

# NI 43-101 TECHNICAL REPORT AUDIT OF THE RESOURCE ESTIMATE FOR THE EL COMETA PROJECT CHIHUAHUA STATE, MEXICO

Report Prepared for:

**ENDEAVOUR SILVER CORP.**

301-700 West Pender St.  
Vancouver, BC, Canada, V6C 1G8  
Toll Free: 877.685.9775  
Phone: 604.685.9775  
Fax: 604.685.9744

Report Prepared by



FILE REF:

P:\U3438 Endeavour 43-101\Project\Reps\Cometa  
Rep\U3438\_008\_Cometa Tech Report.doc

31 MARCH 2008



SRK Version 06/01



# **NI 43-101 TECHNICAL REPORT AUDIT OF THE RESOURCE ESTIMATE FOR THE EL COMETA PROJECT CHIHUAHUA STATE, MEXICO**

**Report Prepared for  
ENDEAVOUR SILVER CORP.**

**Suite 301-700  
West Pender Street  
Vancouver  
Canada  
V6C 1G8**

**SRK Project Number U3438**

**SRK Consulting (UK) Ltd  
5<sup>th</sup> Floor Churchill House  
17 Churchill Way  
Cardiff, UK  
CF10 2HH**

**Tel : +44 29 20 34 81 50  
Fax : +44 29 20 34 81 99  
cardiff@srk.co.uk  
www.srk.co.uk**

**FILE REF:** P:\U3438 Endeavour 43-101\Project\Reps\Cometa  
Rep\U3438\_008\_Cometa Tech Report.doc

**31 MARCH 2008**

Report authors  
Ben Parsons

Reviewed by:  
Martin Pittuck

## Executive Summary

---

SRK Consulting (UK) has produced an independent Mineral Resource Estimate on behalf of Endeavour Silver Corp. (Endeavour) for the El Cometa Project in the Chihuahua State of Mexico. The geological models and associated Mineral Resource Estimates cover three veins within the deposit, namely the El Cometa Vein, La Estrella Vein and the Consuelo Breccia.

The El Cometa property is well located for mining, accessible by paved road only 1 km from a 500 tonne per day government-owned plant. The old El Cometa mine was developed on 3 mine levels to 75 m in depth on the same vein as the Esmeralda mine, located only 2 km to the south. Esmeralda is estimated to have produced 4 million tonnes of ore grading 6% combined lead-zinc, 100 g/t silver and 0.5 g/t gold on 10 levels to 600 m in depth. The deepest drill hole by Endeavour at El Cometa is only 400 m below surface; the resource remains open at depth and to a certain extent along strike.

The principal vein, El Cometa, averages 3.9 m thickness; it strikes 000° in the south changing to 340° in the north and dips approximately -55° to the west at deep elevations, and more steeply closer to surface.

The La Estrella vein is in the hangingwall of El Cometa, it averages about 1 m in width, and is separated from El Cometa by 100 m in the north and 150 m in the south, has a strike of 355° and dips 55° to the west.

The Consuelo Breccia is in the footwall of El Cometa separated by a variable distance of normally 20-30 m, although occasionally they are in contact. The mineralisation occupies a zone generally some 2 m to 5 m wide; it has a strike of 315° in the north and 355° in the south with a 55° westerly dip.

La Mexicana is a 1 m to 2 m wide, near-vertical vein with a perpendicular strike, however this not included in the resource estimate owing to very sparse and poorly oriented drillhole intersections.

Diamond drilling core samples collected as part of Endeavour's 2006 – 2007 El Cometa surface drilling were prepared at the Parral field office. A number of laboratories were involved in the early stages, however all mineralised samples affecting the resource estimate were eventually submitted to ALS-Chemex in Chihuahua for sample preparation and ALS Chemex in Vancouver, Canada for analysis. In addition a batch of mineralised sample pulps was resubmitted to ALS Chemex with sufficient Quality Control samples to ensure confidence in the results.

A Mineral Resource Estimate has been produced using the results from the Diamond Drilling assay results constrained by wireframes of the mineralisation. Inverse Distance Weighting to the power of three has been used to estimate the grades and populate a three dimensional block model using relatively large blocks. Tonnage is based on an average density of 2.7 t/m<sup>3</sup>. A cut-off of 4.5% zinc equivalent has been applied.

An Indicated Mineral Resource and Inferred Mineral Resource have been estimated in accordance with the guidelines set out by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and detailed in the National Instrument 43-101, these are summarised in Table 1:

**Table 1: Summary Mineral Resource Statement, 31 December, 2007.**

Category	Tonnage	Silver	Gold	Zinc	Lead	Copper
Indicated	600 kt	39 g/t	1 g/t	3.0 %	2.7 %	0.16 %
Inferred	1,150 kt	39 g/t	1 g/t	2.5 %	2.4 %	0.17 %

## Table of Contents

---

<b>1</b>	<b>SUMMARY</b>	<b>1</b>
<b>2</b>	<b>INTRODUCTION AND TERMS OF REFERENCE</b>	<b>2</b>
2.1	Introduction	2
2.2	Scope of Work	2
2.3	Qualified Person and Participating Personnel	2
2.4	Term and Definitions	3
2.5	Units <sup>4</sup>	
2.6	Source Documents	5
<b>3</b>	<b>RELIANCE ON OTHER EXPERTS</b>	<b>5</b>
<b>4</b>	<b>PROPERTY LOCATION AND DESCRIPTION</b>	<b>5</b>
4.1	Location	5
4.2	Mineral Tenure	7
4.3	Environmental, Permits and Approvals	8
4.4	Property Ownership	8
4.5	Accessibility	9
4.6	Infrastructure and Surface Features	9
4.7	Climate, Vegetation and Physiography	10
4.8	Historic Mining	11
4.9	Current Mining	11
4.10	Adjacent Properties	11
<b>5</b>	<b>GEOLOGY</b>	<b>12</b>
5.1	Regional Geology	12
5.2	Local Geology	12
5.2.1	Parral Formation (Cretaceous)	13
5.2.2	Intrusive Rocks (Tertiary)	13
5.2.3	Escobedo Volcanics (Eocene)	13
5.3	Deposit Geology	13
5.3.1	El Cometa Vein	14
5.3.2	Subsidiary Veins	14
5.4	Grade distribution	14
5.5	Mineralogy	15
<b>6</b>	<b>EXPLORATION DATA QUALITY</b>	<b>16</b>
6.1	Introduction	16
6.2	2006 - 2007 Drilling Programme	16
6.2.1	Drilling Method and Survey	16
6.2.2	Sample Preparation and Analysis	16
6.2.3	Sample Preparation - ALS-Chemex, Chihuahua, Mexico	17
6.2.4	Analyses - ALS-Chemex, Vancouver	17
6.2.5	Density Determinations	18
6.2.6	Drilling Results	19
6.2.7	Conclusion	19
6.3	Ongoing Work Programme	25
6.4	Quality Control on ALS-Chemex Vancouver	25
6.4.1	Introduction	25
6.4.2	Analysis	25
6.4.3	Conclusions	27

6.5	Independent Verification	27
<b>7</b>	<b>METALLURGICAL TESTWORK</b>	<b>28</b>
7.1	Phase 1 Metallurgical Testing	28
7.1.1	Summary of Phase 1 Metallurgical Test Program	29
7.2	Phase 2 Metallurgical Testwork	29
7.2.1	Phase 2 Test Schedule	30
7.2.2	Phase 2 Head Assay & ICP Analyses	30
7.2.3	Gravity Separation	32
7.2.4	Summary of Phase 2 Metallurgical Test Program	33
7.3	Phase 3 Metallurgical Testing – SGS-Lakefield	34
7.3.1	Summary of Phase 3 Metallurgical Test Program	35
7.4	Metallurgical Testwork Summary	35
<b>8</b>	<b>MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES</b>	<b>35</b>
8.1	Introduction	35
8.2	Database construction and Validation	36
8.3	Review of Endeavour Model	36
8.4	SRK Geological Modelling Approach	36
8.5	Zinc Equivalence Estimation	37
8.6	Model Geometry	37
8.6.1	El Cometa	37
8.6.2	Consuelo Breccia	38
8.6.3	La Estrella	38
8.7	Statistical Analysis	40
8.8	High Grade Capping	44
8.9	Density Data	45
8.10	Block Model Grade Interpolation	45
8.11	Definition of Search Parameters	46
8.12	Classification	48
8.13	Cut-off Grade Derivation	49
8.14	Mineral Resource Statement	49
<b>9</b>	<b>OTHER RELEVANT INFORMATION</b>	<b>51</b>
<b>10</b>	<b>INTERPRETATION AND CONCLUSIONS</b>	<b>51</b>
<b>11</b>	<b>RECOMMENDATIONS</b>	<b>51</b>
11.1	Drilling Plan and Budget	51
11.2	Further Drilling Recommendation	53
11.3	Additional Work	53
<b>12</b>	<b>REFERENCES</b>	<b>53</b>
<b>13</b>	<b>CERTIFICATES OF QUALIFIED PERSONS</b>	<b>54</b>
<b>SRK DISTRIBUTION RECORD</b>		

## List of Figures

---

Figure 4-1:	Location map for the El Cometa Project in Chihuahua, Mexico	6
Figure 4-2:	El Cometa concession boundaries,	7
Figure 4-3:	Location of Endeavour Offices and Esmeralda Plant	10
Figure 4-4:	Vertical Longitudinal Projection looking west and Plan showing adjacent properties	12
Figure 5-1:	Typical cross-section looking north at El Cometa vein and subsidiary veins	15
Figure 6-1:	El Cometa Drilling Plan	20
Figure 6-2:	El Cometa Vertical Longitudinal Projection of Intersection Points looking West	21
Figure 6-3:	Scatter Plot of 2008 versus 2007 zinc % Assays	27
Figure 8-1:	Typical Plan showing Three Main Deposits	39
Figure 8-2:	Typical Vertical section showing three major deposits.	40
Figure 8-3:	Comparative Histograms of Zinc Grades	42
Figure 8-4:	Comparative Histograms of Lead Grades	42
Figure 8-5:	Comparative histograms of Gold Grades	43
Figure 8-6:	Comparative histograms of Silver Grades	43
Figure 8-7:	Comparative histograms of Copper Grades	44
Figure 8-8:	Vertical Projection of El Cometa Vein Silver Values	46
Figure 8-9:	Cross Section of composite grades showing rotation of anisotropy with the El Cometa Vein	47
Figure 8-10:	Vertical Project of El Cometa Vein showing classification	49
Figure 11-1:	Longitudinal section of La Cometa displaying intercept points for proposed infill drill holes in 2008	52

## List of Tables

---

Table 2-1:	List of abbreviations	3
Table 4-1:	El Cometa Concession Coordinates	8
Table 4-2:	El Cometa Concession Expenditure	8
Table 6-1:	Bulk Density Determinations and Analysis	19
Table 6-2:	Summary of El Cometa 2006 – 2007 Drilling Programme	22
Table 6-3:	El Cometa 2006 - 2007 Diamond Drilling Highlights	23
Table 6-4:	El Cometa 2006 - 2007 Diamond Drilling Highlights continued	24
Table 6-5:	QAQC Certified Reference Materials	26
Table 7-1:	Head Assay for Cometa Ore Sample	28
Table 7-2:	Phase 1 Metallurgical Test Results	28
Table 7-3:	Head Assay for PRA Cometa Sample	31
Table 7-4:	Whole Rock Analysis for Cometa Sample (PRA)	32
Table 7-5:	Gravity Concentration Test Conditions (PRA)	32
Table 7-6:	PRA Gravity Concentration Test Results	33
Table 7-7:	Head Assay for Phase 3 El Cometa Sample	34
Table 7-8:	Flotation Results for Phase 3 Test	34
Table 7-9:	Flotation Test Results including one cleaner	35
Table 8-1:	Summary of Metal Prices used for metal equivalent calculations	37
Table 8-2:	Summary Statistics for Composited Grades in El Cometa Vein	41
Table 8-3:	Summary Statistics for Composited Grades in Consulea Breccia	41
Table 8-4:	Summary Statistics for Composited Grades in La Estrella Vein	41
Table 8-5:	High Grade Caps Applied to Composited Data	45
Table 8-6:	Block Model Geometry	45
Table 8-7:	Summary of search ellipsoids used in 2008 model	47
Table 8-8:	Summary of estimation parameters used in 2008 model	48
Table 8-9:	Classification codes used in SRK Resource Model	48
Table 8-10:	Mineral Resource Statement, 31 December 2007.	50
Table 11-1:	Cometa Project - Exploration Budget for 2008	52

## Appendices

---

Appendix A: QA/QC Analysis

Appendix B: VLP's per Element per Vein



## **NI 43-101 TECHNICAL REPORT AUDIT OF THE RESOURCE ESTIMATE FOR THE EL COMETA PROJECT CHIHUAHUA STATE, MEXICO**

### **1 SUMMARY**

Endeavour Silver Corp. (Endeavour) requested SRK Consulting (UK) Ltd (SRK) to produce an independent Mineral Resource Estimate for the El Cometa Project in the Chihuahua State of Mexico. The project is in an area of considerable historical production and has not been extensively explored by modern exploration methods. Endeavour currently holds an option to acquire a 100% interest in the 20 hectare El Cometa mine property located on the outskirts of the city of Parral in Chihuahua State, Mexico. According to the Mexican Geological Survey (SGM, previously CRM), the district of Parral produced over 250 million oz silver historically, as a by-product of several large lead-zinc-silver vein mines. Two large polymetallic mines continue to operate at the south end of the district, the Santa Barbara mine (6000 tpd) of Grupo Mexico and the San Francisco mine (3000 tpd) of Grupo Frisco.

In 2006, Endeavour acquired options to purchase several properties along the Colorada vein system in the Parral district. In 2007, a total of 15,800 m were drilled in 47 holes to test 7 separate prospective silver veins target. Once it became clear that the Company had an emerging discovery on the El Cometa Property, the other properties were dropped because the drill results were less encouraging.

The El Cometa property is well located for mining, accessible by paved road only 1 km from a 500 tpd government-owned plant. The old El Cometa mine was developed on three mine levels to 75 m in depth on the same vein as the Esmeralda mine, located only 2 km to the south. Esmeralda is estimated to have produced 4 million tonnes of ore grading 6% combined lead-zinc, 100 g/t silver and 0.5 g/t gold on 10 levels to 600 m in depth. The deepest drill hole by Endeavour at El Cometa is only 400 m below surface and the newly discovered mineralized zone is still open at depth and to a certain extent along strike.

## **2 INTRODUCTION AND TERMS OF REFERENCE**

### **2.1 Introduction**

Endeavour retained SRK to prepare a Technical Report covering the El Cometa Project located in Chihuahua State, Mexico.

The objective of this Technical Report is to provide Endeavour with a report that will follow existing regulations in Canada. This report meets the requirements for NI 43-101 and conforms to form 43-101F1 for technical reports.

### **2.2 Scope of Work**

SRK's scope of work concentrated on the following areas:

- Review the relevant technical aspects of the El Cometa Project as required to prepare a Mineral Resource statement in accordance with the CIM Code. The scope includes desktop review work covering any related technical studies completed on the El Cometa project.
- Ensure that an appropriate program of quality assurance and quality control (QAQC) is in place.
- Review Endeavour's interpretations, produce a three dimensional model and prepare a Mineral Resource statement dated 31 December 2007 in accordance with the CIM Definition and Standards dated December 30th 2005 as guidelines for the reporting of the Mineral Resources and Mineral Reserves.
- Use data prepared by Endeavour to prepare the 43-101 report with adjustments where considered appropriate.
- SRK has relied on the Company's legal advisors in respect of all legal matters as they relate to mining and exploration licences and operating/contractual agreements with third party state/private entities.

### **2.3 Qualified Person and Participating Personnel**

The qualified person responsible for the preparation of this report and the audit of the resource estimate on the El Cometa Project is Mr Martin Pittuck, a Principal Consultant with SRK who heads up the Geology Department of SRK (UK) Limited.

Mr. Pittuck visited Endeavour Silver's El Cometa Project on 18 December 2007. He visited the project where surface diamond drilling had been undertaken and inspected diamond drill core and core storage facilities, and performed the initial review of the assay database and Endeavour's Vulcan 3D computer model interpretation which has guided the resource estimate.

SRK was assisted during the visit by a number of employees and consultants working for Endeavour including Barry Devlin, Vice President of Exploration, Ing Luis R Castro V, Exploration Manager, and Esperanza Acosta, Computer Specialist.

SRK is pleased to acknowledge the helpful cooperation of Endeavour management and personnel, all of whom made any and all data requested available and responded openly and helpfully to all questions, queries and requests for material.

## 2.4 Term and Definitions

Table 2.1 summarizes a list of the various abbreviations used throughout this report.

**Table 2-1: List of abbreviations**

Name	Abbreviations
ALS	ALS Chemex Laboratories
Canadian Institute of Mining, Metallurgy and Petroleum	CIM
Canadian National Instrument 43-101	NI 43-101
Carbon in leach	CIL
Centimetre(s)	cm
Comisión de Fomento Minero	Fomento Minero
Day	d
Degree(s)	°
Degrees Celsius	°C
Digital elevation model	DEM
Dirección General de Minas	DGM
Canadian and US Dollars	CDN and USD
Endeavour Gold S.A de C.V.	Endeavour Gold
Endeavour Silver Corporation	Endeavour
Gram(s)	g
Grams per metric tonne	g/t
Greater than	>
Grupo Peñoles	Peñoles
Hectare(s)	ha
Internal rate of return	IRR
Kilogram(s)	kg
Kilometre(s)	km
Less than	<
Litre(s)	l
Metre(s)	m
Metres above sea level	masl
Mexican Peso	Peso

Million tonnes	Mt
Million ounces	Moz
Million years	Ma
Million metric tonnes per year	Mtpa
Milligram(s)	mg
Millimetre(s)	mm
Minera Planta Adelante S.A. de C.V.	Minera Planta Adelante
North American Datum	NAD
Net present value	NPV
Net smelter return	NSR
Not available/applicable	n.a.
Ounces	oz
Ounces per year	oz/y
Parts per billion	ppb
Parts per million	ppm
Percent(age)	%
PRA	Process Research Associates
Quality Assurance/Quality Control	QAQC
Second	S
Specific gravity	SG
System for Electronic Document Analysis and Retrieval	SEDAR
Système International d'Unités	SI
Tonne (metric)	t
Tonnes (metric) per day	t/d
Tonnes (metric) per month	t/m
Universal Transverse Mercator	UTM
Year	Y

## 2.5 Units

All currency amounts are stated in US dollars or Mexican pesos, as specified, with costs and commodity prices typically expressed in US dollars. Quantities are generally stated in metric (SI) units, the standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area, grams (g) and grams per metric tonne (g/t) for gold and silver grades (g/t gold, g/t silver). Wherever applicable, any Imperial units of measure encountered have been converted to Système International d'Unités (SI) units for reporting consistency. Precious metal grades may be expressed in parts per million (ppm) or parts per billion (ppb) and their quantities may also be reported in troy ounces (ounces, oz) which is equivalent to 31.1035 g; this is a common practice in the mining industry.

## **2.6 Source Documents**

The review of the El Cometa Project was based on published material researched by SRK, as well as data, professional opinions and unpublished material submitted by the professional staff of Endeavour or its consultants. The review of the resource estimation parameters was conducted at Endeavour's exploration office in Guanajuato, Mexico following the site visit to the El Cometa Project. Further review of the resource parameters and an audit of the resource were undertaken in January and February, 2008. The audit of the resource estimate was conducted in SRK's Cardiff office in the United Kingdom (UK).

## **3 RELIANCE ON OTHER EXPERTS**

SRK has relied on information provided by Endeavour personnel during the site visit and ensuing technical discussions and exchanges.

In particular SRK has relied on Endeavour's lawyers in respect of legal title affecting ownership and production licences.

## **4 PROPERTY LOCATION AND DESCRIPTION**

Endeavour currently holds an option to acquire a 100% interest in the 20 ha El Cometa mine property located on the outskirts of the city of Parral in Chihuahua State, Mexico. The El Cometa Project is held under option by Minera Plata Adelante, SA DE CV, a wholly-owned subsidiary of Endeavour.

### **4.1 Location**

The El Cometa mining concession is registered in the municipality of Hidalgo del Parral (Parral), a city of approximately 100,000 inhabitants in southernmost Chihuahua state, Mexico as illustrated in Figure 4-1. The site is in the mining district of Parral, a roughly 10 km by 10 km area north and west of Parral. El Cometa is approximately 4 km from the centre of Hidalgo del Parral. The mining district is subdivided into sub-districts; El Cometa is part of the Nueva Minas subdistrict, named for a small town built in 1645 around a thriving silver mining industry exploiting the Veta Colorada.

Latitude and longitude for the city of Parral is 26° 56' 29.88" and 105° 42' 45.26".

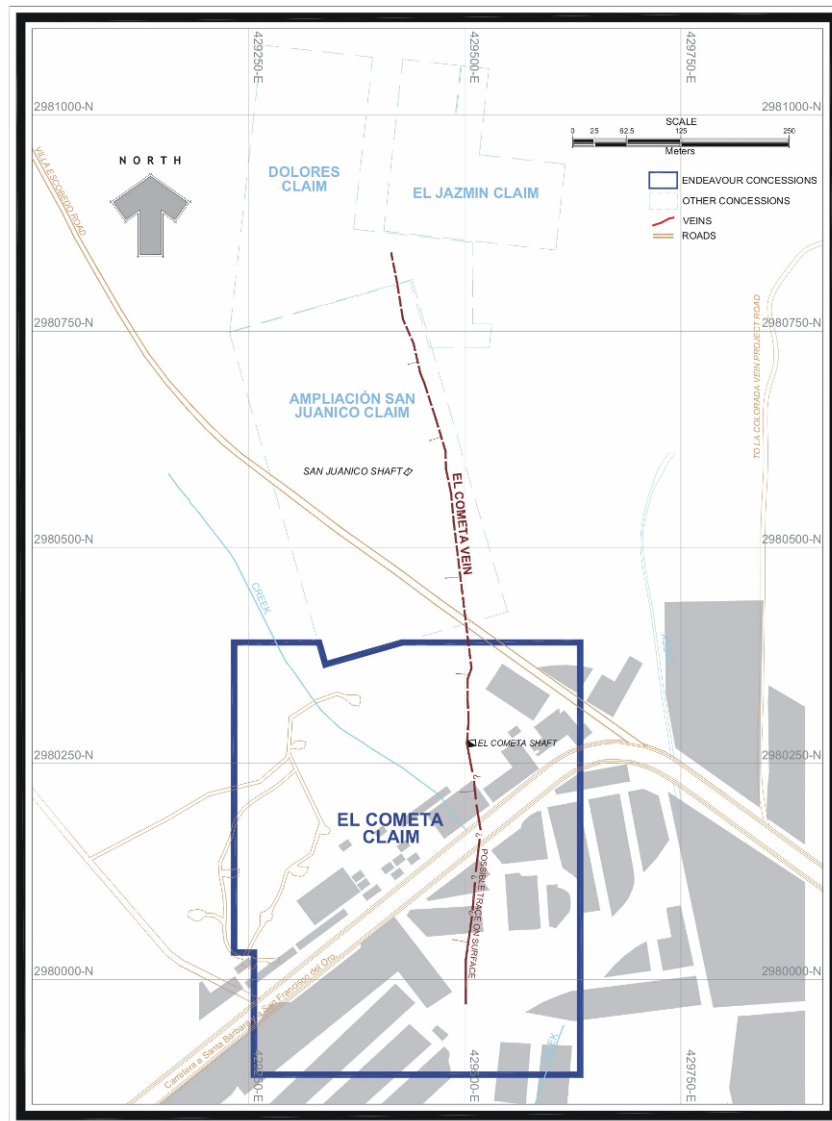
El Cometa consists of a mostly rectangular claim of 19.6 hectares, bisected by a highway leading southwest toward the small mining city of Santa Barbara, about 20 km distant.



**Figure 4-1: Location map for the El Cometa Project in Chihuahua, Mexico**

The southern portion of El Cometa is beneath a residential district, some drilling in the southern part of the deposit has been completed ahead of the original schedule owing to development work which will restrict surface access in that area. The northern half of the outcrop in the concession and the area to the west underneath which the vein dips is open ground. Figure 4-2 illustrates the surface expression of the vein and other existing features.

Whilst the presence of existing surface features may affect the choice of where access to the deposit will be gained, it is not expected to severely restrict the part of the deposit which may be mined. There will need to be some consideration to limiting how close to mining can be to surface under the built up areas.



**Figure 4-2: El Cometa concession boundaries,  
surface vein trace, roads, and development structures**

## 4.2 Mineral Tenure

The El Cometa Project is held under a mining option agreement (“CONTRATO DE EXPLOTACION Y OPCION MINERA”) by MINERA PLATA ADELANTE, S.A. DE C.V., a wholly-owned subsidiary of Endeavour. The registered owner of the El Cometa concession (“lote”) is Horacio Rascón Chávez. The licence is defined by pillar coordinates provided in Table 4-1. The option agreement was signed on 7 August 2006, option payment (rental) details are in Table 4-2.

Endeavour’s lawyers consider that Endeavour is current in meeting the legal obligations and requirements of Mexican Mining and Environmental Laws and Regulations including assessment work, property taxes and operating permits.

**Table 4-1: El Cometa Concession Coordinates**

STATION	UTM COORDINATES	
	(M)	
1	429,234	2,980,390
2	429,332	2,980,390
3	429,339	2,980,365
4	429,428	2,980,390
5	429,634	2,980,390
6	429,634	2,979,890
7	429,257	2,979,890
8	429,257	2,980,031
9	429,234	2,980,031

**Table 4-2: El Cometa Concession Expenditure**

Title No.	File No.	Hectares	Contract Start Date	Payment Schedule	Payments (USD)
215021	16/28233	19.5536	8/7/2006	8/7/2006	30,000
				2/6/2007	40,000
				8/6/2007	50,000
				2/6/2008	50,000
				8/6/2008	80,000
				8/6/2009	100,000
				Total	350,000

### 4.3 Environmental, Permits and Approvals

Minera Plata Adelante, SA de CV is reportedly in compliance with monitoring environmental aspects applicable to safety, hygiene and environmental standards to maintain the balance of the ecosystem.

### 4.4 Property Ownership

In addition to the mineral rights, Endeavour has agreements with private surface owners that provide access for exploration and exploitation purposes.



## **4.5 Accessibility**

Parral is accessed on a well-maintained paved highway from Chihuahua City international airport by travelling 38 km westward on MEX 16D to Cuauhtémoc and then southward some 200 km on MEX 24. This is approximately a 2.5-hour drive. El Cometa is 4 km west of Parral on the road to Santa Barbara. The city of Parral is well maintained with numerous hotels, restaurants and other services.

## **4.6 Infrastructure and Surface Features**

The location of the El Cometa Project is excellent due to its proximity to Parral and Chihuahua City. Most of the supplies and labour required for any mining operation would be brought in from these cities. The area has a long tradition of mining and there is an ample supply of skilled personnel sufficient for both the underground mining operations and the surface facilities.

Power supply to the El Cometa Project is provided by the National Grid (Comisión Federal de Electricidad).

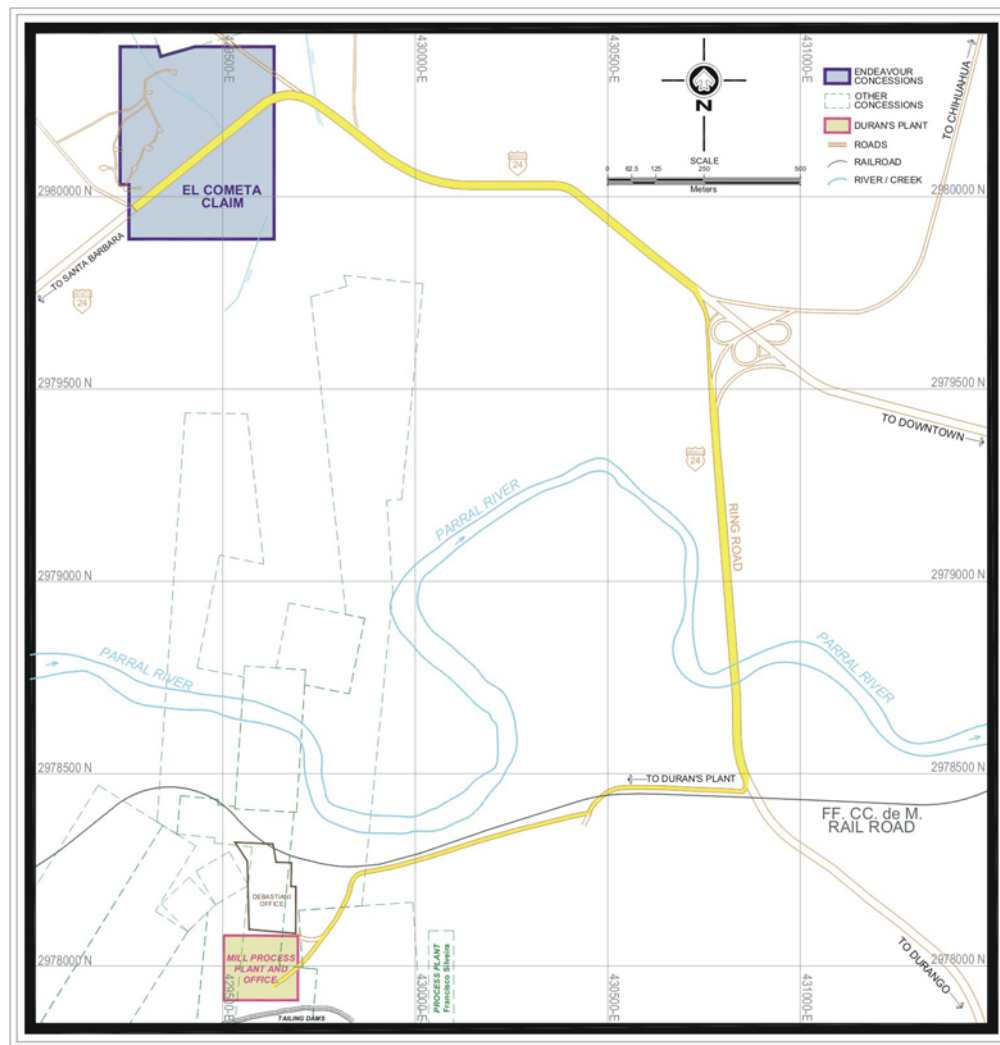
Telephone communications are integrated into the national land-base telephone system that provides reliable national and international direct dial telephone communications.

A creek runs from northwest to southeast across the licence area. Water required for diamond drilling is supplied from dewatering of local mines. The Esmeralda process plant uses water pumped from the Esmeralda Mine; the water table is reasonably close to surface at 1,400 – 1,500 masl.

Endeavour has provided limited housing for exploration staff during its exploration programs.

There is the disused 'El Cometa' mine shaft on site. Some surface workings lie some 100m beyond the concession boundary to the north and the San Juanico mine shaft is a further 100m to the north.

An old office located at the Esmeralda Mine, south of Parral, is currently being used by Endeavour as an exploration field office. On this site, in 1967, the Federal Finance Ministry of Mexico, in coordination with the Mining Development Commission, installed the public service flotation plant Patronato Pro Desarrollo Minero de la Region de Parral (Association for the Mining Development of the Parral region) to support the small miners of the area. Currently this government-owned mill and flotation plant is operating under the management of Sr. Gustavo Duran and is processing 350 tpd ore from various mines; this lease arrangement will expire in October 2008. The plant location is shown in Figure 4-3.



**Figure 4-3: Location of Endeavour Offices and Esmeralda Plant**

#### 4.7 Climate, Vegetation and Physiography

The mining district of Parral is situated in the eastern foothills of the Sierra Madre Occidental. The terrain consists of low-relief alluvial plains and mesas amid rolling hills which on the northwest side of Parral are steep bluff-forming volcanic structural blocks. El Cometa lies beneath flat terrain, several kilometres south of the bluffs. In the Parral district, total relief is about 600 m.

The climate of the Parral district is semi-arid to temperate, with annual rainfall 30 to 50 cm. Vegetation is generally Sonoran, with various grasses, cacti, ocotillo and mesquite brush, and small trees at the higher elevations. The El Cometa licence area itself is mainly grassland.

## **4.8 Historic Mining**

Mining in the Parral district started in 1632 with the discovery of several silver-rich veins. Records for the pre-1929 production are sparse, however a few hundred million ounces are roughly estimated to have been produced during this period.

In the mid 1900s, private mining interests operated the Esmeralda mine, located 2 km south of El Cometa. Some 4 Mt of ore grading 6% lead-zinc, 100 g/t silver and 0.5 g/t gold was reportedly produced over a 1.2 km length to depths of 650 m.

The district-wide production between 1929-1990 is reported to be 24 Mt, which at a likely average grade of 200 g/t silver would amount to some 150 million ounces of silver.

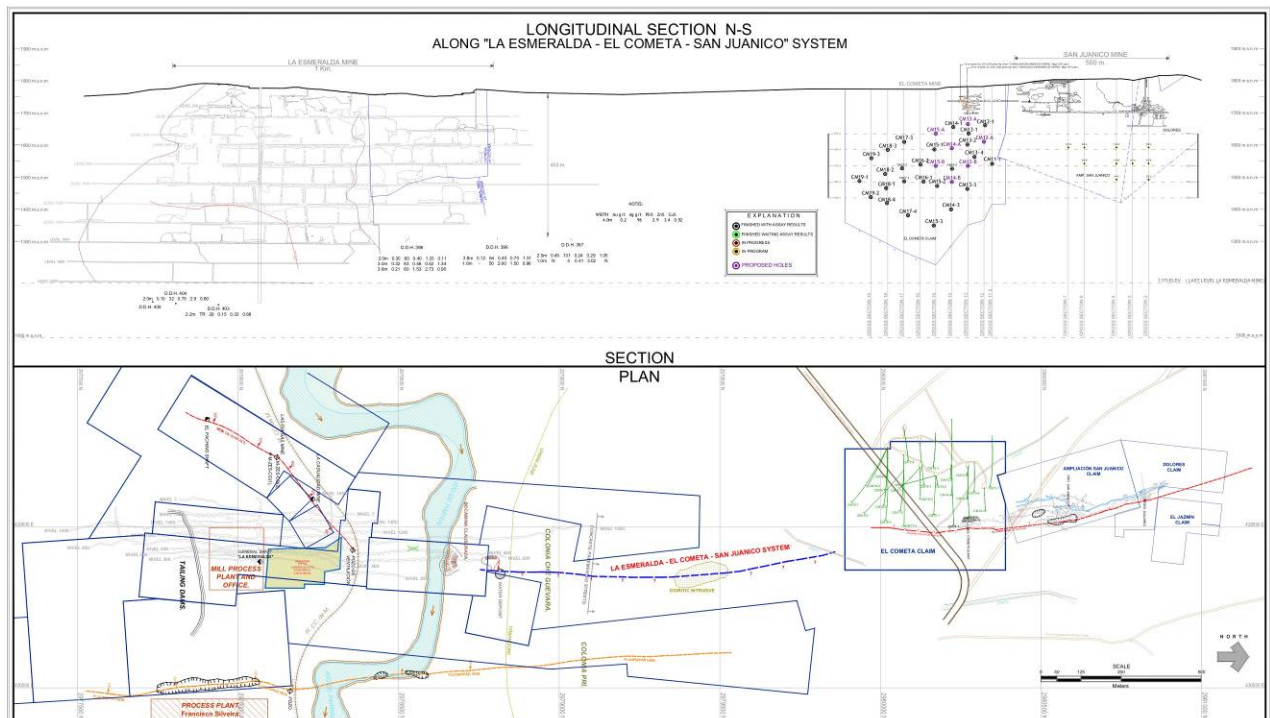
## **4.9 Current Mining**

There is no mining activity at present on the El Cometa property. Endeavour has not produced estimates of costs, mine method, extraction plans or process designs; the project is at the exploration and deposit definition stage. Some metallurgical testwork has been completed.

Directly north of El Cometa, on the same mineralized structure, the San Juanico mine is being exploited producing 50 tpd. La Esmeralda, another mine located 2 km south of El Cometa of El Cometa has been operating since the mid 1900s and is currently operating with an undisclosed, but small, daily production. Tres Arbolitos is a third mine operating in the Nuevas Minas sub-district, approximately 2 km east of El Cometa, on a vein that splays southward from the Veta Colorado. Tres Arbolitos produces approximately 150 tpd, and is processed at the Esmeralda mill. A fourth mine is working the La Palmillas vein, southeast of the Veta Colorado, producing 50-75 tpd also processes ore at the Esmeralda plant.

## **4.10 Adjacent Properties**

Two properties of significance adjoin El Cometa to the north and the south: San Juanico to the north (which remains a possible acquisition opportunity for Endeavour if ownership problems with that concession can be resolved); and Esmeralda to the south. The vertical longitudinal projection in Figure 4-4 illustrates the depths to which La Esmeralda was mined. Over 1 km of untested ground lies between El Cometa and the Esmeralda workings where the surface is covered by residential developments; any future exploration of this ground would be conducted from underground.



**Figure 4-4: Vertical Longitudinal Projection looking west and Plan showing adjacent properties**

## 5 GEOLOGY

### 5.1 Regional Geology

The Parral District is in the heart of the Mexican Silver Belt. The geology of this belt is characterized by two volcanic sequences of Tertiary age, discordantly overlying deeply eroded Mesozoic sediments and older metamorphic rocks. The physiography of the belt resembles the basin and range area in the western United States, with wide, flat valleys and narrow, relatively low mountain ranges and hills.

The most widespread, and economically important type of mineral deposit found in the belt is the precious metal-bearing fissure vein. The belt comprises a significant metallogenic province which has reportedly produced more silver than any other equivalent area in the world.

### 5.2 Local Geology

The Parral district is underlain by three packages of rock, ranging from Cretaceous to Tertiary. The oldest is the Parral formation, a deformed series of low-metamorphic grade marine sediments, intruded by hypabyssal andesites; this is overlain by a Tertiary volcanic sequence named the Escobedo Volcanic Group. It is likely that the hypabyssal intrusions are co-genetic with Escobedo Volcanics. Elsewhere in the Parral district, a quartz monzonite pluton intrudes the Parral Formation, but this is not seen on the El Cometa licence.

### 5.2.1 *Parral Formation (Cretaceous)*

The oldest rocks are carbonaceous greywackes, shales, and thin-bedded limestones. This thick sequence has extensive distribution in the region, from Parral southward to the Santa Barbara mining district where it hosts significant silver-lead-zinc mineralisation. In the Parral district, these rocks are deformed into broad folds with north-south trending axes, except where tight folding is controlled by proximity to compressive structures.

At El Cometa, the Parral Formation contains arenitic greywackes at depth which grade upward to interbedded carbonaceous shales and thin-bedded unfossiliferous grey limestones. The formation is consistent with deposition in a deepening marine basin peripheral to shelf carbonate zones that frequently shed sandy calcareous material into muddy basin depths.

### 5.2.2 *Intrusive Rocks (Tertiary)*

The largest body of intrusive rock at El Cometa is a hypabyssal andesite and has its fullest expression in the centre of the deposit, with apparent apophyses extending into dykes toward the north. The intrusions are pre-mineralisation and do not exercise discernable structural control on the quartz-carbonate veins, although there is a general spatial association of robust mineralisation and such intrusive bodies. The intrusive andesite is seen only in the hangingwall of the El Cometa vein, therefore it may have exerted some control over the development of the structure controlling the vein.

### 5.2.3 *Escobedo Volcanics (Eocene)*

In the Parral district, the Parral Formation is unconformably overlain by a tilted, block-faulted volcanic package of approximately 950 m thickness, known as the Escobedo Volcanic Group which comprises basalt flows, rhyolitic ignimbrites, andesite flows and volcanoclastic units. Major veins of the Parral district such as Veta Colorado and La Prieta are hosted by these volcanics, but El Cometa is hosted only by the Parral Formation, probably representing a deeper expression of the Parral hydrothermal system.

## 5.3 **Deposit Geology**

The El Cometa mineralisation occurs in four north-south structures: El Cometa, La Estrella, La Mexicana and Consuelo Breccia. The mineralisation style is of the low-sulphidation epithermal type exhibiting typical banded, brecciated, and occasionally, chalcedonic textures. The base metal enrichment of the veins, depletion of silver relative to other significant veins of the district and hosting by footwall Parral Formation rocks are consistent with a deep epithermal genesis.

In a typical epithermal system, the precious metal zone may extend to 1,000 m below the hydrothermal venting surface, however, at El Cometa, the metals are unevenly distributed throughout the veins, suggesting that mineralisation is transitional from a precious metal

zone to a deeper base metal interval; the stratigraphic position suggests that the El Cometa mineralisation formed some 1,000 -1,500 m below a volcanic paleosurface.

### 5.3.1 *El Cometa Vein*

The principal vein, El Cometa, averages 3.9 m thickness and dips approximately -55° westward at deep elevations, and more steeply nearer to surface as seen on the typical cross section shown in Figure 5-1. Wider vein thicknesses persist at depth and are due either to reverse faulting causing dilation of flatter portions of the vein or strike-slip displacement with dilational effects controlled by curvature along strike.

### 5.3.2 *Subsidiary Veins*

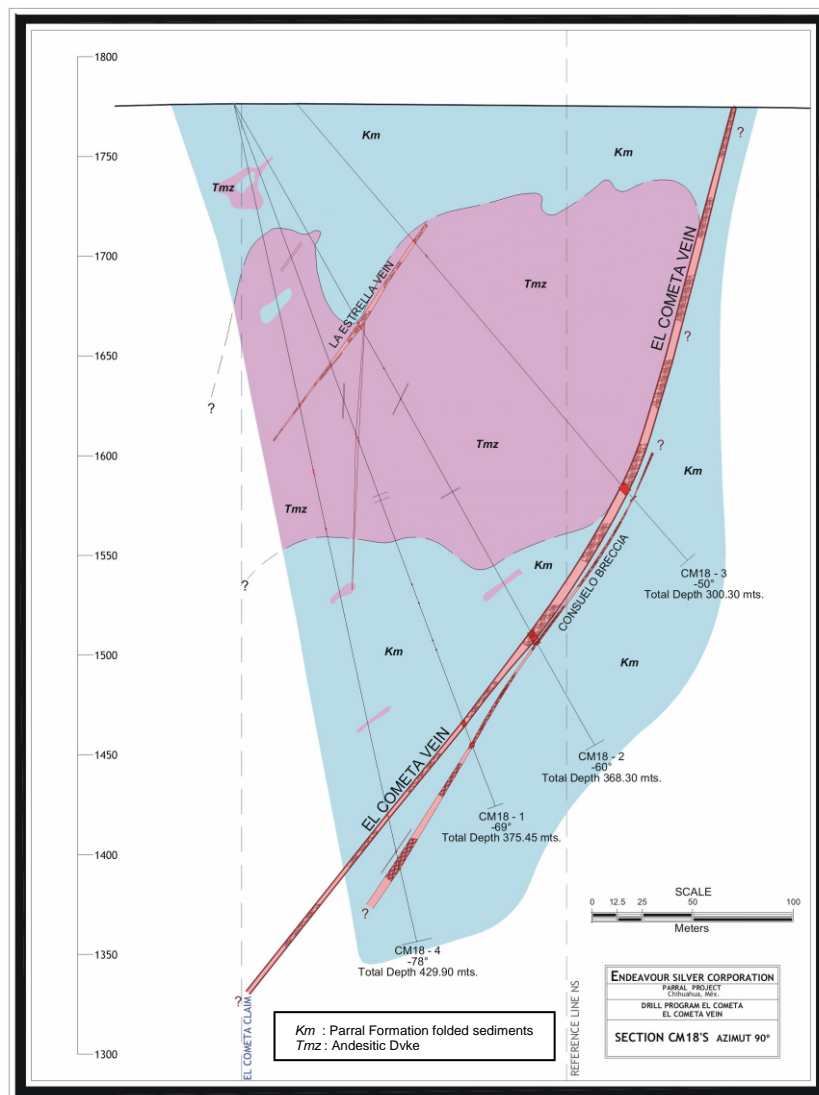
The La Estrella vein is in the hangingwall of El Cometa, it averages about 1 m in width, and is separated from El Cometa by 100m in the north and 150 m in the south, has a strike of 355° and dips 55° to the west.

The Consuelo Breccia is in the footwall of El Cometa separated by a variable distance of normally 20-30 m, although occasionally they are in contact. The mineralisation occupies a zone generally some 2 m to 5 m wide; it has a strike of 315° in the north and 355° in the south with a 55° westerly dip.

La Mexicana is a 1 m to 2 m wide, near-vertical vein with a perpendicular strike, however this not included in the resource estimate owing to very sparse and poorly oriented drillhole intersections.

## 5.4 **Grade distribution**

Zinc, lead, silver, gold and copper combine in economic abundances in many drill intercepts throughout El Cometa. The distribution of these metals is possibly zoned in vertical and steep southerly plunging features. There is also a tendency for lead and particularly zinc to exhibit higher levels at lower depths and in the south.



**Figure 5-1: Typical cross-section looking north at El Cometa vein and subsidiary veins**

## 5.5 Mineralogy

Overall, the most common rock type in mineralized structures is breccia, but banded to massive quartz-calcite is not uncommon. Mineralisation textures range from banded to brecciated quartz-calcite-barite-fluorite gangue with variable distributions of galena-sphalerite-pyrite+/-chalcopyrite +/- pyrolusite +/-hematite. Breccia textures vary from dark silica matrix surrounding white quartz clasts, to white quartz-calcite matrix enclosing dark wall rock clasts. Masses of galena-sphalerite occur in breccia and in association with banded white quartz-carbonate with chlorite-pyrite-(black) sulphide bands.

A petrographic study conducted at the University of Sonora determined a paragenetic sequence in the El Cometa mineralisation consisting of early quartz + sphalerite + galena followed by euhedral pyrite +/- anhedral chalcopyrite and finally late calcite +/- hematite +/- pyrolusite.

## **6 EXPLORATION DATA QUALITY**

### **6.1 Introduction**

Endeavour was initially interested in the San Juanico group of concessions on the north end of El Cometa, however, an agreement was not forthcoming owing to partners in San Juanico that could not be located. Subsequently, Endeavour followed the San Juanico vein southward to El Cometa where negotiations with the owner were concluded by December 2006.

El Cometa has been partially exploited from small scale underground workings, however, no surface or underground sampling information is available and there had been no drilling on the property before Endeavour's 2006-2007 programme.

### **6.2 2006 - 2007 Drilling Programme**

Layne Drilling commenced work on El Cometa in December 2006 after Endeavour completed surveying of the old mine infrastructure, buildings, and roads on the concession. By the end of 2007, a total of 27 diamond drillholes had been completed for a total of some 9,335 m. In total, Endeavour spent USD1,178,494 on exploration activities on the project.

#### **6.2.1 *Drilling Method and Survey***

Drilling used a combination of HQ and NQ core diameters. Drillholes were typically drilled from the hangingwall, perpendicular to and passing through the target structure, into the footwall. Drilling was designed for intercept angles greater than 35° and most are 45-90°.

The drill set-up was surveyed for azimuth, inclination and collar coordinates. There was daily scrutiny and coordination with the drill crew by Endeavour geologists. At or near the targeted drillhole depth, the hole was surveyed using a Reflex down-hole multi-shot instrument. Readings were taken at a depth of approximately 4 m below the end of the drill string and at 30 m to 50 m intervals from the bottom of the hole to the collar.

#### **6.2.2 *Sample Preparation and Analysis***

Drill core was collected daily, transported to the core storage building where it was laid out, measured, logged for geotechnical and geological data and marked for sampling.

Mineralized core was sampled at intervals less than or equal to 1.5 m in length, and were selected by Endeavour geologists to represent individual styles of mineralisation. A total of 1,846 drill core samples were submitted from the 2006 and 2007 drilling. Depending on the competency of the core, core was either cut in half with a diamond saw or split with a pneumatic core splitter. Samples were bagged and tagged at the Parral field office and then shipped for analysis.



Samples were originally shipped to Endeavour's Metalurgica Guanacevi laboratory in Guanacevi for analysis, the laboratory was later changed to BSI-Inspectorate in Durango, where samples were analyzed by fire assay (gravimetric finish) for silver and gold, and by ICP analyses for lead, zinc, and copper. In February 2007, following logistical and analytical problems with BSI Inspectorate, Endeavour changed to SGS Mineral Services in Durango.

In July 2007, following substandard service Endeavour changed laboratory again to ALS-Chemex (ALS) in Chihuahua for sample preparation and ALS-Chemex in Vancouver, Canada for analysis. Earlier mineralised samples were resubmitted to the ALS laboratories, therefore, all samples inside the resource model have assay results from the ALS.

There were several instances of samples whose ALS results were very different from the original assay results suggesting a mix up of sample numbers in the sample storage, retrieval by the original laboratories, or in the ALS receiving process. In most instances, it was possible to determine which samples had been mixed up using original assay results and visual assessment of the drill core as confirmation. With SRK's approval, Endeavour geologists were able to reassign ALS assay results to their original position in the drillholes. Whilst this procedure is not ideal, the mineralisation style is such that visual estimation of grade is possible and therefore the reassignment of mixed assay results to their original position is at relatively low risk to the integrity of the data quality used for resource estimation.

A batch of mineralised sample pulps returned by ALS was renumbered and resubmitted to ALS with sufficient Quality Control samples to ensure confidence in the 2006-2007 ample assay results.

### 6.2.3 *Sample Preparation - ALS-Chemex, Chihuahua, Mexico*

Upon arrival, all samples were recorded using the laboratory's tracking system. Then the entire sample was weighed, dried and crushed to >70% passing 2mm. A sample split of up to 250 g was then taken and pulverized to 85% passing 75 microns.

### 6.2.4 *Analyses - ALS-Chemex, Vancouver*

Gold and silver are determined by fire assay with an atomic absorption (AA) finish and lead, zinc and copper are determined by AA. A 50 g nominal pulp sample weight was used.

The pulps are also subjected to aqua regia digestion and Inductively Coupled Plasma (ICP) multi-element analysis.

The turn around time required for analyses has typically been 4 to 6 weeks.

### 6.2.5 *Density Determinations*

After drill core samples were logged and marked up, a piece of each sample was taken from the box, weighed, and placed in a full cylinder of water resting in a dry bowl. The sample fragment displaces water from the full cylinder, causing it to overflow into the dry bowl. The bowl with excess water from the cylinder was then weighed and the weight of the bowl was subtracted at this point to provide the weight of water. Specific gravity (SG) of the sample is given by the weight of the sample divided by the volume of displaced water.

As a check of Endeavour's determinations, 15 core samples were also submitted to SGS-Lakefield laboratory in Durango, Mexico. The methodology for bulk density determinations conducted at the SGS Lakefield laboratory in Durango was as follows:

1. Weigh the sample.
2. Coat the sample with lacquer and let it completely dry.
3. Immerse the sample in water.
4. Weigh the volume of water that is displaced.
5. For quality control, each density determination is done at least twice.

The average of the SG determinations by SGS-Lakefield was  $3.13 \text{ t/m}^3$  compared to  $3.83 \text{ t/m}^3$  according to Endeavour.

SRK checked the results of the samples submitted to SGS by using the lead, zinc, copper and iron assay results to derive a theoretical SG assuming these elements belonged only to galena, sphalerite, chalcopyrite and pyrite respectively, with a gangue consisting of quartz and either a 0% or 5% porosity due to vugs. SRK's theoretical results agree with the SGS results which casts doubt over the accuracy of Endeavours SG determinations. Results are summarised in Table 6-2.

For the purposes of this resource estimation SRK has used a fixed SG as detailed in Section 8.9.

**Table 6-1: Bulk Density Determinations and Analysis**

<b>SAMPLE DESCRIPTION</b>	<b>Endeavour</b>	<b>SGS Check</b>	<b>SRK Theoretical</b>		<b>Variance</b>	<b>Variance</b>
	<b>t/m<sup>3</sup></b>	<b>t/m<sup>3</sup></b>	<b>0 % Porosity t/m<sup>3</sup></b>	<b>5% Porosity t/m<sup>3</sup></b>	<b>Endev / SGS %</b>	<b>SRK 0%p / SGS %</b>
PDH1082	4.00	3.38	<b>3.15</b>	<b>2.99</b>	18%	(7%)
PDH1083	3.26	2.76	<b>2.87</b>	<b>2.73</b>	18%	4%
PDH1322	3.30	2.77	<b>2.90</b>	<b>2.76</b>	19%	5%
PDH1393	4.05	3.26	<b>3.07</b>	<b>2.92</b>	24%	(6%)
PDH1509	3.60	2.94	<b>3.06</b>	<b>2.91</b>	22%	4%
PDH1607	4.30	3.63	<b>3.84</b>	<b>3.65</b>	18%	6%
PDH1611	6.00	3.04	<b>2.94</b>	<b>2.79</b>	97%	(3%)
PDH2185	3.80	2.92	<b>2.81</b>	<b>2.67</b>	30%	(4%)
PDH2187	3.40	2.86	<b>3.22</b>	<b>3.05</b>	19%	12%
PDH2245	3.30	4.38	<b>3.70</b>	<b>3.51</b>	(25%)	(16%)
PDH2246	3.40	3.32	<b>3.00</b>	<b>2.85</b>	2%	(10%)
PDH2295	3.38	3.27	<b>3.12</b>	<b>2.96</b>	3%	(5%)
PDH2347	3.44	2.67	<b>3.09</b>	<b>2.94</b>	29%	16%
PDH2348	4.16	2.64	<b>2.99</b>	<b>2.84</b>	58%	13%
PDH2390	4.00	3.10	<b>3.17</b>	<b>3.01</b>	29%	2%
<b>Mean</b>	<b>3.83</b>	<b>3.13</b>	<b>3.13</b>	<b>2.97</b>	<b>24%</b>	<b>1%</b>

### 6.2.6 Drilling Results

Intersections in El Cometa are between 120 m and 430 m below surface over a 400 m strike length. Table 6-2 lists the location, direction, and depth data for the drillholes and Figure 6-1 is a plan of the site and the drillhole collars and traces. Figure 6-2 shows the intersection of these drillholes with the El Cometa vein on a west-looking vertical longitudinal projection; also depicted are the interpreted vein's intersection with Endeavour's licence boundary and the El Cometa and neighbouring San Juanico mine workings.

A summary of all the drilling intersections is provided in Table 6-3 and 6-4.

### 6.2.7 Conclusion

Drilling results have outlined a new polymetallic mineral deposit on the El Cometa property. Zinc and lead are more valuable than silver and gold, with overall average grades in the mineralised bodies being approximately 1.7 % zinc, 2.6% lead, 1.8 g/t gold and 50 g/t silver, assuming no mine dilution and no capping of high-grade assays.

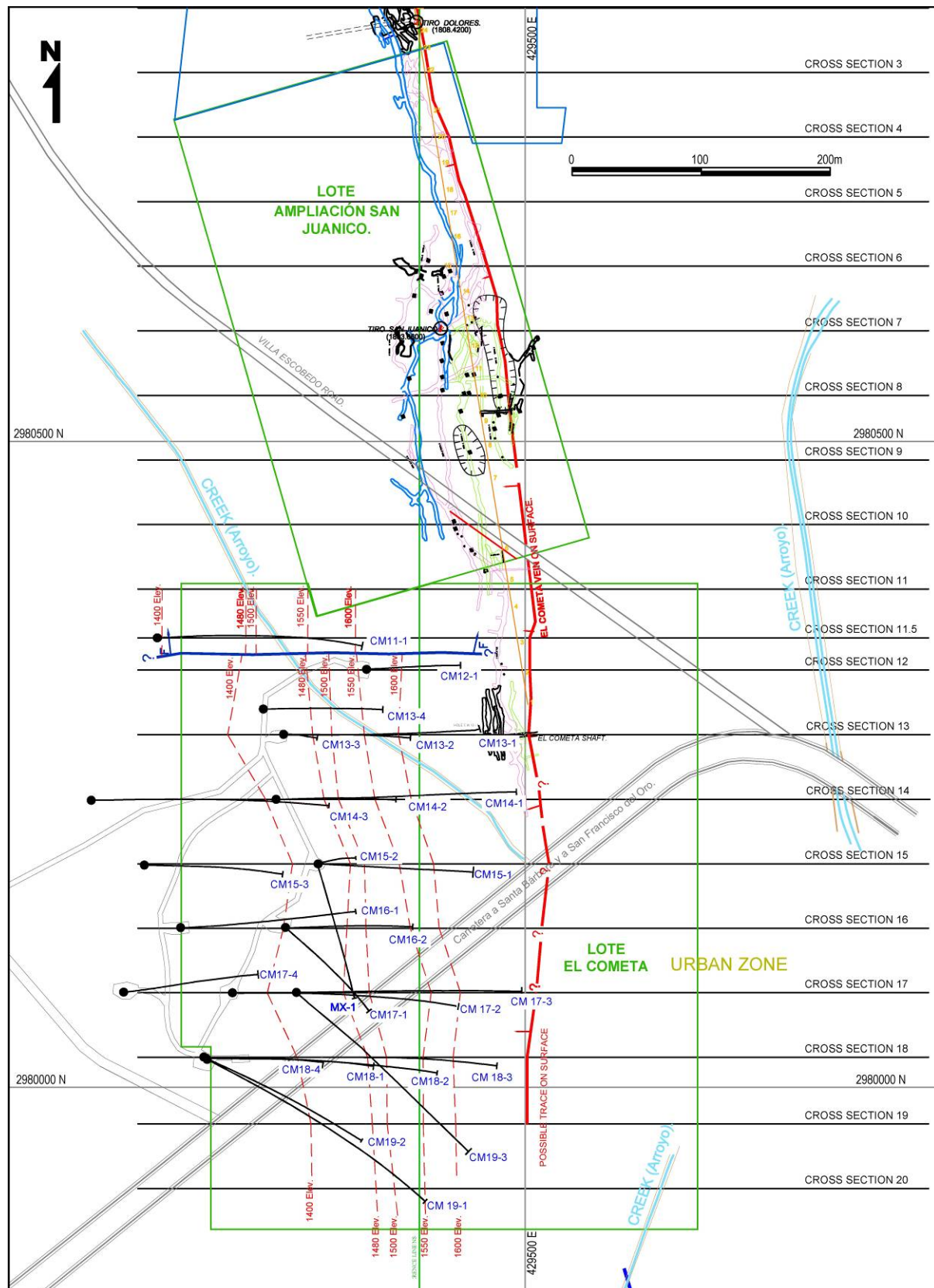


Figure 6-1: El Cometa Drilling Plan



**Table 6-2: Summary of El Cometa 2006 – 2007 Drilling Programme**

HOLE	NORTH(Y)	EAST (X)	ELEV (Z)	AZIMUTH	DIP	DIAMETER	TOTAL DEPTH
CM11-1	2,980,347.77	429,215.04	1,787.39	90	-65	HQ-NQ	404.1
CM12-1	2,980,323.38	429,377.10	1,781.41	90	-64	HQ	173.3
CM12-2 <sup>*</sup>	2,980,323.38	429,377.10	1,781.10	90	-83	NQ	189.33
CM13-1	2,980,272.85	429,311.58	1,782.13	90	-50	HQ	245.85
CM13-2	2,980,272.85	429,311.58	1,782.13	90	-63	HQ	319.40
CM13-3	2,980,272.80	429,310.61	1,782.17	90	-86	HQ-NQ	386.90
CM13-4	2,980,292.81	429,297.16	1,782.29	90	-74	HQ	339.00
CM14-1	2,980,222.91	429,341.47	1,781.49	90	-48	HQ	228.60
CM14-2	2,980,222.89	429,307.38	1,783.62	90	-74	HQ	366.85
CM14-3	2,980,222.13	429,163.84	1,787.34	90	-68	HQ	500.10
CM15-1	2,980,172.83	429,339.63	1,781.23	90	-66	HQ-NQ	306.35
CM15-2	2,980,172.82	429,339.26	1,781.31	90	-85	HQ-NQ	380.70
CM15-3	2,980,171.95	429,204.96	1,783.90	90	-77	HQ	494.65
CM16-1	2,980,123.51	429,233.07	1,782.20	90	-65	HQ-NQ	396.30
CM16-2	2,980,123.05	429,313.10	1,781.38	90	-70	HQ	302.40
CM17-1	2,980,123.63	429,314.31	1,780.84	130	-77	HQ-NQ	391.30
CM17-2	2,980,073.04	429,273.25	1,779.08	90	-61	HQ-NQ	359.30
CM17-3	2,980,073.30	429,322.80	1,778.75	90	-47	HQ	260.70
CM17-4	2,980,073.52	429,188.96	1,778.49	90	-75	HQ	456.05
CM18-1	2,980,022.53	429,252.74	1,776.42	90	-68	HQ-NQ	375.55
CM18-2	2,980,022.53	429,252.91	1,776.60	90	-60	HQ-NQ	368.30
CM18-3	2,980,023.29	429,283.29	1,776.36	90	-50	HQ-NQ	303.95
CM18-4	2,980,022.55	429,252.73	1,776.58	90	-77	HQ	429.80
CM19-1	2,980,021.64	429,253.68	1,775.63	120	-63	HQ-NQ	401.90
CM19-2	2,980,023.44	429,251.04	1,776.65	112	-71	HQ	422.35
CM19-3	2,980,074.00	429,321.69	1,778.55	132	-56	HQ	319.90
MX-1	2,980,172.08	429,339.20	1,781.37	165	-59	HQ	212.90
						<b>TOTAL</b>	<b>9335.83</b>

Hole CM12-2 was drilled in December 2007 and has not been used in the El Cometa resource estimate

**Table 6-3: El Cometa 2006 - 2007 Diamond Drilling Highlights**

HOLE	VEIN	FROM	WIDTH*	Zn(%)	Pb(%)	Au	Ag	Cu(%)	Comments
CM11-1	La Estrella Vein	178.3	2.5	0.3	0.1	0.2	77	0.01	
	El Cometa Vein	265.8	2.5	1.5	0.8	0.1	6	0.02	
	Consuelo Breccia								CB pinches out
CM12-1	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	129.5	2.4	1.3	1.1	0.4	28	0.04	
	Consuelo Breccia								CB pinches out
CM13-1	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	187.4	2.3	3.4	1.7	0.5	14	0.03	
	Consuelo Breccia								CB pinches out
CM13-2	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	199.6	2.7	5.0	2.5	0.9	15	0.05	
	Consuelo Breccia	232.4	2.6	0.8	0.3	0.1	5	0.01	
CM13-3	La Estrella Vein	111.9	3.3	1.9	1.4	0.9	24	0.06	
	El Cometa Vein	292.3	4.0	2.9	1.2	0.2	9	0.07	
	Consuelo Breccia	342.3	3.9	0.1	0.3	0.2	30	0.13	
CM13-4	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	225.8	4.2	4.5	1.9	0.2	10	0.05	
	Consuelo Breccia								No assays - logged as waste
CM14-1	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	166.6	4.3	2.6	1.4	0.3	41	0.04	
	Consuelo Breccia								CBx pinches out
CM14-2	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	263.1	3.7	1.0	3.5	3.1	51	0.17	
	Consuelo Breccia	340.2	3.3	0.1	0.1	0.1	5	0.02	
CM14-3	La Estrella Vein	236.2	3.7	7.3	2.9	0.4	18	0.05	
	Inc.	236.6	0.4	17.9	6.1	0.5	38	0.07	
	Inc.	239.1	0.5	16.6	9.7	0.8	60	0.18	
	El Cometa Vein	416.7	3.0	0.3	0.3	1.8	22	0.12	
	Consuelo Breccia	477.1	3.0	0.5	0.5	0.1	18	0.12	
CM15-1	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	212.1	2.9	1.7	1.8	1.4	22	0.05	
	Consuelo Breccia	258.1	2.6	0.0	0.0	0.1	5	0.01	
CM15-2	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	300.6	8.9	3.0	5.4	1.0	50	0.21	
	Consuelo Breccia	354.3	3.6	0.0	0.2	0.2	17	0.17	
CM15-3	La Estrella Vein	238.9	2.9	4.5	4.2	0.9	20	0.01	
	El Cometa Vein	447.2	4.3	2.4	2.6	0.2	81	0.38	
	Consuelo Breccia	473.5	3.2	0.4	0.1	0.1	15	0.46	

\*The width referred to above is the core width and true widths vary between 50% and 95% of core width.

**Table 6-4: El Cometa 2006 - 2007 Diamond Drilling Highlights continued**

HOLE	VEIN	FROM	WIDTH*	Zn(%)	Pb(%)	Au	Ag	Cu(%)	Comments
CM16-1	La Estrella Vein	156.6	2.5	1.2	3.1	0.3	40	0.02	
	El Cometa Vein	319.7	2.5	3.5	1.8	0.2	15	0.11	
	Consuelo Breccia	340.4	2.5	0.5	2.2	1.1	21	0.18	
CM16-2	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	254.5	2.6	0.7	0.5	0.2	6	0.02	
	Consuelo Breccia	273.9	2.7	2.7	2.1	0.6	16	0.07	
CM17-1	La Estrella Vein								LEV pinches out up dip
	El Cometa Vein	300.9	2.9	4.3	2.8	1.5	23	0.10	
	Consuelo Breccia	324.6	10.6	2.9	2.4	3.1	28	0.16	
CM17-2	La Estrella Vein	111.5	2.4	1.2	1.5	0.2	58	0.06	
	El Cometa Vein	278.8	2.4	0.4	0.5	0.3	6	0.06	
	Consuelo Breccia	283.8	4.2	1.3	3.5	0.6	21	0.13	
CM17-3	La Estrella Vein								
	El Cometa Vein	210.9	2.2	1.2	1.0	0.1	8	0.01	
	Consuelo Breccia	227.4	2.2	2.1	3.1	4.7	362	0.10	
	Inc.	227.7	1.1	3.4	5.3	8.3	700	0.15	
CM17-4	La Estrella Vein	218.7	2.8	3.1	1.6	0.4	10	0.02	
	El Cometa Vein	406.8	5.1	0.4	3.0	3.5	47	0.01	
	Consuelo Breccia	418.2	2.6	0.4	0.3	0.1	14	0.12	
CM18-1	La Estrella Vein	138.2	2.5	2.0	1.5	0.4	19	0.05	
	El Cometa Vein	328.3	3.5	3.5	4.4	15.3	36	0.36	
	Consuelo Breccia	341.2	2.7	1.0	1.0	0.3	8	0.06	
CM18-2	La Estrella Vein	126.7	2.8	2.1	2.0	0.4	32	0.02	
	El Cometa Vein	303.6	4.5	6.5	5.1	0.8	115	0.25	
	Inc.	305.3	0.9	15.8	3.8	0.8	58	0.07	
	Consuelo Breccia	308.5	2.4	0.3	0.1	0.3	5	0.03	
CM18-3	La Estrella Vein	89.3	3.5	1.4	1.5	0.3	157	0.08	
	El Cometa Vein	251.7	2.9	1.3	2.4	1.9	38	0.06	
	Consuelo Breccia	258.5	2.2	0.4	0.3	0.1	5	0.01	
CM18-4	La Estrella Vein	154.0	2.7	1.6	0.9	0.8	11	0.02	
	El Cometa Vein	364.3	2.7	1.6	0.8	0.2	5	0.07	
	Consuelo Breccia	386.6	4.8	1.5	1.9	0.2	87	0.76	
CM19-1	La Estrella Vein	129.4	2.6	3.6	2.2	0.2	58	0.03	
	El Cometa Vein	327.9	6.6	4.6	3.0	0.7	63	0.30	
	Inc.	329.7	0.6	11.1	7.1	0.6	72	0.30	
	Consuelo Breccia								CBx not present
CM19-2	La Estrella Vein	145.2	4.0	1.6	1.0	0.3	11	0.01	
	El Cometa Vein	356.2	6.5	1.9	2.9	1.6	62	0.30	
	Consuelo Breccia								CBx not present
CM19-3	La Estrella Vein	68.6	2.6	0.4	0.3	0.3	23	0.01	
	El Cometa Vein	264.2	8.9	4.5	3.7	0.4	40	0.35	
	Inc.	265.1	0.5	10.7	10.5	0.9	178	0.30	
	Consuelo Breccia								CBx not present
MX-1	La Mexicana Vein	121.0	3.7	6.3	2.9	0.2	47	0.05	
	Consuelo Breccia	273.9	2.7	2.7	2.1	0.6	16	0.07	

\*The width referred to above is the core width and true widths vary between 50% and 95% of core width.



## **6.3 Ongoing Work Programme**

Endeavour has commenced drilling of seven infill holes totalling 2,000 m to tighten up the drill spacing to approximately 40 m centres in a portion of the El Cometa deposit. Some preliminary metallurgical testwork has been completed and further metallurgical test-work and a preliminary economic assessment are also currently underway.

## **6.4 Quality Control on ALS-Chemex Vancouver**

### **6.4.1 Introduction**

A QAQC sampling program of standards and duplicates has been implemented recently to retrospectively assess the integrity the ALS's 2006-2007 assay results.

241 pulps from mineralized zones for the Cometa deposit were re-numbered and re-submitted to ALS for check assaying. The 241 samples represent 15 % of the total sample submission during the 2007 sampling programme.

As requested by SRK, 20 of each of three certified reference material (CRM) standards ("blinds") were inserted among the duplicate pulps. The standards were sourced from WCM Minerals, a division of WCM Sales Ltd. The expected values for PB-123, PB-127 and PM1112 are summarised in Table 6-5 below.

### **6.4.2 Analysis**

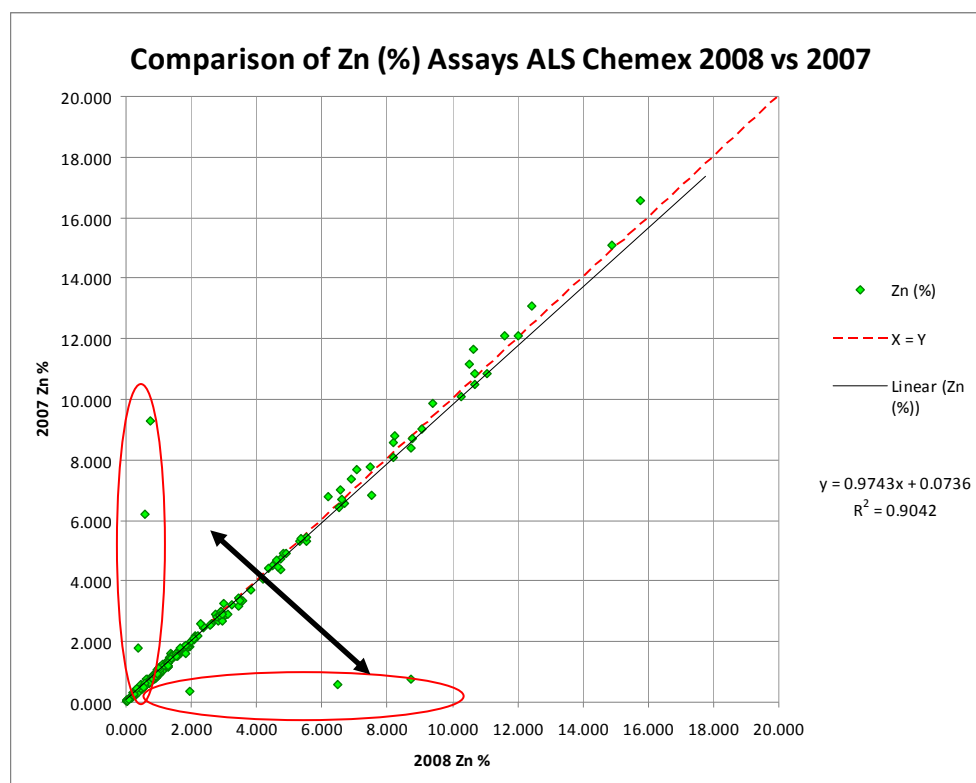
A review of the check assays showed a close correlation between the ALS and the reference standard assay values; these are summarised in Table 6-5 and are presented in more detail in Appendix 1. ALS demonstrates good accuracy for zinc and lead, if anything it is reporting slightly low on higher grades. Silver is reasonably accurate on high grades, but ALS under-reports on low grades, whereas gold appears to be accurately reported for the sort of grades in the deposit. Copper accuracy is reasonable, maybe slightly high at the low grades found in the deposit. Precision of assay results is reasonable with the exception of low grade silver.

Overall, SRK considers the ALS results to display good accuracy; Endeavour should continue to monitor the laboratory with standards to obtain a more substantial set of results before it can assess whether the slight underestimation of high base metal grades is sufficiently demonstrated to warrant application of a small correction factor.

**Table 6-5: QAQC Certified Reference Materials**

	ALS Average of 20 Submissions				
CRM	Zn (%)	Pb (%)	Au (g/t)	Ag (g/t)	Cu (%)
PB-123	6.7	5.8	n/a	55	0.65
PB-127	1.9	3.8	n/a	101	0.85
PM-1112	n/a	n/a	1.36	216	0.24
	Certified Value				
CRM	Zn (%)	Pb (%)	Au (g/t)	Ag (g/t)	Cu (%)
PB123	6.9	6.1	n/a	70	0.68
PB127	1.8	3.9	n/a	101	0.86
PM1112	n/a	n/a	1.35	228	0.23
	ALS / CV				
CRM	Zn	Pb	Au	Ag	Cu
PB123	97%	96%	n/a	79%	95%
PB127	101%	99%	n/a	100%	99%
PM1112	n/a	n/a	101%	95%	103%

Analysis of the duplicate sample results indicates a satisfactory correlation between the 2007 and the 2008 ALS results on the whole. The correlation coefficient is greater than 0.85 for all elements indicating good repeatability of grades; however there are clear signs of mislabelling for six samples which plot a long way from the  $x=y$  line as shown in the zinc assay comparisons in Figure 6-3. Further analysis of sample numbers reveals that these 8 samples were mislabelled after being re-numbered in reverse order. This is a mistake that may have been made by Endeavour staff or by the laboratory and further investigation is warranted to prevent such mishandling errors in the future. Similar mislabelling has affected the sample results as described in Section 6.2.3, however, the issue has been resolved to SRK's satisfaction for the purpose of producing this resource estimate.



**Figure 6-3: Scatter Plot of 2008 versus 2007 zinc % Assays**

### 6.4.3 Conclusions

In summary, the results from the ALS check analysis display a satisfactory correlation with the 2007 results, indicating the use of all assays from the 2007 analysis could be used with confidence. With the exception of a number of suspected sample swaps the analysis displayed a strong repeatability on assays for copper, lead and zinc. The repeatability of the gold and silver was slightly worse but was within acceptable limits. The presence of a slight low bias was seen within the ALS results across a number of standards which could introduce a degree of conservatism into the ALS results; further data should be gathered before applying any correction factors.

Overall, SRK considers there to be no issues in terms of accuracy or precision in the database and sample swaps have been individually assessed and corrected in the database; SRK is satisfied that the results can be used for Resource Estimation.

## 6.5 Independent Verification

SRK did not take independent samples for verification of metal grades; the inspection of core allows visual estimation of mineralisation which is considered sufficient to broadly verify the base metal grades reported.

## 7 METALLURGICAL TESTWORK

### 7.1 Phase 1 Metallurgical Testing

Metallurgical test results have been received from one sample of El Cometa mineralisation submitted to the SGS de Mexico, SA de CV laboratory in Durango, Mexico. The head assay of the sample is shown in Table 7-1.

**Table 7-1: Head Assay for Cometa Ore Sample**

gold	silver	lead	zinc	copper	Fe	As	Mn
g/t	g/t	%	%	%	%	%	%
2.85	58.93	4.74	4.24	0.24	6.40	0.04	0.15

The main objective of the program was to assess the sensitivity of the sample to flotation, as well as the determining the Work Index. The flotation test work was separated into five aspects:

1. grinding and flotation tests at different particle sizes;
2. tests with two different collectors;
3. sphalerite depressing tests using zinc sulphate;
4. optimization of collector addition; and
5. final tests.

Based on the parameters and results of 15 tests, a final test was conducted, the results of which are provided in Table 7-2. The work index of the sample was also determined at 14 kWh/short ton.

**Table 7-2: Phase 1 Metallurgical Test Results**

TEST 16 (Final)	Weight	Assay						DISTRIBUTION %					
	%	gold g/t	silver g/t	lead %	zinc %	copper %	Fe %	gold	silver	lead	zinc	copper	Fe
<b>LEAD FLOTATION</b>													
lead Concentrate	5.9	31.5	611.0	55.5	5.0	1.7	6.3	74.9	62.2	79.9	7.3	54.1	6.1
1st Middlings	0.1	45.2	543.8	43.0	15.0	1.6	8.9	2.2	1.1	1.3	0.5	1.1	0.2
<b>ZINC FLOTATION</b>													
zinc Concentrate	5.7	0.2	87.2	3.1	52.4	0.5	3.1	0.5	8.6	4.4	74.4	16.4	2.9
1st Middlings	0.7	1.2	140.5	5.8	20.0	0.7	6.8	0.3	1.6	0.9	3.3	2.5	0.7
2st Middlings	0.4	1.5	184.8	7.3	13.0	1.0	8.7	0.3	1.4	0.8	1.4	2.4	0.6
TAILS	87.2	0.6	16.6	0.6	0.6	0.1	6.3	21.8	25.0	12.8	13.0	23.5	89.5

### 7.1.1 *Summary of Phase 1 Metallurgical Test Program*

- The initial test showed that it is possible to obtain a lead concentrate grading 55.5% lead and 5.0% zinc; and a zinc concentrate grading 52.4% zinc and 3.1% Fe.
- SGS reported that it was possible to depress the iron in both concentrates, by adding cyanide.
- SGS also reported that recoveries could be improved if a second test program was performed.

## 7.2 **Phase 2 Metallurgical Testwork**

Process Research Associates (PRA) in Vancouver, Canada, under the direction of consulting metallurgist Jasman Yee, completed a second phase of metallurgical test work to determine optimal recoveries for lead, zinc, gold and silver on a second sample of El Cometa mineralisation.

PRA had noted the following:

1. Mineralogical work showed that sphalerite is the most abundant sulphide and is fairly coarse grained, next in abundance is galena followed by pyrite and chalcopyrite with some of the chalcopyrite being oxidized to covellite. No free gold or silver minerals were reported in any of the 6 samples examined. The pyrite, covellite, chalcopyrite and some of the galena are fine grained and intergrown in the sphalerite.
2. The gold and silver assays of the cleaned lead concentrate product by SGS suggested the galena flotation is responsible for a most of the gold and silver recovered but the remaining gold and silver minerals do not respond to the zinc flotation conditions after lead flotation.
3. The cleaned zinc concentrate carried little or no gold with some silver probably from the slow floating lead reporting to the zinc concentrate.
4. The SGS Phase 1 flotation testwork suggests that there are other gold/silver carriers in the mineral assemblage. These carriers could be chalcopyrite, pyrite, ruby silver or native gold and silver.

Several suggestions were made to improve recovery, especially for gold and zinc, by changing some different reagents. Specifically,

- Gold recoveries might be increased by using the collector reagent dithiophosphate (eg. Cytec 404 or 477) instead of using xanthate343 and MIBC.
- The lead concentrate assays 5% zinc recovering 7.3% of the zinc in the feed. With ores containing copper such as is seen at El Cometa, the zinc sulphate will react with copper minerals to form copper sulphate which will promote sphalerite flotation thus taking some of the zinc into the lead concentrate. To prevent this, the zinc sulphate reagent should be replaced with zinc oxide.

- A conditioning step before the lead flotation after the reagents are added is also recommended.

For the Phase 2, Jasman Yee also recommended that PRA conduct the following:

- A gravity step, ahead of lead flotation, to investigate the gold and silver minerals prior to assaying for the gold and silver content.
- Produce separate saleable lead and zinc concentrates and optimize the payable recoveries of lead, zinc, and gold; the copper in the lead concentrate is probably not payable.
- Conduct 2 to 3 test grinds to establish the grinding time required to achieve a target of 70% passing 200 mesh.

Endeavour provided PRA with a new composite sample. Once received, PRA prepared the new sample to their standards of minus 10 mesh and 2 kg test charges. A head sample was split out and assayed for gold, silver, lead, zinc, iron and sulphur. A 30 element multi-acid Inductively Coupled Plasma (ICP) assay was also conducted together with a whole rock analysis.

#### **7.2.1 Phase 2 Test Schedule**

Test #1: A base line test using the same conditions as used in Phase 1 test 16 of SGS. Record the pH of the lead rougher float. Do not add soda ash unless pH is below 7.

Test #2: Use Aerofloat 404 instead of R343, remove the cyanide addition and raise the zinc float pH to 11 with lime.

Test #3: Use Zinc oxide instead of zinc sulphate in the lead float with R343. Zinc float conditions as per test 2, but raise the R343 addition to 30 g/t.

Test #4: Use Zinc oxide in place of zinc sulphate and R404 with 5min conditioning ahead of lead flotation. Zinc float as per Test 3 but with 400 g/t copper sulphate.

Test #5: Remove sodium metabisulphite in the grind for the lead float and introduce a zinc regrind ahead of cleaning if they above results warrant the need of regrinding to upgrade zinc concentrate.

#### **7.2.2 Phase 2 Head Assay & ICP Analyses**

The head assay and multi-element ICP analyses for the sample for the Cometa ore sample used for Phase 2 is shown in Table 7-3. The whole rock analyses are in Table 7.4.

**Table 7-3: Head Assay for PRA Cometa Sample**

Elements	Units	Sample ID		Detection Limits		Analytical
		Composite	RE Composite	Min.	Max.	Method
gold	g/t	1.79	1.68	0.01	5000	FA/AAS
silver	g/t	67.8	69.6	0.5	1000	MuAICP
lead	%	3.8	3.72	0.01	20	AsyMuA
zinc	%	3.56	3.58	0.01	20	MuAICP
Fe	%	5.37	5.37	0.01	20	MuAICP
S(tot)	%	5.11	5.17	0.01	20	Leco
Al	ppm	15333	15473	100	50000	ICPM
Sb	ppm	47	45	5	2000	ICPM
As	ppm	18	23	5	10000	ICPM
Ba	ppm	166	114	2	10000	ICPM
Bi	ppm	<2	<2	2	2000	ICPM
Cd	ppm	204.8	211.2	0.2	2000	ICPM
Ca	ppm	97753	98216	100	100000	ICPM
Cr	ppm	71	73	1	10000	ICPM
Co	ppm	10	10	1	10000	ICPM
copper	ppm	1153	1188	1	20000	ICPM
Fe	ppm	50069	50803	100	50000	ICPM
La	ppm	3	3	2	10000	ICPM
lead	ppm	36334	37056	2	10000	ICPM
Mg	ppm	3333	3384	100	100000	ICPM
Mn	ppm	1605	1630	1	10000	ICPM
Hg	ppm	<3	<3	3	10000	ICPM
Mo	ppm	21	21	1	1000	ICPM
Ni	ppm	<1	<1	1	10000	ICPM
P	ppm	<100	<100	100	50000	ICPM
K	ppm	8324	8408	100	100000	ICPM
Sc	ppm	1	1	1	10000	ICPM
silver	ppm	78.8	73.9	0.5	500	ICPM
Na	ppm	1530	1495	100	100000	ICPM
Sr	ppm	54	54	1	10000	ICPM
Tl	ppm	<2	<2	2	1000	ICPM
Ti	ppm	320	310	100	100000	ICPM
W	ppm	44	48	5	1000	ICPM
V	ppm	18	18	1	10000	ICPM
zinc	ppm	35614	35619	1	10000	ICPM
Zr	ppm	9	7	1	10000	ICPM

**Table 7-4: Whole Rock Analysis for Cometa Sample (PRA)**

Compounds	Units	Sample ID		Detection Limits		Analytical
		Composite	RE Composite	Min.	Max.	Method
Al <sub>2</sub> O <sub>3</sub>	%	3.9	3.86	0.01	100	WRock
BaO	%	0.26	0.26	0.01	100	WRock
CaO	%	14.88	14.35	0.01	100	WRock
Fe <sub>2</sub> O <sub>3</sub>	%	8.25	8.06	0.01	100	WRock
K <sub>2</sub> O	%	2.08	1.95	0.01	100	WRock
MgO	%	0.68	0.63	0.01	100	WRock
MnO	%	0.23	0.23	0.01	100	WRock
Na <sub>2</sub> O	%	1.27	1.55	0.01	100	WRock
P <sub>2</sub> O <sub>5</sub>	%	0.02	0.02	0.01	100	WRock
SiO <sub>2</sub>	%	58.98	59.22	0.01	100	WRock
TiO <sub>2</sub>	%	0.1	0.1	0.01	100	WRock
LOI	%	0.24	0.23	0.01	100	2000 F
Total	%	90.88	90.46	0.01	105	WRock

### 7.2.3 Gravity Separation

The first objective was to recover gold and silver by gravity separation at a target grind size of P70-74 microns. PRA used a centrifugal concentrator and hand panning to produce a concentrate. Test conditions are summarised in Table 7-5.

**Table 7-5: Gravity Concentration Test Conditions (PRA)**

Feed pulp Density	Pressure	Bowl	Rotation Speed	
20%	1.0	28°	68 Hz	200G

The gravity separation test showed that 51.1% of the gold and 25.4% of the silver was contained in the gravity concentrate as shown in Table 7-6



**Table 7-6: PRA Gravity Concentration Test Results**

Products	Weight		Assay		Distribution	
	(g)	(%)	gold (g/t)	silver (g/t)	gold (%)	silver (%)
Pan Concentrate	2.9	0.15	231.6	1048.4	20.0	2.1
Pan Tails	88.9	4.67	11.8	375.6	31.1	23.3
Gravity Concentrate	91.8	4.82	18.8	396.9	51.1	25.4
SB40 Tails	1,812.6	95.18	0.9	59.0	48.9	74.6
<b>recalculated head sample</b>	<b>1,904.4</b>	<b>100.00</b>	<b>1.8</b>	<b>75.3</b>	<b>100.0</b>	<b>100.0</b>
<b>Head assay</b>			<b>1.7</b>	<b>68.7</b>		

#### 7.2.4 Summary of Phase 2 Metallurgical Test Program

- The test results showed lead concentrates with grades ranging from 34.6% to 46.5% lead and zinc concentrates with grades ranging from 34.6% to 45.9% zinc.
- Results from Phase 2 metallurgical testing by PRA were not as good as the results achieved from earlier testing at the SGS-Durango lab.
- In particular, PRA was not able to duplicate the results of the best test (#16) done by SGS.
- Possible explanations for the differences include the following:
- The feed grade for this sample was lower and this may have contributed somewhat to the poorer results. One thing that did stand out is how active the zinc is in the lead flotation with an average of 37% of the zinc reporting to the lead concentrate.
- It could be the xanthate used which was from a different manufacturer, Prospec Chemicals rather than Cytec. However, the final flotation tails in both cases are similar even though the sample tested was slightly different in grade. The zinc in both samples tested was very active.
- Further tests were recommended to reduce the amount of zinc displaced to the lead product provided the current results are not satisfactory.
- Implementation of gravity ahead of flotation to generate the overall result as one of the objectives at PRA was to improve on the gold recovery. The preliminary gravity stand alone test result was positive and hence it should be incorporated with the additional test work for the improvement in zinc recovery.

### 7.3 Phase 3 Metallurgical Testing – SGS-Lakefield

In January 2008, Phase 3 metallurgical testing by SGS Lakefield in Durango was conducted on the same sample material tested by PRA in Vancouver which is different from the sample material used by SGS-Lakefield in Phase 1. PRA did not achieve the same results as SGS so a third phase of testwork was run in an attempt to duplicate the recoveries for lead, zinc, gold and silver obtained by SGS in their first test program.

One ore sample (48 kg) was submitted to SGS. The sample was first dried between 40 to 50°C, and then crushed to 100% passing 10 mesh. The crushing operation was performed in two crushing stages: primary crushing by jaw crusher and secondary crusher by cone crusher.

The Phase 3 head assay of the sample is shown in Table 7-7.

**Table 7-7: Head Assay for Phase 3 El Cometa Sample**

gold	silver	lead	zinc	copper	Fe
g/t	g/t	%	%	%	%
1.73	68.00	3.33	3.40	0.13	5.30

Only one flotation test was carried out on this sample using the same parameters as in Phase 1 Test 16 using a particle size of 70% passing 200 mesh which was achieved after 7 minutes and 45 seconds. Results of this test, using two cleaners, are given in Table 7-8.

**Table 7-8: Flotation Results for Phase 3 Test**

TEST 1	W	ASSAYS						DISTRIBUTION %					
	%	Au g/t	Ag g/t	Pb %	Zn%	Cu%	Fe %	Au	Ag	Pb	Zn	Cu	Fe
LEAD FLOTATION													
Pb Concentrate	3.35	18.6	941	67.7	5	1.63	4.32	42.91	46.47	67.71	5.02	38.75	2.73
1 st Middlings	1.44	4.89	467	12.9	22.8	0.9	11.9	4.86	9.93	5.56	9.86	9.22	3.24
2 st Middlings	0.85	18.7	743	26.2	15.8	1.72	15.1	10.91	9.28	6.63	4.01	10.35	2.41
Pb Scavenger	0.58	10.5	493	17.4	16.9	1.33	12.9	4.16	4.18	2.99	2.91	5.43	1.40
ZINC FLOTATION													
Zn Concentrate	3.40	0.94	82	1.17	57	0.22	2.51	2.20	4.11	1.19	58.10	5.31	1.61
1 st Middlings	1.66	5.29	138	2.18	5.67	0.22	31.1	6.03	3.37	1.08	2.81	2.58	9.70
2 st Middlings	0.66	3.91	160	3.28	31.7	0.4	14	1.77	1.55	0.64	6.23	1.86	1.73
Zn Scavenger	0.84	4.88	150	2.73	7.62	0.3	26.2	2.81	1.85	0.68	1.91	1.78	4.14
TAILS	87.22	0.406	15	0.52	0.35	0.04	4.45	24.35	19.26	13.52	9.14	24.73	73.05

**Table 7-9: Flotation Test Results including one cleaner**

TEST 1	W	ASSAYS						DISTRIBUTION %					
	%	Au g/t	Ag g/t	Pb %	Zn%	Cu%	Fe %	Au	Ag	Pb	Zn	Cu	Fe
Pb Concentrate	4.20	18.62	901.02	59.32	7.18	1.65	6.50	53.82	55.75	74.34	9.03	49.09	5.14
Zn Concentrate	4.06	1.42	94.61	1.51	52.91	0.25	4.37	3.97	5.66	1.83	64.33	7.17	3.34

### 7.3.1 Summary of Phase 3 Metallurgical Test Program

- Phase 3 test results were similar to Phase 1.
- It is possible to obtain a lead concentrate with suitable grades: 59.32% lead and 7.18% zinc and zinc concentrates grading 52.91% zinc and 4.37% Fe.
- It should also be possible to depress the iron in both concentrates by adding cyanide.

## 7.4 Metallurgical Testwork Summary

SRK considers the testwork to demonstrate that saleable zinc and lead concentrates can be produced using industry standard technology. Further work is required to refine some parameters which may improve results to date, further mineralogical testwork on a greater number of samples may assist in this process, a QEMSEM method is recommended.

Whilst SRK consider the metallurgical samples used to date to be reasonably representative of the mineralisation at El Cometa, further variability testwork is recommended to assess how recovery is affected by grade, in each of the modelled deposit structures and to better represent the likely plant feed should the deposit be mined.

Generally speaking, the testwork grades are low compared to similar operations in the larger region. SRK recommends that Endeavour assesses the likely mineral processing costs that would apply to such grades on the basis of the process parameters and recoveries determined to date.

## 8 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

### 8.1 Introduction

Mineral Resource estimates have been produced and classified using guidelines approved by the Canadian Institute of Mining (CIM) and set out in the National Instrument document 43-101 and the accompanying documents 43-101.F1 and 43-1010.CP. The Mineral Resource managed by SRK's Martin Pittuck and completed by SRK's Benjamin Parsons.

## 8.2 Database construction and Validation

Raw assay data has been compiled by Endeavour on site and stored in Microsoft Excel. Separate tables have been supplied for drillhole collar locations, downhole surveys, geological data and assay data. In addition information on density measurements has been provided in conjunction with the assay data file. The raw data has been imported by SRK into Datamine mining software package with data validation checks completed during the import and during desurveying to ensure no sample duplication or overlaps exist in the current database. The assay file has been updated with the latest assay information analysed at ALS with the relevant levels of quality control discussed in Section 6.2.2.

## 8.3 Review of Endeavour Model

Prior to developing SRK's geological model, a review of the data was completed by Martin Pittuck during a site visit on 18 December 2007. He performed the initial review of the assay database and the Vulcan 3D computer model for the resource estimate, in addition to a visit to the location of surface diamond drilling and diamond drill core storage facility.

Modelling was carried out initially in Vulcan mining software package by on site geologists by modelling cross sections at varying intervals dependent on the drill spacing. Structures were modelled according to two conditions:

- minimum actual width of 2.1 m (1.5 m mining plus 0.6 m dilution);
- USD-based cut-off for in-situ metal value of USD100/t.

The economic structures were later combined to define the mineralised wireframe for the three main vein structures within the deposit. The three main structures modelled in the 3D are referred to as:

- El Cometa Vein.
- Consuelo Breccia.
- La Estrella Vein.

## 8.4 SRK Geological Modelling Approach

SRK broadly agrees with the local interpretation and used it as the basis for the final wireframing exercise based on reinterpreted mineralised intersections. The updated mineralised intersection were defined in Microsoft Excel on the desurveyed sample files and recoded according in Datamine based on the three mineralised veins, where the El Cometa acts as the principle vein and therefore principle domain. The mineralised intervals have been calculated based on the following criteria in the final wireframing exercise:

- minimum actual width of 2.1 m (1.5 m mining plus 0.6 m dilution);
- a zinc equivalent cut-off grade of 3%.

## 8.5 Zinc Equivalence Estimation

Zinc equivalent has been calculated using a basic conversions factor as follows:

$$\text{Zinc equivalent} = 1 \text{ g/t gold} + \text{lead \%} + \text{zinc \%} + \text{copper \%} + 1 \text{ oz/t silver}$$

The equivalent zinc values are based on factors calculated from Net Smelter Return (NSR) calculations based on the results from the current Metallurgical testwork and the following metal prices summarised in Table 8-1.

**Table 8-1: Summary of Metal Prices used for metal equivalent calculations**

Element	Unit	Price	Unit	Price
gold	USD/oz	600	USD/g	19.29
silver	USD/oz	12	USD/g	0.39
copper	USD/lb	3	USD/t	6,613.76
lead	USD/lb	0.56	USD/t	1235
zinc	USD/lb	0.65	USD/t	1433

Using the metallurgical recoveries and prices above, the NSR value per tonne has been calculated for each sample. Based on these values a factor per unit has been back calculated for the zinc equivalent. The factor for lead to zinc and the above prices is 1.04, which has been rounded of to a factor of 1.

The silver values have been converted from g/t into oz/t before the application of the mill recoveries (62 %), and a pay factor of 90 % to give a conversion factor of 1.04, which is rounded to a factor of 1 on grades expressed as oz/t.

The gold values in grams/tonne are used along with mill recoveries and a pay factor of 90 % to give a factor 1.006, which is rounded to a factor of 1.

## 8.6 Model Geometry

After the structure has been modelled on 2D sections the information has been connected together to produce a 3D wireframe for each vein. The modelled domains are illustrated in Figure 8-1 and Figure 8-2.

SRK has not modelled La Mexicana vein as there are too few drillhole intersections at present.

### 8.6.1 El Cometa

The deposit is modelled as a narrow vein type structure over a strike length of 500m with an average strike of 355° in the south and 340° in the north. The average dip of the vein is -55° towards the west. The vein averages 3.9 m thickness and dips approximately -55° westward

at deep elevations, and more steeply closer to surface. The wireframe has been extended to an elevation of 1300 masl in the south and variable depths in the north. The deepest portion of the deposit reaches an elevation of 1210 masl. The deposit limits have typically been projected 150 – 200 m beyond the last sample or to the edge of the mining lease.

#### 8.6.2 *Consuelo Breccia*

The Consuelo Breccia is in the footwall of El Cometa and runs over a strike length of 300 m with an average strike of 355° in the south 315° in the northern portion of the structure. Although, as the name states, the mineralisation here forms part of a hydrothermal breccia, the mineralisation in core appears as bands and massive textures and therefore can be modelled as a vein style structure. The structure has been split into two units by a later feature, possibly a fault, which also causes some separation of the El Cometa Vein at depth.

#### 8.6.3 *La Estrella*

The La Estrella vein is in the hangingwall of El Cometa, and runs over a strike length of 500 m, averaging about 1 m in width, and is oriented approximately parallel to El Cometa (strike 000°). The top of the deposit has been cut as no records exist of the deposit in any surface outcrops. The down dip extent of the mineralisation has been limited by the extent of the mining lease.

The wireframe samples have been selected based on the mineralised zone and the following modelling technique completed:

1. Select borehole samples.
2. Calculated statistics.
3. Composite samples across horizontal.
4. Vertical projections constructed for each vein.
5. Run nearest neighbourhood search to pick up potential trends in the mineralisation within each vein.
6. Identified potential anisotropy for the search ellipse.
7. Created 3D search ellipse in Datamine and align each ellipse to the dip and strike of the deposit.
8. Compositing borehole samples to a length of 1m.
9. Estimate grades using inverse distance estimate to the power of 3.
10. Assigned classification to resource model blocks based on sample spacing.
11. Reported and tabulated Mineral Resources.

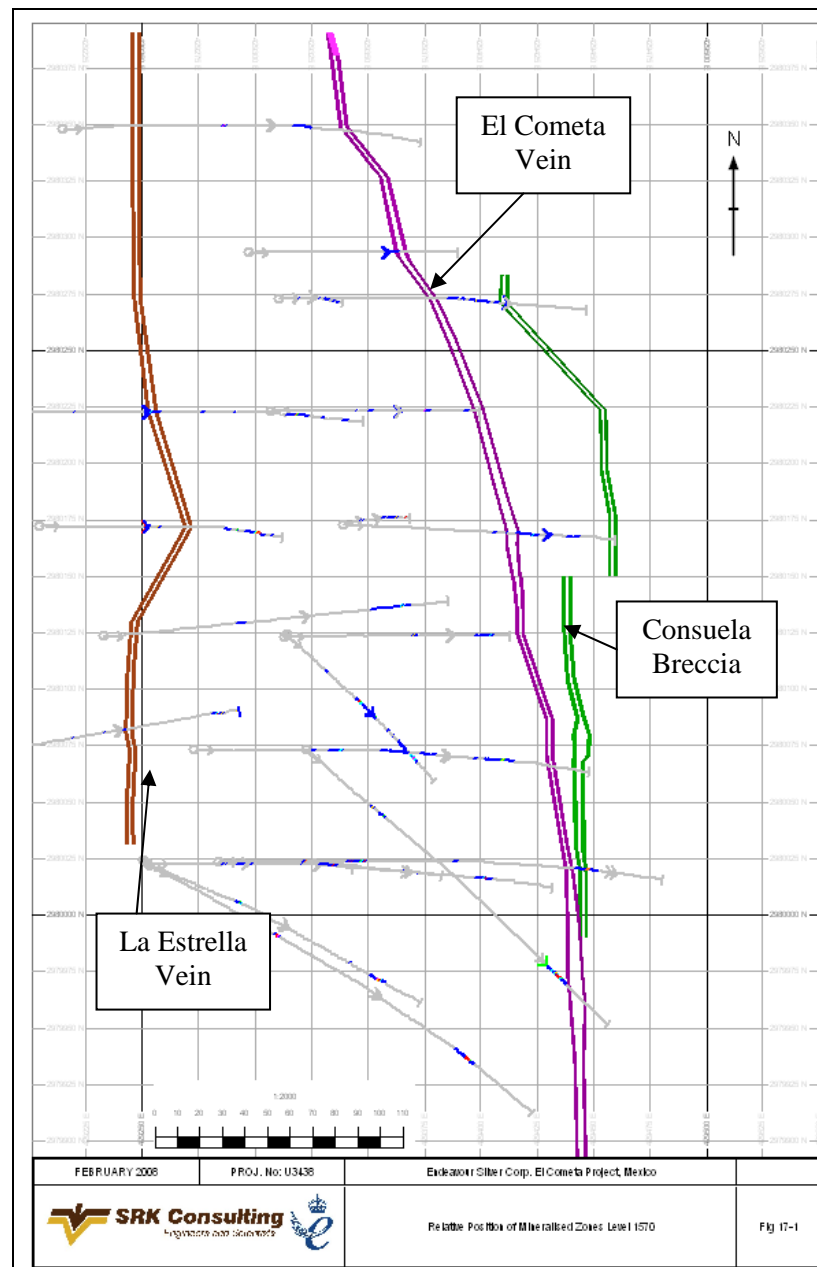
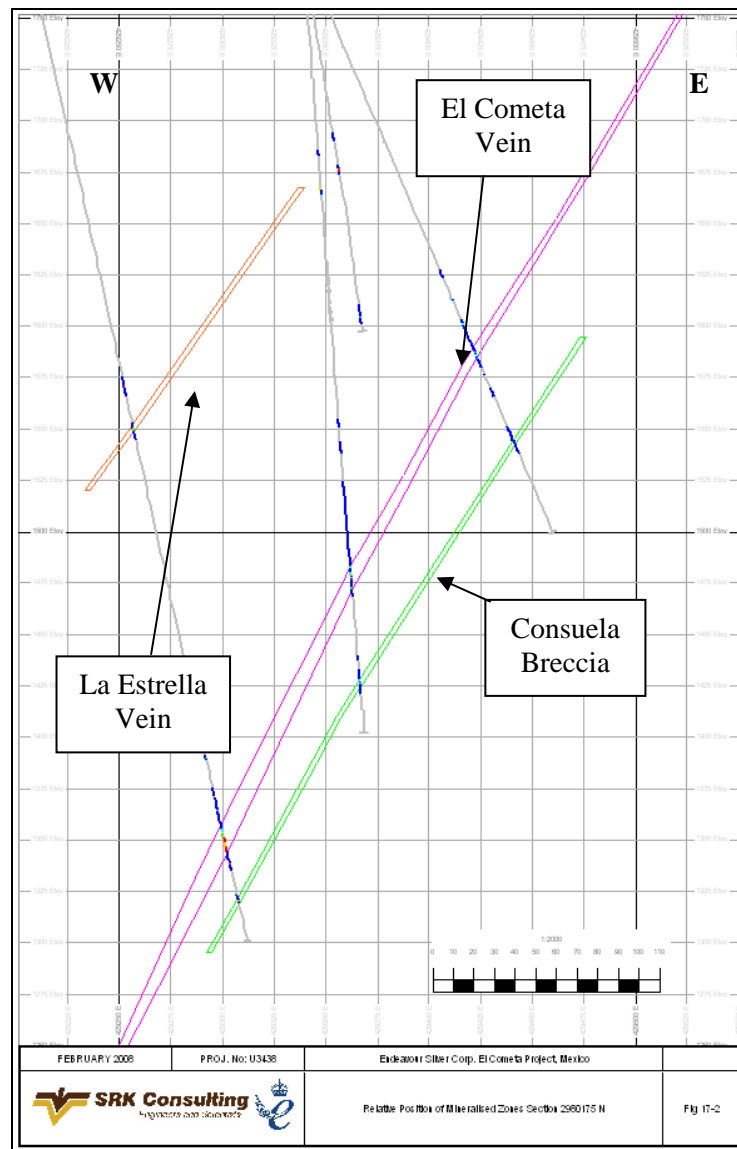


Figure 8-1: Typical Plan showing Three Main Deposits



**Figure 8-2: Typical Vertical section showing three major deposits.**

## 8.7 Statistical Analysis

The data has been composited to 1 m sample lengths within the mineralised zones with a minimum length of 0.5 m applied. The statistics presented are based on all the sampling information available at the time of modelling.

Each of the individual structures has been assessed independently as illustrated from the summary statistics. The statistical distributions for each individual zones display similar properties and display neither normal or log normal distributions. The distributions tend towards log normal and show evidence of skewed (positive) distributions. The summary statistics per domain are shown below in Table 8-2 to Table 8-4. The comparative histograms have been completed per element to allow visual comparison of the three



domains. Histograms have been calculated in both normal and log space, with the cumulative percentage plotted accordingly.

**Table 8-2: Summary Statistics for Composited Grades in El Cometa Vein**

El Cometa	gold g/t	silver g/t	copper %	lead %	zinc %
Mean	1.22	36.64	0.15	2.48	2.33
Median	0.40	17.50	0.05	1.17	1.13
Mode	0.03	5.00	0.01	20.00	1.16
Standard Deviation	3.70	49.66	0.24	3.66	3.04
Sample Variance	13.68	2466.55	0.06	13.40	9.23
Range	43.58	347.00	1.41	19.96	15.73
Minimum	0.03	3.00	0.00	0.04	0.02
Maximum	43.60	350.00	1.41	20.00	15.75
Sum	217.16	6521.10	26.19	440.69	415.18
Count	178	178	178	178	178

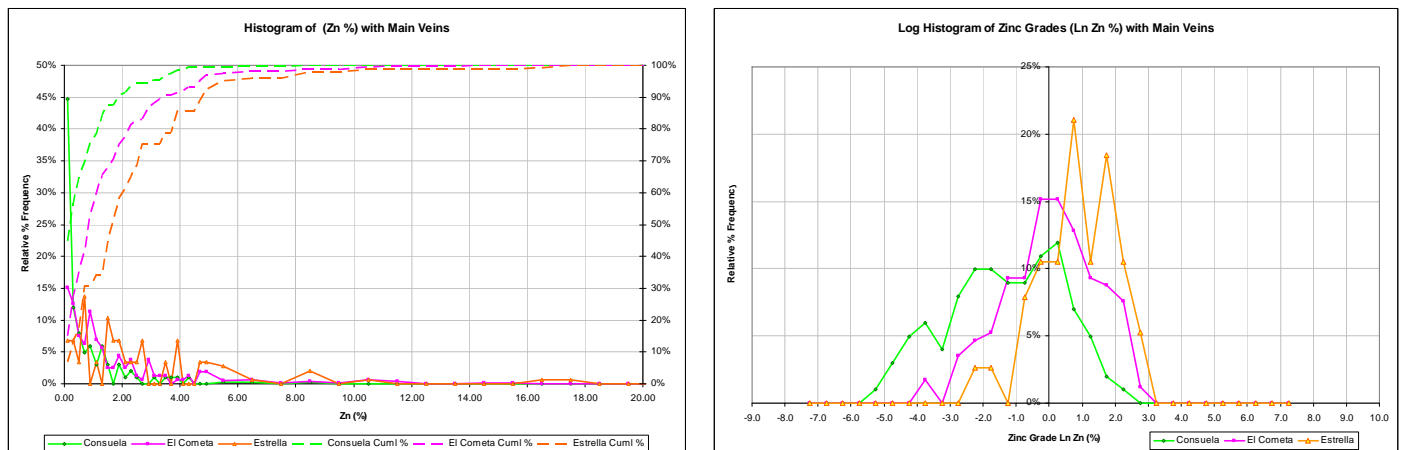
**Table 8-3: Summary Statistics for Composited Grades in Consulea Breccia**

Consuelo Breccia	gold g/t	silver g/t	copper %	lead %	zinc %
Mean	0.69	25.53	0.14	0.86	0.86
Median	0.18	5.00	0.04	0.28	0.27
Mode	0.03	5.00	0.01	0.54	1.06
Standard Deviation	1.58	75.80	0.28	1.28	1.40
Sample Variance	2.50	5746.37	0.08	1.63	1.95
Range	11.38	697.00	1.76	5.33	8.62
Minimum	0.03	3.00	0.00	0.00	0.01
Maximum	11.40	700.00	1.76	5.33	8.63
Sum	70.72	2629.70	14.47	88.67	88.96
Count	103	103	103	103	103

**Table 8-4: Summary Statistics for Composited Grades in La Estrella Vein**

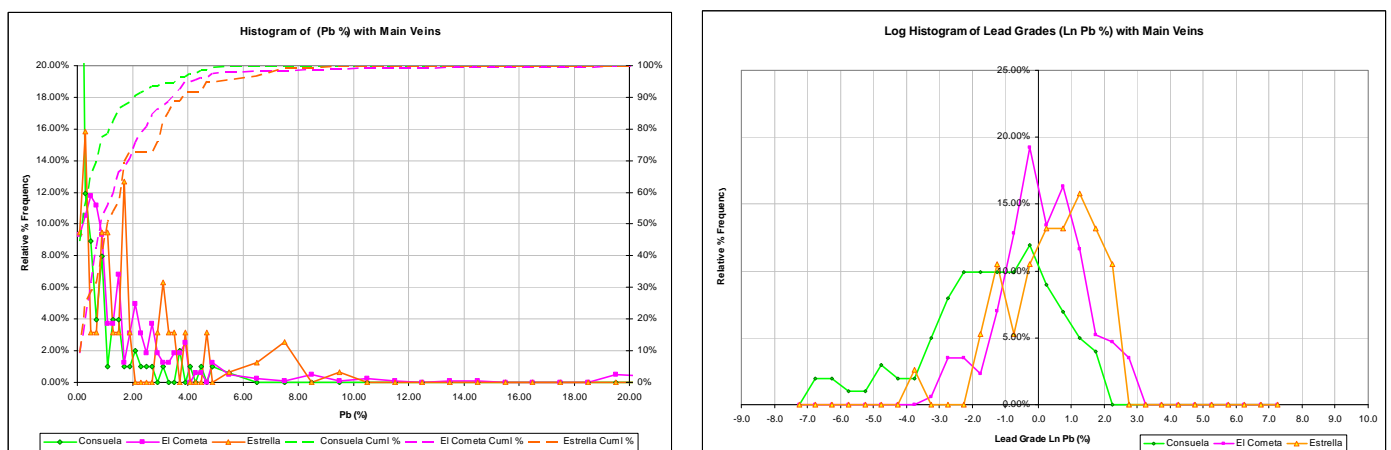
La Estrella	gold g/t	silver g/t	copper %	lead %	zinc %
Mean	0.62	53.39	0.05	2.73	3.91
Median	0.45	24.50	0.02	1.69	2.43
Mode	0.03	5.00	0.02	-	1.60
Standard Deviation	0.61	74.55	0.06	2.71	4.14
Sample Variance	0.37	5557.16	0.00	7.35	17.10
Range	2.87	318.00	0.31	9.69	17.76
Minimum	0.03	5.00	0.00	0.02	0.09
Maximum	2.89	323.00	0.32	9.71	17.85
Sum	23.40	2029.00	1.75	103.84	148.54
Count	38	38	38	38	38

Zinc values display different distributions within the three domains, with low grades seen within the Consuelo Breccia and high values within the La Estrella Vein. The El Cometa Vein which makes up the majority of the samples sits between these two extremes which can be seen in the cumulative frequency plot in Figure 8-3, with approximately 20 % of the values greater than 2 %, while this is closer to 40 % of the data in the La Estrella Vein.



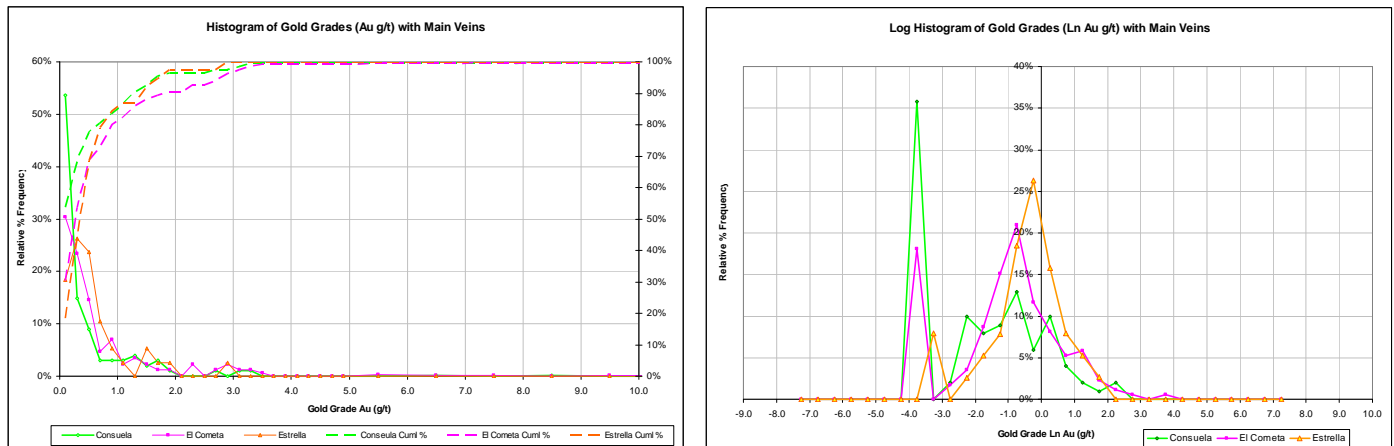
**Figure 8-3: Comparative Histograms of Zinc Grades**

Lead values display similar distributions within the El Cometa and the La Estrella Veins, while the Consuelo Breccia contains lower grade material. The difference in the distributions is highlighted on the cumulative frequency plots, where 27 % of the El Cometa Vein values have grades in excess of 2 % lead, versus only 12 % in the Consuelo Breccia. Due to the limited number of samples in the La Estrella vein the presence of a few higher grade values skews the distribution.



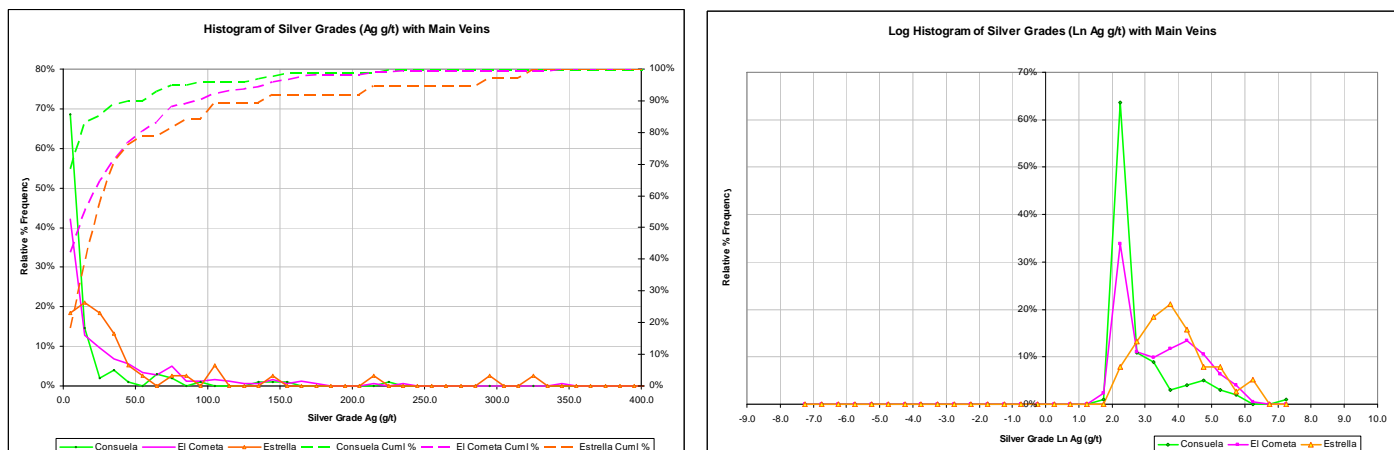
**Figure 8-4: Comparative Histograms of Lead Grades**

Gold values display a slightly skewed log normal distribution. There is little variation in distribution shape of the three domains. The highest values are recorded in the El Cometa Vein, which is highlighted by the increase in grades on the cumulative frequency plot. The lowest grades in general are seen in the Consuelo Breccia and the large spike in the tail is due to an increased number of records reporting on or below detection within the domain.



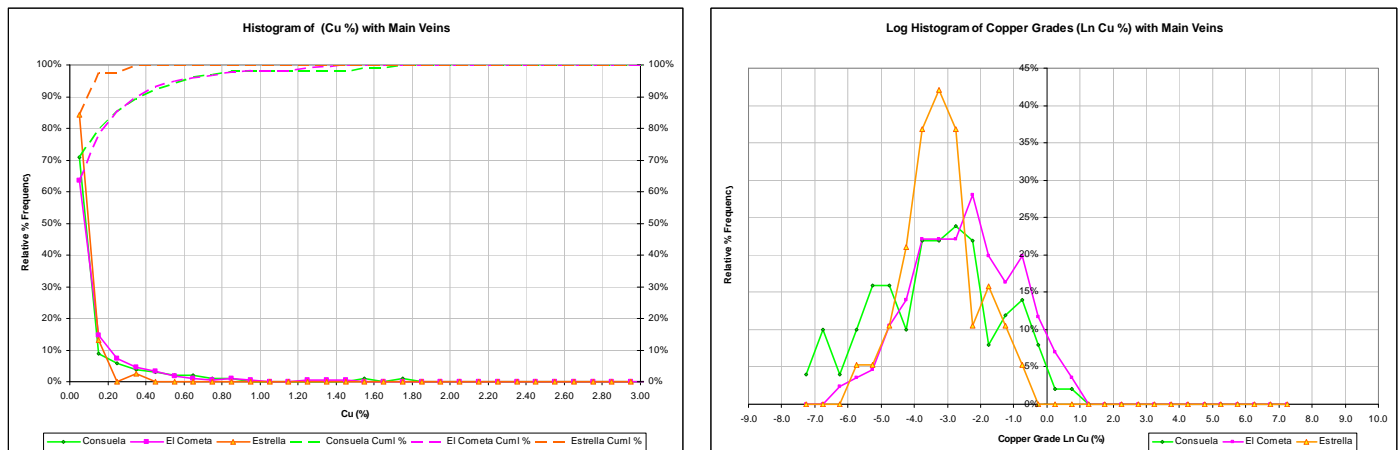
**Figure 8-5: Comparative histograms of Gold Grades**

Silver values are variable per domain with the lowest grades notably seen with the Consuelo Breccia, and the highest grades in the La Estrella vein. It should be noted that there are less than 40 samples used in the La Estrella vein and therefore limited confidence can be placed in the increased mean grades until adequate sampling is completed.



**Figure 8-6: Comparative histograms of Silver Grades**

Copper values display similar distributions in the El Cometa Vein and the Consuelo Breccia, while the copper values are significantly lower in the La Estrella Vein. A review of the log histogram indicates a shift in the grades between the three domains and that the La Estrella vein has a lower mean.



**Figure 8-7: Comparative histograms of Copper Grades**

The investigation into the base statistics indicates that the three domains have similar characteristics in the distributions of individual elements, but overall are independent of one another. With the exception of the gold population, the highest mean grades for each element are seen in the La Estrella Vein. However, given the scale of the two veins the El Cometa vein remains the main structure, even though higher values are recorded in the La Estrella Vein. The lowest grade material is recorded in the Consuelo Breccia on average although the domain contains some high grade intersections of silver, gold, lead and zinc. The highest recorded silver grade (700 g/t), was recorded within the Consuelo Breccia.

Based on the statistical analysis, the decision has been taken for grade interpolation to treat each zone as independent structures.

## 8.8 High Grade Capping

High grade capping was applied to some of the elements within the individual zones at the El Cometa Deposit. The high grade caps were determined on the basis of the shape of the tail of the frequency histograms and the cumulative frequency plots and considering the poor precision seen in the silver assays. The high grade capping reduces the extreme values influence on block estimates. The capping has been completed on the composited samples within Datamine mining software package by assigning values for a given element over the capping value the capped value, while keeping all other composite grades unchanged. The high grade caps used in the 2008 Resource model are summarised in Table 8-5. Capping has only been applied to the precious metals and no capping has been used for the lead, zinc and copper datasets for all three domains.

**Table 8-5: High Grade Caps Applied to Composited Data**

Element	Top Capped Value (g/t)
gold	7
silver	250

## 8.9 Density Data

Density information has been collected for all sampled portions of the deposit from core samples. Density measurements have been measured using a basic Archimedes principle. In SRK's opinion these densities are overestimated as detailed in Section 6.2.5.

Given the uncertainty on the current densities and the current stage of the project, SRK has taken the decision to use a default density of 2.70 t/m<sup>3</sup> for all rocktypes. Whilst this is probably low given the mineralogy, it provides a conservative estimate of tonnage in which there is good confidence. A review of the density data should be completed as part of the next modelling exercise.

## 8.10 Block Model Grade Interpolation

Separate block models were produced for each of the mineralised zones. Block models were not rotated owing to the near northward strike of the mineralised zones. Block sizes were chosen so as not to be too small with respect to the average spacing of drill lines along the strike, but to provide sufficient definition across strike and down dip. Grade data for each of the three structures was interpolated into the individual structures only. Block model parameters are summarised in the Table 8-6. In all cases, the block size used for grade estimation was 25 m east-west, 25 m north-south and 25 m high, with sub-celling for volume estimation using 1 m by 1 m in the Y and Z directions, while sub-celling is smaller in the X-Dimension in order to accurately model the volume within the wireframe.

**Table 8-6: Block Model Geometry**

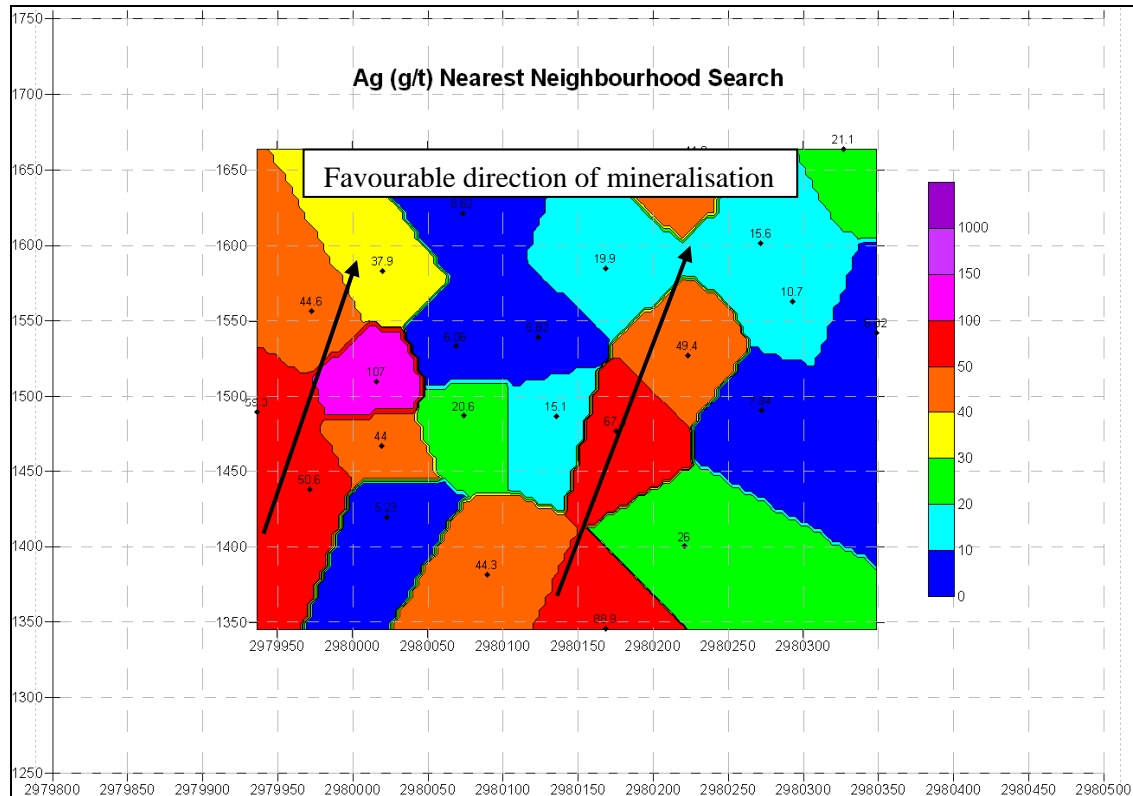
Model Origins		Block Size		Number of Blocks	
XOrig	429200	Xinc	25	Nx	20
YOrig	2979850	Yinc	25	Ny	24
ZOrig	1200	Zinc	25	Nz	22

Due the relatively small number of drillholes and their spacing, semivariograms are poorly structured. However, there is a visibly discernable pattern to grades and thickness suggesting that better value mineralisation is contained in predictable 'shoots' within the veins, this as has been noted at neighbouring mines and is a common feature in this style of mineralisation.

Block grade estimates for all mineralised zones used an IDW3 scheme within Datamine into the parent block size. Samples only influenced blocks within the same domain.

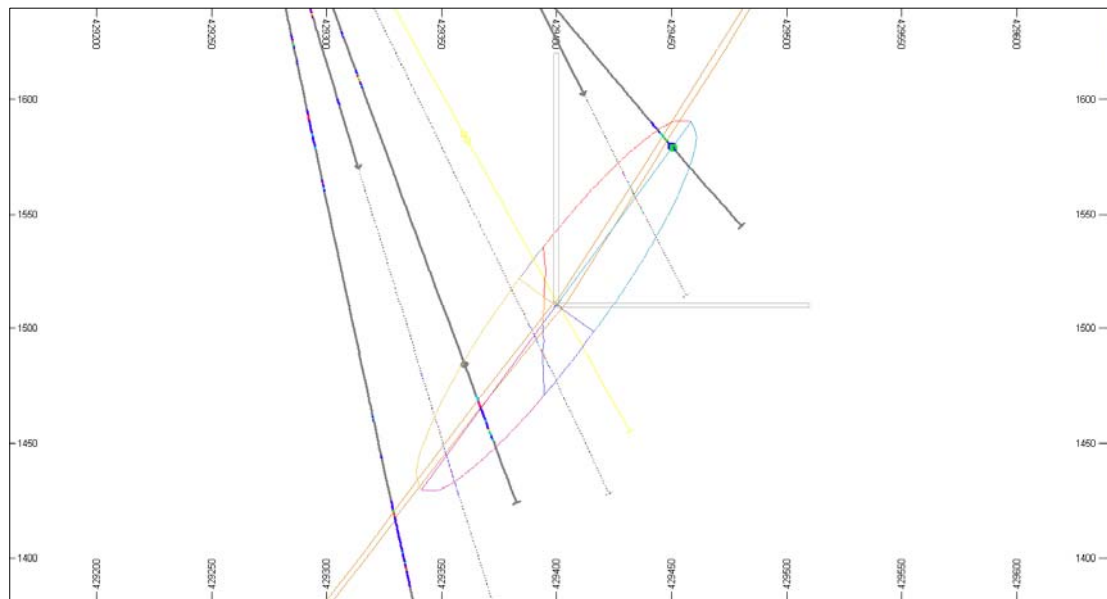
## 8.11 Definition of Search Parameters

Prior to the estimation of each vein the search neighbourhood were first defined, which accounts for anisotropy within the mineralisation per vein. The process is illustrated in Figure 8-8.



**Figure 8-8: Vertical Projection of El Cometa Vein Silver Values**

Anisotropy was defined for each modelled domain after assessing trends in the vertical projections of the grades across each vein. Once these orientations were decided, 3D search ellipses were constructed within Datamine with each ellipse aligned to the dip, strike and plunge of the relevant deposit as shown in Figure 8-9.



**Figure 8-9: Cross Section of composite grades showing rotation of anisotropy with the El Cometa Vein**

A summary of the rotations and the search ellipsoids are shown in Table 8-7, it should be noted that a large distance has been used in the Z-Dimension to ensure all samples are taken both along and across strike, hence removing the changes due to local variations in the strike of the deposit.

**Table 8-7: Summary of search ellipsoids used in 2008 model**

Vein	Distance X	Distance Y	Distance Z	Rotation 1	Axis Rotated	Rotation 2	Axis Rotated	Rotation 3	Axis Rotated
1	200	120	200	-5	Z	58	Z	-20	Z
2	200	100	200	-5	Y	58	Y	-5	Y
3	200	120	200	Z	3	58	Z	54	Z

In addition to the search ellipse definition, the number of samples used in the estimates has also been defined. The decision was taken to use a series of ellipses with confidence being reduced with each multiple of the original range. The different searches are set up in Datamine using an axis multiplying factor set to 2 and 12 for the second and third search ellipses. The third range is artificially large to ensure estimation of the entire wireframe. These outer areas do not form part of the Mineral Resource model and are considered potential upside targets for future drilling. The search ellipse used in each estimate is stored in the Field SVOL within the final Datamine model.

**Table 8-8: Summary of estimation parameters used in 2008 model**

Vein	SVOL	Axis Factor	Min Number Samples	Min Number Samples	SVOL	Axis Factor	Min Number Samples	Max Number Samples	SVOL	Axis Factor	Min Number Samples	Max Number Samples
1	1	1	4	100	2	2	2	100	3	12	1	25
2	1	1	4	100	2	2	2	100	3	12	1	25
3	1	1	4	100	2	2	2	100	3	12	1	25

## 8.12 Classification

Using the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards on Mineral Resources and Mineral Reserves, the Mineral Resources have been separated into Indicated and Inferred blocks. The geological knowledge and interpretation, data density, data reliability and quality, and continuity of the mineralisation in areas where drill holes have intersected the deposit have been taken into account. Other criteria include the number of composites used in estimating block grade and any areas of change in the zinc to lead ratio which require better understanding. The following classification has been used:

- Indicated Mineral Resources are those estimated blocks, which have been interpolated by drillhole data within the first search area and drill spacing in the order of 50 x 50 m.
- Inferred Mineral Resource are inside the wireframes where drillhole spacing is of the order of 100 x 100 m. Some areas of closer spaced drilling 60 x 60 m have been down graded from Indicated to Inferred due to anomalies in the ratios of zinc to lead, Infill drilling in these areas is recommended to improve confidence in the grades.

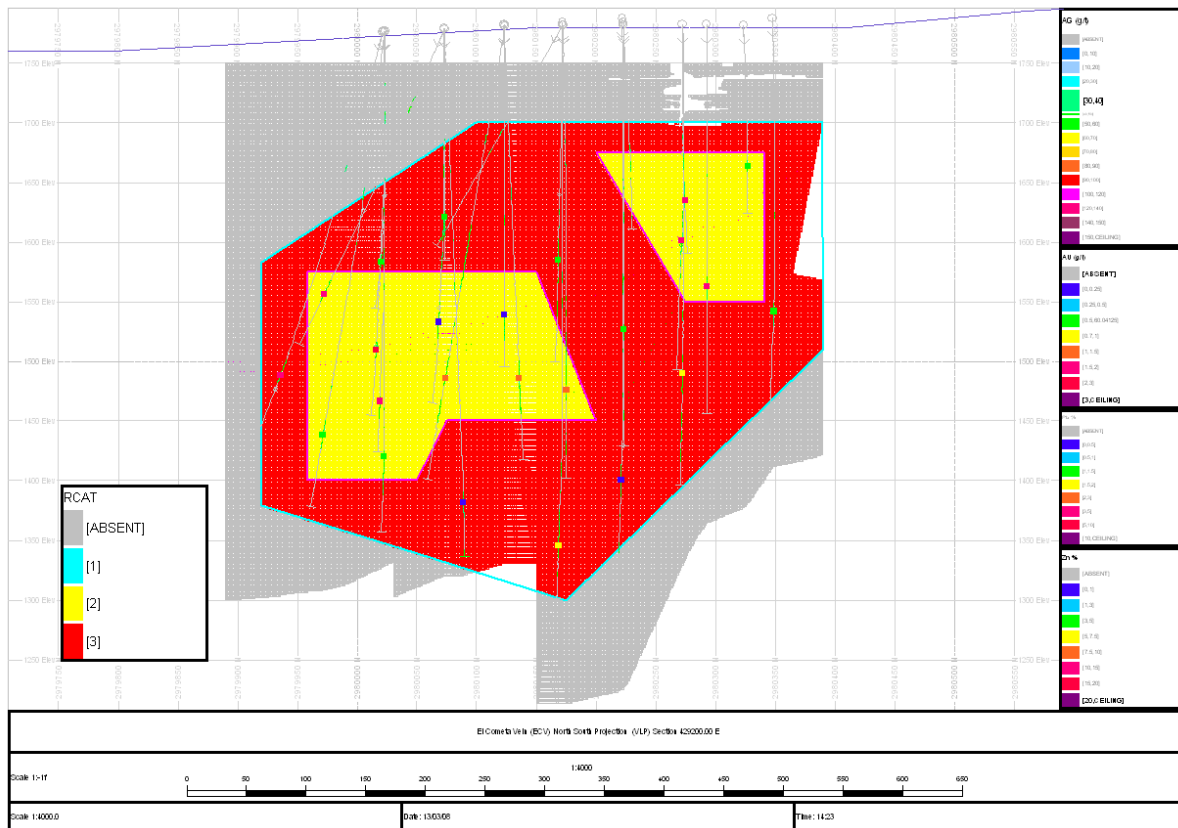
Upside potential has been modelled but has not been used in the final compilation of the Mineral Resource Statement.

The classification has been stored in the Datamine Resource Model under the field RCAT, based on the results shown in Table 8-9, the resultant distribution of classification is shown in Figure 8-10.

**Table 8-9: Classification codes used in SRK Resource Model**

RCAT	Category	Comments
1	Measured	Not used in the SRK Datamine model
2	Indicated	Drilled to 50 m x 50 m with reasonable level of confidence in grade continuity within each vein
3	Inferred	Drilled to 100 m x 100 m with lower levels of confidence in grade continuity within each vein
4	Upside	Insufficient information to be classified as potentially economic and should be used only as targets for infill drilling





**Figure 8-10: Vertical Project of El Cometa Vein showing classification**

### 8.13 Cut-off Grade Derivation

The Mineral Resource Statement given in Table 8-10 is given above a cut-off of 4.5 % zinc equivalent. At this level, the deposits have reasonable continuity and this is considered a reasonable cut off grade for a Mineral Resource of this type. The cut-off is comparable to the Endeavour calculated cut-off based on an NSR of USD50.

### 8.14 Mineral Resource Statement

The SRK Mineral Resource Statement for the El Cometa Project is included as Table 8-10. The Mineral Resource Statement is quoted above a cut-off grade of 4.5 % zinc equivalent and has been classified in accordance with the Guidelines of National Instrument 43-101 and the accompanying documents 43-101.F1 and 43-101.CP has an effective date of 31 December 2007.

**Table 8-10: Mineral Resource Statement, 31 December 2007.**

Vein	Resource Classification	Tonnage (t)	Grade					Metal				
			zinc (%)	lead (%)	silver (g/t)	gold (g/t)	copper (%)	zinc (t)	lead (t)	silver (oz)	gold (oz)	copper (t)
El Cometa	Indicated	420,000	3.4	2.9	40	1.0	0.20	14,000	12,000	515,000	13,500	800
El Cometa	Inferred	760,000	2.2	2.5	40	1.1	0.20	17,000	20,000	960,000	27,000	1,400
Consuelo Breccia	Indicated	120,000	2.3	2.7	25	1.6	0.15	3,000	4,000	105,000	6,000	200
Consuelo Breccia	Inferred	140,000	1.8	2.0	50	1.2	0.35	3,000	5,000	240,000	5,500	500
La Estrella	Indicated	60,000	2.1	1.7	65	0.3	0.05	1,500	2,000	130,000	500	0
La Estrella	Inferred	250,000	3.7	2.6	30	0.5	0.05	9,000	5,000	230,000	4,500	100
All	Indicated	600,000	3.0	2.7	39	1.0	0.16	18,500	16,000	750,000	20,000	1,000
All	Inferred	1,150,000	2.5	2.4	39	1.0	0.17	29,000	30,000	1,430,000	36,500	1,900

## **9 OTHER RELEVANT INFORMATION**

There is no further relevant information to report.

## **10 INTERPRETATION AND CONCLUSIONS**

SRK has conducted an Independent Mineral Resource estimate for the El Cometa project for the period ending 31 December 2007. SRK's resource estimate conforms to both the JORC Code (excepting minor terminology differences) and the current CIM standards and definitions for estimating resources and reserves as required under NI 43-101 "Standards of Disclosure for Mineral Projects." The results from the metallurgical test work have been reviewed to assess the potential economic merit of the deposit given reasonable metal price assumptions.

SRK is not aware of any significant technical, legal, environmental or political considerations which would affect the eventual extraction and processing of the resources and reserves at the El Cometa Project, however further work is required to increase the resource, improve confidence in detailed geometry, increase confidence in local grade estimation before mine planning and subsequent technical economic studies are undertaken in any detail.

SRK believes that the land controlled by Endeavour is prospective both along strike and down dip of the existing mineralisation and that further resources could be discovered on and around the property.

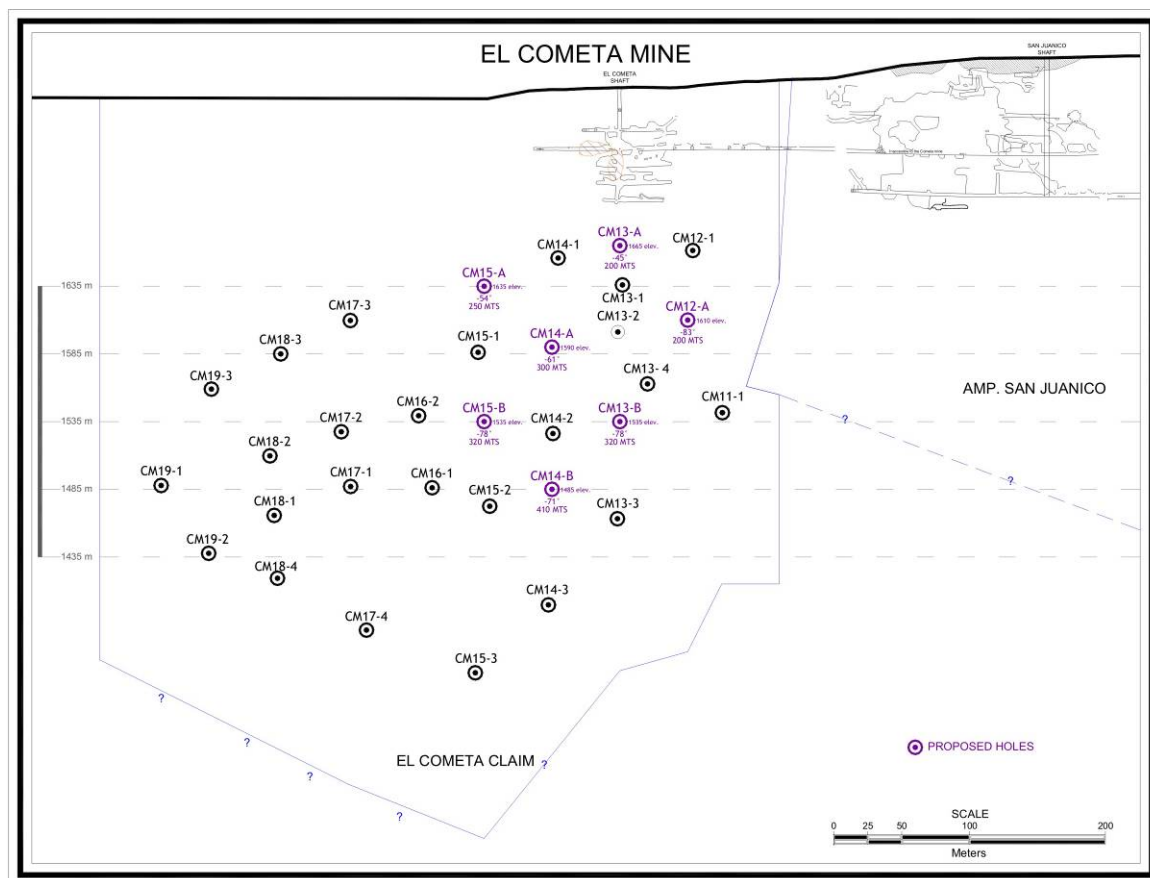
## **11 RECOMMENDATIONS**

### **11.1 Drilling Plan and Budget**

As part of its ongoing exploration at the El Cometa Project, Endeavour plans to spend an USD400,000 on further infill drilling, in an effort to upgrade the level of confidence certain areas as detailed in Table 11-1 and Figure 11-1. SRK agrees with this particular phase of drilling given the likelihood that access to these drilling sites may not be available for long owing to surface development.

**Table 11-1: Cometa Project - Exploration Budget for 2008**

Activity (units)	Units	Unit Cost USD	Total Cost USD
Surface Drilling (m)	2,000.0	125.00	250,000
Contingencies (10% drilling)	1.0	25,000.00	25,000
Contractors	Water Truck		2,000
Roads & Drill Pads	7.0	250.00	1,750
Reclamation	7.0	250.00	1,750
Assays (samples)	300.0	30.00	9,000
Analytical Studies	Metallurgy		10,000
Geologists (days)	40.0	500.00	20,000
Drafting/Surveying (days)	20.0	150.00	3,000
Labour (weeks)	10.0	300.00	3,000
Consultants (days)	6.0	500.00	3,000
Travel & Lodging	1.0	4,000.00	4,000
Supplies	1.0	4,500.00	4,500
Management	3.0	1,000.00	3,000
Mining Concessions			60,000
<b>TOTAL</b>			<b>400,000</b>



**Figure 11-1: Longitudinal section of La Cometa displaying intercept points for proposed infill drill holes in 2008**

## 11.2 Further Drilling Recommendation

SRK would recommend expanding drilling coverage to explore higher grade fringes of the current model within the concession. The zinc equivalent VLP plot for El Cometa in Appendix 2 should be used as a guide to targeting further drilling; of note is the high grade southern fringe that remains open, the high grade steep south plunging shoot through the middle of the deposit and areas above these areas towards surface. La Mexicana vein should also be considered a high priority target given the high grades which exist in the few intersections to date.

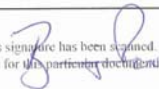
SRK believes that the program for further exploration on the El Cometa Project by Endeavour is both warranted and justified as the potential for the discovery of additional resources and improve confidence in the existing resources are good.

Eventually, total infilling of the Inferred Mineral Resource will be required to upgrade the confidence in the currently drilled areas sufficient to consider mine planning and detailed project evaluation.

## 11.3 Additional Work


Endeavour should revisit the density determinations to provide more accurate values, following this it is likely that a higher density will be used in the resource model which will increase tonnage and metal in the estimate.

**For and on behalf of SRK Consulting (UK) Ltd**



This signature has been scanned. The author has given permission to its use for this particular document. The original signature is held on file.

**Mr Ben Parsons**  
Resource Geologist



This signature has been scanned. The author has given permission to its use for this particular document. The original signature is held on file.

**Martin Pittuck, MIMMM, C.Eng.**  
Principal Resource Geologist

## 12 REFERENCES

Mineragrafia\_Ochoa\_Aug07 – letter report describing mineralogy prepared by Lucas Ochoa Landin, University of Sonora, 6 August 2007.

Phase 1 Metallurgy, ENDEAVOUR REPORT SGS-26-07 (OCT07)

Phase 2 Metallurgy, El Cometa\_Metallurgical Test Phase 2

## 13 CERTIFICATES OF QUALIFIED PERSONS

### CERTIFICATE

#### To Accompany the Report Entitled

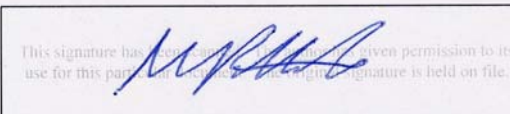
**“NI 43-101 TECHNICAL REPORT AUDIT OF THE RESOURCE ESTIMATE FOR THE EL COMETA PROJECT CHIHUAHUA STATE, MEXICO.”**

**Effective Date 31 March 2008**

I, **Martin Frank Pittuck**, do hereby certify that:

1. I reside at 23, Conway Road, Pontcanna, Cardiff, CF11 9NT.
2. I am a graduate with a master of Science in Mineral Resources gained from Cardiff College, University of Wales in 1996 and I have practised my profession continuously since that time.
3. I am a member of the Institution of Materials Mining and Metallurgy (Membership Number 49186) and I am a Chartered Engineer.
4. I am a Principal Resource Geologist with SRK (UK) Ltd, a firm of consulting mining engineers.
5. I have experience with precious metal deposits and resource estimation techniques.
6. I am a Qualified Person for the purposes of NI 43-101 and I am responsible for the preparation of Mineral Resource Estimates and Exploration Recommendations covered by this report.
7. I have visited The El Cometa Property on 18 December 2007
8. I have no personal knowledge as of the date of this certificate of any material fact or change, which is not reflected in this report.
9. Neither I, nor any affiliated entity of mine, is at present under an arrangement or understanding, nor expects to become, an insider, associate, affiliated entity or employee of Endeavour Silver Corporation or any associated or affiliated entities.
10. Neither I, nor any affiliated entity of mine, own either directly or indirectly, nor expect to receive, any interest in the properties or securities of Endeavour Silver Corporation, or any associated or affiliated companies.
11. Neither I, nor any affiliated entity of mine, have earned the majority of our income during the preceding three years from Endeavour Silver Corporation, or associated or affiliated companies.
12. I have read NI 43-101 and Form 43-101F1 and have prepared the technical report in compliance with these and in conformity with generally accepted International mining industry practices.
13. As of the date of this certificate, to the best of my knowledge, information and belief, the report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

**Martin Pittuck, MIMMM, C.Eng.**  
**Principal Resource Geologist**



**31 March 2008**

## SRK Consulting (UK) Ltd Report Distribution Record

**Report No.**


008

**Copy No.**

U3438\_008\_Cometa Tech Report

Name/Title	Company	Copy	Date	authorised by
Barry Devlin	Endeavour Siler Corporation	PDF	31 March 2008	Martin Pittuck

**Approval Signature:**



This signature has been verified by SRK Consulting (UK) Limited and is permitted to be used for this purpose. It is not to be used for any other purpose without the written permission of the copyright holder, SRK.

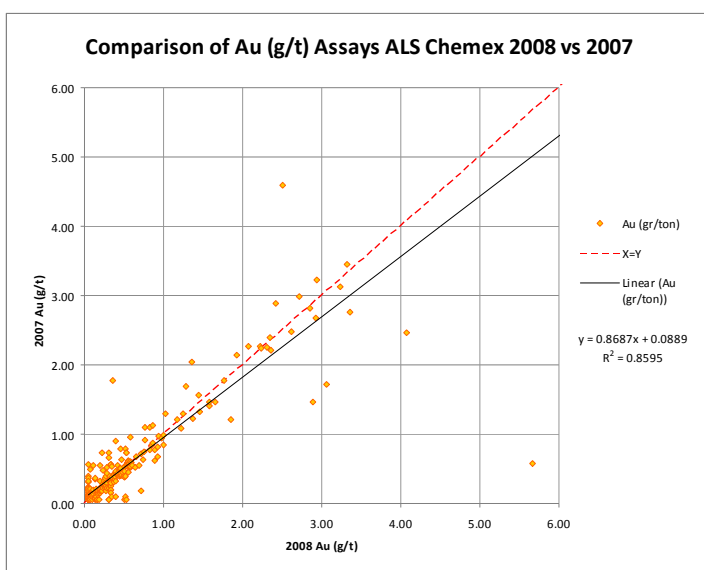
This report is protected by copyright vested in **SRK Consulting (UK) Limited**. It may not be reproduced or transmitted in any form or by any means whatsoever to any person without the written permission of the copyright holder, SRK.

# **Appendix A**

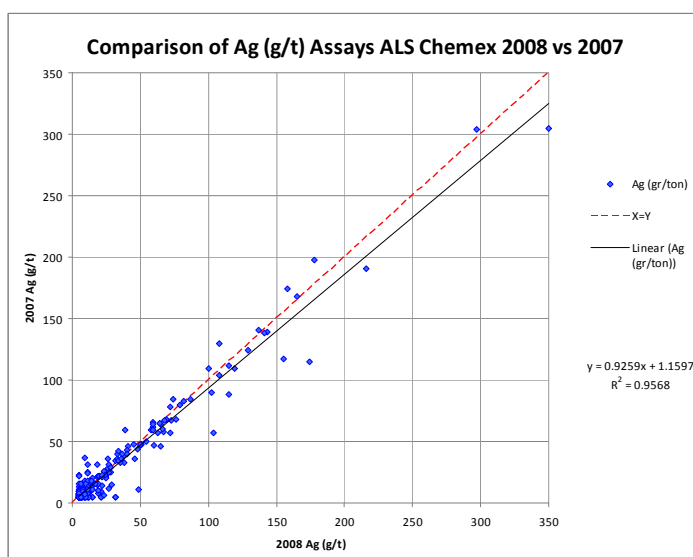
## **QA/QC Analysis**



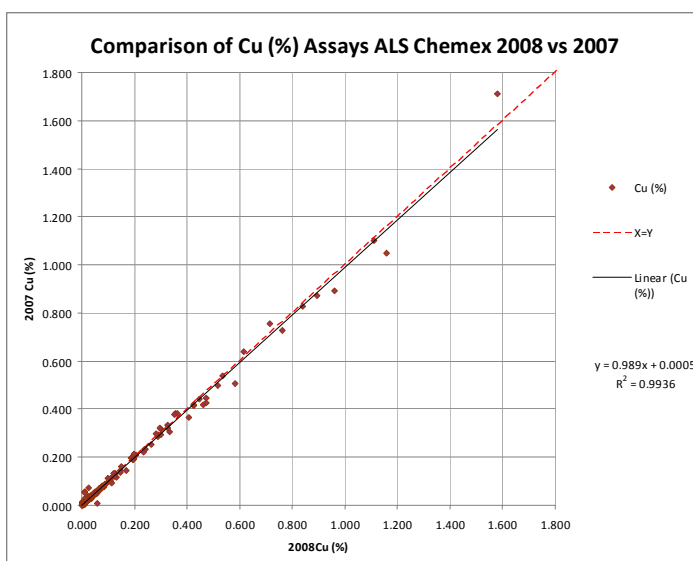
## DUPLICATES QUALITY CONTROL CHARTS



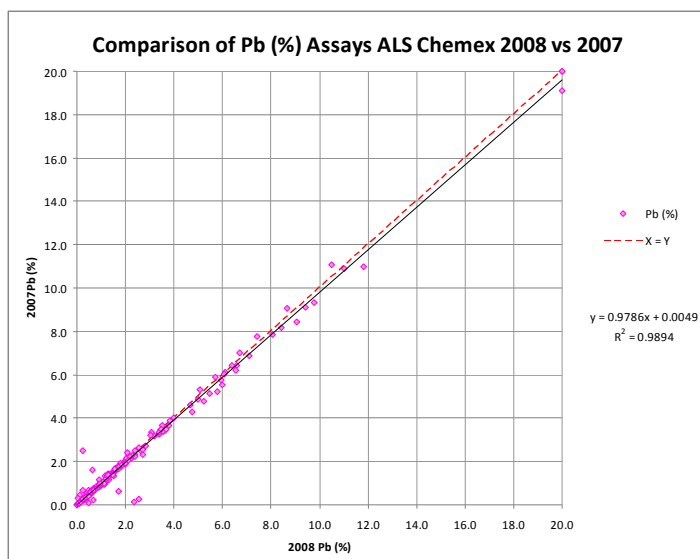
Stats Au	2008	2007
Mean	0.676	0.676
Standard Error	0.075	0.070
Median	0.330	0.370
Mode	0.050	0.050
Standard Deviation	1.168	1.094
Sample Variance	1.364	1.198
Kurtosis	31.823	36.122
Skewness	4.849	5.120
Range	10.300	10.050
Minimum	0.050	0.050
Maximum	10.350	10.100
Sum	163.620	163.650
Count	242	242
Largest(99)	0.42	0.46



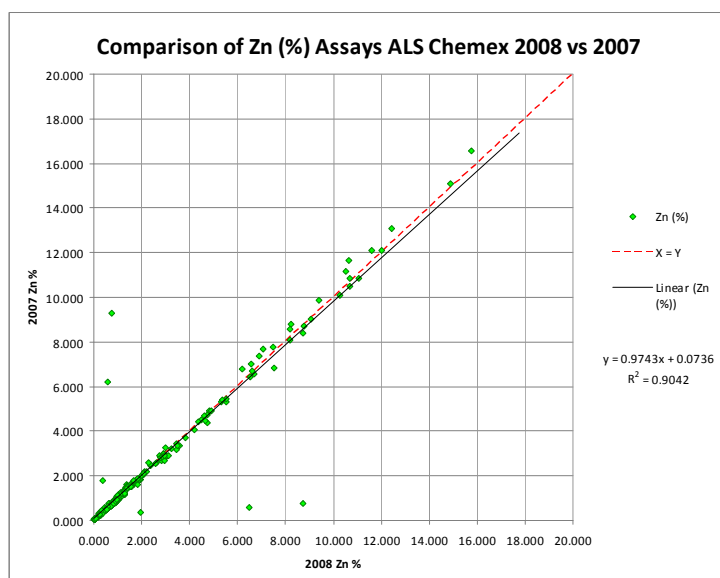
Stats Ag	2008	2007
Mean	30.907	29.628
Standard Error	3.005	2.797
Median	11.000	11.000
Mode	5.000	5.000
Standard Deviation	46.260	43.517
Sample Variance	2140.017	1893.687
Kurtosis	15.175	14.406
Skewness	3.378	3.321
Range	345.000	300.000
Minimum	5.000	5.000
Maximum	350.000	305.000
Sum	7325	7170
Count	237	242
Largest(99)	17	16



Stats Cu	2008	2007
Mean	0.108	0.107
Standard Error	0.013	0.013
Median	0.028	0.029
Mode	0.013	0.005
Standard Deviation	0.210	0.208
Sample Variance	0.044	0.043
Kurtosis	16.241	19.557
Skewness	3.646	3.880
Range	1.579	1.708
Minimum	0.001	0.002
Maximum	1.580	1.710
Sum	26.0247	25.864
Count	242	242
Largest(99)	0.04	0.0413

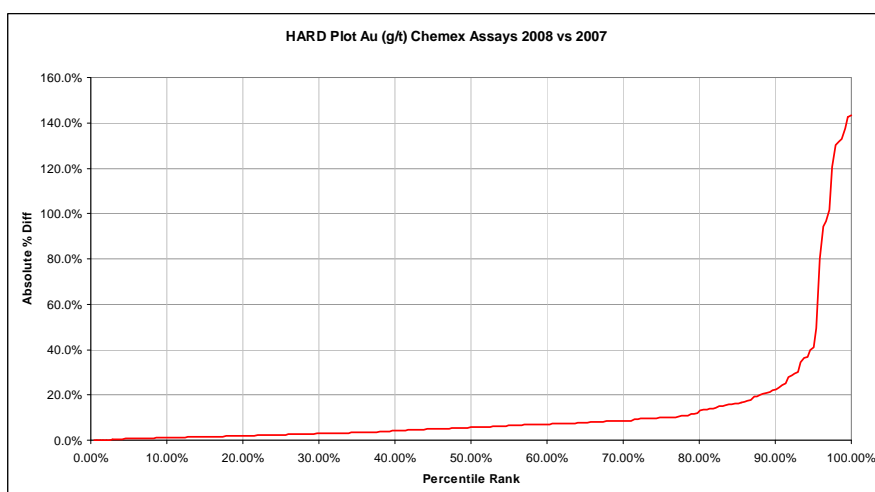
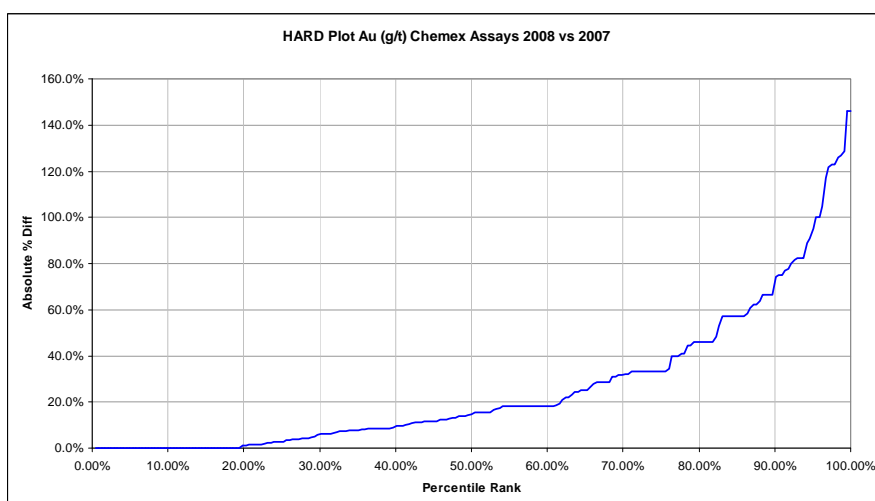
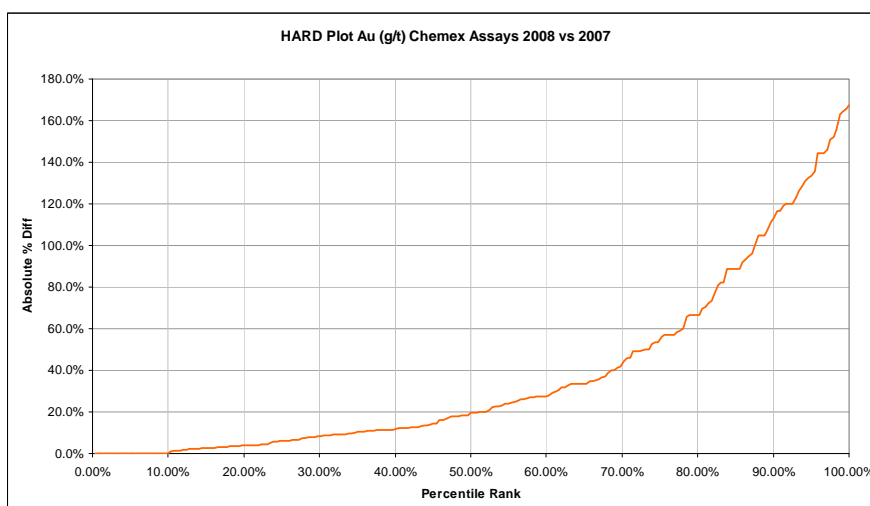


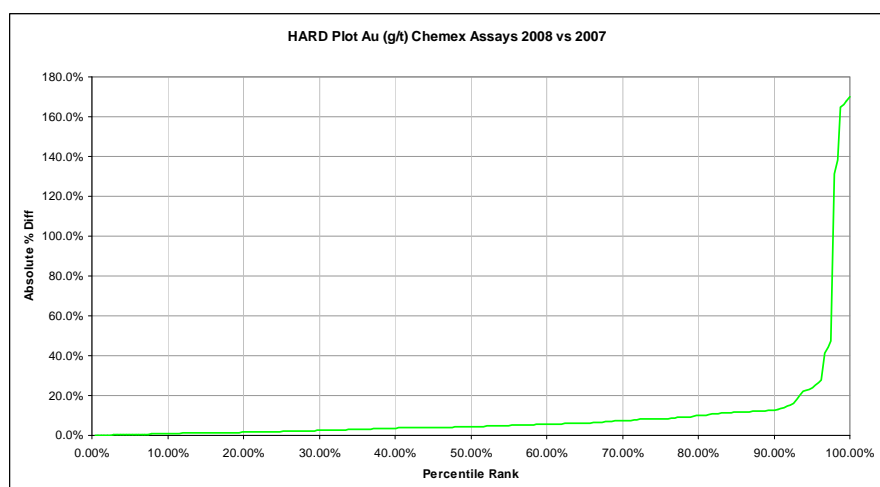
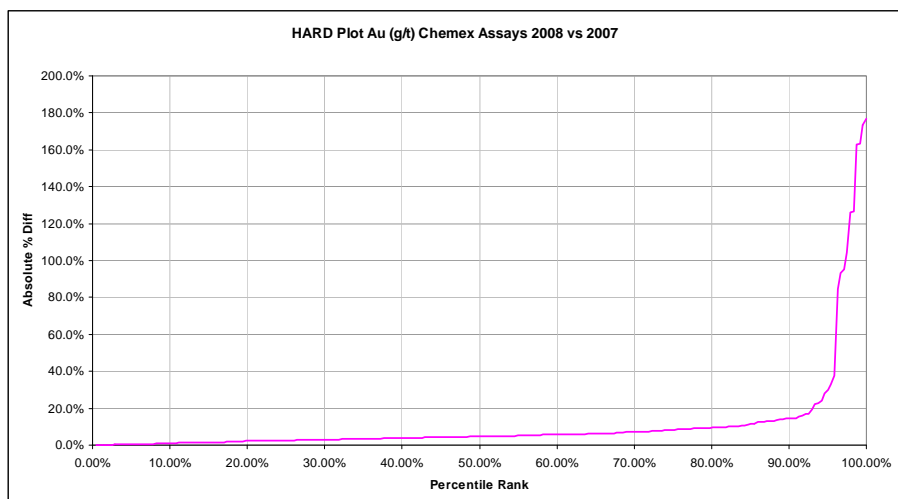
Stats Pb	2008	2007
Mean	1.980	1.943
Standard Error	0.193	0.190
Median	0.909	0.849
Mode	0.259	1.220
Standard Deviation	3.005	2.956
Sample Variance	9.028	8.738
Kurtosis	15.657	15.804
Skewness	3.495	3.508
Range	19.994	19.991
Minimum	0.007	0.010
Maximum	20.000	20.000
Sum	479.211	470.119
Count	242	242
Largest(99)	1.19	1.18



Stats Zn	2008	2007
Mean	2.267	2.282
Standard Error	0.190	0.195
Median	1.020	1.010
Mode	1.270	1.220
Standard Deviation	2.956	3.029
Sample Variance	8.740	9.177
Kurtosis	4.522	4.849
Skewness	2.169	2.227
Range	15.732	16.527
Minimum	0.018	0.023
Maximum	15.750	16.550
Sum	548.540	552.284
Count	242	242
Largest(99)	1.3	1.34

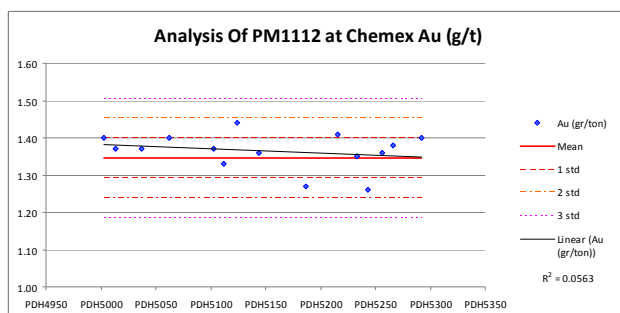
## HARD PLOTS



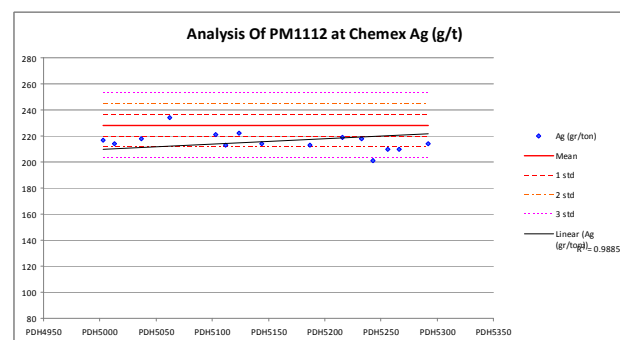
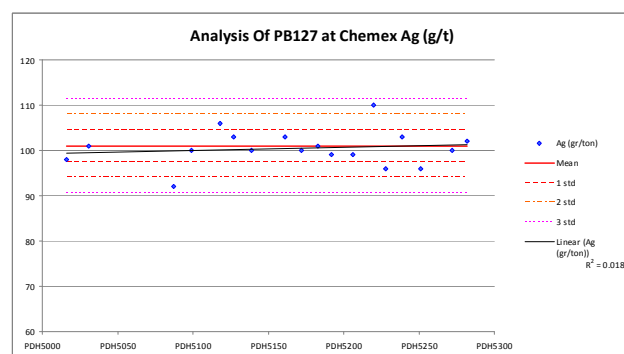
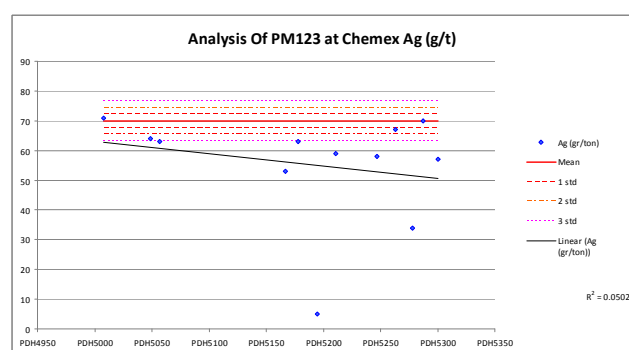


## CERTIFIED STANDARD REFERENCE MATERIAL SUPPLIED BY WMC

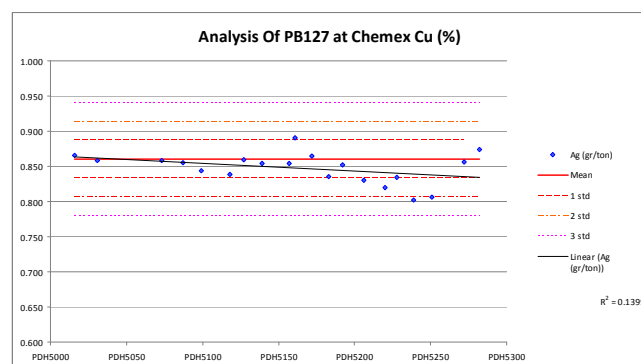
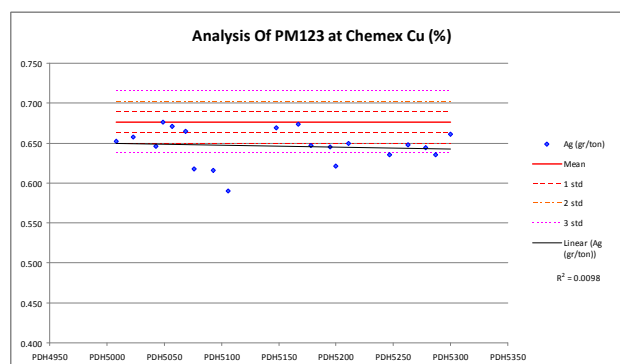
### Au g/t Standards

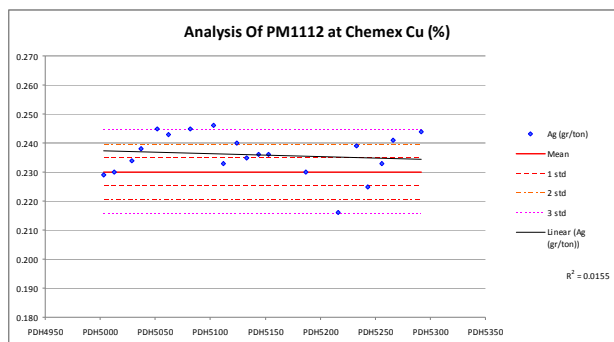


### Ag g/t Standards

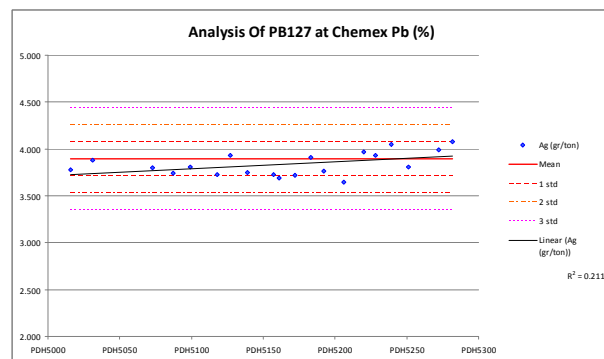
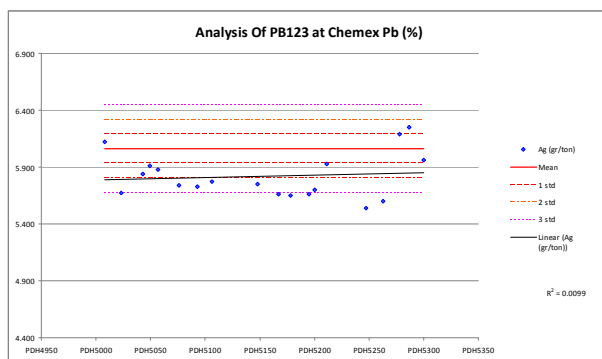


### Cu % Standards

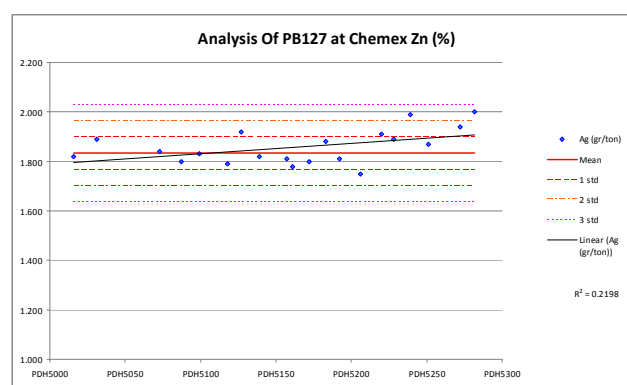
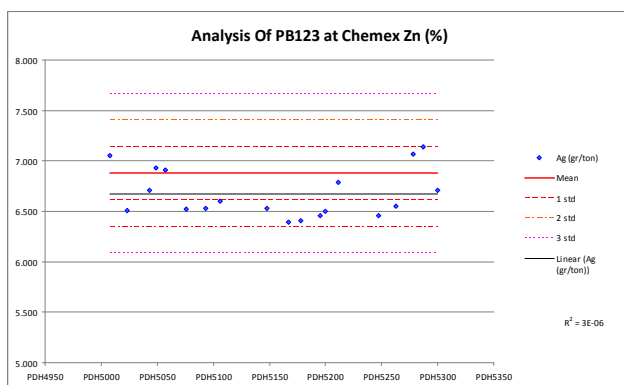




## Pb % Standards



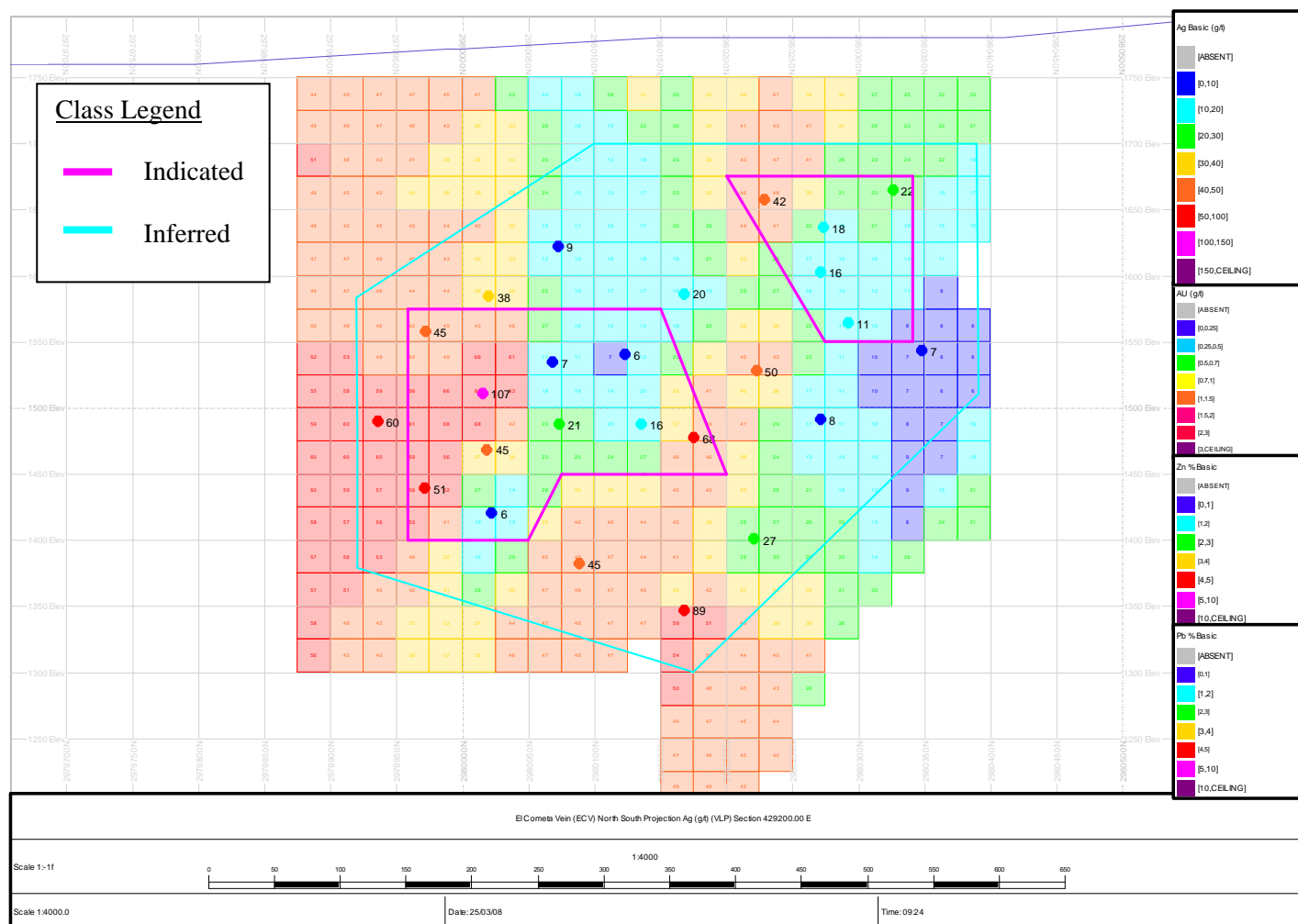
## Zn % Standards



## **Appendix B**

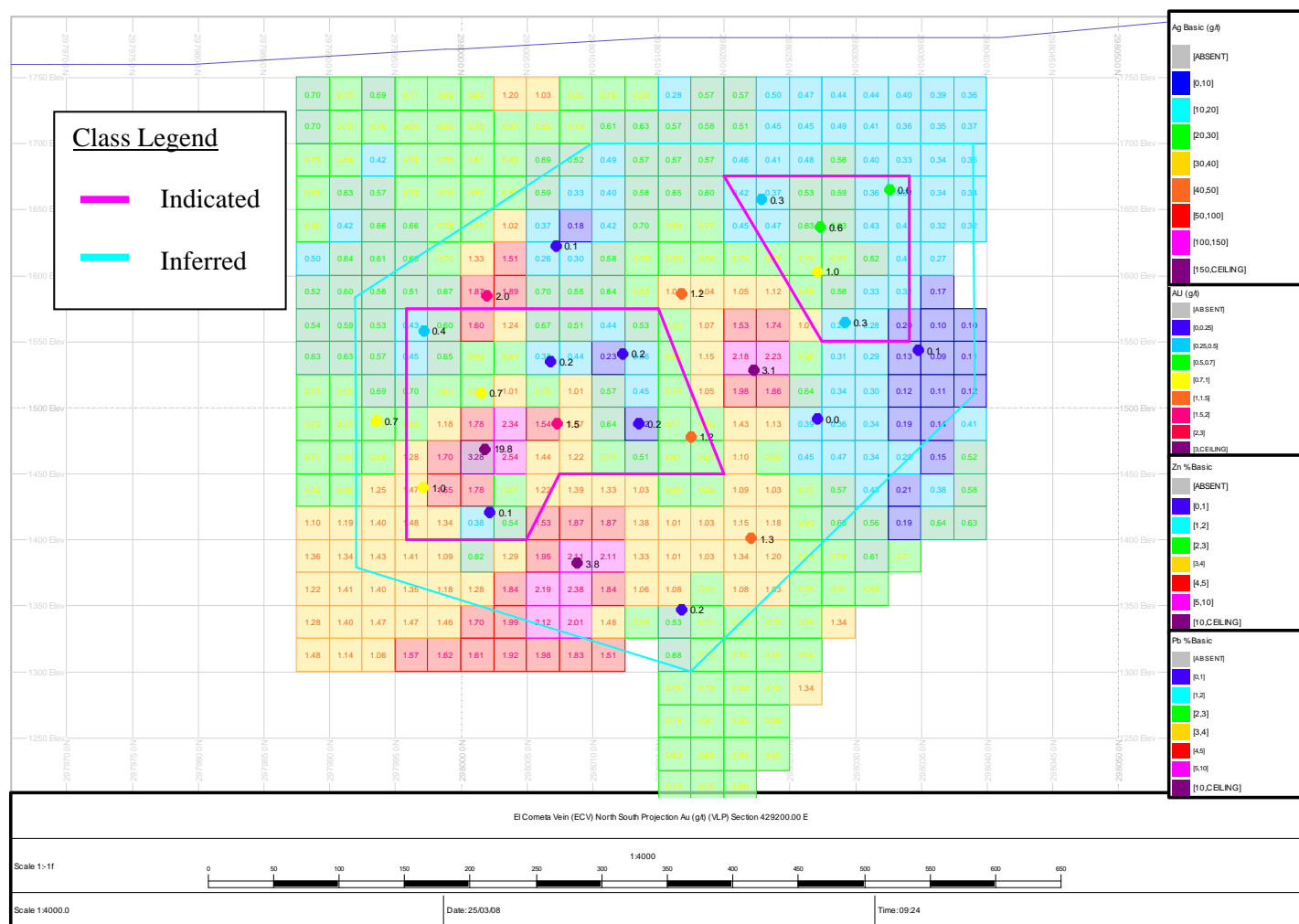
### **VLP's per Element per Vein**

## El Cometa Silver Ag (g/t) Estimates VLP

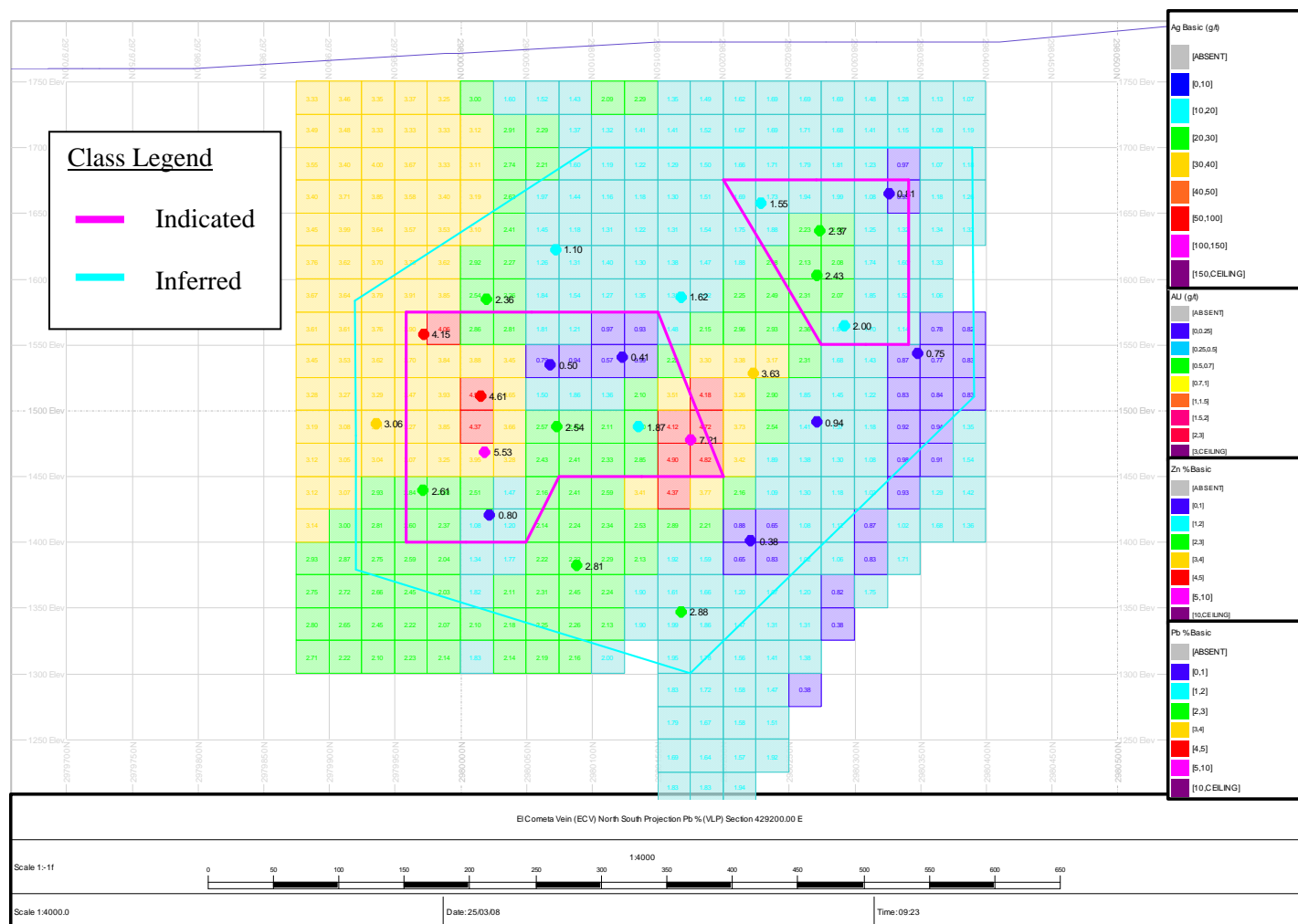




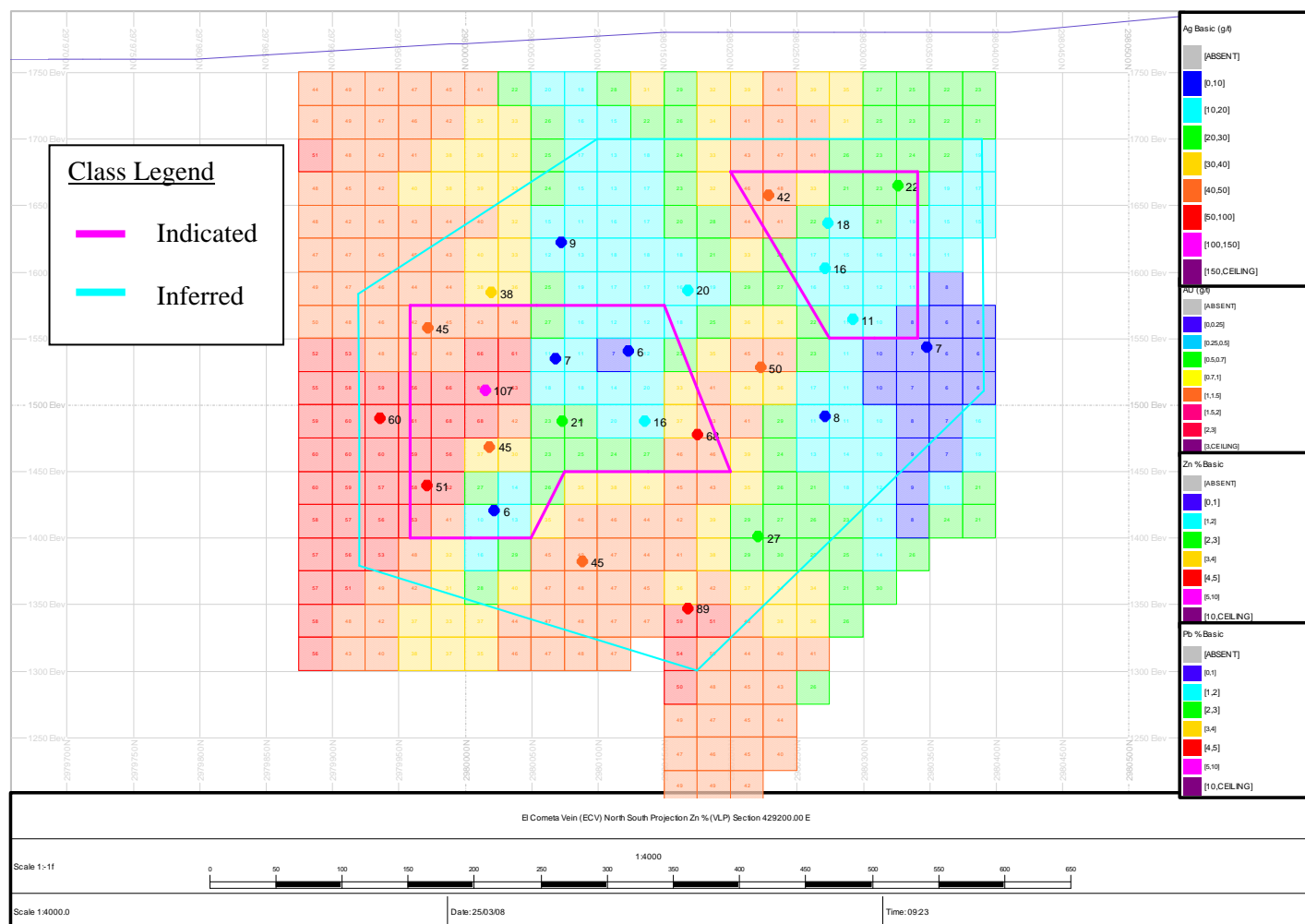
# El Cometa Gold Au (g/t) Estimates VLP



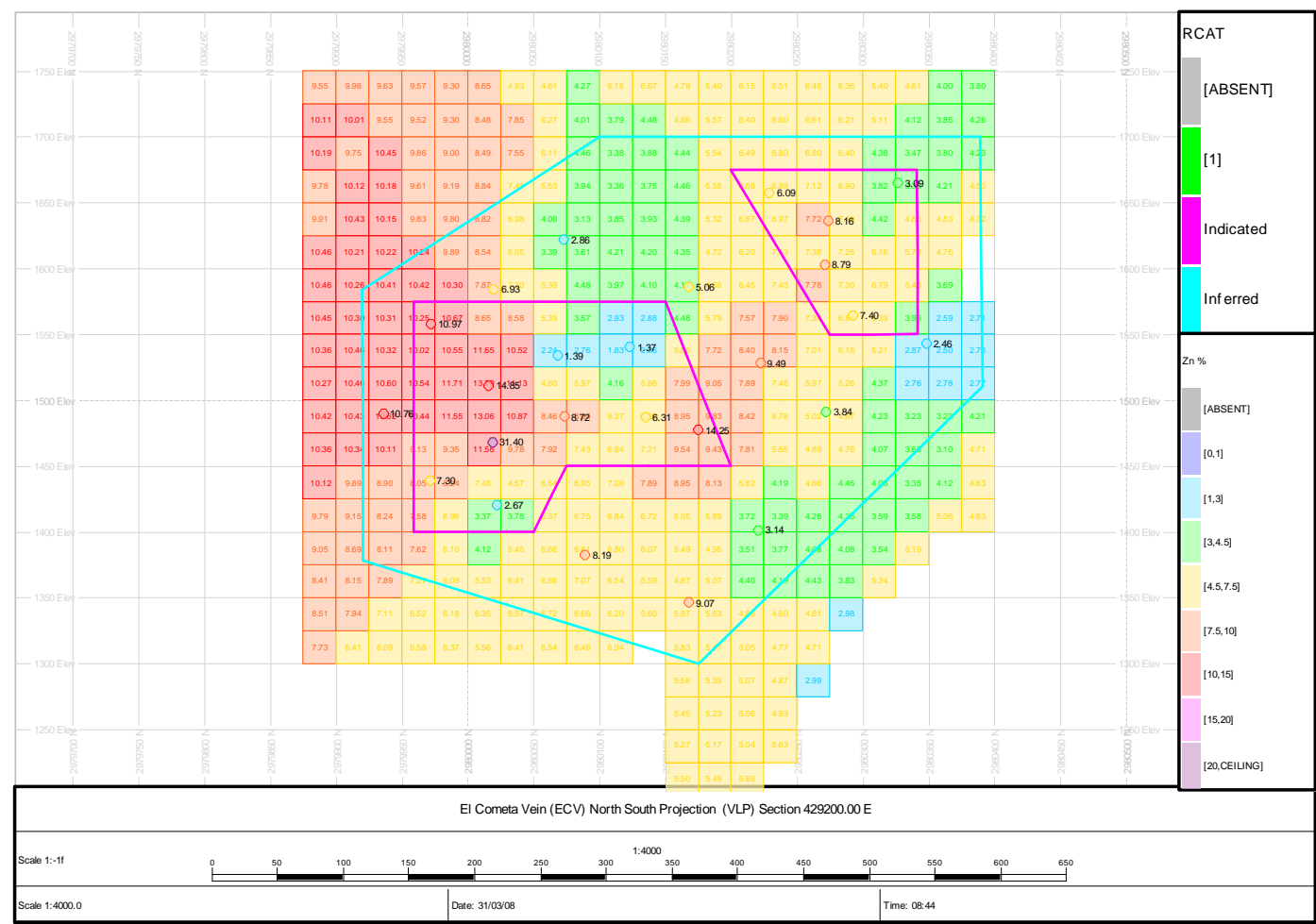
# El Cometa Vein Lead Pb (%) Estimates VLP



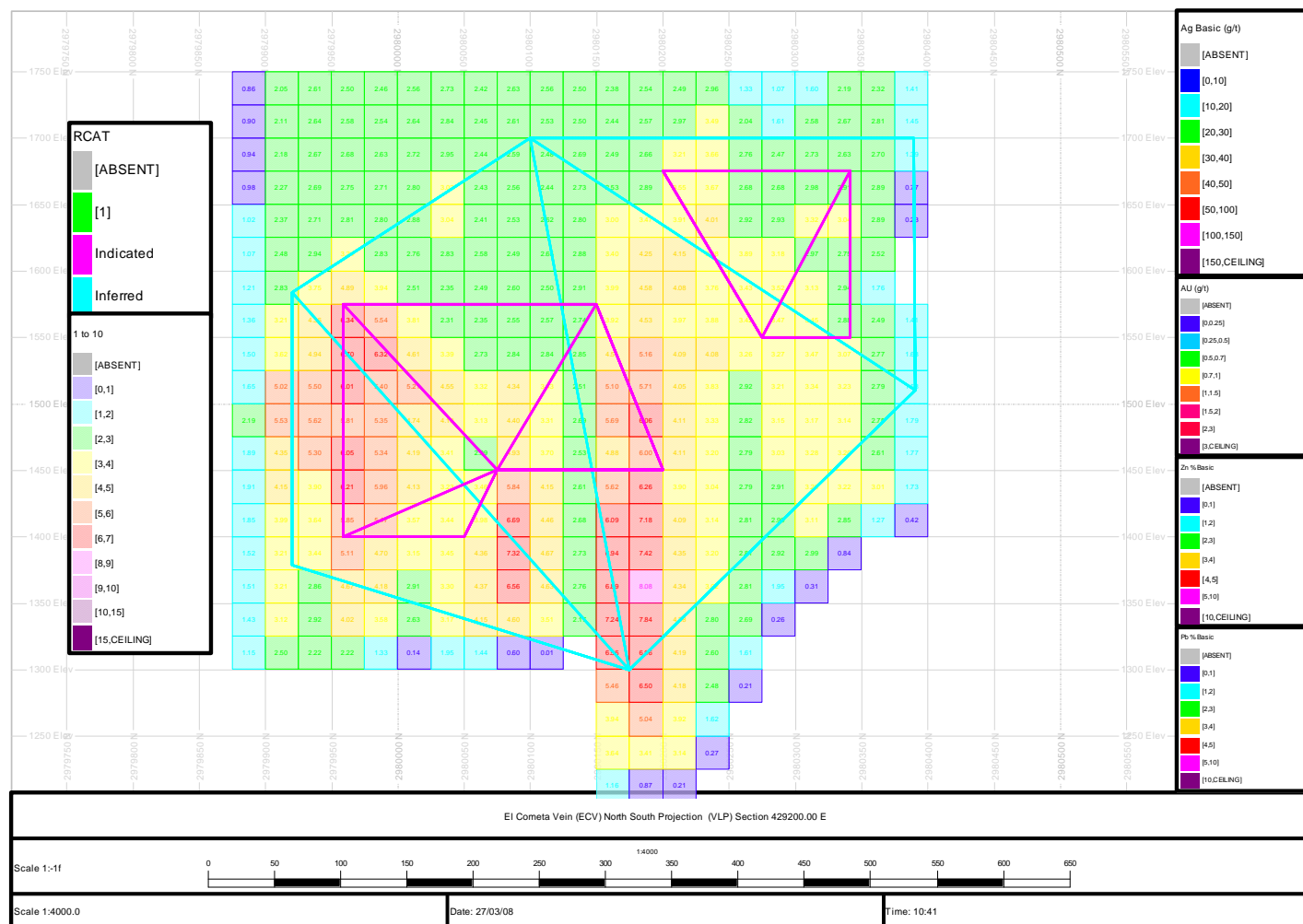
## El Cometa Vein Zinc Zn (%) Estimates VLP



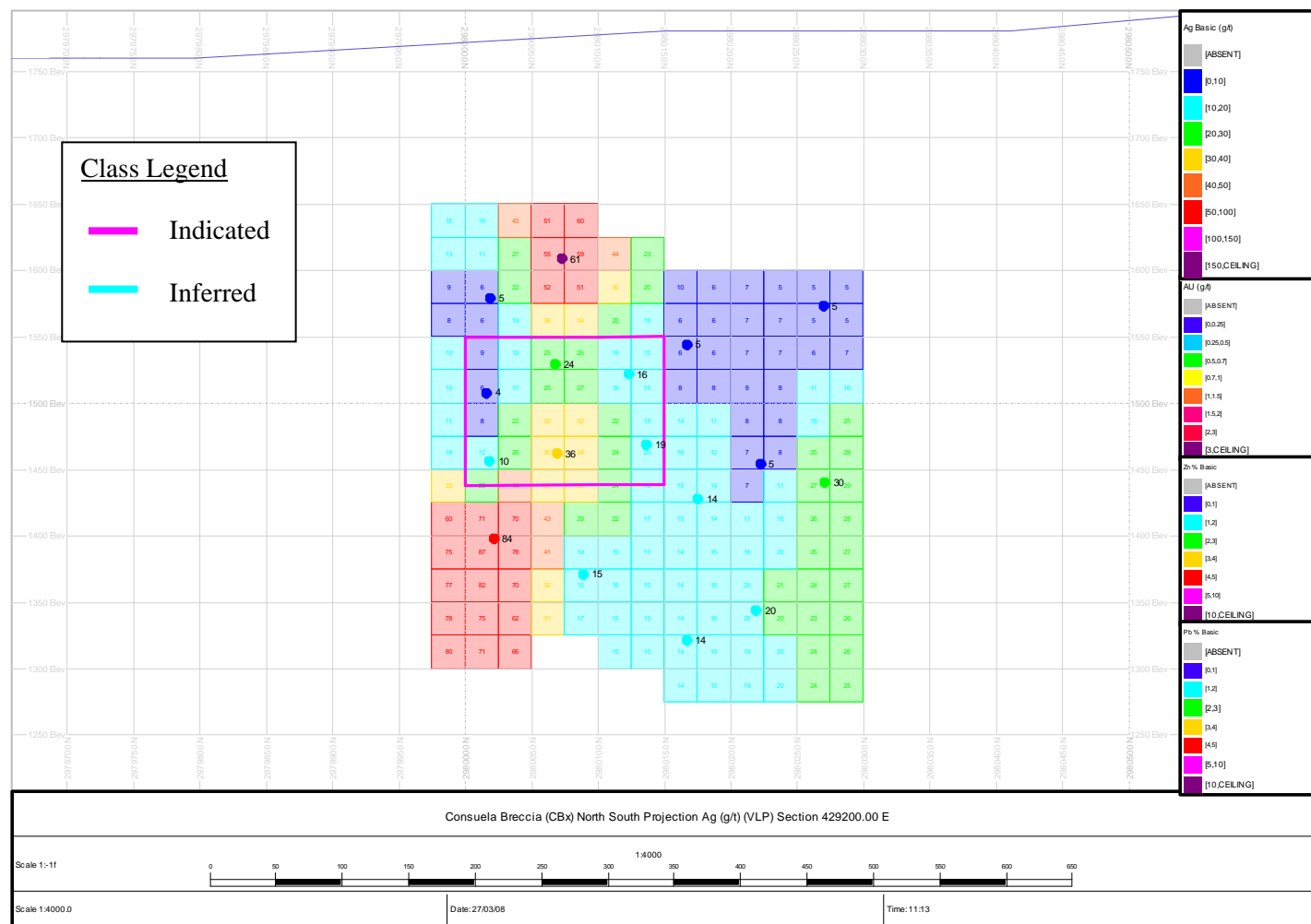
El Cometa Vein Zinc Equivalent (Zn %) VLP



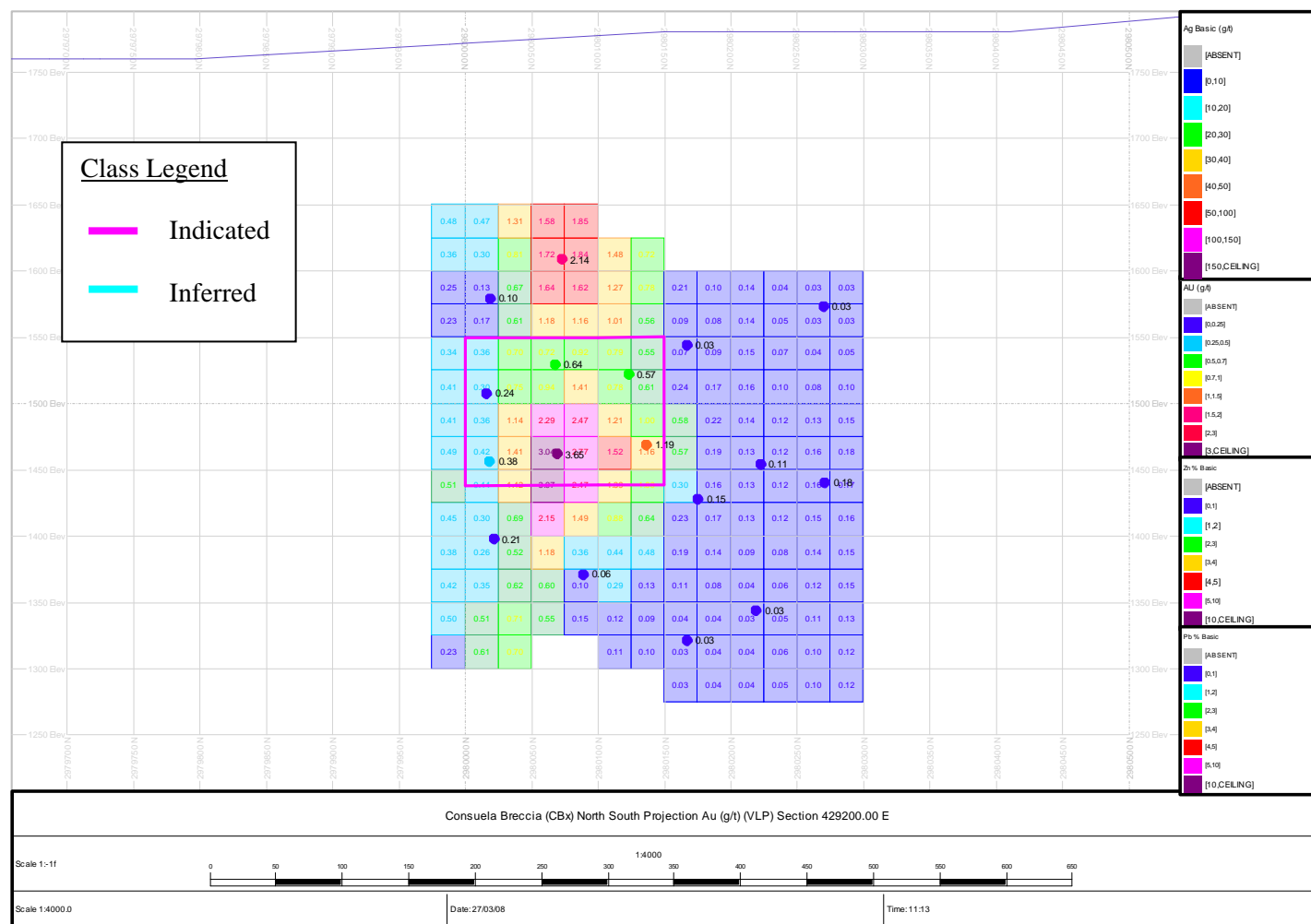
## El Cometa Vein Mean Thickness VLP



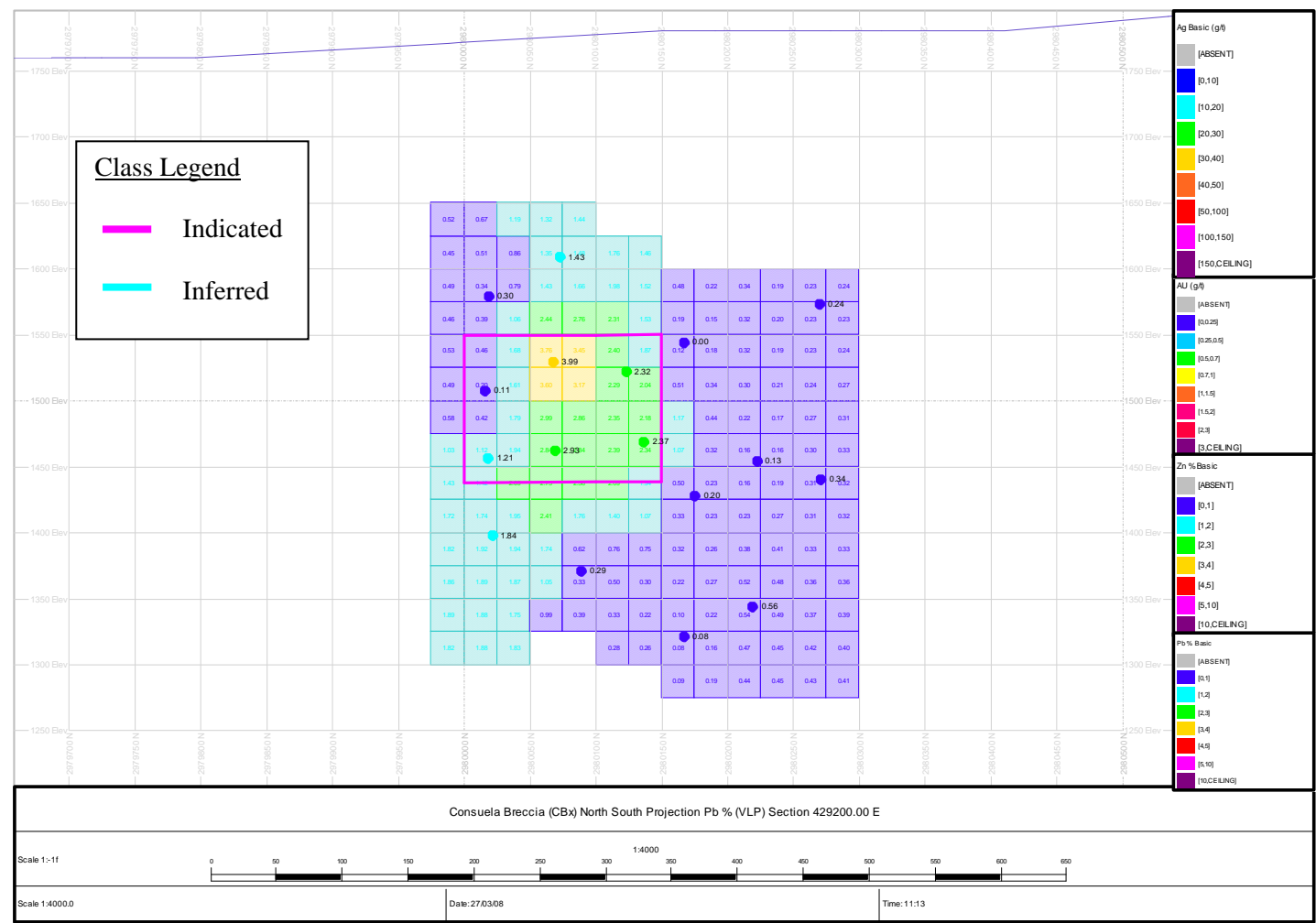
## Consuelo Breccia Silver Ag (g/t) Estimates VLP



## Consuelo Breccia Gold Au (g/t) Estimates VLP

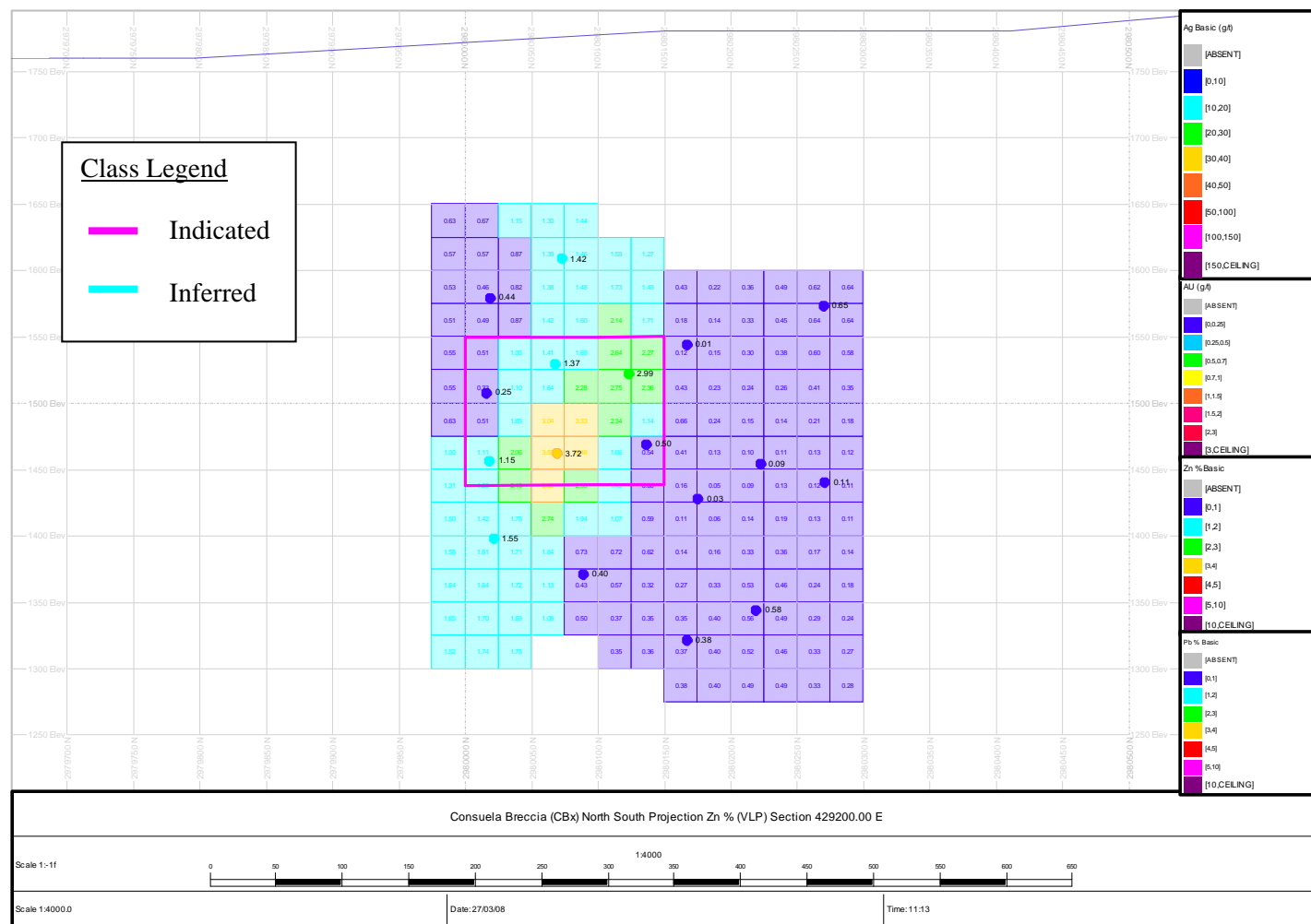


Consuelo Breccia Lead Pb (%) Estimates VLP

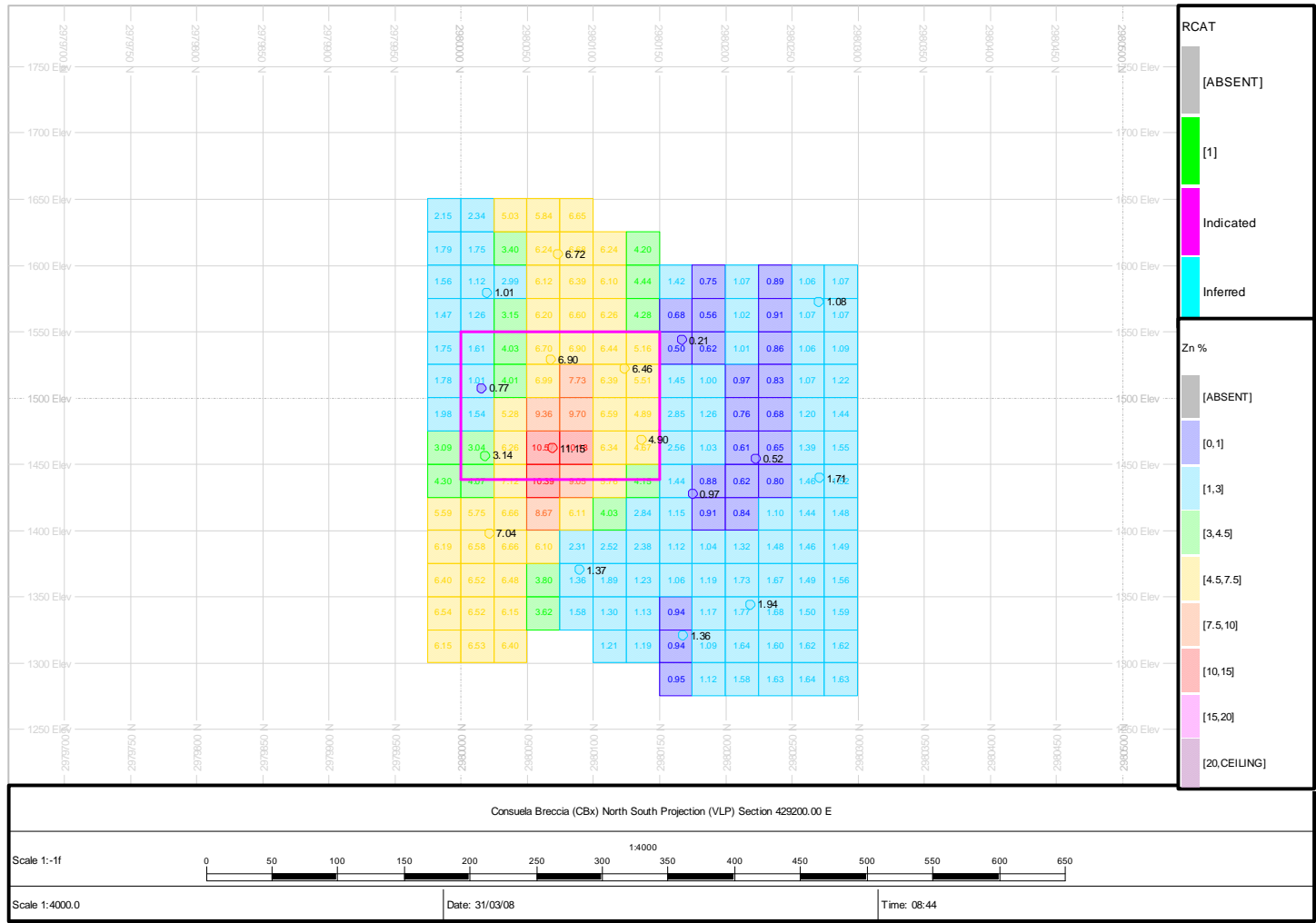




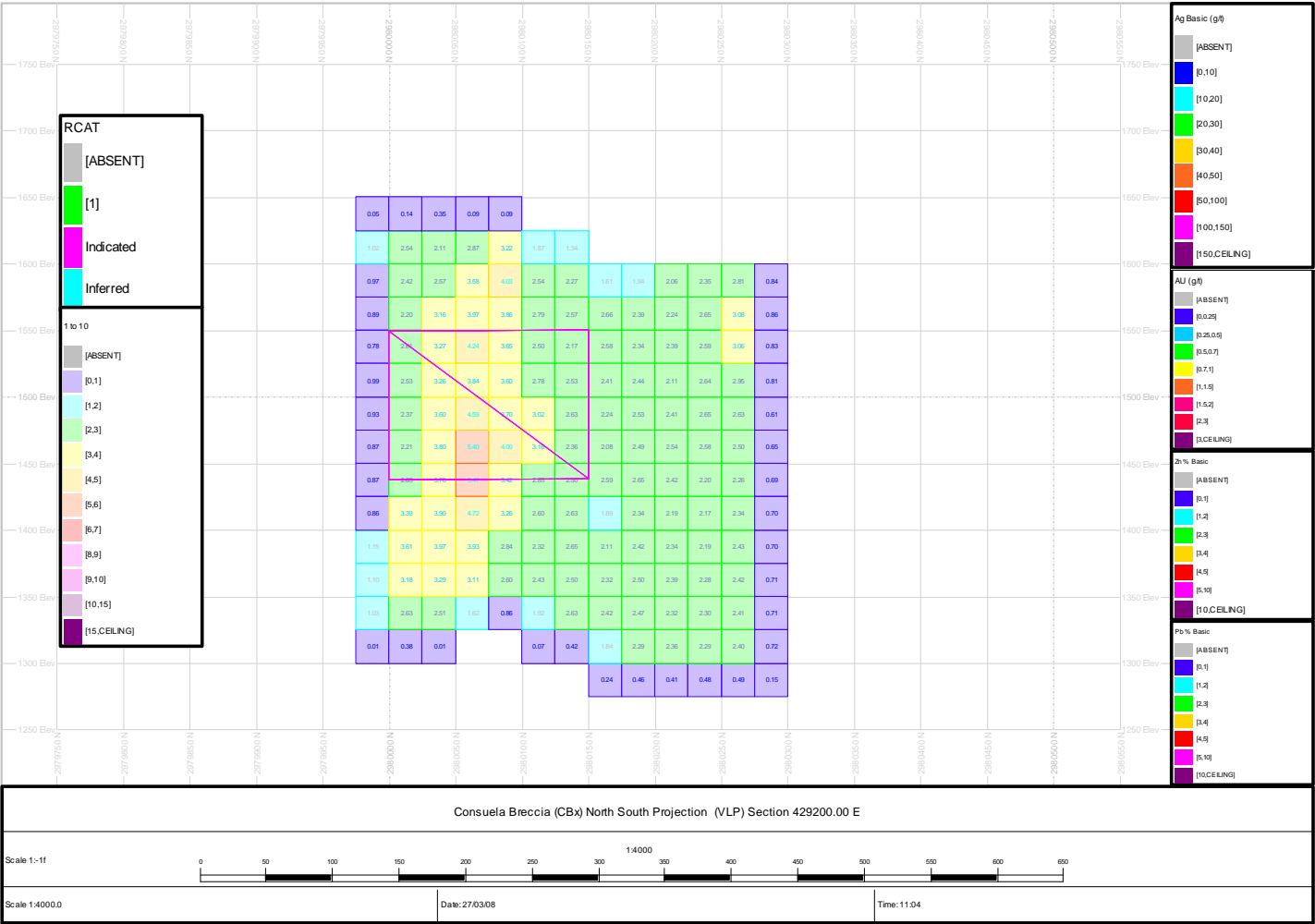
## Consuelo Breccia Zinc (%) Estimates VLP



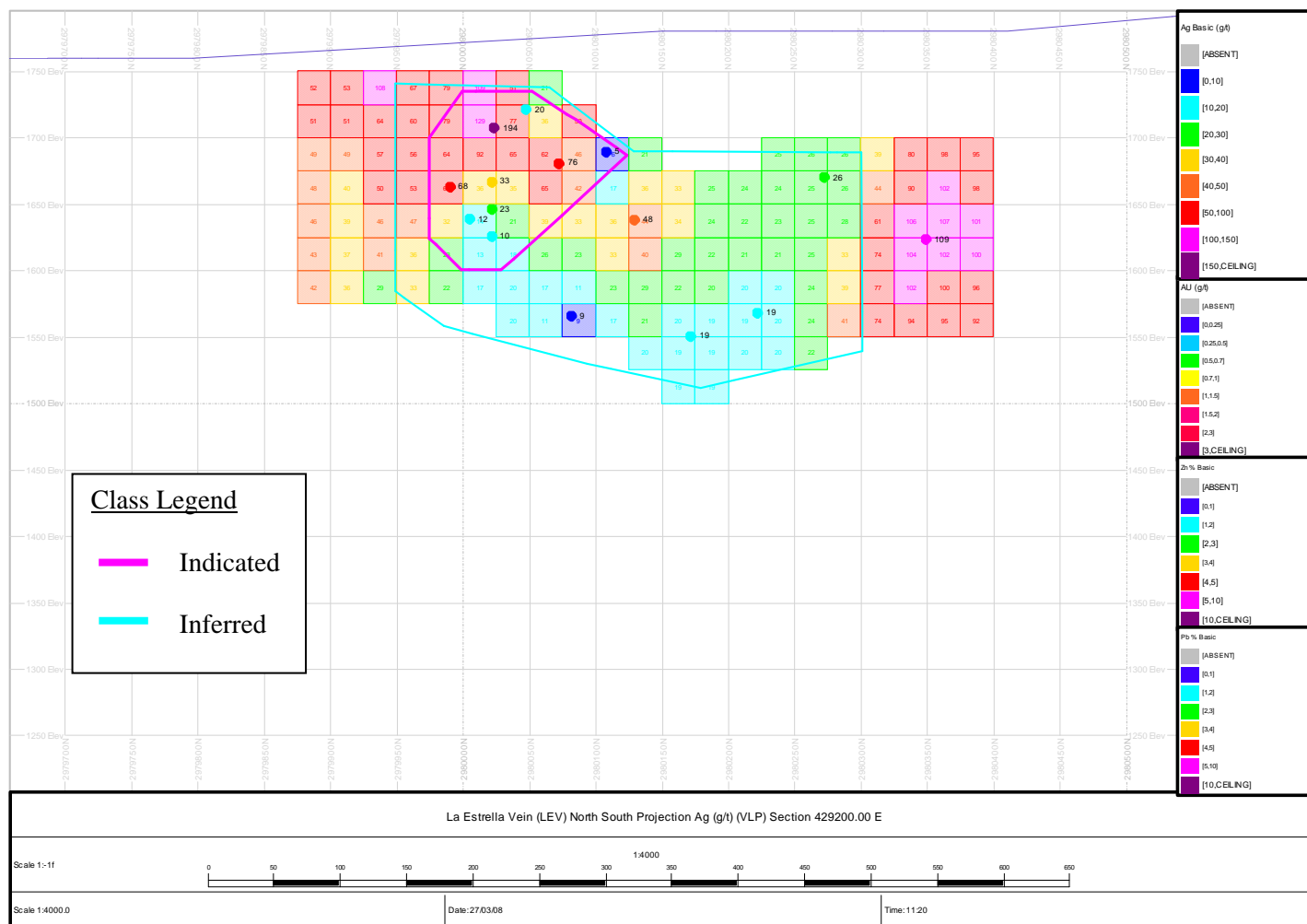
Consuelo Breccia Zinc Equivalent (Zn %) VLP



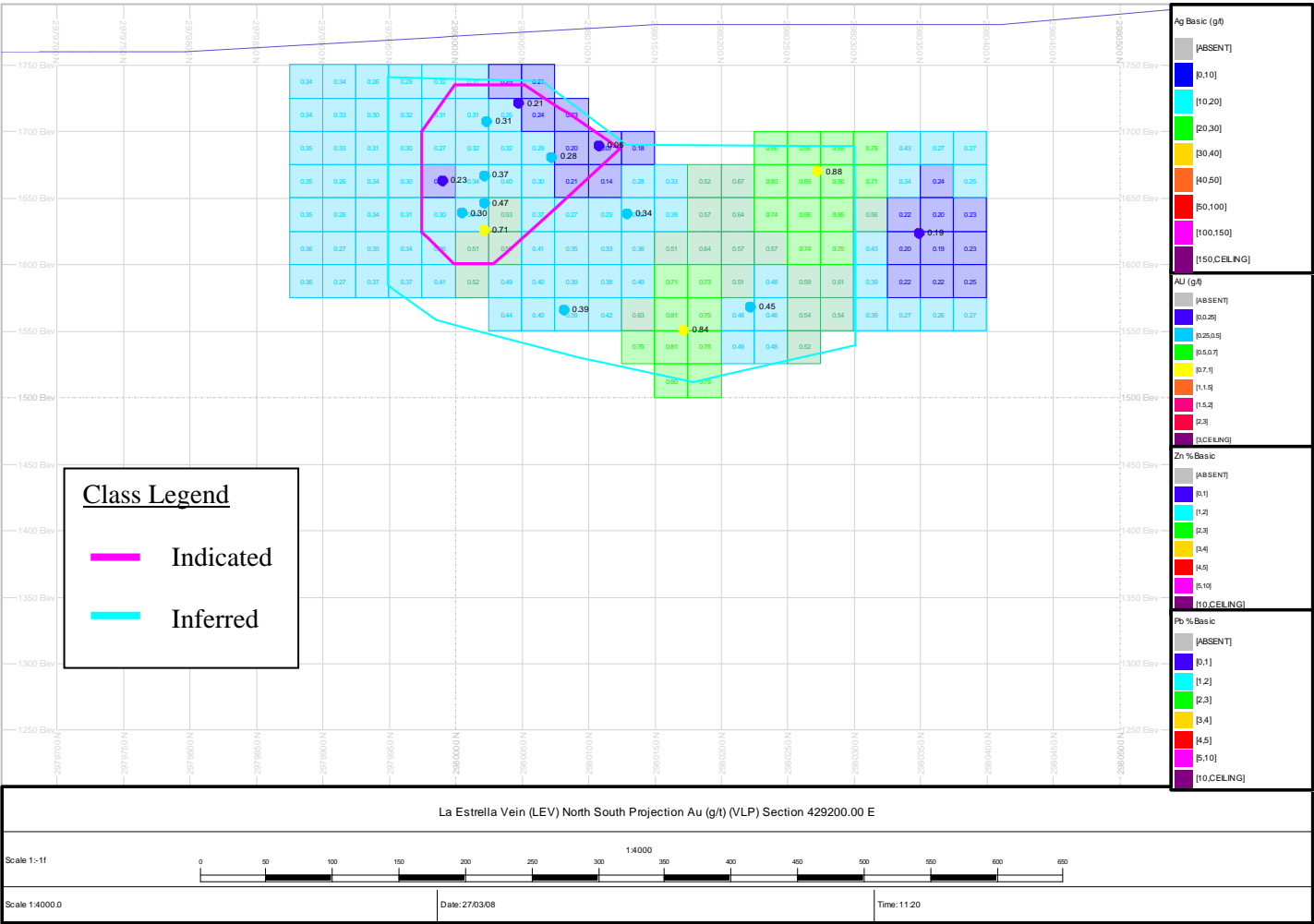
Consuelo Breccia Mean Thickness VLP



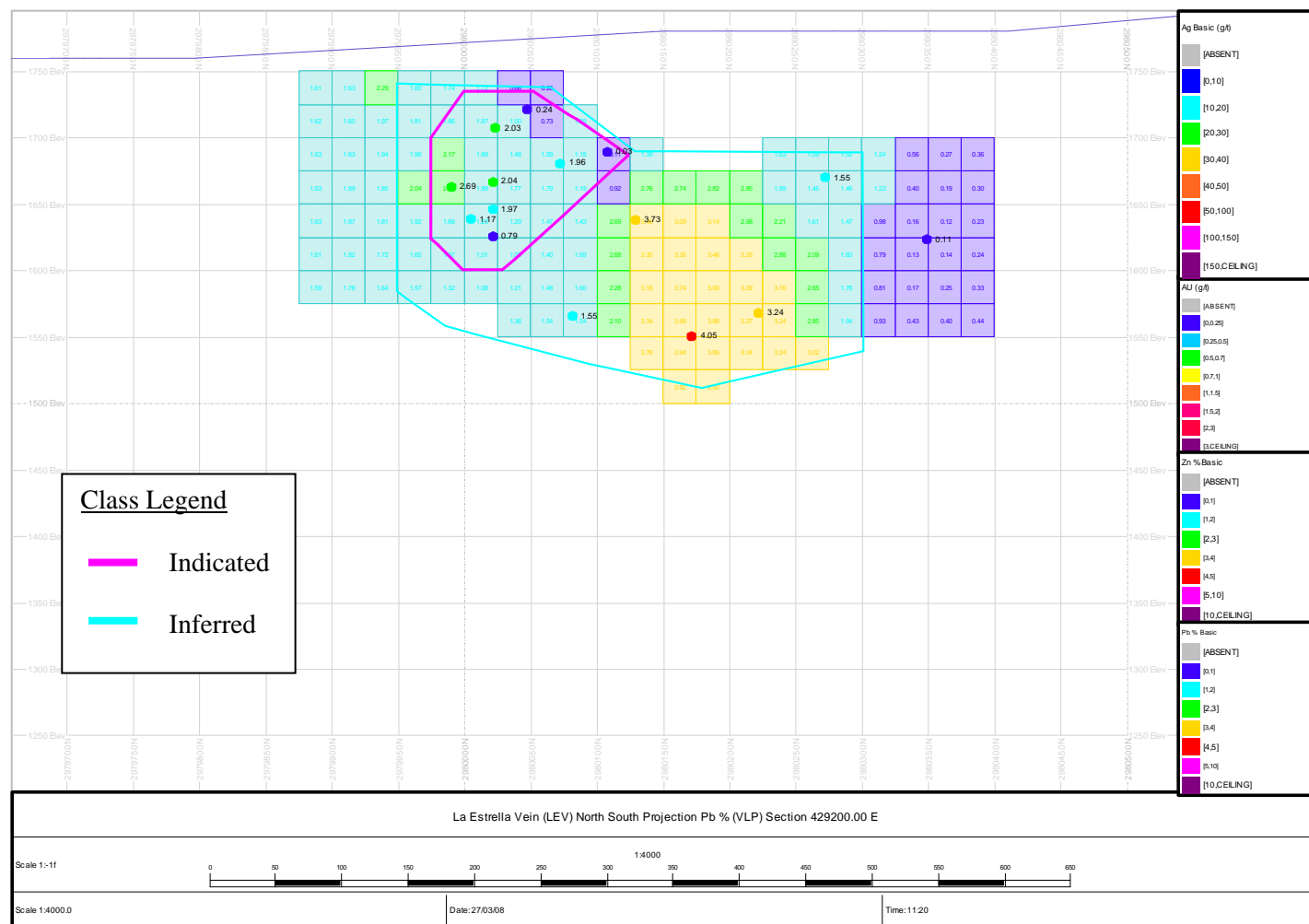
## La Estrella Vein Silver Ag (g/t) Estimates VLP



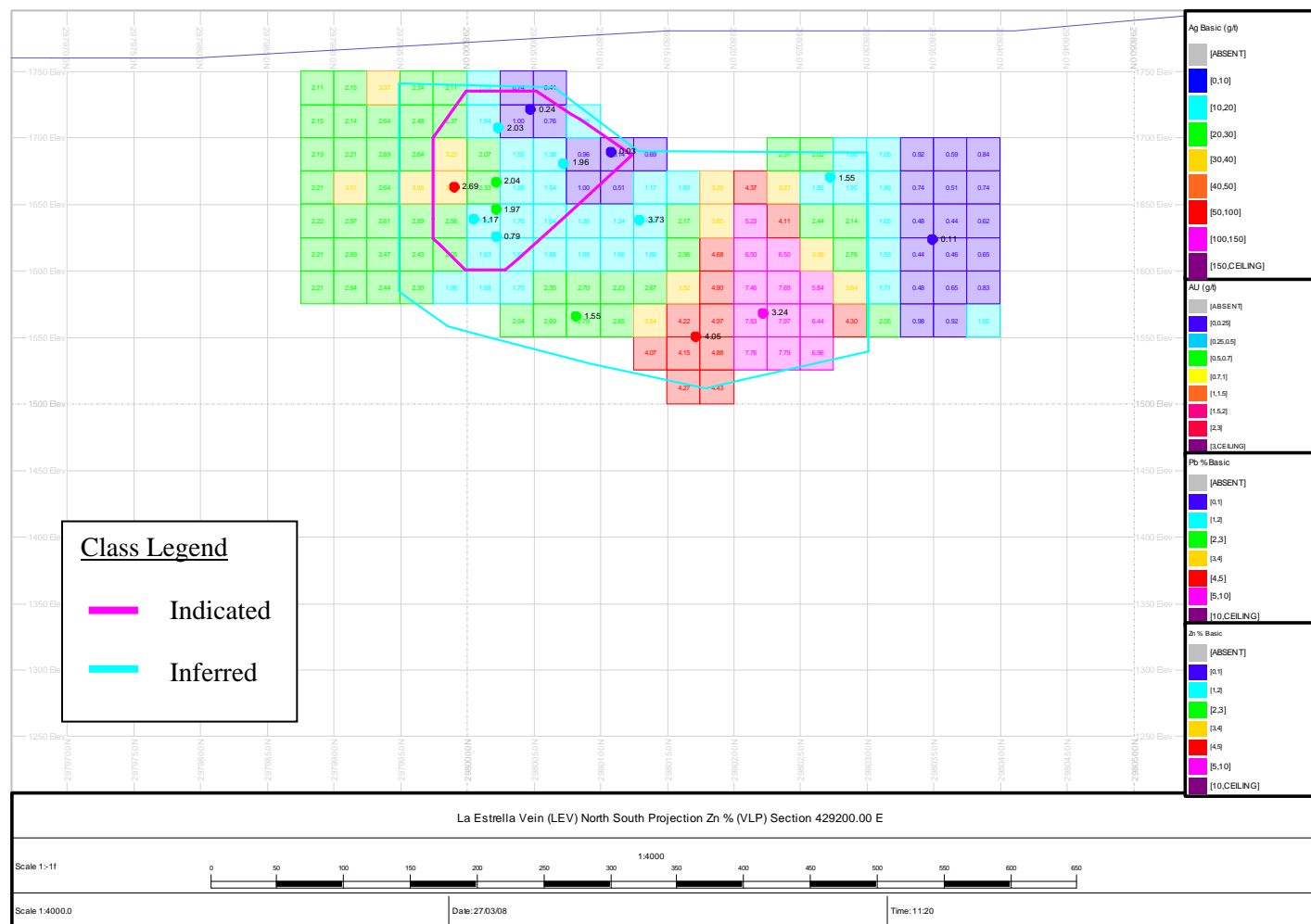
La Estrella Vein Gold Au (g/t) Estimates VLP



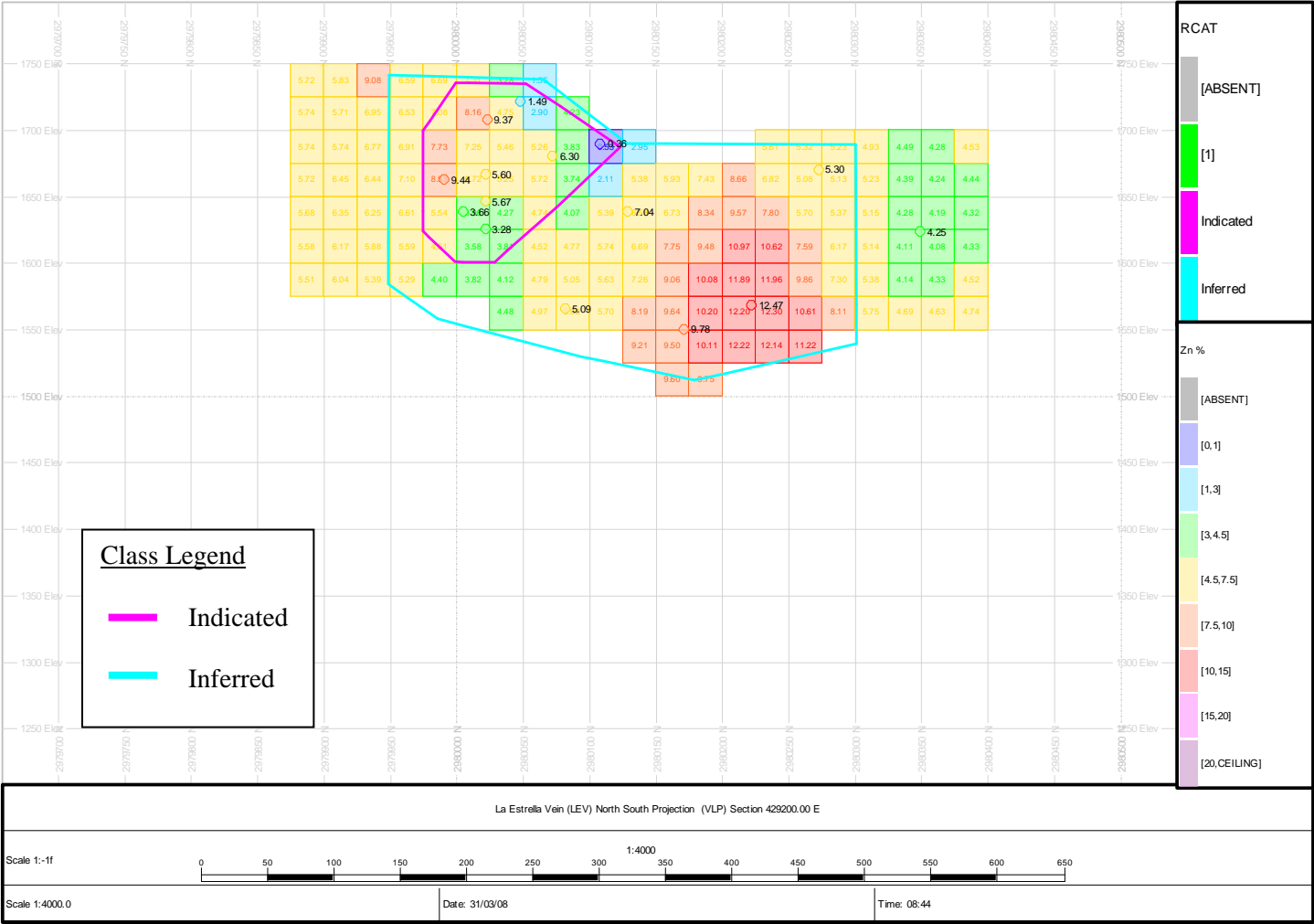
## La Estrella Vein Lead Pb (%) Estimates VLP



## La Estrella Vein Zinc Zn (%) Estimates VLP



La Estrella Vein Zinc Zn (%) Estimates VLP





La Estrella Vein Mean Thickness VLP

