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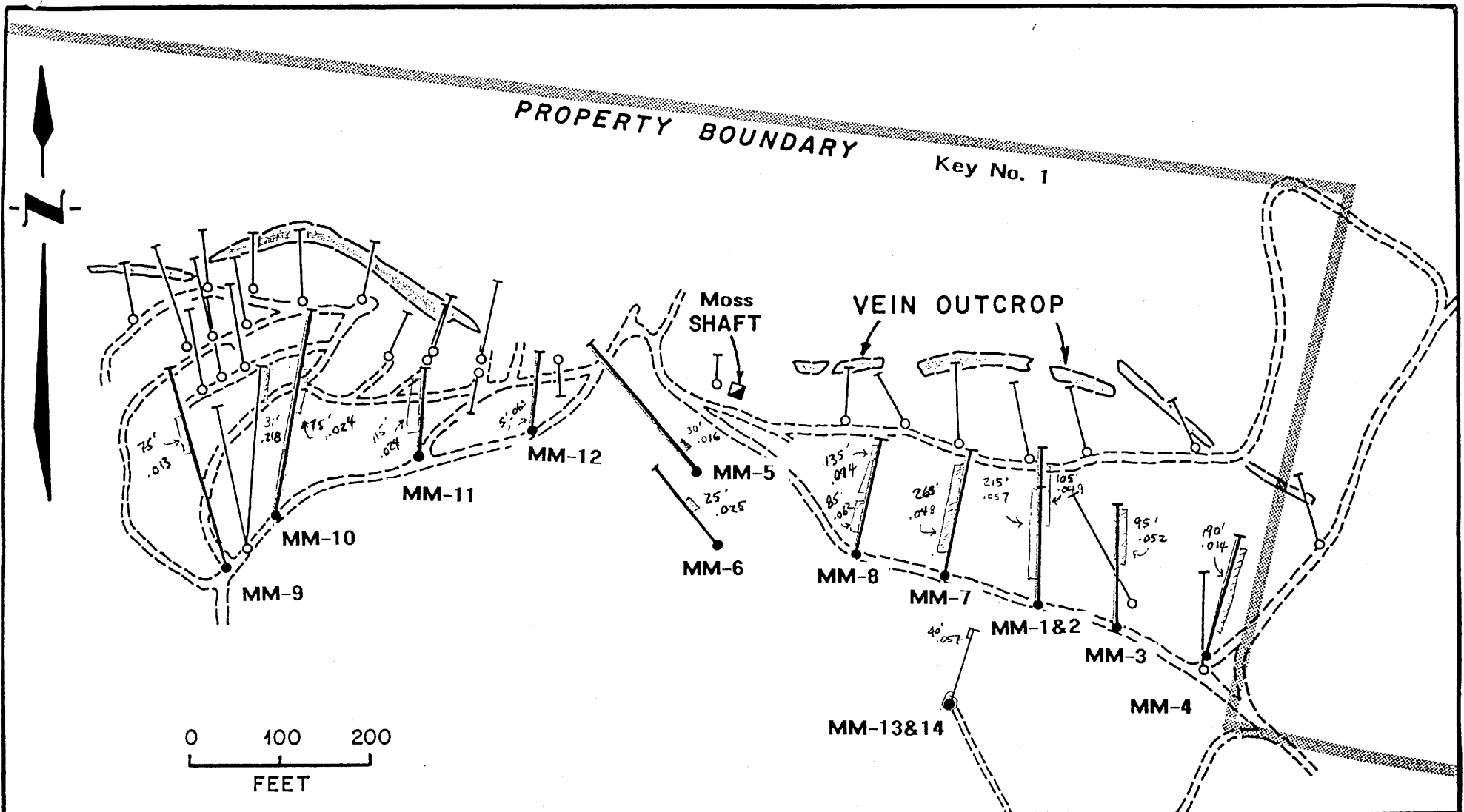
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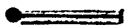
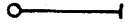

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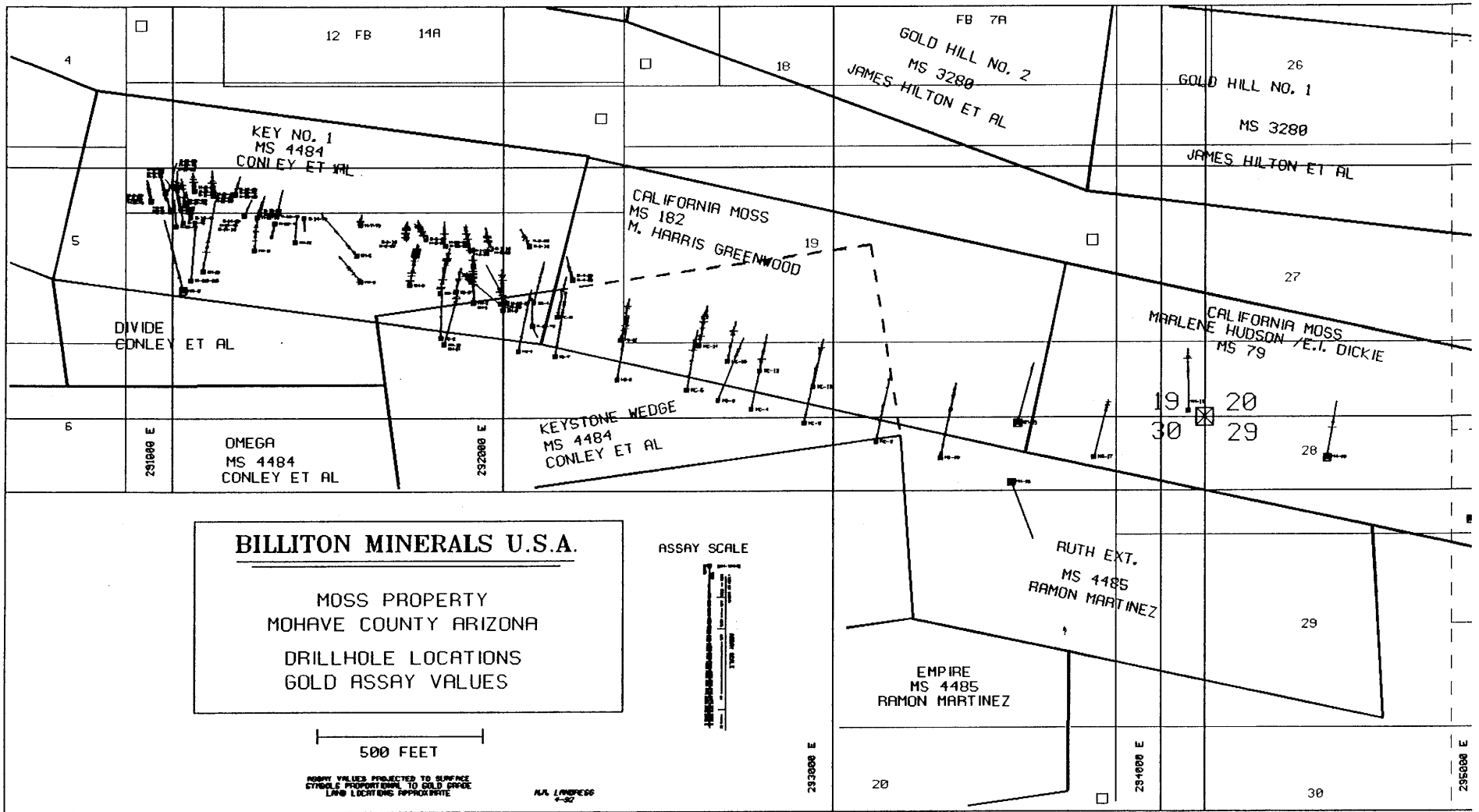
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-  Reverse circulation drill hole, Billiton 1990
-  Air-Trac drill hole, BF Minerals 1982
-  Outcrop exposure of vein system

**MOSS MINE DRILLING
MOSS MINE PROJECT
MOHAVE COUNTY, ARIZONA**



BILLITON MINERALS U.S.A.

MOSS PROPERTY
 MOHAVE COUNTY ARIZONA

DRILLHOLE LOCATIONS
 GOLD ASSAY VALUES

500 FEET

ASSAY VALUES PROJECTED TO SURFACE
 SYMBOLS PROPORTIONAL TO GOLD GRADE
 LAND LOCATIONS APPROXIMATE

MAP LAMBERT
 4-62

ASSAY SCALE



293000 E

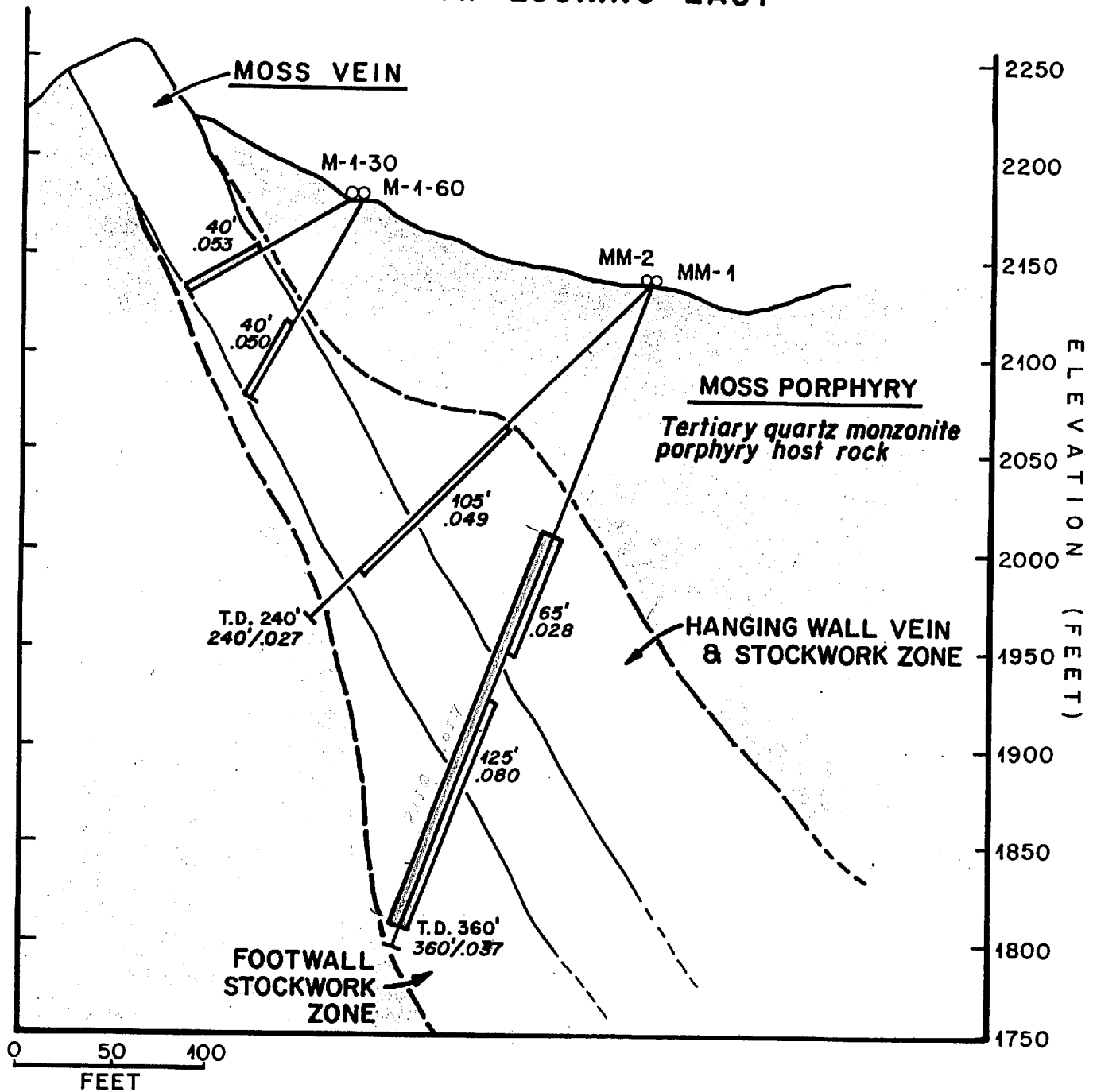
294000 E

295000 E

20

30

VIEW LOOKING EAST



**SCHEMATIC CROSS SECTION
MOSS MINE PROJECT
OATMAN-GOLD ROAD DISTRICT
MOHAVE COUNTY, ARIZONA**

INTERIM REPORT
AND
PROPOSED DEVELOPMENT DRILLING PROGRAM
MOSS MINE PROJECT
OATMAN-GOLDROAD MINING DISTRICT
MOHAVE COUNTY, ARIZONA

PREPARED BY
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APRIL 26, 1982

Mike Godbe's
REPORT
To B.F. Minemba

TABLE OF CONTENTS

Title	Page No.
INTRODUCTION	1
LOCATION & ACCESSIBILITY	1
CLIMATE & WATER	2
TOPOGRAPHY	2
ECONOMIC GEOLOGY & MINE PRODUCTION	2
Table I Quartz-Gold Deposition Stages	3
PHASE I EXPLORATION PROGRAM	4
GENERAL STATEMENT	5
GEOLOGIC FINDINGS & INTERPRETATIONS	7
East Area	7
Drill Hole Descriptions	7
West Area	9
Drill Hole Descriptions	9
FAVORABLE AREAS	10
East-West Transition Zone	10
East Area	11
West Area	11
BLOCK RESERVES	11
West Area	12
East Area	13
Recapitulation	15
CONCLUSIONS	16
RECOMMENDATIONS	16
Table II Proposed Drill Holes (following)	16
DEVELOPMENT DRILLING RECOMMENDATIONS	17
I Canyon Fault-Moss Vein Transition	17
II East Area-300 Level Ore Zone	17
III West Area-Copper Company Hole Ore Zone	18

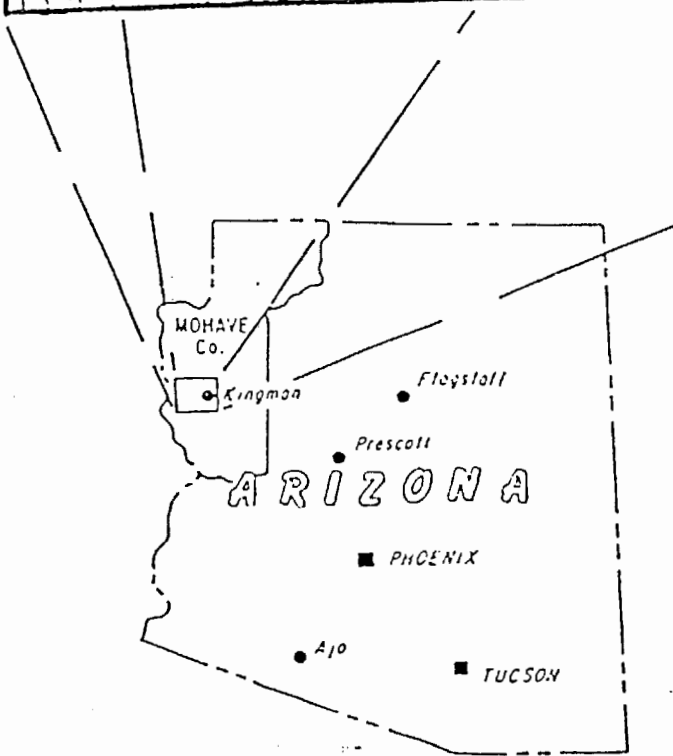
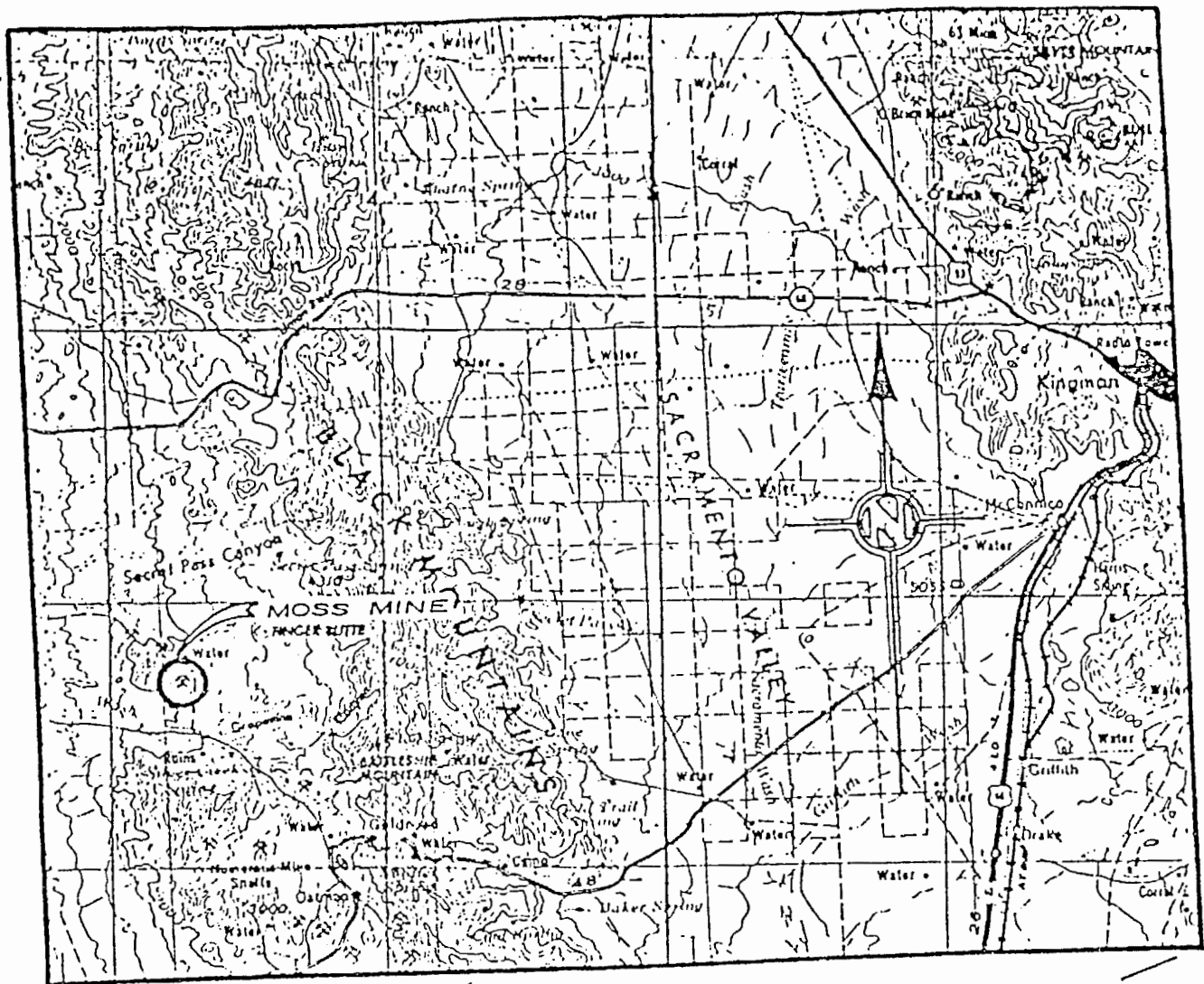
LIST OF ILLUSTRATIONS

Plate I Location Map 1:250,000

following Page 1

MAP APPENDIX IN BACK

A36A No.	Title and Scale
375	Plan Map Phase I Drill Program/1981-82 1" = 50'
376	Plan Map - Overlay 1" = 50'
377	Plan Map Surface & Underground Workings-East Area, Copper Company Hole Log West Area 1" = 50'
378	Drill Sections-Geologic Interpretation Site Nos. 1 thru 14 1" = 50'
378a	Drill Sections-Geologic Interpretation Site Nos. 15 thru 29 1" = 50'
378b	Drill Sections-Geologic Interpretation Composite Sections 1" = 50'
379	Drill Sections-Ore Intercepts Site Nos. 1 thru 14 1" = 50'
379a	Drill Sections-Ore Intercepts Site Nos. 1 thru 29 1" = 50'
380	Graphic Drill Logs-Sheet 1, Holes M-1 thru 7 1" = 50'
381	Graphic Drill Logs-Sheet 2, Holes M-8 thru 12 1" = 50'
382	Graphic Drill Logs-Sheet 3, Holes M-12 thru 16 1" = 50'
383	Graphic Drill Logs-Sheet 4, Holes M-16 thru 23 1" = 50'
384	Graphic Drill Logs-Sheet 5, Holes M-23 thru 28 1" = 50'
385	Graphic Drill Logs-Sheet 6, Holes M-28 thru 29 1" = 50' Geologic Legend
385a	Assay Plan Maps; East Area-Surface, 65 Level, 220 Level, 300 Level 1" = 20'



OATMAN-GOLDROAD MINING DISTRICT
 MOSS MINE PROJECT
 MOHAVE COUNTY ARIZONA

LOCATION MAP

SCALE 1: 250,000
 BASE FROM USGS KINGMAN SHEET

Plate 1

M. C. GODBE, III

Geological Engineer

refer to:

INTERIM REPORT
&
PROPOSED DEVELOPMENT DRILLING PROGRAM
MOSS MINE PROJECT
OATMAN-GOLDRoad MINING DISTRICT
MOHAVE COUNTY, ARIZONA

FIELD WORK ON THE FIRST PHASE EXPLORATION DRILLING PROGRAM WAS COMPLETED MARCH 31, 1982. A COMPREHENSIVE REPORT WITH CONCLUSIONS AND RECOMMENDATIONS WILL BE PREPARED AT THE END OF THE PHASED EXPLORATION-DEVELOPMENT PROGRAM.

THIS IS AN INTERIM REPORT AND SUMMARIZES OUR FINDINGS TO DATE. THE INFORMATION CONTAINED HEREIN IS PRELIMINARY IN NATURE & SUBJECT TO CORRECTION. IT IS OUR PRESENT OPINION THAT CONCLUSIONS DERIVED IN THIS REPORT WILL NOT BE SUBSTANTIALLY DIFFERENT FROM THOSE IN THE FINAL REPORT.

A PROPOSED DEVELOPMENT DRILLING PROGRAM HAS BEEN FORMULATED AND IS PRESENTED HEREWITH. DRILL SITE LOCATIONS ARE PLACED TO TEST SPECIFIC TARGETS. DATA DERIVED FROM HOLES AS DRILLED MAY INFLUENCE THE PLACEMENT OF SUBSEQUENT LOCATIONS.

INTRODUCTION

Property

The Moss mine group consists of six (6) patented lode mining claims. Patent was granted by the United States Government in fee simple title under mineral survey number 4484. A list of the claim names follows:

Key No. 1	Keystone Wedge
Key No. 2	Omega
Key No. 3	Divide

Location & Accessibility

The Moss mine group is located in the Oatman-Goldroad (San Francisco) mining district, sections 19 & 30, Township 20 North, Range 20 West, Gila and Salt River Meridian some eight (8) miles east of Bullhead City, Arizona and 70 miles southeast of Las Vegas, Nevada (refer to Plate I following).

from Bullhead city,
Take the road that goes past the hospital, on the
S. side of Silver Wash.
Access to the property; beginning at ~~Holiday Shores~~ located one (1)
mile south of Bullhead City on U.S. Highway 95, thence easterly eight
(8) miles via good to fair graded and graveled road to the mine turn-
off, thence northerly one and one half (1 1/2) miles via fair to good
unmaintained dirt road to the Moss mine proper.

Climate & Water

Climate is typical arid desert type with cool winters and hot dry
summers. Annual precipitation totals 4 to 5 inches. Relative humidity
is unusually low. Year around operations can be undertaken with little
to no difficulty. Annual recorded temperature ranges from a high of
127° to a low of 14°. Temperatures above 100° and below 32° are rare.

Several small springs issue at the surface in Silver Creek Wash approx-
imately two and one half (2 1/2) miles southeast of the property. Ground
water was intercepted during the recent drilling program at depths of
approximately 140 feet below the surface. An estimated 30 gallon per min-
ute yield was noted at several hole locations.

Topography

The Moss mine claims group is located within an area of low lying, rugged
hills with elevations ranging from 2,100 to 2,500 feet above sea level.
Topography is steep due to the youthful stage of dissection in the igneous
rocks present.

Population Centers

Population distribution is sparse. The nearest permanent settlement is at
Oatman, Arizona located seven (7) miles to the southeast. Bullhead City,
Arizona and Riviera City, Arizona some 10 miles westerly situated on the
banks of the Colorado River are predominantly recreation centers based
upon sports fishing. Kingman, Arizona and Las Vegas, Nevada are the major
population and supply centers for the area.

Economic Geology & Mine Production

Productive gold-silver bearing veins in the vicinity of the Moss mine
lie within a host rock of quartz monzonite locally referred to as the
Moss porphyry. The main structure strikes generally North 80° West,
consisting of a mineralized lode from 20 to 100 feet wide and dipping
on the average 70° southerly. The main Moss structure can be traced
intermittently for a distance of several miles and is widest at its
western end. The Moss mine is located along the structures western trace.
The Moss vein is the most conspicuous in the district and probably the
first to be worked. The original discovery was made in 1863 or 1864 by
John Moss who found free visible gold in croppings immediately north of
the present (Allen) shaft.

The Moss porphyry forms an intrusive body two (2) miles wide by four (4) miles deep with its long axis oriented in a northwest-southeast direction. The porphyry mass intrudes trachyte, andesite and latite flow rocks of Tertiary age. Typically the rock is a pinkish-gray, medium grained intrusive whose porphyritic texture is not particularly conspicuous. Mineral and chemical composition is that of a quartz monzonite. It is inferred by past observers that the Moss porphyry is an intrusive equivalent of an extrusive flow rock (Goldroad Latite).

Veins are characterized as quartz-calcite-adularia which represent several stages of gold-silver mineralization typical of the Oatman-Goldroad metallogenic province. The Moss vein differs from most in the district in that the host rock is quartz monzonite while the majority of the district veins are enclosed in a series of extrusive volcanic rocks.

The Moss mine was developed over a vertical range from surface to the 300 level. All ores mined were within the oxidized zone. The recently concluded drilling shows oxidation phenomena well below the present water table (140 feet below the shaft collar), to at least 500 feet below the present surface.

Gold where noted occurs in its native form. Primary gold is not visible by a hand lens and is thus probably very finely divided. Secondary gold occurs in coarse pieces and fine wires, being almost silver free. Overall fineness of the gold has not been determined. Fluorite occurs in some of the veins. In the rich ore from the Moss mine upper workings, some of the gold was found imbedded in fluorite. Gold is visible only in unusually rich ore.

Several periods of mineralization accompanied by post and contemporaneous fault movement within the vein system is evident. Five stages of quartz emplacement and productive mineralization have been noted in the district. Each of the five stages has its distinctive type of quartz which can usually be identified. Each stage begins with quartz and ends with calcite. No one mine shows all stages of emplacement.

Table I QUARTZ-GOLD DEPOSITION STAGES

STAGE	DISTRIBUTION	QUARTZ		GOLD	
		COLOR	TEXTURE	RANGE oz/ton	Au-Ag RATIO
1	abundant	clear, white & anythest	coarse	to .04	1 : 6
3	scarce	various	fine gr. banded	.06 to .4	2 : 3
4	abundant only in ore shoots	pale green to yellow	fine gr. platy calc. casts	.2 to 1	1 : 2
5	as in 4	pale to deep honey-yellow	fine to med gr. banded	1 +	4 : 1

Moss mine
 Not observed
 @ Moss mine

Microcrystalline silica as chalcedony is evident in the Moss mine occurring mostly in the West Area. Observations from the Moss mine workings and drill hole data indicates that hematite rich, porous quartz zones are most probably associated with the enriched secondary gold mineralization and may prove to be a valuable guide for developing areas of substantial gold bearing ores.

Faulting in the district generally trends northwest-southeast. Dip is generally to the east in the Moss mine area. Faulting is generally contemporaneous with quartz fissure filling as a series of resurgent movements. Many if not most of the major faults possess post mineral movement offsetting ore veins. Displacement along faults ranges from tens to hundreds of feet. Fault structures filled with quartz are considered to be a part of the district vein structure system. Non quartz filled faults cut, offset and in many instances join with vein structures. Resurgent movement along pre-existing faults after early quartz emplacement and before or with late stages, has been important in developing substantial ore bodies.

Vein structures represent fracture fillings. The veins are not filled with quartz along their entire length. Insignificant stringers on the surface have been known to lead to a solid vein of quartz and calcite within 30 feet on the dip. Similiar variations in width are common along strike as well.

*Grade fault
increase with
depth.*

Production records from the Moss mine have not been kept. Reports by past observers place total production to 1910 at \$500,000 at then existing prices. All of this ore came from above the 220 level, with most coming from the near surface workings. By the mid 1930s' work on the 300 level had been accomplished. From 1907 to 1928 when most of the mines had been idled, total production from the district represented \$35,417,926 from 2,659,642 tons of ore. Prior to 1907 the district produced \$2,522,000 from an unknown quantity of ore. All dollar figures are based upon then existing prices.

PHASE I EXPLORATION PROGRAM

During the period October 7 through 17, 1982 a surface mapping project was undertaken at the Moss mine. The surface structure of the Moss vein was mapped for 1,500 feet along strike equidistant east and west of the Main (Allen) shaft. A horizontal and vertical control triangulation net was established using brunton resection and tape. A base map with both horizontal and vertical closure of one (1) foot has been prepared (refer to Map No. A36A-375).

All surface geologic and physical features have been mapped as well as the 65 level underground workings. Inaccessible workings have been composed from old company records.

On November 12, 1982 an Air Trac drill program began. Hole locations were placed based upon data derived from the mapping program. Contract work was done by G. R. Haynes, Kingman, Arizona. Haynes furnished all

site preparation, access road construction and the angle AirTrac drilling. All work was done under the direction of Jack W. Madsen. By February 15, 1982 the AirTrac drilling program had been completed. A total of 4,705 feet of drilling had been done at 25 locations. Maximum hole depth penetration was 120 feet. This initial phase was planned to evaluate the near surface open pit, low grade gold bearing ores. Drilling was at angles varying from 30° to 60°.

To evaluate the down dip potential of the Moss vein structure a four hole, 300 to 500 foot depth range program was approved. T. W. Enterprises, Burns, Oregon performed the drilling services. Equipment comprised a Schramm reverse circulation drill, with air and water circulating media.

The first drill hole was commenced on March 10, 1982 and completed March 14th. During the period March 21st through the 30th, the remaining three holes were completed. A total of 1,590 feet of drilling was accomplished using a 5 inch diameter down the hole hammer and bit.

Drill hole samples during both phases were collected, logged and assayed on 5 foot intervals.

Assaying was done by an in house lab located at Pioche, Nevada. Twenty eight random, representative samples were split out and sent to the Union Assay Office, Salt Lake City, Utah for cross checks (refer to Table I page following).

Samples to be analyzed were selected by the Project Geologist, Jack W. Madsen. Intervals selected represent the hanging wall and main Moss vein including five foot intervals on either side of the foot and hanging walls. Sample intervals analysed are shown on the Graphic Drill Logs and Ore Intercept Drill Sections (refer to Map Nos. A36A-381 thru 385 & A36A-379).

GENERAL STATEMENT

The Moss Vein system is characterized by a general North 78° West strike which has been offset and modified by a series of northwesterly trending transverse faults. The Moss vein system dips consistently to the south 70° with little variation as far as has been observed. Its outcrop pattern is broad and prominent having surface width exposures of seven (7) feet at the eastern end line of the Key No. 1 claim where the strike outcrop extends into the California Moss claim, to nearly 50 feet wide some 1,000 feet westerly. The outcrop trace is continuous at this point for 2,500 feet except where interrupted by transverse faulting. Vein quartz filling varies considerably along strike and dip, as witnessed in underground level workings and drill hole intercepts. As an example the Moss vein is 17 feet wide as exposed in outcrop, and directly down dip it attains a width of 90 feet on the 220 level. It is within late stage quartz filling sections that the ore bodies occur.

Other prominent fracture zones trending approximately North 15° to 20° West are quite common. This northwest set is characterized by the Blind Boy-Fluorite fault system which appear to horsetail out as tension fractures from the North 45° West striking Canyon fault. The Canyon fault

M. C. GODBE, III

-- appears to be a structure with major movement which cuts out the surface trace of the Moss vein for some 200 feet along its strike outcrop. The Canyon fault according to old level maps dips 80° to the northeast and on its down dip projection would cut and offset the Moss vein at depth in the East Area (refer to Map No. A36A-376).

A converging mineralized quartz bearing vein system represented by the North 70° and 15° East striking Ruth (Rattan) vein 1,000 feet south of the Moss mine has been noted.

The vein systems are filled with a gangue of vari-colored quartz and some calcite in the main mine workings and the West Area surface outcroppings. Minor adularia and fluorite seams occur in the Fluorite fault area (refer to Map No. A36A-377). Accessory minerals as limonite and hematite occur as oxidation products in the vein system and enclosing quartz monzonite. Manganese oxide is generally present. Pyrite in the vein material was observed in holes M-26-63, M-27-68 and M-28-78. Pyrite generally occurs in the quartz monzonite below the present water table in the East Area, although zones of unoxidized intrusive were found well above in hole M-27-68. Little to no pyrite is found in the West Area even below the water table despite the quartz monzonite being unoxidized.

Gold and silver are the only minerals of economic importance in the Moss vein system. Primary gold and silver are not visible to the naked eye. Secondary gold is usually deep brassy in color, occurring as coarse particles and fine wires. Secondary gold was panned from drill hole cuttings at 250 to 255 feet in hole M-27-68.

Some chloritization occurs in the monzonite.

There are multi-stages of gangue mineral emplacement accompanied by post and contemporaneous movement within the vein and transverse fault systems. The highest grade gold mineralization was during the last 2 stages of vein filling. The Moss vein shows varying degrees of brecciation and rehealing of the various types of silica from coarse, to sugary, to amorphous chalcedony. Fluorite occupies distinct seams cutting the textural varieties of silica and appears to be a late stage mineralizing sequence. Better grade gold mineralization at the Moss mine is reported to be closely associated with the fluorite. Other mines in the district apparently do not show this relationship, nor is fluorite especially noteworthy as a gangue mineral.

The importance of recurrent movement to the emplacement of higher grade gold ore zones should be recognized. In general this brecciation and fissuring created open space for end stage gold mineralization and/or readily available channels for descending oxygenated waters giving rise to a rapid oxidation rate which created an enriched secondary zone extending well below the unoxidized enclosing, pyrite bearing quartz monzonite. This condition is especially true in the East Area.

GEOLOGIC FINDINGS & INTERPRETATIONS

East Area

A series of angle AirTrac drill holes have been completed on approximately 100 foot centers extending from a point east of the Main (Allen) shaft to the east end line of the Key No. 1 claim. A 30° and 60° angle hole was drilled at seven of the eight sites (refer to Map No. A36A-375). Maximum depth penetrated was 120 feet.

Drill Hole Descriptions-East to West

M-4 Location: Situated at the eastern most boundary of the property, hole M-4-30 intercepted 10 feet of normal quartz monzonite within the Moss vein structure. Thickness of quartz diminished slightly in hole M-4-60 at depth. Only slight gold mineralization was found (.04 oz./ton).

M-3 Location: This drill site collared near a fairly thick outcrop of quartz-calcite-adularia. Direction of the drilled holes projected beneath the vein where extensive surface prospect pits have been dug. Vein thickness diminished drastically in the M-3-60 hole being split by a horse of monzonite (refer to Map No. A36A-378). This split is inferred to project downward to hole M-28-78 at a depth 420 to 520 feet (refer to Map No. A36A-378a). The footwall vein strand was missing in this hole. Highest grade of gold values intercepted in the M-3 holes was .09 oz.

M-1 & M-2 Locations: Porous zones within a 30 foot average thickness of vein quartz were encountered at these sites. Cuttings were dark red due to a high hematite content. The area is inferred to represent the upper reaches of the secondary enriched zone cut in hole M-26-63 at 250 to 254 feet. M-1 and M-2 drill holes encountered a 5 to 15 foot zone of .10 oz./ton average grade gold mineralization.

M-25 Location: A large gap existed between observations in the M-1 and M-5 drill holes. Five feet of .10 oz./ton gold mineralization was intercepted from 75 to 80 feet in hole M-25-60. The Moss vein here showed comparable thickness and composition to the M-1 and M-5 holes.

M-5 & M-6 Locations: Drill holes here encountered solid quartz vein filling with continuity at depth averaging 40 feet thick. These drill holes tested surface exposures which had been thoroughly sampled as well as the 65 level underground (refer to Map No. A36A-385a).

M-1 through M-6 drill holes all show the hanging wall to having been shattered and rehealed with quartz and calcite seams, veinlets and veins indicating the upper reaches of later stage quartz emplacement.

M-7 Location: Hole M-7-70 was drilled to test the small block between the western most underground workings and the Canyon fault. Approximately 6 feet of .11 oz./ton of gold mineralization was intercepted at 35 to 45 feet in the hole.

Based upon surface sampling and drill hole intercepts, the section lying between the Canyon fault on the west, easterly to a point beyond site M-2 represents a potentially large reserve of 0.10 oz. gold bearing material amenable to open pit mining methods.

Shallow surface drilling sites using the AirTrac unit have just about been exhausted at the present. Available underground sample data from old company records indicates exceptional grade values and thickness occurring on the 300 level (refer to Map No. A36A-385a). In order to test the validity and parameters of this zone, three deep holes were drilled.

M-26 Location: Drill hole M-26-63 was positioned to cut the Moss vein structure at the 300 level about 20 feet east of the east crosscut stub drift on the 300 level. A zone of porous quartz with soft to hard hematite and manganese oxide was encountered at 250 to 254 feet in the hole. Several pieces of coarse (pinhead size) gold and fine wires of brassy yellow gold were panned from the cuttings derived from this zone. Assays from this horizon show .24 oz. gold and the adjacent uphole five foot interval assayed .32 oz. gold. The Moss vein here shows 58 feet thick, with a 15 foot thick monzonite inclusion or "horse" from 255 to 275 feet. Pyrite was encountered just above the 210 foot intercept, and is scattered throughout the vein with oxidation phenomena prevailing.

M-27 Location: Drill hole M-27-68 cut the Moss vein between the 302 and 379 foot depth at a position between the west and east crosscuts in order to sample as much horizontal and vertical range as possible. This hole encountered the most favorable geologic conditions, best grade and widest thickness of gold mineralization during the drilling program. Pyrite in a thin strip of unoxidized monzonite was encountered at 65 to 70 feet, well above the water table. Beginning at 320 feet, light green fluorite was encountered in the cuttings. The highest grade gold assay occurred at this first observation of fluorite. Additional fluorite (more purple and some colorless) was noted at 365 to 375 feet. A zone from 290 feet through 330 feet (20 foot true) averages .28 oz. gold and 1.42 oz. silver.

Strike length limits may have been established to the east by drill hole M-28-78. There is a geologic inference that M-28 may be located in a separate fault block than M-26 & 27 and that the Moss vein was not intercepted. Western strike length limits have not been established, however the Canyon fault will be a natural boundary both on strike to the west and down rake (refer to Map No. A36A-376).

M-28 Location: Drill hole M-28-78 was drilled to intercept a zone 500 feet below the Main (Allen) shaft collar elevation and at a point 120 feet east of hole M-26-63. The supposed position of the Moss vein structure showed good oxidation with limonite and hematite in evidence, some limonite pseudomorphs after pyrite were present in the vein gangue as scattered occurrences. The footwall strand of the Moss vein was inferred to be missing as evidenced by nearly 100 feet of monzonite penetrated beyond the hanging wall quartz strand pick.

West Area

With the exception of a few prospect pits and adits on the surface, and a deep diamond drill hole, very little exploration work has been undertaken in the West Area. Date of the surface work is unknown. The core hole, referred to as the Copper Company hole, was drilled sometime during the 1930s'. No core or logs are available, the exception being an assay log of the bottom portion of the hole. Angle AirTrac drilling was utilized during the recently completed program to test the down dip extension of the Moss vein outcrop. Drilling started at the high west end and progressed easterly and down slope. Minus 30°, 45° and 60° angle holes were drilled at each site location where practical.

M-8 & M-9 Locations: The Moss vein shows evidence of spraying out into many small veinlets at sites M-8 and 9. Only minor gold mineralization was encountered in the drill holes. Stringers became thinner at depth and were comprised of quartz and calcite. Hole depths varied from 70 to 80 feet.

M-10 Location: Holes drilled from this site were 60 to 70 feet deep. Good mineralization was encountered at 5 to 10 feet in hole M-10-30, becoming thicker and better grade at depth. In hole M-10-60, a 55 foot interval averages .12 oz. gold/ton.

M-11 Location: Drilling at this site shows a close relationship to the M-10 site holes. A 20 foot thick quartz zone was intercepted here.

M-12 Location: At this site, quartz in the Moss vein structure thickens with depth from 15 to 60 feet (38 feet true). Mineralization here ranges from .07 to .15 oz. gold/ton. From site M-12 through M-14 and M-21 the Moss vein outcrop pattern trends strongly southeasterly. The topography drops rapidly eastward. How much of this outcrop pattern trend is a result of topographic drop and how much is due to fault movement or warping is presently unresolved.

M-13 & M-14 Locations: Mineralization is light to non-existent from site M-13 easterly along this block of vein outcrop. The thick surface width of the Moss vein was still evident in hole M-13-30, but it diminished strongly with depth. A fracture zone near surface caused abandonment of the hole due to lost circulation on holes M-14-30 and M-14-45. Hole M-14-60 was completed and drilled through the vein structure.

M-21 Location: Hole M-21-45 was abandoned due to caving. Hole M-21-60 was abandoned due to lost circulation. Hole M-21-60b cut the entire vein structure. All holes cut a thick section of quartz.

M-22 & M-23 Locations: These holes were drilled at bearing differentials of 180° from each other. Angle of the holes was minus 45°. The holes were drilled in an attempt to find the vein extension of the Moss structure between the East and West Areas. Both holes were drilled to a total

depth of 120 feet. Only quartz monzonite was encountered.

M-24 Location: This hole was drilled to intercept the projected position of the Moss vein between the West Area and East Area. Only quartz monzonite was found.

M-15 through M-20 Locations: Two short drill benches were constructed below sites M-9 through M-11. Drillsites here were to test the down dip extension of the Moss vein and define limits to the small mineralized gold zone intercepted at sites M-10 and M-11. Sites M-15 through M-20 reflected essentially the same composition and structure as their corresponding ones up dip. Holes drilled from sites M-18, M-19, M-20 and possibly M-17 (on the bench above) did not completely cut the Moss vein structure due to thickening. To cut the vein from foot to hanging at this point will require a drill with greater depth capacity than the AirTrac unit. Sparse mineralization here was not expected being at a horizon between the Copper Company hole and the previously defined ore zone at site M-10. Hole M-17-60 intercepted .40 oz. gold & 4.57 oz. silver/ton at depths of 115 and 120 feet. This intercept was at the bottom hole interval and no additional samples were obtained. A series of inferred faults separate this group of sites into several blocks. Drill hole intercepts do not match up across these inferred fault block units. To expand the reserve potential of the mineralization in the M-17-60 and Copper Company holes, fault block relationships and relative movement must be understood (refer to Map No. A36A-376).

M-29 Location: This hole was collared approximately eight feet north of the Copper Company hole location. Bearing of the hole is N 05° E, at a -60° inclination. The target was to cut the Moss vein structure 50 feet east of and at about the same elevation as the Copper Company hole ore intercept. The Moss vein pick was taken as the position of highest gold values. Quartz filling is only 12 feet thick true at this point. The balance of the inferred Moss zone is represented by unoxidized, pyrite free quartz monzonite porphyry. There is a strong geologic inference that hole M-29-60 collared in the same fault block as the Copper Company hole, passing into an adjacent fault block in the lower one half to two thirds of the hole. Relative movement between the blocks could displace the Moss structure to the north. The hole M-29-60 may not have been drilled deep enough to intercept the main Moss structure.

FAVORABLE AREAS

East-West Area Transition Zone

From a point near the Main (Allen) shaft where high grade ores reportedly were mined at or near the surface, westerly for 200 feet the Moss vein structure does not appear in outcrop. Westerly beyond this point of interruption the vein structure evidences a wide zone of quartz filling along strike. The same condition exists along its' east bearing. It is inferred that the western extension of the vein here has been displaced by the Canyon fault. The Moss vein outcrop of the East Area

lies in the Canyon fault hanging wall block, and the West Area outcrop lies in the Canyon fault foot wall block. If this assumption is valid, then both foot and hanging wall segments contain mineralization of productive grade gold. The Canyon fault dips steeply to the northeast. Down dip extensions of the 300 level ore zone will be limited to its' rake intersection with the Canyon fault. Information as to fault throw and relative displacement of the Moss vein structure between the foot and hanging wall segments will be required to effectively develop the down dip potential of the East Area. It is possible that the Moss vein structure is present within the transition zone, but does not crop out due to structural considerations. This would be especially true if the Canyon fault represents a series of parallel fault slice wedges between the East and West Areas rather than one distinct plane of movement. The possibility of ore mineralization being emplaced within the Canyon fault plane should not be overlooked.

East Area

The most favorable area for developing additional tonnages of plus .25 oz. gold ores lies within a near vertical section of the Moss vein between the 300 level east and west crosscuts. Favorable strike length extension aggregates in excess of 200 feet based upon present information. Vertical range expansion remains open once the Canyon fault problem has been resolved. Rake intersection of the Moss vein-Canyon fault is projected to the 500 level at the M-26, M-27, 300 level ore shoot intercept (refer to Map No. A36A-376).

West Area

If data from the old Copper Company hole are valid, then the up and down dip projection coupled with expanding strike length to the west is considered favorable for further development. The eastern strike extension is dependent upon resolving the inferred Copper Company-West fault block problem. Good grade gold intercepts up dip in hole M-17-60 lends evidence to the presence of ore grade emplacement along this eastern extension. Ore grade intercepts similar to the East Area are known or are inferred to exist here. Geologic conditions and mineralization emplacement factors are similar to the East Area.

Additional data needs to be developed within the West Area.

BLOCK RESERVES

Individual block reserve figures are treated individually on the pages following:

BLOCK RESERVES

West Area

<u>Hole No.</u>	<u>Interval</u>	<u>Thickness</u>	<u>Average</u>	
			<u>Au oz.</u>	<u>Ag oz.</u>
M-10-45	5 to 30	25	.11	.72
M-10-60	15 to 45	30	.13	1.12
Site Average		27.5	.12	.95

M-10 drill plane = 962 sq. ft.

$$\frac{962 \times 60}{13} = 4,440 \text{ tons}$$

4,440 X .12 = 533 oz. gold (2.4:1)
 4,440 X .95 = 4,218 oz. silver

*Copper Co.	8.75 true	.56	8.10
	3.75 true	.36	3.21
Site Average	6.25 true	.50	6.63

$$\frac{6.25 \times 50 \times 50}{13} = 1,202 \text{ tons}$$

1,202 X .50 = 601 oz. gold (13.0:1)
 1,202 X 6.63 = 7,969 oz. silver

* based upon unverified old company data.

BLOCK RESERVES

East Area

Upper Area-west (surface outcrop to 65 level underground to Fluorite fault.

<u>Hole No.</u>	<u>Interval</u>	<u>Thickness</u>	<u>Average</u>	
			<u>Au oz.</u>	<u>Ag oz.</u>
*Surface	-	23	.10	-
M-5-30	35 to 65	30	.101	.97
M-5-60	25 to 35	5	.12	.76
M-5-60	50 to 65	7.5	.08	.67
	Site Average	21.75	.10	.84
M-6-30	35 to 48	5	.12	.83
M-6-60	20 to 40	20	.10	.82
	Site Average	12.5	.11	.825
M-5 & M-6	Site Average	17	.105	.83
Surface and	Site Average	20	.102	.83

$$\frac{20 \times 165 \times 160}{13} = 40,615 \text{ tons}$$

$$40,615 \times .102 = 4,143 \text{ oz. gold } 8:1:1$$

$$40,615 \times .83 = 33,710 \text{ oz. silver}$$

* based upon unverified old company data

Upper Area-east (no surface sampling, sites M-1 & M-2)

<u>Hole No.</u>	<u>Interval</u>	<u>Thickness</u>	<u>Average</u>	
			<u>Au.oz</u>	<u>Ag oz.</u>
M-1-30	60 to 65	5	.12	1.08
M-1-60	75 to 85	10	.11	.94
	Site Average	6.5	.115	1.01
M-2-30	30 to 50	20	.10	1.15
M-2-60	45 to 60	15	.102	1.07
	Site Average	15	.101	1.11
M-1 & M-2	Site Average	11	.106	1.06

$$\frac{11 \times 110 \times 50}{13} = 4,654 \text{ tons}$$

$$4,654 \times .106 = 493 \text{ oz. gold } 10:1$$

$$4,654 \times 1.06 = 4,933 \text{ oz. silver}$$

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BLOCK RESERVES

East Area
300 Level

Note: The west and east cross cut (old company records) muck and cut samples were averaged across a true 40 foot wide thickness. Values for the remainder of the crosscuts (beyond the 40 foot) were not included.

Block A: (300 level and Hole M-26-63)

<u>Hole No.</u>	<u>Interval</u>	<u>Thickness</u>	<u>Average</u>	
			<u>Au oz.</u>	<u>Ag oz.</u>
M-26-63	245 to 255	10	.28	3.96
East Xcut		40	.70	1.37
	Block Average	23	.62	1.88

$$\frac{50 \times 23 \times 100}{13} = 8,846 \text{ tons}$$

$$8,846 \times .62 = 5,484 \text{ oz. gold}$$

$$8,846 \times 1.88 = 16,630 \text{ oz. silver} \quad 3:1$$

Block B: (300 level east & west and Hole M-27-68)

<u>Hole No.</u>	<u>Interval</u>	<u>Thickness</u>	<u>Average</u>	
			<u>Au oz.</u>	<u>Ag oz.</u>
M-27-68	290 to 365	75	.18	.87
East Xcut		40	.70	1.37
West Xcut		40	.13	.40
	Block Average	40	.34	.88

$$\frac{40 \times 100 \times 100}{13} = 30,769 \text{ tons}$$

$$30,769 \times .34 = 10,461 \text{ oz. gold}$$

$$30,769 \times .88 = 27,076 \text{ oz. silver} \quad 2.6:1$$

BLOCK RESERVES

Recapitulation

Class	Block	Gross Tons s.t.	Grade Av. in oz.	Gross Ounces	
				Au	Ag
West Area					
UG	M-10	4,440	.12 gold	533	
			.95 silver		4,218
UG	Copper Co.	1,202	.50 gold	601	
			6.63 silver		7,969
East Area					
OP	Upper-W	40,615	.102 gold	4,143	
			.83 silver		33,710
OP	Upper-E	4,654	.106 gold	493	
			1.06 silver		4,933
UG	300 lev.A	8,846	.62 gold	5,484	
			1.88 silver		16,650
UG	300 lev.B	30,769	.34 gold	10,461	
			.88 silver		27,076
TOTALS		90,526	.24 gold	21,715	
			1.04 silver		94,556

UG = underground
 OP = open pit
 * figures rounded

Gross value in place OP \$2,000,000
 Gross value in place UG 6,300,000
 Total GVIP \$8,300,000*

GROSS VALUE OF PRESENTLY DEFINED ORE IN PLACE BY AREA AND CLASS
 (gold @ \$350/oz. silver @ \$7.50/oz.)

West Area underground 5,642 s.t. @ .20 oz. gold
 2.16 oz. silver
 Gross value = \$86.20/ ton

East Area underground 39,615 s.t. @ .40 oz. gold ^{2.7:1}
 1.10 oz. silver
 Gross value = \$148.25/ ton

East Area open pit 45,269 s.t. @ .10 oz. gold ^{9.7:1}
 .97 oz. silver
 Gross value = \$42.27/ ton

Total Reserve potential 90,526 s.t. @ .24 oz. gold
 1.04 oz. silver
 Gross value = \$91.80/ ton

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CONCLUSIONS

The Moss vein represents the largest vein system observed in the Moss Porphyry. It is an important mineralized quartz-calcite-adularia filled fault fissure of major proportions in the Oatman-Goldroad mining district. Principal values are restricted to gold and silver having an abundance ratio varying from .30/1 to .10/1.

The Moss mine is similar to other epithermal gold-silver producing mines and areas in the western United States. The Oatman-Goldroad mining district shows vertical mining ranges in excess of 800 feet.

Low grade gold mineralization (.10 oz. gold/ton) generally prevails in the upper portion of surface outcrop down to the 65 level. Higher grade mineralization (.3 oz. gold/ton and better) has been established by current drilling to 400 feet below the Main shaft collar (2,160' above sea level).

Structural considerations must be recognized in future ore finding development work.

Drilling during the 1981-1982 Phase I Program has defined reasonably assured reserves of 90,000 short tons, having an average grade, in place of .24 oz. gold/ton and 1.04 oz. silver/ton.

Chances for developing additional reserves of like or better grade is considered to be good.

RECOMMENDATIONS

A carefully executed two part development drilling program is recommended.

Part I

Initial drilling should be directed to solving the Canyon fault footwall structure problem.

Holes should be laid out to further develop the known ore horizon in the East Area 300 level zone both horizontally and vertically. West area holes are recommended to develop the Copper Company drill hole area both horizontally and vertically.

Part II

After the foot wall displacement of the Canyon fault is solved, other drill hole locations can be spotted to develop the down dip extension of the East Area hanging wall ore zones.

After fault block relationships of the West Area are resolved, a comprehensive drilling program will be justified.

TABLE I

MOSS MINE PROJECT
OATMAN-GOLDRoad MINING DISTRICT
MOHAVE COUNTY, ARIZONA

Assay Crosscheck

Hole No.	Depth	*Pioche Lab		**Union Assay	
		oz. Au	oz. Ag	oz. Au	oz. Ag
M-1-30	65-70	.03	.13	none	.13
M-2-30	2½- 5	.09	.60	.040	.4
M-2-60	10-15	.08	.51	.120	.7
M-3-60	20-25	tr.	.08	.020	.4
M-4-60	55-60	.04	.37	.010	.5
M-5-30	45-50	.18	2.02	.220	3.5
M-6-60	20-25	.06	.53	.010	.1
M-8-45	30-35	.02	.33	.010	.6
M-9-30	15-20	.03	.39	.010	1.1
M-9-60	60-65	.01	.14	.010	.3
M-10-60	15-20	.09	.61	.080	.5
M-11-45	30-35	.05	.81	.040	1.2
M-12-30	45-50	.15	.86	.160	1.2
M-13-30	10-15	tr.	.07	.020	.2
M-13-60	50-55	.01	.13	.010	.2
M-14-60	90-95	tr.	nil	.010	.2
M-15-45	80-85	.05	.40	.020	.5
M-16-45	85-90	.03	.12	.020	.2
M-17-60	115-120	.40	4.57	.470	4.6
M-19-45	110-115	.01	.08	.010	.2
M-20-30	45-50	.02	.12	.015	.4
M-21-60b	65-70	.01	.12	.010	.4
M-23-45	20-25	.02	.11	.020	.3
M-24-70	105-110	.01	.15	.020	.2
M-25-60	75-80	.10	.62	.140	1.9
M-26-63	250-255	.24	3.46	.250	3.8
M-27-68	340-345	.02	.23	.010	.4
M-27-68	320-325	.44	1.89	.520	1.1
M-27-68	340-345	.02	.23	.010	.4

- * Pioche Lab, Pioche, Nevada -in house facility
 ** Union Assay Office, Salt Lake City, Utah - April 14, 1982
 Hand Sample Serial #10686-10713

TABLE II

PROPOSED DRILL HOLES
MOSS MINE PROJECT
MOHAVE COUNTY, ARIZONA

TARGET ZONE	SITE	ELEVATION		BEARING	ANGLE	SLOPE DISTANCE
		COLLAR	BOTTOM			
East Area:						
200-300 Lev. test	M-30	2,129	1,840	N 44° W	-58°	342
400-500 Lev. test	M-31	2,129	1,630	N 58° W	-74°	518
200-300 Lev. test	M-32	2,129	1,830	N 08° W	-68°	323
E. 300 Lev. test	M-33	2,125	1,830	NORTH	-67°	320
E. Dr. 220 Lev. test	M-34	2,140	1,920	N 26° W	-56°	265
W. side Blind Boy 220 Lev. test	M-35	2,139	1,920	N 37° W	-48°	293
West Area:						
Copper Co. ext. test	M-36	2,258	2,043	N 08° W	-45°	360
as above	M-37	2,256	1,948	N 18° W	-60°	360
as above	M-38	2,254	1,781	N 11° W	-75°	490
Copper Co. fault block test	M-39	2,270	2,120	N 17° W	-60°	174
Canyon Fault-Moss Vein Transition						
subsurface Moss vein test	M-40	2,160	1,760	N 38° W	-45°	565
as above	M-41	2,160	1,730	N 38° W	-60°	600
West Area:						
West fault block test	M-42	2,244	1,898	N 29° E	-60°	400
TOTAL FOOTAGE						5,010

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DEVELOPMENT DRILLING RECOMMENDATIONS

Reference: Map No. A36A-376, Overlay Plan
(Listed in order of importance)

I Canyon Fault-Moss Vein Transition:

Drill Sites M-40 & M-41: Target to define the relative displacement and position of the Moss vein structure in the hanging wall portion of the Canyon fault. The holes are oriented N 38° W in a plane sub-parallel to the Canyon fault trace. Inclination is set at -45° and -60° respectively. Holes are set as to gain the maximum horizontal vertical exposure. Holes will bottom out at 400 to 430 feet below the collars, and should cut the Moss structure at two points based upon inferred projections. This should establish position and dip yielding data concerning offset elevation change of the footwall block.

II East Area-300 Level Ore Zone:

Drill Site M-30: This hole is positioned to cut the Moss Vein above the 300 and below the 220 level underground workings. Orientation; N 44° W, inclination -58°. Target to test 100 foot up dip extension of the 300 level zone.

Drill Site M-31: This hole is planned to intercept the Moss vein at approximately the 400 to 500 foot level. The easterly down dip extension of the Canyon fault is projected to be near the bottom of this hole. Orientation; N 58° W, inclination -74°.

Drill Site M-32: This location should cut the Moss vein east of its intercept in hole M-26-63 to extend the eastern limits of the 300 level ore zone. Orientation; N 8° W, inclination -68°.

Drill Site M-33: The easternmost block of the Moss vein is inferred to have shifted north based upon surface observation. This hole is placed to test this relative shift and define the position of the Moss vein structure. Orientation; North, inclination -67°.

*Drill Site M-34: This hole is projected to cut the Moss vein above the 220 level near the high gold values noted in the east drift. Purpose is to test the 150 to 220 level up dip projection east of the Blind Boy fault. Orientation; N 26° W, inclination -56°.

*Drill Site M-35: This hole is placed to cut the Moss vein at the 240 level on the west offset side of the Blind Boy fault. This hole should yield data relative to the 90 foot thickness of the Moss vein reported on the 220 level maps. Orientation; N 37° W, inclination -48°.

*A new pad will have to be constructed for drill sites M-34 & M-35.

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III West Area-Copper Company Hole Ore Zone:

Drill Site M-36: This location should cut the Moss vein directly up dip 100 feet from the Copper Company hole ore intercepts. Target is to verify the core hole findings and extend reserves. Orientation; N 08° W, inclination -45°.

Drill Site M-37: Hole position is predicted to cut the extension of the Copper Company hole intercept 25 feet to the west at approximately the same elevation. Target is to extend the zone westerly, obtain geologic data as to ore occurrence at this level and deepen the hole through the structure beyond the point where the core hole was abandoned. Orientation; N 18° W, inclination -60°.

Drill Site M-38: This hole is placed to cut the down dip extension of the Moss vein encountered in the Copper Company hole. Orientation ; N 11° W, inclination -75°. If mineralized vein material is encountered in hole M-28, then a steeper almost vertical hole should be considered at this location to test the Moss vein at its' deepest relative point on the property (representing a structurally deep foot wall intercept).

Drill Site M -39: This hole is set to test the inferred fault offset of the Moss vein east of the Copper Company hole. Trend of the hole will overlap at a higher elevation the bottom of hole M-28-60, and the collar of the M-17 & 20 hole series at a lower elevation.

Drill Site M-42: This hole is located to test the geologic inference of a fault block at the eastern most limits of the West Area as well as the down dip of the Moss vein exposed on the surface. Orientation; N 29° E, inclination -60°.

Additional development drilling should be deferred until results of the above program have been evaluated. A full Part II Program, designed to complete the property evaluation from a total reserve and mining plan costing standpoint will then be formulated.

Respectfully Submitted

Jack W. Madsen
Jack W. Madsen
Project Geologist

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April 26, 1982

M. C. GODBE, III

HOMESTAKE MINING COMPANY
CORRESPONDENCE - INTEROFFICE

Homestake's
Memos
&
assays

TO R. B. Blakestad DATE May 27, 1983
FROM W. R. Stanley *W.R. Stanley* SUBJECT UPDATE ON THE MOSS MINE
MOHAVE COUNTY, ARIZONA

INTRODUCTION

New assay results have been received since my monthly report was written and an addendum is in order.

MINERALIZATION AND GEOLOGY

Thirty (30) additional samples were taken along the strike of the vein zone on the last visit. Thirteen (13) of these were rotary drill chip composite samples, fifteen (15) were non-select rock chip samples ranging in length from 5 ft. to 60 ft. and two (2) were dump samples. All samples contained gold and silver. Average gold and silver values for all samples taken on the property are: 0.065 oz/ton Au and 0.82 oz/ton Ag. The averages for samples taken in the vein zone are (25 samples); 0.087 oz/ton Au and 1.08 oz/ton Ag (0.119 oz/ton Au equivalent in Au and Ag).

Figure 1 displays the geology and structure of the prospect and the overlay depicts the sample assay results in oz/ton Au equivalent. Drill chip samples and footage is also shown. The holes have unknown total depths and the upper samples of the holes were washed away - thus unsampled.

The vein zone has now been sampled over a strike length of over 3,000 feet and ore grade gold (≥ 0.10 oz/ton Au) occurs along the entire length. The vein zone is widest at its western end, approaching 100 feet, and narrows to approximately 35 feet at the eastern most sample location. An average of 55 feet to 60 feet wide, a 3,000 foot strike length, and minimum depth of mineralization of 500 feet would yield a tonnage of 6.4 - 7.0 MM tons. The grade may approach 0.24 oz/ton Au and 1.6 oz/ton Ag (calculated from continuous sampling of drill cuttings in one intersection 65 ft. long). This would yield a total contained ounces of: 1.536 MM - 1.89 MM oz of gold and 10.24 MM - 11.2 MM ounces of silver.

The host rock for the mineralization is a hypabyssal(?) porphyritic quartz monzonite. Adjacent to the main vein and the hanging wall stockworks the host is silicified. Outward from the silicified zone, the host is propyliticly altered and contains approximately 3 - 5% disseminated pyrite.

UPDATE ON THE MOSS MINE
MOHAVE COUNTY, ARIZONA
May 27, 1983
W. R. Stanley
Page -2-

LAND OWNERSHIP

The prime target area is confined to patented lode claims (if the assessor's maps and tax roles are correct). There are three parcels involved in the target with others abutting these lands to the south. Figure 2 shows the Patented Land Ownership in the area. Parcel No. 1 has the greatest bulk of the target and may also have the data on the past drilling (4 - 5 rotary holes and 15 - 20 core holes). Parcels No. 2 and 3 also cover part of the mineralized system.

RECOMMENDATIONS AND CONCLUSIONS

The prospect has significant grades, tonnage, and geology. I feel an immediate effort should be made to acquire the drilling data and at least a prospecting permit with right of first refusal with Mr. and Mrs. Pinney (Parcel 1) and Ella Greenwood, et al (Parcel 2). This would insure our control of the bulk of the target area during the preliminary evaluation stage. I cannot be certain of when the drilling was done or why they stopped the program, but from the condition of the drill roads and pads I would estimate the work was done 5 years ago.

In conclusion, the property is recommended for advancement to the Preliminary Evaluation Stage, efforts should be made to acquire all old data from the three principal patented land owners (especially parcels 1 and 2, Figure 2) and obtain at least prospecting permits for the properties with right of first refusal.

WRS/1k

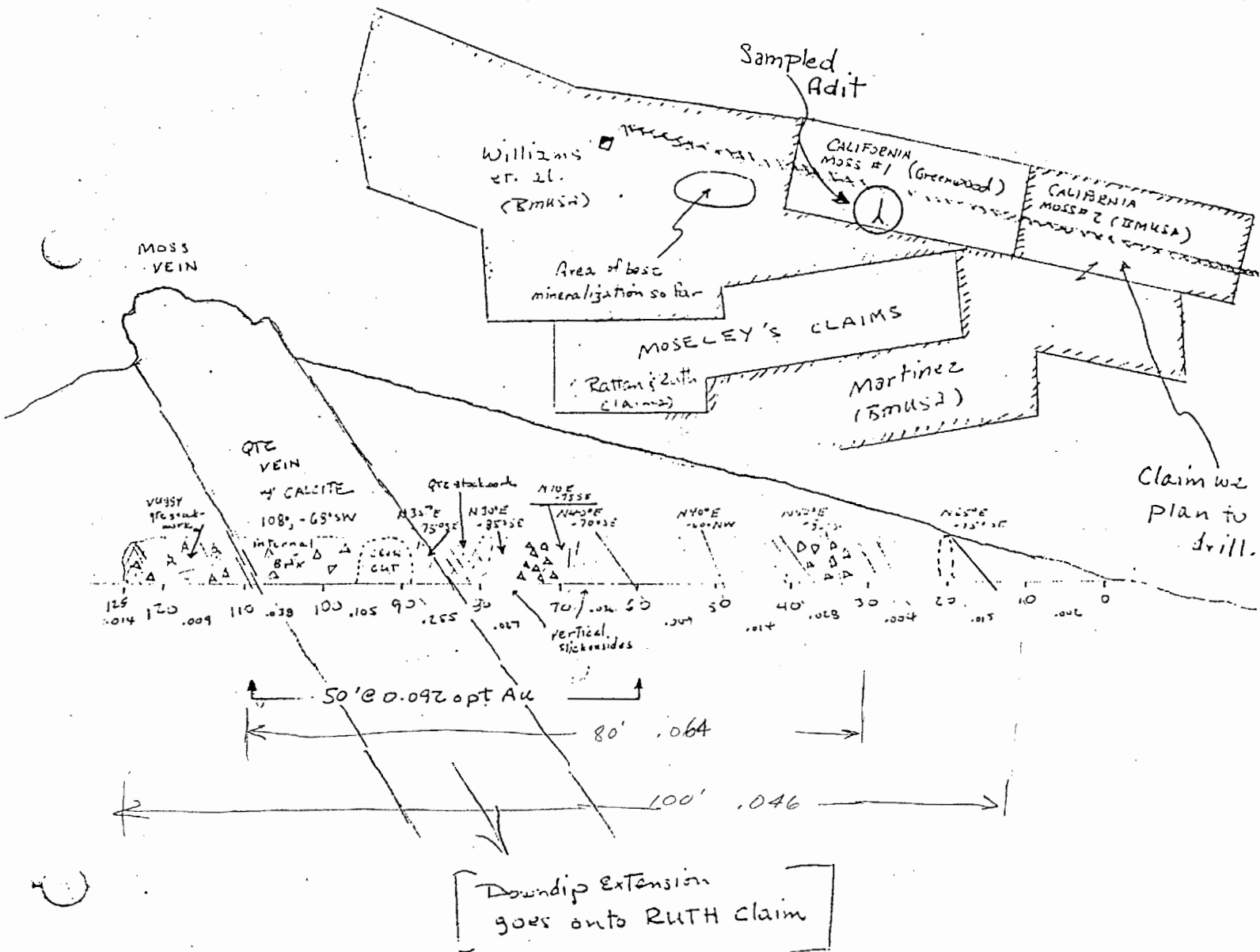
Attachments

Sample Results, Adit on CA MOSS #1 claim

Sample #	Au (ppb)	Au (opt)	Ag (ppm)	Au:Ag	Distance
111336	70	0.002	1.4	0.05	10
111337	500	0.015	3.6	0.14	20
111338	140	0.004	1.5	0.09	30
111339	960	0.028	9.9	0.10	40
111340	490	0.014	2.3	0.21	50
111341	315	0.009	1.6	0.20	60
111342	1250	0.036 HW	9.3	0.13	70
111343	910	0.027 HW	4.6	0.20	80
111344	8740	0.255 vein	61.0	0.14	90
111345	3600	0.105	23.0	0.16	100
111346	1320	0.038	9.3	0.14	110
111347	300	0.009	3.7	0.08	120
111348	490	0.014	3.0	0.16	125

Avg. 0.043

80' @ .064
 50' @ .092
 100' @ .053



Downdip Extension goes onto RUTH claim

SUMMARY OF MOSS PROPOSED DRILLING

<u>Hole No.</u>	<u>Angle/Direction</u> (In Degrees)	<u>TD</u>	<u>Comments</u>
1	Vert	600	New Target
2	-50N	400	New Target
3	-60N	600	Confirmation
4	-45N	300	Confirmation
5	-60N	650	Confirmation
6	-60N	500	New Target
7	-45N	600	New Target
8	Vert	700	New Target
9	-45S	500	New Target
10	-50S	400	New Target
11	-60N	300	New Target
12	-60N	300	New Target
13	-60N	<u>600</u>	Confirmation

6450' = \$106,425 Total Drilling



shaft, as shown in Figure 5. This shoot was 900 feet long by a maximum of 22 feet wide and extended from the surface to the 700 level. Some 600 feet farther southeast is the Sharp ore body which, as shown on Figure 5, was mined from the 300 to the 500 level and from the 700 to the 800 level. Less than 200 feet farther southeast, between the 300 and 500 levels, was the Rice ore body which was about 400 feet long. For about 1,500 feet farther southeast, small pockets of ore were mined from near the surface. As indicated by Figure 5, the Line Road tunnel prospected the vein below these outcrops for a horizontal distance of 3,000 feet, but found no commercial ore.

MOSS MINE

The Moss mine is about 7 miles northwest of Oatman and 2 miles north of Silver Creek.

This deposit was probably the first to be worked in the district. During the early days, it made a reported production of \$240,000 from near the surface. Since that time, considerable intermittent development has been carried on, but little ore has been mined.

The vein strikes N. 78° W., dips 70° S., and occurs in the Moss quartz monzonite-porphry. It forms a lode from 20 to more than 100 feet wide, with the widest portion at the western end, and is traceable on the surface for more than a mile east of the mine.

The vein filling consists of fine-grained white quartz and calcite, with stringers of colorless to pale-green fluorite. The largest ore shoot consisted of free gold in iron-stained quartz but extended to a depth of only 65 feet. Several smaller ore bodies were mined from near the surface at various places along the vein.

Workings on the Moss vein include a 230-foot shaft with about 750 feet of workings, about 900 feet of tunnel, and some irregular surface openings. Ransome states that the vein on the 220 level appears to be 90 feet wide and as a whole probably carries from 0.15 to 0.20 ounces of gold per ton.

TELLURIDE MINE

The Telluride vein, which joins the Lucky Boy and Tom Reed veins south of the Ben Harrison shaft, has made an estimated gross production of about \$200,000. The mine was active from 1922 to 1925, and was operated in a small way during 1930-1934.

This vein strikes northwestward with an inconspicuous outcrop, and is about 3,000 feet long. The ore, which occurred mainly between the 300- and 500-foot levels, ranged from a few inches to 5 feet in width. The vein filling consists mainly of quartz and calcite of the first and second stages of deposition, accompanied by a 6-inch streak of fifth-stage quartz.

PIONEER OR GERMAN-AMERICAN MINE

The Pioneer mine, formerly known as the German-American, is about 1½ miles southwest of Oatman.

In 1902, the Gold Road Company did some development work

on this property. During 1903-1904 the Gold Road Company produced 2,700 tons of gold per ton. Some product was produced in 1930, and 1932.

The Pioneer vein strikes N. 10° W. The hanging wall is Oatman andesite and the footwall is Alcyone trachyte. The vein in the Pioneer mine is a Cone fault zone at an angle of 30° to the surface, offsetting by the other. Near the surface the vein has a maximum width of about 18 feet. The vein filling is fine-grained, gray calcite and quartz, except in iron-stained zones of crushed quartz.

Several small ore bodies were mined from the Pioneer vein. One of the largest was about 400 feet long by a maximum width of about 40 feet. It consisted abruptly near the 400 level of quartz and unreplaced greenish quartz.

North of the Thirty-fifth Parallel a shoot of iron-stained quartz long by 3 feet wide yielded iron-stained quartz.

Near the Pioneer shaft, at the surface, the vein has narrow portions of the vein as yielded some relatively rich ore

GOLD DUST MINE

The Gold Dust mine, formerly known as the Orion, is about a mile south of Oatman.

This deposit, which was located near the Pioneer mine, has a small amount of shipping ore produced. Development was reported in 1916 to 1924. Some production was reported in 1916, but the total output is unknown. The mine is now being reconditioned by the Gold Dust mine.

Lausen¹¹⁷ gives the following description of the vein: The vein is northwest, and, on the surface, has several branches. The southern branch, which intersects the Pioneer vein a few hundred feet south of the Pioneer shaft. The north branch continues northwestward, continuous with the southern branch. The country rock throughout the mine is Oatman andesite.

At some places, the vein consists of a width up to 7 feet. To the west, the vein passes into a series of small stringers in a somewhat altered andesite overlying the Pioneer vein. Ransome¹¹⁸ states that two ore shoots were mined from the vein, one of 200 feet and extending from the

¹¹⁷ Work cited, pp. 110-11.

¹¹⁸ Work cited, p. 49.

TELECOPIER

TO: Ray Irwin
FROM: D. D. Jinks
DATE: February 19, 1991
SUBJ: MOSS MINE, MOHAVE COUNTY, ARIZONA

PAGES TRANSMITTED: 1

A preliminary pro-forma economic analysis of the Moss Mine using costs generated by N. ^{Prin} for Yarnell shows that at 0.05 ounces per ton, a heap leach operation does not meet Reynolds' hurdle rates for return on investment. The internal rate of return works out to slightly over 18%, yielding a negative net present values of over \$300,000 at 20%, \$1.66 million at 30%, and \$2.6 million at 40%. This clearly demonstrates that the property has no up-front value. The analysis did not include the \$1.9 million payment due the "leaseholders."

The area is still interesting from an exploration standpoint, and we should not terminate our interest. The change in any one of the following inputs would yield an internal rate of return of 30%: 1) Increase in the realized gold price to \$403 (achievable by forward selling); 2) Increase the grade to 0.055 ounces per ton; or 3) Increase the gold recovery to 81% (probably not possible in a heap leach scenario). What is the probability of increasing the average grade? If we could combine 1 and 2 above, the project would be economic with a comfortable cushion. Economy of scale also would help; if the ore reserve could be increased so that the operation could process 2 million tons per year, capital costs would not increase greatly and operating costs should be at least marginally lower.

As per our discussions, it appears that we should inform Shell/Billiton USA that the property has little or no up-front value and will not tolerate the ridiculous buy out they negotiated; however, we would be willing to consider a staged payment to them over time if they (or we) can renegotiate a more favorable deal with the leaseholders (i.e. a small NSR plus a token payment in, say, three years). After Wolcott has confirmed our RAL claims/their over staking, and Legal has reviewed, we should also inform them that we legally hold a good portion of their land package.

Regards,



D. D. Jinks



REYNOLDS METALS EXPLORATION, INC.

Reynolds Metals Company • 5301 Longley Lane • Suite 157 • Reno, Nevada 89511-1805
Telephone (702)829-8018 • Facsimile (702)829-8026

DATE: April 19, 1991
TO: Dr. Douglas Jinks
FROM: Ray Irwin
RE: Summary of Moss Mine Lease Agreements

The core of the Moss mine project, which is being offered for sale by Billiton Minerals, consists of fifteen patented claims owned by five separate owners or groups of owners. Billiton Minerals, through their agreement with Gregory Gintoff, has secured option to purchase agreements on two patented claim groups (Williams and Martinez) totaling eleven full or partial claims. The remaining four patented claims are split between three owners or groups of owners and are under various stages of negotiation.

Of the five claim groups comprising the core of the Moss mine project, four groups comprising ten claims are considered to have significant exploration potential. These are:

- 1) The Williams claims
- 2) Mosely claims (under negotiation)
- 3) Greenwood claim or California Moss #182 (under negotiation)
- 4) Hudson claim or California Moss #796 (under negotiation)

The summary of the signed option agreements, as well as the agreement between Billiton Minerals and Gregory Gintoff, are listed below:

Gintoff/Williams Agreement

This option agreement was signed August 4, 1990 and originally had a two year term (expires August 4, 1992). Under this agreement the Williams family received a \$10,000 payment upon signing and \$20,000 payment 180 days after signing the agreement. A \$40,000 payment was then due August 4, 1991. None of these payments are credited to the \$1 million purchase price which originally should have been exercised before August 4, 1992.

Recently, Billiton has renegotiated a one year extension of the buyout. To obtain this extension, Billiton paid the Williams family \$20,000. \$10,000 of this was a bonus and \$10,000 was an advance on the August 4, 1991 payment. Only \$30,000 is now due on August 4, 1991. In addition to these changes, a \$50,000 payment is due on August 4, 1992, and an additional \$50,000 six months later. None of these payments are credited toward the purchase price. Upon execution of the purchase option, the Williams family will have no retained interest.

Note that until the option is exercised, bulk sampling and test leaching are prohibited. At the current time, a 1/16 interest in these claims still needs to be acquired. Apparently, Gintoff and Billiton are having trouble locating this party.

Gintoff/Martinez Agreement

The Gintoff/Martinez agreement is a purchase agreement having a five year term. Unlike the Williams agreement, it would appear that the purchaser could obtain a bulk sample for metallurgical testing. Under this agreement the Martinez family received \$1,000 upon signing (October 17, 1990) and \$500 per month beginning 6 months after signing. The Martinez family will receive \$1000 per month during the second year; \$2000 per month during the third year and \$2500 per month during the fourth and fifth years. All payments are credited to and deducted from the \$250,000 purchase price. Upon execution of the purchase option, the Martinez family will have no retained interest.

Gintoff/Billiton Minerals Agreement

As a result of the Gintoff/Billiton Minerals agreement and various amendments, Billiton has agreed to accept assignment of the Gintoff options and assume all of the option obligations. As consideration, Billiton paid Gintoff \$20,000 upon execution of the agreement (May, 1990) and will pay him an additional \$35,000 in May, 1991 to retain sole right to explore and purchase.

Upon exercising the \$1 million purchase of the Williams patented claims, Gintoff would receive an annual \$60,000 advance royalty payment until commercial production is achieved. After commercial production has begun, Gintoff would receive a 3 1/2% gross value royalty (no deductions) on all production obtained from the patented claims comprising the Williams and the two Mosley claims (Rattan Mine and Ruth) that are currently under negotiation. Gintoff would also receive a 2 1/2% gross value royalty (no deductions) on all other properties within the area of interest. (See map) There is a further royalty provision that royalties payable by Billiton cannot exceed the equivalent of a 5% NSR royalty (not defined).

If in any given year the total production royalty payable to Gintoff is less than \$100,000, Gintoff will receive as an advance royalty the difference between \$100,000 and any production royalty.

Billiton would be entitled to recoup one half of the purchase price on the Williams option (\$500,000) plus any advance royalties paid to Gintoff.

If production were suspended, but commercial reserves remained, Gintoff would receive an advance royalty of \$60,000 for a period of 3 years. After which time the Gintoff interest could be purchased by Billiton for 75% of the value of the gross production royalty that would be due Gintoff on the remaining commercial reserve. Alternatively, Gintoff would be given the option to mine the property and Billiton would receive the equivalent gross production royalty originally due Gintoff.

As previously stated, four patented claims in the core area of the project are split between three owners or groups of owners and are reportedly under various stages of negotiation. A summary of the proposed terms are listed below:

California Moss (M.S. 182)

Owner: Harris Greenwood, et.al.

Type of Agreement: Option to purchase with exploration rights

Term: 5 year option

Purchase Price: \$100,000

Status: Greenwood and 5 heirs constituting 1/4 interest in the property are reviewing the proposed agreement. Greenwood is agreeable to signing the 1/4 interest and is currently contacting the parties constituting the outstanding 3/4 interest.

California Moss (M.S. 796)

Owner: Edith Iona Dickey c/o Marlene Hudson, Guardian for the estate

Type of Agreement: Option to purchase with exploration rights

Term: 3 year option

Purchase Price: \$100,000

Payment Schedule: \$18,000, of which \$9,000 paid upon signing
 \$12,500 at first anniversary
 \$ 6,500 at second anniversary
 Balance of purchase due on third anniversary

Status: Currently negotiating details of agreement with Ms. Hudson and attorney. The draft document is being reviewed by Hudson's attorney. Structure and payments generally agreeable, some final wording and legal details of guardianship and title transfer to be worked out.

Ruth (M.S. 2213) and Rattan Claims (M.S. 857)

Owner: Lead King Mines (Defunct Nevada Corporation)

Tax Ownership: Wilson Mosley (1990)
W.B. Byrne (1991)

Terms: Although none stated, I was told by Jim Curl of Billiton Minerals that Billiton would try to obtain these claims under a 5 year option to purchase agreement with all annual payments credited toward a purchase price of \$100,000.

Status: Mr. Mosley is the heir to the estate of a Mr. E.G. Moyne, who was secretary to Lead King Mines Company. Mosley has been paying the taxes on the property since the 60's. Mr. Mosley currently has no claim of adverse possession against the property, but has a claim for payment for past tax and a debit of \$6,000 owed to Mr. Moyne when the company was formed. Mr. Mosley is willing to work with Billiton to clear title to the land agreement. We are currently reviewing documents to determine the most expedient way to clear title to the land.

Gold Hill and New York Claims

In addition to the patented claims under negotiation in the core area, Billiton Minerals is negotiating for two groups of patented claims (Gold Hill 1-4 and New York 1 and 3-6) located north of the Moss mine. The proposed terms for these claims are summarized below:

Owner: James Hilton, et.ux., et.al., 3 owners on Gold Hill, 5 owners on New York, all relatives or friends of Hilton and will go with Hilton on his advice

Type of Agreement: Lease with option to purchase

Term: 15 year term, renewable

Royalty: 4% net return royalty

Lease payments as advance royalty creditable against production

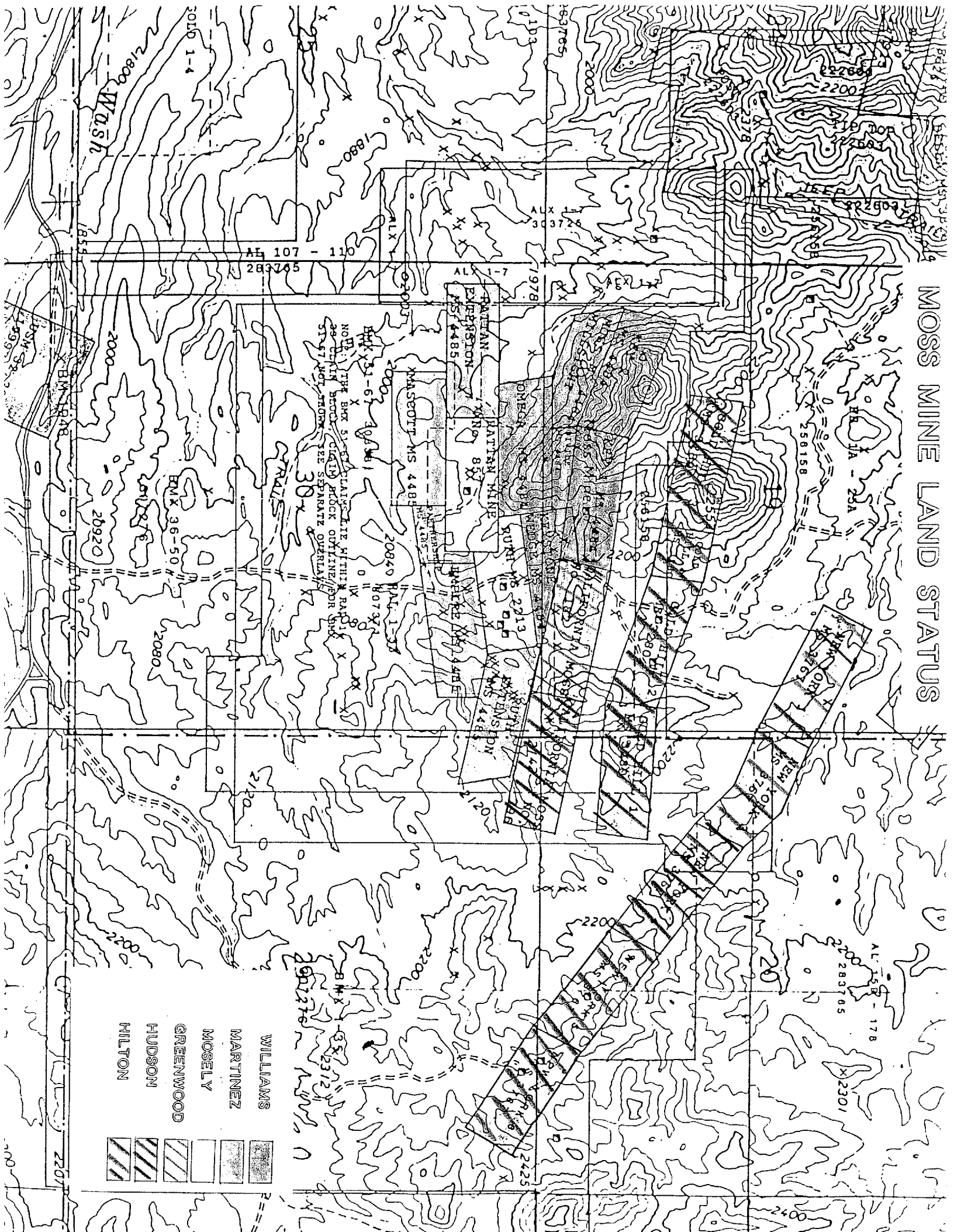
Purchase Price: Purchase price has not been finally negotiated

Proposed Payment structure: \$ 4,000 on signing
\$ 4,000 first anniversary
\$ 5,000 second anniversary
\$ 7,000 third anniversary
\$10,000 fourth anniversary and thereafter

Status: Agreement is being constructed and will be forwarded to owner this week. Some negotiation still to be done on the agreement.

Since some of the key claims are considered to have good exploration, Reynolds' proposed bid for these claims, as outlined in my memo dated April 17, 1991, must be contingent on Billiton's ability to secure the remaining claims under terms similar to those stated above. Our proposed bid should state that the six month option period would commence upon Billiton's successful acquisition of the outstanding claims.

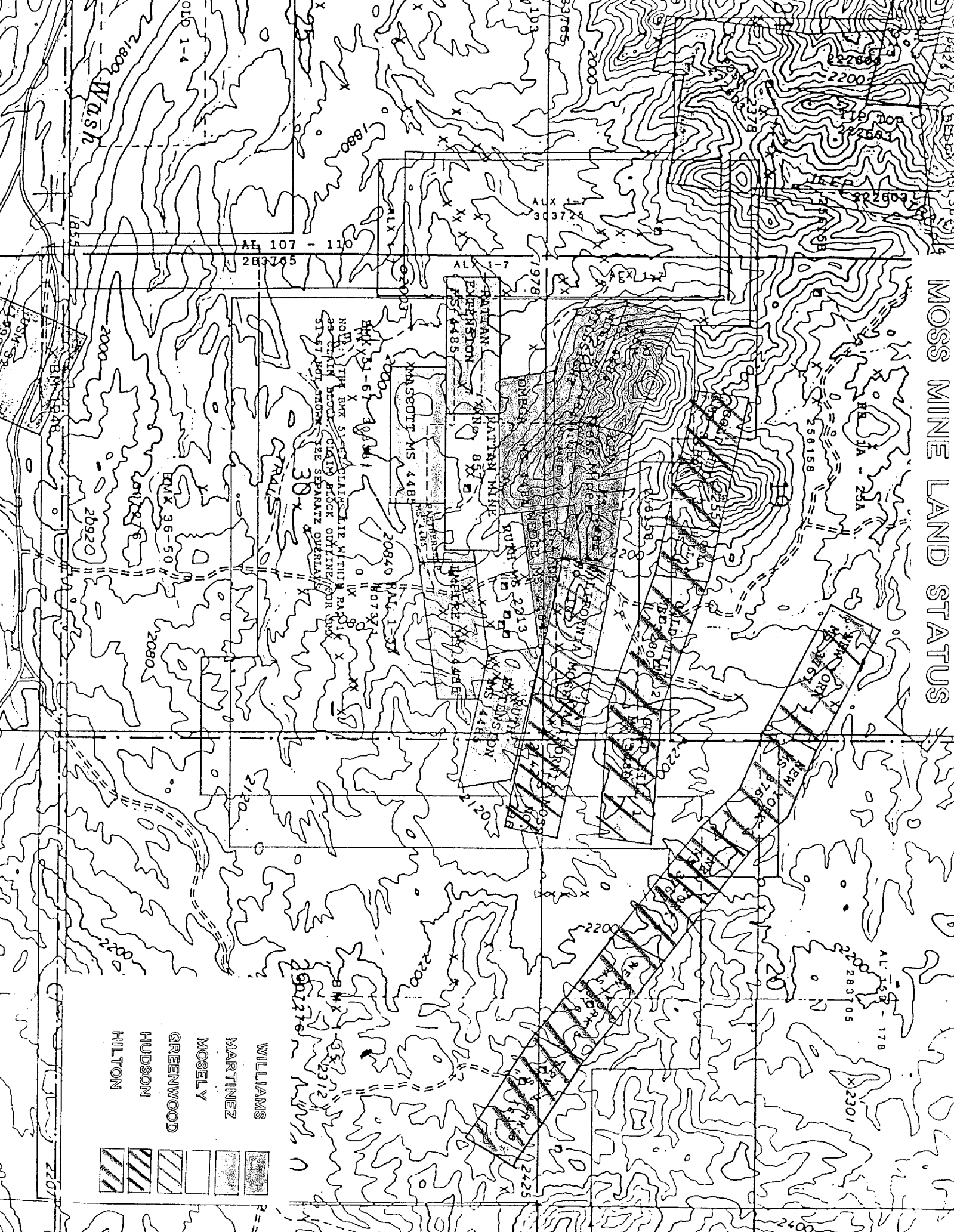
MOSS MINE LAND STATUS



- WILLIAMS
- MARTINEZ
- MOSELY
- GREENWOOD
- HUDSON
- HILTON

NOTE: THE BXX SYSTEM QUADRANGLE WITHIN RANGE OF THIS BROCK CROWN BLOCK OUTLINE FOR BXX 31-57 NOT SHOWN SEE SEPARATE QUADRANGLE

Moss Mine
 PATMAN DEPRESSION MS 4485
 HATTIAN MINE
 MASSCOTT MS 4484
 PAT. 1-338
 20840
 207371
 20920
 2080

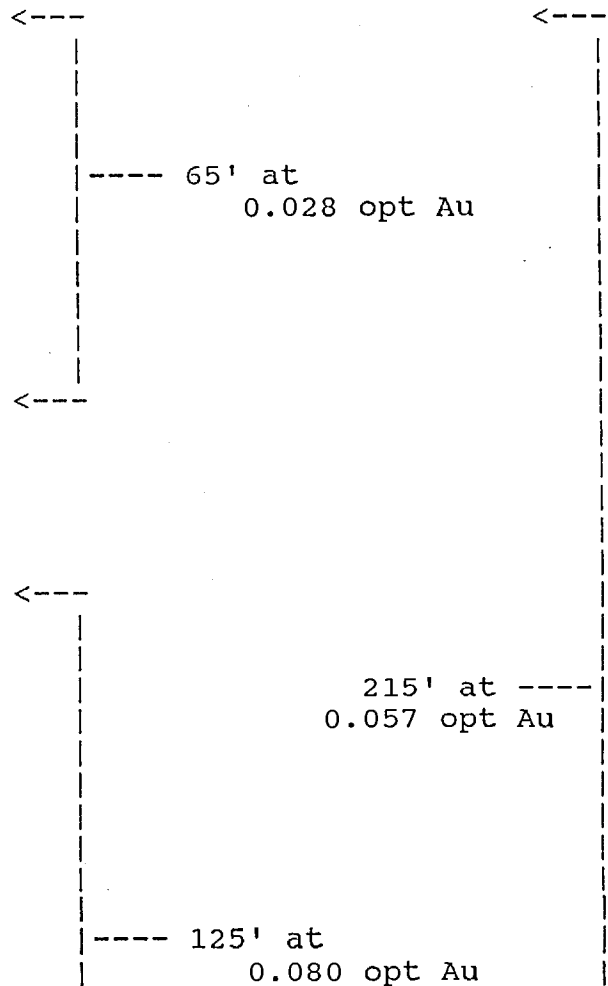


Billiton Drillhole ASSAYS

Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)
MM-1	5	215	0.006	1.5
MM-1	10	485	0.014	5.2
MM-1	15	60	0.002	1.1
MM-1	20	150	0.004	2.4
MM-1	25	30	0.001	1.7
MM-1	30	30	0.001	1.5
MM-1	35	45	0.001	1.5
MM-1	40	135	0.004	0.8
MM-1	45	90	0.003	1.1
MM-1	50	95	0.003	0.7
MM-1	55	80	0.002	0.9
MM-1	60	85	0.002	1.2
MM-1	65	245	0.007	1.6
MM-1	70	85	0.002	1.4
MM-1	75	30	0.001	1.2
MM-1	80	70	0.002	1.7
MM-1	85	50	0.001	1
MM-1	90	75	0.002	1.1
MM-1	95	180	0.005	0.9
MM-1	100	435	0.013	3.4
MM-1	105	360	0.010	3
MM-1	110	430	0.013	4.8
MM-1	115	1340	0.039	4.5
MM-1	120	355	0.010	3.6
MM-1	125	365	0.011	3
MM-1	130	505	0.015	4.4
MM-1	135	355	0.010	3.2
MM-1	140	780	0.023	6
MM-1	145	595	0.017	4.8
MM-1	150	990	0.029	4
MM-1	155	550	0.016	11.7
MM-1	160	1090	0.032	5
MM-1	165	940	0.027	7
MM-1	170	715	0.021	6.6
MM-1	175	3490	0.102	9
MM-1	180	660	0.019	7.1
MM-1	185	780	0.023	3.2
MM-1	190	390	0.011	3.5
MM-1	195	735	0.021	3
MM-1	200	785	0.023	2.2
MM-1	205	540	0.016	7.5
MM-1	210	460	0.013	3.2
MM-1	215	550	0.016	4.4
MM-1	220	580	0.017	6
MM-1	225	420	0.012	4.4
MM-1	230	4210	0.123	9
MM-1	235	1215	0.035	7.2
MM-1	240	1050	0.031	6.4
MM-1	245	21326	0.622	10
MM-1	250	3240	0.094	9.2
MM-1	255	2450	0.071	8
MM-1	260	1450	0.042	18.8
MM-1	265	5177	0.151	22
MM-1	270	3380	0.099	35
MM-1	275	5515	0.161	22
MM-1	280	2070	0.060	31
MM-1	285	1525	0.044	10
MM-1	290	6340	0.185	63

Ave. Au = 0.037 opt Au
for entire hole.

GEOCHEM SUMMARY
(spreadsheet)



MM-1	295	780	0.023	9.2
MM-1	300	380	0.011	4.8
MM-1	305	745	0.022	4.4
MM-1	310	245	0.007	5.2
MM-1	315	2770	0.081	28
MM-1	320	1570	0.046	6.5
MM-1	325	400	0.012	1.6
MM-1	330	630	0.018	1.6
MM-1	335	150	0.004	1.5
MM-1	340	145	0.004	1
MM-1	345	435	0.013	1.8
MM-1	350	1170	0.034	3.8
MM-1	355	610	0.018	1
MM-1	360	490	0.014	0.8

Hole No. Ft. Au (ppb) Au (opt) Ag (ppm)

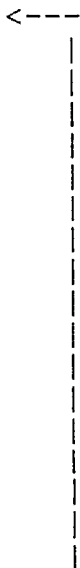
MM-2	5	565	0.016	3.3
MM-2	10	525	0.015	3.2
MM-2	15	265	0.008	1.8
MM-2	20	270	0.008	1.7
MM-2	25	410	0.012	2.2
MM-2	30	90	0.003	2.1
MM-2	35	150	0.004	2
MM-2	40	355	0.01	1.7
MM-2	45	90	0.003	1.7
MM-2	50	145	0.004	1.5
MM-2	55	290	0.008	3.2
MM-2	60	340	0.01	4.3
MM-2	65	255	0.007	1.1
MM-2	70	110	0.003	1.4
MM-2	75	410	0.012	2.5
MM-2	80	305	0.009	2.7
MM-2	85	730	0.021	2.1
MM-2	90	205	0.006	1.4
MM-2	95	1040	0.03	4.6
MM-2	100	330	0.01	1.5
MM-2	105	730	0.021	3.4
MM-2	110	1800	0.052	3.5
MM-2	115	1110	0.032	5.9
MM-2	120	800	0.023	5.4
MM-2	125	855	0.025	3.2
MM-2	130	260	0.008	2.5
MM-2	135	935	0.027	4
MM-2	140	405	0.012	2.8
MM-2	145	375	0.011	2.8
MM-2	150	425	0.012	3.6
MM-2	155	1875	0.055	5.6
MM-2	160	2200	0.064	8
MM-2	165	2435	0.071	14.8
MM-2	170	2175	0.063	11.6
MM-2	175	1650	0.048	13.2
MM-2	180	1320	0.038	13.2
MM-2	185	1340	0.039	19.6
MM-2	190	12309	0.359	100
MM-2	195	725	0.021	16.4
MM-2	200	825	0.024	14
MM-2	205	805	0.023	13
MM-2	210	550	0.016	8.2
MM-2	215	140	0.004	2.6
MM-2	220	145	0.004	3.6

Ave. Au = 0.027 opt Au
for entire hole.

----- 105' at
0.049 opt Au

Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)
MM-2	225	180	0.005	3.2
MM-2	230	320	0.009	2.5
MM-2	235	110	0.003	2.2
MM-2	240	570	0.017	19.2
MM-3	5	250	0.007	1.3
MM-3	10	105	0.003	1
MM-3	15	440	0.013	2.1
MM-3	20	175	0.005	1.1
MM-3	25	215	0.006	2.4
MM-3	30	115	0.003	2
MM-3	35	40	0.001	1.4
MM-3	40	20	0.001	2
MM-3	45	5	0	0.9
MM-3	50	35	0.001	0.5
MM-3	55	45	0.001	1.2
MM-3	60	5	0	1.3
MM-3	65	35	0.001	1.2
MM-3	70	220	0.006	1.7
MM-3	75	50	0.001	1
MM-3	80	20	0.001	1.4
MM-3	85	450	0.013	5.1
MM-3	90	600	0.017	3.1
MM-3	95	605	0.018	3.5
MM-3	100	150	0.004	3
MM-3	105	290	0.008	3.3
MM-3	110	375	0.011	2.8
MM-3	115	315	0.009	3.1
MM-3	120	315	0.009	2.8
MM-3	125	155	0.005	2.2
MM-3	130	170	0.005	1.8
MM-3	135	490	0.014	2.9
MM-3	140	790	0.023	7.4
MM-3	145	400	0.012	2.5
MM-3	150	220	0.006	2.4
MM-3	155	325	0.009	5.9
MM-3	160	440	0.013	5
MM-3	165	270	0.008	4.6
MM-3	170	670	0.02	4.7
MM-3	175	345	0.01	3.4
MM-3	180	410	0.012	6.4
MM-3	185	1470	0.043	14.4
MM-3	190	430	0.013	5.6
MM-3	195	1285	0.037	10.4
MM-3	200	835	0.024	8
MM-3	205	1715	0.05	40
MM-3	210	1325	0.039	28
MM-3	215	1090	0.032	19.6
MM-3	220	1225	0.036	11.6
MM-3	225	5725	0.167	24
MM-3	230	1720	0.05	20
MM-3	235	2160	0.063	21
MM-3	240	715	0.021	6
MM-3	245	2540	0.074	25
MM-3	250	945	0.028	13.6
MM-3	255	1730	0.05	42
MM-3	260	2150	0.063	25
MM-3	265	3775	0.11	71
MM-3	270	2215	0.065	41

Ave. Au = 0.022 opt Au
for entire hole.



----- 95' at
0.052 opt Au

MM-3	275	755	0.022	9.5 <---
MM-3	280	225	0.007	5
MM-3	285	270	0.008	3.7
MM-3	290	300	0.009	4.7
MM-3	295	1050	0.031	6.6
MM-3	300	770	0.022	6.5

Hole No. Ft. Au (ppb) Au (opt) Ag (ppm)

Ave. Au = 0.010 opt Au
for entire hole.

MM-4	5	200	0.006	1.2
MM-4	10	225	0.007	1.3
MM-4	15	185	0.005	1.5
MM-4	20	160	0.005	0.9
MM-4	25	100	0.003	1.2
MM-4	30	95	0.003	0.8
MM-4	35	105	0.003	1
MM-4	40	30	0.001	0.2
MM-4	45	20	0.001	0.2
MM-4	50	55	0.002	0.2
MM-4	55	10	0	0.2
MM-4	60	30	0.001	0.2
MM-4	65	20	0.001	0.4
MM-4	70	30	0.001	0.6
MM-4	75	40	0.001	0.5
MM-4	80	20	0.001	1
MM-4	85	1720	0.05	18.4 <---
MM-4	90	1920	0.056	11.3
MM-4	95	230	0.007	1.1
MM-4	100	190	0.006	1.3
MM-4	105	355	0.01	3.1
MM-4	110	160	0.005	1
MM-4	115	345	0.01	1.8
MM-4	120	165	0.005	1
MM-4	125	435	0.013	7.2
MM-4	130	355	0.01	3.7
MM-4	135	465	0.014	2.3
MM-4	140	435	0.013	1
MM-4	145	160	0.005	1.4
MM-4	150	250	0.007	1.1
MM-4	155	185	0.005	2
MM-4	160	465	0.014	5.9
MM-4	165	530	0.015	2.8
MM-4	170	260	0.008	1.3
MM-4	175	410	0.012	2.1
MM-4	180	175	0.005	0.5
MM-4	185	200	0.006	1.1
MM-4	190	390	0.011	2.4
MM-4	195	515	0.015	5.9
MM-4	200	1120	0.033	18
MM-4	205	270	0.008	3.8
MM-4	210	300	0.009	3.6
MM-4	215	330	0.01	2.3
MM-4	220	475	0.014	2.2
MM-4	225	400	0.012	2
MM-4	230	505	0.015	8
MM-4	235	510	0.015	15.2
MM-4	240	540	0.016	11.6
MM-4	245	390	0.011	9.6
MM-4	250	535	0.016	13.6
MM-4	255	720	0.021	29
MM-4	260	575	0.017	14.4

----- 190' at
0.014 opt Au

Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)	
MM-4	265	620	0.018	13.6	
MM-4	270	385	0.011	12	<---
MM-4	275	185	0.005	2.8	
MM-4	280	100	0.003	1.6	
MM-4	285	120	0.003	1.2	
MM-4	290	35	0.001	0.5	
MM-4	295	140	0.004	0.6	
MM-4	300	65	0.002	0.7	
MM-4	305	80	0.002	0.6	
MM-4	310	75	0.002	1.3	
<hr/>					
MM-5	5	1170	0.034	12.9	<---
MM-5	10	100	0.003	2.3	
MM-5	15	1660	0.048	16	--- Dump
MM-5	20	120	0.003	2.2	
MM-5	25	550	0.016	4.5	<---
MM-5	30	195	0.006	1.2	
MM-5	35	160	0.005	0.9	
MM-5	40	180	0.005	1.7	
MM-5	45	400	0.012	2.6	<---
MM-5	50	845	0.025	3	
MM-5	55	450	0.013	2.6	----- 30' at
MM-5	60	860	0.025	2.9	
MM-5	65	250	0.007	1.5	
MM-5	70	550	0.016	2.2	<---
MM-5	75	155	0.005	1	
MM-5	80	105	0.003	1.6	
MM-5	85	145	0.004	1.6	
MM-5	90	85	0.002	0.7	
MM-5	95	125	0.004	2	
MM-5	100	130	0.004	1.1	
MM-5	105	360	0.01	3.5	
MM-5	110	190	0.006	2	
MM-5	115	110	0.003	4	
MM-5	120	180	0.005	5.4	
MM-5	125	120	0.003	7.2	
MM-5	130	135	0.004	2.3	
MM-5	135	370	0.011	2.7	
MM-5	140	755	0.022	1.2	
MM-5	145	355	0.01	1.8	
MM-5	150	20	0.001	0.3	
MM-5	155	20	0.001	0.2	
MM-5	160	30	0.001	0.2	
MM-5	165	50	0.001	0.2	
MM-5	170	5	0	0.2	
MM-5	175	30	0.001	0.2	
MM-5	180	10	0	0.3	
MM-5	185	35	0.001	0.5	
MM-5	190	10	0	0.3	
MM-5	195	5	0	0.4	
MM-5	200	180	0.005	0.4	
MM-5	205	185	0.005	0.5	
MM-5	210	30	0.001	0.3	
MM-5	215	60	0.002	0.3	
MM-5	220	25	0.001	0.3	
MM-5	225	35	0.001	0.3	
MM-5	230	105	0.003	0.2	
MM-5	235	5	0	0.2	
MM-5	240	5	0	0.2	

Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)
MM-5	245	10	0	0.2
MM-5	250	85	0.002	0.6
MM-6	5	2430	0.071	17.2 <---
MM-6	10	2860	0.083	18
MM-6	15	640	0.019	4.5 --- Dump
MM-6	20	645	0.019	5.4
MM-6	25	605	0.018	2.8 <---
MM-6	30	310	0.009	2.3
MM-6	35	190	0.006	2.9
MM-6	40	200	0.006	2.8
MM-6	45	180	0.005	2.2
MM-6	50	385	0.011	3.8
MM-6	55	75	0.002	1.9
MM-6	60	210	0.006	1.5
MM-6	65	295	0.009	1.8
MM-6	70	975	0.028	2.7
MM-6	75	105	0.003	2.2
MM-6	80	115	0.003	1.7
MM-6	85	145	0.004	2
MM-6	90	130	0.004	2.9
MM-6	95	195	0.006	2.5
MM-6	100	85	0.002	2.1
MM-6	105	1770	0.052	18.8 <---
MM-6	110	325	0.009	4.4
MM-6	115	235	0.007	3.9 --- 25' at
MM-6	120	1630	0.048	11.2 0.025 opt Au
MM-6	125	340	0.010	5.2 <---
MM-6	130	110	0.003	4.3
MM-6	135	60	0.002	1.6
MM-6	140	350	0.010	6.7
MM-6	145	125	0.004	2.1
MM-6	150	75	0.002	1.8
MM-6	155	180	0.005	2.2
MM-6	160	50	0.001	0.8
MM-6	165	85	0.002	1.3
MM-6	170	325	0.009	6.7
MM-6	175	280	0.008	2.5
MM-6	180	135	0.004	2.5
MM-6	185	200	0.006	2.6
MM-6	190	375	0.011	4
MM-6	195	345	0.010	3.9
MM-6	200	415	0.012	7.3
MM-6	205	360	0.010	3.9
MM-6	210	265	0.008	4.2

Ave. Au = 0.013
for entire hole.

Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)
MM-7	5	1400	0.041	5.4
MM-7	10	1210	0.035	5.5
MM-7	15	140	0.004	2
MM-7	20	55	0.002	1.8
MM-7	25	320	0.009	2.7
MM-7	30	185	0.005	2.5
MM-7	35	360	0.010	4.3
MM-7	40	6490	0.189	12.5 <---
MM-7	45	3690	0.108	22
MM-7	50	3810	0.111	12.4
MM-7	55	390	0.011	5.2
MM-7	60	180	0.005	3.1

Ave. Au = 0.040 opt Au
for the entire hole.

MM-7	65	125	0.004	3.7
MM-7	70	425	0.012	2.4
MM-7	75	1950	0.057	9
MM-7	80	1370	0.040	11.9
MM-7	85	1110	0.032	8.3
MM-7	90	1140	0.033	3.4
MM-7	95	1210	0.035	7.1
MM-7	100	935	0.027	4.3
MM-7	105	10000	0.292	6.9
MM-7	110	360	0.010	5.3
MM-7	115	430	0.013	5.1
MM-7	120	1350	0.039	7
MM-7	125	455	0.013	5.4
MM-7	130	500	0.015	4.1
MM-7	135	670	0.020	6.9
MM-7	140	565	0.016	7.2
MM-7	145	1090	0.032	10.7
MM-7	150	315	0.009	3.5
MM-7	155	1200	0.035	4.8
MM-7	160	660	0.019	6.5
MM-7	165	300	0.009	4.1
MM-7	170	705	0.021	5.1
MM-7	175	210	0.006	6
MM-7	180	245	0.007	6.2
MM-7	185	1160	0.034	15.2
MM-7	190	625	0.018	5.6
MM-7	195	700	0.020	8.4
MM-7	200	310	0.009	5.4
MM-7	205	610	0.018	8.3
MM-7	210	2140	0.062	14.8
MM-7	215	1000	0.029	14
MM-7	220	770	0.022	10.8
MM-7	225	1660	0.048	21
MM-7	230	1760	0.051	25
MM-7	235	870	0.025	15.9
MM-7	240	1940	0.057	51
MM-7	245	5880	0.171	93
MM-7	250	7360	0.215	76
MM-7	255	3400	0.099	46
MM-7	260	5660	0.165	15.8
MM-7	265	830	0.024	12.7
MM-7	270	1230	0.036	17.2
MM-7	275	895	0.026	11.7
MM-7	280	875	0.026	11.6
MM-7	285	1100	0.032	13.3
MM-7	290	315	0.009	8.5
MM-7	295	2040	0.059	23
MM-7	300	1340	0.039	12.7
MM-7	305	380	0.011	1.1
MM-7	310	140	0.004	1.2
MM-7	315	80	0.002	0.6
MM-7	320	80	0.002	0.4
MM-7	325	340	0.010	2.3
MM-7	330	385	0.011	1.9
Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)
MM-8	5	195	0.006	2.1
MM-8	10	114	0.003	1.2
MM-8	15	45	0.001	1.9
MM-8	20	175	0.005	2.2

----- 265' at
0.048 opt Au

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Ave. Au = 0.060 opt Au
for entire hole.

Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)
MM-8	25	365	0.011	3.1
MM-8	30	655	0.019	2.9
MM-8	35	4280	0.125	8.5
MM-8	40	8060	0.235	44
MM-8	45	285	0.008	2.3
MM-8	50	145	0.004	2.3
MM-8	55	90	0.003	1
MM-8	60	80	0.002	0.9
MM-8	65	205	0.006	1.4
MM-8	70	200	0.006	1
MM-8	75	2890	0.084	16.2
MM-8	80	730	0.021	3.3
MM-8	85	85	0.002	0.4
MM-8	90	205	0.006	0.6
MM-8	95	395	0.012	4
MM-8	100	10000	0.292	7.2
MM-8	105	1560	0.045	6.1
MM-8	110	650	0.019	4.9
MM-8	115	1440	0.042	6.1
MM-8	120	295	0.009	8.3
MM-8	125	230	0.007	3.3
MM-8	130	240	0.007	2.2
MM-8	135	220	0.006	1.4
MM-8	140	240	0.007	1.3
MM-8	145	285	0.008	1.8
MM-8	150	545	0.016	4.1
MM-8	155	1920	0.056	9
MM-8	160	290	0.008	2.9
MM-8	165	1220	0.036	6.9
MM-8	170	765	0.022	6.6
MM-8	175	665	0.019	6.6
MM-8	180	1470	0.043	11.2
MM-8	185	3280	0.096	27
MM-8	190	800	0.023	12
MM-8	195	955	0.028	16.6
MM-8	200	1760	0.051	29
MM-8	205	2890	0.084	42
MM-8	210	840	0.024	14.4
MM-8	215	4280	0.125	54
MM-8	220	5290	0.154	4.8
MM-8	225	6590	0.192	100
MM-8	230	7840	0.229	43
MM-8	235	3860	0.113	23
MM-8	240	8100	0.236	37
MM-8	245	6340	0.185	26
MM-8	250	3210	0.094	16.7
MM-8	255	4370	0.127	60
MM-8	260	5230	0.153	91
MM-8	265	4180	0.122	42
MM-8	270	4110	0.120	22
MM-8	275	4650	0.136	28
MM-8	280	975	0.028	16.7
MM-8	285	855	0.025	4
MM-8	290	615	0.018	6.8
MM-8	295	180	0.005	1.8
MM-8	300	145	0.004	1.6



Ave. Au = 0.009 opt Au for the entire hole.

MM-9	5	335	0.010	2.9
MM-9	10	150	0.004	0.9

Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)
MM-9	315	110	0.003	1.7
MM-9	320	115	0.003	1.8
MM-9	325	285	0.008	1.9
MM-9	330	185	0.005	3
MM-9	335	180	0.005	2.3
MM-9	340	125	0.004	2.6
MM-9	345	255	0.007	2.7
MM-9	350	545	0.016	2.9
MM-9	355	395	0.012	3.4
MM-9	360	220	0.006	3.8
MM-9	365	190	0.006	2.7
MM-9	370	265	0.008	2.3
MM-9	375	185	0.005	2.4
MM-9	380	50	0.001	0.6
MM-9	385	75	0.002	1
MM-9	390	85	0.002	0.5
MM-9	395	30	0.001	0.5
MM-9	400	225	0.007	0.4
MM-9	405	25	0.001	0.2
MM-9	410	35	0.001	0.3
MM-9	415	15	0.000	0.2
MM-9	420	290	0.008	0.2
MM-9	425	15	0.000	0.2
MM-9	430	5	0.000	0.2
MM-9	435	45	0.001	0.2
MM-9	440	15	0.000	0.2
MM-9	445	15	0.000	0.2
MM-9	450	10	0.000	0.2
MM-10	5	545	0.016	4
MM-10	10	385	0.011	5.5
MM-10	15	95	0.003	1.3
MM-10	20	135	0.004	0.7
MM-10	25	340	0.010	0.9
MM-10	30	510	0.015	3.5
MM-10	35	285	0.008	2.1
MM-10	40	160	0.005	1.4
MM-10	45	295	0.009	1.4
MM-10	50	385	0.011	2
MM-10	55	520	0.015	2.8
MM-10	60	665	0.019	2.4
MM-10	65	625	0.018	5.9
MM-10	70	265	0.008	2.8
MM-10	75	310	0.009	1.9
MM-10	80	355	0.010	1.6
MM-10	85	110	0.003	1
MM-10	90	210	0.006	1.6
MM-10	95	395	0.012	2
MM-10	100	575	0.017	10.4
MM-10	105	295	0.009	6
MM-10	110	175	0.005	2.8
MM-10	115	235	0.007	5.5
MM-10	120	120	0.003	2.3
MM-10	125	245	0.007	5.1
MM-10	130	2980	0.087	34
MM-10	135	955	0.028	15
MM-10	140	225	0.007	3.8
MM-10	145	210	0.006	3.7
MM-10	150	190	0.006	1.9

Ave. Au = 0.008 opt Au
for entire hole.

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MM-10	155	890	0.026	10.9	
MM-10	160	1270	0.037	18.8	
MM-10	165	980	0.029	18.8	----- 75' at
MM-10	170	840	0.024	26	0.024 opt Au
MM-10	175	190	0.006	6.6	
MM-10	180	130	0.004	5.3	
MM-10	185	250	0.007	5.8	
MM-10	190	1970	0.057	45	
MM-10	195	710	0.021	12	
MM-10	200	710	0.021	12.5	-----
MM-10	205	350	0.010	4.2	
MM-10	210	230	0.007	3.5	
MM-10	215	410	0.012	5.3	
MM-10	220	180	0.005	4	
MM-10	225	300	0.009	12	
MM-10	230	470	0.014	11.5	
MM-10	235	395	0.012	13	
MM-10	240	175	0.005	2.1	
MM-10	245	95	0.003	2.4	
MM-10	250	685	0.020	14.6	
MM-10	255	240	0.007	4.1	
MM-10	260	220	0.006	4.8	
MM-10	265	105	0.003	3.8	
MM-10	270	115	0.003	1.3	
MM-10	275	75	0.002	0.7	
MM-10	280	70	0.002	0.6	
MM-10	285	200	0.006	0.6	
MM-10	290	35	0.001	0.7	
MM-10	295	55	0.002	0.5	
MM-10	300	25	0.001	0.6	
MM-10	305	25	0.001	0.5	
MM-10	310	60	0.002	0.4	
MM-10	315	40	0.001	0.2	
MM-10	320	15	0.000	0.3	
MM-10	325	15	0.000	0.3	
MM-10	330	20	0.001	0.3	
MM-10	335	5	0.000	0.2	
MM-10	340	5	0.000	0.2	
MM-10	345	15	0.000	0.6	
MM-10	350	25	0.001	0.4	
MM-10	355	15	0.000	0.5	
MM-10	360	5	0.000	0.2	
MM-10	365	10	0.000	0.2	
MM-10	370	45	0.001	0.7	
MM-10	375	5	0.000	0.2	
MM-10	380	10	0.000	0.4	
MM-10	385	5	0.000	0.2	
MM-10	390	25	0.001	0.2	
MM-10	395	80	0.002	0.2	
MM-10	400	20	0.001	0.2	
MM-10	405	25	0.001	0.2	
MM-10	410	5	0.000	0.2	
MM-10	415	5	0.000	0.2	
MM-10	420	5	0.000	0.2	
MM-10	425	5	0.000	0.2	
MM-10	430	5	0.000	0.2	
MM-10	435	50	0.001	2.6	
MM-10	440	5	0.000	0.5	
MM-10	445	35	0.001	1.6	
Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)	Ave. Au = 0.015 opt Au

for the entire hole.

Hole No.	Ft.	Au (ppb)	Au (opt)	Ag (ppm)
MM-11	5	520	0.015	2.1
MM-11	10	460	0.013	2.4
MM-11	15	200	0.006	1.8
MM-11	20	105	0.003	1
MM-11	25	150	0.004	0.9
MM-11	30	170	0.005	0.5
MM-11	35	85	0.002	1.1
MM-11	40	590	0.017	4.1
MM-11	45	100	0.003	1.3
MM-11	50	240	0.007	1.1
MM-11	55	190	0.006	1.3
MM-11	60	250	0.007	1.7
MM-11	65	210	0.006	2.6
MM-11	70	255	0.007	3.3
MM-11	75	305	0.009	3.9
MM-11	80	2260	0.066	41
MM-11	85	315	0.009	3.7
MM-11	90	135	0.004	2
MM-11	95	265	0.008	4.2
MM-11	100	715	0.021	6.9
MM-11	105	1130	0.033	11.8
MM-11	110	760	0.022	11.4
MM-11	115	600	0.017	6.5
MM-11	120	315	0.009	5
MM-11	125	530	0.015	3.5
MM-11	130	1030	0.030	3.5
MM-11	135	740	0.022	6
MM-11	140	265	0.008	2.6
MM-11	145	2490	0.073	36
MM-11	150	2220	0.065	46
MM-11	155	530	0.015	8.1
MM-11	160	485	0.014	6.3
MM-11	165	30	0.001	0.7
MM-11	170	25	0.001	0.5
MM-11	175	1740	0.051	1.5
MM-11	180	1140	0.033	0.5
MM-11	185	90	0.003	0.5
MM-11	190	960	0.028	1.4
MM-11	195	35	0.001	1.1
MM-11	200	25	0.001	0.4
MM-11	205	20	0.001	0.4
MM-11	210	70	0.002	1
MM-11	215	125	0.004	0.6
MM-11	220	370	0.011	1.6



----- 115' at
0.024 opt Au

Ave. Au = 0.007 opt Au
for the entire hole.

MM-12	5	300	0.009	1.4
MM-12	10	370	0.011	1.8
MM-12	15	2160	0.063	15.8
MM-12	20	490	0.014	3.6
MM-12	25	210	0.006	1.8
MM-12	30	240	0.007	0.7
MM-12	35	265	0.008	1.1
MM-12	40	280	0.008	1
MM-12	45	240	0.007	1.1
MM-12	50	375	0.011	1.2
MM-12	55	500	0.015	2
MM-12	60	465	0.014	1.6
MM-12	65	335	0.010	1.5

MM-12	70	135	0.004	0.8
MM-12	75	135	0.004	1.1
MM-12	80	160	0.005	1.3
MM-12	85	375	0.011	1.9
MM-12	90	220	0.006	2.5
MM-12	95	175	0.005	1.1
MM-12	100	165	0.005	1.6
MM-12	105	155	0.005	2.5
MM-12	110	205	0.006	2.6
MM-12	115	375	0.011	1.7
MM-12	120	50	0.001	0.2
MM-12	125	15	0.000	0.2
MM-12	130	120	0.003	0.3
MM-12	135	85	0.002	0.2
MM-12	140	45	0.001	0.2
MM-12	145	25	0.001	0.2
MM-12	150	55	0.002	0.5
MM-12	155	95	0.003	0.5
MM-12	160	110	0.003	0.6
MM-12	165	20	0.001	0.2
MM-12	170	120	0.003	0.2
MM-12	175	65	0.002	0.2
MM-12	180	40	0.001	0.2
MM-12	185	60	0.002	0.4
MM-12	190	25	0.001	0.2
MM-12	195	10	0.000	0.2
MM-12	200	5	0.000	0.2

Moss Mine Drill Results - Second Round

Hole No.	Depth (Ft.)	Au (ppb)	Au (opt)	Ag (ppm)
MM-13	5	1440	0.042	2.9
MM-13	10	125	0.004	1
MM-13	15	120	0.003	0.5
MM-13	20	195	0.006	0.5
MM-13	25	75	0.002	1.2
MM-13	30	235	0.007	0.5
MM-13	35	155	0.005	1.3
MM-13	40	200	0.006	1.4
MM-13	45	215	0.006	3
MM-13	50	330	0.010	2.4
MM-13	55	225	0.007	2.6
MM-13	60	370	0.011	2.9
MM-13	65	280	0.008	2.6
MM-13	70	80	0.002	2
MM-13	75	130	0.004	2
MM-13	80	115	0.003	1
MM-13	85	50	0.001	0.2
MM-13	90	65	0.002	0.4
MM-13	95	120	0.003	1
MM-13	100	55	0.002	1.3
MM-13	105	145	0.004	1.7
MM-13	110	205	0.006	1.5
MM-13	115	185	0.005	1
MM-13	120	135	0.004	0.5
MM-13	125	70	0.002	0.6
MM-13	130	165	0.005	2.4
MM-13	135	290	0.008	1.5
MM-13	140	150	0.004	2.6
MM-13	145	125	0.004	1.7
MM-13	150	150	0.004	0.7
MM-13	155	200	0.006	2.3
MM-13	160	175	0.005	1.5
MM-13	165	210	0.006	1.5
MM-13	170	110	0.003	1
MM-13	175	125	0.004	1
MM-13	180	65	0.002	0.6
MM-13	185	210	0.006	7.9
MM-13	190	1310	0.038	45.8
MM-13	195	370	0.011	12.3
MM-13	200	55	0.002	1
MM-13	205	595	0.017	8.5
MM-13	210	140	0.004	0.8
MM-13	215	140	0.004	1.7
MM-13	220	220	0.006	2.5
MM-13	225	165	0.005	1.2
MM-13	230	230	0.007	0.7
MM-13	235	215	0.006	0.7
MM-13	240	65	0.002	0.7
MM-13	245	125	0.004	0.9
MM-13	250	40	0.001	0.4
MM-13	255	150	0.004	0.7
MM-13	260	25	0.001	0.4
MM-13	265	50	0.001	0.6
MM-13	270	65	0.002	0.5
MM-13	275	140	0.004	0.4

MM-13	280	120	0.003	3.2
MM-13	285	100	0.003	0.7
MM-13	290	85	0.002	0.7
MM-13	295	70	0.002	1
MM-13	300	180	0.005	5.8
MM-13	305	160	0.005	2
MM-13	310	70	0.002	1
MM-13	315	150	0.004	1.3
MM-13	320	55	0.002	1.2
MM-13	325	170	0.005	1.8
MM-13	330	300	0.009	5.7
MM-13	335	110	0.003	1.1
MM-13	340	140	0.004	1.2
MM-13	345	270	0.008	4.5
MM-13	350	45	0.001	0.6
MM-13	355	50	0.001	0.6
MM-13	360	90	0.003	2
MM-13	365	85	0.002	1.1
MM-13	370	90	0.003	1.4
MM-13	375	45	0.001	0.9
MM-13	380	75	0.002	2.5
MM-13	385	60	0.002	1.9
MM-13	390	120	0.003	4.3
MM-13	395	45	0.001	1.2
MM-13	400	40	0.001	1
MM-13	405	40	0.001	0.6
MM-13	410	90	0.003	1.3
MM-13	415	550	0.016	5.2
MM-13	420	80	0.002	1.1
MM-13	425	650	0.019	1.9
MM-13	430	135	0.004	1
MM-13	435	165	0.005	1.1
MM-13	440	70	0.002	1
MM-13	445	210	0.006	2.7
MM-13	450	295	0.009	3.4
MM-13	455	390	0.011	2
MM-13	460	180	0.005	1.3
MM-13	465	165	0.005	0.9
MM-13	470	105	0.003	0.9
MM-13	475	120	0.003	1
MM-13	480	110	0.003	0.9
MM-13	485	195	0.006	1
MM-13	490	355	0.010	1
MM-13	495	120	0.003	1.3
MM-13	500	295	0.009	1
MM-13	505	210	0.006	1.1
MM-14	5	590	0.017	2.5
MM-14	10	160	0.005	0.4
MM-14	15	90	0.003	0.3
MM-14	20	85	0.002	0.2
MM-14	25	95	0.003	0.2
MM-14	30	220	0.006	0.2
MM-14	35	170	0.005	0.2
MM-14	40	100	0.003	0.2
MM-14	45	80	0.002	0.2
MM-14	50	30	0.001	0.2
MM-14	55	20	0.001	0.2
MM-14	60	40	0.001	0.3
MM-14	65	80	0.002	0.3

MM-15	5	45	0.001	1.2
MM-15	10	20	0.001	1.2
MM-15	15	20	0.001	1
MM-15	20	35	0.001	1.7
MM-15	25	45	0.001	1.5
MM-15	30	25	0.001	1.5
MM-15	35	20	0.001	1.8
MM-15	40	60	0.002	2.2
MM-15	45	30	0.001	1.7
MM-15	50	35	0.001	1.5
MM-15	55	30	0.001	1.5
MM-15	60	20	0.001	1.4
MM-15	65	15	0.000	0.7
MM-15	70	35	0.001	0.7
MM-15	75	30	0.001	1.4
MM-15	80	20	0.001	1.8
MM-15	85	20	0.001	1.6
MM-15	90	15	0.000	1.7
MM-15	95	15	0.000	1.8
MM-15	100	20	0.001	2.5
MM-15	105	15	0.000	2.1
MM-15	110	10	0.000	1
MM-15	115	20	0.001	2.2
MM-15	120	15	0.000	1.8
MM-15	125	35	0.001	1.7
MM-15	130	20	0.001	1
MM-15	135	5	0.000	0.5
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MM-15	150	30	0.001	1
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MM-15	165	35	0.001	0.4
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MM-15	210	5	0.000	0.9
MM-15	215	5	0.000	0.7
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MM-15	225	5	0.000	0.5
MM-15	230	5	0.000	0.8
MM-15	235	5	0.000	0.5
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MM-15	255	5	0.000	0.7
MM-15	260	5	0.000	0.6
MM-15	265	40	0.001	1
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MM-15	275	10	0.000	1
MM-15	280	10	0.000	1
MM-15	285	20	0.001	1.1
MM-15	290	20	0.001	1.2
MM-15	295	45	0.001	1.8
MM-15	300	340	0.010	7.6

MM-15	305	340	0.010	6.6
MM-15	310	180	0.005	1.7
MM-15	315	110	0.003	1
MM-15	320	50	0.001	1.1
MM-15	325	110	0.003	2.4
MM-15	330	125	0.004	1.6
MM-15	335	160	0.005	1.4
MM-15	340	360	0.010	2.9
MM-15	345	170	0.005	2
MM-15	350	530	0.015	2.2
MM-15	355	610	0.018	4.4
MM-15	360	200	0.006	1.5
MM-15	365	200	0.006	1.5
MM-15	370	325	0.009	4.7
MM-15	375	255	0.007	3.8
MM-15	380	265	0.008	2.1
MM-15	385	325	0.009	1.8
MM-16	5	15	0.000	0.8
MM-16	10	20	0.001	0.6
MM-16	15	30	0.001	0.5
MM-16	20	20	0.001	0.5
MM-16	25	20	0.001	0.7
MM-16	30	25	0.001	1.3
MM-16	35	20	0.001	1.3
MM-16	40	15	0.000	1.2
MM-16	45	25	0.001	1
MM-16	50	10	0.000	0.6
MM-16	55	35	0.001	0.6
MM-16	60	5	0.000	0.2
MM-16	65	5	0.000	0.2
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MM-16	75	10	0.000	0.2
MM-16	80	5	0.000	0.3
MM-16	85	10	0.000	0.2
MM-16	90	10	0.000	0.2
MM-16	95	10	0.000	2.3
MM-16	100	5	0.000	0.6
MM-16	105	5	0.000	0.5
MM-16	110	10	0.000	0.2
MM-16	115	10	0.000	0.6
MM-16	120	15	0.000	1.4
MM-16	125	15	0.000	1.3
MM-16	130	15	0.000	1
MM-16	135	10	0.000	0.4
MM-16	140	20	0.001	0.5
MM-16	145	15	0.000	0.9
MM-16	150	20	0.001	1.2
MM-16	155	15	0.000	1
MM-16	160	5	0.000	0.5
MM-16	165	5	0.000	0.5
MM-16	170	5	0.000	0.6
MM-16	175	10	0.000	0.9
MM-16	180	5	0.000	0.6
MM-16	185	10	0.000	1.2
MM-16	190	5	0.000	0.5
MM-16	195	5	0.000	0.7
MM-16	200	10	0.000	0.7
MM-16	205	5	0.000	0.9
MM-16	210	5	0.000	1

MM-16	215	10	0.000	1.5
MM-16	220	15	0.000	1.9
MM-16	225	15	0.000	2.1
MM-16	230	10	0.000	1
MM-16	235	5	0.000	1.3
MM-16	240	20	0.001	2.2
MM-16	245	30	0.001	4
MM-16	250	5	0.000	0.5
MM-16	255	10	0.000	0.5
MM-16	260	5	0.000	0.3
MM-16	265	5	0.000	0.3
MM-16	270	5	0.000	0.2
MM-16	275	10	0.000	1.5
MM-16	280	10	0.000	0.6
MM-16	285	10	0.000	0.5
MM-16	290	10	0.000	0.3
MM-16	295	5	0.000	0.3
MM-16	300	5	0.000	0.3
MM-17	5	5	0.000	0.2
MM-17	10	5	0.000	0.2
MM-17	15	10	0.000	0.2
MM-17	20	5	0.000	0.4
MM-17	25	5	0.000	0.2
MM-17	30	5	0.000	0.2
MM-17	35	5	0.000	0.2
MM-17	40	5	0.000	0.2
MM-17	45	5	0.000	0.2
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MM-17	60	5	0.000	0.2
MM-17	65	5	0.000	0.2
MM-17	70	5	0.000	0.2
MM-17	75	5	0.000	0.6
MM-17	80	5	0.000	1
MM-17	85	5	0.000	1.5
MM-17	90	5	0.000	2.2
MM-17	95	5	0.000	2
MM-17	100	10	0.000	1
MM-17	105	10	0.000	1
MM-17	110	10	0.000	1.1
MM-17	115	10	0.000	1.1
MM-17	120	10	0.000	1.2
MM-17	125	15	0.000	1.1
MM-17	130	20	0.001	1.2
MM-17	135	65	0.002	2.4
MM-17	140	15	0.000	1.5
MM-17	145	15	0.000	1.6
MM-17	150	280	0.008	10.2
MM-17	155	115	0.003	5
MM-17	160	10	0.000	2.6
MM-17	165	20	0.001	2
MM-17	170	20	0.001	1.4
MM-17	175	10	0.000	1.2
MM-17	180	15	0.000	1.2
MM-17	185	115	0.003	1.7
MM-17	190	200	0.006	2.5
MM-17	195	375	0.011	7.6
MM-17	200	445	0.013	1.5
MM-17	205	40	0.001	1.6

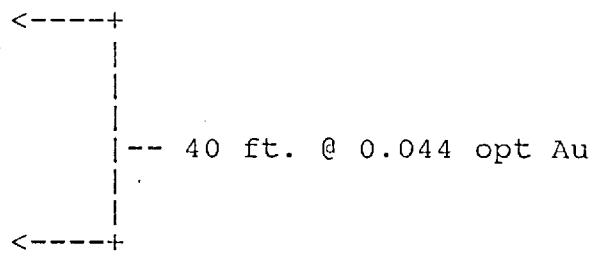
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MM-17	230	25	0.001	1.5
MM-17	235	125	0.004	2.6
MM-17	240	110	0.003	1.8
MM-17	245	85	0.002	1
MM-17	250	200	0.006	1.4
MM-17	255	130	0.004	1.8
MM-17	260	80	0.002	1.8
MM-17	265	225	0.007	5.9
MM-17	270	25	0.001	2.2
MM-17	275	30	0.001	1.8
MM-17	280	160	0.005	2.5
MM-17	285	40	0.001	3
MM-17	290	15	0.000	1.6
MM-17	295	25	0.001	1.4
MM-17	300	940	0.027	13.2
MM-17	305	1200	0.035	13.7
MM-17	310	360	0.010	3.3
MM-17	315	465	0.014	4.2
MM-17	320	1190	0.035	12.4
MM-17	325	65	0.002	1.9
MM-17	330	80	0.002	2.6
MM-17	335	1750	0.051	13.8
MM-17	340	1880	0.055	9.4
MM-17	345	990	0.029	5.5
MM-17	350	350	0.010	4.8
MM-17	355	2220	0.065	8.4



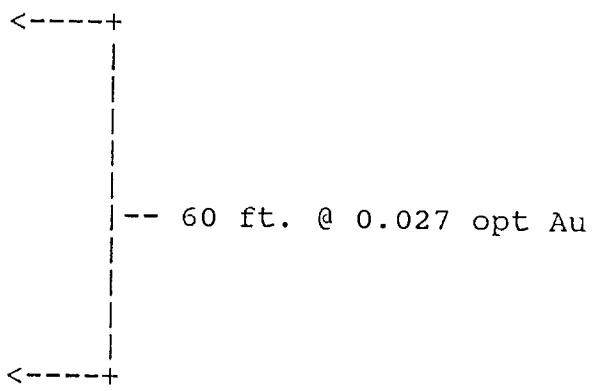
60
 -- 55 ft. @ 0.028 opt Au

MM-18	5	125	0.004	0.5
MM-18	10	10	0.000	0.2
MM-18	15	5	0.000	0.2
MM-18	20	5	0.000	0.2
MM-18	25	5	0.000	0.2
MM-18	30	5	0.000	0.2
MM-18	35	5	0.000	0.2
MM-18	40	5	0.000	0.2
MM-18	45	10	0.000	0.2
MM-18	50	5	0.000	0.2
MM-18	55	5	0.000	0.2
MM-18	60	5	0.000	0.2
MM-18	65	5	0.000	0.2
MM-18	70	5	0.000	0.2
MM-18	75	5	0.000	0.2
MM-18	80	5	0.000	0.2
MM-18	85	5	0.000	0.2
MM-18	90	5	0.000	0.2
MM-18	95	5	0.000	0.4
MM-18	100	20	0.001	0.7
MM-18	105	15	0.000	1.1
MM-18	110	5	0.000	0.2
MM-18	115	5	0.000	0.2
MM-18	120	10	0.000	0.2
MM-18	125	45	0.001	0.8
MM-18	130	45	0.001	1.6
MM-18	135	20	0.001	1.5
MM-18	140	20	0.001	1.7
MM-18	145	70	0.002	1.7

MM-18	150	60	0.002	3.1
MM-18	155	90	0.003	1.9
MM-18	160	40	0.001	1.6
MM-18	165	65	0.002	1.5
MM-18	170	85	0.002	1.5
MM-18	175	105	0.003	1.7
MM-18	180	25	0.001	1
MM-18	185	20	0.001	1.2
MM-18	190	335	0.010	1.1
MM-18	195	110	0.003	1.3
MM-18	200	50	0.001	1
MM-18	205	140	0.004	1.8
MM-18	210	205	0.006	2.2
MM-18	215	805	0.023	2.9
MM-18	220	165	0.005	1.7
MM-18	225	440	0.013	1.8
MM-18	230	110	0.003	2.2
MM-18	235	185	0.005	1.5
MM-18	240	155	0.005	3.5
MM-18	245	170	0.005	5.1
MM-18	250	160	0.005	2.6
MM-18	255	220	0.006	5.2
MM-18	260	215	0.006	4.6
MM-18	265	300	0.009	7.1
MM-18	270	750	0.022	9.8
MM-18	275	360	0.010	5.2
MM-18	280	470	0.014	15.2
MM-18	285	1370	0.040	11
MM-18	290	4350	0.127	33
MM-18	295	2290	0.067	57
MM-18	300	1340	0.039	37
MM-18	305	1220	0.036	53
MM-18	310	400	0.012	4.7
MM-18	315	640	0.019	9.2
MM-18	320	175	0.005	1.4
MM-18	325	140	0.004	5.5
MM-18	330	45	0.001	1.3
MM-18	335	95	0.003	1.1
MM-18	340	50	0.001	0.9
MM-19	5	30	0.001	2.1
MM-19	10	25	0.001	1.4
MM-19	15	20	0.001	1.6
MM-19	20	15	0.000	2.9
MM-19	25	15	0.000	2
MM-19	30	20	0.001	1.9
MM-19	35	15	0.000	1.5
MM-19	40	10	0.000	1.3
MM-19	45	15	0.000	1.1
MM-19	50	35	0.001	1.4
MM-19	55	25	0.001	2.5
MM-19	60	15	0.000	2.5
MM-19	65	15	0.000	2.7
MM-19	70	20	0.001	2.8
MM-19	75	45	0.001	4.3
MM-19	80	20	0.001	2.5
MM-19	85	15	0.000	2.4
MM-19	90	50	0.001	4.3
MM-19	95	35	0.001	1.8
MM-19	100	10	0.000	1.9



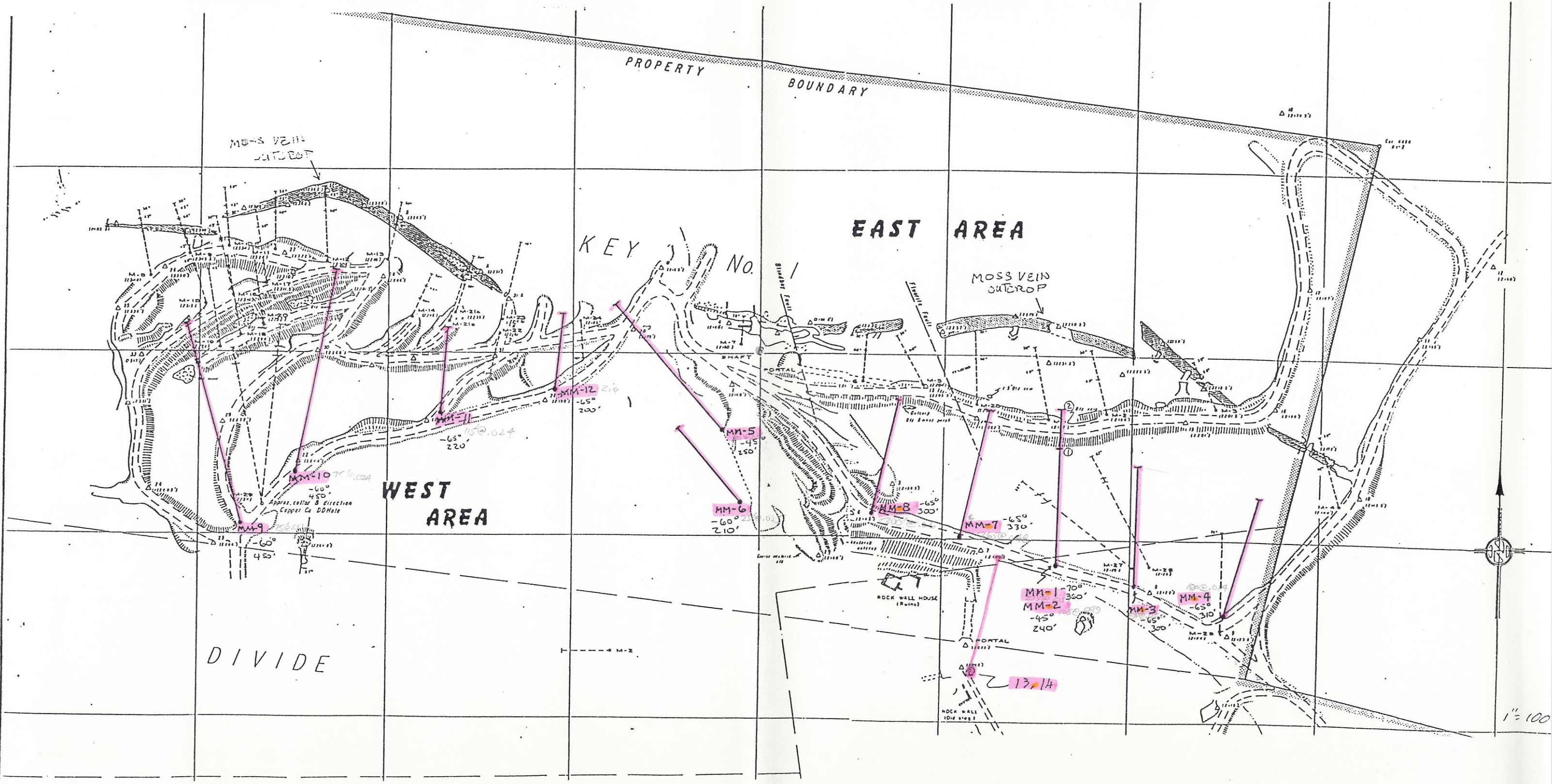
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MM-19	110	5	0.000	1.3
MM-19	115	5	0.000	1.4
MM-19	120	5	0.000	1.4
MM-19	125	10	0.000	2
MM-19	130	10	0.000	1.9
MM-19	135	5	0.000	1.6
MM-19	140	10	0.000	1.9
MM-19	145	25	0.001	2
MM-19	150	10	0.000	2
MM-19	155	50	0.001	2.9
MM-19	160	50	0.001	2
MM-19	165	20	0.001	4.7
MM-19	170	20	0.001	3.5
MM-19	175	50	0.001	3.7
MM-19	180	50	0.001	5.7
MM-19	185	530	0.015	12.6
MM-19	190	3350	0.098	5.8
MM-19	195	1370	0.040	7.8
MM-19	200	345	0.010	17.1
MM-19	205	315	0.009	14.2
MM-19	210	500	0.015	18.5
MM-19	215	710	0.021	15.9
MM-19	220	850	0.025	19.2
MM-19	225	1530	0.045	17.1
MM-19	230	495	0.014	10.6
MM-19	235	255	0.007	2
MM-19	240	700	0.020	2.3
MM-19	245	105	0.003	1.1
MM-19	250	55	0.002	1.1
MM-19	255	80	0.002	1
MM-19	260	55	0.002	1
MM-19	265	35	0.001	1
MM-19	270	95	0.003	0.9
MM-19	275	45	0.001	0.8
MM-19	280	60	0.002	0.6
MM-19	285	30	0.001	2.2
MM-19	290	230	0.007	0.7
MM-19	295	90	0.003	0.7
MM-19	300	140	0.004	0.7
MM-19	305	360	0.010	2.3
MM-19	310	40	0.001	0.8
MM-19	315	45	0.001	0.7
MM-19	320	190	0.006	4.5
MM-19	325	45	0.001	0.7
MM-19	330	30	0.001	0.5
MM-19	335	15	0.000	0.5
MM-19	340	100	0.003	0.6
MM-19	345	195	0.006	1.5
MM-19	350	70	0.002	0.4
MM-19	355	95	0.003	1.1
MM-20	5	10	0.000	0.2
MM-20	10	10	0.000	0.2
MM-20	15	15	0.000	0.2
MM-20	20	5	0.000	0.2
MM-20	25	5	0.000	0.2
MM-20	30	5	0.000	0.2
MM-20	35	5	0.000	0.2
MM-20	40	5	0.000	0.2



MM-20	45	5	0.000	0.2
MM-20	50	5	0.000	0.2
MM-20	55	5	0.000	0.2
MM-20	60	15	0.000	0.2
MM-20	65	5	0.000	0.2
MM-20	70	5	0.000	0.2
MM-20	75	5	0.000	0.2
MM-20	80	5	0.000	0.2
MM-20	85	5	0.000	0.2
MM-20	90	5	0.000	0.2
MM-20	95	5	0.000	0.2
MM-20	100	5	0.000	0.2
MM-20	105	5	0.000	0.2
MM-20	110	5	0.000	0.2
MM-20	115	5	0.000	0.2
MM-20	120	5	0.000	0.2
MM-20	125	5	0.000	0.2
MM-20	130	5	0.000	0.2
MM-20	135	5	0.000	0.2
MM-20	140	5	0.000	0.2
MM-20	145	5	0.000	0.2
MM-20	150	5	0.000	0.2
MM-20	155	5	0.000	0.2
MM-20	160	5	0.000	0.2
MM-20	165	5	0.000	0.2
MM-20	170	5	0.000	0.2
MM-20	175	5	0.000	0.2
MM-20	180	5	0.000	0.2
MM-20	185	5	0.000	0.2
MM-20	190	5	0.000	0.2
MM-20	195	5	0.000	0.2
MM-20	200	5	0.000	0.2
MM-20	205	5	0.000	0.2
MM-20	210	5	0.000	0.2
MM-20	215	5	0.000	0.2
MM-20	220	5	0.000	0.3
MM-20	225	5	0.000	0.3
MM-20	230	5	0.000	0.4
MM-20	235	5	0.000	0.5
MM-20	240	5	0.000	0.8
MM-20	245	5	0.000	0.9
MM-20	250	5	0.000	0.9
MM-20	255	5	0.000	1
MM-20	260	5	0.000	1.3
MM-20	265	5	0.000	1.7
MM-20	270	5	0.000	1.6
MM-20	275	20	0.001	2.2
MM-20	280	20	0.001	1.6
MM-20	285	95	0.003	3
MM-20	290	80	0.002	1.4
MM-20	295	80	0.002	0.8
MM-20	300	10	0.000	0.5
MM-20	305	5	0.000	0.2
MM-20	310	5	0.000	0.2
MM-20	315	5	0.000	0.2
MM-20	320	5	0.000	0.3
MM-20	325	5	0.000	0.3
MM-21	5	10	0.000	0.2
MM-21	10	10	0.000	0.2

MM-21	15	10	0.000	0.2
MM-21	20	10	0.000	0.2
MM-21	25	5	0.000	0.2
MM-21	30	5	0.000	0.2
MM-21	35	10	0.000	0.5
MM-21	40	5	0.000	0.2
MM-21	45	5	0.000	0.2
MM-21	50	5	0.000	0.2
MM-21	55	5	0.000	0.2
MM-21	60	5	0.000	0.2
MM-21	65	10	0.000	0.2
MM-21	70	5	0.000	0.2
MM-21	75	5	0.000	0.4
MM-21	80	5	0.000	0.4
MM-21	85	5	0.000	0.6
MM-21	90	10	0.000	0.6
MM-21	95	5	0.000	0.2
MM-21	100	5	0.000	0.4
MM-21	105	5	0.000	0.5
MM-21	110	10	0.000	1
MM-21	115	10	0.000	1
MM-21	120	50	0.001	1.2
MM-21	125	30	0.001	1.1
MM-21	130	10	0.000	0.9
MM-21	135	10	0.000	1.2
MM-21	140	10	0.000	2
MM-21	145	10	0.000	1.5
MM-21	150	5	0.000	1.4
MM-21	155	10	0.000	1.1
MM-21	160	10	0.000	0.7
MM-21	165	30	0.001	0.5
MM-21	170	5	0.000	0.9
MM-21	175	5	0.000	1
MM-21	180	5	0.000	1.2
MM-21	185	30	0.001	0.5
MM-21	190	30	0.001	0.4
MM-21	195	5	0.000	0.3
MM-21	200	5	0.000	0.3
MM-21	205	70	0.002	0.5
MM-21	210	10	0.000	0.4
MM-21	215	15	0.000	0.8
MM-21	220	10	0.000	0.9
MM-21	225	15	0.000	0.6
MM-21	230	20	0.001	0.5
MM-21	235	40	0.001	0.6
MM-21	240	10	0.000	0.5
MM-21	245	15	0.000	0.6
MM-21	250	5	0.000	0.4
MM-21	255	10	0.000	1
MM-21	260	10	0.000	2
MM-21	265	10	0.000	2
MM-21	270	10	0.000	0.6
MM-21	275	15	0.000	0.6
MM-21	280	25	0.001	0.9
MM-21	285	5	0.000	1
MM-21	290	10	0.000	1.1
MM-21	295	5	0.000	0.3
MM-21	300	10	0.000	0.5
MM-21	305	5	0.000	0.4
MM-21	310	15	0.000	0.6

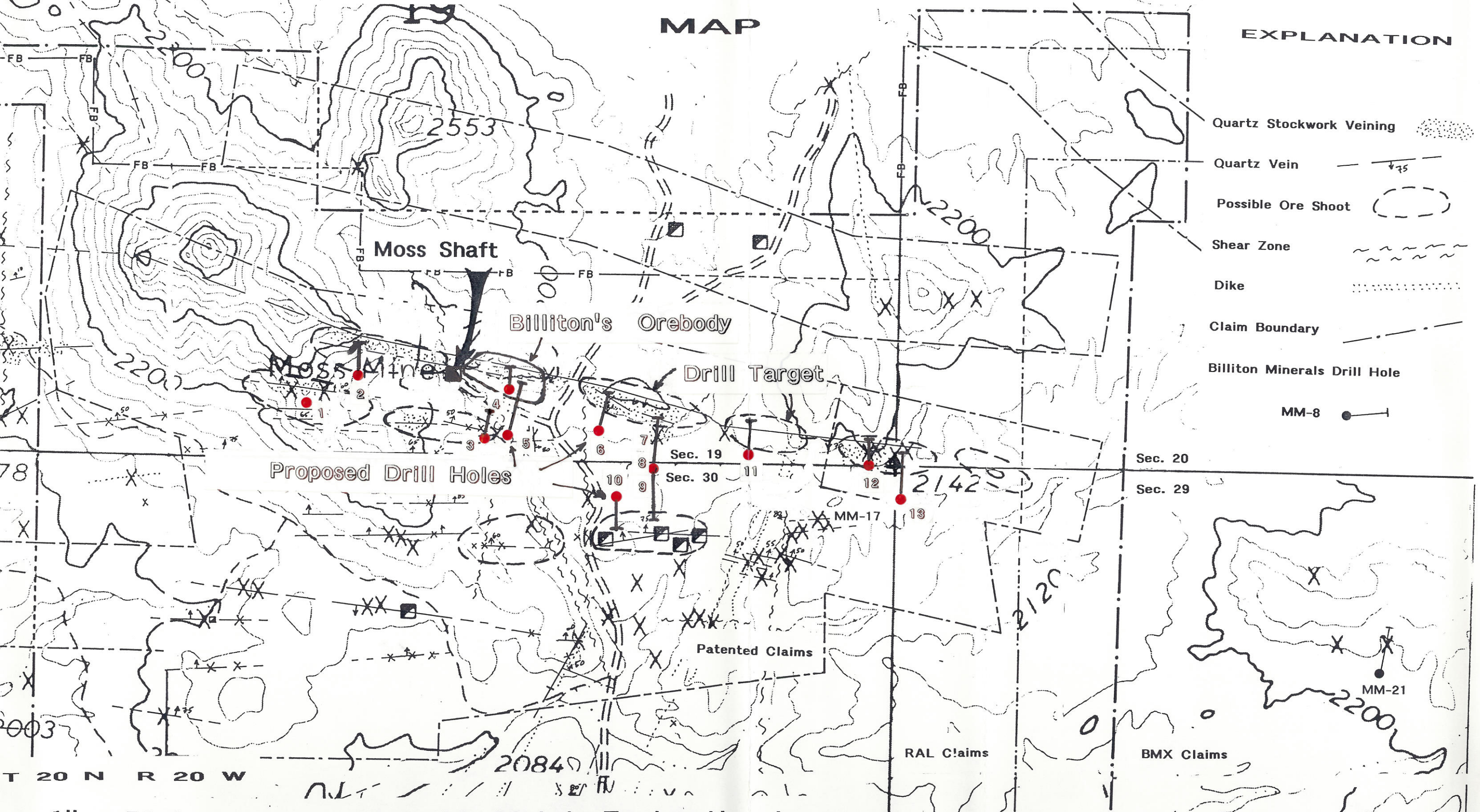
MM-21	315	10	0.000	0.5
MM-21	320	15	0.000	0.2
MM-21	325	5	0.000	0.2
MM-21	330	5	0.000	0.2
MM-21	335	5	0.000	0.2
MM-21	340	5	0.000	0.2
MM-21	345	5	0.000	0.2
MM-21	350	5	0.000	0.2
MM-21	355	5	0.000	0.2
MM-21	360	5	0.000	0.4
MM-21	365	5	0.000	0.2
MM-21	370	5	0.000	0.4
MM-21	375	5	0.000	0.5
MM-21	380	5	0.000	0.3
MM-21	385	5	0.000	0.2



DRILL HOLE and EXPLORATION POTENTIAL MAP

EXPLANATION

- Quartz Stockwork Veining
- Quartz Vein
- Possible Ore Shoot
- Shear Zone
- Dike
- Claim Boundary
- Billiton Minerals Drill Hole
- MM-8



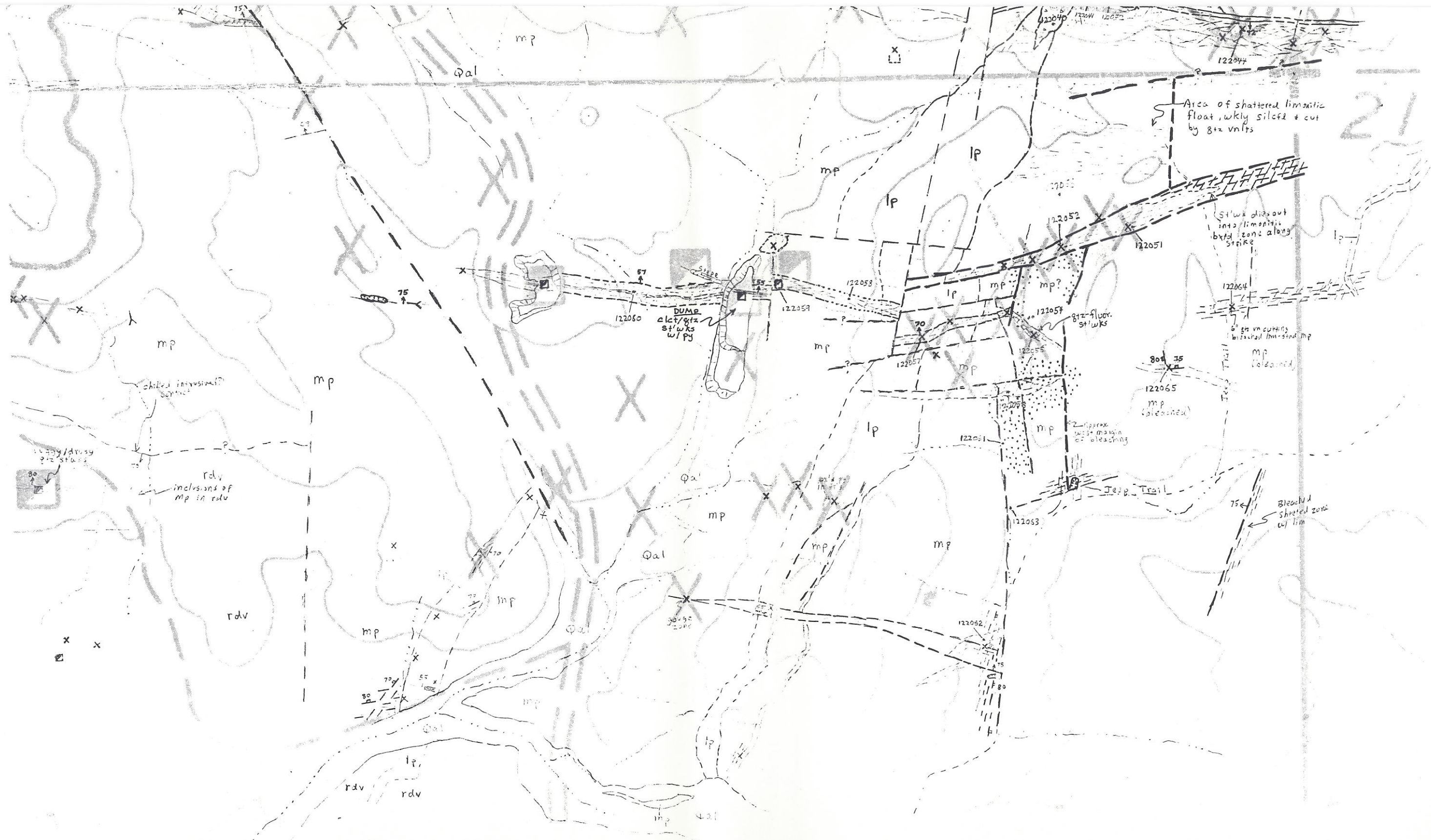
T 20 N R 20 W

1" = 500'

Reynolds Metals Exploration Inc.

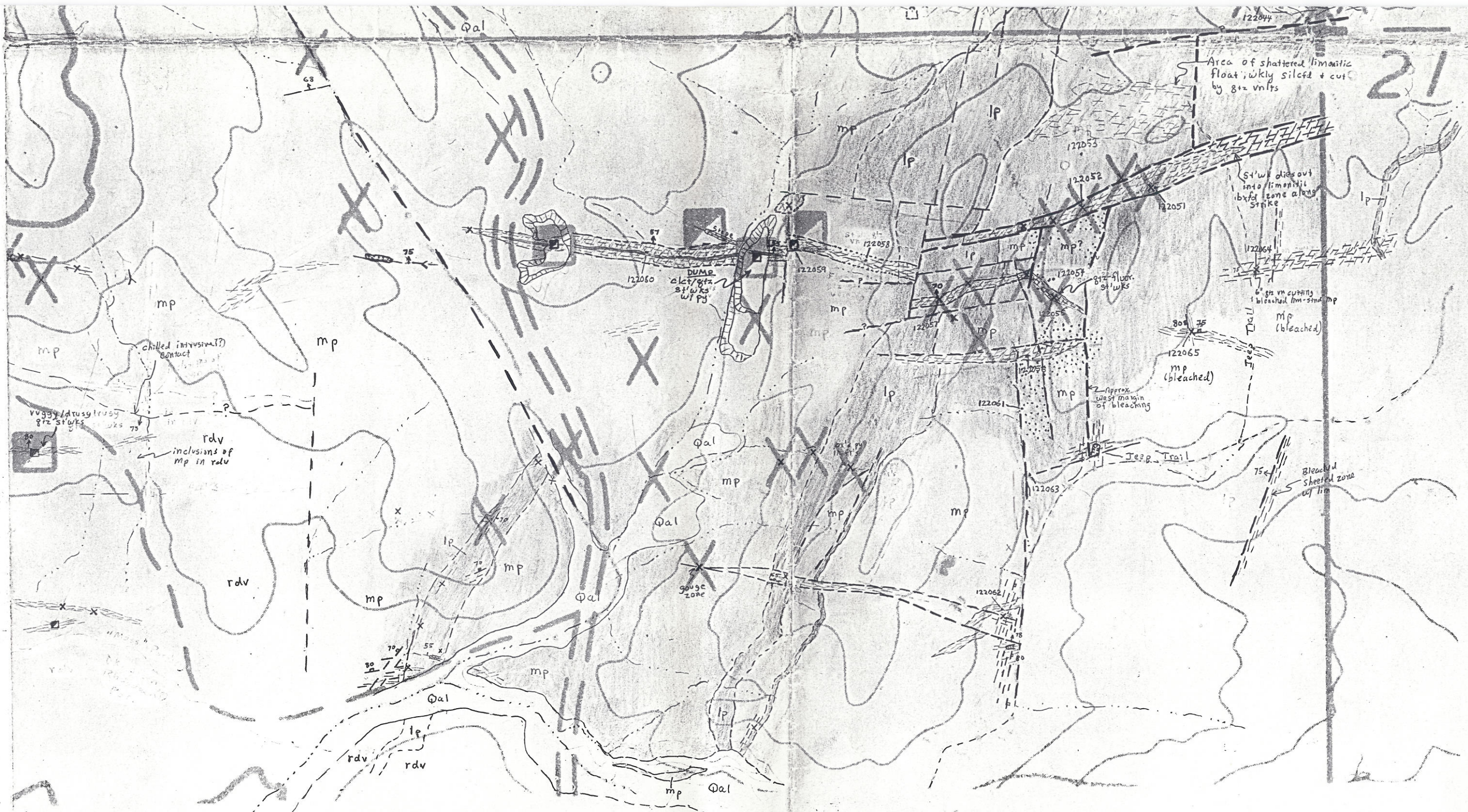






1" = 200'


21

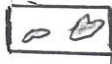



48
-14
29



 Vein


 Zones of sheeted or stockwork quartz veining with dissem. pyrite, but little or no wallrock silicification

 vuggy, jasperoidal silica pods

 silicified zones; associated with stockwork quartz veining (may grade laterally into quartz veins)



 "Moss" Porphyry
Bio / Kspar / Plag Granite

 White "Latite" Porphyry
Aphanitic to aplitic feld. porphyry

 "Rhyodacite volcanic complex

 Vein

 Silicification

 Porphyry silicification

 Silica-filled fractures

