

Report to:

**AUGUSTA RESOURCE CORPORATION
400 – 837 WEST HASTINGS STREET
VANCOUVER B.C. V6C 3N6**

**TECHNICAL REPORT ON THE ROSEMONT
PROPERTY, PIMA COUNTY, ARIZONA**

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AUGUSTA RESOURCE CORPORATION
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TECHNICAL REPORT ON THE ROSEMONT PROPERTY, PIMA COUNTY, ARIZONA

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1.0 SUMMARY

Augusta Resource Corporation (Augusta) has the right to purchase a 100% working interest, subject to a 3% net smelter royalty, in the Rosemont Property, (Property) Pima County, Nevada, USA. The Property contains four known skarn-type copper occurrences, the Rosemont, Broadtop Butte, Copper World and Peach – Elgin, that have been evaluated by previous owners and may be amenable to open cast mining. This report reviews the geological setting, nature and quantification of copper mineralization present within the Rosemont Property.

Wardrop Engineering Inc. (Wardrop) has been retained by Augusta to review and evaluate existing geological data that pertains to the Rosemont Property, including historical resource estimates. This review has included an examination of all known and available data, and a site visit.

The Property is located about 50 kilometers southeast of Tucson, Arizona, at approximately 31° 50' North longitude, 110 ° 43' West latitude. The Property is comprised of 144 Patented Mineral Claims in two parcels, (2,050.14 acres), 850 contiguous unpatented lode claims (1,700 acres), and five parcels of fee surface rights (910.96 acres), with an aggregate area of 4,661.1 acres (1,886.3 hectares).

The Property is underlain by Paleozoic and Mesozoic-age sedimentary rocks that have been intruded by Tertiary-age intrusives. The Paleozoic stratigraphic sequence ranges from Cambrian-age Bolsa Formation quartzite to carbonate and sandstone of the Rain Valley Formation of Permian age. The Devonian to Permian sequence is comprised of the Martin, Escabrosa, Horquilla, Earp, Colina, Epitaph and Concha Formations, in all of which limestone is the predominant rock type, with subordinate dolomite, siltstone, sandstone and shale. The Escabrosa, Horquilla, Earp and Colina Formations are the principal hosts of copper mineralization on the Property.

About 570 holes have been drilled within the Property, and four skarn-type copper deposits have been identified. From south to north these are the Rosemont, Broadtop, Copper World and Peach – Elgin. All four deposits are described as having similar characteristics with respect to geology and mineralization. The Rosemont and Peach – Elgin have been explored in greater detail than the Broadtop and Copper World, and of the two, Rosemont is better known. In plan the Rosemont mineralization occupies an area of about one square kilometer, and extends down-dip for at least 1,200 meters. Stratigraphically, mineralization extends over 100 meters.

Chalcopyrite and pyrite are the primary sulphide minerals. Bornite, molybdenite, sphalerite, galena and scheelite are present in subordinate amounts. Trace amounts of silver and gold are also present. Sulphides occur principally as veinlets, coarse disseminations, blebs and clots within irregular lenticular zones within and generally parallel to lime-silicate intervals. Magnetite is present in varying amounts throughout the skarn zone.

In 1977, Pincock, Allen & Holt conducted a computer-based reserve estimate of the Rosemont deposit. The resultant geological resource was calculated to be 444,678,000 short tons at an average copper grade of 0.54%, using a 0.2% copper cutoff. The portion of this resource that was calculated to fall within designed pit limits was 316,865,000 short tons at an average grade of 0.58% copper, 0.018% molybdenum and 0.25 ounces per ton silver. **This is a relevant but historical mineral resource estimate and is not compliant with National Instrument 43-101 (NI 43-10).**

It will be necessary to confirm the grades and distribution of historically-documented copper, molybdenum and silver values within the Rosemont deposit before the historic resource can be upgraded to an estimate compliant with National Instrument 43-101.

The simplest way to achieve this objective is to twin drill holes on several sections. It is estimated that 5,000 meters of drilling will be required: two sections of five holes, of 500 meters average length.

If this work confirms the historical results, the historical mineral resource can be upgraded and can form the basis of a feasibility study.

Two sections of holes (5,000 meters aggregate) within the Rosemont deposit should be re-drilled. It is recommended that one section be drilled east-west and one north-south, crossing in the approximate center of the deposit. This configuration will test the geology and mineral grades over the full geographic extent of the deposit, and will provide sufficient information to determine whether the existing geological interpretation and analytical database are adequate.

A budget of CAD \$650,000 is estimated to be sufficient for this work.

INTRODUCTION AND TERMS OF REFERENCE

1.1 INTRODUCTION

Augusta Resource Corporation (Augusta) has the right to purchase a 100% working interest, subject to a 3% net smelter royalty, in the Rosemont Property, Pima County, Nevada, USA. The Rosemont Property contains four known skarn-type copper occurrences, the Rosemont, Broadtop Butte, Copper World and Peach – Elgin, that have been evaluated by previous owners and may be amenable to open cast mining. This report reviews the geological setting, nature and quantification of copper mineralization present within the Rosemont Property.

1.2 TERMS OF REFERENCE

Wardrop Engineering Inc. (Wardrop) has been retained by Augusta to review and evaluate existing geological data that pertains to the Rosemont Property, including historical resource estimates. This review has included an examination of all known and available data, and a site visit.

1.3 DISCLAIMER

Wardrop has relied on others for information in this report. Information from third-party sources is referenced. Wardrop makes no guarantees, nor does Wardrop warrant the reliability of any such reports or information. Wardrop used information from these reports under the assumption that they were prepared by Qualified Persons.

2.0 DATA PROVIDED TO WARDROP

All available historical data pertaining to the Rosemont Property is housed in the offices of the current owner, Genesis Real Estate and Development Inc., Tucson, Arizona. The relevant portion of that data reviewed during the due diligence process is listed in Section 16, REFERENCES, of this report.

3.0 PROPERTY DESCRIPTION

The Rosemont Property is located about 50 kilometers southeast of Tucson, Arizona, at approximately 31° 50' North longitude, 110 ° 43' West latitude. (FIGURES 1 & 2) The Property is comprised of 144 Patented Mineral Claims in six parcels, (2,050.14 acres), 850 contiguous unpatented lode claims (1,700 acres), and five parcels of fee surface rights (910.96 acres), with an aggregate area of 4,661.1 acres (1,886.3 hectares). The legal description of the Property is as follows:

Patented Mining Claims: Townships 18 and 19 South, Ranges 15 and 16 East.

Surface Rights: Township 18 South, Range 16 East: Section 14 NE $\frac{1}{4}$ & SW $\frac{1}{4}$; Section 15 E $\frac{1}{2}$ less highway; Section 21 NE $\frac{1}{4}$; Section 23 SE $\frac{1}{4}$; Section 27 SE $\frac{1}{4}$ of SE $\frac{1}{4}$; Section 32 N $\frac{1}{2}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, and NE $\frac{1}{4}$ NW $\frac{1}{4}$.

Unpatented lode Claims: Townships 18 and 19 South, Ranges 15 and 16 East.

(FIGURE 3)

The patented claims and surface tenure (fee land) have been surveyed, the unpatented claims have not.

The Property contains four known copper deposits of potential economic significance, all generally contained within the area of patented claims

The unpatented lode claims are renewable annually on September 01, at a cost of USD\$125 / claim. The patented and fee surface rights are taxed as grazing lands, at an annual rate of less than USD\$2,000.

There are two net smelter royalties payable on the bulk of the non-patented mining claims: 1.5% to Franco-Nevada Mining Co., and 1.5% to Chicago Trust Co.

There are no known environmental liabilities.

In order to conduct the program recommended in this report, permits for drilling will be necessary. Responsible government agencies are the State of Arizona Department of Water Resources, and the federal Bureau of Land Management. None of the necessary permits is in hand at the time of this report, and no applications for the necessary permits have been made at the time of this report.

4.0 PHYSIOGRAPHY, CLIMATE, ACCESSABILITY, LOCAL RESOURCES

The Rosemont Property is located in the northern portion of the Santa Rita Mountains that form the western edge of the Mexican Highland section of the Basin and Range Physiographic Province of the southwest United States, with a prominent northwest-trending structural grain. Elevations on the Property range from 1,370 to 1,890 meters above sea level. The western margin of the Property is approximately coincident with the crest of the Santa Rita Mountains; the eastern portion is comprised of foothills that are incised by numerous short drainages that coalesce into the northeast-trending Davidson Canyon. All drainages are ephemeral and contain water only briefly after periods of heavy rainfall. Runoff from both sides of the Santa Ritas flows into the Santa Cruz River.

The area has a semi-arid climate, with annual precipitation of about 20 centimeters, most of which falls as rain during June through August, and December through February. Temperatures range from about four degrees Celsius in December – January to about 40° Celsius during July and August. Vegetation reflects the climate: lower slopes are dominated by mesquite and grasses, and higher elevations that receive greater rainfall support an open cover of oak, pine, juniper and cypress.

The Property is accessible from the east and west. From Tucson, the eastern access is southeast for 30 kilometers (km) via Interstate 10 and then south for about 20 km via State Highway 83. The western portion of the Property is most readily accessible from the west, via the Tucson – Nogales highway for about 30 km to Sahuarita and then easterly for about 20 km. A network of unpaved access roads exists within the property.

Water rights are an integral part of the Property Title, although it is not known what volume of water this may represent. There are a number of water wells on the Property, one of which currently produces about 1200 gallons (4.5 meters³) per minute.

Mining has been a significant industry in southern Arizona since the 1800s, and several large open-pit mines are currently operating within 30 kilometers of Tucson. It is therefore reasonable to assume that all necessary materials and skills necessary for a mining operation are locally available.

5.0 HISTORY

Documented mining activity in the Property area dates from the late 1880s, at which time two mining “camps” operated, Helvetia on the western side of the Santa Rita Mountains, and Rosemont on the east. Underground mining operations produced copper ore that was treated at the Columbia smelter at Helvetia and at the Rosemont smelter on the east side of the Santa Ritas. This level of mining activity was reduced significantly by an economic recession in 1902, but production continued sporadically until 1911. Mining resumed in 1915 and copper was produced almost continuously until 1951, during which time about 227,000 tons of ore were processed at an average grade of 3.8% copper.⁽¹⁾ Relatively minor quantities of zinc and silver were also recovered.

Since 1950 activities have consisted mainly of exploration and development drilling. The Lewisohn Copper Company conducted a drilling program in the Peach-Elgin area in 1955 and 1956, and outlined a possible open pit copper deposit.

The American Exploration and Mining Company explored southeast of the Broadtop Butte area in 1956 but failed to outline an economic deposit.

In the late 1950s the Banner Mining Company acquired and explored the Rosemont area and intersected the first significant porphyry copper mineralization in the area, 300 meters containing greater than 0.9% copper (Drill hole G-33).

Anaconda Mining Company acquired the property in 1963 and carried out an extensive mapping and drilling program.

Anaconda and Amax formed the Anamax Mining Company in 1973 and through Anamax generated most of the modern information on the mineralization in the Rosemont area, including the delineation of the Rosemont deposit.

Anamax sold the Property to a real estate company in 1986, which in turn sold it to Asarco in 1988.

Asarco conducted exploration, primarily in the Rosemont and Peach – Elgin areas, re-estimated the Rosemont mineral inventory, and in 1996 initiated a mine permitting process. Work on the Property effectively ceased in 1997 following a precipitous drop in copper price, and Asarco sold the property to the present owners, a real estate company, in 2004.

About 570 holes have been drilled within the Rosemont Property.⁽¹⁾ Original logs and assays are available for many of these holes. Although the presence of these logs and assays was verified and a number were examined to determine the nature and quality of recorded observations, as well as the nature of the corresponding analyses, they were not tabulated and therefore the exact number is not known.

Split core from an unknown number of drill holes has also been preserved. This core is currently in the possession of the Property owner and is stored out of doors on shrink-wrapped pallets. When the Property was acquired from Asarco in 2004, the present owners transferred the core from Asarco core-storage buildings to the Property. Although the transfer was undertaken in a careful and orderly manner, the disposition of the pallets at the present storage site is such that it is not a simple matter to locate core from a specific hole, or to readily ascertain the number of holes that are represented. At the time of examination it was estimated that about 240,000 feet (73,000 meters) of core is present.

The Rosemont deposit has been tested by about 130 vertical and angle diamond drill holes.

The Peach – Elgin deposit has been tested by about 207 holes. Prior to 1964, 67 vertical churn and core holes had been drilled. Subsequent drilling amounted to 140 vertical and angle core holes.

The balance of the 570 holes have tested the Broadtop and Copper World deposits as well as an unknown number of other prospects and old mines within the area. The allocation of these holes is not known.

Other than surface geological mapping, no other exploration of the Rosemont Property is known

A reserve estimate for the Peach – Elgin deposit done in 1964 calculated 13.7 million tons with an average grade of 0.78% sulphide copper and 9.7 million tons of oxide copper with an average grade of 0.72%. Cutoff for both estimates was 0.4% copper.⁽¹¹⁾

A reserve estimate was carried out for the Broadtop Butte deposit in 1979, at which time it was estimated to contain 8.8 million tons at an average grade of 0.77% copper and 0.037% molybdenum. **No details of this estimate or that of the Peach – Elgin deposit are available, neither is compliant with NI 43-101 and cannot be considered relevant: both are presented here only in an historical context.**⁽¹¹⁾

Two resource estimates were carried out for the Rosemont deposit. In 1977, Pincock, Allen and Holt (PAH) calculated a “geological resource” of 444,678,000 tons at an average grade of 0.54% copper using a cutoff grade of 0.2%. Using a conceptual open pit, but no economic constraints, PAH further estimated a mineable reserve of 316,865,000 tons at an average grade of 0.58% copper, 0.018% molybdenum and 0.25 ounces per ton silver, at a cutoff grade of 0.2% copper.⁽¹⁰⁾

In 1997 The Winters Company (Winters), on behalf of Asarco Inc., conducted an “Order of Magnitude” study for mining the Rosemont deposit. In this study Winters used an ore reserve estimate and a pit design provided by Asarco. The Asarco reserve figures refer to that portion of the resource estimated to be available to mining, and further used dollar value cutoff limits, therefore their estimate is not directly comparable with that of PAH. During 1997 the price of copper ranged from a high of USD\$1.22/pound to a low of USD\$0.77/pound. At a cutoff value of USD\$1.10/pound, Asarco estimated a mineable reserve of 340,505,100 tons at an average grade of 0.64% copper. ⁽¹²⁾

Neither of these estimates is compliant with the standards of NI 43-101, but both were carried out in a rigorous manner and are considered relevant in demonstrating the technical merits of the Property. These estimates are discussed in greater detail below.

PAH also estimated that 28 million tons of oxide material with an average grade of 0.46% copper are also present. About 55% (0.26% copper) is acid soluble. **This material has not been included in any resource or reserve estimate and the estimate is not considered relevant.**

Asarco developed a resource estimate for the sulphide-copper portion of the Rosemont deposit in the period 1993 – 1994, by which time the deposit had been tested by 140 holes. This estimate was used in 1997 by The Winters Company as the basis of an “order of magnitude” mining study for the deposit. ⁽¹²⁾

At a cutoff price of USD\$1.10 / pound copper, the “mineable resource” was estimated to be 340,505,100 short tons at an average grade of 0.643% copper. In the context of NI 43-101, the term “mineable resource” as used by Asarco is construed by Wardrop to be equivalent in meaning to “indicated mineral resource”. The tonnage factor used was 11.74 foot³ / ton (SG = 2.73), the reserve boundaries were between property grid limits 855,300 and 864,000 east; 300,000 and 308,500 north. The model included 63 benches. Sections are oriented east-west (north-facing) at horizontal intervals of 200 feet. Winter estimated mining, milling and administrative costs to be USD\$6.10/ ton for which the cutoff of USD\$1.10 translates to 0.18% copper. ⁽¹²⁾

Working and final copies of the geological vertical sections used to generate this model were found in the Property archive files. Electronic drillhole and assay data files have subsequently been obtained from Asarco. However, the computer model itself is not available, nor are critical aspects of the estimate such as calculation methodology and resource block size. It is therefore not possible to comment on the credibility of this estimate although Asarco subsequently initiated the mine permitting process which suggests that the estimate was, within the company, regarded as a credible representation of the “mineable” resource.

Pincock, Allen & Holt conducted a computer-based reserve estimate in 1977. The model itself is not available, but all the criteria used to generate the model are documented in the PAH report.⁽¹⁰⁾ The resultant “geological resource” was calculated to be 444,678,000 short tons at an average copper grade of 0.54%, using a 0.2% copper cutoff. In the context of NI 43-101, the term “geological resource” as used by PAH is construed by Wardrop to be equivalent in meaning to “indicated mineral resource”. The portion of this resource that was calculated to fall within the designed pit limits was 316,865,000 short tons at an average grade of 0.58% copper, 0.018% molybdenum, and 0.25 ounces per ton silver.⁽¹⁰⁾

This estimate was generated from a database of 112 holes between grid limits 857,200 and 861,200 east; 302,900 and 306,500 north. Assays, generally of five-foot intervals, were composited into 50-foot intervals which produced 2,976 composites. The geological model was based upon vertical sections provided by Anamax (east-west, north-facing, at 200-foot intervals), and the ultimate geological model was subject to approval by Anamax prior to development of the block model. The geological model incorporated constraint of grade distributions by both rock type and structural dislocations, i.e. grade values were not carried across geological boundaries or faults.

The block model was comprised of blocks measuring 50 X 50 X 50 feet and was comprised of 1,689,600 blocks (160 X 160 horizontally and 66 benches vertically).

Grades were interpolated by inverse-distance-cubed weighing. The long axis of the search ellipse was oriented at N12°E, the short axis dipped at 45° to the east and ellipse dimensions were 800 feet in the X and Y directions (along strike and down dip in the plane of bedding) and 60 feet in the Z direction (perpendicular to bedding).

The tonnage factor was 11.5 feet³ / ton, (SG = 2.78) and was based on an unspecified number of measurements of core.

The PAH methodology conforms to current resource estimation practice with one exception: It is now customary to establish search ellipse dimensions upon the basis of variogram analysis, rather than, as seems to be the case with the PAH ellipse, subjective selection.

The calculated tonnage of the PAH resource estimate that falls within the designed pit limits is within about 7.5% of the Asarco estimate (316,865,000 versus 340,505,100), and within about 10% of the grade estimate (0.58% versus 0.64%). Given the uncertainty of the actual percent cutoff grade represented by the Asarco dollar value cutoff, and the small differences between these two estimates in tonnage factors, grid boundaries and number of benches, both results are considered to be in essential agreement, which is also considered to add further credibility to the PAH estimate.

6.0 GEOLOGICAL SETTING

6.1 REGIONAL GEOLOGY

The oldest rocks in the region are Precambrian metasediments dated at 1.7 billion years⁽³⁾ that have been intruded by granitoid batholiths. Subsequent Precambrian sedimentation was followed by an extensive period of erosion.

Sedimentation resumed during the Paleozoic with the deposition of carbonates, shales and sandstone. Uplift occurred during the early Mesozoic and was followed by continental and shallow marine sedimentation.

Subduction of the Pacific Plate beneath the North American Plate beginning in the late Mesozoic and extending into the Cenozoic, resulted in the Laramide Orogeny that lasted about 30 million years and, in southern Arizona generated abundant volcanic activity as well as intrusion of granitic rocks. Formation of the porphyry copper deposits in this region is related to the intrusion of the Laramide-age granitic rocks. The volcanics are predominantly felsic in composition and comprise rhyolite flows, tuffs and breccias. During the Laramide Orogeny northeast-directed overthrusting along near-horizontal thrust planes displaced several thin sheets of Precambrian to Mesozoic-age rocks by up to 80 kilometers. The distribution and magnitude of displacement of these sheets are incompletely known because of subsequent deformation and erosion.

Following a period of quiescence, orogenic activity resumed during the Middle Tertiary, 28 to 15 million years B.P., but was extensional in nature rather than compressional. Uplift was accompanied by granitic intrusive and felsic, explosive volcanic activity that produced thick deposits of ash. Near-vertical block faulting during the late stage of the Mid-Tertiary Orogeny produced the basin and range physiography of the region and was accompanied by basaltic volcanism. A significant aspect of the mid Tertiary uplift is the formation of metamorphic core complexes, predominantly of Precambrian age, that are flanked by Paleozoic and Mesozoic-aged metamorphic carapaces. Although these metamorphic core complexes underlie the highlands of the northwest-trending ranges, the core complexes themselves have a northeast-trending structural grain. A corollary of the uplift associated with development of the metamorphic core complexes was the development of detachment faults, low-angle gravity slides, that displaced portions of the overlying strata laterally from the flanks of the rising core complexes.

Continuing tensional tectonism has resulted in basin subsidence and infilling by erosion of the flanking ranges, a process that is ongoing.

6.2 PROPERTY GEOLOGY

The Rosemont Property is underlain by Paleozoic and Mesozoic-age sedimentary rocks that have been intruded by Tertiary-age intrusives. The Paleozoic stratigraphic sequence ranges from Cambrian-age Bolsa Formation quartzite to carbonate and sandstone of the Rain Valley Formation of Permian age. The Devonian to Permian sequence is comprised of the Martin, Escabrosa, Horquilla, Earp, Colina, Epitaph and Concha Formations, in all of which limestone is the predominant rock type, with subordinate dolomite, siltstone, sandstone and shale. The Escabrosa, Horquilla, Earp and Colina Formations are the principal hosts of copper mineralization on the Property. (FIGURE 4)

The Mesozoic sequence is predominantly of Cretaceous age and is comprised of limestone and granodiorite cobble conglomerate of the Glance Conglomerate and sandstone, siltstone and minor andesite of the Willow Canyon Formation. These rocks dip predominantly to the east at moderate to steep angles and are cut by northwest-trending faults.

The sedimentary and volcanic rocks are underlain by a metamorphic core complex of Precambrian granodiorite and are cut by two intrusives, both of Cretaceous-Tertiary age: a quartz monzonite stock is located on the western margin of the Property, south of the Peach – Elgin deposit, and a much smaller quartz latite occurs near the center of the Property between the Rosemont and Broadtop deposits. (FIGURE 5) The quartz latite is moderately to strongly altered and limestones in contact with this intrusive have been metasomatically altered to lime-silicate skarn.

The structural geology of the area is complex and manifests both Laramide and Mid-Tertiary deformation.⁽⁵⁾ The rocks are cut by numerous, high-angle normal and reverse faults as well as thrusts and detachment faults. These faults strike parallel to the crest of the Santa Rita Mountains in a zone known as the Backbone Fault. This fault forms the western edge of the east-dipping block of Paleozoic sedimentary rocks that contain the Rosemont deposit. On the basis of the plunge of Laramide-age folds, as well as southeast-dipping Oligocene-Miocene strata, it is probable that this easterly dip was imparted during the Middle Tertiary.

The Peach – Elgin deposit is contained within a klippe that may be the offset upper portion of the Copper World mineral area, with an implied westward displacement of about three kilometers. This klippe is underlain by a detachment fault that has superimposed Paleozoic and Mesozoic sediments and Laramide quartz-latite porphyry over Precambrian granodiorite.

7.0 DEPOSIT TYPES

Although the Rosemont Property mineral occurrences are commonly described as porphyry copper deposits, only a subordinate and economically inconsequential amount of mineralization is contained within the quartz-lattice porphyry. The predominant host is skarn-altered carbonate and therefore skarn-copper is a more appropriate model. Copper is the most significant economic mineral; molybdenum and silver are present in possibly recoverable quantities. Gold content is negligible.

8.0 MINERALIZATION

Four skarn-type copper deposits occur within the Rosemont Property. From south to north these are the Rosemont, Broadtop Butte, Copper World and Peach – Elgin. (FIGURE 5) All four deposits are described⁽¹⁾ as having similar characteristics with respect to geology and mineralization. The Rosemont and Peach – Elgin have been explored in greater detail than the Broadtop and Copper World, and of the two, Rosemont is better known. In plan the Rosemont mineralization occupies an area of about one square kilometer, and extends down-dip for at least 1,200 meters. Stratigraphically, mineralization extends over 100 meters. (FIGURE 6)

Chalcopyrite and pyrite are the primary sulphide minerals. Bornite, molybdenite, sphalerite, galena and scheelite are present in subordinate amounts. Trace amounts of silver and gold are also present. Sulphides occur principally as veinlets, coarse disseminations, blebs and clots in irregular lenticular zones within and generally parallel to lime-silicate intervals. Magnetite is present in varying amounts throughout the skarn zone.

Secondary copper oxides are present in the oxidized zone and include chrysocolla, azurite, malachite, cuprite and chalcantite.

Sulphide mineralization is inferred to be genetically related to the emplacement of the quartz-late porphyry and occurs principally in altered sedimentary rocks within the pyrometamorphically altered skarn envelope marginal to the intrusive. Although mineralization occurs in altered sedimentary rocks of all types, higher-grade copper is preferentially localized within skarn horizons, in particular the Horquilla and Colina Formations, indicating that original carbonate lithology and stratigraphy exerted considerable control over mineral deposition.⁽¹⁾

Total sulphide content is generally less than three percent in altered Paleozoic rocks, and is slightly higher in Mesozoic rocks principally due to increased abundance of pyrite.

9.0 EXPLORATION

No exploration has been carried out by Augusta Resource Corp.

10.0 SAMPLING METHOD AND APPROACH

No information is available regarding core sampling methodology with the exception of the observation that core was split and half preserved for reference. However, as most of the drilling was done by large mining companies that specialized in exploration and mining of porphyry / skarn-type deposits, it is assumed that sampling conformed to the standard industry practices of the time.

Documentation, including contemporary reports as well as analytical sheets that accompany drill logs, suggests that all assaying was done by in-house laboratories of the companies that owned the Property.

Samples were assayed for copper and commonly for molybdenum as well. Some analyses of silver and gold were also carried out, but no silver or gold assays were observed in the drill hole files that were checked by Wardrop.

Copper content was determined by both x-ray and wet chemical methods, molybdenum by x-ray. Limits of detectability and ranges of accuracy are not known.

11.0 DATA VERIFICATION

Data verification of assays is not possible as no information was found by Wardrop to indicate that blank, duplicate, or standard samples were submitted for analysis together with the drill core samples. It must be noted, however, that much of the drilling was done in the 1960s and 1970s during which time quality-assurance and quality-control measures were not common elements of most sampling programs.

Regardless, the data are considered to be of acceptable quality because the sampling and analyses were done by reputable companies that were generating the data for their internal use, and much of this data was subsequently used by them as the basis of mineral resource estimates. It is therefore reasonable to infer that the quality of assays was regarded by those companies to be sufficiently high to permit such calculations, and to be sufficiently reliable to form the basis of economic analyses of the deposits from which the samples were taken.

12.0 ADJACENT PROPERTIES

The Twin Buttes and Mission Mines are two significant, comparable copper deposits within the general area of the Rosemont Property. Geological setting, alteration, and mineralization are similar and the same stratigraphic interval is mineralized at Twin Buttes, Mission and Rosemont.⁽¹⁾ **Wardrop has not verified the information contained in this section and the descriptions of mineralization at the Twin Buttes and Mission Mines to not imply the existence of, nor are necessarily descriptive of, mineralization at Rosemont.**

The Twin Buttes Mine is located 30 kilometres west of Rosemont and between 1969 and 1992 produced 202,182,000 short tons of ore at an average grade of 0.76% copper, 0.009% molybdenum and 0.66 ounces per ton silver.⁽²⁾

The Mission Mine is located 30 kilometres northwest of Rosemont and between 1957 and 1996 produced 613,287,000 short tons of ore at an average grade of 0.60% copper, 0.0027% molybdenum and 0.059 ounces per ton silver. The Mission Mine remains in production.⁽²⁾

13.0 METALLURGY

A limited amount of bench-scale metallurgical testing has been done on samples from the Rosemont deposit. This testing indicated that the sulphide mineralization was amenable to concentration by standard flotation methods. Final concentrates from these tests contained 33.5% copper, 7.0 ounces per ton silver, and 0.065 ounces per ton gold.⁽¹⁾ Copper recoveries ranged from 82.6% to 97.1%, and averaged 90%. Molybdenum recovery from the same tests was 70%.⁽¹³⁾

The oxide material may be amenable to SXEW (solvent extraction – electrowinning) recovery.⁽¹⁾

14.0 MINERAL RESOURCE

Not applicable.

15.0 CONCLUSIONS & RECOMMENDATIONS

15.1 CONCLUSIONS

The Rosemont Property contains four known copper - molybdenum - (silver) deposits of which the best-known is the Rosemont.

The Rosemont deposit was calculated by Pincock, Allen and Holt in 1977, to contain a "geological reserve" of 444,678,000 short tons at an average grade of 0.54% copper and a "mineable reserve" of 316,865,000 short tons at an average grade of 0.58% copper, 0.018% molybdenum and 0.25 ounces per ton silver, all at a cutoff of 0.2% copper.

Despite the abundant data upon which this estimate was based, and the rigorous manner in which it was carried out, certain critical components of the calculation are no longer available for review and evaluation. There is also an absence of quality-assurance data that would permit an evaluation of the reliability of the underlying analytical data. For these reasons, the PAH calculation is not compliant with the standards of NI 43-101, and is referenced only in the context of an historical estimate.

All known mineral occurrences within the Rosemont Property are skarn-type and are contained within skarn-altered carbonate strata of Mississippian to Permian age that are spatially associated with an altered quartz latite porphyry.

It will be necessary to confirm the grades and distribution of historically-documented copper, molybdenum and silver values within the Rosemont deposit before a resource estimate compliant with NI 43-101 standards can be carried out.

The simplest way to achieve this objective is to twin drill holes on several sections. It is estimated that 5,000 meters of drilling will be required: two sections of five holes, of 500 meters average length.

If this work confirms the historical results, the historical mineral resource can be upgraded and can form the basis of a feasibility study.

15.2 RECOMMENDATIONS

Two sections of holes within the Rosemont deposit should be re-drilled. It is recommended that one section be drilled east-west and one north-south, crossing in the approximate center of the deposit. This configuration will test the geology and mineral grades over the full geographic extent of the deposit, and will provide sufficient information to determine whether the existing geological interpretation and analytical database are adequate.

Ten holes, of 500 meters average length should be drilled.

When this work is complete, the existing, historical resource estimate should be updated and confirmed.

A proposed budget for this work is given below (all amounts in Canadian dollars):

ACTIVITY	COST (CDN\$)
DRILLING (5,000 meters @ \$100/meter)	\$500,000
ASSAYS (3,000 @ \$30/assay)	\$ 90,000
TRANSPORTATION, TRAVEL	\$ 10,000
SUPERVISION, REPORTING	\$ 50,000
TOTAL	\$650,000

16.0 REFERENCES

1. Anzalone. S.A., 1995
The Helvetia Area Porphyry Systems, Pima County, Arizona
In: Porphyry Copper Deposits of the American Cordillera
Arizona Geological Society Digest 20.
2. Arizona Department of Mines and Mineral Resources
<http://www.admmr.state.az.us>
3. Chronic, Halka, 1983
Roadside Geology of Arizona
Mountain Press Publishing Company
Missoula, Montana
4. Geology of the Tucson Mountains
United States Department of the Interior
National Park Service
<http://nps.gov/sagu/bulletins/Geology>
5. Hardy Jr., James, J., 2000
Superimposed Laramide and Middle Tertiary Deformations in the Rosemont – Helvetia
District, Southeastern Arizona
Denver Region Exploration Geologists' Society Abstract
<http://www.dregs.org>
6. Harris & Montgomery Inc., July 20, 1981
Hydrology and Geology of the Rosemont Addendum Area
Prepared for Anamax Mining Co.
7. Harshbarger & Associates, July 7, 1975
Analysis of Groundwater Development Program In the Empire Ranch Area
For: Anamax Mining Co.
8. Kirkpatrick, Roger (Asarco), March 26, 1958
Memorandum for Kenyon, Richard
Lewishon Copper Company

9. Phase 1 Environmental Site Assessment, Rosemont Ranch, May 3, 2004
Engineering & Environmental Consultants Inc.
For: Rosemont Ranch L.L.C.
10. Pincock, Allen & Holt Inc., 1977
Ore Reserves, Pit Design and Preliminary Mining Plan
Helvetia Deposit, Pima County, Arizona
For: Anamax Mining Company
11. Rosemont Ranch Helvetia Mining District, 2004
Descriptive Document compiled by
Genesis Real Estate & Dev. Inc. (Rosemont Property Owner)
12. The Winter Company, October 1997
Rosemont Project Validation
Order of Magnitude Study
For: Asarco Inc.
13. Washington Group International, March 24, 2005
Preliminary Assessment
Rosemont and Helvetia Mining Areas
Pima County, Arizona
Draft Report for Augusta Resource Corporation

17.0 CERTIFICATE OF AUTHOR

I Gregory Zale Mosher of North Vancouver, British Columbia, do hereby certify that as author of this **TECHNICAL REPORT ON THE ROSEMONT PROPERTY**, dated June 03, 2005, I hereby make the following statements:

- I am a Senior Geologist with Wardrop Engineering Inc. with a business address at 905 – 1130 West Pender Street, Vancouver, British Columbia.
- I am a graduate of Dalhousie University (B.Sc. Hons., 1970) and McGill University (M.Sc. Applied, 1973).
- I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (Registration #121151).
- I have practiced my profession in mineral exploration continuously since graduation.
- I have read the definition of “qualified person” set out in National Instrument 43-101 (NI 43-101) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purpose of NI 43-101.
- I visited the Property March 16, 2005.
- I am responsible for the preparation of this technical report titled “Technical Report on Rosemont Property “, dated June 03, 2005.
- I have no prior involvement with the property that is the subject of the Technical Report.
- I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- I am independent of the Issuer applying the tests set out in Section 1.5 of National Instrument 43-101.
- I have read National Instrument 43-101 and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

- I consent to the filing of this Technical Report with any stock exchange or other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of this Technical Report.

Signed and dated this 3rd day of June, 2005 at Vancouver, British Columbia

“Greg Z. Mosher”

Greg Z. Mosher, P.Geo.
Senior Geologist
Wardrop Engineering Inc.

18.0 FIGURES

FIGURE 1: ROSEMONT PROPERTY LOCATION MAP

FIGURE 2: ROSEMONT PROPERTY ACCESS MAP

FIGURE 3: ROSEMONT PROPERTY TENURE MAP

FIGURE 4: ROSEMONT PROPERTY AREA STRATIGRAPHY

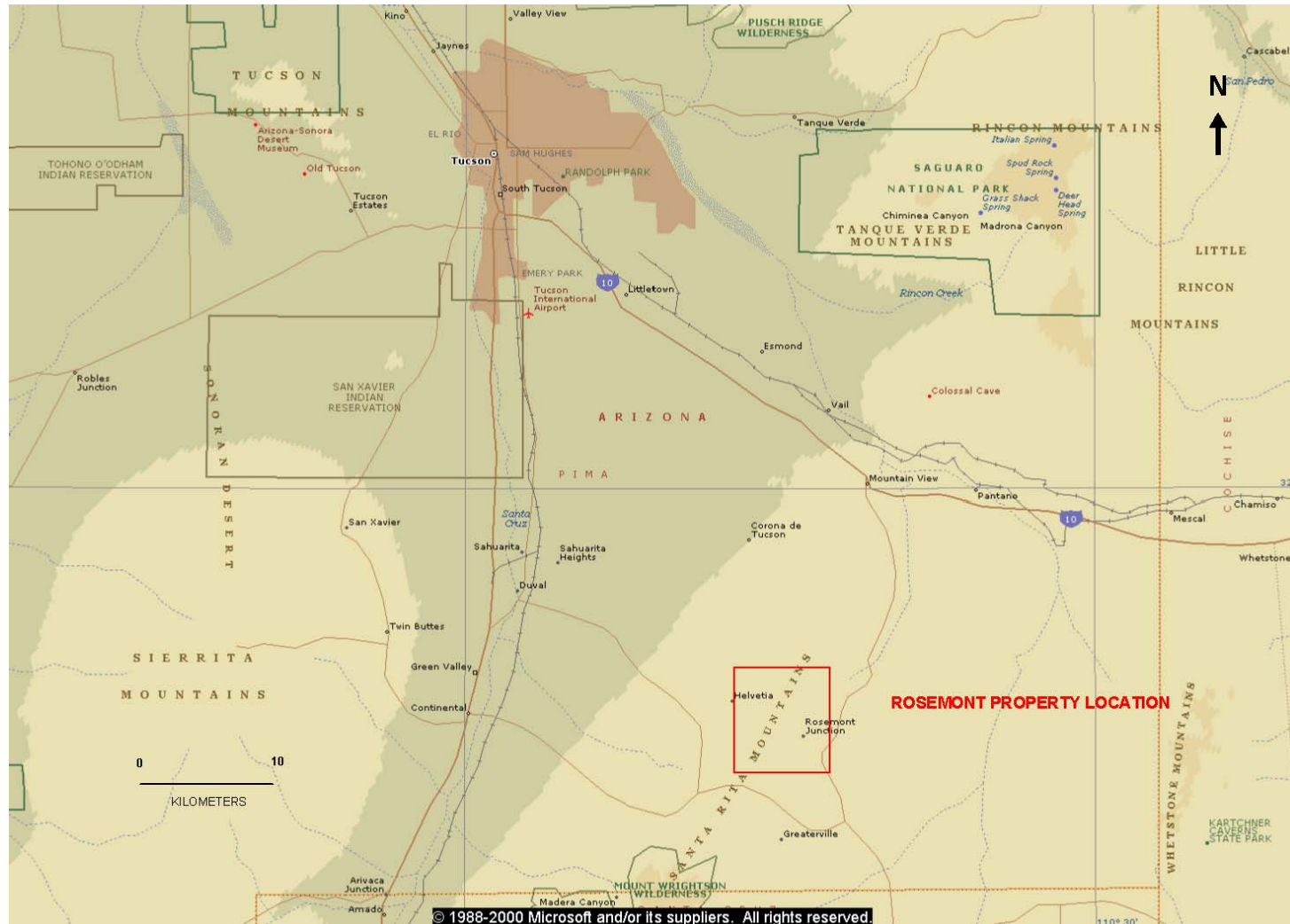
FIGURE 5- ROSEMONT PROPERTY GEOLOGY MAP

FIGURE 6: ROSEMONT DEPOSIT AREA VERTICAL SECTION



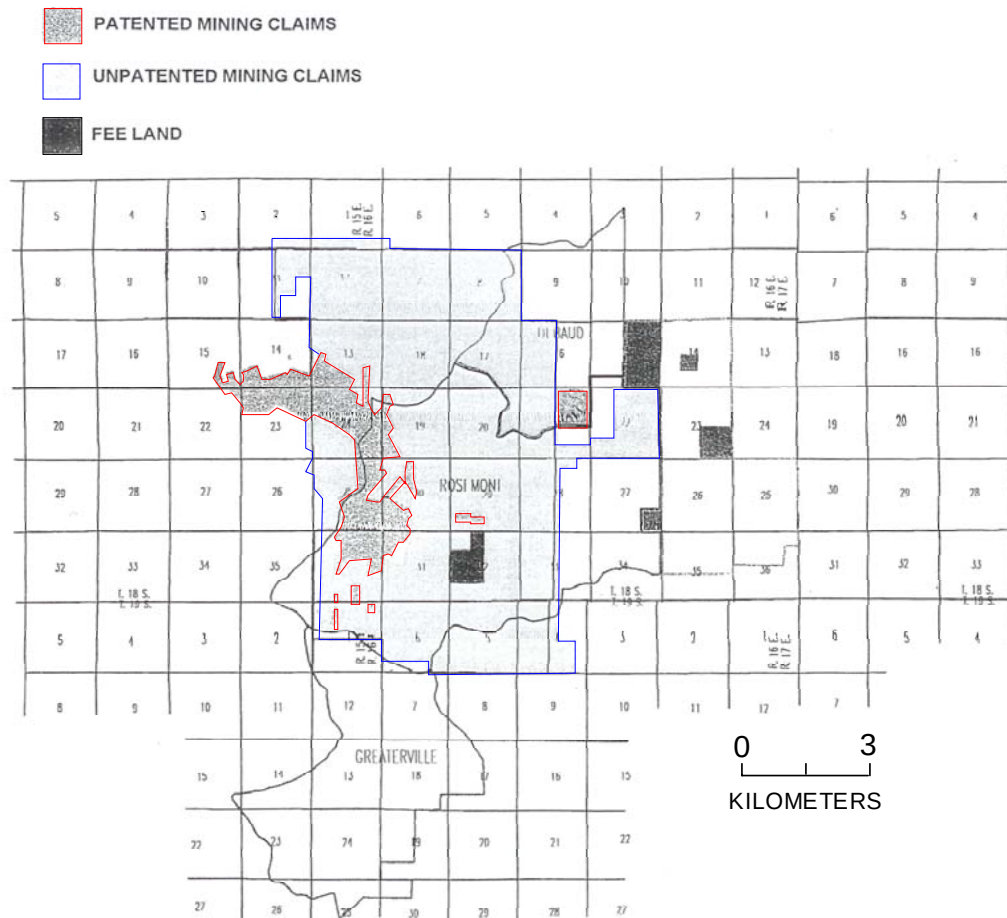
ROSEMONT PROPERTY: LOCATION MAP

FIGURE 1



ROSEMONT PROPERTY: PROPERTY ACCESS

FIGURE 2



Rosemont Property Tenure Map

FIGURE 3

AGE	FORMATION	THICK	SECTION	DESCRIPTION
CRETACEOUS	WILLOW CANYON FORMATION	870m		ARKOSIC SANDSTONE AND SILTSTONE, ANDESITE, VOLCANIC AND CHERT COBBLE CONGLOMERATE
	GLANCE CONGLOMERATE	0-460m		LIMESTONE AND GRANODIORITE COBBLE CONGLOMERATE
PERMAN	RAINVALLEY	10-90m		LIMESTONE, DOLOMITE, SANDSTONE
	CONCHA LIMESTONE	120-175m		LIMESTONE, THICK-BEDDED, CHERTY
	SCHERRER FORMATION	220m		QUARTZ, FINE-GRAINED, DOLOMITE, MINOR SILTSTONE AT BASE
	EPITAPH FORMATION	305m		LIMESTONE, MARL, SILTSTONE, DOLOMITE, LOCAL GYPSUM AND QUARTZITE
	COLINA LS	105m		LIMESTONE, MEDIUM-THICK-BEDDED
	EARP FORMATION	245m		SILTSTONE, SHALE, SOME SANDSTONE AND LIMESTONE
PERM	HORQUILLA LIMESTONE	245m		LIMESTONE, THIN-MASSIVE-BEDDED, SILTSTONE, MINOR SHALE AND CONGLOMERATE AT BASE
MISS	ESCABROSA LIMESTONE	170m		LIMESTONE, THICK-MASSIVE-BEDDED, LOCAL CHERT
DEV	MARTIN FORMATION	120m		DOLOMITE, LIMESTONE, SILTSTONE, SOME SANDSTONE
CAMERIAN	ABRIGO FORMATION	225-275m		SILTSTONE, SHALE, LIMESTONE, AND QUARTZITE, THINLY INTERBEDDED
	BOLSA QZ	140m		QUARTZITE, COARSE-GRAINED
PC	CONT. GR			GRANODIORITE PORPHYRY

Stratigraphic column of the Helvetia area porphyry systems (after McNew, 1981).

Primary mineralization hostrocks outlined in red

FIGURE 4

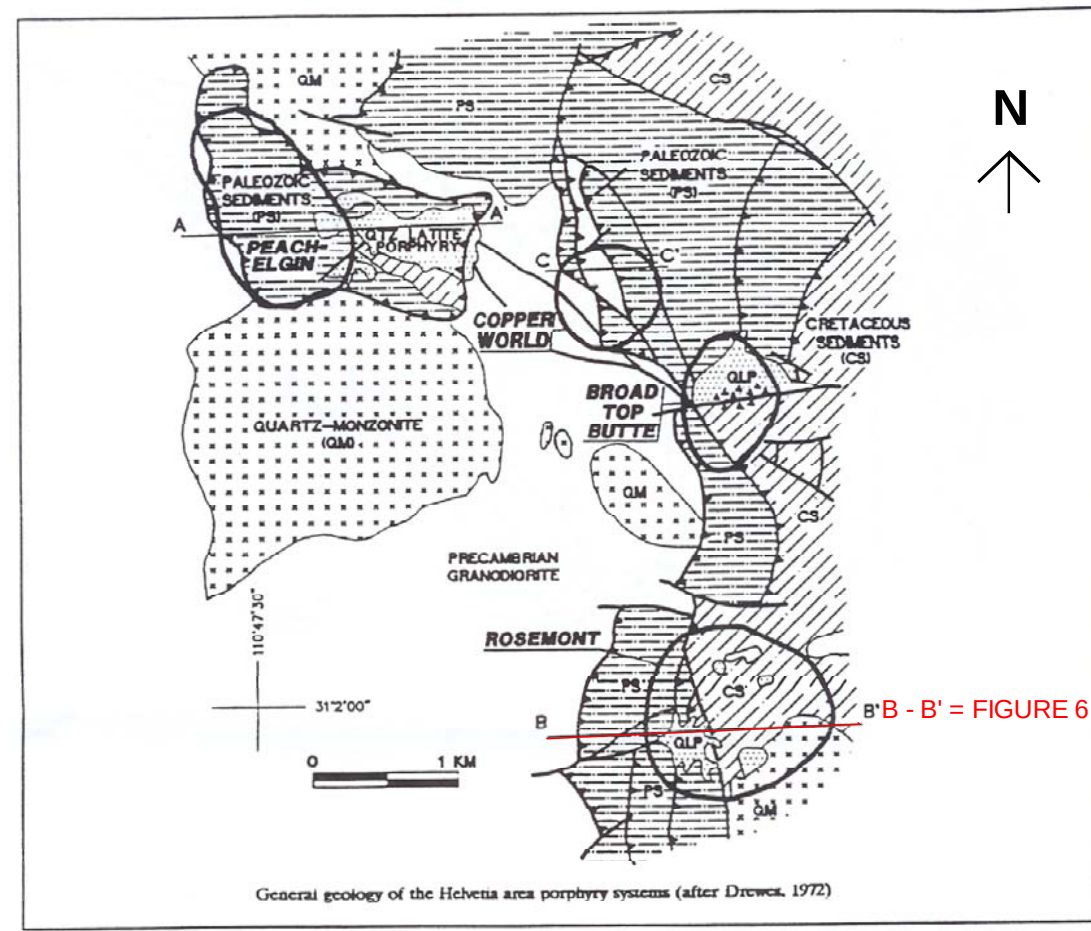
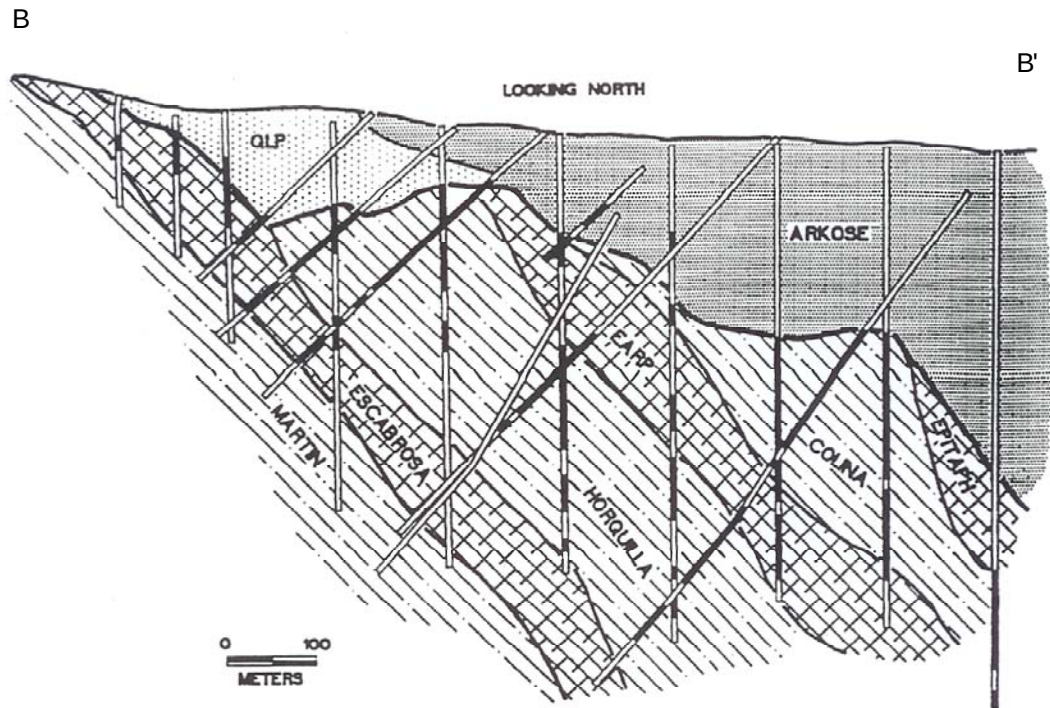


FIGURE 5



Representative cross-section through Rosemont deposit showing location and orientation of drill holes with +0.3% copper intercepts shown in solid black
From Anzalone, 1995

FIGURE 6