TECHNICAL REPORT ON

THE RESERVES AND PROPOSED OPERATING PLAN FOR

THE PIMENTON MINE

Region V, Chile

Property owned by

Compañía Minera Pimentón

a Subsidiary of

South American Gold and Copper Company Ltd.

Report Prepared by
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SELTERS AND COMPANY LTDA.
Santiago, Chile
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September, 2002

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3. SUMMARY

The Pimenton mine, owned 100% by South American Gold and Copper Company (SAGC), began operations in early 1996, milling development ore to help offset mine development costs. Ore reserves were developed on several veins in the Lucho area and the mill was expanded from 35 tpd to 120-tpd capacity by October 1996. Operations were curtailed in mid 1997, due to a combination of falling gold prices, lack of prepared mine extraction stopes, and a severe winter storm associated with the El Indio weather condition which periodically affects the south Andean region.

The mine has been maintained on standby since 1997 with most equipment stored in warehouses in Los Andes, Chile.

Mineral Reserves and Resources : An updated estimate has been prepared, assuming a cut-and-fill mining operation producing between 70 and 120 tonnes of high-grade gold-copper ore per day.

Mineral Reserves are summarized as follows:

Reserves	Tonnes	Au .gpt	% Cu
Proven Mineral Reserve	17.800	18.7	1.57
Probable Mineral Reserves	50.000	18.7	1.56
Total Mineral Reserves	67.800	18.7	1.56

Contained	Gold,	0.60 ounces/tonne
	Gold, ounces	40.700 ounces
	Copper, pounds	2.3 million

These mineral reserves are based on channel sampling of veins at 1.5 meter intervals exposed in 2.260 meters of drifting on four levels spaced at 40 meters vertically (elevations 3.560, 3.510, 3.470, 3.430). The near vertical veins are calculated at a minimum mining width of 45 centimeters per segmented data from the rock-chip channels cut at 1.5 meter spacing in the back (or face) of the drift. The width and grade from each channel is then composited to vertical sections on 10-meter centers. Two or more sections with values above the cut-off grade form a resource block. Proven reserves are derived from Measured Resources by applying dilution and mining recovery to Mineral Resources volumes projected on vein structure for 5 meters upwards and 5 meters downwards from the sampled drift interval.

Probable reserves are derived from Indicated Resources by applying dilution and mining recovery to Mineral Resources volumes projected on vein structure from 5 to 20 meters above and below the sampled interval.

In addition to the minimum width of 45 centimeters, the reserve calculation incorporates 22% dilution on an average. Mining recovery is estimated at 98%. (using highly selective cut-and-fill mining with resuing).

Separately, Inferred Mineral Resources are estimated as follows:

Inferred Resources	**Tonnes**	**Au gpt**	**% Cu**
A. Projection (20 to 40 meters from Channel Sampling Zone) (down to 3.390) (Classified Possible in 1999)	37.000	18.4	1.45
B. Projection from 3.390 to lowest level of Drill Intercepts (3.185)	171.000	19.4	1.6

These Inferred Mineral Resources are distinct from the Mineral Reserves. The Class A Inferred Resources are projections from 20 to 40 meters vertically above or below the established Reserve Blocks as defined by channel sampling on existing level (s). This material was previously classified as “possible” ore reserves under Canadian NP-2A guidelines. This resource (Inferred Class A) is assigned a fairly high probability of being converted to Mineral Reserves during the first months of mine development when the new 3.390 level drifting is planned on the Lucho, Leyton, and Michelle vein structures. However, there is no assurance that the additional Mineral Reserves will be confirmed and therefore, these Mineral Resources are not included in the financial analysis presented in this report.

The Class B Inferred Resources are estimated by projection of existing Lucho area ore zones below the class A inferred blocks (elevation 3.390) down to an elevation of 3.185 meters where a diamond drill intersection indicates the continuation of high-grade ore to that depth. Drill hole intersections to depth have cut high-grade intervals as follows:

			Grades	
Elevations	**Vein**	**True Width**	**Au gpt**	**Cu %**
3185	Lucho	25 cm	21.3	7.05
3280	Michelle	36 cm	145.5	
3260	Manterola	35 cm	10.5	1.6
3300	Lucho	62 cm	49.4	2.23

Although these results are convincing evidence that high-grade mineralization at Pimenton extends to depth, the density of drill-hole intersections is such that these projections must be classified as inferred mineral resources. There is not enough data to assure economic vein continuity over the 210 meters of vertical distance.

The María Elena vein resources and the newly discovered Carmela area vein are excluded from the resource estimate, as they are currently outside the scope of the mining plan.

This estimate assumes a highly selective mining system: overhand cut-and-fill with "resuing". The narrow veins are carefully drilled and blasted to minimum mining width of 45 centimeters. Over break of 10 centimeters is assumed (dilution). Broken ore falls onto a stope floor where it is scraped to an ore pass. After every 2nd cut on the vein, the floor is removed and the wall slashed for fill to provide a 1.20 meter wide working space. The removable floor will be placed to prevent loss of fines into the fill.

As a part of the Preliminary Feasibility Study, the preferred Mine Plan "A" has been developed with a five-year time frame, which includes development of the Class "A" Inferred Resources for incorporation in the production plan.

Reopening the mine road and rehabilitation of the camp will be accomplished as early as weather and accumulated snow conditions permit, possibly as soon as November 2002.

During the period November 2002 to March 2003, the mill will be renovated and reassembled in a snow-proof structure while mine development proceeds to prove vertical vein continuity between levels, and to establish the first high grade extraction stopes. Milling operations are scheduled to start in March 2003, treating 2.000 tonnes per month (67 tpd). By September 2003, (end of SAGC's fiscal year), approximately 13.000 tonnes should be processed, assuming no significant delays from winter storms.

During the 2nd and 3rd year, mining and plant operations are currently planned for full year operations, extracting existing Mineral Reserves and completing new level exploration and development work to convert Inferred Mineral Resources to additional Mineral Reserves; sustaining operations and aiming for an eventual expansion to higher mining rates.

The intention is to reopen the mine under existing permits. The generally depressed state of small-scale mining in Chile should make this project attractive to regulatory authorities. Personnel should be available at reasonable pay rates due to the currently under-employed situation of miners in the small and medium-sized mine sector.

Economic Analysis

Under the guidelines of Canadian National Instrument 43-101, Financial Projections cannot be made which incorporate Inferred Resources. Therefore, a special mine plan, designated Mine Plan "B" has been prepared; based on extraction of only the existing Proven and Probable Mineral Reserves.

Summary of Economics (in terms of US Dollars):

For Mine Plan "B"

Investment	$ 3.0 million (new investment)
Cash Flow	$ 1.5 million per year (before Tax)
Pay Back	2.0 years (assuming gold price of $ 310/oz and copper at $ 0.68/lb
Cash Costs	$ 180/oz Gold (Net of By-product Credits)
Rate of Return	(on new Investment)
DCF – IRR	30% (during 3 years of mining proven and probable reserves)
Mine Life	34 months (existing Proven and Probable Reserves only)

Additional details are given in Section 25 of this report (p. 63).

John J. Selters

[Original Signed by: John J. Selters]

Independent Consultant

Qualified Person (QP)
Date of Signature:
September 30,2002

SEAL

John Joseph Selters
Register Professional Engineer
Nº 11381
State of Colorado

CERTIFICATE
(under s. 8.1 of NI 43-101)

Re: Technical report (the "Report") on the Reserves and Proposed Operating Plan for the Pimenton Mine, Region V, Chile (the "Property") of South American Gold and Copper Company Limited (the "Company") pursuant to National Instrument 43-101 ("NI 43-101")

I, John J. Selters, residing at Robinson Crusoe 1150, #903, Las Condes, Santiago, Chile, do hereby certify that:

1. I am an Independent Consulting Mining Engineer working for the Company.

2. I am a graduate of Colorado School of Mines, with a Engineer of Mines Degree, and have practiced my profession continuously since 1961; working in Peru and Chile from 1961 through 1971 and in Chile from 1988 to the present.

3. My statement of work history is attached. Recent relevant experience is as follows:

   (a) El Indio (Santiago, Chile) – President of gold and copper mining company with operations in the high cordillera producing 300,000 ounces per year of gold and 35,000 tonnes per year of copper. Mining systems included mechanized cut-and-fill with segregation of extremely high-grade ores for direct shipping to smelters.

   (b) Minera Can Can (Copiapó) – Gold mine: Mining Consultant responsible for conceptual design of underground mining systems for improvement of recovery and head grades.

   (c) Minera Cobrex (La Serena) - Copper mine: General Manager 1993 – 1994. Revised underground mining systems and develop new reserves to allow expansion of flotation plant from 400 tpd to 1200 tpd.

   (d) Minera San Esteban (Copiapó) – Gold-copper mine: Consultant on mining system planning and general operations improvement for three underground vein mines and a central flotation plant.

   (e) Minera Carola (Copiapó) – Copper mine producing 2500 tpd. Design and conceptual planning assistance on longer term mine operating strategy and design for underground blast hole stopes for steeply dipping copper ore bodies.

   (f) Andina Mine (Los Andes, Chile) 1968 to 1971, General Mine Superintendent during construction and start-up of a 10,000-tpd block-cave copper mine. Snow and avalanche safety systems applied in conditions similar to Pimenton Mine site.

(g) Cerro De Pasco Corp. (Peru) (1961 to 1968) Various positions; starting from Mine Foreman at Morococha, where I supervised mining of narrow veins with cut-and-fill and shrinkage systems. In 1966 I was appointed Project Manager for the design, construction, and initial operations of the 1000 tpd Cobriza flotation plant and underground mine producing copper concentrates from a remote location with self-contained campsite and power generation facilities.

4. I am a Professional Engineer registered with the Colorado State Board of Registration for Professional Engineers**.** I am also a member of the Canadian Institute of Mining, and the Society of Mining Engineers of AIME (USA).

5. I am a "qualified person" for the purposes of NI 43-101.

6. I prepared a Preliminary Review of Feasibility for the Pimenton Mine in 1999, now up-graded to a Preliminary Feasibility study during September of 2002.

7. I last visited the Property on February of 1999 for a period of **one** day.

8. I am the author of the Report (writing sections 1 through 8; 13 through 26). Sections 9 through 12 were abstracted from earlier reports on the geology of the property.

9. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, of which the omission to disclose would make the Report misleading.

10. I am independent of the Company upon application of the tests set out in section 1.5 of NI 43-101.

11. I have read NI 43-101 and Form 43-101F1 and the Report has been prepared in compliance therewith.

DATED this 30 th day of September, 2002

J o h n J . S e l t e r s

[Orignial signed by John J. Selters]

[Original has QP Seal]

Summary of Working Experience -- John J. Selters

Experience

1991 to Date>> J. Selters & Company Ltda., Santiago

- Consulting Assignments including project evaluations, mine design, and economic modelling for over twenty (20) copper, gold, and limestone properties.
- **VP of Operations** (Management Contract) with Northern Orion Explorations, Argentina (Vancouver) 1996-7. Feasibility Study of Agua Rica and San Jorge mine/mill projects with estimated capital of US$ 950 million and $ 110 million respectively.

General Manager for Cobrex S.A. (60% owned by Aurex, Vancouver) Expanded underground mine and flotation plant from 400 tpd to 1200 tpd copper ore.

1988 – 1991>> Bond International Gold Corp, Santiago, Chile (Denver, Colorado)

President & CEO- Compañia Minera El Indo and Compañía Minera San Jose

- Responsible for operations of the El Indio Mining complex with annual production of 200,000 ounces of gold and 35,000 tonnes of copper. Underground mining, 3000 tpd flotation and gold leach plant, concentrate roasters.
- Expansion of operations and construction of 2nd and 3rd roasters.

1985-1988>> Parsons Brinckerhoff Quade & Douglas, Inc. (New York)

Vice President -- Mining Development

- Project Manager, Alligator Ridge Gold Recovery Plant Expansion, Ely, Nevada. For 1000 tpd plant, completed feasibility study and EPCM through start-up in 11 months.
- Project Manager, Niagara Power Plant Expansion Study

1982 – 1985>> American- Arabian Oil Company (Dhahran, Saudi Arabia)

Senior Project Manager -

- Large underground cavern project (s): oil storage facilities
- Preliminary feasibility study for multibillion dollar project.

1971 - 1982 Gulf Mineral Resources Co. (Gulf Oil), Denver, Colorado

General Manager of Tract Operations, Rio Blanco Oil Shale Demonstration Plant, underground Modified In-Situ Retorting

Senior Project Manager - Mount Taylor Uranium Mill Design

Project Manager - Mount Taylor Mine Development Project

- Design, contracting, and construction of Mine Hoisting plant and two shafts 3,300 feet deep to access uranium ore bodies in sandstone with significant inflows of hot water.

1961 - 1971 Cerro Corporation (New York, Lima, Santiago)

General Mine Superintendent - start-up Andina copper mine near Santiago, Chile, block- caving copper mine, 10,000 tpd

1961-1971 Cerro Corporation (Continued)

Project Engineer/ Operations Superintendent - built Cobriza copper Mine, Peru, Underground mechanized cut-and-fill. 1000 tpd

Assistant to General Mine Superintendent, Peru, coordination for six mines, New Mine Project Engineering and Evaluations

Mine Foreman - Morococha, Peru, Narrow Vein mining, cut-and fill with resuing, static shrinkage, draw shrinkage.

Education

- Engineer of Mines, Colorado School of Mines, Golden Co.
- Executive Development Program, University of Michigan
- Registered Professional Engineer, Colorado

Memberships

Society of Mining Engineers (SME);
Canadian Institute of Mining- President of local Santiago Branch of CIM;
Institute of Mining Engineers, Chile; Toastmasters International, Santiago

4. INTRODUCTION AND TERMS OF REFERENCE

a) Terms of Reference

- The format of this report complies with Form 43-101F1, part of Canadian National Instrument 43-101, Standard of Disclosure for Mineral Projects.
- The Pimenton Mine is owned by South American Gold and Copper Company Ltd. (SAGC), a company listed on the Toronto Stock Exchange.
- Compañía Minera Vizcachas and Compañía Minera Pimenton are subsidiary companies of SAGC.
- BTX is a company formed by M. Bernstein and D. Thomson, which identified Pimenton in the early 1980's, and later acquired control.
- ENAMI (Empresa Nacional de Minería) an enterprise owned by the government of Chile. ENAMI operates two custom copper smelters in Chile. One, Ventanas, is located about 192 kilometres from Pimenton.
- SERNAGEOMIN (National Mining Service). The entity that oversees mining activity in Chile, with particular emphasis on safety and permitting of projects.
- All monetary amounts are in US Dollars $, or Chilean Pesos CHP unless otherwise indicated.
- All measurements are in metric units unless otherwise indicated. The term tonne or tonnes refers to a metric tonne (1,000 kg or 2,205 lbs).
- Gold amounts may be referred to in terms of grams/tonne or in ounces. (1 ounce troy = 31.1035 grams).
- Mining levels are named by approximate elevation in meters above sea level.
- Geographic locations are expressed in terms of the Universal Transverse Mercator (UTM) System, Band Nº 19, based on the CANOA Survey of 1956. All mining claim surveys in Chile are referred to this system of coordinates, which is linked to the Geodetic survey of Chile.
- Adits are mining tunnels driven from the surface usually with a slight grade (1%) towards the portal to drain water by gravity.
- Drifts are tunnels driven along a vein or mineralized structure.
- Crosscuts are tunnels driven in waste rock at oblique angles to the direction (strike) of mineralized veins.

- Raises are vertical openings, often driven between levels following a vein to prove continuity of the vein.
- Stopes are extraction openings formed by drilling, blasting and removing ore for recovery of valuable metals in process plants.
- Overhand cut-and-fill stoping, is a system consisting or drilling and blasting a sequence of overhand cuts, removing the ore with scrapers or mechanical loaders and filling the space to an appropriate level to provide a working floor for drilling the next cut.
- Cut-off Grade: the minimum metal content (or breakeven value), expressed in grams of gold per tonne, required to pay all costs of operation, including exploration, mining, processing, and delivery to market via smelting and refining. Copper assays are converted to gold equivalents by a formula, which considers relative metal prices, mill recoveries, and smelter terms.

b) Purpose

This report is prepared to present and cross reference current scientific and technical information on the Pimenton Mine with an estimate of Mineral Reserves and exploration potential, including a referenced Preliminary Feasibility Study outlining economic viability of a plan for reinitiating and sustaining the production operations from high-grade gold-copper veins.

This report is confined to the high-grade vein mining aspect of the Pimenton mine only. The potential and economics of low-grade bulk-mineable resources in the Pimenton area are not within the scope of this report.

c) Sources of Information and Data

The report has been prepared using data from SAGC's Santiago office files, including specific reference to the following reports.

- "The Geology, Mineral Resources and Potential of South American Gold and Copper Company Ltd.'s Pimenton and Halcon Prospects" – by Robert A. Lyall, Santiago, Chile, 1996. (the "Lyall Report")

- "Description of Concentrator Plant Process" by J. Omori, Superintendent of Plant, October 1996. (in Spanish)
- "South American Gold and Copper Company Limited Mineral Properties. Chile and Peru, Pimenton Gold – Qualifying Report by Behre Dolbear and Company Ltd., Toronto, Nov. 26, 1996. (the "Behre Dolbear Report")
- "Detailed Scoping Study, Compañía Minera Pimenton, Pimenton Gold Mine" Internal Study reviewed by external Consultants in September 1997, Santiago, Chile. (the "Scoping Study"). This includes a set of Plans and Sample Database in Excel Files.
- "Pimenton Tailings Deposit", by Geotécnica Ltda. Chile
- "Preliminary Study of Feasibility of Restarting Operations", John J. Selters, first issued July-August 1999 and then expanded and updated to August 2002. (the "Feasibility Study")

A more complete list of references is included in Section 23 of this Technical Report.

d) The Extent of Field Involvement of Qualified Person

John Selters, Qualified Person (Q.P.) and author of this report, visited the Pimenton Mine in March of 1999 and inspected three levels – 3510, 3470, and 3430 in the Lucho area. The four adits on the María Elena vein were also inspected. The purpose of the site visit was for orientation and confirmation of mining conditions prior to developing a scheme for restarting the mine. Considerable time was also spent inspecting the mill, tailings area, and the camp facilities. This inspection was conducted in company of senior executives of SAGC.

At the time, the mine had been closed for two years (since May of 1997). There were no significant rock stability problems observed in the underground workings. The heavy snow load of the 1997 winter had damaged the mill buildings and some elements of the camp. The basic mill equipment (ball mill, crusher, and flotation cells) were observed to be in place and appeared undamaged.

In July 1999, the QP inspected SAGC's Los Andes shops and warehouses to review the status of the mine equipment, electrical motors and switchgear that had been stored at that location, pending reopening of the mine.

5. DISCLAIMER

In the preparation of this report, the Qualified Person (QP) has relied on Mr. Lyall's report on the general geology and his description of the sampling procedures being applied when he visited the mining development headings. This is in addition to discussions with owners and former supervisors. The QP has relied on the sample data and mine maps provided by SAGC.

The validity of prior operating permits for reinitiating the operations is confirmed by informal consultations with SERNAGEOMIN.

Water quality data and water rights information has been supplied via reports from SITAC, a company specialized in mining industry water management in Chile.

With regard to metallurgical performance, the QP has relied on the daily Plant metallurgical balance sheets and the smelter settlement sheets, which have been reconciled for the period from May 1, 1996 through February 1997.

6. PROPERTY DESCRIPTION AND LOCATION

a) The primary Mining Claims at Pimenton constitute 2.660 hectares. Additional protective claims cover 110 hectares. (Figure 2, Section 26)

b) Location:

The center of the mining area is (UTM coordinates):

N - 6.407.500 m

E - 386.000 m

The geographic coordinates (approximately) are:

70º12' West longitude

32º28' South latitude

This location is within the San Esteban Comuna, in Los Andes Province of Chile's Fifth Region. The town of Los Andes is the administrative center for legal matters pertaining to the project. (Figure 1, Section 26)

c) "SAGC's mineral rights are secured by a block of continuous mining claims (Pertenencias) Pimenton 1 to 532 covering an area of 2.660 hectares, within a rectangular figure of 6 kilometres north-south by 5 kilometres east-west. (the Lyall Report) (See figure 3)

d) These exploitations claims were surveyed in 1984 by BTX and are now annotated in the name of Compañía Minera Pimenton by the Mining Property Registrar in Los Andes. They are the equivalent of patented claims in North American and are valid mineral property rights so long as the annual fees of 0.1 UTM per hectare is paid (approximately US$ 4.00 per hectare). The patent fees have been paid to March 2003.

The surface rights in the area are the property of a group entitled Comunidad Los Campos de Cerro Gallegos. Compañía Minera Pimenton has been assigned the agreement with the Comunidad, which grants rights-of-way ("servidumbre") to the former to carry out explorations and mining operations, including the construction of camps, plants, waste deposits and tailings dams, in accordance with Chile's Mining Code. The area subject to the agreement covers all of the claims area, plus sectors in valleys south of the claims, for a total of 3.751 hectares, plus the right to construct improved access roads in the main valley, and a possible power line. These rights are maintained by payment of an annual fee to the Comunidad. (200 UF = US$ 4.800, payable in September).

e) The mineral property survey was registered in 1984 as part of the process (mensura) for obtaining the permanent exploitation claims. Surface rights of way have been marked on a 1:50.000 scale map, which is part of the rights-of-way agreement.

f) The location of mineral reserves, mineral resources, mine workings, plant and tailings areas are shown on figure 4, (Section 26).

g) Production from the property is subject to a net-smelter royalty (NSR) of 5% payable to two individuals, one of whom is a director of South American Gold and Copper Company.

h) The magnitude of environmental liability has not been quantified. The Pimenton Mine and Plant operation was approved on a voluntary Environmental Study and initiated before enactment of the current environmental legislation. The mine closure plan requires:

- Securing all mine openings against entry
- Removal of all equipment and structures
- Capping and revegetation of tailings and waste rock dumps

i) In 1996-97, the Pimenton Mine was operating with all applicable permits. A list of these permits is included in the references. A permit to raise the current tailings containment dikes was obtained in April 1997. These permits are still in effect. An expanded tailings storage facility will be needed within two years after restarting the operation, which will require a 2nd revision to the tailings deposit permit.

7. ACCESIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

(Portions of this Section are taken from the Lyall report)

a) The area of interest lies near the headwaters of the Río Colorado, a major south flowing tributary of the Aconcagua River in mountainous country, close to the Chilean-Argentinean border. The mine is 22 kilometers due north of Portillo, a ski resort that is near the Libertadores Pass on the international highway to Argentina.

The project area occupies two parallel southeast trending glacial valleys separated by a steep ridge, within an area of 4 x 5 km, and at elevations between 3.200 and 4.400 m.a.s.m.l. (Fig. 10).

The ridges are extremely steep and are prone to develop snow avalanches during winter storms.

The vegetation and fauna are sparse as is typical of the high cordillera of the Andes of central Chile. Wildlife includes guanaco, vizcachas, and condors.

b) Access is via the main international highway between Santiago or Valparaíso and Mendoza (Routes 57 and 60) to the Maitenes hydroelectric plant, 12 km east of the town of Los Andes. From this point, the project is reached via a gravel road, which climbs to a pass at 3.400 meters elevation to descend again to the level of the Río Colorado at 2.500 meters thereafter following the course of the river to 3.000 meters elevation where the road climbs steeply to reach the Pimenton camp site and plant at 3.400 meters. The total road distance to Santiago is 174 km of which 84 km is the unsurfaced section from Maitenes to Pimenton. (Fig. 1, 4 – Section 26).

c) The nearest established living area is the Aconcagua Valley, beginning at Maitenes where rural housing and small villages have built up along the river for 12 kilometers downstream to Los Andes, a town of about 150.000 people. Transportation to the mine will be by contracted bus and van from the Aconcagua Valley and Los Andes.

d) The climate in central Chile is Temperate Mediterranean, with rainfalls in the range 350 mm to 1.500 mm, much of which falls in the winter months of April to September. Above 2.500 meters elevation, this precipitation is in the form of snow that may give rise, in severe winters, to heavy accumulations, particularly on south facing slopes.
Temperatures in the project area typically range from 0ºC to 18ºC in summer and from minus 10ºC to 0ºC in winter. Vegetation and fauna are extremely sparse.

e) Sufficiency of water rights and infrastructure.

"Consumptive water rights would be difficult to obtain in this area, since the Río Colorado is part of the catchment which feeds towards one of Chile's most prosperous fruit growing areas, and additionally, this river's yield is used in a small privately owned hydro electrical plant at Maitenes in the Aconcagua valley.
However, Chile's Water Code concedes the right of any mine owner to consumptive use of any water made in his mine workings. Underground adits at Pimenton have each encountered minor flows, quantities of which can be expected to increase as the workings extend in length and depth below surface. (the Lyall Report – 1996)

After review of water documents, the QP opinion is that Pimenton has adequate water rights for mining and milling operations for the restart program at 120 tpd and up to 250 tpd.

The water rights documents show the following:

- Non-consumptive rights to 60-liters/ sec of stream flow on Quebrada Pimenton where an intake is installed. Resolution Nº 120, January 9, 1990 DGA.
- Non-consumptive rights to 600 liters/sec on three other creeks in the area.
- Eventual consumptive rights to 80 liters/sec of stream flow on Los Azules creek. This right can be applied when downstream users (power plant and irrigation companies) are satisfied and there is excess stream flow. This water right could be combined with a water storage facility to capture excess flows during the spring runoff. Resolution Nº 44, 12 January 1990, DGA.
- Consumptive right to all water found in underground workings. When last measured, 14 liters/sec was flowing from the bottom level of Lucho area. This water right is established in the Chilean Water Code.

For the current scale of operation at 2.000 tonnes per month, (67 tpd), and up to 200 tpd, the following considerations apply.

Power is best generated at the mine site with diesel generators. A 60-kilometer power line is required to connect to the power grid.

Mining personnel are generally available in the Los Andes area. Adoption of long-term rotating shifts can allow employment of miners and plant operators from as far as La Serena and Santiago.

Space for processing plants and mine facilities and tailings is limited to a small area in the upper Pimenton Quebrada that is safe from snow avalanches.

8. HISTORY OF THE PROJECT

(This information taken from the Lyall report and the Scoping Study)

"Pimenton was first recognised as an area of interest in the course of a regional exploration programme of the high Andes in Chile carried out by Bernstein and Thomson Ltda. (BTX), in partnership with Anglo American and Cominco (ANCOM). This programme consisted of aerial recognition of colour anomalies representing areas of hydrothermal alteration, followed up by helicopter supported reconnaissance sampling. The Pimenton claims were established by ANCOM in 1981, together with claims over a number of other colour anomalies in the same general area.

"COMINCO carried out helicopter supported regional geological and geochemical work in these areas between 1982 and 1984. However, ANCOM decided to discontinue work at Pimenton, and under the terms of their agreement the mineral rights became the property of Bernstein and Thomson Ltda. (BTX).

"Next, BTX entered into an option agreement with Newmont Mining Chile Ltda. to explore Pimenton (Newmont had also negotiated an agreement with ANCOM to acquire the company's adjacent Novicio, West Wall and North Arm prospects).

"Newmont initiated a programme of geological mapping and geochemical sampling and scout drilling to detect epithermal gold targets in 1985. This programme was initiated based on transport by mules and helicopter, but in 1987, financed by Newmont, BTX completed the opening of the present access road to the mine, which enabled some bulldozer trenching to be carried out, facilitated access for drilling and enabled the first exploration adits to be driven on the narrow but rich gold-bearing veins which had been located in outcrops in the south of the prospect area.

"Newmont, whose prime model was large volume bulk mining deposits and a large part of whose effort in the area had been expended on the nearby Novicio property, returned the property (Pimenton) to BTX in 1988.

"BTX mounted a small, labour intensive semi-mechanised operation, driving adits on the narrow veins which had been located. Hand cobbed ore was sold directly to ENAMI's Ventanas smelter, and during 1991 and 1992, 1.182 oz Au was credited from 192 tonnes of ore dispatched, (6.16 oz Au/ tonne).

"A new option agreement was signed with Mount Isa Mines, who carried out a one-season (1993) programme to investigate the porphyry copper potential in the area. They selected a zone for testing in the west of the property, and drilled four 400-foot boreholes, all of which encountered pervasive albitic, siliceous and sericitic alteration, with only weak films of chalcocite enrichment on pyrite. MIM concluded that any hypogene centre of potential interest would only occur at considerably greater depth.

As Compañía Minera Pimenton continued work on developing the high-grade vein system, the company was vended into South American Gold and Copper Limited. (SAGC), a listed company on the Toronto Stock Exchange. SAGC invested in further exploration and development and the construction of a small pilot-scale treatment plant with a 35-tpd capacity. This plant originally included a cyanide leach circuit, which was later converted to flotation and gravity to better deal with the predominately sulfidic ores. The 35-tpd plant was subsequently upgraded to 120 tpd by the installation of a larger ball mill, a larger crushing unit and additional flotation capacity. Four levels in the Lucho area were developed and another four levels in Maria Elena. Development was focused on adding to reserves, primarily on the Lucho/Leyton and Michelle veins.

c) Previous Estimates of Ore Reserves and Resources:

1) October, 1996. Robert Lyall reviewed the ore reserves of Minera Pimenton and incorporated the following estimate in his report.

Total Proven and Probable for all veins (including María Elena) 50.242 tonnes at 18.63 gpt Au and 1.54% Cu. This estimate lacks mining recovery to comply with NI 43-101. No Feasibility Study was prepared.

2) November 26, 1996. Behre Dolbear and Company Ltd. published the same reserve estimate in the Behre Dolbear Report:

Total Proven and Probable for all veins: 50.242 tonnes at 18.63 gpt Au and 1.54% Cu. This estimate lacks mining recovery to comply with NI 43-101. No Feasibility Study was prepared.

3) September, 1997. Detailed Scoping Study, Pimenton Mine. This estimate was prepared on the basis of shrinkage stoping at 450 tpd with higher dilution:

Proven Ore	22.944	at	13.91 gpt Au Equiv.
Probable Ore	64.562	at	14.17
Possible Ore	32.598	at	13.8
Drill Inferred	120.313	at	14.62
Inferred	300.781	at	14.62
Total Stope Resource	541.198	at	14.48 gpt Au Equiv.

This estimate is not in compliance with NI 43-101. The categories are different and Possible/Inferred Categories cannot be added to proven and probable reserves. An Economic Feasibility Study was prepared.

4) July, 1999. Preliminary Study of Feasibility of Restarting Operations by J. J. Selters. Based on a highly selective mining system, the estimate for Lucho area was:

Proven	16.334	tonnes @	21.2 gpt Au Equivalent
Probable	46.554	tonnes @	21.58
Possible	24.852	tonnes @	21.05
Total	87.740	tonnes @	21.04

This estimate includes dilution and mining considerations but does not qualify for NI 43-101 criteria because the "possible" category cannot be added to reserves. Preliminary Feasibility economics were included in the Study.

Estimates of Potential:

October 1996. R. Lyall, Referring to earlier estimates by Bernstein and Thomson, "Estimates which indicate total gold contents of the order of 1 million ounces or more, therefore, are considered valid for Pimenton".

This estimate complies with NI-43-101 only in the sense of identifying exploration targets (exception Part 2.3 (2)).

d) Production History

i) During the first two years of BTX exploration (1991-1992) with adits on the Lucho vein near elevation 3.600, high-grade direct shipping ore was sold to ENAMI's Ventanas Smelter:

Tonnes Sold	192
Au Credit	1.182 ounces
Grade	6.16 oz/t
	191 grams Au/tonne

ii) In 1993, South American Gold and Copper Company Limited entered into an agreement with Compañía Minera Pimenton to earn up to a 56% ownership interest in the property by financing development of the high-grade vein system along with the purchase and installation of a pilot-scale gold flotation/cyanidation plant rated at 35 tpd.

After permitting and construction, the 35-tpd plants began operating in the summer season of 1995-96. In November 1996 South American Gold and Copper Company entered into an agreement to acquire the remaining 44% interest in Compañía Minera Pimenton.

By April 1st 1996, the plant had been credited with 241 tonnes of concentrate averaging 114 grams Au per tonne (3.66 oz/t), plus three shipments of doré containing 162 ounces of gold. No mill operating records were found for this period.

iii) Beginning May 1st 1996, through February 1997 the mill operated with assay control and a Metallurgical Balance Calculation that corresponds well with Concentrate Settlements at the Ventana Smelter. By November 1996, the 35-tpd plant was expanded to 120 tpd.

	ENAMI Receipts	Pimenton Mill Shipments
Tonnes Concentrate (Dry)	402.91	394.45
Payable Gold, grams Au	78.169	76.342
Grade, grams Au/tonne	194.0	193.5
Ounces Au/tonne	6.23	

Thus the total recorded production of gold from Pimenton is summarized as follows:

		Tonnes Conc.	**Au gm/t**	**Gold Ounces**
i)	BTX – 1991, 92	192		1,182
ii)	Concentrate to April 1996	241	114.3	884
	Doré (Feb. – Mar. 96)			162
iii)	Concentrate – May 96 to Feb. 97	402.9	193.5	2.513
				4.741

- The recorded copper content of concentrates during periods (ii) and (iii) was 110 tonnes.
- In addition, there are undocumented reports that mill cleanups after shutdown may have yielded another 200 to 300 ounces of gold.

This production is mostly from milling of diluted ore from development work. Systematic production mining has not yet been applied at Pimenton.

9. GEOLOGIC SETTING

(This information is taken from the Lyall Report)

"*Regional Geology* : Chile's most important mineral deposits lie in the "Copper Belt", the great alignment of major porphyry deposits which parallels the Andes in an extension from the Cuajone, Quellaveco and Toquepala deposits of Southern Perú, through Collahuasi, Chuquicamata, Escondida and Salvador in Northern Chile, to Pelambres/Pachon, Andina/Disputada and El Teniente in Central Chile. The belt in fact consists of a series of sub-belts, which become progressively younger to the south and east and important auriferous sectors have been discovered in the Maricunga and El Indio sectors.

"Pimenton lies squarely within the belt mid-way between the major porphyry copper centres at Pelambres/Pachon to the north, and Andina/Disputada to the south.

"The regional geological map shows a predominance of the Upper Cretaceous to Lower Tertiary Abanico Formation. This unit comprises a sequence of volcanic rocks, mainly of andesitic composition, including lavas, porphyritic flows, breccias and pyroclastics, intercalated with continental sandstones, bedded tuffs and occasional intercalated ignimbrite and rhyolitic flows. Its total thickness is estimated at 3.000 – 5.000 m. Rocks of this group have been dated at ages ranging from 16.4 to 64.3 m.y. Plutons intruding the sequence have ages between 16 to 19 m.y.

"The Abanico Formation is overlain unconformably by the mid-Tertiary Farellon Formation. This unit contains typically welded dacitic tuffs, thick flows of basic andesitic lavas and fine clastic sediments. The basal unit consists of a sequence of ignimbrite flows some 120 metres thick and the entire formation is of the order of 1.600 m thick. Radiometric ages of 10 to 20 million years are recorded.

"Intrusive rocks in the area include plutonic and hypabyssal bodies of varied composition and dimensions. The plutonic rocks occur principally as stocks with dimensions ranging from a few sq. Km to 50 sq. Km, and are typically monzonitic biotite granites, or quartz-biotite-amphibolite diorites. These rocks are accorded a lower Miocene age, and are intrusive into the Abanico Formation, but are pene-contemporaneous with the overlying Farellón Formation.

"A younger system of hypabyssal intrusives, in the form of dykes and volcanic rocks, occur in the north and east of the Pimenton. These rocks consist essentially of porphyritic dacites, with phenocrysts of plagioclase and biotite, and they are associated with areas of hydrothermal alteration. Age determinations of 7 to 10 million years have been registered in these rocks.

"These formations are disposed in a broad regional Synclinorium, whose west limb dips eastwards at a moderate angle. The east limb dips steeply westwards, near vertical at times. The centre of the structure presents folds of varying amplitude -- a N-W trending anticline is recorded in the project area. Faulting and fracturing on NS and NW-SE trends are recognised in the area.

"Superficial deposits consist of extensive alluvial valley fill in the major drainage courses in the west of the region, giving rise to large areas of cultivation, and accumulations of glacial moraine in the high valleys of the Cordillera.

9.1 *Detailed Geology Project Area (fig. 5)*: " Within the project area, andesitic lavas, lithified tuffs and agglomerates are intruded by stocks of monzonitic and granodiorite composition, with late stage tourmaline breccia bodies.

"In their study of the project, Mount Isa Mines divide the area of the project into two sectors divided by the Pimenton valley, which is largely filled by glacial and alluvial material.

"To the west, the Abanico Formation is represented by a thick sequence of dacitic or rhyodacitic crystalline tuffs, overlain in the north-western part of the area by andesitic lavas. Granodiorite and monzonite intrusives outcrop in the higher ground west of the Pimenton valley. The western side of the valley is divided into three sectors, separated by two NW trending faults denominated the Guanaco and Condor faults. Between the faults, the intrusive consists of a highly altered monzonite, with stockworking related to the fault margins.

"In the eastern sector, the intrusive rocks are reported to be more abundant, and are predominantly monzonitic, with some dioritic stocks. Stockworking is stronger than on the west with multidirectional quartz veining.

"Hydrothermal breccias occur in the eastern sector, one forming the highest point on the dominant ridge east of the Pimenton valley, and a second at lower elevation to the south east on the same ridge. The upper breccia occupies an area of 120 x 80 metres, and consists of a matrix of tourmaline, anhydrite and pyrite enclosing angular fragments of monzonite porphyry with strong sericitic alteration.

"Hydrothermal alteration has affected all the rocks within an area of some 5 x 4 km centred on the Pimenton valley, and on surface a strong colour anomaly with red, brown and yellow tones produced by hematite, jarosites and clays is present. Within this outer argillic limit, zones with quartz sericite alteration form the ridges that flank the valley, with strongly silicified sectors in the central part of the East Ridge, and southwest end of the west ridge.

"Strong NW-SE faulting is present, with the Guanaco and Condor faults having marked surface traces with clay or limonitic infilling and fracturing in the walls.

"Quartz veining is widespread but has to date been best studied in the Lucho sector, where veins denominated Lucho/Leyton, Contacto, Donoso, JT, 70 and Michelle have been mapped. In the west sector, another group of veins including María Elena, "C", Patricia and Javier are identified.

"In both areas, the general trend of the veins is N 30º E, compared to the general fault and structural direction of NW, which the veins of the western sector favor.

Within the Lucho area, a fault denominated Angelica (trending NW-SE) was encountered during underground development. This fault causes minor offsets to the N30E trending veins.

10. DEPOSIT TYPES

Early work by Newmont, and Mount Isa Mines was focused on finding large-tonnage, bulk mineable ore bodies that typically occur beneath or adjacent to veins carrying high-grade gold-copper mineralization. Although to date no positive indications of such a gold copper porphyry system have appeared, the model of ore deposit formation supposes such a mineralizing center at greater depth.

Breccia pipes have been identified in two zones on surface and may be targeted for exploration at depth, as they constitute “fractured ground” which may have been open at the time of gold deposition.

Underground drifting and drilling has encountered some “stockworks” areas grading on the order of 1 gram Au per tonne. However, to date, these occurrences have not been perceived as coherent ore bodies of a size amenable to low-cost bulk mining.

The narrow, quartz-sulfide veins, particularly those trending N30ºE, have the only demonstrated economic potential, and they are the focus of this technical report.

As seen on Figure 6, the surface gold anomalies are closely associated with magnetic alignments (N30º-40ºE) that have been found to correlate with the quartz-sulfide veins.

Some 17 alignments are observed on the Geochemical-Magnetic plot, with spacings of 150 to 200 meters. In the Lucho mine area, two of these alignments correlate with the Leyton/Lucho vein and the Michelle vein, both trending N30ºE and dipping 75º to the East. Over 80% of the current reserves are developed on these two veins, between elevations 3.600 meters (ridge top) to 3.430 meters (current bottom level).

During the summer of 2002, a new vein, named Carmela, was opened about 800 meters to the South East of Lucho area. This vein seems to fit the pattern of parallel veins.

Moving north-westward from Lucho area along the Pimenton East Ridge, the gold anomalies continue up to 4.000 meters elevation, with N30ºE trending, magnetic alignments crossing the ridge for distances of 1.200 to 1.500 meters.

Thus the exploration/development model for Pimenton is:

- Develop 3.390 level beneath the existing Lucho area reserves.
- Mine existing reserves in Lucho area from 3.390 level upwards.
- Drive access tunnels to reach the drill inferred resources beneath the Lucho area veins. These lower crosscuts will explore for new veins to Southeast (Carmela and between).
- At greater depths, the Lucho area veins will be explored to the Southwest, as they may continue beneath the gravels of Quebrada Pimenton.
- A 3.390 level crosscut extending to the Northwest of Lucho area can explore the vein potential at depth along the Pimenton ridge, providing exploration, rapid development access and a year-around ore haulage way beneath this rugged terrain.
- As the high-grade areas are opened to the northwest, new geologic information may lead to the discovery of coherent bulk-mineable deposits of sufficient grade and size to justify mining and milling installations of a much larger scale.

11. MINERALIZATION

(From R. Lyall Report)

The focus of this report is the high-grade gold-copper veins, which are the only economic mineralization discovered to date. In his early studies of the property, Bernstein recognised three vein types:

A. Pyrite chalcopyrite barite quartz veins. Which range from narrow veinlets to massive sulphide veins individually of 50 centimeters. These veins carry very high gold values, trending North 30 E
B. Pyrite with saccharoidal quartz veins is normally flanked by strong clay or sericite zones, and carry moderate gold values. These veins trend N30ºW
C. Pyrite magnetite veins occur in the margins of siliceous masses, are accompanied by gypsum in their margins, and generally carry gold values of the order 0.3 to 1 g/ t Au.

VEIN DESCRIPTION

(Taken in large part from the Scoping Study)

LEYTON VEIN : The Leyton vein is a Type A vein, with a known strike length of some 300 meters. It is predominantly Pyrite/Chalcopyrite vein. To the south, Leyton lies in a Clastic tuff forming ribbon veins with alteration extending as much as a meter from the vein. An example is the Leyton south on the 3.470 level. In the tuffs the alteration is predominantly argillic with some silicification and disseminated pyrite. To the north as Leyton enters the Porphyritic andesite or fine-grained tuffs, the vein becomes tighter with a pervasive propylitic alteration with little or no alteration of the wall rocks. Here the veins are predominantly massive sulphides, almost exclusively Pyrite/Chalcopyrite. The trend of these veins ranges from 0 to 35 degrees north East with N30E as the preferred direction. Some 45 meters north of the Angelica Fault, Leyton and Lucho Join together. To the north of this joint, the vein has produced some of the highest consistent assays for gold and copper recorded in the mine. The combination of Lucho/Leyton is still in the face in the 3.430 level but not in any of the upper levels. The trend of Leyton varies from 0 to N30E dipping to the east at 75 degrees.

LUCHO VEIN : The Lucho vein is a Type A vein, which has a strike length of some 250 meters. It is a predominantly Pyrite/Chalcopyrite vein. Lucho behaves in much the same way as the Leyton vein. The only real difference is the lower copper values of Lucho compared to Leyton, when it lies in the Clastic tuffs. On the 3.430 level Lucho has only minor displacement to the east at the Angelica Fault. However on the upper levels Lucho either fails to cross Angelica or dies out after 30 meters. The trend of Lucho is N30E dipping to the east at 75 degrees.

MICHELLE VEIN : Michelle has a strike length of over 300 meters. The Angelica fault marks the divider between the Clastic tuffs to the south and the intrusive to the north. To the south of Angelica the vein is up to 1.2 meters wide with either intense stockworks or strong ribbon veining Michelle South differs from Lucho South in that copper values often exceed 3% copper. To the north, the vein is a tight 10 to 40 cm wide massive sulphide vein with little or no alteration apart from the pervasive propylitic alteration. The trend of Michelle is N30E dipping from 65 to 75 degrees to the south.

KATHY VEIN : Kathy is an eastern split of the Lucho/Leyton vein. It has all the characteristics of the Lucho vein and the vein is currently exposed in the northeast face. It has a strike length of 50 meters. The trend of Kathy is N35E, the dip ranges from 75 to 85 degrees east.

MANTEROLA VEIN : Manterola lies in clastic tuff breccias and tourmaline breccias. It has a strike length of 40 meters before turning west where the grades become more erratic. There are two parallel high-grade pyrite/chalcopyrite veins that seldom exceed a 10-cm width. These veins are roughly one meter apart. Parallel and in-between these veins run 1 mm fractures that carry good gold values as well.

The gold occurs both as free particles and as inclusions within sulfides.

The copper occurs primarily as chalcopyrite.

12. EXPLORATION

The primary topic of this report is the reserve and production possibilities on the narrow gold-bearing veins at Pimenton. The related exploration work is described (the Lyall Report) as follows:

Results of the Work Program to date (Fig. 5 and 6) : During the course of the successive field programs carried out on the project activities have included surface geological mapping, geochemical sampling, road trenching by bulldozer, diamond drilling, and underground adit development, with attendant geological mapping and detailed sampling.

Surface geological maps of the area are the result of observations by geologists from COMINCO, Newmont, MIM and Cía. Minera Pimenton. The area is of difficult access. Early programs were carried out with helicopter access, and in some areas of hazardous terrain, particularly in the high ground on the central ridge in the project, the support of trained mountaineers was required. Snow accumulations shortened the period of access to higher areas in most seasons. Lower slopes are more accessible.

The geology described in the previous sections is the result of the accumulated evidence of these programs.

Geochemical sampling programs have consisted in collection of –80 mesh screened scree material from the steep flanks of the Pimenton valley, and the west flank of the adjacent valley to the northeast. Because of the nature of the terrain, samples were collected initially on contour traverses along the scree slopes parallel to the ridges. Only in the upper, northeastern part of the Pimenton valley, was it practical to run four parallel SE trending traverses. The overall density of geochemical sampling is therefore low in relation to the surface area of the prospect, and is especially low in the flank of the valley, parallel to Pimenton, in the northeast. Samples were analyzed in Geolab, Santiago by atomic absorption, after attack by bromide hydrobromic acid, for gold, and after agua regia attack, for Ag, Cu and Zn. Values anomalous in gold (greater than 100 ppb) occur on both flanks of the central ridge on the project, and on the southern part of the southwestern ridge, with peak areas carrying 500 to 2.500 ppb Au. Anomalous copper values are also recorded. The area carrying anomalous gold values occupies an area roughly 2.5 x 1 km on the east flank of the Pimenton valley, and 1.5 x 0.5 km on the west flank.

A magnetic survey was conducted initially COMINCO with later details by contracted personnel operating a company-owned magnetometer. The survey was conducted by traversing the rugged terrain on approximately 25-meter contour intervals.

Refer to Figure 6, Pimenton Geochemical Anomalies (Section 26, Illustrations), for a plot of these survey results.

With reference to the specific paragraphs of NI 43-101 FI.

a) Geochemical and geophysical exploration (GC/GP). Fig. 6 is a map showing geochemical gold anomalies and some magnetic alignments. The first survey was contracted by COMINCO with later details added by SAGC personnel and sub contractors.

b) As a result of this GC/GP work, several adits were driven on vein structures in the Lucho area, confirming the occurrence of high-grade gold veins in proximity of the anomalies, and leading to development of the current mine recoverable reserves.

c) These surveys were carried out by contracted personnel under the direction of Dr. David Thomson, Director of Exploration of SAGC.

d) The data and resultant map of geochemical anomalies has been instrumental in focusing the development work to date, which has developed reserves on the more accessible veins in one small sector (Lucho area). This validated the use of geochemistry and magnetic surveys in guiding future drift and crosscut development in search of additional veins and/or shear zones.

   The magnetic alignments have been interpreted as indicative of high-grade veins. The QP assessment of the magnitude of the potential resources is based in part on this map (Fig. 6).

13. DRILLING

Early drilling programs by Newmont and Mount-Isa Mines were focused on evaluating potential for large, bulk mineable ore bodies. Most of those drill holes are not relevant to the current narrow vein (resource) evaluation.

Following the drifting on veins in the Lucho area on four levels down to the 3430 level, Minera Pimenton executed an underground drilling program, which indicated the presence of high-grade gold ore on several vein projections down to elevation 3.180, as shown in the following table

Drill Hole	Vein	Width m.	Au g/t	Cu %	Elevation
TDDH - 2	Lucho	0.21	21.3	7.05	3.180
	Manterola	0.35	10.4	1.6	3.250
TDDH - 3	Michelle	0.36	145.5		3.270
TDDH - 4	Lucho	0.46	50.6	2.3	3.300
TDDH - 4	Leyton	0.15	22.4		3.360
TDDH - 4	Nicole	0.90	17.3	2.3	3.405
TDDH - 7	Lucho	2.82	15.5	1.2	3.317
	(including)	(0.5)	(76.6)	(5.81)	
DDHI - 17	Lucho	0.41	15.0	1.1	3.376
DDHI - 18	Lucho	0.16	12.0	4.4	3.325

Figures 18 and 19 (Section 26) show the position of some these intercepts on sections giving possible projections of veins in the Lucho area.

Figure 12 shows the position of some of the drill intersections on the Lucho vein-down to elevation 3.180, in relation to the levels and prior work on the Lucho (Leyton) vein from 3.430 to 3.560.

14. SAMPLING METHOD AND APPROACH

All sampling for the Pimenton Reserve database was performed prior the Qualified Person involvement in the project. The Lyall report described the process as "standard-industry practice".

a) *Vein Sampling during drift advance*

The following sample method is described in the Scoping Study (p. 16)

"Channel samples form the mine are taken every 1.5 meters with samples to either side of the zone of interest as well as the vein. These are coded A, B, C, etc. and every effort is made to put the vein in the center of the "B" channel sample. Samples average 8 kilogram per bag with one bag per sample. Samples are bagged, identified and sealed in the mine. They are then sent direct to Acme Laboratories in Santiago by pickup as soon as possible, often the same day.

"Plan maps for each vein, showing sample identification, location and grade have been made and are available.

"A flowchart describing the individual steps in the sampling process used to collect assay samples for the reserve calculation is shown below.

Sampling Flow Chart

1) Vein was first identified on the roof of tunnel by geologist.
2) The vein sample was marked along with at least one sample of sterile material adjacent to the vein. When the vein was not in the wall two adjacent sterile samples were marked, one on each side of the vein. Samples were marked every 1.5 m along the length of vein (i.e. tunnel) by red spray paint.
3) Immediately after samples were marked, and experienced sampler with two helpers took rock chip evenly through the mark lines. The actual sample was taken by mall hammer and chisel, and collected by hand held trap.
4) The experienced sampler screened each sample to ensure a representative sample.
5) Sample was then bagged in thick plastic bags, ticketed and stapled closed.
6) Samples were then moved outside the mine by scoop and taken by truck to the camp.
7) The samples were stored in an uncovered holding pen until a truck was available to go to Santiago.
8) Samples were normally taken to Acme Labs in Santiago by a staff geologist or head sampler.
9) Samples were assayed in Acme Labs using fire assay from 30 g sample for gold and atomic absorption for Cu. Results were reported in approximately 2 days. Check samples were taken on every fifth sample."

This procedure was observed by Bob Lyall and in his report was classified as "standard procedure for narrow vein gold mining".

b) The possible problem with this type of sampling occurs when the sampler fails to take an equal volume of rock from all segments of the channel being cut across the drift face or roof.

The practice of sampling the hanging wall and footwall segments separately from the visible vein tends to minimize any "over-representation" of the high-grade streaks.

The QP was not present to observe the sampling practice. However, he did observe in the Lucho area that the vein rock is of nearly equal hardness to the wall rock, which means the inadvertent over-sampling of high-grade material is less likely.

In the case of the María Elena veins, the vein material is softer and the operators found that resampling was necessary. (Note: the current reserve estimate does not include the María Elena vein resources, because of some concern about sampling).
Drilling recoveries are not a factor in this reserve estimate, as drill hole intercepts have not been used.

c) From the observations of others and supported by mill and concentrate data, the QP concludes that the sample quality was satisfactory. There is a possibility that sampling is somewhat based to the high side due to the so-called "nugget-effect" wherein an occasional particle of gold adds great value to a small sample. Taking larger samples usually solves this. The 8-kilogram sample size is a good first step.

And secondly, the resource estimating process eliminates isolated high values. To be considered, high values must occur in a group of values, which exceed cutoff and show a consistent pattern over a 10-meter length of drift (6 or 7 samples). Any "nugget-effect" has been largely attenuated by the combination of sample size and sample interval and compositing to 10-meter sections. Note also; the resource estimate has been capped with individual grades not to exceed 195 gpt Au to guard against possible excessive influence of extreme high grades.

During the operations last months of 1996-97, there was often concern about the fact that expected head-grades from mining faces were not being met by mill head sampling or calculations. This is a common problem when a mill is treating development rock with a high amount of dilution. The QP attributes this difference to lack of awareness of the high amount of dilution that occurs when a 2.5-meter drift is driven on a vein of 50 centimeters width.

d) In the Lucho area, the wall rock is hard, principally andesite and welded tuffs, with the mineralization occurring in veinlets of quartz and sulfides. The 1.5-meter sampling interval was established for operating convenience and appears adequate.

e) The Mineral Resource estimate appended to this report: (Attachment A) contains a listing of samples numbers and sample widths used in the estimate. These sample values are plotted on the level plans (1:250 scale) that also constitute part of the database. The near-vertical veins were sampled with channels very close to true width.

15. SAMPLE PREPARATION, ANALYSES AND SECURITY

As described in Section 14, samples of approximately 8 kilos were taken at the mine and sealed in plastic bags by stapling.

a) The handling of samples from the mine to the off-site laboratory was done by experienced employees. Officers and directors of the company were involved in general direction of the work.

b) Sample preparation, assaying, and analytical procedures were performed by ACME Laboratories in Santiago, a laboratory with a good reputation in the Chilean mining and exploration business. The laboratory is controlled by ACME Laboratories of Vancouver and runs periodic checks on duplicate samples at their Vancouver Laboratories (which is certified in Canada). ACME Santiago is in process of obtaining ISO 9000 Certification.

"Once at Acme, samples are dried if necessary at no more than 65 degrees centigrade. Primary crushing is to ¼ in followed by roll crushing to –10 mesh. The sample is riffle split to 500 g, then pulverized to 90% under –150 mesh. Assays have a second split taken every 5th sample, which is used for check assaying.

"30 grams of sample are then fire assayed and read on AAS. Every sample with an Au grade greater than 3.00 g/t is repeated and finished gravimetrically.

c) ACME routinely runs a check analysis on every fifth sample. During the preparation of the Scoping Study, a statistical analysis of these check assays shows the following variance:

Samples grading 100 to 300 grams / Au per tonne
16 samples with a variance of 1.600 grams
Samples grading 50 to 100 grams / Au per tonne
35 samples with a variance of 0.400 grams

d) The QP opinion is that the sample preparation procedures at ACME Laboratories were adequate and appropriate for the time.

16. DATA VERIFICATION

The sample database has been reviewed and is consistent and well documented.

At the time of this writing, no independent resampling of the mine is possible. The mine is inaccessible until the road is opened next spring after the snowmelt.

a) A spot review of the laboratory "re-assay" results shows repeats are within 2 to 10% of original assay and in the case of higher grades, 5 of 6 repeats were higher than original.

b) The QP is relying on the existing sample, mapping and analytical data, subject to spot checks. See Attachment B for a description of the spot check that was done on the correlation between the assay data in the database and the corresponding sample tags and assay certificates.

c) No independent sampling is possible at the time of writing because the mine is inaccessible.

d) The QP opinion is that the sampling, mapping, and assay data base has been prepared in a normal manner for a small operating gold mine and is reliable for estimation of Mineral Resources.

The correlation with the milling results (which correlate the concentrate and dore shipments) gives additional confidence in using the sample database for the Mineral Resource estimate.

The sample database has been prepared as part of a normal gold mine operations. The experienced people involved in sampling were under the constant pressure that their sample results would be checked when the development rock was milled.

From Robert Lyall's observations together with discussions with former managers who were independent of the CMP ownership, the QP is confident that the mine sampling was done according to professional standards.

The mine geology samples were assayed at ACME laboratories in Santiago. The daily mill samples were assayed at the Pimenton mill laboratory, which indirectly checked against the ENAMI Ventanas smelter laboratories (the closure of the Pimenton Metallurgical Balance with the Smelter Settlement assays indicates good accuracy for the mill laboratory).

During most of the 1996-97 operations the mill was treating muck from development headings, with very high dilution (50 centimeter veins diluted to 250 centimeter drift width). However, in May and June 1996, some production was coming from shrinkage stoping on a high-grade vein above (Lucho 3.470 level). At this time, higher grades in the mill might be expected.

This in fact did occur, the mill metallurgical balance from May through July showed some days of high grades, when some stoping ore was extracted in addition to drift development muck. Daily balances from a few 24-hour periods:

		Assay Heads		**Calculated Heads**	
	Tonnes	**Au gpt**	**Cu %**	**Au gpt**	**Cu %**
04/05/96		14.55	2.31	18.65	2.31
05/05/96	24.6	19.41	0.71	11.35	0.82
06/05/96	11.6	16.4	2.26	29.34	2.25
07/05/96	30.1	19.84	0.96	18.64	1.97
08/05/96	31.8	16.38	1.36	16.15	1.37
21/05/96	24.7	14.51	1.65	19.37	1.64

The calculated heads are derived from actual mill results by summing of concentrates and tails assays.

Spot checking these and other data leads to the following conclusions:

1. That the high-grade zones are real and when extracted carefully gave corresponding value in the mill.

2. There was an insufficient understanding of the dilution occurring when a 2.5 x 2.5 m. drift is advancing on a 50 cm vein. (The grade in the mill will be about 20% of the sampled grade i.e. 4 grams Au/t in the mill versus 20 grams Au/t sample on the vein at the face)

3. The reserve sample database is reasonably representative and reliable (within the natural variability parameters of a high-grade gold mine).

17. ADJACENT PROPERTIES

The issuer has not made any reference to adjacent properties, nor is there any relevant published information on adjacent properties that has any bearing on this estimate of gold-copper reserves contained in narrow veins.

The one item of comparable data is that at El Indio, a gold-copper district of similar geologic setting 500 kilometers to the north at Pimenton, primary gold-copper mineralization was found in veins and breccias from elevation 4.200 meters down to elevation 3.200 meters, a total vertical range of 1.000 meters. This lends credence to the total vertical range of gold occurrence (800 meters) observed to date in Pimenton.

18. MINERAL PROCESSING AND METALLURGICAL TESTING

In October 1995, Minera Pimenton began operating a pilot plant treating 35 tonnes per day by gravity, flotation and cyanidation leaching of the tailings. This plant had been designed on the basis of test work at the C. H. Plenge laboratories in Lima, Perú. The samples were from the upper oxidized zones of the Lucho vein. The Merrille Crowe circuit for recovering gold from the flotation tailings was found to be inappropriate for the sulfide ores and was taken out of service.

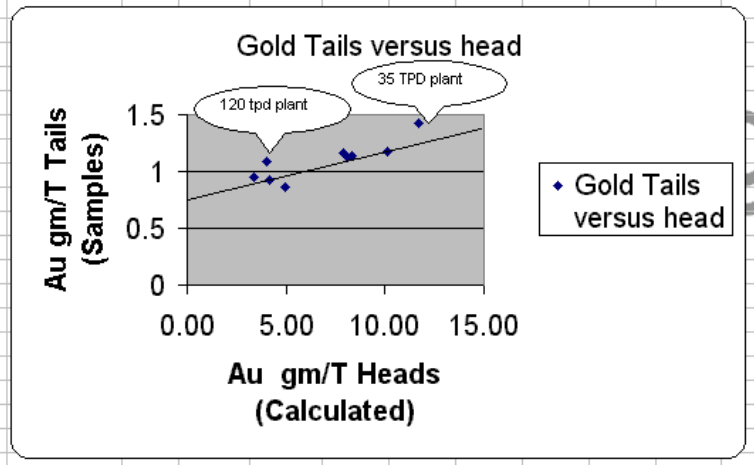
From May to October 1996 the plant was enlarged to treat approximately 120 tonnes per day, processing development rock grading from 6 to 12 grams per tonne gold and from 0.5% to 1.4% Cu. A daily metallurgical balance was performed on this circuit. The product was a copper concentrate grading up to 28% Cu with an average of 200 gpt Au. Gold recoveries ranged from 89% (Heads 10 gpt Au) to 72% (Heads 6 gpt Au). Copper recoveries ranged from 75% (Heads @ 1.45% Cu) to 36% (heads @ 0.33%).

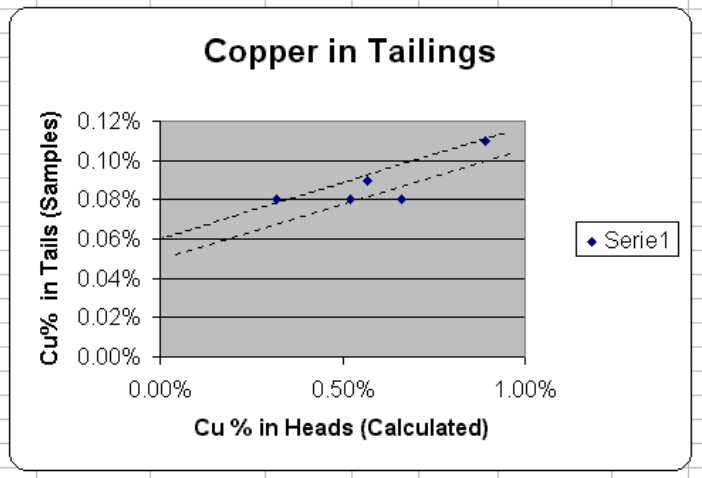
These operating results on development material constitute a pilot demonstration of the metallurgical recoveries on Pimenton ores by flotation. The tables on the next page show the results obtained, wherein percent recovery of gold increases with higher head grades. From this data, a formula for prediction of gold in tailings is derived, allowing prediction of recovery at any given head grade.

The sampling procedures used on this plant were periodic “grab” samples of the flotation feed pulp and the tailings pulp. Such a system could under-report gold values where coarse gold particles tend to sink quickly in the pulp. It is also well known that gold accumulated in the grinding section and in several gravity traps and conditioners within the circuit. This problem is indicated by the fact that on most daily reports the copper head assays check closely with the calculated head while a significant difference frequently existed on gold.

PIMENTON MILLING PERFORMANCE-- 1996-97

		Tonnes	Head Grades Assay			Calculated Heads				Tailings Sample Assay			Concentrate Tonnes & Sample Assay				Recovery to Concentrate		
	Month	Processed	Au g/T	Ag g/T	Cu %	Au g/T	Ag g/T	Cu %		Au g/T	Ag g/T	Cu %	Tonnes	Au g/T	Ag g/T	Cu %	Au	Ag	Cu
	May																		
96	June	1009	12.08	18.18	1.45%	11.71	18.43	1.44%		1.42	4.79	0.17%	49.3	212	284	26.09%		75.28%	88.74%
96	July	975.52	7.86	12.05	0.74%	7.93	12.21	0.74%		1.16	3.38	0.08%	31.93	208	273	20.27%	85.85%	73.21%	89.55%
96	Aug	741.1	10.15	13.3	1.05%	10.10	13.85	1.06%		1.18	3.99	0.08%	27.05	245.65	274.02	26.88%	88.75%	72.23%	92.72%
96	Sept	940.5	9.58	8.44	0.65%	8.14	8.59	0.65%		1.12	2.95	0.10%	20.96	315.9	256	24.69%	86.54%	66.42%	84.91%
96	Oct	1103.73	9.47	7.82	0.89%	8.34	7.39	0.89%	1066.7	1.14	2.32	0.11%	37.07	215.45	153.29	23.38%	86.79%	69.66%	88.08%
96	Nov	1689.85	5.65	5.58	0.53%	4.14	4.80	0.52%	1654	0.93	2.08	0.08%	35.82	152.47	130.45	20.93%	78.02%	57.59%	85.00%
96	Dec	2613.28	5.88	6.65	0.66%	4.96	5.38	0.66%	2548.2	0.86	1.83	0.08%	65.07	165.41	144.34	23.42%	83.08%	66.82%	88.20%
97	Jan	2483.45	6.99	8.43	0.57%	4.05	6.42	0.57%	2428.8	1.09	3.78	0.09%	54.69	135.42	123.56	21.83%	73.67%	42.40%	84.52%
97	Feb	2460.22	6.15	5.2	0.33%	3.40	3.99	0.32%	2426	0.95	2.57	0.08%	34.23	176.83	104.37	17.33%	72.42%	36.43%	75.35%





Gold Tailings grade prediction formula

Tailings grade = 0.70 plus 0.045 times Au head grade

Head Grade	Tails
5.00	0.93
10.00	1.15
15.00	1.38
20.00	1.60
24.00	1.78

Copper Tailings grade prediction formula

Tailings grade = 0.055% plus 0.055 times Cu head grade

Head Grade	Tails
0.60%	0.09%
1.00%	0.11%
1.20%	0.12%
1.40%	0.13%
1.60%	0.14%
1.78%	0.15%

Flotation Concentrate Balance:

From May 1994 through February 1997, the plant operated with daily metallurgical balance, which correlates well with the total concentrate shipments for the total period. (See Attachments D, E, and F).

	ENAMI PAYABLE	PIMENTON MILL BALANCE ASSAY DATA
Tonnes Concentrate, Dry tonnes	402.91	394.45
Payable Gold Grams	78.196	76.342
Average Grade, grams/tonne	194	193.5

Note that the ENAMI payable amounts include a 0.5% deduction on tonnes of concentrate and a 1-gram deduct on gold assay before payment.

This close comparison gives confidence in the operating laboratory at the Pimenton mill and shows that reasonable recoveries in the flotation section are achievable.

A series of tests by Mountain States Engineers have been run (1997) to indicate possible optimization of the flotation. However, the main area for improvement will be the recovery of coarse gold.

Mill circuit improvements:

On re-installation of the milling equipment, the following improvements are planned:

- Installation of a Secondary Crusher (2 ft Cone) will reduce the maximum feed size to the mill to minus ½ inch particles, increasing potential grinding capacity of the mill to the order of 10 tonnes per hour (250 tpd). More importantly, this will improve feed characteristics to the gravity circuit and reduce the recirculating load to the grinding mill.

- Installation of Knelson centrifugal concentrators in the grinding circuit will recover the coarse gold early in the process; reducing hammering of gold particles and the rate of accumulation in the mill liners.

- Gravity concentrates will need high-security handling during processing in a gold-room to produce a marketable Doré product. This will probably involve a shaking table to separate copper-bearing material followed by an amalgamation barrel, filter and retort to produce sponge gold which is then melted and cast as doré bars.

- Automatic sampling devices will be installed to periodically cut the full ore pulp stream as well as the tailings and concentrate pulp streams.

- The concentrate drying system will be improved with a thickener installed ahead of the disc filters plus a rotary concentrate-drying kiln to reduce moisture below the 10% limit required by ENAMI.

19. MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

a) The estimate categories set out in this report are in accordance with section 1.3 and 1.4 of Canadian National Instrument 43-101, which refers to the CIM standards on Mineral Resources and Reserves – Definitions and Guidelines, as follows:

"A Mineral Resource is a concentration of natural material in the earth's crust in such form and quantity that it has reasonable prospects for economic extraction. The sub-classifications of Inferred, Indicated, and Measured Mineral Resources represent increasing levels of knowledge about the size, shape, and grade of the resource derived from geologic analysis, drilling, and channel sampling".

"A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource as demonstrated by a Preliminary Feasibility Study. A Proven mineral reserve is derived from a Measured Mineral Resource by applying mining factors such as economic cutoff determination, dilution, and mining recovery. Similarly a Probable Mineral Reserve is the economically mineable part of a Indicated Mineral Resource".

b) Mineral Resource blocks are defined on each mine level, and each vein by grouping contiguous channel samples which are above cutoff grade (combined Gold and Copper values equal or exceed the incremental cost of extraction). Values are projected to the nearest section on the 10-meter Mine Grid, creating a weighted average value for that section, at that level for a given vein.

- A Measured Resource Block is constituted when at least one 10-meter sampled interval has a weighted average grade above cutoff values. The measured block is estimated to extend 5 meters above and below the level. This category becomes the Proven Reserve category by incorporating wall rock dilution and mining losses (if any).
- An Indicated Resource block is estimated to extend from the Measured Block Limit (5 meters) to a total distance of 20 meters above and below the drift. This Indicated Resource Block becomes a Probable Mineral Reserve Block by incorporating planned mining dilution and mining recovery factors.

  When a raise is driven between two levels, establishing the ore grade and thickness continuity between the levels, a portion of the Indicated Resource (Probable Reserve) may be converted to Measured Resource (Proven Reserve).

- Inferred Resource Category has been assigned to block projections extending more than 20 meters vertically above or below a set of Measured and Indicated Resource Blocks.

  In this estimate, two types of Inferred Mineral Resources have been estimated (both within the CNI 43-101 definition)

  Class A Resource projection from 20 to 40 meters above or below a Measured Resource Block constituted on a sampled drift. Formerly called "Possible Ore". Blocks in this resource category are targeted for development by drifting and raising in years 1 and 2.

  Class B Vein projection from the bottom Class "A" Inferred Resource Blocks (elevation 3.390) down to elevation 3.185 where the deepest drill hole intersection on the Lucho vein cut 0.6 meters grading 49 gpt Au with 2.2% Cu. This resource area is targeted for development with lower levels.

c) The Mineral Reserve categories have been estimated by applying mining dilution and mining recovery to the Measured and Indicated Resource Category, forming Proven and Probable Categories, respectively. A total of 44 Proven and 46 Probable Mineral Reserve Blocks have been quantified. Also to qualify as Reserves, reference is made to a Preliminary Feasibility Study discussed in Section 25 of this report.

d) The Class B Inferred Mineral Resource area has several good drill hole intersections and it is located as an extension to depth under ore blocks constituted by a drift sampling. Data and sampling are not sufficiently spaced in this area to assure continuity of the veins, therefore, in this geologic environment, this material must be categorized as Inferred Resources.

e) This estimate is prepared by John J. Selters with a degree as Engineer of Mines from Colorado, who is a Registered Professional Engineer in the State of Colorado. He has over 40 years experience in underground mining, much of it in Perú and Chile, including narrow-vein gold and polymetallic mining. Mr. Selters is an independent consultant with no financial relationship to owners of Pimenton.

f) The details of the Mineral Reserve and Resource Estimate are included in Attachment A, which is made a part of this Technical Report. The data are organized in a series of spreadsheet models. Level maps and long sections are included in the Illustrations (Section 26).

g) The assumptions, parameters, and methods used in the estimate are included in the Attachment A referred to above. These are summarized as:

Vein Mining Width	-	0.45 meters (minimum)
Dilution	-	0.10 meters.
Mining Method	-	Overhand cut and fill (short cuts with resuing)
	-	0.90 m. cut depth
	-	1.20 m. width after slashing footwall for fill.
Specific Gravity	-	2.9 tonnes / cubic meter (see note)
Cut off Grade	-	12.2 grams Gold equivalent
(Mine Design)		With Gold Price at $ 310 per ounce
		Copper $ 0.68/Lb
		Calculation is illustrated on page 48.
Production Rate	-	2.000 tonnes per month.
		(Note that this has important effects on costs per tonne, which is turn affects the cutoff grade)

Note: on specific gravity

The specific gravity of the Pimenton ore has historically been estimated at 2.75 tonnes per cubic meter.

This is somewhat conservative for a highly selective mining scheme, which will deliver a higher percentage of heavy sulfides. A revised ore density is estimated as follows:

- A 1.6% average copper grade implies a 4.65% chalcopyrite content.
- Geologists estimate that pyrite content is about twice the chalcopyrite content.

ORE SPECIFIC GRAVITY ESTIMATE

Mineral Component	(Average %)	Specific Gravity	
Chalcopyrite	4.65	4.2	0.195
Pyrite	9.3	5.2	0.483
Andesite and Quartz	86.05	2.6	2.237
Total			**2.916**

Applying the specific gravity of 2.9 instead of 2.75 increases the estimated mineral reserves by some 4.000 tonnes, or 6 percent.

PIMENTON PROJECT

Gold Equivalent Calculation — **Updated September 2002**

	Price		Mill Recovery	Smelter Payable	Refine Cost
GOLD, OZS	$310.00	USD/oz	92.00%	96.00%	$10.50
GOLD, Gr 31.1035	$9.97	USD/gm			$0.34
COPPER	$0.68	USD/lb	94.00%	95.47%	$0.0948

Net Value of

1 gram gold = ((price) * (Mill Recovery %) * (Smelter Payable %))- (Refining Cost)

= $8.47

1 % Copper = ((price/lb)*(22.05 lb/%-t)*(Mill Rec)*(Smelter Payable))-Refine Cost)

= $11.58

1% Cu= 1.37 grams of gold

RESERVE CUTOFF DETERMINATION	Costs USD/t ore	C-1 Hole Increment	C-2 Stope increment	C-3 Block Criteria Mine Design	C-4	C-T Total	
Exploration & Devel	8.12				8.12	8.12	
Mine Stoping	13.90	4.17	13.90	13.90	13.90	13.90	
Stope Prep	7.82	0.00	3.13	7.82	7.82	7.82	
Mine General	12.73	3.82	3.82	12.73	12.73	12.73	
Maintenance	9.83	1.97	1.97	9.83	9.83	9.83	
Milling & Assay Lab	11.78	6.00	9.00	11.78	11.78	11.78	
Power & Comp Air	10.82	8.656	10.82	10.82	10.82	10.82	
Admin at Site	9.06			9.06	9.06	9.06	
Haul to Smelter	1.18	1.18	1.18	1.18	1.18	1.18	
Royalty	8.51	1.00	1.92	3.52	4.17	8.51	
G& A, Sales	13.40				13.40	13.40	
Smelting	5.93	5.93	5.93	5.93	5.93	5.93	
Financing Cost	0.00				0.00	0.00	
Depreciation	25.93					25.93	As reserves build up, this number declines
Note: Refining already deducted							
Total	$139.02	$32.72	$51.66	$86.57	$108.75	$139.02	
Net Recovered Value of one gram Gold		$8.47	$8.47	$8.47	$8.47	$8.47	
Cutoff (s) Grams Gold/Equivalent		3.87	6.10	10.23	12.85	16.42	

Hole Increment Cutoff	C-1	**3.87**	Blast segment as ore instead of waste
Use for addition of mineral segment within a channel or hole, where the primary segment meets the general cutoff criteria			Must only pay direct costs of handling out of stope and through mill, concentrate haulage & smelting
Basic Cutoff for inclusion of segment in reserve.			No additional overheads or development cost
Stope Increment Cutoff	C-2	**6.10**	Add section to block, where in the costs of development are covered.
1) Use for addition of a section to an established stope block.			
2) Must not reduce block grade below the mine-design cutoff.			
Stope Design Cutoff	C-3	**10.23**	Excludes sunk cost & offsite overheads
			This is the grade required to include a stope
1) Use to determine the addition of a stope block adjacent to and concurrent with mining of stopes which meet the Total Design Cutoff.			within a set of stopes which meet the total cutoff criteria. This criteria allows for the recovery of additional value from the reserve while extraction is proceeding in adjacent blocks
Mine Design Cutoff		**12.85**	Includes all operating costs
			Excludes sunk costs, depreciation, & taxes
			Use for starting new stoping area
Total Design Cutoff	C-T	**16.42**	Use for initial stope selection before payback
			Includes all costs and depreciation recovery allowance.(New Money)
			Excludes sunk cost and income taxes

CUTOFF GRADES AND COPPER / GOLD EQUIVALENTS

h) General discussion of sensitivity of this Resource Estimate to external factors, such as socio-economic, environmental, and political considerations.

- Restarting the Pimenton mine on the relatively small proven and probable reserve is dependent on keeping the incremental investment (new money) as small as possible.
- Continuing validity of operating permits is assumed. Any renewal of municipal permits should be accomplished expeditiously by the Municipalities.
- Approval of an expanded tailings facility by SERNAGEOMIN is required within 18 months of the restart. This is perhaps the most critical element of the plan for achieving a long-term sustainable operation.
- Given the concern about re-establishing increased economic activity in the small mine sector of Chile, the regulatory authorities are expected to approve the restart with a minimum of bureaucratic delay.
- There are no unresolved title, or taxation issues that would affect the project.
- Political: The political stability of Chile seems assured and the main concern of the government is the path of higher growth, investment, and creation of jobs.
- Market: the state-owned ENAMI smelter at Ventanas will treat the concentrates at reasonable charges, paying London Metal Exchange prices for recovered metals.
  The National Mining Company (ENAMI), in addition to operating two custom smelters in Chile, is dedicated to formenting development of small and medium sized mining in Chile.

i) Mining, metallurgical and infrastructure factors and their effect on the Reserve.
The mining must be a highly selective and flexible system, getting the most gold recovery from the current plant treatment capacity. Such mining practices existed 30 to 40 years ago, and have been applied recently in some high-grade Japanese gold mines.

The mining method applied here is overhand cut-and-fill, with most of the fill coming from slashing the footwall after selective blasting and removal of the narrow vein material. A removable floor (conveyor belting and canvas) is placed between blasts. This system can extract virtually all of the high-grade material in the reserve and can follow splits and fault displacements in both the horizontal and vertical sense.

By sequential blasting of short holes (90 cm) spaced at 50 centimeters using a “trim” type explosive, the over break is expected to be limited to 5 centimeters (average) on either side of the design mining width (in sections of minimum design width: 45 centimeters + 10 centimeters = 55 centimeters).

The natural parting planes that exist parallel to the sulfide veins will aid this blasting approach. Blasting procedures will be fine-tuned to Pimenton rock conditions during extraction of the first demonstration stope.

Systems with higher worker productivity, such as mechanized cut-and-fill stoping may eventually be applied in zones of greater width where vertical continuity has been established by raises.

j) Mine Plan “B” with an economic projection has been detailed in the Preliminary Feasibility Study. Plan “B” is based solely on the proven and probable reserves, quantities sufficient to cover just under three years of production at planned rates (34 months or 68.000 tonnes).

This plan demonstrates that these Mineral Reserves can be extracted at a profit.

k) The Mineral Reserves and Resources are summarized as:

• **Mineral Reserves**	**Tonnes**	**Au gpt**	**Cu %**
Proven Mineral Reserves	17,800	18.7	1.57
Probable Mineral Reserves	50,000	18.7	1.56
TOTAL MINERAL RESERVES	**67,800**	**18.7**	**1.56**

Contained Metals:

Ounces Au	40,760
Tonnes Cu	1,060

The Measured and Indicated categories of Resources are incorporated in this Mineral Reserve and are not reported separately.

- The **Inferred Mineral Resources** are reported separately and are summarized as:

	Tonnes	**Au gpt**	**Cu %**
Inferred Class A	37,000	18.4	1.45
Inferred Class B	171,000	19.4	1.6

Note: this estimate of Inferred Mineral Resource considers a minimum mining width of 45 centimeters and includes dilution but does not include a mining recovery factor.

The class “A” Inferred Resources in this estimate were formerly classified as “possible ore reserves”, a classification that was dropped from the new CIM standards on Mineral Resources and Reserves Definitions and Guidelines.

In Mine Plan “A” prepared for the Feasibility Study, these Class A Inferred Mineral Resources are developed in year 1 and incorporated in a production scheme that proceeds upwards from the bottom-most level (3.390). Mine Plan “A” is of 5-years duration and also includes development costs for two lower levels (3.350, 3.300) to sustain future operations.

However in NI-43-101, Part 2.3, paragraph (i) (b), an issuer shall not make any disclosure of results of an economic evaluation which uses inferred mineral resources.

Therefore, Mine Plan “B” has been prepared for Base Case economic analysis. This plan uses only Proven and Probable Mineral Reserves, in compliance with CNI 43-101.

- Development of the 3.390 level is executed as in Mine Plan “A”, with associated costs. However, the drifting in Inferred Resource Blocks on level 3.390 is assumed to produce no ore.
- Raises are driven from level 3.390 up to 3.430 level as in Plan “A”. This provides access to Mineral Reserves below level 3.430. However, in Plan “B” the stope sublevels are driven at the base of the Probable Mineral Reserve blocks, 20 meters above the level (elevation 3.410) rather than at the 3.390 elevation.

- Raises into Inferred Resource blocks above level 3.540 and 3.510 are scheduled through the blocks in terms of cost and time but stopes are terminated on reaching the upper limits of the Probable Reserve Blocks.
- No additional development work is programmed or included in the costs.
- Mine closure costs are assumed to be covered by the working capital, and by sale of plant and equipment. This "stand alone" case demonstrates that the Mineral Reserves can be extracted at a profit.

The estimated unit costs of this Mine Plan "B" are:

Fiscal Year	Tonnes Mined	US$ / Tonne	US$ /oz Au (1)
Year 1 (7mons.)	13.663	118	142
Year 2	23.025	137	211
Year 3	25.159	112	168
Year 4 (3 months)	6.052	130	196
TOTALS	**67.899**	**128**	**180**

(1) Cash Costs, Net of By Product Credits.

The Inferred Resources are separate and distinct from the Mineral Reserves. The Inferred Resources cannot be added to mineral reserves and are not included in cash flow projections.

l) Gold equivalent grade is used only for cutoff calculations and to assess the comparative value of different ore blocks. For the Reserve Calculations, the conversion factors for conversion of Copper to equivalent grams/tonne of Gold are:
(assuming a gold price of US$ 310 and copper at 0.68 USD/lb).

1% Cu = 1.37 gm/t Au

See Page 48 for details of this calculation.

20. OTHER RELEVANT DATA AND INFORMATION

The Pimenton mine is located in rugged topography that periodically receives heavy snowfall with resultant avalanches on the steep slopes.

This requires special operating precautions and may mean some cessation of operations, during particularly severe winters. During the past shutdown period, a portion of the current camp, shops and mill facilities have been damaged by the combination of heavy snow, and/or avalanches. The capital cost estimates of the Preliminary Feasibility Study include a combination of measures to eliminate future damage to equipment and facilities.

21. INTERPRETATION AND CONCLUSIONS

Mining development in the Lucho area has established high-grade mineral reserves on two veins, Lucho/Leyton and Michelle, which are roughly parallel (N 40º E, UTM). These veins are roughly 150 meters apart and fit in an alignment of geochemical gold anomalies and magnetic lineal features extending for some 2.000 meters to the northwest along the rugged east ridge of the Pimenton Valley. (See Fig. 6 in Illustrations).

The gold has been observed in quartz vein and pyrite-chalcopyrite mineralization from elevation 3.600 down to 3.430 and in drill hole intersects to 3.185 levels. Because strong anomalies exist up and over the ridge top (at 4.000 meters), there is an indicated 800-meter vertical interval of gold occurrence.

There are 17 alignments (N 40º E) that are indicative of being potential gold veins of the nature of Leyton and Michelle (ore shoots averaging 50 cm width and grading 20 gpt Au). These shoots appear to have a “rake” to the southwest. Assuming that ore shoots are found on 12 of these 17 structures (70%) with average dimension of 250 meters of strike length (20%) and 400 meters of vertical dimension (50%):

250 mts	x	400 mts	x	0.5 mts width
	x	2.9 t /m^3	=	145.000 tonnes / vein
At 20 gpt Au	x	1 oz. Au / 31.1035 g	=	93.000 ounces / vein
With 12 veins	≈	1.0 million ounces.		

There is no assurance that this is the case. This is a conceptual quantification of narrow-vein potential based on surface geochemical/geophysical analysis and interpretation. It gives some guide as to what might be developed in the district. It defines the possible outcome and justification for continued exploration for new veins, which if found to be similar to currently known veins, would be extractable at a profit.

EXCEPTION: Under terms of the exception defined in Part 2.3 (2) of NI 43-101, this estimate of potential is presented as a definition of exploration targets, development of which may accompany the proposed production program.

The general vision for development of this district is:

1. Demonstrate mining and milling parameters on the existing, narrow-vein reserves in upper Lucho area. Generate cash flow with 2.000 tonnes per month (67 tpd) operation. “Harden” all facilities to survive winter.
2. Augment reserves by developing Lucho area veins to depth, and driving access crosscuts to both the southeast (new Carmela vein) and to the northwest.
3. As reserves and tailings space are generated, increase processing rate up to the 250-tpd capacity of the ball mill at the present location.
4. Expand to a new mill located to treat ores coming by ore-pass transfer down to a haulage level that eventually can be driven underneath the whole district.
5. The quest for high-grade narrow-vein ores will lead to much improved knowledge of the district and to possible discovery of larger ore bodies, amenable to bulk mining.

22. RECOMMENDATIONS

When the management of South American Gold and Copper decides that the gold price and market outlook is sufficiently attractive, the Pimenton project can be again put into operation. Depending on the severity of the preceding winter, this start can be accomplished by opening the road in October.

Phase I

- Establish living camp
- Reopen mine level 3.430 and drive raises on veins through to 3.470 level.
- Set up a demonstration stope and establish 3 extraction stopes.
- Re-establish the mill building structure.
- Re-install mill and flotation equipment and electrical system
- Install coarse gold recovery system and concentrate drying along with reliable sampling system on heads and tailings.
- Begin conceptual design and permitting of lower valley tailings facility.

Phase II – Start depends on severity of winter (2003)

- Begin mining in 3 stopes.
- Mill operations at 2.000 tonnes per month (67 tpd).
- Construct portal for level 3.390 and crosscut to access Michelle and Lucho/Leyton veins.

Conclusion: Pimenton is an established mineral resource area with a number of identified high-grade gold veins. Two veins have been developed to a limited extent so far. There are sufficient reserves on these two veins to establish a profitable operation (with US$ 310 gold price) with enough margin to pay for development and exploration leading to probable expansion of reserves at a rate at least double the rate of mining.

Pimenton is thus a candidate for starting from a small reserve and growing the mine to sustain production.

The Pimenton area is still largely unexplored but from what is known it has enough potential to reward the investment with:

1) Establishment of profitable operations of 20,000 ounces gold per year.
2) Growth in reserves
3) Resource potential for probable eventual expansion to 250-tpd ore treatment rate, with annual gold output of 40.000 ounces per year.

23. REFERENCES

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  Internal File Document – Summarizing Status of Property Rights, Permits, and Resolutions Cerca April 1997.

- "Estudio Ambiental Proyecto Minero Pimentón" by Geotécnica Consultores, Abril 1995.

- "Línea Base Hidrológica, Cuenca Río Colorado" by SITAC, Feb. 1995.

- "Ampliación Depósito de Relaves Mina Pimentón" – Geotécnica Consultores, Oct. 1996.

- "Peralte del Depósito de Relaves Mina Pimentón" – Enero 1997, Geotécnica Consultores Rep-1500-GC-01. This plan to raise the present tailings dams was presented to SERNAGEOMIN in January 1997 and approval was obtained in April 1997, just before the mine was placed on standby.

- "Restart Plan – A Preliminary Study of Feasibility of Restarting the Pimenton Mine", J. J. Selters, 1999.

- "A Preliminary Feasibility Study of Restarting Pimenton Mine" – J.J. Selters, October 2002.

24. DATE / SIGNATURE

This report was prepared from July through September 2002 for signature on September 30th.

[OriginalSignedby John J. Selters]

SEAL

John Joseph Selters
Register Professional Engineer
Nº 11381
State of Colorado

25. ADDITIONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT AND PRODUCTION PROPERTY

John Selters, Registered Professional Engineer (Colorado # 11381) prepared a Preliminary Study of the Feasibility of Restarting the Pimenton Mine in 1999. That Study developed a 5-year Mine Plan that included the "possible" reserves category.

That study has been expanded and upgraded to a Preliminary Feasibility Study, with the recommended operating plan designated as Mine Plan "A".

The key operating assumptions are:

Production Rate	=	2.000 tonnes ore per month
Ore Grades	=	Mineral Reserve Blocks averaging 18.6 gpt Au, 1.55% Cu. Also some adjacent Inferred Blocks.
Manpower	=	90 employees working 10 days at Mine Site, with 5 days off per fortnight.
Milling	=	Average Recoveries 92% Au, 90% Cu to a concentrate grading 20.5% Cu. Truck concentrates to Ventanas Smelter, 192 km.

A special mining plan, Mine Plan "B", has been prepared covering only the extraction of Proven and Probable Mineral Reserves.

As required by CNI 43-101, the economic projections are based on Mine Plan "B" which includes no planned production from Inferred Resources.

a) Mining and Milling Operations. Included in the Feasibility Study is a description of:

- Mining Method - Overhand cut-and-fill with resuing
- Mining Plan and Sequencing - Month by month for 90 Mineral Reserve Blocks
- Production Forecast - Per month-by-month Mine Plan "B"
- Description of the Milling Circuit - Flotation and gravity concentrators

b) The milling recovery tests run by Mountain States Engineers in 1997 are indicative of what is possible in terms of flotation. However, the best starting point is the actual plant operations in 1996-97. The data available indicates a tailings relationship as follows:

Cu Tailings (%)	=	0.055% plus 0.055 times Cu Head Grade
Au Tailings (gpt)	=	0.70 plus 0.045 times Au Head Grade

Thus, with a nearly constant tail, higher ore grades to plant result in higher percent recoveries.

For the average grade in the Mineral Reserve, the following recoveries are estimated:

	Heads	**Tails**	**Recovery**
Au gpt	18.6	1.54	92 %
Cu %	1.55	0.14	91 %

These expected recoveries are better than past plant experience and are consistent with the Laboratory test work and will be achieved in part by the following plant improvements:

- Secondary crushing will improve grinding performance, resulting in lower circulating loads and quicker liberation of gold.
- With installation of a regrind mill, the operators can intensify the flotation of rougher concentrate to maximize recovery of gold, with less concern about the minimum grade of copper in the concentrates.
- In addition, an improved gravity circuit will enhance recovery of coarse gold.

c) Markets: As mentioned in Section 1a, the concentrates produced at Pimenton will be sold as copper concentrates to the ENAMI smelter at Ventanas, a haulage distance of 192 km by truck. ENAMI most recent monthly settlement sheet (August, 2002) incorporates the following parameters, which are included in the economic model:

Smelter Recovery	Copper deduct 1.2%, pay 100%
Treatment Charge	US$ 85 per tonne of concentrate
Cu Refining Charge	US$ 0.10 per pound of Payable Copper
Gold Payable Rate	Gold deduct 1-gram, pay 97%
Copper Price	LME – Market, final settlement 90 days

For this economic projection, all the recovered gold is included in the concentrates.

Gold doré sales are assumed to produce an economic result equivalent to (and probably better) than inclusion of the gold in the copper concentrate.

Assumed metal prices are (gold, $ 310/oz, Copper $ 0.68/lb).

d) Contracts: No contracts are in place at the time of writing this report. All prices used for external services are based on recent experience or informal quotes. ENAMI smelter and Refining charges are normally above the international markets but represent the best option for small producers when the cost of port handling and ocean shipping is considered.

e) Environmental considerations: Although Pimenton's Start-up in 1995 precedes the full enactment of the Environmental Law in Chile, the company prepared an Environmental Impact Study which was reviewed by the National Mining Service (SERNAGEOMIN) in connection with the tailings deposit approval. This study included a basic closure plan, which commits to:

- Closure of all mine openings to surface
- Removal of buildings
- Grading and revegetation of building sites tailings deposits, and waste rock dumps.

The cost of this work has not been quantified and no bonds have been required. The salvage value of plant and equipment is assured to cover the cost of closure.

f) Taxes: The Chilean corporate tax has gone from 15% to 17%. Dividends or other distributions to shareholders are taxed at 35% with credit being given for the 17% corporate tax. Value Added Tax of 18% applies to all purchases (IVA). IVA on concentrate and doré sales will be refunded because exports are exempt from this tax. Pimenton has a substantial tax loss carry forward, which is assumed to offset operating gains during the first three years of operations.

g) Capital and Operating Cost Estimates (US$):

Investment:

Preproduction Expenses	830.000
Capital, Mine, Camp, Plant	1.760.000
Working Capital and Inventories	430.000
	3.020 $ Million

Operating Costs: (Plan "B")

Cash Cost	$ 180 per ounce of Gold
Capital Amortization	$ 85 per ounce (Note)
Total Cost (BT)	$ 265 per ounce of Gold

Note: Based on new Investment (less working capital) divided by payable gold ounces produced under Plan "B" (Proven and Probable Mineral Reserves).

h) Economic Analysis: Assuming that Mine Plan "B" is executed with the following price assumptions:

Gold	$ 310 $/ounce
Copper	0.68 $/lb
Chile Pesos	700 per USD.

The 34-month production program gives the following results (in US Dollars):

Gold, Payable ounces	36,138
Copper, Payable tonnes	923
Revenues	$ 13.0 million
Operating Costs	6.2 million
Haulage, Smelting, Refining	1.1
General and Administration	0.6
Initial Capital and Development	2.7
Replacement Capital	0.4
Free Cash flow	2.0 million
Internal Rate of Return	30%

Note: This economic analysis is based on Mine Plan "B" which is limited to current Proven and Probable Mineral Reserves and thus complies with CNI 43-101.

Conclusions:

Mine Plan "B" applied only to Proven and Probable reserves can be executed at a profit, generating a margin of US $ 2.0 million over a 34-month period.

The project economic model shows the following sensitivities to changes in conditions.

SENSITIVITY		CASHFLOW ANALYSIS MINE PLAN "B" (Extraction of Proven & Probable Mineral Reserves **ONLY)**		
		Sum of Free Cash Flow BT KUSD	Internal Rate of Return (IRR) %	Cash Cost (Net of BPC) USD/ oz Au
Base Case	100%	2,013	30%	$179.81
Revenue Change, (Au price or grade)	110%	$3,310	48%	$180
	90%	$715	11%	$180
Operating Cost	110%	$1,397	21%	$197
	90%	$2,628	39%	$163
Additional Dilution	10%	1,913	29%	$182
	20%	$1,814	27%	$185
Capital Cost	110%	$1,710	23%	$180
	90%	$2,315	38%	$180

The Base Case is Mine Plan “B” with all the assumptions given herein. The sensitivities are shown in the table above.

The highest sensitivity is to **revenue** wherein a change of plus or minus 10% causes a direct change in the IRR of nearly 20%. This reflects variations in Gold Price or any combination of change in gold grades, mill recovery, or smelter payment terms.

Cost sensitivity (both operating and capital) is nearly one on one, with a 10% increase in operating costs causing a 9% decrease in IRR, and visa versa.

Additional dilution: the current estimate is based on a highly selective mining scheme with 20% dilution. Should the mining operations result in additional dilution, the effect on IRR is roughly 1.5% decrease in IRR per 10% increase in dilution. Another 20% of dilution reduces IRR from 30% to 27%. Costs per ounce increase by US$ 5 per ounce for each 20% of additional dilution. (This analysis is based on having additional mill capacity to handle the extra tonnage, as is the case for Mine Plan “B”).

i) Payback: The projected payback of the new investment is 2 years.

j) Mine Life: Mine life with proven and probable reserves is 34 months. With Class A Inferred Reserves to be confirmed during year 2, that would extend to 52 months. Included in the operating cost estimates is provision for development of a new level (3.390) plus provision for drifting and raising on veins in the Lucho area.

Resources and Mine Life: The Mine Life is 34 months after start of operations. The development work programmed in Plan "B" and included in these costs will give access to the Class "A" Inferred Mineral Resources, which if they exist as projected, will add to the Mine Life with no additional development time or costs. This is the operating intention and the chances are good that these addition Mineral Reserves will materialize during the execution of Mine Plan "B". However, there is no assurance that these additional Resources will be confirmed and under guidelines of CNI 43-101, they are not included or quantified in this financial projection.

26. ILLUSTRATIONS

Figure

27. ATTACHMENTS (in separate File or Volume)

A) Ore Reserve Summary and Calculations

B) Reconciliation of Sample Data and Assay Certificates

C) Cut-off Determinations

D) Reconciliation of Smelter Settlement Data with Mill Balance

E) Concentrate Shipments Summary

F) Metallurgical Balance Summary

G) Metallurgical Balance – Tails Calculation

ILLUSTRATIONS

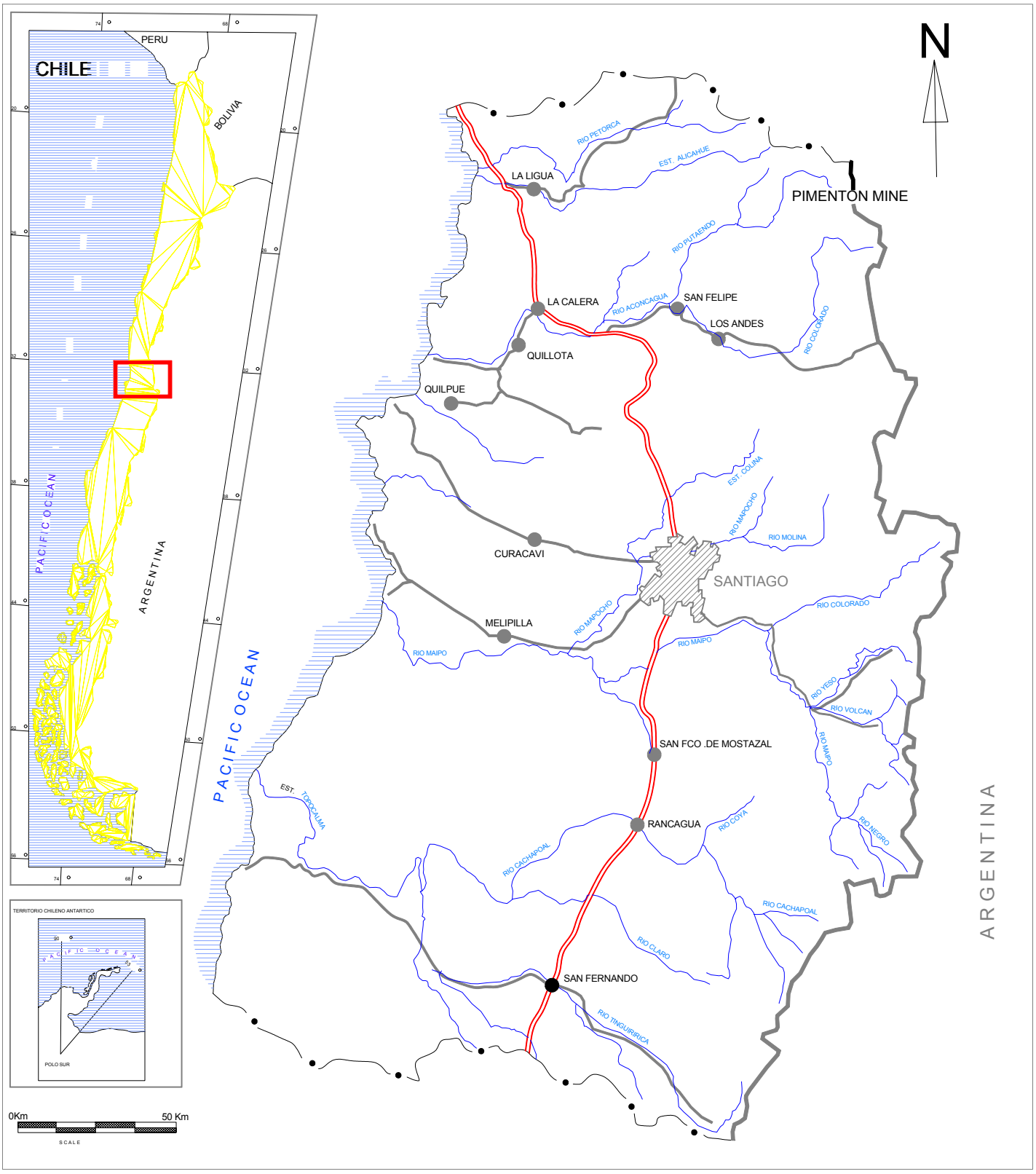


FIGURE 1-- General Site Location and Access

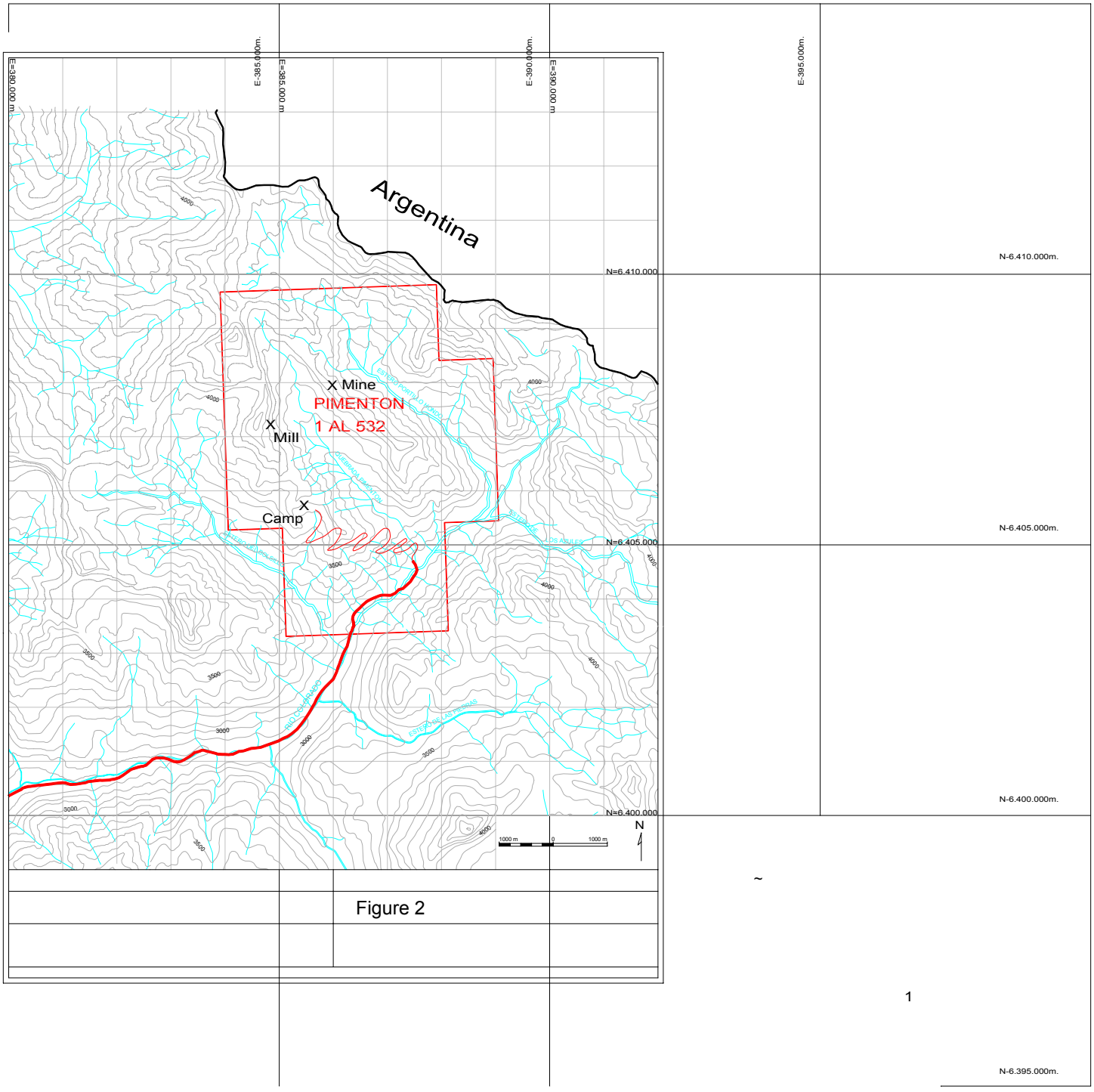


Figure 2

1

FIGURE 2-- Mining Claim Locations, Mine & Plant Sites

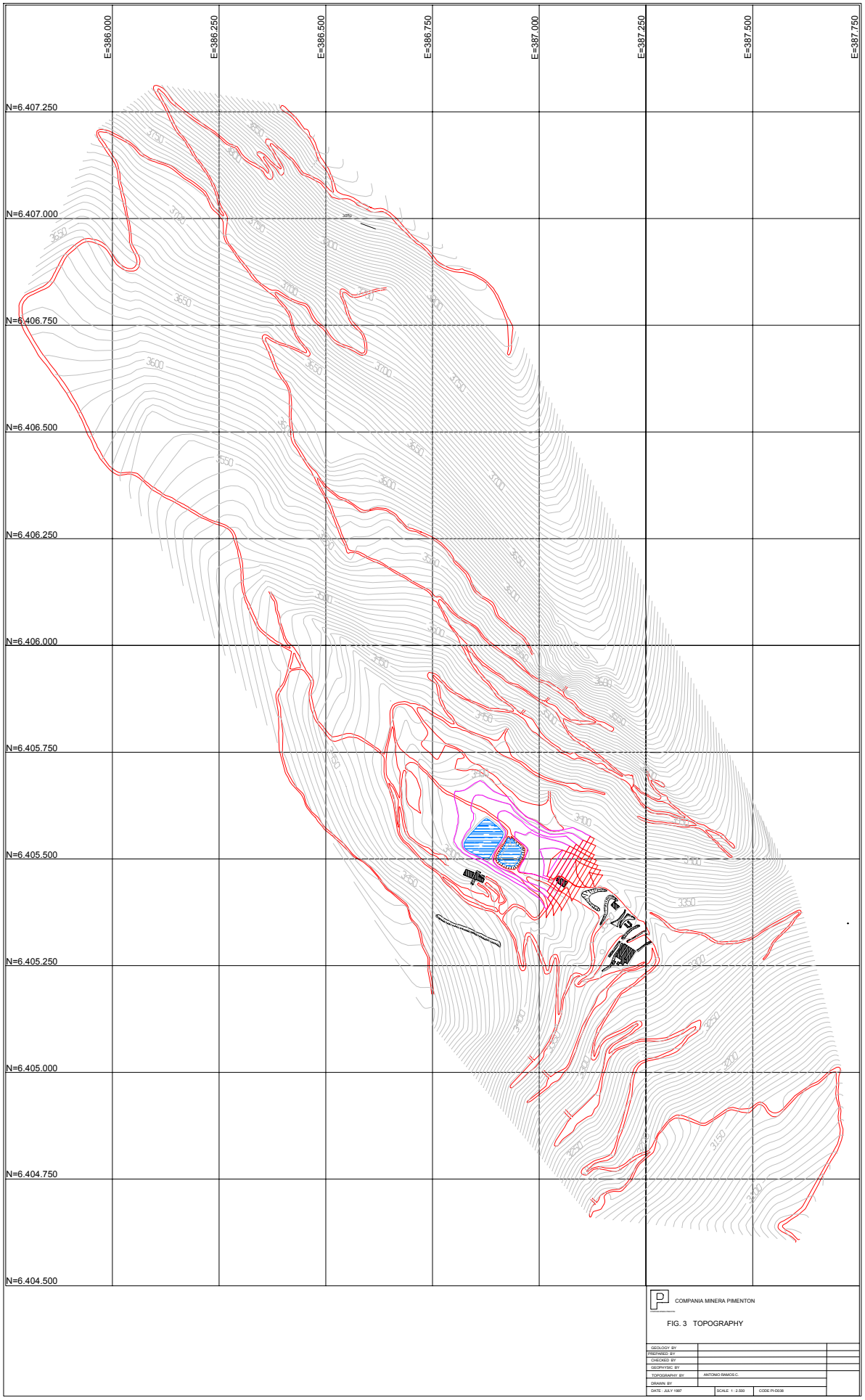


FIGURE 3 -- PIMENTON AREA TOPOGRAPHY

Figure 4

General Mine Layout

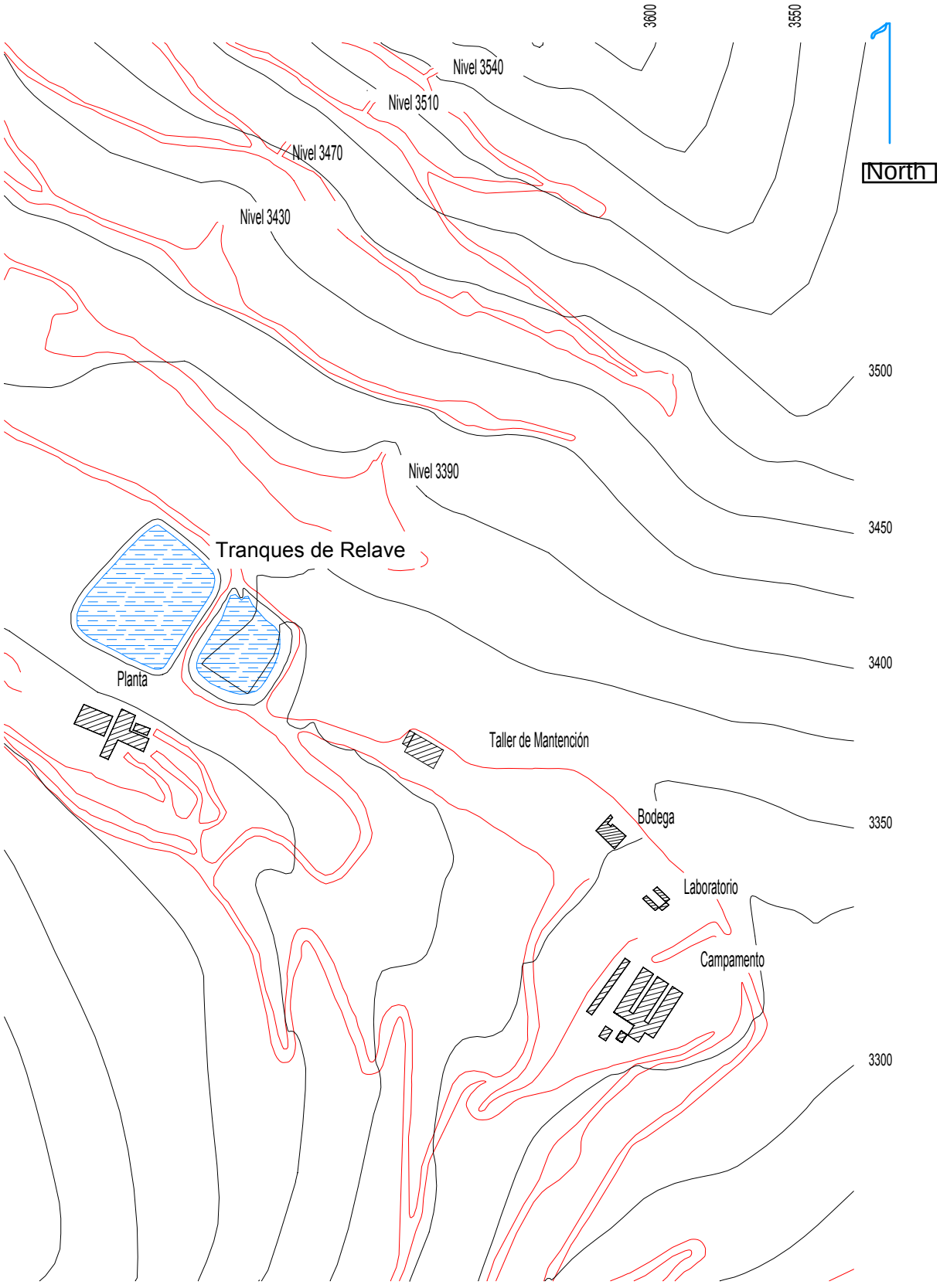
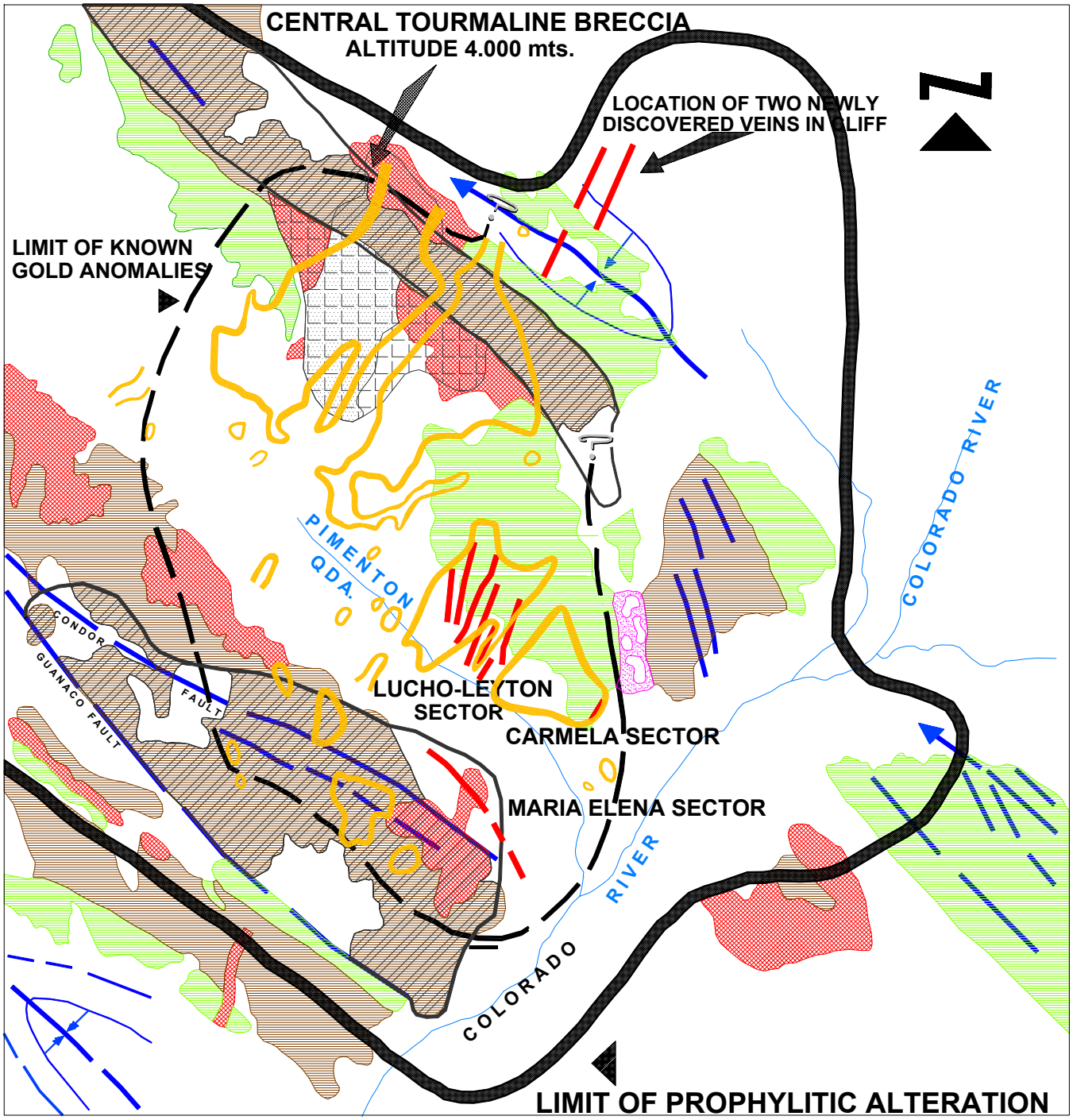


FIGURE 4 -- General Site Layout



PIMENTON PROJECT FIG. 5

1Km 0 1 2Km

LEGEND

INTRUSIVE
TUFFS
ANDESITE
CONGLOM. GRITS
QTZ-SERECITE ALTERATION
POTASSIC ALTERATION
SILISIFICAT.
100 PPB GOLD ANOMALIES

Map prepared from Newmont and CMP data 1996. updated 2001

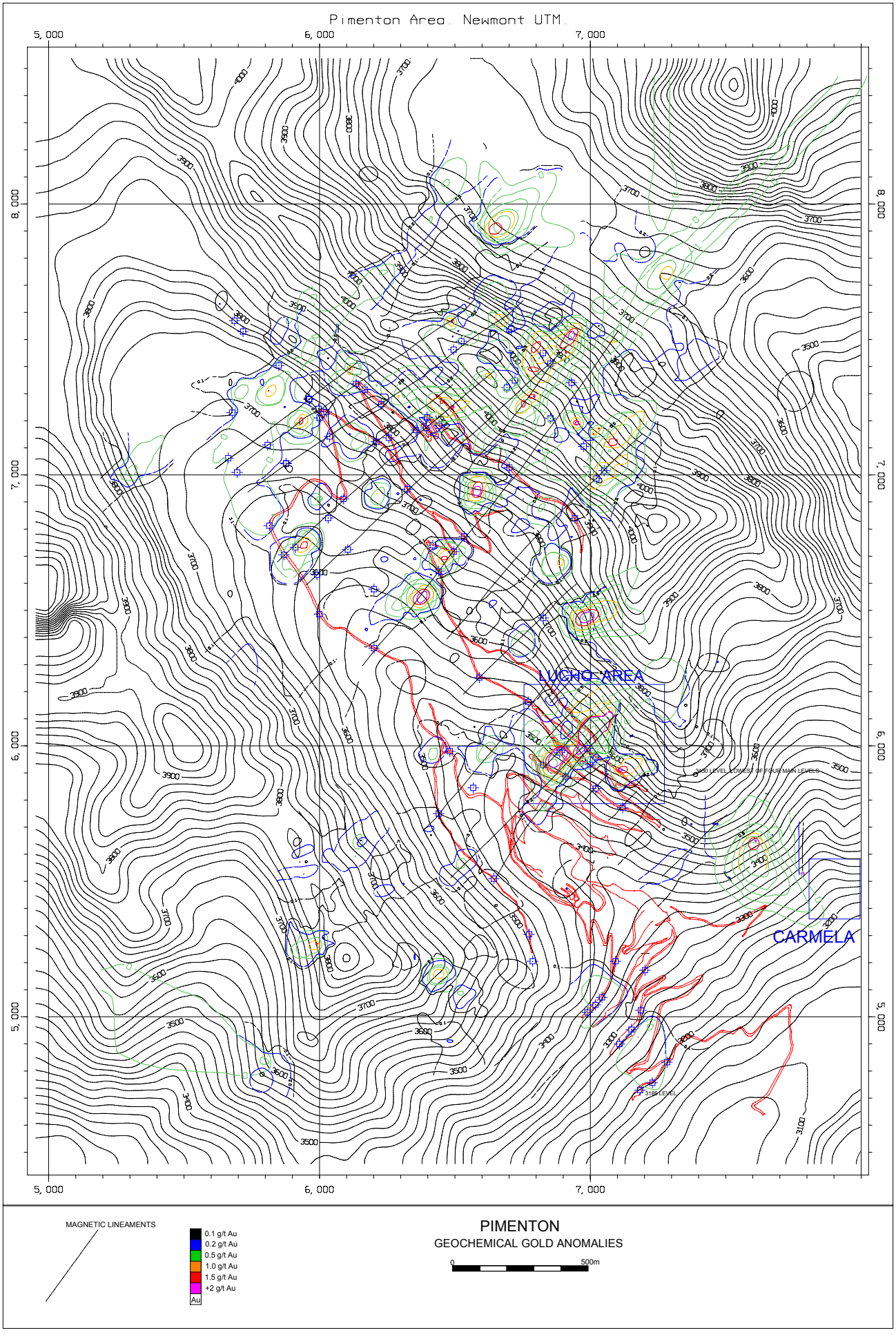
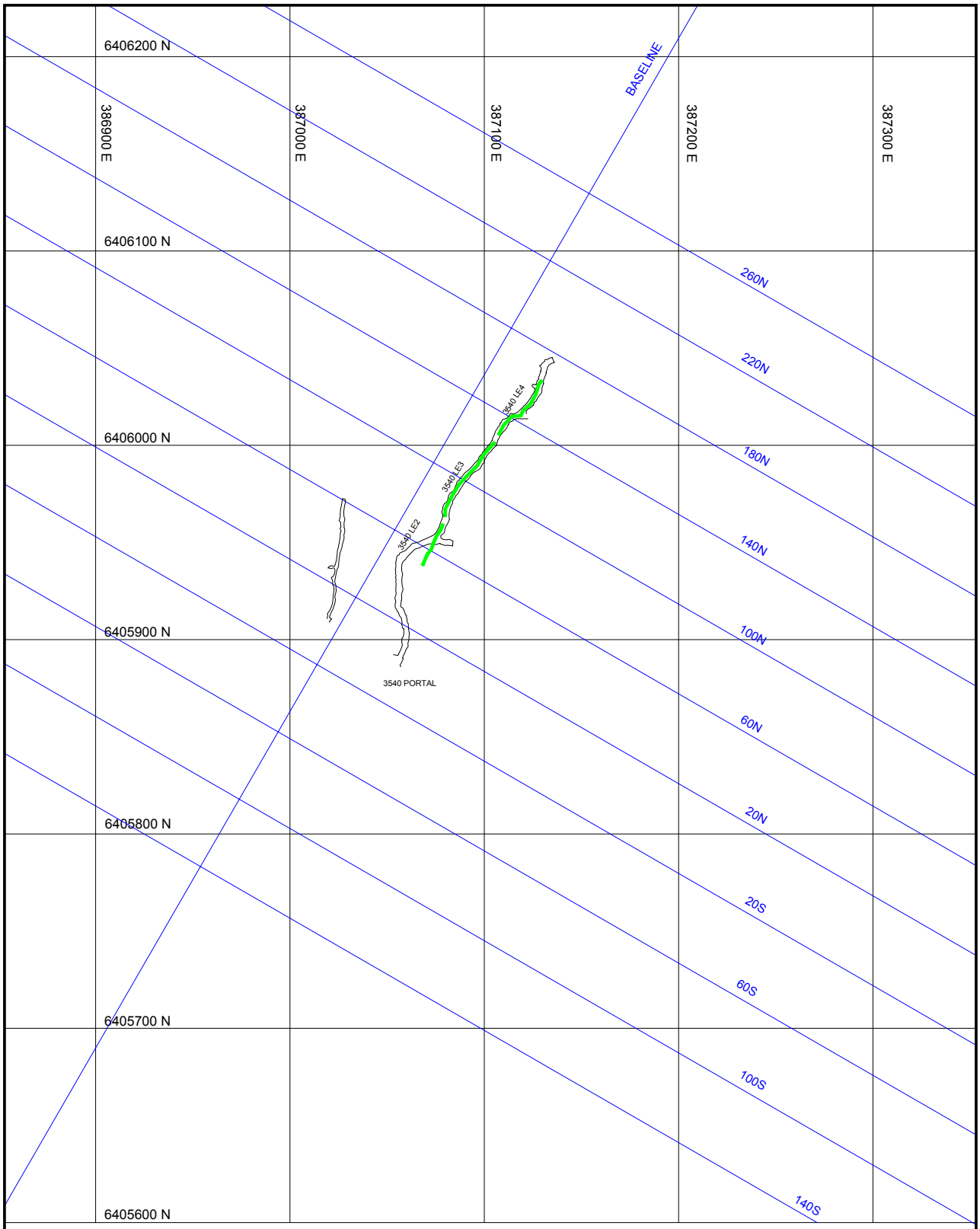


FIGURE 6 -- Map showing Geochemical Anomalies and Magnetic Alignments



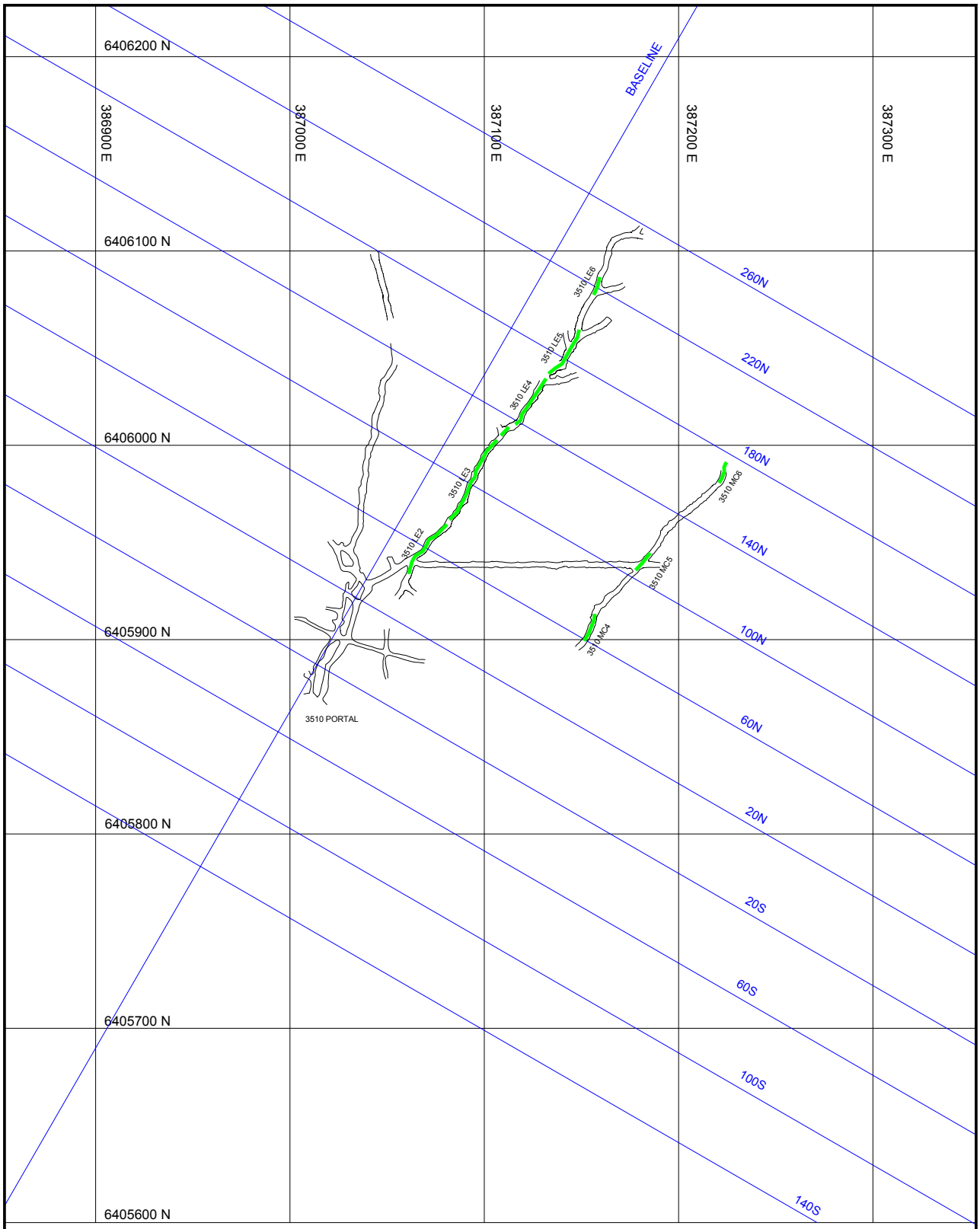
COMPANIA MINERA PIMENTON

3540 LEVEL PLAN

FIG. 7 3540

0 50 100 150

SCALE IN METERS



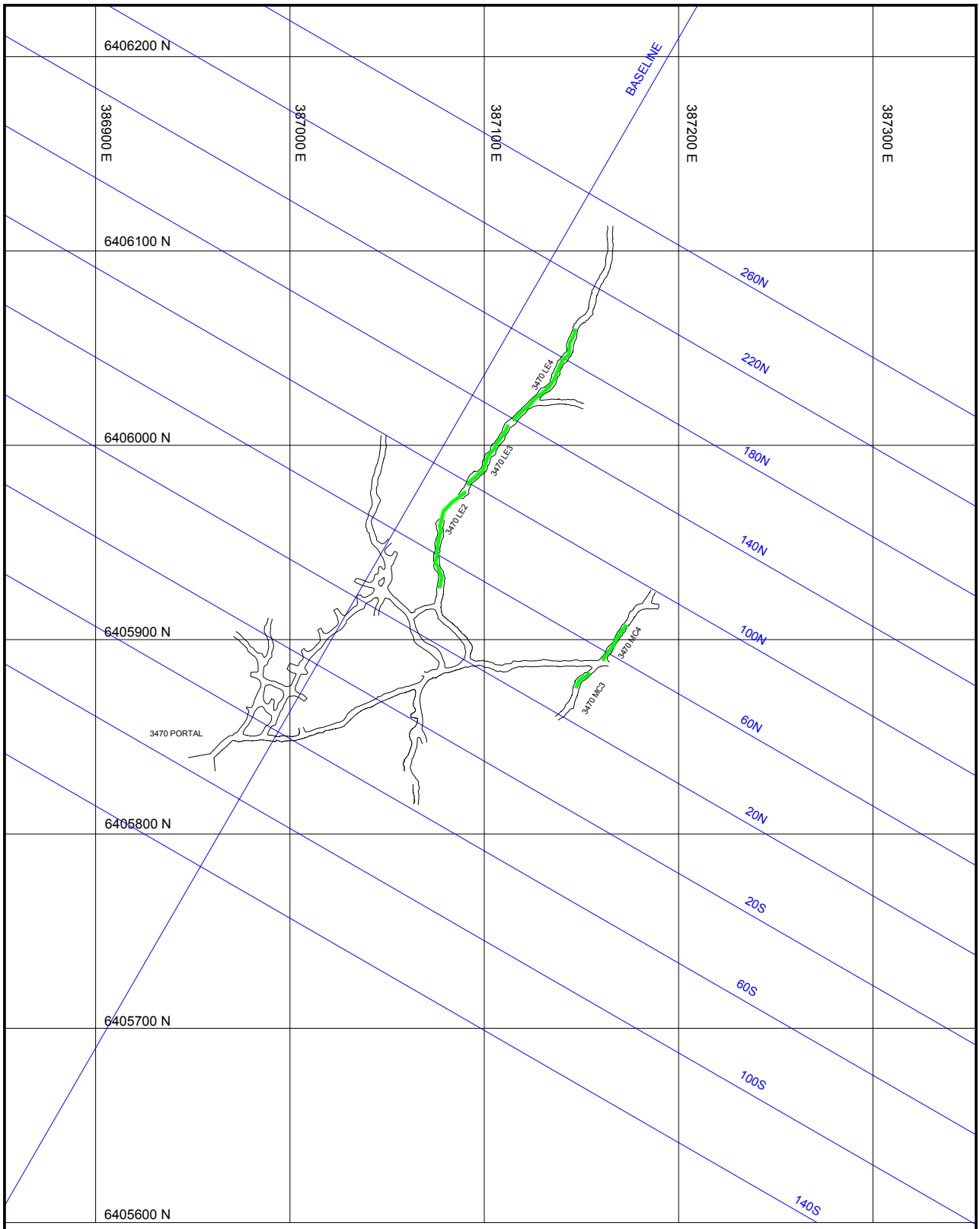
COMPANIA MINERA PIMENTON

3510 LEVEL PLAN

FIG. 8

0 50 100 150

SCALE IN METERS



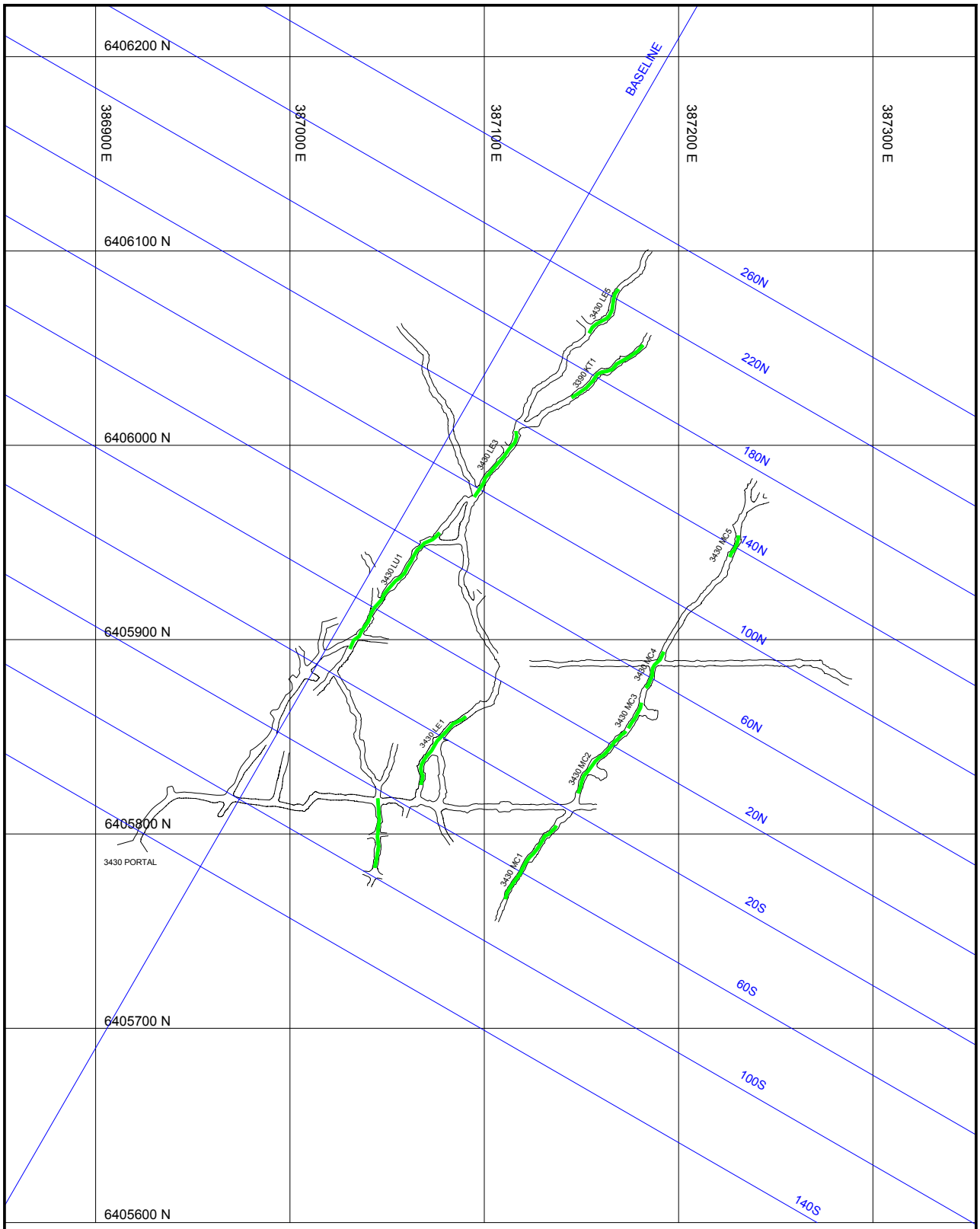
COMPANIA MINERA PIMENTON

3470 LEVEL PLAN

FIG. 9

0 50 100 150

SCALE IN METERS



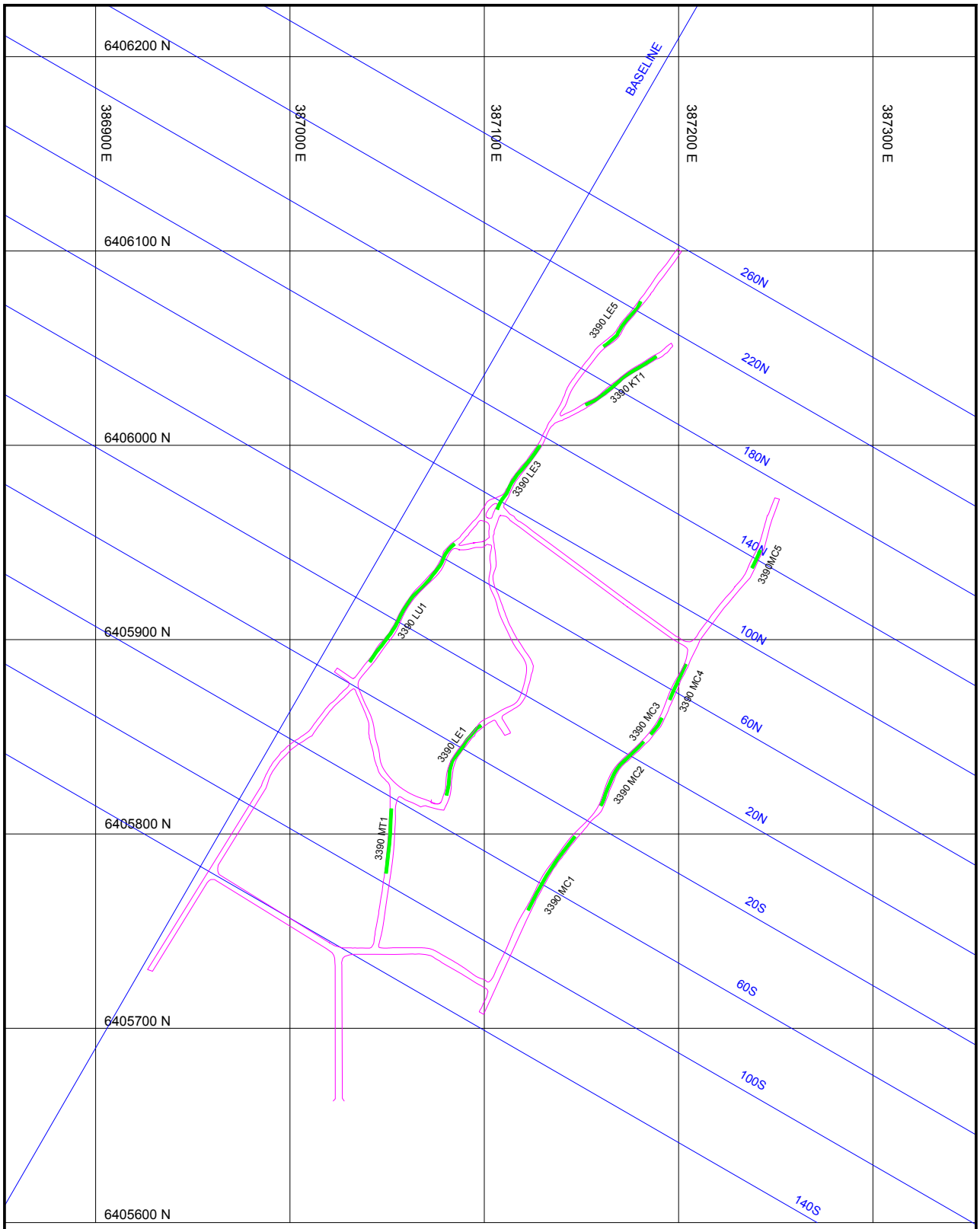
COMPANIA MINERA PIMENTON

3430 LEVEL PLAN

FIG.10

0 50 100 150

SCALE IN METERS



Level Design by
J.J. Selters,

August, 2002

COMPANIA MINERA PIMENTON

3390 LEVEL PLAN
FIG.11

0 50 100 150
SCALE IN METERS

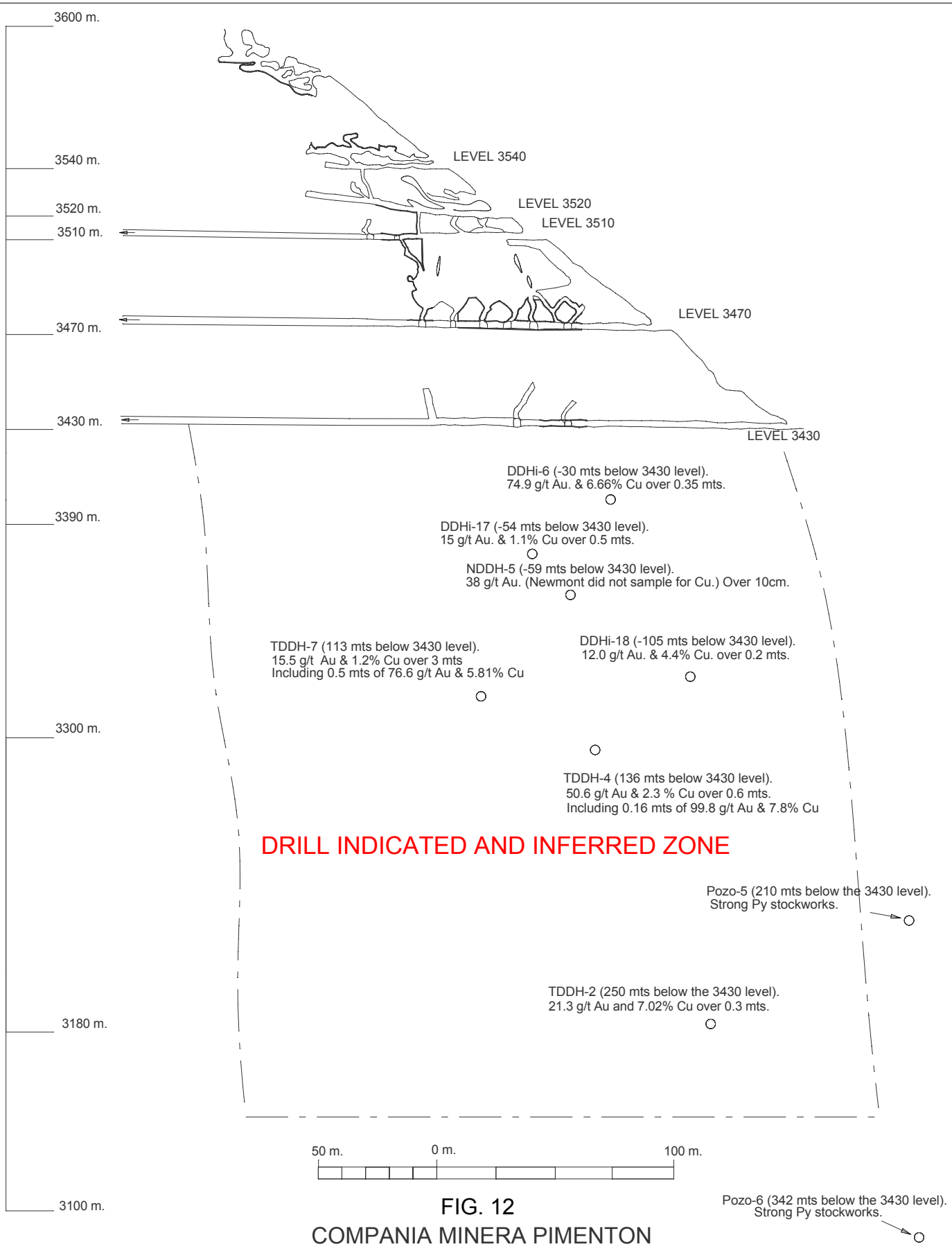
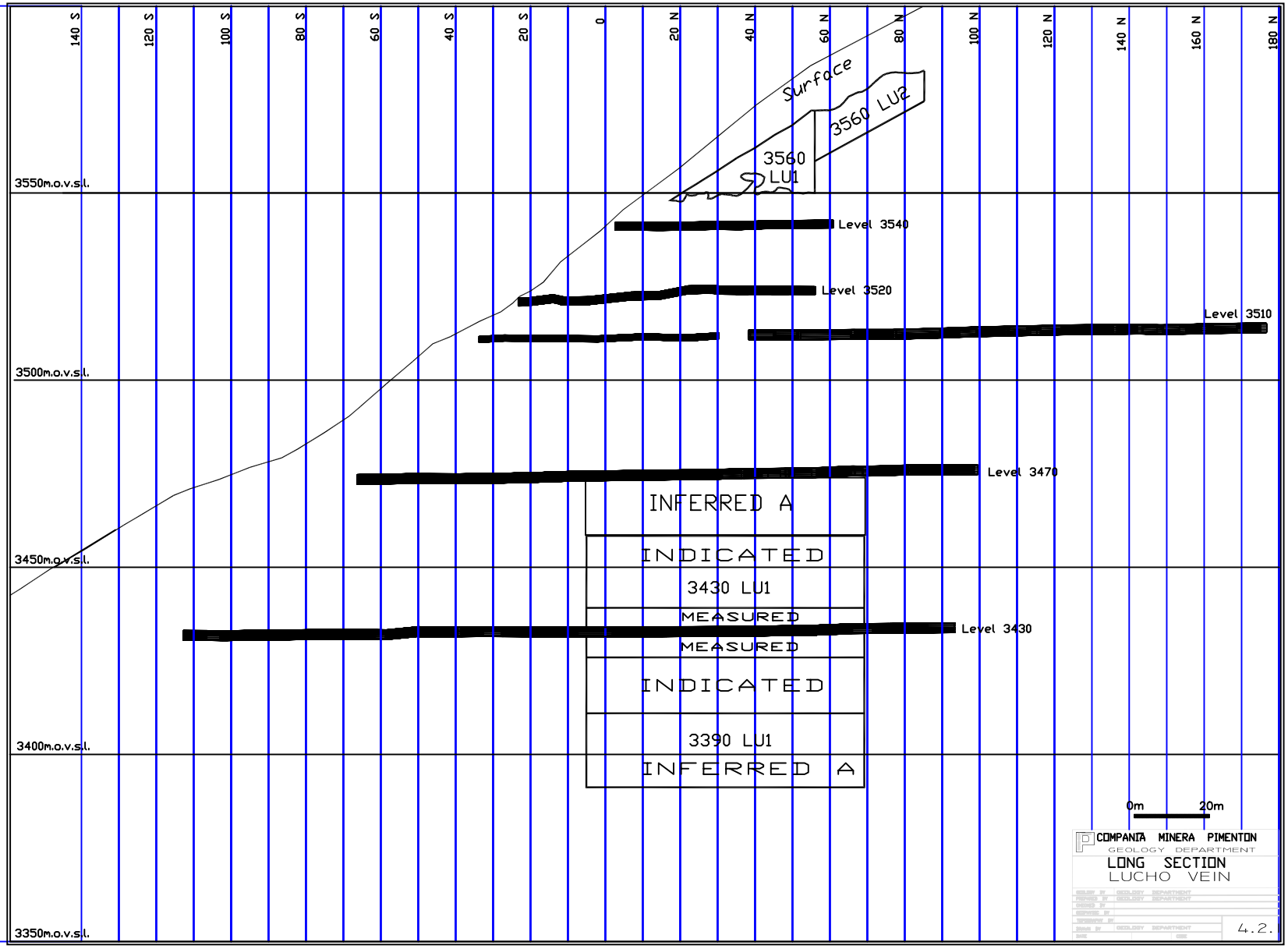


FIG. 12

COMPANIA MINERA PIMENTON

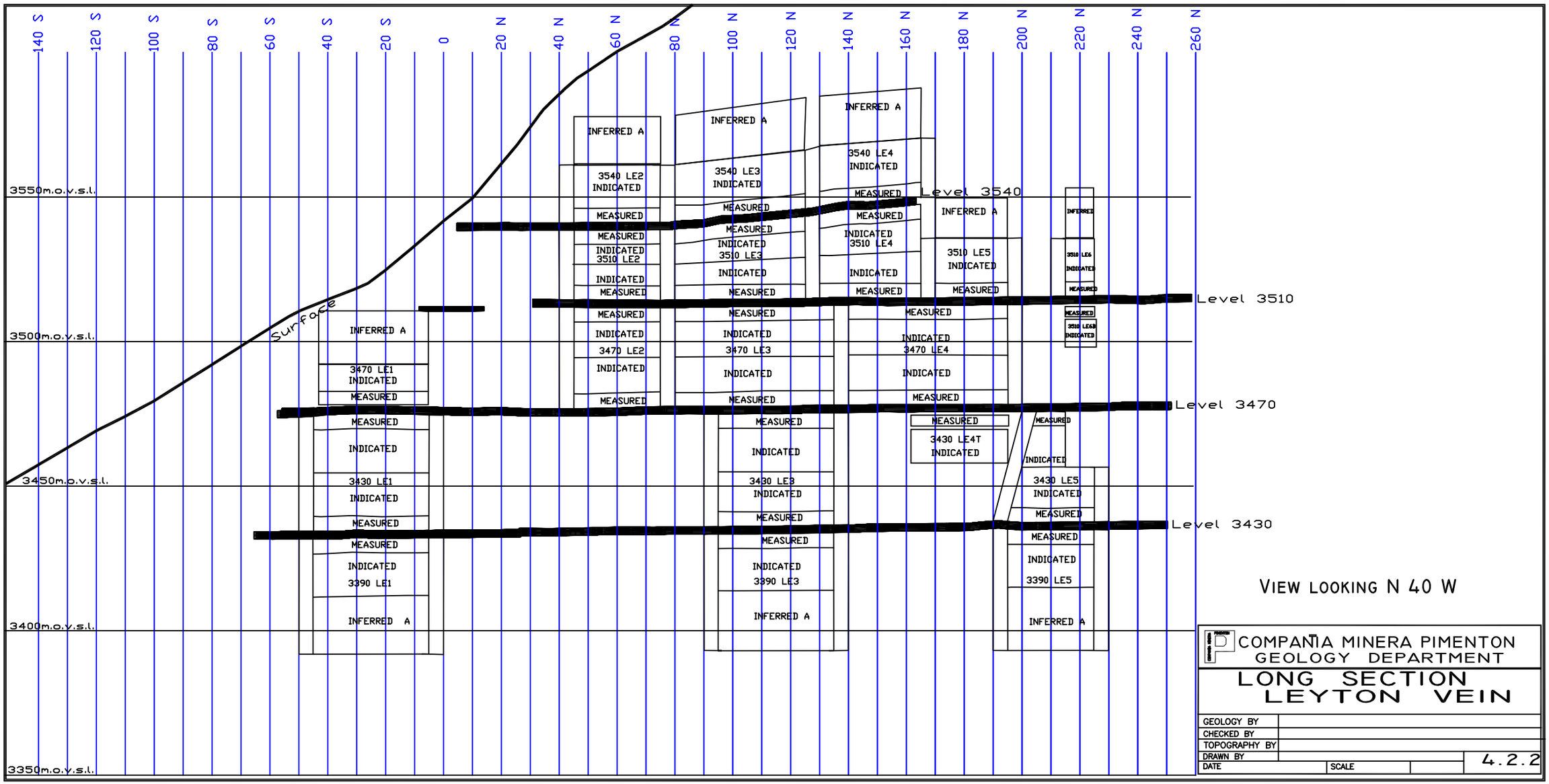
LUCHO AND J.T. ORE RESERVES

N30E LONGITUDINAL SECTION LOOKING EAST



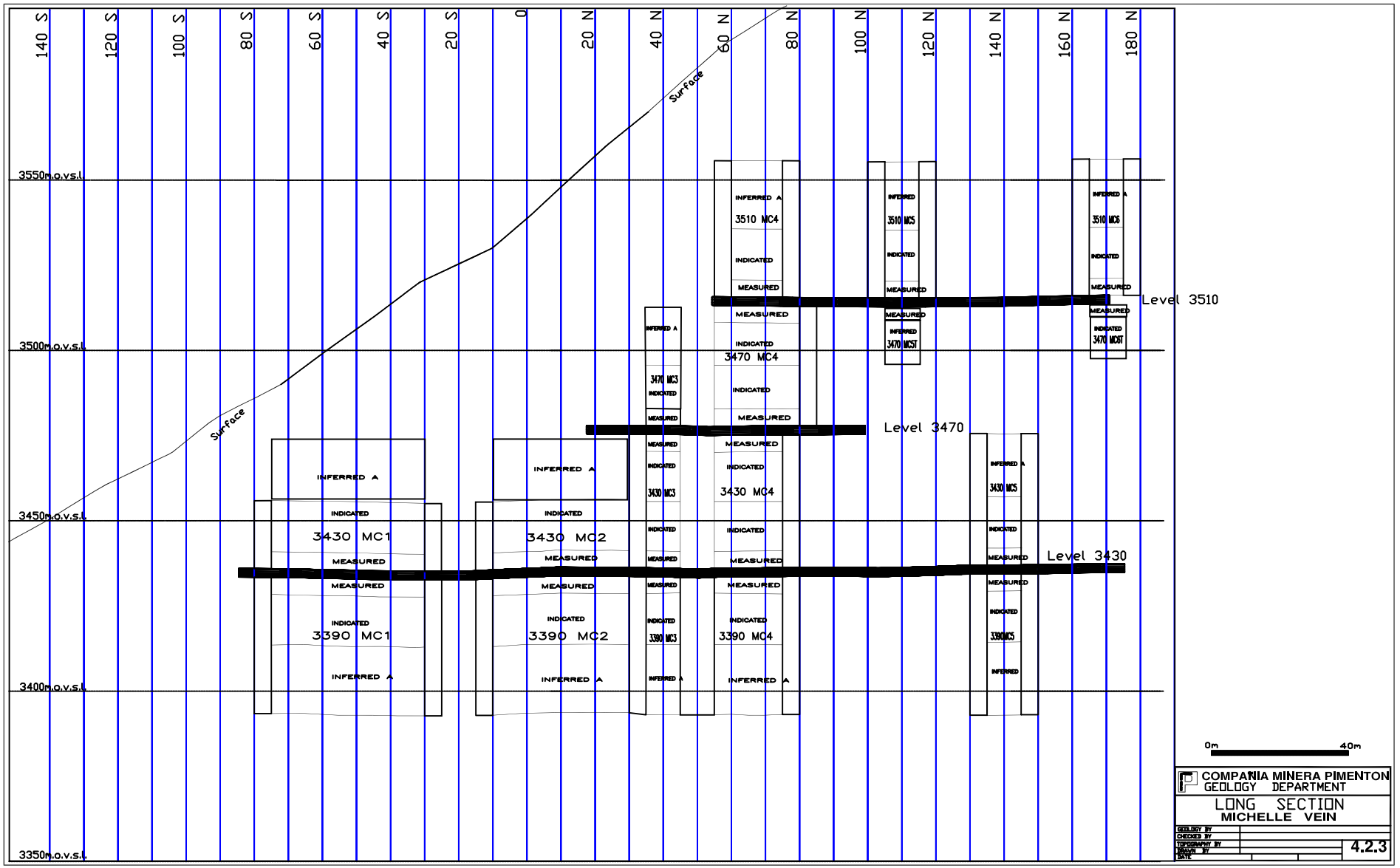
RESOURCE BLOCKS BY
J.J.SELTERS,
AUGUST 2002

FIGURE 13



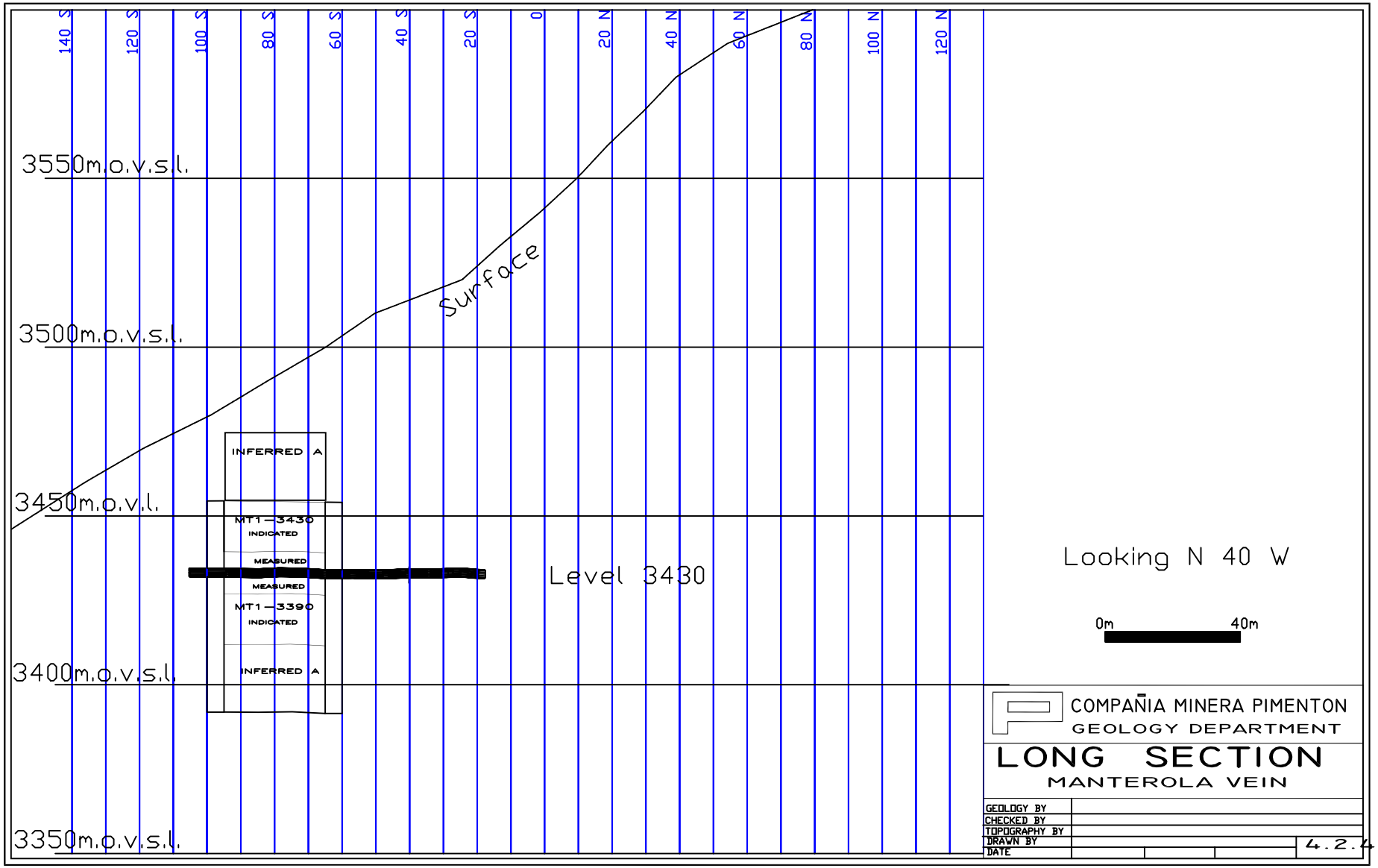
RESOURCE BLOCKS
BY J.J. SELTERS,
AUG. 2002

FIGURE 14



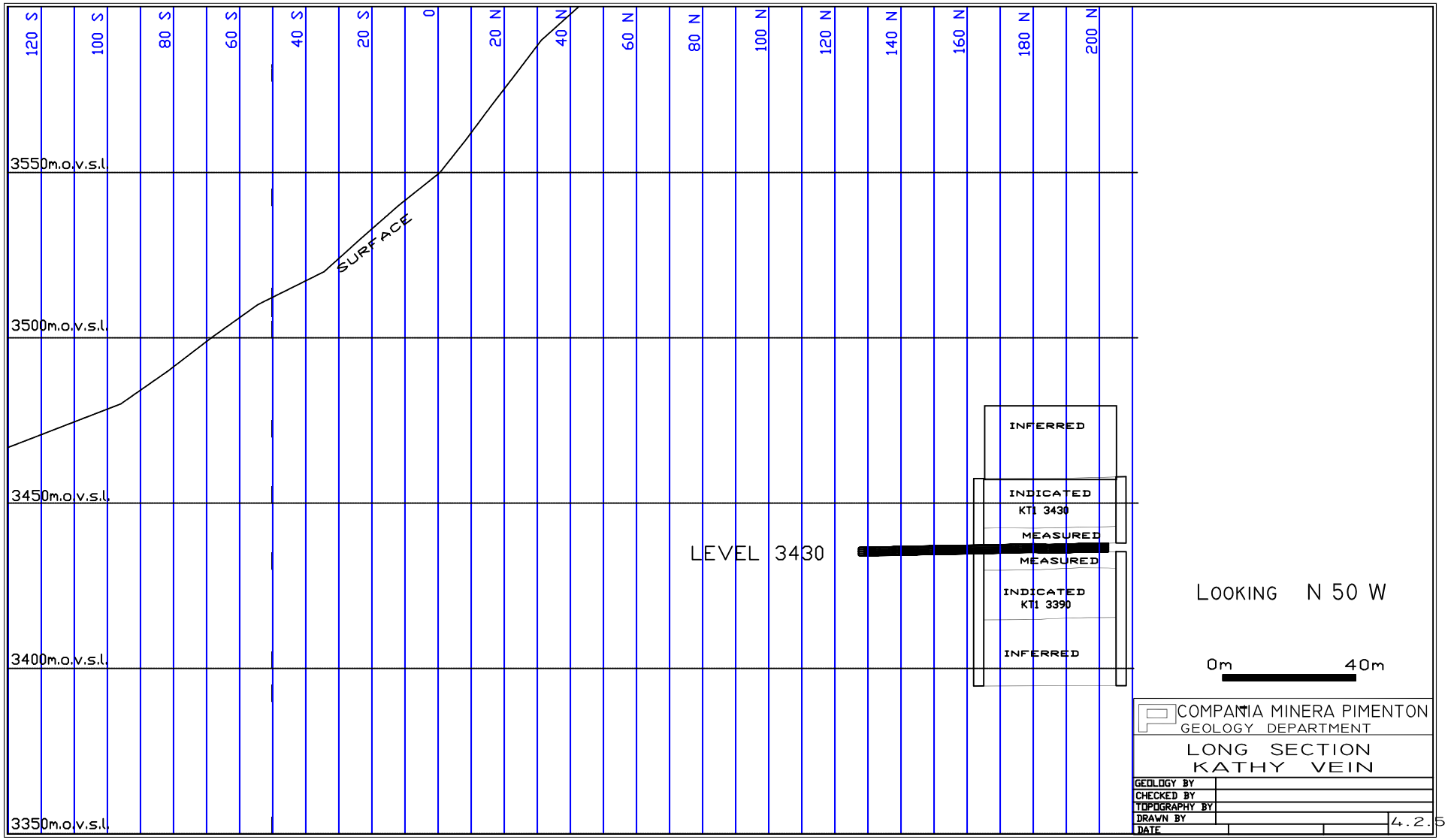
Resource Blocks by
J.J.Selters, August 2002

FIGURE 15



Resource Blocks by
J.J.Selters, August 2002

FIGURE 16



RESOURCE BLOCKS BY
J.J.SELTERS, AUGUST, 2002

FIGURE 17

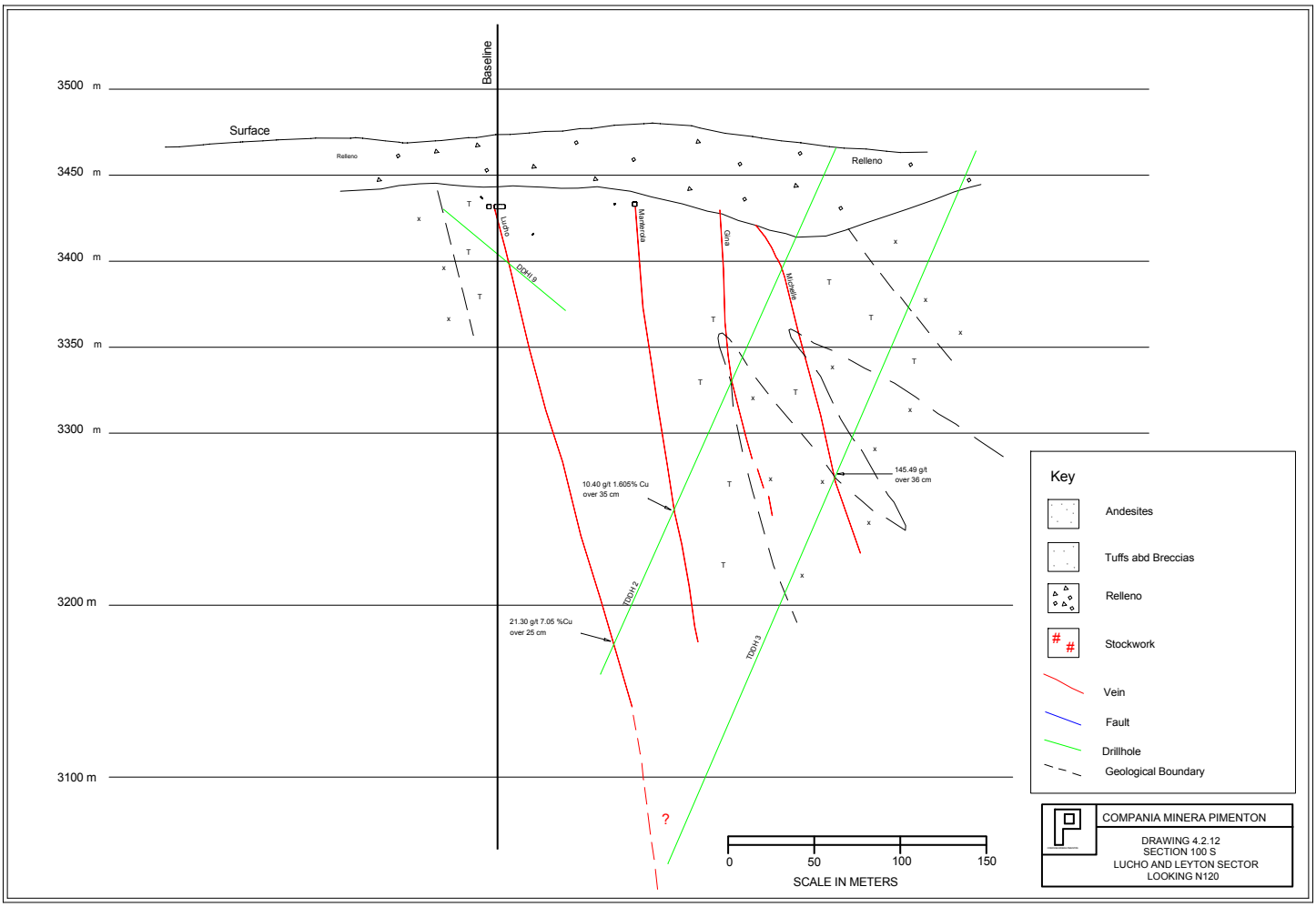


FIGURE 18 -- CROSS SECTION at 100 S, from Scoping Study

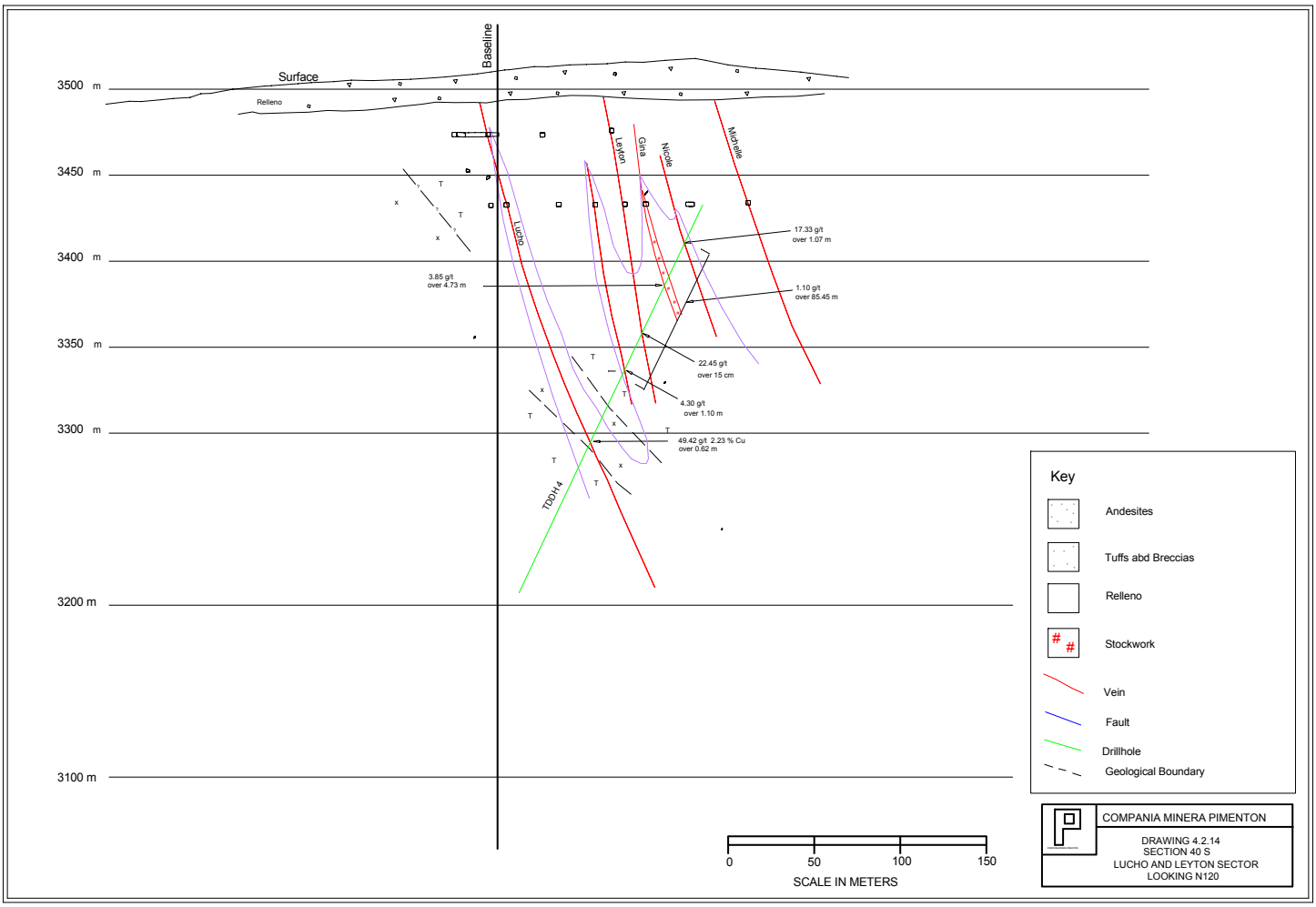


FIGURE 19 -- Cross-section at 40 S, from Scoping Study

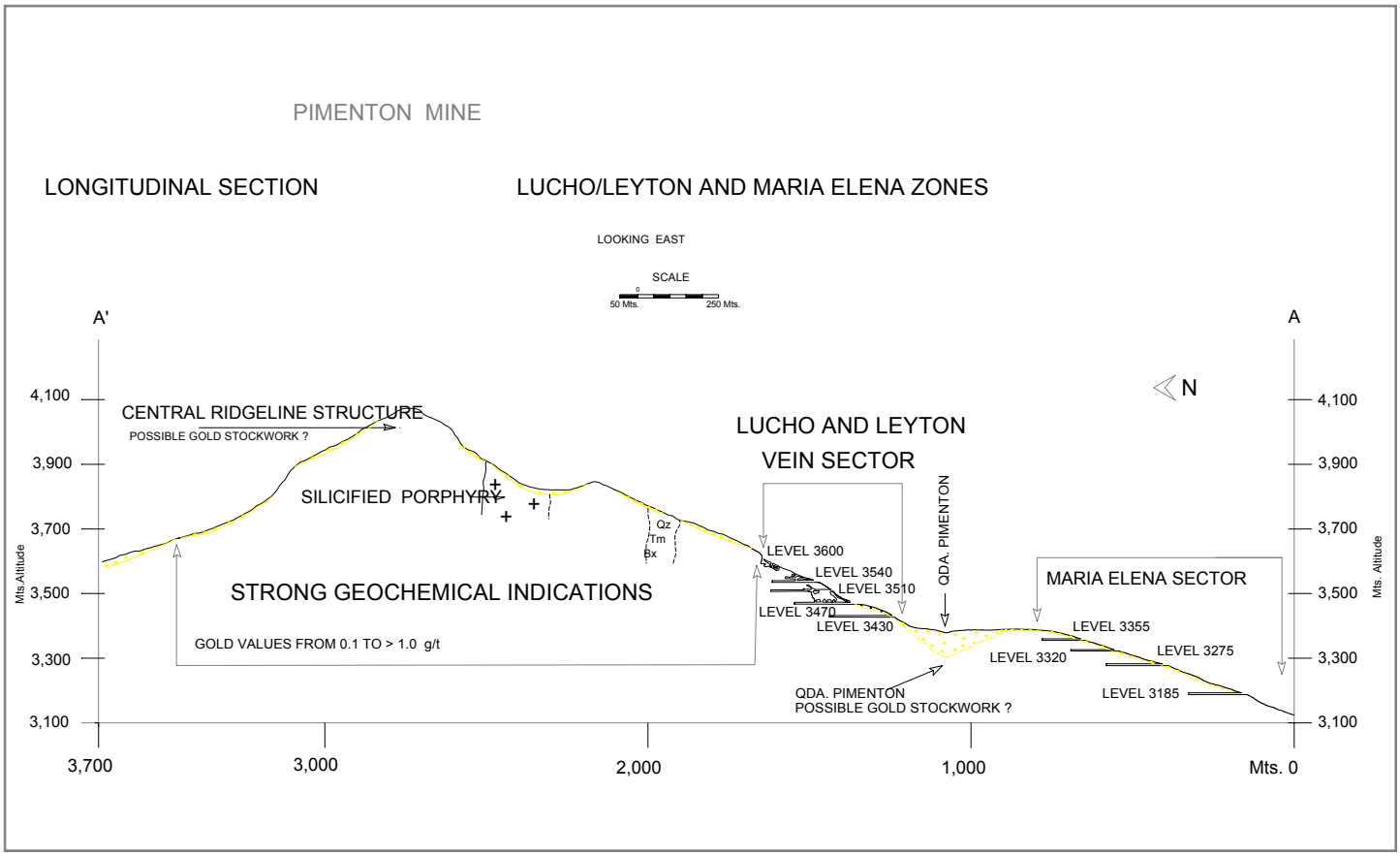


FIGURE 20 - Longitudinal Section Through Pimenton District