Report to:

AUGUSTA RESOURCE CORPORATION
400 – 837 WEST HASTINGS ST.
VANCOUVER, B.C. V6C 3N6

TECHNICAL REPORT ON THE LONE MOUNTAIN PROPERTY, GRANT COUNTY, NEW MEXICO

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DATE: APRIL 06, 2005

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WARDROP

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REVISION HISTORY

REV. NO	ISSUE DATE	PREPARED BY AND DATE	REVIEWED BY AND DATE	APPROVED BY AND DATE	DESCRIPTION OF REVISION

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1.0 SUMMARY

The Lone Mountain Property is located in Grant County New Mexico, and is comprised of two State Mineral Leases and 40 unpatented BLM mining claims, with an aggregate area of 1,490 acres (603 hectares).

The Property has been explored by surface mapping, core and percussion drilling (33 holes, 19,287 meters) between 1975 and 1997.

Minor surface occurrences of argentiferous iron and manganese oxide-bearing quartz veins are related to a buried quartz monzonite porphyry stock.

Copper and zinc sulphide mineralization occurs within skarn-altered carbonate strata belonging to the Lake Valley, Fusselman and El Paso Formations on the northeastern margin of the intrusive.

Copper – zinc-(silver) mineralization of potentially economic significance occurs at depths of 500 to 1000 meters below surface.

Distribution of mineralization appears to be controlled by lithology, alteration, and structural setting. By comparison with similar mineralization in the area, it is reasonable to expect that the distribution of that mineralization is complex.

Exploration to date appears to have identified a zone of potentially economic mineralization within the Lake Valley Formation, but too few holes have been drilled to permit an accurate estimation of the mineral inventory.

In 1983 Chevron Resources calculated a “drill-indicated” resource, a classification that does not meet the standards of National Instrument 43-101, of 7.4 million tons with a grade of 2.2% copper, 5% zinc and 1.2 ounces per ton silver. This estimate is considered premature at the present level of exploration.

A significant amount of additional drilling would be necessary to confidently permit interpretation of both the geological setting and the distribution of mineralization within this zone. Wardrop recommends a drillhole spacing of about 50 meters to achieve these objectives.

A preliminary program of drilling is recommended in order to assess whether a more extensive program of evaluation drilling is warranted. A program of 6,000 meters in 10 holes, within the area of known mineralization, is proposed at an estimated cost of CAD$700,000.

2.0 INTRODUCTION AND TERMS OF REFERENCE

2.1 INTRODUCTION

Augusta Resource Corporation (Augusta) has the right to acquire a 100% working interest in the Lone Mountain copper– zinc skarn property located in Grant County, New Mexico and requires a technical report on the property in order to facilitate regulatory approval of the acquisition.

2.2 TERMS OF REFERENCE

Wardrop Engineering Inc. (Wardrop) has been retained by Augusta to conduct appropriate due diligence and to prepare the necessary technical report. Due diligence has included compilation and review of all available documentation, a site visit, and review of existing drill core.

2.3 DISCLAIMER

Wardrop has relied upon 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.

3.0 DATA PROVIDED TO WARDROP

Data provided to Wardrop is listed in Section 16, REFERENCES. Access to those items marked CWG was provided by Chapman, Wood and Griswold Inc., consulting mining engineers and geologists in Albuquerque, New Mexico, whose cooperation is gratefully acknowledged.

4.0 PROPERTY DESCRIPTION

The Lone Mountain Property (Property) is located in Grant County New Mexico, Township 18 south, Range 13 west, Sections 17, 19, 20, 21, 29, and 30. The Property is located eight kilometres southeast of the town of Silver City, 15 kilometers southwest of the Chino open pit and eight kilometres northwest of the Hurley Copper smelter. (FIGURE 1, 2)

The Property is comprised of :

- New Mexico State Mineral Lease HG-0054 -T18S, R13W, Section 17 (640 acres)
- New Mexico State Mineral Lease HG-0055 -T18S, R13W, NE¼, NE¼ of NW¼ Section 20 (240 acres)
- Bureau of Land Management (BLM) Lode Mining Claims LM 1-40, T18S, R13W, Sections 19-21with a total area of approximately 610 acres (247 hectares).

The total area of the Property is 1,490 acres (603 hectares). (FIGURE 3)

There are a few, shallow exploration pits, probably dating from the 1800s, in the southern portion of the Property, as well as non-outcropping copper and zinc mineralization within the Property.

Three patented mining claims, Corliss, El Campo, and Sweet Home, are located within the area of the present lode mining claims. These patented claims are owned by LT Ranch Partnership, which also owns the surface rights to Section 20, and do not form part of the Property. Wardrop has not seen a title report for the Property and therefore cannot confirm the veracity of the Property status.

Surface rights are privately held and access to the property and the terms of use of the surface for any exploration or production activities must be negotiated with the surface owners.

Augusta has the right to earn a 100% working interest in the Property by making a series of cash payments totalling US$1 million and share payments totalling 325,000 common shares of Augusta to the Property owners over a period of three years, and by undertaking work commitments of US$4,850,000 over the same period. On subsequent anniversaries of the agreement, pending commencement of commercial production, Augusta will pay to the owners US$400,000 and 100,000 common shares of Augusta.

Upon commencement of commercial production Augusta must pay to the Property owners the greater of US$100,000 or a 2% net smelter royalty on all state or private mineral lands, and a 3% net smelter royalty on all federal (BLM) mineral lands.

The Property has not been legally surveyed.

To Wardrop's knowledge, there are no outstanding environmental liabilities associated with the Property.

In order to carry out the program of exploration recommended in this report, it will be necessary to acquire permits from both the State of New Mexico and the federal Bureau of Land Management. Application has not been made for these permits at the time of this report.

5.0 PHYSIOGRAPHY, CLIMATE, ACCESSABILITY, LOCAL RESOURCES

Western Grant County includes part of the Basin and Range and Colorado Plateau physiographic provinces. Northwest-trending mountain ranges, separated by gravel-filled basins characteristic of the Basin and Range occupy the southern part of the county. The northern part of the county is occupied by a dissected lava plateau, part of the southern edge of the Colorado Plateau.

The Gila River crosses the northern and western parts of the county and all drainages in the Silver City area are tributary to it. Except for the Gila, all streams are intermittent and flow only during short intervals after summer rains or in the spring during snow-melt.

The Lone Mountain Property is located at the southern end of the Piños Altos Mountain Range at an elevation of about 1800 meters above sea level. The area of the Property has moderate topographic relief, on the order of 50 meters, and is cut by a series of near-parallel, south-verging drainages. To the north, the Piños Altos Range rises to about 2500 meters above sea level; elevations drop very gently to the south. In general, the gravel-filled basins are at elevations of 1200 to 1800 meters above sea level.

Southwestern New Mexico has a continental, semiarid to semidesert climate. Average temperatures in the Silver City area are two degrees Celsius in winter and 22 degrees Celsius in summer. Annual precipitation is about 40 centimeters, mostly as rain.

The flora and fauna reflect the semiarid climate. Ponderosa pine and scattered hardwoods occupy the highest area; Piñon pine covers the lower hills; and yucca, cacti and various desert grasses are common at lower elevations. The Property is covered in grasses as well as a sparse population of yucca and sagebrush.

The Property is readily accessible. Silver City is about 360 kilometers southwest of Albuquerque via Interstate 25 and paved Highway 152. It is also about 150 kilometers northwest of the city of Las Cruces to which it is connected by Interstate 10 and Highway 180. The Property is located about three kilometres south of Highway 180 on the eastern outskirts of Silver City. The access road from Highway 180 to the property is paved for about 1.5 kilometers of this distance, the balance is an unpaved road that continues to the south boundary of the Property. A number of four-wheel tracks branch from this road and provide ready access to most parts of the Property, including the area in which all the drilling has taken place to date.

A 115 KV power line that supplies the Chino Mine to the northeast, passes through the southeast corner of the Property.

Silver City is a mining center that serves the nearby Chino Mine and supported several former mines in the area including the Tyrone Mine, located about eight kilometres to the southwest. Most needs of an operating mine can therefore be expected to be met within the immediate area.

Water rights for the area are fully allocated and the pumping or use of water for a mining operation at Lone Mountain would require the purchase of existing rights.

6.0 HISTORY

Mining of turquoise was carried out by Indians near Silver City prior to the arrival of Europeans. Historically, the earliest mining in the area was at Santa Rita (Chino) where Spaniards mined and shipped copper to Chihuahua and Mexico City to supply metal for Mexican coinage [15]. The main period of mining in the area began in 1875 and has continued, with interruptions, to the present.

The earliest mining operations were concerned with copper, but deposits of gold, fluorspar, silver and lead were all discovered and exploited prior to 1900. Between 1900 and 1950, production was intermittent and mostly concerned with production of fluorspar during World War II. Drilling at Tyrone to define the porphyry copper deposit there, commenced in 1950. Between 1969 and 1992, 300 million tons of ore were mined at Tyrone at an average grade of 0.81% copper. In 1998, 466 million tons of leachable ore, at a grade of 0.3% copper, remained. [15]

Small-scale mining of high-grade copper at the Santa Rita (Chino) Mine commenced in the late 1800s. Open-pit production of porphyry-type copper mineralization commenced in 1911 and by 2000, about 650 million tons of ore had been mined, and reserves were 310 million tons of milling ore at a grade of 0.6% copper and 480 million tons of leachable ore at a grade of about 0.3% copper. [Various Internet Sources]

Exploration of the Lone Mountain Property began in 1975 by Bear Creek Mining Company to test the hypothesis that historic manganese-silver occurrences and a large magnetic anomaly were indicative of a buried porphyry system. During the period 1975–1978, Bear Creek and associated companies drilled 18 core and percussion holes (4,982 meters). In 1979 Getty and Coastal Mining drilled and deepened four holes for a total of 8,070 meters. During 1982–1983, Chevron Resources Company drilled and deepened three holes (4,042 meters). Bear Creek drilled two holes (213 meters) in 1985. Granges drilled two holes (1,249 meters) in 1989, and the last drilling was done in 1997 when Clark Arnold drilled four rotary holes (731 meters). In total, 33 holes with an aggregate length of 19,287 meters were drilled, most at 305-meter (1000 feet) centers, and few fill-in holes at separations of about 150 meters (500 feet).

In addition to the drilling, an induced polarization survey was carried out in 1963, and an aeromagnetic survey in 1976.

There has been no known work on the Property since 1997.

The original target was a porphyry-style copper deposit, but after the first phase of drilling in 1975, Bear Creek recognized that although an intrusive stock is present, it is not significantly mineralized, and that the copper-zinc mineralization that was discovered is hosted within an envelope of skarn alteration on the northeast margin of the intrusive. Subsequent exploration programs have been designed to test or to expand upon the mineralization discovered by Bear Creek.

In 1983 Chevron Resources calculated a "drill-indicated resource", a classification that does not meet the standards of National Instrument 43-101, of 7.4 million tons with a grade of 2.2% copper, 5% zinc and 1.2 ounces per ton silver. (*)

7.0 GEOLOGICAL SETTING

7.1 REGIONAL GEOLOGY

The regional fabric of bedrock geology in southern Grant County is controlled by northwest-trending basin and range tectonics and bedrock is exposed in three ranges, from east to west, the Black and Piños Altos Ranges, and Big Burro Mountains.

The most abundantly exposed units are Lower to Middle Tertiary-age rhyolitic to dacitic pyroclastics, and overlying Lower to Middle Tertiary-age basaltic andesite. The southern end of Big Burro Mountain, southwest of Silver City, is underlain by Mesoproterozoic granitic rocks. In the southern portion of the Pinos Altos Range, in the vicinity of Silver City, Paleozoic to Mesozoic-age sedimentary and volcanic rocks are exposed in a window measuring about 40 kilometers east-west, by 10 kilometers north-south. Cretaceous to Tertiary-age stocks, sills and dikes are present in both the Big Burrow Mountains and Pinos Altos Range, and are associated with both porphyry and skarn-type mineralization. The most significant of these intrusives are the Tyrone, Santa Rita and Piños Altos Stocks and the Hanover – Fierro Pluton. Economic concentrations of copper and /or zinc are associated with all these intrusive bodies. (FIGURE 4)

7.2 PROPERTY GEOLOGY

Bedrock within the Lone Mountain Property is largely covered by a blanket of alluvium that ranges in thickness from about 15 to 75 meters. Within the area of the lode mining claims, south of the main area of economic interest, Cretaceous-age Colorado shale and underlying Lake Valley Limestone of Mississippian age are exposed in a northwest-trending belt of outcrop. (FIGURE 5)

The southern portion of the State Mineral Leases is underlain by a buried, elliptical Tertiary-age monzonite porphyry stock that measures about 1500 meters northeast-southwest, and about 500 meters along the short axis. This stock has intruded sedimentary rocks of Cambrian to Cretaceous age, and andesitic volcanics of Cretaceous to Tertiary age. The stock is spatially associated with felsic sills and dikes.

The mineralization of primary interest is contained within the Lake Valley Formation limestone which is comprised of two members, the upper Tierra Blanca, a white, medium to coarse-grained crinoidal limestone, and a lower chert-nodule bearing member. (FIGURE 6)

The Lake Valley Formation is overlain by the Oswaldo Limestone of Upper and Middle Pennsylvanian age that is grey, fine to medium-grained and fossiliferous with shale interbeds at its base. The Lake Valley is underlain by the Percha Shale of Upper Devonian age. The upper portion of the Percha is grey and calcareous with chert nodules, and the lower portion is black shale.

A lower stratigraphic interval of potential economic interest is comprised of the El Paso Dolomite of Lower Ordovician age, Montoya Group of Upper and Middle Ordovician age, and the overlying Fusselman Dolomite of Silurian age. The El Paso Dolomite is grey, fine-grained, crystalline dolomite with local limestone and conglomerate horizons. The Montoya Group is comprised of brownish-grey, very fine- to medium-grained crystalline dolomite. The lower portion contains chert bands. The Fusselman Dolomite is brownish-grey, very fine-grained crystalline dolomite.

The sedimentary sequence is intruded by an igneous stock, sills and dikes. The sill and stock are comprised of quartz monzonite porphyry, quartz latite porphyry, and latite porphyry. Dikes are of latite porphyry composition.

The sedimentary sequence forms the southwestern limb of a syncline that strikes northwest and dips at 15 to 25º to the northeast. Folding has been attributed to igneous intrusion and faulting during the Tertiary. [(15)] The Rio de Arenas fault is exposed on the southern boundary of the Property (FIGURE 5); this fault strikes northeast and has a normal displacement on the southwest side of about 700 meters. The Rio de Arenas fault offsets the sill and cuts dikes, and therefore must postdate emplacement of the igneous rocks. A low-angle thrust has been inferred from drill evidence to repeat an interval of mineralization in hole LM-15, but its presence in adjacent holes has not been verified. Emplacement of the intrusive rocks as well as subsequent alteration, was controlled by a series of northeast-trending faults, most of which are normal in their displacement.

Outcrops on the Property are 600 to 1200 meters southwest and northeast of the major subsurface mineralization, and alteration of these rocks is weak: bleaching and clay-sericite and epidote alteration occur in the Colorado Formation shale, and dikes contain clay-sericite alteration and quartz veins. Silicified fractures with manganese and iron oxides occur in the Lake Valley limestones on the southwest.

Within the main area of mineralization alteration is comprised of prograde garnet-magnetite-wollastonite and retrograde hydrous silicate-quartz-calcite and clay alteration. The distribution of prograde and retrograde alteration is similar.

Alteration of the stock, sill and dikes includes potassium-feldspar –quartz-magnetite-sericite.

8.0 DEPOSIT TYPES

The Lone Mountain Property contains skarn-type copper-zinc-silver mineralization. The primary host is the Mississippian-age Lake Valley Formation limestone that has been altered by prograde skarn formation on the periphery of a latite stock of Cretaceous to Tertiary age, and by subsequent retrograde quartz-calcite-pyrite-magnetite-hematite alteration, assumed to also be genetically associated with the emplacement of the stock. Chalcopyrite and sphalerite are the primary minerals of economic interest and are associated with retrograde alteration. A second, deeper occurrence of copper mineralization of potential economic interest is contained within skarn-altered dolomite and shale belonging to the El Paso, Montoya and Fusselman Formations of Ordovician to Silurian age.

The presence of a buried intrusive at Lone Mountain was inferred on the basis of manganese-silver occurrences that were explored historically and are located within the southern portion of the present property. These occurrences are not considered to be of sufficient size to be of economic significance.

The Lone Mountain Property was first explored to assess the possible presence of porphyry-type copper mineralization, similar to the nearby Santa Rita and Tyrone deposits. The earliest drilling, in 1975, by Bear Creek demonstrated that the intrusive stock is only weakly mineralized with respect to copper and molybdenum, and that a porphyry deposit model is not a viable target here.

9.0 MINERALIZATION

Surface mineralization at Lone Mountain is limited to narrow, northeast-trending argentiferous quartz veins that are stained by iron and manganese oxides. These veins were explored by shallow pits and trenches, probably in the late 1800s, contemporaneous with other early exploration in the district.

The Lone Mountain Property has been tested by 33 core and reverse circulation drill holes, and these provide the only information about the significant mineral occurrences, which occur at depths of about 500 (Lake Valley Formation) and 1000 meters (Fusselman and El Paso Formations) below surface.

The major metals introduced during mineralization are iron as magnetite and pyrite, copper as chalcopyrite, and zinc as sphalerite. Minor copper occurs as bornite and chalcocite, and recoverable amounts of silver and gold occur with chalcopyrite. Minor disseminations and veinlets of sulphides and magnetite occur in the intrusive rocks; the significant quantities of both sulphides and oxides occur within the altered carbonates adjacent to the stock, in particular the Lake Valley Formation and to a lesser extend the Fusselman and El Paso Formation dolomites.

In the Lake Valley Formation, magnetite, pyrite, and sphalerite occur as banded to near-massive replacements in association with late-stage quartz-calcite alteration. Chalcopyrite is typically present as disseminations within pyrite. Magnetite is commonly altered to hematite. Major concentrations of mineralization occur near the upper and lower contacts of the Lake Valley Formation with shale or shaly carbonates which suggests that movement of mineralizing fluids was constrained by permeability barriers. Another possible constraint to fluid circulation is a sill that immediately overlies the major Lake Valley-hosted mineralization. This sill was noted in hole LM-15, the apparent center of copper-zinc concentration, as well as in hole LM-12.

The best-mineralized intercepts occur in holes LM-12, 15 and 23 which are adjacent and therefore allow for the possibility that mineralization is continuous between them. Although continuity may exist, it has been demonstrated (21) that the mineralization is not strictly stratabound.

The limits of this zone of mineralization appear to have been defined by the present level of drilling: Unmineralized or poorly-mineralized holes have been drilled to the north, east, and west of the principal mineralized holes. The intrusive stock is located to the south of the zone of mineralization.

Potential remains for the discovery of additional mineralization along the southwest and northwest flanks of the intrusive.

Within the deeper Fusselman and El Paso Formation dolomites, pyrite, chalcopyrite, and minor sphalerite occur as disseminations and irregular stringers within the garnet-magnetite and forsterite-serpentine-magnetite phase of retrograde alteration. Replacement is similar to, but less intense than that within the Lake Valley Formation, and incomplete replacement of sedimentary beds and laminae are apparently more common. As in the Lake Valley, lithological contrast is also the predominant control on distribution of sulphides: the greatest concentrations of copper occur within the Fusselman dolomite adjacent to the overlying Percha shale, and within the El Paso adjacent to the overlying Montoya Group shaly carbonates.

The most significant intercepts of mineralization that have been encountered at Lone Mountain, and that underlie historic resource estimates are listed below.

LAKE VALLEY ZONE

HOLE #	FROM (m)	TO (m)	THICKNESS (m)	Cu (%)	Zn (%)	Ag(opt)
LM-12	466.3	472.4	6.1	1.72	26.4	2.25
LM-12	557.8	567.0	9.2	1.08	_	0.17
LM-15	484.6	487.7	3.1	1.28	_	0.09
LM-23	502.3	504.7	2.5	3.11	0.2	2.10
LM-23	513.0	516.6	3.6	5.43	1.9	3.22
LM-28	563.0	589.0	26.0	1.62	_	3.52

Corresponding gold values are 0.015 ounces/short ton or less (about 0.5 grams/tonne).

FUSSELMAN – EL PASO ZONE

HOLE #	FROM (m)	TO (m)	THICKNESS (m)	Cu (%)	Zn (%)	Ag(opt)
LM-9	832.0	838.2	6.2	1.08	_	0.29
LM-9	954.0	963.2	9.2	1.04	_	0.08
LM-14	856.5	868.7	12.2	1.44	_	0.07
LM-14	890.0	902.2	12.2	1.29	_	0.18
LM-14	1012.0	1024.1	12.2	1.48	_	0.24
LM-15	832.1	838.2	6.2	1.38	_	0.04
LM-15	990.6	999.7	9.2	1.81	_	1.15

No zinc values are given, corresponding gold values are on the order of 0.001 ounces/ton (0.025 grams/tonne). FIGURE 8 is illustrative of the distribution of mineralization in both the Lake Valley and lower Paleozoic intervals.

10.0 EXPLORATION

10.1 DRILLING

The Lone Mountain Property has been explored by 33 drill holes, of which 23 were core holes and the balance reverse-circulation percussion holes. Aggregate length of all holes is 19,287 meters. Most of this core no longer exists, although representative portions of most holes have been preserved by the New Mexico Bureau of Mines in Socorro. Original or facsimile copies of original logs and laboratory assay sheets exist for all holes. Holes were logged for lithology, alteration and mineralization. A number of holes were relogged repeatedly, a consequence of the fact that half the total amount of drilling was completed by 1976, and the property was subsequently explored by a number of different companies up to 1997, whose programs included the deepening of a number of existing holes. Several of the repeat logs also exist. These and the original logs are in the custody of Chapman, Wood & Griswold Inc. in Albuquerque.

10.2 GEOPHYSICS

Only two geophysical surveys have been carried out on the property, an induced polarization survey in 1963, and aeromagnetic survey in 1976, but a magnetic anomaly at Lone Mountain was apparently known to Bear Creek Mining Company as early as 1957. [13] Both the magnetic and induced polarization surveys detected the presence of the intrusive and corroborated the initial geological interpretation of a buried stock.

11.0 SAMPLING METHOD AND APPROACH

Specific sampling protocols are not known for either the core or the reverse-circulation drilling, although it is self-evident from examination of the drill core that it was split, half sent for analysis and the remaining half initially, but no longer, retained for reference. No such similar evidence exists for the reverse-circulation samples, although the integrity of these samples can be inferred from the fact that all drilling was done by major corporations with highly experienced personnel.

12.0 DATA VERIFICATION

It appears from a brief comparison of drill logs and laboratory analytical sheets that quality-assurance / quality-control programs were not an integral part of the Lone Mountain sampling programs as there is no evidence of duplicate, blank or control samples on the assay sheets. However, analyses were undertaken by independent laboratories and it is reasonable to assume that as the companies undertaking the exploration were large and well-established, they would have determined that the analytical laboratories were reliable and analytical methodologies used conformed to industry norms. Therefore, although data verification is not possible, it is probable that the assays are reliable.

No evidence of down-hole surveying of any holes was noted in any of the documentation available for review by Wardrop. As most holes are shown on sections as being perfectly vertical, this suggests that surveying was not carried out. If so, the absence of accurate locational data may have had an impact on subsequent interpretations of both geology and distribution of mineralization.

The potential for down-hole contamination has not been evaluated for the reverse-circulation drill holes.

13.0 ADJACENT PROPERTIES

The Santa Rita and Tyrone deposits have been mentioned elsewhere in this report. The Santa Rita (Chino) deposit is about 15 kilometers distant to the northeast from the Lone Mountain property and the Tyrone about an equal distance to the southwest. In addition, several zinc-copper deposits, the former Thunderbolt and Pewabic mines, are located northwest of the Santa Rita Mine adjacent to the Hanover – Fierro Pluton, and lie within the same structural corridor as Lone Mountain. Further, a portion of the mineralization there occurs within the Lake Valley Formation as at Lone Mountain, and in the immediately overlying Oswaldo Formation. (FIGURES 4 & 7) It is therefore probable that the inferred genesis of these deposits is relevant to the interpretation of the genesis and nature of the Lone Mountain mineralization. The following information was excerpted from USGS Paper 555 [(15)].

Although the predominant regional structural trend is northwest, within the area of Santa Rita – Hanover - Fierro and Lone Mountain, the predominant trend is northeast. (FIGURE 4) Within this trend, the Santa Rita stock is located on the southeast side of a horst of triangular shape, the Hanover – Fierro pluton on the northwest, and the Lone Mountain area is situated at its southwest apex.

Intrusion of the Santa Rita and Hanover – Fierro stocks was preceded during the late Cretaceous by intrusion of sills that contributed to the arching of strata and development of the faults that define the structural corridor. Emplacement of the stocks and many dikes occurred after the intrusion of the sills and the stock and dikes are confined to the zone of domal uplift that was initiated by emplacement of the sills.

Sphalerite replacement orebodies formed within the Oswaldo and Lake Valley Formations on the northeast side of the Hanover – Fierro Pluton, in the footwall of a prominent sill that was deformed and folded as a consequence of emplacement of the stock. With few exceptions, mineralization is confined to a favourable sedimentary unit beneath the sill, and within a zone about 100 to 200 meters from the margin of the stock. The individual sulphide bodies have cross-sectional dimensions from less than 30 to about 60 meters. (FIGURE 7)

Although it postdates mineralization, it is interesting to note that a low-angle thrust fault occurs in the footwall of the Pewabic ore bodies and that apparently no mineralization occurs beneath it. (FIGURE 7)

14.0 MINERAL RESOURCE

Chevron Resources Company in 1983 [13] calculated “drill-indicated” and “potential” reserves for both the Lake Valley and Fusselman – El Paso horizons. These classifications are not compliant with National Instrument 43-101 (NI 43-101) guidelines and the estimate is described here only to illustrate the basis of the historical calculations.

The Lake Valley was estimated by Chevron to contain a drill-indicated reserve of 7.4 million tons at an average grade of 2.2% copper, 5% zinc, and 1.2 ounces per ton silver, and a potential reserve of 18 million tons at the same grade, both at a cutoff of 1% copper. The combined Fusselman – El Paso horizon was estimated to contain a drill-indicated reserve of 17.5 million tons at 1.36% copper, and a potential reserve of 35 million tons at the same grade, both at a cutoff of 1% copper.

The “reserve” for the Lake Valley is predicated upon three drill holes (LM-12, 15 and 23) that are from150 to 300 meters apart. (Hole LM-28 had not been drilled at that time.) Polygons were constructed around each hole by extrapolating grades and thicknesses as horizontal slabs, halfway to the nearest bounding drill hole. A density of 3.5 g/cm^3 was chosen to convert volumes to tons.

A similar approach was taken for the Fusselman – el Paso zones, with the exception that the relevant drill holes were LM-9, 14, and 15.

Despite the assumption of continuity that underlies these estimates, the lack of consensus among the various parties that have explored the Property regarding the interpretation of the geology as revealed by drilling, indicates that neither the geology nor the distribution of mineralization are sufficiently well-understood at the present level of exploration to permit a credible estimation of mineral resources. As well, the application of an average density is considered inappropriate in a rock that varies from almost massive magnetite to disseminated pyrite in coarse-crystalline, vuggy, dolomitic marble.

For these reasons, Wardrop believes that a significant amount of additional data must be acquired before a resource estimate that is compliant with NI 43-101 definitions can be established.

15.0 CONCLUSIONS & RECOMMENDATIONS

15.1 CONCLUSIONS

The Lone Mountain Property is located in Grant County New Mexico, and is comprised of two State Mineral Leases and 40 unpatented BLM mining claims, with an aggregate area of 603 hectares.

The Property has been explored by surface mapping, core and percussion drilling (33 holes, 19,287 meters) between 1975 and 1997.

Minor surface occurrences of argentiferous iron-manganese oxide bearing quartz veins are related to a buried quartz monzonite porphyry stock.

Copper and zinc sulphide mineralization occurs within skarn-altered carbonate strata belonging to the Lake Valley, Fusselman and El Paso Formations on the northeastern margin of the intrusive.

Copper – zinc – (silver) mineralization of potentially economic significance occurs at depths of 500 to 1000 meters below surface.

Distribution of mineralization appears to be controlled by lithology, alteration, and structural setting. By comparison with similar mineralization in the area, it is reasonable to expect that the distribution of that mineralization is complex.

Exploration to date appears to have identified a zone of potentially economic mineralization within the Lake Valley Formation, but too few holes have been drilled to permit an accurate estimation of the mineral inventory.

A significant amount of additional drilling would be necessary to confidently permit interpretation of both the geological setting and the distribution of mineralization.

Wardrop recommends a drillhole spacing of about 50 meters is to achieve these objectives.

The justification of such an extensive drill program can be determined by a preliminary drill program to establish whether continuity of mineralization can be demonstrated within the area of presently-known mineralization. A program of 10 holes, of 600 meters average length should be adequate for this test.

15.2 RECOMMENDATIONS

It is recommended that 10 core holes be drilled within the area of known mineralization in order to test the Lake Valley Formation. These holes should be vertical, about 600 meters in length, and located to test continuity between existing holes that have intersected significant thicknesses and grades of mineralization.

A budget for this program is presented below. All values are in Canadian dollars:

ACTIVITY	AMOUNT (CAD$)
Drilling (6,000m @ $100 / meter)	$600,000
Analyses (1,500 @ $30/ assay)	$ 45,000
Logistics (Shipping etc.)	$ 10,000
Supervision & Reporting	$ 45,000
TOTAL	$700,000

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17.0 QUALIFICATIONS OF AUTHOR

I, Gregory Zale Mosher, of North Vancouver, British Columbia, do hereby certify that:

As the author of this **TECHNICAL REPORT ON THE LONE MOUNTAIN PROPERTY, GRANT COUNTY, NEW MEXICO**, dated April 4, 2005, I hereby make the following statements:

1. I am a Senior Geologist with Wardrop Engineering Inc. with a business address at 905 – 1130 West Pender Street, Vancouver, British Columbia.
2. I am a graduate of Dalhousie University (B.Sc. Hons., 1970) and McGill University (M.Sc. Applied, 1973)
3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia. (Registration #121151)
4. I have practiced my profession in mineral exploration continuously since graduation.
5. 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 purposes of NI 43-101.
6. I am responsible for the preparation of this technical report titled "Technical Report on the Lone Mountain Property, Grant County New Mexico", dated April 4, 2005.
7. I have had no prior involvement with the property that is the subject of the Technical Report.
8. 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.

9. I am independent of the Issuer applying the tests set out in Section 1.5 of National Instrument 43-101.

10. I have read National Instrument 43-101 and the Technical Report has been prepared incompliance with National Instrument 43-101 and Form 43-101F1.

11. I consent to the filing of this Technical Report with any stock exchange and 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.

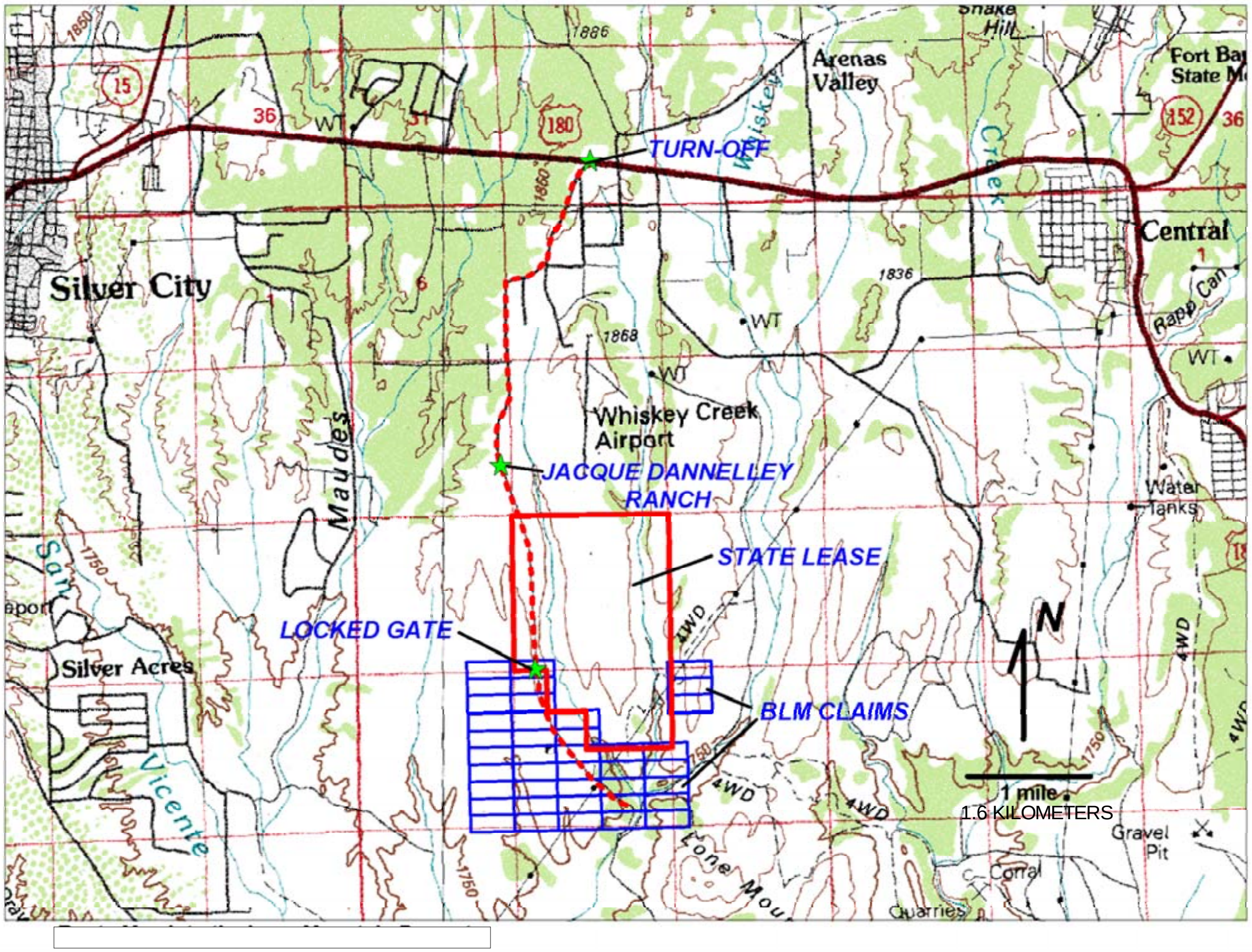
Signed and dated this 4th day of April, 2005 at Vancouver, British Columbia.

"Greg Z. Mosher"

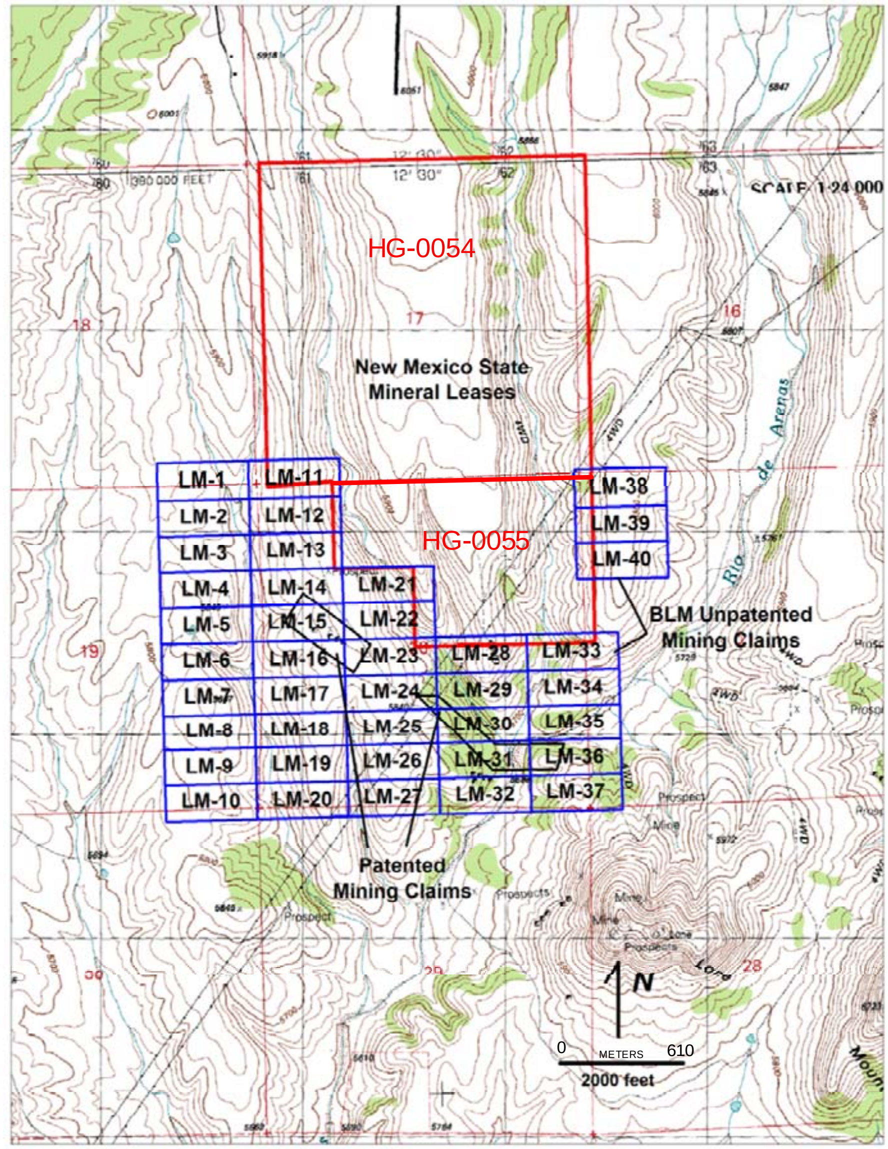
G.Z. Mosher, P.Geo.
Senior Geologist
Wardrop Engineering Inc.

18.0 FIGURES

LOCATION MAP LONE MOUNTAIN PROPERTY GRANT COUNTY NEW MEXICO FIGURE 1

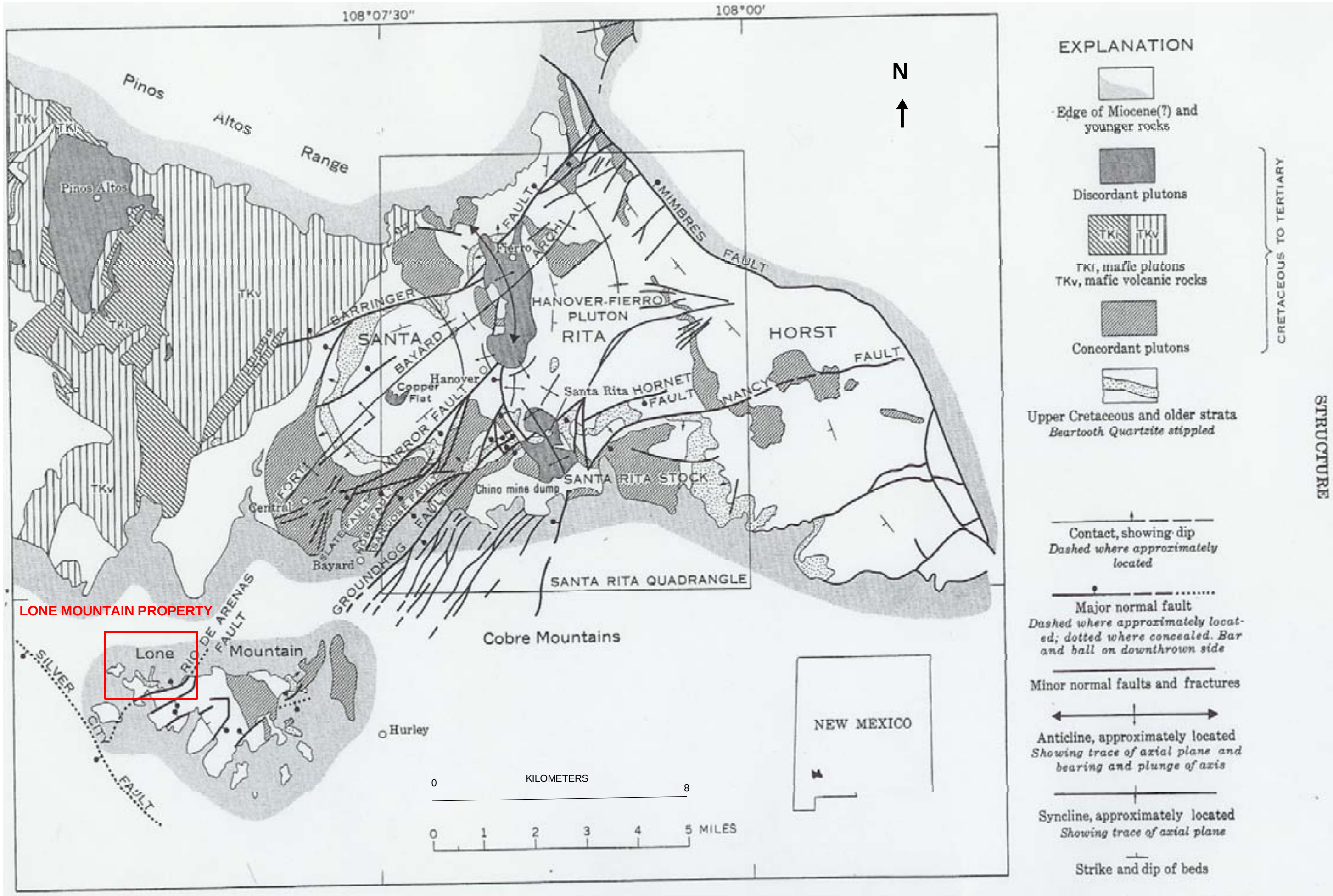


LONE MOUNTAIN PROPERTY, GRANT COUNTY, NEW MEXICO: PROPERTY ACCESS FIGURE 2



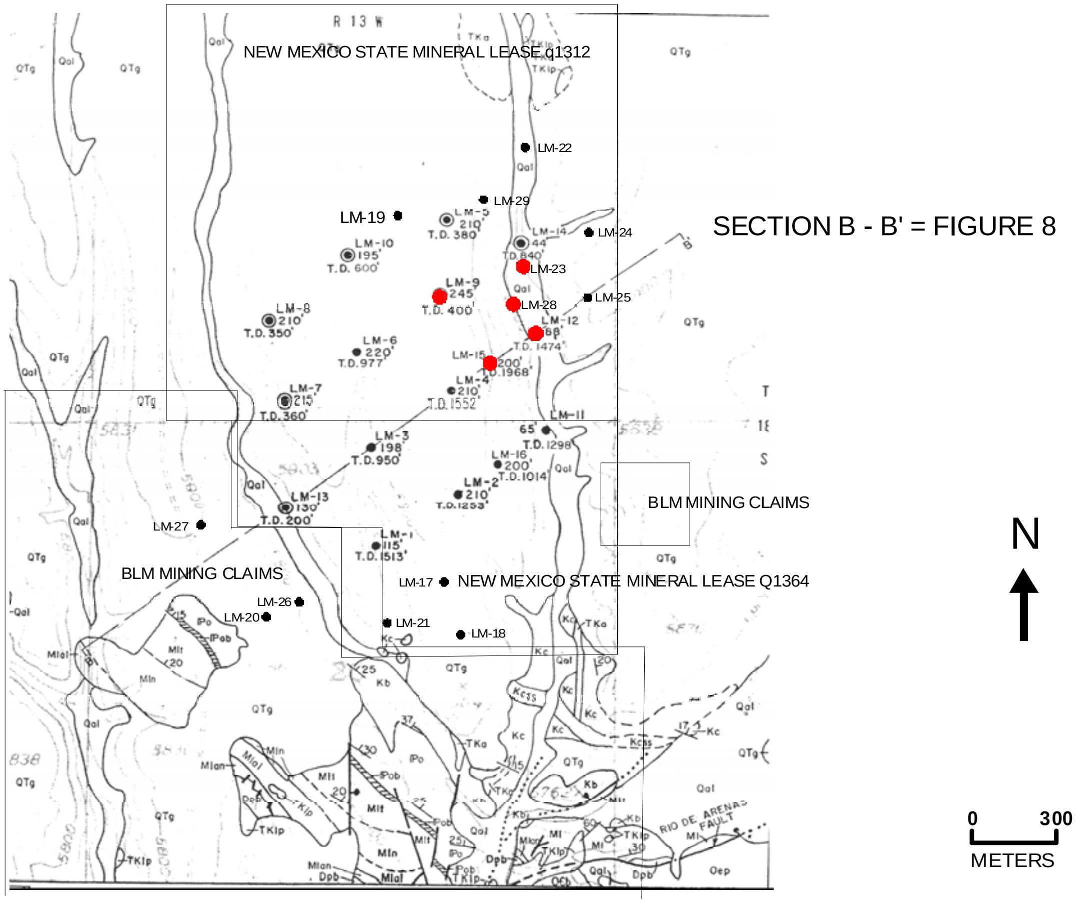
LONE MOUNTAIN PROPERTY TENURE, T18S, R13W, GRANT COUNTY NEW MEXICO

FIGURE 3



STRUCTURAL GEOLOGICAL SETTING SANTA RITA QUADRANGLE, GRANT COUNTY, NEW MEXICO

FIGURE 4



Qal Alluvium
QTg Gila Conglomerate
TKlp Quartz-Orthoclase Latite Porphyry
TKa Andesite Porphyry
Kc Colorado Shale
Po Oswaldo Limestone
Mlt Lake Mountain Formation Tierra Blanca Member
Mln Lake Mountain Formation Nunn Member
Mlal Lake Mountain Formation Alamogordo Member
Mlan Lake Mountain Formation Andrecito Member
Dpb Percha Shale (Box Member)
OCb Bliss Sandstone

● Diamond Drill Hole

◉ Roatory Drill Hole

● Hole With Significant Mineralization in Lake Valley Formation

LONE MOUNTAIN PROPERTY

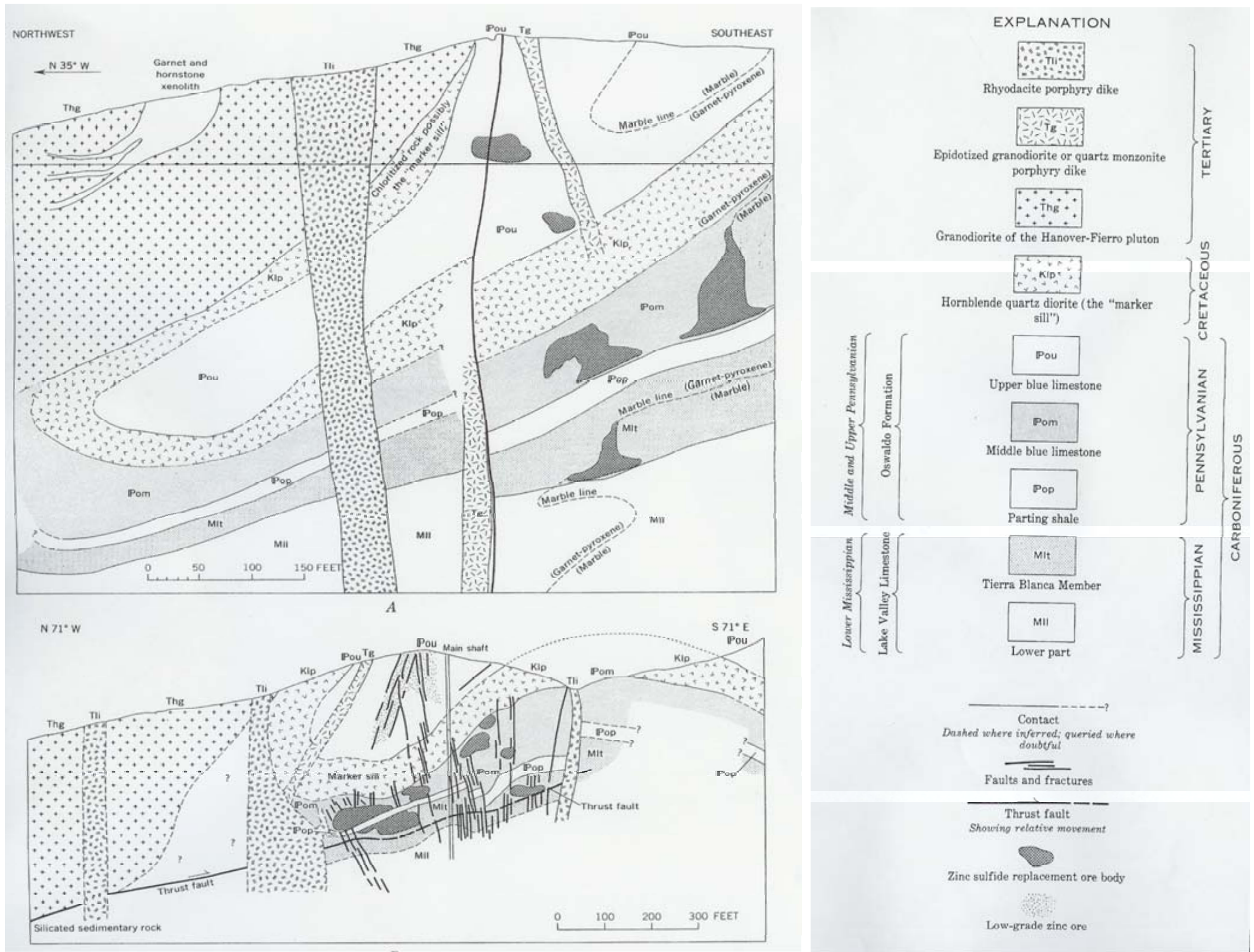
GRANT COUNTY, NEW MEXICO

DRILL HOLE LOCATIONS

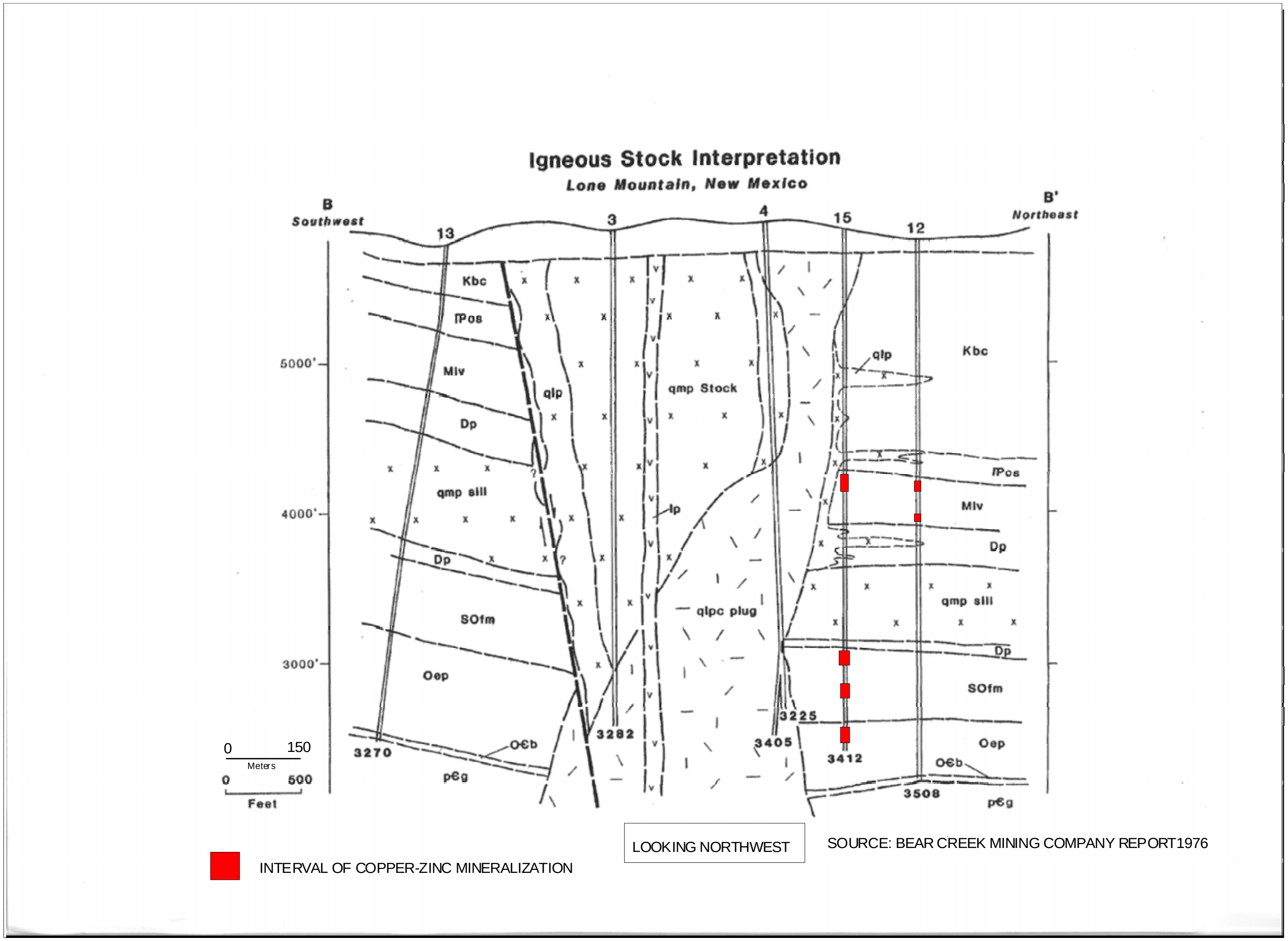
FIGURE 5

SYSTEM OR SERIES	FORMATION	SECTION	APPROXIMATE RANGE IN THICKNESS (FEET)	LITHOLOGY
Recent and Pleistocene	Younger alluvium Older alluvium			Unconsolidated alluvium and colluvium in valley floors, flat uplands, and on slopes. Includes sand, silt, and gravel.
Pliocene and Miocene(?)	Gravel deposits in Mimbres River system		0-800	Somewhat consolidated poorly sorted bolson deposits ranging from silt to boulder deposits. Similar and in part equivalent to Gila Conglomerate and Santa Fe Formation.
Miocene(?)	Basaltic andesite flows and underlying gravel and boulder deposits		0-850	Dark-gray finely crystalline porphyritic flows; weather reddish brown; contain phenocrysts of pyroxene, magnetite, and olivine in matrix of labradorite.
	Pitchstone, sandstone, and indurated rhyolite tuff underlain by Kneeling Nun Tuff		0-600	Crystal fragments of quartz, sanidine, biotite, and oligoclase, and rock fragments imbedded in compacted glass shards, in part devitrified and in part replaced by chalcedony. Black pitchstone contains rock fragments and is locally vesicular.
	Sugarlump Tuff		0-600	Pumiceous tuff, gravel, and sandstone locally replaced by clinoptilolite. Generally well stratified.
				Andesite breccia. (See below.)
	Rubio Peak Formation		0-600	Conglomerate containing intercalated indurated tuffs and rhyodacite and andesite flows. (Rubio Peak Formation)
Lower Tertiary and Upper Cretaceous(?)	Andesite breccia		0-500	Andesite breccia and fine-grained crystal tuff, volcanic sandstone, and some nonvolcanic sandstone and mudstone.
Upper Cretaceous	Colorado Formation		0-1000	Upper 800 feet consists of tan, greenish-brown, and white sandstone interbedded with dark-green, brown, and black shale. Lower 225 feet is black limy shale except for 20 feet of quartzite about 80 feet above base. Thin beds of fossiliferous impure limestone conspicuous in lower part above the lower beds of black shale.
Upper(?) Cretaceous	Beartooth Quartzite		66-142	Fine-grained quartzite containing thin black-shale partings locally. Conglomerate beds near top.
Lower Permian	Abo Formation		0-265	Red shale, mudstone, and limy mudstone containing lenses of algal conglomerate locally.
Upper Pennsylvanian	Syrena Formation		170-390	Impure limestone and limestone interbedded with irregular lenses of red calcareous shale and with shale beds particularly in lower 140 feet.
Upper and Middle Pennsylvanian	Oswaldo Formation		330-420	Blue-gray limestone, fairly pure except in upper part, interbedded with thin shale beds; gray to red siliceous shale or grit about 20 feet thick occurs at base; known locally as "Parting shale."
Lower Mississippian	Lake Valley Limestone		300-400	Limestone, pure crinoidal and massive in upper part, argillaceous and thin bedded in central part. Much nodular chert throughout.
Upper Devonian	Percha Shale		230-315	Upper member, or Box Member, is gray calcareous shale containing abundant limestone nodules; lower member, or Ready Pay Member, is black fissile shale, calcareous at base.
Silurian	Fusselman Dolomite		100-300	Gray cherty finely crystalline vuggy massive dolomite.
Upper and Middle Ordovician	Montoya Dolomite		300-350	Light-gray to gray very finely crystalline massive dolomite containing interbedded dolomite and dark chert in central part and concentrations of opalescent quartz sandstone at base.
Lower Ordovician	El Paso Limestone		500-519	Thin- to thick-bedded light-gray limestone and dolomite. Chert nodules in upper part; abundant fucoidal markings in lower part.
Upper Cambrian	Bliss Formation		140-188	Predominantly dark-brown massive quartzite, locally hematitic and glauconitic. Grayish-brown shaly dolomite and basal coarse conglomerate locally.
Precambrian				Granite, granite gneiss, and greenstone.

STRATIGRAPHIC COLUMN SANTA RITA QUADRANGLE GRANT COUNTY NEW MEXICO FIGURE 6



VERTICAL SECTION THROUGH THUNDERBOLT AND PEWABIC MINES. Upper, THUNDERBOLT MINE Lower, PEWABIC MINE FIGURE 7



V ERTICAL SECTION B – B' THROUGH LONE MOUNTAIN

FIGURE 8