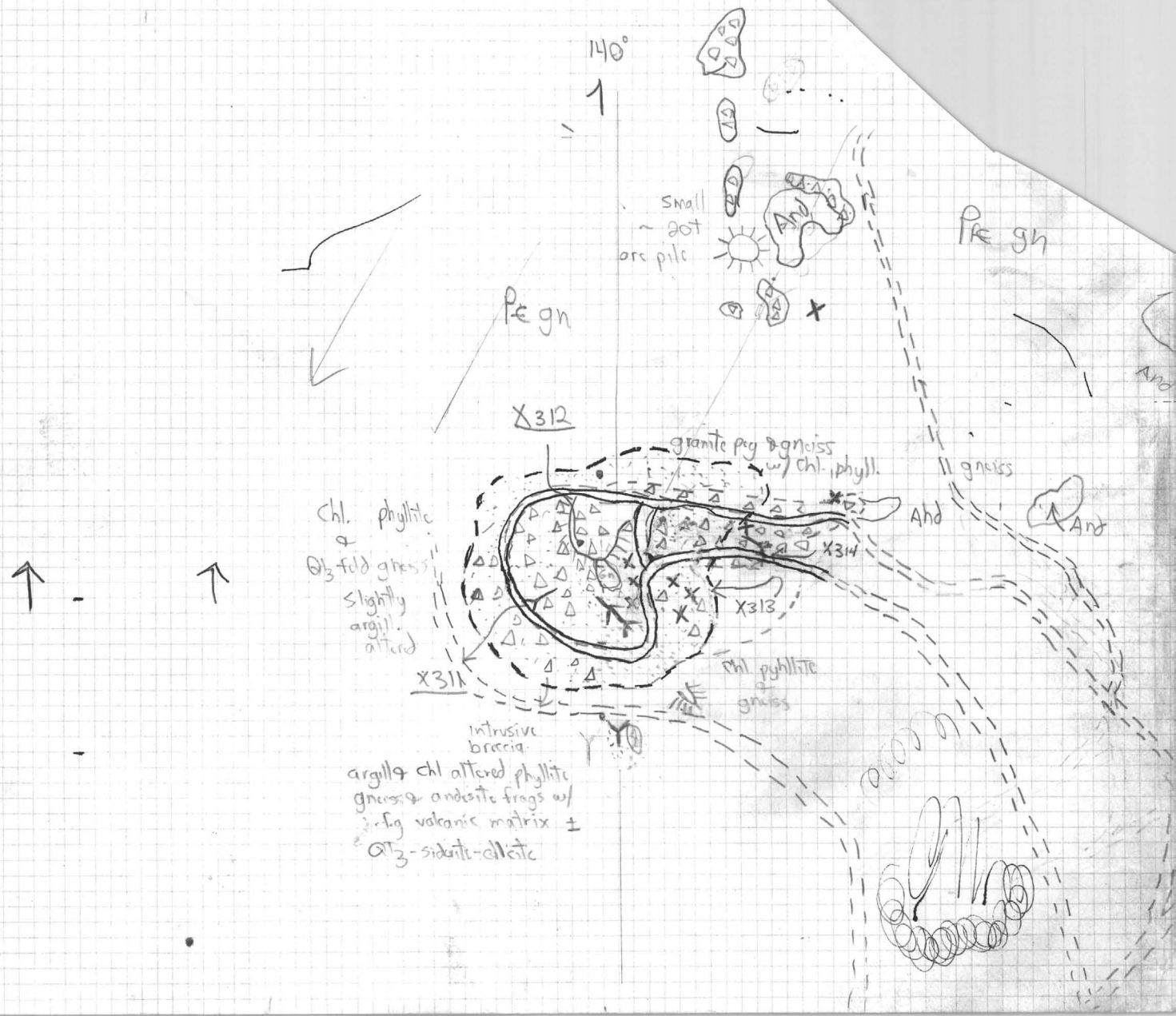
190
3
570


140°
1
= 1
small ~ dot ore pile
And
Pe gn
Pe gn
And
X312
granite peg gneiss w/ chl. phyll.
II gneiss
And
And
Chl. phyllite & Qtz fold gneiss slightly argill. altered
X314
X313
X311
Chl. pyhllite gneiss
intrusive breccia
argill & chl altered phyllite gneiss & andesite frags w/ f.g volcanic matrix ± Qtz - sidrite - calcite

all samples from Van Deemen Mine W½ Sec 29 (unsurv) T27N R21W MT Perkins 15' Ariz

X-307 Random Chip Sample from outcrop just below Andesite FeOx stained & argill. altered chloritic phyllitic and Musc. Schist. Matrix is rich in Kaolin - Montmorill. (?), & Hematite & limonite

X-308 Random Chip from small adit ~100 ft below Andesite contact - Heavily Kaolinized Musc. schist & chl. phyllite; locally brecciated on fine scale. Hematite, limonite & qtz (locally in stringers) form matrix in brecciated areas, & contains small eyes of green altered phyllitic? (possibly Kspar).

X-309 Same locality (see map) Random sample from dump. 60% sample composed of a (gneiss?) light red rock matrix w/ K-feld phenos (<5mm, 1-2mm ave). Alt. in part w/ sericite. 40% of sample composed of brecciated rock w/ ang to sub ang sericite, kaol, or qtz. clasts between 1-20 mm (2-4mm ave.) Also contains few qtz stringers. Matrix contains abund hem.

X-310 Random Chip across adit near main Van Deemen Shaft. - Chloritically altered Phyllite and chloritic & argill. altered Andesite - prominent brecciation w/ matrix of v.fg hematite, chl., Kaolin & sericite(?) Some of hem. matrix material appears intrusive (altered Andesite?)

X-311 Same locality (see map) Chip sample from portal. Sample composed mostly of a fine gn (hematite actinolite?) red to green gray rock, moderately to highly altered into blue green and yellow rusty colored clays (limonite). Contains few qtz stringers. Also contains a greenish qtz-feldspatoid, fn gn, equigranular gneissic rock composing ~5% of sample

X-312 Rep. dump sample from large Pit near SE end of workings - Brecciated chl. phyllite & musc-Qtz_3-Kspar gneiss; extensive brecciation; cemented by fg. hem & limonite, Qtz_3 & locally by altered andesite. Actinolite needles locally present. FeOx stain is common in brecciated zones.

X 313 Same locality (see map) Random sample from dump. Dump sample contains mostly qtz occurring as vein and breccia materials. Qtz. is mostly smokey white in color, but is also often FeOx stained and occasionally is clear, green, and yellow tinted color. Qtz contains numerous erosional cavities of irregular and cubic shapes, w/ some producing intergrowths of small prismatic qtz crystals. Approx. 15% of sample is composed of altered sericite clays.

X 314 - ~~Sam~~ Random Chip across small portal near SE end of workings. Extensively brecciated and Argillized Andesite (?) & phyllite. Very FeOx stained w/ stringers & inclusions of white Qtz_3 (20-60%) up to 8mm across. Rock appears granulated; f.g. Qtz_3 & hem commonly cement breccia clasts & are found in veinlets; minor CuOx's noted; Rock is spongy & limonite rich.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

GARNET MOUNTAIN QUADRANGLE
ARIZONA–MOHAVE CO.
15 MINUTE SERIES (TOPOGRAPHIC)

3156 III (VIRGIN BASIN)

3156 II (ICEBERG CANYON)

114°15' 36°00'

750000m E. 751 R. 18 W. 752 753 754 755 10' 756 757 758 R. 17 W. 763 764 765 766 767 420 000 FEET R. 16 W. 114°00' 36°00'

GREGGS HIDEOUT 0.1 MI.

PIERCE FY ANCHORAGE 11 MI.

3986000m N.

T. 30 N.

3985 3984 3983 3982 3981 3980 3979 3978 3977 3976 3975

T. 29 N.

SPILLWAY 1221

LAKE MEAD

Salt Spring Bay

L A K E M E A D N A T I O N A L R E C R E A T I O N A R E A

Sample Localities

Lost Basin Range

D.F.S. 1/80

1 8:10 000 FEET

Climax Mine

Golden Mile Mine

King Tut Placer

Bluebird Mine

Golden Rule Peak

Gold Hill Mine site

Golden Gate Mine

Climax Mine

King Tut Placer Mine

Golden Mile Mine

Lone Jack Placer Mine

Bluebird Mine

Water

BOUNDARY

INDEFINITE

TRAIL

JEEP TRAIL

Wash

Grand Wash Cliffs

PIPELINE

AQUEDUCT

BM 1458
BM 1528
BM 1703
BM 1748
BM 1832
BM 1877
BM 1971
BM 2041
BM 2199
BM 2323
BM 2379
BM 2427
BM 2475
BM 3087
BM 3152
BM 3241
BM 3276
BM 3363
BM 3457
BM 3507
BM 3592
BM 3698
BM 3721
BM 3770
BM 3797
BM 3852
BM 3959
BM 4056
BM 2947
BM 3979
VABM 2200
VABM 4194
VABM 4685

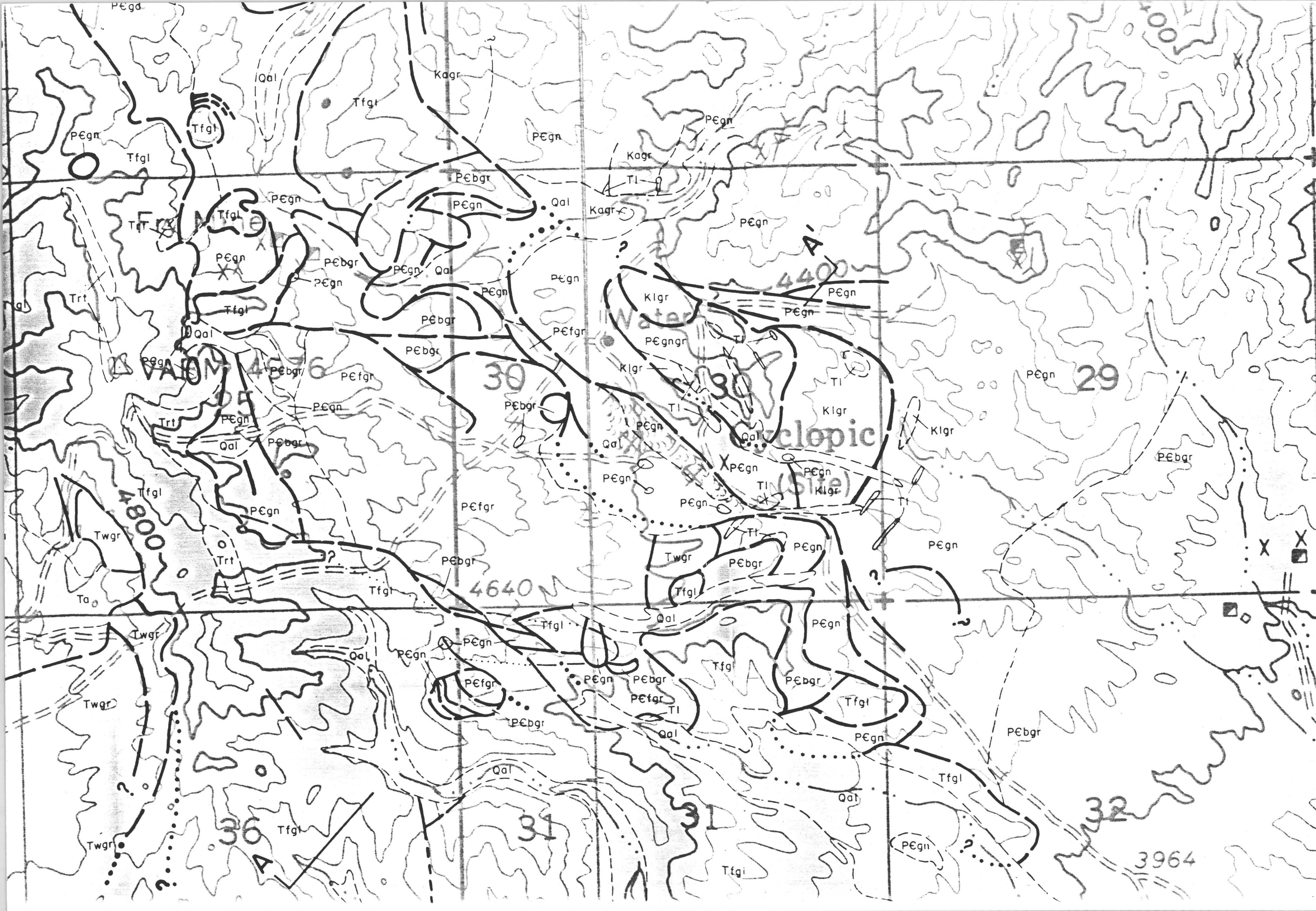
I 62 I 64 I 65 I 66, 67 I 68 I 69 I 70, 71, 72 I 73 I 76 I 77 I 78, 79 I 80, 81 I 85 I 86 I 87 I 88 I 90, 91, 92

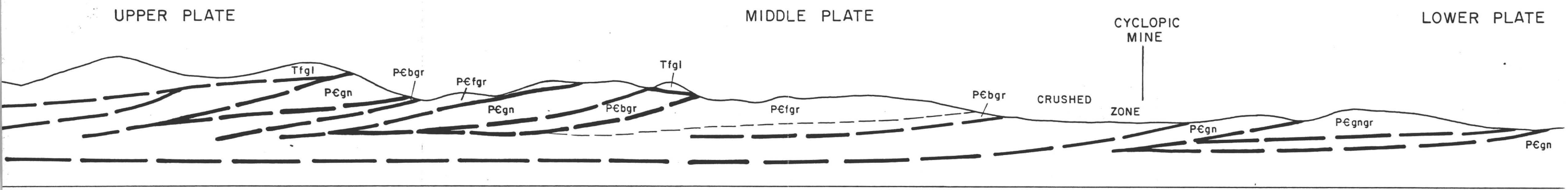
3155 IV (GREGORY MTN.)

3156 I (BAR RANCH 0.6 MI.)

Gold in ppm

Pb
1.3
1.2
0.9
0.6
0.6
0.10
7.5
Pb
0.1
Pb
25
0.2
0.3, 1.9
0.5
Pb
0.4
0.4
?
0.2
2.1
0.5
2.7
4.4
0.2
3.1
2.4
25.3
1.0
9.1
0.4
36
31
29.6
Pb
0.4
29.6
8.9
4.7
10.4
0.3
0.2
3.5
Pb
0.3
0.1
Pb
0.5
0.8
8.1
0.5
3.1
Pb
0.2
30
2.9
Pb
0.4
20.9
0.8
Pb
Pb, 1.4
0.1
1.7
6.2
Pb
0.4
0.2
Pb
0.2
0.1
29
32


Cyclopic
(Site)
Water
4400
4640
4800
3964
29
30
31
32
36



LOOKING NORTHWEST

SECTION A-A'

GOLD BASIN MINING DISTRICT
MOHAVE COUNTY, ARIZONA

1" = 500' H=V

MAY, 1983

R 19 W R 18 W

T 28 N

T 27 N

LITHOTECTONIC UNITS

UP UPPER PLATE

MP MIDDLE PLATE and CRUSHED ZONE

CZ

LP LOWER PLATE

UPPER MARGIN OF LOWER PLATE

PYRITIZED AREA

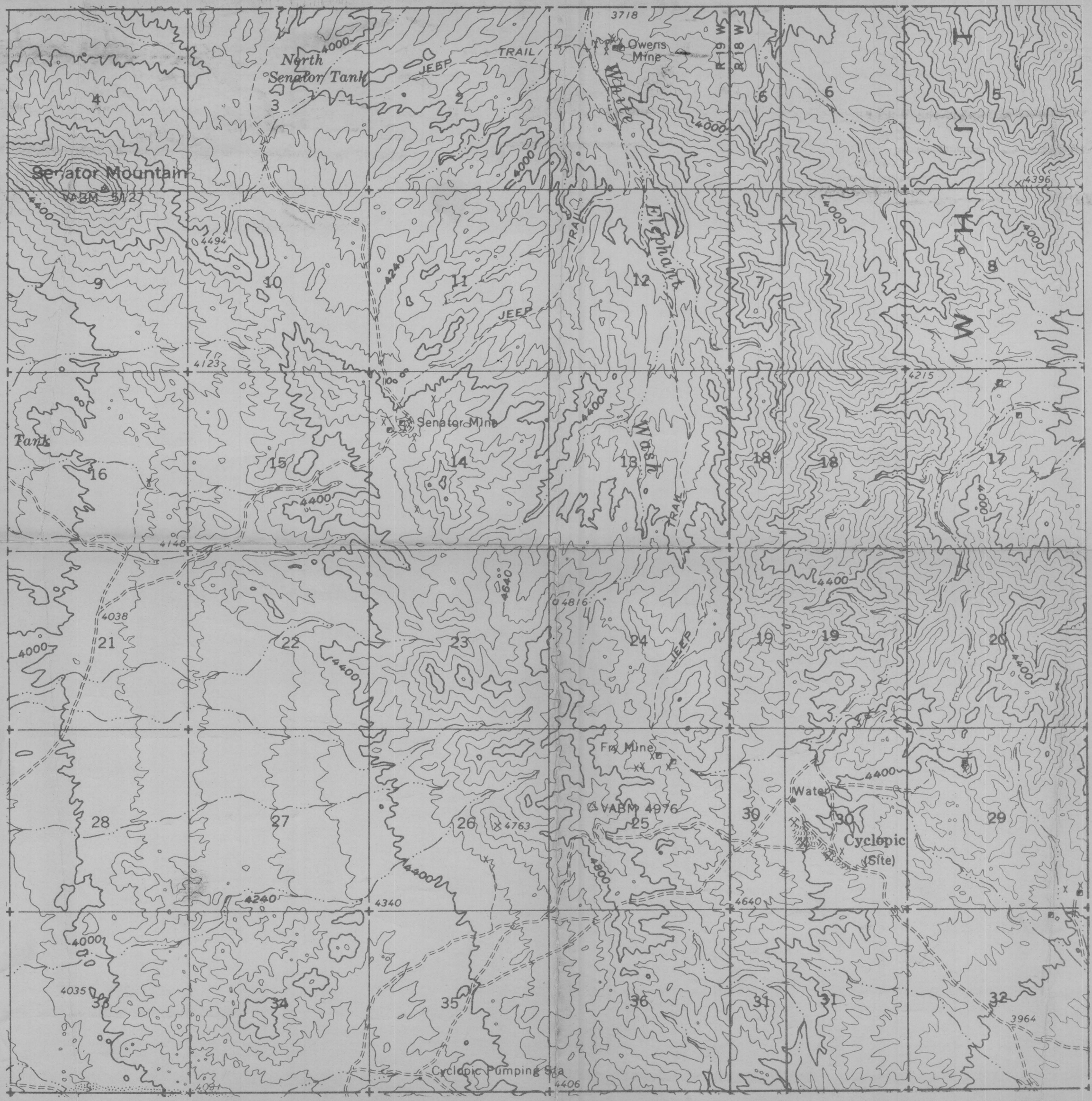
PROPOSED DRILL HOLE

LITHOTECTONIC MAP GOLD BASIN DISTRICT MOHAVE COUNTY, ARIZONA

1" = 2000'

May 1983
Corn & Ahern

PLATE I

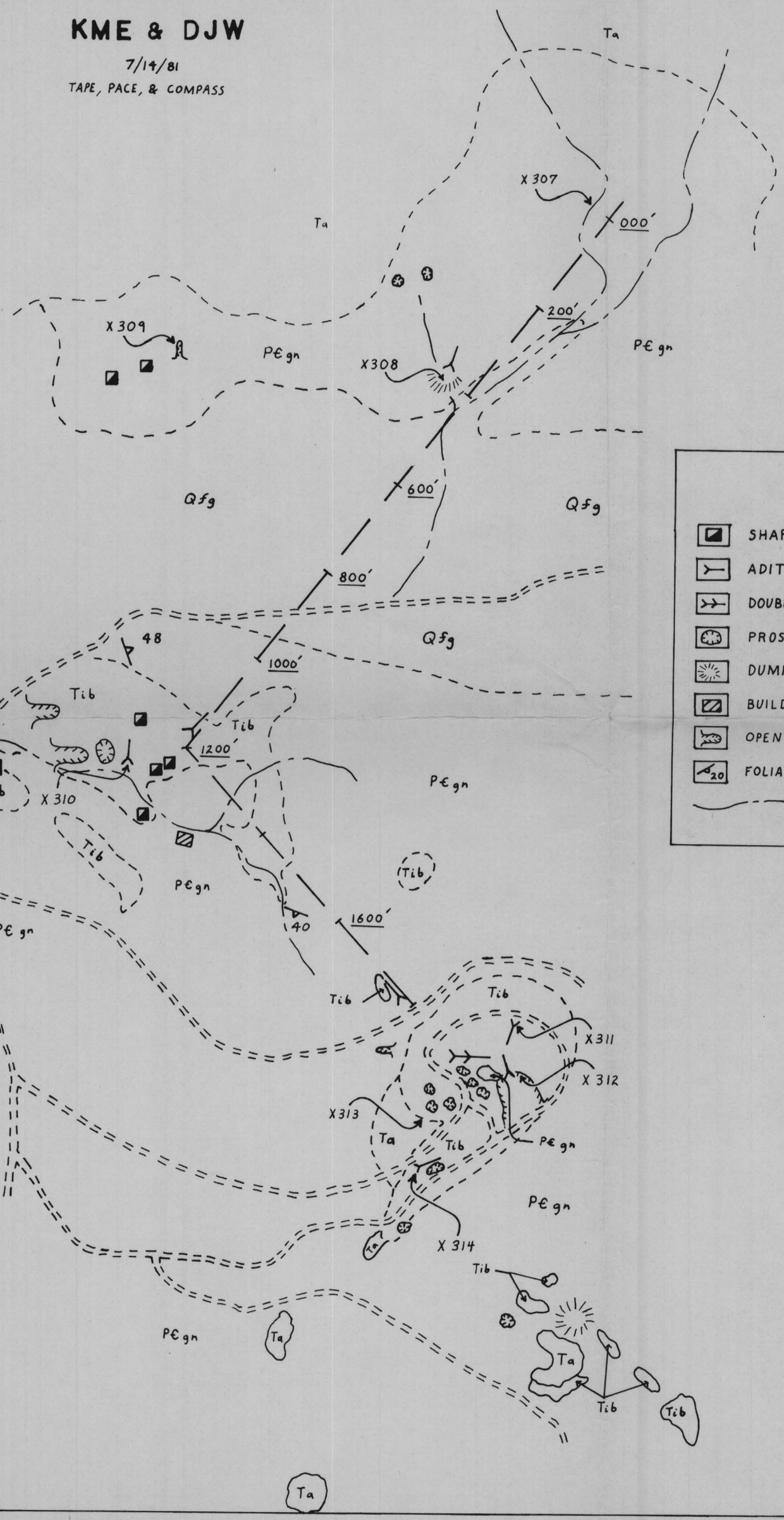

Senator Mountain
VABM 5127
North Senator Tank
JEEP TRAIL
Owens Mine
White
Elephant
TRAIL
JEEP
Senator Mine
West
TRAIL
Tank
Fry Mine
VABM 4976
Water
Cyclopic
(Site)
Cyclopic Pumping Sta
R 19 W
R 18 W
T 4 N
4000
4400
4240
4640
4800
4494
4123
4148
4038
4816
4763
4340
4035
4091
4406
4396
4215
3718
3964

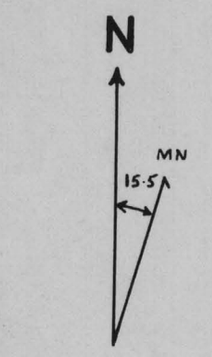
VAN DEEMEN MINE

KME & DJW

7/14/81

TAPE, PACE, & COMPASS





200'

SCALE 1:2400

KEY

SHAFT	Qfg QUATERNARY FANGLOMERATE
ADIT	Tib TERTIARY (?) INTRUSIVE BRECCIA
DOUBLE ADIT	Ta TERTIARY (?) ANDESITE
PROSPECT PIT	P€gn PRE-CAMBRIAN GNEISS
DUMP PILE	200' TRAVERSE LINE
BUILDING	UNPAVED ROAD
OPEN CUT	FORMATION CONTACT
20 FOLIATION STRIKE & DIP	APPROXIMATE FORMATION CONTACT
WASH	

A3 Mohave County

Gold Basin District

CAMBIOR

Please RETURN this data package
to Tucson Office for files.

THANK YOU

GOLD BASIN PROJECT
DATA PACKAGE

Gold Basin Index Map (8½"x11")	1:250,000	
Drill Hole Locations on Gold Basin Claim Map (8½"x11")		1" = 2000'
Aeromagnetic Map (8½"x11")	December 1981	
Diagramatic Section (8½"x11")		
Geologic Section	June 1983	
Generalized Sequence of Lithotectonic Units		June 1983
Lithologic Descriptions	June 1983	
Screen Test of Surface Sample	June 1983	
Sample Logs	June 1983	
Sieve Test, Gold Basin Drill Cuttings		
Drill Hole Logs for RDH GB-1 through GB-16		
Descriptive Log		
Assay Log		
Graphic Log		

GOLD BASIN MAPS

Lithotechtonic Map	1" = 2000'	Pl. I	May 1983
Geologic Map	1" = 1000'	Pl. II	May 1983
X Sections	1" = 500'	Pl. III	May 1983
Land Status	1" = 2000'	Pl. IV	May 1983
Sample Index Map	1" = 1000'	Pl. V	May 1983
Gold Distribution	1" = 1000'	Pl. VI	May 1983
Gold and Mercury Distribution	1" = 1000'	Pl. VII	May 1983
Gold and Lead Distribution	1" = 1000'	Pl. VIII	May 1983
Drill Hole Plan Map	1" = 200'	May 1984	
Drill Hole X Sections A,B,C and D	1" = 100'		May 1984
Drill Hole X Section E	1" = 100'	May 1984	

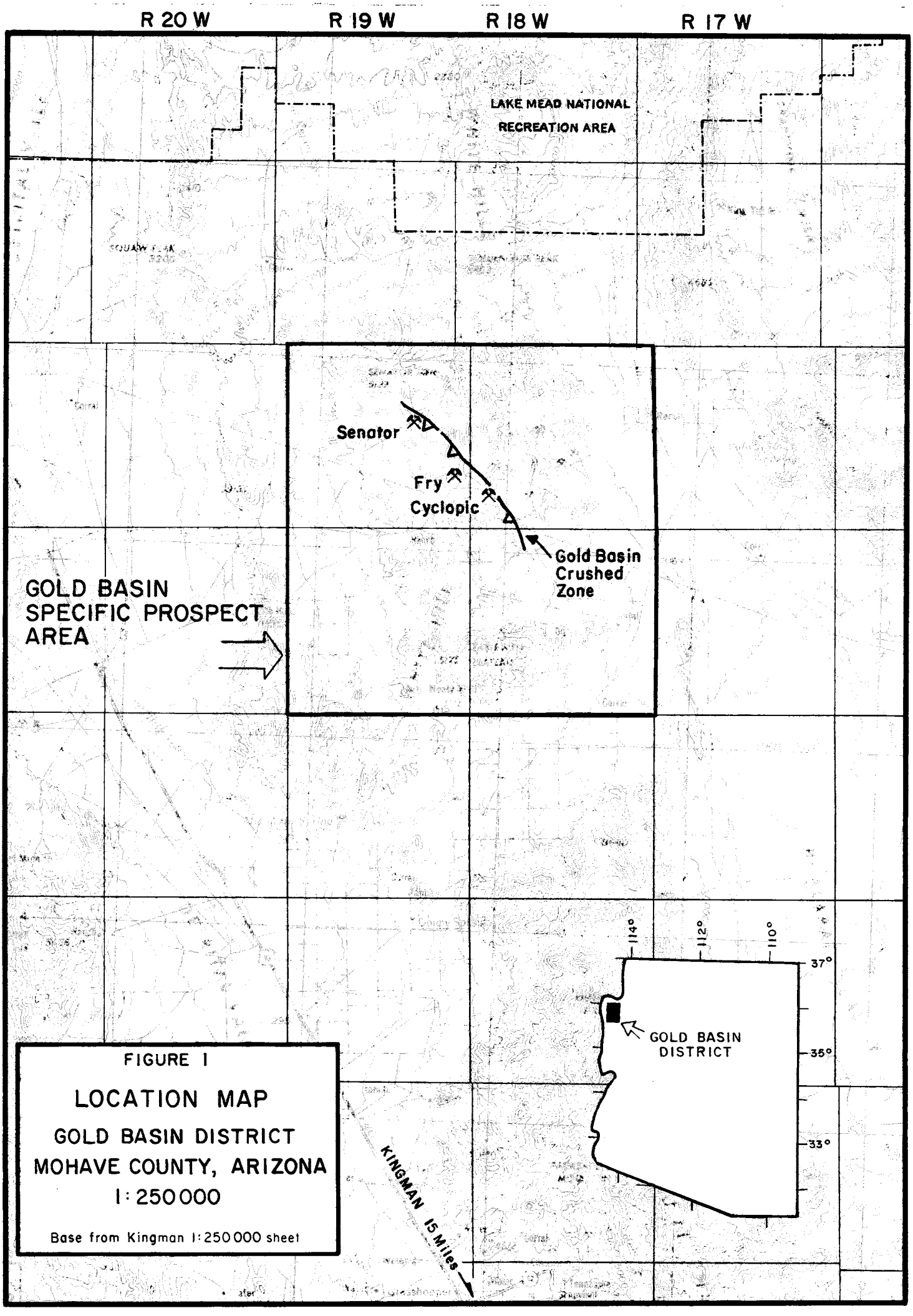


FIGURE 1

LOCATION MAP

GOLD BASIN DISTRICT

MOHAVE COUNTY, ARIZONA

1:250000

Base from Kingman 1:250000 sheet

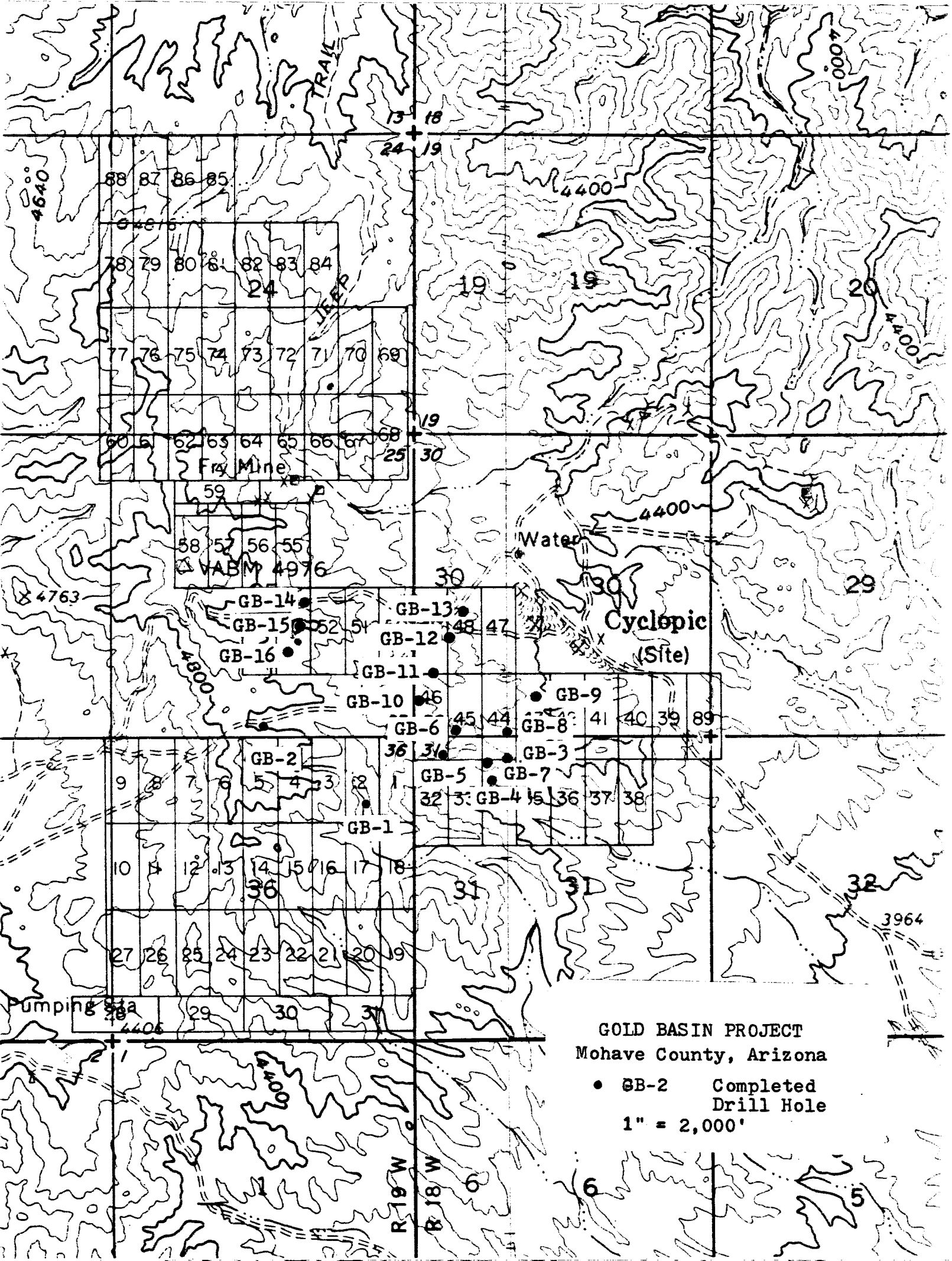
SUMMARY OF DRILLING RESULTS

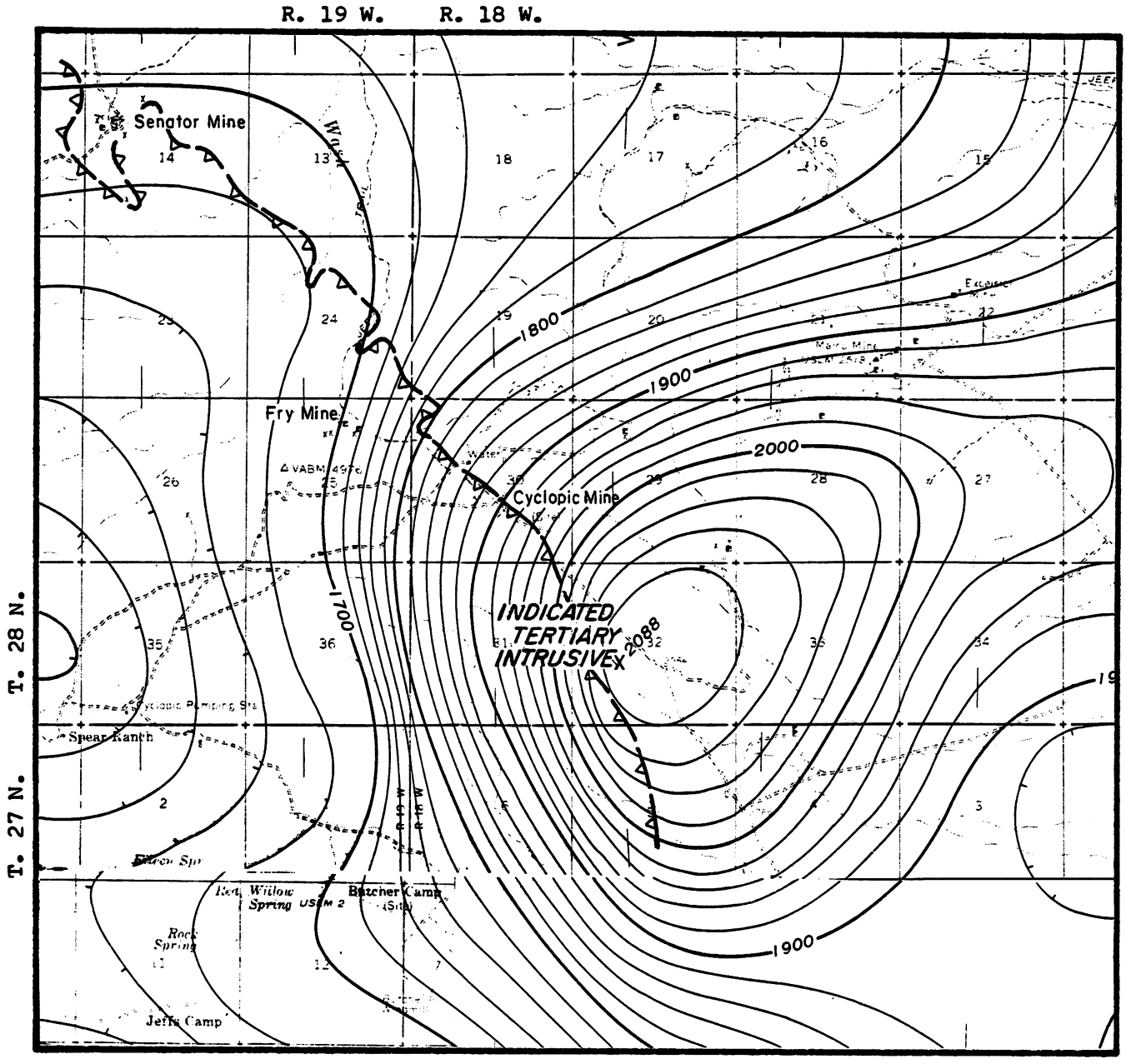
In the recent drill holes, erratic gold values are associated with clay, limonite after pyrite, and anomalous mercury and tungsten values. Drill hole intercepts with more than .3 ppm gold include:

Drill Hole	Intercept	Interval	PPM Gold
GB-5	80-90	10'	.31
	110-130	20'	.85
GB-7	0-5	5'	1.61
	60-75	15'	3.54
	130-165	35'	.86
GB-11	145-150	5'	2.31
	270-275	5'	.89
GB-12	185-190	5'	.56
GB-13	110-115	5'	.99
GB-16	55-75	20'	.48

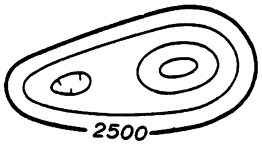
Drill holes 5, 7, and 16 are positioned on and near an elongate west-northwest trending zone of mineralization. These vertical holes do not adequately define the grade of the gold mineralization but do indicate the relative intensity and extent of mineralization. Representative surface samples taken along a road cut across this zone show a 60 foot width that averages 1.66 ppm gold with an adjacent 60 feet that averages .27 ppm gold. Additional surface samples show that the mineralized zone continues westward for several thousand feet through hole GB-5 and toward hole GB-16. This data and the drilling results indicate that the better gold mineralization is restricted to an elongate 50 to 100 foot wide zone with a probable potential of less than one million tons averaging .03 to .05 oz. gold. Mineralization at the Cyclopic Mine is similarly localized in an elongate, west-northwest zone of limited width with a probable tonnage potential of only several million tons.

The drilling results at Gold Basin indicate that better-grade gold mineralization occurs in elongate, west-northwest trending zones of limited width and tonnage potential. The mineralized zone indicated by PCMI's drilling has an estimated potential for several hundred thousand tons of .03 to .05 oz. gold.


GB-14
GB-13
GB-15
GB-12
GB-16
GB-11
GB-10
GB-9
GB-6
GB-8
GB-2
GB-3
GB-5
GB-7
GB-4
GB-1
Cyclopic
(Site)
Water
Fry Mine
VABM 4976
Pumping Sta
TRAIL
JEEP
4400
4600
4640
4763
3964
R 18 W
GOLD BASIN PROJECT
Mohave County, Arizona
• GB-2 Completed Drill Hole
1" = 2,000'



EXPLANATION



Magnetic contours

Showing total intensity magnetic field of the earth in gammas relative to arbitrary datum. Hachured to indicate closed areas of lower magnetic intensity. Contour intervals 20 and 100 gammas

Location of measured maximum or minimum intensity within closed high or closed low

Flight path

Showing location and spacing of data

Approximate location of the eastern edge of the Gold Basin Crushed Zone

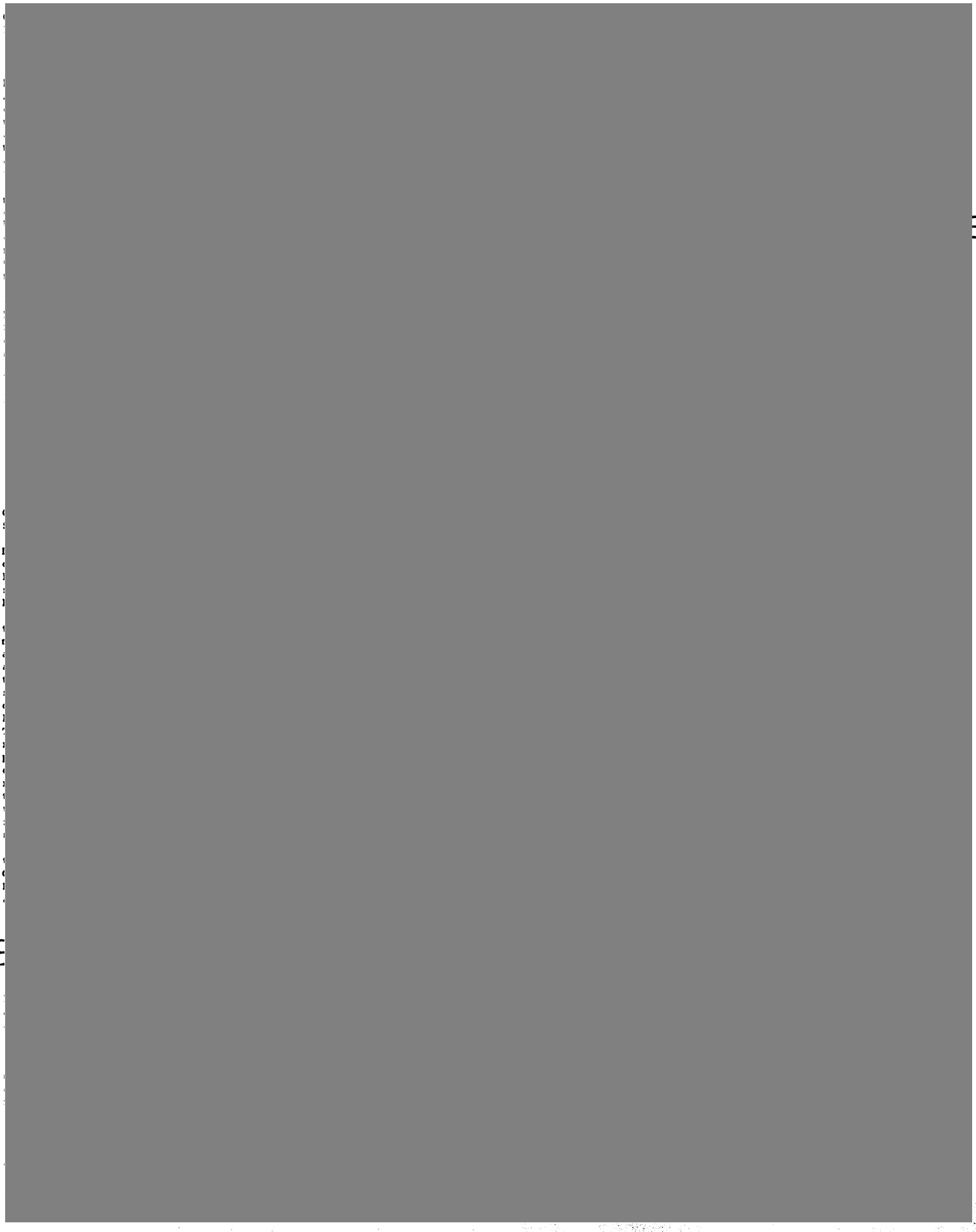
Figure 2

AEROMAGNETIC MAP OF GOLD BASIN AREA

Mohave County, Arizona

1 : 62,500

From:
USGS Aeromagnetic Map of the Gold Butte - Chloride Quadrangle, GP-757



REFERENCES

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Blacet, P.M. Preliminary geologic maps of the Garnet Mountain quadrangle, Mohave County, Arizona, U.S.G.S. Open-File Report OF-75-93, 1975.

Myers, I.A., et al. Relationship of mineralization to detachment faulting at the Cyclopic Mine, Mohave County, Northwestern Arizona, G.S.A. Abstracts, 1984.

Schrader, F.C. Mineral deposits of the Cerbat Range, Black Mountains, and Grand Wash Cliffs, Mohave County, Arizona, U.S.G.S. Bulletin 397, 1909.

Theodore, T.G., et al. Preliminary report on the geology and gold mineralization of the Gold Basin-Lost Basin Mining districts, Mohave County, Arizona, U.S.G.S. Open-File Report OF-82-1052, 1982.

U.S.G.S. Aeromagnetic map of the Gold Butte-Chloride quadrangle, U.S.G.S. Map GP-757, 1972.

Wilson, E.D., et al. Arizona lode gold mines and gold mining, Arizona Bureau of Mines Bulletin 137, 1934.

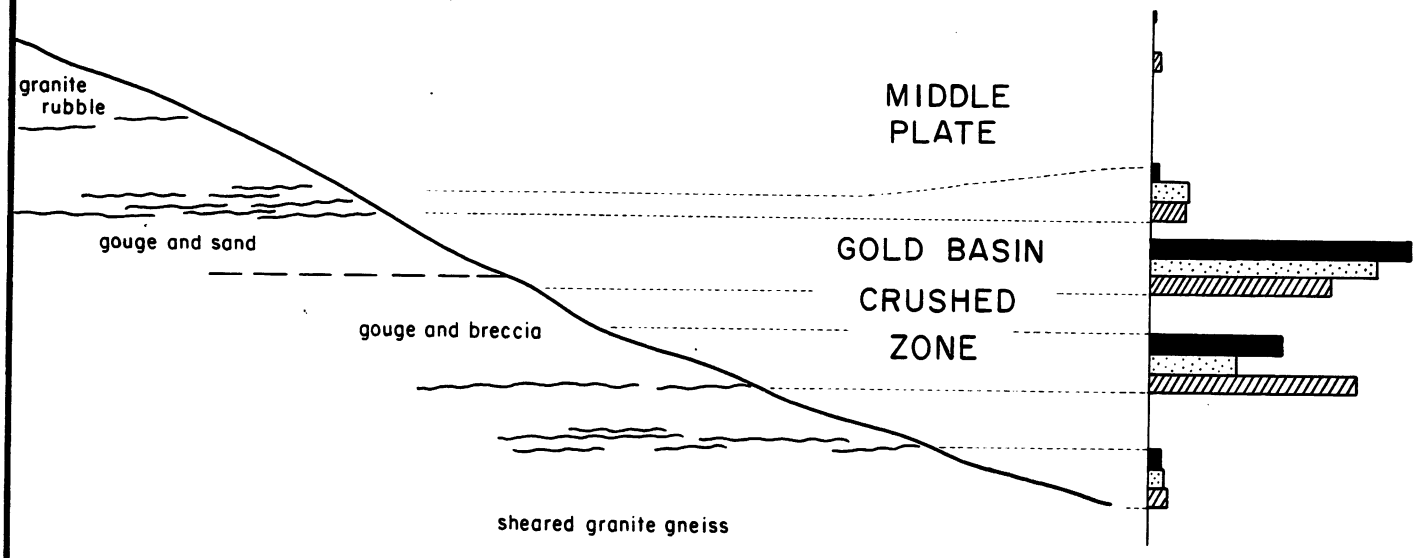
TABLE 1

Quaternary	Alluvium
Pliocene (?)	Basalt and conglomerate
Listric faulting----------	
Late Miocene (?)	Sandstone
	Rhyolitic tuff
	Fanglomerate
Gold Mineralization	
Listric faulting----------GOLD BASIN CRUSHED ZONE----------	
Miocene (USGS dates on similar Middle Tertiary volcanics and intrusives are 10-20 my)	Quartz latite welded tuff
	Andesite
	Lamprophyre
	Porphyritic granite
Cretaceous	Granite, alaskite
Precambrian	Granite, gneissic granite and granodiorite, granite gneiss, amphibolite, gneiss.

Table 2

Generalized Sequence of Rock Units at Gold Basin

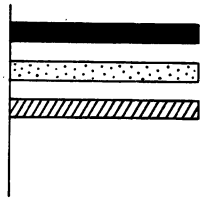
Lithotectonic Unit	Structural Features	Rock Units Affected
Upper Plate	structurally rotated cohesive fault blocks and slivers.	Fanglomerate Ryolitic tuff Sandstone Andesite Porphyritic biotite granite Layered gneiss
----------Sub-horizontal zone of Shearing----------		
Middle Plate	thoroughly shattered and sheared rocks.	Lamprophyre White Hills granite Fine-grained quartz-biotite granite Porphyritic biotite granite Granite gneiss Layered gneiss Gneissic granodiorite Gneissic granite
Crushed Zone	crushed rock material and gouge	
----------Major Sub-horizontal Zone of Shearing and Coalesced Faults----------		
Lower Plate	competent unsheared rocks.	Lamprophyre and Latite porphyry White Hills granite Alaskite Leucogranite Porphyritic biotite granite Layered gneiss Gneissic granite



EXPLANATION

BAR GRAPH OF RELATIVE ASSAYS

VALUES ARE AN AVERAGE OF 2 or 3 SAMPLES TAKEN AT SIMILAR STRATIFORM POSITIONS



Au, 1" = 5.0 ppm
Hg, 1" = 1.0 ppm
W, 1" = 50.0 ppm

FIGURE 2

DIAGRAMMATIC SECTION ILLUSTRATING THE DISTRIBUTION OF GOLD IN THE GOLD BASIN CRUSHED ZONE MOHAVE COUNTY, ARIZONA

DIAGRAM IS BASED ON GENERALIZED GEOLOGIC AND SAMPLE DATA FROM THE NE ¼ OF SECTION 25, T. 28 N., R. 19 W.

SCALE: 1" = ~50'

Appendix C
Sample Logs

PROSPECT GOLD BASIN DISTRICT

COUNTY MOHAVE STATE ARIZONA

SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS							BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh	BeO[2]	Li[2]	W[3]	Acid Sol Ba[2]	Total Ba %[2]	F[2]	Hg[2]	Cu[3]	Mo[3]	Pb[3]	Zn[3]	As[3]	Sb[3]	Au[3]	Ag[3]
1659	Center of 25, 28 N, 20 W	Hidden prospect.	Quartzite gneiss from fault.						<1	275	.16			32	6	25	43	2	3	.12	0.9
1661	NW ¼ Section 14, 28 N, 19 W	Senator Mine.	Sheared leucogranite with siderite-chlorite.						1	680	.15			25	<5	17	41	6	1	.03	0.7
1662	"	"	Bleached earthy breccia with siderite and clay.						<1	520	.14			44	<5	7	32	6	5	.02	0.9
1663	NW ¼ Section 1 28 N, 19 W	Owens Mine.	Fresh gneiss, quartz K-spar, biotite, amphibolite.						2	445	.20			144	<5	8	33	6	3	.11	0.9
1664	"	"	Amphibolite dike with chlorite, siderite veinlets.						1	1200	.17			1384	<5	15	47	6	6	.87	2.0
1665	"	"	Silicified brecciated gneiss with copper quartz siderite veinlets.						1	1100	.98			8480	<5	46	43	15	5	1.41	2.2
1666	"	"	FeMnOx in fault breccia.						<1	910	.16			429	<5	13	27	7	4	.21	1.6
1667	NW ¼ Section 30, 28 N, 18 W	West of Cyclopic Mine	Fault gouge in hematitic gneiss.						15	1200	.28			58	<5	311	148	6	4	.07	1.4
1668	"	"	Upper edge of flat fault in hematitic gneiss.						28	610	.30			274	56	2038	562	7	5	4.65	2.6
1669	NE ¼ Section 25 28 N 19 W	Fry Mine.	Pliocene fanglomerate on dump.						18	720	.14			46	6	514	123	8	4	1.22	1.0
1671	NW ¼ Section 1 28 N 19 W	Owens Mine.	High grade copper with hematite, specularite, siderite alteration.						<1	20	.21		36	400	<5	60	31	2	5	2.82	2.2
1880	NE/NW Section 4, 27 N, 18 W.	3 shafts; PLM claim.	Selected quartz vein on dump.				2	10	11	110	.18	1100	.910	168	5	108	12	11	3	8.40	2.0
1881	"	"	Grab of argillic altered Precambrian granite with pyrite and quartz.				6	20	140	250	.23	2700	1.08	14	<5	38	7	2	<2	2.31	1.3
1882	"	"	Drill cuttings, argillic altered Precambrian granite with pyrite & quartz.				5	19	21	375	.24	3500	.240	22	8	55	36	3	<2	.05	0.5
1883	"	East of headframe.	Silicified gneissic granite with quartz veinlets.				3	10	23	520	.29	760	.205	7	<5	7	25	2	<2	.18	<.2
1884	NW/SE Section 30, 28 N, 18 W	Cyclopic Mine.	Red-brown coarse tailings.				6	18	56	195	.27	1300	.910	274	27	6490	780	37	9	1.65	1.8
1885	"	Cyclopic Mine, old mill site.	Spill of mill feed; leucogranite.				5	4	4	345	.10	450	.070	20	<5	179	51	3	<2	.08	0.3
1886	"	"	Cemented quartz-granite breccia.				<1	6	16	65	.12	280	.480	116	11	1140	108	15	5	6.15	1.6
1887	"	Outcrop on road.	Leucogranite with black FeOx on fractures.				5	3	3	340		350	.065	16	<5	24	28	<2	<2	.03	<.2
1888	"	In main pit.	Red mudstone gouge and and fault breccia.				11	18	77	410	.18	1200	.360	102	10	1169	193	16	<2	.21	1.5
1889	"	Dozer cut.	Red-brown unconsolidated gravel.				8	17	23	665	.15	660	.075	13	<5	80	50	2	3	.05	0.4
1891	"	Slit trench.	Unconsolidated gravels.				6	14	8	1000	.18	1200	.100	13	<5	29	67	<2	4	.03	0.2
1892	"	Prospect pit.	Mylonitic granite with quartz-sericite-pyrite.				8	9	9	610	.15	310	.070	29	<5	526	63	4	<2	.39	0.2
1893	"	Cyclopic pit.	Silicified gneissic granite breccia.				10	59	31	455	.15	1300	.475	112	7	1677	262	17	6	.80	1.1
1894	"	North end Cyclopic pit.	Quartz-granite breccia in low-angle fault.				5	14	64	255	.081	940	1.03	182	12	2077	216	43	11	8.1	3.2

1 VALUES IN PPM EXCEPT "TOTAL BARIUM" WHICH IS IN %.
2 COPPER STATE ANALYTICAL, TUCSON.
3 U.S. BORAX RESEARCH CENTER, ANAHEIM.

4. Gold results on samples 1659 through 1671 confirmed by repeats at USBRC and confirmation testing at Copper State Analytical (SWAC).

CORN & AHERN
CONSULTING GEOLOGISTS
TUCSON, ARIZONA

PROSPECT GOLD BASIN DISTRICT

COUNTY MOHAVE STATE ARIZONA

SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS							BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh	BeO[2]	Li[2]	W[3]	Acid Sol Ba[2]	Total Ba %[2]	F[2]	Hg[2]	Cu[3]	Mo[3]	Pb[3]	Zn[3]	As[3]	Sb[3]	Au[3]	Ag[3]
1895	NW/SE Section 30, 28 N, 18 W	North end Cyclopic pit.	Gneissic granite below fault.				5	24	18	1100	.13	1300	.065	6	<5	45	97	13	<2	.05	0.3
1896	"	Percussion hole.	5' to 10' "wash fill", no bedrock.				7	28	38	665	.18	1700	.210	53	5	606	160	8	<2	.54	0.8
1897	"	Cyclopic pit.	Argillized gouge beneath fault.				10	292	51	675	.23	790	.130	412	8	2307	551	17	<2	3.12	1.0
1898	SE/SE Section 19, 28 N, 18 W	Adit on fault.	Altered gneissic granite with sericite and limonite.				4	42	4	310	.16	350	.055	47	<5	44	65	<2	<2	.05	<.2
1899	NE/NW Section 29, 28 N, 18 W	Digs at end of ridge.	Leucogranite with amphibolite.				4	9	3	145	.10	280	.030	125	<5	13	102	<2	4	.05	2.1
2201	NE/NE Section 25, 28N, 19W	Fry tank spillway.	Clay-quartz gneissic granite conglomerate or breccia.				6	16	5	670	.20	840	.070	10	<5	41	39	<2	<2	.30	0.9
2202	"	Prospect pit north of tank.	Quartz breccia - fault (?).				<1	7	74	95	.22	380	.175	97	8	1127	429	3	<2	.03	1.9
2203	"	"	Granite and conglomerate at fault contact.				6	15	80	340	.14	1200	.970	219	6	(1,860)	1400	17	<2	10.35	4.5
2204	NE/NE Section 25 28 N, 19 W	Fry Mine.	Hematitic granite with quartz veinlets.				4	4	22	430	.22	1100	.870	59	5	292	74	<2	2	.63	0.5
2205	"	"	Sandy conglomerate with granite and quartz.				3	25	45	835	.20	1800	.235	65	11	260	158	4	2	.56	1.1
2206	"	"	Sandy conglomerate with altered granite fragments.				6	26	5	550	.21	1300	.066	17	<5	38	46	<1	3	<.02	0.4
2207	"	"	Mine dump sample, conglomerate.				6	22	36	520	.53	1900	.475	135	10	1364	431	8	4	.92	7.3
2208	SW/SE Section 24, 28 N, 19 W	Cyclopic well.	Cuttings 0-375' (½ gpm).				4	17	6	1000	.23	2300	.250	11	<5	19	86	<2	<2	<.02	0.4
2209	SE/NW Section 11, 27 N, 20 W	Bonanza Mine area.	Quartz veins in leucogranite.				2	14	2	335	.22	700	.030	17	<5	16	45	11	7	<.02	0.8
2210	SW Section 18, 30 N, 18 W	Salt Spring Prospect.	FeOx quartz-rich conglomerate/ breccia.				2	30	10	1200	.66	620	.790	484	6	83	180	207	8	.05	2.3
2212	East ½ Section 24, 30 N, 19 W	Salt Spring wash.	Fault breccia with amphibolite and granite.				<1	21	2	1100	.24	490	.135	8	<5	10	43	<2	3	2.39	1.2
2213	NW/SE Section 33, 30 N, 17 W	Climax Mine.	Conglomerate with magnetite in drill cuttings.				2	17	25	390	.17	310	.920	79	35	83	69	11	<2	.03	0.4
2214	"	"	Sludge from mud pit.				2	32	3	405	.23	680	.055	38	7	40	67	9	<2	.12	0.8
2287	S½NW Section 25, 28 N, 19 W	VABM 4976.	Light gray unaltered lithic tuff.						2	220	.09	2100	.14	101	<5	31	20	<2	<2	<.02	0.2
2288	NE/SW Section 25, 28 N, 19 W	On road at bend.	"						6	290	.12	3200	.11	23	<5	27	25	<2	<2	.03	<.2
2289	NW/NW Section 25, 28 N, 19 W	On ridge crest.	Bedded rhyolite ash flow.						1	200	.10	1400	.16	53	<5	25	73	<2	<2	.03	0.9
2290	SW/SW Section 24, 28 N, 19 W	East of ridge crest road.	Weathered granite.						2	350	.08	2500	.14	<5	<5	21	60	<2	<2	.03	<.2
2291	SE/SW Section 24, 28 N, 19 W	North of saddle.	"						19	470	.16	1700	.17	20	<5	393	43	<2	<2	.05	0.3
2292	NE/NE Section 24, 28 N, 19 W	East of road.	Leucogranite with pegmatite stringers.						5	280	.07	1900	.11	27	<5	157	53	<2	<2	.03	0.3
2293	NE/NE Section 25, 28 N, 19 W	Ridge east of stock tank.	Biotite granite gneiss.						2	910	.17	1600	.09	10	<5	27	54	<2	<2	.03	<.2

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COUNTY MOHAVE STATE ARIZONA

SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS						BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W[3]	Acid Sol Ba[2]	Total Ba %[2]	F[2]	Hg[2]	Cu[3]	Mo[3]	Pb[3]	Zn[3]	As[3]	Sb[3]	Au[3]	Ag[3]
2295 A	NW¼ Section 14, 28 N, 19 W	500' north of saddle.	Alluvium below quartz breccia outcrop.	-80 Mesh		soil			288	450	.09	1100	.17	64	<5	34	87	4	<2	.24	0.5
B		400' north of saddle.		sample					3	330	.07	1200	.22	57	<5	33	92	8	3	.05	0.3
C	Senator Mine traverse	300' north of saddle.							5	560	.09	1100	.11	54	<5	40	84	4	<2	.15	0.2
D		200' north of saddle.	Fine grained, true dirt quartz breccia.						4	450	.10	590	.12	58	<5	39	72	6	<2	.06	0.5
E		150' north of saddle.							379	520	.13	835	.20	6	<5	24	18	<2	<2	.05	<0.2
F		100' north of saddle.							12	890	.21	1600	.14	47	<5	34	78	4	<2	.05	0.8
G		50' north of saddle.							7	530	.10	1100	.12	55	<5	37	85	4	<2	.03	0.4
H		Saddle.	Amphibolite granite outcrop.						9	510	.11	930	.15	86	<5	34	101	5	<2	.03	0.3
I		100' south of saddle.	Leucogranite outcrop.						2	440	.08	1100	.12	24	<5	61	67	4	<2	.03	<0.2
J		200' south of saddle.	"						2	510	.09	505	.13	23	<5	49	75	5	<2	.03	<0.2
K		300' south of saddle.	"						2	410	.08	545	.17	18	<5	53	64	6	<2	.03	<0.2
2296 A	NE/NE Section 14, 28 N, 19 W	(south of # 2293) 100' south of hilltop.							2	430	.08	1300	.12	21	<5	44	92	4	<2	.03	<0.2
B		150' south of hilltop.							2	500	.11	1300	.14	23	<5	25	102	5	<2	.03	0.7
C	Cyclopic #1 traverse	200' south of hilltop.							5	300	.13	1000	.13	18	5	32	88	6	<2	.12	0.4
D		250' south of hilltop.							5	340	.10	1100	.13	26	<5	46	112	6	<2	.03	0.3
E		300' south of hilltop.							6	570	.23	2300	.22	13	<5	30	66	3	<2	.06	<.2
F		350' south of hilltop.	Prospect exposing fault.						10	390	.10	1000	.38	27	<5	164	125	4	<2	.06	<.2
G		400' south of hilltop.							15	360	.19	1100	.13	22	<5	74	81	5	<2	.09	0.4
H		450' south of hilltop.							6	420	.11	1600	.14	21	<5	48	90	3	<2	.06	<.2
I		500' south of hilltop.							6	490	.11	1100	.13	19	<5	40	80	7	<2	.12	<.2
J		550' south of hilltop.							7	350	.11	930	.15	20	<5	50	83	3	<2	.09	<.2
K		600' south of hilltop.	Precambrian granite.						4	300	.10	1900	.19	16	<5	45	65	2	<2	.06	1.3
L		700' south of hilltop.	"						16	500	.15	3200	.16	48	<5	57	86	4	<2	.06	<.2
M		800' south of hilltop.	"						5	530	.12	1500	.25	20	<5	58	82	4	<2	.06	0.9
N		900' south of hilltop.	"						3	450	.09	4500	.16	17	6	38	73	4	<2	.06	1.2

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SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS							BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
2297 A	NE NE Section 25, 28 N, 19 W	Hilltop east of Line 1.	Thin cover.	-80 Mesh soil Samples					4	340	.11	1300	.13	31	<5	40	94	6	<2	.09	0.9
B		150' south.	"						5	320	.08	1000	.12	33	<5	42	100	4	<2	.06	0.9
C	Cyclopic #2 traverse.	200' south.	"						5	440	.11	1900	.16	22	<5	43	113	7	<2	.06	0.9
D		250' south.	At prospect pit in Tertiary fanglomerate.						3	370	.08	1300	.15	24	<5	42	92	8	<2	.06	0.7
E		300' south.	Thicker alluvial cover.						4	440	.12	2600	.16	20	<5	43	104	3	<2	.06	1.1
F		350' south.	"						3	650	.16	2400	.17	15	<5	31	75	2	<2	.06	1.2
G		400' south.	"						2	440	.12	1500	.15	19	<5	38	91	4	<2	.06	0.9
H		450' south.	"						3	460	.11	1500	.14	19	<5	41	93	7	<2	.06	0.9
2298 A	Center of NW ¼ Sec 14 28 N, 19 W	500' north of saddle.	Alluvium below quartz breccia outcrop.	-20 to +80 screened soil samples					4					55	5	44	66	5	<2	.12	0.9
B		400' north of saddle.							3					61	<5	49	97	9	3	.03	0.6
C	Senator Mine traverse	300' north of saddle.							6					58	<5	52	72	7	2	.08	0.7
D		200' north of saddle.	Fine-grained "true dirt".						6					64	<5	38	62	7	<2	.06	0.8
E		150' north of saddle.							8					63	<5	50	80	4	<2	.03	1.1
F		100' north of saddle.							13					53	5	38	77	5	<2	.05	0.8
G		50' north of saddle.							7					52	<5	34	80	6	<2	<.02	0.8
H		Saddle.	Amphibolite granite outcrop.						9					83	<5	42	94	3	<2	<.02	0.6
I		100' south of saddle.							3					11	<5	44	43	4	<2	<.02	0.2
J		200' south of saddle.							2					12	<5	65	46	8	<2	<.02	<.2
K		300' south of saddle.							2					10	<5	47	40	5	<2	<.02	<.2
2299 A	NE NE Section 25, 28 N, 19 W	100' south of # 2293	Line 1.						3					16	<5	52	95	4	4	.05	0.04
B		150' south of # 2293.							3					15	<5	29	87	4	<2	<.02	0.03
C	Cyclopic #1 traverse.	200' south of # 2293.							3					12	<5	48	75	3	4	<.02	0.2
D		250' south of # 2293.							5					15	<5	59	103	5	<2	.03	0.2
E		300' south of # 2293.							8					11	<5	31	53	2	<2	.05	0.5

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	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
2299 F	NE NE Section 25, 28 N, 19 W	350' south of # 2293.	Prospect on fault.	-20 to +80 screened soil samples					12					33	<5	412	165	6	<2	.06	0.9
G		400' south of # 2293.							31					20	<5	107	69	5	4	.09	1.0
H	Cyclopic #1 traverse.	450' south of # 2293.							8					12	<5	59	58	4	<2	<.02	0.7
I		500' south of # 2293.							8					12	<5	51	59	4	<2	<.02	0.7
J		550' south of # 2293.							9					11	<5	49	54	3	11	<.02	0.5
K		600' south of # 2293.	Precambrian granite.						5					16	5	51	61	3	4	.03	1.5
L		700' south of # 2293.	"						15					71	7	75	68	3	<2	.03	1.3
M		800' south of # 2293.	"						7					14	<5	47	48	6	<2	<.02	0.6
N		900' south of # 2293.	"						4					14	5	31	47	7	<2	<.02	0.8
2300 A	NE NE Section 25, 28 N, 19 W	Hilltop east of Line 1.	Thin cover.						5					27	5	54	71	5	<2	.03	0.5
B		150' south.	"						5					29	<5	47	68	5	<2	.06	0.7
C	Cyclopic #2 traverse.	200' south.	"						4					19	<5	42	90	7	<2	<.02	0.7
D		250' south.	At prospect pit in Tertiary fanglomerate.						4					25	<5	46	76	3	<2	<.02	0.7
E		300' south.	Thick alluvial cover.						4					19	<5	36	102	4	<2	<.02	0.8
F		350' south.	"						4					16	<5	39	74	4	<2	<.02	0.8
G		400' south.	"						4					20	5	40	70	4	<2	<.02	1.0
H		450' south.							4					5	<5	39	69	17	<2	<.02	0.6
2387	NW SW Section 12, 27 N, 19 W	Ridge at head of draw.	Red hematitic, argillized tuffaceous conglomerate and arkosic sandstone.						4			470	.080	37	<5	172	78	4	4	.03	1.8
2388	NW SW Sec 1, 27 N, 19 W	Near old road in gulch.	Limonite-hematite stained fine-grained andesite.						2			470	.040	50	<5	13	66	<2	3	<.02	1.4
2389	"	100' west of high-angle fault.	Reddish, bedded fanglomerate 20° dip 50' below contact with andesite.						7			830	.070	55	<5	22	34	2	<2	.04	1.8
2390	"	5' from high-angle fault.	Bleached, argillized fine-grained sandstone, cross-bedded.						9			800	.055	45	<5	28	88	<2	<2	.02	1.5
2392	SE SE Section 1, 27 N, 19 W	In bluff, south of Cyclopic pump sta. road	100' of sheared hematitic quartz-rich granite and quartz cobble fanglomerate.						9			450	1.03	8	<5	19	20	6	<2	.03	1.0
2393	NW SE Section 30, 28 N, 18 W	At north edge of new drilling.	Cyclopic quartz breccia on north side of big cut.						12			620	.790	215	14	1830	69	55	9	2.87	2.3

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	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W[3]	Acid Sol Ba[2]	Total Ba %[2]	F[2]	Hg[2]	Cu[3]	Mo[3]	Pb[3]	Zn[3]	As[3]	Sb[3]	Au[3]	Ag[3]
2394	NW SE Section 30, 28 N, 18 W	Exposed in old mill foundation cuts.	Sheared chlorite-siderite altered gneiss? and gneissic granite exposed.						11			1200	.265	24	<5	47	99	3	<2	.05	1.4
2395	"	NW corner and at upper edge of deeper pit.	Small pod of hematitic-limonitic quartz breccia.						26			1100	1.13	71	15	1130	170	44	4	20.85	6.6
2396	"	NW corner of deeper pit.	Limonitic clays, fault gouge? and sheared gneiss, clays are heavy.						28			2200	.440	112	6	1290	465	25	5	.78	1.4
2397	NW NE Section 25, 28 N, 19 W	East shaft of Fry Mine.	Grab from dump at shaft.						49			2600	.625	570	13	5870	467	51	9	7.50	3.5
2398	"	South of east shaft of Fry Mine.	Chip sample, ~5' of limonitic sheared fanglomerate?						43			3100	.240	9	5	72	56	3	<2	.08	0.7
2399	NE NE Section 25, 28 N, 19 W	Prospect 300' north of road.	Sheared fanglomerate & fault gouge.						6			3300	.200	14	<5	64	94	<2	<2	.03	1.0
2430	Center of W½ Sec 12, 27 N, 19 W	Ridge crest.	Hematitic sandstone with chalcedony.						3			230	.26	17	<5	30	26	9	<2	.03	1.0
2431	SW NE Section 12, 27 N, 19 W	Ridge crest.	Hematitic sandstone with chalcedony veinlets.						9			225	.38	168	33	1050	800	3	<2	1.02	1.6
2432	NE SW Section 1, 27 N, 19 W	Bluff adjacent to wash.	Limonitic granite pebble conglomerate.						1			720	.12	9	<5	47	47	14	<2	.06	0.3
2433	NE SW Section 1, 27 N, 19 W	200' north of #2432.	Silicified granite pebble conglomerate.						2			310	.10	6	<5	22	25	7	<2	.05	0.6
2434	SE SE Section 1, 27 N, 19 W	Hillside near wash.	Non-hematitic conglomerate.						5			1100	.20	14	<5	32	33	29	<2	.03	1.0
2435	NW SE Section 1, 27 N, 19 W	Slope north of road.	Hot spring sinter (?)						1			3700	.09	14	6	45	12	3	<2	.03	4.6
2436	NE SE Section 1, 27 N, 19 W	Ridge north of road.	Poorly cemented sandstone.						3			1300	.19	11	<5	32	39	13	<2	.03	1.2
2437	SW SE Section 32, 28 N, 18 W	Wash below powerline.	Limonitic fractures in granite and aplite.																		
2438	NW SE Section 26, 28 N, 19 W	Prospect pit.	Quartz specularite veinlets in granite.						1			28,700	.08	6	<5	57	16	<2	<2	.05	1.0
2440	NE NE Section 31, 28 N, 18 W	Lower Cyclopic wash	Quartz specularite-chlorite altered granite.						5			780	1.46	719	6	364	288	19	<2	.15	3.4
2441	SW SW Section 29, 28 N, 18 W	Prospect on ridge.	Hematite-chlorite quartz altered granite.						10			660	.21	22	<5	47	71	<2	<2	.05	1.0
2442	NE NE Section 32, 28 N, 18 W	On ridge southeast of # 2441.	Altered alaskite with specularite-clay-chlorite.						14			335	.44	62	<5	50	57	<2	<2	.05	0.5
2443	Center NW¼ Section 31 28 N, 18 W	On old road.	Altered andesite float.						1			335	.80	54	<5	23	84	<2	<2	.06	2.0
2444	NW NW Section 31, 28 N, 18 W	Prospect pit.	Siderite, specularite, quartz altered granite breccia.						15			940	.41	6	<5	55	12	<2	<2	4.35	0.6
2445	SE NW Section 31, 28 N, 18 W	Shaft dump.	Hematized siliceous granite.						24			1100	1.60	66	7	295	7	10	7	3.09	3.3
2446	NW NE Section 31, 28 N, 18 W	Hillside.	Chlorite, siderite, hematite altered granite with minor quartz.						64			1200	.20	<5	<5	41	389	<2	<2	.09	1.2
2447	SW SE Section 30, 28 N, 18 W	North side of wash.	Biotite K-spar porphyry.						2			980	.23	11	<5	34	75	<2	<2	.03	0.9
2448	"	Ridge south of Cyclopic.	Hematite-chlorite granite.						3			370	1.50	<5	<5	12	51	<2	<2	.05	0.9
2449	"	Hillside above wash.	Quartz breccia.						3			335	.07	19	7	252	74	<2	<2	.38	11.3

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	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
2501	NE NE Section 25, 28 N, 19 W	Prospect No. 1 north of road.	Sheared limonitic clay and gouge in flt.						45			2500	1.21	509	34	4100	970	21	2	8.85	4.7
2502	"	Prospect No. 2 ~1,000' north of road	Chip sample; fanglomerate with gneiss in hanging wall of fault.						5			840	.215	24	<5	44	60	6	3	.06	0.7
2503	"	Prospect No. 2, on dump.	Chip sample; ~6' below fault, hematitic chips-quartz fragments & hematitic gneiss.						17			1300	.185	74	<5	553	383	2	<2	.35	1.1
2504	"	Prospect No. 3	Hematitic and limonitic sheared gneiss ~20' below fault.						12			1600	.120	43	<5	29	81	<2	<2	.06	1.1
2505	"	Prospect No. 2, at dump ~1,000' n.of road.	Recrystallized quartz breccia, grey sheen suggests some cerussite in rx.						53			420	1.33	134	213	(1,200)	205	11	5	29.55	19.0
2539	Center Section 25, 28 N, 20 W	Shallow shaft.	Limonitic & jarositic fault breccia, fault is under quartz gneiss rubble.						9			2400	1.25	77	8	162	28	6	21	10.50	1.0
2541	NE NW Section 31, 28 N, 18 W	Zone above old prospect.	Chip sample; ~5' limonitic and argillized sheared fanglomerate.						54			1400	.225	32	<5	263	780	<2	<2	.05	1.2
2542	"	~10' above adit level below top of fault zone.	Chip sample of sheared argillic and limonitic Precambrian fragments & clays.						123			1500	.175	<5	<5	37	568	<2	<2	<.02	1.0
2543	"	Prospect dump.	Sheared limonitic and argillized Precambrian and fanglomerate below fault.						118			1200	.265	14	<5	73	506	<2	2	.03	1.3
2544	NW NW Section 31, 28 N, 18 W	In old road west of shaft & buried ladder.	Limonitic and argillized sheared material and fault gouge.						54			3300	.265	14	6	32	44	<2	4	<.02	1.1
2545	"	From (old) adit; dump sample.	Pyritic altered red zone with some capping indicating pyrite, chalcopyrite and chalcocite in rock with hematite-limonite.						19			1900	.560	214	10	150	111	7	<2	2.40	2.9
2546	Center SE¼ Section 30 28 N, 18 W	Coarse Cyclopic tails	Sand size fraction from Cyclopic tails.						16			2000	1.07	281	18	4840	830	20	5	1.44	1.9
2547	NE SW Section 25, 28 N, 19 W	Dump sample from small prospect on fault zone	Beneath tuff and lithic tuff. Poorly exposed, minor siderite & argillic alt.						67			1700	.520	31	6	97	99	<2	5	.17	0.8
2548	NE SE Section 25, 28 N, 19 W		Fine-grained, quartz-rich Precambrian granite with minor disseminated pyrite alteration to hematite with siderite and quartz veinlets.						30			5200	.160	23	5	127	69	<2	3	.03	0.8
2549	NE NW Section 25, 28 N, 19 W	On hill at head of gulch SW of Fry Mine.	Chip sample; ~6' sheared argillized Precambrian at upper contact with fanglomerate; hematite and limonite.						30			2900	.175	9	7	23	55	<2	3	.08	0.7
2551	NW NW Section 30, 28 N, 18 W	Below lower fault zone at small prospect.	Chip sample; ~6' hematitic and limonitic gouge with quartz breccia.						33			3600	.400	163	10	427	368	33	<2	.03	1.2
2552	"	In wash trending ENE through NW¼ of section.	Sample of siderite-chlorite altered dike in lower plate.						<1			890	.535	41	<5	52	200	<2	<2	<.02	1.6
2557	SE NW Section 31, 28 N, 18 W	Prospect pit in wash.	Altered fine-grained andesite or amphibolite-siderite & chlorite from lower part of fault.						<1			1200	.40	18	<5	27	47	<2	<2	.03	1.6
2558	NW NW Section 31, 28 N, 18 W	Copper prospect.	Pervasively silicified granite gneiss with pyrite and copper.						<1			2200	1.60	66	<5	215	8	<2	2	1.04	15.5
2559	"	Copper prospect dump.	Sheared granite with abundant hematite, limonite and pyrite.						13			1800	.95	116	19	80	<5	<2	7	9.60	3.5
2560	NW NE Section 25, 28 N, 19 W	Prospect west of Fry headframe.	FeMnOx stained zone with altered and weathered tuff in fanglomerate.						4			9800	.27	<5	<5	17	33	<2	14	.08	1.5

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CONSULTING GEOLOGISTS
TUCSON, ARIZONA

PROSPECT GOLD BASIN DISTRICT

COUNTY MOHAVE STATE ARIZONA

SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS							BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
2561	SE NW Section 24, 28 N, 19 W	East wall mouth of short adit.	Hematitic, clay-altered sheared gr gneiss.						30			1500	.10	8	<5	24	79	<2	5	.05	1.6
2562	"	Dump of short adit.	Hematitic, sheared granite gneiss and dirt.						9			1900	.12	64	<5	39	120	<2	<2	.06	1.5
2563	NE NW Section 24, 28 N, 19 W	Gulch bottom, north of fanglomerate.	Sheared alaskite, fanglomerate exhibits chlorite-siderite alteration and white quartz veinlets.						<1			975	.11	8	<5	9	27	<2	<2	.03	0.7
2564	SW SE Section 12, 27 N, 19 W.	SE of windmill.	Bedded conglomerate-granite cobbles in sandy matirx with orange siderite.						<1			775	.26	17	<5	17	52	<2	<2	<.02	1.0
2565	Center Section 12, 27 N, 19 W	Outcrop in gulch.	Red and orange-red altered conglomerate bed beneath andesite or within andesite.						<1			540	.12	18	<5	18	40	<2	<2	<.02	1.3
2566	"	In gulch.	Weakly altered andesite with clay and hematite, biotite with scattered chalcedony and calcite veinlets.						5			610	.10	17	<5	13	49	<2	<2	.17	1.1
2567	Center SE¼ Section 1 27 N, 19 W	On south bank of wash south of road.	Hematitic stained crushed zone with angular granite and quartz fragments.						<1			270	.14	18	<5	22	9	<2	<2	.03	1.5
2568	SW NW Section 14, 28 N, 19 W	Edge of crush & above Senator qtz bx	Hematitic and limonitic dirt with some fragments of hematite granitic gneiss.						1			890	.31	38	<5	30	74	6	<2	.06	1.9
2570	SW NW Section 22, 28 N, 19 W	Lower plate ?	Shattered hematitic-stained, red, coarse-grained granite-earthy hematite on fracture; chlorite and clay.						3			3000	.31	<5	<5	38	14	6	<2	.05	0.9
2572	NW NW Section 22, 28 N, 19 W	South of road.	Red clay matrix & pebbles in sheared fanglomerate, maybe near or in basal flt.						7			1300	.22	20	<5	28	55	3	<2	.03	1.4
2573	Center SW¼ Section 14, 28 N, 19 W	Shaft dump SW of Senator Mine.	Rubble with limonite-stained & siderite-chlorite altered coarse granite with some quartz and pyrite.						20			1300	.25	21	5	23	46	6	3	.66	1.0
2574	NW SW Section 14, 28 N, 19 W	Shallow pit, SW of Senator Mine.	Hematitic and sideritic argillized crush between fanglomerate above and leuco-granite below.						13			1000	.15	37	<5	57	87	21	<2	.06	1.4
2575	Center SW¼ Sec 14, 28 N, 19 W	Shallow cut.	Quartz vein material; quartz, coarse pyrite, minor galena, chalcopyrite, and possible tetrahedrite.						8			475	1.75	109	20	1090	12	38	30	31.5	10.9
2576	"	Cut 30' above shaft.	Fanglomerate, chlorite-siderite alteration, limonite stain and some shearing, argillic alteration.						9			1400	.21	39	5	91	56	5	<2	.24	1.1
2577	"	Short adit, 200' east of shaft.	Sheared argillized and limonite-stained faulted fanglomerate.						29			2100	.23	24	6	26	17	5	<2	9.60	1.4
2578	NE NE Section 15, 28 N, 19 W	On ridge northwest of Senator Mine.	Sheared hematitic amphibolite at base of fanglomerate.						3			560	.95	84	5	49	117	<2	<2	.06	2.0
2579	Center NW¼ Sec 14, 28 N, 19 W	Small cut SE of Senator Mine.	Hematitic gouge at base of fanglomerate.						23			900	1.85	18	5	25	60	8	<2	.12	2.0
2581	"	Prospect east of Senator Mine.	Hematitic & argillized gouge and quartz breccia.						15			570	1.93	15	<5	20	28	3	<2	.12	1.5

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2570 – 2581 Hg by "sniffer"

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TUCSON, ARIZONA

PROSPECT GOLD BASIN DISTRICT

COUNTY MOHAVE STATE ARIZONA

SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS						BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh	W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
2582	Center NW¼ Section 14 28 N, 19 W	Prospect east of Senator Mine.	Quartz breccia associated with fault gouge, cemented by quartz-$CO_3^=$.				3			205	1.90	18	6	9	20	12	<2	12.15	2.7
2583	"	East side of Senator.	Quartz breccia from sheared quartz vein with dark brown goethite.				9			245	.27	250	<5	14	20	7	<2	.41	0.9
2584	SW SW Section 13, 28 N, 19 W	Exposure in gulch.	Crushed alaskite with siderite and chlorite alteration of lower plate.				3			585	.12	43	<5	22	10	<2	<2	.06	1.1
2585	"	South of # 2584	Fine-grained diorite ? cut by thin siderite and quartz veinlets.				4			670	.10	23	<5	25	61	<2	<2	.05	2.2
2586	SW SW Section 13, 28 N, 19 W	1,000' south of #2584	Sheared, argillized fine-grained diorite of upper crushed zone.				11			930	.19	16	5	15	72	<2	<2	.06	1.7
2587	SW SW Section 24, 28 N, 19 W	Gulch, northwest of Fry Mine.	~40' sheared fanglomerate ? and granite, dip south to north.				4			3500	.35	18	5	16	53	<2	<2	.02	1.1
2588	Center SW¼ Sec 24, 28 N, 19 W	3' at adit mouth.	Hematitic and sideritic alteration, amphibolite gneiss? quartz bx on dump.				8			2900	.22	249	7	72	80	5	<2	.05	1.9
2589	"	Top of dump from 2588.	Sorted quartz breccia, fair hematite stain, druzy quartz in vugs.				15			255	.14	58	9	122	7	2	<2	6.45	2.6
2591	NW SW Section 15, 28 N, 19 W	In gulch, west of windmill.	Diorite rubble below fault, clay seams and hematite stain.				3			600	.25	8	<5	12	33	2	<2	.12	1.3
2592	NE SE Section 15, 28 N, 19 W	Toe of road cut.	Sheared and bleached leucogranite, siderite-chlorite and sericite alteration.				15			745	1.80	10	<5	177	39	4	<2	.05	0.5
2593	NW NW Section 14, 28 N, 19 W	Dozer cut on ridge.	Sorted quartz breccia, cut by siderite and hematite seams.				4			290	.28	36	5	5	<5	5	<2	.05	0.3
2594	"	Cut on top of west ridge.	Milled quartz breccia, recemented and stained with jarosite.				5			350	.16	54	<5	23	14	4	<2	.05	0.7
2595	SE SW Section 24, 28 N, 19 W		Fanglomerate or amphibolite gneiss, argillized, some red hematite streaks.				5			870	.14	26	<5	76	49	<2	<2	.03	0.7
2596	"	Prospect pit.	Sheared amphibolite gneiss with siderite, dark hematite, and manganese stain.				5			1700	.17	<5	<5	17	79	2	<2	.03	0.6
2597	NW SE Section 25, 28 N, 19 W	Prospect pit.	Shattered hematized amphibolite ? and amphibolite gneiss with quartz or chalcedony veinlets.				24			1200	1.76	20	<5	29	78	3	<2	.26	0.7
2598	"	Shallow shaft.	Milled granite on dump carries abundant purple fluorite.				6			1.98%	.75	115	7	2330	52	12	11	.51	0.7
2599	"	Shallow shaft.	Quartz breccia with abundant hematite-limonite.				5			1300	.43	14	26	639	<5	6	<2	1.94	1.1

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SAMPLE LOG

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	LEGAL *	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
3002	SW NE Sec 30	Exposure in cut 100 ft. from road.	Lower Plate; sheared coarse granite.						26				.23	32	<5	37	57	2	<2	.02	.9
3003	"	Gulch bottom.	Lower Plate; sheared lamprophyre.						77				.23	6	<5	19	113	2	<2	<.02	1.3
3004	"	"	Lower Plate; sheared lamprophyre and granite.						3				.17	51	<5	19	85	2	<2	<.02	1.8
3005	"	"	"						15				.17	10	<5	26	51	3	<2	.03	.9
3006	SW NW Sec 29	Major gulch.	Lower Plate; medium-grained biotite granite.						8				.11	13	<5	15	70	<2	<2	.03	1.0
3007	NW SW Sec 29	"	Lower Plate; siderite-hematite altered lamprophyre.						4				.11	51	<5	9	17	<2	<2	.03	.6
3008	SE NE Sec 30	South of gulch.	"						1				.24	18	<5	32	194	2	<2	<.02	1.4
3009	"	Hill.	Lower Plate; sheared coarse leucogranite.						131				.11	<5	<5	16	88	<2	<2	.03	1.1
3010	SE SE Sec 30	North of Cyclopic road.	Lower Plate; layered gneiss.						44				.12	<5	<5	17	72	<2	2	<.02	1.9
3012	"	400 ft. north of Cyclopic road.	Lower Plate; sheared coarse-grained leucogranite.						25				.11	6	<5	9	54	<2	<2	.06	1.1
3013	"	South of Cyclopic road.	Lower Plate; sheared gneissic granite.						27				.12	7	<5	72	79	<2	<2	.04	1.0
3014	"	"	"						12				.90	12	<5	189	96	2	<2	.05	1.1
3015	"	Gulch bottom, east of road.	Lower Plate; sheared layered gneiss.						9				.14	10	6	33	37	<2	<2	<.02	.9
3016	SW SW Sec 29	Shaft dump.	Lower Plate; sheared gneiss and lamprophyre.						2				.12	294	<5	15	99	<2	<2	<.02	1.3
3017	"	"	"						2				.18	37	<5	25	116	<2	<2	<.02	1.9
3018	"	Gulch bottom, east of road.	Breccia in lower part of crush.						3				.06	7	<5	46	151	<2	<2	<.02	1.3
3019	SE NW Sec 30	Flat between roads.	Lower Plate; shattered, coarse leucogranite.						13				.42	36	<5	40	75	<2	<2	.11	1.7
3021	SE SE Sec 30	NE Cor GB 39.	Lower Plate; layered gneiss and lamprophyre.						1				.18	9	8	21	73	<2	<2	.06	1.7
3021 A	"	NE Cor GB 40.	"						7				.09	6	<5	171	91	<2	<2	.06	1.4
3021 B	SW SE Sec 30	NE Cor GB 41.	Surface debris near crushed zone.						8				.09	85	<5	28	60	<2	<2	.03	1.4
3022	SE SW Sec 30	NE Cor GB 42.	"						3				.06	27	<5	20	60	<2	<2	<.02	1.4
3022 A	"	100 ft. east of NE Cor GB 42.	"						1				.09	5	<5	15	63	<2	<2	<.02	1.3
3022 B	"	100 ft. southwest of NE Cor GB 43.	"						13				.59	17	<5	107	355	<2	<2	.11	2.3
3023	"	NE Cor GB 43.	"						10				.06	11	6	40	61	<2	<2	<.02	1.3
3024	SW SW Sec 30	NE Cor GB 44.	Middle Plate; shattered fine-grained granite.						1				.08	11	5	28	60	<2	<2	<.02	1.3

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*Township 28 North, Range 18 West

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SAMPLE LOG

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	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
3025	SW SW 30, 28 N., 18 W	NE Cor GB 45.	Middle Plate; fine-grained granite.						5				.08	11	<5	26	50	<2	<2	<.02	1.3
3026	"	NE Cor GB 46.	Middle Plate; fine-grained granite.						6				.08	12	5	18	46	2	<2	<.02	1.3
3027	SE SE 25, 28N., 19W.	SE Cor GB 50.	"						10				2.18	25	6	762	60	2	<2	<.02	7.0
3028	"	SE Cor GB 51.	"						6				.16	13	<5	43	58	<2	<2	<.02	1.4
3029	"	SE Cor GB 52.	"						4				.12	10	<5	36	48	<2	<2	<.02	1.5
3030 A	SE SE 30, 28N., 18W.	NE Cor GB 89.	Lower Plate; sheared quartz-feldspar gneiss.						5				.12	28	<5	20	74	2	<2	<.02	1.4
3031	SW SE 25, 28N., 19W.	SE Cor GB 53.	Middle Plate; coarse porphyritic biotite granite.						7				.19	23	<5	28	47	<2	<2	.02	.9
3032	"	SE Cor GB 54.	Middle Plate; coarse quartz feldspar gneiss.						10				.14	18	<5	20	55	<2	<2	.03	1.0
3033	SE SW 25, 28N., 19W.	SW Cor GB 54.	Upper Plate (?); fanglomerate debris.						18				.08	13	5	21	45	2	<2	<.02	1.1
3034	SE NW 30, 28N., 18W.	NE Cor GB 47.	Debris near crushed zone.						56				.27	121	7	1990	524	18	2	.54	2.3
3035	SW NW 30, 28N., 18W.	NE Cor GB 48.	Middle Plate; fine-grained granite.						9				.06	10	<5	25	47	<2	<2	.02	1.1
3035 A	"	Road cut.	Middle Plate; sheared fine-grained granite.						13				.13	13	<5	103	51	4	<2	.28	2.3
3036	"	NE Cor GB 49.	Middle Plate; fine-grained granite.						10				.10	11	6	21	58	<2	<2	<.02	1.3
3037	SE NE 25, 28N., 19W.	NE Cor GB 50.	"						11				.10	13	<5	24	60	<2	<2	.03	1.2
3038	"	NE Cor GB 51.	"						10				.10	12	<5	19	53	<2	<2	<.02	1.4
3039	"	NE Cor GB 52.	"						10				.08	12	<5	24	56	<2	<2	.02	1.3
3041	SW NE 25, 28N., 19W.	NE Cor GB 53.	Middle Plate; coarse porphyry biotite granite.						13				.10	12	<5	21	57	<2	<2	.07	1.4
3042	"	NE Cor GB 54.	Middle Plate; coarse quartz-feldspar gneiss.						22				.19	6	5	27	22	<2	<2	.02	1.4
3043	SE NW 25, 28N., 19W.	NW Cor GB 54.	"						20				.15	7	5	11	38	<2	<2	<.02	1.4
3044	"	SE Cor GB 58.	Upper Plate; fanglomerate.						5				.13	12	<5	29	51	<2	<2	<.02	1.5
3045	SW NW 25, 28N., 19W.	SW Cor GB 58.	"						2				.10	9	<5	25	41	<2	<2	.02	1.3
3046	NW NE 25, 28N., 19W.	NE Cor GB 55.	Middle Plate; coarse porphyry biotite granite.						4				.10	9	<5	31	59	<2	<2	.03	1.9
3047	"	NE Cor GB 56.	Debris near crushed zone.						5				.22	26	<5	18	51	<2	<2	.05	1.6
3048	NE NW 25, 28N., 19W.	SE Cor GB 59.	"						11				.56	11	<5	20	41	3	<2	.12	1.5
3048 A	"		Upper part of crushed zone.						15				.19	6	6	10	39	<2	2	.04	1.5

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3049	NE NW 25, 28N., 19W.	NE Cor GB 57.	Middle Plate; debris near crushed zone.						5				.29	16	<5	33	56	5	<2	.02	1.5
3051	NE SE 25, 28N., 19W.		Middle Plate; sheared fine-grained granite.						20				.30	11	6	110	47	<2	<2	.03	1.3
3052	SW SE 25, 28N., 19W.		Middle Plate; sheared coarse quartz-feldspar gneiss.						35				.36	8	5	18	38	<2	<2	.02	1.0
3053	NW SE 25, 28N., 19W.		"						28				.07	6	<5	18	25	<2	<2	<.02	.9
3054	NW SW 30, 28N., 18W.	Prospect pit.	Middle Plate; sheared fine-grained granite.						3				.09	11	<5	22	56	<2	<2	<.02	1.0
3055	"	North side of hill.	Middle Plate; crushed and sheared argillic fine-grained granite.						3				.07	13	5	23	48	<2	<2	<.02	1.4
3056	C-25, 28N., 19W.	North of road.	Middle Plate; coarse quartz-feldspar gneiss.						9				.05	6	<5	16	34	<2	<2	<.02	1.0
3057	"	"	"						35				.07	8	<5	19	41	<2	2	.07	1.3
3058	NW NW 25, 28N., 19W.	NE Cor GB 58.	Upper Plate; fanglomerate.						5				.09	15	<5	27	45	3	2	<.02	1.2
3059	"	SW Cor GB 59.	"						1				.07	9	<5	20	34	<2	<2	<.02	1.3
3061	"	SW Cor GB 61.	"						9				.09	19	5	19	41	2	<2	<.02	1.3
3062	"	SW Cor GB 60.	"						2				.09	30	<5	23	62	<2	<2	<.02	1.5
3063	"	SE Cor GB 61.	"						2				.09	26	<5	28	55	<2	<2	<.02	1.4
3064	NE NW 25, 28N., 19W.	SE Cor GB 62.	Middle Plate; sheared gneiss.						2				.09	32	<5	27	43	2	<2	<.02	1.6
3065	"	SE Cor GB 63.	"						3				.09	12	<5	32	44	2	<2	<.02	1.2
3066	NW NE 25, 28N., 19W.	SE Cor GB 64.	"						2				.11	12	5	36	46	2	2	<.02	1.3
3067	"	SE Cor GB 65.	"						4				.09	15	<5	32	70	<2	<2	<.02	1.4
3068	NE NE 25, 28N., 19W.	SE Cor GB 66.	Middle Plate; sheared gneiss.						1				.07	16	<5	30	59	<2	<2	<.02	1.8
3069	"	SE Cor GB 67.	Middle Plate; gneissic porphyry biotite granite.						3				.09	12	<5	31	63	<2	<2	<.02	1.9
3071	"	SE Cor GB 68.	Lower Plate; sheared gneiss.						1				.19	17	<5	29	53	7	<2	<.02	1.7
3072	NE Cor 31, 28N., 18W.	SE Cor GB 89.	Lower Plate; sheared gneiss.						7				2.28	33	9	294	144	5	2	.03	10.1
3073	NE NE 31, 28N., 18W.	SE Cor GB 39.	Lower Plate; sheared gneiss.						9				.61	15	<5	35	91	4	<2	<.02	1.2
3074	"	SE Cor GB 40.	Middle Plate; coarse biotite granite.						2				.28	18	5	29	70	4	<2	<.02	1.0
3075	NW NE 31, 28N., 18W.	SE Cor GB 41.	Upper Plate; fanglomerate.						3				.24	24	<5	27	55	4	<2	<.02	.9
3076	"	SE Cor GB 42.	"						13				.18	19	<5	43	107	3	<2	<.02	1.1

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CORN & AHERN
CONSULTING GEOLOGISTS
TUCSON, ARIZONA

PROSPECT GOLD BASIN

COUNTY MOHAVE STATE ARIZONA

SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS					BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh	W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
3077	NE NW 31, 28N., 18W.	SE Cor GB 43.	Upper Plate; fanglomerate.				3				.18	10	7	24	35	2	<2	.04	.9
3078	"	SE Cor GB 44.	Middle Plate; fanglomerate & quartz-feldspar gneiss.				5				.18	15	5	35	58	3	<2	<.02	.8
3079	NW NW 31, 28N., 18W.	SE Cor GB 45.	Fanglomerate debris on Middle Plate rocks.				4				.28	12	5	30	42	7	<2	<.02	1.0
3081	"	SE Cor GB 46.	Middle Plate; fine-grained granite.				8				.19	12	5	27	41	2	<2	<.02	1.1
3082	"	SW Cor GB 46.	Upper Plate; fanglomerate.				2				.11	10	5	30	41	<2	<2	<.02	.9
3083	NE NE 36, 28N., 19W.	NE Cor GB 1.	Upper Plate; fanglomerate.				3				.11	13	5	38	42	3	<2	<.02	.9
3084	"	NE Cor GB 2.	"				2				.18	24	<5	29	64	3	<2	<.02	1.1
3085	"	NE Cor GB 3.	"				3				.16	17	<5	30	48	3	<2	<.02	1.0
3086	NW NE 36, 28N., 19W.	NE Cor GB 4.	"				8				.16	15	<5	31	46	3	<2	<.02	1.1
3087	"	NE Cor GB 5.	"				4				.16	17	<5	28	46	4	<2	<.02	1.0
3088	"	NE Cor GB 6.	"				9				.18	17	<5	28	48	4	<2	<.02	1.0
3089	NE NW 36, 28N., 19W.	NE Cor GB 7	"				1				.16	15	<5	33	31	2	<2	<.02	1.4
3091	NW NW 36, 28N., 19W.	NE Cor GB 8.	Middle Plate; crushed granite.				4				.11	7	6	42	21	6	<2	<.02	1.1
3092	SE NW 36, 28N., 19W.	SW Cor GB 6.	Upper Plate; fanglomerate.				7				.11	12	5	26	43	8	<2	<.02	.9
3093	SW NW 36, 28N., 19W.	SW Cor GB 7.	Middle Plate (?); crushed granite.				<1				.11	14	<5	17	44	5	<2	<.02	1.1
3094	"	SW Cor GB 8.	"				<1				.09	8	7	32	35	10	<2	<.02	1.1
3095	"	SW Cor GB 9.	"				3				.09	7	8	28	32	12	<2	<.02	1.0
3096	SE NW 36, 28N., 19W.	SW Cor GB 5.	Upper Plate; fanglomerate.				5				.11	10	5	33	37	3	<2	<.02	1.2
3097	SW NE 36, 28N., 19W.	SW Cor GB 4.	"				4				.14	30	<5	22	53	3	<2	<.02	1.4
3098	"	SW Cor GB 3.	"																
3099	SE NE 36, 28N., 19W.	SW Cor GB 2.	"				3				.11	15	5	24	42	2	<2	<.02	1.4
3101	"	SW Cor GB 1	"				12				.14	16	<5	7	11	<2	<2	.07	.7
3102	NW Cor 24, 28N., 19W.	NW Cor GB 88.	Middle Plate; chlorite-CO_3 rock.				2				.11	8	<5	22	87	<2	<2	.06	1.9
3103	NE SE 24, 28N., 19W.	NE Cor GB 69.	Lower Plate; alaskitic altered leucogranite.				3				<.05	12	<5	22	52	4	<2	<.02	1.0
3104	"	NE Cor GB 70.	Middle Plate; debris in vicinity of crush zone.				2				.17	7	<5	12	41	<2	<2	.03	.8

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PROSPECT GOLD BASIN

COUNTY MOHAVE STATE ARIZONA

SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS							BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol. Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [1]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
3111	SW NW 24, 28N., 19W.	SW Cor GB 78.	Upper Plate; fanglomerate.						4				.17	16	<5	23	54	3	<2	<.02	1.0
3112	"	NW Cor GB 78.	"						4				.21	23	<5	19	61	2	<2	<.02	1.0
3114	"	NW Cor GB 79.	"						2				.16	27	<5	14	73	2	<2	<.02	1.3
3115	"	NW Cor GB 80.	"						7				.14	11	<5	14	44	<2	<2	<.02	.6
3116	NE NW 24, 28N., 19W.	NW Cor GB 81.	Middle Plate; layered gneiss.						3				.12	15	<5	43	71	2	<2	.04	.6
3121	"	NE Cor GB 85.	Lower Plate; sheared leucogranite.						5				.14	20	<5	42	40	<2	<2	.03	.5
3122	"	NE Cor GB 86.	"						2				.48	13	<5	15	27	<2	<2	.03	1.0
3126	NW NW 24, 28N., 19W.	NW Cor GB 86.	Middle Plate; sheared lamprophyre and fanglomerate.						2				.16	17	<5	15	70	<2	<2	<.02	.4
3126 A	"	100 ft. south of NW Cor GB 86.	"						3				.23	7	<5	11	51	<2	<2	<.02	.9
3127	SE NW 25, 28N., 19W.	Saddle on ridge 700' southwest of Fry.	Middle Plate; sheared coarse quartz-feldspar gneiss.						3				.09	10	<5	26	45	2	<2	<.02	1.3
3127 A	"	"	Middle Plate; sheared coarse quartz-feldspar gneiss with siderite & quartz seams.						44				.38	14	6	102	36	<2	<2	.03	1.3
3128	"	South of Fry.	Middle Plate; sheared coarse quartz-feldspar below quartz breccia.						26				.25	5	5	12	43	<2	<2	.05	1.3
3129	"	"	Middle Plate; brown quartz breccia - siderite but no limonite or hematite stain.						4				.13	<5	<5	7	16	<2	<2	<.02	2.0
3131	NW NW 25, 28N., 19W.	South end GB 60 & 61.	Upper Plate; shattered coarse porphyritic biotite granite in fanglomerate?						4				.18	6	<5	13	48	6	<2	<.02	2.7
3132	NW NE 25, 28N., 19W.	Fry Mine.	Middle Plate; 8-inch limonite stained shear zone and gouge at raise.						67				.80	317	17	9460	2000	13	8	1.34	41.3
3133	NE NE 31, 28N., 18W.	West of road.	Lower Plate; sheared coarse quartz-feldspar gneiss.						15				.23	7	<5	120	220	<2	2	<.02	17.6
3134	SE SW 25, 28N., 19W.	100 ft. north of NW Cor GB 6.	Middle Plate; two feet of crushed material base of fanglomerate.						16				.25	14	7	30	54	6	2	.21	6.8
3135	NE NW 36, 28N., 19W.	Road-cut power line road.	Middle Plate; hematite stained crushed zone at lower edge of fanglomerate.						14				.23	10	6	29	39	3	2	.07	8.8
3136	SE NE 36, 28N., 19W.	"	Middle Plate; hematite-siderite stained shear zone.						16				.32	20	5	73	47	<2	<2	<.02	4.9
3137	"	"	"						10				.45	57	6	114	55	6	<2	<.02	3.9
3138	"	"	Middle Plate; sheared fine-grained granite.						3				.16	9	7	22	37	<2	<2	<.02	3.1
3140	NE NE 36, 28N., 19W.	SE Cor GB 1.	Upper Plate; fanglomerate.						4				.13	22	<5	26	65	3	<2	.02	1.7
3141	SW NW 31, 28N., 18W.	SW Cor GB 32.	Middle Plate - Upper Plate (?); Crush and fanglomerate debris.						5				.11	20	<5	32	49	3	<2	.44	1.6
3142	"	SE Cor GB 32.	Upper Plate; fanglomerate.						4				.11	24	<5	28	59	2	<2	.02	1.0
3143	"	SE Cor GB 33.	"						3				.09	14	5	38	50	3	<2	<.02	1.1

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SAMPLE LOG

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS							BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
3144	SE NW 31, 28N., 18W.	SE Cor GB 34.	Upper Plate; fanglomerate.						4				.09	12	5	29	43	3	< 2	<.02	.9
3145	"	SE Cor GB 35.	"						< 1				<.05	19	<5	27	46	< 2	< 2	<.02	1.0
3146	SW NE 31, 28N., 18W.	SE Cor GB 36.	"						1				.09	21	5	37	65	2	< 2	<.02	1.3
3147	"	SE Cor GB 37.	Fanglomerate debris.						6				.09	14	<5	37	78	2	< 2	<.02	1.6
3148	SE NE 31, 28N., 18W.	SE Cor GB 38.	Debris in vicinity of crush.						1				.20	23	<5	55	72	3	< 2	<.02	1.5
3149	NW NW 36, 28N., 19W.	NW Cor GB 8.	Upper Plate; andesite.						1				.09	23	<5	31	41	3	< 2	<.02	1.8
3150	"	NW Cor GB 9.	"						< 1				.05	94	<5	26	86	7	< 2	<.02	1.8
3152	SE SE 24, 28N., 19W.	NE Cor GB 68.	Lower Plate; leucogranite.						< 1				.09	149	<5	28	93	2	< 2	<.02	2.0
3153	"	SW Cor GB 69.	Fanglomerate debris near crush.						< 1				.05	28	<5	33	69	3	< 2	<.02	1.8
3154	"	SW Cor GB 70.	Upper Plate; fanglomerate.						< 1				.05	23	<5	33	57	2	< 2	<.02	2.1
3155	SW SE 24, 28N., 19W.	SW Cor GB 71.	Upper Plate; fanglomerate.						< 1				.05	13	<5	25	53	2	< 2	<.02	1.7
3156	"	SW Cor GB 72.	Middle Plate; poorly exposed sheared layered gneiss.						< 1				.07	29	6	33	38	4	< 2	<.02	2.4
3157	SE SW 24, 28N., 19W.	SW Cor GB 73.	Upper Plate; fanglomerate.						< 1				.05	25	<5	29	57	3	< 2	<.02	2.3
3158	"	SW Cor GB 74.	"						1				.09	21	<5	31	58	3	< 2	<.02	1.9
3159	SW SW 24, 28N., 19W.	SW Cor GB 75.	"						< 1				.05	20	<5	33	58	2	< 2	<.02	2.3
3160	"	SW Cor GB 76.	"						< 1				.07	16	<5	37	62	4	< 2	<.02	2.2

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	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W [3]	Acid Sol Ba [2]	Total Ba % [2]	F [2]	Hg [2]	Cu [3]	Mo [3]	Pb [3]	Zn [3]	As [3]	Sb [3]	Au [3]	Ag [3]
3168	SW NW 30, 28N., 18W.	Northwest of Cyclopic Mine.	Altered fine-grained granite (Middle Plate) near fluorite prospect.						37				.09	42	9	437	232	3	< 2	.02	2.4
3169	"	Prospect pit, northwest of Cyclopic Mine	Middle Plate. Brecciated quartz with fluorite on dump.						32				5.86	36	301	2220	362	5	2	.19	5.6
3170	"	"	4-6" vein of fluorite-cerusite-no quartz with hematitic limonite. Middle Plate.						116				238	283	565	2%	590	ND	5	3.53	214
3171	SW NE 25, 28N., 19W.	1500' south of Fry Mine.	Middle Plate. Altered coarse-grained leucocratic granite.						41				.84	5	9	636	26	<2	<2	.10	2.0
3172	SE NW 25, 28N., 19W.	Pit on ridge.	Middle Plate. Altered gneiss.						48				.31	<5	5	76	33	2	4	.03	1.3
3173	SW SW 30, 28N., 18W.	Validation pit.	Middle Plate. Shattered fine-grained granite.						5				.27	<5	5	69	22	2	3	<.02	1.6
3174	NE SW 30, 28N., 18W.	Near Cyclopic.	Middle Plate, above crush. Silicified and sheared gneiss.						25				2.45	5	6	110	75	<2	<2	.04	1.5
3183	SW SE 25, 28N., 19W.	1000' southeast of fluorite prospect.	Middle Plate. Crushed and sheared altered gneiss.						27				.98	24	14	28	19	10	< 2	.43	1.7
3184	NW NW 31, 28N., 18W.	Dump of adit.	Middle Plate. Tan to gray silicified fault breccia.						25				11.02	184	14	299	144	35	< 2	25.3	11.0
3185	"	Prospect pit.	Middle Plate. Pyritized and silicified gneiss and granite.						9				1.16	13	9	21	7	2	2	2.68	1.4
3186	"	Road cut and drill site.	Middle Plate. Sample across 100' of pyritized gneiss and granite.						13				.83	13	10	23	7	2	2	2.09	1.2
3187	NE NE 36, 28N., 19W.	Prospect pit near head of gulch.	Middle Plate. Silicified and pyritized gneiss on wall of pit.						19				.55	13	10	31	9	2	2	.54	1.2
3188	"	Head of gulch.	Middle Plate. Crushed material and fault below fanglomerate.						6				.18	6	8	89	49	<2	<2	<.02	1.0
3189	"	"	Middle Plate. Extensive exposure crushed rock.						9				.16	9	9	49	48	<2	<2	.19	0.9
3191	NW SE 26, 28N., 19W.	Fluorite prospect.	Middle Plate. Sample of 6' of granite with fluorite veinlets.						5				.13	11	8	61	13	2	< 2	.06	1.3
3192	"	"	Middle Plate. Gouge and crushed granite on east side of pit.						5				.13	7	7	36	18	3	< 2	.09	1.0
3193	"	"	Middle Plate. Dense unmineralized granite.						4				.07	5	6	38	23	<2	< 2	<.02	0.7
3194	SE SE 24, 28N., 19W.	Shaft dump.	Lower Plate. Alaskitic altered granite.						2				.17	6	<5	15	35	<2	< 2	<.02	0.6
3195	"	Top of hill.	Lower Plate. Episyenite altered with sulfides in granite.						4				.24	577	19	17	29	<2	< 2	<.02	0.9
3196	SE NW 24, 28N., 19W.	Prospect pit.	Middle Plate. Shattered biotite granodiorite.						6				.22	27	5	18	49	3	< 2	<.02	1.0
3197	SE NE 1, 27N., 19W.	North of road.	Middle Plate. Quartz vein zone in granite.						4				.15	12	< 5	20	22	2	< 2	<.02	0.7

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SAMPLE LOG

PAGE ____ OF ____

SAMPLE NUMBER	LOCATION		DESCRIPTION	RADIOACTIVE ELEMENTS			PATHFINDER ELEMENTS							BASE METALS				SULFO-SALTS		PRECIOUS METALS	
	LEGAL	GEOGRAPHIC	LITHOLOGY AND MINERALIZATION	U_3O_8	eU	eTh			W[3]	Acid Sol Ba[2]	Total Ba %[2]	F[2]	Hg[2]	Cu[3]	Mo[3]	Pb[3]	Zn[3]	As[3]	Sb[3]	Au[3]	Ag[3]
3227-B	SW/NW/30, T28N, R18W	PP above Fry stock tank	Panned heavy concentrate sample no. 2799 from crush zone used for screen test						930				---	---	---	---	---	---	---	---	---
3847	NE/NW/31, T28N, R18W	On rd. 50' SW of RDH GB-13	Fault, coarse grained granite w/no limonite staining						17				.24	7	5	28	46	2	<2	.04	1.6
3847-A	" "	20' SW of 3847	Coarse grained granite, fractured and limonite stained						29				.42	37	7	35	36	5	6	.65	1.9
3847-B	" "	40' SW of 3847	Coarse grained granite, limonite and hematite staining						34				.82	111	9	65	42	5	5	2.82	3.1
3847-C	" "	60' SW of 3847	Hem. lim. stained cse. gr. granite						33				.95	22	7	21	37	2	2	.91	2.2
3847-D	" "	80' SW of 3847	Sample from roadbed across adit limonite stained granite						28				.55	41	15	31	34	3	3	1.26	2.5
3847-E	" "	100' SW of 3847	Cse. gr. granite w/limonite stained fractures						11				1.13	104	7	186	92	5	14	.31	3.5
3847-F	" "	120' SW of 3847	" " " "						9				3.43	34	8	58	32	4	4	.25	2.4
3847-G	" "	140' SW of 3847	Cse. grained granite w/minor limonite						11				.63	56	8	75	61	7	4	.24	3.0

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APPENDIX A

SIEVE TEST
Gold Basin Drill Cuttings
Mohave County, Arizona

Sieve tests were run on selected samples representing the anomalous and mineralized intervals in the two best holes from the recent drilling at Gold Basin. The results, summarized on Table 1 suggest that the gold values contained in the more readily captured coarse fraction (>80 mesh) are equal to or sometimes greater than the gold content of the fine fraction (<80 mesh), which is more readily lost from the sample collection system.

The improved recovery of fines by a reverse circulation drill is illustrated by comparing the percentage of fines to coarse from the Gold Basin drilling to that from other projects where conventional drilling methods were used. The reverse circulation drill at Gold Basin produced samples containing from 10% to 30% <80 mesh material where as samples from a conventional rig on another project contained from 2.6% to 17% <80 mesh material. The suggestion here is that the conventional drilling system lost from 10% to 20% of the fines.

The above comments and the data on Table 1 indicate that while loss of fines was not a problem at Gold Basin, it would not have significantly affected the results if fines had been lost.

Table 1. Sieve Test - Gold Basin Drill Cuttings Mohave County, Arizona

Drill Hole	Interval	Size Distribution		Gold Distribution				Total Gold	
				>80		<80		Calc. Head	Assay Head
		% >80	% <80	PPM Au	% Total	PPM Au	% Total	PPM Au	PPM Au
GB-5	80-90	71.0	29.0	.05	52.5	.11	47.5	0.07	.50
	90-100	81.4	18.6	<.02	98.0	.05	2.0	0.05	.06
	100-110	82.0	18.0	.72	95.9	.14	4.1	0.61	.21
	110-120	81.4	18.6	.47	79.2	.44	20.8	0.48	.24
	120-130	76.8	23.2	.63	88.8	.27	11.2	0.54	.55
GB-7	0-5	88.1	11.9	1.05	89.8	1.0	10.2	1.03	1.61
	60-65	83.1	16.9	10.2	96.2	2.31	3.8	8.80	2.69
	65-70	79.9	20.1	1.86	93.4	.54	6.6	1.59	.78
	70-75	78.5	21.5	1.26	88.7	.47	11.3	1.11	1.03
	125-130	82.0	18.0	.08	68.0	.17	32.0	0.10	.13
	130-135	74.2	25.8	2.21	94.3	.38	5.7	1.73	1.76
	135-140	78.4	21.6	1.34	80.8	1.14	19.2	1.30	1.71
	140-145	81.8	18.2	1.77	91.6	.72	8.4	1.58	.67
	145-150	68.3	31.7	.45	76.2	< .02	23.8	0.40	.58

APPENDIX A

DESCRIPTIVE LOGS
GB-1 through GB-16

HOLE NO. GB - 1 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB #2 SECTION NE36 T. 28N R. 19W COLLAR COORDS. 655'S., 925'W. of N.E. Cor. Sec. 36

ELEVATION 4640' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 10/24/83 COMPLETED 10/30/83 DRILLER Conners Drllg.Co LOGGED BY W. Szymanski

TOTAL DEPTH 570'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0 - 20	20	Good				Qal	Alluvium	Granite & boulders and debris		
		Recov.	GB-1 10-20	<.02						
20 - 40	20		GB-1 20-30	<.02		Tfgl	Fanglomerate	Cemented granite boulders & debris	Unaltered	
			GB-1 30-40	<.02						
40 - 120	80		GB-1 40-50	.02		P€fgr	Fine-gr. qtz-rich Biotite Granite	Dk gray & red qtz-rich biotite granite	Minor hematite & siderite noted on fracture	No indicated mineralization
			GB-1 50-60	<.02			" "			
			GB-1 60-70	.03						
			GB-1 70-80	.03						
			GB-1 80-90	.02			" "			
			GB-1 90-100	.03						
			GB-1 100-110	.03						
			GB-1 110-120	.03			" "			
120 - 150	30		GB-1 120-130	<.02			Biotite Granite	Med. gray med. gr.	Minor clays	
			GB-1 130-140	.04				Biotite granite	weak hematite stain	
			GB-1 140-150	.07						
150 - 155	5		GB-1 150-155	.08						Cuttings are almost entirely quartz
155 - 160	5		GB-1 155-160	<.02		F	155 - 160 Probable Fault			
160 - 170	10		GB-1 160-170	.03		Twgr	White Hills Granite (?)	Red, hard, massive coarsely porphyritic	Hematite stain	Complete Oxidation
170 - 220			GB-1 170-180	.03				Biotite granite	Argillia alteration	
			GB-1 180-190	.04				Gradational decrease in red color with increasing depth	Very weak chloritic alt	
			GB-1 190-200	.08			"			
			GB-1 200-210	<.02		F	205' - Fault			
			GB-1 210-220	.09						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-1 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
220 - 300	80	Good	GB-1 220-230	<.02		Twgr.	White Hills Granite (?)	Massive coarse-grained lt red porphyritic biotite granite	Hematitic stain and minor clay alteration of feldspars	Complete oxidation
		Recov.	GB-1 230-240	<.02						No indicated mineralization
			GB-1 240-250	<.02						
			GB-1 250-260	.05						
			GB-1 260-270	.03						
			GB-1 270-280	.06						
			GB-1 280-290	.03						
			GB-1 290-300	<.02						
300 - 350	50		GB-1 300-310	.03		"	" "	" "		
			GB-1 310-320	.03						
			GB-1 320-330	<.02						
			GB-1 330-340	<.02					330-350 increased clay alteration	
			GB-1 340-350	<.02						
350 - 400	50		GB-1 350-360	<.02						
			GB-1 360-370	<.02						
			GB-1 370-380	<.02						
			GB-1 380-390	<.02						
			GB-1 390-400	.02		F	Fault		Minor clay & siderite noted	
400 - 410	10		GB-1 400-410	<.02		Twgr	White Hills Granite	" "		
410 - 440	30		GB-1 410-420	<.02		F	410-440-Zone of Shearing	Granite as above, but characterized by darker red stain & lighter altered feldspars	410-440 Increased clay & siderite	Complete oxidation
			GB-1 420-430	.03						
			GB-1 430-440	<.02						
440 - 450	10		GB-1 440-450	.02						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

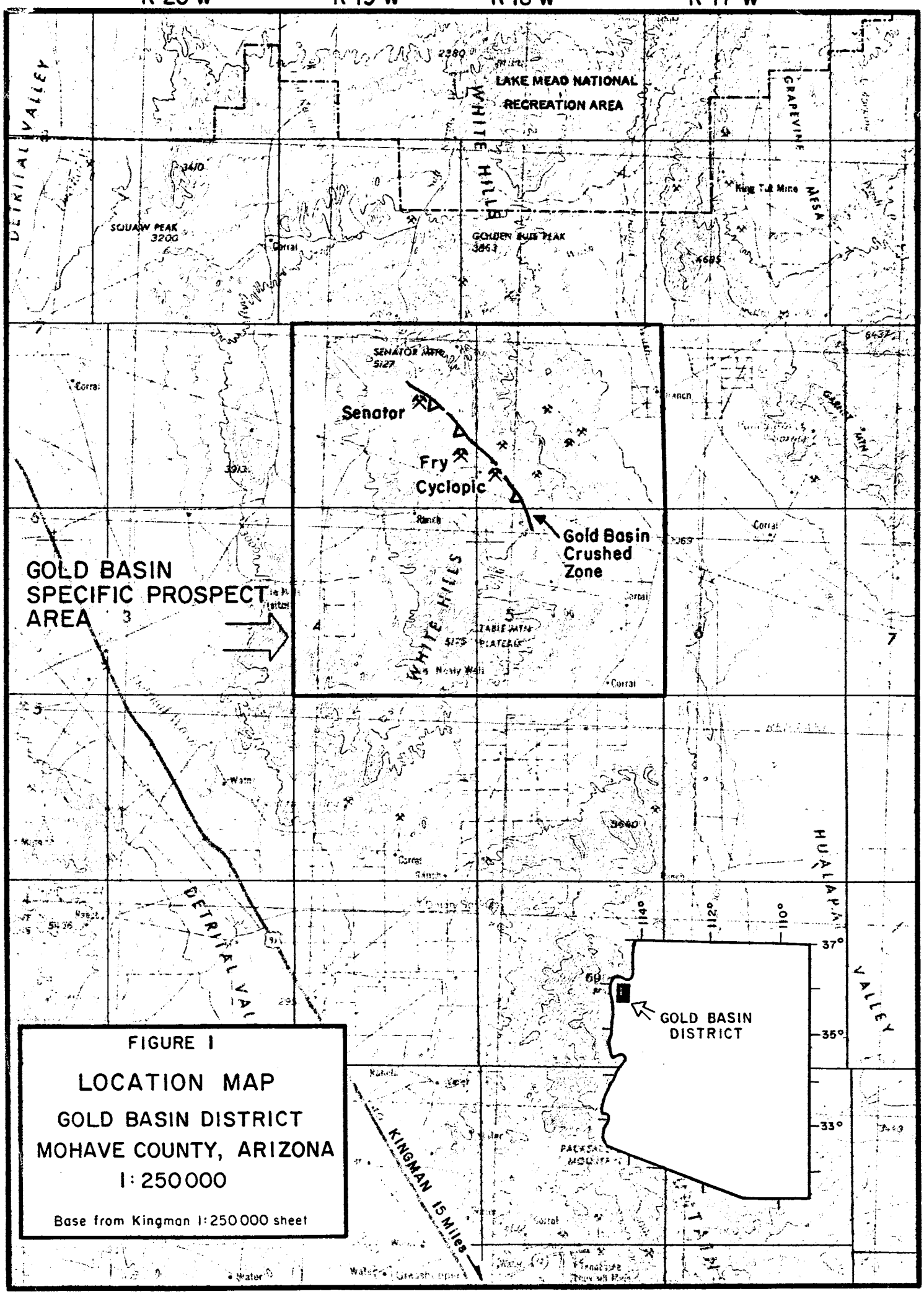

FIGURE 1

LOCATION MAP

GOLD BASIN DISTRICT

MOHAVE COUNTY, ARIZONA

1:250000

Base from Kingman 1:250000 sheet

HOLE NO. GB-1 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
450 - 510	60	Good	GB-1 450-460	.02		Twgr	White Hills Granite (?)	Massive coarse gr., lt red porphyritic biotite granite	Hematite stain & minor	
		Recov.	GB-1 460-470	.02					clay alt. of feldspars	
			GB-1 470-480	.02						
			GB-1 480-490	<.02						
			GB-1 490-500	<.02						
			GB-1 500-510	.06						
510 - 520	10		GB-1 510-520	.03		"	510-560 sheared	Cuttings were wet; dominantly rock flour w/only a few coarse fragments.	Feldspars are altered to clay. Minor siderite. Little biotite is evident; most has been alt to chlorite.	
520 - 575	5		GB-1 520-525	.03			granite			Orange-red stain suggests minor
525 - 530	5		GB-1 525-530	.03			Major sheared			limonite after pyrite.
530 - 535	5		GB-1 530-535	<.02			zone			
535 - 540	5		GB-1 535-540	<.02		"				
540 - 545	5		GB-1 540-545	<.02					Hematitic stain	
545 - 550	5		GB-1 545-550	<.02						
550 - 555	5		GB-1 550-555	<.02						
555 - 560	5		GB-1 555-560	.02		"	Granite & granulate rock			
560 - 565	5		GB-1 560-565	<.02		Twgr	White Hills	Massive coarse-gr. pro-	Minor clay & chlorite	
565 - 570	5		GB-1 565-570	<.02		"	Granite (?)	phyritic granite	alteration	
570	is	TD								

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB- #2 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM _____ SECTION 25 T. 28N R. 19W COLLAR COORDS. 315'N., 2840'W. of S.E. Cor. Sec. 25

ELEVATION 4800 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 11-1-83 COMPLETED _____ DRILLER Connors LOGGED BY W. Szymanski

TOTAL DEPTH 600'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-10	10'	NO RECOV.				Qal	Alluvium			
								10-40 weak clay and siderite alt.	10-40 weak clay and siderite alt.	Variable limonite stain
10-50	40'	GOOD	GB-2 10-20	.04		Tfgl	Fanglomerate and	Mixed frags. of Cse feld, bio and some chips of		
		RECOV.	GB-2 20-30	.15						
			GB-2 30-40	.20		&	Fgr. Granite	dark fine-grained granite		
			GB-2 40-50	.10		PCfgr				
50-80	30'		GB-2 50-60	<.02			" "			
			GB-2 60-70	<.02						
			GB-2 70-80	<.02						
80-110	30'		GB-2 80-90	<.02			White Hills Granite	Cse gr. reddish granite chips of Qtz, minor.	80-100 Interval shows hematite stain but feldsp.	
			GB-2 90-100	<.02				biotite & fresh feldspr	are not altered.	
			GB-2 100-110	<.02						
110-190	80'		GB-2 110-120	.23		PCbgr	Cse gr. Biotite Granite	Cse gr. medium gray biotite granite	Weak clay, chlorite	Minor siderite and weak limonite stain.
			GB-2 120-130	.13				Chips are qtz, gray feldspr and wkly	alteration with minor	
			GB-2 130-140	.19				chloritized biotite	siderite on fracts.	
			GB-2 140-150	.08						
			GB-2 150-160	.08						
			GB-2 160-170	.15						
			GB-2 170-180	.05						
			GB-2 180-190	.06						
190-210	20'		GB-2 190-200	.04		PCbgr	Biotite Granite	Mixed frags of granite as above and white tuff.	Weak clay alteration	
						&	&			
			GB-2 200-210	.03		trt	Rhyolitic Tuft.			
210-250	40'		GB-2 210-215	<.02		PCbgr	Biotite Granite	Cse gr. biotite granite	Weak clay, chlorite.	Minor siderite and limonite stain.
			GB-2 215-220	.16						
			GB-2 220-225	.07				similar to granite above	alteration	
			GB-2 225-230	.04						
			GB-2 230-240	.24						
			GB-2 240-250	<.02						
250-300	50'		GB-2 250-260	<.02		Twgr	Whitehills	Cse gr. reddish gray	Feldsp. is unalt.	No indicated mineralization.
			GB-2 260-270	<.02						
			GB-2 270-280	<.02			Granite	Granite with minor biotite	Minor hematite stain	
			GB-2 280-290	<.02						
			GB-2 290-300	<.02				and dom. Kspar.	on fracts.	

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-2 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
300-400	100'	GOOD	GB-2 300-310	<.02		Twgr	White Hils Granite	Reddish-gray cse gr.	Hematite stain on fracts.	No indicated mineralization.
			GB-2 310-320	<.02						
		RECOVERY	GB-2 320-330	<.02				granite. Chips are qtz,	Minor clay alt. of plag.	
			GB-2 330-340	<.02				fresh reddish K feldspar		
			GB-2 340-350	<.02				and minor biotite.		
			GB-2 350-360	<.02						
			GB-2 360-370	<.02						
			GB-2 370-380	<.02						
			GB-2 380-390	<.02						
			GB-2 390-400	<.02						
400-530	130'		GB-2 400-410	<.02						
			GB-2 410-420	<.02						
			GB-2 420-430	<.02		Twgr	White Hills Granite			
			GB-2 430-440	<.02						
			GB-2 440-450	.03				430-460 Indicated shear	Increased hematitc stain	
			GB-2 450-460	<.02				zone		
			GB-2 460-470	<.02						
			GB-2 470-480	.04						
			GB-2 480-490	<.02						
			GB-2 490-500	<.02						
			GB-2 500-510	<.02						
			GB-2 510-520	<.02						
			GB-2 520-530	.04						
										Driller estimated
530-580	50'		GB-2 530-535	<.02		Twgr	White Hills Granite	530-580 Sheared granite	Increased hematitic stain	5-10 gpm water from
			GB-2 535-540	<.02					and clay alt. in sheared	shear zone.
			GB-2 540-545	<.02						
			GB-2 545-550	<.02					zone.	
			GB-2 550-555	<.02						
			GB-2 555-560	<.02						
			GB-2 560-565	<.02						
			GB-2 565-570	<.02						
			GB-2 570-575	<.02						
			GB-2 575-580	<.02						
580-600	20'		GB-2 580-585	<.02		Twgr	White Hills Granite	Reddish-gray cse gr. granite	Fragments show weak hematite	
			GB-2 585-590	<.02						
			GB-2 590-595	<.02					stain and appear relatively	
			GB-2 595-600	<.02						
600 is TD.									fresh.	

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-3 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB #44 SECTION NW 31 T. 28N R. 18W COLLAR COORDS. 275'S., 1590'E. of N.W. Cor. Sec. 31

ELEVATION 4480' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE vertical

SPUDDED 11/10/83 COMPLETED 11/11/83 DRILLER Connors Dril.Co. LOGGED BY R. M. Corn

TOTAL DEPTH 200"

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
			GB-3 0-5	<.02				Med. gray colored		
0 - 20	20	Good	GB-3 5-10	<.02		Pegn	Gneissic granite	granitic rock	0 - 20 wk limonite	
			GB-3 10-15	<.02				Fragments show qtz feld-		
		Recov.	GB-3 15-20	<.02				spar & minor wispy bio-	Stain & some clay	
								tite		
			GB-3 20-25	.03					20-60 Minor hematite &	
20 - 60	40		GB-3 25-30	<.02					siderite stain on frag-	
			GB-3 30-35	<.02					ments	
			GB-3 35-40	<.02						
			GB-3 40-45	<.02						
			GB-3 45-50	<.02			" "	" "		
			GB-3 50-55	<.02						
			GB-3 55-60	<.02						
			GB-3 60-65	<.02			60-130	Lighter colored fragments	60-100 Increased hematite	
60 - 100	40		GB-3 65-70	<.02			(crushed zone?)	of granitic material	& limonite stain on	Siderite, hematite & some limonite
			GB-3 70-75	.04					fragments	
			GB-3 75-80	<.02						after former fgr. pyrite
			GB-3 80-85	<.02				Frags are small & cutt-	Prominent limonite in	
			GB-3 85-90	<.02				ings dominantly fines	fine fraction between	
			GB-3 90-95	.02					85 & 95	
			GB-3 95-100	<.02						
			GB-3 100-105	<.02				Cse frags are med. gray	100-130 Limonite & sider-	
100 - 130	30		GB-3 105-110	<.02				colored while fines are	ite coat cse frags & in	
			GB-3 110-115	.11				tan & limonitic	fines	
			GB-3 115-120	<.02						
			GB-3 120-125	<.02						
			GB-3 125-130	<.02						
			GB-3 130-135	<.02				Med. gray colored frags		
130 - 200	70		GB-3 135-140	<.02		Pegn	Gneissic granite	of cse granitic material	130-200 weak siderite &	
			GB-3 140-145	<.02				w/minor biotite	hematite stain. Biotite	
			GB-3 145-150	<.02					& feldspars are only	
			GB-3 150-155	.03					slightly altered.	
			GB-3 155-160	<.02						
			GB-3 160-165	<.02						
			GB-3 165-170	<.02						
			GB-3 170-175	<.02						
			GB-3 175-180	<.02						
			GB-3 180-185	<.02						
			GB-3 185-190	<.02						
			GB-3 190-195	<.02						
			GB-3 195-200	<.02						
200	is	TD								

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-4 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 34 SECTION 31 (NW NW) T. 28N R. 18W COLLAR COORDS. 560'S., 1290'E. of N.W. Cor. Sec. 31

ELEVATION 4420 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 11-11-83 COMPLETED 11-12-83 DRILLER Connors LOGGED BY

TOTAL DEPTH 380'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-20	20'	GOOD	GB-4 0-10	<.02		PEfgr	Fgr. biotite granite	Medium gray fgr. qtz-rch granite	Chlorite, clay and minor siderite	
		RECOV.	GB-4 10-20	<.02			20 - Fault			15-20 Prominent limonite stain on fragments. Some of limonite may be after pyrite
20-40	20'		GB-4 20-30	<.02		PEfgr & Twgr	Mixed frags of Fgr granite and cse gr. granite	Cse fresh feldsp. & qtz. mixed with frags of fine gr granite	Clay alteration of fines only	
			GB-4 30-40	<.02			40 - Fault		KFeld. is fresh	
40-80	40'		GB-4 40-50	<.02		PEfgr	Fgr biotite granite	Medium gray fgr granite with fgrs of black qtz & biotite	Minor siderite on fractures. Black chloritic alteration evident in granite.	
			GB-4 50-60	<.02						
			GB-4 60-70	<.02						
			GB-4 70-80	<.02			80 - Fault			
80-100	20'		GB-4 80-90	<.02		PEfgr	Sheared granite	Light gray to tan color from limonite and siderite stain	Chlorite, clay and siderite alt.	80-90 Prominent limonite after siderite
			GB-4 90-100	<.02						
100-200	100'		GB-4 100-110	<.02		PEfgr	Fgr biotite granite	Medium gray fgr granite	Moderate clay and siderite alteration intensifying in shear zones at 130-150 and 170-180	
			GB-4 110-120	<.02				as above with variable		
			GB-4 120-130	<.02				shearing at 130-150 and		
			GB-4 130-140	<.02				170-180		No indicated mineralization.
			GB-4 140-150	<.02					Rock exhibits dark chlorite	
			GB-4 150-160	<.02					alteration and some chips appear black.	
			GB-4 160-170	<.02						
			GB-4 170-180	<.02						
			GB-4 180-190	<.02						
			GB-4 190-200	<.02						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-4 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
200-320	120'	GOOD	GB-4 200-210	<.02		P€fgr	Fgr Biotite Granite	Dark reddish gray chips with hematite stain mixed with	Moderate clay and siderite with black chlorite	
		RECOV.	GB-4 210-220	<.02				medium gray chloritized granite to a depth of 240'	alteration.	
			GB-4 220-230	<.02					Hematite stain increases with depth.	
			GB-4 230-240	<.02						
			GB-4 240-250	<.02			240 - Fault (?)	240 - Color changes to reddish gray.	Clay and hematite alteration. Biotite	
			GB-4 250-260	<.02				Granite appears to be a fine to medium grained holo-	is altered to light colored chlorite and sericite.	
			GB-4 260-270	<.02				crystalline rock coarser gr. than granite above, and with	Black chloritic alteration noted above 240' is absent.	
			GB-4 270-280	<.02				less biotite		
			GB-4 280-290	<.02						
			GB-4 290-300	<.02						
			GB-4 300-310	<.02						
			GB-4 310-320	<.02			320 - Fault			
320-340	20'		GB-4 320-330	< .02		P€bgr	Cse grained Biotite granite	Sheared granite with chips of cse qtz, fspr and biotite	320-340 Clay and chlorite altn with limonite st. on clays	320-330 Limonite stain on frags and clay. Suggests former pyrite.
			GB-4 330-340	<.02			320-340 Shear zone			
340-380	40'		GB-4 340-350	.02		P€bgr	"	Medium to light gray granite Chips are qtz, feldspar and	Feldspar frags. show minor hematite stain and partial	
			GB-4 350-360	<.02				minor biotite	alt. to clays.	
			GB-4 360-370	<.02					Minor siderite noted on fractures.	
			GB-4 370-380	<.02						
380 is TD										

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CA CORN & AHERN

HOLE NO. GB-5 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 46 SECTION NW NW 31 T. 28N R. 18W COLLAR COORDS. 280'S., 555'E. of N.W. Cor. Sec. 31

ELEVATION 4560 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 11-13-83 COMPLETED 11-16-83 DRILLER Connors LOGGED BY Russell M. Corn

TOTAL DEPTH 600'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-30	30'	GOOD	GB-5 0-10	<.02		Tfgl.	Fanglomerate	Tan and light brown chips of granite and sandy matrix		
		RECOV.	GB-5 10-20	<.02						
			GB-5 20-30	<.02						
30-90	60'		GB-5 30-40	<.02		PEfgr	Fine-grained qtz.-rich biotite granite	Medium brown to dark brown granite. Chips show fine-grained black qtz. and lt. feldspar.	Weak clay and siderite alteration some black chloritic altn indicated.	Limonite after siderite on fractures. Minor hematite stain.
			GB-5 40-50	<.02						
			GB-5 50-60	<.02						60-90 Increased hematite stain.
			GB-5 60-70	<.02						
			GB-5 70-80	<.02						
			GB-5 80-90	.31						
90-110	20'		GB-5 90-100	.06			90-110 FLT zone Mixed Fgr and cse gr. gneiss	Mixed light and dark brown granite chips and dark brown cse granitic gneiss	Increased clay alteration. limonite stain	Limonite stain after siderite. 125' - Scattered chips of limonite stained clay - and qtz grains.
			GB-5 100-110	.21						
110-130	20'		GB-5 110-120	1.14		PEgn	Sheared gneiss	coarse chips of qtz and dark brown altered feldspar	after siderite on fractures.	Clay is probably from a fault.
			GB-5 120-130	.55						
									Clay, chlorite and siderite altn.	Minor hematite.
130-160	30'		GB-5 130-140	.11						
			GB-5 140-150	.13						
			GB-5 150-160	.12						
160-210	50'		GB-5 160-170	.03		PEggr	granite gneiss	Medium tan colored frags. of qtz and altered fspar. Chips of qtz and alt. fsper are coarse grained.	Limonite stain after siderite is fairly abundant. Kfspar relatively fresh.	Complete oxidation
			GB-5 170-180	.13						
			GB-5 180-190	<.02						
			GB-5 190-200	<.02						
			GB-5 200-210	.04						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-5 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (I) Au	PPM (I) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
210-260	50'	GOOD	GB-5 210-220	.06		PEfgr & PEgn	Fine-grained biotite granite	Medium brown, fine-grained granite consisting of dark grains of quartz and altered fspar. with cse frags of qtz and fspar.	Clay, siderite and substantial amounts of hematite	
		RECOV.	GB-5 220-230	<.02						
			GB-5 230-240	.03						
			GB-5 240-250	<.02						
			GB-5 250-260	.04						
260-400	140'		GB-5 260-270	<.02		PEgrgn	Granite gneiss	Mottled lt. brown and gray chips of cse altd. fspar and qtz		
			GB-5 270-280	.10					Siderite, clay and minor chlorite	Limonite stain is widespread, tut is dominantly after siderite.
			GB-5 280-290	.04						
			GB-5 290-300	<.02						
			GB-5 300-310	.06						
			GB-5 310-320	<.02						
			GB-5 320-330	<.02						
			GB-5 330-340	.05						Complete oxidation.
			GB-5 340-350	.03			Granite gneiss	Mottled lt. brown and gray chips of cse. altd fspar and qtz	" "	
			GB-5 350-360	<.02						
			GB-5 360-370	<.02						
			GB-5 370-380	<.02						
			GB-5 380-390	<.02		T1	" 380-390 lamprophyre	Lamprophyre mixed with chips from gneiss.	" "	
			GB-5 390-400	<.02						
400-450	50'		GB-5 400-410	<.02		PEgn	gneiss	gneiss similar to above. Light colored zones 420-430 and 440-450 indicate zones of shearing	" "	
			GB-5 410-420	<.02			shear zones (?)		Increase in dark fgr chlorite alteration. Black chlorite is masked by siderite and limonite stain	
			GB-5 420-430	<.02			420-430			
			GB-5 430-440	<.02			&			430-440 Increased hematite stain.
			GB-5 440-450	<.02			440-450			

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CORN & AHERN

HOLE NO. GB-5 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
450-480	30'	GOOD	GB-5 450-460	<.02		PEgn	gneiss	Mottled light brown and gray chips of qtz and altd. fspar.	Siderite, clay and chlorite.	
		RECOV.	GB-5 460-470	<.02					Relatively strong black chlorite altn.	No indicated mineralization.
			GB-5 470-480	.04					bleached with	
									increased clay	
480-490	10'		GB-5 480-490	<.02			sheared	gneiss similar to above but		
							gneiss	exhibiting a variable		
			GB-5 490-495	<.02				lighter color		
490-520	30'		GB-5 495-500	<.02						
			GB-5 500-505	<.02		-				
			GB-5 505-510	<.02						
			GB-5 510-515	<.02						
			GB-5 515-520	<.02						
520-580	60'		GB-5 520-525	<.02		PEbgr	Cse gr biotite granite	Medium gray colored chips of cse qtz and fspar with cse grains of biotite.	Clay, siderite and	No indicated mineralization.
			GB-5 525-530	<.02						
			GB-5 530-535	<.02					minor chlorite.	
			GB-5 535-540	<.02						
			GB-5 540-545	<.02					Alteration is less intense	
			GB-5 545-550	.05						
			GB-5 550-555	.10					in comparison to gneiss.	
			GB-5 555-560	<.02						
			GB-5 560-565	<.02						
			GB-5 565-570	<.02						
			GB-5 570-575	.03						
			GB-5 575-580	.02						
580-600			GB-5 580-590	<.02						
			GB-5 590-600	.03						
600 is TD										

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CORN & AHERN

HOLE NO. GB-6 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB-45 SECTION 30 SW/SW T. 28 N R. 18 W COLLAR COORDS. 210'N., 865'E. of S.W. Cor. Sec. 30

ELEVATION 4550' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE vertical

SPUDDED 11/16/83 COMPLETED 11/17/83 DRILLER Connors Dril.Co LOGGED BY R. M. Corn

TOTAL DEPTH 300'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
			GB-6 0-10	<.02		Tfgl	Fanglomerate	Mixed frags of granite in muddy matrix	Not altered or mineralized	
0 - 20	20	Good	GB-6 10-20	<.02						
		Recov.				F	20' Fault	Lim. & sid. stained granite frags.	Weak lim. & siderite alteration	
			GB-6 20-30	<.02		Pebgr	20-40 sheared cse por. bio. granite	Medium grey colored cse gr. granite w/cse biotite		
20 - 40	20		GB-6 30-40	<.02						
			GB-6 40-50	<.02		Pefgr	Fgr. qtz-rich biotite granite	Frg. dk grey to blk qtz-rich granite w/ fgr. biotite	Dominant cse frags w/little fines	
40 - 90	50		GB-6 50-60	<.02						
			GB-6 60-70	<.02						
			GB-6 70-80	<.02						
			GB-6 80-90	<.02						
90 - 100	10		GB-6 90-100	<.02			" "	" some shearing ? 30 - 50% fines	90-100 Increased lim., hematite & sid. coat. frags	Siderite & hematite common
			GB-6 100-110	.02			sheared		110-120 increased hematite	but no limonite after sulfides is evident.
110 - 120	10		GB-6 110-120	<.02						
120 - 150	30		GB-6 120-130	<.02		Pegn &	sheared gneissic granite orgran.gr	Qtz-rich - fine to cse gr. granitic rock w/increased feldspar cont. & lineated biotite or alt. material	Cuttings & fragments all exhibit hematite	
			GB-6 130-140	.02		Pefgr	& fgr biotite granite		Stain & some siderite & limonite coating fractures	
			GB-6 140-150	<.02						
150 - 160	10		GB-6 150-160	.03			150-160 Gouge & clay noted			
160 - 170	10		GB-6 160-170	.07			150-220 Crushed zone	Mixed frags of granitic material in dominantly fine sand & clay sized material	150-220 Substantial hematite & siderite	Zone of substantial clay. cuttings are almost all fines. Siderite & hematite are fairly abundant in fines and as stain on frags.
170 - 180	10		GB-6 170-180	.07					Minor limonite stain	
180 - 190	10		GB-6 180-190	<.02		Tl	180-190			
			GB-6 190-200	<.02						
190 - 220	30		GB-6 200-210	<.02		Pefgr				
			GB-6 210-220	<.02			Fgr. qtz-rich			
220 - 240	20		GB-6 220-230	<.02			biotite granite	Granite exhibits prominant black color. Blk qtz grains & blk stained feldspar	Little or no alt. evident	No evidence of limonite or other indication of mineralization
			GB-6 230-240	<.02						
240 - 300	60		GB-6 240-250	<.02		Pebgr	Cse gr. biotite granite	Med. gray to dk gray colored cse grained granite	Moderate hematite & siderite on frags	
			GB-6 250-260	<.02				black stain or coloration continues, but less intense.		
			GB-6 260-270	<.02						
			GB-6 270-280	<.02						
			GB-6 280-290	<.02						
			GB-6 290-300	<.02						
300	is	TD								

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-7 PROSPECT Gold Basin NE NW COUNTY Mohave STATE Arizona

CLAIM GB#44 SECTION 31 T. 28N R. 18W COLLAR COORDS. 280'S., 1370'E. of N.W. Cor. Sec. 31

ELEVATION 4500 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 1-18-83 COMPLETED 1-20-83 DRILLER Connors LOGGED BY Russell M. Corn

TOTAL DEPTH 400'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-5	5'	GOOD	GB-7 0-5	1.61		PEgn	Sheared gneiss	Tan & lt brown frags of cse qtz & alt fspar.	Clay	Limonite after fgr pyrite on fracts & in clay
		RECOV.								
5-40	35'		GB-7 5-10	.20			"	" "	Clays and siderite with	
			GB-7 10-15	.08						
			GB-7 15-20	.05					variable limonite st. after	Most of limonite stain is after.
			GB-7 20-25	.09						siderite. Minor limonite after pyrite.
			GB-7 25-30	.11					siderite	
			GB-7 30-35	.05				Chips are small and		
			GB-7 35-40	.04			35-40 Fault	bleached.		
			GB-7 40-45	.26						
40-60	20'		GB-7 45-50	.05		PEgn	Gneiss	Cse lt and dark brown chips of qtz and altd. fspar.	Dark coloration suggest chloritic alteration.	
			GB-7 50-55	.12						
			GB-7 55-60	.23						
			GB-7 60-65	(8.80)	(value from screen test & check assays)					
60-115	55'		GB-7 65-70	.78		PEgn	Sheared gneiss	Color varies		
			GB-7 70-75	1.03						
			GB-7 75-80	.09				60-90 Lighter colored		
			GB-7 80-85	.21				and small chips		
			GB-7 85-90	.05						
			GB-7 90-95	.05					Clay and siderite	
			GB-7 95-100	.09						
			GB-7 100-105	.04						
			GB-7 105-110	.14					increase below 105	105-115 Limonite stain after siderite
			GB-7 110-115	.05						
115-125	10'		GB-7 115-120	.14		T1	Sheared gneiss & lamprophyre	Altd gneiss as above with 40% sideritized lamprophyre	Clay and siderite, lamp. chips are completely altd to siderite	115-120 Prominent limonite stain-mostly after siderite but some after pyrite. Diminished limonite with increasing depth to 130.
			GB-7 120-125	.14						
			GB-7 125-130	.13						
125-135	10'		GB-7 130-135	1.76		PEgn	Sheared gneiss			
			GB-7 135-140	1.71			Cse grained biotite granite	Cse chips of cse gr. qtz, fspar and biotite	Slight altn.	
135-145	10'		GB-7 140-145	.67		PEbgr				
							Fault			Complete oxidation.
145-160	15'		GB-7 145-150	.58			" "	Fgr chips similar to above	Clay & limonite stain	140-150 Limonite after pyrite on fractures.
			GB-7 150-155	.30						
			GB-7 155-160	.50						155-160 Prominent limonite after vfg pyrite.

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CORN & AHERN

HOLE NO. GB-7 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
160-225	65'	GOOD	GB-7 160-165	.50		PEbgr	Cse grained Biotite granite	Cse chips of cse grained qtz, lt. gray fspar and biotite	160-190 Weak to moderate clay alteration	
			GB-7 165-170	.22						
		RECOV.	GB-7 170-175	.24						No indicated mineralization.
			GB-7 175-180	.09						
			GB-7 180-185	.12						
			GB-7 185-190	.03						
			GB-7 190-195	.04					190-225 little or weak indicated alteration. Fresh fspar and biotite. Some biotite altd to chlorite.	Minor limonite stain after siderite.
			GB-7 195-200	<.02						
			GB-7 200-205	<.02						
			GB-7 205-210	<.02						
			GB-7 210-215	.03					Minor limonite after siderite	
			GB-7 215-220	<.02						
			GB-7 220-225	<.02						
225-240	15'		GB-7 225-230	<.02		T1	lamprophyre	Fgr speckled - salt and pepper gray rock. 30% chlorite and 70% clay and siderite	clay, siderite and chlorite altn.	
			GB-7 230-235	.06						
			GB-7 235-240	.03						
240-300	60'		GB-7 240-245	.03		PEbgr	Cse - grained biotite granite	cse chips of cse gr. granite as above	weak chloritic altn of biotite	Minor limonite stain.
			GB-7 245-250	.03						
			GB-7 250-255	.05						
			GB-7 255-260	.03						
			GB-7 260-265	.03						
			GB-7 265-270	.02						
			GB-7 270-275	.03						
			GB-7 275-280	<.02						
			GB-7 280-285	<.02						
			GB-7 285-290	<.02						
			GB-7 290-295	<.02						
			GB-7 295-300	<.02						
300-400	100'		GB-7 300-305	<.02		PEbgr	" "	" "		
			GB-7 305-310	.05						
			GB-7 310-315	<.02				Rock is dark gray - darker than above 300'.	Darker color suggests some black chloritic alteration.	No indicated mineralization.
			GB-7 315-320	<.02						
			GB-7 320-325	<.02						
			GB-7 325-330	<.02						
			GB-7 330-335	<.02						
			GB-7 335-340	<.02						
			GB-7 340-345	.03						
			GB-7 345-350	<.02						
			GB-7 350-355	<.02						
			GB-7 355-360	<.02						
			GB-7 360-365	<.02						
			GB-7 365-370	<.02						
			GB-7 370-375	<.02						
			GB-7 375-380	.02						
			GB-7 380-385	<.02						
			GB-7 385-390	.02						
			GB-7 390-395	<.02						
			GB-7 395-400	.02						
400 is TD.										

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CORN & AHERN

HOLE NO. GB-8 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 43 SECTION 31 SE SW T. 28N R. 18W COLLAR COORDS. 275'N., 1855'E. of S.W. Cor. Sec. 30

ELEVATION 4450 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 11-20-83 COMPLETED 11-28-83 DRILLER Connors LOGGED BY Russell M. Corn

TOTAL DEPTH 265'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
			GB-8 0-5	0.07						
0-20	20	GOOD	GB-8 5-10	<0.02		Qal.	Alluvium and			
		RECOV.	GB-8 10-15	<0.02			weathered granite.			
			GB-8 15-20	<0.02						
			GB-8 20-25	<0.02				Medium gray colored	Biotite and fspar are fresh	
20-90	70		GB-8 25-30	<0.02		PEbgr	Biotite granite	Cse to med gr.	and unaltered.	No indicated mineralization.
			GB-8 30-35	<0.02				foliated biotite gr.		
			GB-8 35-40	<0.02				chips show cse qtz &		
			GB-8 40-45	<0.02				fspar with foliated fine		
			GB-8 45-50	<0.02				to med gr. biotite.		
			GB-8 50-55	<0.02						
			GB-8 55-60	<0.02						
			GB-8 60-65	<0.02						
			GB-8 65-70	<0.02						
			GB-8 70-75	<0.02						
			GB-8 75-80	<0.02						
			GB-8 80-85	0.03						
			GB-8 85-90	<0.02						
			GB-8 90-95	<0.02			90-130			
90-130	40		GB-8 95-100	<0.02		PEbgr	Shear zone	Similar to above but		
			GB-8 100-105	<0.02			Sheared biotite	limonite stained and	Clay and chlorite altn.	Limonite stain on fractures.
			GB-8 105-110	<0.02			granite	bleached		
			GB-8 110-115	<0.02					siderite is not present.	Limonite probably after vfg pyrite.
			GB-8 115-120	0.12						
			GB-8 120-125	<0.02						
			GB-8 125-130	<0.02						
			GB-8 130-135	<0.02				Dark gray foliated		
130-200	70		GB-8 135-140	<0.02		PEbgr	Biotite granite	biotite granite		
			GB-8 140-145	<0.02					Darker color of granite due	
			GB-8 145-150	0.07						
			GB-8 150-155	<0.02					to fgr black chlorite altn	
			GB-8 155-160	<0.02						
			GB-8 150-165	<0.02					in fspars.	
			GB-8 155-170	0.02						
			GB-8 170-175	<0.02					Variable altn of fspars to	160-170 Limonite stained.
			GB-8 175-180	<0.02						
			GB-8 130-185	<0.02					clay.	
			GB-8 135-190	<0.02						
			GB-8 130-195	<0.02						
			GB-8 135-200	<0.02						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-8 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (I) Au	PPM (I) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
200-250	50	GOOD	GB-8 200-205	0.03		PCbgr	Sheared	Bleached light gray - tan foliated	Fspars altered to clays. Biotite altered to	200-250 Limonite stained
			GB-8 205-210	0.02						
		RECOV.	GB-8 210-215	0.03			Biotite granite.	med to cse gr. granite as above.	chlorite (light color)	Limonite partly alter.
			GB-8 215-220	0.03						
			GB-8 220-225	<0.02					Rock appears bleached.	siderite; minor limonite alter vfg pyrite.
			GB-8 225-230	0.02						
			GB-8 230-235	<0.02						
			GB-8 235-240	<0.02						
			GB-8 240-245	<0.02						
			GB-8 245-250	<0.02						
250-265	15		GB-8 250-255	<0.02		PCfgr	Fine-grained biotite granite	Med to dark gray fine gr biotite granite	Fresh appearing with dark color	
			GB-8 255-260	<0.02				Chips exhibit 30-40% fine qtz grains, 15% fine gr.	caused by fgr. black chlorite altn.	
			GB-8 260-265	0.03				biotite and fine to med gr fspar.		
	265 is TD									

(I) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

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HOLE NO. GB-9 PROSPECT Gold Basin COUNTY Mojave STATE Arizona

CLAIM GB #43 SECTION 30 (SESW) T. 28N R. 18W COLLAR COORDS. 780'N., 2125'E. of S.W. Cor. Sec. 30

ELEVATION 4450 HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE 90°

SPUDDED 11/28/83 COMPLETED 11/29/83 DRILLER Connors Drilling LOGGED BY M.H. Rauschkolb

TOTAL DEPTH 240'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-10'	10'	Excllnt	GB-9 0-5	.05		PEfgr	Granite (fill)	Medium grey fine grained granite consisting of ½-1 mm intergrown quartz, opaque white feldspar, and dark grn-black biotite. Granite also contains 1% euhedral (2 mm x 4 mm rectangular) clear to cloudy white feldspar crystls. Above grey granite is mixed with lesser quantities of lt brownish grey to orange med. grained granite consisting of 1-2 mm intergrown quartz, opaque white feldspar and biotite. Biotite occurs in 2 mm euhedral crystals and also as wispy segregations distinctly different from the evenly distributed fine grained biotite in the grey granite. Sample contained 1% white to light brown caliche.	Grey granite: Tr golden chlor. Orange granite: wk chloritiz-ation of biotite. Large euhe-dral crystals pseud. replaced by bl-grn chlorite. Small xls alt to golden yellow color.	Grey: None Orange: Wk to mod orange-brown limonite-clay on joints. Some local hematite aft. biotite.
		.	GB-9 5-10	.06						
10-20'	10'	"	GB-9 10-15	.07		PEfgr	Granite -	Medium grey fine grained granite as above. Black bio forms elongate crystals rather than euhedral hexagon-al plates. Biotite occurs as evenly distributed to inter-connected chains of crystals.	Trace golden chlorite altn of fine grained biotite. ⅔% of biotite altd to earthy orange brown limonite, especially on joint surfaces. Wk red hema-tite staining of rock 1-5 mm out from joints.	Occ ½ mm limonite vnlt.
			GB-9 15-20	.04			Fgr Biotite Granite			
20-30'	10'	"	GB-9 20-25	<.02			Granite "	As above, sample dust is no-ticeably lighter colored than intervals above and be-low. 25-35'. Lt brn color contrasts with darker grey-brown.	Moderate chloritization of biotite up to 50% replacement by golden yellow to dk-grn chlorite. Trace greenish white clay filling voids or replacing feldspars. Trace pale grn chloritic altn of feldspars. Minor red hematitic staining of groundmass.	6 mm milky white quartz vein with red hematite and yellow-orange-brown earthy limonite selvages. 1 mm limonite cubes after py on some joint surfaces. (See chipboard)
			GB-9 25-30	.03						
30-40'	10'	"	GB-9 30-35	.03		PEfgr	Granite "	Medium grey fine-grn granite as above. 30-35'-much less sand-size fraction than above or below. May be fault (?) or bedrock/ pad fill contact (?)	50% of chips are strongly altd. Biotite is altd to golden yellow chlorite (50%) or red hematite (50%). Hema-titic altn causes rock to turn white to orange-brown due to loss of all black mafic minerals.	Wk to mod orange-brn earthy limonite on joints.
			GB-9 35 40	.04						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

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HOLE NO. GB-9 PROSPECT Gold Basin COUNTY Mojave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
40-50'	10'	Excllnt	GB-9 40-45	<.02		PEfggr	Granite -	Medium grey fine grained granite as above.	5% chlorite/hematite altd chips. Orange-brn chips contain hematite and/or golden chlorite after biotite.	Mod orange-brn earthy limonite on joints cutting the altd chips (5% of total). Tr octahedral limonite pseud aft py (See chipboard).
			GB-9 45-50	.03			Fgr Biotite Granite			
50-60'	10'	"	GB-9 50-55	<.02			Granite "	Granite as above. Possible fault 55-60'. Few large +¼" chips. Abundant silty material - slightly more orange.	3 % hematite > chlorite altd chips. Altn as above. 5% of feldspar in medium grey granite are altd to cloudy white clay. Minor chloritic altn in some chips.	
			GB-9 55-60	<.02						Mod orange-brn earthy limonite on joints. Tr red hematite patches within orange-brn limonite. Possibly hem aft. py.
60-70'	10'	"	GB-9 60-65	<.02			Granite "	Granite as above	5% hematite altd chips	Wk orange-brn earthy limonite on jts. Tr euhedral ½ mm hematite aft py (60-70'). (See chipboard).
			GB-9 65-70	<.02					Tr yellowish white clay altn of feldspar adjacent to limonite coated jts.	
70-80'	10'	"	GB-9 70-75	<.02						Wk orange-brn staining of Gmass 1-5 mm adjacent to some joints.
			GB-9 75-80	<.02					5% overall altn of biotite to grn chlorite	Occ limonite microveinlets (crackle vnlt cut through bleached rock.
80-90'	10'	"	GB-9 80-85	<.02						
			GB-9 85-90	.05						
90-100'	10'	"	GB-9 90-95	.06			Granite "	As above; Possible wk fault 90-95' - few large chips.	As Above	As Above
			GB-9 95-100	<.02				(No change noted in cutting sample.)		
100-110'	10'	"	GB-9 100-105	.03				Occ megacrystal (6x10 mm) of orthoclase in sample.		
			GB-9 105-110	.03						
110-120'	10'	"	GB-9 110-115	.03			Granite "	Medium grey granite as above plus 2% coarse grained pink granite w/ 3 mm biotite clusters 2-3 mm qtz and fspr and occ 10 mm fspr.	As above-med. gy granite Pink granite: biotite 50% altd to dk-grn chlorite & red hematite aureole. Some feldspars are pink-purple due to hematite staining.	As Above
			GB-9 115-120	.03						
120-130'	10'	"	GB-9 120-125	.09		PEfggr & Twgr.	Two Granites	Medium grey fine grained granite (70%) mixed w/ (30%) pink medium grained granite.	Grey: wk 5% chlorite repl of biotite. Tr yellowish-white clay repl. feldspar. Pink: Mod selective chlorite green stain in some feldspars.	Wk orange-brn earthy limonite on jts. Occ limonite crackle microveinlets cut through lighter colored granite chips.
			GB-9 125-130	.06						
130-140'	10'	"	GB-9 130-135	.04			Granite -	Medium grey granite as above 5% pink med grained granite	As Above	As Above
			GB-9 135-140	.03			Fgr Biotite Granite			
140-150'	10'	"	GB-9 140-145	.03			Granite (Fault)	Fine grained granite in Fault zone.	10% altn as above. 90% hematitic altn: biotite altd completely to dk grn chlorite or red hematite. Loss of biotite plus limonite & hema. staining give chips a pink or orange color.	Pink chips are highly fractured and cut by limonite microveinlets.
			GB-9 145-150	.06				Abundant orange clay-sized material. Increased altn.		Moderate limonite on joints.

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CORN & AHERN

HOLE NO. GB-9 PROSPECT Gold Basin COUNTY Mojave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
150-160'	10'		GB-9 150-155	.02			Granite (Fault)	Fine grained granite in fault Zone	10% grey granite w/ mod. repl of biotite by chlor. All chips	Thin hematite or limonite microvein-lets cut all chips.
			GB-9 155-160	.08					microfractured and "bleached" along veinlets.	Tr MnOx
160							FAULT		90% hematite altd chips with destruction of biotite; either	
									replacement by chlorite or more commonly repl. by limon-	
									ite and/or hematite.	
160-170'	10'		GB-9 160-165	.12		PEfggr.	Granite -	Medium grey fine grained granite (as above).	90% of chips w/ wk golden chlorite altn of biotite.	Moderate hematite and limonite on jts in strongly hematite altd granite.
			GB-9 165-170	.06			Fgr Biotite Granite		10% pink hematitic altn w/loss of biotite.	Tr. black mineral w/ rectangular to square cross-section, black metallic luster, and red streak: Hematite (?) aft pyr.
										Mineral occurs w/ (calcite) on grey granite. (See chipboard 160-170).
170-180'	10'		GB-9 170-175	.10			Granite "	Greenish grey fine grained granite. (same rock as above, altn different.)	90% greenish grey chips. Biotite 100% altd to dk-grn chlorite and lesser yellow-white clay. Intense micro-fracturing. Minor hematite on a few fracs, stains. Some feldspars pinkish orange 10% pink hematitic altn as in fault zone.	Wk limonite on jts. Tr hem in micro-fractures.
			GB-9 175-180	.05						
180-190'	10'		GB-9 180-185	.03						
			GB-9 185-190	.05						
190-200'	10'		GB-9 190-195	.03			Granite "	Fine grained greenish grey to orange granite.	Predominantly hematitic altn chloritic altn.	Moderate orange-brn limonite on abdt jts. Tr hematite on microfractures.
			GB-9 195-200	.05					Fsprs slightly yellowish due to limonite staining and devel of yellow clay around bio/ chlor crystals.	
200			200				FAULT			
200-210'	10'		GB-9 200-205	.03		PEfggr Twgr & tl(?)	Granite (breccia?)	Fine grained granite; sample predominantly crs sand-size	Intense removal of biotite. Fsprs pale grn due to incipi-	Moderate limonite on joints.
			GB-9 205-210	.09			(Two Granites?)	fspr cleavage frags & quartz. 2 mm chlor crystals and 4 mm	ent chloritization. Remnant biotite altd to dk grn chlor.	
210-220'	10'		GB-9 210-215	.10			Lamprophyre	fspr cleavage chips indica-tive of medium gr granite.	Strong limonite staining.	
			GB-9 215-220	.03				A few chips of dk gy to black diabase occur at 210-220'.		
220-230'	10'		GB-9 220-225	<.02						
			GB-9 225-230	.02						
230-240'	10'		GB-9 230-235	.02		PEfggr	Two Granites	Predominantly fine grained grey granite w/ lesser pink	Wk chloritization of fine grained biotite. Wk repl. by	Wk limonite on jts.
			GB-9 235-240	.03				medium grained granite.	hematite or limonite.	
240 is TD										

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CORN & AHERN

HOLE NO. GB-10 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 46 SECTION SW SW 30 T. 28N R. 18W COLLAR COORDS. 705'N., 85'E. of S.W. Cor. Sec. 30 Q

ELEVATION 4600 HOLE SIZE 5 1.6" Reverse Circ. HOLE ANGLE ~~Vertical~~

SPUDDED 11-29-83 COMPLETED 12-1-83 DRILLER Connors Drilling Co. LOGGED BY Mike Rauschkolb

TOTAL DEPTH 360'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-10	10'	EXCEL-LENT RECOV.	GB-10 0-5	<.02			Granite debris	Fine-grained reddish brown granite and weathered debris.	Strong hematite altn of biotite Tr chloritization	Moderate limonite on joints
			GB-10 5-10	<.02						
10-30	20'		GB-10 10-15	.06		PEfgr	Fine grained Biotite Granite	Medium gray fine-grained granite consisting of intergrown ½-1 mm qtz feldspar and biotite with 1% larger euhedral 2-4 mm clear to white feldspars. Fine grained biotite generally disseminated but really occurs as chains of crystals.	Moderate altn of biotite to golden yellow to dark green chlorite. Weak altn of biotite/chlor. to limonite/ hematite.	Moderate limonite on joints. Moderate staining of groundmass with orange-brown limonite local tr hematite (usually altn of biotite)
			GB-10 15-20	.04						
			GB-10 20-25	.03				As above.	Wk. chlorite altn of biotite ~~minor yellowish white clay~~ altn in a few feldspars ~~adjacent to fractures.~~ Very weak hematite altn. wk. ~~overall yellowish Feox~~ staining	Weak limonite, occ. hematite on joints
			GB-10 25-30	<.02						
30-80	50'		GB-10 30-35	.02			30-165' sheared	As above, increased	Moderate chloritization of the fine grained biotite-wk. but increased clay altn of feldspars. Wk. hematite altn. of biotite.	Moderate limonite on joints; 1/8-1/4" staining adjacent to joints
			GB-10 35-40	.03			"Crushed Zone"	Feox staining		Tr black specular hematite (?) as irregular almost dendritic growths on non-limonitic joint faces
			GB-10 40-45	.02		PEfgr	Fgr. Biotite Granite	As above.	Moderate to strong chloritization of biotite. Wk-med clay altn of feldspar Increasing overall hematite staining	As above.
			GB-10 45-50	.03						
			GB-10 50-55	.03				As above, with very large chips V. Cse sand-size chips are lithic fragments (not non-mineralic). Zone is very well fractured, but probably not a fault.	As above.	As above.
			GB-10 55-60	<.02						

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CORN & AHERN

HOLE NO. GB-10 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
			GB-10 60-65	.06				As above, 30-40' abundant plus ½" chips	As above, 30-40'	As above, 30-40'
			GB-10 65-70	.03						
			GB-10 70-75	.02		PEfgr	Fgr. Biotite Granite			
			GB-10 75-80	.05						
80-85	5'		GB-10 80-85	.04						
85-90	5'	50% of normal	GB-10 85-90	.10						
90-95	5'	50% of normal recov.	GB-10 90-95	.02		PEfgr	Fgr. Biotite Granite	Medium gray fine grained granite as above	Moderate chloritization of biotite	Moderate hematite/limonite on joints
95-100	5'		GB-10 95-100	<.02				A few chips of megacrystic granite containing 74 mm	Moderate hematite/limonite repl of biotite	
								feldspar and 2 mm chloritized biotite	Wk. yellowish white clouding of the 2-4mm larger feldspar	
100-105	5'		GB-10 100-105	<.02			(Fault)	Granite as above plus cse sand size fragments of	in the f.gr. granite. Large chips of med. gry granite	Wk. clear calcite vnlts filling upper spaces
								feldspar and qtz and abundant orange-brown clay	have wk. chloritization of biotite. Crs sand contains str hem. repl. of biotite/chlorite	
105-165	60'		GB-10 105-110	<.02			Fgr Biotite Granite	Medium gray fine-grained granite	Very weak chloritzation of biotite	Weak hematite on joints
									Very weak hematite altn.	
			GB-10 110-115	<.02				As above	Tr limonite repl of a few biotite	Weak tr hematite on joints
			GB-10 115-120	<.02					Tr yellow-white clay on biotite/chlorite	Tr specular hematite (dendritic)
			GB-10 120-125	<.02					Wk chloritization of biotite	Weak calcite veining
			GB-10 125-130	<.02				As above, possible weak fault	Fairly "fresh" granite Large chips as above, w/o cloudy white altn of large feldspars.	As above
								Abundant crs sand chips of feldspar.		
			GB-10 130-135	.02		PEfgr	Fgr Biotite Granite	As above, 110-120'		
			GB-10 135-140	.10						
			GB-10 140-145	.04					Slight increase in altn. lg 2mm feldspar are cloudy	Slightly increased fracturing . Joints & cleavage planes in feldspar coated with
			GB-10 145-150	<.02					and yellowish white Wk chloritization of biotite	limonite, rarely hematite
			GB-10 150-155	.02		PEfgr	Fgr Biotite Granite	As above	Sharply increased hematitic/ limonitic altn. 90% of chips	Mod to str limonitic fracturing
									microfractured with biotite destroyed.	Weak calcite veining.

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-10 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
			GB-10 135-160	<.02			Fgr Biotite Granite	As above	Decreased altn similar to 140-150' Wk chloritization of biotite	Wk jointing - limonite coated fractures
			GB-10 160-165	<.02			165 - Fault		Wk repl of biotite/chlor by limonite and/or lesser hematite.	Wk calcite veins - crystals form in open joints
165-200	35'	GOOD	GB-10 165-170	<.02					Large feldspar crystals are fractured but 75% are clear	
		RECOV.	GB-10 170-175	<.02					Some cloudy yellowish white altn of feldspars. Wk. limonitic staining.	
			GB-10 175-180	<.02						
		GOOD	GB-10 180-185	<.02		PEfgr	Fgr Biotite Granite	Medium gray fine grained granite	Very weak chloritization of fine grained biotite.	Minor limonite and less commonly hematite on joints.
		RECOV.	GB-10 185-190	.03				Granite must be well shattered since sample	Feldspars are occasionally cloudy.	Rock is well fractured, but limonite coats only a few of the joints.
			GB-10 190-195	.03				consists of 1/2-3/4" coarse pebbles	165-200 Black chloritic altn. noted	
								Only 1 tablespoon of sand and silt /cup of sample.		
			GB-10 195-200	<.02				(Hole is caving and packing around bit.)		
200-255	55'		GB-10 200-205	<.02		PEfgr	Fgr Biotite Granite	Medium gray fgr biotite granite	Weak chlorite & clay alteration. Rock is lighter colored than granite above.	220 clay zone and 220-225 is light tan with minor limonite st.
			GB-10 205-210	<.02						
			GB-10 210-215	<.02						
			GB-10 215-220	.03						
			GB-10 220-225	<.02						
			GB-10 225-230	<.02						
			GB-10 230-235	.04						
			GB-10 235-240	.05						
			GB-10 240-245	<.02						
			GB-10 245-250	<.02						
			GB-10 250-255	.02						
255-300	45'		GB-10 255-260	.03		PEfgr	Fgr Biotite Granite	Granite is similar to above but is darker and exhibits a variable dark grayish red hematite coloration. 30-50% of granite is fine grains of black quartz.	255- Variable increase in black chlorite and hematitic stain. Rock gets denser with less intense alteration with increasing depth.	No indicated mineralization.
			GB-10 260-265	<.02						
			GB-10 265-270	.06						
			GB-10 270-275	.03						
			GB-10 275-280	<.02						
			GB-10 280-285	<.02						
			GB-10 285-290	<.02						
			GB-10 290-295	<.02						
			GB-10 295-300	<.02						
300-360	60'		GB-10 300-305	<.02		PEfgr	Fgr Biotite Granite		Prominent hematitic stained zone 290-305 ft.	
			GB-10 305-310	<.02						
			GB-10 310-315	<.02						
			GB-10 315-320	<.02						
			GB-10 320-325	.29						
			GB-10 325-330	<.02						
			GB-10 330-335	<.02						
			GB-10 335-340	<.02						
			GB-10 340-345	<.02						
			GB-10 345-350	.02						
360 is TD			GB-10 350-355	<.02						
			GB-10 355-360	<.02						

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CORN & AHERN

HOLE NO. GB-11 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 49 SECTION SW SW 30 T. 28N R. 18W COLLAR COORDS. 1175'N., 350'E. of S.W. Cor. Sec. 30

ELEVATION 4560 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 12-2-83 COMPLETED 12-5-83 DRILLER Connors LOGGED BY Russell M. Corn

TOTAL DEPTH 300'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-25	25'	GOOD	GB-11 0-5	<.02		PCfgr	Fine-grained biotite granite	light gray to tan fine-gr. biotite granite	Rock is bleached	Weak limonite stain
			GB-11 5-10	.05						
		RECOV.	GB-11 10-15	<.02			0-25' sheared		with fspars altd to clays & biotite to light chlorite	in shear zone 0-25 ft.
			GB-11 15-20	<.02						
			GB-11 20-25	<.02					and minor siderite.	
25-120	95'		GB-11 25-30	<.02		PCfgr	Fine-grained biotite granite	Med. to dark gray fine-grained equi.gr.	Dark color is caused by	25-120' No indicated mineralization.
			GB-11 30-35	<.02						
			GB-11 35-40	<.02				granite chips exhibit 40% fine gr.	black chlorite alteration	
			GB-11 40-45	<.02						
			GB-11 45-50	.04				dark colored qtz, 10% vfg biotite and some segrega-	as well as dark qtz. Minor clay and siderite	
			GB-11 50-55	.02						
			GB-11 55-60	<.02				tions of cser qtz and white fspar.	alteration.	
			GB-11 60-65	<.02						
			GB-11 65-70	<.02						
			GB-11 70-75	<.02						
			GB-11 75-80	<.02						
			GB-11 80-85	<.02						
			GB-11 85-90	<.02						
			GB-11 90-95	<.02						
			GB-11 95-100	.06						
			GB-11 100-105	<.02						
			GB-11 105-110	<.02						
			GB-11 110-115	<.02						
			GB-11 115-120	<.02						
120-135	15'		GB-11 120-125	<.02		PCfgr	120-135' Prominent shear zone	Fine chips only	Clay, chlorite and siderite	120-135' Considerable limonite after vfg pyrite.
			GB-11 125-130	<.02				of bleached limonite stained	alteration.	
			GB-11 130-135	<.02				fgr. granite		
135-200	65'		GB-11 135-140	<.02		PCfgr	Fine-grained biotite granite	Chips are mixed light and dark gray and tan	Variable clay	Minor limonite after
			GB-11 140-145	<.02			variable	fine-grained granite as described above.	siderite and hematite	vfg pyrite.
			GB-11 145-150	2.31						
			GB-11 150-155	<.02			shearing from		siderite and hematite	
			GB-11 155-160	<.02						
			GB-11 150-165	.07			135-240'		localized on fracts.	
			GB-11 155-170	<.02						
			GB-11 170-175	.15						Complete oxidation.
			GB-11 175-180	<.02						
			GB-11 130-185	<.02						
			GB-11 135-190	<.02						
			GB-11 130-195	<.02						
			GB-11 135-200	<.02						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-11 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
200-240	40'	GOOD	GB-11 200-205	<.02		PCfgr	Fine-grained biotite granite	Fine-gr. equigran. granite with 40% dark qtz and variable vfg biotite.	Variable clay	Minor limonite after.
		RECOV.	GB-11 205-210	<.02					siderite and hematite	vfg pyrite
			GB-11 210-215	<.02			200-240 Variable		siderite and hematite	calcite noted as
			GB-11 215-220	<.02			Shearing		along fracts.	a fracture coating
			GB-11 220-225	<.02					Biotite altd. to light colored chlorite	
			GB-11 225-230	<.02						
			GB-11 230-235	<.02						
			GB-11 235-240	<.02						
240-300	60'		GB-11 240-245	<.02		PCfgr	Fine-grained biotite	Med. to dark gray fine-grained equigran.	Moderate black	Minor limonite
			GB-11 245-250	<.02			granite	granite. 40% qtz; 10-15% biotite	chloritic altn.	after. siderite
			GB-11 250-255	<.02					minor siderite	
			GB-11 255-260	<.02					and hematite.	No indicated mineralization.
			GB-11 260-265	.11					Fspars are fresh with	
			GB-11 265-270	<.02					biotite converted to dark	
			GB-11 270-275	.89					chlorite.	
			GB-11 275-280	.06						
			GB-11 280-285	<.02						
			GB-11 285-290	<.02						
			GB-11 290-295	.03						
			GB-11 295-300	.06						
300 is TD										

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-12 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB#12 SECTION 30 (NW SW) T. 28N R. 18W COLLAR COORDS. 1810'N., 615'E. of S.W. Cor. Sec. 30

ELEVATION 4550 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 12-5-83 COMPLETED 12-6-83 DRILLER Connors LOGGED BY Russell M. Corn

TOTAL DEPTH 230'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-55	55'	GOOD	GB-12 0-5	<.02		PEfgr	Fine-grained biotite granite	Fine-gr, med to dark gray equigranular granite with 40% dark colored qtz, 50% fspars & 10% biotite	Weak clay altn. dark color indicates vgf black chlorite altn.	No indicated mineralization.
			GB-12 5-10	.02						
		RECOV.	GB-12 10-15	<.02						
			GB-12 15-20	<.02						
			GB-12 20-25	<.02						
			GB-12 25-30	<.02						
			GB-12 30-35	<.02						
			GB-12 35-40	<.02						
			GB-12 40-45	<.02						
			GB-12 45-50	<.02						
			GB-12 50-55	.05						
55-95	40'		GB-12 55-60	.10		PEfgr	55-95 Shear zone Fine-grained biotite granite	Light gray, tan & pink colored altered fine-grained granite sheared with most of sample as fines.	Fspars altered to clays, biotite to lt. colored chlorite. Siderite is both disseminated and on fractures.	55-90 Shear zone exhibits hematite and limonite stain with some limonite after vfg pyrite.
			GB-12 60-65	.02						
			GB-12 65-70	0.11						70-75 purple fluorite noted in cuttings.
			GB-12 70-75	<.02						Fluroite occurs as a .10 to .20 inch veinlet; qtz limonite or siderite are not associated with the fluorite.
			GB-12 75-80	.03						
			GB-12 80-85	<.02						
			GB-12 85-90	<.02						
			GB-12 90-95	.06						
95-115	20'		GB-12 95-100	.08		PEfgr	Fine-grained biotite granite	Med. to dk. gray fine gr. granite that is not sheared	95-115 Weak alteration	
			GB-12 100-105	.22						
			GB-12 105-110	.04						
			GB-12 110-115	.07						
115-140	25'		GB-12 115-120	.02		PEfgr	115-140 Sheared biotite granite	Light gray and tan sheared fine-grained granite as above.	Clay, chlorite and siderite alteration of fspar and biotite	115-125 Prominent limonite after vfg pyrite in interval of more intense shearing.

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-12 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
140-165	25'	GOOD	GB-12 140-145	<.02		PEfgr	Fine-grained biotite granite	Variably sheared fine-grained granite as above. Chips are a mixture of light and dark gray colored altered granite	Plag. and most of kspar alt. to clay Biotite to sericite and lt. colored chlorite. Alteration most intense near fracture surfaces.	Complete oxidation. Limonite after vfg pyrite Most of limonite is on fractures. Some reflects a minor amount of dissem pyrite.
		RECOV.	GB-12 145-150	.11						
			GB-12 150-155	<.02						
			GB-12 155-160	.07						
			GB-12 160-165	.07						
165-170	5'		GB-12 160-165	.07			165-170 Sheared Zone	Dominantly yellow limonite stained clay	Clay alteration	165-170 Limonite stain after. vfg pyrite
										Purple fluorite noted in cuttings.
170-230	60'		GB-12 170-175	<.02		PEfgr	Variably sheared fine-grained biotite granite	Mixed light to med. gray altered fine-grained granite 40% dark colored qtz., 50% light altd. fspar. and 10% altd. biotite	Feldspars are altered to clays and biotite is altered to sericite or light colored chlorite.	Minor limonite after vfg pyrite. Siderite noted on fractures.
			GB-12 175-180	.15						
			GB-12 180-185	.05						
			GB-12 185-190	.56						
			GB-12 190-195	.22						
			GB-12 195-200	<.02						
			GB-12 200-205	<.02						
			GB-12 205-210	.10					Chips indicate that clay	
			GB-12 210-215	.25					alteration is more intense	210-230 Fracture surfaces are coated
			GB-12 215-220	.12					than in the interval above	with prominent bright red hematite.
			GB-12 220-225	.05					100 feet.	
			GB-12 225-230	.18						
230 is TD.										

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB-13 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB#48 SECTION 30 (NW SW) T. 28N R. 18W COLLAR COORDS. 2410'N., 800'E. of S.W. Cor. Sec. 30

ELEVATION 4480 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 12-7-83 COMPLETED 12-8-83 DRILLER Connors LOGGED BY Russell M. Corn

TOTAL DEPTH 160'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-65	65'	GOOD	GB-13 0-5	<.02		PEfgr	Fine-grained biotite granite	Med. to dark gray equigr. fine-gr. granite with 40%	Relatively weak alteration.	Variable, relatively weak siderite and hematite on fractures.
			GB-13 5-10	.04						
		RECOV.	GB-13 10-15	.02				drk. qtz grains, 50% fspar, and approx. 10% altd.	Dark color is caused by	
			GB-13 15-20	<.02						
			GB-13 20-25	<.02				biotite	vfg black chlorite.	
			GB-13 25-30	.02						
			GB-13 30-35	.04						
			GB-13 35-40	<.02						
			GB-13 40-45	<.02						
			GB-13 45-50	.02						
			GB-13 50-55	<.02						
			GB-13 55-60	<.02						
			GB-13 60-65	<.02						
65-105	40'		GB-13 65-70	<.02		PEfgr	65-105 "Crushed Zone"	Bleached light gray to lt. tan fine grained granite	All feldspars are altered to white clays. Siderite	Disseminated vfg limonite after pyrite. Disseminated siderite.
			GB-13 70-75	.03			Intense shearing	that is intensely sheared and thoroughly altered to	replaces clay and former	Limonite noted on fracture surfaces
			GB-13 75-80	<.02				clays	biotite.	
			GB-13 80-85	<.02						
			GB-13 85-90	.10						
			GB-13 90-95	.04						
			GB-13 95-100	<.02						
			GB-13 100-105	.02						
105-160	55'		GB-13 105-110	.03		PEfgr	Variably sheared	Grayish pink colored fine-	Feldspars are altered to white clays. Biotite is	Minor limonite after. vfg dissem. pyrite.
			GB-13 110-115	.99			fine-grained granite	grained granite as above.	altered to sericite or lt green chlorite.	Siderite occurs as thin seams and veinlets.
			GB-13 115-120	.12						
			GB-13 120-125	<.02				Alteration is variable and	Chips show hematite stain on fractures.	Minor fine-grained dissem. hematite.
			GB-13 125-130	<.02						
			GB-13 130-135	.08				indicates variable shearing.	Alteration intensity decreases with increasing depth.	
			GB-13 135-140	<.02						
			GB-13 140-145	<.02				Color darkens to med. gray		
			GB-13 145-150	.04						
			GB-13 150-155	.03				toward bottom of hole.		
			GB-13 155-160	<.02						
160 is TD										

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CORN & AHERN

HOLE NO. GB-14 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB#53 SECTION 25 (NW SE) T. 28N R. 19W COLLAR COORDS. 2430'N., 1810'W. of S.E. Cor. Sec. 25

ELEVATION 4700 HOLE SIZE 5 1/8" Reverse Circ. HOLE ANGLE Vertical

SPUDDED 12-8-83 COMPLETED 12-19-83 DRILLER Connors LOGGED BY

TOTAL DEPTH 320'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-10	10'	GOOD	GB-14 0-5	<.02		PEfgr	Fine-grained biotite granite	Light brown weathered fine-grained granite	Clays & chlorite may be weathering	
			GB-14 5-10	<.02						
		RECOV.								
10-40	30'		GB-14 10-15	<.02		PEfgr	Fine-grained biotite granite	Dark gray fine-gr. granite 40% dark quartz. Some segregations of cse white feldspar	Black chloritic alt. of biotite	Minor siderite on fractures.
			GB-14 15-20	.07						
			GB-14 20-25	<.02						
			GB-14 25-30	.03						
			GB-14 30-35	<.02						
			GB-14 35-40	<.02						
40-60	20'		GB-14 40-45	<.02		PEbgr	Cse grained biotite granite	Light-gray, med to cse grained biotite granite. Some shearing suggested	Weak clay altn. of fspar. biotite altered to chlorite and siderite.	
			GB-14 45-50	<.02						
			GB-14 50-55	.05						
			GB-14 55-60	<.02						
60-160	100'		GB-14 60-65	<.02		PEfgr	Fine-grained biotite granite with variable shearing indicated.	Med. gray to light brown fine-grained granite. 40-50% qtz. and fspar with 10% biotite	Feldspars altd. to clay near fractures	85-115 Minor limonite after vgf pyrite. Some dissemination siderite. Siderite is mostly on fractures.
			GB-14 65-70	<.02						
			GB-14 70-75	<.02						
			GB-14 75-80	<.02						
			GB-14 80-85	<.02						
			GB-14 85-90	<.02						
			GB-14 90-95	<.02						
			GB-14 95-100	<.02						
			GB-14 100-105	<.02						
			GB-14 105-110	<.02						
			GB-14 110-115	.03						
			GB-14 115-120	<.02						
			GB-14 120-125	<.02						
			GB-14 125-130	.05						
			GB-14 130-135	<.02						
			GB-14 135-140	<.02						
			GB-14 140-145	.03						
			GB-14 145-150	<.02						
			GB-14 150-155	.11						
			GB-14 155-160	<.02						
160-250	90'		GB-14 160-165	<.02		PEfgr	160-250 "Crushed Zone"	Prominent shearing	160-180 Intense clay & chlorite alteration.	160-180 Prominent limonite stain after siderite and vfg pyrite. Siderite is both dissem. and on fracts. throughout sheared interval.
			GB-14 165-170	<.02						
			GB-14 170-175	<.02			Fine-grained granite			
			GB-14 175-180	<.02						
			GB-14 180-185	<.02		PEbgr	180-200 Cse-grained biotite granite	Dark gray & brown cse gr. granite	180-250 Plag. altd. to clay. Kspar is unaltered.	
			GB-14 185-190	<.02						
			GB-14 190-195	<.02				cse Kspar and biotite		
			GB-14 195-200	<.02						
			GB-14 200-205	<.02		T1	Lamprophyre	Lamprophyre and granite frags		
			GB-14 205-210	<.02						
			GB-14 210-215	<.02		PEbgr	Cse-grained biotite granite and gneiss	210-250 Mixed fragments of cse-gr. biotite granite & gneiss	Partial altn. of biotite to chlorite.	
			GB-14 215-220	.06						

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CORN & AHERN

HOLE NO. GB-14 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
			GB-14 220-225	<.02						
			GB-14 225-230	<.02						
			GB-14 230-235	.03			230-250 More intense shearing		230-250 Prominent limonite stain.	
			GB-14 235-240	<.02						
			GB-14 240-245	<.02						
			GB-14 245-250	<.02						
250-265	15'	GOOD	GB-14 250-255	.06		Tl	Lamprophyre and cse-gr. biotite granite	Mixed frags. of dark gray-green fgr. lamprophyre with cse-gr. biotite granite	Granite is only weakly altered.	
		RECOV.	GB-14 255-260	<.02		& PEbgr			Lamprophyre is altered to clay, chlorite and siderite	
			GB-14 260-265	<.02						
265-295	30'		GB-14 265-270	<.02		PEgn	Gneiss	Med. gray to pinkish tan chips of coarse fspar and qtz.	Rock is bleached with substantial alt. of fspars to clay	Siderite is relatively abundant and occurs both disseminated and as thin seams and veinlets. Minor limonite after vfg pyrite.
			GB-14 270-275	<.02						
			GB-14 275-280	.03						
			GB-14 280-285	.05						
			GB-14 285-290	<.02						
			GB-14 290-295	<.02						
295-320	25'		GB-14 295-300	<.02		PEbgr	Cse-grained biotite granite	Med to dark gray coarse-grained granite. Chips show .20 inch & larger grains of qtz & fspar.	Little or no alteration is evident. Darker color may be caused by black chlorite.	No indicated mineralization.
			GB-14 300-305	<.02						
			GB-14 305-310	<.02						
—			GB-14 310-315	<.02						
			GB-14 315-320	<.02						
320 is TD										

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CORN & AHERN

HOLE NO. GB #15 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB #53 SECTION 25 (NW SE) T. 28N R. 19W COLLAR COORDS. 2010'N., 2010'W. of S.E. Cor. Sec. 25

ELEVATION 4780 HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE 90°

SPUDDED 12/14/83 COMPLETED 12/15/83 DRILLER Connors LOGGED BY

TOTAL DEPTH 360'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-40'	40'		GB-15 0-5	<.02		PEbgr	0-130' Cse grained gneissic Biotite granite	Cse gr. Biotite granite, 10-15% biotite-Feld and qtz ½" or larger xls. Mottled grn-gr color w/ siderite and hematite stain.	Weak hematite and siderite stain on fracts. Biotite is chloritized and some dk. chloritiz. of feldspar.	No mineralization noted.
			" 5-10	<.02						
			" 10-15	<.02						
			" 15-20	<.02						
			" 20-25	<.02						
			" 25-30	<.02						
			" 30-35	<.02						
			" 35-40	<.02						
40-60'	20'		GB-15 40-45	<.02					40-60' some yellowish limonitic clay noted	
			" 45-50	<.02						
			" 50-55	.02						
			" 55-60	<.02						
60-130'	70'		GB-15 60-65	<.02					60-130' variable chlorite altn. Wk hematite and siderite	
			" 65-70	<.02						
			" 70-75	<.02						
			" 75-80	<.02						
			" 80-85	<.02					K Feldspars are generally fresh and unalt'd.	
			" 85-90	<.02						
			" 90-95	<.02						
			" 95-100	<.02						
			" 100-105	<.02						
			" 105-110	<.02						
			" 110-115	<.02						
			" 115-120	.02						
			" 120-125	<.02						
			"							
130-150'	20'		GB-15 125-130	<.02						
			GB-15 130-135	.03		PEfgr	130' - Fine grained qtz rich bio granite	Grey to dk grayish red fine-grained granite, qtz and alt. biot and fspr. Chlorite and siderite have repl. any biotite.	130'- increased siderite and hematite alt. biotite & fspr alt to clay and siderite	Siderite and earthy hematite on fractures and disseminated through granite.
			" 135-140	<.02						
—			" 140-145	<.02						
			" 145-150	<.02						
150'							Fault.			
150-235'	85'		GB-14 150-155	<.02		T1	150-160'. As above w/ frags lamp.			
			" 155-160	<.02						
			" 160-165	<.02		PEfgr	160'. Fine gr. qtz rich biotite granite	With increasing depth, the granite darkens in color.	Less intense siderite and clay alt below 200'. Bio is alt. to dk chlorite. Rock darkens from chloritic alt'n.	
			" 165-170	<.02						
			" 170-175	<.02						
			" 175-180	<.02						
			" 180-185	<.02						
			" 185-190	<.02						
			" 190-195	<.02						
			" 195-200	<.02						
			" 200-205	<.02						
			" 205-210	<.02						
			" 210-215	<.02						
			" 215-220	<.02						
			" 220-225	<.02						
			" 225-230	<.02						
			" 230-235	<.02						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB #15 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
235			GB-15 235	<.02			Fault.			
235-240'	5		GB-15 235-240	<.02		PEfgr	Fine gr. qtz-biotite granite. 235-300'	Mix frags of med gry to tan color. Fine gr qtz & former	Abdt. limonite after siderite and subst siderite. All fract	Limonite after siderite and some milky qtz frags. Bright red earthy
						& PEgn	crushed zone. Mixed fgr bio gran &	fspr. alt to clay, sid and chlorite;	show sid. and hem. stain. Biotite conv. to chlorite.	hematite noted on some fract. Some limonite after pyrite noted on fracts.
240-280'	40'		GB-15 240-245	<.02			Mixed f. gr. bio gran & granite gneiss			
			" 245-250	<.02						
			" 250-255	<.02						
			" 255-260	<.02						
			" 260-265	<.02			" "			
			" 265-270	.03						
			" 270-275	<.02			" "			
			" 275-280	<.02						
280-295'	15'		GB-15 280-285	<.02			280-295' Fault Zone Soft.	280-295'. Rock is completely tan in color from siderite &	280-295'. Clay, chlor & sid. altn. All fracts stained w/	280-295'. Abdt. siderite. Limonite after siderite & some earthy
			" 285-290	<.02				limonite. Qtz is only non-replaced mineral.	limonite and minor hematite.	hematite.
			" 290-295	<.02						
295-325'	30'		GB-15 295-300	<.02			295-325' Granite Gneiss.	295'. Frags are mottled gry-grn, tan and qtz. Large frags	295'. Clay, chlor, wk sid & hematite on fracts.	295-320'. Siderite and hematite on fracts.
			" 300-305	.04				show foliated cse qtz & fspr.	310'. Color darkens w/ incr. black chlorite.	
			" 305-310	<.02						
			" 310-315	<.02					320'. Increased siderite alt.	
			" 315-320	<.02						
			" 320-325	<.02						
325-330'	5'		GB-15 325-330	<.02		T1	325-330'. Granite Gneiss & lamprophyre.	325-330'. Granite gneiss as above mixed w/ frags of grn-brn. lamprophyre	Clay, chlorite, siderite & wk hematite alt.	
330-335'	5'		" 330-335	<.02		T1	330-335'. Lamprophyre	330-335'. Dominantly green-brown lamprophyre	Clay, chlorite alt. in lamprophyre	
335-340'	5'		" 335-340	<.02		PEgn	335-360' Granite Gneiss			
340-360'	20'		GB-15 340-345	<.02				335'. Cse Feldspar & quartz - minor biotite and chlorite.	Wkly alt'd. Chlorite and min-or siderite and hematite.	335-260'. No indicated mineralization
			" 345-350	<.02				Rock is dense and hard.	Fsprs are pale bl-grn. color. Chloritic altn.	
			" 350-355	<.02						
			" 355-360	.04						
			360 is T.D.							

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HOLE NO. GB- #16 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM JB #53 SECTION NWSE 25 T. 28N R. 19W COLLAR COORDS. 1680'N., 2105'W. of S.E. Cor. Sec. 25

ELEVATION 4780 HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 12/16/83 COMPLETED 12/18/83 DRILLER Connors LOGGED BY R. Corn

TOTAL DEPTH 360'

DRILL HOLE DESCRIPTIVE LOG

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
0-10	10'	GOOD RECOV.	GB-16 0-5	<.02		Pegngr	Granite Gneiss	Mottled green-gray and tan fragments of foliated fspr	Clay, chlorite & siderite altn Feldspars are altd to clay &	Abdt siderite, but no other indication of mineralization
			" 5-10	.07				and white qtz.	dk grn chlorite	
10-50	40'		GB-16 10-15	.27			10-50' sheared Granite Gneiss	10-50' few cse frags sample almost all fines	Frags are cut by num. thin seams of siderite.	
			" 15-20	.05						
			" 20-25	.12					10-50' increased clay & sider-ite altn. Approx 30% of chips	Siderite is abdt, minor hematite noted
			" 25-30	.17						
			" 30-35	.06					show feldsp completely repl. by siderite.	
			" 35-40	.05						
			" 40-45	.04						
			" 45-50	.05						
50-100	50'		GB-16 50-55	<.02			Granite Gneiss	Similar to gneiss above but with less intense shearing	Feldspars show pale green sericite (?)chlorite altn.	Thin seams of siderite cut quartz and feldspar.
			" 55-60	.37						
			" 60-65	.33					Yellowish clay (gouge?) is fairly common.	
			" 65-70	.90						
			" 70-75	.33						
			" 75-80	.14						
			" 80-85	.06						
			" 85-90	.06						
			" 90-95	<.02				" "	Clay, chlorite, siderite altn	
			" 95-100	<.02						
100-115	15'		GB-16 100-105	<.02			Granite Gneiss	Mottled dk gry, grn and reddish brn and tan chips of	" "	Yellow and yellow-tan siderite is very common
			" 105-110	<.02						
			" 110-115	<.02				chloritized feldsp & qtz.		
115-160	45'		GB-16 115-120	<.02			Quartz-Feldspar	110-120'30% chips of tan		
			" 120-125	<.02			Gneiss or F gr.	sideritized fspr. 5% white	115' abundant siderite less	115' MnOx noted on fract. Abund sider-ite. Fgr. white mineral-fluorite or
			" 125-240	<.02			Granite Gneiss	clay. 115' tan to lt-brn	intense chlorite.	
			" 130-135	<.02				fine gr.foliated qtz-fspr.		barite noted in panned conc.
			" 135-140	<.02				Chips are dominantly former		
			" 140-145	<.02				feldsp w/fgr qtz.		
			" 145-150	<.02						
			" 150-155	<.02						
			" 155-160	<.02						
160-200	40'		GB-16 160-165	<.02		Pegngr	Granite Gneiss	Tan to lt. brn altd fspr & white qtz. Chips show gneissic foliation.	Clay, chlorite & siderite abundant siderite	Abdt siderite seams and vnlts.
			" 165-170	<.02						
			" 170-175	<.02						
			" 175-180	.02						
			" 180-185	<.02						
			" 185-190	.04						
			" 190-195	<.02						
			" 195-200	<.02						
200-230	30'		GB-16 200-205	.03			Granite Gneiss	Lt red-brn sideritized fspr and white to clear qtz.	Fsprs are alt. to siderite, clay and minor chlorite.	Abdt thin seams and vnlts of siderite
			" 205-210	<.02						
			" 210-215	<.02						
			" 215-220	<.02						
			" 220-225	<.02						
			" 225-230	<.02						

(1) ASSAYS by U.S. BORAX RESEARCH CORPORATION, ANAHEIM, CA.

CORN & AHERN

HOLE NO. GB- #16 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

HOLE DEPTH	INTERVAL	RECOVERY	SAMPLE NUMBER	PPM (1) Au	PPM (1) Hg		ROCK TYPE	ROCK DESCRIPTION	ALTERATION	MINERALIZATION
230-260	30'	GOOD RECOV	GB-16 230-235	<.02		Pegngr	Granite Gneiss	230'-Rd to red brown chips of altd feldspar & white qtz w/	230'- Prominent increase in hematite stain & coloration.	230'- earthy hematite & MnOx noted on fractures.
			" 235-240	<.02			More shearing below 240'	prominent hematite & siderite stain on fracts.	Some hematitic limonite aft. pyrite.	240'-several small frags of bracciated qtz w/ hematitic limonite noted.
			" 240-245	.04						
			" 245-250	<.02						
			" 250-255	<.02			250-260' Some Fault Gouge.		Siderite, clay & hematite are dominant alt mins.	250-260'- some hematitic limonite stained clay.
			" 255-260	.03						
260-300	40'		GB-16 260-265	.07		Pegn	Gneiss	260-300'-greenish gray chlor. gneiss w/ partial hematite	260'- sericite & chlorite altn Wk. siderite	Minor siderite - little hematite
			" 265-270	<.02				stain.		
			" 270-275	.04						
			" 275-280	<.02						
			280-285	.05						290'- increased siderite & hematite stain.
			" 285-290	.03						
			" 290-295	<.02				295-300'-20% of chips are white clay. Fault Gouge.		
			" 295-300	<.02						
300							Fault			
300-310	10'		GB-16 300-305	<.02			Gneiss	300-310'- Siderite & hematite stained. Dense gneiss. 310'-	300-330'-siderite & hematite stain on fractures. Black	
			" 305-310	<.02						
310-330	20'		GB-16 310-315	<.02				350'-larger chips exhibit black chloritic color on	chloritic alt of gneiss.	
			" 315-320	<.02						
			" 320-335	<.02				fresh fractures.		
			" 325-330	<.02						
330							Fault	330'-tan or light brown leuco-cratic rock composed of qtz	Chlorite and siderite. Alteration is generally weak.	
330-360	30'		GB-16 330-335	<.02		Klgr	Leucogranite	and K feldspars, somewhat foliated		No indicated mineralization in Leucogranite
			" 335-340	<.02						
			" 340-345	<.02			"			
			" 345-350	<.02						
			" 350-355	.03						
			" 355-360	<.02						
			360 is T.D.							

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APPENDIX B

ASSAY LOGS
GB-1 through GB-16

HOLE NO. GB-1 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB #2 SECTION NE36 T. 28N R. 19W COLLAR COORDS. 655'S., 925'W. of NE Cor

ELEVATION 4640' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 10-24-83 COMPLETED 10-30-83 DRILLER Connors Drilling Company LOGGED BY W. Szymanski

TOTAL DEPTH 576'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-40	40	GB-1 0-40	< .02	1.2	2	< 2	10	5	46	61	< .05	4						Fanglomerate and Alluvium
40-120	80	GB-1 40-120	< .02	1.3	2	< 2	10	6	40	70	< .05	4						Fine Grained Biotite Granite
120-155	35	GB-1 120-155	< .02	1.4	4	< 2	19	7	88	61	.05	5						
																		Fault
155-200	45	GB-1 155-200	< .02	1.4	2	< 2	11	7	48	50	< .05	3						
200-300	100	GB-1 200-300	< .02	1.4	3	< 2	7	6	46	40	< .05	3						
300-400	100	GB-1 300-400	< .02	1.3	4	< 2	8	7	60	41	< .05	3						
400-530	130	GB-1 400-530	< .02	1.3	3	< 2	8	8	51	46	< .05	4						White Hills Granite
530-560	30	GB-1 530-560	< .02	1.4	3	< 2	6	9	49	39	< .05	3						
560-570	10	GB-1 560-570	< .02	1.4	2	< 2	6	7	47	31	< .05	3						
0-570	570'	Avg	< .02	1.4	3	< 2	9	7	53	49	< .05	4						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-2 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM _____ SECTION 25 T. 28N R. 19W COLLAR COORDS. 315'N., 2840'W. of S.E. Cor. Sec. 25

ELEVATION 4800' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 11-1-83 COMPLETED _____ DRILLER Connors Drilling Co. LOGGED BY W. Szymanski

TOTAL DEPTH 600'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au ppb [2]	Ag ppm [2]	As ppm [2]	Sb ppm [2]	Cu ppm [2]	Mo ppm [2]	Pb ppm [2]	Zn ppm [2]	Hg ppb [2]	W ppm [2]	F ppm [1]	Acid Sol. Ba ppm [1]	Total Ba % [1]	U ppm [1]		GEOLOGY
0=10	10	No Sample																
																		Fanglomerate
10-50	40	GB-2 10-50	.11	1.7	3	2	18	6	54	54	.39	7						Fine grained granite
																		and
50-110	60	GB-2 50-110	<.02	1.6	2	2	8	6	40	39	.08	3						White Hills granite
110-170	60	GB-2 110-170	.12	1.6	2	4	18	6	50	53	.22	6						Coarse grained
																		Biotite Granite
170-210	40	GB-2 170-210	.03	1.9	2	2	11	6	38	46	.16	5						
210-240	30	GB-2 210-240	.12	1.6	3	2	17	6	35	51	.22	7						
240-340	100	GB-2 240-340	<.02	1.7	2	2	12	6	37	56	.11	3						
340-430	90	GB-2 340-430	<.02	1.5	2	< 2	10	5	36	47	< .05	2						
430-460	30	GB-2 430-460	<.02	2.0	2	< 2	11	5	38	57	< .05	2						
																		White Hills Granite
460-530	70	GB-2 460-530	<.02	1.6	<2	< 2	9	< 5	38	45	< .05	2						
530-580	50	GB-2 530-580	.03	1.7	2	< 2	8	6	45	47	< .05	2						
580-600	20	GB-2 580-600	<.02	1.9	2	< 2	6	7	49	33	.05	2						
10-600	590	AVG	.02	1.7	3	< 2	11	6	40	48	.11	4						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-3 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB #44 SECTION NW 31 T. 28N R. 18W COLLAR COORDS. 275'S., 1590'E. of N.W. Cor. Sec. 31

ELEVATION 4480' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 11-10-83 COMPLETED 11-11-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 200'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-5	5	No Sample																Gneissic Granite
5-60	55	GB-3 5-60	< .02	1.0	< 2	2	9	6	35	52	.11	11						
60-130	70	GB-3 60-130	< .02	1.1	< 2	< 2	9	6	37	59	.11	6						CRUSHED ZONE
130-200	70	GB-3 130-200	< .02	1.0	< 2	< 2	9	6	37	49	.08	5						Gneissic Granite
5-200	195	AVG	< .02	1.0	< 2	< 2	9	6	36	54	.10	7						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-4 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 34 SECTION 31 NW NW T. 28N R. 18W COLLAR COORDS. 560'S., 1290'E. of N.W. Cor. Sec. 31

ELEVATION 4420' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 11-11-83 COMPLETED 11-12-83 DRILLER Connors Drilling Company LOGGED BY

TOTAL DEPTH 380'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au ₂	Ag ₂	As ₂	Sb ₂	Cu ₂	Mo ₂	Pb ₂	Zn ₂	Hg ₁	W ₂	F ₁	Acid Sol. Ba ₁	Total Ba % ₁	U ₁		GEOLOGY
0-80	80	GB-4 0-80	< .02	.09	< 2	< 2	7	5	42	52	.11	5						Fine grained Biotite Granite
80-100	20	GB-4 80-100	< .02	1.3	< 2	< 2	9	5	42	55	.30	8						CRUSHED ZONE
100-200	100	GB-4 100-200	< .02	1.1	< 2	3	13	6	40	57	.25	7						
200-240	40	GB-4 200-240	< .02	1.1	< 2	2	11	8	34	54	.47	8						Fine grained Biotite Granite
240-320	80	GB-4 240-320	< .02	1.2	< 2	2	5	12	24	43	.61	9						
320-380	60	GB-4 320-380	< .02	1.1	< 2	2	13	6	23	46	.55	8						Coarse grained Biotite Granite
0-380		AVG	< .02	1.1	< 2	2	10	7	36	50	.37	8						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-5 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 46 SECTION 31 NW NW T. 28N R. 18W COLLAR COORDS. 280'S., 555'E. of N.W. Cor. Sec. 31

ELEVATION 4560' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 11-13-83 COMPLETED 11-16-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 600'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-30	30	GB-5 0-30	< .02	1.5	2	3	9	5	36	46	<.05	10						Fanglomerate
30-80	50	GB-5 30-80	.03	1.1	2	< 2	11	< 5	31	57	114	9						Fine grained Biotite Granite
80-130	50	GB-5 80-130	.33	2.0	7	4	31	7	25	62	.61	12						CRUSHED ZONE
130-180	50	GB-5 130-180	.17	2.6	4	4	35	6	36	46	.55	17						Granite Gneiss
180-210	30	GB-5 180-210	.03	1.4	< 2	2	7	5	18	46	.41	16						
210-260	50	GB-5 210-260	.05	1.6	2	3	11	< 5	26	51	.72	12						Fine grained Biotite Granite
260-380	120	GB-5 260-380	.03	1.2	2	3	13	< 5	29	69	.36	10						Granite Gneiss
380-390	10	GB-5 380-390	< .02	1.6	3	2	15	6	29	92	.53	5						Lamprophyre
390-480	90	GB-5 390-480	< .02	1.2	< 2	3	8	5	26	61	.33	7						Gneiss
480-520	40	GB-5 480-520	< .02	1.3	< 2	2	12	6	27	70	.21	5						
520-600	80	GB-5 520-600	< .02	1.2	< 2	2	9	6	27	63	.28	3						Coarse grained Biotite Granite
0-600		AVG	.06	1.5	2	3	15	< 5	27	60	.37	10						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-6 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 45 SECTION 30 SW/SW T. 28N R. 18W COLLAR COORDS. 210'N., 865'E. of S.W. Cor. Sec. 30

ELEVATION 4550' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 11-16-83 COMPLETED 11-17-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 300'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-40	40	GB-6 0-40	< .02	1.4	2	< 2	9	6	32	42	< .05	4						Fanglomerate
40-90	50	GB-6 40-90	< .02	1.2	< 2	< 2	10	9	46	54	.08	5						Fine grained Biotite Granite
90-150	60	GB-6 90-150	< .02	1.5	< 2	11	10	6	34	50	.08	5						
150-220	70	GB-6 150-220	< .02	1.3	< 2	< 2	8	6	24	44	.10	6						CRUSHED ZONE
220-300	80	GB-6 220-300	< .02	1.5	< 2	< 2	12	6	38	53	.13	4						Coarse grained Biotite Granite
0-300		AVG	< .02	1.4	< 2	2	10	6	35	49	.08	5						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CA CORN & AHERN

HOLE NO. GB-7 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 44 SECTION 31 NE/NW T. 28N R. 18W COLLAR COORDS. 280'S., 1370'E. of N.W. Cor. Sec. 31

ELEVATION 4500' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 1-18-83 COMPLETED 1-20-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 400'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-10	10	NO COMPOSITE SAMPLE																
10-60		GB-7 10-60	.11	1.5	< 2	2	10	7	25	41	.53	25						
																		Gneiss
60-75	15	GB-7 60-75	.47	1.8	3	5	71	7	33	48	.60	17						
		GB-7 60-75*	(3.54 AVG of Individual Assays)															
75-130	55	GB-7 75-130	.06	1.7	3	4	34	7	28	48	.51	15						
130-165	35	GB-7 130-165	.81	2.1	3	5	101	5	40	66	.48	22						CRUSHED ZONE
165-185	20	GB-7 165-185	.17	1.5	< 2	3	23	8	18	34	.44	19						
																		Coarse grained Biotite Granite
185-225	40	GB-7 185-225	< .02	1.5	2	< 2	14	7	33	54	.30	5						
225-235	10	GB-7 225-235	< .02	2.5	3	< 2	32	5	33	83	.30	2						Lamprophyre
235-275	40	GB-7 235-275	< .02	1.5	< 2	2	8	6	32	44	.17	4						Coarse grained Biotite Granite
275-300	25	GB-7 275-300	< .02	1.7	< 2	< 2	3	6	24	38	.13	4						
300-400	100	GB-7 300-400	< .02	0.7	< 2	< 2	7	5	29	45	.13	4						
10-185	175	AVG	.27	1.7	2	4	42	7	29	41	.46	20						Gneiss
185-400	215	AVG	< .02	1.6	< 2	< 2	11	6	30	47	.18	4						Biotite Granite

*Particulate gold indicated by variation in repeat assays of individual samples.

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-8 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 43 SECTION 31 T. 28N R. 18W COLLAR COORDS. 275'N., 1855'E. of S.W. Cor. Sec. 30 SE SW

ELEVATION 4450' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 11-20-83 COMPLETED 11-28-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 265'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-20	20	GB-8 0-20	< .02	0.6	< 2	< 2	6	5	30	39	.08	3						Alluvium
20-90	70	GB-8 20-90	< .02	0.6	< 2	< 2	8	5	34	46	.08	4						Coarse Grained Biotite Granite
90-130	40	GB-8 90-130	< .02	0.7	< 2	< 2	6	6	25	41	.10	5						CRUSHED ZONE
																		Coarse Grained Biotite Granite
130-180	50	GB-8 130-180	< .02	0.6	< 2	< 2	9	5	33	54	.06	3						
180-230	50	GB-8 180-230	< .02	0.7	< 2	< 2	8	6	28	41	.13	4						
																		Fine Grained Biotite Granite
230-265	35	GB-8 230-265	< .02	0.7	< 2	< 2	9	5	22	32	.08	3						
0-265		AVG	< .02	0.6	< 2	< 2	8	5	29	43	.09	4						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-9 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 43 SECTION 30 SE/SW T. 28N R. 18W COLLAR COORDS. 780'N., 2125'E, of S.W. Cor. Sec. 30

ELEVATION 4450' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE 90°

SPUDDED 11-28-83 COMPLETED 11-29-83 DRILLER Connors Drilling Company LOGGED BY Michael H. Rauschkolb

TOTAL DEPTH 240'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-20	20	GB-9 0-20	< .02	0.7	< 2	2	9	8	36	54	< .05	7						Fine grained Granite
20-50	30	GB-9 20-50	.03	0.9	< 2	3	8	6	33	46	< .05	7						----------Fault----------
50-100	50	GB-9 50-100	< .02	0.8	< 2	2	9	6	36	54	< .05	5						Fine grained Granite
100-150	50	GB-9 100-150	< .02	0.8	< 2	2	6	6	33	49	< .05	5						
150-220	70	GB-9 150-220	.03	0.9	< 2	3	6	5	19	35	< .05	10						
220-240	20	GB-9 220-240	< .02	0.8	< 2	3	8	8	23	39	< .05	6						
0-240		AVG	< .02	0.8	< 2	3	8	6	29	45	< .05	7						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-10 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 46 SECTION 30 SW/SW T. 28N R. 18W COLLAR COORDS. 705'N., 85'E. of S.W. Cor. Sec. 30

ELEVATION 4600' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 11-29-83 COMPLETED 12-1-83 DRILLER Connors Drilling Company LOGGED BY Michael H. Rauschkolb

TOTAL DEPTH 360'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au ppm [2]	Ag ppm [2]	As ppm [2]	Sb ppm [2]	Cu ppm [2]	Mo ppm [2]	Pb ppm [2]	Zn ppm [2]	Hg ppm [2]	W ppm [2]	F' ppm [1]	Acid Sol. Ba ppm [1]	Total Ba % [1]	U ppm [1]		GEOLOGY
0-30	30	GB-10 0-30	< .02	0.8	< 2	2	10	6	40	48	<.05	4						Fine grained Biotite Granite
30-90	60	GB-10 30-90	< .02	0.9	2	< 2	10	8	25	49	<.05	3						CRUSHED ZONE
90-165	75	GB-10 90-165	< .02	0.6	< 2	2	9	5	32	50	<0.5	4						Fine grained Biotite Granite
165-200	35	GB-10 165-200	< .02	1.0	< 2	< 2	10	6	53	56	.07	5						
200-255	55	GB-10 200-255	< .02	1,0	< 2	2	9	5	35	46	.16	5						
255-300	45	GB-10 255-300	< .02	1.1	< 2	< 2	10	5	32	47	.20	6						
300-360	60	GB-10 300-360	< .02	1.2	< 2	< 2	14	6	41	56	.16	5						
0-360		AVG	< .02	1.0	< 2	< 2	10	6	36	50	.09	5						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-11 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 49 SECTION SW/SW 30 T. 28N R. 18W COLLAR COORDS. 1175'N., 350'E. of S.W. Cor. Sec. 30

ELEVATION 4560' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 12-2-83 COMPLETED 12-5-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 300'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-25	25	GB-11 0-25	< .02	1.3	2	<2	13	6	53	47	.09	4						Fine grained Biotite Granite
25-120	95	GB-11 25-120	< .02	1.0	< 2	2	10	5	32	55	.09	4						
120-135	15	GB-11 120-135	< .02	1.2	2	2	11	6	31	52	.09	5						CRUSHED ZONE
135-200	65	GB-11 135-200	< .02	1.1	< 2	<2	11	5	29	54	.14	6						Sheared Fine grained Biotite Granite
200-240	40	GB-11 200-240	< .02	1.3	< 2	<2	11	6	30	50	005	5						
240-300	60	GB-11 240-300	.06	1.1	< 2	<2	12	5	32	54	.05	4						
0-300		AVG	< .02	1.2	< 2	<2	11	6	36	52	.08	5						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-12 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 12 SECTION 30 (NW/SW) T. 28N R. 18W COLLAR COORDS. 1810'N., 615'E. of S.W. Cor. Sec. 30

ELEVATION 4550' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 12-5-83 COMPLETED 12-6-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 230'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au ppm [2]	Ag ppm [2]	As ppm [2]	Sb ppm [2]	Cu ppm [2]	Mo ppm [2]	Pb ppm [2]	Zn ppm [2]	Hg ppm [2]	W ppm [2]	F ppm [1]	Acid Sol. Ba ppm [1]	Total Ba % [1]	U ppm [1]		GEOLOGY
0-55	55	GB-12 0-55	< .02	1.3	< 2	2	10	5	27	38	< .05	4						Fine grained Biotite Granite
55-90	35	GB-12 55-90	< .02	1.3	< 2	2	6	< 5	15	26	.09	7						
90-130	40	GB-12 90-130	.05	1.4	< 2	2	9	5	24	42	< .05	12						CRUSHED ZONE
130-170	40	GB-12 130-170	.03	1.4	< 2	2	7	< 5	18	41	< .05	9						Fine grained Biotite Granite
170-200	30	GB-12 170-200	< .02	1.5	2	5	9	5	21	44	.05	7						
200-230	30	GB-12 2002-30	< .02	1.6	< 2	< 2	10	5	20	50	< .05	5						
0-230		AVG	< .02	1.4	< 2	2	9	< 5	21	40	< .05	7						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-13 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 48 SECTION 30 NW/SW T. 28N R. 18W COLLAR COORDS. 2410'N., 800'E. of S.W. Cor. Sec. 30

ELEVATION 4480' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 12-7-83 COMPLETED 12-8-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 160'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-65	65	GB-13 0-65	< .02	1.7	< 2	< 2	11	< 5	33	59	<.05	6						Fine grained Biotite Granite
65-105	40	GB-13 65-105	< .02	1.5	< 2	< 2	21	5	19	49	.05	6						CRUSHED ZONE
105-160	55	GB-13 105-160	< .02	0.6	< 2	< 2	12	6	25	61	<.05	7						Fine grained Biotite Granite
0-160		AVG	< .02	1.3	< 2	< 2	15	< 5	27	57	<.05	6						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CA CORN & AHERN

HOLE NO. GB-14 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 53 SECTION 25 NW/SE T. 28N R. 19W COLLAR COORDS. 2433'N., 1810'W. of S.E. Cor. Sec. 25

ELEVATION 4700' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 12-8-83 COMPLETED 12-19-83 DRILLER Connors Drilling Company LOGGED BY

TOTAL DEPTH 320'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au ppm [2]	Ag ppm [2]	As ppm [2]	Sb ppm [2]	Cu ppm [2]	Mo ppm [2]	Pb ppm [2]	Zn ppm [2]	Hg ppm [2]	W ppm [2]	F ppm [1]	Acid Sol. Ba ppm [1]	Total Ba % [1]	U ppm [1]		GEOLOGY
0-40	40	GB-14 0-40	.03	0.8	< 2	< 2	10	5	26	50	<.05	9						Fine grained Biotite Granite
40-60	20	GB-14 40-60	< .02	0.8	< 2	2	10	5	17	37	<.05	8						Coarse grained Biotite Granite
60-110	50	GB-14 60-110	< .02	0.8	< 2	< 2	31	7	102	53	<.05	15						Fine grained Biotite Granite
110-160	50	GB-14 110-160	< .02	0.7	3	< 2	20	6	82	50	<.05	14						
160-200	40	GB-14 160-200	< .02	0.8	< 2	< 2	9	6	28	67	<.05	10						CRUSHED ZONE
200-250	50	GB-14 200-250	< .02	0.8	< 2	3	9	6	20	45	.05	8						
250-320	70	GB-14 250-320	< .02	0.8	< 2	3	10	5	25	53	<.05	10						Coarse grained Biotite Granite and Gneiss
0-320		AVG	< .02	0.8	<2	< 2	16	6	45	52	<.05	11						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-15 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 53 SECTION 25 (NW SE) T. 28N R. 19W COLLAR COORDS. 2010'N., 2010'W. of S.E. Cor. Sec. 25

ELEVATION 4780' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE 90°

SPUDDED 12-14-83 COMPLETED 12-15-83 DRILLER Connors Drilling Company LOGGED BY

TOTAL DEPTH 360'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-60	60	GB-15 0-60	< .02	0.8	< 2	5	5	7	24	26	< .05	5						Coarse grained Biotite Granite
60-130	70	GB-15 60-130	< .02	0.9	< 2	3	7	8	23	32	< .05	11						
130-160	30	GB-15 130-160	< .02	1.0	< 2	3	13	6	16	39	< .05	11						Fine grained Biotite Granite
160-200	40	GB-15 160-200	< .02	0.7	< 2	2	13	6	25	49	< .05	8						
200-240	40	GB-15 200-240	< .02	0.8	< 2	< 2	9	5	23	52	< .05	7						
240-295	55	GB-15 240-295	< .02	1.1	2	< 2	14	6	63	54	< .05	16						CRUSHED ZONE
295-325	30	GB-15 295-325	< .02	0.9	< 2	< 2	10	6	20	33	< .05	17						Granite Gneiss
325-360	35	GB-15 325-360	< .02	1.0	< 2	4	11	6	36	51	< .05	11						Lamprophyre and Granite Gneiss
0-360		AVG	< .02	0.9	< 2	2	9	6	29	38	< .05	11						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

HOLE NO. GB-16 PROSPECT Gold Basin COUNTY Mohave STATE Arizona

CLAIM GB# 53 SECTION 25 NW SE T. 28N R. 19W COLLAR COORDS. 1680'N., 2105'W. of S.E. Cor. Sec. 25

ELEVATION 4780' HOLE SIZE 5 1/8" Reverse Circulation HOLE ANGLE Vertical

SPUDDED 12-16-83 COMPLETED 12-18-83 DRILLER Connors Drilling Company LOGGED BY Russell M. Corn

TOTAL DEPTH 360'

DRILL HOLE ASSAY LOG

HOLE DEPTH	INTERVAL	SAMPLE NUMBER	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [1]	W [2]	F [1]	Acid Sol. Ba [1]	Total Ba % [1]	U [1]		GEOLOGY
0-10	10	NO SAMPLE																
10-30	20	GB-16 10-30	.15	0.8	< 2	2	8	6	13	36	< .05	29						Sheared Granite Gneiss with Siderite-Hematite Alteration
30-50	20	GB-16 30-50	.03	0.9	< 2	< 2	8	6	15	37	< .05	21						
50-115	65	GB-16 50-115	.18	1.1	< 2	3	6	6	17	38	< .05	20						
115-160	45	GB-16 115-160	< .02	1.6	< 2	2	6	< 5	29	46	.07	27						Granite Gneiss
160-200	40	GB-16 160-200	.03	1.5	< 2	2	10	7	36	47	< .05	29						
200-230	30	GB-16 200-230	.03	1.6	< 2	< 2	6	5	27	44	.06	27						
230-260	30	GB-16 230-260	.06	1.7	< 2	< 2	10	5	30	41	.10	28						CRUSHED ZONE
260-310	50	GB-16 260-310	.05	1.7	< 2	3	7	7	27	36	.06	22						
310-360	50	GB-16 310-360	< .02	1.7	< 2	< 2	5	5	26	45	.12	48						Leuco Granite
10-360		AVG	.05	1.4	< 2	< 2	7	6	24	41	.05	28						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

CORN & AHERN

APPENDIX C

SUMMARY OF AVERAGE VALUES FROM DRILLING RESULTS

SUMMARY OF AVERAGE VALUES FROM DRILLING RESULTS

PROSPECT Gold Basin COUNTY Mohave STATE Arizona PAGE ____ OF ____

HOLE NUMBER		INTERVAL	Au [2]	Ag [2]	As [2]	Sb [2]	Cu [2]	Mo [2]	Pb [2]	Zn [2]	Hg [2]	W [2]	F [1]	Acid Sol. Ba [1]	Totgl Ba % [1]	U [1]		GEOLOGY
GB-1		0-570	< .02	1.4	3	< 2	9	7	53	49	< .05	4						White Hills Granite
GB-2		10-600	.02	1.7	2	< 2	11	6	40	48	.11	4						Biotite Granite
GB-3		5-200	< .02	1.0	< 2	< 2	9	6	36	54	.10	7						Gneiss
GB-4		0-380	< .02	1.1	< 2	7	10	7	36	50	.37	8						Biotite Granite
GB-5		0-600	.06	1.5	2	3	15	< 5	27	60	.37	10						Gneiss
GB-6		0-300	< .02	1.4	< 2	2	10	6	35	49	.08	5						Biotite Granite
GB-7		10-185	.27	1.7	2	4	42	7	29	41	.46	20						Gneiss
		185-400	< .02	1.6	< 2	< 2	11	6	30	47	.18	4						Biotite Granite
GB-8		0-265	< .02	0.6	< 2	< 2	8	5	29	43	.09	4						Biotite Granite
GB-9		0-240	< .02	0.8	< 2	3	8	6	29	45	< .05	7						Biotite Granite
GB-10		0-360	< .02	1.0	< 2	< 2	10	6	36	50	.09	5						Biotite Granite
GB-11		0-300	< .02	1.2	< 2	< 2	11	6	36	52	.08	5						Biotite Granite
GB-12		0-230	< .02	1.4	< 2	2	9	< 5	21	40	< .05	7						Biotite Granite
GB-13		0-160	< .02	1.3	< 2	< 2	15	< 5	27	57	< .05	6						Biotite Granite
GB-14		0-320	< .02	0.8	< 2	< 2	16	6	45	52	< .05	11						Biotite Granite
GB-15		0-360	< .02	0.9	< 2	2	9	6	29	38	< .05	11						Biotite Granite
GB-16		10-360	.05	1.4	< 2	< 2	7	6	24	41	.05	28						Granite Gneiss
		AVG	< .02	1.0	< 2	< 2	10	6	35	50	.10	7						

ALL VALUES IN PPM UNLESS OTHERWISE INDICATED.

ASSAYS BY:
1. COPPER STATE ANALYTICAL, TUCSON.
2. U.S. BORAX RESEARCH CENTER, ANAHEIM.

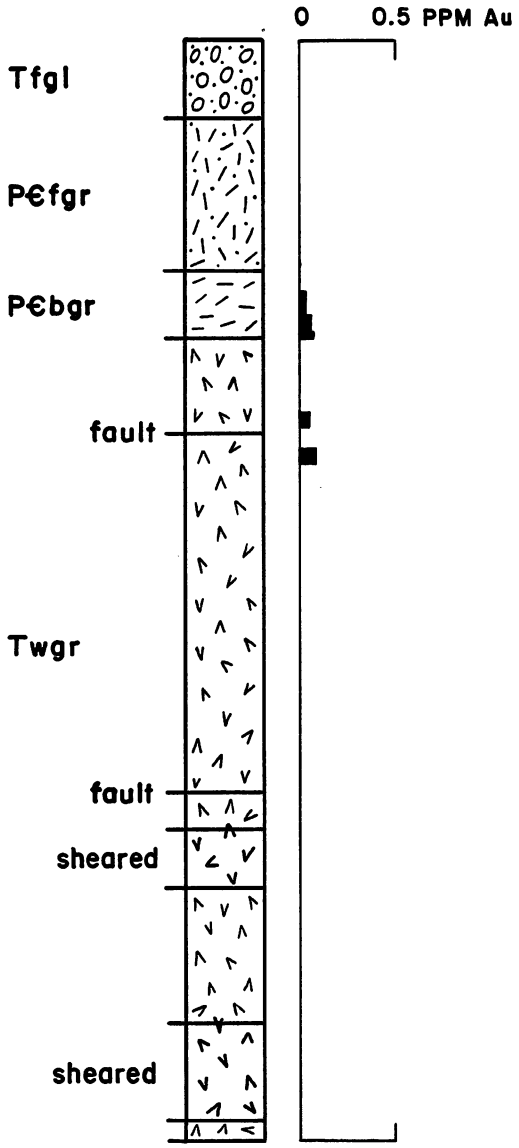
CORN & AHERN

APPENDIX D

GRAPHIC LOGS
GB-1 through GB-16

RDH GB-1

Elevation 4640'



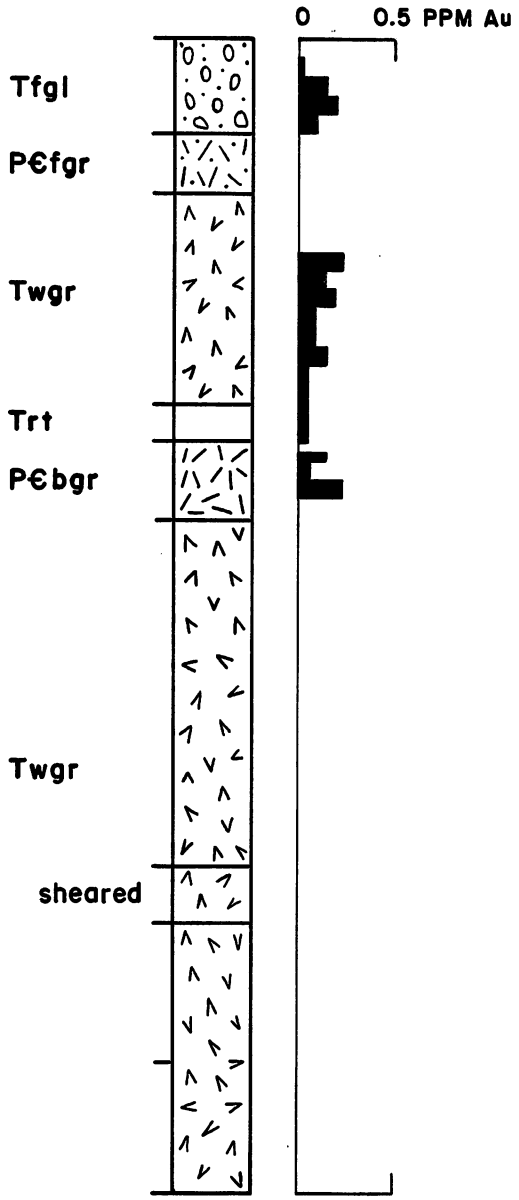
155 - 160 quartz-rich fault breccia

LOWER PLATE

T.D. 570'

RDH GB-2

Elevation 4800'



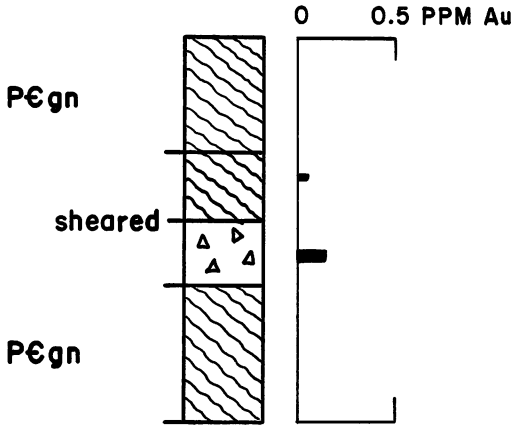
LOWER PLATE

530' water 5 gpm

T.D. 600'

RDH GB-3

Elevation 4480'



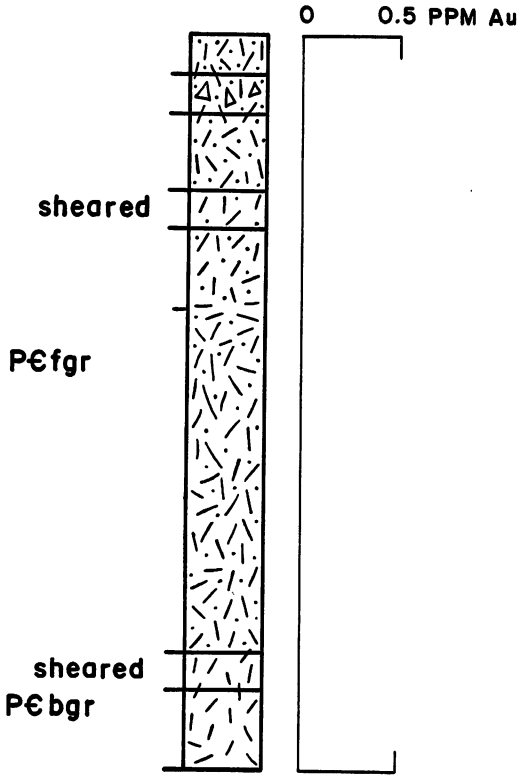
CRUSH ZONE

LOWER PLATE

T.D. 200'

RDH GB-4

Elevation 4420'

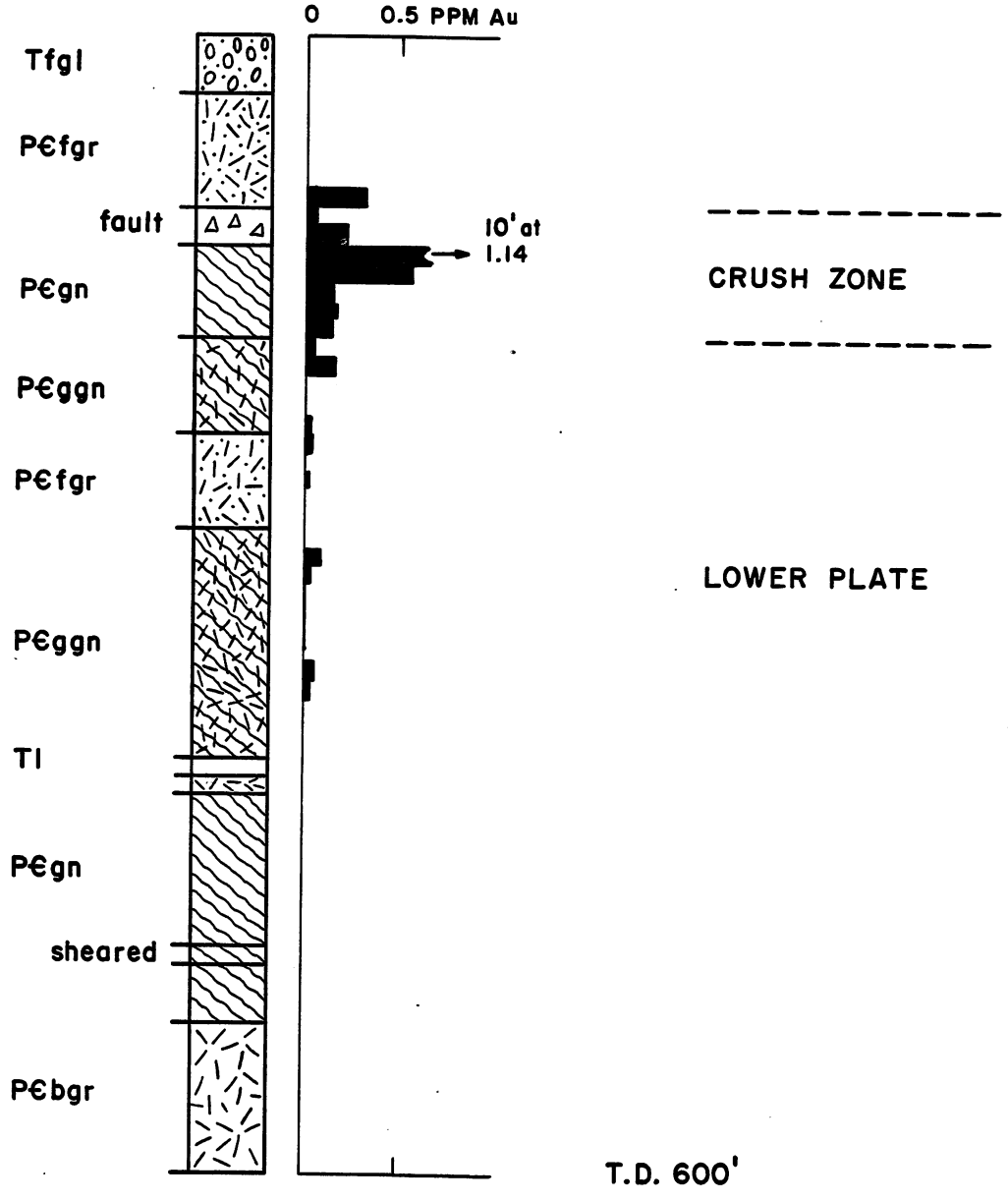


CRUSH ZONE

140' chloritic alteration

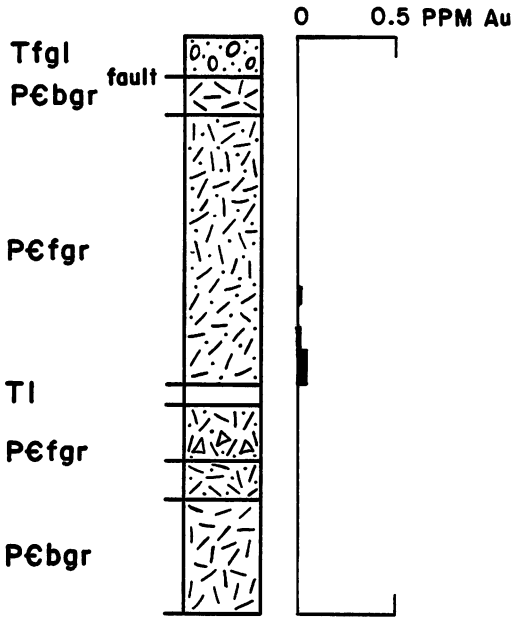
T.D. 380'

RDH GB-5
Elevation 4560'



RDH GB-6

Elevation 4550'



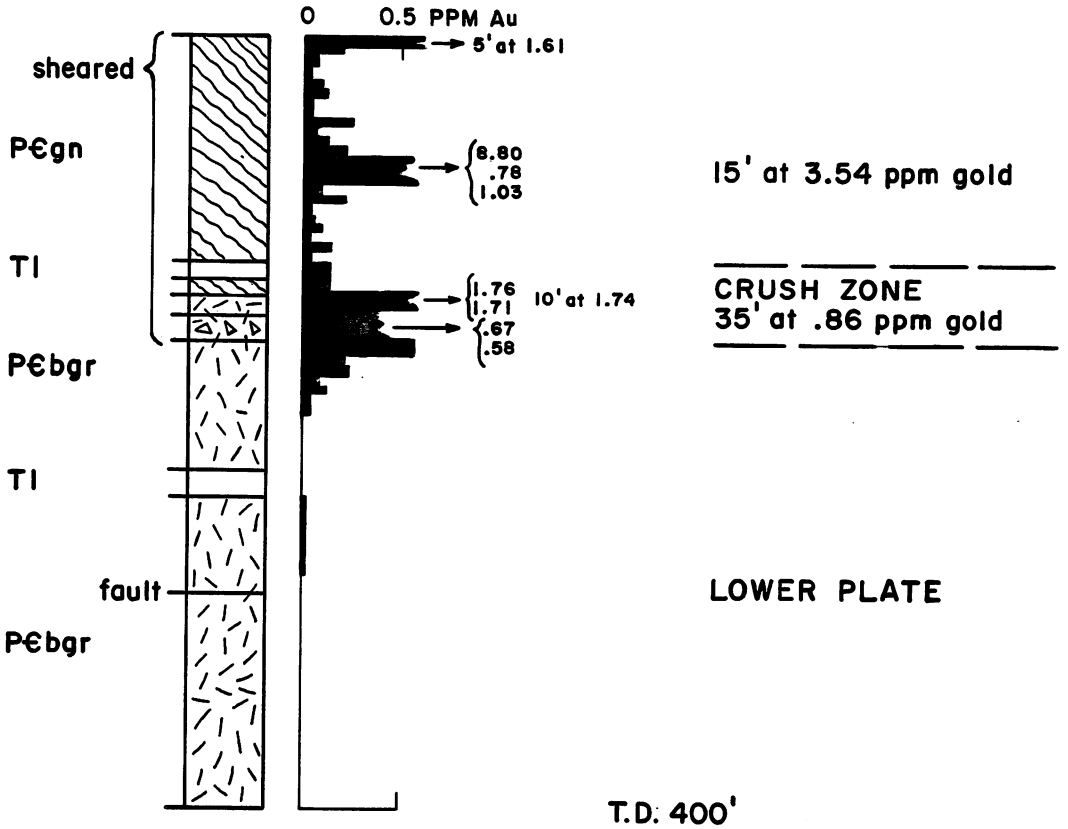
CRUSH ZONE

LOWER PLATE

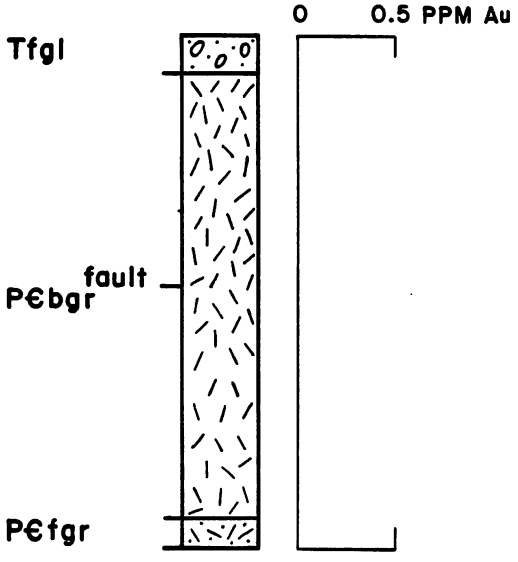
T.D. 300'

RDH GB-7

Elevation 4500'



RDH GB-8
Elevation 4450'



CRUSH ZONE

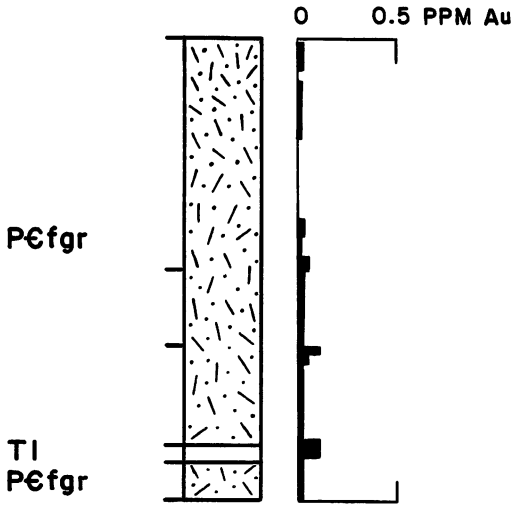
fine-grained black alteration in feldspars

LOWER PLATE

T.D. 265'

RDH GB-9

Elevation 4450'



CRUSH ZONE

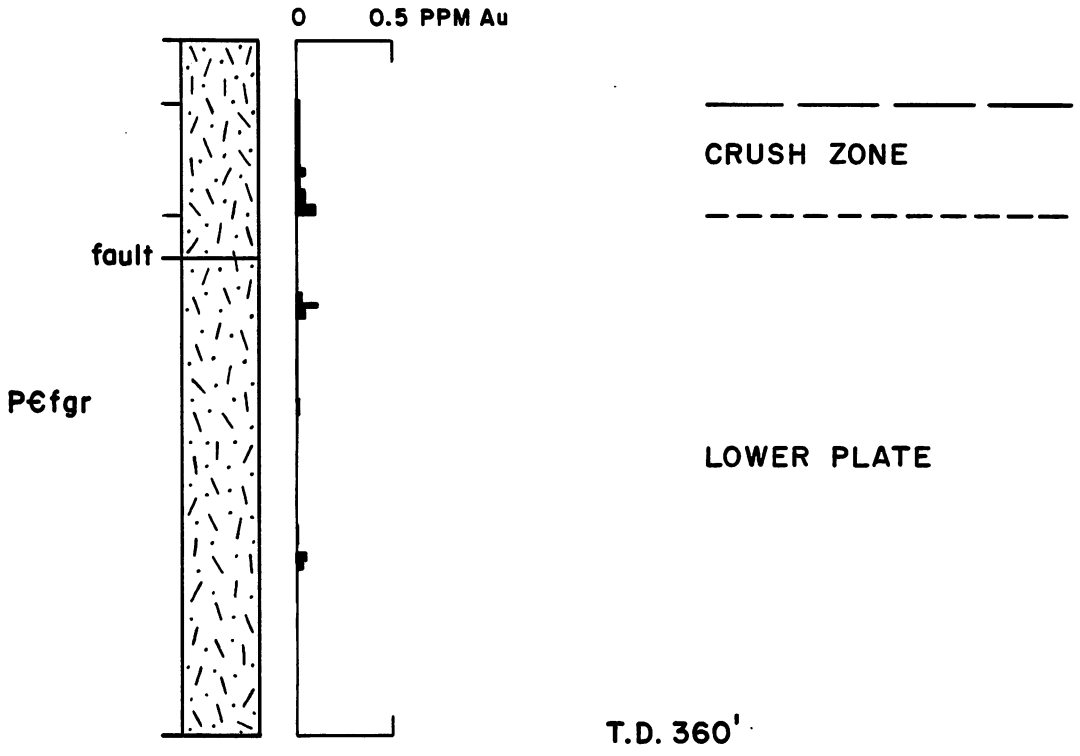
chloritic alteration

LOWER PLATE

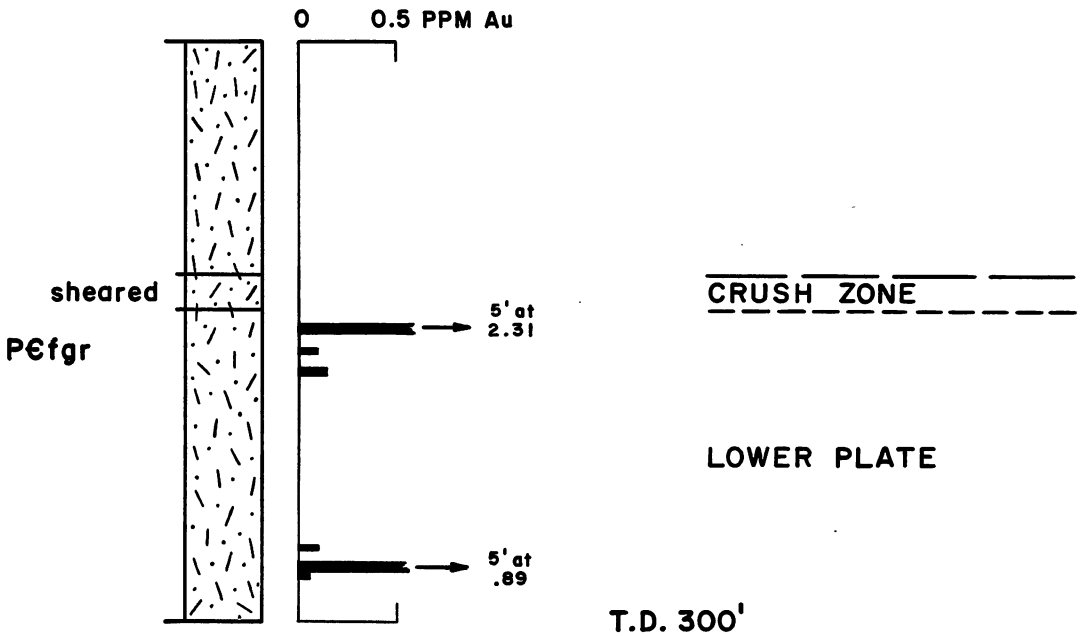
T.D. 240'

RDH GB-10

Elevation 4600'

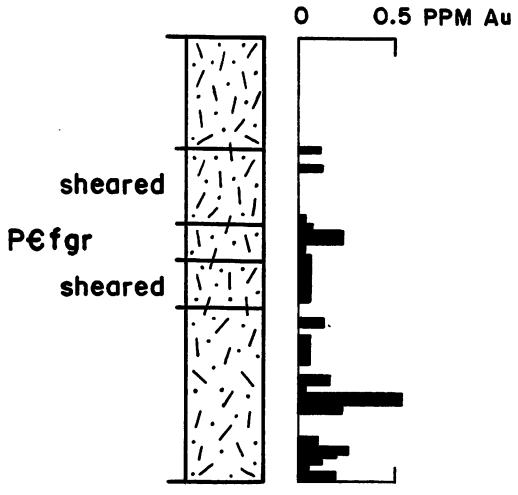


RDH GB-11
Elevation 4560'



RDH GB-12

Elevation 4550'



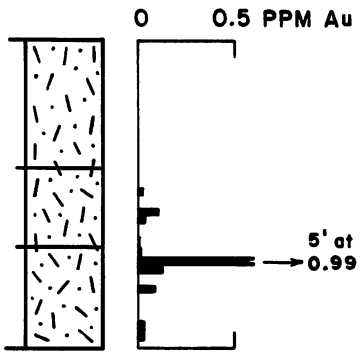
CRUSH ZONE

chloritic alteration with purple fluorite

LOWER PLATE

T.D. 230'

RDH GB-13
Elevation 4480'



P€fgr

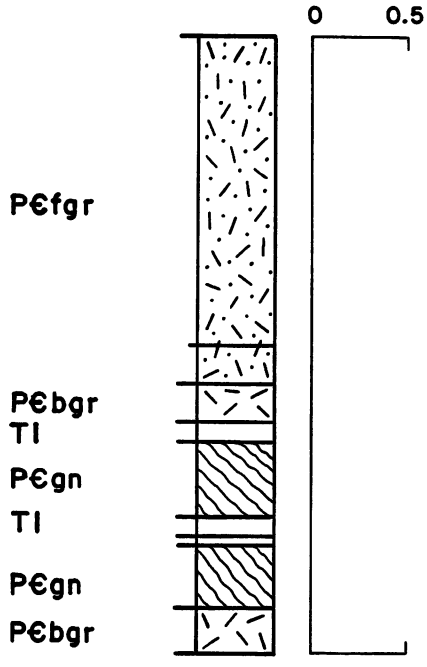
CRUSH ZONE

LOWER PLATE

T.D. 160'

RDH GB-14

Elevation 4700'

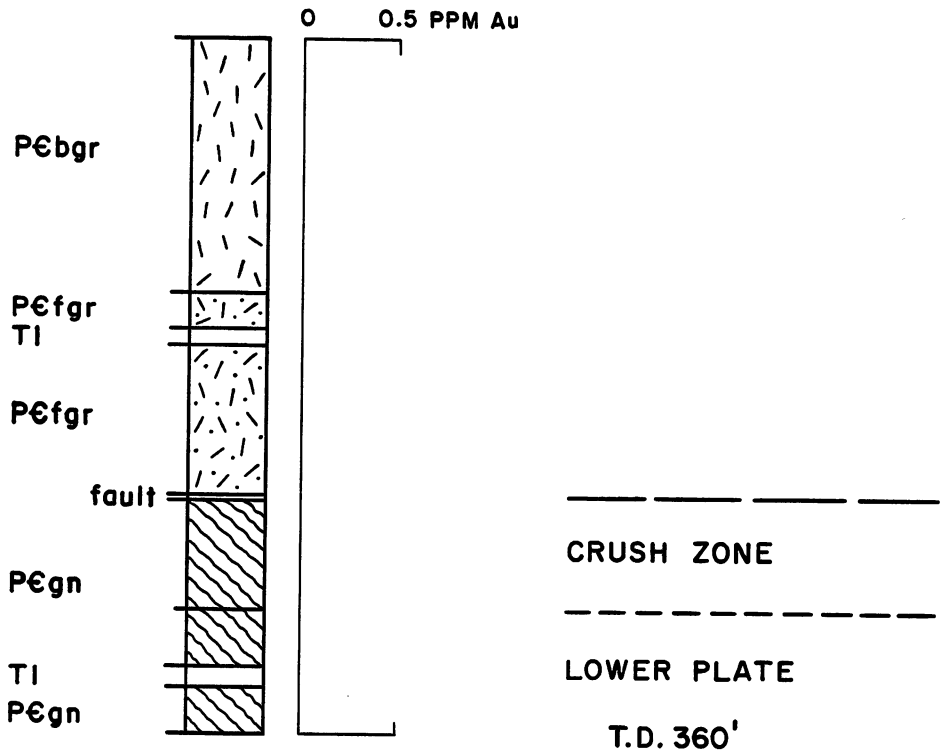


CRUSH ZONE

LOWER PLATE

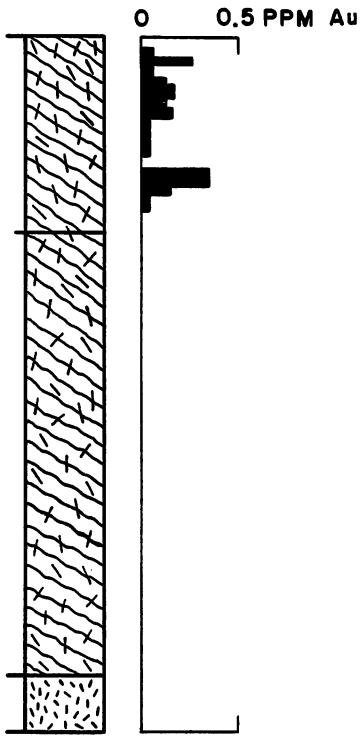
T.D. 320'

RDH GB-15
Elevation 4780'



RDH GB-16

Elevation 4780'



CRUSH ZONE ?

chloritic alteration

LOWER PLATE

T.D. 360'

APPENDIX E

SAMPLE LOG

APPENDIX A

ROCK UNITS
GOLD BASIN DISTRICT
MOHAVE COUNTY, ARIZONA

Quaternary	Alluvium (Qal)	
Tertiary	Fanglomerate and conglomerate (Tfg)	Unsorted bouldery fanglomerate made up dominantly of cobbles and boulders of gneiss and granite set in a coarse sandy matrix. The unit includes a similar conglomerate that was derived from eroded and disintegrated fanglomerate.
	Rhyolitic tuff (Tr)	White, unwelded, fine-to-medium-grained rhyolitic ash flow tuff intimately associated with the fanglomerate.
	Andesite (Ta)	Medium-grained, dark grey hornblende andesite.
	Sandstone (Ts)	Fine-grained, light grey bedded arkosic sandstones.
	Lamprophyre (Tl)	Fine-to medium-grained, dark brown or greenish brown, intrusive dikes and sills characterized by phenocrysts and fragments of hornblende and plagioclase in a fine-grained matrix with a roughly equivalent content of amphibole and plagioclase. The rock is commonly fragmental or brecciated, exhibiting outlines of milled fragments or angular fragments of amphibole, and is generally altered to chlorite and siderite.
	Latite porphyry (Tl)	Light gray intrusive porphyry exhibiting small phenocrysts of feldspar (20%) in a dense gray aphanitic groundmass.
	White Hills granite (Twgr)	Light-gray to white coarse-grained leucocratic biotite granite (5% biotite) characterized by prominent one to two inch long feldspar crystals. This granite is not foliated, cut by pegmatites, or lamprophyre and is common south and west of the Cyclopic Mine.

Cretaceous	Leucogranite (Kg)	Medium to coarse-grained, light gray or white, biotite and biotite-muscovite granite that contains numerous pegmatite and aplite dikes over a large area adjacent to the low-angle shear zone at Gold Basin. The granite is altered to an alaskite (Kagr) which exhibits numerous quartz veinlets and muscovite as the only mica.
Precambrian	Quartz-Biotite granite (PC-fgr)	Fine-grained, dark gray-green, quartz-rich holocrystalline biotite granite. Quartz (30%) and biotite (10%) are prominent constituents.
	Biotite granite (PC-bgr)	Coarse-grained, equigranular biotite granite containing 10 to 15% biotite. The granite has been weakly metamorphosed and varies from non-foliated to severely foliated.
	Gneissic granodiorite (PC-gd)	Medium to coarse-grained, dark-colored gneissic granodiorite with 30% or more former ferro-magnesian minerals.
	Gneiss (PC-gn)	Layered gneissic metasedimentary and meta-volcanic rocks that exhibit epidote-amphibolite to amphibolite rank metamorphism. Included in the mapped unit are fine-grained quartz-biotite-feldspar gneiss, coarse-grained garnet-feldspar-amphibole gneiss and medium to coarse-grained granitic gneiss.
	Gneissic biotite granite (PC-gngr)	Coarse-grained, gneissic, intensely foliated tan to pink granite characterized by prominent K-feldspar, biotite and quartz.

APPENDIX B.

SCREEN TEST
GOLD BASIN PROJECT
MOHAVE COUNTY, ARIZONA

A bulk sample weighing over twenty-five pounds was collected from an exposure of the "Crushed Zone" prospect pit in the NE NW of Section 25, T. 28 N., R. 19 W. Several previous samples of the crush and gouge zone from this prospect ran 3.5 ppm to 7 ppm gold.

The bulk sample was crushed and ground in a pulping mill and screened into three size fractions, coarse (+20 mesh), middle (<20:+60 mesh) and fine (<60 mesh). Assay results for gold, silver and several pathfinder elements on these fractions are shown on the following table. Detailed examinations of each size fraction did not disclose any gold particles, but gold was observed during microscopic examination of the panned heavies from the fine fraction. The gold observed consisted of a delicate crystalline particle in a soft white clay matrix. The panned heavy concentrate from 6 pounds of fines consisted of a few grams of hematite and goethite after fine-grained pyrite, too little to assay.

The analytical data show that gold and silver are slightly concentrated in the more siliceous coarse (+20 mesh) screen fraction with 60-percent of the total gold in this fraction. The data indicates that gold permeates the gouge and crushed material, probably occurring as free gold and/or auriferous pyrite and the mineralization has resulted from pervasive soaking of the crushed zone by epigenetic hydrothermal fluids.

Screen Test, Bulk Sample From Crushed Zone*

Sample Number	Screen Mesh	% Fraction	% Total Au in Fraction	Au ppm	Ag ppm	W ppm	As ppm	Sb ppm	Hg ppm
2799	-	-		2.13	1.1	79	20	2	2.03
2799A	+20	49.7	61%	3.02	3.5	43	18	2	1.66
2799G	<20 +60	32.4	26%	1.95	1.4	54	23	2	1.04
2799C	<60	17.9	13%	1.78	0.7	61	23	2	1.65

*Testing results from USBRC, Anaheim, California

GOLD BASIN PROJECT (Au)
MOHAVE COUNTY, ARIZONA

GENERAL

Land: 90 claims located by PCMI in 1982 and 1983 in the following sections: T28N, R18W Sections 30 and 31
T28N, R19W Sections 24, 25 and 36

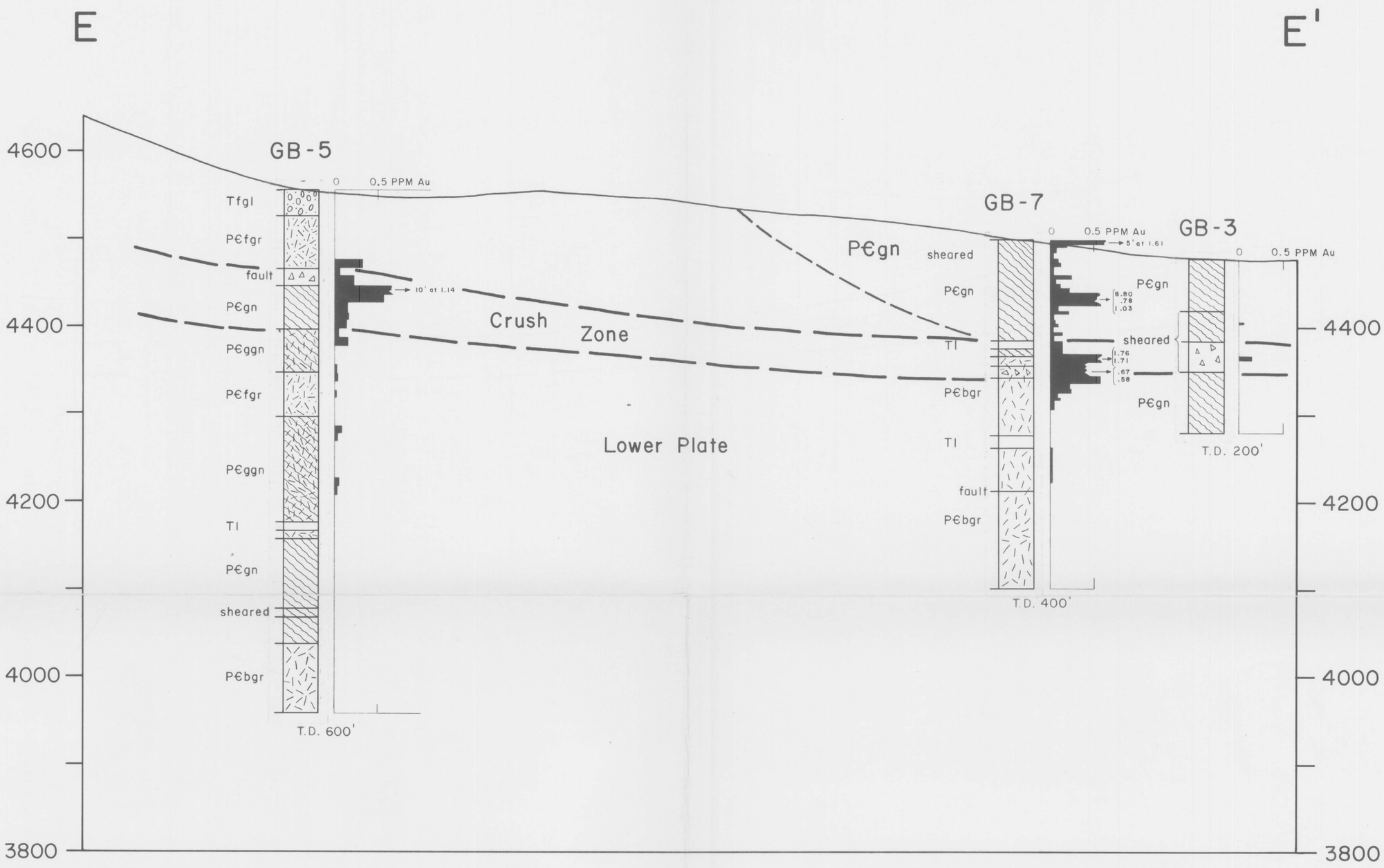
There are no outstanding options or commitments.

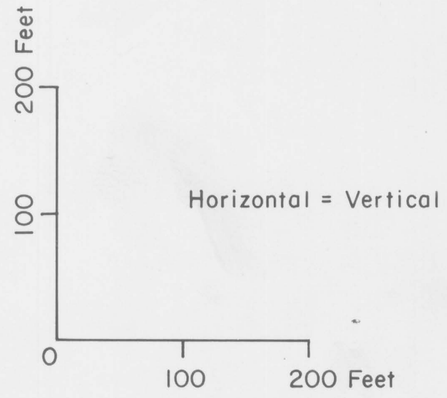
Work-To-Date: 367 surface samples
5,645 feet of reverse circulation drilling in 16 holes

GEOLOGY AND MINERALIZATION

Gold occurs at Gold Basin as widespread diffuse epigenetic mineralization localized in an extensive, sub-horizontal zone of crushing and shearing. The mineralized "Crushed Zone" is a 50 to 100-foot thick zone of gouge, breccia and crushed rock that resulted from coalescing listric faults at the base of an overlying lithotectonic unit positioned between an Upper Plate post-mineral lithotectonic unit and a stable underlying basement complex. In the vicinity of the Cyclopic Mine, the "Crushed Zone" contains .05 to .20 ounces of gold per ton associated with minor introduced pyrite and anomalous fluorine, tungsten mercury and lead.

Geologic investigations and drilling have outlined an elongate northwest trending zone of pyritic alteration and prominently anomalous gold and mercury values in exposures of Middle Plate rocks above the "Crushed Zone", which could contain a limited tonnage of low grade gold mineralization treatable by selective open pit mining and heap leaching.



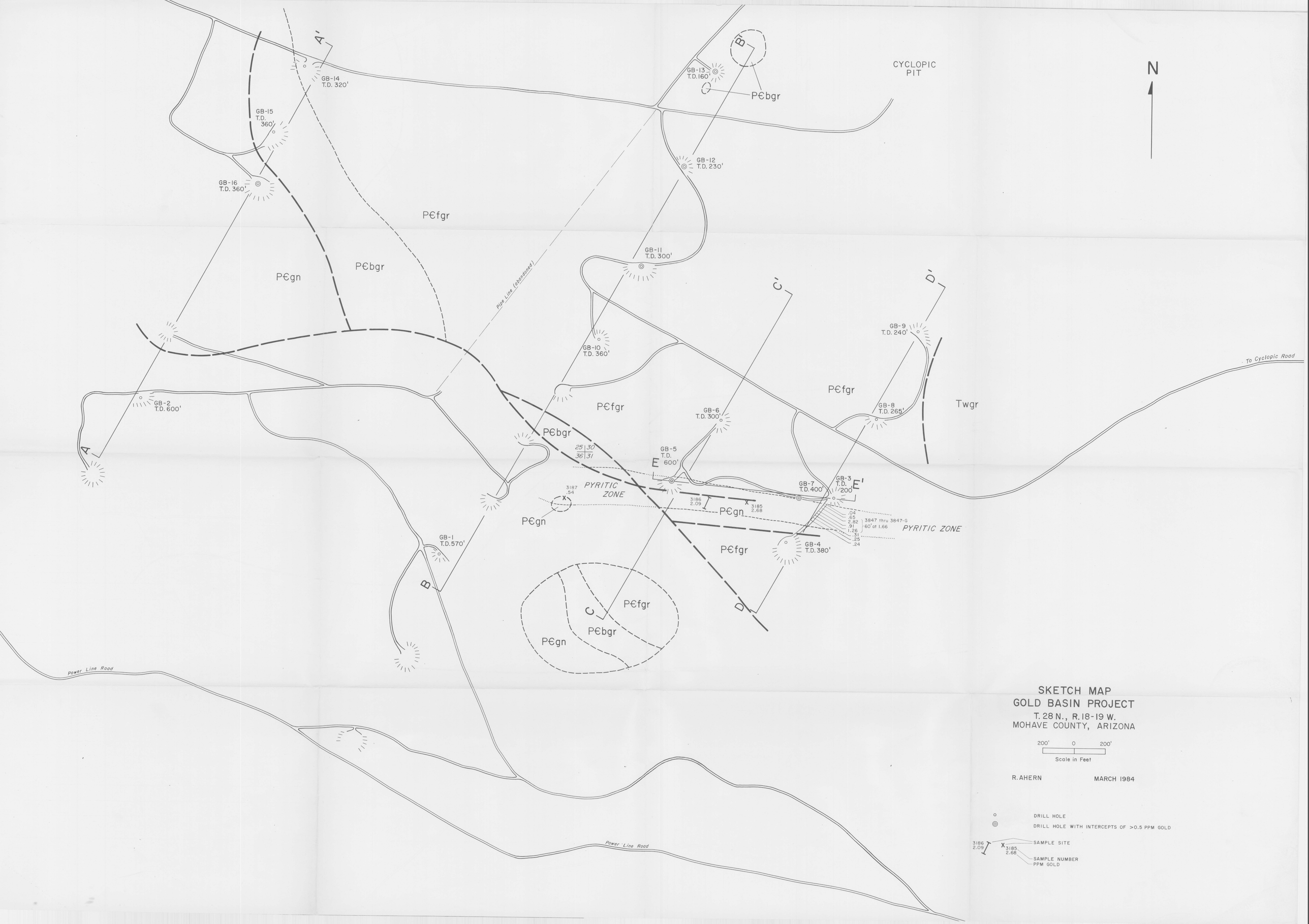


CROSS SECTION E-E'
(LOOKING NORTH)
GOLD BASIN PROJECT

MOHAVE COUNTY, ARIZONA

R. AHERN

MAY 1984

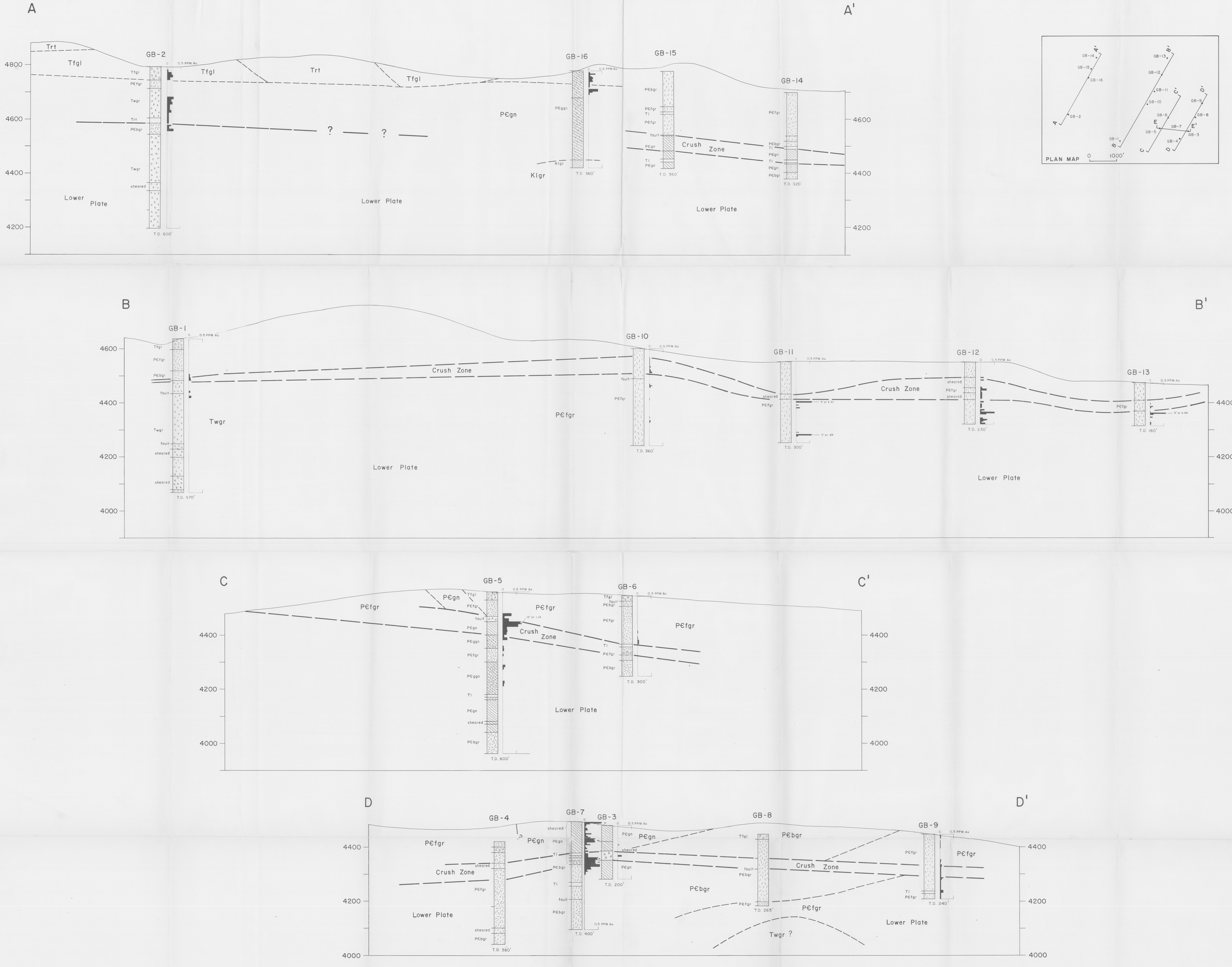


SKETCH MAP
GOLD BASIN PROJECT
T. 28 N., R. 18-19 W.
MOHAVE COUNTY, ARIZONA

200' 0 200'
Scale in Feet

R. AHERN MARCH 1984

- ○ DRILL HOLE
- ◎ DRILL HOLE WITH INTERCEPTS OF >0.5 PPM GOLD
- 3186 / 2.09 — X — 3185 / 2.68 — SAMPLE SITE; SAMPLE NUMBER; PPM GOLD



CROSS SECTIONS A-A', B-B', C-C', D-D'
(LOOKING NORTHWEST)
GOLD BASIN PROJECT

MOHAVE COUNTY, ARIZONA

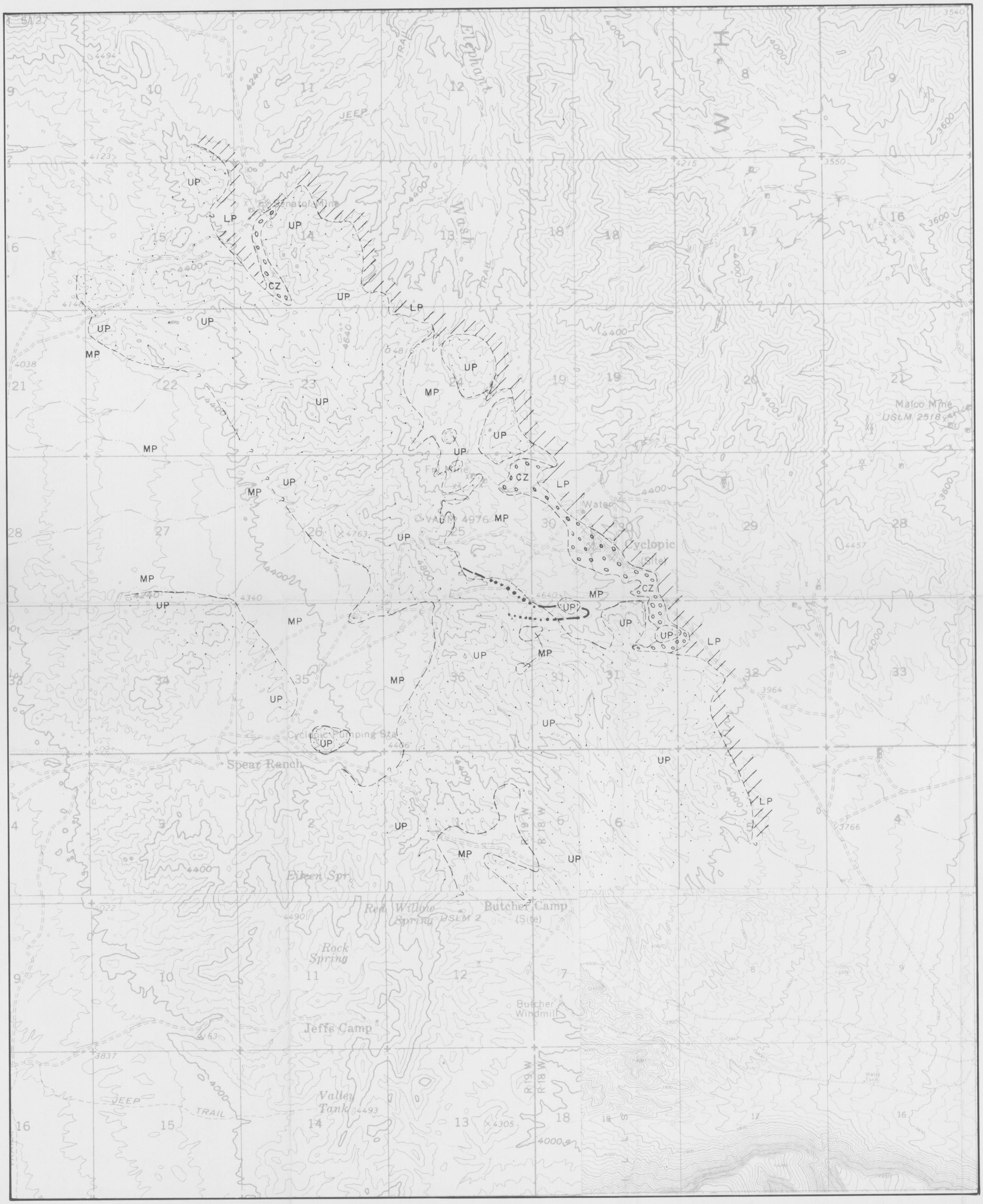
R. AHERN

MAY 1984

R 19 W R 18 W

T 28 N

T 27 N



LITHOTECTONIC UNITS

UP UPPER PLATE

MP MIDDLE PLATE and CRUSHED ZONE

CZ

LP LOWER PLATE

/// UPPER MARGIN OF LOWER PLATE

PYRITIZED AREA

PROPOSED DRILL HOLE

LITHOTECTONIC MAP GOLD BASIN DISTRICT

MOHAVE COUNTY, ARIZONA

1" = 2 000'

May 1983
Corn & Ahern

PLATE I

R 19 W R 18 W

T 28 N

T 27 N

EXPLANATION

PROPOSED DRILL HOLE

		Qal	ALLUVIUM
UPPER PLATE	TERTIARY	Tfgl	FANGLOMERATE and CONGLOMERATE
		Trt	RHYOLITIC TUFF
		Ta	ANDESITE
		Ts	SANDSTONE
		Tl	LAMPROPHYRE and LATITE PORPHYRY
		Twgr	WHITE HILLS GRANITE
MIDDLE PLATE and LOWER PLATE	CRETACEOUS	Klgr	LEUCOGRANITE
		Kagr	ALASKITIC ALTERED LEUCOGRANITE
	PRECAMBRIAN	PEfgr	FINE-GRAINED QUARTZ-RICH BIOTITE GRANITE
		PEbgr	COARSE-GRAINED, FOLIATED BIOTITE GRANITE
		PEgd	GNEISSIC GRANODIORITE
		PEgn	GNEISS
		PEgngr	GNEISSIC BIOTITE GRANITE

PYRITIZED AREA

FAULT

GEOLOGIC MAP

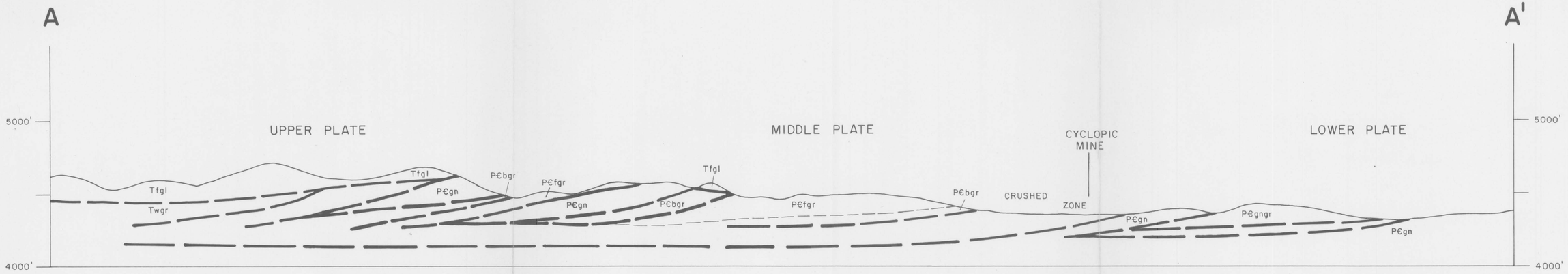
GOLD BASIN MINING DISTRICT

MOHAVE COUNTY, ARIZONA

1" = 1000'

MAY, 1983

PLATE II



LOOKING NORTHWEST

SECTION A-A'

GOLD BASIN MINING DISTRICT
MOHAVE COUNTY, ARIZONA

1" = 500' H=V

MAY, 1983

PLATE III

R 19 W R 18 W

T 28 N

T 27 N

UNPATENTED CLAIM OWNERSHIP

(1) & (9) RIDDLES

(3) JOANNE and CLARENCE CALLENDAR

(4) JOHN MILLS

(5) GOLDTEX MINING DEVELOPMENT (SR) (Abandoned ?)

(6) ROCKY MOUNTAIN SURVEY

(10) WYMAN and KING

(11) WILLIAM and CHLOE JOHNSON

(12) VERN and ROBERT SCHENECK, and L. MORRISON (Abandoned ?)

(13) VENDOR B. LEE (SR)

(14) SFP MINERAL CORP. (Abandoned ?)

(15) OTHER

(18) FORTRESS MINING

(19) JOHNSON - CAMERON

GB PCM1 GB CLAIMS

PATENTED CLAIM OWNERSHIP

(2)

(7)

(8)

(16) & (17)

(20)

/// PROPOSED SANTA FE LEASE

LAND STATUS MAP
GOLD BASIN DISTRICT
MOHAVE COUNTY, ARIZONA

1" = 2,000

Revised :
May 1983

PLATE IV

R 19 W R 18 W

T 28 N

T 27 N

LITHOTECTONIC UNITS

Sample Site in respective unit

UPPER PLATE

MIDDLE PLATE and CRUSHED ZONE

UPPER MARGIN OF LOWER PLATE

Sample Number

2442

SAMPLE INDEX MAP
GOLD BASIN MINING DISTRICT
MOHAVE COUNTY, ARIZONA

1" = 1000'

MAY, 1983

PLATE V

R 19 W R 18 W

T 28 N

T 27 N

14 13 18 17

23 24 19 20

26 25 30 29

35 36 31 32

2 1 6 5

11 12 7 8

0.2 0.4 0.1 0.1 12.2 0.7 31.5 0.2 9.6 6.5 29.6 1.3 1.2 0.9 0.4 29.6 0.6 0.6 0.1 7.5 8.9 4.7 10.4 0.3 0.1 0.2 3.5 0.5 0.8 8.1 0.5 3.1 0.3 0.2 2.9 0.4 20.9 0.8 1.4 0.1 1.7 6.2 0.4 0.2 0.3, 1.9 0.5 0.4 0.4 ? 0.2 2.1 2.7 0.5 4.4 0.2 0.2 3.1 2.4 25.3 1.0 9.1 0.4 1.0 0.2

PROPOSED DRILL HOLE

PYRITIZED AREA

LITHOTECTONIC UNITS

Sample Site in respective unit

▲ UPPER PLATE

○ MIDDLE PLATE and CRUSHED ZONE

● UPPER MARGIN OF LOWER PLATE

□

Gold in ppm

25.3 (ONLY VALUES > 0.10 PPM ARE SHOWN)

GOLD DISTRIBUTION

GOLD BASIN MINING DISTRICT

MOHAVE COUNTY, ARIZONA

1" = 1000'

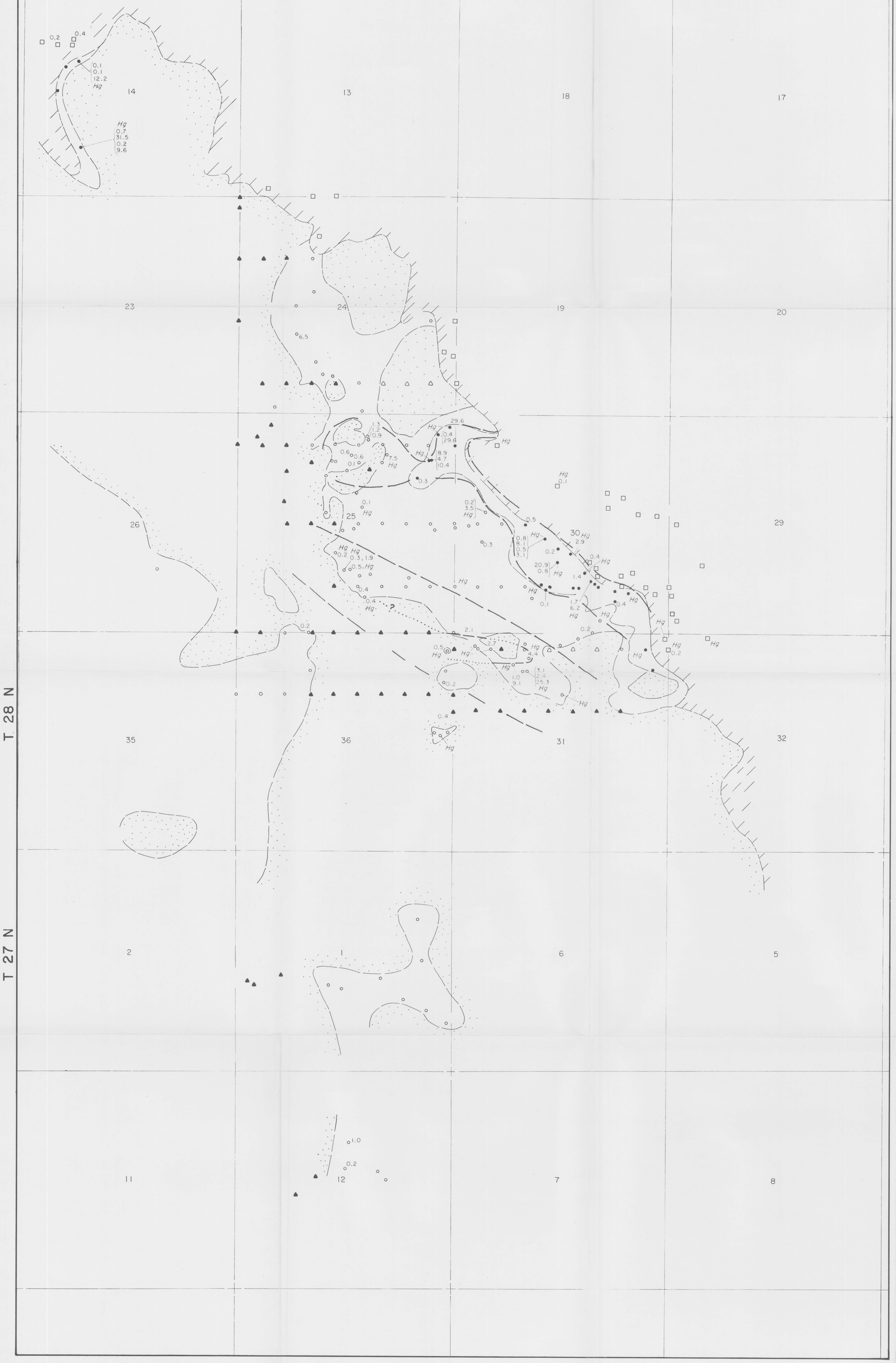
MAY, 1983

PLATE VI

R 19 W R 18 W

T 28 N

T 27 N



PROPOSED DRILL HOLE

PYRITIZED AREA

LITHOTECTONIC UNITS

Sample Site in respective unit

- UPPER PLATE
- MIDDLE PLATE and CRUSHED ZONE
- UPPER MARGIN OF LOWER PLATE

Gold in ppm
25.3
(ONLY VALUES >0.10 PPM ARE SHOWN)

Anomalous Mercury
Hg
SAMPLE WITH >0.4 PPM Hg

GENERALIZED AREA OF COINCIDENT GOLD AND MERCURY ANOMALIES

GOLD and MERCURY DISTRIBUTION
GOLD BASIN MINING DISTRICT
MOHAVE COUNTY, ARIZONA

1" = 1000'

MAY, 1983

PLATE VII

R 19 W R 18 W

T 28 N

T 27 N

14 13 18 17

23 24 19 20

26 25 30 29

35 36 31 32

2 1 6 5

11 12 7 8

0.2 0.4 0.1 0.1 12.2 0.7 31.5 0.2 9.6 Pb. 6.5 Pb 1.3 1.2 0.9 0.6 0.6 0.1 7.5 Pb 29.6 Pb 0.4 29.6 8.9 4.7 10.4 0.3 0.1 0.2 3.5 Pb 0.1 Pb 0.5 0.3 0.8 8.1 0.5 3.1 Pb 0.2 2.9 Pb 0.4 20.9 0.8 Pb Pb, 1.4 0.1 1.7 6.2 Pb 0.4 0.2 0.3, 1.9 0.5 Pb 0.4 0.4 ? 0.2 2.1 2.7 0.5 4.4 0.2 Pb 0.2 3.1 2.4 25.3 1.0 9.1 0.2 0.4 1.0 0.2

PROPOSED DRILL HOLE

PYRITIZED AREA

LITHOTECTONIC UNITS

Sample Site in respective unit

- ▲ UPPER PLATE
- ○ MIDDLE PLATE and CRUSHED ZONE
- ●
- □ UPPER MARGIN OF LOWER PLATE

Gold in ppm
25.3 (ONLY VALUES >0.10 PPM ARE SHOWN)

Anomalous Lead
Pb SAMPLE WITH >350 PPM Pb

GOLD and LEAD DISTRIBUTION
GOLD BASIN MINING DISTRICT
MOHAVE COUNTY, ARIZONA

1" = 1000'

MAY, 1983

PLATE VIII