Martha Mine Josephine

REVIEW AND EVALUATION OF

THE MARTHA MINE

JOSEPHINE COUNTY, OREGON

May 1989

Prepared For
Dragon's Gold Incorporated

Magee Geological Consulting

May 1989

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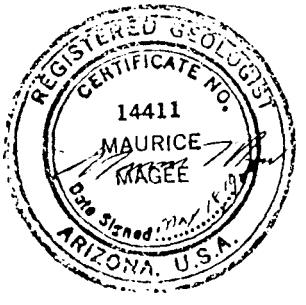
CERTIFICATE

I, Maurice Magee, of 5184 E. Paseo del Bac, Tucson, Arizona 85718 DO HEREBY CERTIFY THAT:

1) I am a consulting geologist, registered in State of Arizona.
2) I am a graduate of the University of Georgia with a Bachelor of Science Degree in Geology, 1953.
3) I have more than 35 years experience in the minerals industry evaluating the reserves of mineral deposits including precious metal deposits.
4) I have been on site at the Martha Mine three times in the past seven years.
5) I have prepared the attached report titled "Review and Evaluation of the Martha Mine, Josephine County, Oregon, May 1989" consisting of 38 pages, six appendices plus maps, this report being compiled from my own work, plus work of Dragon's Gold Inc. and work of other consultants.
6) I have no interest, direct or indirect, in the Martha Mine or Dragon's Gold Inc., nor do I expect to receive any interest, direct or indirect, in the Martha Mine or Dragon's Gold Inc.



1.0 INTRODUCTION

At the request of Dragon's Gold Incorporated (DGI) of Medford, Oregon, a review and evaluation of the Martha Mine, Josephine County, Oregon was made by Magee Geological Consulting (MGC) of Tucson, Arizona.

This report presents the results of this review, evaluation and update of the current status of the Martha Mine. The objective here is to bring together all information that has been developed on this mine regarding the geology, ore reserves, mining and mine plans, recommended exploration plans, metallurgical testing and mill design criteria, and capital and operating cost order-of-magnitude estimate. A general summation of the economic potential of this deposit is presented to allow the reader to judge the potential of this deposit to become a viable operating gold mine.

This report is not a feasibility study nor a pre-feasibility study and is not meant to convey such. Detailed engineering work will have to be done for the design of the mine and mill to arrive at proper estimates of the capital and operating cost for the project. Such engineering work has not been completed, but is recommended. Cost figures presented herein are only order-of magnitude projections and should not be taken as based on detailed engineering work. The Martha Mine has been in an exploration mode since 1980 by Schreiber & Company and by Dragon's Gold Inc. The initial objective of Schreiber & Co. was to determine if the property justified exploration and development. The objective of

DGI has been to conduct underground development drifting on three levels through adit entry along this relatively narrow gold-quartz vein. This development work has found areas of high grade gold in the vein, that if found in sufficient quantity, should prove this mine to be economically viable. Reserves have been blocked out that indicate a tonnage and grade that should cover the cash cost of an operation and may return a cash flow sufficent to pay back much of the capital requirements. Details are presented in the text of the report and also summarized in section 2.0.

A section is presented with recommendations for ongoing exploration work with a cost estimation for this work. Recommendations are made in the report for other aspects of the development plan for the mine and mill and a timing for this work is suggested.

The reader should review, not only the details presented in this report, but also the other reports presented in the Appendices to this report.

This report is based upon the work of MGC, the work of the staff and employees of DGI, the work, reports, and maps of Tom Ferrero and Bob Jones, consulting geologists, the work and maps of Geoffrey Garcia, consulting geologist, Louis Cope, mill consultant, metallurgical reports by McClelland Laboratories and Dawson Metallurgical Laboratories, assay work of Shasta Analytical Laboratory and Bondar-Clegg Laboratory. MGC assumes that the data as provided from these various sources are reasonably and fairly presented. The various consulting and engineering services named

above and used by DGI are considered reliable and are for the most part done by registered geologists, engineers and laboratories.

MGC appreciates the assistance of the several consultants and of Dragon's Gold Inc. who provided much of their time in assembling the information and maps that were incorporated into this report.

2.0 SUMMARY AND RECOMMENDATIONS

The Martha Mine, Josephine County, Oregon is currently being explored and developed by Dragon's Gold Incorporated (DGI). This work has been ongoing for more than seven years. Mining was done at the Martha Mine during the period 1900 to 1912. Production records are not available. Production was probably less than 50,000 tons. Grade of production is not known. (See reports in the Appendix A for details.)

Magee Geological Consulting (MGC) has reviewed the development work and reports of this operation during the past year and has been intermittently involved with the Martha mine development since 1983. Samples have been taken for assays by MGC and by others. Results of this sampling and assaying have indicated a fairly continuous quartz vein containing some gold values over a strike length 590 feet. Assays for the first 326 feet have been erratic in gold content and generally of low grade. Assays for the most recent 264 feet of development have ranged from 0.020 to over one ounce of gold per ton and averages about 0.500 ounces per ton for a diluted mine grade over a four foot width. The vein ranges from a few inches wide to more than four feet wide and averages about 24 inches in width. Reserves have been calculated for the mineable vein zone on a four foot minimum mining width. The vein dips on about 40 to 60 degrees. Reserves as calculated to date are:

Martha Mine
Josephine County, Oregon
Reserve Summary as of March 1, 1989

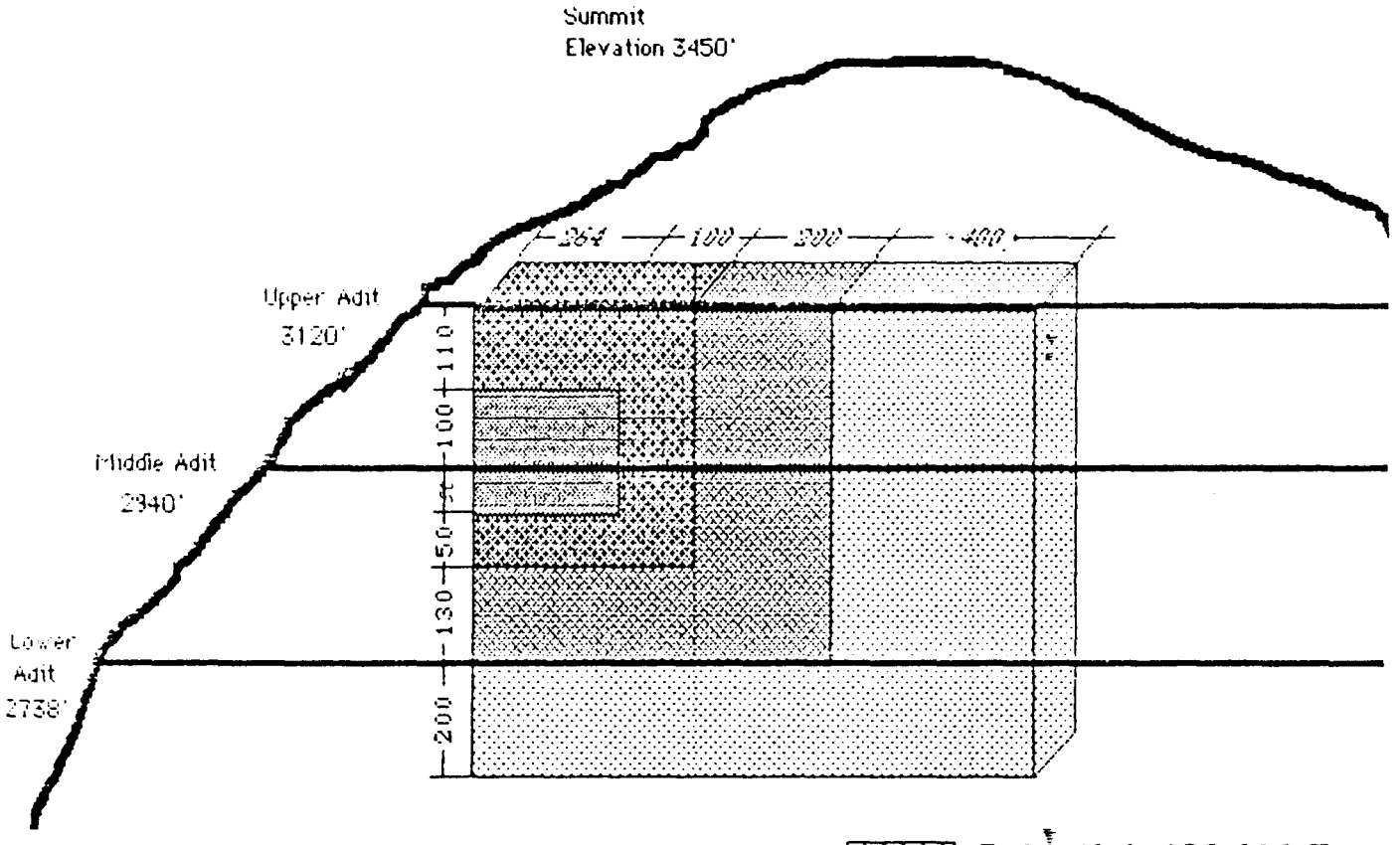
	Tons	Grade (oz gold per ton)
Proven	13,200	0.500 (a diluted mine grade over a four foot mining width.)
Probable	24,413	Grade assumed the same as the proven
Possible	58,440	Grade assumed the same as the proven
Total	96,053	0.500 (Grade assumed)

Note: The reserves stated above are qualified in the entirety by ten notes to reserve definitions in the text of the report in Section 3.3 Reserves.

Definitions of proven, probable and possible reserves are set forth in the report. Figure 2.1 shows the reserves as developed on a longitudinal section. Figure 2.2 developed by DGI shows a block model presentation of the reserves.

Mine Model Diagram - 3/3/89

Proven	13,200	Tons
Probable	24,413	Tons
Possible	58,440	Tons
	96,053	Tons



Potential 122,933 Tons

Figure 2.2

MGC believes that the proven reserves are reasonably established from the development drifting completed to date. The probable reserves are reasonably certain based upon the drifting and old mining work that was done, but the grade of the vein is less certain since the mine workings were not accessible for detailed sampling. The possible reserve is a reasonable projection of this vein based on the work done to date, but there is no assurance that the vein continues, nor what the grade may be in the areas into which the vein has been projected. Details of the reserve calculations are presented in the text of the report. There is a potential for finding this vein zone continuing to the east for 500 feet and possible up to 3000 feet and continuing at depth below the middle (3rd) level. The surface has been explored to the east and the underground needs to be explored further to the east. The Martha Mine vein is characterized as a narrow quartz-gold vein with minor sulfides striking about S 70 to 80 degrees east and dipping 40 to 60 degrees to the north. The host rock is a greenstone. The vein zone is fairly well defined, but breaks up near cross-fault zones. No parallel veins or other veins have been found, but such is possible in this geologic environment. Other gold deposits in Josephine County show a multiple vein system. Vein offsets of a few feet to 20 feet have been noted. Gold mineralization is erratic in some areas, but has been found to be continuous in the central part of the deposit for a strike length of about 264 feet. The vein zone width ranges from a few inches

to over five feet wide, and averages about 24 inches in width. The grade of the vein ranges from 0.02 to over one ounce per ton and selected individual assays taken by DGI are in places more than four ounces per ton.

Mining of the Martha Mine vein in the old stoping areas was done by an overhand open stoping sub-level method with an average mining width of about four feet. Some stope areas are as narrow as three feet and as wide as five feet. Timbers were installed as drill staging and also to support the hangingwall. Proposed mining would be similar with a maximum stope width of four feet. Sub-levels would be driven about every 60 feet vertically and a scram or slusher level about 15 feet above the haulage level. Raises would be driven to connect each haulage level for access and ventilation about every 100 feet. This type of mining should allow a mine recovery of about 80 percent of the calculated reserve tons. Preliminary mine layout has been done by DGI. Mine design details for production and ventilation have not been completed. Current plans are to continue drift development on the middle (3rd) and lower (4th) levels to explore the vein to the east and define additional reserves. The ore from the development drifting has been stockpiled and totals about 700 tons with a grade calculated by DGI of about 0.60 ounces per ton. Sampling and measurements of the stockpiles were done by DGI.

Metallurgical bench test have been made on ore samples from the Martha Mine. This work indicates a potential metallurgical recovery of up to 98 percent using a combined gravity and flotation

circuit. This work is described in the appendix to this report. Gravity concentrates may be processed on site and flotation concentrates would likely be shipped for smelting and refining. Actual recoveries are more likely to be on the order of 90 to 92 percent allowing for mill grade fluctuations and in-plant losses. Preliminary flow sheets have been developed, but detailed engineering work with cost estimates have not been done. This deposit is most likely suited for a mill production rate of about 100 tons per day, but plant design should allow for an increase in the production rate to 200 tons per day if additional reserves are found. A pilot mill and planned millsite is under lease and located about two miles from the mine. This location requires significant additional site preparation to accomodate a 100 ton a day mill because of the steep hillside location. The proposed tailings dam is located along a creek, which also requires additional site preparation to accommodate 100,000 to 200,000 tons of tailings and more if additional reserves are found and processed at this site. Diversion of the creek and allowance for drainage of normal precipitation must be developed. Alternate millsites and tailings dam locations should be considered, should volume exceed the capacity at this location. Detailed engineering design and costs estimation for the tailings dam need to be completed.

A detailed economic evaluation has not been made and cannot be completed until detailed engineering work is completed. At this time only a comparison to similar operations can be made. There are many variables in mine and plant designs and related costs so that

comparisons have a very high potential of error in cost estimation. The following is an order-of-magnitude estimate only based upon similar operations in Western North America:

Order-of-Magnitude Operating Cost Estimate

Cost per Ton of Ore Mined and Processed

Mining	$67.00	(Does not include future development and exploration cost.)
Mill	29.00	
G&A	14.00	
Total	$110.00	(May range from $90 to 135 per ton of ore.)

Order-of-Magnitude Capital Cost Estimate
(assumes a new start-up operation.)

	MGC Estimate		Louis Cope Estimate	
	New Equipment	Used Equipment	New Equip.	Used Equip.
Engineering (1)	$100,000			
Mine (2)	400,000			
Mill (3)	1,800,000	1,500,000	$1,020,000	$792,000
Surface (4)	200,000			
Tailings Dam(5)	500,000		100,000	
Total (6)	$3,000,000			

(1) Engineering includes detailed mine, mill, surface and tailings dam design for completion of a feasibility study.

(2) Mine design has not been completed. Future development is not included.

(3) Mill capital costs include equipment, construction and installation. MGC believes that the Louis Cope estimate does not allow sufficient cost for construction materials, concrete, steel, piping, electrical and labor. See Cope report in Appendix F. Some used equipment has been purchased by DGI.

(4) Surface includes roads, office buildings and equipment, power lines, water wells, pipelines, pumps, communications etc.

(5) The tailings dam has not been designed. This is a big unknown in the capital cost. A dam construction must meet state permitting requirments.

(6) Total capital costs may range from $2.5 to 3.5 million, and may be higher if unforseen construction costs or mine, mill or tailings dam construction problems develop.

Operating and capital costs estimation methods have many variables and uncertainties. Without the detailed engineering, a more refined estimate cannot be made. If used equipment can be obtained and existing equipment utilized the capital costs may be reduced significantly. The use of used equipment in good repair is a common and acceptable practice in mine and mill development.

Assuming the proven and probable reserves are developed and the grade of ore is as indicated, the mine and mill may produce 37,613 tons x .80(mine) x .92(mill) x .50(grade) = 13,841 ounces. With gold at a price of $386 per ounce (net of smelting and refining charges) a gross value of $5,342,000 may be generated.

With a mining and processing cost of $110 per ton x 30,090 tons = $3,309,900. This would leave a balance of $2,032,100 toward a capital cost estimated at approximately $3 million. This does not include the capital cost invested to date nor the time value of money.

If the possible reserves are found and developed and using the same calculation basis for costs, the capital costs may be paid and a profit generated. Therefore, developing additional proven reserves may enable the Martha mine to reach a potential profit mode.

MGC believes that the Martha mine has a reasonable probability of economic success as compared to similar relatively small mining ventures and recommends an exploration program for 1989-1990 to develop additional reserves. DGI has spent about $500,000, according to DGI, in exploration and mine development from 1987 to March 1989. This has resulted in the definition of 37,613 tons of proven and probable reserves at a cost of about $13 per ton, ($26 per ounce of gold, assuming the grade of gold averages 0.50 ounces per ton throughout the proven and probable reserve area.) Results of this effort have been very encouraging. Should significant additional reserves be found as a result of this program, DGI could then proceed to complete the economic feasibility, followed by mine development and construction and begin production.

This exploration program would cost approximately $1.138 million and should take 12 to 18 months to complete. Assuming the program is successful and the vein continues to the east and to depth with similar widths and grade, the proven and probable reserves may be increased by a factor of ten, or from the present 37,613 tons up to a potential 376,000 tons. This exploration program is outlined and described below:

1. Exploration development on the middle and lower (3rd and 4th) levels should continue with drift development for at least an additional 400 feet along the vein on the middle level and 700 feet on the lower level. The upper (2nd) level may also be explored from a raise from the 3rd level beyond the caved area.

2. Surface exploration by geologic mapping and cross-cut

trenching and sampling to explore for the continuation of the vein to the east on surface.

3. Surface diamond drilling of 10 holes (HQ size - 2.5" core) to 400 to 800 feet depth to explore for continuation of the vein at depth. This would be expanded if drilling results are favorable.

4. Exploration crosscuts on the 3rd and 4th levels of the mine to explore for parallel veins and to prepare underground diamond drill stations for drilling down to below the 3rd and 4th levels.

5. Raises should be driven to connect the 4th, 3rd, and 2nd levels and to the surface to provide ventilation and escapeways during the underground exploration program. This will also provide information as to the continuity of the vein along the dip of the structure. The 2nd level should be explored from a raise to be driven up from the 3rd to the 2nd level.

MGC also recommends a continuing program of environmental monitoring of air and water quality near planned and proposed mill and tailings dam sites. Stream water and sediments of nearby streams should be collected periodically and assayed for mercury and other heavy metals to establish baseline background levels prior to the mill operations.

MGC recommends that mine, mill, and tailing dam engineering studies be initiated as early as the third quarter of 1989. and not later than the first quarter of 1990, as dictated by the development of additional proven and probable reserves. Initial permitting applications should be filed at that time. and an

environmental assessment prepared to file with the state and federal regulating agencies. A completed engineering feasibilty study shoud be available by the end of the first quarter of 1990.

If the economic feasibility is favorable, detailed mine development, mill construction and tailings dam construction would begin in the second quarter of 1990 and production started in the last quarter of 1990.

DGI should be prepared to raise upwards of $1 to 1.5 million presently for the exploration, mine development, environmental monitoring, and engineering and feasibility study for the next 12 to 18 months of operation and an additional $2.5 to 3.5 million for mine, mill and tailings dam construction in 1990.

This summary section of this report is qualified in its entirety by the detailed information presented and developed in the text of the full report and the attached appendices.

GEOLOGY

3.1 Location, History, Land Status

(Information in this section and 3.2 below taken from report by Tom Ferrero presented as Appendix A to this report.)

The Martha mine is located in section 28, Township 33 South, Range 5 West, Willamette Meridian, Josephine County, Oregon. The mine is about nine miles east of Interstate 5 on paved and all weather gravel roads, up Coyote Creek to the west slope of St. Peter Mountain. The mine is at elevation of about 3,000 feet. The terrain is steep and forested. Rainfall is heavy with some snow, but operations can be maintained year round. Water is abundant and available. Power is available from a nearby public power source. Generator power is presently used for mine development.

Historical production records are not available. The Martha mine and the Greenback mine apparently operated concurrently by the Greenback Milling Company. Production records from the Martha mine cannot be segregated from the total operation. According to DGI the average combined ore grade was about 0.80 ounces per ton to the mill. However, hand sorting of waste rock from the ore to improve ore grade to the mill was a standard practice at that time.

The mine is believed to have been discovered about 1900 and put into production about 1906 by the operators of the Greenback mine. A tramway from the Martha mine to the Greenback mill about one mile to the south of the Martha mine was built to haul ore to the Greenback mill. Production from the Martha mine was processed at the Greenback mill from 1906 to 1910. About 1912 a new owner

set up a five stamp mill near the mine and continued processing the remaining developed ore. Total mine development at that time was reported as less than 3,000 feet of drifts and raises. Total ore production is thought to be less than 50,000 tons. The grade of this production is not known. Sampling by Geoffrey Garcia on the upper (2nd) level indicates the vein to be about 0.637 ounces per ton for 19 channel samples taken in some of the remaining pillars. It is likely that the mined out area was of a similar grade. Mine dilution to a four foot mining width likely lowered the average mine grade.

The Martha mine property, as held by Dragon's Gold Inc. (DGI), consists of four patented claims that are leased from Josephine County and eight unpatented claims staked and filed by Dragon's Gold Inc. MGC did not examine courthouse records or records of DGI as to the lease payments or assessment work for these claims. These were examined by Ferrero (see Appendix A.) The Martha claim covers most of the known Martha mine. Present underground mine exploration is now extending onto the Summit Quartz Mine claim, a patented claim leased from Josephine County. These two claims cover the apex of the Martha mine vein. Details of the claims with claim maps are shown in Appendix A. Some recent claims staking by other parties adjoins the DGI claims, but should present no operating problem of the Martha mine.

DGI has leased a gravity separation mill and a portion of the patented Horseshoe Lode claim occupied by the mill, all belonging to John Miller. The mill has a reported capacity of 0.20 ton per

hour. Some of this equipment may be incorporated into a new mill when constructed. This lease reportedly has a tailings dam site, but it is not presently adequate nor suitable for the volume of tailings the mining operation will generate because of the narrow valley in which it is located.

Investigations made by DGI indicate that culverts can be installed to divert stream water from the proposed tailing dam site. A detailed engineering study of the proposed tailings dam must be done by qualified engineers.

3.2 Geology

The Martha mine is one of several mines comprising the Greenback Mining District. The Martha and Greenback mines develop east-west striking, north dipping, fissure quartz veins in greenstone. Ore bodies in both mines are related to cross-faulting. The greenstone host rocks and nearby serpentines, gabbros and metasediments are located along the thrust faulted contact of the Western Jurassic Belt and the Western Paleozoic/Triassic Belt, both of the Klamath Mountains Geologic Province.

The Martha vein strikes S 70 to 80 degrees E and dips 40 to 60 degrees north, with an average dip of about 52 degrees. The vein width ranges from a small fracture to about five feet. The average vein width in 250 feet of the new workings on the middle (3rd) level is about 24 inches. Gangue minerals include mostly quartz, with minor calcite, jasper, and epidote (altered fragments

of greenstone). Metallic minerals include arsenopyrite, pyrite, chalcopyrite and free gold. Metallics comprise about one or five percent of the ore. Smaller veinlets parallel or cross the main vein and contain some gold values. Further details of the geology can be found in Appendix A and geologic maps prepared by Tom Ferrero in the pockets at the end of this report.

3.3 Reserves

Reserves have been calculated based upon information developed to March 1, 1989. Sampling and assay results have been developed independently by several parties. This information was reviewed by MGC and incorporated in the reserve estimate. Reserve calculations are based primarily on the new information developed during the past year on the middle (3rd) level which includes the development of the vein over 264 feet. Results of these reserve calculations are as follows:

Martha Mine
Josephine County, Oregon
Reserve Summary as of March 1, 1989

	Tons	Grade (oz gold per ton)	
Proven	13,200	0.500	(a diluted mine grade over a four foot mining width.)
Probable	24,413	Grade assumed the same	
Possible	58,440	Grade assumed the same	
Total	96,053	0.500	(Grade assumed the same)

The grade of the above reserves has been calculated incorporating 37 samples collected by MGC in February, 1989. In

addition the sampling work of Tom Ferrero and that of DGI by their miner Tom Billings were also utilized to arrive at the average grade. The various sampling programs are summarized as follows:

1. Drift sampling of 172 feet by Tom Ferrero with waste dilution to four feet mining width average 0.356 ounces per ton.

2. Drift sampling of 240 feet by Maurice Magee (MGC) with waste dilution to four feet mining width averaged 0.510 ounces per ton.

3. Fifty face samples collected by Tom Billings (DGI) averaged 0.717 ounces per ton over a four foot mining width. (Likely unintentional bias on the high side by chipping more quartz vein and less greenstone.)

4. Muck samples collected from 35 headings by Tom Billings (DGI) averaged 0.442 ounces per ton. (Likely includes some waste and low grade drift headings.)

5. Ore deck stockpile sampling by Tom Billings averaged 0.644 ounces per ton. (Likely biased on the high side since some low grade headings were not delivered to the stockpiles.

From the above MGC concludes that a fair estimate of the mine grade in the area of the proven reserve would average about 0.50 ounces per ton. Mining in select areas may average 0.60 ounces per ton, at the same time some low grade areas cannot be avoided in mining and the grade may drop to 0.40 ounces per ton or lower in some areas.

Grade of the probable and possible areas can only be assumed

and cannot be assured until sampled.

This reserve summary requires several footnotes to explain the calculations, estimates and observations. The above table is qualified in the entirety by the following ten notes.

1. The definition of reserves as used in this report is subject to restrictive use. The SEC requires that a "reserve" be "technically, economically and legally extractable." Only the technical aspects of the reserve estimation and calculations are addressed in this report. The SEC will accept only "proven and probable" categories of reserves for reporting purposes. A "reserve" implies that the calculations have been properly made from adequate sampling and assaying information and that the material is reasonably assured to be in place. Only the proven and probable categories may meet the technical and economic criteria of the SEC.

2. The "possible" or "inferred" category is based upon reasonable geologic projections of the vein along strike and down dip from the proven and probable areas of the mine, but the "possible" areas have not been sampled and assayed, as no mine development is in place for sampling. We have no assurance that the vein will continue nor do we have assurance that the grade will continue as projected. The "possible" category tonnage and grade may be presented in private or exempt transactions and may be used in some Canadian mining company reserve statements. It is used here for presenting the projected potential of the property and for mine planning and development.

3. Reserves stated are in-place diluted reserves. For mining purposes a mine recovery factor of 80 percent may be appropriate with 20 percent of the reserve left in the ground as support pillars. A mill recovery factor of an estimated 90 to 92 percent based on metallurgical tests should also be applied in the economic evaluation. Actual metallurgical recoveries will be based upon plant design, which has yet to be completed.

4. Accuracy in reserve estimation has not been quantified in the industry and no criteria or formulae for percentage estimation has been established throughout the industry. The following is an approximation of probable accuracy. A proven reserve is considered generally accurate to about +/- 10 percent and may also be stated as a figure with about a 90 percent confidence level. A probable reserve is considered generally accurate to +/- 30 percent with a confidence level of about 70 percent. Proven and probable reserves may be combined and may be stated as reasonable accurate to +/- 20 percent. Possible reserves may be accurate to about +/- 50 percent. These percentage estimates are not applied uniformly throughout the industry. These percentage estimates apply to both the tonnage and the grade.

5. Reserve estimates in this letter report are based primarily on the chip sampling work by Maurice Magee assisted by Tom Billngs of DGI in February, 1989. A review was made of the work of Tom Ferrero and his interpretations included in his report of January 12, 1989. Work by Geoff Garcia is used for the upper level projections and estimations made in his report of May 2, 1988. The

sampling and assaying done by Tom Billings for DGI have been reviewed and are used for comparisons in the areas of the new mine development on the middle level and in the area to the east of the sampling done by Tom Ferrero. Muck sample assays and ore deck sample assays taken by Tom Billings of DGI were also reviewed.

6. The vein width ranges from one to 48 inches and is on average about 24 inches. The reserve estimate minimum mining width is 48 inches, which includes an average of 24 inches of greenstone wallrock as dilution. This material may have some gold content, and it was sampled and weighted into the average grade by Maurice Magee. It was also sampled in part by Tom Ferrero. While the quartz vein contains most of the gold, some of the gold occurs in shear zone material adjacent to the vein and some gold occurs in the greenstone where it is brecciated. The average grade of a minimum mining width of four feet is estimated to be 0.50 ounces gold per ton. The vein is reasonably certain to project to the upper level, but the grade in this area is less certain. Projection of the vein to the lower level is projected with less confidence. The vein has been found on the lower level in recent mine development, but the grade of the vein at 200 feet further depth is not known at this time and is projected to this lower level with much less confidence.

7. The grade data for the proven reserve is based principally on the sampling by Maurice Magee. However, the sampling by Tom Ferrero and Tom Billings are also considered. Mr. Ferrero, in his calculations excluded a 30 foot section of low grade material from

his reserve estimate. This resulted in a grade estimation averaging 0.411 opt over a strike length of 145 feet. If the low grade zone is added back to the reserve calculations estimate, the average grade is 0.356 opt over 172 feet. By comparison, the grade average by Magee was 0.510 opt over 240 feet, which includes 90 feet of new mine development not included in the Ferrero estimate. The proven reserve is projected up 100 feet and down 50 feet from the middle (3rd) level over a strike length of 264 feet and a mining width of 4 feet. The grade of the vein cannot be projected further with sufficient confidence upward to the upper level. The proven reserve is calculated as:

264' x 150' x 4' /12 cu. ft. per ton = 13,200 tons.

8. Probable reserves are projected from the proven area another 50 feet downward, 100 feet along strike and upward to the upper level about 110 feet. Calculation procedures are similar to that stated above in note 7. Grade information is projected from the proven area and an assumption is made that the grade will continue as found in the proven area. There has been no sampling in the probable area except for a few samples taken in pillars on the upper level. New mine development of 70 to 100 feet east on the middle level will add new information on the grade and vein width.

9. Possible reserves are projected to the lower level and upper level and along strike to the east another 200 feet beyond the proven and probable categories. A block of possible reserves of 13,333 tons are also estimated above the upper level, between

stopes, however, in this area the early mining may have mined out much of this area and what is left may be too low grade to be economically recoverable. There are no samples taken in the possible area and the grade is assumed at the same level as that found in the proven area.

10. The Martha vein dips on about 40 to 60 degrees to the north. The actual vein width is demonstrated in the areas of the middle level where stoping has been done in two areas about 10 feet up above the drift level and along the drift for about 150 feet on the strike of the vein. A vein dip of 60 degrees is used for the calculations made in the reserve estimation and a minimum mining width of four feet is used. The tonnage calculations are based on a tonnage factor of 12 cubic feet per ton which is reasonable for this type quartz vein in greenstone deposit.

3.4 Exploration Recommendations

MGC believes that the Martha mine should be explored to develop additional reserves. In order to achieve the definition of additional reserves the following programs should be continued or started.

1. Exploration development on the middle and lower (3rd and 4th) levels should continue with drift development of an additional 400 feet along the vein on the middle level and 700 feet on the lower level. The upper (2nd) level should also be explored beyond the caved area to explore the upper part of the deposit and be reached by a raise from the middle level to the upper level for an

escapeway and for ventilation.

2. Surface exploration with geologic mapping, rock chip geochemical sampling and trenching and sampling. (See MGC letter report of November 28, 1988 in Appendix C.)

3. Surface diamond drilling of 10 holes (HQ size) to 400 to 800 depth to explore for continuation of the vein at depth. This may be expanded if results are favorable.

4. Drive exploration crosscuts on the 3rd and 4th levels of the mine to explore for parallel veins and to prepare underground diamond drill station for drilling down to below the 3rd and 4th levels. DGI may want to consider the purchase of a "Bazooka" or "Winkie" type drill for underground drilling of EW size core.

5. Raises should be driven to connect the 4th, 3rd, and 2nd levels and to the surface to provide ventilation and escapeways during the underground exploration program. This will also provide information on the continuity of the vein down dip. These raises will also function for mine production access.

MGC estimates that this exploration program would cost approximately $1.1 million and take 12 to 18 months to complete. If the program is successful and the vein continues to the east and down dip of the 3rd and 4th levels at similar widths and grade, the reserves may be increased by a factor of five to ten.

The proposed drifting and drilling are shown on the maps in the pocket to this report. The exploration program costs are summarized below:

Proposed Exploration Program Costs for 1989-1990
(for 18 months of exploration and mine development.)

Mine Development:	
Two drifts, 5'x7', 1100' x $100	$110,000
Crosscuts 5'x7' 6x 100'= 600' x $100	60,000
Raises 4 x 220' = 880' x $100	88,000
Surface Exploration and Drilling:	
Surface mapping, trenching and sampling	15,000
Core drilling: 10 x 400' to 800' = 7,000'x $33 (four to six drillsites)	231,000
Core drilling underground 24 x200, 4800' x $20 (six drill sites)	96,000
Bullldozing and site preparation	10,000
Surveying, staking, recording	10,000
Core splitting, sampling (equipment)	10,000
Bazooka or Winkie Drill for underground (optional)	25,000
Consultants overview - geology, mining, metallurgy tailings	50,000
Project Geologist and assistant (18 months)	75,000
G & A / Working capital (12 months)	180,000
Other *	75,000
	$1,035,000
Contingency (10%)	103,500
Total exploration program	$1,138,500

* Additional capital items may be required if three crews are required to complete the development, for drifting crosscutting and raising. An underground diamond drill crew will be required part time if the work is not contracted. Air compressors, generators, ventilation system, extra drills, battery locomotive, ore cars, loader and similar items will be required. A trailer office to accomodate the mine formeman, geologists, sample prep and other services may be required.

4.0 MINING

4.1 Mining History, Methods

Mining at the Martha Mine in the 1906-1912 period consisted of open stoping along the narrow vein. Ore was drilled and blasted and trammed from the haulage level by hand cars to the surface. There, ore was loaded either into trucks or directly to the tram. The old stopes are standing open above the upper (2nd level). The hanging wall is braced with timbers on a random spacing but on average about every 15 to 20 feet. No ore pillars are left in the stopes. Mining was apparently done on a continuous basis, working upward toward the 1st level and on to surface in some areas. Caving has taken place from surface and has partially filled some stope areas and has blocked access to the east beyond the stopes. It is not certain how far to the east stoping has take place. The open stopes stand well with timber bracing. Mining was very conservative with the stoping for the most part completed to a four foot width and even a three foot width in some areas. This is difficult to achieve in a 50 to 60 degree dipping vein that changes in dip angle. No intentional mine back filling was done. Drifting was done on four levels now designated levels 1, 2 ,3 and 4. Approximate elevations of the four levels are: 1 - 3300' 2 - 3120' 3 - 2940' and 4 - 2740'. The levels are not connected vertically but part of the level 2 stopes may have been mined up to level 1. Details of the old mine drifts have been surveyed in recent times and are plotted on the mine maps at the end of this report. Stope locations are approximate and could not be surveyed.. Drifting was

for the most part approximately 5'x 7' with some drifting done at about 6' x 8' and some 4' x 6'. In the old mining efforts were made to keep the drift following the vein. It is evident this was not always the case.

4.2 Recent Mine Development

Three levels of the mine which were caved near the adit openings were reopened. During the past few years new developent has been concentrated on the middle (3rd) level, with new development finding the vein and drifting along the vein for about 264 feet since reopening this level. This is the area upon which most of the proven ore is based.

The upper (2nd) level has been reopened and timbered in areas to permit access. A caved area exist at the end of the accessible drift and the extent of development beyond is thought to be at least 200' and may extend several hundred feet more. Old records are not clear as to the length of this development.

On the lower (4th) level, recent development has picked up a vein, but it is not certain if this is part of the main vein or a parallel stringer. The vein material is mostly calcite and not typical of the main vein. Assays of have been low, below 0.05 ounces gold per ton. Development drifting is shifting currently to a cross cut toward the east tointersect the vein on this level.

4.3 Proposed Development

Current plans are to continue the drifting development on the

3rd and 4th levels to the east to follow the vein as far as possible. Approximately 400' on the 3rd level and 700 feet on the 4th level are recommended. In addition, crosscuting is proposed to test for parallel and possible cross vein structures. The cross cuts would also be located as favorable drillsite locations for diamond drilling to test the vein at depths below the 3rd and 4th levels. In addition a raise is recommended to connect the 4th to the 3rd and the 3rd to 2nd level and the 2nd level to surface. The objective here is to 1. Explore the vein continuity in the vertical dimension, 2. Provide for ventilation for future development, 3. Provide an emergency escapeway, and 4. Possibly connect to the 2nd level beyond the caved area for exploration to the east.

4.4 Recommendations

In addition to the drift development recommended above, it is suggested that underground diamond drilling be done as described. This drilling could add significantly to the understanding of the vein character at depth and will serve to guide a 5th level drift about 200' below the 4th level, if results are favorable. A complete mine design should be undertaken by late 1989 or early 1990 to determine the extent of mine development required to mine the ore. This mine plan would include a ventilation system, manways, ore passes and chutes, and haulage design and loading facilities on surface. Equipment selection would also be outlined with costs estimation.

5.0 METALLURGY

5.1 Process Bench Tests

Several bench test were done in 1988 to determine the ameanablity of the ore to permit the recovery of gold by gravity methods, by flotation, by amalgamation and by cyanidation. Results of this work are described in reports by McClelland Laboratories and Dawson Laboratories. Results of these tests are presented in Appendix E. to this report. Details will not be duplicated here. In summary this work indicated that the gold occurs both as free gold and also in association with sulfides. Recovery can best be achieved by a combination of gravity for the free gold and flotation for the sulfide associated gold. These two methods combined could result in a total gold recovery of up to 98 percent. However, allowing for net smelter return of the gold in flotation concentrate and other losses, the net return of gold to DGI may be about 90 to 92 percent of the contained gold in the ore. The test samples sent to the laboratories had a much higher grade than the average expected from the mine. This may have produced a slightly biased results on the high side. The sample sent to Dawson Labs was 1.526 ounces of gold per ton and the sample sent to McClelland labs was about 0.688 ounces per ton. If the head grade averages 0.500 ounces per ton, the recoveries would be some what less than the bench test results. An estimated average recovery estimate of 90 percent would be conservatve and suggested for economic studies. A 92 percent recovery is a probable maximum.

Cyanidation was rejected as being unacceptable for

environmental reasons. If amalgamation is used for gold recovery from the gravity circuit, careful process and retorting control must be observed. The work of amalgamation should be done in a well planned and controlled laboratory.

The sulfide concentrates containing about 30 percent of the gold would be shipped to a smelter and refinery for processing where the return to DGI would be about 86 percent of the contained gold allowing for smelting charges and losses.

5.2 Plant Design Parameters

A preliminary site review and equipment selection was made for a mill with gravity and flotation circuits to process about 100 tons of ore per day on a three shift basis. This work by MGC and additional work by Lou Cope, mill consultant provided guidelines of the equipment needed for such a plant. Site selection by Lou Cope was designed to take advantage of the existing small mill location and the ball mill acquired by DGI. A flow sheet and materials balance were developed by MGC for the design. Cost estimation was done by Lou Cope. These results are shown in the report by Lou Cope in Appendix F. At this time, the plant design work is preliminary and requires detailed layout drawings to complete the engineering design. The metallurgical bench test work appears well done and forms the basis for the plant designed by Lou Cope.

5.3 Tailing Dam and Site Selection

A tailing dam location has been selected by DGI adjacent to the mill site. Detailed engineering work needs to be done by qualified tailings dam engineers to determine the suitability of this site for the tailings requirments. This work can be very critical to the operation and must be included in the feasibility study.

State regulations may require a lined pond, which would add significantly to the tailing dam cost. State and federal approval for the dam and mill site must be obtained, before construction start.

5.4 Recommendations

Environmental baseline monitoring for the mill and tailing dam locations should begin immediately to establish background levels of heavy metals, especially mercury, in the stream water and sediments. Air quality monitoring for dust monitoring should also be initiated as soon as possible near the mill site to establish background levels. Tailings dam, ore stockpiles and the mine waste dump areas should have dust monitors.

Permitting and environmental reclamation plans should be developed to meet with state and federal regulations.

The final plant design and tailings dam design with cost estimation should be undertaken early in 1990. This would be added to the feasibility study and would provide the necessary information for permitting.

A water supply must be established for the mill operations

and possibly for the mine during the dry seasons. Reclaim water from the tailings pond will be pumped back to the mill and will reduce the overall water requirments.

Alternative power supply from the public source should be established, and the trade off of cost versus diesel generated power determined. Costs from Pacific Power and Light should be established as an alternative power source.

A site should be selected for permanent offices for both mine and mill. Location is likely best near the proposed mill site.

6.0 PROJECT ECONOMICS

Data in hand are not sufficent to develop detailed project economics. Detailed costs cannot be be developed at this time, with out detailed engineering and design work. this must be completed for the mine, mill and tailings dam, water supply and power supply, access roads and ancillary buildings.

At this time only an order of magnitude cost estimate may be developed by comparison to existing similar operations. There are many variables in a mine and plant design, that even this approach to cost estimation has significant risks. The costs as developed in the summary section 2.0 of this report is of this type. The reader should realize the chance of potential error in this type of cost estimation is quite high. Individual cost items may be in error by up to 50 percent and the overall costs may be in error by +/- 30 percent.

Based upon similar mine-mill gold operations the Martha mine may operate at a cash cost as presented in Section 2.0 of this report. DGI is in the process of developing a project economics cash flow. This information is still being developed at this time by DGI.

Mining Risk

All mining has certain inherent risk in the development of the project and the bringing on stream of a mine and mill. Some of the major risks are:

1. Ore reserves. If reserves are not found in sufficient

quantity and quality to provide the cash flow, the project may fail. Present reserves are estimated almost entirely from the development on the middle (3rd) level and from a few samples on the uppper (2nd) level. Certain assumptions are based on the historic mining from the upper level. More confirmation of the grade and continuity of this ore is needed. Future development and exploration drilling should provide the needed additional grade assurance.

2. Mining. In narrow vein mining, control of dilution is critical to the operation. Reserves are calculated to a four foot mining width at the Martha mine. If mining is allowed to go to five feet into waste rock, or if dilution happens from hanging wall failure, the overall calculated in-place reserve grade can drop in a mined grade by a factor of 20 percent additional dilution. Or, for example, a calculated mineable grade of 0.50 ounce gold per ton may drop to 0.40 ounce per ton with unplanned mine dilution. An average grade of 0.40 or lower delivered to the mill can have a serious impact on the project economics.

3. Gold Price. Perhaps the most critical in the economics of a small mine is the price of the commodity. A price of gold at $300 per ounce would make the Martha mine a much less attractive venture. By the same token a $500 per ounce gold price would make the project considerably more attractive.

4. Process recovery. Sufficient work has been done to establish the estimated process recovery. A recovery of 90 to 92 percent is estimated. This assumes both gravity and flotation is

used in the concentration of the gold.

5. Operating costs. The operating cost estimate of $110 per ton in the example used is reasonable for this size operation. Costs may be contained in several areas in a small operation of this type. Overruns in the mine development costs are also possible. Excessive corporate overhead charged to the operation can also impact the project economics.

6. Capital costs. The capital costs estimate of about $3 million, as presented is a reasonable assessment, however detailed engineering for the mine, plant and tailings dam may develop some cost surprises for this venture. Capital costs savings would be achieved with the purchase of used equipment, however used equipment may lead to higher repair and maintainance costs and possibly higher operating costs and more down time. Mill construction costs may be higher because of the steep hillside selected for the mill site. Tailings dam construction costs may be higher to meet safety and environmental requirements.

7. Plant Security. Security in the gold recovery section of the plant is very important. An unsecured gold recovery section can lead to major revenue losses. This is especially true in free gold recovery in a gravity plant.

APPENDICES

A. Report by Tom Ferrero, January 12, 1989
B. Letter Report by Geoffrey Garcia, May 2, 1988
C. Miscellaneous Correspondence by Maurice Magee 1988, 1989
D. Assay Data Sheets - from all sources
E. Metallurgical Test Data by McClelland Labs, Dawson Labs and other metallurgical and plant design reports.
F. Report by Louis Cope, April 21, 1989 on plant design and cost estimation.

G. Mine Maps in pockets - by Tom Ferrero, Bob Jones, G. Garcia, G. Nygren and others.

1. Martha Mine Plan Map Middle Level (Level #3) Vein Map plates 1-A and 1-B
2. Martha Mine Plan Composite Map
3. Martha Mine Cross Sections
4. Martha Mine Longitudinal Section
5. Martha Mine Property Map
6. Martha Mine District Geology

FROM: Geoffrey Garcia
Garcia Consultants
12303 Galice Rd.
Merlin, OR 97532

TO: James Schreiber
Dragon's Gold, INC.
261 E. Barnett Rd. Suite 6
Medford, OR 97501

RE: PROGRESS REPORT AND ORE RESERVE ESTIMATE
SAINT PETERS MOUNTAIN PROJECT

RE-OPENING OF MINE

The upper level of the Martha Mine has been cleared to allow an inspection and sampling of the old workings. Most of the pillars had been removed by earlier miners allowing falling slabs of rock to cover the floor of the level. The eastern end of the level is blocked by a second rockfall which contained surface dirt indicating that it lies beneath a large sink structure which can be seen on the surface of the mountain. It appears that extensive mining was carried out at this level. The company has sampled and mapped these workings to develop ore reserve estimates.

An examination of the old workings indicates that a significant amount of mining was carried out on three upper levels of the mine between 2845' and 3136' elevation. The mined areas are roughly 115' high by 500' long at an average of 4' in width and extends another 220' in height, 500' long in the caved area; or approximately 450,000 cubic feet in total. (See Diagram 1)

The vein was mined to the surface from the level of the upper adit in two places approximately 450' apart - between these areas the vein has been selectively mined, with stopes 30-100+ feet in height and widths from 3' to 8'. The exact amount of ore mined from the two caved levels lying above the upper adit is unknown, however, estimates have been based on evidence and sampling in the reopened level.

The lower level was driven 450' parallel to the vein but did not intersect it. It appears that the slope of the vein was not taken into account. Further drifting of approximately 150' on this level should intersect the ore zone mined above.

ORE RESERVE DESCRIPTION

From observations and measurements taken on the recently opened upper adit it would appear that roughly 60-75% of the vein above this level has been stoped averaging approximately 4 feet in width. This would give an estimate tonnage of ore removed of between 22,500 to 28,125 tons, or a mean average of 25,000 tons.

The vein has been drifted on two levels beneath the uppermost reopened adit. The first of these, or middle level, lies approximately 210 feet below the upper level on the 45-55 degree plunge of the vein. The lowest level, approximately 230' below the middle level was driven parallel to the vein and failed to intersect it. If the ore zone mined above continues at depth to

the next level, then the total reserves that could be accessed from both levels would be approximately 50,000 tons of ore. The vein east of this area remains unexplored at this time. It is possible that reserves many times greater than those outlined above lie to the east and in extensions of the ore body at depth, in addition to those areas calculated herein.

CALCULATIONS

Mined Ore (Above Upper Adit)

$$\text{Area 1} = \frac{\left(\frac{500' \times 220'}{2} \times 4'\right) + (500' \times 115' \times 4')}{12 \text{ cubic ft/ton}} = \frac{450{,}000 \text{ cu.ft.}}{12 \text{ cubic ft/ton}}$$

= 37,500 tons @ 60-75% of area actually stoped

= 22,500 to 28,125 or a mean average: 25 M tons

Additional Mined Ore (Extension of Drift/Above Upper Adit)

Since the adits to these workings remain caved, no accurate estimate of tonnage mined can be made. The area on which these caved adits are located is approximately 330' x 190', would have added very roughly 10 to 15 M tons to the ore removed, if mined as extensively as the reopened adit.

Probable Reserves (Middle Level Adit to Mined Area)

$$\text{Area 3} = \frac{(500' \times 210' \times 4')}{12 \text{ cubic ft/ton}} = \frac{420{,}000 \text{ cu.ft.}}{12 \text{ cubic ft/ton}}$$

= 35,000 tons @ 60-75% of area actually mined

= 21,000 to 26,250 or a mean average: 23 M tons

Possible Reserves (Extension of ore body to depth & length)

$$\text{Areas 4,5,6} = \frac{(230' \times 500' \times 4') + (625' \times 500' \times 4') + (1{,}065' \times 190' \times 4')}{12 \text{ cubic ft/ton}}$$

$$= \frac{460{,}000 \text{ cu.ft.} + 1{,}250{,}000 \text{ cu.ft.} + 809{,}400 \text{ cu.ft.}}{12 \text{ cubic ft/ton}}$$

= 209,950 tons @ 60-75% of area actually mined

= 125,970 to 157,463 or a mean average: 141 M tons

TOTAL ESTIMATED RESERVES = 23 M + 141 M = 164 M TONS

GRADE OF ORE

An initial series of 8 chip samples taken on exposed parts of the vein averaged 2.564 ounces per ton of gold. Later, 19 channel samples were taken on accessible parts of the vein left by earlier workers in the upper adit. The vein averaged 18" in width and the ore carried 0.637 oz/Au per ton on a weighted average basis. Stopes 3 to 8 feet in width indicate that the parts of the vein removed by the earlier miners greatly exceeded what was sampled. (See Assays)

Historic production records indicate that the ore produced at the Greenback Mill during the time the Martha was in production averaged better than 0.68 ounces of gold per ton. The actual grade of the ore in place on the levels below the area already mined will be known after detailed channel sampling of the vein upon the completion of the drift which is now in progress in the middle adit. Initial assays in the vein from this drift have shown gold values that range from 0.130 to 0.710 Au/ton, or an average of 0.288 Au/ton. The widest mineralization recorded to date has been a four foot width; a channel cut across this zone assayed at 0.327 on a five assay ton basis.

RESERVE VALUATION

Estimated probable reserves calculate to 23 M tons of ore above the middle level adit. By extrapolating the average assay results recorded in the old workings of 0.6 ounces per ton, and a

price of $450 per ounce for gold, said reserves would have a calculated value of over $6 million. The use of 0.6 as the assumed ore grade over an average of 4 feet in the stopes, is in my opinion conservative, on the basis of assays in the old workings and the present drift.

Confirmation of reserves at depth require additional exploration. Reserves above the middle level will become proven as ore is blocked out by confirming with assays commercial ore values as the drift progresses for at least an estimated 500 feet. Exploration at the lowest level adit and drilling should greatly increase the reserves, but requires even more extensive exploration. Sampling and drilling of a parallel vein structure on the property and on at least one anomaly on the projected extension of the vein, are also warranted at this time. Field exploration to date indicates a high probability that additional ore can be located on the property adjacent to the mine.

RECOMMENDED PLAN OF OPERATIONS

An inspection of the upper workings confirms that an ore zone occurs for a distance of at least 500 feet. Initial results from samples taken on this level indicate the presence of gold in economic quantities. In view of these two facts, drifting beneath this part of the vein on the middle level is justified. The company should plan for bulk testing of the vein as drifting progresses to determine both the amount of gold and the best method of recovery. Preliminary evaluation of a mill design

should be under taken to establish preliminary costs and efficiency of a 50 to 100 ton per day mill. Ore realized from present drifting should be decked at the mill site. A geochemical grid on 100 foot centers should be undertaken on the balance of the property, and a drilling program to expand reserves elsewhere on the property is also warranted when economically feasible.

PROJECTED MINING COSTS PHASE II	
Drifting on the middle level 500' ore @ $100/foot	$50,000
Drilling (2,500' @ $10 per foot, reverse circulation)	25,000
Sampling, bulk testing and analysis (Surface drift assays plus grid)	12,000
Used Equipment Purchases (Trucks, Backhoe, Compressor, Drill, Etc.)	10,000
Geologic work and field supervision (Geochemical Grid & Mill Analysis)	13,000
TOTAL	$110,000

At the completion of phase II, enough should be known about the ore body to allow planning for a mill and define a production schedule.

Geoffrey Garcia
5/2/88

MINE MODEL
Diagram #1

RESERVE SUMMARY:

TOTAL PROVEN TONNAGE: 2 M
TOTAL PROBABLE TONNAGE: 21 M
TOTAL POSSIBLE TONNAGE: 141 M

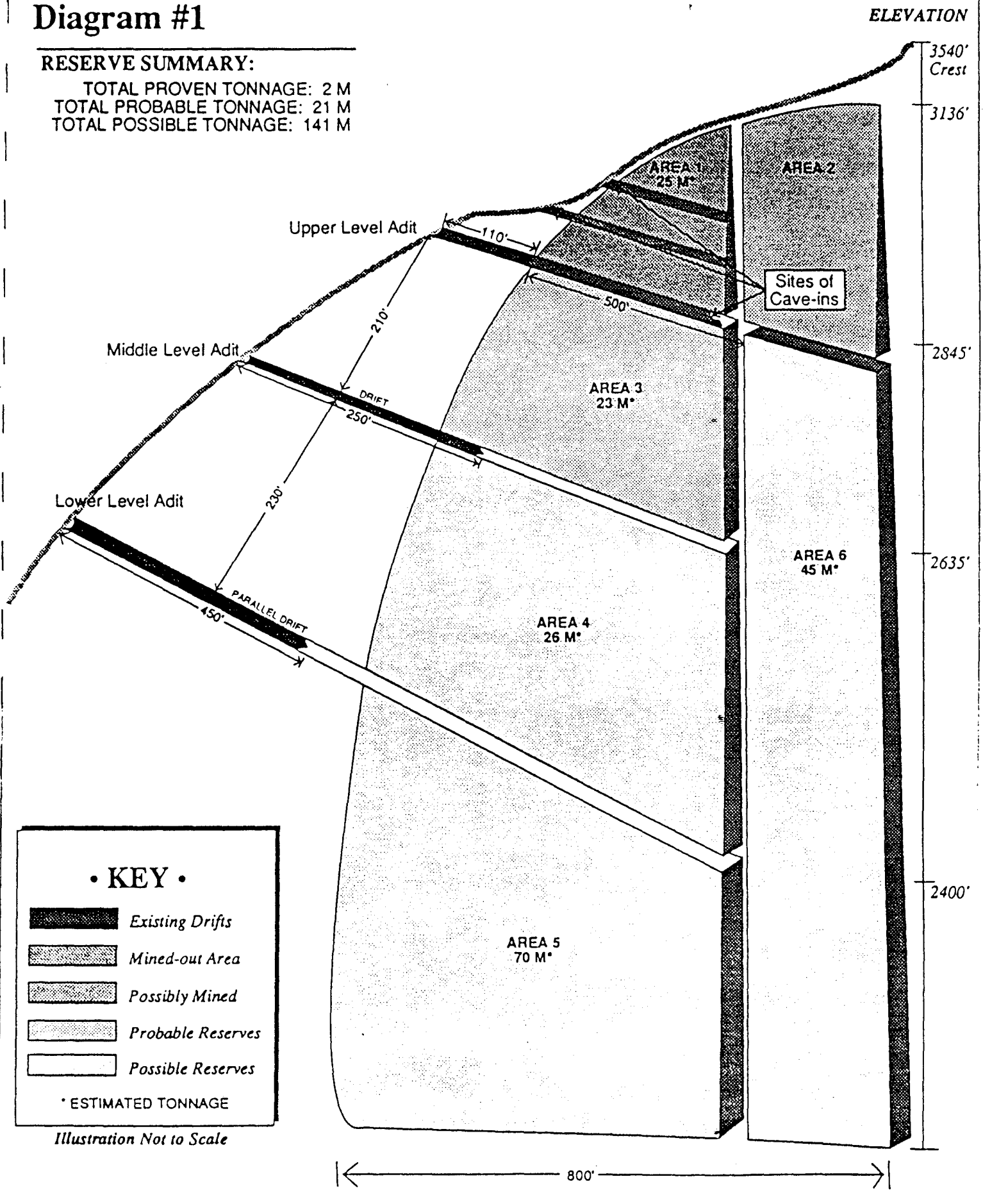


Illustration Not to Scale

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY

1240 Redwood Boulevard, Redding, California 96003 (916) 244-4441

DATE: April 14, 1988

No. Of Samples/Job No. 22/5402

CLIENT: Dragon Gold
261 E. Barnet H. Road
Medford, OR 97501

Analytical Methods:
FA: IAT, Au

DATE RECEIVED: April 4, 1988

RESULTS REPORTED IN:
Oz/Ton: Au

SAMPLE NO.		Au	
5-15		0.105	
15-31		0.069	
44-18		3.088	
59-36-31		0.411	
29-36		0.605	
74-23-30		0.081	
99-11-21		4.599	
109-8		0.163	
123-16		0.201	
192-10		3.068	
199-18		0.089	
218-12		0.265	
230-8-68		0.486	
240-15-80	* DELETED - GRAB SAMPLES IN STOPE.	0.247	
260-32-75		0.180	
340-1 *		0.146 *	
340-2 *		0.089 *	
340-3 *		0.340 *	
365-17-50		0.279	
378-6-40		0.982	
398-17-30		0.177	
418-12-30		0.159	
18" = AVERAGE WIDTH		0.8028	MEAN AVERAGE
		.637	WEIGHTED AVERAGE

BY: _____ BY: _____ VERIFIED: _____
FIRE ASSAYER ANALYTICAL GEOCHEMIST LABORATORY MANAGER

ND: No Detection
NR: Not received
1 Troy oz/ton: 34.286 ppm

NA: Not Analyzed
IS: Insufficient Sample
1 ppm: 0.0292 Troy oz/ton

T: Trace

Estimated Reserves - thru 12/31/89

	Strike	Dip	Wid	Tons*	Oz's	$ Value	Tons*	Oz's	$ Value	Costs/Ton $87.00	Gross Profit
Proven	879	150	4	43950							
	465	150	4	23250							
	Total			67200	33600	13,440,000	53760	24192	9,676,800	4,677,120	**$4,999,680.00**
Probable	979	310	4	101163							
	565	230	4	43317							
Less	879	150	4	-43950	* Proven Block (Middle Level)						
Less	465	150	4	-23250	* Proven Block (Lower Level)						
	Total			77280	38640	15,456,000	61824	27821	11,128,320	5,378,688	**$5,749,632.00**
Total Proven & Probable				144480	72240	28,896,000	115584	52013	20,805,120	10,055,808	**$10,749,312.00**
Possible	1179	640	4	251520							
				-144480	* Less Proven & Probable						
	Total			107040	53520	21,408,000	85632	38534	15,413,760	7,449,984	**$7,963,776.00**
Proven, Probable & Possible				251520	125760	50,304,000	201216	90547	36,218,880	17,505,792	**$18,713,088.00**
Potential	1579	840	4	442120							
				-251520	* Less Reserves						
	Total			190600	95300	38,120,000	152480	68616	27,446,400	13,265,760	**$14,180,640.00**
Grand Total - All categories				442120	221060	88,424,000	353696	159163	63,665,280	30,771,552	**$32,893,728.00**

Assumptions:

(A) Advancing 5' per round, and 3 rounds per week. For the 6 months (6/30-12/31) or 26 weeks, the total advance is 26 weeks x 15' feet/week = 390 feet. Drifting is progressing on both the lower and middle levels simultaneously.

(B) Probable Reserves are extrapolated using the same criteria outlined by Maurice Magee, which include 100' along strike and both below and above the drifts, 50' and 100' respectively.

Estimated Reserves - thru 6/30/89

	Strike	Dip	Wid	Tons*	Oz's	$ Value	Tons*	Oz's	$ Value	Costs/Ton $87.00	Gross Profit
Proven	489	150	4	24450							
	75	150	4	3750							
	Total			28200	14100	5,640,000	22560	10152	4,060,800	1,962,720	**$2,098,080.00**
Probable	589	310	4	60863							
	175	230	4	13417							
Less	489	150	4	-24450	* Proven Block (Middle Level)						
Less	75	150	4	-3750	* Proven Block (Lower Level)						
	Total			46080	23040	9,216,000	36864	16589	6,635,520	3,207,168	**$3,428,352.00**
Total Proven & Probable				74280	37140	14,856,000	59424	26741	10,696,320	5,169,888	**$5,526,432.00**
Possible	375	100	4	12500							
	230	200	4	15333							
	414	130	4	17940							
	200	310	4	20667							
	Total			66440	33220	13,288,000	53152	23918	9,567,360	4,624,224	**$4,943,136.00**
Proven, Probable & Possible				140720	70360	28,144,000	112576	50659	20,263,680	9,794,112	**$10,469,568.00**
Potential	1189	840	4	332920							
				-140720	* Less Reserves						
	Total			192200	96100	38,440,000	153760	69192	27,676,800	13,377,120	**$14,299,680.00**
Grand Total - All categories				332920	166460	66,584,000	266336	119851	47,940,480	23,171,232	**$24,769,248.00**

Assumptions:

(A) Advancing 5' per round and 3 rounds per week. For the 3.5 months (3/15-6/30) or 15 weeks, the total advance is 15 weeks x 15' feet/week = 225 feet. Drifting is progressing on both the lower and middle levels simultaneously.

(B) Probable Reserves are extrapolated using the same criteria outlined by Maurice Magee, which include 100' along strike and both below and above the drifts, 50' and 100' respectively.

December 10, 1993

Mr. Allan R. Young
New Projects Manager
Sunshine Mining Company
815 Park Boulevard
Boise, Idaho 83712

Dear Allan:

As the year winds down the pace quickens with Christmas activities and shopping. I am desperately trying to tie up a host of loose ends in a number of directions before the end of the year. I hope that you will find a few moments to scribble out a status report on the submittals that we have pending.

Cumberland/Kentucky Favorite/Maginnis- Spotted Horse has been dealt away but these three adjacent mines are part of the large Spotted Horse vein system...they are available and may present an opportunity for a 100 TPD higrade precious metal operation. Before going belly-up at Spotted Horse, Chelsea Resources drove ramps into extensions of known ore at both Kentucky Favorite and Maginnis mines and are reported to be in ore.

Golden Armells/Armells Favorite/Iron King- These three prospects outline another higrade vein system just a few miles northeast of Spotted Horse and, as such, may represent another opportunity for a 100 TPD higrade gold operation

Green Campbell- The owners of this prospect will be meeting with me during the Christmas week. They have negotiated a deal with Kennecott at their Kersearge prospect and are debating whether to open up Green Campbell on their own. I'll know more by the end of the year.

Martha- This prospect appears to meet Sunshine's acquisition criteria.

Totolan del Oro- This prospect also appears to have potential to product a relatively small tonnage of very higrade ore fairly quickly at a minimum cost. The district has other higrade veins.

Los Reyes- While shy on gold, this prospect has sufficient seed reserves to offer the potential to be a substantial silver producer.

Magistral- This old timer is being drilled, is available, and should be looked at.

Sincerely,

Charles P. Seel
250 Old Yellowstone Trail
Bozeman, MT 79715

October 08, 1993

Mr. Allan R. Young
Operations Manager
Sunshine Mining Company
815 Park Boulevard
Boise, Idaho 83712

Re: Martha Prospect, Josephine County, Oregon

Allan:

Back in 1989, the President of the small company holding the subject prospect spoke with me on several occasions with concerns about his exploration program that was being funded by eastern investors.

A consultant, Geoffrey Garcia, in May, 1988, wrote a summary report in which he cites an 18" wide vein with Proven-Probable Reserves of 23,000 tons averaging 0.60 OPT gold.

A second consultant, Tom Ferrero, in Jan 1989, wrote a report listing reserves of 38,000 tons @ 0.411 OPT gold.

Following an underground sampling program, a third consultant, Maurice Magee, wrote another report in which he says that the vein ranges from a small fracture to about five feet in width averaging 24". He lists Proven-Probable Reserves at 37,613 tons plus Possible-Potential Reserves of 181,373 tons all at an average grade of 0.50 OPT gold.

I suspect that Sunshine may already have this prospect in its file. If not and if interested, let me hear from you and I can send copies of the Garcia, Ferrero, and Magee reports.

I have not been on the property and it is likely that the holding company no longer exists.

Sincerely,

Charles P. Seel
250 Old Yellowstone Trail
Bozeman, MT 59715
(406) 586-0734

Probably too small
Permitting a problem
ARY 3/24/95

SUBMITTAL CHRONOLOGY

Date Submitted	Prospect/Project	Status/Disposition
07-06-93	~~Alaska/Susana/V Grande~~ Sonora, Mexico	Declined
07-07-93	~~La Resurreccion~~ Sinaloa, Mexico	Declined
07-09-93	San Sebastian District ~~Bramador~~ ~~Sta Gertrudis~~ Totolan del Oro Jalisco, Mexico	 Declined Declined
07-13-93	Spotted Horse Fergus County, Montana	
08-26-93	Green Campbell/~~Rusty Pick~~ Madison County, Montana	Declined Rusty Pick
09-22-93	Cumberland/Kentucky Favorite/ Maginnis Fergus County, Montana	
09-30-93	Golden Armells/Iron King/ Armells Bonanza Fergus County, Montana	
10-08-93	Martha Prospect Josephine County, Oregon	

DRAGON'S GOLD, INC.

Corporate Profile

History

Dragon's Gold, Inc. controls acreage containing valuable precious metals in the Klamath Mountains of Josephine County of southwestern Oregon, north of Grants Pass. This land consists of about 450 acres of unpatented and patented claims on BLM and county land and 6 gold mines, including the "Martha", that has a history of containing some of the highest grade ore in the state of Oregon in the early 1900's. The Martha Mine was part of the Greenback Mining and Milling Company, which had recorded production of over 170,000 ounces of gold between 1898 and 1916. The market value of that production at today's spot price for gold of $400 per ounce would be $68,000,000.

It is not clear if production at the Martha Mine was included in the Greenback figures, but based on calculations of ore mined, and the fact that for four years the Greenback Mine was shut down in favor of operating the Martha lode because of its higher grade ore, implies 30,000 to 50,000 ounces of gold were produced. A 7,000 foot aerial tramway was built in 1910 at a cost in current dollars of about $1,000,000 to provide sufficient ore for the 100 ton per day Greenback Mill. Obviously, the properties had to be extremely rich to have justified that kind of expenditure. The orebody was apparently developed over a distance of 1,400 feet, however, the strike length could extend to a serpentine contact, or an additional 2,100 feet.

Recent Developments

Pincock, Allen & Holt prepared the initial evaluation of the mine in 1980 and indicated the company had the potential for developing 100,000 tons of ore. This was before the mine was reopened; since then we have expanded our land portfolio from one claim to control of approximately a section of land.

Large scale operations terminated at the Martha Mine about 1912, after a futile and expensive search downdip for the main vein. The company relocated the main vein which had been offset 16 feet in the old workings. Reopening the mine on three levels and subsequently relocating the primary orebody has enabled the company to develop 96,053 tons of reserves, 37,613 of which are proven and probable. The vein pinches and swells, but averages 2 feet in width. Assays taken to date and diluted to a 4 foot mineable width averaged better than .600 oz Au/ton. Additional drifting and drilling is required to block out the balance of the orebody. The primary source for the development of additional reserves is along the essentially unmined extension of the vein on strike and to depth. Additional potential exists on the balance of our land portfolio and wide areas of mineralization have been recorded.

The company owns an 80 TPD mill and related equipment; but numerous additional items must be purchased to implement the flow sheet and preliminary mill design. Proven and probable reserves would require about 2 years to process, given start-up rates and assuming 260 days of production per year. The 58,440 tons of reserves in the possible category would add 2 additional years of processing time at the assumed rates of production. Management believes there is a high probability that a fivefold increase in the reserves and potential resources blocked out to date will be realized as the result of a one to two year exploration and development program to confirm the extension of the primary orebody on strike and to depth.

3/17/89

DRAGON'S GOLD INC
BALANCE SHEET
DECEMBER 31, 1988

ASSETS

Current Assets			
Cash		39,776.00	
Raw Ore Inventory, Gross Value (Note#1)		125,199.00	
Other Current Assets		11,033.00	
Total Current Assets			$176,008.00
Property and Equipment			
Land Martha Claim, Less depletion allowance (Note #2)		85,932	
Leased Pilot Mill (Note#3)		50,000	
Mining and Mill Equipment	95,627		
Less accumulated depreciation (Note#2)	2,804		
		92,823	
Buildings, Furniture, Vehicles	13,377		
Less accumulated depreciation (Note#2)	-1,405		
		11,972	
Total Property and Equipment			$240,727.00
Other Assets			
Mineral Rights Martha, Less depletion (Note#2)		144,785	
Mineral Leases (Note#4)		31,500	
Road and Leasehold Improvements (Note#2)		28,757	
Total Other Assets			$205,042.00
Total Assets			**$621,777.00**

Liabilities and Stockholders Equity

Current Liabilities		47,767	
Total Current Liabilities			$47,767.00
Long Term Liabilities			
Long Term Notes Payable (Note#5)		51,000	
Lease Obligations Payable (Note #3)		49,705	
Total Long Term Liabilities			$100,705.00
Stockholders Equity			
Common Stock Par $1.00 Authorized 11,000,000			
Issued and Outstanding (Note#6)		3,849,900	
Preferred Stock Authorized 1,000,000 Outstanding		0	
Additional paid-in capital		-3,089,155	
Total Contributed Capital			$760,745.00
Retailed Earnings			($287,440.00)
Total Stockholders Equity			$473,305.00
Total Liabilities and Stockholders Equity			**$621,777.00**

Dragon's Gold Inc.
December 31, 1988

Notes To the Balance Sheet

1. Raw Ore inventory is calculated at Net Realizable Value using company assays prepared by Shasta Analytical Geochemistry Laboratory assuming a 90% recovery based on metallurgical test performed by McClelland Laboratories and Hazen Research and a gold value of $400 an ounce. Further processing of the Ore is necessary before income can be realized. Estimated projected cost of completing construction of the mill, processing, storage, transportation and proximity of market has been deducted from the gross value to obtain the Net Realizable Value of the Ore.

2. Depreciation , Amortization and Depletion.
The cost of Mining Equipment , Mining Building, and Vehicles used in the mining process are recorded at cost, and depreciated using a straight-line method over the estimated useful lives of the related assets. Replacement and major improvements to Equipment, Building and Vehicles are capitalized, Maintenance and repairs are charged to expenses as incurred. Leasehold improvements and Road improvements will be amortized when work is completed on these projects.The cost of the Martha Mine and mineral rights to the Martha Mine were recorded at fair market value using arms length transactions to unrelated parties as an indicator of the fair market value of the shares of common stock issued. The Martha Mine and the mineral rights to the Martha Mine are being depleted using units of ore from proven and probable reserves. Based upon yearly amounts of mined ore the capitalized amount will be depleted over the life of the reserves. The cost of issuing common stock is amortized over 10 years using a straight line method.

3. The company entered into an agreement to lease an existing mill which included the building and specified equipment. The lease is being accounted for as a Capitalized Lease. The terms of the lease are for five years at ten percent interest with the first payment being made in advance, and the balance due at the end of five years. The lease of the Mill Site is being treated as an operating lease with the monthly rent being charged to rent expense. The payments on the capitalized lease for the equipment, and the lease for the mill site have been temporially suspended until more capital is raised.

4. The lease of Mineral Rights are being accounted for at fair market value, determined by the market value of the common stock issued at the time of purchase through arms length transactions to unrelated parties. No amortization is currently in effect for these leases.

5. Long term notes payable consists of three $17000.00 notes, due on May 27, 1991 with ten percent simple interest per year. Notes are subject to early payment upon successful completion of private placement of $500000 of Dragon's Gold Inc., common stock at $1.00 a share.

6. Common stock authorized 11,000,000 issued and outstanding 3,849,900 shares. All Common Stock issued to date is subject to Investment Letter restrictions. Preferred Stock authorized and unissued 1,000,000 shares. Options and Warrants outstanding for Dragons Gold Inc. Common Stock consists of 754,000 shares.

PROPERTIES SUBMITTED BY CHARLES SEEL

1. Totolan Del Oro, Jalisco, MX
2. Rusty Pick, Madison Co., MT
3. Los Reyes, Jalisco, MX
4. Spotted Horse, Fergus Co., MT
5. Kentucky Fairsite/Maginnis, Fergus Co., MT
6. Divide Meadows, Grant Co., OR
7. Green Campbell, Madison Co., MT
8. Martha, Josephine Co., OR
9. Magistral, Sinaloa, MX
10. Honduras A (no name - not subject to agreement)
11. Honduras B (no name - not subject to agreement)
12. Alaska/Suana, Sonora, MX
13. Bramadero, Jalisco, MX
14. Santa Gertrudis, Jalisco, MX
15. Golden Anniello, Fergus Co., MT
16. La Resurreccion, Sinaloa, MX

MARTHA MINE JOSEPHINE

THE MARTHA MINE

Josephine County, Oregon

A Geologic Report

for

Dragon's Gold, Inc.
261 East Barnett Road, #6
Medford, Oregon 97501

by

Tom Ferrero,Geologist
27 1/2 North Main Street, #1
Ashland, Oregon 97520

January 12, 1989

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LIST OF ILLUSTRATIONS

Drafting by Bob Jones

SUMMARY

Mine development work, sampling and geologic mapping at the Martha Mine in 1988 have yielded positive results. Drifting on the Martha vein on the middle level has progressed 175 feet into an ore body projected to be about 600 feet across. Assays along 145 feet of the new drift averaged 0.411 OPT Au, four feet wide. Estimated ore reserve volume proven by the recent mine developments is 4,833 tons. Projections based on geologic data and the configuration of old stopes indicate another 6,000 tons of very probable ore reserves. Within the projected ore body (measuring 380 feet by 600 feet), probable reserves are about 14,500 tons, and possible reserves, about 12,667 tons. All reserves total 38,000 tons. Rough economic calculations indicate that a reserve of 15,000 tons would be adequate to pay for necessary proposed mine development, mill construction, and other past and foreseeable expenses, and yield a profit. It is recommended that development work be continued, based on the probability demonstrated by work to date that adequate ore reserves will be blocked out.

LOCATION, ACCESS AND GEOGRAPHY

The Martha Mine property is located in section 28, Township 33 South, Range 5 West, Willamette Meridian, Josephine County, Oregon. The mine is about nine miles east on paved and all-weather gravel roads, up Coyote Creek to the west slope of St. Peter Mountain. The elevation of the mine is about 3,000 feet above sea level (see Figure 1).

The terrain is steep and forested. Rainfall is heavy, with some snow, but not enough to prevent winter operation. Water is plentiful in springs, streams and underground. Electric power lines reach the mill site. Power at the mine is supplied by a generator.

PROPERTY DESCRIPTION

The Martha Mine property is composed of four patented claims that are leased form Josephine County by Dragon's Gold, Inc., and eight unpatented claims staked and filed by Dragon's Gold, Inc. Three of the patented claims and one of the unpatented claims cover the apex of the Martha vein. The remaining claims cover adjacent ground on both sides (see Figure 2).

Dragon's Gold has also leased a gravity separation mill and the portion of the patented Horeshoe Lode Claim occupied by the mill, all belonging to John Miller. The mill is a gravity separation system with a capacity of 5 tons per 24 hours. Dragon's Gold plans to up-grade the mill capacity to 100 tons per 24 hours, and add flotation cells. Acquisition of milling equipment and construction are in progress.

Figure 2 shows the orientation of the claim groups in the Martha Mine area. Note that another staker (Bert West) has claimed the ground between the Dragon's Gold and Miller claims, and in the process has overlapped some of both groups. The Martha vein apex and Horseshoe Lode millsite are not disputed by the overlaps, and so there is no immediate, significant problem. The Dragon's Gold unpatented claims should be surveyed and the posts adjusted and reset as necessary.

HISTORY

Historical records state that the Martha Mine was discovered in about 1900. It was put into production by the operators of the Greenback Mine and mill in 1906, who built a tramway from the Martha Mine to the Greenback 40-stamp mill. The Greenback Mine, the greatest lode gold producer in southwest Oregon, had from 1904 to 1906 yielded about 150,000 tons of ore. The 1906

operation was started by new owners with the goal of developing ore on both the Martha and Greenback properties for milling at the Greenback mill. There are no production records from that period, but it is assumed that all or most of the ore milled from 1906 to 1910 came from the Martha Mine. In about 1912 the mine was leased by a local miner who set up a 5-stamp mill on the property and mined out the remaining developed ore. Total development of the Martha Mine (old workings) is reported to include a little less than 3,000 feet of drifts and raises.

The Martha Mine has recently been revived. My first involvement with the property was in January of 1985. I was called in to provide an independent analysis of the potential of the property. Geoffrey Garcia, Geologist and partner in the mine had theorized that the ore body developed by the Martha Mine might extend downward, below the existing workings. At that time, only the first 115 feet of the upper level, and the old workings of the middle level were open (see Plate 1). The alignment of surface subsidence, caved stopes and errant drifts supported Geoff's theory. I recommended opening the upper level to find out if there were substantial stopes above, if the ore body continued downward, and if so, had it been mined out below.

Since then, in 1988, the upper and lower level have been opened, and the middle level extended into a substantial body of ore. The following sections of this report present the results of the recent work.

UNDERGROUND WORKINGS

The maps and cross-section on Plate 1 show the extent and orientation of the Martha Mine workings. The middle and lower levels are stable and safe. The drift and old stopes on the upper level are very dangerous due to caving from the surface and slabbing from the hanging wall. The upper level is being kept open as a future airway and emergency escapeway, via a raise that is going to be driven up from the middle level. To my knowledge, all necessary developments related to safety and health have been installed, and are being maintained as per MSHA regulations.

SAMPLING

In 1987 and 1988, Geoff Garcia cut samples from the Martha vein on the upper and lower levels. Nineteen channel samples cut where possible from the floor, pillars and the top of stopes on the upper level averaged 0.263 OPT Au, four feet wide. The configuration of the upper level workings, as shown on the cross-section on Plate 1, is based on Geoff's assay map. He also cut

ten samples on the middle level, at ten foot intervals along the back (roof) of the drift from west of the projected ore body, before the drift was extended to the east. They averaged 0.025 OPT Au, four feet wide. Geoff's assay map from the middle level and the assay report on his upper level samples are included in the Appendices of this report.

In December of 1988, my assistant (Bill Barton) and I cut 50 channel samples at five foot intervals in the new drift on the middle level, as shown on the cross-section on Plate 1. All of the samples were cut from the back of the drift and stopes except sample numbers 246083, 72736 and 246084, which were cut from the floor of the west stope. The entire interval averaged 0.279 OPT Au, four feet wide. A 145 foot long segment of the sampling interval averaged 0.411 OPT Au, four feet wide. The sample record sheets in the appendices of this report list the detailed data pertaining to these samples.

All 81 samples described above were channels cut perpendicularly across the vein, and generally included about six inches of hanging wall and foot wall greenstone. All of the samples, which were originally cut at varying widths, have been recalculated to a uniform mining width of four feet.

Other sampling of the mine has included continuous sampling by the miners as the middle level drift was driven ahead. Since my samples cover the same ground, the miner's samples are not included in this report.

Ore mined to date from the middle level drift and small stopes, totalling 657 tons, is decked at the millsite. Grab samples from 76 truck loads taken by the miners have average 0.640 OPT Au.

GEOLOGY

Regional Geology

The Martha Mine is one of several mines comprising the Greenback Mining District. The Martha and Greenback mines develop east/west striking, north dipping, fissure quartz veins in greenstone. Ore bodies in both mines are related to cross-faulting. The vein hosting greenstones (and associated serpentines, gabbros, metasediments, etc.) are located along the thrust faulted contact of the Western Jurassic Belt and the Western Paleozoic/Triassic Belt, both of the Klamath Mountains Geologic Province. The greenstone is mapped by Hotz (1971) as Jurassic, and by Ramp and Peterson (1979) as Triassic.

Geology of the Martha Mine

The Martha vein strikes mainly east/west to northwest/southeast and dips from 30 to 70 degrees north. It varies in width from zero to five feet. The average vein width in the 250 feet of new workings is about 2 feet. Gangue minerals in the ore include mostly quartz, with minor calcite, jasper and epidote (altered greenstone gouge and fragments). Metallic minerals include mainly arsenopyrite, pyrite, chalcopyrite and free gold. Metallics comprise about one or two percent of the ore.

The map of the new workings on the middle level (Plate 1) shows a somewhat simplified expression of the quartz veining and cross-faulting. Not shown are numerous string quartz veins in the wall rock, silicified wall rock, several minor fractures and faults, sulfide mineralization and late deposition of quartz and jasper. The map does show how the widening of the vein is related to the cross-faulting. The vein is quite narrow west of the projected ore body, and widens considerably in the ore body, where cross-faulting and related dislocation of the east/west fissure increase. The vein pinches again at the east end of the new drift, but I expect that the next cross-fault will mark the beginning of another vein swell. At the face of the drift, the wall rock appeared to be sheared, indicating that the next cross-fault might be a short distance ahead.

It is clear that the north/south trending cross-faulting occurred after the east/west fissure, as indicated by the offset of the latter by the former. It appears that the vein deposition occurred after the cross-faulting, because where the veins abut the primary cross-faults at sample stations 83 and 70, they appear to have been deposited in pinched or truncated fault segments that were distorted by cross faulting. The veins in places are not continuous to the cross-fault walls, as would be expected with small offset, post-mineralization faulting.

Three features indicate continued cross-faulting after the initial deposition of the gold bearing veins. The first is the well matched vein ends across some of the secondary cross-faults at about sample stations 78 and 73. Another is the widespread brecciation of quartz in the vein. The third is the presence of later, lower grade quartz, calcite and jasper in a complex pattern of crossing fractures, and in the main vein. The low grade quartz also occurs as stringers in the major cross-faults.

All of the above factors, and others noted during sampling and mapping, suggest the following sequence of ground preparation and veining.

1) The east/west fissure formed, probably due to deep seated extensional forces. Greenstone was sheared and broken along the fissure walls.

2) The north/south cross-faulting formed due to compressional forces most likely related to regional thrust faulting. Offsets were small. Some of the faults were singular fractures. Others were multiple fractures, or fault zones, which broke the east/west fissure into small segments. The east/west fissure was dislocated and warped in the cross-fault zones, causing the formation of numerous, somewhat randomly oriented and distributed openings (voids) between fault blocks along the east/west fissure segments. Compressional forces prevented the cross-faults from opening.

3) Hot aqueous solutions saturated with silica exsolved from a molten intrusion at depth, most likely related to plate margin tectonic processes. The solutions, also containing substantial iron, arsenic, calcium, copper and gold, migrated up through the east/west fissure. Lateral flow was prevented by the compressed cross-faults. Quartz calcite, arsenopyrite, chalcopyrite and gold were deposited throughout the east/west fissure. Wider areas in the fissure recieved wider deposits of quartz and metallics. These became the ore pockets. The fluids saturated the zones of sheared and broken greenstone in the walls of the

fissure, depositing silica and sulfides, thus forming the characteristic pattern of multiple quartz veinlets and silicification in the vein. Closed portions of the fissure and the cross-faults recieved little or no mineralization.

The lack of phyllic alteration of the greenstone wall rocks and the presence of arsenopyrite in the ore indicate that the mineralization was mesothermal.

The cross-faulting and mineralization may have occurred as a series of events rather than just one ground preparation event followed by one depositional event. More detailed vein mapping would tell.

4) Movement occurred again along the cross-faults due to continued compressional, regional, thrust related forces. Conjugate faulting offset the existing veining. Movement of fault blocks reopened portions of the vein bearing fissure, fracturing quartz and wall rock. Regional thrusting and erosion brought the host greenstone unit closer to surface.

5) Low temperature, silica saturated fluids also containing calcium, sulfer and iron circulated through the reopened ground, depositing low grade quartz, calcite, pyrite and jasper. Reduced compressional forces due to closer proximity to surface and

waning of thrust activity allowed minor opening of the cross-faults and caused opening of stress relief fractures. As a result, low grade mineralization was deposited as quartz and calcite stringers throughout the cross-faults, and as scattered quartz stringer swarms in the wall rock. This was surely a long term series of events.

The Martha Ore Body

The cross-section on Plate 1 shows the known and projected limits of the Martha ore body. The west limit is based on the west edge of stoping on the upper level and the west limit of ore grade samples on the middle level.

The east limit of the ore body is based roughly on the east limit of surface excavation and subsidence, and the east end of the upper level drift. It is logical to assume that the early miners stopped digging on surface and drifting underground where they ran out of ore. The location of the end of the upper level drift is based on a State of Oregon report (Parks and Swartley, 1916; see Appendices). Caving has prevented direct access to it. I have placed the east limit of the ore body about 100 feet west of the end of the upper level drift, because it is likely that it took that much dead drifting to discourage the early miners.

Before stoping in the old workings, the upper limit of the ore body was at surface. Now it is at the lower limit of stoping on the upper level drift. Some ore may have been mined out below there via the winze shown on the cross-section (Plate 1), or other possible winzes beyond the cave-in. No old workings reaching down from above have been encountered in the new drift on the middle level so far.

I have set the lower limit of the ore body at the elevation of the lower level drift for the sake of calculating reserves. The lower limit could actually be above or below there. Two factors support the further extent of ore down dip. One is that the Martha ore is not enriched or made free milling by surface oxidation. The fine and coarse free milling and flotable gold is primary. This means that whereas ore in many districts can only be mined and milled economically within 200 to 500 feet of surface, the Martha ore has no such limiting factor.

The second factor tending to support greater extent of ore on dip is that the mineralization appears to be mesothermal (intermediate depositional depth) as opposed to epithermal (shallow depositional depth). Epithermal vein deposits tend to have distinct upper and lower limits controlled by a confined vertical range of deposition related to pressure conditions. Mesothermal vein depostis are not confined in this way, and

commonly, as in the Mother Lode District of California, they measure 1,000 to 2,000 feet or more on dip. The nearby Greenback Mine, which is structurally and mineralogically very similar to the Martha Mine, produced ore from surface down to a depth of about 1,000 feet. Such deep gold mines are rare in Southern Oregon, exceptions being the Greenback and Ashland Mines.

Two theories could explain the structure and location of the Martha ore body, as described above. One is that the limits of a north/south cross-fault zone corresponds to the projected east and west limits of the ore body. The other is that the projected east limit of the ore body is a major fault with a large offset distance, and that the Martha vein does not continue east of the fault. In that case, the west limit would most likely correspond to the western extension of concentrated shearing related to the major fault. The latter theory describes the structural conditions at the Greenback Mine. I have not completed the surface mapping necessary to definitely ascertain the structural character of the east limit of the ore body and vein. Surface mapping should be continued.

Why Was the Martha Ore Body not Mined Out?

Generally, the early miners were very efficient. They rarely left any substantial ore within easy reach of a developed mine. One might well ask "Why was the Martha ore body not mined out?"

Though the history of the mine is poorly documented, some facts are known. The Martha vein in the upper level stopes dips steeply above, and flattens at the level of the drift. This roll in the vein may have corresponded to a pinch (decrease in vein width) and/or decrease of ore grade.

When the early miners drove the middle level drift, they started well west of the ore body. When they hit the first cross-fault (see Map of the Martha Mine, Plate 1) they angled southeast in search of the vein, then dog-legged back to the northeast. They hit a quartz stringer in the foot wall, apparently believing it was a pinch on the Martha vein. The had stopped just south of the vein and east of the fault, at sample station 83 (see Map of New Workings, Plate 1). A round or two west, or three north, would have put them in ore.

They then went back and drove north, along the first fault, and found the vein. They drifted east on it for about 100 feet and gave up because it was too narrow to pay, and because it lined up perfectly with the pathetic little quartz stringer in the end of the dog-legged cross-cut. Though the fault (at sample station 83) did show in the cross-cut, they apparently did not realize its significance.

When they drove the lower level, they started in a draw south of the vein, so as to start as far into the mountain and as close to the downward projection of ore as possible. They searched to the north and south without finding the vein. A recent survey done for Dragon's Gold by Gerald Nygren, Licensed Surveyor indicated that the vein must be between 10 and 30 feet north of the northern most workings on the lower level. The Dragon's Gold miners drilled two long-holes to the north and in both intersected quartz (estimated to be about a foot wide) about 20 to 25 feet north of the northeast end of the lower level workings. They have installed track and otherwise prepared for cross-cutting to, and drifting east on what is probably the Martha vein.

CONCLUSIONS AND RECOMMENDATIONS

Significant Progress

Exploration and development work in 1988 at the Martha Mine has yielded positive results. Most significant is the intersection of substantial ore by the new drifting on the middle level. In June of 1988 I recommended to Dragon's Gold that, if after 300 feet of drifting on the middle level, the projected downward extension of the ore body was not intersected, then the potential of the mine would be in question. As it turned out, the first 250 feet of drifting intersected substantial ore.

It is also significant that historical and new geologic data indicate that continued development work (drifting east, upper and lower levels) will intersect additional ore within the limits of a 600 foot wide, fault-intersection controlled ore body.

Definitions and Assumptions

The cross-section on Plate 1 shows the distribution of projected proven, very probable, probable and possible ore reserves. Proven is defined as the projection, as justified by geologic and other data, of significant assay results 50 feet into unsampled vein material. Very probable is defined as the projection, as justified by geologic and other data, of significant assay results beyond 50 feet into unsampled vein material. Probable is defined as 50 percent of the vein material within the ore body limits as projected down from known stopes and assays. Possible is defined as 50 percent of the vein material within the ore body limits as projected down from inferred drifts and stopes.

The 50 percent dilution factor used to calculate probable and possible ore reserves is based on two factors. One is the theorized geologic structure of the ore body (see Geology), which by definition would produce a somewhat randomly distributed group of ore pockets separated by faults and narrow "pinched" areas. The other is the distribution of stoping above the accessible

portion of the upper level (see cross-section and map of workings, Plate 1). The stope/pillar ratio there appears to be about 50/50.

The assumed Martha mining and milling cost, based on Dragon's Gold records and projections, is $100 per ton. Assumed tunneling (drifting) cost, also based on Dragon's Gold records and projections, is $100 per foot. The assumed gold price, based on current levels, is $400 per ounce. The assumed gravity and flotation mill recovery is 95 percent. This is based on laboratory testing (McClelland Lab, 1988; see report excerpts in Appendices) which indicated a combined gravity and flotation recovery of 97.7 percent. I have rounded down to 95 percent, since mill recovery rarely matches lab test values.

All of the reserves have been calculated with the assumed stoping width of four feet and the assumed grade of 0.411 OPT Au, based on the 145 foot long run of assays on the middle level. The actual average grade of the projected ore reserves could vary somewhat from 0.411 OPT Au, but since that grade is based on the most continuous and random sampling interval to date, it is the most reliable figure.

Ore is defined as rock that can be profitably mined and milled. Cut-off (minimum) grade of ore in narrow vein mines varies from

about 0.250 OPT Au to about 0.400 OPT Au. Each mine has a different cut-off grade based on mining and milling cost, recovery, etc. I have assumed a cut-off grade of 0.300 OPT Au for the Martha Mine based on the following calculation.

0.300 OPT Au x 0.95 (recovery) x $400/oz Au
= $114/Ton, recovered
- 100/Ton, cost
$ 14/Ton, value

The $14 per ton value figure is minimal and so 0.300 OPT Au is a valid cut-off grade. Note that the entire sampled interval in the new workings on the middle level assayed an average of 0.279 OPT Au, and the proven ore block is drawn around the 0.411 OPT Au segment. This reflects the 0.300 OPT Au cut-off grade.

Based on all of the above assumptions, my reserve calculations are as follows:

Ore Reserve Volumes

Proven Reserve:
145 ft. long x 100 ft. high x 4 ft. wide 12 cu.ft./Ton
= 4,833 Tons, Proven

Very Probable Reserve:
Ave 150 ft. long x 120 ft. high x 4 ft. wide 12 cu.ft./Ton
= 6,000 Tons, Very Probable
+4,833 Tons, Proven
10,833 Tons, Proven and Very Probable

Probable Reserve:
400 ft. long x 380 ft. high x 4 ft wide 12 cu.ft./Ton
= 50,667 Tons x 0.50 (dilution)
= 25,333 Tons, Proven, Very Probable, and Probable
-10,833 Tons, Proven and Very Probable
14,500 Tons, Probable

Possible Reserve: ~ 480'
200 ft. long x 380 ft. high x 4 ft. wide 12 cu.ft./Ton
= 25,333 Tons x 0.50 (dilution)
= 12,667 Tons, Possible

Total, All Reserves: 38,000 Tons

Economic Analysis of Reserves

Value Per Ton, All Reserves:
0.411 OPT Au x 0.95 (recovery) x $400/oz Au
= $156.18 $155/Ton, recovered
- 100/Ton, cost
$ 55/Ton, value

Proven Reserve Value:
4,833 Tons x $55/Ton = $265,815

Very Probable Reserve Value:
6,000 Tons x $55/Ton = $330,000

Proven and Very Probable Reserves Value:
10,833 Tons x $55/Ton = $595,815

Probable Reserve Value
14,500 Tons x $55/Ton = $797,500

Proven, Very Probable and Probable Reserves Value:
25,333 Tons x $55/Ton = $1,393,315

Possible Reserve Value:
12,667 Tons x $55/Ton = $696,685

All Reserves Value
38,000 Tons x $55/Ton = $2,090,000

Additional Major Costs

Mill Lease (5-years) and Mill Up-grade Costs:
Estimated by Dragon's Gold to be about $250,000

Mine Development Costs:
Proposed Drifing, Middle Level
450 ft. in ore body x 0.50 (dilution*) x $100/ft. (cost)
= $22,500

Proposed Cross-Cutting/Drifting, Lower Level
190 ft. not in ore body
650 ft. in ore body

190 ft. + [650 ft. x 0.50 (dilution*)]

= $51,500
+ 22,500
$74,000 Total Drifting Costs

* The dilution factor accounts for drifting in dead rock only as per probable and possible ore reserve calculations. Drifting in ore is covered by the $100 per ton cost for mining and milling.

It is important to note that the above calculations are based on some estimated and/or unconfirmed numerical factors, and numerous assumptions that may prove to be inaccurate and/or incomplete. The derived numbers and resulting conclusions should be considered in that light.

Continued Development

The data and analysis presented in this report indicate that it is probable that the Martha Mine can be developed into a profitable gold producer.

Drifting east on the vein should be continued on the middle level. Cross-cutting northeast to the projected vein on the

lower level should be started. If the vein is intersected there it should be drifted on to the east, into the projected ore body.

The above conclusions and recommendations deal only with development of the known and projected Martha ore body as defined in this report. Geologic information to date has not defined the east, west and downward extension of the Martha vein beyond the projected ore body, or the possiblity of other ore bearing structures in the Martha vein and elsewhere on and around the Dragon's Gold property. The lack of data precludes any quantative expression of the potential of the property beyond the projected Martha ore body. Future development plans should include surface geologic mapping, and exploration as warranted by mapping results.

LIST OF SOURCES

Ferrero, Tom, The Martha Mine, report for Dragon's Gold, Inc., October, 1987

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Garcia, Geoffrey, Map of Martha Mine, January, 1988

_____, Sample Map, Upper Level, Martha Mine (Rough), March, 1988

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McCelland Laboratories, Inc., Metallurgical Testing Report (for Dragon's Gold, Inc.), October, 1988.

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_____, Horizontal Control Map (Rough), Martha Mine, September, 1988

Parks, H.M. and A.M. Swartley, Handbook of the Mining Industry of Oregon, in Mineral Resources of Oregon, Vol. 2, No. 4, Oregon Bureau of Mines and Geology, December, 1916.

Ramp, Len, and Norman V. Peterson, Geology and Mineral Resources of Josephine County, Oregon, Bulletin 100, Oregon Dept. of Geology and Mineral Industries, 1979.

U.S. Geological Survey, Map of Glendale Quadrangle, Oregon, 15 Minute Series (Topographic), 1954.

APPENDICES

1) Historical Reference, Martha Mine, Parks and Swartley, 1916.

2) Assay Documents
   Map of G. Garcia Samples, middle level
   Assay report, G. Garcia samples, upper level
   Assay report, T. Ferrero/B. Barton samples, middle level

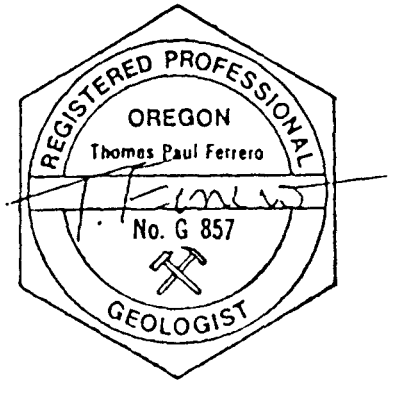
3) Excerpts from Metallurgical Lab Testing Report, McLelland Lab, 1988.

CERTIFICATE

I, Tom Ferrero, of 27 1/2 North Main Street, #1, Ashland, Oregon, DO HEREBY CERTIFY THAT:

1) I am a consulting Geologist, registration number G857, Oregon Board of Geologist Examiners, since 1982.
2) I am a graduate of the University of Oregon with a Bachelor of Science Degree in Geology, 1983.
3) I have eight years of experience exploring and assessing precious metal deposits.
4) I have done field work at the Martha Mine several times from 1984 to 1988.
5) I have no interest, direct or indirect, nor do I expect to recieve any interest, direct or indirect, in the Martha Mine property or any other holdings of Dragon's Gold, Inc.

Dated this 12th day of January, 1989.



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MINERAL RESOURCES OF OREGON

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Handbook of the Mining Industry of Oregon

Alphabetical List of Properties; Description of Mining Districts

By H. M. PARKS and A. M. SWARTLEY

306 Pages

1916

MARTHA MINE (gold) GREENBACK DISTRICT JOSEPHINE COUNTY

The Martha mine is in the S. W. ¼ Sec. 28, T. 33 S., R. 5 W., about 1 mile north of the Greenback mine. It is 2½ miles north of the town of Placer, which is 8 miles west of Leland, the nearest railroad point. It is on the steep western slope of St. Peter mountain overlooking Coyote creek. It is opened by 4 adits at different elevations, having a total length of about 3000 feet. It was opened as a separate mine, but in 1904 it was purchased by the Greenback company and developed more fully by means of electric power from the Greenback mine. In 1906 the Martha was connected with the Greenback mill by means of an aerial tramway. After the Greenback mine was closed the Martha was leased to J. M. Clarke, of Golden, Oregon, who erected a 5-stamp mill on the ground and treated ore previously developed and partly mined. The country rock is greenstone and the ore is similar to that of the Greenback, though not as rich. It occurs in veins and stringers in zones of shearing. In adit 2 the chief vein strikes N. 70° W. and dips at an angle of 55 to 60°; it varies in width from a few inches to about 4 feet with an average of about 2 feet for the first 600 feet; the adit beyond was not accessible; it was said to extend 800 feet. At about 350 feet from the portal a fault which strikes about N. 60° W. causes an offset of about 15 feet toward the north. upper level (T.F.)

This mine is at present owned by R. C. Robinson of Parish, New York.

Sample Record

Property Martin Mine
County/State [illegible] Oregon

Location					Width	RESULTS (Opt AU)			Description: Middle Level drift samples taken by Tom [illegible] December 1988
Sample No.	T.	R.	Sec	Type	(inches)	Channel Width	@ 43"	Station	
246051	33S	5W	28	Channel	13	0.412	0.112	250	Bk/9" qtz V/2" slc WR/2"WR
246052	33S	5W	28	Channel	30	0.880	0.550	245	6" HWR/3"Gg-Str qtz/15" qtz V/6"FWR
246053	33S	5W	28	Channel	66	0.042	0.058	240	1"HW qtz str/35" slc HWR/1" slc Gg
246055	33S	5W	28	Channel	43	0.042	0.038	235	7"HWR/24" slc HWR/3"Gg/4"qtzV/5"slc FWR
246057	33S	5W	28	Channel	36	0.176	0.132	230	5"HWR/16" slc WR/7"qtz V/8"FWR
246058	33S	5W	28	Channel	35	0.082	0.060	225	5"HWR/14" slc WR/3" qtz V/9" slc WR/4"FWR
246059	33S	5W	28	Channel	35	0.438	0.319	220	5"HWR&str qtz/6"slc WR&Br/9"qtz V&WR/15"FWR
246060	33S	5W	28	Channel	44	1.102	1.010	215	7"HWR &strqtz25"slc WR/6" qtz/6" FWR
246061	33S	5W	28	Channel	47	0.518	0.507	210	BK/10" qtz V+BR/4" WR/9" qtz V+BR/9" WR/10"qtz v/5" FWR
246062	33S	5W	28	Channel	39	0.516	0.419	205	5"HWR/1"qtzv/11" slc WR&BR/6" qtzv/10"slc WR&BR/6"FWR Broken
246063	33S	5W	28	Channel	37	0.211	0.163	200	6"HWR/15"slc WR&Str qtz/9" slc WR/1:qtzv/6"FWR
246064	33S	5W	28	Channel	45	0.249	0.233	195	5"HWR/21"slc WR&Str qtz/14: qtzv&WR/5"FWR
246065	33S	5W	28	Channel	52	0.272	0.295	190	4"HWR/48" slc WR&str qtz/ floor
246066	33S	5W	28	Channel	63	0.144	0.189	185	6"HWR/13: qtz v w/WR/38" WR&stratz/6"FWR
246067	33S	5W	28	Channel	23	0.704	0.337	180	6"slc HWR/12"qtzv&WR/5" FWR
246068	33S	5W	28	Channel	38	0.562	0.445	175	38" slc WR&str qtz (in stope)
246069	33S	5W	28	Channel	36	0.584	0.438	170	4"Gg,WR&str qtz/23" qtzVYBr/9" slc FWR (in stope)
246070	33S	5W	28	Channel	27	0.462	0.260	165	5"HWR/12" qtz V/ 10" WR& strqtz/floor (in stope)
246071	33S	5W	28	Channel	32	1.543	1.029	160	7"HWR/21" qtz V&WR/4" FWR
246072	33S	5W	28	Channel	36	1.338	1.004	155	4"Gg/4" qtz V&BR/28" WR w str qtz in cross fracs from below
246073	33S	5W	28	Channel	15	1.108	0.346	150	5" HWR/5" qtz V/5" FWR
246074	33S	5W	28	Channel	21	1.776	0.777	145	5"HWR/3"qtz V/20"slc WR BR &Jp/3:FWR
246075	33S	5W	28	Channel	10	1.430	0.298	140	3"HWR /5"qtz V/2" FWR
246076	33S	5W	28	Channel	19	0.698	0.276	135	4"HWR/11" qtz V/4" FWR
246077	33S	5W	28	Channel	43	0.198	0.177	130	22" HWR & str qtz/11" qtz V/8" FWR w/strqtz
246078	33S	5W	28	Channel	28	0.639	0.373	125	4" HWR&strqtz/12" HWR/6" qtz V/6" FWR w/strqtz
246079	33S	5W	28	Channel	26	0.508	0.275	120	8"HWR/12:qtz V/6:FWR
246080	33S	5W	28	Channel	17	0.808	0.286	115	7" HWR/2" Gg&strqtz/2"qtz V/5"FWR
246081	33S	5W	28	Channel	18	0.408	0.153	110	4"HWR/8"qtz v/6" FWR&strqtz
246082	33S	5W	28	Channel	25	0.938	0.489	105	Bk/8"qtz V/10" slc WR&strqtz/1"qtz v/6" FWR
72737, 8	33S	5W	28	Channel	33	0.323	0.222	102	5'HWR/6" qtz V&Br/4"WR/18" WR&strqtz (in stope)
246083	33S	5W	28	Channel	27	0.266	0.150	97.5	6"HWR/8" qtz V&WR/10"slc WR& strqtz/3" FWR (in stope)
72736	33S	5W	28	Channel	26	0.855	0.463	93	6"HWR/5'qtz V/4" WR/4"qtzV/7" FWR (in stope)
246084	33S	5W	28	Channel	18	0.724	0.272	86.5	3"HWR/9" qtz V&WR Br/6" FWr (in stope)
72739	33S	5W	28	Channel	16	2.165	0.722	80	4"HWR/12"qtz V&BR (in stope)
246085	33S	5W	28	Channel	23	0.418	0.200	75	6" HWR/1"Gg/10" qtz V/6" FWR&Jp
246086	33S	5W	28	Channel	26	0.175	0.095	70	7" HWR/9"qtz V&WR BR& strqtz/10"FWR&Jp
246087	33S	5W	28	Channel	15	0.086	0.027	65	6'HWR/3"qtz-wr-br/5"FWR

Sample Record

Property Martha Mine
County/State Josephine Co., Oregon

Location					Width	RESULTS (Opt AU)				Description: Middle Level Drift
Sample No.	T.	R.	Sec	Type	(inches)	Channel Width	@ 48"	Intervals	Station #	Sampled & logged by Tom Ferraro 11/82
246088	33S	5W	28	Channel	14	0.092	0.027		60	6"HWR/2" Gg&straqtz/6"FWR
246089	33S	5W	28	Channel	13	0.025	0.007		55	6" HWR/1" Gg/ 6" FWR (No qtz in vein fault)
246090	33S	5W	28	Channel	13	0.020	0.005		50	6"HWR/1"Gg/6"FWR (No qtz in vein fault)
246091	33S	5W	28	Channel	14	0.002	0.002		45	6"HWR/2"Gg/6" FWR (No qtz in vein fault)
246092	33S	5W	28	Channel	19	0.146	0.058		40	6"HWR/3" qtz V&WR/ 4"slc WR & str qtz/6"FWR
246093	33S	5W	28	Channel	16	0.048	0.016		35	6" HWR/4"Gg V&WR/6"FWR
246094	33S	5W	28	Channel	26	0.380	0.206		30	5"HWR/5"qtzv&WR/4"WR/6"qtz V&WR/6"FWR
246095	33S	5W	28	Channel	44	0.127	0.116		25	6"HWR/7"qtz V&Wr/25" WR/3"qtz V/3"FWR
246096	33S	5W	28	Channel	22	0.233	0.107		20	4"HWR/11"qtz V&WR/7"FWR
246097	33S	5W	28	Channel	19	0.112	0.048		15	4"HWR/1" Gg/8"qtz V&WR/6"FWR
246098	33S	5W	28	Channel	16	0.344	0.115		10	BK/1" Gg/9"qtz V/6" FWR
246099	33S	5W	28	Channel	18	0.122	0.046		5	6"HWR/6"qtz V/6" FWR
246100	33S	5W	28	Channel	18	0.054	0.020		0	6"HWR/6" WR w/str qtz/6" FWR

SAMPLE RECORD KEY - DESCRIPTIONS

Bk = Back (meaning could not sample HWF)

9 1/2 V = Quartz Vein

slc = silicic

WR = Wall Rock (greenstone)

HWR = Wall Rock (greenstone) above hanging wall of vein fault

FWR = Wall Rock (greenstone) below feet wall of vein fault

Gg = Gouge

Strqtz = String Quartz (quartz veinlets < 2" wide; mainly < 1/2")

HWqtzstr = Quartz veinlet against hanging wall of vein fault

Br = Breccia

WRBr = Wall Rock (greenstone) breccia

quzBr = quartz breccia

& = and

/ = separates sample segments

25" = 25 inches, true width (perpendicular to dip and strike)

floor = meaning could not sample any lower

in stope = sample cut from small stope

Jp = Jasper (late silica)

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MINE EVALUATION
ORE RESERVES
MINERAL EXPLORATION
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SOCIETY OF ECONOMIC GEOLOGISTS
SOCIETY OF MINING ENGINEERS
CANADIAN INSTITUTE OF MINING

March 8, 1989

Mr. James Schreiber, President
Dragon's Gold Inc.
261 East Barnett Road #6
Medford, OR 67501

Dear Jim:

I have reviewed the new information with sampling and assaying that was developed from my trip to the Martha Mine in February.

As a result of this review, I am presenting here my views on the reserves as of March 1, 1989. I have not completed my assessment of the average grade that can be expected from the mine, but I am presenting my best estimate from the data in hand, which is described below. I will send a follow up letter with a more comprehensive review in late March and my report to you should be completed in mid-April.

With the drift development on the middle level now extended to 590 feet, including vein development of 264 feet, the proven ore zone is as tabulated below. Up dip and down dip distance parameters are the same as in my letter of February 13, 1989. The reserve summary is as follows:

Proven	13,200	tons	Grade 0.500 ounces gold per ton (a diluted mine grade over a four foot width.)
Probable	24,413	tons	Grade assumed the same
Possible	58,440	tons	Grade assumed the same
Total	96,053	tons	

The grade has been calculated incorporating the 37 samples I collected in February and also reviewing the sampling and assaying work of Tom Ferrero and Tom Billings. In summary, the grade averages for the various sampling programs are:

1. 172 feet of 0.356 opt by Tom Ferrero with waste dilution to 4 feet mining width. (assumes zero grade for greenstone waste.)

2. 240 feet of 0.510 opt by Maurice Magee with waste dilution to 4 feet mining width. (27' of drift not sampled.)

3. 50 face samples by Tom Billings avg. grade 0.717 opt for 4 feet mining width. (Likely, unintentional bias on the high side by chipping more quartz vein and less greenstone.)

4. 35 drift muck samples by Tom Billings averaged 0.442 opt. (Likely includes some waste and low grade headings.)

5. Ore Deck Sampling by Tom Billings averaged 0.644 opt. (Likely, somewhat biased on the high side as some waste headings were not sent to the ore deck.)

From the above I would conclude that a fair estimate of the average mine grade would be 0.500 opt. Mining may be selective in some areas and grade may average 0.600 opt in select areas. At the same time there will be low grade areas that can't be avoided in stoping that may lower the average grade.

Grade of the probable and possible areas can only be assumed and cannot be assured until tested.

For purposes of estimation and economic evaluation, I would use a mine diluted grade of 0.500 opt for the proven area. You should also estimate the mine recovery of the measured tons at 80 percent and the mill recovery at 90 percent.

Other conditions and notations on reserve definitions in my letter of February 13, 1989 remain the same.

I believe that the Martha mine has a potential on strike and down dip on this property beyond that stated in the proven, probable and possible categories. This will be discussed in my report to you.

Sincerely yours,

Maurice Magee

Notes:

This reserve summary requires several footnotes to explain the calculations, estimates and observations. The above table is qualified in the entirety by the following notes.

1. The definitions of reserves as used in this report is subject to restrictive use. The SEC requires that a "reserve" be "technically, economically and legally extractable." Only the technical aspects of the reserve estimation and calculations are addressed in this report. The SEC will accept only "proven and probable" categories of reserves for reporting purposes. A "reserve" implies that the calculations have been properly made from adequate sampling and assaying information and that the material is reasonably assured to be in place. Only the proven and probable categories may meet the technical and economic criteria of the SEC.

2. The "possible" or "inferred" category is based upon reasonable geologic projections of the vein along strike and down dip from the proven and probable areas of the mine, but the "possible" areas have not been sampled and assayed, as no mine development is in place for sampling. We have no assurance that the vein will continue nor do we have assurance that the grade will continue as projected. The "possible" category tonnage and grade may be presented in private or exempt transactions and may be used in some Canadian mining company reserve statements. It is used here for presenting the projected potential of the property and for mine planning and development.

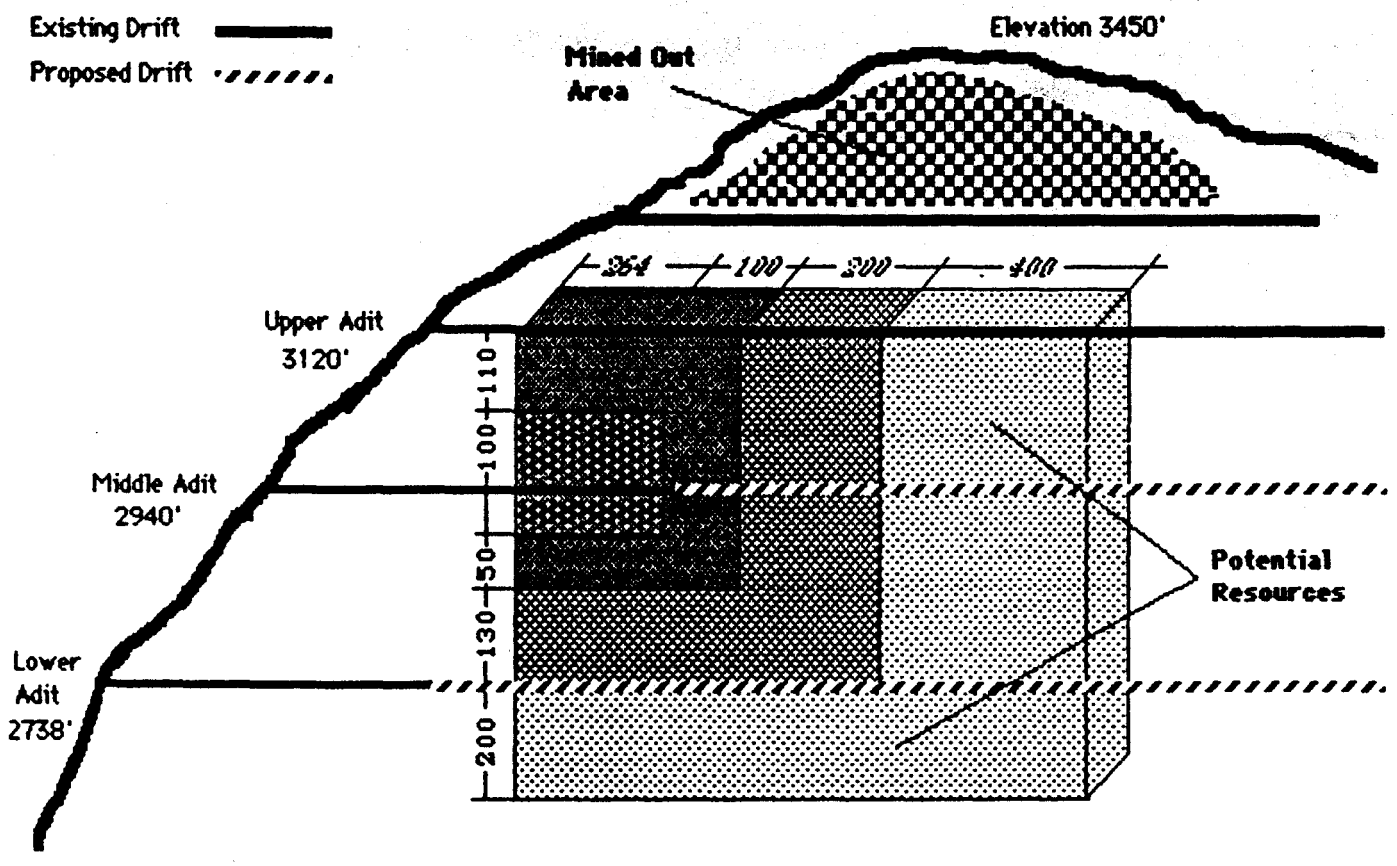
3. Reserves stated are in-place diluted reserves. For mining purposes a mine recovery factor of 80 percent may be appropriate with 20 percent of the reserve left in the ground as support pillars. A mill recovery factor of an estimated 90 percent based on metallurgical tests should also be applied in the economic evaluation. Actual metallurgical recoveries will be based upon plant design which has yet to be completed.

4. Accuracy in reserve estimation has not been quantified in the industry and no criteria or formulae for percentage estimation has been established throughout the industry. The following is an approximation of probable accuracy. A proven reserve is considered generally accurate to about +/- 10 percent and may also be stated as a figure with about a 90 percent confidence level. A probable reserve is considered generally accurate to +/- 30 percent with a confidence level of about 70 percent. Proven and probable reserves may be combined and may be stated as reasonable accurate to +/- 20 percent. Possible reserves may be accurate to about +/- 50 percent. These percentage estimates are not applied uniformly throughout the industry.

Mine Model Diagram

3/3/89

Proven	13,200 Tons
Probable	24,413 Tons
Possible	58,440 Tons



Ore Grade: 0.500 **Gold Price** $400 **Recovery Factor:** 80% **Mill Rates:** 80 TPD @ 90%

Reserve Calculations :

	Strike	Dip	Wid	Geologic Reserves Tons*	Oz's	$ Value	Recoverable Reserves Tons*	Oz's	$ Value	Projected Operations Costs/Ton $87.00	Gross Profit
Proven	264	150	4	13200	6600	2,640,000	10560	4752	1,900,800	918,720	**$982,080.00**
Probable	364	310	4	24413	12207	4,882,667	19531	8789	3,515,520	1,699,168	**$1,816,352.00**
Proven & Probable				37613	18807	7,522,667	30091	13541	5,416,320	2,617,888	**$2,798,432.00**
Possible	364	130	4	15773							
	200	440	4	29333							
	250	160	4	13333							
				58440	29220	11,688,000	46752	21038	8,415,360	4,067,424	**$4,347,936.00**
Proven, Probable & Possible				96053	48027	19,210,667	76843	34579	13,831,680	6,685,312	**$7,146,368.00**
Potential	964	200	4	64267							
	400	440	4	58667							
				122933	61467	24,586,667	98347	44256	17,702,400	8,556,160	**$9,146,240.00**
Total All Categories				218987	109493	43,797,333	175189	78835	31,534,080	15,241,472	**$16,292,608.00**

*12 cu ft per ton

Potential Resource Calculations:

	Strike	Dip	Wid	Geologic Resources Tons*	Oz's	$ Value	Recoverable Resources Tons*	Oz's	$ Value	Projected Operations Cost/Ton $87.00	Gross Profit
(A) - Development thru 3/3/89 (See Mine Model)											
	964	200	4	64267							
	400	440	4	58667							
Total:				122933	61467	24,586,667	98347	44256	17,702,400	8,556,160	**$9,146,240.00**
(B) - Projected Development thru 6/1/89 (Assuming Ore Body is intersected at lower level)											
	1189	840	4	332920							
	Less Reserves **			-96053							
Total:				236867	118433	47,373,333	189493	85272	34,108,800	16,485,920	**$17,622,880.00**
(C) - Assumes strike length extends to historic limits of Martha											
	1400	1000	4	466667							
	Less Reserves **			-96053							
Total:				370613	185307	74,122,667	296491	133421	53,368,320	25,794,688	**$27,573,632.00**
(D) - Assumes strike length extends eastward to serpentine contact (See Area Geology Map)											
	3500	1000	4	1166667							
	Less Reserves **			-96053							
Total:				1070613	535307	214,122,667	856491	385421	154,168,320	74,514,688	**$79,653,632.00**

Notes:

*** 12 cu ft per ton**

**** Proven, Probable and Possible Categories based on exploration to date.**

MAURICE MAGEE

EDUCATION: B.S. Geology, 1953
University of Georgia
Graduate studies University
of Tennessee

AFFILIATIONS: Member AIME, AIPG, CIMM, GSA,
SEG, SExG, Registered Geologist - Arizona

EXPERIENCE:

1980 -1986 Manager and Senior Geologist, Geology Department - Pincock, Allen & Holt, Inc., Tucson, Arizona. Responsible for exploration project planning and evaluations, geochemical survey, economic evaluations, ore reserve measurements and verification.

1978 - 1979 Geological Consultant - Salt Lake City, Utah. Conducted and managed geological, geophysical and geochemical surveys for base and precious metals, uranium, and non-metallic minerals.

1978 - 1978 New Venture Analyst - Utah Power and Light Company, Salt Lake City, Utah. Responsible for uranium reserve acquisitions and evaluation of coal and limestone properties.

1955 - 1977 Minerals Economist - Cities Service Company, Salt Lake City, Utah. Performed financial analysis of domestic and international porphyry copper-molybdenum projects, copper-nickel and massive sulfide deposits. Responsible for present worth and cash flow analysis, price projections, market studies, project planning, capital costs analysis and budget development.

District Geologist for the eastern United States, Cities Service Company, Knoxville, Tennessee. Engaged in massive sulfide copper and Mississippi Valley type zinc exploration and evaluation. Supervised geophysical and geochemical surveys. Industrial minerals commodity studies.

Chief Geologist, Geochemist, Mine Geologist - Cities Service Company, Ducktown Mining District, Tennessee. Engaged in mineral exploration, exploration drill planning and supervision, geophysical and geochemical surveys, ore reserves evaluation, zoning, alteration and petrographic studies and property acquisition.

1953 - 1954 Geophysicist - Shell Oil Company, Texas and Lousiana. Conducted seismic and gravity surveys in the Gulf Coast and mid-continent regions. Responsible for geological structural interpretation of geophysical data.

1950 - Seismic Interpreter - Marine Geophysical Company, Maracaibo, Venezuela. Engaged in marine seismic data compilation and structural interpretation.

MAURICE MAGEE

Consulting Projects (1980-1985)

U. S. Bureau of Mines - Examination and evaluation of major lead-zinc deposits worldwide including mines and mills in Canada, Sweden, Germany and France.

U. S. Bureau of Mines - Evaluation of major lithium, beryllium, and rare earth oxide deposits and operations with evaluations made in Canada, South America, Africa and India.

Hendricks-Good Mining Company - Evaluation of the Cross-Caribou Mines, Colorado. This is a complex stockwork vein system with gold and silver. An exploration plan was developed which outlined additional ore reserves.

Home Oil Company - Evaluation of ore reserves at the Gooseberry Mine, Nevada. Measurements of ore reserves and grade of stopes in this narrow quartz-calcite vein with gold and silver reserves.

Gerald Metals Company - Descubridora Mine, Durango State, Mexico. Evaluation of ore reserves of this complex lead-zinc-silver vein type deposit. Measurements of ore reserves, assays and exploration planning.

Union Minere - Oracle Ridge Mine, Arizona - Examination and evaluation of copper-silver ore reserves in complex scarn type mineralization.

Alaska Apollo Gold Mines - Exploration drill planning on Unga Island, Alaska.

BHP Ltd. - Evaluation of ore reserves of Island Copper Deposit, Vancouver Island, British Columbia.

Lornex Mining Ltd. - Evaluation of ore reserves of copper and molybdenum, in Highland Valley, British Columbia.

NL Industries - Evaluation of precious metal ore reserves in Mexico.

Lynx Corporation - Evaluation of potential gold properties and placer gold ore reserves, Arizona.

Atlas Corporation - Exploration of gold-silver prospects in Pima County, Arizona.

Piedmont Mining Corporation - Geological review and exploration drilling program planning for volcanic hosted gold deposits, South Carolina.

Consulting Projects (1980-1985) (cont)

Centennial Gold - Exploration drill planning for alluvial gold deposit in Colorado.

Quintana Minerals - Measure and verification of gold ore reserves for acquisition in Utah.

Atlas Minerals - Measure and verification of gold ore reserves for acquisition in Nevada.

Schreiber & Company - Geological review and exploration evaluation of gold deposit in Oregon.

Anaconda - Evaluation of uranium ore reserves, Jackpile Mine, New Mexico.

Reserve Oil & Minerals - Evaluation of uranium reserves, L-Bar Mine, New Mexico.

Minere Frisco - Evaluation and reserve calculations of molybdenum porphyry deposit in Sonora, Mexico.

Steinfeld Estate - Evaluation of lead-zinc-silver mineral properties in Arizona.

Lincoln Company - Examination and evaluation of gold properties, Yavapai and Yuma Counties, Arizona.

Indiana Bank - Evaluation of gold-silver properties in San Bernadino and Riverside Counties, California.

International Oro-Fino Placers, Inc. - Evaluation of gold placer in Idaho. Recommend program for sampling and ore reserve verification.

Lacana Mining Inc. - Evaluation of gold ore reserves in sediment hosted deposit in Nevada.

Kaiser Steel Corp. - Geological mapping and ore reserve estimation of underground gold mine, California.

Freeport-McMoRan - Ore reserve verification, Jerritt Canyon Gold Deposit, Nevada.

Mosearanes, Raul - Evaluation of copper deposit, Bahia Brazil.

Lincoln, Dave - Evaluation of placer gold deposit, Weaver Creek, Yavapai Co., Arizona.

Elmas Mining - Evaluation of gold prospects in Arizona.

NRD Mining Ltd. - Evaluation of diatomaceous earth property, Arizona.

Maurice Magee

Clients and Consulting Projects
1985-1989

American Barrick Resources Corp. - Gold Reserve Evaluations

Asarco - Copper Reserve Evaluation

Battle Mountain Gold Company - Gold Reserve Evaluations
Project Evaluations

Bond International Gold - Gold Reserve Evaluation

Chase Manhattan Bank - Gold Property Evaluations

Chase AMP Bank - Gold Property Evaluations, Australia

Cyprus Mining - Copper Property Reserve Evaluation

Dallhold Resources Inc. - Gold Reserve Evaluations

Dragon's Gold Inc. - Gold Reserve Evaluation

Freeport McMoRan Gold Company - Gold Reserve Evaluations

Magma Copper Company - Copper Reserve Evaluations

Montana Resources Inc. - Copper Reserve Evaluation

Newmont Gold Company - Gold Reserve Evaluations

Newmont Mining Corp. - Gold & Copper Reserve Evaluations

St. Joe Gold Company - Gold Reserve Evaluations

Office of Technology Assessment - Cold Weather Mining Evaluation

1991 PROGRESS REPORT

PROJECT 315 - DRAGON'S GOLD

MARTHA PROPERTY
JOSEPHINE COUNTY, OREGON

Prepared By:
LAURENCE GABORIT,
Project Geologist

July, 1991

SUMMARY

Cambior drilled a total of 10,038 feet on the Martha Property in 1990-91 to fulfill the requirements for the first year of the Option Agreement with Dragon's Gold. Phase II drilling completed between April and June, 1991, consisted of eleven reverse circulation holes for a total of 6,875 feet. Drilling covered the previously untested portion of the Martha vein structure and explored the strongest geochemical soil anomalies.

Eight holes were drilled on the Martha vein structure. Each hole intersected the structure with results being nil or marginal. Three holes drilled on soil anomalies located north of the Martha intersected several structures which were identified from surface mapping. The values were low, ranging from .015 to .057 opt Au over widths of 15 to 30 feet.

Drilling on the Martha Vein has not been successful in outlining the presence of other ore shoots. Other structures drilled north of the Martha intersected sub-economic gold values. The potential still exists on these structures to find economic mineralization. The property does not appear to have the minimum size requirements of Cambior and, therefore, exploration will not continue on the Martha Property.

LOCATION

The property is located in Section 28, Township 33 South, Range 5 West, Josephine County, Oregon, approximately 30 miles north of Grants Pass (Figures 1 and 2).

DRILLING

The objective of the Phase II drilling program was to test the remaining 1500 foot strike length of the Martha vein structure. The drilling program also tested the mineralized structures identified by the geochemical soil anomalies located north of the Martha.

Between April and June, 1991, Cambior drilled eleven reverse circulation holes for a total of 6,875 feet (Figure 3, Table 1). The drilling contract was awarded to Heller Drilling of Lewiston, Montana. Eight holes tested the Martha Vein intersecting the structure from 200 to 700 feet below surface. The vein varied from several inches to two feet in width, with dips from 44° to 55° to the north, becoming shallower to the east. All assays were nil or marginal (Figure 4). Three holes targeted the geochemical soil anomalies located 2,100 feet north of the Martha. Results were low, ranging from .015 to .057 opt Au over widths of 15 to 30 feet (Table 1 and 2).

MARTHA VEIN STRUCTURE:

Hole MA-4 intersected the Martha vein structure between 725 and 730 feet. The vein is 1.5 to 2 feet wide composed of light grey quartz and carbonate with <1% pyrite. The vein is brecciated containing fragments of bleached diorite/gabbro with 2-3% pyrite. The structure returned a value of .009 opt Au over five feet (two flakes of gold were panned in the field). A second quartz and carbonate vein was intersected at 90-95 feet containing 3-5% pyrite and some fuchsite. The vein assayed .018 opt Au over five feet (one flake of gold was panned in the field). The footwall (95-100 ft.) returned .016 opt Au, however some contamination was present.

Hole MA-6 intersected the Martha Vein between 385 and 390 feet. The vein is approximately one foot wide and is composed of carbonate and quartz with <1% pyrite. The wallrock is highly silicified and bleached, containing <1% pyrite. The structure does not contain any gold. A value of .036 opt Au was obtained from 305-310 feet in a fresh appearing gabbro containing <1% pyrite.

Hole MA-7 intersected the Martha vein structure between 441 and 445 feet. The vein is only two to three inches wide and is composed of light grey quartz and carbonate with 5% pyrite. The footwall, from 445 to 455 feet, contained 20-25% quartz veins with <5% carbonate and 1-2% pyrite. The wallrock was a bleached, silicified aphanitic gabbro. All assays were nil.

Hole MA-8 was the westernmost hole drilled on the Martha structure. Approximately 10% quartz and carbonate veins with hematite alteration were intersected between 355 and 360 feet. It is not clear if this structure represents the Martha vein. All assays were nil.

Hole MA-9 intersected the Martha vein structure in the interval from 430 to 435 feet. The vein is approximately two feet wide and is composed of quartz with 10-20% carbonate and 2% pyrite and trace fuchsite. All assays were nil.

In hole MA-10 the Martha vein structure was difficult to identify. It is believed to have been intersected between 460.5 and 462 feet. It consists of carbonate and quartz with <1% pyrite, trace hematite and no gold. From 255 to 260 feet, an assay of .029 opt Au was obtained in a sample containing 1-2% of both carbonate and quartz veinlets. Other veins were intersected from 485 to 500 feet consisting of 10-20% carbonate and quartz veins with 1-4% pyrite. The gold values obtained were less than 64 ppb. A zone of silicified, bleached gabbro with 1-3% pyrite and 5-10% brecciated carbonate veins with minor quartz was intersected from 512 to 530 feet. The interval from 515 to 520 feet assayed .046 opt Au. Another zone of 70-80% veins of carbonate and minor quartz veins containing fragments of silicified and bleached gabbro with 2-3% pyrite was intersected from 530 to 550 feet. The best interval returned .022 opt Au from 540 to 545 feet.

Hole MA-11 intersected a series of carbonate and quartz veins from 165 to 185 feet containing hematite and trace pyrite. No gold values were obtained from that structure. The Martha structure is believed to have been intersected between 300 and 305 feet at the second level. The structure is about one foot wide and composed of carbonate veins with minor quartz. The wallrock is bleached and slightly silicified with <1% pyrite and a slightly hematitic alteration. All assays were nil.

Hole MA-15 intersected the Martha structure between 290 and 295 feet. The structure was only several inches wide and composed of quartz and carbonate with traces of pyrite. The wallrock consisted of bleached and silicified gabbro. All assays were nil.

GEOCHEMICAL SOIL ANOMALIES:

Three holes totaling 2,125 feet were drilled on geochemical soil anomalies located 2,100 feet north of the Martha vein structure. Two holes (MA-12 and MA-14) tested a geochemical soil anomaly of 47-437 ppb Au (Figure 5b, No. 1). The area is characterized by the presence of two main structures trending roughly east-west. Their traces are followed by caved drifts and stopes over a strike length of +300 feet. One hole (MA-13) tested a geochemical soil anomaly of 26-404 ppb Au where five mineralized structures have been identified (Figure 5b, No. 2).

Hole MA-12 tested a geochemical soil anomaly located around two caved adits and several small prospects. The first structure was intersected from 319 to 325.5 feet and consisted of 85-90% whitish grey quartz vein with 2-3% pyrite and trace amounts of fuchsite. The footwall contained quartz vein stockworks (10-15%) with 1-3% pyrite. Assays returned 30 feet at .015 opt Au from 315 to 345 feet (Table 2). An identical quartz vein containing no gold was intersected from 350 to 358 feet. The second major structure was intersected from 515 to 520 feet. The sample consisted of 40% veins of quartz and carbonate with <2% pyrite hosted in an andesite with 3-4% pyrite. The structure returned values varying from .024 to .130 opt Au. The footwall contained 2-3% carbonate and quartz veins. A value of .036 opt Au was obtained from 515 to 530 feet (Table 2).

Hole MA-13 tested a geochemical soil anomaly located around a 160 foot adit, several caved adits and prospects. A zone of 15-20% vein material of quartz and carbonate with traces of pyrite was intersected from 45 to 55 feet. The next twenty feet contained 2-5% veins of quartz and carbonate with traces of pyrite. This zone of quartz vein stockworks returned .022 opt Au over 25 feet (from 50 to 75 feet, Table 2). This structure is interpreted to represent the strike extension of the first structure intersected in hole MA-12. At the beginning of the hole a value of .031 opt Au was obtained in an oxidized andesite from 30 to 35 feet. The downdip projection of the structure exposed in a 160 foot adit was intersected between 410 and 415 feet. It yielded .011 opt Au over five feet. The second important structure intersected in hole MA-12 was not found in this hole.

Hole MA-14 drilled between holes MA-12 and MA-13 intersected both structures found in MA-12. The first one was encountered between 145 and 150 feet. The interval consisted of 50% quartz veins with a slight chlorite and epidote alteration and 3-5% pyrite. The wallrock was a silicified andesite. The structure assayed .059 opt Au over five feet. The footwall contained 2% quartz veins and returned .034 opt Au over five feet (Table 2). The second structure represented by quartz vein stockworks returned 20 feet of .057 opt Au (Table 2). This zone, intersected from 410 to 430 feet, was composed of 3-10% quartz veins with minor carbonate and 1-2% pyrite. One sample returned up to .134 opt Au over five feet. This structure correlates with the second structure intersected in hole MA-12.

Approximately 150 feet west of collar MA-13, two road cut samples returned .045 and .046 opt Au over a ten foot interval. The first structure can be traced for at least 550 feet and may be extended to 700 feet if projected to the road cut samples. The second structure was intersected only in MA-12 and MA-14 and can be followed over a strike length of 300 feet.

Geological logs and drilling assays are found in Appendix 2 and 3 respectively. Drilling sections at 1":200' and 1":50' are located in Appendix 1, Pocket A and Pocket B.

Table 1: Phase II Drilling Results

HOLE	LOCATION	BEARING	ANGLE	DEPTH	SIGNIFICANT ASSAYS (opt Au)
MA-4	9+50W/12+80N	204°	-55°	765′	90-100′ = 10′ @ .017
MA-6	3+35W/11+65N	204°	-55°	590′	305-310′ = 5′ @ .027
MA-7	3+00E/12+15N	204°	-70°	800′	Nil.
MA-8	18+80W/9+50N	155°	-50°	500′	Nil.
MA-9	9+00E/15+00N	204°	-45°	580′	Nil.
MA-10	12+00E/16+90N	204°	-54°	680′	255-260′ = 5′ @ .029 515-520′ = 5′ @ .046 540-545′ = 5′ @ .022
MA-11	14+60E/16+15N	204°	-53°	410′	Nil.
MA-12	2+50W/29+00N	170°	-45°	730′	315-345′= 30′@ .015 515-530′= 15′@ .036
MA-13	3+95W/24+05N	204°	-45°	905′	30-35′ = 5′ @ .031 50-75′ = 25′ @ .022
MA-14	4+15W/26+40N	160°	-60°	490′	145-160′ = 15′ @ .033 410-430′ = 20′ @ .057
MA-15	12+00E/13+00N	204°	-45°	425′	Nil.
			Total Footage	6875′	

Table 2: Mineralized Intersections

HOLE NO.	FEET	STRUCTURE I opt Au		FEET	STRUCTURE II opt Au	
MA-12	315 - 320 320 - 325 325 - 330 330 - 335 335 - 340 340 - 345	.028 .020 .005 .007 .011 .018	30′ @ .015 opt	515 - 520 520 - 525 525 - 530	.077 .024 .006	15′ @ .036 opt
MA-13	50 - 55 55 - 60 60 - 65 65 - 70 70 - 75	.025 .024 ---- .053 .007	25′ @ .022 opt			
MA-14	145 - 150 150 - 155 155 - 160	.059 .034 .006	15′ @ .033 opt	410 - 415 415 - 420 420 - 425 425 - 430	.062 .134 .018 .014	20′ @ .057 opt

ROCK CHIP SAMPLING

In October 1990, Dragon's Gold exposed the Martha vein structure on the east side of St. Peters Mountain where a caved adit was found. The vein is exposed over a strike length of 20 feet and ranges from less than 1 inch to three inches wide. The vein strikes N70°E and dips 25-35° to the north. A channel sample of two to three feet was taken every five feet along a strike length of 15 feet. The best assay yielded .064 opt Au over three feet.

During road construction to hole MA-15, a quartz vein ranging from one inch to one foot in width was exposed over ten feet of strike length. The vein strikes N85°E and has a shallow dip to the north. The vein pinches and swells and could be faulted off to the west. Two grab samples of quartz vein material were assayed and returned 267 and 90 ppb Au.

The Geology, Land Status, Assay and Sample Location maps at 1":200' have been modified. Amended copies are found in the 1990 Progress Report.

DISCUSSION AND CONCLUSIONS

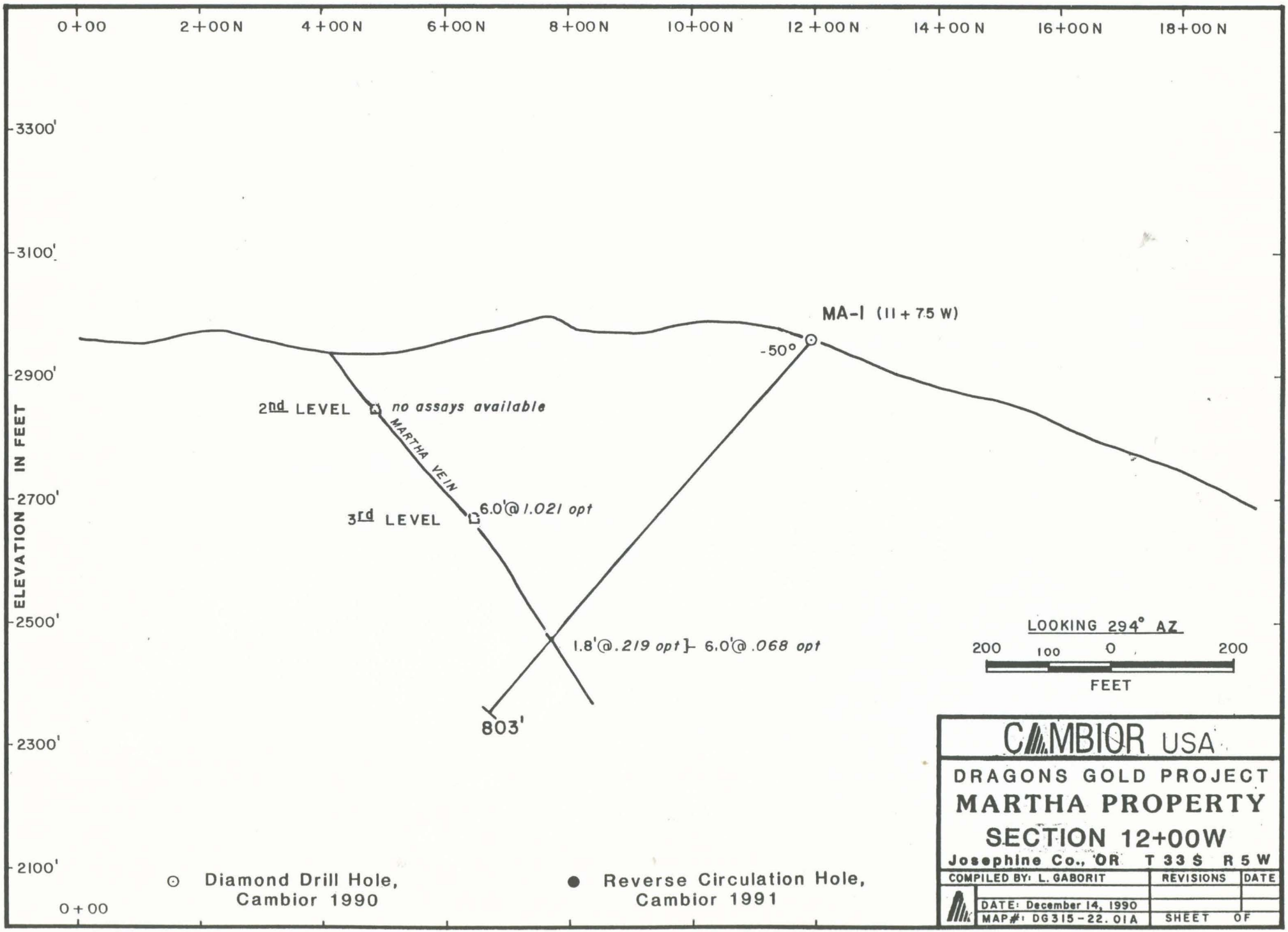
Cambior drilled a total of 10,038 feet on the Martha Property in 1990-91. A total of twelve holes were drilled on the Martha vein structure covering a strike length of 3,200 feet. The best intercept was .699 opt Au over six feet in hole MA-2. All of the other holes intersected the Martha vein with nil or sub-ore grade gold values. Drilling has indicated limited vertical and lateral continuity of the ore shoot. No other ore shoots were identified from the drilling.

Drilling on the best defined geochemical soil anomalies resulted in identifying two main mineralized vein structures. These structures contained quartz vein stockwork in the footwall. Gold values are too low (ranging from .015 to .057 opt Au over widths of 15 to 30 feet) to necessitate further drilling by Cambior.

On the east side of St. Peters Mountain the Martha vein is exposed over a strike length of 20 feet. The best assay returned .064 opt Au over three feet. Dragon's Gold exposed the vein approximately 15 feet downdip from where it is presently exposed. At this location the vein was five feet wide and returned values between .184 and .497 opt Au over five feet. This pinching and swelling over short distances is also observed in the underground workings on the west side of St. Peters Mountain.

While Cambior's drilling has confirmed the existence of the Martha vein over a strike length of 3200 feet, it has failed to outline the minimum size requirement of the company. Other ore shoots may exist on the Martha but our drilling has shown that

they will be of limited strike length (<300 feet). The drilling program was successful in locating mineralized structures north of the Martha. While our drilling found sub-economic grade material on these structures, the structures still have the potential to host ore grade material over mineable widths. Further exploration on these structures may add ounces to the current small reserves. Any further work on the property should focus on the down-dip extension of the known ore shoot on the Martha vein and further exploration along the Martha vein system. Due to the limited reserves on the Martha, Cambior is terminating its exploration activities.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12+00N
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16+00N
18+00N
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3100'
2900'
2700'
2500'
2300'
2100'
ELEVATION IN FEET
MA-1 (11+75 W)
-50°
2nd LEVEL
no assays available
MARTHA VEIN
3rd LEVEL
6.0'@1.021 opt
1.8'@.219 opt
6.0'@.068 opt
803'
LOOKING 294° AZ
200 100 0 200
FEET
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● Reverse Circulation Hole, Cambior 1991
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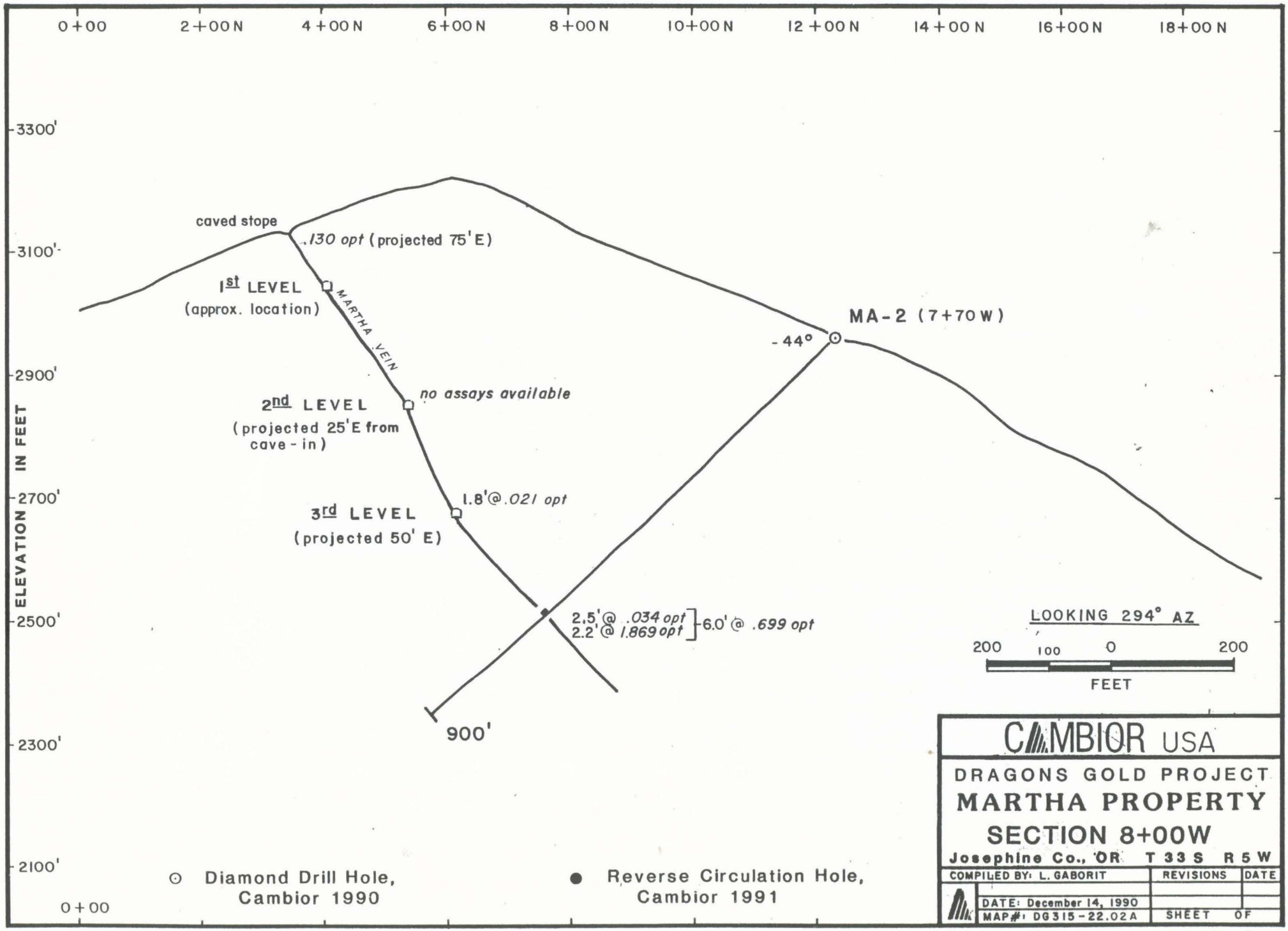

CAMBIOR USA

DRAGONS GOLD PROJECT

MARTHA PROPERTY

SECTION 8+00W

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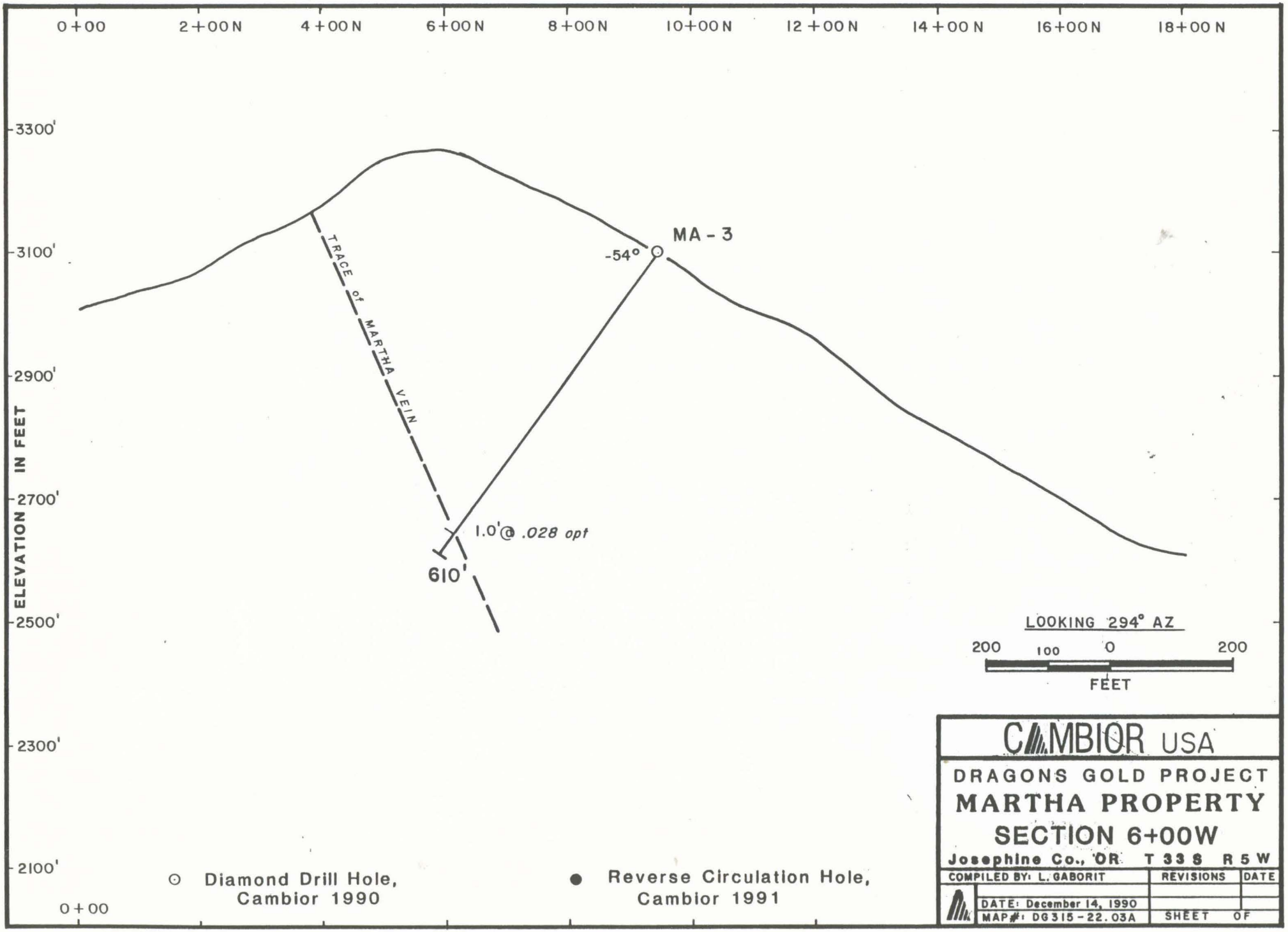
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2700'
2500'
2300'
2100'
ELEVATION IN FEET
TRACE of MARTHA VEIN
MA - 3
-54°
1.0'@ .028 opt
610'
LOOKING 294° AZ
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
0+00
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DRAGONS GOLD PROJECT
MARTHA PROPERTY
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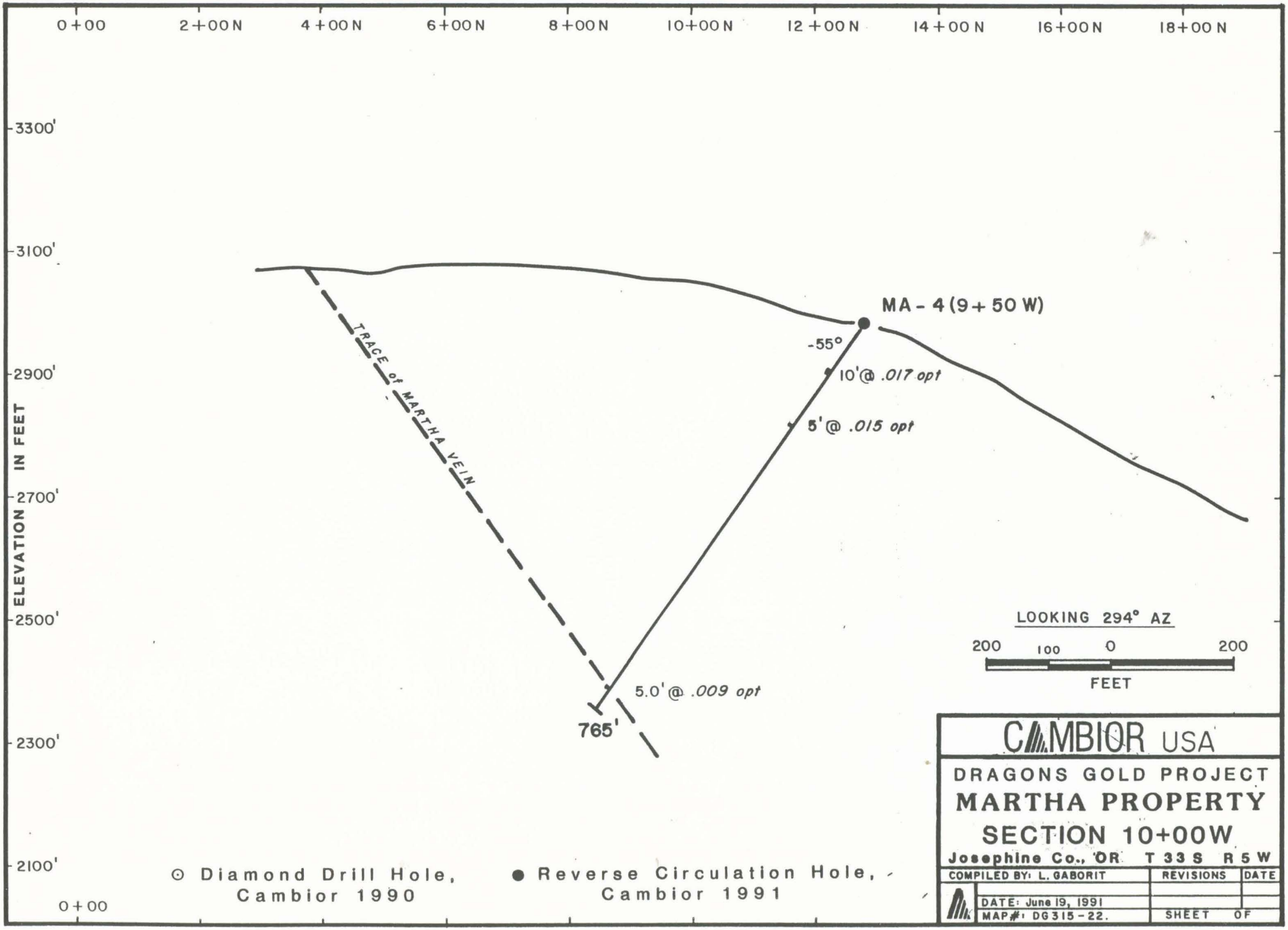
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3100'
2900'
2700'
2500'
2300'
2100'
ELEVATION IN FEET
TRACE of MARTHA VEIN
MA - 4 (9+50 W)
-55°
10'@ .017 opt
5'@ .015 opt
5.0'@ .009 opt
765'
LOOKING 294° AZ
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
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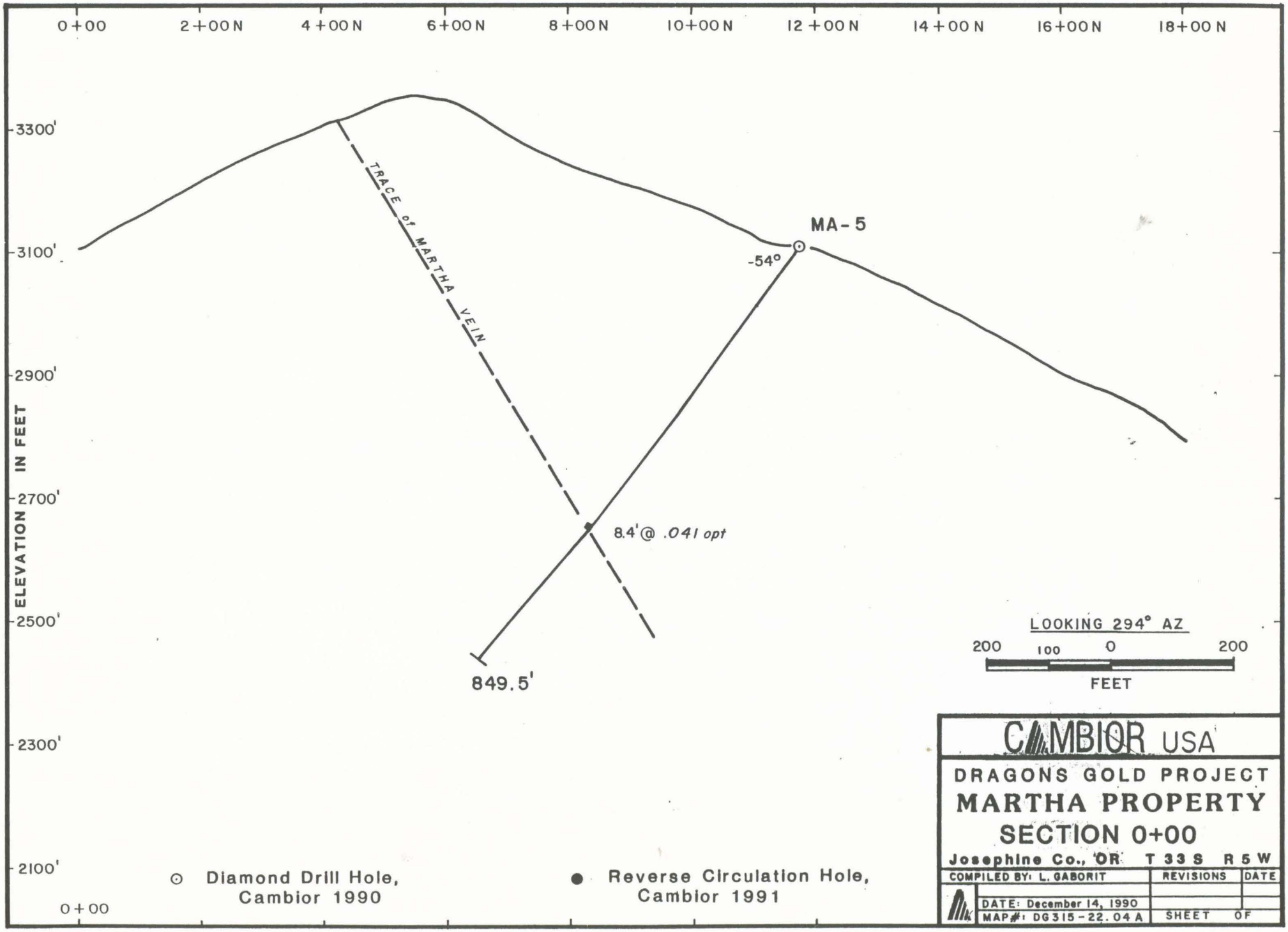
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3300'
3100'
2900'
2700'
2500'
2300'
2100'
ELEVATION IN FEET
TRACE of MARTHA VEIN
MA-5
-54°
8.4'@ .041 opt
849.5'
LOOKING 294° AZ
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
0+00
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DRAGONS GOLD PROJECT
MARTHA PROPERTY
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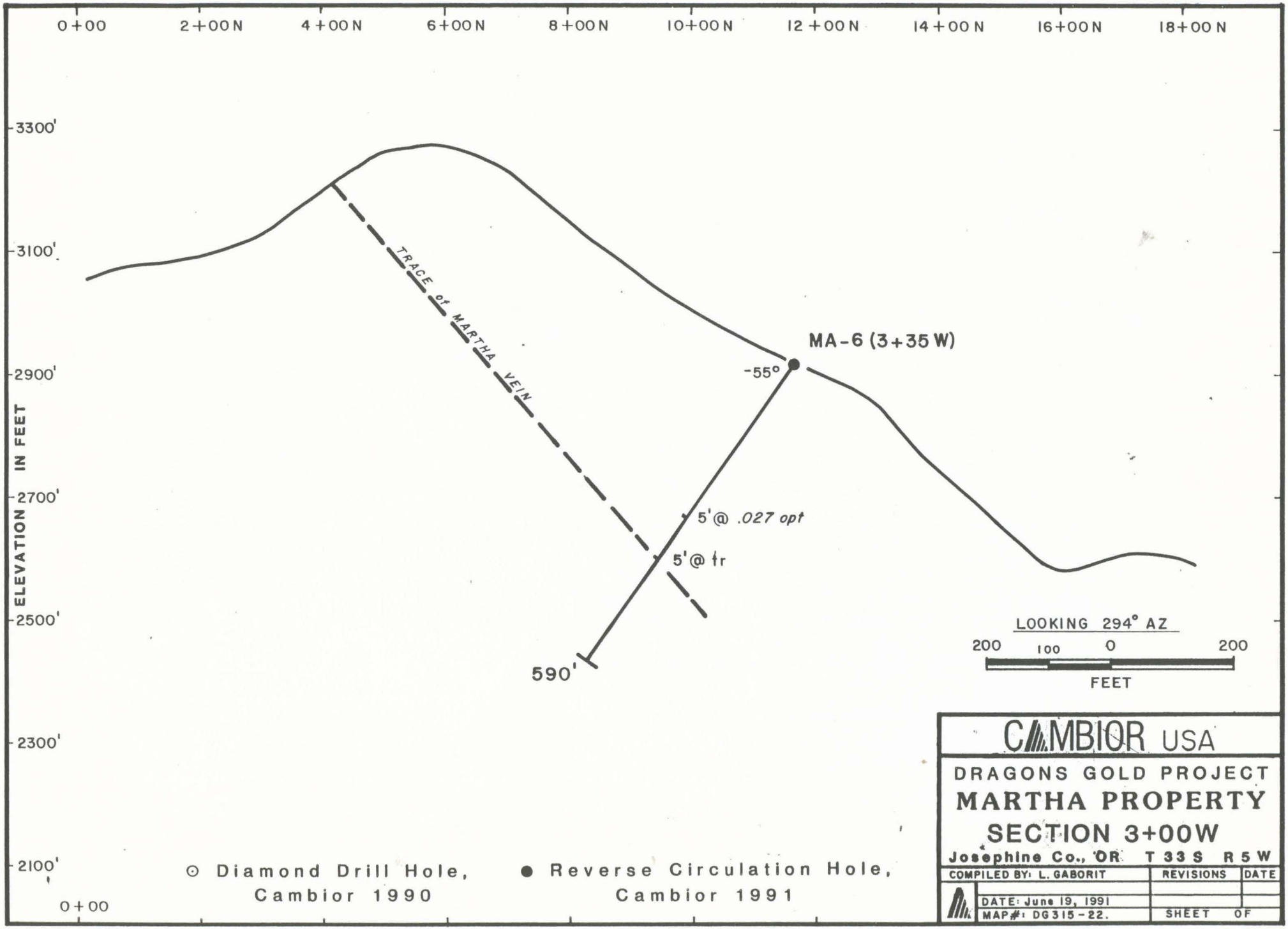
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3100'
2900'
2700'
2500'
2300'
2100'
ELEVATION IN FEET
TRACE of MARTHA VEIN
MA-6 (3+35 W)
-55°
5'@ .027 opt
5'@ tr
590'
LOOKING 294° AZ
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
0+00
CAMBIOR USA
DRAGONS GOLD PROJECT
MARTHA PROPERTY
SECTION 3+00W
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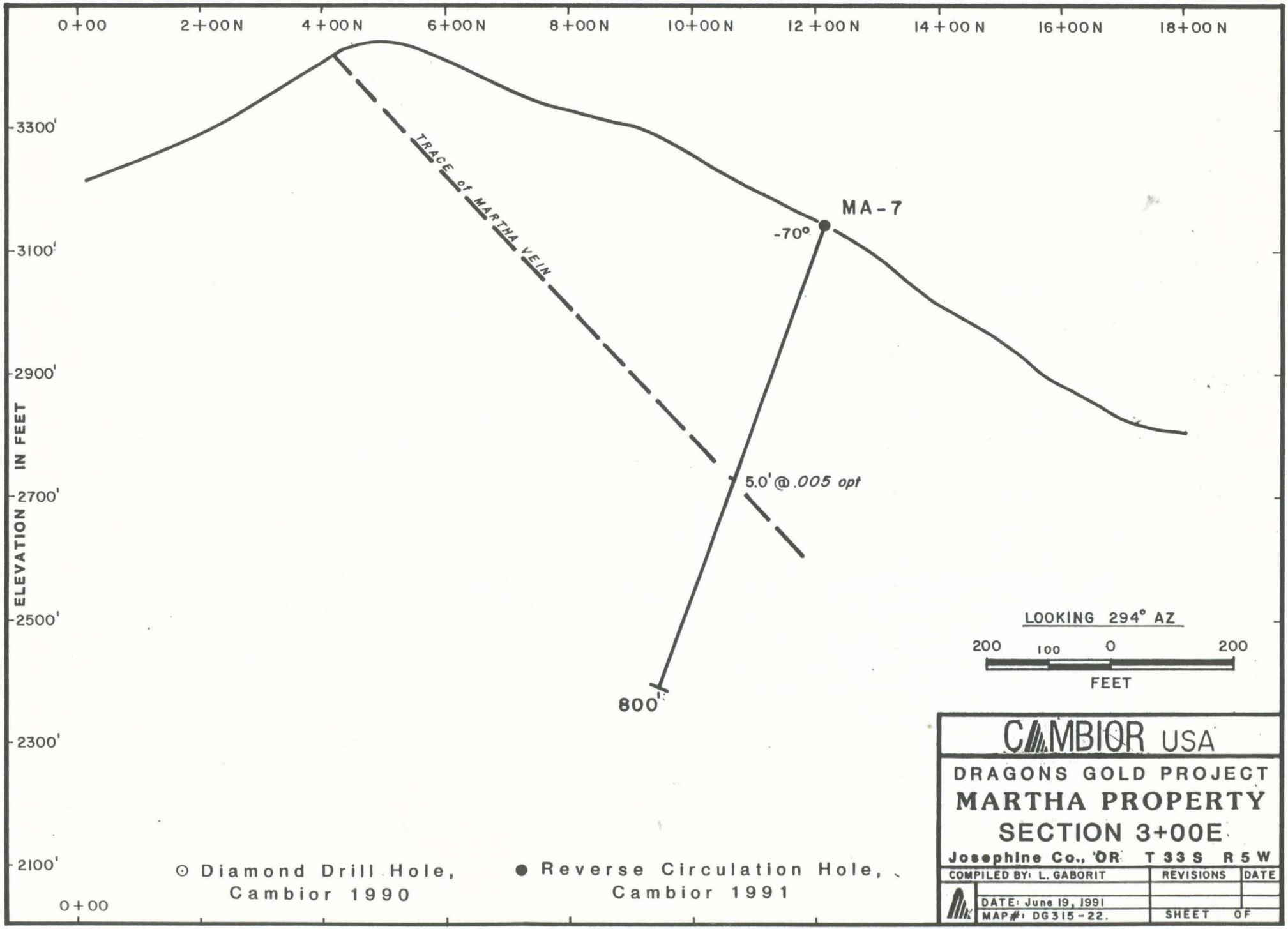
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3100'
2900'
2700'
2500'
2300'
2100'
ELEVATION IN FEET
TRACE of MARTHA VEIN
MA-7
-70°
5.0' @ .005 opt
800'
LOOKING 294° AZ
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
0+00
CAMBIOR USA
DRAGONS GOLD PROJECT
MARTHA PROPERTY
SECTION 3+00E
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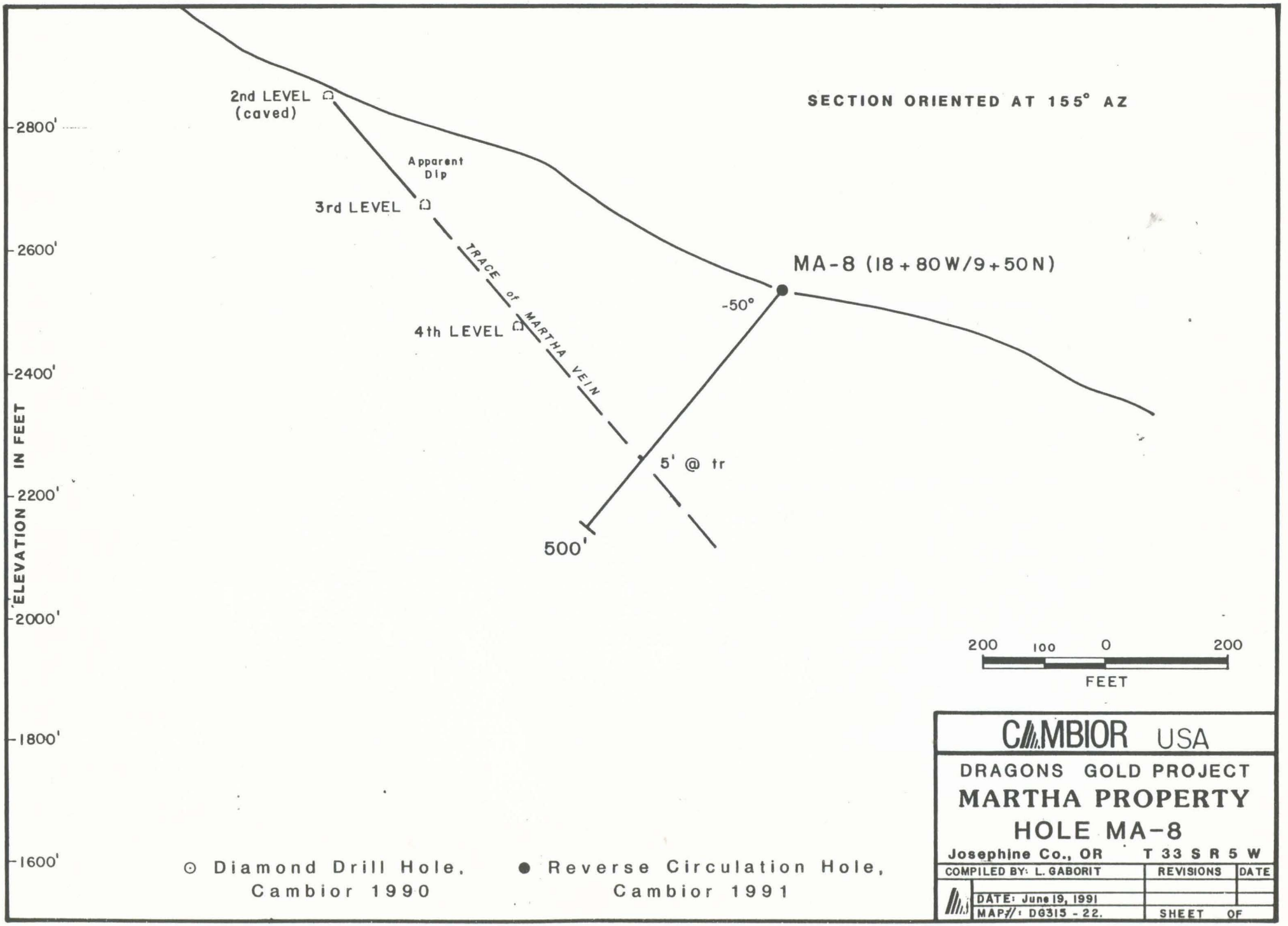
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(caved)
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Dip
3rd LEVEL
TRACE of MARTHA VEIN
4th LEVEL
MA-8 (18+80W/9+50N)
-50°
5' @ tr
500'
2800'
2600'
2400'
2200'
2000'
1800'
1600'
ELEVATION IN FEET
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
CAMBIOR USA
DRAGONS GOLD PROJECT
MARTHA PROPERTY
HOLE MA-8
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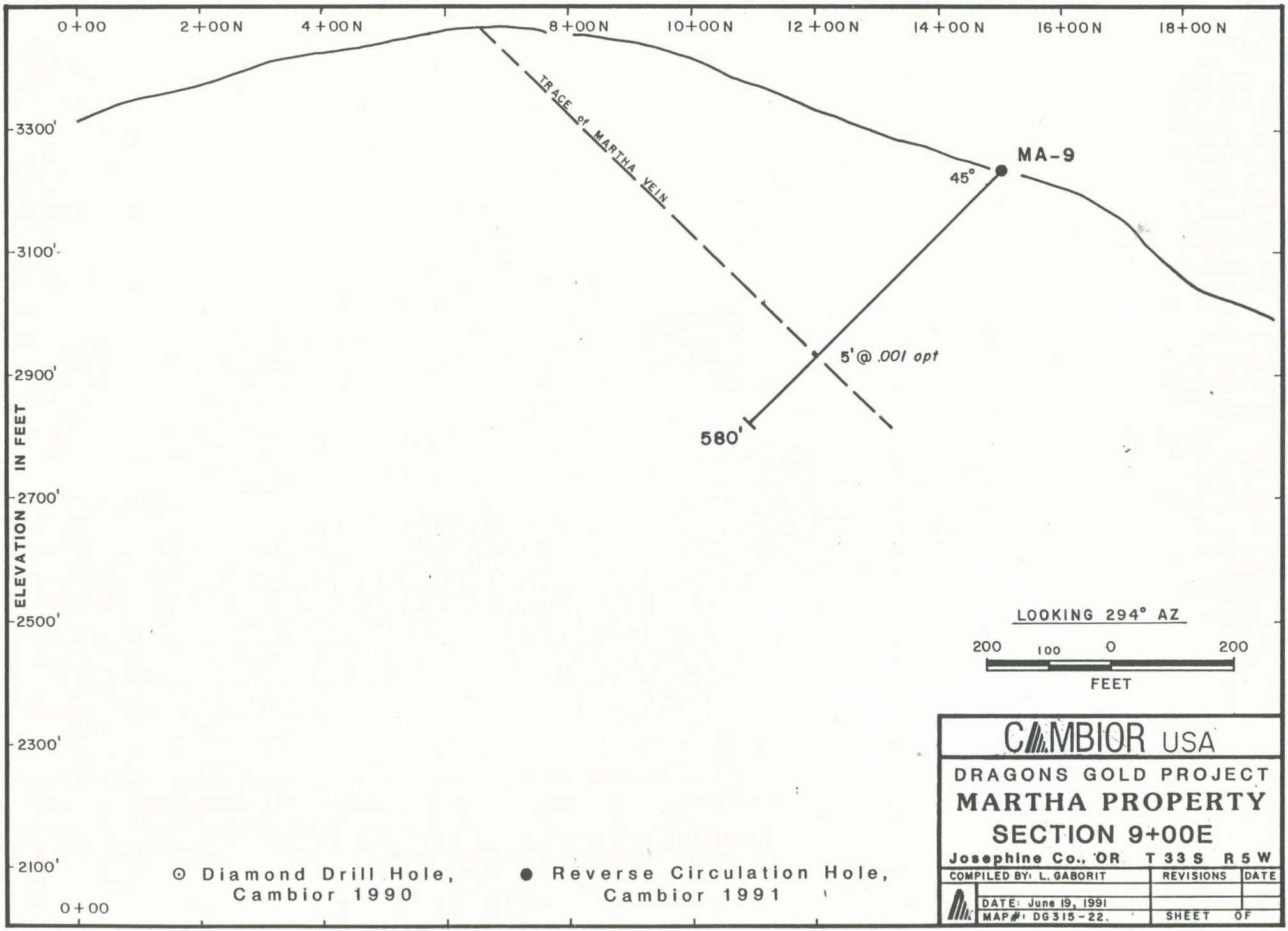

CAMBIOR USA

DRAGONS GOLD PROJECT

MARTHA PROPERTY

SECTION 9+00E

Josephine Co., OR T 33 S R 5 W

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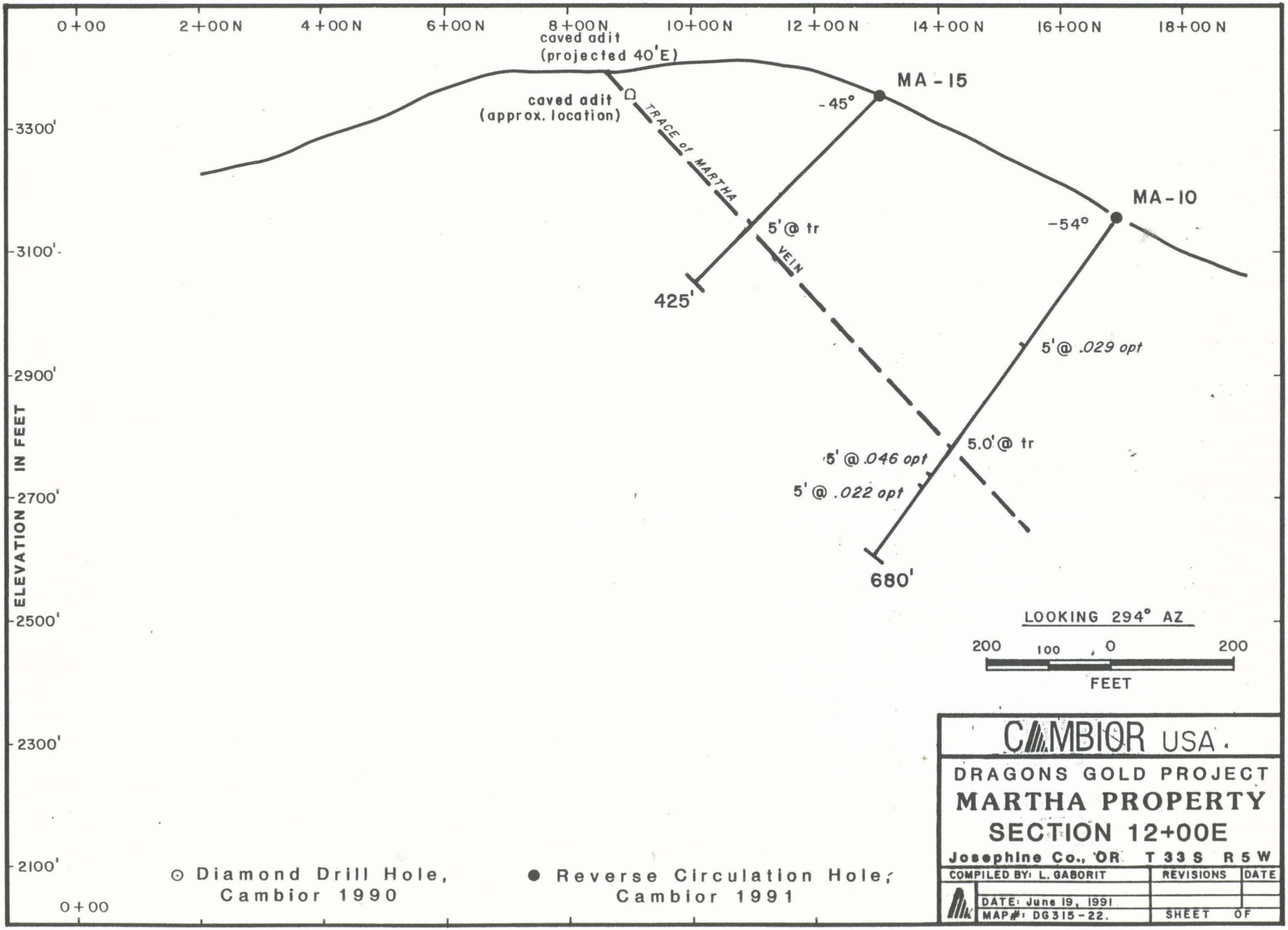
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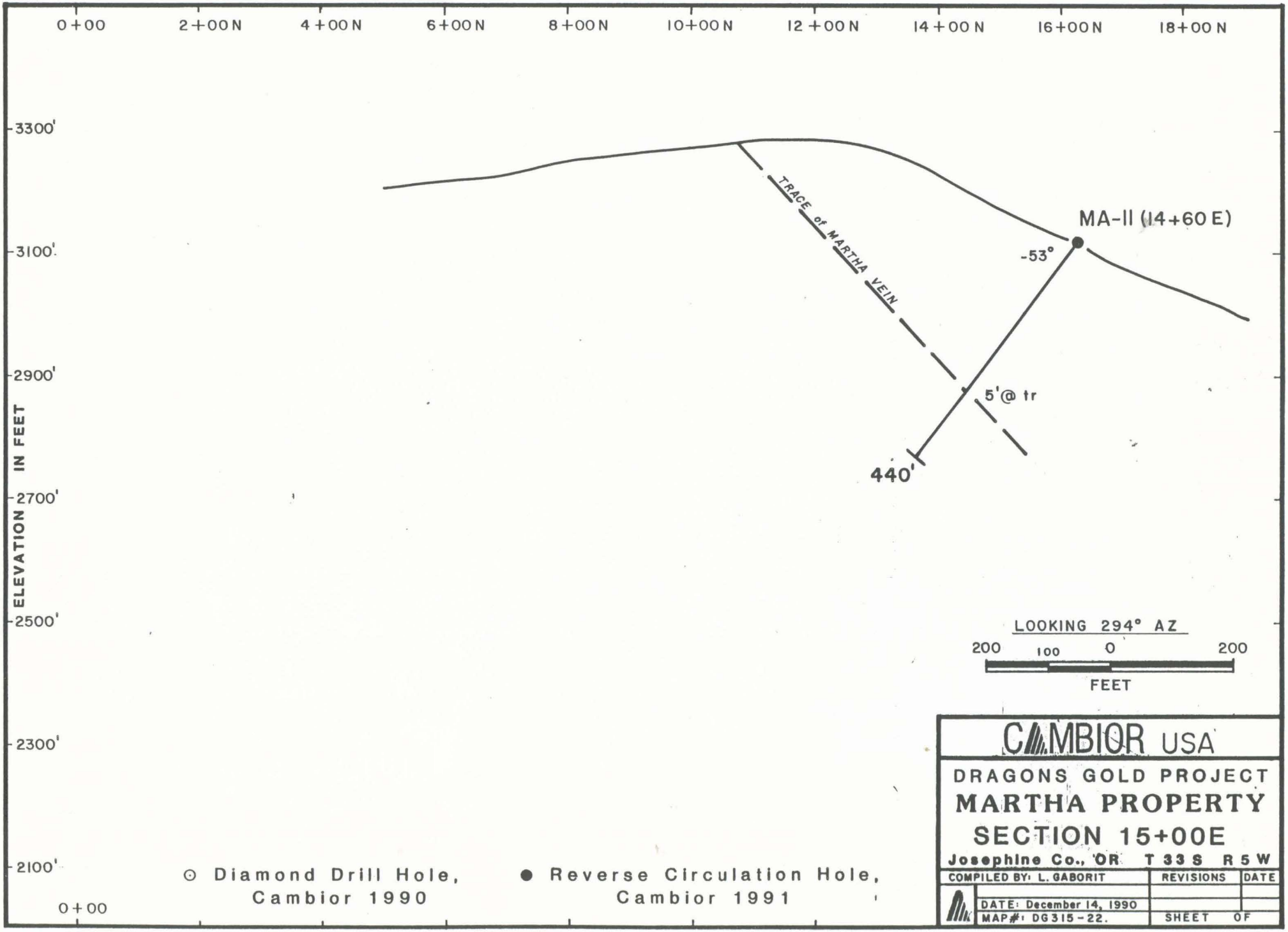
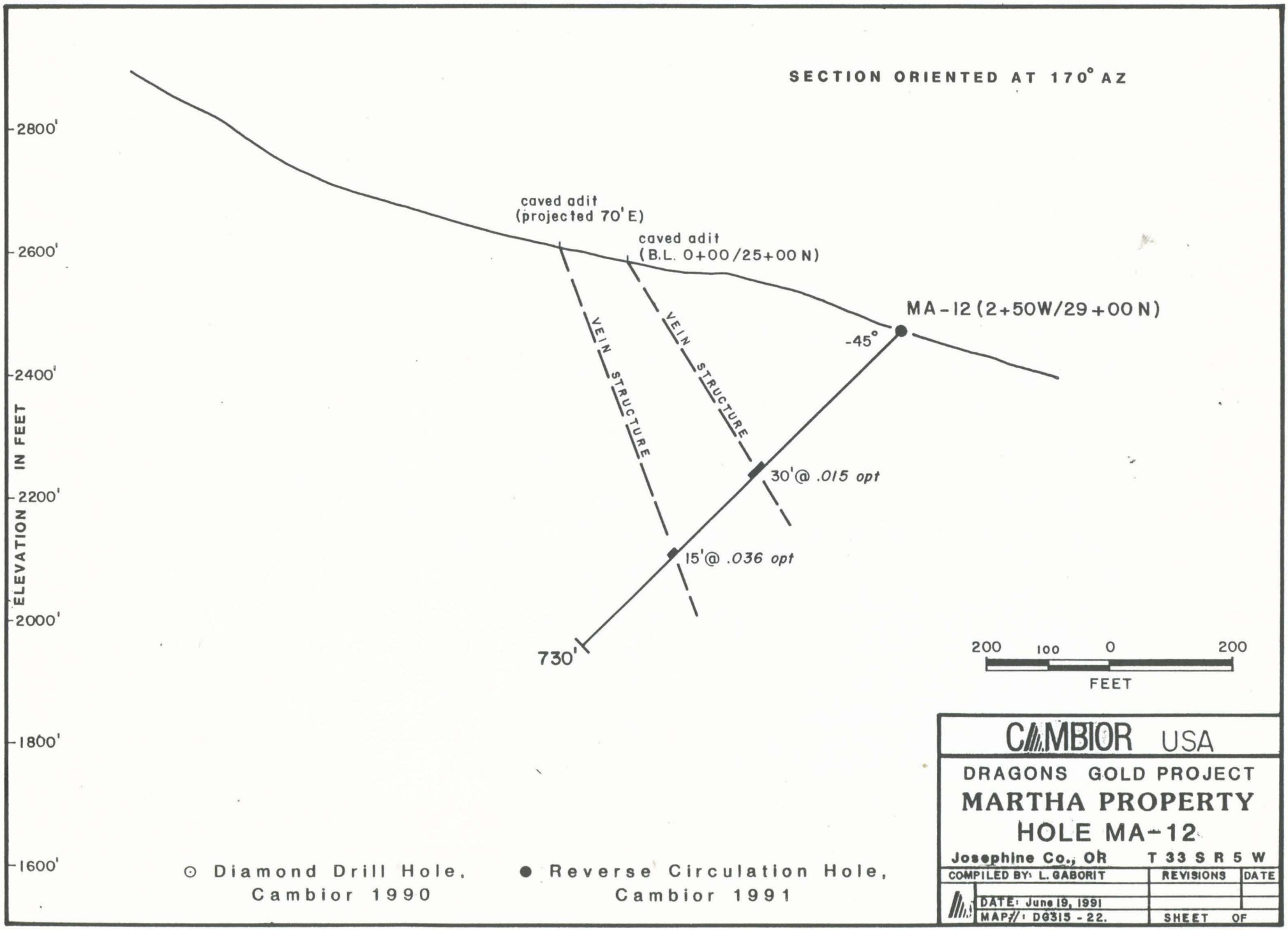
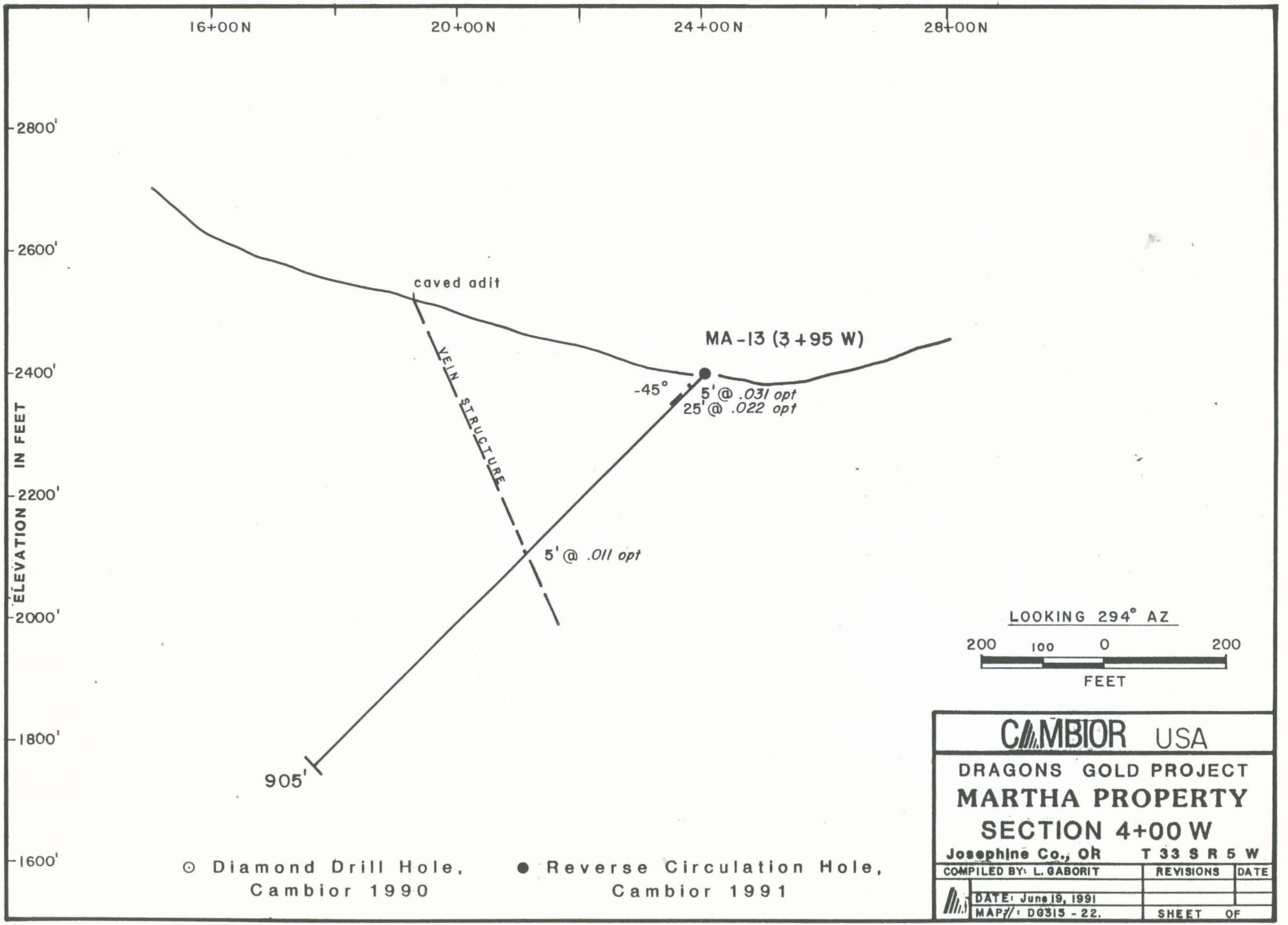
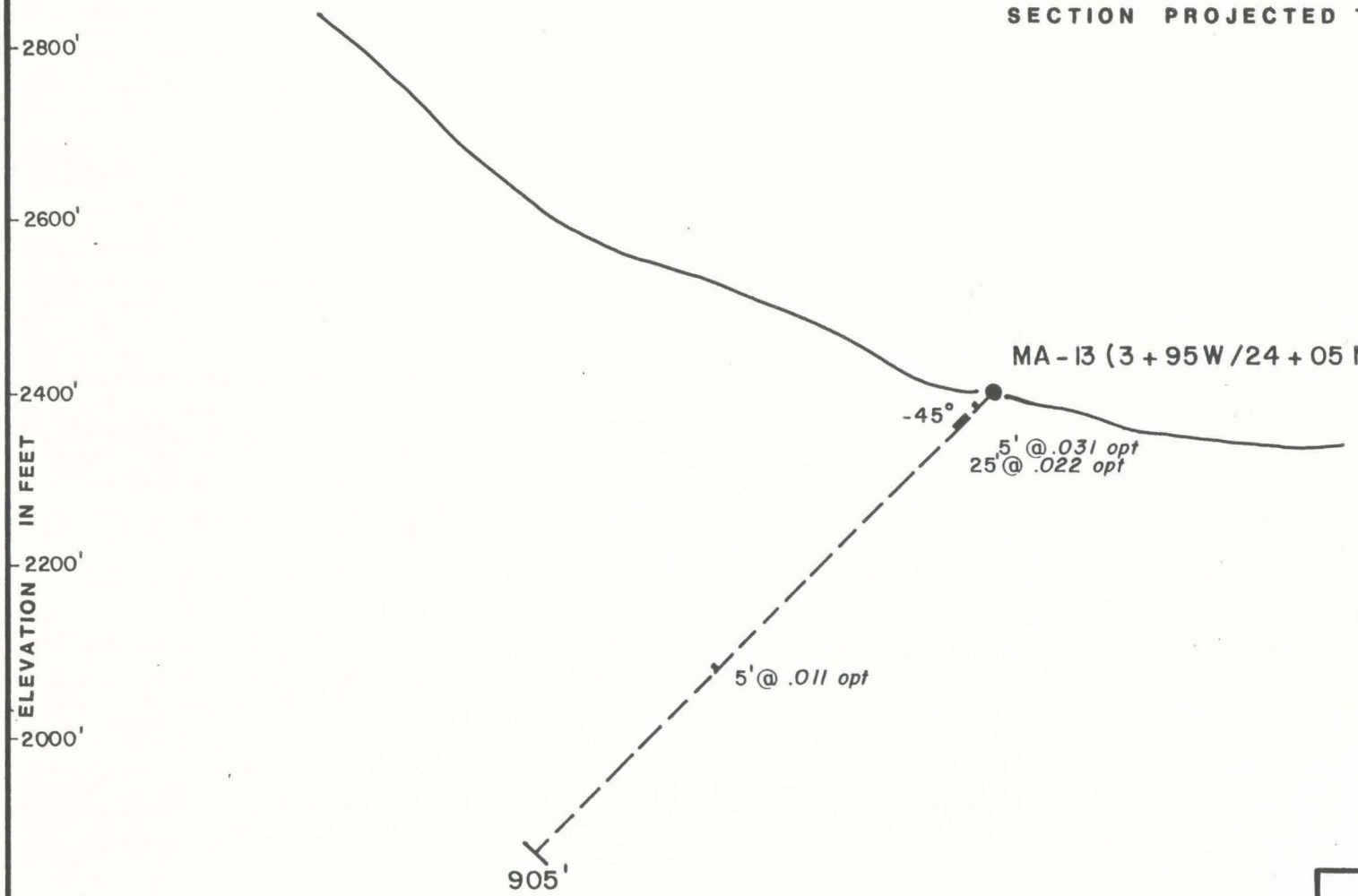
caved adit
(projected 40'E)
caved adit
(approx. location)
TRACE of MARTHA
MA-15
-45°
MA-10
-54°
5'@ tr
VEIN
425'
5'@ .029 opt
5.0'@ tr
5'@ .046 opt
5'@ .022 opt
680'
3300'
3100'
2900'
2700'
2500'
2300'
2100'
ELEVATION IN FEET
LOOKING 294° AZ
200
100
0
200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
0+00
CAMBIOR USA
DRAGONS GOLD PROJECT
MARTHA PROPERTY
SECTION 12+00E
Josephine Co., OR T 33 S R 5 W
COMPILED BY: L. GABORIT
REVISIONS
DATE
DATE: June 19, 1991
MAP#: DG315-22.
SHEET OF


0+00
2+00N
4+00N
6+00N
8+00N
10+00N
12+00N
14+00N
16+00N
18+00N
3300'
3100'
2900'
2700'
2500'
2300'
2100'
ELEVATION IN FEET
TRACE of MARTHA VEIN
MA-II (14+60 E)
-53°
5'@ tr
440'
LOOKING 294° AZ
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
0+00
CAMBIOR USA
DRAGONS GOLD PROJECT
MARTHA PROPERTY
SECTION 15+00E
Josephine Co., OR T 33 S R 5 W
COMPILED BY: L. GABORIT
REVISIONS
DATE
DATE: December 14, 1990
MAP#: DG315-22.
SHEET OF


SECTION ORIENTED AT 170° AZ
2800'
2600'
2400'
2200'
2000'
1800'
1600'
ELEVATION IN FEET
caved adit
(projected 70' E)
caved adit
(B.L. 0+00/25+00 N)
MA-12 (2+50W/29+00 N)
-45°
VEIN STRUCTURE
VEIN STRUCTURE
30'@ .015 opt
15'@ .036 opt
730'
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
CAMBIOR USA
DRAGONS GOLD PROJECT
MARTHA PROPERTY
HOLE MA-12
Josephine Co., OR
T 33 S R 5 W
COMPILED BY: L. GABORIT
REVISIONS
DATE
DATE: June 19, 1991
MAP #: DG315 - 22.
SHEET OF


16+00N
20+00N
24+00N
28+00N
2800'
2600'
2400'
2200'
2000'
1800'
1600'
ELEVATION IN FEET
caved adit
MA-13 (3+95 W)
VEIN STRUCTURE
-45°
5'@ .031 opt
25'@ .022 opt
5'@ .011 opt
905'
LOOKING 294° AZ
200 100 0 200
FEET
⊙ Diamond Drill Hole, Cambior 1990
● Reverse Circulation Hole, Cambior 1991
CAMBIOR USA
DRAGONS GOLD PROJECT
MARTHA PROPERTY
SECTION 4+00 W
Josephine Co., OR T 33 S R 5 W
COMPILED BY: L. GABORIT
REVISIONS
DATE
DATE: June 19, 1991
MAP#: DG315 - 22.
SHEET OF

SECTION PROJECTED TO 170° AZ



200 100 0 200
FEET

⊙ Diamond Drill Hole, Cambior 1990

● Reverse Circulation Hole, Cambior 1991

CAMBIOR USA

DRAGONS GOLD PROJECT

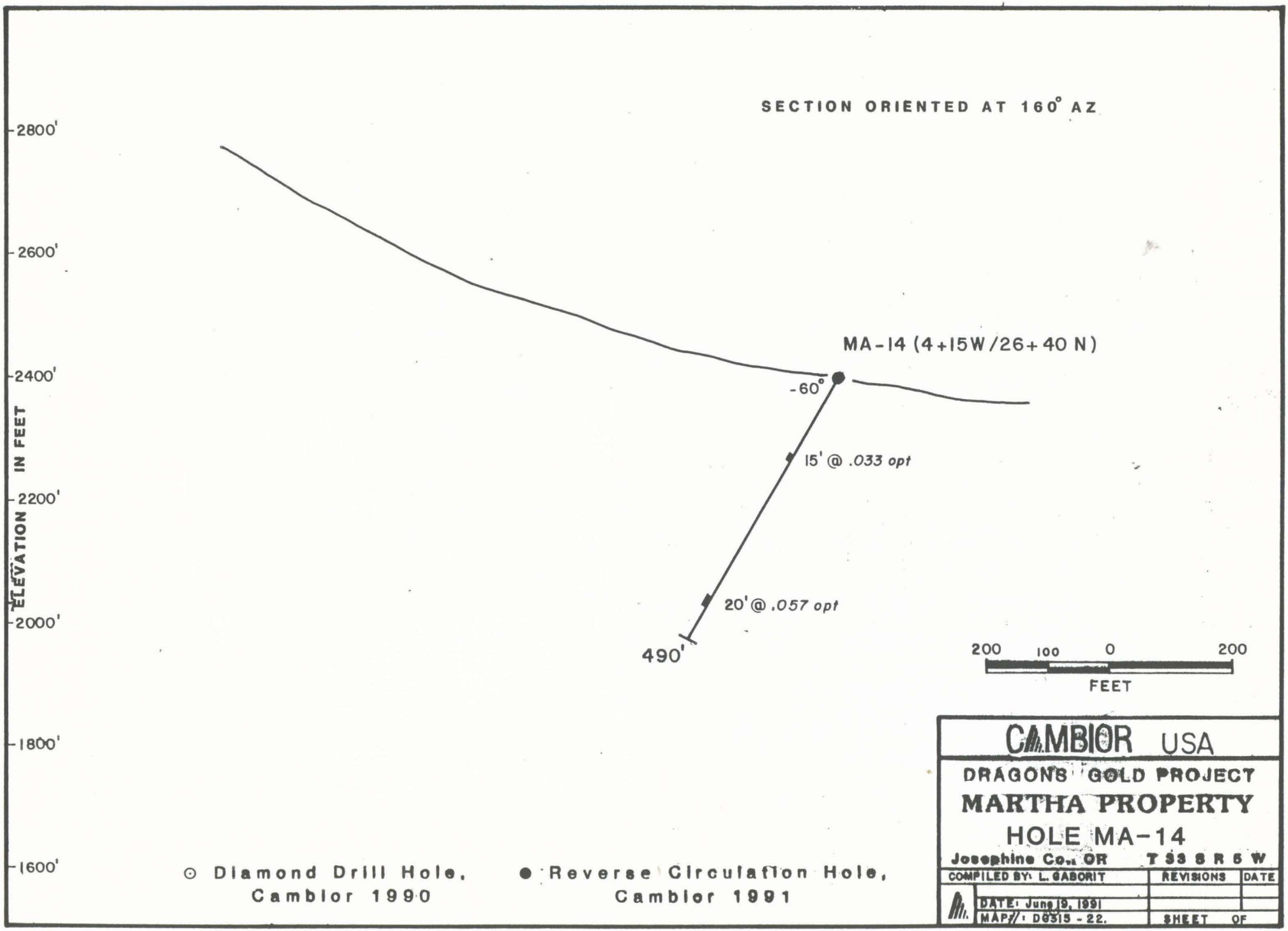
MARTHA PROPERTY

HOLE MA-13

Josephine Co., OR T 33 S R 5 W

COMPILED BY: L. GABORIT	REVISIONS	DATE
DATE: June 19, 1991		
MAP#: DG315 - 22.	SHEET OF	

SECTION ORIENTED AT 160° AZ



⊙ Diamond Drill Hole, Cambior 1990

● Reverse Circulation Hole, Cambior 1991

CAMBIOR USA

DRAGONS GOLD PROJECT

MARTHA PROPERTY

HOLE MA-14

Josephine Co., OR T 33 S R 6 W

COMPILED BY: L. GABORIT	REVISIONS	DATE
DATE: June 19, 1991		
MAP#: D6315 - 22.	SHEET OF	

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-4 Zone # : MARTHA Contractor : HELLER DRILLING Date started : 5/ 2/1991
County : JOSEPHINE Date completed: 5/ 7/1991
Township: 33S Range: 5W Section: 10+00W Claim # :SP-5

Level : Location :

Collar coordinate : Line : 9+50 W Northing: 0.00 N Azimuth: 204° 0′ 0"
Station: 12+80 N Easting : 0.00 E Dip : 55° 0′ 0"
Reference frame : Elevation: 2982.00 Length : 765.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 55 ft
0-190 ft- Dry

Water depth: Plugged: YES
Cimented : YES Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 5/ 5/1991 Hole # : MA-4

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
0.00	360.00	VERY FINE GRAINED BASALT Medium to dark greenish grey, very fine grained, local aphanitic phases, homogeneous, <1% carb+qtz veinlets, sometimes looks like a very fine grained gabbro.									
		0.00- 40.00	22445	0.00	5.00	5.00	<5				
		OXIDIZED VERY FINE GRAINED BASALT	22446	5.00	10.00	5.00	<5				
		Weak to moderate oxidation, strong fracturing.	22447	10.00	15.00	5.00	10				
			22448	15.00	20.00	5.00	<5				
			22449	20.00	25.00	5.00	<5				
			22450	25.00	30.00	5.00	NS				
			22451	30.00	35.00	5.00	7				
			22452	35.00	40.00	5.00	6				
			22453	40.00	45.00	5.00	NS				
			22454	45.00	50.00	5.00	NS				
			22455	50.00	55.00	5.00	NS				
			22456	55.00	60.00	5.00	NS				
			22457	60.00	65.00	5.00	NS				
			22458	65.00	70.00	5.00	NS				
			22459	70.00	75.00	5.00	<5				
			22460	75.00	80.00	5.00	7				
			22461	80.00	85.00	5.00	10				
		85.00- 90.00									
		1-2% Quartz+Carbonate Veins	22462	85.00	90.00	5.00	86	.002			
		Moderate bleaching of wallrock, 1-2% qtz+carb veinlets, tr Py.									
		90.00- 95.00	22463	90.00	95.00	5.00	624	.018			
		30% Quartz+Carbonate Veins									
		Qtz+carb veins containing bleached and silicified fragments of very fine grained basalt (?), minor oxidation, tr fuchsite, 3-5% Py, V.G. attached to a piece of qtz (panning).									
		95.00- 100.00	22464	95.00	100.00	5.00	548	.016			
		Some contamination in the sample.									
			22465	100.00	105.00	5.00	37	.001			
		105.00- 110.00	22466	105.00	110.00	5.00	68	.002			
		EPIDOTIZED VERY FINE GRAINED BASALT									
		Weak epidotization.									
		110.00- 115.00	22467	110.00	115.00	5.00	25				
		1-2% Quartz+Carbonate Veinlets									
		Very weak epidotization, local									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		bleaching and silicification, tr Py.									
			22468	115.00	120.00	5.00	22				
			22469	120.00	125.00	5.00	7				
		125.00- 130.00	22470	125.00	130.00	5.00	7				
		EPIDOTIZED VERY FINE GRAINED BASALT Weak to moderate epidotization, 1-2% qtz+carb+epi veinlets, tr Py.									
			22471	130.00	135.00	5.00	9				
		135.00- 140.00	22472	135.00	140.00	5.00	<5				
		SILICIFIED BASALT (?) Light to medium greyish green, aphanitic, moderate silicification, local weak epidote altn, tr Py.									
			22473	140.00	145.00	5.00	<5				
			22474	145.00	150.00	5.00	<5				
			22475	150.00	155.00	5.00	<5				
			22476	155.00	160.00	5.00	<5				
			22477	160.00	165.00	5.00	<5				
			22478	165.00	170.00	5.00	<5				
			22479	170.00	175.00	5.00	<5				
			22480	175.00	180.00	5.00	<5				
		180.00- 185.00	22481	180.00	185.00	5.00	314	.009			
		2-3% Carbonate+Quartz Veinlets Carb+qtz veinlets with tr Hem.									
			22482	185.00	190.00	5.00	<5				
			22483	190.00	195.00	5.00	<5				
			22484	195.00	200.00	5.00	<5				
		200.00- 210.00	22485	200.00	205.00	5.00	523	.015			
		10-15% Quartz+Carbonate Veins Qtz+carb veins with tr Py, slightly silicified wallrock containing 1% Py.	22486	205.00	210.00	5.00	93	.003			
		210.00- 215.00	22487	210.00	215.00	5.00	7				
		5% Quartz+Carbonate Veins Same as 200.0-210.0; tr Hem.									
			22488	215.00	220.00	5.00	5				
		220.00- 225.00	22489	220.00	225.00	5.00	<5				
		10-15% Quartz+Carbonate Veins Qtz+carb veins with tr Hem and tr Py.									
		225.00- 230.00	22490	225.00	230.00	5.00	<5				
		5% Quartz+Carbonate Veins Qtz+carb veinlets with tr Hem.									
			22491	230.00	235.00	5.00	<5				
		232.00- 246.00	22492	235.00	240.00	5.00	<5				
		SILICIFIED INTRUSIVE (?)	22493	240.00	245.00	5.00	320	.009			

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		70-85% white to greenish white qtz containing micro chloritized fragments of wallrock, 15-30% aphanitic to very fine grained, locally silicified, light to medium greyish green rock, 1% Py, tr Hem.	22494	245.00	250.00	5.00	14				
			22495	250.00	255.00	5.00	<5				
		252.00- 280.00	22496	255.00	260.00	5.00	<5				
		SILICIFIED INTRUSIVE (?)	22497	260.00	265.00	5.00	<5				
		Same as 232.0-246.0; 1-2% Py.	22498	265.00	270.00	5.00	<5				
			22499	270.00	275.00	5.00	<5				
			22500	275.00	280.00	5.00	<5				
			22501	280.00	285.00	5.00	<5				
		285.00- 290.00									
		2% Carbonate+Quartz Veinlets	22502	285.00	290.00	5.00	<5				
			22503	290.00	295.00	5.00	<5				
			22504	295.00	300.00	5.00	<5				
			22505	300.00	305.00	5.00	<5				
			22506	305.00	310.00	5.00	<5				
			22507	310.00	315.00	5.00	9				
			22508	315.00	320.00	5.00	<5				
			22509	320.00	325.00	5.00	8				
			22510	325.00	330.00	5.00	<5				
		330.00- 340.00	22511	330.00	335.00	5.00	<5				
		WEAKLY EPIDOTIZED VERY FINE GRAINED BASALT	22512	335.00	340.00	5.00	<5				
		Weak epidote altn.									
			22513	340.00	345.00	5.00	<5				
			22514	345.00	350.00	5.00	<5				
			22515	350.00	355.00	5.00	<5				
			22516	355.00	360.00	5.00	<5				
360.00	765.00	FINE GRAINED GABBRO	22517	360.00	365.00	5.00	<5				
		Mottled light to medium yellowish green or light greenish grey and dark greyish green to black, fine grained, massive, weak to moderate epidotization, locally absence of epidote altn.	22518	365.00	370.00	5.00	<5				
			22519	370.00	375.00	5.00	<5				
			22520	375.00	380.00	5.00	<5				
		380.00- 395.00	22521	380.00	385.00	5.00	<5				
		APHANITIC GABBRO	22522	385.00	390.00	5.00	<5				
		Dark greyish green to black, aphanitic, massive, approx. 20-30% light to medium yellowish green aphanitic gabbro (?) representing probably a more altered phase.	22523	390.00	395.00	5.00	<5				
			22524	395.00	400.00	5.00	<5				
			22525	400.00	405.00	5.00	<5				
			22526	405.00	410.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		407.00- 425.00	22527	410.00	415.00	5.00	<5				
		APHANITIC GABBRO (?)	22528	415.00	420.00	5.00	<5				
		Dark greyish green to black, aphanitic, massive, local strong epidote altn, <1% carb+qtz veinlets.	22529	420.00	425.00	5.00	<5				
		425.00- 440.00	22530	425.00	430.00	5.00	<5				
		VERY FINE GRAINED GABBRO/DIORITE	22531	430.00	435.00	5.00	<5				
		Medium yellowish greyish green, very fine grained, weak epidote altn, massive.	22532	435.00	440.00	5.00	<5				
		440.00- 473.00	22533	440.00	445.00	5.00	<5				
		APHANITIC GABBRO	22534	445.00	450.00	5.00	<5				
		Medium to dark greyish green to black, aphanitic to locally very fine grained, strong epidote altn from 449.0-460.0 with 1-2% Py.	22535	450.00	455.00	5.00	<5				
			22536	455.00	460.00	5.00	<5				
			22537	460.00	465.00	5.00	<5				
			22538	465.00	470.00	5.00	<5				
			22539	470.00	475.00	5.00	<5				
			22540	475.00	480.00	5.00	<5				
			22541	480.00	485.00	5.00	<5				
		481.00- 496.00									
		VERY FINE GRAINED GABBRO/DIORITE	22542	485.00	490.00	5.00	289	.008			
		Same as 425.0-440.0; weak epidote altn from 490.0-496.0.	22543	490.00	495.00	5.00	17				
			22544	495.00	500.00	5.00	<5				
		500.00- 505.00	22545	500.00	505.00	5.00	9				
		SILICIFIED ANDESITE (?)									
		Light greyish green, aphanitic, strong silicification, weak epidote altn, 1-2% epi+qtz veinlets, <1% Py, 20% fresh fine grained gabbro.									
			22546	505.00	510.00	5.00	<5				
			22547	510.00	515.00	5.00	<5				
		514.00- 560.00	22548	515.00	520.00	5.00	<5				
		VERY FINE GRAINED GABBRO	22549	520.00	525.00	5.00	9				
		Medium to dark greyish green to black, very fine grained, massive, local weak epidote altn, locally aphanitic, tr Py.	22550	525.00	530.00	5.00	<5				
			22551	530.00	535.00	5.00	<5				
			22552	535.00	540.00	5.00	<5				
			22553	540.00	545.00	5.00	<5				
			22554	545.00	550.00	5.00	<5				
			22555	550.00	555.00	5.00	<5				
			22556	555.00	560.00	5.00	14				
		560.00- 565.00									
		2% Carbonate+Quartz Veinlets	22557	560.00	565.00	5.00	102	.003			
		Carb+qtz veinlets with tr Py, slight epidote altn, 1% Py in wallrock.									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		565.00- 570.00 2-3% Carbonate+Quartz Veinlets Carb+qtz veinlets, local slight epidote altn.	22558	565.00	570.00	5.00	19				
			22559	570.00	575.00	5.00	<5				
			22560	575.00	580.00	5.00	<5				
		580.00- 585.00 2-3% Quartz+Carbonate Veinlets	22561	580.00	585.00	5.00	<5				
			22562	585.00	590.00	5.00	<5				
		590.00- 600.00 10-15% APHANITIC GABBRO Light to medium greyish green, aphanitic, massive.	22563	590.00	595.00	5.00	<5				
			22564	595.00	600.00	5.00	<5				
			22565	600.00	605.00	5.00	<5				
			22566	605.00	610.00	5.00	<5				
			22567	610.00	615.00	5.00	<5				
		615.00- 620.00 10-15% APHANITIC GABBRO Same as 590.0-600.0.	22568	615.00	620.00	5.00	<5				
		620.00- 632.00 FINE GRAINED DIORITE Mottled white to light greenish white and dark greyish green to black, fine grained, local weak epidote altn, composition varies from diorite to gabbro, equigranular, massive.	22569	620.00	625.00	5.00	<5				
			22570	625.00	630.00	5.00	<5				
			22571	630.00	635.00	5.00	7				
		632.00- 634.00 Carbonate+Quartz Veins Brecciated carb+qtz vein(s), <10% qtz and tr Py, contains fragments of silicified and chloritized diorite (?).									
		634.00- 637.00 SILICIFIED DIORITE Light greyish green, aphanitic to very fine grained, moderate silicification, looks like an andesite.	22572	635.00	640.00	5.00	<5				
		637.00- 640.00 VERY FINE GRAINED GABBRO or DIABASE Medium brownish green, very fine grained, granular texture, moderate to strong epidote altn, massive, sharp contacts.									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		640.00- 699.00	22573	640.00	645.00	5.00	<5				
		VERY FINE GRAINED GABBRO	22574	645.00	650.00	5.00	<5				
		Same as 514.0-560.0.	22575	650.00	655.00	5.00	<5				
			22576	655.00	660.00	5.00	<5				
			22577	660.00	665.00	5.00	<5				
			22578	665.00	670.00	5.00	11				
			22579	670.00	675.00	5.00	<5				
			22580	675.00	680.00	5.00	<5				
			22581	680.00	685.00	5.00	<5				
			22582	685.00	690.00	5.00	<5				
			22583	690.00	695.00	5.00	<5				
			22584	695.00	700.00	5.00	<5				
			22585	700.00	705.00	5.00	<5				
			22586	705.00	710.00	5.00	<5				
		710.00- 715.00									
		30% Quartz+Carbonate Veins	22587	710.00	715.00	5.00	28				
		Qtz+carb vein(s) with tr Py, slightly brecciated, weak silicification, moderate epidotization in the footwall.									
		715.00- 720.50	22588	715.00	720.00	5.00	<5				
		EPIDOTIZED GABBRO/DIORITE	22589	720.00	725.00	5.00	<5				
		Light yellowish green, very fine grained, massive, strong epidotization.									
		720.50- 725.00									
		1-2% Quartz+Carbonate Veinlets									
		725.00- 749.00									
		VERY FINE GRAINED GABBRO									
		Medium greyish green, very fine grained, local weak epidote altn, massive, <1% qtz+carb veinlets.									
		725.00- 730.00	22590	725.00	730.00	5.00	314	.009			
		Quartz+Carbonate Vein	Check	725.00	730.00	5.00	189				
		Martha vein structure (1.5-2.0ft)	Check	725.00	730.00	5.00	162				
		30% white to light greyish white qtz+carb vein(s) containing <1% Py, slightly brecciated with silicified bleached fragments of diorite/gabbro containing 2-3% Py, slightly silicified and bleached wallrock with tr Py, panning two colours (V.G.).	Check	725.00	730.00	5.00	496				
			22591	730.00	735.00	5.00	11				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		730.00- 735.00 5-10% Quartz+Carbonate Veins 5-10% qtz+carb vein(s) containing tr Py, very weak altn of wallrock, tr Py.	22591	730.00	735.00	5.00	11				
			22592	735.00	740.00	5.00	<5				
			22593	740.00	745.00	5.00	<5				
			22594	745.00	750.00	5.00	<5				
		749.00- 765.00 FINE GRAINED DIORITE/GABBRO Mottled light greenish white and medium to dark greyish green to black, fine grained, massive, equigranular, locally strong epidote altn, tr Py.	22595	750.00	755.00	5.00	<5				
		755.00- 760.00 20-25% Quartz Veins Quartz veinlets with minor carbonate, strong chloritization and epidotization, tr Py.	22596	755.00	760.00	5.00	<5				
		760.00- 762.00 20% Quartz Veins Same as 755.0-760.0.	22597	760.00	765.00	5.00	<5				
765.00		End of hole Total amount of samples= 153 Total length sampled = 765.00F -Samples 0'-25', 30'-40' taken from previous attempt in the same hole; sample 25'-30' is missing. -No samples from 40'-70', too much contamination from hole caving.									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-6 Zone # : MARTHA Contractor : HELLER DRILLING Date started : 4/15/1991
County : JOSEPHINE Date completed: 4/17/1991
Township: 33S Range: 5W Section: 3+00W Claim # :SP-1

Level : Location :

Collar coordinate : Line : 3+35 W Northing: 0.00 N Azimuth: 204° 0′ 0"
Station: 11+65 N Easting : 0.00 E Dip : 55° 0′ 0"
Reference frame : Elevation: 2913.00 Length : 590.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 7 ft
Water at 520 ft, <1 gal/min

Water depth: 520 ft Plugged: YES
Cimented : YES Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 4/18/1991 Hole # : MA-6

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
0.00	365.00	VERY FINE GRAINED GABBRO	22001	0.00	5.00	5.00	<5				
		Medium to dark greyish green, fine grained,	22002	5.00	10.00	5.00	<5				
		massive, <1% carb+qtz veinlets with occasionnal	22003	10.00	15.00	5.00	<5				
		epidote, tr Py.	22004	15.00	20.00	5.00	7				
			22005	20.00	25.00	5.00	<5				
			22006	25.00	30.00	5.00	<5				
			22007	30.00	35.00	5.00	11				
			22008	35.00	40.00	5.00	<5				
			22009	40.00	45.00	5.00	<5				
			22010	45.00	50.00	5.00	27				
			22011	50.00	55.00	5.00	16				
		53.00- 69.00									
		APHANITIC TO VERY FINE GRAINED ANDESITE	22012	55.00	60.00	5.00	53	.001			
		Light greenish grey, aphanitic to very	22013	60.00	65.00	5.00	<5				
		fine grained, weak to moderate	22014	65.00	70.00	5.00	<5				
		epidotization, silicified from 53.0-60.0,									
		1-2% carb+qtz veinlets, tr Py.									
			22015	70.00	75.00	5.00	<5				
			22016	75.00	80.00	5.00	9				
			22017	80.00	85.00	5.00	<5				
			22018	85.00	90.00	5.00	<5				
			22019	90.00	95.00	5.00	<5				
			22020	95.00	100.00	5.00	<5				
		100.00- 117.00	22021	100.00	105.00	5.00	<5				
		FINE GRAINED GABBRO	22022	105.00	110.00	5.00	<5				
		Mottled light yellowish green and dark	22023	110.00	115.00	5.00	<5				
		greyish green, fine grained, local weak	22024	115.00	120.00	5.00	<5				
		epidote altn, <1% carb+qtz veinlets, tr									
		Py.									
		117.00- 136.00	22025	120.00	125.00	5.00	146	.004			
		APHANITIC TO VERY FINE GRAINED ANDESITE	22026	125.00	130.00	5.00	21				
		Light to medium greyish green, aphanitic	22027	130.00	135.00	5.00	<5				
		to very fine grained, moderate	22028	135.00	140.00	5.00	<5				
		epidotization, local silicification, <2%									
		carb+qtz veinlets, tr Py.									
		136.00- 153.00	22029	140.00	145.00	5.00	6				
		EPIDOTIZED VERY FINE GRAINED GABBRO	22030	145.00	150.00	5.00	<5				
		very fine grained to locally fine	22031	150.00	155.00	5.00	<5				
		grained, moderate epidotization, tr Py.									
			22032	155.00	160.00	5.00	<5				
			22033	160.00	165.00	5.00	<5				
			22034	165.00	170.00	5.00	<5				
			22035	170.00	175.00	5.00	<5				
			22036	175.00	180.00	5.00	<5				
			22037	180.00	185.00	5.00	<5				
			22038	185.00	190.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
			22039	190.00	195.00	5.00	7				
			22040	195.00	200.00	5.00	<5				
			22041	200.00	205.00	5.00	<5				
			22042	205.00	210.00	5.00	31				
			22043	210.00	215.00	5.00	<5				
			22044	215.00	220.00	5.00	<5				
			22045	220.00	225.00	5.00	<5				
			22046	225.00	230.00	5.00	<5				
			22047	230.00	235.00	5.00	<5				
			22048	235.00	240.00	5.00	<5				
			22049	240.00	245.00	5.00	<5				
			22050	245.00	250.00	5.00	<5				
		249.00- 275.00	22051	250.00	255.00	5.00	<5				
		FINE GRAINED GABBRO	22052	255.00	260.00	5.00	<5				
		Mottled light yellowish green and dark	22053	260.00	265.00	5.00	<5				
		green, fine grained, local epidote altn,	22054	265.00	270.00	5.00	<5				
		<1% carb+qtz veinlets, tr Py.	22055	270.00	275.00	5.00	<5				
			22056	275.00	280.00	5.00	<5				
			22057	280.00	285.00	5.00	<5				
			22058	285.00	290.00	5.00	77	.002			
			22059	290.00	295.00	5.00	<5				
			22060	295.00	300.00	5.00	<5				
			22061	300.00	305.00	5.00	<5				
		305.00- 310.00	22062	305.00	310.00	5.00		.036	.018		.027
		<1% Carbonate+Quartz Veinlets									
		tr Py.									
		310.00- 315.00	22063	310.00	315.00	5.00	47	.001			
		APHANITIC ANDESITE									
		Light to medium greenish grey, aphanitic,									
		local weak epidote altn.									
			22064	315.00	320.00	5.00	<5				
			22065	320.00	325.00	5.00	<5				
		321.00- 324.00									
		APHANITIC ANDESITE									
		Same as 310.0-315.0; 2% carb+qtz									
		veinlets.									
			22066	325.00	330.00	5.00	<5				
			22067	330.00	335.00	5.00	<5				
			22068	335.00	340.00	5.00	<5				
			22069	340.00	345.00	5.00	<5				
		341.00- 345.00									
		APHANITIC ANDESITE									
		Same as 310.0-315.0; tr Py.									
			22070	345.00	350.00	5.00	<5				
			22071	350.00	355.00	5.00	<5				
			22072	355.00	360.00	5.00	<5				
			22073	360.00	365.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
365.00	535.00	APHANITIC ANDESITE Light to medium greyish green, aphanitic, abundant leucoxene, local epidote altn, 1-2% carb+qtz veinlets, <1% Py.	22074	365.00	370.00	5.00	<5				
		370.00- 395.00 SILICIFIED ANDESITE Weakly to moderately silicified, aphanitic, light greenish grey, bleached, tr Py.	22075	370.00	375.00	5.00	30				
			22076	375.00	380.00	5.00	<5				
			22077	380.00	385.00	5.00	<5				
		385.00- 390.00 35% Carbonate+Quartz Veins Martha vein structure- approx. 1 to 1.5 foot carb+qtz stringer zone containing <1% Py, wallrock highly silicified and bleached with <1% Py.	22078	385.00	390.00	5.00	<5				
			22079	390.00	395.00	5.00	<5				
			22080	395.00	400.00	5.00	<5				
			22081	400.00	405.00	5.00	65	.002			
			22082	405.00	410.00	5.00	19				
			22083	410.00	415.00	5.00	<5				
			22084	415.00	420.00	5.00	<5				
			22085	420.00	425.00	5.00	<5				
			22086	425.00	430.00	5.00	<5				
		430.00- 435.00 25% FINE GRAINED GABBRO Dark greenish black, fine grained, tr hem, massive.	22087	430.00	435.00	5.00	<5				
			22088	435.00	440.00	5.00	<5				
			22089	440.00	445.00	5.00	<5				
			22090	445.00	450.00	5.00	<5				
		450.00- 465.00 VERY FINE TO FINE GRAINED GABBRO Mottled light yellowish green and medium to dark greyish green, very fine to fine grained, weak epidote altn, 1% carb+qtz+hem veinlets.	22091	450.00	455.00	5.00	<5				
			22092	455.00	460.00	5.00	18				
			22093	460.00	465.00	5.00	<5				
			22094	465.00	470.00	5.00	<5				
			22095	470.00	475.00	5.00	<5				
			22096	475.00	480.00	5.00	<5				
			22097	480.00	485.00	5.00	<5				
		482.00- 490.00 SILICIFIED INTRUSIVE Light whitish green, composed of 80% qtz (silica) and 20% aphanitic chloritized	22098	485.00	490.00	5.00	<5				

diabase dikes ?

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		andesite(?), 1-2% Py.									
			22099	490.00	495.00	5.00	254	.007			
			22100	495.00	500.00	5.00	<5				
		500.00- 505.00	22101	500.00	505.00	5.00	276	.008	.007		.007
		40% Quartz Veins White qtz veins with minor carbonate and <1% Py, 60% light to medium greyish green andesite, tr epidote, tr Py.									
		505.00- 510.00	22102	505.00	510.00	5.00	20				
		25% Quartz Veins White to light whitish green qtz veins, minor carbonate, tr Py, 75% dark greenish grey basalt or gabbro ?									
		510.00- 515.00	22103	510.00	515.00	5.00	<5				
		VERY FINE GRAINED ANDESITE Medium greenish grey, very fine grained, massive, abundant leucoxene.									
			22104	515.00	520.00	5.00	13				
		519.00- 535.50	22105	520.00	525.00	5.00	<5				
		SILICIFIED INTRUSIVE	22106	525.00	530.00	5.00	<5				
		Highly silicified (80-85% qtz) intrusive, contains 3-5% hematite, 1-2% disseminated Py, abundant chlorite altn.	22107	530.00	535.00	5.00	<5				
535.00	590.00	VERY FINE GRAINED GABBRO	22108	535.00	540.00	5.00	<5				
		Medium to dark greyish green, very fine grained,	22109	540.00	545.00	5.00	<5				
		massive, local weak to moderate epidote altn, 1%	22110	545.00	550.00	5.00	<5				
		qtz+carb+epi veinlets, tr Py.	22111	550.00	555.00	5.00	<5				
			22112	555.00	560.00	5.00	<5				
			22113	560.00	565.00	5.00	226	.007			
		565.00- 570.00									
		15% Quartz+Epidote+Carbonate Veinlets Quartz and epidote veinlets with minor carbonate and tr Py.	22114	565.00	570.00	5.00	26				
			22115	570.00	575.00	5.00	<5				
			22116	575.00	580.00	5.00	<5				
			22117	580.00	585.00	5.00	6				
			22118	585.00	590.00	5.00	<5				
590.00		End of hole									
		Total amount of samples= 118 Total length sampled = 590.00F									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-7 Zone # : MARTHA Contractor : HELLER DRILLING Date started : 5/ 8/1991
County : JOSEPHINE Date completed: 5/16/1991
Township: 33S Range: 5W Section: 3+00E Claim # :SP-3

Level : Location :

Collar coordinate : Line : 2+95 E Northing: 0.00 N Azimuth: 204° 0′ 0"
Station: 12+10 N Easting : 0.00 E Dip : 70° 0′ 0"
Reference frame : Elevation: 3140.00 Length : 800.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 10 ft
Water at 32 ft, <1 gal/min.

Water depth: 32 ft
Cimented : YES

Plugged: YES
Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 5/16/1991 Hole # : MA-7

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
0.00	50.00	VERY FINE GRAINED GABBRO Medium to dark greyish green to black, very fine grained, massive.									
		0.00- 12.00	22598	0.00	5.00	5.00	<5				
		OXIDIZED GABBRO	22599	5.00	10.00	5.00	<5				
		Medium brownish greyish green, very fine grained, slightly oxidized.	22600	10.00	15.00	5.00	38				.001
		12.00- 20.00	22601	15.00	20.00	5.00	19				
		SILICIFIED GABBRO Light to medium greyish green, very fine grained, moderate silicification, bleached.									
			22602	20.00	25.00	5.00	<5				
			22603	25.00	30.00	5.00	<5				
			22604	30.00	35.00	5.00	<5				
		35.00- 40.00	22605	35.00	40.00	5.00	<5				
		FINE GRAINED GABBRO Mottled light to medium greyish green and dark greyish green to black, fine grained, local weak epidote altn, 1% qtz+carb veinlets, tr Py.									
		40.00- 50.00	22606	40.00	45.00	5.00	<5				
		10-20% APHANITIC GABBRO	22607	45.00	50.00	5.00	50				.001
		Medium to dark green to greenish black, aphanitic, weak epidote altn, 1-2% carb+qtz veinlets.									
50.00	80.00	FINE GRAINED GABBRO	22608	50.00	55.00	5.00	10				
		Mottled medium greyish green and dark greyish green to black, fine grained, massive,	22609	55.00	60.00	5.00	<5				
		equigranular, <1% carb+qtz veinlets, local	22610	60.00	65.00	5.00	<5				
		epidote altn.	22611	65.00	70.00	5.00	13				
			22612	70.00	75.00	5.00	<5				
			22613	75.00	80.00	5.00	<5				
80.00	145.00	VERY FINE GRAINED GABBRO									
		Medium to dark greyish green to black, very fine	22614	80.00	85.00	5.00	<5				
		grained, massive, 1% carb+qtz veinlets, tr Py.	22615	85.00	90.00	5.00	<5				
			22616	90.00	95.00	5.00	<5				
			22617	95.00	100.00	5.00	<5				
			22618	100.00	105.00	5.00	<5				
			22619	105.00	110.00	5.00	<5				
		110.00- 115.00									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		FINE GRAINED GABBRO/DIORITE Mottled white to light whitish green and medium to dark greyish green to black, fine grained, equigranular.	22620	110.00	115.00	5.00	<5				
			22621	115.00	120.00	5.00	17				
			22622	120.00	125.00	5.00	<5				
			22623	125.00	130.00	5.00	<5				
			22624	130.00	135.00	5.00	<5				
			22625	135.00	140.00	5.00	<5				
			22626	140.00	145.00	5.00	<5				
145.00	200.00	FINE GRAINED DIORITE/GABBRO Mottled light yellowish green and dark greyish green to black, fine grained, moderate to strong epidote altn, massive, equigranular, <1% carb+qtz veinlets, tr Py.	22627	145.00	150.00	5.00	<5				
			22628	150.00	155.00	5.00	<5				
			22629	155.00	160.00	5.00	<5				
			22630	160.00	165.00	5.00	29				
			22631	165.00	170.00	5.00	<5				
			22632	170.00	175.00	5.00	<5				
			22633	175.00	180.00	5.00	<5				
			22634	180.00	185.00	5.00	<5				
			22635	185.00	190.00	5.00	<5				
			22636	190.00	195.00	5.00	<5				
			22637	195.00	200.00	5.00	<5				
200.00	800.00	VERY FINE GRAINED GABBRO Medium to dark greyish green to black, very fine grained, locally fine grained, massive, local very weak epidote altn, <1% carb+qtz veinlets, tr Py.									
		200.00- 205.00 90% APHANITIC ANDESITE (?) Light yellowish green to light greyish green, aphanitic, moderate silicification, weak epidote altn, tr Py, could well be intrusive.	22638	200.00	205.00	5.00	<5				
			22639	205.00	210.00	5.00	<5				
			22640	210.00	215.00	5.00	<5				
			22641	215.00	220.00	5.00	<5				
			22642	220.00	225.00	5.00	9				
			22643	225.00	230.00	5.00	7				
			22644	230.00	235.00	5.00	<5				
		235.00- 242.00 HEMATIZED GABBRO Dark reddish brown to green, very fine grained to fine grained, massive, weak to moderate hematite altn, <1% carb+qtz	22645	235.00	240.00	5.00	<5				
			22646	240.00	245.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		veinlets.									
			22647	245.00	250.00	5.00	<5				
		250.00- 255.00	22648	250.00	255.00	5.00	<5				
		10% HEMATIZED GABBRO									
		Same as 235.0-242.0.									
			22649	255.00	260.00	5.00	<5				
		260.00- 270.00	22650	260.00	265.00	5.00	<5				
		2-3% Carbonate+Quartz Veinlets	22651	265.00	270.00	5.00	<5				
			22652	270.00	275.00	5.00	<5				
			22653	275.00	280.00	5.00	<5				
			22654	280.00	285.00	5.00	<5				
			22655	285.00	290.00	5.00	<5				
			22656	290.00	295.00	5.00	<5				
		295.00- 300.00	22657	295.00	300.00	5.00	<5				
		2-3% Carbonate+Quartz Veinlets									
			22658	300.00	305.00	5.00	<5				
		305.00- 350.00	22659	305.00	310.00	5.00	<5				
		2-3% Carbonate+Quartz Veinlets	22660	310.00	315.00	5.00	<5				
			22661	315.00	320.00	5.00	<5				
		320.00- 435.00	22662	320.00	325.00	5.00	<5				
		VERY FINE GRAINED GABBRO (?)	22663	325.00	330.00	5.00	<5				
		Medium to dark greyish green and medium	22664	330.00	335.00	5.00	<5				
		brownish greenish grey, occasionally	22665	335.00	340.00	5.00	<5				
		light greyish green, very fine grained,	22666	340.00	345.00	5.00	<5				
		locally aphanitic, weak to moderate	22667	345.00	350.00	5.00	<5				
		silicification, massive, 2-3% carb+qtz	22668	350.00	355.00	5.00	<5				
		veinlets, local epidote altn,	22669	355.00	360.00	5.00	<5				
		occasionnal salmon colour altn (?), tr	22670	360.00	365.00	5.00	<5				
		Py.	22671	365.00	370.00	5.00	<5				
			22672	370.00	375.00	5.00	66				
			22673	375.00	380.00	5.00	<5				
			22674	380.00	385.00	5.00	<5				
			22675	385.00	390.00	5.00	<5				
			22676	390.00	395.00	5.00	<5	36			
		395.00- 405.00									
		Epidotized Aphanitic to Very Fine	22677	395.00	400.00	5.00	<5	12			
		Grained Gabbro	22678	400.00	405.00	5.00	<5	7			
		Local strong epidote altn.									
			22679	405.00	410.00	5.00	<5				
			22680	410.00	415.00	5.00	<5				
			22681	415.00	420.00	5.00	<5				
			22682	420.00	425.00	5.00	<5				
			22683	425.00	430.00	5.00	<5				
			22684	430.00	435.00	5.00	<5				
		435.00- 441.00	22685	435.00	440.00	5.00	<5	6			
		FINE GRAINED GABBRO	22686	440.00	445.00	5.00	136	238			.005

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		Mottled light grey and dark greenish grey to black, fine grained, massive, equigranular.									
		441.00- 520.00 APHANITIC TO VERY FINE GRAINED GABBRO (?) Similar to 320.0-435.0; weak to moderate epidote altn, zone with abundant qtz veins.									
		441.00- 445.00 15% Quartz+Carbonate Veins Martha vein structure, qtz+carb vein(s) containing up to 5% Py, strong grey colouring from the sulfides, presence of slickenlines on one fragment, wallrock is moderately silicified, locally weak to moderate epidote altn, tr Py.									
		445.00- 450.00 20% Quartz Veins Very light grey qtz vein(s) with <5% carbonate and 1-2% Py, approx. 40% of the wallrock is weakly to moderately silicified, light to medium greenish grey (aphanitic gabbro), the other 40% is moderately epidotized, tr Py.	22687	445.00	450.00	5.00	26	40			
		450.00- 455.00 20-25% Quartz Vein(s) White to light whitish grey qtz vein(s) with <5% carbonate, <2% Py. Wallrock is bleached, silicified, aphanitic, light greyish green, tr Py, local epidote altn (possible contamination from 445.0-450.0).	22688	450.00	455.00	5.00	17	21			
		455.00- 460.00 25% Silicified Gabbro (?) 25% weakly to moderately silicified, light greenish grey, aphanitic, mixed with white to light grey qtz vein material, 2% Py.	22689	455.00	460.00	5.00	<5	5			
			22690	460.00	465.00	5.00	<5				
			22691	465.00	470.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		470.00- 475.00 2% Pyrite Mainly associated with epidote and silica altns.	22692	470.00	475.00	5.00	<5				
			22693	475.00	480.00	5.00	<5				
		480.00- 485.00 5% Quartz Veins 5% white to light whitish grey qtz vein(s) with some epidote and 1-2% Py.	22694	480.00	485.00	5.00	<5				
		485.00- 490.00 15% Quartz Veins Same as 480.0-485.0; local moderate epidote altn.	22695	485.00	490.00	5.00	<5				
		490.00- 495.00 5% Quartz Veins Same as 480.0-485.0; local moderate epidote altn.	22696	490.00	495.00	5.00	<5				
			22697	495.00	500.00	5.00	<5				
			22698	500.00	505.00	5.00	<5				
			22699	505.00	510.00	5.00	<5				
		510.00- 515.00 5-10% Quartz Veins Same as 480.0-485.0; associated with epidote, veins contain 2-3% Py.	22700	510.00	515.00	5.00	<5				
		515.00- 520.00 10% Quartz Veins 10% white to light greyish green qtz vein with 10% carbonate, silicified wallrock, 1% Py.	22701	515.00	520.00	5.00	<5				
		520.00- 564.00 VERY FINE GRAINED GABBRO (?) Light to medium greyish green, very fine grained, locally aphanitic, common weak to moderate epidote altn, occasionnal leucoxene, massive, tr Py.	22702	520.00	525.00	5.00	<5				
			22703	525.00	530.00	5.00	<5				
			22704	530.00	535.00	5.00	<5				
			22705	535.00	540.00	5.00	<5	<5			
		540.00- 545.00 1-2% Quartz+Epidote Veinlets White qtz veinlets with <5% epidote and tr Py.	22706	540.00	545.00	5.00	17	<5			

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		545.00- 550.00 3-4% Quartz+Epidote Veins White qtz veins with 1-20% epidote, minor carbonate and tr Py.	22707	545.00	550.00	5.00	<5	<5			
			22708	550.00	555.00	5.00	<5	<5			
			22709	555.00	560.00	5.00	<5	<5			
			22710	560.00	565.00	5.00	1	7			
		564.00- 591.00	22711	565.00	570.00	5.00	<5	<5			
		VERY FINE TO FINE GRAINED GABBRO Mottled light greenish grey and dark greenish grey to black, very fine to fine grained, massive, inequigranular, local light greyish green aphanitic fragments, <2% qtz veinlets, tr Py.	22712	570.00	575.00	5.00	1	<5			
			22713	575.00	580.00	5.00	1	<5			
		580.00- 585.00 2-3% Quartz Veins White qtz veinlets with <5% carbonate.	22714	580.00	585.00	5.00	2	5			
			22715	585.00	590.00	5.00	<5	<5			
			22716	590.00	595.00	5.00	<5	<5			
			22717	595.00	600.00	5.00	<5	<5			
		599.00- 607.00	22718	600.00	605.00	5.00	<5	5			
		MEDIUM GRAINED GABBRO Mottled medium green and black, medium grained, at least 50% pyroxene, massive, tr Py.	22719	605.00	610.00	5.00	<5	<5			
		607.00- 626.00	22720	610.00	615.00	5.00	16	<5			
		VERY FINE TO FINE GRAINED GABBRO Similar to 564.0-591.0; composition might vary from gabbro to diorite.	22721	615.00	620.00	5.00	<5	6			
			22722	620.00	625.00	5.00	<5				
			22723	625.00	630.00	5.00	<5				
		626.00- 680.00	22724	630.00	635.00	5.00	<5				
		VERY FINE GRAINED GABBRO Medium to dark greyish green, very fine grained, locally aphanitic, massive, abundant leucoxene, tr Py.	22725	635.00	640.00	5.00	<5				
			22726	640.00	645.00	5.00	<5				
			22727	645.00	650.00	5.00	<5				
			22728	650.00	655.00	5.00	<5				
			22729	655.00	660.00	5.00	<5				
			22730	660.00	665.00	5.00	<5				
			22731	665.00	670.00	5.00	<5				
			22732	670.00	675.00	5.00	<5				
			22733	675.00	680.00	5.00	<5				
		680.00- 692.00									
		VERY FINE TO FINE GRAINED GABBRO Mottled light to medium greyish green and	22734	680.00	685.00	5.00	<5				
			22735	685.00	690.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		dark greyish green to black, very fine to fine grained, unequigranular, local very slight epidote altn, tr Py.	22736	690.00	695.00	5.00	<5				
			22737	695.00	700.00	5.00	<5				
			22738	700.00	705.00	5.00	<5				
			22739	705.00	710.00	5.00	<5				
		706.00- 720.00	22740	710.00	715.00	5.00	<5				
		FINE GRAINED GABBRO/DIORITE	22741	715.00	720.00	5.00	<5				
		Mottled light greenish grey and medium to dark greyish green to black, fine grained, locally very fine grained, massive, unequigranular, local epidote altn, tr Py.									
			22742	720.00	725.00	5.00	<5				
			22743	725.00	730.00	5.00	<5				
			22744	730.00	735.00	5.00	<5				
			22745	735.00	740.00	5.00	<5				
		736.00- 760.00	22746	740.00	745.00	5.00	<5				
		FINE GRAINED GABBRO/DIORITE	22747	745.00	750.00	5.00	<5				
		Same as 706.0-720.0; 1-2% qtz+carb veinlets, locally aphanitic to very fine grained.	22748	750.00	755.00	5.00	<5				
			22749	755.00	760.00	5.00	<5				
		760.00- 770.00	22750	760.00	765.00	5.00	<5				
		EPIDOTIZED VERY FINE GRAINED GABBRO	22751	765.00	770.00	5.00	<5				
		Moderate epidote altn.									
			22752	770.00	775.00	5.00	<5				
		775.00- 780.00	22753	775.00	780.00	5.00	<5				
		20% FINE GRAINED GABBRO/DIORITE									
		Same as 706.0-720.0.									
			22754	780.00	785.00	5.00	<5				
			22755	785.00	790.00	5.00	<5				
		789.00- 800.00	22756	790.00	795.00	5.00	<5				
		VERY FINE GRAINED GABBRO	22757	795.00	800.00	5.00	<5				
		Mottled light whitish grey and black, very fine grained, locally fine grained, local weak epidote altn, unequigranular, massive, tr Py.									
800.00		End of hole									
		Total amount of samples= 160									
		Total length sampled = 800.00F									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
0.00	315.00	VERY FINE GRAINED GABBRO Dark greenish black, very fine grained, locally aphanitic, massive, homogeneous, <1% qtz+carb veinlets accompanied by chlorite altn, tr Py.									
		0.00- 20.00	23092	0.00	5.00	5.00	<5				
		OXIDIZED GABBRO	23093	5.00	10.00	5.00	<5				
		Weak to moderate oxidation, orange brown altn colour, local sericite altn.	23094	10.00	15.00	5.00	<5				
			23095	15.00	20.00	5.00	<5				
			23096	20.00	25.00	5.00	<5				
			23097	25.00	30.00	5.00	<5				
		30.00- 35.00	23098	30.00	35.00	5.00	<5				
		15% Quartz+Carbonate Vein(s) White qtz+carb vein(s) with a slight chlorite and epidote altn.									
		35.00- 40.00	23099	35.00	40.00	5.00	<5				
		35% Quartz+Epidote Vein(s) Qtz+epi vein(s) or altn zone, local chlorite altn.									
			23100	40.00	45.00	5.00	<5				
		45.00- 50.00	23101	45.00	50.00	5.00	19				
		Slight oxidation open fracture, <5 gal/min.									
			23102	50.00	55.00	5.00	<5				
			23103	55.00	60.00	5.00	<5				
			23104	60.00	65.00	5.00	<5				
			23105	65.00	70.00	5.00	<5				
			23106	70.00	75.00	5.00	<5				
			23107	75.00	80.00	5.00	<5				
			23108	80.00	85.00	5.00	<5				
			23109	85.00	90.00	5.00	<5				
		90.00- 95.00	23110	90.00	95.00	5.00	<5				
		40-50% FINE GRAINED GABBRO Mottled light whitish grey and dark greenish black, fine grained, 2% carb+qtz veinlet(s).									
		95.00- 100.00	23111	95.00	100.00	5.00	<5	<5	0.042		
		10% Quartz+Carbonate Vein(s) Qtz+carb vein(s) with epidote and chlorite altn, slightly brecciated.									
			23112	100.00	105.00	5.00	<5				
		105.00- 110.00	23113	105.00	110.00	5.00	<5				
		25% Quartz+Epidote Veins Qtz+epi veins, minor carbonate,									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-8 Zone # : MARTHA Contractor : HELLER DRILLING Date started : 5/29/1991
County : JOSEPHINE Date completed: 5/31/1991
Township: 33S Range: 5W Section: 19+00W Claim # :DG-5

Level : Location :

Collar coordinate : Line : 18+80 W Northing: 0.00 N Azimuth: 155° 0′ 0"
Station: 9+50 N Easting : 0.00 E Dip : 50° 0′ 0"
Reference frame : Elevation: 2530.00 Length : 500.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 10 ft
Water at 50 ft, <5 gal/min.

Water depth: 50 ft
Cimented : YES

Plugged: YES
Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 6/18/1991 Hole # : MA-8

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		moderate epidotization and chloritization of wallrock.									
		110.00- 115.00 5% Quartz Vein(s) White qtz veins, minor carbonate and epidote.	23114	110.00	115.00	5.00	<5				
			23115	115.00	120.00	5.00	<5				
		120.00- 125.00 Fault Zone 20% light greenish grey, very soft clay, slightly foliated.	23116	120.00	125.00	5.00	<5				
			23117	125.00	130.00	5.00	<5				
			23118	130.00	135.00	5.00	<5				
			23119	135.00	140.00	5.00	<5				
			23120	140.00	145.00	5.00	<5				
			23121	145.00	150.00	5.00	<5				
		150.00- 155.00 3-4% Quartz+Carbonate Veins Qtz+carb veins, local epidote and chlorite altn.	23122	150.00	155.00	5.00	<5				
		155.00- 160.00 2-3% Quartz+Carbonate Veins Slight chlorite altn.	23123	155.00	160.00	5.00	<5				
		160.00- 165.00 3-4% Quartz+Carbonate Veins Slight epidote and chlorite altn.	23124	160.00	165.00	5.00	<5				
			23125	165.00	170.00	5.00	<5				
			23126	170.00	175.00	5.00	<5				
		175.00- 180.00 2-3% Quartz+Carbonate Veins Local slight chlorite altn.	23127	175.00	180.00	5.00	<5				
		180.00- 185.00 2-3% Quartz+Carbonate Veins Same as 175.0-180.0.	23128	180.00	185.00	5.00	<5				
			23129	185.00	190.00	5.00	<5				
			23130	190.00	195.00	5.00	10				
			23131	195.00	200.00	5.00	<5				
		200.00- 205.00 EPIDOTIZED GABBRO (?) 60% strongly epidotized, aphanitic gabbro (?), local banding.	23132	200.00	205.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		205.00- 210.00 30% EPIDOTIZED GABBRO (?) Same as 200.0-205.0; 20% light grey qtz vein(s), moderate chlorite altn.	23133	205.00	210.00	5.00	<5				
		210.00- 215.00 5% EPIDOTIZED GABBRO (?) Same as 200.0-205.0; 5% qtz veins.	23134	210.00	215.00	5.00	<5				
			23135	215.00	220.00	5.00	<5				
		220.00- 230.00 25% Quartz+Carbonate Veins White qtz veins with minor carbonate, moderate epidote altn.	23136	220.00	225.00	5.00	<5				
			23137	225.00	230.00	5.00	<5				
		230.00- 241.00 FINE GRAINED GABBRO Mottled light grey and dark greenish black, fine grained, massive, 10-20% qtz+carb veins, moderate chlorite altn.	23138	230.00	235.00	5.00	<5				
			23139	235.00	240.00	5.00	<5				
			23140	240.00	245.00	5.00	<5				
			23141	245.00	250.00	5.00	<5				
		250.00- 255.00 40% FINE GRAINED GABBRO Mottled white to light greyish green and dark greenish black, fine grained, massive.	23142	250.00	255.00	5.00	<5				
		255.00- 260.00 60% FINE GRAINED GABBRO Same as 250.0-255.0; 2-4% qtz veins.	23143	255.00	260.00	5.00	<5				
		260.00- 270.00 15-25% Quartz Veins White to light greenish white qtz veins, minor carbonate, 25-30% silicified and chloritized wallrock.	23144	260.00	265.00	5.00	<5				
			23145	265.00	270.00	5.00	<5				
			23146	270.00	275.00	5.00	<5				
		275.00- 285.00 10% FINE GRAINED GABBRO Same as 250.0-255.0.	23147	275.00	280.00	5.00	<5				
			23148	280.00	285.00	5.00	<5				
			23149	285.00	290.00	5.00	<5				
		290.00- 300.00 5% Epidote Alteration 1-3% qtz veins.	23150	290.00	295.00	5.00	<5				
			23151	295.00	300.00	5.00	<5				
		300.00- 305.00 5-10% Quartz+Epidote Veins Light whitish green qtz veins, minor carbonate, moderate epidote altn,	23152	300.00	305.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		silicified wallrock.									
		305.00- 315.00 FINE GRAINED GABBRO Same as 250.0-255.0.									
		305.00- 310.00 10-15% Quartz Veins Light greyish green qtz veins, strong epidotization, silicified wallrock.	23153	305.00	310.00	5.00	<5				
		310.00- 315.00 5-10% Quartz Veins Same as 305.0-310.0.	23154	310.00	315.00	5.00	<5				
315.00	355.00	APHANITIC TO VERY FINE GRAINED ANDESITE Light to medium greyish green, aphanitic to very fine grained, massive, abundant leucoxene, 1-2% qtz+carb veinlets.	23155	315.00	320.00	5.00	<5				
			23156	320.00	325.00	5.00	<5				
			23157	325.00	330.00	5.00	<5				
			23158	330.00	335.00	5.00	<5				
			23159	335.00	340.00	5.00	<5				
			23160	340.00	345.00	5.00	<5				
			23161	345.00	350.00	5.00	<5				
			23162	350.00	355.00	5.00	<5				
355.00	500.00	FINE GRAINED GABBRO Mottled white to light greenish white and dark greenish black, fine grained, massive, homogenuous, 1-2% qtz+carb veinlets.									
		355.00- 360.00 60% SILICIFIED ANDESITE (?) Light greyish green, aphanitic, silicified, at least 10% qtz+carb veins, local hematite altn, possibly representing the Martha vein structure(?).	23163	355.00	360.00	5.00	<5				
		360.00- 370.00 5-10% Quartz+Carbonate Veins Local epidote altn.	23164	360.00	365.00	5.00	<5				
			23165	365.00	370.00	5.00	<5				
		370.00- 375.00 10% Carbonate+Quartz Veins Local epidote altn.	23166	370.00	375.00	5.00	<5				
			23167	375.00	380.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		380.00- 385.00 2-3% Quartz+Carbonate Veins Tr Py.	23168	380.00	385.00	5.00	<5				
			23169	385.00	390.00	5.00	<5				
		390.00- 395.00 10-15% Quartz+Carbonate Veins Qtz+carb veins, moderate chloritization of wallrock.	23170	390.00	395.00	5.00	<5				
		395.00- 410.00 4-5% Carbonate+Quartz Veins	23171	395.00	400.00	5.00	<5				
			23172	400.00	405.00	5.00	<5				
			23173	405.00	410.00	5.00	<5				
			23174	410.00	415.00	5.00	<5				
			23175	415.00	420.00	5.00	<5				
		420.00- 430.00 APHANITIC GABBRO Dark greenish black, aphanitic, massive, 10% white to whitish green qtz+carb veins.	23176	420.00	425.00	5.00	<5				
			23177	425.00	430.00	5.00	<5				
		430.00- 449.00 VERY FINE GRAINED GABBRO Same as 0.0-315.0; 2-4% qtz+carb veins.	23178	430.00	435.00	5.00	<5				
			23179	435.00	440.00	5.00	<5				
			23180	440.00	445.00	5.00	<5				
			23181	445.00	450.00	5.00	<5				
			23182	450.00	455.00	5.00	<5				
			23183	455.00	460.00	5.00	<5				
		460.00- 465.00 30% APHANITIC GABBRO Dark greenish black, aphanitic, massive.	23184	460.00	465.00	5.00	<5				
			23185	465.00	470.00	5.00	<5				
			23186	470.00	475.00	5.00	<5				
			23187	475.00	480.00	5.00	<5				
		480.00- 485.00 90% APHANITIC TO VERY FINE GRAINED GABBRO Same as 0.0-315.0.	23188	480.00	485.00	5.00	<5				
		485.00- 490.00 15% APHANITIC TO VERY FINE GRAINED GABBRO Same ae 0.0-315.0.	23189	485.00	490.00	5.00	<5				
		490.00- 495.00 85-90% VERY FINE GRAINED GABBRO Same as 0.0-315.0.	23190	490.00	495.00	5.00	<5				
		495.00- 500.00 5% Quartz Veins	23191	495.00	500.00	5.00	<5				
500.00		End of hole									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		Total amount of samples= 100 Total length sampled = 500.00F									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-9 Zone # : MARTHA Contractor : HELLER DRILLING Date started : 5/20/1991
County : JOSEPHINE Date completed: 5/26/1991
Township: 33S Range: 5W Section: 9+00E Claim # :DIVISION

Level : Location :

Collar coordinate : Line : 9+00 E Northing: 0.00 N Azimuth: 204° 0′ 0"
Station: 15+00 N Easting : 0.00 E Dip : 45° 0′ 0"
Reference frame : Elevation: 3230.00 Length : 580.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 120 ft
0′-50′- Dry

Water depth:
Cimented : YES

Plugged: YES
Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 5/28/1991 Hole # : MA-9

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
0.00	30.00	**OVERBURDEN**	22894	0.00	5.00	5.00	<5				
		Brownish orange mud, mainly fragments of fine	22895	5.00	10.00	5.00	5				
		grained gabbro.	22896	10.00	15.00	5.00	<5				
			22897	15.00	20.00	5.00	<5				
			22898	20.00	25.00	5.00	7				
			22899	25.00	30.00	5.00	<5				
30.00	80.00	**APHANITIC TO VERY FINE GRAINED GABBRO**									
		Moderate oxidation, medium greyish green on fresh	22900	30.00	35.00	5.00	21				
		surface, aphanitic to very fine grained, locally	22901	35.00	40.00	5.00	24				
		fine grained, possibly strong fracturing, <1%	22902	40.00	45.00	5.00	<5				
		qtz+carb veinlets.	22903	45.00	50.00	5.00	<5				
			22904	50.00	55.00	5.00	6				
			22905	55.00	60.00	5.00	<5				
			22906	60.00	65.00	5.00	<5				
			22907	65.00	70.00	5.00	6				
			22908	70.00	75.00	5.00	5				
			22909	75.00	80.00	5.00	12				
80.00	201.00	**VERY FINE GRAINED GABBRO**									
		Dark greyish green to black, very fine grained									
		to locally aphanitic, massive, local fine grained									
		facies, <1% qtz+carb veinlets, contaminated									
		from 80.0-110.0.									
		80.00- 85.00	22910	80.00	85.00	5.00	13				
		5% Quartz Vein(s)									
		White qtz vein(s), slightly									
		brecciated, local weak oxidation.									
		85.00- 90.00	22911	85.00	90.00	5.00	<5				
		2-3% Quartz Vein(s)									
		White qtz vein(s) with minor carb,									
		brecciated, some epidote altn.									
		90.00- 110.00	22912	90.00	95.00	5.00	6				
		Moderate to strong contamination.	22913	95.00	100.00	5.00	<5				
			22914	100.00	105.00	5.00	<5				
			22915	105.00	110.00	5.00	<5				
		110.00- 120.00									
		2-5% Quartz Vein(s)	22916	110.00	115.00	5.00	<5				
		White qtz+carb veins, slightly	22917	115.00	120.00	5.00	<5				
		bleached and chloritized wallrock.									
		120.00- 135.00	22918	120.00	125.00	5.00	<5				
		FINE GRAINED DIORITE									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		Mottled white to light grey and dark greyish green to black, fine to medium grained, massive, weak epidote altn, 2% qtz veinlets.									
		125.00- 130.00 Strong Epidote Alteration 30% aphanitic, strongly epidotized, light yellowish green fragments, probable spotty type of altn.	22919	125.00	130.00	5.00	<5				
		130.00- 135.00 80% Quartz Vein(s) White to light greenish grey quartz vein material containing epidote veinules and fragments of unaltered diorite, 1-2% Py, 10-15% aphanitic epidotized fragments (?).	22920	130.00	135.00	5.00	<5				
			22921	135.00	140.00	5.00	<5				
		140.00- 145.00 50% FINE GRAINED DIORITE Mottled white to light whitish grey and dark greyish green to black, fine to medium grained, massive, local weak epidote altn.	22922	140.00	145.00	5.00	<5				
		145.00- 150.00 80% FINE GRAINED DIORITE Same as 140.0-145.0.	22923	145.00	150.00	5.00	<5				
			22924	150.00	155.00	5.00	<5				
		155.00- 160.00 FINE GRAINED DIORITE Same as 140.0-145.0.	22925	155.00	160.00	5.00	<5				
			22926	160.00	165.00	5.00	<5				
		165.00- 170.00 5% Quartz Vein(s) Light grey qtz vein(s) with minor carbonate, contains small chloritized and bleached fragments of aphanitic gabbro, 1-2% Py.	22927	165.00	170.00	5.00	<5				
			22928	170.00	175.00	5.00	<5				
			22929	175.00	180.00	5.00	<5				
			22930	180.00	185.00	5.00	<5				
			22931	185.00	190.00	5.00	<5				
			22932	190.00	195.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		195.00- 200.00 1% Quartz+Carbonate Vein Qtz+carb vein(s) with tr Py.	22933	195.00	200.00	5.00	<5				
			22934	200.00	205.00	5.00	<5				
201.00	580.00	FINE GRAINED DIORITE Mottled white to whitish grey and dark greyish green to black, fine grained, loc. medium grained, massive, composition varies from diorite to quartz diorite, local moderate to strong epidote altn, <2% qtz veinlets, tr Py.									
		201.00- 250.00 Moderate to strong epidote altn zones.									
		205.00- 210.00 50% VERY FINE GRAINED GABBRO Same as 80.0-201.0; moderate local epidote altn.	22935	205.00	210.00	5.00	<5				
			22936	210.00	215.00	5.00	<5				
			22937	215.00	220.00	5.00	<5				
			22938	220.00	225.00	5.00	<5				
			22939	225.00	230.00	5.00	<5				
			22940	230.00	235.00	5.00	<5				
		235.00- 250.00	22941	235.00	240.00	5.00	<5				
		5-10% VERY FINE GRAINED GABBRO Same as 80.0-201.0.	22942	240.00	245.00	5.00	<5				
		245.00- 250.00 50% Silicified Diorite White to light grey, strongly silicified, chloritized pyroxene specks throughout, moderate epidote altn (mostly veinules), tr Py.	22943	245.00	250.00	5.00	<5				
		250.00- 269.50	22944	250.00	255.00	5.00	<5				
		VERY FINE GRAINED GABBRO Same as 80.0-201.0.	22945	255.00	260.00	5.00	<5				
		260.00- 265.00 2% Quartz+Carbonate Vein(s) Bleached and chloritized wallrock.	22946	260.00	265.00	5.00	<5				
			22947	265.00	270.00	5.00	<5				
			22948	270.00	275.00	5.00	<5				
		275.00- 285.00	22949	275.00	280.00	5.00	<5				
		10-15% VERY FINE GRAINED GABBRO	22950	280.00	285.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		Same as 80.0-201.0.									
		285.00- 290.00	22951	285.00	290.00	5.00	<5				
		30% VERY FINE GRAINED GABBRO									
		Same as 80.0-210.0.									
		290.00- 300.00	22952	290.00	295.00	5.00	<5				
		10% VERY FINE GRAINED GABBRO	22953	295.00	300.00	5.00	21				
		Same as 80.0-201.0.									
		300.00- 310.00	22954	300.00	305.00	5.00	<5				
		VERY FINE GRAINED GABBRO									
		Same as 80.0-201.0.									
		305.00- 310.00	22955	305.00	310.00	5.00	<5				
		10-15% Quartz Veins									
		White to light grey qtz veins, 30% aphanitic epidotized gabbro (?), 5% fine grained diorite.									
		310.00- 315.00	22956	310.00	315.00	5.00	<5				
		30% VERY FINE GRAINED GABBRO									
		Same as 80.0-201.0.									
			22957	315.00	320.00	5.00	<5				
		320.00- 325.00	22958	320.00	325.00	5.00	<5				
		10% VERY FINE GRAINED GABBRO									
		Same as 80.0-201.0; local epidote altn.									
		325.00- 330.00	22959	325.00	330.00	5.00	<5				
		30% VERY FINE GRAINED GABBRO									
		Same as 80.0-201.0; tr Py, local epidote altn.									
		330.00- 340.00	22960	330.00	335.00	5.00	<5				
		5-10% APHANITIC GABBRO OR BASALT(?)	22961	335.00	340.00	5.00	<5				
		Varying from medium greyish green to light greenish grey beige, aphanitic, highly silicified from 335.0-340.0, possibly a dyke.									
		340.00- 345.00	22962	340.00	345.00	5.00	<5				
		3-4% Carbonate+Quartz Veins									
		Very slight epidote altn.									
		345.00- 356.00	22963	345.00	350.00	5.00	<5				
		VERY FINE GRAINED GABBRO	22964	350.00	355.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		Same as 80.0-201.0.	22965	355.00	360.00	5.00	<5				
			22966	360.00	365.00	5.00	<5				
			22967	365.00	370.00	5.00	<5				
			22968	370.00	375.00	5.00	<5				
			22969	375.00	380.00	5.00	<5				
		378.00- 386.00	22970	380.00	385.00	5.00	<5				
		EPIDOTIZED APHANITIC TO VERY FINE GRAINED GABBRO (?)	22971	385.00	390.00	5.00	<5				
		Light greyish green, aphanitic to very fine grained, moderate epidotization, sharp contacts, massive.									
		386.00- 420.00	22972	390.00	395.00	5.00	<5				
		VERY FINE TO FINE GRAINED DIORITE/GABBRO	22973	395.00	400.00	5.00	<5				
		Composition varies from very fine to fine grained, very fine grained same as 80.0-201.0.									
		400.00- 405.00	22974	400.00	405.00	5.00	<5				
		10% Carbonate+Quartz Veins									
		Carb+qtz veinlets with tr Py, sheared and sericitized contacts.									
			22975	405.00	410.00	5.00	7				
		410.00- 415.00	22976	410.00	415.00	5.00	<5				
		25% Carbonate+Epidote+Quartz Veins									
		Carb+qtz veins with abundant epidote, slight bleaching of wallrock.									
			22977	415.00	420.00	5.00	<5				
			22978	420.00	425.00	5.00	<5				
		425.00- 430.00	22979	425.00	430.00	5.00	41	.001			
		2-3% Carbonate+Quartz Veins									
		approx. 10% silicified, light greenish grey, aphanitic, dacitic composition (?), containing 5-10% chloritized mafic phenocrysts, tr Py.									
		430.00- 435.00	22980	430.00	435.00	5.00	<5				
		60% Carbonate+Quartz Vein									
		Brecciated carb+qtz vein containing bleached, silicified fragments of very fine grained gabbro, 2% Py, tr fuchsite, representing Martha vein structure.									
		435.00- 440.00	22981	435.00	440.00	5.00	31				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		70% APHANITIC DACITE (?) Light greenish grey, aphanitic, local weak silicification, massive, tr Py, same as 425.0-430.0.									
			22982	440.00	445.00	5.00	<5				
		444.00- 455.00	22983	445.00	450.00	5.00	<5				
		VERY FINE GRAINED GABBRO Same as 80.0-201.0.	22984	450.00	455.00	5.00	<5				
			22985	455.00	460.00	5.00	<5				
			22986	460.00	465.00	5.00	<5				
			22987	465.00	470.00	5.00	<5				
			22988	470.00	475.00	5.00	<5				
		474.00- 497.00	22989	475.00	480.00	5.00	<5				
		VERY FINE GRAINED GABBRO Same as 80.0-201.0; locally varies from very fine to fine grained.									
		480.00- 485.00	22990	480.00	485.00	5.00	<5				
		20% APHANITIC DACITE (?) Light greenish grey, aphanitic, locally contains qtz and mafic phenocrysts, weak silicification, possibly a dyke (?).									
			22991	485.00	490.00	5.00	6				
			22992	490.00	495.00	5.00	<5				
			22993	495.00	500.00	5.00	<5				
			22994	500.00	505.00	5.00	<5				
		505.00- 537.00	22995	505.00	510.00	5.00	<5				
		VERY FINE GRAINED GABBRO Same as 80.0-201.0; locally varies from very fine to fine grained.									
		510.00- 520.00	22996	510.00	515.00	5.00	12				
		20% Carbonate+Quartz Veins Carb+qtz veins, slightly brecciated and sheared with 1-2% Py; bleached, silicified, aphanitic wallrock (gabbro?) with 2-4% Py, tr fuchsite, from 510.0-515.0: strong epidote altn in the fine grained diorite.	22997	515.00	520.00	5.00	21				
			22998	520.00	525.00	5.00	5				
			22999	525.00	530.00	5.00	<5				
			23000	530.00	535.00	5.00	<5				
			23001	535.00	540.00	5.00	<5				
			23002	540.00	545.00	5.00	<5				
			23003	545.00	550.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		550.00- 555.00 VERY FINE GRAINED GABBRO Same as 80.0-201.0.	23004	550.00	555.00	5.00	<5				
			23005	555.00	560.00	5.00	<5				
			23006	560.00	565.00	5.00	<5				
		565.00- 570.00 5-10% Carbonate+Quartz Veins Carb+qtz veins, silicified and bleached wallrock, tr Py.	23007	565.00	570.00	5.00	<5				
		570.00- 575.00 EPIDOTIZED VERY FINE TO FINE GRAINED DIORITE/GABBRO Same as 386.0-420.0; strong epidotization.	23008	570.00	575.00	5.00	<5				
		575.00- 580.00 80% VERY FINE GRAINED GABBRO Same as 80.0-201.0.	23009	575.00	580.00	5.00	<5				
580.00		End of hole									
		Total amount of samples= 116 Total length sampled = 580.00F									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-10 Zone # : MARTHA Contractor : HELLER DRILLING Date started : 5/17/1991
County : JOSEPHINE Date completed: 5/19/1991
Township: 33S Range: 5W Section: 12+00E Claim # :DIVISION

Level : Location :

Collar coordinate : Line : 12+00 E Northing: 0.00 N Azimuth: 204° 0′ 0"
Station: 16+90 N Easting : 0.00 E Dip : 54° 0′ 0"
Reference frame : Elevation: 3163.00 Length : 680.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 10 ft
0-130 ft -Dry

Water depth:
Cimented : YES

Plugged: YES
Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 5/20/1991 Hole # : MA-10

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
0.00	210.00	VERY FINE GRAINED GABBRO Dark greenish grey to black, very fine grained, massive, homogenuous, rare epidote altn, <2% carb+qtz veinlets.									
		0.00- 10.50	22758	0.00	5.00	5.00	<5				
		OXIDIZED VERY FINE GRAINED GABBRO	22759	5.00	10.00	5.00	<5				
		Weakly to moderately oxidized, very fine grained, mottled light grey and dark grey to black when fresh, massive.	22760	10.00	15.00	5.00	<5				
		10.50- 18.00	22761	15.00	20.00	5.00	<5				
		VERY FINE GRAINED GABBRO Mottled light grey and dark grey to black, very fine grained, homogenuous, slight oxidation locally (possible contamination).									
		18.00- 30.00	22762	20.00	25.00	5.00	<5				
		APHANTIC TO VERY FINE GRAINED GABBRO	22763	25.00	30.00	5.00	<5				
		Medium to dark grey to black, aphanitic to very fine grained, massive homogenuous, <1% qtz+carb veinlets.									
		30.00- 35.00	22764	30.00	35.00	5.00	<5				
		FINE GRAINED QUARTZ DIORITE (?) Mottled light whitish grey and dark greenish grey to black, fine grained, massive, mixed with some aphanitic to very fine grained gabbro (?).									
			22765	35.00	40.00	5.00	<5				
			22766	40.00	45.00	5.00	<5				
		43.00- 62.00	22767	45.00	50.00	5.00	<5				
		FINE GRAINED QUARTZ DIORITE (?) Mottled light whitish grey and dark greenish black, massive, fine grained, mixed with some aphanitic to very fine grained gabbro (?).									
		50.00- 60.00	22768	50.00	55.00	5.00	<5				
		5% Carbonate+Quartz Veins	22769	55.00	60.00	5.00	<5				
			22770	60.00	65.00	5.00	<5				
			22771	65.00	70.00	5.00	<5				
			22772	70.00	75.00	5.00	<5				
			22773	75.00	80.00	5.00	<5				
		80.00- 85.00	22774	80.00	85.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		30% FINE GRAINED DIORITE/GABBRO Mottled white and dark greenish black, fine grained, 10-15% carb+qtz veinlets, slight local epidote altn.									
			22775	85.00	90.00	5.00	<5				
			22776	90.00	95.00	5.00	<5				
			22777	95.00	100.00	5.00	<5				
		100.00- 110.00	22778	100.00	105.00	5.00	<5				
		FINE GRAINED DIORITE/GABBRO Mottled white to light grey and dark grey to black, fine grained, massive, from 105.0-110.0 mixed with 20% aphanitic to very fine grained gabbro, <2% carb+qtz veinlets.	22779	105.00	110.00	5.00	<5				
		110.00- 115.00	22780	110.00	115.00	5.00	<5				
		20% FINE GRAINED DIORITE/GABBRO Same as 100.0-110.0.									
			22781	115.00	120.00	5.00	<5				
		120.00- 142.00	22782	120.00	125.00	5.00	<5				
		FINE GRAINED DIORITE/GABBRO Same as 100.0-110.0; massive and homogenuous.									
		125.00- 130.00	22783	125.00	130.00	5.00	<5				
		10-15% Carbonate+Quartz Veins White carb+qtz veinlets with strongly silicified light brownish grey wallrock, aphanitic, tr Py.									
			22784	130.00	135.00	5.00	<5				
			22785	135.00	140.00	5.00	<5				
			22786	140.00	145.00	5.00	<5				
		142.00- 145.00									
		Aphanitic Sericitized Gabbro (?) Light greyish green, aphanitic, bleached, sericitized, 10% carb+qtz veinlets (?).									
			22787	145.00	150.00	5.00	<5				
			22788	150.00	155.00	5.00	<5				
		155.00- 172.00	22789	155.00	160.00	5.00	<5				
		FINE GRAINED DIORITE/GABBRO	22790	160.00	165.00	5.00	<5				
		Same as 120.0-142.0; tr Py.	22791	165.00	170.00	5.00	<5				
			22792	170.00	175.00	5.00	<5				
			22793	175.00	180.00	5.00	<5				
			22794	180.00	185.00	5.00	<5				
			22795	185.00	190.00	5.00	<5				
			22796	190.00	195.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		195.00- 200.00									
		20% SILICIFIED MATERIAL (?)	22797	195.00	200.00	5.00	<5				
		Light brownish grey, aphanitic, moderate silicification, 2-3% carb+qtz veinlets, possible contact altn zone (?).									
			22798	200.00	205.00	5.00	<5				
			22799	205.00	210.00	5.00	<5				
210.00	298.00	FINE GRAINED DIORITE/GABBRO	22800	210.00	215.00	5.00	<5				
		Mottled white and dark greenish grey to black, fine grained, massive, equigranular, % of mafic minerals varies from 40-75%, <2% carb+qtz veinlets, local spotty epidote altn.	22801	215.00	220.00	5.00	<5				
		218.00- 225.00	22802	220.00	225.00	5.00	<5				
		VERY FINE GRAINED GABBRO									
		Same as 0.0-210.0.									
		225.00- 230.00	22803	225.00	230.00	5.00	9				
		10-15% Carbonate Veins									
		Brecciated carb veins with minor qtz, fragments of bleached silicified and/or slightly chloritized gabbro.									
		230.00- 235.00	22804	230.00	235.00	5.00	<5				
		VERY FINE GRAINED GABBRO									
		Same as 0.0-210.0.									
			22805	235.00	240.00	5.00	<5				
			22806	240.00	245.00	5.00	<5				
			22807	245.00	250.00	5.00	<5				
			22808	250.00	255.00	5.00	<5				
			22809	255.00	260.00	5.00	6	<5	.036	.021	.029
			22810	260.00	265.00	5.00	<5				
			22811	265.00	270.00	5.00	<5				
			22812	270.00	275.00	5.00	<5				
			22813	275.00	280.00	5.00	<5				
			22814	280.00	285.00	5.00	<5				
			22815	285.00	290.00	5.00	<5				
			22816	290.00	295.00	5.00	<5				
			22817	295.00	300.00	5.00	<5				
298.00	530.00	VERY FINE GRAINED GABBRO	22818	300.00	305.00	5.00	<5				
		Same as 0.0-210.0; 1-2% carb+qtz veinlets with local weak epidote altn, locally fine grained facies.	22819	305.00	310.00	5.00	<5				
			22820	310.00	315.00	5.00	<5				
		315.00- 335.00	22821	315.00	320.00	5.00	<5				
		2-4% Carbonate+Quartz Veins	22822	320.00	325.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		Carbonate veins with minor qtz and occasional epidote.	22823	325.00	330.00	5.00	<5				
			22824	330.00	335.00	5.00	<5				
			22825	335.00	340.00	5.00	<5				
			22826	340.00	345.00	5.00	<5				
			22827	345.00	350.00	5.00	<5				
			22828	350.00	355.00	5.00	<5				
			22829	355.00	360.00	5.00	<5				
			22830	360.00	365.00	5.00	<5				
			22831	365.00	370.00	5.00	<5				
		366.00- 402.00	22832	370.00	375.00	5.00	<5				
		FINE GRAINED DIORITE/GABBRO	22833	375.00	380.00	5.00	<5				
		Same as 210.0-298.0.	22834	380.00	385.00	5.00	<5				
			22835	385.00	390.00	5.00	<5				
			22836	390.00	395.00	5.00	<5				
			22837	395.00	400.00	5.00	<5				
			22838	400.00	405.00	5.00	<5				
		402.00- 415.00									
		APHANITIC TO VERY FINE GRAINED	22839	405.00	410.00	5.00	<5				
		GABBRO/DIORITE	22840	410.00	415.00	5.00	<5				
		Light to medium greyish green, aphanitic to very fine grained, spotty epidote altn, tr Py.									
			22841	415.00	420.00	5.00	<5				
			22842	420.00	425.00	5.00	<5				
			22843	425.00	430.00	5.00	<5				
			22844	430.00	435.00	5.00	<5				
			22845	435.00	440.00	5.00	<5				
			22846	440.00	445.00	5.00	<5				
			22847	445.00	450.00	5.00	<5				
		448.00- 455.00	22848	450.00	455.00	5.00	<5				
		FINE GRAINED DIORITE/GABBRO									
		Same as 210.0-298.0; mottled light greyish green and dark greenish grey to black.									
			22849	455.00	460.00	5.00	<5				
		460.00- 465.00	22850	460.00	465.00	5.00	<5				
		15-20% Carbonate+Quartz Vein									
		Martha vein structure, 15-20% carb+qtz vein(s) with tr Hem and <1% Py, white to light grey qtz, silicified light greyish green wallrock (gabbro?) mixed with some vein material, tr Py, mineralized zone approx. from 460.5-462.0.									
			22851	465.00	470.00	5.00	<5				
			22852	470.00	475.00	5.00	<5				
			22853	475.00	480.00	5.00	<5				
			22854	480.00	485.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		485.00- 490.00 Carbonate+Quartz Vein(s) Carb vein with light grey qtz and 1-2% Py, immediate contact moderately silicified with 1-3% Py.	22855	485.00	490.00	5.00	<5				
		490.00- 495.00 10-15% Carbonate+Quartz Vein(s) Carb+qtz vein(s) with <1% Py, immediate contact with wallrock highly silicified containing 1-3% Py (light grey), away from the contact <1% Py (light greyish green), local epidote altn.	22856	490.00	495.00	5.00	33				
		495.00- 500.00 15-20% Quartz+Carbonate Vein(s) White to light grey qtz and carb vein(s) containing 2-4% Py, highly silicified light greenish grey wallrock with up to 5% Py (immediate contact), gabbro varies from aphanitic to fine grained.	22857	495.00	500.00	5.00	64				.002
		500.00- 505.00 1-2% Carbonate+Quartz Veins Probable contamination from 495.0-500.0, presence of slickenlines on one of the vein fragments.	22858	500.00	505.00	5.00	5				
			22859	505.00	510.00	5.00	<5				
			22860	510.00	515.00	5.00	14				
		512.50- 530.00	22861	515.00	520.00	5.00					.046
		50% BLEACHED AND SILICIFIED GABBRO (?) Light brownish grey and light greyish green, aphanitic, silicified, bleached (?), abundant leucoxene, contains 1-3% Py, probable gradual contact, 5-10% brecciated carbonate veins with minor qtz and mineralized altered wallrock fragments.	22862	520.00	525.00	5.00	<5				
			22863	525.00	530.00	5.00	8				
530.00	680.00	**FINE GRAINED GABBRO/DIORITE** Mottled light greyish green or whitish green and dark greyish green to black, fine grained, loc. very fine grained, massive, <1% carb+qtz									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		veinlets, local epidote altn, tr Py.									
		530.00- 535.00	22864	530.00	535.00	5.00	<5				
		30% FINE GRAINED GABBRO/DIORITE									
		Slight hematite altn, tr Py.									
		535.00- 550.00	22865	535.00	540.00	5.00	126				.004
		70-80% Carbonate+Quartz Veins	22866	540.00	545.00	5.00	740				.022
		Highly brecciated carb+qtz veins	22867	545.00	550.00	5.00	27				
		containing 40-50% silicified,									
		bleached, light brownish grey to									
		green fragments of aphanitic gabbro									
		(?), 2-3% Py.									
		550.00- 555.00	22868	550.00	555.00	5.00	<5				
		10% Carbonate+Quartz Veins									
		Carb+qtz veins, slightly brecciated,									
		tr Py.									
			22869	555.00	560.00	5.00	<5				
			22870	560.00	565.00	5.00	<5				
			22871	565.00	570.00	5.00	<5				
			22872	570.00	575.00	5.00	<5				
			22873	575.00	580.00	5.00	<5				
			22874	580.00	585.00	5.00	<5				
			22875	585.00	590.00	5.00	<5				
			22876	590.00	595.00	5.00	<5				
			22877	595.00	600.00	5.00	<5				
			22878	600.00	605.00	5.00	<5				
			22879	605.00	610.00	5.00	<5				
			22880	610.00	615.00	5.00	<5				
		615.00- 635.00	22881	615.00	620.00	5.00	<5				
		APHANITIC GABBRO (?)	22882	620.00	625.00	5.00	<5				
		Light to medium greyish green, aphanitic	22883	625.00	630.00	5.00	<5				
		to loc. very fine grained, weakly to	22884	630.00	635.00	5.00	<5				
		moderately silicified, massive, 2-3%									
		carb+qtz veinlets, tr Py.									
			22885	635.00	640.00	5.00	<5				
			22886	640.00	645.00	5.00	<5				
			22887	645.00	650.00	5.00	<5				
			22888	650.00	655.00	5.00	<5				
			22889	655.00	660.00	5.00	<5				
			22890	660.00	665.00	5.00	<5				
			22891	665.00	670.00	5.00	<5				
			22892	670.00	675.00	5.00	<5				
			22893	675.00	680.00	5.00	<5				
680.00		End of hole									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		Total amount of samples= 136 Total length sampled = 680.00F									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-11 Zone # : MARTHA Contractor : HELLER DRILLING Date started : 5/27/1991
County : JOSEPHINE Date completed: 5/28/1991
Township: 33S Range: 5W Section: 15+00E Claim # :DIVIDEND

Level : Location :

Collar coordinate : Line : 14+60 E Northing: 0.00 N Azimuth: 204° 0′ 0"
Station: 16+15 N Easting : 0.00 E Dip : 53° 0′ 0"
Reference frame : Elevation: 3122.00 Length : 410.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 10 ft

Water depth:
Cimented : YES

Plugged: YES
Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 6/25/1991 Hole # : MA-11

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
0.00	20.00	**VERY FINE GRAINED GABBRO** Medium to dark greenish black, very fine grained, massive, slight oxidation.	23010	0.00	5.00	5.00	<5				
			23011	5.00	10.00	5.00	5				
			23012	10.00	15.00	5.00	<5				
			23013	15.00	20.00	5.00	<5				
20.00	170.00	**PERIDOTITE** Dark greenish black to black, occasionally partly serpentinized, massive, weakly foliated, <1% qtz+carb veinlets.									
		20.00- 30.00 OXIDIZED PERIDOTITE Moderate to strong oxidation, weak to moderate shearing, partly serpentinized.	23014	20.00	25.00	5.00	13				
		25.00- 30.00 50-60% Carbonate Veins White to light greenish white carbonate veins.	23015	25.00	30.00	5.00	60	.002			
			23016	30.00	35.00	5.00	<5				
			23017	35.00	40.00	5.00	<5				
			23018	40.00	45.00	5.00	<5				
			23019	45.00	50.00	5.00	<5				
			23020	50.00	55.00	5.00	<5				
			23021	55.00	60.00	5.00	<5				
			23022	60.00	65.00	5.00	<5				
			23023	65.00	70.00	5.00	<5				
			23024	70.00	75.00	5.00	<5				
			23025	75.00	80.00	5.00	<5				
			23026	80.00	85.00	5.00	5				
			23027	85.00	90.00	5.00	167	.005			
		90.00- 95.00 5% Carbonate Veins mm carbonate veinlets, partly serpentinized wallrock.	23028	90.00	95.00	5.00	13				
			23029	95.00	100.00	5.00	31				
			23030	100.00	105.00	5.00	<5				
			23031	105.00	110.00	5.00	<5				
			23032	110.00	115.00	5.00	<5				
		115.00- 120.00 5% Carbonate Veins Same as 90.0-95.0.	23033	115.00	120.00	5.00	<5				
			23034	120.00	125.00	5.00	<5				
			23035	125.00	130.00	5.00	<5				
		130.00- 135.00 5% Carbonate Veins	23036	130.00	135.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		Same as 90.0-95.0.									
			23037	135.00	140.00	5.00	<5				
		140.00- 145.00	23038	140.00	145.00	5.00	<5				
		5% Carbonate Veins									
		Same as 90.0-95.0.									
			23039	145.00	150.00	5.00	<5				
			23040	150.00	155.00	5.00	<5				
			23041	155.00	160.00	5.00	<5				
		160.00- 165.00	23042	160.00	165.00	5.00	<5				
		10% Carbonate Veins									
		Light grey to white carbonate veins.									
		165.00- 170.00	23043	165.00	170.00	5.00	<5				
		50-60% Carbonate Veins									
		White to light greenish white									
		carbonate veins, tr Py, minor talc.									
170.00	410.00	**VERY FINE TO FINE GRAINED GABBRO/DIORITE**									
		Mottled white to light green and dark greenish									
		black, very fine grained to fine grained,									
		massive, local weak epidote altn, local aphanitic									
		phases, 1-2% carb+qtz veinlets.									
		170.00- 175.00	23044	170.00	175.00	5.00	<5				
		Contact Zone									
		Altered peridotite, carbonate and									
		hematite altns, 10% carbonate veins with									
		minor quartz.									
		175.00- 180.00	23045	175.00	180.00	5.00	<5				
		15-20% Carbonate Veins									
		White to light greenish white									
		carbonate veins, <5% quartz.									
		180.00- 185.00	23046	180.00	185.00	5.00	<5				
		60-70% Carbonate Veins									
		Same as 175.0-180.0.									
		185.00- 190.00	23047	185.00	190.00	5.00	<5				
		5-10% Carbonate Veins									
		Same as 175.0-180.0.									
		190.00- 195.00	23048	190.00	195.00	5.00	<5				
		10-15% Carbonate Veins									
		Same as 175.0-180.0.									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		195.00- 200.00 3% Carbonate Veins Weak epidote altn.	23049	195.00	200.00	5.00	<5				
		200.00- 205.00 5% Carbonate Veins Local weak epidote altn.	23050	200.00	205.00	5.00	<5				
		205.00- 210.00 15% Carbonate Veins Bleached wallrock.	23051	205.00	210.00	5.00	<5				
		210.00- 215.00 15% APHANITIC GABBRO Dark greenish black, aphanitic, possibly a dyke.	23052	210.00	215.00	5.00	<5				
			23053	215.00	220.00	5.00	<5				
		220.00- 225.00 40% APHANITIC GABBRO Same as 210.0-215.0.	23054	220.00	225.00	5.00	<5				
			23055	225.00	230.00	5.00	<5				
			23056	230.00	235.00	5.00	<5				
			23057	235.00	240.00	5.00	<5				
			23058	240.00	245.00	5.00	<5				
			23059	245.00	250.00	5.00	<5				
			23060	250.00	255.00	5.00	<5				
			23061	255.00	260.00	5.00	<5				
		260.00- 265.00 10% Carbonate Veins mm carbonate veins, local epidote, tr Py, 6 in. altn zone.	23062	260.00	265.00	5.00	<5				
			23063	265.00	270.00	5.00	<5				
			23064	270.00	275.00	5.00	<5				
			23065	275.00	280.00	5.00	<5				
			23066	280.00	285.00	5.00	<5				
		285.00- 292.00 APHANITIC TO VERY FINE GRAINED GABBRO Dark greenish black, aphanitic to very fine grained, massive, homogeneous.									
		285.00- 290.00 2-3% Carbonate Veinlets mm carbonate veinlets.	23067	285.00	290.00	5.00	<5				
			23068	290.00	295.00	5.00	<5				
			23069	295.00	300.00	5.00	NR				
		300.00- 305.00	23070	300.00	305.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		5% Carbonate Veins Possibly representing the Martha vein structure, bleached and slightly silicified wallrock, carbonate veins with minor quartz, slight hematite altn, <1% Py, zone approx. 12 in. wide.									
		305.00- 310.00 2% Carbonate Veins Slight epidote altn.	23071	305.00	310.00	5.00	<5				
		310.00- 315.00 10-15% Carbonate Veinlets Slight epidote altn.	23072	310.00	315.00	5.00	<5				
		315.00- 320.00 10-15% Carbonate+Quartz Veins Slight bleaching and silicificatoin of wallrock.	23073	315.00	320.00	5.00	<5				
			23074	320.00	325.00	5.00	<5				
		325.00- 330.00 APHANITIC TO VERY FINE GRAINED GABBRO Dark greenish black, aphanitic to very fine grained, massive, frequent leucoxene, <2% carbonate veinlets.	23075	325.00	330.00	5.00	<5				
		330.00- 340.00 FINE GRAINED GABBRO/DIORITE Mottled white to light whitish green, fine grained, local weak epidote altn.	23076	330.00	335.00	5.00	<5				
			23077	335.00	340.00	5.00	<5				
		340.00- 355.00 APHANITIC TO VERY FINE GRAINED GABBRO Same as 325.0-330.0; local leucoxene.	23078	340.00	345.00	5.00	<5				
			23079	345.00	350.00	5.00	<5				
		350.00- 355.00 20% Carbonate Vein Carbonate vein with minor quartz, tr Py, approx. 12 in. wide, similar to 300.0-305.0.	23080	350.00	355.00	5.00	<5				
			23081	355.00	360.00	5.00	<5				
			23082	360.00	365.00	5.00	<5				
			23083	365.00	370.00	5.00	<5				
			23084	370.00	375.00	5.00	<5				
		375.00- 405.00	23085	375.00	380.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		FINE GRAINED GABBRO/DIORITE	23086	380.00	385.00	5.00	<5				
		Mottled white and dark greenish black,	23087	385.00	390.00	5.00	<5				
		fine grained, massive, inequigranular.	23088	390.00	395.00	5.00	<5				
			23089	395.00	400.00	5.00	<5				
			23090	400.00	405.00	5.00	<5				
			23091	405.00	410.00	5.00	<5				
410.00		End of hole									
		Total amount of samples= 82									
		Total length sampled = 410.00F									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-12 Zone # : Contractor : HELLER DRILLING Date started : 4/17/1991
County : JOSEPHINE Date completed: 4/21/1991
Township: 33S Range: 5W Section: Claim # :SP-4

Level : Location :

Collar coordinate : Line : 2+50 W Northing: 0.00 N Azimuth: 170° 0′ 0"
Station: 29+00 N Easting : 0.00 E Dip : 45° 0′ 0"
Reference frame : Elevation: 2480.00 Length : 730.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 30 ft
0-295 ft -Dry
Water at 360 ft, 60 gal/min.

Water depth: 360 ft
Cimented : YES

Plugged: YES
Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 4/21/1991 Hole # : MA-12

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
0.00	125.00	**OXIDIZED ANDESITE** Light to medium orange brown, aphanitic, moderate oxidation, Fe oxides along fractures, medium greenish grey when fresh, local silicification, tr Py.									
		0.00- 10.00	22119	0.00	5.00	5.00	5				
		BLEACHED OXIDIZED ANDESITE Light beige to grey, weak oxidation, bleached, aphanitic, tr Fe oxides.	22120	5.00	10.00	5.00	<5				
			22121	10.00	15.00	5.00	<5				
			22122	15.00	20.00	5.00	<5				
			22123	20.00	25.00	5.00	<5				
			22124	25.00	30.00	5.00	38				
			22125	30.00	35.00	5.00	5				
			22126	35.00	40.00	5.00	<5				
			22127	40.00	45.00	5.00	<5				
			22128	45.00	50.00	5.00	<5				
			22129	50.00	55.00	5.00	<5				
			22130	55.00	60.00	5.00	<5				
			22131	60.00	65.00	5.00	<5				
			22132	65.00	70.00	5.00	<5				
			22133	70.00	75.00	5.00	<5				
			22134	75.00	80.00	5.00	<5				
			22135	80.00	85.00	5.00	<5				
			22136	85.00	90.00	5.00	<5				
		90.00- 105.00	22137	90.00	95.00	5.00	<5				
		15-20% SILICIFIED ANDESITE Light to medium grey, aphanitic, massive appearance, % of silicified andesite varies from 5-30%, 2% Py.	22138	95.00	100.00	5.00	<5				
			22139	100.00	105.00	5.00	<5				
			22140	105.00	110.00	5.00	<5				
			22141	110.00	115.00	5.00	<5				
			22142	115.00	120.00	5.00	<5				
			22143	120.00	125.00	5.00	<5				
125.00	505.00	**APHANITIC ANDESITE** Light to medium greyish green, aphanitic to locally very fine grained, local silicification and epidotization, tr Py.									
		125.00- 140.00	22144	125.00	130.00	5.00	<5				
		SILICIFIED ANDESITE Highly silicified aphanitic andesite, light greenish grey, 5% disseminated Py.	22145	130.00	135.00	5.00	<5				
		135.00- 140.00	22146	135.00	140.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		20% Quartz+Carbonate Veins Quartz and carbonate veins with tr Py, 4-5% Py in wallrock.									
			22147	140.00	145.00	5.00	<5				
		145.00- 150.00 WEAKLY SILICIFIED ANDESITE Weak silicification, light to medium greenish grey, 2-3% Py.	22148	145.00	150.00	5.00	<5				
		150.00- 160.00 SILICIFIED ANDESITE Same as 125.0-140.0; 2-3% Py, <1% carbonate.	22149	150.00	155.00	5.00	<5				
			22150	155.00	160.00	5.00	<5				
		160.00- 170.00 WEAKLY SILICIFIED ANDESITE Same as 145.0-150.0; <2% Py, 1% qtz+carb veinlets.	22151	160.00	165.00	5.00	<5				
			22152	165.00	170.00	5.00	<5				
			22153	170.00	175.00	5.00	<5				
			22154	175.00	180.00	5.00	<5				
			22155	180.00	185.00	5.00	25				
			22156	185.00	190.00	5.00	6				
			22157	190.00	195.00	5.00	<5				
			22158	195.00	200.00	5.00	5				
		200.00- 210.00 1-2% Py.	22159	200.00	205.00	5.00	<5				
			22160	205.00	210.00	5.00	<5				
			22161	210.00	215.00	5.00	<5				
			22162	215.00	220.00	5.00	8				
			22163	220.00	225.00	5.00	<5				
		225.00- 230.00 1% Py, tr Hem.	22164	225.00	230.00	5.00	7				
		230.00- 235.00 WEAKLY SILICIFIED ANDESITE Slightly silicified, weak epidotization, medium greenish grey, 1% Py.	22165	230.00	235.00	5.00	<5				
		235.00- 240.00 2% Py.	22166	235.00	240.00	5.00	<5				
			22167	240.00	245.00	5.00	<5				
			22168	245.00	250.00	5.00	<5				
		250.00- 255.00 WEAKLY SILICIFIED ANDESITE Weak silicification, light to medium greenish grey, 1-2% Py, 1% qtz+carb veinlets.	22169	250.00	255.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		255.00- 260.00 SILICIFIED ANDESITE Highly silicified andesite, light greenish grey, 3% disseminated Py.	22170	255.00	260.00	5.00	<5				
		260.00- 305.00 WEAKLY SILICIFIED ANDESITE Weak silicification, light to medium greenish grey, aphanitic to very fine grained, local weak epidote altn, tr Py.									
		260.00- 270.00 2-3% Carbonate+Quartz Veins	22171	260.00	265.00	5.00	13				
			22172	265.00	270.00	5.00	<5				
			22173	270.00	275.00	5.00	<5				
			22174	275.00	280.00	5.00	<5				
			22175	280.00	285.00	5.00	<5				
			22176	285.00	290.00	5.00	<5				
			22177	290.00	295.00	5.00	<5				
		295.00- 305.00 10-15% Quartz+Carbonate Veins Slight epidote altn, 1% Py.	22178	295.00	300.00	5.00	5				
			22179	300.00	305.00	5.00	<5				
		305.00- 310.00 SILICIFIED ANDESITE 50% light grey silicified andesite mixed with some qtz vein material containing 1-2% Py, 50% light greenish grey moderately silicified andesite with tr Py.	22180	305.00	310.00	5.00	<5				
		310.00- 325.00 SILICIFIED ANDESITE Light greenish grey to light grey, aphanitic, moderate to strong silicification, 2-3% Py.	22181	310.00	315.00	5.00	<5	2			
			22182	315.00	320.00	5.00			.040	.016	.028
		319.00- 325.50 Quartz Vein 85-90% light whitish grey qtz vein, 2-3% Py, tr Fuschite, 10-15% silicified light greenish grey andesite.	22183	320.00	325.00	5.00	617	738	.018	.021	.020
			22184	325.00	330.00	5.00	199	138	.006	.004	.005
		325.50- 330.00 VERY FINE GRAINED ANDESITE Light to medium greenish grey, very fine									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		grained, tr Fuschite, <1% Py.									
		330.00- 380.00	22185	330.00	335.00	5.00	320	170	.009	.005	.007
		APHANITIC TO VERY FINE GRAINED ANDESITE	22186	335.00	340.00	5.00	417	322	.012	.009	.011
		Light to medium greyish green, aphanitic	22187	340.00	345.00	5.00	561	662	.016	.019	.018
		to very fine grained, 10-15% light	22188	345.00	350.00	5.00	15	6			10 pbb
		whitish grey qtz material with tr									
		Fuschite and 1-3% Py, silicified									
		contacts.									
		350.00- 358.00	22189	350.00	355.00	5.00	7	8			7 pbb
		Quartz Vein	22190	355.00	360.00	5.00	<5	8			6 pbb
		Light whitish grey qtz vein with <10%									
		carb, 3-5% Py (locally									
		oxidized).									
		360.00- 370.00	22191	360.00	365.00	5.00	<5				
		30% Quartz Veins	22192	365.00	370.00	5.00	16				
		30% light whitish grey qtz veins with									
		minor carb and <1% Py, slightly									
		silicified and sericitized wallrock.									
		370.00- 375.00	22193	370.00	375.00	5.00	205		.006		
		2-3% Quartz+Carbonate Veinlets									
		1% Py in wallrock, some leucoxene.									
		375.00- 380.00	22194	375.00	380.00	5.00	66		.002		
		50% Quartz Veins									
		50% light whitish grey qtz veins with									
		minor carbonate, contacts are highly									
		silicified, 1-2% Py, 10-15% fresh									
		light to medium green andesite.									
			22195	380.00	385.00	5.00	<5				
			22196	385.00	390.00	5.00	<5				
			22197	390.00	395.00	5.00	<5				
			22198	395.00	400.00	5.00	<5				
			22199	400.00	405.00	5.00	<5				
			22200	405.00	410.00	5.00	<5				
			22201	410.00	415.00	5.00	5				
		415.00- 420.00	22202	415.00	420.00	5.00	<5				
		10-15% Carbonate+Quartz Veins									
		1% Py.									
			22203	420.00	425.00	5.00	<5				
			22204	425.00	430.00	5.00	<5				
			22205	430.00	435.00	5.00	<5				
			22206	435.00	440.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		440.00- 445.00 5% Carbonate+Quartz Veinlets 1% Py, moderate epidote altn.	22207	440.00	445.00	5.00	<5				
			22208	445.00	450.00	5.00	<5				
			22209	450.00	455.00	5.00	<5				
			22210	455.00	460.00	5.00	<5				
			22211	460.00	465.00	5.00	<5				
		465.00- 470.00 3% Carbonate+Quartz Veinlets 1% Py, moderate epidote altn.	22212	465.00	470.00	5.00	<5				
			22213	470.00	475.00	5.00	<5				
			22214	475.00	480.00	5.00	<5				
			22215	480.00	485.00	5.00	<5				
		485.00- 495.00 SILICIFIED ANDESITE Light greenish grey to greyish green, moderately to highly silicified, 10-15% qtz+epi stringers, weak to moderate epidotization, 3-5% Py.	22216	485.00	490.00	5.00	<5				
			22217	490.00	495.00	5.00	<5				
			22218	495.00	500.00	5.00	12				
			22219	500.00	505.00	5.00	<5				
505.00	730.00	VERY FINE GRAINED ANDESITE Generally medium greenish grey, very fine grained, weak epidote altn, <1% carb+qtz veinlets,									
		505.00- 510.00 3-5% Py, tr Hem.	22220	505.00	510.00	5.00	151		.004		
			22221	510.00	515.00	5.00	53		.001		
		515.00- 520.00 40% Quartz+Carbonate Veins White to light grey qtz veins with minor carb, <2% Py, 60% light to medium greenish grey to blackish grey andesite, local slight silicification, 3-4% Py.	22222	515.00	520.00	5.00	830		.024	.130	.077
		520.00- 525.00 2% Quartz+Carbonate Veins Local silicification, possible contamination from above sample.	22223	520.00	525.00	5.00			.037	.011	.024
			22224	525.00	530.00	5.00	203		.006		
			22225	530.00	535.00	5.00	9				
		535.00- 540.00 2-3% Carbonate+Quartz+Epidote Veins Contains 2-3% Py in wallrock.	22226	535.00	540.00	5.00	12				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		540.00- 545.00 10-15% Quartz+Carbonate+Epidote Veins Contains 1-2% Py in wallrock, silicified contacts.	22227	540.00	545.00	5.00	10				
			22228	545.00	550.00	5.00	11				
			22229	550.00	555.00	5.00	7				
			22230	555.00	560.00	5.00	<5				
		560.00- 565.00 80% SILICIFIED ANDESITE light greenish grey, aphanitic, highly silicified, 2% Py, 2-3% white qtz vein material.	22231	560.00	565.00	5.00	<5				
			22232	565.00	570.00	5.00	<5				
		570.00- 575.00 15% SILICIFIED ANDESITE Same as 560.0-565.0; 1% Py.	22233	570.00	575.00	5.00	<5				
		575.00- 580.00 80-85% SILICIFIED ANDESITE Same as 560.0-565.0; 2-3% Py.	22234	575.00	580.00	5.00	<5				
		580.00- 585.00 40-45% SILICIFIED ANDESITE Same as 560.0-565.0; at least 5% greyish white qtz vein material, 2-3% Py.	22235	580.00	585.00	5.00	<5				
		585.00- 595.00 WEAKLY SILICIFIED ANDESITE Light to medium greenish grey, aphanitic, weakly silicified, minor epidote, tr Py.	22236	585.00	590.00	5.00	<5				
			22237	590.00	595.00	5.00	<5				
		595.00- 605.00 MODERATELY SILICIFIED ANDESITE Light to medium greenish grey, moderate silicification, 10% greyish white qtz material, tr epidote, 2-3% Py.	22238	595.00	600.00	5.00	<5				
		600.00- 605.00 40% QUARTZ VEINS White to greyish white qtz veins containing at least 2% Py, wallrock is a highly silicified light greenish grey andesite with 2% Py.	22239	600.00	605.00	5.00	95		.003		
		605.00- 675.00 3-5% Py.	22240	605.00	610.00	5.00	30				
			22241	610.00	615.00	5.00	296		.009		

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
			22242	615.00	620.00	5.00	73		.002		
		620.00- 625.00	22243	620.00	625.00	5.00	6				
		10% SILICIFIED ANDESITE 10% light greenish grey, silicified, 2% Py.									
			22244	625.00	630.00	5.00	302		.009		
			22245	630.00	635.00	5.00	7				
		635.00- 640.00	22246	635.00	640.00	5.00	<5				
		EPIDOTIZED ANDESITE Moderate epidotization, <1% qtz+epi veinlets, 5% Py.									
		640.00- 645.00	22247	640.00	645.00	5.00	251		.007		
		90% Quartz Veins White to greenish white qtz vein(s) containing minor carbonate and 3-4% Py.									
		645.00- 650.00	22248	645.00	650.00	5.00	166		.005		
		2-3% Quartz+Carbonate Veinlets Local weak silicification of wallrock.									
		650.00- 670.00	22249	650.00	655.00	5.00	6				
		SILICIFIED ANDESITE	22250	655.00	660.00	5.00	6				
		Moderately to strongly silicified, aphanitic, weak epidotization, 2-4% Py.									
		660.00- 665.00	22251	660.00	665.00	5.00	6				
		Panned one colour, very very fine.									
			22252	665.00	670.00	5.00	5				
			22253	670.00	675.00	5.00	<5				
			22254	675.00	680.00	5.00	13				
			22255	680.00	685.00	5.00	<5				
			22256	685.00	690.00	5.00	<5				
			22257	690.00	695.00	5.00	5				
			22258	695.00	700.00	5.00	7				
		700.00- 710.00	22259	700.00	705.00	5.00	<5				
		VERY FINE TO FINE GRAINED DIORITE	22260	705.00	710.00	5.00	7				
		Mottled light yellowish green and medium to dark greyish green, very fine to fine grained, weak to moderate epidotization, <1% carb+qtz veinlets.									
			22261	710.00	715.00	5.00	<5				
			22262	715.00	720.00	5.00	<5				
			22263	720.00	725.00	5.00	<5				
			22264	725.00	730.00	5.00	5				
730.00		End of hole									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		Total amount of samples= 146 Total length sampled = 730.00F									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-13 Zone # : Contractor : HELLER DRILLING Date started : 4/22/1991
County : JOSEPHINE Date completed: 5/ 1/1991
Township: 33S Range: 5W Section: Claim # :HS-8

Level : Location :

Collar coordinate : Line : 3+95 W Northing: 0.00 N Azimuth: 204° 0′ 0"
Station: 24+05 N Easting : 0.00 E Dip : 45° 0′ 0"
Reference frame : Elevation: 2400.00 Length : 905.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : From 0-350 ft, 5 1/8" Diameter Hole
Water at 170 ft, <1 gal/min.

Water depth: 170 ft Plugged: YES
Cimented : YES Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 5/ 1/1991 Hole # : MA-13

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
0.00	35.00	OXIDIZED ANDESITE	22265	0.00	5.00	5.00	<5				
		Weakly oxidized, very fine grained, light to	22266	5.00	10.00	5.00	<5				
		medium greyish green, local epidote altn.	22267	10.00	15.00	5.00	6				
			22268	15.00	20.00	5.00	31				
			22269	20.00	25.00	5.00	69				.002
			22270	25.00	30.00	5.00	17				
			22271	30.00	35.00	5.00			.039	.024	.031
35.00	75.00	APHANITIC ANDESITE									
		Light greenish grey to occasionally medium	22272	35.00	40.00	5.00	56				.002
		greenish grey, aphanitic, local silicification	22273	40.00	45.00	5.00	27				
		when carb+qtz veins are present, tr Py.									
		45.00- 55.00	22274	45.00	50.00	5.00	15				
		15-20% Quartz+Carbonate Veins	22275	50.00	55.00	5.00	949	786	.028	.023	.025
		White to whitish grey qtz+carb									
		veinlets with tr Py, moderately									
		silicified wallrock.									
		55.00- 75.00	22276	55.00	60.00	5.00	823	840	.024	.024	.024
		2-5% Quartz+Carbonate Veins	22277	60.00	65.00	5.00	30	24			27 ppb
		Tr Py.	22278	65.00	70.00	5.00			.052	.054	.053
			22279	70.00	75.00	5.00	159	358			.007
75.00	310.00	APHANITIC TO VERY FINE GRAINED BASALT	22280	75.00	80.00	5.00	5				
		Medium to dark greyish green, aphanitic to very	22281	80.00	85.00	5.00	6				
		fine grained, massive, <1% carb+qtz veinlets,	22282	85.00	90.00	5.00	<5				
		local weak epidote altn.	22283	90.00	95.00	5.00	<5				
			22284	95.00	100.00	5.00	<5				
			22285	100.00	105.00	5.00	<5				
			22286	105.00	110.00	5.00	<5				
		110.00- 115.00									
		WEAKLY TO MODERATELY EPIDOTIZED BASALT	22287	110.00	115.00	5.00	<5				
		Weak to moderate epidote altn.									
			22288	115.00	120.00	5.00	<5				
			22289	120.00	125.00	5.00	<5				
			22290	125.00	130.00	5.00	<5				
			22291	130.00	135.00	5.00	<5				
			22292	135.00	140.00	5.00	<5				
		140.00- 155.00	22293	140.00	145.00	5.00	<5				
		WEAKLY EPIDOTIZED BASALT	22294	145.00	150.00	5.00	<5				
		Weak epidote altn, 1-2% qtz+epi veinlets,	22295	150.00	155.00	5.00	<5				
		155.00- 160.00	22296	155.00	160.00	5.00	<5				
		20% Quartz+Epidote Veins									
		White qtz veins with minor epidote.									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		160.00- 165.00 FINE GRAINED GABBRO Mottled light yellowish green and dark green to black, fine grained, massive, weak epidote altn.	22297	160.00	165.00	5.00	18				
		165.00- 170.00 80% Quartz+Epidote Veins White qtz veins with 20-25% epidote and tr Py, both gabbro (?) and andesite/basalt in wallrock.	22298	165.00	170.00	5.00	<5				
		170.00- 175.00 15-20% Quartz+Epidote Veins White to whitish grey qtz veins with minor epidote and carbonate, tr Py.	22299	170.00	175.00	5.00	81				.002
			22300	175.00	180.00	5.00	23				
			22301	180.00	185.00	5.00	10				
			22302	185.00	190.00	5.00	<5				
			22303	190.00	195.00	5.00	8				
			22304	195.00	200.00	5.00	7				
		200.00- 215.00 VERY FINE GRAINED DIORITE Mottled light yellowish beige and medium greyish green, very fine grained to fine grained, weak epidote altn, massive.	22305	200.00	205.00	5.00	<5				
			22306	205.00	210.00	5.00	<5				
			22307	210.00	215.00	5.00	7				
			22308	215.00	220.00	5.00	<5				
			22309	220.00	225.00	5.00	<5				
			22310	225.00	230.00	5.00	<5				
		230.00- 242.00 QUARTZ DIORITE (?) Mottled light whitish grey and dark greyish green, fine grained, massive, tr Py.	22311	230.00	235.00	5.00	<5				
			22312	235.00	240.00	5.00	<5				
			22313	240.00	245.00	5.00	<5				
		242.00- 285.00 VERY FINE GRAINED GABBRO OR DIORITE Dark greyish green, very fine grained, masssive, frequent leucoxene, local weak epidote altn, <1% carb+qtz veinlets, tr Py.	22314	245.00	250.00	5.00	<5				
			22315	250.00	255.00	5.00	<5				
			22316	255.00	260.00	5.00	<5				
		260.00- 265.00 2-3% Carbonate+Quartz Veins	22317	260.00	265.00	5.00	<5				
			22318	265.00	270.00	5.00	<5				
			22319	270.00	275.00	5.00	<5				
			22320	275.00	280.00	5.00	<5				
			22321	280.00	285.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		285.00- 310.00	22322	285.00	290.00	5.00	<5				
		APHANITIC TO VERY FINE GRAINED ANDESITE/	22323	290.00	295.00	5.00	<5				
		BASALT	22324	295.00	300.00	5.00	<5				
		Medium greyish green, aphanitic to very fine grained, weak epidote altn, 1-2% carb+qtz veinlets, tr Py.									
		300.00- 305.00	22325	300.00	305.00	5.00	<5				
		5-10% Carbonate+Quartz Veins									
		weak epidote altn.									
			22326	305.00	310.00	5.00	<5				
310.00	440.00	FINE GRAINED GABBRO	22327	310.00	315.00	5.00	<5				
		Mottled light whitish grey and dark greenish grey	22328	315.00	320.00	5.00	<5				
		to black, fine grained, massive, <1% carb+qtz	22329	320.00	325.00	5.00	<5				
		veinlets, local moderate to strong epidote altn.									
		323.00- 336.00	22330	325.00	330.00	5.00	<5				
		APHANITIC GABBRO OR BASALT	22331	330.00	335.00	5.00	<5				
		Medium to dark greyish green, aphanitic	22332	335.00	340.00	5.00	<5				
		to locally very fine grained, local weak epidote altn, 1% qtz+carb+epi veinlets, tr Py.									
			22333	340.00	345.00	5.00	12				
			22334	345.00	350.00	5.00	8				
		350.00- 355.00	22335	350.00	355.00	5.00	95				.003
		No vial sample									
		355.00- 367.00	22336	355.00	360.00	5.00	15				
		VERY FINE GRAINED DIORITE	22337	360.00	365.00	5.00	5				
		Light to medium greyish green, very fine	22338	365.00	370.00	5.00	<5				
		grained, moderate epidote altn, massive, probable gradual contact, composition varies from diorite to gabbro.									
			22339	370.00	375.00	5.00	<5				
			22340	375.00	380.00	5.00	<5				
		380.00- 390.00	22341	380.00	385.00	5.00	<5				
		VERY FINE GRAINED DIORITE/GABBRO	22342	385.00	390.00	5.00	<5				
		Same as 355.0-376.0.									
		390.00- 410.00	22343	390.00	395.00	5.00	<5				
		FINE GRAINED EPIDOTIZED GABBRO	22344	395.00	400.00	5.00	10				
		Moderate to strong epidote altn.	22345	400.00	405.00	5.00	<5				
			22346	405.00	410.00	5.00	9				
		410.00- 440.00	22347	410.00	415.00	5.00	391				.011
		VERY FINE GRAINED GABBRO	22348	415.00	420.00	5.00	52				.001
		Very fine grained, local moderate	22349	420.00	425.00	5.00	57				.002

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		epidotization.	22350	425.00	430.00	5.00	30				
			22351	430.00	435.00	5.00	20				
			22352	435.00	440.00	5.00	<5				
440.00	507.00	**APHANITIC ANDESITE** light greyish green, aphanitic to locallly very fine grained, local silicification, 1-3% carb+qtz veinlets, tr Py, occasional leucoxene, tr epidote.									
		440.00- 445.00 15-20% Quartz Veins White to light greyish white quartz veins with minor carbonate, tr Py, moderately to highly silicified wallrock.	22353	440.00	445.00	5.00	14				
			22354	445.00	450.00	5.00	<5				
			22355	450.00	455.00	5.00	<5				
			22356	455.00	460.00	5.00	<5				
		460.00- 465.00 20% Very Fine Grained Gabbro Dark greenish black, very fine grained, abundant leucoxene, contains 5% Py as surface coating, disseminated, or as veinlets.	22357	460.00	465.00	5.00	<5				
			22358	465.00	470.00	5.00	<5				
			22359	470.00	475.00	5.00	4				
		475.00- 480.00 10% Carbonate Veins Small carbonate veinlets with <5% qtz, chloritized wallrock.	22360	475.00	480.00	5.00	<5				
			22361	480.00	485.00	5.00	<5				
			22362	485.00	490.00	5.00	24				
			22363	490.00	495.00	5.00	<5				
			22364	495.00	500.00	5.00	<5				
		500.00- 507.00 SILCIFIED ANDESITE Light greyish green, aphanitic, strong silicification, possibility of mixed qtz veinlets with silicified andesite, 1-2% Py.	22365	500.00	505.00	5.00	<5				
			22366	505.00	510.00	5.00	<5				
507.00	584.00	**FINE GRAINED GABBRO** Mottled light yellowish green and dark greyish green to black, fine grained, massive, local epidote altn, <1% carb+qtz veinlets, tr Py, slightly magnetic.	22367	510.00	515.00	5.00	<5				
			22368	515.00	520.00	5.00	8				
			22369	520.00	525.00	5.00	6				
			22370	525.00	530.00	5.00	50				.001
			22371	530.00	535.00	5.00	15				
			22372	535.00	540.00	5.00	8				
			22373	540.00	545.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
			22374	545.00	550.00	5.00	8				
			22375	550.00	555.00	5.00	8				
		555.00- 560.00 2-3% Carbonate+Quartz Veinlets Tr Py.	22376	555.00	560.00	5.00	18				
			22377	560.00	565.00	5.00	22				
			22378	565.00	570.00	5.00	6				
			22379	570.00	575.00	5.00	5				
			22380	575.00	580.00	5.00	<5				
			22381	580.00	585.00	5.00	5				
584.00	789.00	APHANITIC TO VERY FINE GRAINED GABBRO Medium greyish green to dark greyish green, aphanitic to very fine grained, massive, local epidote altn, tr Py.	22382	585.00	590.00	5.00	<5				
		589.50- 595.00 EPIDOTIZED GABBRO 60% completely epidotized aphanitic gabbro, tr Py.	22383	590.00	595.00	5.00	6				
		595.00- 610.00 MODERATELY EPIDOTIZED GABBRO Moderate epidote altn, tr Py.	22384	595.00	600.00	5.00	12				
			22385	600.00	605.00	5.00	<5				
			22386	605.00	610.00	5.00	<5				
		610.00- 615.00 2-3% Carbonate+Quartz Veinlets Tr Py.	22387	610.00	615.00	5.00	<5				
			22388	615.00	620.00	5.00	<5				
			22389	620.00	625.00	5.00	<5				
			22390	625.00	630.00	5.00	<5				
			22391	630.00	635.00	5.00	<5				
			22392	635.00	640.00	5.00	<5				
			22393	640.00	645.00	5.00	6				
			22394	645.00	650.00	5.00	<5				
			22395	650.00	655.00	5.00	<5				
			22396	655.00	660.00	5.00	<5				
			22397	660.00	665.00	5.00	<5				
			22398	665.00	670.00	5.00	<5				
		670.00- 679.00 SILICIFIED INTRUSIVE (?) Light greyish green, aphanitic, highly silicified, sharp contact with aphanitic gabbro (?), weak epidote altn, 2-3% white qtz+carb, 1-2% Py.	22399	670.00	675.00	5.00	<5				
			22400	675.00	680.00	5.00	<5				
		679.00- 688.00	22401	680.00	685.00	5.00	5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		FINE GRAINED DIORITE Mottled light whitish grey and medium to dark greenish black, fine grained, massive, slight epidote altn, tr Py.	22402	685.00	690.00	5.00	<5				
			22403	690.00	695.00	5.00	9				
			22404	695.00	700.00	5.00	<5				
			22405	700.00	705.00	5.00	<5				
			22406	705.00	710.00	5.00	<5				
		710.00- 727.00	22407	710.00	715.00	5.00	9				
		FINE GRAINED DIORITE Same as 679.0-688.0.	22408	715.00	720.00	5.00	<5				
			22409	720.00	725.00	5.00	<5				
			22410	725.00	730.00	5.00	<5				
		727.00- 740.00	22411	730.00	735.00	5.00	<5				
		2-4% Quartz+Carbonate Veinlets Local epidote, tr Py.	22412	735.00	740.00	5.00	<5				
		740.00- 750.00	22413	740.00	745.00	5.00	6				
		SILICIFIED INTRUSIVE (?) 70-75% silicified diorite(?), abundant little specks of chlorite, could also be qtz veins, local weak epidote altn, tr Py.	22414	745.00	750.00	5.00	<5				
			22415	750.00	755.00	5.00	<5				
			22416	755.00	760.00	5.00	<5				
		760.00- 765.00	22417	760.00	765.00	5.00	6				
		SILICIFIED INTRUSIVE (?) Same as 740.0-750.0.									
		765.00- 789.00	22418	765.00	770.00	5.00	<5				
		APHANITIC ANDESITE/BASALT (?) Light to medium greyish green, aphanitic, 1-2% carb+qtz veinlets.	22419	770.00	775.00	5.00	<5				
			22420	775.00	780.00	5.00	<5				
			22421	780.00	785.00	5.00	<5				
			22422	785.00	790.00	5.00	<5				
789.00	905.00	FINE GRAINED GABBRO/DIORITE Mottled light yellowish green and dark greenish black, fine grained, weak to moderate epidotization, massive.	22423	790.00	795.00	5.00	<5				
			22424	795.00	800.00	5.00	<5				
			22425	800.00	805.00	5.00	<5				
			22426	805.00	810.00	5.00	<5				
		810.00- 815.00	22427	810.00	815.00	5.00	<5				
		APHANITIC GABBRO Dark greenish black, aphanitic, local weak epidote altn.									
			22428	815.00	820.00	5.00	<5				
			22429	820.00	825.00	5.00	<5				
			22430	825.00	830.00	5.00	<5				
			22431	830.00	835.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU PPB	AU OPT	AU OPT	AU OPT
		835.00- 847.00	22432	835.00	840.00	5.00	<5				
		VERY FINE GRAINED GABBRO (?)	22433	840.00	845.00	5.00	<5				
		Medium greyish green, very fine grained,	22434	845.00	850.00	5.00	<5				
		massive, homogeneous.									
			22435	850.00	855.00	5.00	<5				
			22436	855.00	860.00	5.00	<5				
			22437	860.00	865.00	5.00	<5				
			22438	865.00	870.00	5.00	<5				
			22439	870.00	875.00	5.00	<5				
		875.00- 880.00	22440	875.00	880.00	5.00	<5				
		2% Quartz+Carbonate Veinlets									
			22441	880.00	885.00	5.00	<5				
			22442	885.00	890.00	5.00	<5				
			22443	890.00	895.00	5.00	<5				
		895.00- 900.00	22444	895.00	900.00	5.00	<5				
		2-3% Quartz+Carbonate Veinlets									
		900.00- 905.00	22444A	900.00	905.00	5.00	<5				
		VERY FINE GRAINED GABBRO									
		Medium to dark greyish green, very fine									
		grained, massive, 5% diorite/gabbro									
		fragments, <1% qtz+carb veinlets.									
905.00		End of hole									
		Total amount of samples= 181									
		Total length sampled = 905.00F									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-14 Zone # : Contractor : HELLER DRILLING Date started : 6/ 1/1991
County : JOSEPHINE Date completed: 6/ 3/1991
Township: 33S Range: 5W Section: 4+00W Claim # :SP-4

Level : Location :

Collar coordinate : Line : 4+15 W Northing: 0.00 N Azimuth: 160° 0′ 0"
Station: 26+40 N Easting : 0.00 E Dip : 60° 0′ 0"
Reference frame : Elevation: 2400.00 Length : 490.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 10 ft
Water at 120 ft, <1 gal/min.

Water depth: 120 ft Plugged: YES
Cimented : YES Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 6/ 4/1991 Hole # : MA-14

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
0.00	5.00	OVERBURDEN	23192	0.00	5.00	5.00	<5				
5.00	90.00	APHANITIC ANDESITE Light to medium greyish green, aphanitic to locally very fine grained, weak to locally moderate epidote altn, weak silicification, <1% Py, <1% qtz+carb veinlets, massive, homogeneous.									
		5.00- 20.00	23193	5.00	10.00	5.00	<5				
		OXIDIZED ANDESITE	23194	10.00	15.00	5.00	<5				
		Weakly to moderately oxidized, aphanitic, light to medium greyish green on fresh surface, massive.	23195	15.00	20.00	5.00	<5				
			23196	20.00	25.00	5.00	<5				
		25.00- 30.00	23197	25.00	30.00	5.00	<5				
		5-10% Carbonate+Quartz Veins White carb+qtz veins, slight epidote altn.									
			23198	30.00	35.00	5.00	<5				
			23199	34.00	40.00	6.00	<5				
		35.00- 40.00 2-3% Carbonate+Quartz Veins White carb+qtz veins, slight epidote altn.									
			23200	40.00	45.00	5.00	<5				
			23201	45.00	50.00	5.00	<5				
			23202	50.00	55.00	5.00	<5				
			23203	55.00	60.00	5.00	<5				
		60.00- 65.00 3-4% Quartz Vein(s) Light grey qtz vein(s), 1% Py, silicified wallrock.	23204	60.00	65.00	5.00	<5				
			23205	65.00	70.00	5.00	<5				
		70.00- 75.00 2% Quartz veins Light grey qtz veins with 2-3% Py, or highly silicified andesite.	23206	70.00	75.00	5.00	<5				
			23207	75.00	80.00	5.00	<5				
			23208	80.00	85.00	5.00	<5				
		85.00- 90.00 Slight pinkisk altn (hem?) associated with epidote.	23209	85.00	90.00	5.00	<5				
90.00	490.00	VERY FINE GRAINED ANDESITE/BASALT Medium greyish green, very fine grained, massive,	23210	90.00	95.00	5.00	<5				
			23211	95.00	100.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		weak to moderate epidote altn, tr Py, <1% qtz+carb veinlets, local leucoxene, from 350.0-490.0 approx 1-2% Py.									
		100.00- 120.00	23212	100.00	105.00	5.00	<5				
		Oxidized basalt	23213	105.00	110.00	5.00	<5				
		Local slight oxidation, intersected	23214	110.00	115.00	5.00	<5				
		fracture and water at 120.0.	23215	115.00	120.00	5.00	155	.004			
			23216	120.00	125.00	5.00	14				
			23217	125.00	130.00	5.00	<5				
			23218	130.00	135.00	5.00	<5				
			23219	135.00	140.00	5.00	<5				
		140.00- 145.00	23220	140.00	145.00	5.00	<5				
		5% Quartz+Epidote Veins									
		2% Py.									
		145.00- 150.00	23221	145.00	150.00	5.00		.059			
		50% Quartz Veins									
		Light greenish grey qtz veins, slightly brecciated, chlorite and epidote altn, 3-5% Py, silicified wallrock.									
		150.00- 155.00	23222	150.00	155.00	5.00		.034			
		2% Quartz Veins									
		Same as 145.0-150.0; possible contamination.									
		155.00- 160.00	23223	155.00	160.00	5.00	192	.006			
		SILICIFIED ANDESITE/BASALT									
		Weak to moderate silicification, 2% Py.									
		160.00- 180.00	23224	160.00	165.00	5.00	15				
		WEAKLY EPIDOTIZED ANDESITE/BASALT	23225	165.00	170.00	5.00	<5				
		Weak epidote altn.									
		170.00- 175.00	23226	170.00	175.00	5.00	<5				
		3% Quartz Vein(s)									
		Light grey qtz vein(s) with 3% Py, pinkish brown altn (hem?) associated with epidote.									
			23227	175.00	180.00	5.00	<5				
			23228	180.00	185.00	5.00	<5				
			23229	185.00	190.00	5.00	<5				
			23230	190.00	195.00	5.00	<5				
		195.00- 200.00	23231	195.00	200.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		3% Carbonate+Quartz Veins Tr Py.									
			23232	200.00	205.00	5.00	<5				
		205.00- 210.00 2-3% Quartz Veins Light grey qtz veins with tr Py.	23233	205.00	210.00	5.00	<5				
		210.00- 215.00 VERY FINE TO FINE GRAINED GABBRO/DIORITE Mottled light yellowish green and dark greenish black, very fine to fine grained, weak epidote altn, massive.	23234	210.00	215.00	5.00	<5				
			23235	215.00	220.00	5.00	<5				
			23236	220.00	225.00	5.00	<5				
			23237	225.00	230.00	5.00	<5				
			23238	230.00	235.00	5.00	<5				
			23239	235.00	240.00	5.00	<5				
			23240	240.00	245.00	5.00	<5				
			23241	245.00	250.00	5.00	<5				
			23242	250.00	255.00	5.00	<5				
			23243	255.00	260.00	5.00	<5				
		260.00- 270.00 SILICIFIED ANDESITE Light greenish grey, aphanitic, moderate to strong silicification, weak epidote altn, 1-2% Py.	23244	260.00	265.00	5.00	<5				
			23245	265.00	270.00	5.00	<5				
		270.00- 280.00 40-60% SILICIFIED ANDESITE Silicified and epidotized andesite or qtz+epi altn zones, 1% Py.	23246	270.00	275.00	5.00	<5				
			23247	275.00	280.00	5.00	<5				
			23248	280.00	285.00	5.00	<5				
			23249	285.00	290.00	5.00	<5				
			23250	290.00	295.00	5.00	<5				
			23251	295.00	300.00	5.00	<5				
			23252	300.00	305.00	5.00	<5				
			23253	305.00	310.00	5.00	<5				
			23254	310.00	315.00	5.00	<5				
			23255	315.00	320.00	5.00	<5				
			23256	320.00	325.00	5.00	<5				
			23257	325.00	330.00	5.00	<5				
			23258	330.00	335.00	5.00	<5				
		335.00- 340.00 2-3% Carbonate+Quartz Veins	23259	335.00	340.00	5.00	<5				
		340.00- 350.00	23260	340.00	345.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		WEAKLY EPIDOTIZED ANDESITE/BASALT Weak epidotization, very fine grained.	23261	345.00	350.00	5.00	<5				
		350.00- 355.00 SILICIFIED ANDESITE Light to medium greenish grey, aphanitic, moderate to strong silicification, 2-4% Py.	23262	350.00	355.00	5.00	<5				
			23263	355.00	360.00	5.00	<5				
			23264	360.00	365.00	5.00	<5				
			23265	365.00	370.00	5.00	5				
		370.00- 375.00 20% Quartz Veins White to light grey qtz veins, minor carbonate, 2-4% Py.	23266	370.00	375.00	5.00	<5				
			23267	375.00	380.00	5.00	13				
		380.00- 385.00 20% Silicified Andesite Light greenish grey, aphanitic, strong silicification, 2% Py.	23268	380.00	385.00	5.00	5				
		385.00- 390.00 SILICIFIED ANDESITE Light greyish green, aphanitic to locally very fine grained, weak to moderate silicification, 2-4% Py.	23269	385.00	390.00	5.00	<5				
			23270	390.00	395.00	5.00	5				
			23271	395.00	400.00	5.00	<5				
			23272	400.00	405.00	5.00	7				
		405.00- 410.00 2% Carbonate+Quartz Vein(s) Tr Py.	23273	405.00	410.00	5.00	125	.004			
		410.00- 415.00 3-5% Quartz Veins White to light grey qtz+carb veins, 1% Py.	23274	410.00	415.00	5.00		.062			
		415.00- 420.00 5-7% Quartz Veins White to light grey qtz+carb veins, 2% Py.	23275	415.00	420.00	5.00		.134			
		420.00- 425.00 5-7% Quartz Veins White to light grey qtz+carb veins,	23276	420.00	425.00	5.00	619	.018			

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		1% Py.									
		425.00- 430.00	23277	425.00	430.00	5.00	471	.014			
		10% Quartz Veins									
		White to light grey qtz+carb veins,									
		2% Py.									
			23278	430.00	435.00	5.00	82	.002			
			23279	435.00	440.00	5.00	16				
			23280	440.00	445.00	5.00	<5				
			23281	445.00	450.00	5.00	9				
			23282	450.00	455.00	5.00	12				
			23283	455.00	460.00	5.00	<5				
			23284	460.00	465.00	5.00	<5				
			23285	465.00	470.00	5.00	<5				
		470.00- 475.00	23286	470.00	475.00	5.00	<5				
		2-3% Carbonate+Quartz Veins									
		Tr Py.									
			23287	475.00	480.00	5.00	<5				
			23288	480.00	485.00	5.00	<5				
			23289	485.00	490.00	5.00	<5				
490.00		End of hole									
		Total amount of samples= 98									
		Total length sampled = 491.00F									

CAMBIOR USA, INC
DRILL LOG
Property : MARTHA

Hole # : MA-15 Zone # : MARTHA Contractor : HELLER DRILLING Date started : 6/ 4/1991
County : JOSEPHINE Date completed: 6/ 6/1991
Township: 33S Range: 5W Section: 12+00E Claim # :DIVISION

Level : Location :

Collar coordinate : Line : 12+00 E Northing: 0.00 N Azimuth: 204° 0′ 0"
Station: 13+00 N Easting : 0.00 E Dip : 45° 0′ 0"
Reference frame : Elevation: 3360.00 Length : 425.00 F

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth

Remarks : Casing 20 ft
Dry up to 140 ft

Water depth:
Cimented : YES

Plugged: YES
Hole diameter: 4 1/2"

Logged by : LAURENCE GABORIT Date logged: 6/26/1991 Hole # : MA-15

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
0.00	100.00	VERY FINE GRAINED GABBRO Medium to dark greenish black, very fine grained, massive, local weak epidote altn, <1% carb+qtz veinlets. 0.00- 5.00 FINE GRAINED GABBRO/DIORITE Mottled white and dark geeenish black, generally fine grained. 0.00- 35.00 Oxidized Gabbro Moderate oxidation, decreases downhole, local bleaching and epidote altn.	23290	0.00	5.00	5.00	<5				
			23291	5.00	10.00	5.00	<5				
			23292	10.00	15.00	5.00	<5				
		15.00- 20.00 FINE GRAINED GABBRO Mottled light greenish white and dark greenish black, fine grained, weak epidote altn.	23293	15.00	20.00	5.00	<5				
			23294	20.00	25.00	5.00	15				
			23295	25.00	30.00	5.00	132	0.004			
			23296	30.00	35.00	5.00	259	0.008			
			23297	35.00	40.00	5.00	50	0.001			
		39.00- 55.00 FINE GRAINED DIORITE/GABBRO Mottled white to light grey and dark greenish black, fine grained, massive, unequigranular, local weak epidote altn, <2% carb+qtz veinlets.	23298	40.00	45.00	5.00	29				
			23299	45.00	50.00	5.00	22				
			23300	50.00	55.00	5.00	18				
			23301	55.00	60.00	5.00	27				
			23302	60.00	65.00	5.00	22				
			23303	65.00	70.00	5.00	11				
			23304	70.00	75.00	5.00	13				
			23305	75.00	80.00	5.00	<5				
			23306	80.00	85.00	5.00	20				
		85.00- 90.00 5% Carbonate+Quartz Veinlets Slightly chloritized wallrock.	23307	85.00	90.00	5.00	<5				
			23308	90.00	95.00	5.00	<5				
			23309	95.00	100.00	5.00	6				
100.00	425.00	VERY FINE TO FINE GRAINED GABBRO Mottled white to greenish white and dark greenish black, very fine to fine grained, local weak	23310	100.00	105.00	5.00	5				
			23311	105.00	110.00	5.00	<5				
			23312	110.00	115.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		epidote altn, massive, homogeneous, <2% carb+qtz veinlets, tr Py.	23313	115.00	120.00	5.00	<5				
			23314	120.00	125.00	5.00	<5				
			23315	125.00	130.00	5.00	<5				
			23316	130.00	135.00	5.00	<5				
			23317	135.00	140.00	5.00	6				
		140.00- 145.00									
		3-4% Carbonate+Quartz Veins	23318	140.00	145.00	5.00	<5				
		145.00- 155.00	23319	145.00	150.00	5.00	<5				
		APHANITIC TO VERY FINE GRAINED GABBRO	23320	150.00	155.00	5.00	<5				
		Medium to dark greyish green, aphanitic to very fine grained, weak to moderate epidote altn, 2-3% carb+qtz veinlets, tr Py.									
			23321	155.00	160.00	5.00	<5				
		160.00- 175.00	23322	160.00	165.00	5.00	<5				
		VERY FINE GRAINED GABBRO									
		Dark greyish green, very fine grained, local weak epidote altn, <2% qtz+carb veins.									
		165.00- 170.00	23323	165.00	170.00	5.00	116	0.003			
		15% Carbonate+Epidote Veins									
			23324	170.00	175.00	5.00	<5				
			23325	175.00	180.00	5.00	<5				
			23326	180.00	185.00	5.00	<5				
			23327	185.00	190.00	5.00	<5				
			23328	190.00	195.00	5.00	<5				
			23329	195.00	200.00	5.00	<5				
			23330	200.00	205.00	5.00	<5				
			23331	205.00	210.00	5.00	<5				
			23332	210.00	215.00	5.00	<5				
			23333	215.00	220.00	5.00	<5				
			23334	220.00	225.00	5.00	<5				
			23335	225.00	230.00	5.00	<5				
			23336	230.00	235.00	5.00	<5				
			23337	235.00	240.00	5.00	<5				
		240.00- 255.00	23338	240.00	245.00	5.00	<5				
		APHANITIC TO VERY FINE GRAINED GABBRO	23339	245.00	250.00	5.00	<5				
		Dark greyish green, aphanitic to very fine grained, local weak epidote altn, <1% carb+qtz veinlets, tr Py.									
		250.00- 255.00	23340	250.00	255.00	5.00	<5				
		3% Carbonate+Quartz Veinlets									

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		Slight chlorite altn, tr Py.									
		255.00- 260.00 5% Carbonate+Quartz Vein(s) Tr Py.	23341	255.00	260.00	5.00	<5				
		260.00- 265.00 APHANITIC TO VERY FINE GRAINED GABBRO Same as 240.0-255.0.									
		260.00- 265.00 15-20% Quartz+Carbonate Veins Qtz+carb veins, local slight epidote altn, tr Py.	23342	260.00	265.00	5.00	<5				
		265.00- 270.00 20% Quartz+Carbonate Vein Qtz+carb vein, tr Py, local weak epidote altn.	23343	265.00	270.00	5.00	<5				
			23344	270.00	275.00	5.00	<5				
			23345	275.00	280.00	5.00	<5				
			23346	280.00	285.00	5.00	<5				
		285.00- 290.00 2% Carbonate+Quartz Veins Tr Py.	23347	285.00	290.00	5.00	<5				
		290.00- 295.00 4-5% Quartz+Carbonate Vein(s) Qtz+carb vein(s) with tr Py, bleached and silicified contacts, possibly representing the Martha vein structure.	23348	290.00	295.00	5.00	<5				
			23349	295.00	300.00	5.00	<5				
			23350	300.00	305.00	5.00	<5				
			23351	305.00	310.00	5.00	<5				
			23352	310.00	315.00	5.00	<5				
			23353	315.00	320.00	5.00	<5				
		320.00- 330.00	23354	320.00	325.00	5.00	<5				
		APHANITIC TO VERY FINE GRAINED GABBRO Dark greyish green, aphanitic to very fine grained, massive, <1% carb+qtz veinlets, local leucoxene.	23355	325.00	330.00	5.00	<5				
			23356	330.00	335.00	5.00	<5				
			23357	335.00	340.00	5.00	<5				
			23358	340.00	345.00	5.00	<5				
			23359	345.00	350.00	5.00	<5				

FROM (F)	TO (F)	DESCRIPTION	Sampl.	FROM	TO	L (F)	AU PPB	AU OPT	AU OPT	AU OPT	AU OPT
		350.00- 380.00	23360	350.00	355.00	5.00	<5				
		APHANITIC TO VERY FINE GRAINED GABBRO	23361	355.00	360.00	5.00	<5				
		Same as 320.0-330.0.	23362	360.00	365.00	5.00	<5				
			23363	365.00	370.00	5.00	<5				
			23364	370.00	375.00	5.00	<5				
			23365	375.00	380.00	5.00	<5				
			23366	380.00	385.00	5.00	<5				
			23367	385.00	390.00	5.00	<5				
			23368	390.00	395.00	5.00	<5				
			23369	395.00	400.00	5.00	5				
			23370	400.00	405.00	5.00	<5				
			23371	405.00	410.00	5.00	<5				
			23372	410.00	415.00	5.00	<5				
			23373	415.00	420.00	5.00	<5				
			23374	420.00	425.00	5.00	<5				
425.00		End of hole									
		Total amount of samples= 85									
		Total length sampled = 425.00F									

Owners

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY

1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 South Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: April 26, 1991 JOB NO.: 6456

PROJECT NO.: 315 DATE RECEIVED: April 17, 1991 NO OF SAMPLES: 149

FOOTAGE		SAMPLE NO.	Au PPB
		MA-6	
0	-5	22001	<5
5	-10	22002	<5
10	-15	22003	<5
15	-20	22004	7
20	-25	22005	<5
25	-30	22006	<5
30	-35	22007	11
35	-40	22008	<5
40	-45	22009	<5
45	-50	22010	27
50	-55	22011	16
55	-60	22012	53
60	-65	22013	<5
65	-70	22014	<5
70	-75	22015	<5
75	-80	22016	9
80	-85	22017	<5
85	-90	22018	<5
90	-95	22019	<5
95	-100	22020	<5
100	-105	22021	<5
105	-110	22022	<5
110	-115	22023	<5
115	-120	22024	<5
120	-125	22025	146
125	-130	22026	21

VERIFIED: [signature]
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB
130 -135	22027	<5
135 -140	22028	<5
140 -145	22029	6
145 -150	22030	<5
150 -155	22031	<5
155 -160	22032	<5
160 -165	22033	<5
165 -170	22034	<5
170 -175	22035	<5
175 -180	22036	<5
180 -185	22037	<5
185 -190	22038	<5
190 -195	22039	7
195 -200	22040	<5
200 -205	22041	<5
205 -210	22042	31
210 -215	22043	<5
215 -220	22044	<5
220 -225	22045	<5
225 -230	22046	<5
230 -235	22047	<5
235 -240	22048	<5
240 -245	22049	<5
245 -250	22050	<5
250 -255	22051	<5
255 -260	22052	<5
260 -265	22053	<5
265 -270	22054	<5
270 -275	22055	<5
275 -280	22056	<5
280 -285	22057	<5
285 -290	22058	77
290 -295	22059	<5
295 -300	22060	<5
300 -305	22061	<5

FOOTAGE	SAMPLE NO.	Au PPB
305 -310	22062	0.036 Oz/Ton
310 -315	22063	47
315 -320	22064	<5
320 -325	22065	<5
325 -330	22066	<5
330 -335	22067	<5
335 -340	22068	<5
340 -345	22069	<5
345 -350	22070	<5
350 -355	22071	<5
355 -360	22072	<5
360 -365	22073	<5
365 -370	22074	<5
370 -375	22075	30
375 -380	22076	<5
380 -385	22077	<5
385 -390	22078	<5
390 -395	22079	<5
395 -400	22080	<5
400 -405	22081	65
405 -410	22082	19
410 -415	22083	<5
415 -420	22084	<5
420 -425	22085	<5
425 -430	22086	<5
430 -435	22087	<5
435 -440	22088	<5
440 -445	22089	<5
445 -450	22090	<5
450 -455	22091	<5
455 -460	22092	18
460 -465	22093	<5
465 -470	22094	<5
470 -475	22095	<5
475 -480	22096	<5

FOOTAGE		SAMPLE NO.	Au PPB
480	-485	22097	<5
485	-490	22098	<5
490	-495	22099	254
495	-500	22100	<5
500	-505	22101	276
505	-510	22102	20
510	-515	22103	<5
515	-520	22104	13
520	-525	22105	<5
525	-530	22106	<5
530	-535	22107	<5
535	-540	22108	<5
540	-545	22109	<5
545	-550	22110	<5
550	-555	22111	<5
555	-560	22112	<5
560	-565	22113	226
565	-570	22114	26
570	-575	22115	<5
575	-580	22116	<5
580	-585	22117	6
585	-590	22118	<5
	MH-12		
0	-5	22119	5
5	-10	22120	<5
10	-15	22121	<5
15	-20	22122	<5
20	-25	22123	<5
25	-30	22124	38
30	-35	22125	5
35	-40	22126	<5
40	-45	22127	<5
45	-50	22128	<5
50	-55	22129	<5
55	-60	22130	<5

FOOTAGE		SAMPLE NO.	Au PPB
60	-65	22131	<5
65	-70	22132	<5
70	-75	22133	<5
75	-80	22134	<5
80	-85	22135	<5
85	-90	22136	<5
90	-95	22137	<5
95	-100	22138	<5
100	-105	22139	<5
105	-110	22140	<5
110	-115	22141	<5
115	-120	22142	<5
120	-125	22143	<5
125	-130	22144	<5
130	-135	22145	<5
135	-140	22146	<5
140	-145	22147	<5
145	-150	22148	<5
150	-155	22149	<5

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: May 2, 1991 JOB NO.: 6466

PROJECT NO.: 315 DATE RECEIVED: April 25, 1991 NO OF SAMPLES: 115

FOOTAGE	SAMPLE NO.	Au PPB
155 -160	22150	<5
160 -165	22151	<5
165 -170	22152	<5
170 -175	22153	<5
175 -180	22154	<5
180 -185	22155	25
185 -190	22156	6
190 -195	22157	<5
195 -200	22158	5
200 -205	22159	<5
205 -210	22160	<5
210 -215	22161	<5
215 -220	22162	8
220 -225	22163	<5
225 -230	22164	7
230 -235	22165	<5
235 -240	22166	<5
240 -245	22167	<5
245 -250	22168	<5
250 -255	22169	<5
255 -260	22170	<5
260 -265	22171	13
265 -270	22172	<5
270 -275	22173	<5
275 -280	22174	<5
280 -285	22175	<5

VERIFIED: _____
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB
285 -290	22176	<5
290 -295	22177	<5
295 -300	22178	5
300 -305	22179	<5
305 -310	22180	<5
310 -315	22181	<5
315 -320	22182	0.040 OZ/TON
320 -325	22183	617
325 -330	22184	199
330 -335	22185	320
335 -340	22186	417
340 -345	22187	561
345 -350	22188	15
350 -355	22189	7
355 -360	22190	<5
360 -365	22191	<5
365 -370	22192	16
370 -375	22193	205
375 -380	22194	66
380 -385	22195	<5
385 -390	22196	<5
390 -395	22197	<5
395 -400	22198	<5
400 -405	22199	<5
405 -410	22200	<5
410 -415	22201	5
415 -420	22202	<5
420 -425	22203	<5
425 -430	22204	<5
430 -435	22205	<5
435 -440	22206	<5
440 -445	22207	<5
445 -450	22208	<5
450 -455	22209	<5
455 -460	22210	<5

FOOTAGE	SAMPLE NO.	Au PPB
460 -465	22211	<5
465 -470	22212	<5
470 -475	22213	<5
475 -480	22214	<5
480 -485	22215	<5
485 -490	22216	<5
490 -495	22217	<5
495 -500	22218	12
500 -505	22219	<5
505 -510	22220	151
510 -515	22221	53
515 -520	22222	830
520 -525	22223	0.037 OZ/TON
525 -530	22224	203
530 -535	22225	9
535 -540	22226	12
540 -545	22227	10
545 -550	22228	11
550 -555	22229	7
555 -560	22230	<5
560 -565	22231	<5
565 -570	22232	<5
570 -575	22233	<5
575 -580	22234	<5
580 -585	22235	<5
585 -590	22236	<5
590 -595	22237	<5
595 -600	22238	<5
600 -605	22239	95
605 -610	22240	30
610 -615	22241	296
615 -620	22242	73
620 -625	22243	6
625 -630	22244	302
630 -635	22245	7

FOOTAGE	SAMPLE NO.	Au PPB
635 -640	22246	<5
640 -645	22247	251
645 -650	22248	166
650 -655	22249	6
655 -660	22250	6
660 -665	22251	6
665 -670	22252	5
670 -675	22253	<5
675 -680	22254	13
680 -685	22255	<5
685 -690	22256	<5
690 -695	22257	5
695 -700	22258	7
700 -705	22259	<5
705 -710	22260	7
710 -715	22261	<5
715 -720	22262	<5
720 -725	22263	<5
725 -730	22264	5

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: May 2, 1991 JOB NO.: 6467

PROJECT NO.: 315 DATE RECEIVED: April 25, 1991 NO OF SAMPLES: 106

FOOTAGE	SAMPLE NO.	Au OZ/TON
	M4-13	
0 -5	22265	<5
5 -10	22266	<5
10 -15	22267	6
15 -20	22268	31
20 -25	22269	69
25 -30	22270	17
30 -35	22271	0.039 OZ/TON
35 -40	22272	56
40 -45	22273	27
45 -50	22274	15
50 -55	22275	949
55 -60	22276	823
60 -65	22277	30
65 -70	22278	0.052 OZ/TON
70 -75	22279	159
75 -80	22280	5
80 -85	22281	6
85 -90	22282	<5
90 -95	22283	<5
95 -100	22284	<5
100 -105	22285	<5
105 -110	22286	<5
110 -115	22287	<5
115 -120	22288	<5
120 -125	22289	<5
125 -130	22290	<5

VERIFIED: _____
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB
130 -135	22291	<5
135 -140	22292	<5
140 -145	22293	<5
145 -150	22294	<5
150 -155	22295	<5
155 -160	22296	<5
160 -165	22297	18
165 -170	22298	<5
170 -175	22299	81
175 -180	22300	23
180 -185	22301	10
185 -190	22302	<5
190 -195	22303	8
195 -200	22304	7
200 -205	22305	<5
205 -210	22306	<5
210 -215	22307	7
215 -220	22308	<5
220 -225	22309	<5
225 -230	22310	<5
230 -235	22311	<5
235 -240	22312	<5
240 -245	22313	<5
245 -250	22314	<5
250 -255	22315	<5
255 -260	22316	<5
260 -265	22317	<5
265 -270	22318	<5
270 -275	22319	<5
275 -280	22320	<5
280 -285	22321	<5
285 -290	22322	<5
290 -295	22323	<5
295 -300	22324	<5
300 -305	22325	<5

FOOTAGE	SAMPLE NO.	Au PPB
305 -310	22326	<5
310 -315	22327	<5
315 -320	22328	<5
320 -325	22329	<5
325 -330	22330	<5
330 -335	22331	<5
335 -340	22332	<5
340 -345	22333	12
345 -350	22334	8
350 -355	22335	95
355 -360	22336	15
360 -365	22337	5
365 -370	22338	<5
370 -375	22339	<5
375 -380	22340	<5
380 -385	22341	<5
385 -390	22342	<5
390 -395	22343	<5
395 -400	22344	10
400 -405	22345	<5
405 -410	22346	9
410 -415	22347	391
415 -420	22348	52
420 -425	22349	57
425 -430	22350	30
430 -435	22351	20
435 -440	22352	<5
440 -445	22353	14
445 -450	22354	<5
450 -455	22355	<5
455 -460	22356	<5
460 -465	22357	<5
465 -470	22358	<5
470 -475	22359	4
475 -480	22360	<5

FOOTAGE	SAMPLE NO.	Au PPB
480 -485	22361	<5
485 -490	22362	24
490 -495	22363	<5
495 -500	22364	<5
500 -505	22365	<5
505 -510	22366	<5
510 -515	22367	<5
515 -520	22368	8
520 -525	22369	6
525 -530	22370	50

d as D
owners

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: May 14, 1991 JOB NO.: 6472

PROJECT NO.: 315 DATE RECEIVED: May 2, 1991 NO OF SAMPLES: 75

FOOTAGE	SAMPLE NO.	Au PPB
M 5-13		
530 -535	22371	15
535 -540	22372	8
540 -545	22373	<5
545 -550	22374	8
550 -555	22375	8
555 -560	22376	18
560 -565	22377	22
565 -570	22378	6
570 -575	22379	5
575 -580	22380	<5
580 -585	22381	5
585 -590	22382	<5
590 -595	22383	6
595 -600	22384	12
600 -605	22385	<5
605 -610	22386	<5
610 -615	22387	<5
615 -620	22388	<5
620 -625	22389	<5
625 -630	22390	<5
630 -635	22391	<5
635 -640	22392	<5
640 -645	22393	6
645 -650	22394	<5
650 -655	22395	<5
655 -660	22396	<5

VERIFIED: Chris Allen
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB
660 -665	22397	<5
665 -670	22398	<5
670 -675	22399	<5
675 -680	22400	<5
680 -685	22401	5
685 -690	22402	<5
690 -695	22403	9
695 -700	22404	<5
700 -705	22405	<5
705 -710	22406	<5
710 -715	22407	9
715 -720	22408	<5
720 -725	22409	<5
725 -730	22410	<5
730 -735	22411	<5
735 -740	22412	<5
740 -745	22413	6
745 -750	22414	<5
750 -755	22415	<5
755 -760	22416	<5
760 -765	22417	6
765 -770	22418	<5
770 -775	22419	<5
775 -780	22420	<5
780 -785	22421	<5
785 -790	22422	<5
790 -795	22423	<5
795 -800	22424	<5
800 -805	22425	<5
805 -810	22426	<5
810 -815	22427	<5
815 -820	22428	<5
820 -825	22429	<5
825 -830	22430	<5
830 -835	22431	<5

FOOTAGE	SAMPLE NO.	Au PPB
835 -840	22432	<5
840 -845	22433	<5
845 -850	22434	<5
850 -855	22435	<5
855 -860	22436	<5
860 -865	22437	<5
865 -870	22438	<5
870 -875	22439	<5
875 -880	22440	<5
880 -885	22441	<5
885 -890	22442	<5
890 -895	22443	<5
895 -900	22444	<5
900 -905	22444 A	<5

2c: ... all ... owners

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: May 22, 1991   JOB NO.: 6484

PROJECT NO.: 315   DATE RECEIVED: May 10, 1991   NO OF SAMPLES: 180

FOOTAGE	SAMPLE NO.	Au PPB
	MA-4	
0 -5	22445	<5
5 -10	22446	<5
10 -15	22447	10
15 -20	22448	<5
20 -25	22449	<5
25 -30	22450	NR
30 -35	22451	7
35 -40	22452	6
40 -45	22453	NR
45 -50	22454	NR
50 -55	22455	NR
55 -60	22456	NR
60 -65	22457	NR
65 -70	22458	NR
70 -75	22459	<5
75 -80	22460	7
80 -85	22461	10
85 -90	22462	86
90 -95	22463	624
95 -100	22464	548
100 -105	22465	37
105 -110	22466	68
110 -115	22467	25
115 -120	22468	22
120 -125	22469	7
125 -130	22470	7

VERIFIED: [signature]
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB
130 -135	22471	9
135 -140	22472	<5
140 -145	22473	<5
145 -150	22474	<5
150 -155	22475	<5
155 -160	22476	<5
160 -165	22477	<5
165 -170	22478	<5
170 -175	22479	<5
175 -180	22480	<5
180 -185	22481	314
185 -190	22482	<5
190 -195	22483	<5
195 -200	22484	<5
200 -205	22485	523
205 -210	22486	93
210 -215	22487	7
215 -220	22488	5
220 -225	22489	<5
225 -230	22490	<5
230 -235	22491	<5
235 -240	22492	<5
240 -245	22493	320
245 -250	22494	14
250 -255	22495	<5
255 -260	22496	<5
260 -265	22497	<5
265 -270	22498	<5
270 -275	22499	<5
275 -280	22500	<5
280 -285	22501	<5
285 -290	22502	<5
290 -295	22503	<5

FOOTAGE	SAMPLE NO.	Au PPB
295 -300	22504	<5
300 -305	22505	<5
305 -310	22506	<5
310 -315	22507	9
315 -320	22508	<5
320 -325	22509	8
325 -330	22510	<5
330 -335	22511	<5
335 -340	22512	<5
340 -345	22513	<5
345 -350	22514	<5
350 -355	22515	<5
355 -360	22516	<5
360 -365	22517	<5
365 -370	22518	<5
370 -375	22519	<5
375 -380	22520	<5
380 -385	22521	<5
385 -390	22522	<5
390 -395	22523	<5
395 -400	22524	<5
400 -405	22525	<5
405 -410	22526	<5
410 -415	22527	<5
415 -420	22528	<5
420 -425	22529	<5
425 -430	22530	<5
430 -435	22531	<5
435 -440	22532	<5
440 -445	22533	<5
445 -450	22534	<5
450 -455	22535	<5
455 -460	22536	<5
460 -465	22537	<5
465 -470	22538	<5

FOOTAGE	SAMPLE NO.	Au PPB
470 -475	22539	<5
475 -480	22540	<5
480 -485	22541	<5
485 -490	22542	289
490 -495	22543	17
495 -500	22544	<5
500 -505	22545	9
505 -510	22546	<5
510 -515	22547	<5
515 -520	22548	<5
520 -525	22549	9
525 -530	22550	<5
530 -535	22551	<5
535 -540	22552	<5
540 -545	22553	<5
545 -550	22554	<5
550 -555	22555	<5
555 -560	22556	14
560 -565	22557	102
565 -570	22558	19
570 -575	22559	<5
575 -580	22560	<5
580 -585	22561	<5
585 -590	22562	<5
590 -595	22563	<5
595 -600	22564	<5
600 -605	22565	<5
605 -610	22566	<5
610 -615	22567	<5
615 -620	22568	<5
620 -625	22569	<5
625 -630	22570	<5

FOOTAGE	SAMPLE NO.	Au PPB	Au CHECK	Au CHECK	Au CHECK	Au CHECK
630 -635	22571	7				
635 -640	22572	<5				
640 -645	22573	<5				
645 -650	22574	<5				
650 -655	22575	<5				
655 -660	22576	<5				
660 -665	22577	<5				
665 -670	22578	11				
670 -675	22579	<5				
675 -680	22580	<5				
680 -685	22581	<5				
685 -690	22582	<5				
690 -695	22583	<5				
695 -700	22584	<5				
700 -705	22585	<5				
705 -710	22586	<5				
710 -715	22587	28				
715 -720	22588	<5				
720 -725	22589	<5				
725 -730	22590	314	189	4	12	496
730 -735	22591	11				
735 -740	22592	<5				
740 -745	22593	<5				
745 -750	22594	<5				
750 -755	22595	<5				
755 -760	22596	<5				
760 -765	22597	<5				
MA-7						
0 -5	22598	<5				
5 -10	22599	<5				
10 -15	22600	38				
15 -20	22601	19				
20 -25	22602	<5				
25 -30	22603	<5				
30 -35	22604	<5				

FOOTAGE	SAMPLE NO.	Au PPB
35 -40	22605	<5
40 -45	22606	<5
45 -50	22607	50
50 -55	22608	10
55 -60	22609	<5
60 -65	22610	<5
65 -70	22611	13
70 -75	22612	<5
75 -80	22613	<5
80 -85	22614	<5
85 -90	22615	<5
90 -95	22616	<5
95 -100	22617	<5
100 -105	22618	<5
105 -110	22619	<5
110 -115	22620	<5
115 -120	22621	17
120 -125	22622	<5
125 -130	22623	<5
130 -135	22624	<5
135 -140	22625	<5

ANALYSIS REPORT

American Assay Laboratories

RENO: 1500 Glendale Ave,SPARKS 89431
P.O. Box 71060, RENO 89570
Ph (702)356 0606 Fax 3561413

AMERICAN ASSAY LABORATORIES

REPORT : SP 011704 1 Page(s) Date : 05/29/91

Client reference : 22676/2272 Project : 315

Cost code :

Copies to : LAURENCE GABORIT

Samples : Type Preparation code
Received : 05/23/91

Analysis	Code	Quality Parameter	Detection	Units
Au	FA30	Acc. 15 %	5	ppb
Au(R)	FA30	Acc. 15 %	5	ppb

Signatory : Jorge Ugarte

ANALYSIS REPORT

American Assay Laboratories

REPORT : SP 011704 MA-7

Sample	Au ppb	Au(R) ppb
22676:390-395	36	
22677:395-400	12	
22678:400-405	7	6
22685:435-440	6	
22686:440-445	238	256
22687:445-450	40	
22688:450-455	21	
22689:455-460	5	
22705:535-540	<5	
22706:540-545	<5	
22707:545-550	<5	
22708:550-555	<5	
22709:555-560	<5	
22710:560-565	7	
22711:565-570	<5	
22712:570-575	<5	
22713:575-580	<5	
22714:580-585	5	
22715:585-590	<5	
22716:590-595	<5	<5
22717:595-600	<5	
22718:600-605	5	
22719:605-610	<5	
22720:610-615	<5	
22721:615-620	6	

Please refer to the cover sheet for further analysis details.

cc: owners

INTERNATIONAL PLASMA LABORATORY LTD

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

R E P O R T S U M M A R Y Report:[9100170 R]

A N A L Y T I C A L R E P O R T

Origin Inception Date:[May 21, 1991]

Client:[	226	Cambior USA, Inc.]
Contact:[		Laurie Gaborit]
Project:[	0	315]
Amount/Type:[	26	RC Cutting-Rock Reject Stored 3 Mon]
[		-Soil Reject Discarded]

Analytical Requisition

Geochemical:[	Hg 5ppb/ICP(AqR)29]		
Assay:[	Au(FA/AAS 30g)]	ICP:[	29]
Comments:[	RePulp/ReAssay for Au>1ppm		]

Delivery Information Reporting Date:[May 30, 1991]

Principal Destination (Hardcopy,Fascimile,Invoice)

Company:[	Cambior USA, Inc.]
Address:[	230 South Rock Blvd., Suite 23]
City/Province:[	Reno, NV]
Country/Postal:[	USA 89502]
Attention:[	Laurie Gaborit]
Fascimile:[	(702)786-4549]

Secondary Destination (Hardcopy)

Company:[	]
Address:[	]
City/Province:[	]
Country/Postal:[	]
Attention:[	]
Fascimile:[	]

1 data pages in this report. Approved by: _____

B.C. Certified Assayers

iPL CODE: 910530-10:11:04

Report: 9100170 R Cambior USA, Inc. Project: 315 Page 1 of 1 Section 1 of 2

Sample	Name		Type	Au ppb	Au oz/st	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppb	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	W ppm
22062	0305-0310	MA-6	RC Cutting	616	--	<0.1	92	<2	63	6	6	60	4	<10	<2	<0.1	34	71	<5
22077	0380-0385		RC Cutting	4	--	0.2	139	<2	52	<5	<5	45	7	<10	<2	<0.1	30	67	<5
22078	0385-0390		RC Cutting	6	--	<0.1	91	<2	35	<5	<5	150	2	<10	4	<0.1	21	35	<5
22079	0390-0395		RC Cutting	4	--	<0.1	99	<2	45	<5	<5	185	5	<10	<2	<0.1	25	31	<5
22101	0500-0505		RC Cutting	242	--	<0.1	165	2	26	5	<5	120	9	<10	<2	<0.1	20	41	<5
22181	0310-0315	MA-12	RC Cutting	2	--	0.1	44	<2	121	<5	5	40	3	<10	<2	<0.1	19	14	<5
22182	0315-0320		RC Cutting	556	--	0.2	66	8	77	6	<5	50	4	<10	<2	0.1	21	44	<5
22183	0320-0325		RC Cutting	738	--	0.2	49	3	127	8	5	55	5	<10	<2	0.2	23	32	<5
22184	0325-0330		RC Cutting	138	--	0.1	69	<2	112	<5	5	30	2	<10	<2	<0.1	30	84	<5
22185	0330-0335		RC Cutting	170	--	0.1	180	<2	69	5	6	60	7	<10	3	<0.1	27	100	<5
22186	0335-0340		RC Cutting	322	--	0.2	70	<2	87	<5	6	20	3	10	<2	0.2	33	128	<5
22187	0340-0345		RC Cutting	662	--	<0.1	40	<2	137	11	<5	55	3	<10	<2	0.1	30	68	<5
22188	0345-0350		RC Cutting	6	--	0.1	93	<2	181	<5	5	40	1	<10	<2	<0.1	34	71	<5
22189	0350-0355		RC Cutting	8	--	<0.1	33	8	63	<5	<5	35	2	10	<2	0.1	17	24	<5
22190	0355-0360		RC Cutting	8	--	<0.1	55	<2	109	<5	<5	50	2	<10	2	<0.1	22	40	<5
22222	0515-0520		RC Cutting	2820	0.130	0.1	54	2	138	10	5	35	3	<10	<2	0.4	20	51	<5
22223	0520-0525		RC Cutting	384	--	<0.1	118	<2	363	13	5	60	3	<10	<2	1.0	29	23	<5
22271	0030-0035	MA-13	RC Cutting	1012	0.024	0.1	135	128	313	<5	8	55	3	<10	<2	0.3	33	119	<5
22275	0050-0055		RC Cutting	786	--	0.1	144	180	194	17	5	55	5	<10	<2	<0.1	28	62	<5
22276	0055-0060		RC Cutting	840	--	<0.1	90	46	92	11	<5	60	3	<10	<2	<0.1	25	25	<5
22277	0060-0065		RC Cutting	24	--	0.2	124	284	144	7	5	40	3	<10	<2	<0.1	26	26	<5
22278	0065-0070		RC Cutting	2026	0.054	0.3	128	16	76	137	<5	55	3	<10	<2	<0.1	36	44	<5
22279	0070-0075		RC Cutting	358	--	0.1	165	267	185	25	6	65	3	<10	<2	<0.1	28	46	<5
22589	0720-0725	MA-4	RC Cutting	8	--	<0.1	32	16	31	<5	5	45	1	<10	<2	<0.1	23	33	<5
22590	0725-0730		RC Cutting	162	--	<0.1	58	11	49	25	6	55	3	<10	<2	<0.1	29	67	<5
22591	0730-0735		RC Cutting	16	--	0.1	161	<2	60	22	5	55	2	<10	<2	<0.1	47	104	<5
Minimum Detection				2	0.005	0.1	1	2	1	5	5	5	1	10	2	0.1	1	1	5
Maximum Detection				10000	1000.000	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	10000.0	10000	10000	1000
Method				FA/AAS	FAGrav	ICP	ICP	ICP	ICP	ICP	ICP	Geo	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample

INTERNATIONAL PLASMA LABORATORY LTD
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Fax (604) 879-7898

Report: 9100170 R Cambior USA, Inc. Project: 315 Page 1 of 1 Section 2 of 2

Sample	Name	Ba ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
22062	0305-0310	<2	101	144	1188	<2	65	1	17	0.01	3.34	6.64	>5.00	3.36	0.06	0.03	0.03
22077	0380-0385	2	112	119	1034	<2	49	1	19	<0.01	3.19	6.36	4.80	2.74	0.03	0.03	0.02
22078	0385-0390	<2	53	78	997	2	49	1	12	<0.01	2.51	5.84	4.42	1.85	0.05	0.05	0.04
22079	0390-0395	<2	22	91	1479	<2	61	1	15	<0.01	1.99	7.51	>5.00	3.16	0.05	0.06	0.02
22101	0500-0505	<2	67	65	1140	<2	37	<1	11	<0.01	1.44	7.83	2.88	1.01	0.09	0.04	0.02
22181	0310-0315	<2	36	82	1014	3	15	1	8	<0.01	2.49	2.36	>5.00	2.36	0.05	0.03	0.08
22182	0315-0320	3	65	29	879	2	56	1	9	<0.01	0.86	3.95	3.10	1.49	0.11	0.04	0.05
22183	0320-0325	<2	45	85	1060	2	37	1	8	<0.01	2.13	3.42	4.68	2.17	0.07	0.03	0.07
22184	0325-0330	<2	156	105	1218	2	71	1	19	<0.01	2.82	5.62	>5.00	4.15	0.10	0.03	0.03
22185	0330-0335	16	185	96	885	2	67	2	12	0.01	2.16	4.13	3.45	2.84	0.06	0.06	0.06
22186	0335-0340	20	245	138	1103	2	90	2	14	0.02	3.00	4.84	4.86	4.05	0.08	0.05	0.04
22187	0340-0345	<2	95	76	1347	<2	52	1	15	<0.01	2.35	5.57	4.85	1.95	0.12	0.03	0.03
22188	0345-0350	<2	122	141	1510	<2	38	1	19	<0.01	3.53	6.01	>5.00	2.96	0.04	0.03	0.02
22189	0350-0355	2	88	40	581	2	18	1	5	<0.01	0.98	3.04	2.96	0.63	0.07	0.04	0.03
22190	0355-0360	<2	99	100	1270	2	36	1	13	<0.01	2.15	6.50	4.02	1.46	0.08	0.04	0.04
22222	0515-0520	<2	104	113	1040	2	56	1	11	0.01	1.97	4.38	4.04	2.40	0.07	0.03	0.03
22223	0520-0525	<2	20	192	1586	2	26	1	13	0.02	3.14	2.91	>5.00	3.37	0.06	0.03	0.05
22271	0030-0035	<2	249	175	1310	2	36	1	18	0.01	4.42	2.39	>5.00	6.27	0.05	0.02	0.04
22275	0050-0055	<2	89	91	1179	2	50	1	10	<0.01	2.79	5.64	4.99	2.35	0.12	0.03	0.07
22276	0055-0060	<2	35	132	1077	2	58	1	12	<0.01	3.16	4.52	>5.00	2.88	0.11	0.03	0.07
22277	0060-0065	<2	47	132	1229	2	62	1	11	<0.01	3.66	4.88	>5.00	3.15	0.13	0.03	0.04
22278	0065-0070	<2	59	184	1291	<2	69	1	19	0.01	3.60	5.74	>5.00	3.34	0.05	0.03	0.05
22279	0070-0075	<2	98	118	1152	<2	39	2	14	0.05	3.15	5.15	>5.00	3.02	0.07	0.03	0.04
22589	0720-0725	<2	49	114	441	<2	21	3	5	0.10	2.12	1.90	3.83	2.67	0.06	0.04	0.03
22590	0725-0730	<2	160	132	778	<2	50	2	17	0.07	2.81	4.60	4.29	3.78	0.04	0.03	0.02
22591	0730-0735	<2	164	339	1016	<2	58	2	25	0.08	4.47	4.58	>5.00	5.98	0.03	0.02	0.02
Minimum Detection		2	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection		10000	10000	10000	10000	10000	10000	10000	10000	1.00	5.00	10.00	5.00	10.00	10.00	5.00	5.00
Method		ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample

ipl
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SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: June 4, 1991

JOB NO.: 6490

PROJECT NO.: 315

DATE RECEIVED: May 16, 1991

NO OF SAMPLES: 123

FOOTAGE		SAMPLE NO.	Au PPB
MA-7			
135	-140	22625	NR
140	-145	22626	<5
145	-150	22627	<5
150	-155	22628	<5
155	-160	22629	<5
160	-165	22630	29
165	-170	22631	<5
170	-175	22632	<5
175	-180	22633	<5
180	-185	22634	<5
185	-190	22635	<5
190	-195	22636	<5
195	-200	22637	<5
200	-205	22638	<5
205	-210	22639	<5
210	-215	22640	<5
215	-220	22641	<5
220	-225	22642	9
225	-230	22643	7
230	-235	22644	<5
235	-240	22645	<5
240	-245	22646	<5
245	-250	22647	<5
250	-255	22648	<5
255	-260	22649	<5
260	-265	22650	<5

VERIFIED: _____
Laboratory Manager

FOOTAGE	SAMPLE NO	Au PPB
265 -270	22651	<5
270 -275	22652	<5
275 -280	22653	<5
280 -285	22654	<5
285 -290	22655	<5
290 -295	22656	<5
295 -300	22657	<5
300 -305	22658	<5
305 -310	22659	<5
310 -315	22660	<5
315 -320	22661	<5
320 -325	22662	<5
325 -330	22663	<5
330 -335	22664	<5
335 -340	22665	<5
340 -345	22666	<5
345 -350	22667	<5
350 -355	22668	<5
355 -360	22669	<5
360 -365	22670	<5
365 -370	22671	<5
370 -375	22672	<5
375 -380	22673	<5
380 -385	22674	<5
385 -390	22675	<5
390 -395	22676	<5
395 -400	22677	<5
400 -405	22678	<5
405 -410	22679	<5
410 -415	22680	<5
415 -420	22681	<5
420 -425	22682	<5
425 -430	22683	<5
430 -435	22684	<5
435 -440	22685	<5

FOOTAGE		SAMPLE NO	Au PPB
440	-445	22686	136
445	-450	22687	26
450	-455	22688	17
455	-460	22689	<5
460	-465	22690	<5
465	-470	22691	<5
470	-475	22692	5
475	-480	22693	<5
480	-485	22694	<5
485	-490	22695	<5
490	-495	22696	<5
495	-500	22697	<5
500	-505	22698	<5
505	-510	22699	<5
510	-515	22700	<5
515	-520	22701	<5
520	-525	22702	<5
525	-530	22703	<5
530	-535	22704	<5
535	-540	22705	<5
540	-545	22706	17
545	-550	22707	<5
550	-555	22708	<5
555	-560	22709	<5
560	-565	22710	<5
565	-570	22711	<5
570	-575	22712	<5
575	-580	22713	<5
580	-585	22714	<5
585	-590	22715	<5
590	-595	22716	<5
595	-600	22717	<5
600	-605	22718	<5
605	-610	22719	<5
610	-615	22720	16

FOOTAGE	SAMPLE NO	Au PPB
615 -620	22721	<5
620 -625	22722	<5
625 -630	22723	<5
630 -635	22724	<5
635 -640	22725	<5
640 -645	22726	<5
645 -650	22727	<5
650 -655	22728	<5
655 -660	22729	<5
660 -665	22730	<5
665 -670	22731	<5
670 -675	22732	<5
675 -680	22733	<5
680 -685	22734	<5
685 -690	22735	<5
690 -695	22736	<5
695 -700	22737	<5
700 -705	22738	<5
705 -710	22739	<5
710 -715	22740	<5
715 -720	22741	<5
720 -725	22742	<5
725 -730	22743	<5
730 -735	22744	<5
735 -740	22745	<5
740 -745	22746	<5
745 -750	22747	<5

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: June 11, 1991 JOB NO.: 6496

PROJECT NO.: 315 DATE RECEIVED: May 21, 1991 NO OF SAMPLES: 146

FOOTAGE	SAMPLE NO.	Au PPB
750 -755	22748	<5
755 -760	22749	<5
760 -765	22750	<5
765 -770	22751	<5
770 -775	22752	<5
775 -780	22753	<5
780 -785	22754	<5
785 -790	22755	<5
790 -795	22756	<5
795 -800	22757	<5
AA-10		
0 -5	22758	<5
5 -10	22759	<5
10 -15	22760	<5
15 -20	22761	<5
20 -25	22762	<5
25 -30	22763	<5
30 -35	22764	<5
35 -40	22765	<5
40 -45	22766	<5
45 -50	22767	<5
50 -55	22768	<5
55 -60	22769	<5
60 -65	22770	<5
65 -70	22771	<5
70 -75	22772	<5

VERIFIED: _____
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB
75 -80	22773	<5
80 -85	22774	<5
85 -90	22775	<5
90 -95	22776	<5
95 -100	22777	<5
100 -105	22778	<5
105 -110	22779	<5
110 -115	22780	<5
115 -120	22781	<5
120 -125	22782	<5
125 -130	22783	<5
130 -135	22784	<5
135 -140	22785	<5
140 -145	22786	<5
145 -150	22787	<5
150 -155	22788	<5
155 -160	22789	<5
160 -165	22790	<5
165 -170	22791	<5
170 -175	22792	<5
175 -180	22793	<5
180 -185	22794	<5
185 -190	22795	<5
190 -195	22796	<5
195 -200	22797	<5
200 -205	22798	<5
205 -210	22799	<5
210 -215	22800	<5
215 -220	22801	<5
220 -225	22802	<5
225 -230	22803	9
230 -235	22804	<5
235 -240	22805	<5
240 -245	22806	<5
245 -250	22807	<5

FOOTAGE	SAMPLE NO.	Au PPB	Au RESPLIT
250 -255	22808	<5	
255 -260	22809	0.036 Oz/Ton	6
260 -265	22810	<5	
265 -270	22811	<5	
270 -275	22812	<5	
275 -280	22813	<5	
280 -285	22814	<5	
285 -290	22815	<5	
290 -295	22816	<5	
295 -300	22817	<5	
300 -305	22818	<5	
305 -310	22819	<5	
310 -315	22820	<5	
315 -320	22821	<5	
320 -325	22822	<5	
325 -330	22823	<5	
330 -335	22824	<5	
335 -340	22825	<5	
340 -345	22826	<5	
345 -350	22827	<5	
350 -355	22828	<5	
355 -360	22829	<5	
360 -365	22830	<5	
365 -370	22831	<5	
370 -375	22832	<5	
375 -380	22833	<5	
380 -385	22834	<5	
385 -390	22835	<5	
390 -395	22836	<5	
395 -400	22837	<5	
400 -405	22838	<5	
405 -410	22839	<5	
410 -415	22840	<5	
415 -420	22841	<5	
420 -425	22842	<5	

FOOTAGE	SAMPLE NO.	Au PPB
425 -430	22843	<5
430 -435	22844	<5
435 -440	22845	<5
440 -445	22846	<5
445 -450	22847	<5
450 -455	22848	<5
455 -460	22849	<5
460 -465	22850	<5
465 -470	22851	<5
470 -475	22852	<5
475 -480	22853	<5
480 -485	22854	<5
485 -490	22855	<5
490 -495	22856	33
495 -500	22857	64
500 -505	22858	5
505 -510	22859	<5
510 -515	22860	14
515 -520	22861	0.046 Oz/Ton
520 -525	22862	<5
525 -530	22863	8
530 -535	22864	<5
535 -540	22865	126
540 -545	22866	740
545 -550	22867	27
550 -555	22868	<5
555 -560	22869	<5
560 -565	22870	<5
565 -570	22871	<5
570 -575	22872	<5
575 -580	22873	<5
580 -585	22874	<5
585 -590	22875	<5
590 -595	22876	<5
595 -600	22877	<5

FOOTAGE	SAMPLE NO.	Au PPB
600 -605	22878	<5
605 -610	22879	<5
610 -615	22880	<5
615 -620	22881	<5
620 -625	22882	<5
625 -630	22883	<5
630 -635	22884	<5
635 -640	22885	<5
640 -645	22886	<5
645 -650	22887	<5
650 -655	22888	<5
655 -660	22889	<5
660 -665	22890	<5
665 -670	22891	<5
670 -675	22892	<5
675 -680	22893	<5

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: June 11, 1991 JOB NO.: 6500

PROJECT NO.: 315 DATE RECEIVED: May 28, 1991 NO OF SAMPLES: 160

FOOTAGE	SAMPLE NO.	Au PPB
	MA 9	
0 -5	22894	<5
5 -10	22895	5
10 -15	22896	<5
15 -20	22897	<5
20 -25	22898	7
25 -30	22899	<5
30 -35	22900	21
35 -40	22901	24
40 -45	22902	<5
45 -50	22903	<5
50 -55	22904	6
55 -60	22905	<5
60 -65	22906	<5
65 -70	22907	6
70 -75	22908	5
75 -80	22909	12
80 -85	22910	13
85 -90	22911	<5
90 -95	22912	6
95 -100	22913	<5
100 -105	22914	<5
105 -110	22915	<5
110 -115	22916	<5
115 -120	22917	<5
120 -125	22918	<5
125 -130	22919	<5

VERIFIED: _____
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB
130 -135	22920	<5
135 -140	22921	<5
140 -145	22922	<5
145 -150	22923	<5
150 -155	22924	<5
155 -160	22925	<5
160 -165	22926	<5
165 -170	22927	<5
170 -175	22928	<5
175 -180	22929	<5
180 -185	22930	<5
185 -190	22931	<5
190 -195	22932	<5
195 -200	22933	<5
200 -205	22934	<5
205 -210	22935	<5
210 -215	22936	<5
215 -220	22937	<5
220 -225	22938	<5
225 -230	22939	<5
230 -235	22940	<5
235 -240	22941	<5
240 -245	22942	<5
245 -250	22943	<5
250 -255	22944	<5
255 -260	22945	<5
260 -265	22946	<5
265 -270	22947	<5
270 -275	22948	<5
275 -280	22949	<5
280 -285	22950	<5
285 -290	22951	<5
290 -295	22952	<5
295 -300	22953	21
300 -305	22954	<5

FOOTAGE	SAMPLE NO.	Au PPB	Au RESPLIT
305 -310	22955	<5	
310 -315	22956	<5	
315 -320	22957	<5	
320 -325	22958	<5	
325 -330	22959	<5	
330 -335	22960	<5	
335 -340	22961	<5	
340 -345	22962	<5	
345 -350	22963	<5	
350 -355	22964	<5	
355 -360	22965	<5	
360 -365	22966	<5	
365 -370	22967	<5	
370 -375	22968	<5	
375 -380	22969	<5	
380 -385	22970	<5	
385 -390	22971	<5	
390 -395	22972	<5	
395 -400	22973	<5	
400 -405	22974	<5	
405 -410	22975	7	
410 -415	22976	<5	
415 -420	22977	<5	
420 -425	22978	<5	
425 -430	22979	41	
430 -435	22980	<5	<5
435 -440	22981	31	
440 -445	22982	<5	
445 -450	22983	<5	
450 -455	22984	<5	
455 -460	22985	<5	
460 -465	22986	<5	
465 -470	22987	<5	
470 -475	22988	<5	
475 -480	22989	<5	

FOOTAGE	SAMPLE NO.	Au PPB
480 -485	22990	<5
485 -490	22991	6
490 -495	22992	<5
495 -500	22993	<5
500 -505	22994	<5
505 -510	22995	<5
510 -515	22996	12
515 -520	22997	21
520 -525	22998	5
525 -530	22999	<5
530 -535	23000	<5
535 -540	23001	<5
540 -545	23002	<5
545 -550	23003	<5
550 -555	23004	<5
555 -560	23005	<5
560 -565	23006	<5
565 -570	23007	<5
570 -575	23008	<5
580 -580	23009	<5
MA-11		
0 -5	23010	<5
5 -10	23011	5
10 -15	23012	<5
15 -20	23013	<5
20 -25	23014	13
25 -30	23015	60
30 -35	23016	<5
35 -40	23017	<5
40 -45	23018	<5
45 -50	23019	<5
50 -55	23020	<5
55 -60	23021	<5
60 -65	23022	<5

FOOTAGE	SAMPLE NO.	Au PPB
65 -70	23023	<5
70 -75	23024	<5
75 -80	23025	<5
80 -85	23026	5
85 -90	23027	167
90 -95	23028	13
95 -100	23029	31
100 -105	23030	<5
105 -110	23031	<5
110 -115	23032	<5
115 -120	23033	<5
120 -125	23034	<5
125 -130	23035	<5
130 -135	23036	<5
135 -140	23037	<5
140 -145	23038	<5
145 -150	23039	<5
150 -155	23040	<5
155 -160	23041	<5
160 -165	23042	<5
165 -170	23043	<5
170 -175	23044	<5
175 -180	23045	<5
180 -185	23046	<5
185 -190	23047	<5
190 -195	23048	<5
195 -200	23049	<5
200 -205	23050	<5
205 -210	23051	<5
210 -215	23052	<5
215 -220	23053	<5

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: June 11, 1991 JOB NO.: 6505

PROJECT NO.: 315 DATE RECEIVED: June 2, 1991 NO OF SAMPLES: 28

FOOTAGE		SAMPLE NO.	Au PPB
		MA-14	
0	-5	23192	<5
5	-10	23193	<5
10	-15	23194	<5
15	-20	23195	<5
20	-25	23196	<5
25	-30	23197	<5
30	-35	23198	<5
35	-40	23199	<5
40	-45	23200	<5
45	-50	23201	<5
50	-55	23202	<5
55	-60	23203	<5
60	-65	23204	<5
65	-70	23205	<5
70	-75	23206	<5
75	-80	23207	<5
80	-85	23208	<5
85	-90	23209	<5
90	-95	23210	<5
95	-100	23211	<5
100	-105	23212	<5
105	-110	23213	<5
110	-115	23214	<5
115	-120	23215	155
120	-125	23216	14
125	-130	23217	<5
130	-135	23218	<5
135	-140	23219	<5

VERIFIED: _____
Laboratory Manager

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: June 11, 1991 JOB NO.: 6507

PROJECT NO.: 315 DATE RECEIVED: June 3, 1991 NO OF SAMPLES: 196

FOOTAGE	SAMPLE NO.	Au PPB
M9-11		
220 -225	23054	<5
225 -230	23055	<5
230 -235	23056	<5
235 -240	23057	<5
240 -245	23058	<5
245 -250	23059	<5
250 -255	23060	<5
255 -260	23061	<5
260 -265	23062	<5
265 -270	23063	<5
270 -275	23064	<5
275 -280	23065	<5
280 -285	23066	<5
285 -290	23067	<5
290 -295	23068	<5
295 -300	23069	NR
300 -305	23070	<5
305 -310	23071	<5
310 -315	23072	<5
315 -320	23073	<5
320 -325	23074	<5
325 -330	23075	<5
330 -335	23076	<5
335 -340	23077	<5
340 -345	23078	<5
345 -350	23079	<5

VERIFIED: _____
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB	Au CHECK	Au CHECK
350 -355	23080	<5		
355 -360	23081	<5		
360 -365	23082	<5		
365 -370	23083	<5		
370 -375	23084	<5		
375 -380	23085	<5		
380 -385	23086	<5		
385 -390	23087	<5		
390 -395	23088	<5		
395 -400	23089	<5		
400 -405	23090	<5		
405 -410	23091	<5		
0 -5	MA-S 23092	<5		
5 -10	23093	<5		
10 -15	23094	<5		
15 -20	23095	<5		
20 -25	23096	<5		
25 -30	23097	<5		
30 -35	23098	<5		
35 -40	23099	<5		
40 -45	23100	<5		
45 -50	23101	19		
50 -55	23102	<5		
55 -60	23103	<5		
60 -65	23104	<5		
65 -70	23105	<5		
70 -75	23106	<5		
75 -80	23107	<5		
80 -85	23108	<5		
85 -90	23109	<5		
90 -95	23110	<5		
95 -100	23111	0.042 Oz/Ton	<5	<5
100 -105	23112	<5		
105 -110	23113	<5		
110 -115	23114	<5		

FOOTAGE	SAMPLE NO.	Au PPB
115 -120	23115	<5
120 -125	23116	<5
125 -130	23117	<5
130 -135	23118	<5
135 -140	23119	<5
140 -145	23120	<5
145 -150	23121	<5
150 -155	23122	<5
155 -160	23123	<5
160 -165	23124	<5
165 -170	23125	<5
170 -175	23126	<5
175 -180	23127	<5
180 -185	23128	<5
185 -190	23129	<5
190 -195	23130	10
195 -200	23131	<5
200 -205	23132	<5
205 -210	23133	<5
210 -215	23134	<5
215 -220	23135	<5
220 -225	23136	<5
225 -230	23137	<5
230 -235	23138	<5
235 -240	23139	<5
240 -245	23140	<5
245 -250	23141	<5
250 -255	23142	<5
255 -260	23143	<5
260 -265	23144	<5
265 -270	23145	<5
270 -275	23146	<5
275 -280	23147	<5
280 -285	23148	<5
285 -290	23149	<5

FOOTAGE	SAMPLE NO.	Au PPB
290 -295	23150	<5
295 -300	23151	<5
300 -305	23152	<5
305 -310	23153	<5
310 -315	23154	<5
315 -320	23155	<5
320 -325	23156	<5
325 -330	23157	<5
330 -335	23158	<5
335 -340	23159	<5
340 -345	23160	<5
345 -350	23161	<5
350 -355	23162	<5
355 -360	23163	<5
360 -365	23164	<5
365 -370	23165	<5
370 -375	23166	<5
375 -380	23167	<5
380 -385	23168	<5
385 -390	23169	<5
390 -395	23170	<5
395 -400	23171	<5
400 -405	23172	<5
405 -410	23173	<5
410 -415	23174	<5
415 -420	23175	<5
420 -425	23176	<5
425 -430	23177	<5
430 -435	23178	<5
435 -440	23179	<5
440 -445	23180	<5
445 -450	23181	<5
450 -455	23182	<5
455 -460	23183	<5
460 -465	23184	<5

FOOTAGE	SAMPLE NO.	Au PPB	Au CHECK	Au CHECK
465 -470	23185	<5		
470 -475	23186	<5		
475 -480	23187	<5		
480 -485	23188	<5		
485 -490	23189	<5		
490 -495	23190	<5		
495 -500	23191	<5		
MA-14				
140 -145	23220	<5		
145 -150	23221	0.059 Oz/Ton		
150 -155	23222	<5	0.034 OPT	767
155 -160	23223	192		
160 -165	23224	15		
165 -170	23225	0.034 Oz/Ton	5	<5
170 -175	23226	<5		
175 -180	23227	<5		
180 -185	23228	<5		
185 -190	23229	<5		
190 -195	23230	<5		
195 -200	23231	<5		
200 -205	23232	<5		
205 -210	23233	<5		
210 -215	23234	<5		
215 -220	23235	<5		
220 -225	23236	<5		
225 -230	23237	<5		
230 -235	23238	<5		
235 -240	23239	<5		
240 -245	23240	<5		
245 -250	23241	<5		
250 -255	23242	<5		
255 -260	23243	<5		
260 -265	23244	<5		
265 -270	23245	<5		
270 -275	23246	<5		

FOOTAGE	SAMPLE NO.	Au PPB	Au RESPLIT
275 -280	23247	<5	
280 -285	23248	<5	
285 -290	23249	<5	
290 -295	23250	<5	
295 -300	23251	<5	
300 -305	23252	<5	
305 -310	23253	<5	
310 -315	23254	<5	
315 -320	23255	<5	
320 -325	23256	<5	
325 -330	23257	<5	
330 -335	23258	<5	
335 -340	23259	<5	
340 -345	23260	<5	
345 -350	23261	<5	
350 -355	23262	<5	
355 -360	23263	<5	
360 -365	23264	<5	
365 -370	23265	5	
370 -375	23266	<5	
375 -380	23267	13	
380 -385	23268	5	
385 -390	23269	<5	
390 -395	23270	5	
395 -400	23271	<5	
400 -405	23272	7	
405 -410	23273	125	
410 -415	23274	0.062 Oz/Ton	0.055 Oz/Ton
415 -420	23275	0.134 Oz/Ton	0.091 Oz/Ton

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
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CLIENT: Cambior USA, Inc.
230 S. Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA Finish: Au

DATE: June 11, 1991 JOB NO.: 6508

PROJECT NO.: 315 DATE RECEIVED: June 5, 1991 NO OF SAMPLES: 92

FOOTAGE	SAMPLE NO.	Au PPB
420 -425	23276	619
425 -430	23277	471
430 -435	23278	82
435 -440	23279	16
440 -445	23280	<5
445 -450	23281	9
450 -455	23282	12
455 -460	23283	<5
460 -465	23284	<5
465 -470	23285	<5
470 -475	23286	<5
475 -480	23287	<5
480 -485	23288	<5
485 -490	23289	<5
M4-15		
0 -5	23290	<5
5 -10	23291	<5
10 -15	23292	<5
15 -20	23293	<5
20 -25	23294	15
25 -30	23295	132
30 -35	23296	259
35 -40	23297	50
40 -45	23298	29
45 -50	23299	22
50 -55	23300	18

VERIFIED: _____
Laboratory Manager

FOOTAGE	SAMPLE NO.	Au PPB
55 -60	23301	27
60 -65	23302	22
65 -70	23303	11
70 -75	23304	13
75 -80	23305	<5
80 -85	23306	20
85 -90	23307	<5
90 -95	23308	<5
95 -100	23309	6
100 -105	23310	5
105 -110	23311	<5
110 -115	23312	<5
115 -120	23313	<5
120 -125	23314	<5
125 -130	23315	<5
130 -135	23316	<5
135 -140	23317	6
140 -145	23318	<5
145 -150	23319	<5
150 -155	23320	<5
155 -160	23321	<5
160 -165	23322	<5
165 -170	23323	116
170 -175	23324	<5
175 -180	23325	<5
180 -185	23326	<5
185 -190	23327	<5
190 -195	23328	<5
195 -200	23329	<5
200 -205	23330	<5
205 -210	23331	<5
210 -215	23332	<5
215 -220	23333	<5
220 -225	23334	<5
225 -230	23335	<5

FOOTAGE	SAMPLE NO.	Au PPB	
230 -235	23336	<5	
235 -240	23337	<5	
240 -245	23338	<5	
245 -250	23339	<5	
250 -255	23340	<5	
255 -260	23341	<5	
260 -265	23342	<5	
265 -270	23343	<5	
270 -275	23344	<5	
275 -280	23345	<5	
280 -285	23346	<5	
285 -290	23347	<5	
290 -295	23348	<5	
295 -300	23349	<5	
300 -305	23350	<5	
305 -310	23351	<5	
310 -315	23352	<5	
315 -320	23353	<5	
320 -325	23354	<5	
325 -330	23355	<5	
330 -335	23356	<5	
335 -340	23357	<5	
340 -345	23358	<5	
345 -350	23359	<5	
350 -355	23360	<5	
355 -360	23361	<5	
360 -365	23362	<5	
	20313	267	
	20314	90	
	20315	314	
	20316	0.064	Oz/Ton
	20317	197	

dr. ass.
owners

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY
1240 Redwood Boulevard, Redding, California 96003
(916) 244-4441 FAX (916) 244-4443

CLIENT: Cambior USA, Inc.
230 South Rock Blvd., Suite 23
Reno, NV 89502

ANALYTICAL METHODS:
FA: 1AT/AA FINISH: Au

DATE: June 14, 1991 JOB NO.: 6511

PROJECT NO.: 315 DATE RECEIVED: June 10, 1991 NO OF SAMPLES: 12

FOOTAGE	SAMPLE NO.	Au PPB
	MS-15	
365 -370	23363	<5
370 -375	23364	<5
375 -380	23365	<5
380 -385	23366	<5
385 -390	23367	<5
390 -395	23368	<5
395 -400	23369	5
400 -405	23370	<5
405 -410	23371	<5
410 -415	23372	<5
415 -420	23373	<5
420 -425	23374	<5

VERIFIED: Chris Ulmer
Laboratory Manager

Volume 2 Number 4

December Issue

of the

MINERAL RESOURCES OF OREGON

Published by

The Oregon Bureau of Mines and Geology

Handbook of the Mining Industry of Oregon

Alphabetical List of Properties; Description of Mining Districts

By H. M. PARKS and A. M. SWARTLEY

306 Pages

1916

MARTHA MINE (gold) GREENBACK DISTRICT JOSEPHINE COUNTY

The Martha mine is in the S. W. ¼ Sec. 28, T. 33 S., R. 5 W., about 1 mile north of the Greenback mine. It is 2½ miles north of the town of Placer, which is 8 miles west of Leland, the nearest railroad point. It is on the steep western slope of St. Peter mountain overlooking Coyote creek. It is opened by 4 adits at different elevations, having a total length of about 3000 feet. It was opened as a separate mine, but in 1904 it was purchased by the Greenback company and developed more fully by means of electric power from the Greenback mine. In 1906 the Martha was connected with the Greenback mill by means of an aerial tramway. After the Greenback mine was closed the Martha was leased to J. M. Clarke, of Golden, Oregon, who erected a 5-stamp mill on the ground and treated ore previously developed and partly mined. The country rock is greenstone and the ore is similar to that of the Greenback, though not as rich. It occurs in veins and stringers in zones of shearing. In adit 2 the chief vein strikes N. 70° W. and dips at an angle of 55 to 60°; it varies in width from a few inches to about 4 feet with an average of about 2 feet for the first 600 feet; the adit beyond was not accessible; it was said to extend 800 feet. At about 350 feet from the portal a fault which strikes about N. 60° W. causes an offset of about 15 feet toward the north. upper level [T.F]

This mine is at present owned by R. C. Robinson of Parish, New York.

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY

1240 Redwood Boulevard, Redding, California 96003 (916) 244-4441

DATE: April 14, 1988

No. Of Samples/Job No. 22/5402

CLIENT: Dragon Gold
261 E. Barnet H. Road
Medford, OR 97501

Analytical Methods:
FA: IAT, Au

Sampler: G. Garcia [TF]

RESULTS REPORTED IN:
Oz/Ton: Au

DATE RECEIVED: April 4, 1988

SAMPLE NO.	Au
5-15	0.105
15-31	0.069
44-18	3.088
59-36-31	0.411
29-36	0.605
74-23-30	0.081
99-11-21	4.599
109-8	0.163
123-16	0.201
192-10	3.068
199-18	0.089
218-12	0.265
230-8-68	0.486
240-15-80	0.247
260-32-75	0.180
365-17-50	0.279
378-6-40	0.982
398-17-30	0.177
418-12-30	0.159

Samples from upper level. [TF]

Distance from east end of open. drift (Ft.)

Width of channel samples. (in.)

Height, if up in stope. (ft.)

[TF]

BY: _____ BY: _____ VERIFIED: _____

FIRE ASSAYER ANALYTICAL GEOCHEMIST LABORATORY MANAG

ND: No Detection
NR: Not received
1 Troy oz/ton: 34.286 ppm

NA: Not Analyzed
IS: Insufficient Sample
1 ppm: 0.0292 Troy oz/ton

T: Trace

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building I, Unit A
Sparks, Nevada 89431
702 (359-9330)

BONDAR-CLEGG

Geochemical Lab Report

REPORT: R88-110510.4 (COMPLETE)

REFERENCE INFO: DGMF

CLIENT: DRAGON'S GOLD, INC.
PROJECT: DGMF

SUBMITTED BY: FERRERO
DATE PRINTED: 21-DEC-88

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	50	0.002 OPT		Fire Assay

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	50	2 -150	50	ASSAY PREP	50

NOTES: * indicates ERRATIC RESULTS

REMARKS: ERRATIC RESULT CHECKS: 246052= .778,246058=.055
246063=.182 OPT, 246071=1.312 OPT, 246078=.514
246079=.686 OPT, 246080=.640 OPT, 246086=.152,
246093=.082 OPT, 246095=.154 OPT,

REPORT COPIES TO: DRAGON'S GOLD, INC.
MR.TOM FERRERO
MR. MAURICE MCGEE

INVOICE TO: DRAGON'S GOLD, INC.

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)

BONDAR-CLEGG

Geochemical Lab Report

REPORT: R88 04107.4 (COMPLETE)

REFERENCE INFO: NONE GIVEN

CLIENT: DRAGON'S GOLD, INC.
PROJECT: NONE GIVEN

SUBMITTED BY: FERRERO
DATE PRINTED: 16-AUG-88

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	5	0.001 OPT		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	5	2 -150	5	ASSAY PREP	5
				OVERWEIGHT/LBS	30

REPORT COPIES TO: DRAGON'S GOLD, INC.
MR.TOM FERRERO

INVOICE TO: DRAGON'S GOLD, INC.

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359 9330)

BONDAR-CLEGG

Geochemical Lab Report

REPORT: R88-06107.4

PROJECT: NONE GIVEN PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT
R2 72735		0.018
R2 72736		0.855
R2 72737		0.658
R2 72738		0.043
R2 72739		2.165

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)

BONDAR-CLEGG

Geochemical Lab Report

REPORT: R88-10510.4 | PROJECT: DGMF |

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	SAMPLE NUMBER	ELEMENT UNITS	Au OPT
R2 246051		0.412	R2 246091		<0.002
R2 246052		0.981#	R2 246092		0.146
R2 246053		0.015	R2 246093		0.014#
R2 246054		0.076	R2 246094		0.380
R2 246055		0.009	R2 246095		0.099#
R2 246056		0.138	R2 246096		0.233
R2 246057		0.176	R2 246097		0.112
R2 246058		0.108#	R2 246098		0.344
R2 246059		0.438	R2 246099		0.122
R2 246060		1.102	R2 246100		0.054
R2 246061		0.518			
R2 246062		0.516			
R2 246063		0.240#			
R2 246064		0.249			
R2 246065		0.272			
R2 246066		0.144			
R2 246067		0.704			
R2 246068		0.562			
R2 246069		0.584			
R2 246070		0.462			
R2 246071		1.774#			
R2 246072		1.338			
R2 246073		1.108			
R2 246074		1.776			
R2 246075		1.430			
R2 246076		0.698			
R2 246077		0.198			
R2 246078		0.764#			
R2 246079		0.330#			
R2 246080		0.976#			
R2 246081		0.408			
R2 246082		0.938			
R2 246083		0.266			
R2 246084		0.724			
R2 246085		0.418			
R2 246086		0.197#			
R2 246087		0.086			
R2 246088		0.092			
R2 246089		0.025			
R2 246090		0.020			

Mr. James Schreiber/Dragon's Gold, Inc.
MLI Job No. 1249 - Tabulated Data

October 17, 1988

Table 1. - Head Assay Results and Head Grade Comparisons, Martha/Greenback Bulk Sample

Determination Method		oz Au/ton
Direct Assays:		
5 Assay Ton Fusions	1.	0.688
	2.	0.637
	3.	0.546
1 Assay Ton Fusions		
	1.	0.634
	2.	0.621
	3.	0.664
	4.	0.555
	5.	0.703
	6.	0.561
	7.	0.742
	8.	0.690
	9.	0.647
	10.	0.609
Calculated Head, Gravity/Flotation Test		0.694

Table 6. - Combined Gravity/ Flotation Results, Bulk Sample, 80 Percent Minus 65 Mesh Feed Size

Product	Weight, percent	Cum. Wt., pct.	Assays, oz Au/ton	Au Distribution, percent	Au Distribution, cum. pct.
Grav Cl. Conc.	0.61	0.61	95.135	83.59	83.59
Flot Cl. Conc.	1.99	2.60	4.922	14.10	97.69
Flot Cl. Tail	0.76	3.36	0.583	0.64	98.33
Ro. Tail	96.64	100.00	0.012	1.67	100.00
Composite	100.00		0.694	100.00	

McCLELLAND LABORATORIES, INC.

1016 Greg Street, Sparks, Nevada 89431 702 / 356-1300
FAX 702 / 356-8917

Note: This data is a compilation of excerpts from the full report. [T.F.]

TABLE 1

MARTHA MINE
Reserve Estimation Calculations
February 13, 1989

Class	Length	x Height	x Width	/Cu. Ft. /ton	Tons	Grade Oz./ton	Contained Ounces Gold
Proven	172	150	4	12	8600	0.356	3062
						(assumed grade and ounces)	
Probable	172	110	4	12	6307	0.356	2245
	172	50	4	12	2867	0.356	1020
	100	310	4	12	10333	0.356	3679
					19507	0.356	6944
Possible	200	440	4	12	29333	0.356	10442
	160	250	4	12	13333	0.356	4747
	272	130	4	12	11787	0.356	4176
					54453	0.356	19385
Total Proven, Probable & Possible					82560	0.356	29392

Notes:

This reserve summary requires several footnotes to explain the calculations, estimates and observations. The above table is qualified in the entirety by the following notes.

1. The definitions of reserves as used in this report is subject to restrictive use. The SEC requires that a "reserve" be "technically, economically and legally extractable." Only the technical aspects of the reserve estimation and calculations are addressed in this report. The SEC will accept only "proven and probable" categories of reserves for reporting purposes. A "reserve" implies that the calculations have been properly made from adequate sampling and assaying information and that the material is reasonably

assured to be in place. Only the proven and probable categories may meet the technical and economic criteria of the SEC.

2. The "possible" or "inferred" category is based upon reasonable geologic projections of the vein along strike and down dip from the proven and probable areas of the mine, but the "possible" areas have not been sampled and assayed, as no mine development is in place for sampling. We have no assurance that the vein will continue nor do we have assurance that the grade will continue as projected. The "possible" category tonnage and grade may be presented in private or exempt transactions and may be used in some Canadian mining company reserve statements. It is used here for presenting the projected potential of the property and for mine planning and development.

3. Reserves stated are in-place diluted reserves. For mining purposes a mine recovery factor of 80 percent may be appropriate with 20 percent of the reserve left in the ground as support pillars. A mill recovery factor of an estimated 90 percent based on metallurgical tests should also be applied in the economic evaluation. Actual metallurgical recoveries will be based upon plant design which has yet to be completed.

4. Accuracy in reserve estimation has not been quantified in the industry and no criteria or formulae for percentage estimation has been established throughout the industry. The following is an approximation of probable accuracy. A proven reserve is considered generally accurate to about +/- 10 percent and may also be stated as a figure with about a 90 percent confidence level. A probable reserve is considered generally accurate to +/- 30 percent with a confidence level of about 70 percent. Proven and probable reserves may be combined and may be stated as reasonable accurate to +/- 20 percent. Possible reserves may be accurate to about +/- 50 percent. These percentage estimates are not applied uniformly throughout the industry.

5. Reserve estimates in this letter report are based primarily on the channel sampling work of Tom Ferrero, and the interpretations included in his report of January 12, 1989. Geoff Garcia's work is used for the upper level projections and estimations made in his report of May 2, 1988. The sampling and assaying done by Tom Billings for Dragon's Gold Inc. have been reviewed and are used for comparisons in the areas of the new mine development on the middle level and in the area to the east of the sampling done by Tom Ferrero.

6. The vein width ranges from one to 48 inches and is on average about 24 inches. The reserve estimate minimum mining width is 48 inches, which includes an average of 24 inches of greenstone wallrock as dilution. This material may have some gold content, and it was sampled and weighted into the average grade by Tom Ferrero. The quartz vein or veins average grade is about 0.740 opt over 24 inches, but it is necessary to present a mining average grade with dilution which calculates to an

average grade of about 0.356 opt over 48 inches. It is reasonable that the vein projects to the upper level, but the grade in this area is less certain. Projections of the vein to the lower level are also projected with less confidence. The vein has been found on the lower level in recent mine development, but the grade of the vein at 200 feet further depth is not known at this time and is projected to this lower level with much less confidence.

7. The grade data for the proven reserve is based on Tom Ferrero's sampling, which is the only independent sampling and assay data available. Mr. Ferrero, in his calculations excluded a 30 foot section of low grade material from his reserve estimate. This resulted in a grade estimation averaging 0.411 opt over a strike length of 145 feet. I have added this low grade material in the reserve estimate and present an average grade of 0.356 opt over 172 feet. The proven reserve is projected up 100 feet and down 50 feet from the middle level over a strike length of 172 feet and a mining width of 4 feet. The grade of the vein cannot be projected further with sufficient confidence upward to the upper level. The proven reserve is calculated as: 172' x 150' x 4' /12 cu. ft. per ton = 8,600 tons.

8. Probable reserves are projected from the proven area another 50 feet downward, 100 feet along strike and upward to the upper level about 110 feet. Calculation procedures are similar to that stated above in note 7. Grade information is projected from the proven area and an assumption is made that the grade will continue as found in the proven area. There has been no sampling in the probable area except for a few samples taken in pillars on the upper level. New mine development of 70 to 100 feet east on the middle level will add new information on the grade and vein width.

9. Possible reserves are projected to the lower level and upper level and along strike to the east another 200 feet beyond the proven and probable categories. A block of possible reserves of 13,333 tons are also estimated above the upper level, between stopes, however, in this area the early mining may have mined out much of this area and what is left may be too low grade to be economically recoverable. There are no samples taken in the possible area and the grade is assumed at the same level as that found in the proven area.

10. The Martha vein dips on about 45 to 60 degrees to the north. The actual vein width is demonstrated in the areas of the middle level where stoping has been done in two areas about 10 feet up above the drift level and along the drift for about 150 feet on the strike of the vein. A vein dip of 60 degrees is used for the calculations made in the reserve estimation and a minimum mining width of four feet is used.

11. The tonnage calculations are based on a tonnage factor of 12 cubic feet per ton which is reasonable for this type quartz vein deposit.

MAURICE MAGEE

EDUCATION: B.S. Geology, 1953
University of Georgia
Graduate studies University
of Tennessee

AFFILIATIONS: Member AIME, AIPG, CIMM, GSA,
SEG, SExG, Registered Geologist - Arizona

EXPERIENCE:

1980 -1986 Manager and Senior Geologist, Geology Department - Pincock, Allen & Holt, Inc., Tucson, Arizona. Responsible for exploration project planning and evaluations, geochemical survey, economic evaluations, ore reserve measurements and verification.

1978 - 1979 Geological Consultant - Salt Lake City, Utah. Conducted and managed geological, geophysical and geochemical surveys for base and precious metals, uranium, and non-metallic minerals.

1978 - 1978 New Venture Analyst - Utah Power and Light Company, Salt Lake City, Utah. Responsible for uranium reserve acquisitions and evaluation of coal and limestone properties.

1955 - 1977 Minerals Economist - Cities Service Company, Salt Lake City, Utah. Performed financial analysis of domestic and international porphyry copper-molybdenum projects, copper-nickel and massive sulfide deposits. Responsible for present worth and cash flow analysis, price projections, market studies, project planning, capital costs analysis and budget development.

District Geologist for the eastern United States, Cities Service Company, Knoxville, Tennessee. Engaged in massive sulfide copper and Mississippi Valley type zinc exploration and evaluation. Supervised geophysical and geochemical surveys. Industrial minerals commodity studies.

Chief Geologist, Geochemist, Mine Geologist - Cities Service Company, Ducktown Mining District, Tennessee. Engaged in mineral exploration, exploration drill planning and supervision, geophysical and geochemical surveys, ore reserves evaluation, zoning, alteration and petrographic studies and property acquisition.

1953 - 1954 Geophysicist - Shell Oil Company, Texas and Lousiana. Conducted seismic and gravity surveys in the Gulf Coast and mid-continent regions. Responsible for geological structural interpretation of geophysical data.

1950 - Seismic Interpreter - Marine Geophysical Company, Maracaibo, Venezuela. Engaged in marine seismic data compilation and structural interpretation.

MAURICE MAGEE

Consulting Projects (1980-1985)

U. S. Bureau of Mines - Examination and evaluation of major lead-zinc deposits worldwide including mines and mills in Canada, Sweden, Germany and France.

U. S. Bureau of Mines - Evaluation of major lithium, beryllium, and rare earth oxide deposits and operations with evaluations made in Canada, South America, Africa and India.

Hendricks-Good Mining Company - Evaluation of the Cross-Caribou Mines, Colorado. This is a complex stockwork vein system with gold and silver. An exploration plan was developed which outlined additional ore reserves.

Home Oil Company - Evaluation of ore reserves at the Gooseberry Mine, Nevada. Measurements of ore reserves and grade of stopes in this narrow quartz-calcite vein with gold and silver reserves.

Gerald Metals Company - Descubridora Mine, Durango State, Mexico. Evaluation of ore reserves of this complex lead-zinc-silver vein type deposit. Measurements of ore reserves, assays and exploration planning.

Union Minere - Oracle Ridge Mine, Arizona - Examination and evaluation of copper-silver ore reserves in complex scarn type mineralization.

Alaska Apollo Gold Mines - Exploration drill planning on Unga Island, Alaska.

BHP Ltd. - Evaluation of ore reserves of Island Copper Deposit, Vancouver Island, British Columbia.

Lornex Mining Ltd. - Evaluation of ore reserves of copper and molybdenum, in Highland Valley, British Columbia.

NL Industries - Evaluation of precious metal ore reserves in Mexico.

Lynx Corporation - Evaluation of potential gold properties and placer gold ore reserves, Arizona.

Atlas Corporation - Exploration of gold-silver prospects in Pima County, Arizona.

Piedmont Mining Corporation - Geological review and exploration drilling program planning for volcanic hosted gold deposits, South Carolina.

Consulting Projects (1980-1985) (cont)

Centennial Gold - Exploration drill planning for alluvial gold deposit in Colorado.

Quintana Minerals - Measure and verification of gold ore reserves for acquisition in Utah.

Atlas Minerals - Measure and verification of gold ore reserves for acquisition in Nevada.

Schreiber & Company - Geological review and exploration evaluation of gold deposit in Oregon.

Anaconda - Evaluation of uranium ore reserves, Jackpile Mine, New Mexico.

Reserve Oil & Minerals - Evaluation of uranium reserves, L-Bar Mine, New Mexico.

Minere Frisco - Evaluation and reserve calculations of molybdenum porphyry deposit in Sonora, Mexico.

Steinfeld Estate - Evaluation of lead-zinc-silver mineral properties in Arizona.

Lincoln Company - Examination and evaluation of gold properties, Yavapai and Yuma Counties, Arizona.

Indiana Bank - Evaluation of gold-silver properties in San Bernadino and Riverside Counties, California.

International Oro-Fino Placers, Inc. - Evaluation of gold placer in Idaho. Recommend program for sampling and ore reserve verification.

Lacana Mining Inc. - Evaluation of gold ore reserves in sediment hosted deposit in Nevada.

Kaiser Steel Corp. - Geological mapping and ore reserve estimation of underground gold mine, California.

Freeport-McMoRan - Ore reserve verification, Jerritt Canyon Gold Deposit, Nevada.

Mosearanes, Raul - Evaluation of copper deposit, Bahia Brazil.

Lincoln, Dave - Evaluation of placer gold deposit, Weaver Creek, Yavapai Co., Arizona.

Elmas Mining - Evaluation of gold prospects in Arizona.

NRD Mining Ltd. - Evaluation of diatomaceous earth property, Arizona.

Maurice Magee

Clients and Consulting Projects
1985-1989

American Barrick Resources Corp. - Gold Reserve Evaluations

Asarco - Copper Reserve Evaluation

Battle Mountain Gold Company - Gold Reserve Evaluations
Project Evaluations

Bond International Gold - Gold Reserve Evaluation

Chase Manhattan Bank - Gold Property Evaluations

Chase AMP Bank - Gold Property Evaluations, Australia

Cyprus Mining - Copper Property Reserve Evaluation

Dallhold Resources Inc. - Gold Reserve Evaluations

Dragon's Gold Inc. - Gold Reserve Evaluation

Freeport McMoRan Gold Company - Gold Reserve Evaluations

Magma Copper Company - Copper Reserve Evaluations

Montana Resources Inc. - Copper Reserve Evaluation

Newmont Gold Company - Gold Reserve Evaluations

Newmont Mining Corp. - Gold & Copper Reserve Evaluations

St. Joe Gold Company - Gold Reserve Evaluations

Office of Technology Assessment - Cold Weather Mining Evaluation

Dragon's Gold Inc.
Balance Sheet
December 31, 1988

ASSETS			
Current Assets			
Cash		39,776	
Raw Ore Inventory ,Gross Value (Note#1)		105,485	
Mine, Mill and Office Supplies		4,707	
Other Current Assets		6,326	
Total Current Assets			156,294
Long Term Assets			
Property and Equipment			
Mill and Mine Equipment	95,627		
Less Accumulated Depreciation (Note#2)	-2,804		
		92,823	
Building, Furniture and Vehicles	13,377		
Less Accumulated Depreciation (Note#2)	-1,405		
		11,972	
Land, Martha Claim	86,800		
Less Depletion (Note#2)	-868		
		85,932	
Leased Pilot Mill (Note#3)		50,000	
Total Property and Equipment		240,727	
Other Assets			
Mineral Leases (Note#4)		31,500	
Mineral Rights, Martha Mine (Note#2)		144,785	
Organizational and Common Stock Costs	5,263		
Less Amortization (Note#2)	-261		
		5,002	
Road and Leasehold Improvements		23,755	
Total Other Assets		205,042	
Total Long Term Assets			445,769
TOTAL ASSETS			**602,063**

LIABILITIES		
Current Liabilites		
Accounts Payable	24,684	
Deferred Salary Payable	2375	
Federal, State, and FICA Withholdings	9,784	
Employer Payroll Taxes	10,924	
Total Current Liabilities	47,767	
Long Term Liabilities		
Long Term Notes (Note#5)	51,000	
Lease Obligation (Note#3)	49,705	
Total Long Term Liabilites	100,705	
Total Liabilities		$148,472.00
Stockholders Equity		
Common Stock Par $1.00 Authorized 11,000,000		
Issued and Outstanding (Note#6)	3,829,900	
Preferred Stock No Par Authorized 1,000,000		
Issued and Outstanding	0	
Additional paid-in-capital	-3,074,155	
Retained Earnings	-302,154	
Total Stockholders Equity		453,591
Total Liabilities and Stockholders Equity		**602,063**

Dragon's Gold Inc.
December 31, 1988

Notes To the Balance Sheet

1. Raw Ore inventory is calculated at Net Realizable Value using company assays prepared by Shasta Analytical Geochemistry Laboratory with a 75% recovery and a gold value of $400 an ounce. Futher processing of the Ore is necessary before income can be realized from it. Estimated projected cost of completing construction of the mill, processing, storage, transportation and proximity of market has been deducted from the gross value to obtain the Net Realizable Value of the Ore.

2. Depreciation , Amortization and Depletion.
The cost of Mining Equipment , Mining Building, and Vehicles used in the mining process are recorded at cost, and depreciated using a straight-line method over the estimated useful lives of the related assets. Replacement and major improvements to Equipment, Building and Vehicles are capitolized, Maintenance and repairs are charged to expenses as incurred. Leasehold improvements and Road improvements will be amortized when work is completed on these projects.The cost of the Martha Mine and mineral rights to the Martha Mine were recorded at fair market value using arms length transactions to unrelated parties as an indicator of the fair market value of the shares of common stock issued. The Martha Mine and the mineral rights to the Martha Mine are being depleted using units of ore from proven and probable reserves. Based upon yearly amounts of mined ore the capitalized amount will be depleted over the life of the reserves. The cost of issuing common stock is amortized over 10 years using a straight line method.

3. The company entered into an agreement to lease an existing mill which included the building and specified equipment. The lease is being accounted for as a Capitalized Lease. The terms of the lease are for five years at ten percent interest with the first payment being made in advance, and the balance due at the end of five years. The lease of the Mill Site is being treated as an operating lease with the monthly rent being charged to rent expense.

4. The lease of Mineral Rights are being accounted for at fair market value, determined by the market value of the common stock issued at the time of purchase through arms length transactions to unrelated parties. No amortization is currently in effect for these leases.

5. Long term notes payable consists of three $17000. 00 notes, due on May 27, 1991 with ten percent simple interest per year. Notes are subject to early payment upon successful completion of private placement of $500000 of Dragon's Gold Inc., common stock at $1.00 a share.

6. Common stock authorized 11,000,000 issued and outstanding 3,816,000 shares. All Common Stock issued to date is subject to Investment Letter restrictions. Preferred Stock authorized and unissued 1,000,000 shares. Options and Warrants outstanding for Dragons Gold Inc. Common Stock consists of 634,000 shares.

Josephine County
Greenback District

Name: Greenback Consolidated Mines (Lode and placer--gold)

Owner: Bullion Mountain Inc., Selling Building, Portland, Oregon. D. Witt Connell, President and Dr. Robert D. Brandon, General Manager. Leased to Greenback Consolidated, Inc. (Greenback Consolidated Mines is the operating company for the Bullion Mountain, Inc. Same directors as for Bullion Mountain, Inc.)

J.W. Stowbridge Pres. in 1938

Capitalization: $300,000. Shares 300,000.

Location: Graves Creek 21 miles by road north of Grants Pass and three miles east of Graves Creek Post Office which is on Highway 99, in Secs. 32 and 33, T. 33 S., R. 5 W. and Secs. 3, 4, 5, 7, and 8 in T. 34 S., R. 5 W.

Placer Rights only on sec 33

Area: This Company owns 2240 acres on Tom East ~~Creek~~ and Graves Creeks and holdings consist of 7 unpatented placer claims, 11 unpatented lode claims, 3 patented lode claims and the remainder is patented ground. A large portion of this acreage is not mining ground but is held for the purpose of protecting ditch right-of-ways etc. The unpatented mining claims might be called the Yellowhorn Jim Blaine group and will be described as such later in the report. The placer ground still goes by the name of Columbia Placer and the Company owns all the placer ground on Tom East Creek.

St. Jacob Morning Star & Browning are patented. (Star mine)

History: The properties of the Bullion Mountain, Inc. are listed in the Hand Book. There was very little activity on any of the properties from 1916 to 1929 at which time the Bullion Mountain, Inc. purchased the major part of its holdings from the Lewis Investment Company. The Greenback Consolidated was formed in 1934 and took over operations of the property under lease from the Bullion Mountain Inc. Development work on the lode claims has been carried on in a small way since 1929. Possibly 400 feet of tunnel has been driven since they acquired the property. There has been no production on the lode claims. Mr. Glen Booth and asscciates have had a lease on the lower part of the Columbia Placer since 1934 and the placer has been worked every season by Mr. Booth.

THE YELLOWHORN JIM BLAINE GROUP

General Information:

This group consists of 11 unpatented mining claims in Sections 4 and 5 estimated at 150 acres. Steep Mountainous topography. Elevation 1700 to 2100 feet. Maximum snow is two feet. Plenty of timber for mining purposes on property. There is a good mining road to the property. 23/100 c.f.s. water right for milling purposes.

Development: The Yellowhorn workings are described on Page 240 in the Hand Book. 225 feet of these old workings were caved

TO REPLACE PAGE NO. 2 ON THE GREENBACK CONSOLIDATED

IMPORTANT

2000ft workings on Yellowhorn

and has been re-opened. From the face of the tunnel a drift was run about 234 feet in a southwest direction through the mountain. This was done for convenience of tramming ore from the Sherington workings. The Sherington workings consist of 3 tunnels with a total length of 350 feet on which is thought to be on continuation of the Yellowhorn vein. At a point 78 feet in on the Yellowhorn tunnel a drift was started and run in a northerly direction 100 feet to pick up the Vulcan vein, which is a parallel vein about 260 feet north of the Yellowhorn. This vein was never reached. The workings on the Vulcan vein consist of an inaccessible tunnel which runs in a westerly direction 200 feet. There are six tunnels, the total length of which 1250 feet on the Jim Blaine vein. The Jim Blaine Claim is described on Page 134 of the Handbook. On the west side there are two tunnels. The lower one runs S. 85° E. 206 feet. The upper tunnel which is about 120 feet vertically above the lower tunnel runs S. 75° E. 240 feet On the east side of the ridge at an elevation of 2109 feet there is a tunnel which runs N. 50° W. 108 feet. Tunnel No. 2 at an elevation of 2075 feet runs in a general direction of N. 50° W. 150 feet. Tunnel No. 3 at an elevation of 2075 feet runs in a general direction of N. 60° W. 110 feet with a drift at a point 55 feet in, running in a northerly direction 70 feet. Tunnel No. 4 at an elevation of 1960 feet which is a cross-cut tunnel and is not on the vein, runs N. 29° W. 150 feet with a drift to the west of 100 feet on a vein and to the east 40 feet. Each of the other claims have a small amount of workings but none accessible at the present time.

Geology: The country rock at the Yellowhorn Jim Blaine group is largely greenstone which is the result of an alteration of an andesitic mass which in places shows darker phases. About 300 feet east of the Yellowhorn tunnel is a contact with the serpentine. This contact runs in a general north 30° E. direction and is thought to be the same contact which is spoken of in the Greenback Mine workings. There are three parallel east west veins which can be traced for a distance of almost 1000 feet. All three exhibit variations in strike and dip. The veins vary in width from nothing to 4 feet and as a whole will carry some gold; possibly two or three dollars. Rich ore shoots are encountered in the vein which run up very high. These shoots are seldom over 25 to 30 feet in their greatest dimension and are found near intersections with branch veins as there are a great number of these. But the inter-sections of all the branch veins do not produce rich ore shoots. The vein filling is chiefly white quartz with some calcite pyrite and a small amount of galina. The Yellowhorn is the most southerly vein and has the most development work on it. Then the Vulcan which is about 260 feet north of it, and the Jim Blaine which is about 1000 feet north.

Jim Blaine Dip 70° North.

Equipment: One Ingersoll Rand compressor--two drill 120 cu ft. capacity. Buda Diesel Engine--80 H.P., and miscellaneous small equipment

for carrying on the development work. At present three men are working.

COLUMBIA PLACER

The Columbia Placer is under lease to Glen Booth and Associates of Placer, Oregon. The Columbia Placer, as now known, refers to all the placer ground on Tom East Creek and it has been worked from the mouth to the Greenback Mine, a distance of approximately two miles. The grade on the lower part of Tom East Creek is very low and the original operators did not go to bedrock due to this fact. The present operators started in at the Tom East Creek bridge and are mining to bedrock about 6 feet below the original operations. They have installed hydraulic lifts in order to dispose of the tailings. 12'

Geology: Fairly smooth greenstone bedrock. No clay, few boulders larger than a water bucket. Fine to coarse gold. Gold comes from veins near the head of Tom East Creek.

Water Right: A water right for 6200 miner's inches was taken out in 1895 on Graves Creek and its tributaries. Two ditches were constructed to deliver the water to the property. The upper ditch is shown on the Riddle Quadrangle Topographic sheet. This ditch is 16 miles long and has a capacity of 3000 miner's inches. If this ditch was in use it would deliver the water to the present workings under a 900 foot head. The lower ditch is three miles long and has a capacity of 3200 miner's inches and delivers the water under a head of 350 feet.

Equipment: The property is operated with three hydraulic giants under 145 pound pressure with six men employed.

Informant: J. E. Morrison. 9/7/37, 8/6/38, 12/19/38.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

GREENBACK CONSOLIDATED MINES (lode and placer, gold)   Greenback area

Owner: Bullion Mountain, Inc., Yeon Bldg. Portland, Oregon, D. Witt Connell, President, Robert B. Brandun, jr.m Treas. Leased to Greenback Consolidated, Inc., (Greenback Consolidated Mines is the operating company for the Bullion Mountain, Inc. with the same directors in both companies.)

Location: In secs. 32 and 33, T.33S., R5W. and secs. 3,4,5,7, and 8, in T.34S., R5W. On Grave Creek 21 miles by road north of Grants Pass and three miles east of Grave Creek Post Office which is on Hiway 99.

Area: This company owns 2240 acres on Tom East and Grave Creeks. There are 7 unpatented placer claims and 11 unpatented lode claims; the remainder is patented ground. A large portion of this acreage is not mining ground but is held for the purpose of protecting ditch right-of-ways, etc. The unpatented lode mining claims make up the Yellowhorn-Jim Blaine Group which contains about 150 acres in sec. 4 and 5. The company still owns all the placer ground (Columbia Placer) on Tom East Creek.

History: There was very littel activity on any of the properties from 1916 to 1929 at which time the Bullion Mountain, Inc., purchased the major part os its holdings from the Lewis Investment Co. The Greenback Consolidated was formed in 1934 and took over the property under lease from the Bullion Mountain, Inc. Development work on the lode claims has been carried on in a small way since 1929. Possibly 400 feet of tunnels has been driven since the property was acquired. There has been no production from the lode claims. Mr. Glen Booth and associates leased the lower part of the Columbia Placer in 1934 and the placer has been worked by them each season since then.

General: Steep mountainous topography; elevation 1700 to 2100 feet; maximum snow is two feet; plenty of timber for mining purposes; good road to the property; 23/100 d.f.s. water right for milling purposes.

Development: The Yellowhorn workings are described by Parks & Swartley (16:240). 225 feet of these old workings have been reopened. From the face of the tunnel a drift was run about 234 feet in a southwest direction through the mountain to connect with the Sherington workings. These consist of 3 tunnels with a total length of 350 feet, a believed to be on a continuation of the Yellowhorn Vein, At a point 78 feet in on the Yellowhorn tunnel a drift was driven in a northerly direction 100 feet for the purpose of picking up the Vulcan vein, which is a parallel vein about 260 feet north of the Yellowhorn. The Vulcan vein was never reached. The workings on the Vulcan vein consist of a tunnel now inaccessible which runs in a westerly direction 200 feet. The Jim Blaine vein is about 1000 feet north of the Vulcan.

There are six tunnels on the Jim Blaine vein with total length of 1250 feet. The Jim Blaine Claim is described by Parks and Swartley (16:134). On the west side of the ridge there are two tunnels, the lower of which runs S. 85° E. for 206 feet. The upper tunnel, which is about 120 feet vertically above the lower tunnel trends S. 75° E. for 240 feet.
~~On the east side of the ridge at an elevation of [illegible] feet~~

On the east side of the ridge at an elevation of 2109 feet there is a tunnel which trends N. 50°W for 108 feet. Tunnel No. 2 at an elevation of 2075 feet trends N. 50°W. for 150 feet. Tunnel No. 3 at an elevation of 2075 feet has a general direction of N. 60°W. form110 feet with a drift at a point 55 feet in, running in a northerly direction for 70 feet. Tunnel No. 4 at an elevation of 1960 feet is a crosscut tunnel and trends N.29° W for 150 feet. There is a drift to the west 100 feet on a vein, and one to the east for 40 feet. Each of the other lcaims has a small amount of workings but they are inaccessible at the present time. (1938)

According to Dr. Rex Ross, (March, 1940) a new drift on the Jim Blaine is 300 feet long.

Geology: The country rock at the Yellowhorn-Jim Blaine group is largely greenstone resulting from alteration of andesitic lavas which in places show dark colored phases. About 300 feet east of the Yellowhorn tunnwl is a contact with serpentine. This contact runs in a general N. 30°E. direction and is thought to be the same contact reported to occur in the Greenback Mine workings. There are three parallel east-west veins which can be traced for a distance of almost 1000 feet. All three exhibit variations in strike and dip. They vary in width from a fraction of an inch to 4 feet and excluding enriched portions will average about two or three dollars in gold to the ton. Rich ore shoots which may run vary high are encountered in the veins. These shoots are seldom over 25 to 30 feet in their greatest dimension and are found near interesections with branch veins of which there are many;the inter-sections of all the branch veins do not produce rich ore shoots. The vein filling is chiefly white quartz with some calcite, pyrite and a small amount of galena. The Yellowhorn is the most southerly vein and has the most development work on it.

Equipment: One Ingersoll Rand compressor of two drill capacity; 80 h.p. Buda Diesel engine and miscellaneous small equipment for carrying on the development work.

Columbia Placer: As now known, the Columbia Placer, under lease to Glen Booth and associates of Placer, Oregon, consists of all the placer ground on Tom East Creek; it has been worked from the mouth of Tom East Creek to the Greenback Mine, a distance of approximately two miles. The grade of the lower part of Tom East Creek is very low and due to this fact the original operators did not go to bedrock. The present operators started in at the Tom East Creek bridge and are mining to bedrock about 6 feet below the original operators. They have installed hydraulic lifts in order to dispose of the tailings.

Bedrock is fairly smooth greenstone; no clay; few boulders larger than a water bucket; fine to coarse gold, which came from veins near the head of Tom East Creek.

Water Right: A water right for 6200 miner's inches was taken out in 1895 on Grave Creek and its tributaries. Two ditches were constructed to deliver the water to the property. The upper dtich is shown on the Riddle quadrangle topographic sheet, and is 16 miles long with a capacity of 3000 miner's inches. If this ditch were used, it would deliver the

water to the present workings under a 900 foot head. The lower ditch is three miles long and has a capacity of 3200 miner's inches and delivers the water under a head of 350 feet.

Equipment: The property is operated with three hydraulic giants under 145 pound pressure. Six men are employed.

Informant: J. E. Morrison, 38.

M.R. P.P. 134

Capital Stock $3,000,000
3,000,000 shares.

QUARTZ PROPERTY

1. Name of property Greenback Consolidated Inc.
Operating company (or individual) Under lease from Bullion Mt. Inc.
Address Selling Bldg Portland.
Location of property ~~NW44 Sec 4 T3S R5W~~
Acreage of holdings St. Jacobs, Browning, Jupo, New Esmeralda & Hgidden Treasure Yellow Horn, Jim Blaine, Peggy, Orphington, Vulcan, Negative, Loma, Morning Star

2. History of property, past and recent:
No change since last report except for work at present Time. Opening up West side of hill.

3. History of production:
None.

4. Development: Number of levels, lengths of drifts and cross-cuts, raises, etc.:
2 tunnels on West side & 3 tunnels on East Side of Hill (caved)

5. General description and equipment on hand, topography, country rocks, elevation, timber, water, snow fall, climate, power, etc.
1 - Compressor - Ingersoll-Rand - 2 drills. Cap. 93 Diesel Muda
2 - Ore Cars & track.
Very steep hill side 33° — Elev
Plenty of mine timber, water, & no commential Power.

6. Geology - General and local. Ore geology - type of deposit, i.e., vein, mineralized zone, bed; contact relations, attitude and orientation, vein minerals, gangue, type of mineralization, alteration, enrichment, etc.
Contact Quartz vein between Greenstone & Quartz Diorite. Strike N80°W Dip. 70 North.
White quartz vein. with a small amount of free gold, chalcopyrite & pyrite
Pyrite more abundant in ~~diorite~~ Wall rocks near the vein than in the vein itself. Max. width 4ft of vein filling.
Shortage 5 ft.

7. Metallurgy - nature of ore, hard or soft, free-milling, base, direct shipping, etc. Kind of mill and equipment in use or planned, current daily tonnage of ore or concentrates, approximate value, freight rates to smelter, etc.
Med hard ore. not rich enough to ship direct. No mill on property & none planned on at present. Plan to build mill when ore has been developed.

8. Remarks - economics: High or low cost, principal drawbacks, reasons for success or failure, apparent life of operation based on apparent quantity of ore available.
Bullion Mt. Inc also same as Greenback Con. Inc.
~~J. W. Stowbridge Pres.~~ D. Witt Connell Pres
Dr Robert B Brandon Gen. Manager. Selling Bldg.
Dr Connel & Dr Ross.

Placer rights on S2 Sec 33 only.

NE4 - Sec 33
N2 - SW4 - Sec 33
Part of SE4 of SE4 Sec 32
NW4 of Sec 33 less NE4 - 4 NW4

1253
1254
1255

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

ASSAY REPORT Office Number 1256

Grants Pass, Oregon
~~Baker, Oregon~~

October 29, 1938

Sample submitted by J. E. Morrison, Mining Geologist, Grants Pass, Ore.

Sample description Following are the results of assays made on samples of sand and sand concentrate from the Columbia Mine:

The assay results given below are made without charge as provided by Chapter 176, Section 10, Oregon Laws 1937, the sender having complied with the provisions thereof.

NOTICE: The assay results given below are from a sample furnished by the above named person. This department had no part in the taking of the sample and assumes no responsibility, other than the accuracy of the assay of the material as furnished it by the sender.

Sample Number	GOLD		SILVER						Total Value
	Ounces per ton	Value	Ounces per ton	Value	Percent	Value	Percent	Value	
#25	0.05	1.75	Trace						$1.75
Tail.	0.07	2.45	Trace						2.45
#1 Con.	2.09	73.15	0.3	0.19					73.34
#2 Con.	0.40	14.00	Trace						14.00

Market Quotations:

Gold	$35.00	per oz.
Silver	$ 0.64	per oz.
	$	per lb.
	$	per lb.

State Assay Laboratory

Assayer

Note: Following are the weights of the different samples:

Sample	Weight, lbs.
#25	3.40
Tail.	1.75
#1 Con.	1.85
#2 Con.	5.80

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
ASSAY LABORATORIES

Baker, Oregon
Grants Pass, Oregon

SAMPLE INFORMATION REQUESTED

The law passed by the Legislature, governing the free assaying and analyzing of samples sent to a State Assay Laboratory, provides that certain information be furnished to the Laboratory regarding samples sent for assays, etc. A copy of the law will be found on the back of this blank. Please read the law carefully. Will you please fill in the information called for in the following blank, as far as possible, and return the same to the nearest State Assay Laboratory, along with your sample. If you have made out a blank, this copy is for your future use. Keep a copy of the information on each sample for your own reference.

Your name in full . . J. E. M. . . . . .

Postoffice address. . . . . .

Are you a citizen of Oregon? . . . . . Date on which sample is sent. 10/22/38.

Name (or names) of owners of the property . Grubback Consol Inc! . . . . .

Name of particular claim and date of location Pat. Prop. . . . . .

Location of property or source of sample:

(1) County. Josephine . . . . . (2) Mining District . . . . . .

(3) Township . . . . . (4) Range . . . . . (5) Section . . .

(6) Quarter Section . . . . . .

How far from passable road? . . On Grave Cr. Road! . . . . . .

For what do you wish sample tested? . . . Gold . . . . . .

Does your sample represent a new discovery? . . No. . . . . .

On a newly located claim? . . . No . . Old? . . Yes . . . . . .

Has any ore from this claim been milled or shipped? . . . Yes . . . . . .

Width of ore where sample was taken (length of channel cut) . Blackbands 4' sample undercurrent. . . . . .

Remarks: The Department would be pleased to have you add to the above, such information as you think would be of interest and value. Use the reverse side of this sheet or a separate sheet. This could best be shown by a pencil sketch, indicating the development on the claim with the widths of vein, expecially the width of ore at the place where this sample was taken.

A sample, to be of value, should be taken in an <u>even channel across the vein</u> from wall to wall. Its position in the workings should be marked and the width measured. Assays of unlocated samples, without widths, are of little value. They create but little interest in the minds of experienced investors and engineers.

(signed) J. E. Merrion

(Over)