

# NI 43-101 TECHNICAL REPORT



on the  
**Peñoles Gold-Silver Project**  
**Durango Mexico**

At  
**104° 31' 45" Longitude**  
and  
**25° 39' 01" Latitude**

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## Table of Contents

1	SUMMARY .....	5
	1.1 Mineral Resources .....	6
	1.2 Conclusions and Recommendations .....	9
2	INTRODUCTION.....	10
	2.1 UNITS AND MEASUREMENTS .....	11
	2.2 Information Sources .....	11
3	RELIANCE ON OTHER EXPERTS .....	12
4	PROPERTY DESCRIPTION AND LOCATION.....	12
	4.1 UNDERLYING AGREEMENTS .....	15
	4.1.1 Capitan I Concession and Purisima 1 Concession.....	15
	4.1.2 Guerrero Agreement (Jesus Maria and San Rafael) .....	16
	4.1.3 Altiplano Option (El Capitan and El Tubo).....	16
	4.2 RISK FACTORS.....	17
	4.3 MEXICAN MINING LAW .....	18
5	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY .....	19
6	HISTORY .....	20
	6.1 PRE 2004 EXPLORATION .....	21
	6.2 POST 2004 EXPLORATION.....	21
	6.3 EXPLORATION WORK: AURCANA AND RIVERSIDE 2004 TO 2011 .....	21
	6.4 EXPLORATION WORK: SIERRA MADRE 2011 TO 2013.....	22
	6.5 EXPLORATION WORK: MORRO BAY 2014-2015.....	27
	6.6 Riverside Resources Inc. 2018 .....	28
7	GEOLOGICAL SETTING AND MINERALIZATION .....	29
	7.1 EL CAPITAN .....	35
	7.2 JESUS MARIA VEIN SYSTEM.....	38
	7.3 SAN RAFAEL AND EL TUBO VEIN SYSTEM .....	38
	7.4 MINERALIZATION .....	39
8	DEPOSIT TYPES.....	39
9	EXPLORATION.....	41
10	DRILLING.....	41
	10.1 Drilling: Aurcana and Riverside (2004-2011).....	41
	10.2 Riverside Drilling (2008).....	42
	10.3 Sierra Madre Drilling (2011).....	42
	10.4 Sierra Madre Drilling (2012).....	42
	10.5 Sierra Madre Drilling (2013).....	42
	10.6 Morro Bay Drilling (2014) .....	43
11	SAMPLING PREPARATION, ANALYSES, AND SECURITY.....	48
12	DATA VERIFICATION .....	49
13	MINERAL PROCESSING AND METALLURGICAL TESTING.....	51
	13.1 JESUS MARIA .....	51
	13.1.1 Introduction .....	51
	13.1.2 Samples and Head Assays.....	51
	13.1.3 Gravity Separation Testing .....	52
	13.1.4 Flotation Testing.....	52
	13.1.5 Cyanidation Leach Testing .....	53
	13.1.6 Summary and Recommendations.....	55
	13.2 EL CAPITAN .....	56
	13.2.1 Summary of 2011 Test Work .....	56
	13.2.2 Summary of 2012-2013 Test Work .....	57
	13.2.3 Samples and Head Assays.....	58
	13.2.4 Bottle Roll Testing.....	59

	13.2.5	Column Leach Testing .....	60
	13.2.6	Comminution Testing .....	61
	13.2.7	Summary and Recommendations.....	62
14		MINERAL RESOURCE ESTIMATE.....	63
	14.1	Introduction .....	63
	14.2	Available Data .....	63
	14.3	Geological Model .....	68
	14.4	Bulk Density Data.....	69
	14.5	Compositing .....	69
	14.6	Exploratory Data Analysis .....	69
	14.6.1	Basic Statistics by Domain.....	70
	14.6.2	Contact Profiles.....	70
	14.6.3	Conclusions and Modeling Implications.....	72
	14.7	Development of Probability Shells .....	72
	14.8	Evaluation of Outlier Grades.....	76
	14.9	Variography.....	77
	14.10	Model Setup and Limits .....	79
	14.11	Interpolation Parameters.....	79
	14.12	Validation .....	80
	14.12.1	Visual Inspection .....	80
	14.12.2	Model Checks for Change of Support.....	80
	14.12.3	Comparison of Interpolation Methods .....	83
	14.12.4	Swath Plots (Drift Analysis).....	84
	14.13	Resource Classification .....	85
	14.14	Mineral Resources .....	86
15		THROUGH 22 ARE NOT APPLICABLE TO THIS REPORT .....	91
23		ADJACENT PROPERTIES .....	91
24		OTHER RELEVANT DATA AND INFORMATION .....	92
25		INTERPRETATION AND CONCLUSIONS.....	92
26		RECOMMENDATIONS.....	95
27		REFERENCES.....	98
28		CERTIFICATE OF AUTHORS.....	100

## LIST OF FIGURES

	FIGURE 1:	CONCESSIONS AND PEÑOLES EJIDOS .....	14
	FIGURE 2:	ALTIPLANO ROYALTY MAP.....	16
	FIGURE 3:	VIEW FROM EL CAPITAN HILL TO PEÑOLES VILLAGE (LOOKING EAST) .....	19
	FIGURE 4:	MEXICAN GOVERNMENT PROPERTY GEOLOGY MAP .....	30
	FIGURE 5:	GEOLOGY LEGEND .....	31
	FIGURE 6:	MEXICAN GOVERNMENT AIRBORNE FIRST VERTICAL DERIVATIVE MAGNETICS MAP .....	33
	FIGURE 7:	REGIONAL AIRBORNE MAGNETICS MAP .....	34
	FIGURE 8:	EL CAPITAN GEOLOGY SECTION SHOWING DRILL HOLES AND STRUCTURES-1 .....	36
	FIGURE 9:	EL CAPITAN GEOLOGY SECTION SHOWING DRILL HOLES AND STRUCTURES (2) .....	37
	FIGURE 10:	DEPOSIT MODEL.....	41
	FIGURE 11:	DRILL HOLE LOCATIONS.....	44
	FIGURE 12:	JESUS MARIA DEPOSIT TRENCHES AND UNDERGROUND WORKINGS (PLAN VIEW) .....	45
	FIGURE 13:	GOLD EXTRACTION KINETICS .....	54
	FIGURE 14:	SILVER EXTRACTION KINETICS .....	55
	FIGURE 15:	MEDIUM GRIND BOTTLE ROLL TEST RESULTS.....	60
	FIGURE 16:	DISTRIBUTION OF DRILL HOLES BY VINTAGE .....	64
	FIGURE 17:	DISTRIBUTION OF GOLD SAMPLE DATA (ISOMETRIC VIEW LOOKING NORTH) .....	65
	FIGURE 18:	DISTRIBUTION OF GOLD SAMPLE DATA (ISOMETRIC VIEW LOOKING SOUTHWEST) .....	66
	FIGURE 19:	DISTRIBUTION OF SILVER SAMPLE DATA (ISOMETRIC VIEW LOOKING NORTH) .....	66
	FIGURE 20:	DISTRIBUTION OF SILVER SAMPLE DATA (ISOMETRIC VIEW LOOKING SOUTHWEST) .....	67
	FIGURE 21:	BOXPLOT OF GOLD BY LITHOLOGIC TYPE AT EL CAPITAN .....	70

FIGURE 22: CONTACT PROFILE FOR GOLD IN MINERALIZED VOLCANICS VS. SILICIFIED BRECCIA ZONE AT EL CAPITAN .....	71
FIGURE 23: CONTACT PROFILE FOR GOLD IN SILICIFIED BRECCIA ZONE VS. MINERALIZED SEDIMENTS AT EL CAPITAN .....	72
FIGURE 24: INTERPRETED GOLD TREND PLANES USED TO CONTROL DYNAMIC SEARCH ORIENTATIONS DURING MODEL INTERPOLATIONS .....	73
FIGURE 25: INTERPRETED SILVER TREND PLANES USED TO CONTROL DYNAMIC SEARCH ORIENTATIONS DURING MODEL INTERPOLATIONS .....	74
FIGURE 26: ISOMETRIC VIEW LOOKING NORTHWEST OF THE GOLD AND SILVER PROBABILITY SHELLS .....	75
FIGURE 27: ISOMETRIC VIEW LOOKING SOUTHWEST OF THE GOLD AND SILVER PROBABILITY SHELLS .....	75
FIGURE 28: EL CAPITAN HERCO GRADE/TONNAGE PLOT FOR GOLD AND SILVER .....	82
FIGURE 29: JESUS MARIA HERCO GRADE/TONNAGE PLOT FOR GOLD AND SILVER .....	83
FIGURE 30: EL CAPITAN GRADE/TONNAGE COMPARISON OF GOLD AND SILVER MODELS .....	83
FIGURE 31: JESUS MARIA GRADE/TONNAGE COMPARISON OF GOLD AND SILVER MODELS .....	84
FIGURE 32: EL CAPITAN SWATH PLOT OF GOLD AND SILVER MODELS BY EASTING .....	85
FIGURE 33: JESUS MARIA SWATH PLOT OF GOLD AND SILVER MODELS BY EASTING .....	85
FIGURE 34: ISOMETRIC VIEW OF GRADE SHELLS AT PROJECTED CUT-OFF GRADES RELATIVE TO FLOATING CONE PIT SHELLS .....	87
FIGURE 35: ISOMETRIC VIEW OF GRADES SHELLS AT PROJECTED CUT-OFF GRADES RELATIVE TO FLOATING CONE PIT SHELLS .....	88
FIGURE 36: ADJACENT PROPERTY DRILLING .....	91
FIGURE 37: GULLY FAULT INTERPRETATION AND TARGETING INCLUDING 3D WIREFRAMING (2018) .....	94
FIGURE 38: LONG SECTION OF THE CAPITAN ZONE LOOKING NORTH .....	95
FIGURE 39: CROSS SECTION OF EL CAPITÁN ZONE LOOKING WEST. ....	96

## LIST OF TABLES

TABLE 1: INFERRED MINERAL RESOURCE ESTIMATE.....	7
TABLE 2: SENSITIVITY OF EL CAPITAN MINERAL RESOURCE TO GOLD CUT-OFF GRADE.....	8
TABLE 3: SENSITIVITY OF JESUS MARIA MINERAL RESOURCE TO SILVER CUT-OFF GRADE .....	8
TABLE 4: DEFINITIONS, ABBREVIATIONS, AND CONVERSIONS .....	11
TABLE 5: MINERAL CONCESSION DETAILS AND WORK REQUIREMENTS.....	13
TABLE 6: MEXICAN TAX PAYMENTS .....	19
TABLE 7: JESUS MARIA TRENCHING.....	26
TABLE 8: JESUS MARIA UNDERGROUND LEVEL SAMPLING .....	26
TABLE 9: JESUS MARIA CROSSCUT SAMPLING .....	27
TABLE 10: SIGNIFICANT GOLD DRILL INTERSECTIONS.....	46
TABLE 11: COMPLETE HISTORICAL DRILL HOLE COLLARS LISTING .....	47
TABLE 12: AUTHOR COLLECTED ASSAYS.....	50
TABLE 13: COMPOSITE DETAILS AND HEAD ASSAYS.....	51
TABLE 14: GRAVITY SEPARATION TEST RESULTS.....	52
TABLE 15: FLOTATION REAGENT SCHEME.....	52
TABLE 16: BASELINE FLOTATION TESTING RESULTS.....	53
TABLE 17: WHOLE-ORE CYANIDATION TEST RESULTS .....	54
TABLE 18: COMPARISON OF TEST RESULTS.....	55
TABLE 19: TYPES OF BOTTLE ROLL TESTS.....	57
TABLE 20: COLUMN LEACH TEST PARAMETERS .....	58
TABLE 21: COMPOSITE HEAD ASSAYS .....	58
TABLE 22: BOTTLE ROLL TEST RESULTS AT A MEDIUM GRIND .....	59
TABLE 23: CYANIDE COLUMN LEACH RESULTS .....	61
TABLE 24: COMMINUTION TEST RESULTS .....	61
TABLE 25: STATISTICAL SUMMARY OF DRILLING SAMPLE DATABASE .....	68
TABLE 26: STATISTICAL SUMMARY OF COMPOSITED SAMPLE DATABASE INSIDE/OUTSIDE OF THE PROBABILITY SHELL DOMAINS.....	76
TABLE 27: SUMMARY OF OUTLIER GRADE CONTROLS .....	77
TABLE 28: VARIOGRAM PARAMETERS.....	78
TABLE 29: BLOCK MODEL LIMITS.....	79
TABLE 30: INTERPOLATION PARAMETERS.....	80
TABLE 31: INFERRED ESTIMATE OF MINERAL RESOURCES.....	89
TABLE 32: SENSITIVITY OF EL CAPITAN MINERAL RESOURCE TO GOLD CUT-OFF GRADE.....	89
TABLE 33: SENSITIVITY OF JESUS MARIA MINERAL RESOURCE TO SILVER CUT-OFF GRADE .....	90
TABLE 34: PROPOSED EXPLORATION PROGRAM AND FURTHER WORK.....	97

# 1 SUMMARY

Capitan Mining Inc. (“Capitan”) and Riverside Resources Inc. , retained Derrick Strickland, P. Geo. and Robert Sim, P. Geo. of SIM Geological Inc. (“SGI”) to provide updated mineral resource estimate for the mineralized zones located on the Peñoles Project. They are both responsible for the preparation of this technical report on the Peñoles Project, and has been prepared in accordance with National Instrument 43-101 (“NI 43-101”).

The Peñoles Project is easily accessible and is located approximately 170 km, by road, west of the city of Torreón, Coahuila State, Mexico. The centre of the Peñoles Project is located approximately 180 km north-northeast of the city of Durango, and 50 km north of the town of Rodeo in the Municipality of San Pedro del Gallo, Durango State, Mexico.

The Peñoles Project includes two historic silver mines (Jesus Maria and San Rafael), an oxide gold prospect (El Capitan) and several exploration targets located in the historic Peñoles Mining District, in Durango State, Mexico. Historic mine workings, surface trenching and diamond drilling have partially delineated several precious metal-enriched epithermal-type vein systems, poly-metallic skarns, and silicified breccia zones localized at or near the unconformity between Tertiary-age volcanoclastic rocks and Cretaceous-age sediments. To date, 87 diamond drill holes totalling approximately 11,559 m have been completed on the Peñoles Project tenures that Riverside Resources Inc. controls.

In 2008 and 2009, Riverside Resources Inc. acquired the Peñoles Project by purchasing two groups of concessions and staking two large surrounding concessions. The two groups of purchased concessions (the Altiplano Option and Guerrero Option) collectively cover the El Capitan prospect and the historic Jesus Maria and San Rafael mine workings. The two staked concessions (initially comprising 35,694.1 ha) currently comprise 6,612.1 ha and cover several early-stage exploration targets. The purchased concessions cover both the El Capitan prospect, and the historic mine workings and comprise a total of 259.8 hectares. All mineral titles are beneficially held by subsidiaries 100% owned by Riverside Resources Inc.

The only modern exploration work completed on the subject property consisted of a four-hole drill program completed by Aurcana Corporation (“Aurcana”) in 2004, and surface mapping, sampling, a limited geophysical induced polarization ground survey, and a five-hole drill program completed by Riverside Resources Inc. in 2008 and 2009. According to Daniels (2011), the drill holes completed by Aurcana and Riverside Resources Inc. returned encouraging results and suggested that El Capitan prospect had potential to host a bulk-tonnage, low-grade gold deposit. Preliminary metallurgical tests completed by Sierra Madre in 2011, using Riverside Resources Inc.’s drill core showed that the gold mineralization at El Capitan can be recovered using cyanide leaching.

Since March 2011, exploration work and drilling has been focused on the Jesus Maria Silver Zone and the El Capitan Gold Zone. The El Capitan and Jesus Maria deposits are south dipping, west-to west-northwest-trending mineralized zones located on the concessions purchased by Riverside Resources Inc. in 2008.

During 2011 and 2012, drilling at El Capitan encountered numerous intervals of gold mineralization ranging from apparent 50 m to 140 m width. Mineralization is localized along the unconformity between Tertiary-age volcanoclastic rocks and Cretaceous-age sediments. The upper part of the mineralized zone consists of porous, volcanic agglomerate cut by narrow quartz veinlets and hydrothermal breccias (averaging 0.2 g/t to 0.5 g/t Au). At the base of the volcanic unit, there is a shallow-dipping, 10 m to 35 m wide silicified zone (averaging 0.7 g/t to 1.5 g/t Au), and, below this zone, there is a sequence of oxidized shales that is also cut by quartz veinlets and hydrothermal breccias (averaging 0.2 g/t to 0.6 g/t Au) with low silver values.

The Jesus Maria prospect was initially considered to be a relatively narrow but high-grade vein-type target; however, drilling carried out in 2013 and 2014 encountered 20 m to 80 m wide intervals of predominantly silver-rich mineralization (with accessory gold and base-metal values) in the hanging wall of the zone that was mined historically. Based on the widths of mineralization, the Jesus Maria might be amenable to open-pit extraction methods. At their eastern limits, the deposits are separated by approximately 300 m; however, the mineralized zones are interpreted as merging to the west. Additional drilling between the western limit of the Jesus Maria deposit and the El Capitan deposit could connect the two zones and delineate additional mineralization.

Between 2012 and 2014, preliminary metallurgical test work carried out by Inspectorate Exploration & Mining Services Ltd. ("Inspectorate") indicates that the gold and silver mineralization at Jesus Maria can be recovered by using flotation or whole-ore cyanide leaching. Preliminary metallurgical test work also indicates that gold mineralization at El Capitan can be recovered by using cyanide leaching.

The NI 43-101 resource estimates are based primarily on diamond drilling conducted by Morro Bay and previous operator Sierra Madre Developments Inc. between 2011 and 2014.

## **1.1 Mineral Resources**

The mineral resource estimates have been generated from drill hole sample assay results, limited surface trench and underground drift channel samples, and the interpretation of geological models, which relate to the spatial distribution of gold and silver in the El Capitan and Jesus Maria deposits. Interpolation characteristics have been defined based on the geology, drill hole spacing, and geostatistical analysis of the data. The resources have been classified by their proximity to the sample locations and are reported, as required by NI 43-101, according to the CIM Definition Standards for Mineral Resources and Reserves (May, 2014).

Estimates are made from 3D block models based on geostatistical applications using commercial mine planning software (MinePlan® v15.6). The project limits are based in the UTM coordinate system using a nominal block size of 10 m x 5 m x 10 m, with the shorter blocks roughly perpendicular to the east-southeast-oriented strike direction of the deposits. The mineral resource estimate for the El Capitan Gold Zone is based on results from 50 diamond drill-core holes totalling 7,004 m of drilling. The mineral resource estimate for the Jesus Maria Silver Zone is based on results from 30 diamond drill-core holes totalling 3,114 m of drilling. Diamond drilling was conducted from surface drill stations in the hanging wall of the deposits. Holes are generally spaced at 40 m intervals and drilled to depths of between 100 m and 200 m below surface.

Both deposits are at a relatively early stage of evaluation with respect to drilling and, as a result, some assumptions have to be made using the available data. Classification at El Capitan is primarily influenced by the nature of gold in the deposit. Similarly, classification at Jesus Maria is primarily driven by the distribution of silver in the deposit. Visual observations and studies of indicator variogram ranges suggest that zones of continuous mineralization, above the base-case cut-off limits, can be inferred when drill holes are spaced at a maximum distance of 150 m. Therefore, blocks in the model within a maximum distance of 75 m from a drill hole have been included in the Inferred category.

Gold and silver mineralization occurs over relatively continuous zones for more than 500 m of strike length at Jesus Maria, and for more than 1,000 m of strike length at El Capitan. Floating cone pit shells, based on projected technical and economic parameters, suggest that mineralization to depths of 150 m below surface exhibits reasonable prospects for eventual economic extraction using open-pit extraction methods. The Mineral Resource statement for the El Capitan and Jesus Maria deposits is shown in Table 1. The resources are not constrained within pit shells but include mineralization, above cut-off, that is within a maximum depth of 150 m below surface. There are no adjustments for recovery or dilution in the statement of mineral resources. It is important to note that these are estimates of mineral *resources*, not mineral reserves, as the economic viability has not been demonstrated. It is reasonable to expect that a majority of mineral resources in the Inferred category will be upgraded to Indicated or Measured mineral resources with additional exploration.

Table 1: Inferred Mineral Resource Estimate

Deposit	ktonnes	Gold (g/t)	Silver (g/t)	Contained Gold (koz)	Contained Silver (koz)
El Capitan	20,722	0.458	2.8	305	1,832
Jesus Maria	7,573	0.105	62.3	26	15,158
<b>Combined</b>	<b>28,295</b>	<b>0.364</b>	<b>18.7</b>	<b>331</b>	<b>16,990</b>

Notes: "Base case" cut-off grade for El Capitan is 0.25 g/t Au, and for Jesus Maria is 30 g/t Ag  
Mineral resources occur within a maximum depth of 150 m below surface

Resources are not mineral reserves as the economic viability has not been demonstrated

The base-case cut-off grades of 0.25 g/t Au at El Capitan and 30 g/t Ag at Jesus Maria are based on projected metal prices of \$1,500/oz Au and \$20/oz Ag. Variations in these projected prices will result in changes to the cut-off grades. The sensitivity of mineral resources to the cut-off grade is shown in Table 2 and Table 3.

Table 2: Sensitivity of El Capitan Mineral Resource to Gold Cut-Off Grade

Cut-Off Grade (Au g/t)	ktonnes	Au (g/t)	Ag (g/t)	Contained Gold (koz)	Contained Silver (koz)
0.15	33,101	0.362	2.0	385	2,150
0.20	27,388	0.401	2.3	353	2,043
<b>0.25 (base case)</b>	<b>20,722</b>	<b>0.458</b>	<b>2.8</b>	<b>305</b>	<b>1,832</b>
0.30	15,726	0.517	3.2	261	1,608
0.35	12,236	0.572	3.5	225	1,393
0.40	9,648	0.626	3.9	194	1,207
0.45	7,879	0.671	4.2	170	1,054
0.50	6,477	0.714	4.4	149	912

Notes: "Base case" cut-off grade of 0.25 g/t Au using a price of \$1,500/oz Au is highlighted in the table

Mineral Resources are not mineral reserves as the economic viability has not been demonstrated

Table 3: Sensitivity of Jesus Maria Mineral Resource to Silver Cut-Off Grade

Cut-Off Grade (Ag g/t)	ktonnes	Ag (g/t)	Au (g/t)	Contained Silver (koz)	Contained Gold (koz)
15	10,764	50.6	0.095	17,507	33
20	9,836	53.7	0.099	16,983	31
25	8,740	57.6	0.102	16,192	29
<b>30 (base case)</b>	<b>7,573</b>	<b>62.3</b>	<b>0.105</b>	<b>15,158</b>	<b>26</b>
35	6,425	67.6	0.109	13,960	23
40	5,493	72.7	0.113	12,840	20
45	4,566	78.9	0.120	11,577	18
50	3,896	84.3	0.124	10,561	16

Notes: "Base case" cut-off grade of 30 g/t Ag using a \$20/oz Ag price is highlighted in the table

Resources are not mineral reserves as the economic viability has not been demonstrated

## 1.2 CONCLUSIONS AND RECOMMENDATIONS

In summary, drilling to 2015 on the Peñoles Project defined significant intervals of near-surface silver mineralization (with associated gold, lead and zinc values) at Jesus Maria, and wide intervals of near-surface gold mineralization (with low silver values) at El Capitan could potentially be amenable to open-pit extraction methods. Further drilling is recommended and a large, expanded exploration program is warranted.

In the Authors' opinions, the Peñoles Project has sufficient merit to warrant further exploration work. To date, the limits of the mineralized zones remain "open" in many areas and there is potential to increase the resources with additional drilling both along strike and at depth.

It is recommended that Capitan Mining Inc. complete a trenching program and 5,500 m of drilling to test the continuity and further extensions of the Jesus Maria silver deposit. The next stage of drilling should also include step-out holes drilled between the current western limit of the Jesus Maria Silver Zone and the El Capitan Gold Zone (the "Gully Fault" target) to determine whether the two zones merge into a single mineralized zone. It is also recommended to drill the 'wedge' between the north dipping Gully Fault and the South dipping Jesus Maria structure.

The total cost of the proposed a two phase exploration program, including applicable permitting costs and concession taxes payable up to December 31, 2020, is estimated at CDN\$2,255,000

It is also recommended that Capitan Mining Inc. conduct additional metallurgical test work on both the Jesus Maria and El Capitan mineralized zones. A 2,000 m drill program specifically for metallurgical test work is proposed. On completion of the planned drill program and metallurgical test work, the results could be used to calculate an updated resource estimates and, if warranted, proceed to PEA-level assessments for both the Jesus Maria and El Capitan deposits.

It is recommended that Capitan Mining Inc. complete a trenching program and 5,500 m of drilling to test the continuity and further extensions of the Jesus Maria silver deposit. The next stage of drilling should also include step-out holes drilled between the current western limit of the Jesus Maria Silver Zone and the El Capitan Gold Zone (Gully Fault target) to determine whether the two zones merge into a single mineralized zone. It is also recommended to drill the 'wedge' between the north dipping Gully Fault and the South dipping Jesus Maria structure.

## 2 INTRODUCTION

Capitan Mining Inc. (“Capitan”), a wholly owned subsidiary of Riverside Resources Inc., retained Derrick Strickland, P. Geo. and Robert Sim, P. Geo, of SIM Geological Inc. (“SGI”) to provide updated mineral resource estimate for the mineralized zones located on the Peñoles Project. They are both responsible for the preparation of this technical report on the Cerro Caliche Project, which has been prepared in accordance with National Instrument 43-101 (“NI 43-101”) and Form 43-101F1.

Both authors are independent qualified persons (“QP”s) as defined by Canadian Securities Administrators NI 43-101 Standards of Disclosure for Mineral Projects. This report will be filed with the securities commission in all the Canadian provinces with the exception of Quebec. To prepare this report, the authors used information provided by Capitan Mining Inc. as well as other technical reports in the region that have been previously published on [www.sedar.com](http://www.sedar.com). Results for the historical exploration on the property are discussed in Section 6 (History) of this report. A list of reports, maps, and other information examined by the authors is provided in Section 27 (References) of this report.

On May 8, 2014, a site visit was carried out by author Robert Sim, in the company of James Thom (contract geologist employed by Morro Bay) and Howard Davies and Lex Lambeck (contract geologists employed by Riverside Resources Inc.). Sim inspected the core logging and core storage facilities at the project site office, examined drill core from the El Capitan and Jesus Maria target areas, reviewed plans and sections of the historic and recent drilling completed at El Capitan and Jesus Maria, and reviewed the QA/QC procedures implemented by Sierra Madre and Morro Bay for the drill programs completed in 2011, 2012, 2013 and spring 2014. Sim also visited the site on June 12, 2012 during which he observed on-site drilling activities on the El Capitan deposit.

On December 22, 2019, author Derrick Strickland also conducted a recent site visit, in the company Alberto J. Orozco, President and CEO of Capitan Mining Inc., to confirm the status of the property. Details of this most recent site visit are in Section 12 (Data Verification) of this report.

All measurement units used in this report are metric, and all currency is expressed in Canadian dollars (CDN) unless stated otherwise.

## 2.1 UNITS AND MEASUREMENTS

Table 4: Definitions, Abbreviations, and Conversions

Units of Measure	Abbreviation	Units of Measure	Abbreviation
Above mean sea level	amsl	Micrometre (micron)	µm
Billion years ago	Ga	Milligram	mg
Centimetre	cm	Milligrams per litre	mg/L
Cubic centimetre	cm <sup>3</sup>	Millilitre	mL
Cubic metre	m <sup>3</sup>	Millimetre	mm
Days per week	d/wk	Million tonnes	Mt
Days per year (annum)	d/a	Minute (plane angle)	'
Degree	°	Month	mo
Degrees Celsius	°C	Ounce	oz.
Degrees Fahrenheit	°F	Parts per billion	ppb
Diameter	∅	Parts per million	ppm
Gram	g	Percent	%
Grams per litre	g/L	Pound(s)	lb.
Grams per tonne	g/t	Power factor	pF
Greater than	>	Specific gravity	SG
Hectare (10,000 m <sup>2</sup> )	ha	Square centimetre	cm <sup>2</sup>
Gram	g	Square inch	in <sup>2</sup>
Grams per litre	g/L	Square kilometre	km <sup>2</sup>
Grams per tonne	g/t	Square metre	m <sup>2</sup>
Greater than	>	Thousand tonnes	kt
Kilo (thousand)	k	Tonne (1,000kg)	t
Kilogram	kg	Tonnes per day	t/d
Kilograms per cubic metre	kg/m <sup>3</sup>	Tonnes per hour	t/h
Kilograms per hour	kg/h	Tonnes per year	t/a
Kilometre	km	Total dissolved solids	TDS
Less than	<	Week	wk
Litre	L	Weight/weight	w/w
Litres per minute	L/m	Wet metric tonne	wmt
Metre	m	Yard	yd.
Metres above sea level	masl	Year (annum)	a

## 2.2 Information Sources

This technical report follows on from previous technical reports, and other technical data provided by Riverside Resources Inc., along with selected publicly available government maps and publications. The subject property has documented in other recent NI 43-101 technical reports, including Daniels (2011), Magrum (2013), Myers et al. (2014), Whiting et al. (2015) and Lambeck (2018). Detailed metallurgical reports on the property by Chen, S., (2013), Shi & Redfearn (2011 & 2015) also exist. All documents used as sources of information can be found in Section 27 (References) of this report.

On January 3, 2020 Riverside Resources Inc. provided the authors information regarding the legal status of Riverside Resources Inc., Capitan Mining Inc., and its related companies, the current

details of the property title, material terms for all agreements, and material environmental and permitting information that pertain to the Peñoles Project.

For the purpose of this report, the Authors have relied on claim ownership information provided by Riverside Resources Inc. The Authors have not researched property titles or mineral rights for the Peñoles Project, and they have not reviewed the Peñoles plans of arrangement between Riverside Resources Inc. and Capitan Mining Inc. As a result, the authors express no opinion as to the ownership status of the property.

### **3 RELIANCE ON OTHER EXPERTS**

The authors have relied upon the legal opinion with respect to mineral titles and associated agreements dated January 3, 2020 written by Alberto M. Vazquez of VHG Servicios Legales, S.C with address at. Av. Paseo de las Palmas 755, Lomas de Chapultepec, Miguel Hidalgo, 11000 Ciudad de México, CDMX, Mexico for Rios de Suerte, S.A. de C.V. This information is included in Section 4 (Property Description and Location) of this report.

### **4 PROPERTY DESCRIPTION AND LOCATION**

Capitan Mining Inc. ("Capitan"), a wholly owned subsidiary of Riverside Resources Inc will have 100% ownership. in the Peñoles Project consists of 8 non-surveyed non-contiguous mineral concessions and one mineral concession application totalling 6,612 has centered on 104° 31' 45" Longitude and 25° 39' 01" Latitude on 1:50,000 m, map sheet G13-D22. The mineral concessions are located in the municipality of San Pedro del Gallo, of Durango, Mexico (see Table 5 and Figure 1 for details).

The current Peñoles Project consists of 2 Riverside Resources Inc. concessions, named the 'Red. 3 Capitán 1' Concession, and 'La Purisima' Concession, and concessions acquired through the Guerrero and Altiplano Options. A further concession, 'Capitán 2' has been staked, but title has not yet been issued. The Guerrero Option covers the Jesus Maria and San Rafael prospects, and the Altiplano Option covers the El Capitan prospect. Property details are shown in Figure 1. Riverside Resources Inc. reports it has completed all payments of all options and titles, all of which have been transferred and in good standing in name of one of Riverside Resources Inc.'s wholly owned Mexican subsidiaries companies.

The titles beneficially held by Riverside Resources Inc. are internal to a larger group of concessions controlled by Minera La Parreña, a subsidiary of Fresnillo plc (2,652.8 ha.), which in turn, are surrounded by additional concessions staked by Riverside Resources Inc. (Figure 1).

Since 2008, the Peñoles Project has been reduced in stages to its current 6,612.1 hectares. A reduction of concession Red. 3 Capitan 1 was submitted, with a new surface of 649.0812 hectares and the new title (T. 245768); this reduction was issued on November 17, 2017; however, the Director of Mines has not yet issued a title confirmation on this requested reduction. The reduction is referred to as 'Pinchazo' and has the file number 2/2-0334.

For the purposes of this report the author has assumed that the mineral concessions have been reduced, and all the figures in this report reflected the reduced Pinchazo area. Concession holders must maintain their properties in good standing by way of minimum annual work commitments and tax payments (see Table 5).

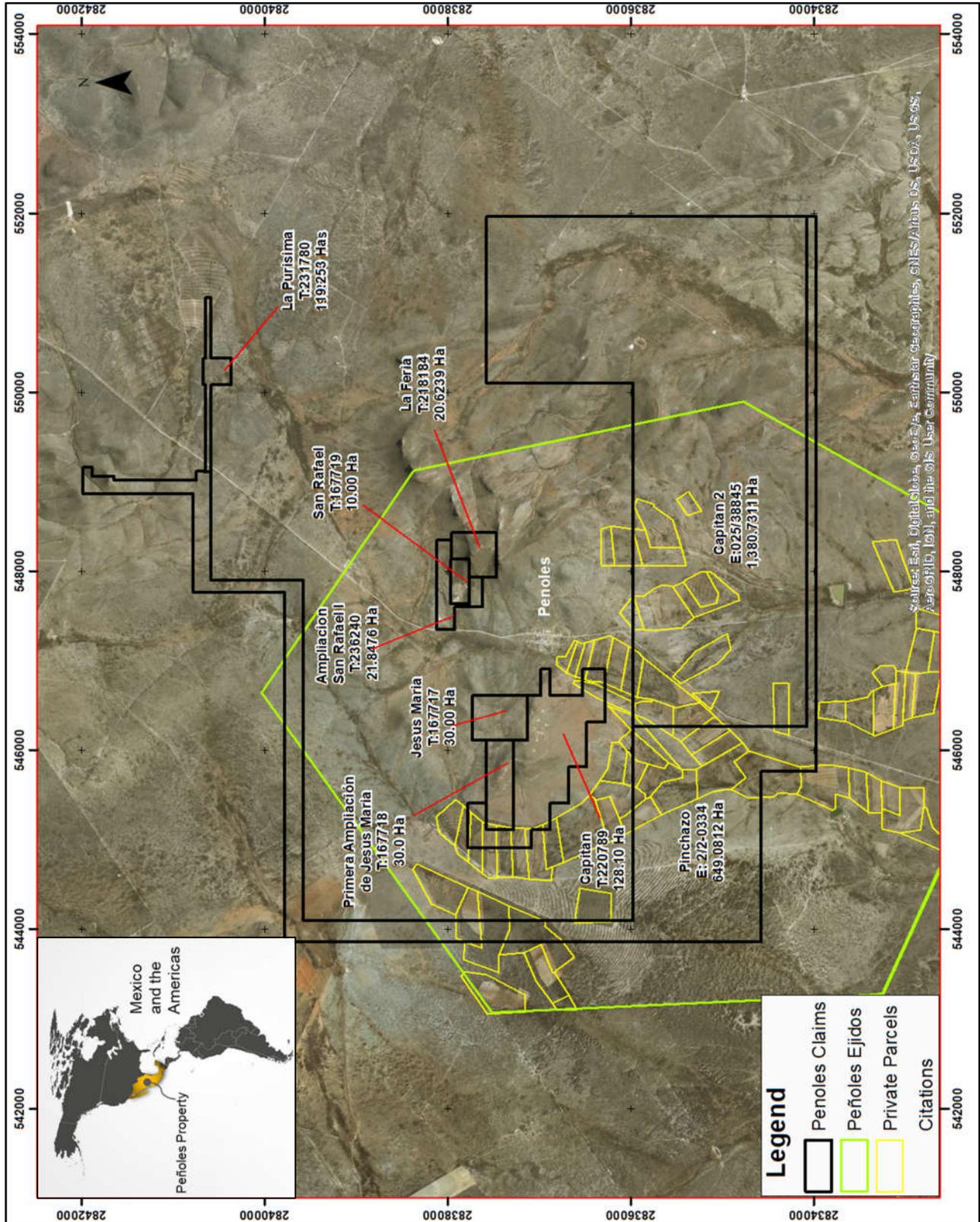
A legal opinion on mineral title dated January 3, 2020 written by Alberto M. Vazquez (Vazquez) of VHG Servicios Legales, is where the information for Table 5 was derived.

Table 5: Mineral Concession Details and Work Requirements to Retain the property..

Name	Concession No	Area (ha.)	Date Issued (dd/mm/yyyy)	Expiry Date (dd/mm/yyyy)	2020 Work Requirements (MXN\$)	2020 Taxes (MXN\$)	Onwer of Mining Conession
<b>Staked By Riverside Resources Inc</b>							
Red. 3 Capitan 1	245768	4971.56	08/04/2009	07/04/2059	\$451,747	\$220,988	RRM Exploración, S.A.P.I. de C.V,
Capitan 2	025/38845	1380.73	05/10/2010	04/10/2060	\$76,038	\$21,486	Riverside Resources México, S.A
<b>Guerrero Agreement</b>							
Jesus Maria	167717	30	05/12/1980	04/12/2030	\$2,985	\$10,214	RRM Exploración, S.A.P.I. de C.V,
P. Amp. Jesus Maria	167718	30	05/12/1980	04/12/2030	\$2,985	\$10,214	RRM Exploración, S.A.P.I. de C.V,
San Rafael	167719	10	05/12/1980	04/12/2030	\$1,235	\$3,406	RRM Exploración, S.A.P.I. de C.V,
Amp. San Rafael 1	236240	21.84	28/05/2010	27/05/2060	\$2,272	\$7,440	RRM Exploración, S.A.P.I. de C.V,
<b>Altiplano Agreement</b>							
El Capitan	220789	128.1	07/10/2003	06/10/2053	\$45,588	\$43,614	RRM Exploración, S.A.P.I. de C.V,
La Feria	218184	20.62	11/10/2002	10/10/2052	\$2,165	\$7,022	RRM Exploración, S.A.P.I. de C.V,
La Purisima	231780	19.25	24/04/2008	23/04/2058	\$2,045	\$6,556	RRM Exploración, S.A.P.I. de C.V,
<b>Totals</b>		6612.0982			\$587,060	\$330,940	

Note: Total original surface area of 6,612.1 ha. With the Pinchazo reduction this will decrease to 2,289.64 hectares. Calculated Work and Tax Commitments for Peñoles Project.

Figure 1: Concessions and Peñoles Ejidos



Note: Total area owned by Riverside Resources Inc.: 6,612.1 ha. With the Pinchazo reduction this will decrease to 2,289.64 hectares. For the purposes of this report the reduced area of the Pinchazo claim is illustrated

## 4.1 UNDERLYING AGREEMENTS

Riverside Resources Inc., the parent company of Capitan Mining Inc., reports that it owns all concessions and a net smelter royalty payable to certain claim holders as described elsewhere in this report. All titles are in Riverside Resources Inc.'s subsidiaries: (1) 'RRM Exploración, S.A.P.I. de C.V.', and (2) 'Riverside Resources México, S.A. de C.V.'. Additionally, 'Rios de Suerte, S.A. de C.V.' is a subsidiary of Capitan Mining Inc.

Rios de Suerte, S.A. de C.V. entered into an agreement with RRM Exploración, S.A.P.I. de C.V, and Riverside Resources México, S.A. de C.V. to pay \$25,000 for acquisition of the mining concession subject of this report. Rios de Suerte, S.A. de C.V. also agrees to abide by the existing net smelter return royalty. As of the effective date of this report a definitive agreement has not been ratified (Vazquez 2020).

Vazquez 2020 states "Contract of Assignment of Rights entered into by and between RRM Exploración, S.A.P.I. de C.V. and Riverside Resources México, S.A. de C.V. ,whereby Riverside Resources México, S.A. de C.V. agreed to pay the following royalties on Net Smelter Returns ("NSR") derived from mineral obtained from the concessions to RRM Exploración, S.A.P.I. de C.V.: 1% Net Smelter Returns Royalty derived from all mining concession except "Capitan 2" up to a total amount of \$250,000 dollars."

### 4.1.1 Capitan I Concession and Purisima 1 Concession

The Capitan I Concession (#233718) was granted to Riverside Resources Inc. on April 8, 2009 following an open application process, and it is valid for a period of 50 years. The concession was reduced on November 17, 2017 to 4,971.5582 hectares and the reduction was called 'Red. 3 Capitan 1' (aka T. 245768), holding the same expiry date as the original title. Further to this, on November 16, 2018, a new reduction was submitted by Riverside Resources Inc., requesting the property be further reduced to 649.0812 hectares. The reduction was called 'Pinchazo' and the file number is 2/2-0334. To the date of this report, the reduction has not yet been granted by the Director of Mines.

The Purisima 1 Concession (#236917) was granted to Riverside Resources Inc. on October 5, 2010.

These concessions are subject to the provisions of the Altiplano Option agreement. Both the Capitan I and Purisima 1 concessions are subject to a 0.75% net smelter royalty payable to Altiplano Resources Inc. ("Altiplano").

As part of the 2014 exploration program, Morro Bay Resources Inc. ("Morro Bay") and Riverside Resources Inc. reviewed all available technical data for the early-stage exploration target areas located within the Capitan I and Purisima 1 concessions as staked by Riverside Resources Inc, and elected to reduce the staked concession holdings to 13,942.8 ha. Later reduction decisions were made, to a current surface of 6,612.1 hectares in 2017 and further to a total of 2,289.64 hectares, which has not been accepted by the Director of Mines and thus has not yet been formally titled.

#### 4.1.2 Guerrero Agreement (Jesus Maria and San Rafael)

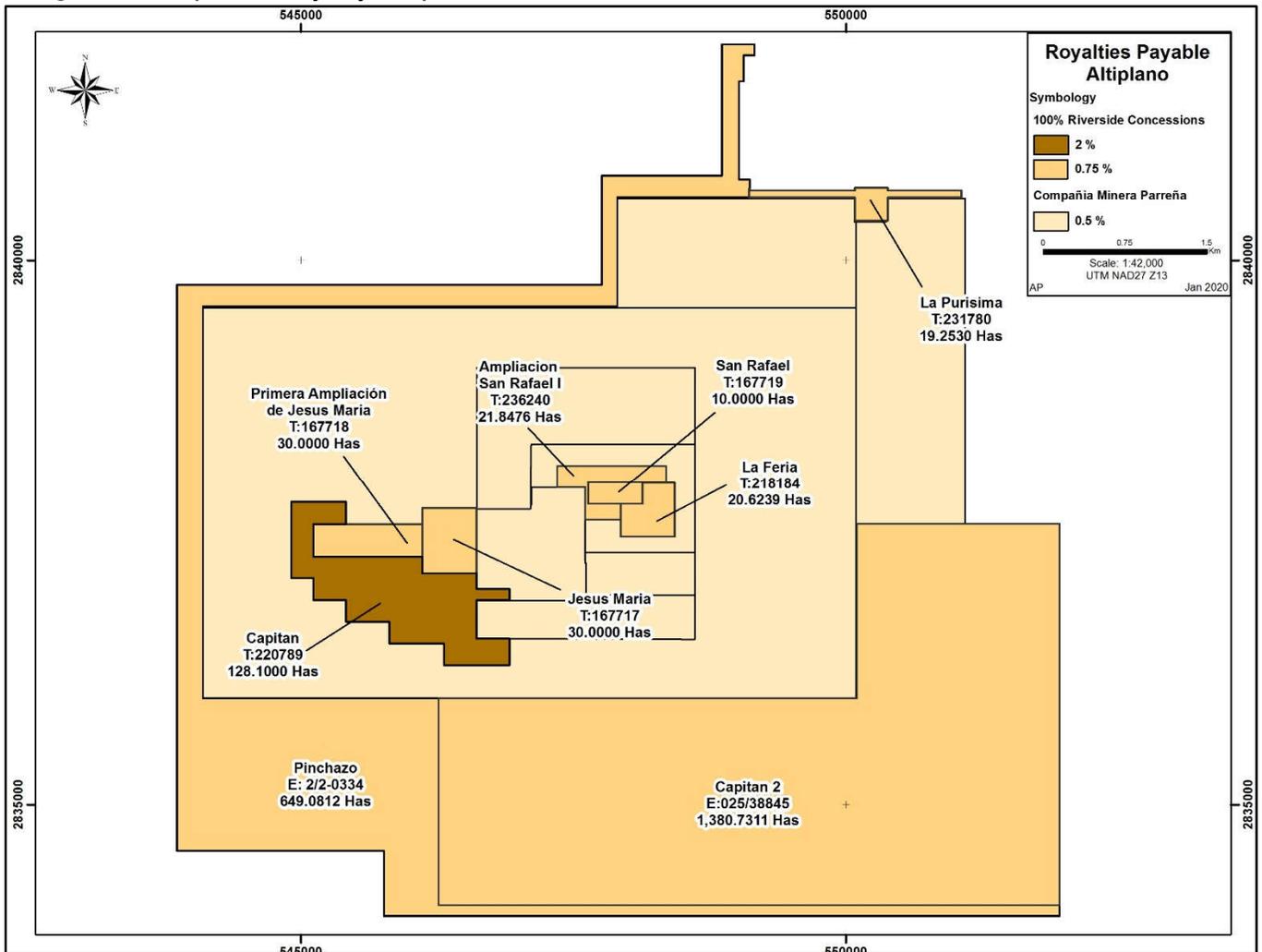
Riverside Resources Inc. acquired 4 concessions from the Jose Guerrero family that covered the Jesus Maria and San Rafael vein-system targets. The overall terms of the agreement outlined the option to purchase 100% of the property over a period of 40 months following the signing of the option agreement (May 30, 2008) for a total purchase price of USD\$800,000.

According to Riverside Resources Inc, all required payments have been made and the property is 100% owned by Riverside Resources Inc. According to the provisions of option agreement, the Guerrero Property is subject to a 0.75% net smelter royalty payable to Altiplano. The option terms have been fully completed, with the NSR remaining.

#### 4.1.3 Altiplano Option (El Capitan and El Tubo)

Riverside Resources Inc. acquired 3 concessions from the Altiplano Exploration Company covering the El Capitan, El Tubo, and La Purisima targets. The overall terms of the agreement outlined the option to purchase 100% of the property over a period of 48 months from the signing of the option agreement.

Figure 2: Altiplano Royalty Map



Source Riverside Resources Inc.

(January 31, 2008) following the completion of the schedule of payments, work commitments, and Riverside Resources Inc. share issuances, as outlined in the option agreement. According to Riverside Resources Inc., all required payments have been made and the property is 100%-owned by Riverside Resources Inc.

The Altiplano Option are subject to a 'Royalty Interest' equivalent to 2% of the net smelter returns.

Altiplano will be entitled to receive a Net Smelter Returns Royalty of 0.75% from third-party claims within the Area of Interest, except for claims held by Exploraciones Mineras Parreña, S.A. de C.V., in which case Altiplano will be entitled to a 0.5% Net Smelter Returns Royalty. The option is fully completed and only the net smelter royalty remains. (Figure 2)

## 4.2 RISK FACTORS

To the best of the authors' knowledge, there are no significant factors or risks that could affect access to or the right or ability to perform exploration work on the property other than the requirement to obtain permission from the holders for any surface rights located within the mining concessions.

The Peñoles Project is a historic silver-gold-lead-zinc mine which was exploited at the turn of the 20th Century. The mineralized material contains arsenic, antimony, cadmium, and other trace metals. Small remnants of old mine dumps, apparent low-grade stockpiles, and smelter slags are present in the area related to the historic workings. Several of the old tailings piles and waste dumps were sold by the local Ejido to unrelated parties and processed; these areas were removed down to the underlying soil or bedrock surface from 2010 to 2012. The underground mines are flooded to the upper working levels. The local Ejido used some of the mine water for agricultural purposes, but the water was not used for human consumption. Dust contamination has not been reported an issue in the past. To the authors' knowledge, a review of mitigation options for these issues has not been completed, but it is recommended.

To the best of the authors' knowledge, the property is not subject to any environmental liabilities other than the requirement to re-vegetate drill stations and drill access roads, and to back-fill trenches excavated for exploration. Riverside Resources Inc. and Morro Bay have been proactive and have constructed secure enclosures surrounding existing underground mine shafts to ensure public safety.

Currently, there are no active environmental permits for exploration or any other mining activity. Previous permits by Secretaría de Medio Ambiente y Recursos Naturales ("SEMARNAT") were signed on December 10, 2013 and expired on August 18, 2015. Environmental compliance is monitored by Procuraduría Federal de Protección al Ambiente ("PROFEPA").

Surface rights in the primary target areas (El Capitan, Jesus Maria, and San Rafael) are owned by the Peñoles Ejido (i.e., the local agrarian community). Riverside Resources Inc. reports it has negotiated a multi-year access agreement with the Peñoles Ejido which grants access to these

primary target areas. The agreement requires an annual payment and is in good standing to the best of the Authors' knowledge. The agreement covers access to all the areas currently covered by Riverside's mining claims and expires in 2030. No legal review was conducted for the surface access agreement with the local ejido. Figure 2 shows the area near the concessions and the local ejido for reference.

It is common for mining companies in Mexico to negotiate surface access agreements with the owners of surface rights within their concessions. In the event that a decision is made to complete exploration work and drilling outside of the primary target areas, Capitan Mining Inc. and Riverside Resources Inc. will need to negotiate with the surface-rights holders regarding access agreements.

### **4.3 MEXICAN MINING LAW**

Mineral exploration and mining in Mexico are regulated by the Mining Law of 1992, which establishes that all minerals found in Mexican territory are owned by the Mexican nation, and that private parties may exploit such minerals (except oil and nuclear fuel minerals) through mining licenses, or concessions, granted by the Federal Government.

Under the terms of the original law, exploration concessions were granted for a period of six years and exploitation concessions for a period of fifty years. There was no provision to extend the term of the exploration concession but exploitation concessions were renewable once for an additional term of fifty years.

On April 29, 2005 the Mexican Congress published several amendments to the Mining Law of 1992. According to these amendments, old exploration and exploitation concessions were replaced by a single concession type, the mining concession, which gives the holder both exploration and exploitation rights subject to the payment of relevant taxes. Old exploration and exploitation concessions were automatically transformed into mining concessions with a single term of 50 years from the date the concession was first registered at the Public Registry of Mines. Accordingly, exploration concessions that were originally issued for a term of 6 years now have a term of 50 years from the date the exploration concession was originally registered. Under the new amendments, the concession holder has all the rights previously granted for an exploitation concession under the old law.

Concessions may be granted to (or acquired by, since they are freely transferable) Mexican individuals, local communities with collective ownership of the land known as ejidos and companies incorporated pursuant to Mexican law, with no foreign ownership restrictions for such companies. While the Constitution makes it possible for foreign individuals to hold mining concessions, the Mining Law does not allow it. This means that foreigners wishing to engage in mining in Mexico must establish a Mexican corporation for that purpose, or enter into joint ventures with Mexican individuals or corporations.

Maintenance obligations which arise from a mining concession, and which must be kept current to avoid its cancellation are the performance of assessment work, the payment of mining taxes and the compliance with environmental laws. The Regulations of the Mining Law establish

minimum amount of assessment work that must be performed during the exploration in the case of exploration concessions, or exploration and/or exploitation work, in the case of exploitation concessions, see Table 6.

Table 6: Mexican Tax Payments

Year	Payment per Hectare (Mexican Pesos)
1-2	4.42
3-4	6.61
5-6	13.68
7-8	27.51
9-10	55.01
After 10	96.83

Mexican mining law also imposes a 7.5% annual tax on any profits from the extraction and sale of mineral commodities. There is an additional 0.5% gross sales tax on mining production of gold, silver, and platinum. Both of these are additional to the national corporate income tax at a rate of 30%.

Figure 3: View from El Capitan Hill to Peñoles Village (looking east)



## 5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Peñoles Project is easily accessible via paved and dirt roads year-round. Initial access to the property can be gained via the paved Highway 49 north from Torreón to Bermejillo, turning west on the paved road to Mapimí, continuing to an all-weather gravel road located just before the turn off to Santo Domingo and then turning south. From this intersection, continue to the village of Peñoles which is centrally located on the property. The total driving time from Torreón to the property is approximately 1.5 to 2.0 hours. The centre of the Peñoles Project is located approximately 180 km north-northeast of Durango and 50 km north of the town of Rodeo in the Municipality of San Pedro del Gallo, in Durango, Mexico.

A semi-dry climate dominates the Peñoles area and rainfall is limited to approximately 500 mm annually. The climate is temperate with an average temperature of 18°C, with maximum temperatures reaching 35°C, and minimum temperatures falling to 2°C. The rainy season is from

June through to August, with minimal rainfall occurring from September to May. Exploration work and drilling can be conducted on a year-round basis.

Unskilled workers are available from the village of Peñoles, but outfitters and a supply of heavy construction equipment and skilled labour will need to be sourced from Torreón, Rodeo or Durango; all are within a two-hour drive of the project area. Riverside Resources Inc. currently rents a house/office/core logging complex in the village of Peñoles where core logging and processing takes place and field personnel are housed during field operations. Geological field and technical staff must be brought in from farther away as would be the case for any future mining personnel.

Electrical power is available throughout the property and is provided by existing power lines that cross the property. At this time, it is not known whether sufficient power is available to support any mining operation. Water is available from wells and old mine workings, so exploration can be carried out year round. There are a few scattered small villages throughout the large concession area in addition to the village of Peñoles near the El Capitan, Jesus Maria, San Rafael, and El Tubo prospects.

The Peñoles Project comprises two distinct topographic zones: (1) a central zone that consists of low hills with a maximum relief of 100 m, and (2) a flat-lying zone that forms an apron around the central hills. Absolute relief varies from 1,875 m above mean sea level (“amsl”) in stream gullies to 2,000 m amsl. Numerous intermittent streams bisect the landscape and drainage is almost fan-like away from the central hills. Vegetation in the area consists of various species of cactus, mesquite, and other thorny bushes. Fertile areas of the flat-lying fans near prominent streams are under cultivation (corn, beans), and the remainder is used for pasture land.

Groundwater is present in the Quaternary gravel basins created by basin-and-range faulting in the region. To date, no water, well-specific drilling or flow-rate pump tests have been conducted by Morro Bay or Riverside Resources Inc. Future work may include conducting ground water resource assessments.

## **6 HISTORY**

Many of the details in this history section are sourced from previous technical reports by Daniels (2011), Magrum (2013), Myers et al. (2014), Whiting et al (2015) and Lambeck (2018) – appropriate references are noted within this section.

The historical work recounted here mainly pertains to the exploration and mining work carried out by a few sporadic operators up until modern times, as the area has been mined since the 1880s, and this is the property where Minera Industrias Peñoles began in 1887. Minera Industrias Peñoles still exists today and continues to hold mining claims in the area. Note: Parts of the property were explored throughout its history, but the property has not consolidated into a coherent exploration package prior to Riverside/Capitan's involvement.

## **6.1 PRE 2004 EXPLORATION**

### **1890 to 1991**

Minera Industrias Peñoles acquired the Jesus Maria, Nuestra Señora del Refugio and San Rafael mines near the town of Peñoles and operated until 1908. At that time, two mineralized bodies, one at Jesus Maria (silver-lead-zinc-arsenic) and the other at San Rafael (silver), were reportedly mined out. The full extent of the historic mine workings is unknown, but mining appears to have been selective and limited to within approximately 100 m of surface. The property package may have been held almost 100 yrs. by Compania Minera de Peñoles, but remained inactive. This has not been confirmed (Daniels, 2011).

### **1991 to 1993**

Vicente Aguirre operated a small 100 t/d operation on the San Rafael mine dumps and reportedly produced 350 g/t to 400 g/t Ag throughout this operations life. The land holdings lapsed and were acquired by Jose Guerrero Legoretta with whom Riverside Resources Inc. currently has option agreements – the Guerrero Option (Daniels, 2011).

### **2003**

Consejo de Recursos Minerales published geological information map sheet G13-D22. On this map sheet, a reference is made to sampling at Jesus Maria in the 1960s (Daniels, 2011).

La Plata Gold signed an option agreement with Jose Guerrero to acquire 100% of the Jesus Maria and San Rafael gold-silver exploration properties. Documented exploration activities were not available at the time of report preparation (Daniels, 2011).

## **6.2 POST 2004 EXPLORATION**

Modern exploration work on the Peñoles Project includes Aurcana Corporation (2004), Riverside Resources Inc. (2008 to 2011), Sierra Madre Developments Inc. (2011 to 2013), Morro Bay Resources Ltd. (2014 to 2017) and Riverside Resources Inc. (2018 to 2019). Exploration work has included surface mapping, soil, rock and trench sampling, underground sampling, petrographic and fluid inclusion studies, ground-based magnetic surveys, induced polarization (IP) - resistivity surveys, diamond drilling, and metallurgical testing. All drill core from the 4 drilling programs mentioned here is stored on site and is readily accessible for re-logging and quartering for verification sampling. Rejects and pulps from the drill programs completed by Sierra Madre and Morro Bay are also stored on site and are available for verification sampling.

Exploration work carried out on the Peñoles Project by Aurcana, Riverside, Sierra Madre, and Morro Bay up until December 2014 has been summarized in two previously published, independent technical reports (Daniels, 2011; Magrum, 2013), and in an unpublished technical report prepared by Myers et al. (2014).

## **6.3 EXPLORATION WORK: AURCANA AND RIVERSIDE 2004 TO 2011**

*After Daniels, 2011*

Preliminary geological work by Aurcana and Riverside Resources Inc. showed that gold and silver mineralization observed on the Peñoles Project occurs in the same geological setting as, and

exhibits many of the same characteristics as, the epithermal-type vein systems developed throughout the Mexican Silver Belt. Drilling carried out by Aurcana and Riverside Resources Inc. showed that El Capitan has potential to host a bulk-tonnage, low-grade deposit. A total of 4 diamond drill holes of historical drilling were carried out on the property by Aurcana in 2004 for a total of 866.48 m. Three of the four drill holes targeted the El Capitan Gold Zone. Aurcana drilling results are discussed in Section 10 Drilling. No other Aurcana exploration records are known to the authors.

In 2008 and 2009, Riverside Resources Inc. acquired the Peñoles Project by purchasing two groups of concessions and staking two concessions. The two purchased groups of concessions, (the Altiplano Option and Guerrero Option), collectively cover the El Capitan target and the Jesus Maria and San Rafael mine workings. The two staked concessions cover several early-stage exploration targets. The purchased concessions that cover El Capitan and the historic mines comprise a total of 259.8 hectares, and are internal to a larger group of concessions controlled by Minera La Parreña, a subsidiary of Fresnillo plc (2,652.8 ha.), which in turn, are surrounded by the concessions staked by Riverside Resources Inc.

From 2008 to 2011, Riverside Resources Inc. focused its exploration work on the Jesus Maria, El Capitan, and San Rafael mineralized zones. It carried out geophysical surveys, trenching (Trench Nos. RRI-01 to RRI-04), and diamond drilling. During this time, Riverside Resources Inc. also acquired the Capitan I and Purisima 1 concessions and carried out reconnaissance prospecting on targets generated from an Aster alteration study. A total of five diamond drill holes targeting El Capitan were completed in 2008 for a total of 967.6 m. Trenching results reported by Whiting et al. (2015) are shown in Table 7. Riverside Resources Inc. drilling results are discussed in Section 10 Drilling.

In 2004, Aurcana drilled a total of four diamond drill holes on the Peñoles Project for a total of 866.48 m. Three of the four drill holes targeted the El Capitan Gold Zone. Results of the 2004 drilling at the El Capitan Gold Zone were encouraging in that the thickness of encountered mineralization showed that gold was not just localized to the quartz vein and silicified breccia exposed at surface, but that the mineralization extended into the Cretaceous sediments below the quartz zone and into the Tertiary volcanics above the quartz zone. Collar PE04-01 was approximately 120 m perpendicular to the trend of the exposed quartz zone and drilled towards the exposure with an inclination of -55°. Drill hole PE04-01 encountered 38.6 m of 0.27 g/t Au mineralization in the tertiary volcanics, 13.93 m of 2.33 g/t Au mineralization in the quartz zone, and 16.12 m of 0.52 g/t Au mineralization in the Cretaceous sediments.

## **6.4 EXPLORATION WORK: SIERRA MADRE 2011 TO 2013**

*After Magrum 2013*

In March 2011, Sierra Madre acquired an option from Riverside Resources Inc. to earn either a 51% or a 65% interest in the Peñoles Project (Peñoles Option Agreement) by incurring exploration expenditures and making cash and share payments to Riverside Resources Inc. Sierra Madre incurred exploration expenditures of approximately \$3,000,000 and made cash and share payments totalling approximately \$2,140,000 to Riverside Resources Inc. between March 2011 and June 2013 (Magrum, 2013). On October 22, 2013, Morro Bay and Sierra Madre announced

that they had entered into an arm's-length, non-binding letter of intent pursuant to which Morro Bay would acquire all of the interests of Sierra Madre in the Peñoles Project. On January 23, 2014, Morro Bay acquired all of Sierra Madre's interests in exchange for 16 million Morro Bay common shares and 8 million share purchase warrants entitling the holders to purchase up to 8 million Morro Bay common shares. The deemed purchase price was \$1,600,000, all of which was paid by way of the aforesaid shares and warrants of Morro Bay. Sierra Madre distributed the Morro Bay shares and share purchase warrants pro rata to shareholders of record as of the closing date.

From March 2011 to June 2013, Sierra Madre focused its exploration work on the Jesus Maria and El Capitan mineralized zones. It incurred exploration expenditures of approximately \$3,000,000 and made cash and equity payments to Riverside Resources Inc. totalling \$2,140,000.

The main objective of the 2011 drill program was to validate the conceptual deposit model developed by Riverside Resources Inc. and Aurcana, and increase the density of pierce points within El Capitan. The drilling program was completed between June and September 2011, and included 18 drill holes totalling 2,210.1 m. In addition to the 2011 drill program at El Capitan, surface sampling and trenching was completed in the Jesus Maria mine area. Seven new trenches (JMT 11-01 to JMT 11-07) and one drill hole totalling 289.75 m were completed to test the Jesus Maria target. Trenching results are shown in Table 7, and the drilling results are discussed in Section 10 Drilling.

Results of the 2011 drilling program at El Capitan were encouraging: the encountered grade and thickness of mineralization showed considerable improvement over preliminary drilling results reported by Riverside Resources Inc. in 2008. The strike length of the "Main Zone" was extended to 700 m and several of the drill holes encountered mineralized intervals greater than 70 m thick with potentially economic grades, including: CDDH 11-07, which returned 108.35 m averaging 0.410 g/t, and CDDH 11-17, which returned 88.40 m averaging 0.816 g/t (including 33.50 m averaging 1.687 g/t). The quoted widths are drilled widths and these are believed to represent approximate true widths. Sections with the referenced drill holes at El Capitan are shown in Figure 8 and Figure 9.

Geologic mapping during summer 2012 identified at four target areas for potential gold and gold-silver mineralization. The previous Soils-Float Reconnaissance sampling identified target areas on Capitan I mining concession which now deserve drill follow up. The soil-float sample areas are located SW and SE of the Peñoles Village and NE of El Casco Village, and were generated mostly from interpreting three different regional surveys: a detail aeromagnetic survey, and ASTER mapping study, and a structural interpretation carried out in the area in previous exploration campaigns.

To study the two soil anomaly target areas, 10 soil lines oriented N-S were designed with a sampling spacing of 50m and line spacing of 200 m. A total of 386 samples were collected along these lines and for QA-QC procedures 21 standard material were inserted and 16 duplicate samples were also collected. Additionally, 10 float samples were collected in sites where milky chalcedonic banded quartz float material with some Fe oxides staining (hematite-jarosite) was found.

In 2012, Sierra Madre drilled a total of 2,890.40 m in 22 diamond drill holes at the El Capitan target. Five of the 22 drill holes completed in 2012 were collared near the western end of the El Capitan Gold Zone, but poor ground conditions were encountered and these drill holes were abandoned or not completed to target depths. The remaining drill holes were reported in sequence and were re-numbered (field number and press release number). Drilling results are summarized in Section 10.

During 2011 and 2012, drilling at El Capitan encountered numerous intervals of gold mineralization ranging from 50 m to 140 m wide. Jesus Maria was initially considered an underground vein-type target; however, drilling and sampling of a 35 m long crosscut in 2013 encountered wide intervals of silver mineralization with accessory gold and base-metal values in the hanging wall of the mineralized zone that was exploited by the historic mine workings.

In March 2013, Sierra Madre completed a second trenching program (consisting of nine trenches), a limited underground sampling program and additional drilling on the Jesus Maria target. Underground sampling was carried out along the upper levels of the former Jesus Maria mine (over a strike length of approximately 50 m) and along a 35 m long crosscut that extends into the hanging wall of the mineralization exposed in the mine workings. A total of eight drill holes were completed totalling 887.3 m. Whiting et al. (2015) reported trenching results in Table 7, with underground sampling results summarized in Table 8 and

Table 9, and drilling results are discussed in Section 10 Drilling.

In March 2013, Sierra Madre completed trenching and eight drill holes (887.3 m) in the Jesus Maria mine area. Significant silver mineralization was reportedly intersected in all trenches and drill holes. Reportedly, trench 2013-11 returned 15.4 m averaging 420.8 g/t Ag, including a 2.0 m interval that assayed 2,152 g/t Ag. JM DDH 13-06 returned 11.85 m averaging 320.3 g/t Ag, including a 0.9 m interval that assayed 3,409.1 g/t Ag. JM DDH 13-07 intersected a 2.1 m interval that returned 279.5 g/t Ag and a 4.0 m interval that returned 532.9 g/t Ag. The most westerly hole of the program, JM DDH 13-09, was drilled to intersect the western extension of the mineralized zone below the historic mine workings, and it intersected several significant mineralized intervals.

Table 7: Jesus Maria Trenching

Trench ID	Interval (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
RRI-01	22	1.08	224.98	2.45	1.74
RRI-02	6	0.2	35.84	0.65	0.94
RRI-03	8.3	1.68	144.5	2.38	2.19
RRI-04	14.9	0.1	123.64	0.08	0.34
JMT-11-01	12	0.24	140.03	0.17	0.12
JMT-11-02	36	0.35	66.6	0.29	0.68
Including	20	0.47	103.42	0.51	1.1
JMT-11-03	9.5	0.93	167.4	3.27	1.18
JMT-11-04	14.4	2.05	351.08	2.85	0.75
JMT-11-05	9.55	0.38	78.04	1.12	0.83
JMT-11-06	4.2	0.37	78.63	1.79	1.29
JMT-11-07	1.5	0.14	25.9	0.93	0.68
JMT-13-08	15.8	0.16	129.8	0.06	0.18
JMT-13-09	8	0.31	294.6	0.19	0.29
JMT-13-10	6	0.13	153	0.24	0.29
JMT-13-10	2	0.49	288.6	0.08	0.07
JMT-13-11	15.4	0.15	420.8	0.42	0.29
JMT-13-12	2.15	0.84	31.4	0.21	0.65
JMT-13-13	7.2	0.17	67.6	1.05	3.91
JMT-13-14	2.8	0.1	32.5	0.02	0.07
JMT-13-15	20	0.24	30.8	0.03	1.32
JMT-13-16	6.4	0.14	90.3	2.27	2.07

Whiting et al. (2015)

Table 8: Jesus Maria Underground Level Sampling

Location	Strike Length (m)	Average Width (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
23 m Level	50.6	1.71	1.22	268.87	3.72	2.56
31 m Level "B"	20.2	1.74	0.44	17.43	0.25	0.64

Table 9: Jesus Maria Crosscut Sampling

Location	Width (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
23 m Level Hanging Wall	35.2	0.247	94.9	0.55	0.46

## 6.5 EXPLORATION WORK: MORRO BAY 2014-2015

*After Myers et al 2014*

In order to earn a 51% interest in the Peñoles Project, Morro Bay was initially required to expend \$750,000 of exploration expenditures by June 30, 2014 and pay Riverside Resources Inc. \$1,350,000 cash (\$100,000 and USD\$1,250,000) and issue \$1,500,000 worth of Morro Bay shares (or cash at Morro Bay's option, provided that, if the market value of the Morro Bay shares is less than \$0.05 based on a 30-day volume-weighted average price [VWAP], such payments would be made in cash). During 2014, Morro Bay incurred approximately \$1,250,000 in exploration expenditures, made a \$750,000 payment to Riverside Resources Inc. in shares of Morro Bay, and extended the option exercise date to January 20, 2015.

On January 20 and April 1, 2015, Morro Bay and Riverside Resources Inc. announced amendments to the Peñoles Option Agreement such that Morro Bay can earn an initial 51% interest by making a payment of \$750,000 by May 1, 2015 (payable in cash or Morro Bay shares at Morro Bay's election, provided that, if the market value of Morro Bay shares is less than \$0.05 based on a 30-day VWAP, such payments would be made in cash). Additional terms are included in the press releases dated January 20, 2015 and April 1, 2015.

In January 2014, Morro Bay assumed control of Sierra Madre's option agreement, with Riverside Resources Inc. as program operator. Morro Bay focused its exploration work on the Jesus Maria and San Rafael prospects and carried out geological mapping, geophysical surveys (mag and IP), soil sampling, and diamond drilling. In 2014, it incurred exploration expenditures of approximately \$1,250,000 and made a payment of \$750,000 in shares to Riverside Resources Inc. Published results for Morro Bay's 2014 drilling program at Jesus Maria are shown in Table 10. San Rafael's 2014 results are shown in Table 10.

The main objective of the 2014 Jesus Maria drill program was to delineate the extent of mineralization in the hanging wall of the Jesus Maria structure. The 2014 drill program on the Jesus Maria Silver Zone included 21 drill holes totalling 1,937 m. Drilling results are summarized in Table 10. Morro Bay also drilled two holes at El Capitan totalling 205.6 m, however, the holes encountered poor ground conditions and were abandoned before reaching target depth. Five additional holes were completed at San Rafael totalling 1,062.3 m, and one exploratory hole on a regional target totalling 232.9 m. Collar locations are shown in Figure 11

It is important to note that outcrop is limited to the Jesus Maria mine area. Most of the interpreted surface expression of the mineralization that is present in the hanging wall of the Jesus Maria structure is covered by overburden and has not been sampled. The mineralized intervals shown in Table 7 are not necessarily indicative of the overall width of the mineralized zones that are present. Trench locations are shown in Figure 12.

The Jesus Maria prospect was initially considered an underground vein-type target; however, drilling carried out in 2013 and 2014 encountered 20 m to 80 m wide intervals of predominantly silver-rich mineralization (with accessory gold and base-metal values) in the hanging wall of the zone that was mined historically. Published drilling results are shown in Table 10. Based on the widths of mineralization, Jesus Maria might be amenable to open-pit extraction methods. At their eastern limits, the deposits are separated by approximately 300 m, and the mineralized zones are interpreted as merging together to the west. Additional drilling between the western limit of the Jesus Maria deposit and the El Capitan deposit could connect the two zones and delineate additional mineralization. Significant intersections at the San Rafael prospect are shown in Table 10.

Figure 11 shows plan views of the Jesus Maria drill hole locations, El Capitan drill hole locations, and Jesus Maria trenches and underground workings, respectively. Table 10 provides a complete list of drill hole collars.

## 6.6 Riverside Resources Inc. 2018

Riverside Resources Inc, conducted field programs, targeting, relogging geology and revised structural and geologic interpretations which now warrant drill testing.

The observed structures should be followed with drill holes to the east, where anomalies are observed. When correlating drill holes, continuity between one section and another is observed, although somewhat limited in depth, but generate the hypothesis that the presence of fault structures are moving towards the south-southeast and therefore the depth of mineralization is increased (by normal failures).

When reviewing the 8 holes drilled in 2014 it was observed that holes JM-DDH-14-11, JM-DDH-14-14, and JM-DDH-14-15 were drilled at the bottom of the La Chula structure, so that the possibility of having a west-southwest target, like that of hole JM DDH-14-24, where at least 450 m of surface expressed length remains open, with the possibility that it continues below the mineralized structure at El Capitan (Au mineralization).

According to data collected in the field, there are structures with heading N75E and dipping at 60° -70° SE, which could correspond to those intersected with the holes and that have similar characteristics to those that contain the high values of Ag (Structure La Chula), which are cut and/or displaced by failure, which could be causing the bends in the structures and may be the reason why some holes do not intersect the same high grade values of Ag.

It is recommended that subsequent drilling test, via north directed holes (Azimuth 0°) dipping ~60° be drilled to depths of 150 m to 200 m, and separated by at least 30 m be planned for completion. This could give additional structural information, similar to the structure intersected by hole 14-24 and likewise, the proposed hypothesis (high angle structure that is cutting and displacing Ag mineralization) could be tested.

## 7 GEOLOGICAL SETTING AND MINERALIZATION

The Peñoles Project lies in the Altiplano sub province of the Sierra Madre Occidental.

The Sierra Madre Occidental (“SMO”) is a regionally extensive Eocene to Miocene volcanic field that extends from the US-Mexican border into Central Mexico. The Altiplano sub province is on the eastern flank of the SMO and comprises Jurassic to late Tertiary sedimentary and volcanic rocks (Sedlock et al., 1993). This district hosts extensive hydrothermal-related silver, gold and base-metal deposits and is generally referred to as the Faja de Plata or Mexican Silver Belt (Figure 4 with Figure 4 providing the corresponding map legend).

The oldest rocks in the Peñoles area are Cretaceous-age siltstones, sandstones, and limestones belonging to the Indidura Formations. These rocks are unconformably overlain by a thick sequence of Tertiary volcanic rocks which characterize the Sierra Madre Occidental. The volcanic sequence comprises two main series, an older andesite-dominated series and a younger rhyolite-pyroclastic-dominated series; these two main series are referred to as the Lower Volcanic Series (“LVS”) and Upper Volcanic Series (“UVS”), respectively. The LVS can attain thicknesses of 1,000 m and is dominated by Palaeocene and Eocene andesitic lava and pyroclastic rocks with volcanoclastic interbeds. The UVS is the main unit exposed on the Peñoles property. The LVS is cut by calc-alkaline dacite to rhyodacite intrusive rocks that occur as domes, sills, and dykes. The UVS unconformably overlies the LVS rocks and can be up to 1,000 m thick. It is dominated by Oligocene and early Miocene dacite-rhyolite-pyroclastic units.

In the region, precious metal deposits in the Sierra Madre Occidental were traditionally believed to occur primarily in the LVS rocks with the UVS having fewer precious metals deposits. However, since 2000, several new discoveries, particularly of gold in the UVS, have disproven this generality (Clark et al., 1982a). To the west, the La Cienega gold mine of Fresnillo plc and, to the southwest, the Bacis mine of Minas de Bacis S.A. de C.V. have a significant portion of their ore hosted in the basal units of the UVS. Therefore, the Cretaceous Formations and Tertiary LVS and UVS are all potential host rocks for mineralization.

There are multiple geologic reports available on the Peñoles property. Myers et al. (2014) documents various petrological aspects of the intrusive and extrusive suites of rocks. Lambeck (2014) addresses implications of structural re-interpretation, and Anon. (2005) covers fluid inclusion geothermometry of the veins. For the purposes of this report, the authors have chosen to concentrate on the main resource areas.

According to Daniels (2011), the geology of the Peñoles Project consists of an Upper Cretaceous carbonate-siliciclastic succession which has been intruded by Tertiary diorite, granodiorite, and rhyolite porphyries. Tertiary rhyolite tuffs unconformably overlie the Cretaceous marine sedimentary rocks. An orthogonal set of faults has been mapped on the property, which includes a northwest-striking set related to the regional horst and graben basin and range structures, and a northeast-striking set that appears to be related to the Tertiary-age intrusive rocks. Complex offsetting relationships between the two fault sets suggest that they are contemporaneous.



Figure 5: Geology Legend

### SIMBOLOGÍA CUATERNARIO

**Qho** GRAVA - LIMO  
**gv-ln**

### TERCIARIO NEÓGENO

**TmCgp** CONGLOMERADO POLIMÍFICO

**TmB** BASALTO

### PALEÓGENO

**ToR** RIOLITA

**ToBvR** BRECHA RIOLÍTICA

**ToIg** IGNIMBRITA

**ToTR** TOBA RIOLÍTICA

**ToB-A** BASALTO - ANDESITA

**TeoIg** IGNIMBRITA

**TeoTR** TOBA RIOLÍTICA

**TeoCgp** CONGLOMERADO POLIMÍFICO

**TeoA-TA** ANDESITA - TOBA ANDEÍTICA

### CRETÁCICO INFERIOR

**Kvap** CALIZA - LUTITA  
**Cz-Lu**

**Kvap** ARENISCA - LUTITA  
**Ar-Lu**

### ROCAS ÍGNEA INTRUSIVAS

**To(?)PA** PÓRFIDO ANDEÍTICO

**To(?)PR** PÓRFIDO RIOLÍTICO

**Te(?)Gd** GRANODIORITA

### ELEMENTOS ESTRUCTURALES

- CONTACTO GEOLÓGICO
- CONTACTO GEOLÓGICO
- CONTACTO GEOLÓGICO INFERIDO
- RUMBO Y ECHADO (S<sub>0</sub>)
- FOLIACIÓN (S<sub>1</sub>)
- SEUDOESTRATIFICACIÓN
- DOMO
- FLUJO DE LAVA
- PITCH EN PLANO DE FALLA
- FALLA NORMAL
- FALLA NORMAL INFERIDA
- FALLA NORMAL CON COMPONENTE LATERAL
- FALLA INVERSA O CABALGADURA
- FALLA INVERSA INFERIDA
- FALLA INVERSA CON COMPONENTE LATERAL
- FALLA LATERAL
- FALLA LATERAL INFERIDA
- ANTICLINAL
- ANTICLINAL INFERIDO
- ANTICLINAL BUZANTE
- ANTICLINAL RECUMBENTE
- ANTICLINAL RECUMBENTE INFERIDO
- ANTICLINAL RECUMBENTE BUZANTE
- SINCLINAL
- SINCLINAL INFERIDO
- SINCLINAL BUZANTE
- SINCLINAL BUZANTE INFERIDO
- SINCLINAL RECUMBENTE
- SINCLINAL RECUMBENTE INFERIDO
- FRACTURA
- FRACTURA INFERIDA
- FRACTURA MEDIDA
- VETA
- VETA INFERIDA
- LÍNEA DE SECCIÓN

### SÍMBOLOS MINEROS

#### MINAS

- MINA EN PRODUCCIÓN
- MINA ABANDONADA
- PROSPECTO
- MINA EN REACTIVACIÓN
- MANIFESTACIÓN DE MINERAL IN SITU

#### BANCO DE MATERIALES Y ROCAS DIMENSIONABLES

- EN PRODUCCIÓN
- INACTIVO
- PROSPECTO

#### TIPOS DE PLANTAS

- PLANTA DE BENEFICIO
- PROCESADORA DE NO METÁLICOS
- PLANTA GEOTÉRMICA

#### OTROS

- JALES
- TAJO
- TERRERO

#### MUESTREO

- PETROGRÁFICO
- ESQUIRLA
- MINERAGRÁFICO
- RAYOS X
- ROCA DIMENSIONABLE
- ROCA TOTAL
- INCLUSIÓN FLUIDA
- CARACTERIZACIÓN
- DATACIÓN RADIMÉTRICA

#### ALTERACIONES

- ARGILITIZACIÓN
- SERICITIZACIÓN
- OXIDACIÓN
- SILICIFICACIÓN
- CAOLINIZACIÓN
- PROPILITIZACIÓN
- EPIDOTIZACIÓN
- GRANATIZACIÓN

### DEPÓSITOS MINERALES

#### FORMA

- VETA
- IRREGULAR
- ESTRATIFORME
- STOCKWORK
- BRECHA
- CHIMENEA
- MANTO
- LENTICULAR

#### ORIGEN

- EPITERMAL
- EXHALATIVO
- HIDROTHERMAL
- MESOTERMAL
- REEMPLAZAMIENTO
- SINGENÉTICO
- VULCANOGÉNICO
- METASOMATISMO DE CONTACTO

#### NATURALEZA DE LA MINERALIZACIÓN

- ÓXIDOS
- SULFUROS
- SILICATOS
- CARBONATOS
- SULFATOS
- FLUORUROS
- ELEMENTOS NATIVOS
- BITUMEN

### SÍMBOLOS TOPOGRÁFICOS

- POBLADO
- CARRETERA PAVIMENTADA
- TERRACERÍA
- BRECHA
- VEREDA
- VÍA DE F.F.C.C.
- AEROPISTA
- LÍMITE ESTATAL
- CURVA DE NIVEL
- CORRIENTE PERENNE
- CORRIENTE INTERMITENTE
- CUERPO DE AGUA

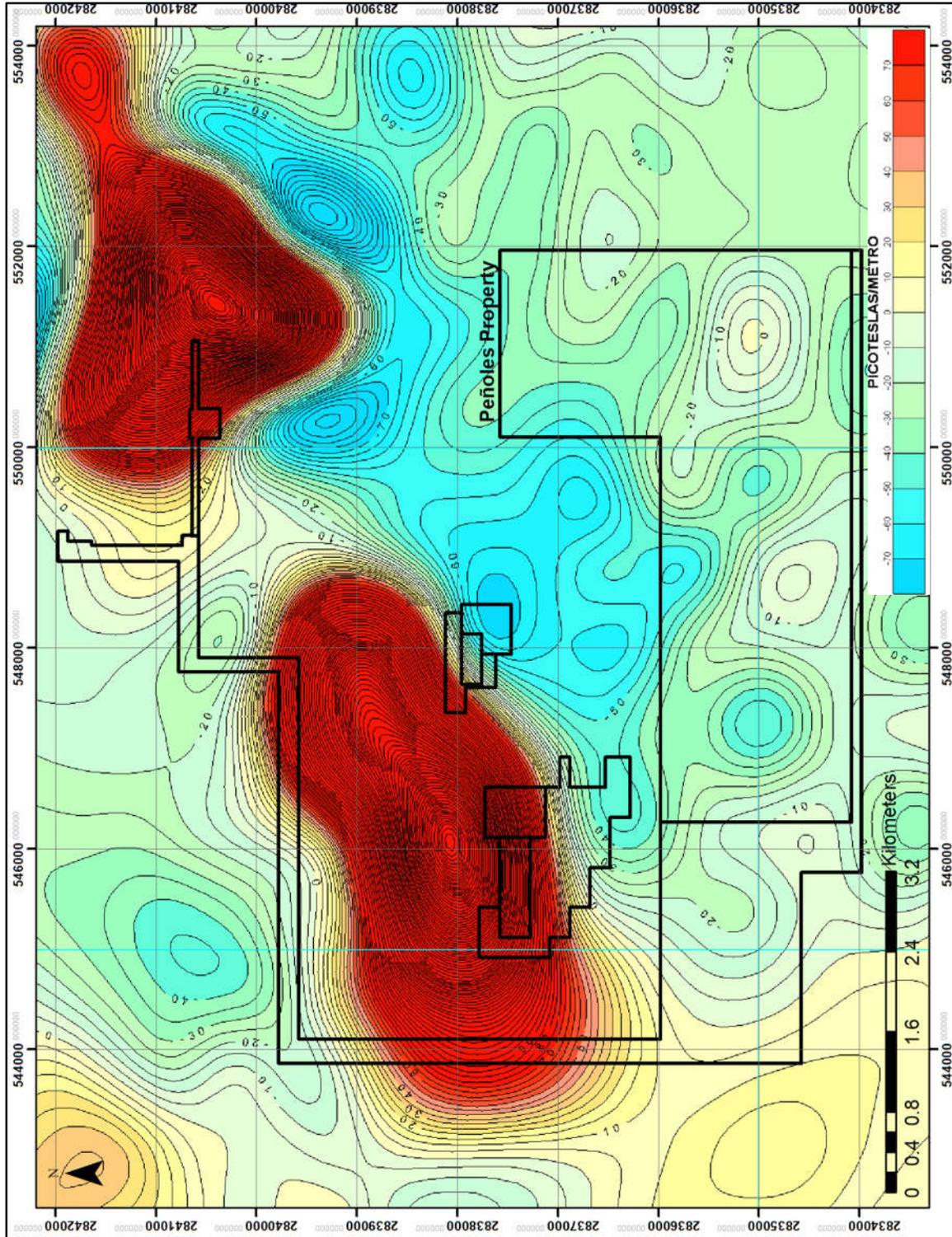
The magnetic anomaly associated with the known mineralized zones is interpreted to be related to underlying intrusive rocks and there is a similar magnetic anomaly located approximately 5 km to the northeast. The majority of the second magnetic anomaly lies within the concessions staked by Riverside Resources Inc.; however, it is completely masked by Quaternary alluvium (Figure 4, Figure 6, and Figure 7).

According to Myers et al. (2014), the Peñales area displays several phases of deformation and hydrothermal fluid flow typical of the post-Laramide evolution of the northern Altiplano of Central Mexico (Starling, 2008). The Jesus Maria and San Rafael structures that characterize the main structural zones of the Peñales area appear to have been formed as part of very early post-Laramide north-south extension, very similar to the Fresnillo's Proaño mine. The mineralization appears to be controlled at the intersection of a west-northwest-trending fault zone and an east-northeast-trending structural corridor. The west-northwest fault zone is likely a reactivated basement structure similar to that seen at Proaño and other major early- to mid-Tertiary deposits in the region. The east-northeast structural corridor likely represents a transfer fault zone generated during Laramide fold-thrust deformation and is confirmed from the 1:50,000 scale geology map as the northeast to east-northeast-trending intrusion occurs at an abrupt change in the north-northwest-trending Laramide fold axes (Starling, 2008).

The El Capitan Gold Zone hosted in silicified volcanic rocks and sediments represents a higher level, lower temperature style of low-sulphidation mineralization compared to the higher temperature, skarn-hosted mineralization of the Jesus Maria-Refugio structure. Cross-cutting gold-silver structures in the Jesus Maria Silver Zone appear to be later in age and lower temperature, which is similar to, or possibly related to, the El Capitan mineralization. The bedded textures in the El Capitan silica cap zone might reflect repeated hydrothermal depressurization and brecciation events in a volcanic/sub-volcanic environment.

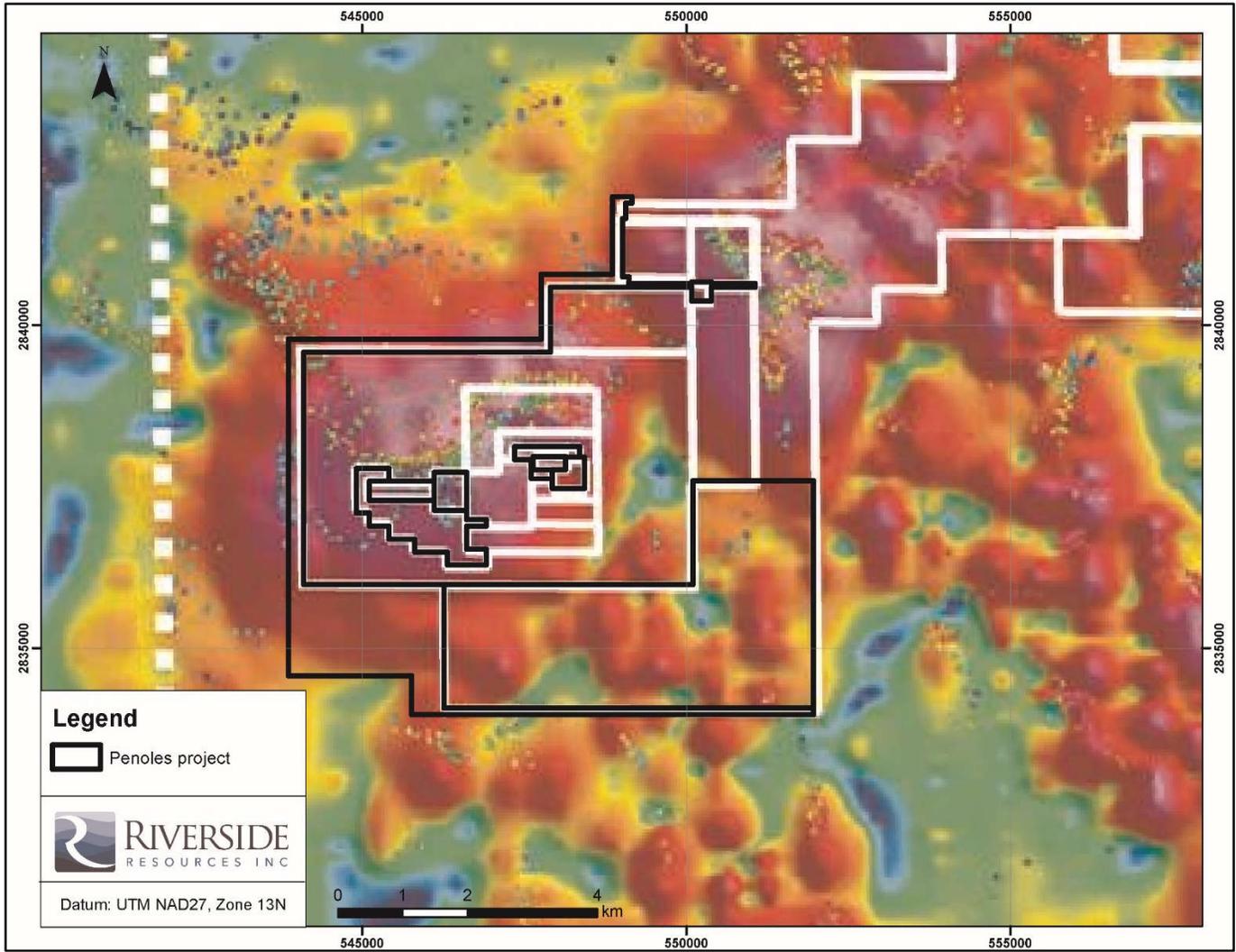
In the Jesus Maria area, the hydrothermal skarn is transitional to a series of sub-parallel, late- to post-mineralization coarse calcite veins referred to as carbonate-gold zones that are common in many deposits in the Altiplano (e.g. Velardeña, Fresnillo, and Guanajuato). The rare kinematic indicators show that the quartz-calcite and late carbonate veins were emplaced under a phase of north-south to north-northeast extensions similar to that at many deposits in the Altiplano generated around 32-28 Ma. These late carbonate veins are cut by low-temperature quartz veinlets and breccias that appear to have formed under more northeast extensions as they show dextral transtensional reactivation of the east-northeast- to west-northwest-trending carbonate zones.

Figure 6: Mexican Government Airborne First Vertical Derivative Magnetics Map



Source: Servicio Geologico Mexicano <https://www.sgm.gob.mx>

Figure 7: Regional Airborne Magnetics Map



Source: Riverside Resources Inc.

## 7.1 EL CAPITAN

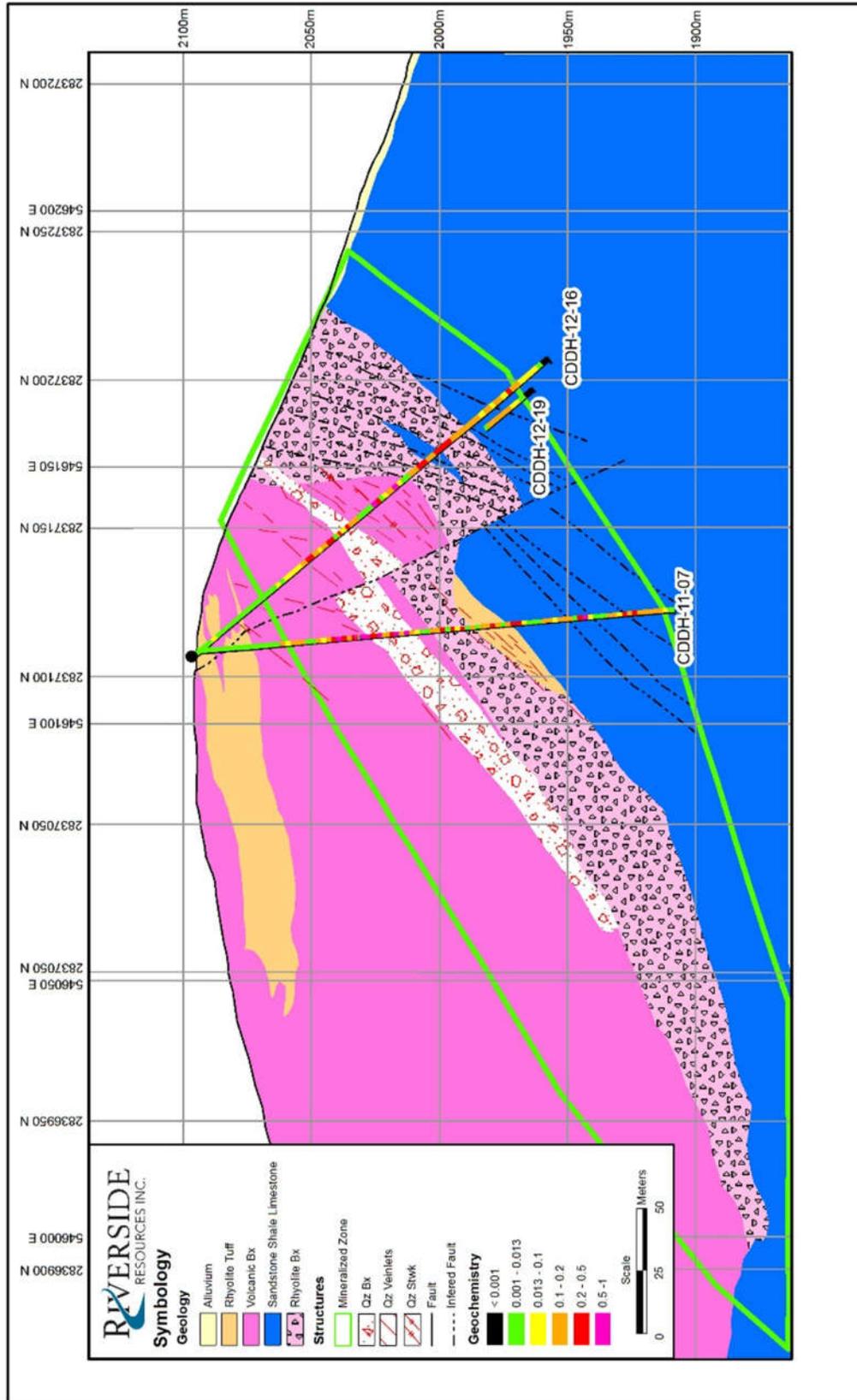
The El Capitan target is situated at a major intersection of northeast-trending and northwest-trending structural lineaments (Starling, 2008). The target area geology consists of an Upper Cretaceous, carbonate-siliciclastic succession which has been intruded by Tertiary diorite, granodiorite, and rhyolite porphyries. Tertiary rhyolite tuffs unconformably cap the Cretaceous marine sedimentary rocks.

According to Daniels (2011) and Magrum (2013), the El Capitan target is a 700 m long by 70 m thick mineralized zone, trending east-west/northwest-southeast, with a shallow dip to the south. It occurs along a geologically unconformable contact formed between a tilted Tertiary volcanoclastic unit and a folded Cretaceous marine sedimentary sequence. The El Capitan target displays hot-spring-style gold mineralization consisting of quartz-calcite-fluorite veins, breccias, stringers, silicification and stockwork veining, associated with a very active volcanic sequence, contemporaneous with several breccia stages and accompanied by moderate to strong silicification, moderate oxidation, and local argillic alteration. Several silica pulses and bladed carbonate minerals are present. These bladed carbonate minerals, commonly pseudo-morphed by quartz, are interpreted to indicate gold deposition from boiling fluids, which is the mechanism that cause the ore fluids to drop their mineralized fluid into available open spaces.

According to Magrum (2013), drilling has defined three distinct, mineralized rock units at El Capitan. The upper part of the mineralized zone consists of porous, volcanic agglomerates cut by narrow quartz veinlets and hydrothermal breccias (averaging 0.2 g/t to 0.5 g/t Au). At the base of the volcanic unit there is a shallow dipping, 10.0 m to 35.0 m wide silicified zone (averaging 0.7 g/t to 1.5 g/t Au), and below this zone there is a sequence of oxidized shales that is also cut by quartz veinlets and hydrothermal breccias (averaging 0.2 g/t to 0.6 g/t Au).

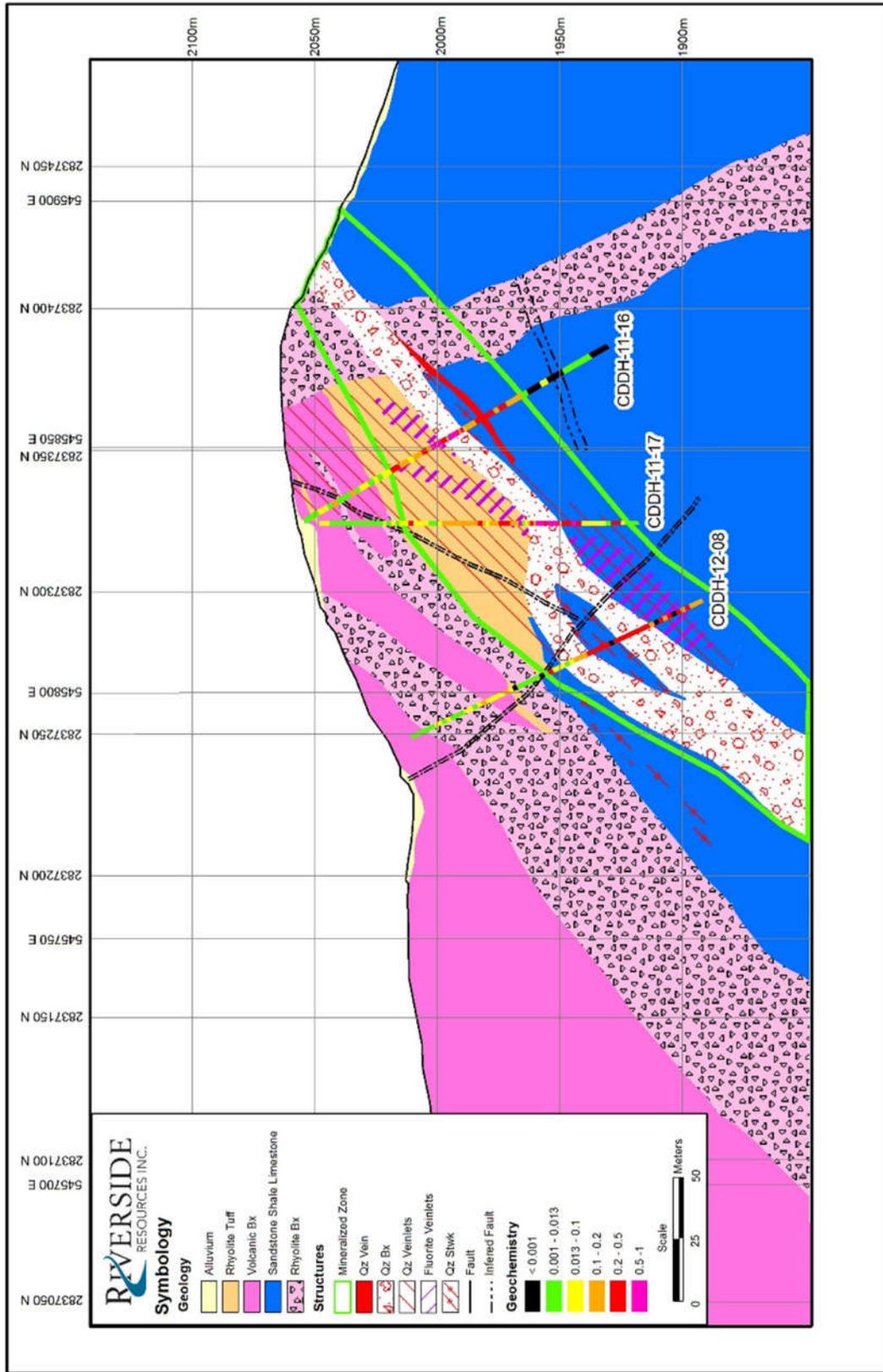
According to Myers et al. (2014), the El Capitan Gold Zone is at least 700 m long and up to 108 m in approximate true thickness, trending north-northwest and dipping to the south at approximately 35° to 45°. Mineralization occurs along an unconformable contact between a tilted Tertiary volcanoclastic unit and a folded Cretaceous Indidura Formation (Daniels, 2011). The El Capitan target displays gold-dominant, epithermal-style mineralization with generally low silver values. It consists of quartz-calcite-fluorite veins, breccias, stringers, silicification, and stockwork veining, within the rhyolitic rocks and in the underlying sediments near the contact, presumably contemporaneous with several breccia stages and accompanied by moderate to strong silicification, moderate oxidation, and local argillic alteration. Quartz-veining often displays colloform banding. Drilling programs have encountered mineralized intervals greater than 70 m thick, including CDDH 11-07, which returned 108.35 m averaging 0.410 g/t, and CDDH 11-17, which returned 88.40 m averaging 0.816 g/t (including 33.50 m averaging 1.687 g/t) as shown in Figure 8 and Figure 9, respectively.

Figure 8: El Capitan Geology Section Showing Drill Holes and Structures-1



Source: Myers et al. (2014)

Figure 9: El Capitan Geology Section Showing Drill Holes and Structures (2)



Source: Myers et al. (2014)

## 7.2 JESUS MARIA VEIN SYSTEM

The Jesus Maria target was originally considered an intermediate sulphidation silver-gold-lead-zinc-copper vein system with an approximate strike length of 2 km. Surface mapping by Riverside Resources Inc. identified quartz-calcite-pyrite veins with barite and chlorite selvages and silver minerals, galena, sphalerite, and minor chalcopyrite of up to 5 metres wide which have been historically mined along more than 600 metres of strike length. Compania Minera Industrias Peñoles reportedly mined the Jesus Maria vein system from 1887 to 1908 and produced grades of 300 g/t to 2,000 g/t Ag, 3% to 12% Pb, and 4% to 10% Zn to a depth of 200 m. The full extent of the historic mine workings is unknown, but mining appears to have been selective and limited to within approximately 100 m of surface.

According to Magrum (2013), the results of the 2013 drill program demonstrated that mineralization in the Jesus Maria mine area is much more extensive than previously recognized. Several parallel zones of previously unrecognized silver mineralization (consisting of low-sulphide content stockwork and breccia zones) were defined in the hanging wall of the main Jesus Maria structure.

According to Myers et al. (2014), the Jesus Maria Silver Zone hosts vein, breccia, and poly-metallic skarn or replacement bodies with elevated values of silver-gold-lead-zinc-copper with an approximate strike length of 1.4 km.

The 2013 and 2014 drill program partially tested a 750 m long portion of the mineralization in the Jesus Maria Silver Zone. Two types of mineralization were intersected in this drilling. One mineralization style is a gold-silver zone, possibly controlled by a north-northeast-trending porphyritic monzonitic dike, or a district-scale, east-northeast-trending fault zone. The other mineralization style hosts gold-silver-zinc-lead and occurs as skarn or replacement-type zones in the carbonate-rich beds of the Indidura Formation. The skarn/replacement zones are up to 30 m wide, true width in drill holes, and have been tested as deep as 160 m from surface. The same zone outcrops at the surface giving a down-dip length of 200 m. This zone is expected to continue at depth. The base and precious metal target types and the gold-silver zone have been minimally tested along strike and remain open to depth and to the east and west. Other carbonate-rich beds occur in this portion of the Indidura Formation and represent very favourable and, currently, untested targets.

## 7.3 SAN RAFAEL AND EL TUBO VEIN SYSTEM

The San Rafael vein system strikes approximately east-west and contains several historical mining sites and multiple semi-parallel and oblique vein sets. The main San Rafael structure was accessed via a production shaft greater than 100 m in depth. The San Rafael vein was also historically mined by Compania Minera Industrias Peñoles, and reportedly produced grades ranging from 300 g/t to 1,000 g/t Ag, but no official records are available to substantiate these values. The fall 2014 drilling program tested the main San Rafael structure, the Escondida vein, the Las Brujas zone, and the minor vein zones between the primary structures. Results of the 2014 drill program are listed in Table 10.

The sedimentary rock package in the San Rafael zone appears to be dominated by siliceous siltstones, and argillaceous limestones appear to be much less abundant than observed in the

Jesus Maria Silver Zone. Calcareous siltstones are noted at San Rafael as indicated by the presence of calc-silicate hornfels, but skarn or carbonate-rich mineralized zones with base-metal sulphides were rare and minor. Pyrite replacements are present in thin zones and veinlets with limited base or precious metal content.

The El Tubo target is one of the exploration targets on the Peñoles Project; it is a gold-bearing vein system located one kilometre east of the village of Peñoles where values of 0.5 g/t Au and elevated values of mercury, arsenic, barium, and antimony are common in surface samples. El Tubo has been interpreted as a high-level expression of a gold-bearing vein system. A 30 m wide alteration body has been mapped and could be drill tested. Assays from Riverside Resources Inc. sampling in 2009 show relatively high gold: silver ratios compared to the silver-base-metal-dominant veins at Jesus Maria and San Rafael; this could possibly indicate a different stage of mineralization in the history of the Peñoles Mining District.

## 7.4 MINERALIZATION

There are three features that control the epithermal mineralization on the Peñoles property. It is unclear which feature is most influential, but it is clear that all three play a part.

First, structurally controlled conduit pathways for hydrothermal fluids mark the vein emplacement in the Jesus Maria area (Daniels 2011; Lambeck 2014; Lambeck 2018).

Second, the Jesus Maria area has carbonate-rich sedimentary rock horizons, which have provided a buffering of the acidic hydrothermal fluids, and show hornfels skarn affinities; this might extend mineralization laterally along bedding planes (Myers et al. 2014).

Lastly, the angular unconformity surface between the sedimentary rocks and the overlying UVS rhyolites at El Capitan, which is a more passive fluid flow conduit, are similar to the mineralization controls identified at La Preciosa silver-gold deposit (Whiting 2008, Whiting 2013) and La Pitarrilla silver-gold deposit (McCrea 2006, Boychuck et al. 2012).

The El Capitan deposit, the Jesus Maria deposit, and the San Rafael-El Tubo prospects of the Peñoles Project are located on the concessions owned by Riverside Resources Inc. (within the boundaries of the concessions held by Minera La Parreña), and they appear to be related to intersections between the northwest-striking and northeast-striking regional structures. These occurrences are also localized along the southern margins of a northeast-oriented magnetic anomaly identified from government airborne surveys.

## 8 DEPOSIT TYPES

The Peñoles Project is an example of an epithermal gold, silver, and base-metals system similar to other major deposits within the Mexican Silver Belt. Epithermal deposits form in the shallow parts of magma-related hydrothermal systems (

Figure 10). They are generally associated with volcanism and intrusions of calc-alkaline magmas, commonly in sub-aerial volcanic arcs. There are two end-member styles of epithermal mineral deposits: low-sulphidation and high-sulphidation, although intermediate-sulphidation has been used to describe many Mexican precious metal deposits.

Mineralization at Peñoles is somewhat difficult to define because it displays several of the following mineralization styles all in very close proximity to each other:

- Hot-spring gold mineralization (El Capitan structure);
- Low sulphidation silver-gold-antimony mineralization (San Rafael-El Tubo and El Refugio vein systems);
- Intermediate sulphidation silver-gold-lead-zinc-copper mineralization (Jesus Maria vein system); and
- Sulphide-bearing (gold-copper-silver-zinc-lead) skarns or mantos associated with Tertiary porphyries (La Purisima).

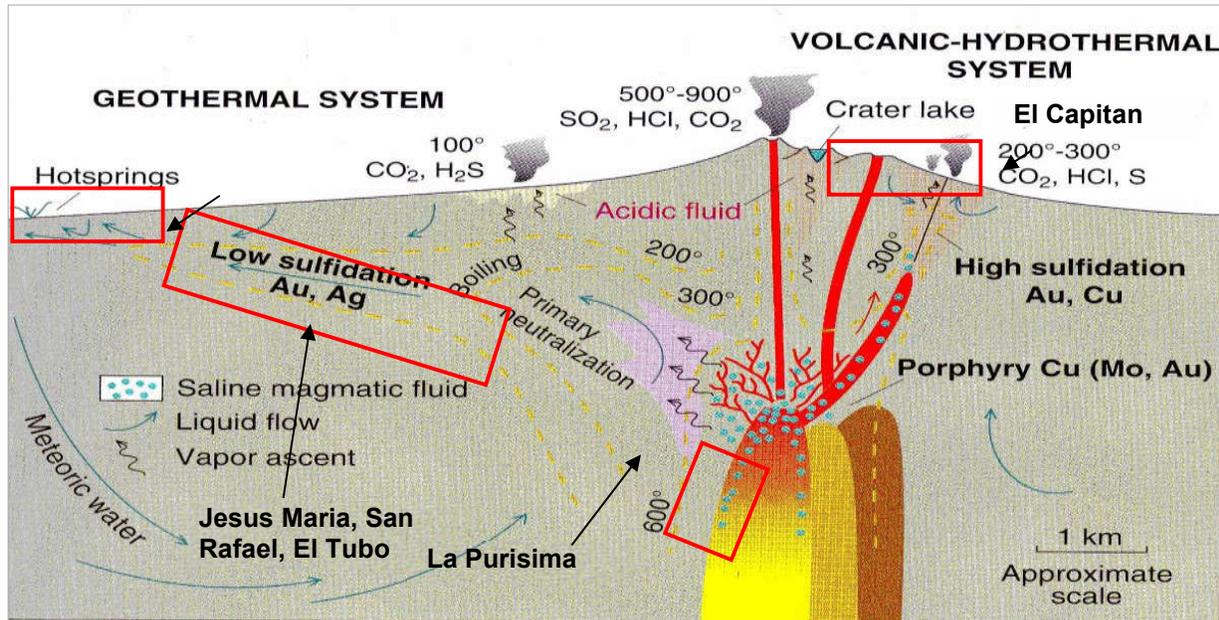
The Castillo deposit, previously named El Cairo (Argonaut Gold), is an example of a recent mine development in a geological environment that is similar to the El Capitan Gold Zone. There is a structural component to the low-grade, bulk-tonnage Castillo deposit, as seen on bench-level blast-hole assay data plots. Castillo is a successful, heap leach operation in Durango State.

The Jesus Maria Silver Zone can be compared to the mineralization styles and geophysical responses of the San Sebastian gold-silver (plus base metals) deposit (Hecla Mining) in Durango State (Redak 2015b).

*“... mineralization in the Saladillo district (San Sebastian) is hosted in Mesozoic sedimentary rocks and is closely associated with Tertiary volcanic and intrusive rocks. Two NW-WNW oriented regional scale structural features pass through the Saladillo district and are known to be important controls to mineralization throughout the Mexican Silver Belt and in the district. A set of NE oriented regional scale faults also traverse the center of the district and the confluence of these deep-seated WNW, NW and NE structures appears to be an important factor for the localization of the mineralizing systems at the Saladillo district.”*

*A set of WNW oriented intermediate-sulphidation epithermal veins occur in the Saladillo Valley, including the Francine, Middle, Professor, and North Vein. These veins are proximal to each other and are hosted in shale of the Cretaceous Caracol Formation. This area is largely covered with soil and bedrock exposure comes primarily from trenching. About six kilometres south of the Francine Vein is a set of NNW oriented veins known as the Pedernalillo vein system, including the Don Sergio, Jessica, Andrea and Antonella veins. These veins are end member low-sulphidation epithermal veins and are also hosted in the Caracol formation sediments with some dioritic intrusive rocks”*

Figure 10: Deposit Model



Modified After Hedenquist, J.W., and Lowenstern, J.B., 1994

## 9 EXPLORATION

Capitan Mining Inc. has not undertaken an exploration program on the Peñoles Project. The exploration undertaken on the Peñoles Project can be found in the history section of this report.

## 10 DRILLING

Capitan Mining Inc. has not undertaken a drill program on the Peñoles Project. The drilling information in this section below has been done by previous operators. According to the excel table provided by Riverside Resources Inc. there are 11,559 metres of drilling in 87 drill holes on the current property configuration. The GPS location of all the drilling in the excel table are found in Table 11. Table 10 highlights select gold reported assays from the reported 87 drill holes.

### 10.1 Drilling: Aurcana and Riverside (2004-2011)

In 2004, Aurcana drilled a total of four diamond drill holes on the Peñoles Project for a total of 866.48 m. Three of the four drill holes targeted the El Capitan Gold Zone. Results of the 2004 drilling at the El Capitan Gold Zone were encouraging in that the thickness of encountered mineralization showed that gold was not just localized to the quartz vein and silicified breccia exposed at surface, but that the mineralization extended into the Cretaceous sediments below the quartz zone and into the Tertiary volcanics above the quartz zone. Collar PE04-01 was approximately 120 m perpendicular to the trend of the exposed quartz zone and drilled towards the exposure with an inclination of -55°. Drill hole PE04-01 encountered 38.6 m of 0.27 g/t Au

mineralization in the tertiary volcanics, 13.93 m of 2.33 g/t Au mineralization in the quartz zone, and 16.12 m of 0.52 g/t Au mineralization in the Cretaceous sediments.

## 10.2 Riverside Drilling (2008)

In 2008, Riverside Resources Inc. drilled five diamond drill holes on the Peñoles Project at the El Capitan target for a total of 967.6 m. Collar CDDH-08-01 was approximately 160 m northwest of collar PE04-01. Table 10 shows the drilling results reported by Aurcana and Riverside Resources Inc. Drill hole locations are shown in Figure 11.

## 10.3 Sierra Madre Drilling (2011)

In 2011, Sierra Madre drilled 19 diamond drill holes on the Peñoles property. A total of 2,210.10 m in 18 diamond drill holes was completed at the El Capitan target. A total of 289.75 m in one diamond drill hole was completed at the Jesus Maria target. Drilling results are summarized in Table 10. Drill hole locations are shown in Figure 11. Results of the 2011 drilling program at El Capitan were encouraging: the encountered grade and thickness of mineralization showed considerable improvement over preliminary drilling results reported by Riverside Resources Inc. in 2008. The strike length of the “Main Zone” was extended to 700 m and several of the drill holes encountered mineralized intervals greater than 70 m thick with potentially economic grades, including: CDDH 11-07, which returned 108.35 m averaging 0.410 g/t, and CDDH 11-17, which returned 88.40 m averaging 0.816 g/t (including 33.50 m averaging 1.687 g/t). The quoted widths are *drilled* widths and these are believed to represent approximate true widths. Sections with the referenced drill holes at El Capitan are shown in Figure 8 and Figure 9, respectively.

## 10.4 Sierra Madre Drilling (2012)

In 2012, Sierra Madre drilled a total of 2,890.40 m in 22 diamond drill holes at the El Capitan target. Five of the 22 drill holes completed in 2012 were collared near the western end of the El Capitan Gold Zone, but poor ground conditions were encountered and these drill holes were abandoned or not completed to target depths. The remaining drill holes were reported in sequence and were re-numbered (field number and press release number). Drilling results are summarized in Table 10. Collar locations are shown in Figure 11.

## 10.5 Sierra Madre Drilling (2013)

In March 2013, Sierra Madre completed trenching and eight drill holes (887.3 m) in the Jesus Maria mine area. Significant silver mineralization was reportedly intersected in all trenches and drill holes. Reportedly, trench 2013-11 returned 15.4 m averaging 420.8 g/t Ag, including a 2.0 m interval that assayed 2,152 g/t Ag. JM DDH 13-06 returned 11.85 m averaging 320.3 g/t Ag, including a 0.9 m interval that assayed 3,409.1 g/t Ag. JM DDH 13-07 intersected a 2.1 m interval that returned 279.5 g/t Ag and a 4.0 m interval that returned 532.9 g/t Ag. The most westerly hole of the program, JM DDH 13-09, was drilled to intersect the western extension of the mineralized zone below the historic mine workings, and it intersected several significant mineralized intervals. Drilling results are summarized in **Error! Reference source not found.** Collar locations are shown in Figure 11.

## 10.6 Morro Bay Drilling (2014)

In 2014, Morro Bay drilled 21 diamond drill holes on the Jesus Maria Silver Zone totalling 1,937 m. Drilling results are summarized in Table 10. A total of 205.6 m in two diamond drill holes were also completed at the El Capitan mineralized zone; however, the holes encountered poor ground conditions and were abandoned before reaching target depth (see Table 10). Collar locations are shown in Figure 11.

The Jesus Maria prospect was initially considered an underground vein-type target; however, drilling carried out in 2013 and 2014 encountered 20 m to 80 m wide intervals of predominantly silver-rich mineralization (with accessory gold and base-metal values) in the hanging wall of the zone that was mined historically. Published drilling results are shown in Table 10. Based on the widths of mineralization, Jesus Maria might be amenable to open-pit extraction methods. At their eastern limits, the deposits are separated by approximately 300 m, and the mineralized zones are interpreted as merging together to the west. Additional drilling between the western limit of the Jesus Maria deposit and the El Capitan deposit could connect the two zones and delineate additional mineralization. Significant intersections at the San Rafael prospect are shown in Table 10.

Figure 11 shows a plan view of the Jesus Maria drill hole locations, the El Capitan drill hole locations, and the Jesus Maria trenches and underground workings, respectively. Table 11 provides a complete list of all known drill hole collars.

Figure 11: Drill Hole Locations

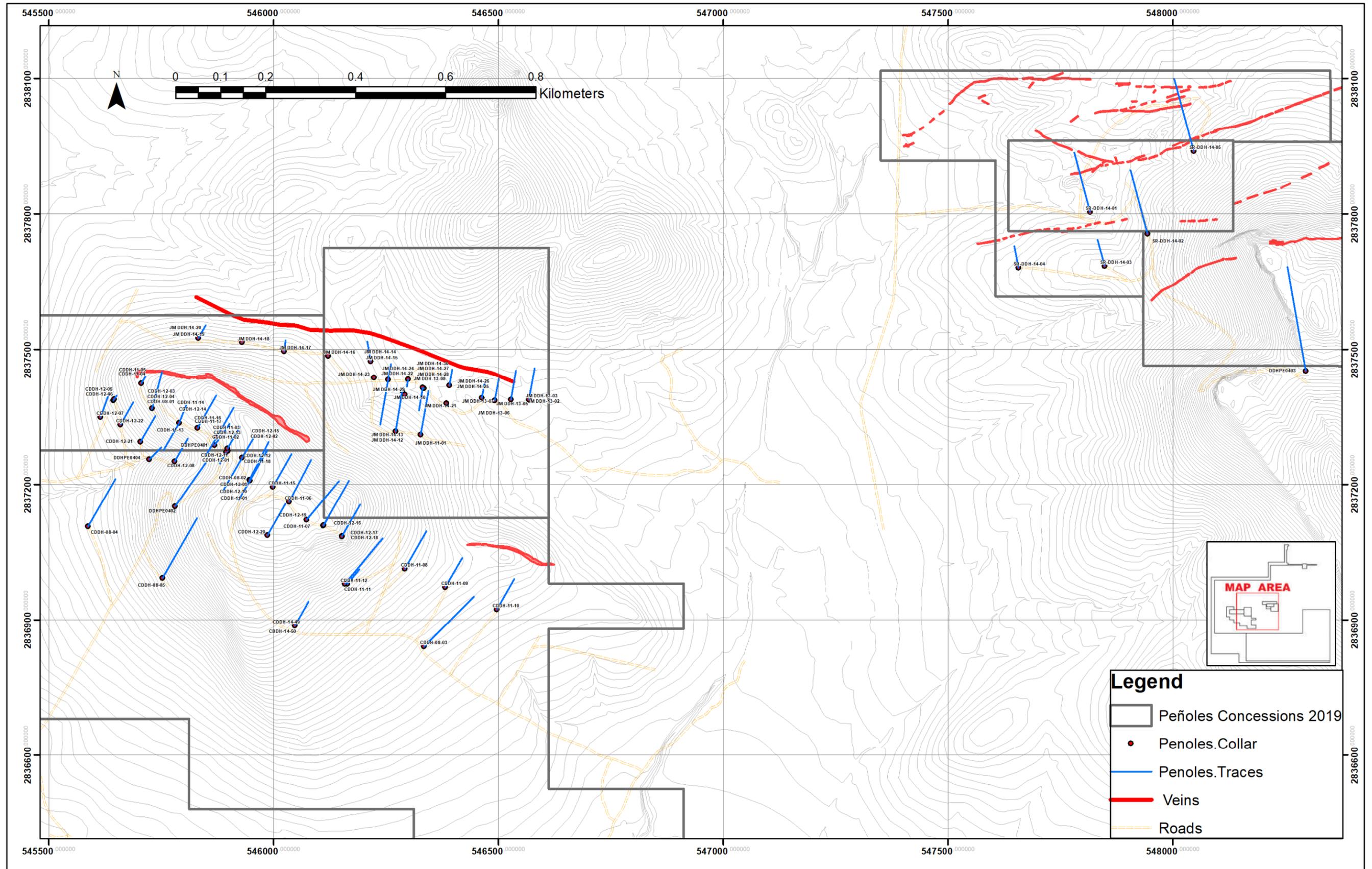
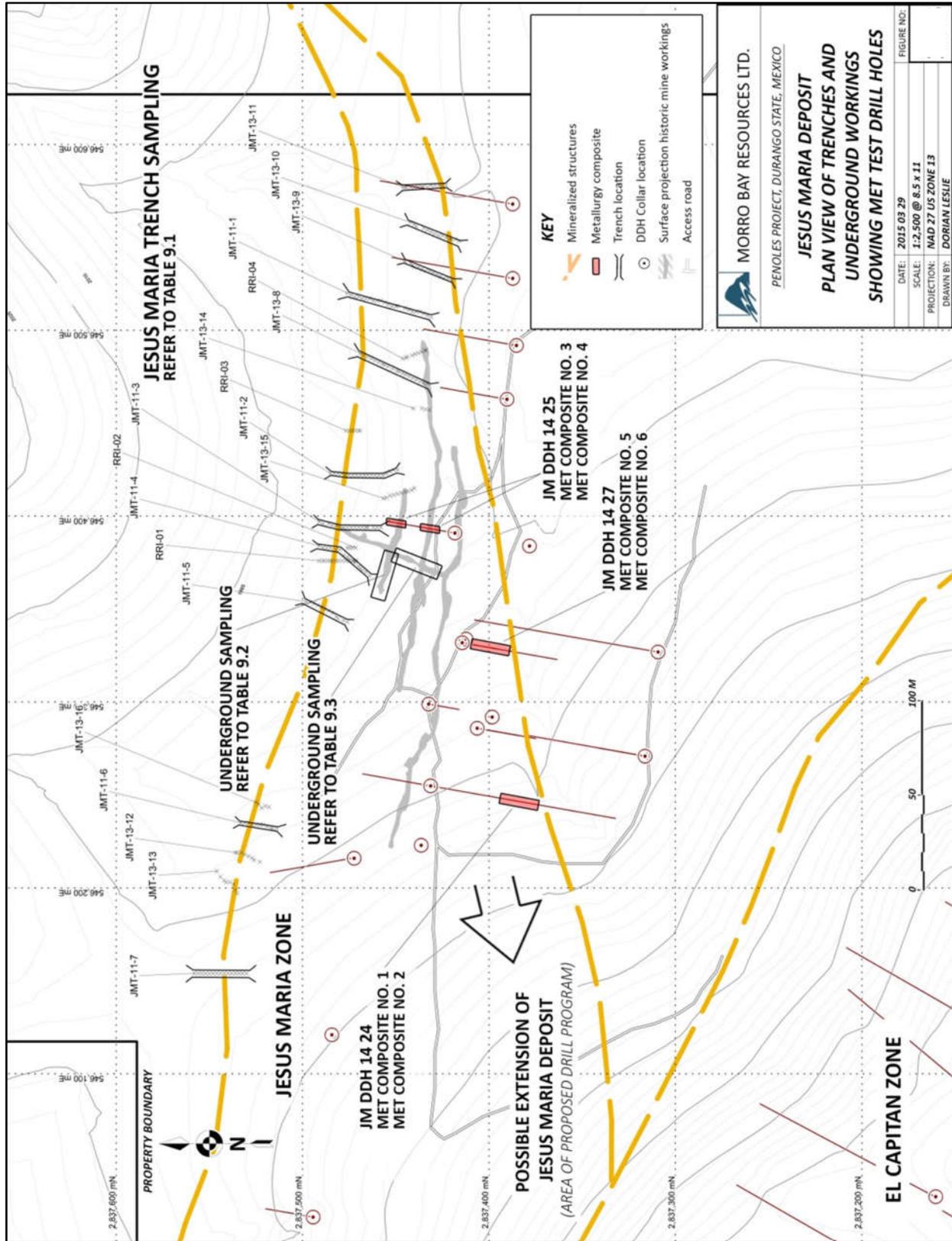


Figure 12: Jesus Maria Deposit Trenches and Underground Workings (plan view)



After Whiting et al. (2015)

Table 10: Significant Gold Drill Intersections

Drill Hole	From (m)	To (m)	Interval (m)	Au g/t	Drill Hole	From (m)	To (m)	Interval (m)	Au g/t	Drill Hole	From (m)	To (m)	Interval (m)	Au g/t	Drill Hole	From (m)	To (m)	Interval (m)	Au g/t
<b>(2004-2009) Drilling</b>					<b>(2011) Drilling Cont.</b>					<b>(2012) Drilling Cont.</b>					<b>(2014) Drilling Cont.</b>				
PE04-01	31.85	93.27	61.42	0.81	CDDH-11-18	64.05	97.90	33.85	1.40	CDDH 12 – 21	94.6	117.00	22.40	0.67	JM_DDH_14_22	28.9	59.55	30.65	0.18
Including	76.2	80.77	4.57	6.40	includes	82.35	97.90	15.55	2.10	CDDH 12 – 22	NSM**				Including	44.9	47.15	2.25	0.13
PE04-02	125	190.50	65.50	0.17	<b>(2012) Drilling</b>					<b>(2013) Drilling</b>					Including	54.15	57.10	2.95	0.94
PE04-04	78	147.52	69.52	0.31	CDDH 12 – 01	12.65	123.10	110.45	0.37	JM_DDH_13_02	79	91.25	12.25	0.16	And	70.45	93.05	22.60	0.35
CDDH-08-01	33.75	35.20	1.45	2.51	Including	32.7	123.10	90.40	0.43	JM_DDH_13_03	153	172.40	13.90	0.04	JM_DDH_14_23	25.3	56.50	31.20	0.11
And	47	76.18	29.18	0.53	Including	95.1	116.00	20.90	1.01	Including	164.6	172.40	7.85	0.04	JM_DDH_14_24	52.65	123.45	70.80	0.37
Including	61.9	71.70	9.80	1.07	CDDH 12 – 02	13.55	155.10	141.55	0.31	Including	168.4	170.15	1.75	0.01	Including	67.8	90.50	22.70	0.63
CDDH-08-02	89.94	122.25	32.31	0.66	Including	120.55	141.35	20.80	0.73	JM_DDH_13_04	29.65	30.60	0.95	0.73	Including	101.9	107.35	5.45	1.47
Including	102.25	105.30	3.05	1.84	CDDH 12 – 03	APGC*				And	49.2	51.10	1.90	0.20	JM_DDH_14_25	20.1	35.95	15.85	0.22
Including	102.25	11.80	9.55	1.11	CDDH 12 – 04	APGC*				And	71.9	79.00	7.10	0.11	And	52.2	72.05	19.85	0.35
CDDH 08-04	182.65	189.50	6.85	0.27	CDDH 12 – 05	APGC*				JM_DDH_13_05	26.7	30.95	4.25	0.14	JM_DDH_14_26	11	17.25	6.25	0.18
<b>(2011) Drilling</b>					CDDH 12 – 06	APGC*				And	62.6	68.30	5.70	0.37	And	33.65	50.20	16.55	0.45
CDDH-11-01	90.35	122.50	32.15	0.48	CDDH 12 – 07	NSM**				JM_DDH_13_06	20.35	30.80	10.45	0.14	Including	33.65	41.00	7.35	0.82
Including	105.2	108.90	3.70	1.04	CDDH 12 – 08	6.8	138.10	131.30	0.35	And	68.45	80.30	11.85	0.17	JM_DDH_14_27	1.95	39.00	37.05	0.40
CDDH-11-02	45.45	96.20	50.75	0.51	Including	68.7	134.20	65.50	0.61	Including	79.4	80.30	0.90	0.36	Including	15.95	25.45	9.50	0.79
Including	62.6	77.00	14.40	1.08	Including	86.2	126.20	40.00	0.78	JM_DDH_13_07	100.7	102.80	2.10	0.21	Including	29.95	37.10	7.15	0.48
Including	71	75.60	4.60	2.41	CDDH 12 – 09	107.8	152.00	44.20	0.67	And	114.7	118.70	4.00	0.16	JM_DDH_14_28	14.4	38.70	24.30	0.33
CDDH-11-03	35.35	126.00	90.65	0.60	CDDH 12 – 10	124.1	190.85	66.75	0.32	JM_DDH_13_08	22.3	28.70	6.00	0.39	Including	32.1	36.55	4.45	0.30
Including	78.75	116.25	37.50	1.03	Including	128.1	147.30	19.20	0.59	And	42.3	43.40	1.10	0.05	JM_DDH_14_29	7.35	28.45	21.10	0.13
Including	91.5	97.90	6.40	1.90	CDDH 12 – 11	68.75	127.05	58.30	0.36	And	62.45	68.65	6.20	0.06	And	37.3	43.75	6.45	0.21
CDDH-11-04	APGC*				Including	88	98.80	10.80	0.56	And	70.2	79.70	9.50	0.79	JM_DDH_14_30	16.8	56.90	40.10	0.19
CDDH-11-05	2.3	68.80	66.50	0.20	Including	107.05	127.05	20.00	0.37	JM_DDH_13_09	10.25	19.60	9.35	0.16	Including	25.05	28.75	4.70	0.39
Including	14.8	31.75	16.95	0.45	CDDH 12 – 12	110.2	190.69	80.49	0.38	Including	10.25	12.45	2.20	0.44	Including	41.5	45.25	3.75	0.26
CDDH-11-06	28.35	79.85	51.50	0.14	Including	117.5	138.83	21.33	0.55	And	40.63	60.15	19.52	0.38	CDDH_14 – 49	APGC*			
CDDH-11-06	110.75	155.50	44.75	0.18	Including	142.83	154.83	12.00	0.60	And	63.9	69.80	5.90	0.25	CDDH_14 – 50	APGC*			
CDDH-11-07	57.2	165.55	108.35	0.41	CDDH 12 – 13	41.55	165.85	124.30	0.61	And	71.9	88.60	16.70	0.49	<b>(2014) San Rafael Drilling</b>				
Including	57.2	71.15	13.95	0.62	Including	117.15	165.85	48.70	1.01	<b>(2014) Drilling</b>					SR_DDH_14_01	66.95	69.25	2.30	0.09
Including	90.65	103.70	13.05	0.79	Including	131.99	146.85	14.86	1.56	JM_DDH_14_10	18.9	59.50	40.60	0.54	And	190.32	193.40	3.08	1.19
CDDH-11-11	APGC*				CDDH 12 – 14	18.2	51.90	33.70	0.41	Including	27.7	31.95	4.25	1.20	And	193.4	205.30	11.90	0.06
CDDH-11-12	13.28	74.20	60.92	0.15	Including	40.2	51.90	11.70	0.98	Including	40.95	43.25	2.30	1.29	And	214.3	223.70	9.40	0.06
CDDH-11-12	170.15	194.40	24.25	0.24	And	111.9	179.35	67.45	0.58	Including	50.3	57.00	6.70	1.08	SR_DDH_14_02	NSM**			
CDDH-11-13	63.15	92.05	28.90	0.47	Including	133.9	171.90	38.00	0.75	JM_DDH_14_11	81.3	93.30	12.00	0.28	SR_DDH_14_03	94.9	96.10	1.20	0.04
Including	64.85	85.70	20.85	0.50	CDDH 12 – 15	54.05	96.87	42.82	0.41	JM_DDH_14_12	NSM**				SR_DDH_14_04	55.7	57.70	2.00	0.03
Including	64.85	68.10	3.25	0.92	Including	76.87	94.87	18.00	0.60	JM_DDH_14_13	100.9	113.30	12.40	0.23	SR_DDH_14_05	123.3	126.70	3.40	0.10
CDDH-11-14	77.7	114.80	37.10	0.69	Including	76.87	84.87	8.00	0.82	And	146.30	157.80	11.50	0.28	And	146.8	155.65	8.90	0.63
Including	90.35	103.00	12.65	1.39	CDDH 12 – 16	32.97	187.40	154.43	0.45	JM_DDH_14_14	41	41.58.6	17.65	0.12	And	174.4	179.00	4.60	0.33
Including	94.55	99.60	5.05	2.09	Including	54.97	153.65	98.68	0.57	JM_DDH_14_15	29	36.05	7.05	0.23					
CDDH-11-15	46.55	74.15	27.60	0.20	Including	54.97	83.60	28.63	1.12	JM_DDH_14_16	36	38.40	2.35	0.19					
CDDH-11-15	91.8	131.15	39.35	0.22	CDDH 12 – 17	0	161.80	161.80	0.33	JM_DDH_14_17	74.5	76.80	2.30	0.15					
CDDH-11-16	42.7	104.00	61.30	0.68	Including	112.69	142.00	29.31	0.74	JM_DDH_14_18	56.3	60.80	4.50	0.06					
Including	61.7	76.10	14.40	1.52	CDDH 12 – 18	0.95	131.15	130.20	0.56	JM_DDH_14_19	NSM**								
Including	69.6	74.00	4.40	2.43	Including	39.15	100.30	61.15	0.92	JM_DDH_14_20	NSM**								
CDDH-11-17	43.4	131.80	88.40	0.82	CDDH 12 – 19	64.4	108.35	43.95	0.45	JM_DDH_14_21	37.95	39.85	1.90	0.25					
Including	80.5	114.00	33.50	1.69	And	152.35	164.35	12.00	0.38	And	113.2	129.35	16.15	0.10					
Including	95.95	104.00	8.05	2.41	CDDH 12 – 20	139.65	161.00	21.35	0.84										
Including	99.85	104.00	4.15	3.10															

Table 11: Complete Historical Drill Hole Collars Listing

_Hole_No	Nad27E	Nad27N	Elev.	Depth (m)	Dip	Az		_Hole_No	Nad27E	Nad27N	Elev.	Depth (m)	Dip	Az
DDHPE0401	545869	2837287	2053.9	99.4	-55	35		CDDH-12-18	546152	2837084	2090.9	131.2	-90	30
DDHPE0402	545781	2837151	2028.6	212.4	-55	35		CDDH-12-19	546073	2837121	2097.2	175.2	-50	40
DDHPE0403	548295	2837452	2121.4	407.2	-55	350		CDDH-12-20	545986	2837087	2096.8	161	-60	30
DDHPE0404	545723	2837255	2005	147.5	-75	45		CDDH-12-21	545704	2837294	2008.4	133.4	-60	30
CDDH-08-01	545730	2837368	2029.3	169.1	-60	15		CDDH-12-22	545659	2837332	2002.4	135.8	-65	30
CDDH-08-02	545946	2837210	2071.8	146.4	-50	27		CDDH-14-49	546047	2836887	2047.7	96.5	-50	30
CDDH-08-03	546334	2836841	1997	222.1	-45	45		CDDH-14-50	546047	2836887	2047.7	109.1	-70	30
CDDH-08-04	545587	2837106	1978.3	212.9	-55	30		JM_DDH_11_01	546327	2837310	1999.9	289.8	-70	10
CDDH-08-05	545753	2836992	2005.3	217	-45	30		JM_DDH_13_02	546568	2837388	1980.2	101	-45	10
CDDH-11-01	545947	2837208	2072.2	122.5	-50	30		JM_DDH_13_03	546568	2837388	1980.2	227.8	-89	10
CDDH-11-02	545873	2837304	2058.3	118.5	-50	30		JM_DDH_13_04	546528	2837388	1978.6	92	-45	10
CDDH-11-03	545873	2837304	2058.3	137.3	-90	30		JM_DDH_13_05	546492	2837386	1977.3	70.5	-45	10
CDDH-11-04	545706	2837424	2019.1	5.5	-50	30		JM_DDH_13_06	546463	2837391	1978.6	84	-65	10
CDDH-11-05	545706	2837424	2019.1	70.2	-75	30		JM_DDH_13_07	546463	2837391	1978.6	120.7	-89	10
CDDH-11-06	546034	2837161	2093.1	164.9	-50	28		JM_DDH_13_08	546334	2837413	1986.2	92.5	-90	10
CDDH-11-07	546110	2837108	2095.1	179.9	-50	30		JM_DDH_13_09	546299	2837433	1988.8	99	-80	190
CDDH-11-08	546292	2837013	2030.8	149.4	-50	30		JM_DDH_14_10	546292	2837399	1992.3	127.7	-90	10
CDDH-11-09	546382	2836972	2009.4	115.9	-50	30		JM_DDH_14_11	546223	2837437	2000.3	136.5	-90	10
CDDH-11-10	546496	2836923	1991.1	122	-50	30		JM_DDH_14_12	546271	2837317	2005.3	36.5	-50	10
CDDH-11-11	546164	2836979	2053.4	66	-50	40		JM_DDH_14_13	546271	2837317	2005.3	185.4	-70	10
CDDH-11-12	546158	2836979	2054.9	205.4	-50	40		JM_DDH_14_14	546216	2837473	1998.2	81.9	-90	350
CDDH-11-13	545790	2837336	2045.7	100.7	-60	22		JM_DDH_14_15	546216	2837473	1998.2	70	-50	350
CDDH-11-14	545790	2837336	2045.7	115.9	-90	22		JM_DDH_14_16	546121	2837485	2008.4	75.6	-90	10
CDDH-11-15	545998	2837194	2084.8	131.2	-50	30		JM_DDH_14_17	546023	2837495	2012.8	144.3	-80	10
CDDH-11-16	545831	2837325	2055.3	165.7	-60	30		JM_DDH_14_18	545930	2837515	2007.5	70.6	-90	10
CDDH-11-17	545831	2837325	2055.3	137.3	-90	30		JM_DDH_14_19	545833	2837525	2006.6	75.5	-85	30
CDDH-11-18	545930	2837259	2066.7	112.8	-60	30		JM_DDH_14_20	545833	2837525	2006.6	65.8	-60	30
CDDH-12-01	545898	2837274	2058.8	123.1	-90	30		JM_DDH_14_21	546384	2837379	1982.7	145.5	-90	10
CDDH-12-02	545895	2837271	2057.7	164.3	-80	210		JM_DDH_14_22	546255	2837432	1995.3	106.3	-90	10
CDDH-12-03	545730	2837368	2029.3	7.2	-75	210		JM_DDH_14_23	546255	2837432	1995.3	56.5	-50	10
CDDH-12-04	545730	2837368	2029.3	38.5	-90	30		JM_DDH_14_24	546255	2837432	1995.3	157.6	-50	190
CDDH-12-05	545644	2837386	2000.9	14.1	-75	30		JM_DDH_14_25	546391	2837419	1982.3	85	-90	10
CDDH-12-06	545646	2837389	2001.6	18.8	-60	30		JM_DDH_14_26	546391	2837419	1982.3	56.6	-50	10
CDDH-12-07	545615	2837349	1992.8	108.6	-60	20		JM_DDH_14_27	546332	2837415	1986.3	81.3	-50	190
CDDH-12-08	545780	2837251	2016.5	138.1	-65	30		JM_DDH_14_28	546332	2837415	1986.3	56.7	-70	190
CDDH-12-09	545947	2837208	2072.2	175.8	-90	210		JM_DDH_14_29	546286	2837407	1992.5	50.6	-50	190
CDDH-12-10	545947	2837208	2072.2	190.8	-75	210		JM_DDH_14_30	546286	2837407	1992.5	69.3	-70	190
CDDH-12-11	545930	2837259	2066.7	138.8	-90	30		SR-DDH-14-01	547816	2837804	1986	273.6	-60	345
CDDH-12-12	545930	2837259	2066.7	201.1	-65	210		SR-DDH-14-02	547943	2837756	2009	255.1	-55	345
CDDH-12-13	545873	2837304	2058.3	173.7	-75	210		SR-DDH-14-03	547848	2837684	2010	123.5	-60	345
CDDH-12-14	545790	2837336	2045.7	200	-70	210		SR-DDH-14-04	547656	2837680	2008	78.1	-50	350
CDDH-12-15	545897	2837279	2059.1	111.8	-60	30		SR-DDH-14-05	548046	2837939	2018	332	-60	345
CDDH-12-16	546111	2837109	2094.9	187.4	-85	30		ST-DDH-14-01	543790	2839902	1985	232.9	-55	65
CDDH-12-17	546152	2837085	2091	161.8	-60	30		<b>Total Meters Drilled</b>				<b>11559</b>		

Source: Riverside Resources Inc., Excel table December 27, 2019

## 11 SAMPLING PREPARATION, ANALYSES, AND SECURITY

Capitan Mining Inc. has not undertaken any ground exploration programs resulting in the collection of samples on the Peñoles Project. Therefore, the author is unable to discuss adequacy of sample preparation, security, and the analytical procedures used by Capitan Mining Inc. on the Peñoles Project.

### Sierra Madre during the 2011-13

A total of 2,929 drill core samples were submitted for analysis by Sierra Madre during the 2011, 2012, and 2013 field programs, and a total of 1,503 drill core samples were submitted by Morro Bay in 2014. All samples from the Peñoles Project were shipped to and processed at the Inspectorate Laboratories (Inspectorate) in Durango.

The core from all drilling campaigns on the Peñoles Project was transported by road from the drill site to a core-logging facility at the Morro Bay Peñoles compound where it was logged and marked for sampling. All holes received a preliminary log followed by a more detailed logging and labelling procedure for sampling purposes. Samples were designated within lithologically uniform intervals as determined by the geologists, with attention to varying mineralogy and textures. The geologist drew a cutting line down the core with cross-lines marking out sample intervals; the intent was to minimize sample bias and not cross any contacts. Sample lengths were generally one metre, but some were as short as 30 cm and as long as 2.5 m. In most cases, barren samples were collected to shoulder both ends of the mineralized intersection. Because of the fairly competent nature of the core recovered, the sampled material sent away to be assayed is, for the most part, an accurate reflection of one half of the core for the El Capitan mineralization. For sampling purposes, the core was sawn lengthwise using diamond-blade saws. One half of the core was sent to a laboratory for analysis, and the other half was retained. Core samples were tracked by three-part ticket books. One tag went with the sample for assay, a second tag was stapled into the core box at the beginning of the sample interval, and the last tag was kept with the geologist's records. Core trays were marked with felt marker.

The plastic bags were tied closed, and instructions for the laboratory were enclosed. The plastic bags were sealed in larger rice bags. These bags of samples were either delivered to or picked up by Inspectorate and taken to the Inspectorate Lab in Durango, Mexico. All sample preparation and analytical work was done by Inspectorate. Inspectorate Laboratories is accredited to the ISO 17025 Standard.

All samples were prepared (Sample Prep) by crushing to >80% passing -10 mesh, split approximately 250 g and pulverised to >90% passing -150 mesh. The content of gold and silver were determined by procedure 2-FA-08/2-FA-10, involving FA/AAS and FA/GRAV on over-limit samples (>2,000 ppb Au and >200 ppm Ag). Other elements were determined by ICP-AES.

Gold and silver values were determined by assay with an Atomic Absorption ("AA") finish and, in the case where gold assays were returned >2,000 ppb or silver assays were returned >200 ppm in the initial FA/AA result, a gravimetric duplicate finish was applied. Other elements were determined by ICP-AES. A

30-element, inductively coupled plasma (“ICP”) package was run on all drill core and field samples. Inspectorate has routine quality control procedures which ensure that every batch of 40 prepared samples includes three sample repeats, one in-house standard, and/or one commercial standard. Inspectorate is independent from both Sierra Madre and Morro Bay. Sierra Madre and Morro Bay used standard QA/QC procedures, when inserting standards and blanks, for all drilling programs completed on the property.

Quality control procedures used by Morro Bay, and its predecessor Sierra Madre, to monitor El Capitan and Jesus Maria zone drilling consisted of inserting blank and SRM control samples at a frequency of once for every 10 samples. These two drilling programs, from 2011 to 2013, represent the bulk of the diamond drilling on the Peñoles Project (Myers et al., 2014).

The 2014 drilling program was also under the direction of Morro Bay, with the exception of five drill holes in the San Rafael zone (outside of the current resource area). This program followed the same quality control protocols.

Overall, the drilling programs appear to have been completed to industry standards and QA/QC procedures were adequate for purposes of resource estimation. No significant operational or logistical problems were identified during the course of the site visits.

An extensive examination of the in-laboratory duplicate testing and values for control standards and blanks was conducted by Magrum (2013). The report, which will not be reproduced herein, has been examined. It was based on 59 coarse reject duplicates, 85 pulp duplicates, and 220 standard reference material (“SRM”) control samples. The Authors concur with the conclusion that the duplicate analyses correspond reasonably well with the original analyses.

## **12 DATA VERIFICATION**

### **12.1.1 2015 Verification Program**

Capitan Mining Inc. made available data for the Peñoles Project to the independent Qualified Persons (QPs), and provided access to all of the on-site core storage areas with no restrictions.

On December 22, 2019 the author Derrick Strickland, undertook a site visit with Alberto J. Orozco, President and Chief Executive Officer of Capitan Mining Inc. Mr. Strickland inspected the core storage facilities at the project site office, examined selected drill core from the El Capitan and Jesus Maria target areas, and visited site. Mr. Strickland collected 10 select grab core samples from select core stored at the project site office. The purpose of the site visit was to verify that no new work has been undertaken on the property since 2015. Mr. Strickland is a Qualified Person as defined by National Instrument 43-101 Standards of Disclosure for Mineral Projects.

Table 12: Author collected Assays

Author Sample No.	Historical Sample No.	Drill No.	From (m)	To (m)	Au ppm	Ag ppm	Au ppm	Ag ppm
P19-01	996	CDDH-12-17	105.3	107.30	0.11	-0.1	0.076	<2
P19-02	20077	CDDH-11-03	91.50	93.00	2.31	34.7	1.259	65
P19-03	20078	CDDH-11-03	93.00	94.25	2.18	15.9	3.124	92
P19-04	10897	JM_DDH_14_27	15.95	18.40	0.16	97.5	0.043	14
P19-05	10898	JM_DDH_14_27	18.40	20.65	2.14	337.9	1.688	605
P19-06	10901	JM_DDH_14_27	23.10	25.45	0.38	117.6	0.489	215
P19-07	10736	JM_DDH_14_24	78.95	81.50	0.77	550.9	0.688	1978
P19-08	10737	JM_DDH_14_24	81.50	83.85	1.78	1708.8	0.112	268
P19-09	10738	JM_DDH_14_24	83.85	86.10	1.21	731.9	1.786	181
P19-10	597	CDDH-12-13	109.15	111.15	1.78	140.1	0.177	47

The data appears congruent between the author collected samples above and the samples historically collected and analyzed.

The author dropped of the 10 rock samples personally to Bureau Veritas in Durango Mexico, where the samples underwent. FA450 10 50g Lead Collection Fire Assay Fusion - AAS Finish for Gold, MA404 10 4 Acid Digest AAS Finish Vancouver. Bureau Veritas is an accredited laboratory and is independent of Capitan Mining Inc. and Riverside Resources Inc.

On May 8, 2014, a site visit was carried out by Robert Sim, in the company of James Thom (contract geologist employed by Morro Bay) and Howard Davies and Lex Lambeck (contract geologists employed by Riverside Resources Inc.). Sim inspected the core logging and core storage facilities at the project site office, examined drill core from the El Capitan and Jesus Maria target areas, reviewed plans and sections of the historic and recent drilling completed at El Capitan and Jesus Maria, and reviewed the QA/QC procedures implemented by Sierra Madre and Morro Bay for the drill programs completed in 2011, 2012, 2013, and spring 2014. Sim also visited the site on June 12, 2012 during which he observed on-site drilling activities on the El Capitan deposit. Independent analyses of two drill core samples collected during this site visit returned gold grades similar to values.

A suite of independent samples were collected and analyzed and these grades are similar to the grades contained in the project database. The results of these data validation checks indicate that the database is sound and sufficiently reliable to support the estimation of mineral resources.

## 13 MINERAL PROCESSING AND METALLURGICAL TESTING

### 13.1 JESUS MARIA

In 2015 Morro Bay Resources Ltd. carried out metallurgical test work program was carried out on samples from the Jesus Maria Silver Zone of the Peñoles Project in Mexico, and the Bureau Veritas Commodities Canada Ltd. (Metallurgical Division) produced the following report “Preliminary Metallurgical Testing to Recover Gold and Silver on Samples from the Jesus Maria Zone”, Peñoles Project, Mexico – March 2015, which is summarized in this section from Shi, 2015. It is unknown to if these samples are represented of the Peñoles Project

#### 13.1.1 Introduction

A series of six composites were tested to explore the optimum method(s) to economically recover gold and silver from the ore using three different process routes.

Testing included the following mineral processing circuits:

- Gravity concentration;
- Rougher-scavenger flotation; and
- Whole-ore cyanidation.

All testing was performed at the nominal grind size of P80=75 µm for comparative purposes.

#### 13.1.2 Samples and Head Assays

Samples were collected from mineralized intervals for three drill holes from the 2014 program and composited to provide six bulk samples for metallurgical testing. The specific intervals and head grades are shown in Table 13.

Table 13: Composite Details and Head Assays

	Unit	Composite					
		1	2	3	4	5	6
Drill Hole Interval (m)		DDH-14-24 67.8-79.0	DDH-14-24 79.0-90.5	DDH-14-25 20.1-36.0	DDH-14-25 56.8-67.8	DDH-14-27 13.7-25.5	DDH-14-27 25.5-37.1
Au	g/t	0.28	0.84	0.23	0.30	0.59	0.38
Ag	ppm	141	642	96	85	196	133
Cu	ppm	171	958	144	1923	189	131
Pb	ppm	570	1140	244	13760	1668	1884
Zn	ppm	1248	1730	517	19414	1588	1461
S(tot)	%	0.68	0.94	0.69	3.79	0.35	0.22
Mn	ppm	16809	19141	8253	1115	21317	36763
As	ppm	2768	5903	2031	17272	3881	3422
Sb	ppm	145.0	650.5	82.4	355.8	274.7	188.0
Bi	ppm	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SG	g/cm <sup>3</sup>	2.64	2.59	2.60	2.80	2.60	2.73

Source: Shi, 2015.

### 13.1.3 Gravity Separation Testing

Gravity concentration was performed in two stages on the six composites at the nominal grind of P80=75 µm. A single-pass rougher gravity concentration was conducted in a 3-in. laboratory Knelson® centrifugal concentrator (Model KC-MD3) equipped with a 3-in. diameter bowl adjusted to a 120G gradient and using a water backpressure of 6.9 kPa (1 psi). The samples were each ground to target sizes in a laboratory mill at 65% solids. The feed was then re-pulped to a pulp density of about 20% solids and subjected to a single pass through the concentrator. The Knelson® gravity concentrate was washed out of the bowl and hand-panned to simulate a gravity upgrading circuit as well. The entire gravity cleaner concentrate was fire-assayed for gold and silver to extinction. Splits from the gravity cleaner tails and gravity tails were also analysed for gold and silver for metallurgical balance.

There appears to be very little coarse, free gold or silver as indicated in the set of results shown in Table 14. Further testing by gravity separation is not recommended.

Table 14: Gravity Separation Test Results

Comp.	Pan Concentrate					Total Gravity Concentrate				
	Mass %	Assay		Recovery, %		Mass %	Assay		Recovery, %	
		Au (g/t)	Ag (g/t)	Au	Ag		Au (g/t)	Ag (g/t)	Au	Ag
1	0.09	21.0	3755	6.6	2.6	2.9	2.4	967	24.2	21.6
2	0.09	21.8	50473	2.5	7.7	3.4	4.2	6642	18.1	37.7
3	0.08	5.7	4857	1.8	4.1	3.1	0.9	643	11.9	21.3
4	0.10	4.6	572	1.3	0.8	4.3	2.1	86	27.2	5.2
5	0.06	7.2	2356	0.6	0.8	3.2	1.3	607	6.5	11.8
6	0.08	10.6	2832	2.1	1.7	3.1	1.1	436	8.9	10.9
Aver.	0.08	11.8	10808	2.5	2.9	3.3	2.0	1564	16.1	18.1

Source: Shi, 2015

### 13.1.4 Flotation Testing

A single baseline rougher-scavenger flotation test was conducted on each of the six composites at the P80=75 µm grind. As shown in Table 15, a combination of potassium amyl xanthate (PAX), Aerophine 3418A, and Aeroflot 242 were used as mineral collectors. Methyl isobutyl carbinol (MIBC) was used as a frother and added, as required, to maintain an adequate froth level. Collectors were added before aerating with timed conditioning and froth-collecting periods.

Table 15: Flotation Reagent Scheme

Test No.	Target P80 Size (µm)	pH	Collector Dosage, g/t							
			Ro.1		Ro.2		Ro.3		Ro.4	
			PAX	A208	PAX	A208	PAX	A208	PAX	A242
F1-F6	75	Natural	20	10	10	5	10	5	10	10

Source: Shi, 2015.

The baseline kinetic flotation test results are summarized in Table 16. As shown, the rougher gold recovery on the six composites varied from 54.6% to 94.6% from sample to sample, while silver

recovery varied from 75.2% to 98%. On average, flotation methods recovered 76.1% Au and 87.2% Ag into a sulphide concentrate representing 33.3% of ore mass. Flotation tailings from the six test samples averaged 0.16 g/t Au and 31 g/t Ag. Excluding Composite 2, which had a head grade of 642 g/t Ag, the average for the flotation tailings is 0.12 g/t Au and 18 g/t Ag.

Table 16: Baseline Flotation Testing Results

Comp.	Gold Grade, g/t Au						Gold Recovery, %				Mass %
	Feed	Ro. Con.	Ro. Con.	Ro. Con.	Ro. Con.	Tails	Ro. Con.	Ro. Con.	Ro. Con.	Ro. Con.	
		1	1-2	1-3	1-4		1	1-2	1-3	1-4	
1	0.28	1.5	1.2	1.0	0.9	0.07	65.8	75.4	79.9	83.4	28.9
2	0.84	3.0	2.2	1.9	1.7	0.16	67.4	81.6	86.4	89.2	43.0
3	0.23	0.5	0.5	0.4	0.4	0.11	57.3	68.2	73.8	77.8	48.6
4	0.30	1.4	1.1	1.0	0.9	0.03	84.5	92.4	93.8	94.6	36.4
5	0.59	1.9	1.7	1.6	1.4	0.38	35.4	44.0	50.0	54.6	24.3
6	0.38	2.0	1.6	1.4	1.2	0.21	40.7	48.8	53.2	57.2	18.3
<b>Aver.</b>	<b>0.44</b>	<b>1.7</b>	<b>1.4</b>	<b>1.2</b>	<b>1.1</b>	<b>0.16</b>	<b>58.5</b>	<b>68.4</b>	<b>72.9</b>	<b>76.1</b>	<b>33.3</b>

Comp.	Silver Grade, g/t Ag						Silver Recovery, %				Mass %
	Feed	Ro. Con.	Ro. Con.	Ro. Con.	Ro. Con.	Tails	Ro. Con.	Ro. Con.	Ro. Con.	Ro. Con.	
		1	1-2	1-3	1-4		1	1-2	1-3	1-4	
1	141	888	637	535	457	14	82.7	86.8	90.4	93.0	28.9
2	642	2929	1991	1647	1499	23	84.7	94.5	96.4	98.0	43.0
3	96	362	304	265	242	9	79.8	93.4	95.3	96.2	48.6
4	85	387	299	267	244	4	90.0	96.5	96.8	97.2	36.4
5	196	848	689	604	531	97	49.4	56.0	60.2	63.7	24.3
6	133	976	720	611	514	38	64.5	70.2	73.4	75.2	18.3
<b>Aver.</b>	<b>216</b>	<b>1065</b>	<b>773</b>	<b>655</b>	<b>581</b>	<b>31</b>	<b>75.2</b>	<b>82.9</b>	<b>85.4</b>	<b>87.2</b>	<b>33.3</b>

Source: Shi, 2015

### 13.1.5 Cyanidation Leach Testing

Bottle roll, whole-ore cyanide leach tests were conducted on all six composites at 40 wt% solids at the P80=75 µm target grind (see Table 17). Before adding sodium cyanide (NaCN), the alkalinity was adjusted with hydrated lime to pH 10.5-11 and further maintained at this level. The NaCN-level was established and maintained at 2.0 g/L while the dissolved oxygen (d.O<sub>2</sub>) concentration was monitored for the duration of the test. Intermediate solution samples were removed to determine gold and silver dissolution kinetics. The leach tests were terminated after 72 hours with filtration of pregnant leach solution (PLS). The solid residues were displacement-washed with cyanide solution, followed by two hot water rinses. The PLS and the final residue were analysed for gold and silver content for metallurgical balance.

Gold was partially refractory to cyanide leaching in Composite #4. Gold extraction for the remaining composites ranged from 37.5% to 83.1%. Silver responded well to this leach procedure with extractions ranging from 67.5% to 90% and averaging 78%.

A partial correlation was observed between gold and silver recovery and the arsenic (As) content of the feed: the higher the arsenic, the lower the gold and silver recoveries.

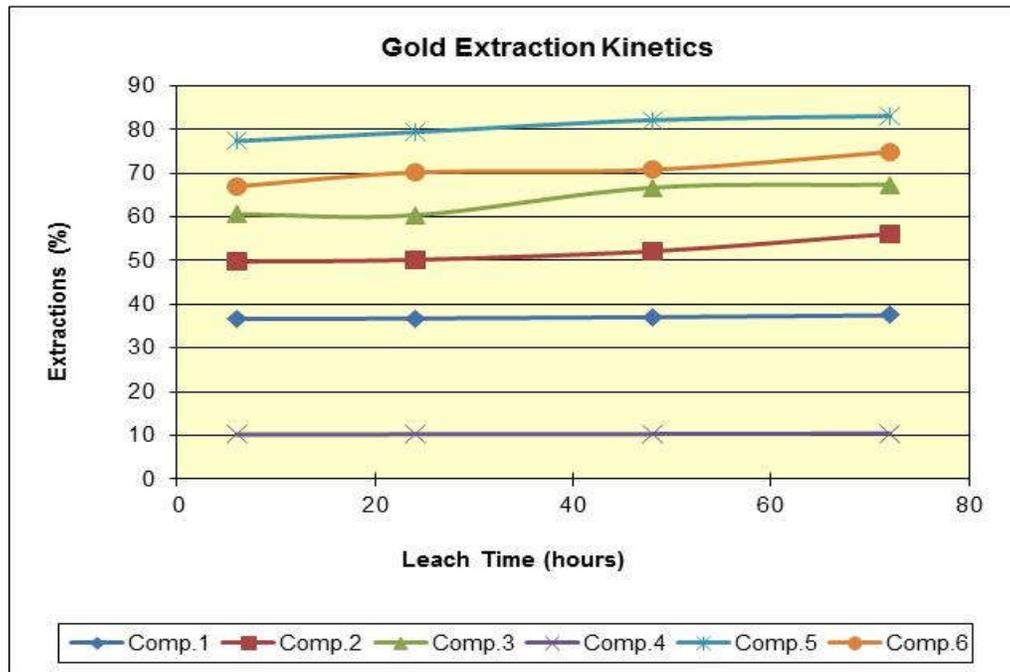
Table 17: Whole-Ore Cyanidation Test Results

Comp ID	Head Grade		72-h Extraction		Residue Grade		Consumption (kg/t)	
	Au (g/t)	Ag (g/t)	Au (%)	Ag (%)	Au (g/t)	Ag (g/t)	NaCN	Lime
1	0.28	141	37.5	84.3	0.18	24	4.12	0.17
2	0.84	642	56.1	78.0	0.40	159	3.79	0.21
3	0.23	96	67.4	90.9	0.09	10	2.45	0.22
4	0.30	85	10.5	66.8	0.33	33	2.59	0.20
5	0.59	196	83.1	67.5	0.13	70	2.43	0.37
6	0.38	133	74.9	80.3	0.12	29	3.03	0.30
Aver.	0.44	216	54.9	78.0	0.21	54	3.07	0.25

Source: Shi, 2015.

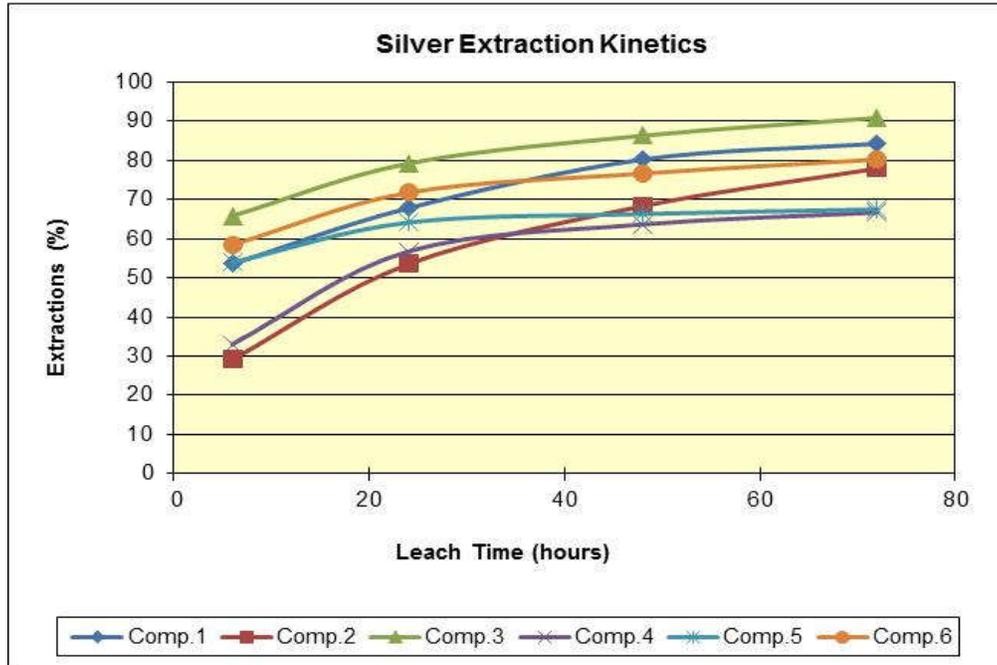
The leaching process kinetics indicated that the gold extraction rate was very quick, and achieved close to maximum results in less than five hours. At this point, leaching slowed and continued at a much lower rate as indicated in Figure 13. Whereas, after the initial, rapid 5-hour silver leach, the leaching process continued significantly for the remaining 67 hours of the test.

Figure 13: Gold Extraction Kinetics



Source: Shi, 2015

Figure 14: Silver Extraction Kinetics



Source: Shi, 2015.

### 13.1.6 Summary and Recommendations

Samples from the Jesus Maria zone responded differently to the three types of processes. Although flotation resulted in the highest recoveries for both gold and silver, it needs to be followed by a concentrate cyanidation process as a second stage, which significantly increases operating costs. The tested ore samples were found to be amenable to an agitated tank-leaching procedure using cyanide. At a P80 grind of 75 µm, they leached favourably in 72 hours, and generally achieved an average rate extraction of 55% Au and 78% Ag recoveries (see Table 18).

Table 18: Comparison of Test Results

Comp ID	Hole ID	Interval	Grade		Gravity Recovery		Flotation Recovery		Cyanidation Recovery	
			Au, g/t	Ag, g/t	Au, %	Ag, %	Au, %	Ag, %	Au, %	Ag, %
1	JM-DDH-14-24	67.8-78.95m	0.28	141	6.6	2.6	83.4	93.0	37.5	84.3
2	JM-DDH-14-24	78.95-90.5m	0.84	642	2.5	7.7	89.2	98.0	56.1	78.0
3	JM-DDH-14-25	20.1-35.95m	0.23	96	1.8	4.1	77.8	96.2	67.4	90.9
4	JM-DDH-14-25	56.8-67.8m	0.30	85	1.3	0.8	94.6	97.2	10.5	66.8
5	JM-DDH-14-27	13.7-25.45m	0.59	196	0.6	0.8	54.6	63.7	83.1	67.5
6	JM-DDH-14-27	25.45-37.1m	0.38	133	2.1	1.7	57.2	75.2	74.9	80.3
Average			0.44	216	2.5	2.9	76.1	87.2	54.9	78.0

Source: Shi, 2015.

Because these are preliminary scoping tests, additional testing should be conducted on whole-ore cyanidation to study the economics of a heap leach process. Specific recommendations include the following:

- Conduct a series of 10-day bottle roll tests on three different ore-type composites at varying crush sizes ( $\frac{1}{2}$ -in.,  $\frac{3}{4}$ -in., and 1-in.);
- Review the most favourable bottle roll results and conduct follow-up testing to study the effects of cyanide dosage and lime consumption on the overall extraction rate; and
- Perform comminution tests, including Bond ball mill work index and abrasion index.

## 13.2 EL CAPITAN

Historical metallurgical test work programs have been carried out on samples from the El Capitan Project in Mexico. The following reports are from these projects:

- Gold Recovery by Cyanide Leaching on Samples from Sierra Madre's El Capitan Project – October 2011, Bureau Veritas Commodities Canada Ltd. (Metallurgical Division) for Sierra Madre Developments Inc. and
- Metallurgical Testing on Samples from El Capitan Project, Mexico – August 2013, Bureau Veritas Commodities Canada Ltd. (Metallurgical Division) for Sierra Madre Developments Inc.
- It is unknown if these samples are represented of the Peñoles Project

### 13.2.1 Summary of 2011 Test Work

In 2011 (Grcic, 2011) Inspectorate Exploration & Mining Services performed preliminary bottle roll testing on mineral samples obtained from 2008 drill core samples provided by Riverside Resources Inc. from the El Capitan zone. The results show that the samples were amenable to gold leaching by cyanidation.

A total of 28 cyanide bottle roll tests were conducted. The initial work was performed on sample #28 DDH 08-01 (62.4 m to 64.3 m), which assayed 1.06 g/t Au. The initial bottle rolls were conducted at three coarser particle sizes ( $\frac{3}{4}$ -in.,  $\frac{1}{2}$ -in., and 6 mesh) to determine whether the material is amenable to heap leaching procedures. The two more coarsely crushed samples achieved a gold recovery of about 30% after 96 hours of leach retention. On the sample crushed to 6 mesh, a gold recovery of 53% was achieved after 96 hours of leach retention. Gold dissolution is expected to continue to increase with additional leach retention time based on observations of the leach kinetic curves.

Another 25 samples from drill holes 08-01, 08-02, and 08-03 were submitted for cyanide bottle roll leaching for 96 hours at a particle feed crush size of 6 mesh. Gold fire assays on this set of samples varied from 0.04 g/t to 2.2 g/t. Comparison of metallic gold assays with gold by fire assay on 1AT (assay tonne) split indicated that the gold particles did not appear to be coarse grained. These gold leach recoveries were approximately 60%, with recoveries of up to 70% to 80% for some of the higher gold grade samples. The kinetic data indicates leaching continues after 96 hours of retention time. The sodium cyanide consumption ranged from about 1.0 kg/t to 1.5 kg/t.

The results appear to show that the material responds well to cyanidation and might be amenable to heap leach procedures. Heap leaching potential should be estimated from column leach testing and it is recommended that representative composite samples are prepared from the resource for column study at various particle sizes. Crushing to coarser particle sizes and down to 6 mesh is recommended. Due to fines generation, agglomeration would be included; this is based on observations noted during this test program. Cyanide bottle roll testing should also be performed on ground samples to determine the response of each.

In summary, preliminary testing shows that the El Capitan material responds favourably to cyanidation procedures.

### 13.2.2 Summary of 2012-2013 Test Work

A series of bottle roll and column leach tests were conducted to explore the suitability of a heap leach process to economically recover gold and silver values from the ore (Chen, 2013).

Standard bottle roll tests were run on 37 samples at varying crush or grind sizes and durations as shown in Table 19.

Table 19: Types of Bottle Roll Tests

Set	Crush or Grind Size Approx. P80	Length of Test Hours	NaCN g/t	pH	% Solids
1	75µm	48	1.0	10.5	40
2	1/2" - 5/8"	144	1.0	10.5	40
3	1"	216	1.0	10.5	40
4	90 - 165µm	48	1.0	10.5	40

Source: Chen, 2013

Solution samples were taken at intervals to develop leaching time curves versus recovery.

Coarse-crush, 82-day, column-leach tests were conducted; samples were agglomerated with cement and lime powder, and then cured in the columns for 5 days. Test parameters are shown in Table 20.

Table 20: Column Leach Test Parameters

	Col Dia (in.) x 10' h	Crush Size	Cement kg/tonne	Lime kg/tonne	Time (days)
1	6	1"	0	0.3	82
2	6	1"	0	0.3	82
3	6	5/8"	5	0.3	82
4	4	3/8"	5	0.3	82
5	4	1/2"	5	0.3	82
6	6	1"	0	0.3	82
7	4	1/2"	5	0.3	82
8	4	1"	0	0.3	82
9	6	1/2"	5	0.3	82
10	4	1"	5	0.3	82
11	4	1/2"	5	0.3	82

Source: Chen, 2013

Solution samples were taken at intervals to develop leaching time curves versus recovery.

### 13.2.3 Samples and Head Assays

Samples were combined into 14 composites representing 6 lithological groups: volcanics (V), hydrothermal flooded (F), sediments (S), and subdivided into low (L), medium (M), and high (H) grade units based on the range of gold assays. Before crushing, representative samples were removed for comminution testing from each lithological group. These were tested for Bond ball mill work index, crushing work index, and abrasion index. Head analyses of the various composites are shown in Table 21.

Table 21: Composite Head Assays

Element Unit	Au g/mt	S(tot) %	S(-2) %	Ag ppm	Ca %	Fe %
Comp VL	0.12	0.04	0.02	1.0	0.79	1.16
Comp VM	0.28	0.08	0.06	3.9	1.57	2.35
Comp VH	0.69	0.04	0.03	29.5	0.90	2.76
Comp FL	0.48	0.08	0.04	3.9	5.40	1.05
Comp FM	1.16	0.03	0.01	14.0	5.10	1.33
Comp FH	1.32	0.05	0.01	36.3	8.25	0.82
Comp SL	0.28	0.06	0.04	7.9	2.08	2.49
Comp SM1	0.46	0.04	0.01	5.0	2.58	2.05
Comp SM3	1.34	0.03	0.01	4.9	2.42	2.59
Comp SM2+4	0.49	0.05	0.02	245.0	2.36	1.87
Comp SH	2.72	0.07	0.04	11.9	1.98	3.00

Source: Chen, 2013

### 13.2.4 Bottle Roll Testing

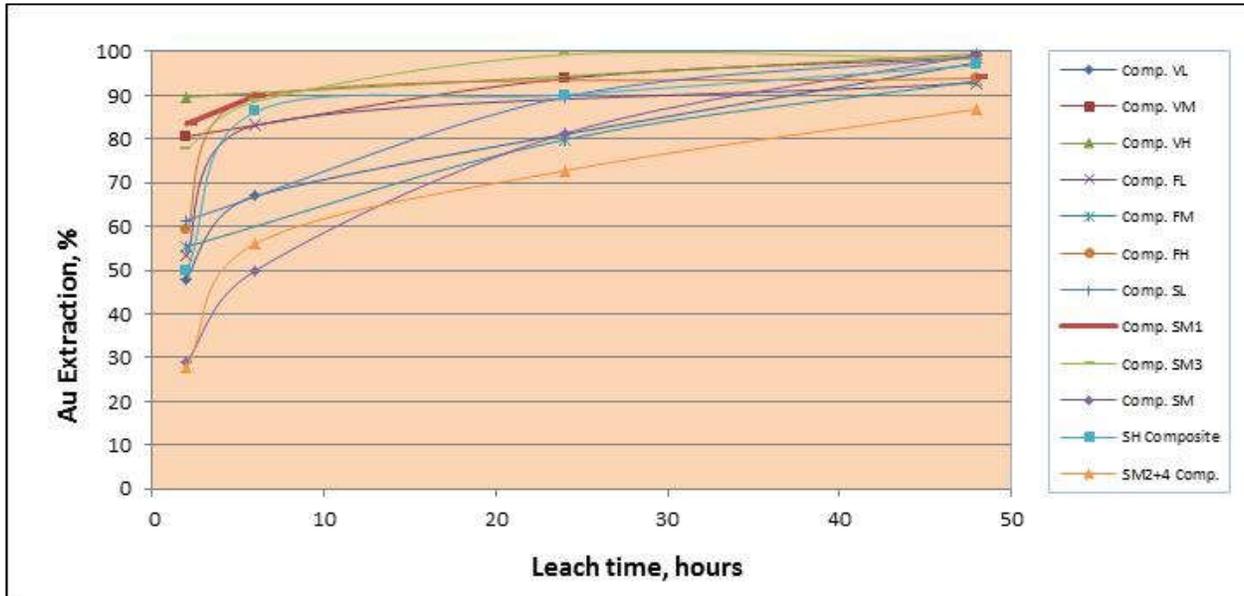
Bottle roll cyanide leach tests were conducted on a variety of grind and crush sizes, with optimum results occurring in samples ground to a P80 range of 60 to 120  $\mu\text{m}$ . An example of these types of results can be seen in the series of 37 bottle roll tests covering a 48-hour period at a P80 grind size range of 61 to 116  $\mu\text{m}$ , shown Table 22 and Figure 15. Gold leaching occurred relatively quickly within the first 24 hours, with some leaching continuing slightly beyond that. Extraction rates were generally +90%; only two samples were less than that at 85% recovery.

Table 22: Bottle Roll Test Results at a Medium Grind

Composite ID	P80 Size $\mu\text{m}$	Extraction(%)		Residue Grade		Consumption (kg/t)	
		Au	Ag	Au (g/t)	Ag (g/t)	NaCN	Ca(OH) <sub>2</sub>
VL	88	97.5	-	0.01	-	0.73	0.3
VM	93	98.7	63.7	0.01	4.0	0.83	0.4
VH	78	99.5	63.7	0.01	6.7	0.82	0.7
FL	116	92.9	-	0.04	-	0.77	0.3
FM	94	93.3	17.8	0.09	19.2	0.77	0.2
FH	88	93.9	31.2	0.11	25.3	0.80	0.4
SL	86	98.8	60.1	0.01	3.3	0.74	0.6
SM1	102	94.4	-	0.03	-	0.70	0.3
SM3	77	98.3	-	0.01	-	0.75	0.5
SM	70	99.3	87.2	0.01	6.4	0.73	0.5
SH	85	96.9	41.9	0.04	6.7	0.65	0.9
SM2+4	61	86.9	61.0	0.05	107.2	1.64	0.4
FM2	67	90.1	41.9	0.13	8.2	2.53	0.3
SM2	86	96.6	35.1	0.05	6.3	2.57	0.4

Source: Chen, 2013

Figure 15: Medium Grind Bottle Roll Test Results



Source: Chen, 2013

### 13.2.5 Column Leach Testing

A series of 11 cyanide column leach tests were conducted on a variety of composite combinations. Each test, running for 82 days, was started with a 1.0 g/L NaCN solution then maintained at a constant 0.5 g/L for the test duration.

The PLS was fed through a small carbon column filled with 30 g of activated carbon. The stripped barren solution (BLS), after the adjustment of pH and NaCN concentrations, was recycled to the top of the column. The gold-loaded carbon and strip-solution sample were collected at regular intervals: three times a week for the first month, then twice a week after that.

At the end of leaching, the columns were washed with a 0.5 g/L NaCN solution and then washed again with two water washes to remove the dissolved metals. The wash solution was collected separately and assayed for metallurgical balance.

Following the wash procedure, the columns were taken down, and the residues were emptied onto plastic sheets and air dried. The dried residue was blended and a 5 kg sub-sample was removed for size-assay analysis to calculate size-specific extractions.

Table 23 shows results for the 11 tests. They are divided into the various ore types to better highlight the leaching properties and results at this preliminary stage of testing.

Two of the sedimentary tests achieved 55% and 58% Au extraction rates, and one of the volcanic composites achieved a 48% Au extraction rate. Additional testing is recommended to further study the optimum crush sizes and operating parameters for the separate ore types.

Table 23: Cyanide Column Leach Results

Col. No	Comp	P <sub>80</sub> Size mm	% Au Extraction	Residue Grade Au (g/t)	Chemical Consumption (kg/t)	
					NaCN	Ca(OH) <sub>2</sub>
<b>Volcanics (V)</b>						
1	Comp VL	22.0	38.9	0.08	0.56	0.47
2	Comp VM+VH	23.4	38.1	0.28	0.67	0.36
3	Comp VM+VH	13.8	42.0	0.24	0.22	0.30
4	Comp VM+VH	6.2	48.1	0.18	0.41	0.30
<b>Hydrothermal Flooded (F)</b>						
5	Comp FL	14.1	12.5	0.46	0.37	0.30
6	Comp FM+FH	22.2	28.6	0.61	0.56	0.39
7	Comp FM+FH	12.2	16.8	1.08	0.36	0.31
<b>Sediments (S)</b>						
8	Comp SL	20.8	55.0	0.10	0.67	0.44
9	Comp SL	12.6	58.6	0.10	0.64	0.31
10	Comp SM+SH	21.3	25.7	0.49	0.23	0.30
11	Comp SM+SH	11.5	35.5	0.31	0.35	0.30

Source: Chen, 2013

### 13.2.6 Comminution Testing

Several composite samples were tested for hardness and abrasion using Bond ball mill work index, Bond crusher work index, and Bond abrasion index methods. The tested ore samples had a relatively high work index and moderate crushability and abrasion index results. The results are shown in Table 24

Table 24: Comminution Test Results

Sample ID	Ball Mill Work Index (kWh/tonne)	Crusher Work Index (kWh/tonne)	Abrasion Index Ai (g)
Comp. FM	20.9	9.55	0.8042
Comp. SL	--	8.07	0.3890
Comp. SM3	19.3	--	--
Comp. VH	20.7	--	--
Comp. VL	--	14.7	1.1152

Source: Chen, 2013

### 13.2.7 Summary and Recommendations

Samples from the El Capitan zone were found to be amenable to an agitated tank-leaching procedure using cyanide. At a P80 grind range of 60 to 120 µm, they were seen to leach favourably in 48 hours or less, generally achieving an average extraction rate of 95% Au recovery.

The coarse-crush extraction rates were less than those of the same samples ground to 60 to 120 µm. However, several of these samples demonstrated higher extractions than others and additional studies are required. The work outlined in this summary is very preliminary, but it supports possible heap leach processing.

It is recommended that further testing be conducted to optimize the crush size, along with various operating parameters, such as cyanide and lime consumption, leach time required, pulp density, etc.

The specifically recommended tests would consist of a composite from two or three of the ore types run in 10-day bottle roll tests at crushes of ½-in., ¾-in., and 1-in. The best results from each ore-type would then be followed up with a few tests to study the effect of cyanide dosage on the overall extraction rate.

## 14 MINERAL RESOURCE ESTIMATE

### 14.1 Introduction

This section describes the approach used to generate mineral resource estimates for the El Capitan and Jesus Maria deposits. El Capitan is primarily a gold-bearing deposit with minor silver credits, and Jesus Maria is a silver deposit with minor amounts of contained gold. The deposits are separated by approximately 300 m and the mineralized zones are interpreted as merging together to the west. Due to their close proximity, resources are generated using one block model, but, due to differences in the nature of the mineralization, they remain essentially segregated during the development of the resource model.

The mineral resource estimates were prepared under the direction of Robert Sim, P. Geo., with the assistance of Bruce Davis, FAusIMM. Mr. Sim is the independent Qualified Person within the meaning of NI 43-101 for the purposes of mineral resource estimates contained in this report. Estimates are made from 3D block models based on geostatistical applications using commercial mine planning software (MinePlan® v15.6). The project limits are based in the UTM coordinate system using a nominal block size of 10 m x 5 m x 10 m, with the shorter blocks roughly perpendicular to the east-southeast oriented strike direction of the deposits. Diamond drilling was conducted from surface drill stations in the hanging wall of the deposits. Holes are generally spaced at 40 m intervals to depths of between 150 m and 200 m below surface.

The resource estimates have been generated from drill hole sample assay results, and limited surface trend and drift channel samples, and the interpretation of a geologic model which relates to the spatial distribution of gold and silver in the El Capitan and Jesus Maria deposits. Interpolation characteristics have been defined based on the geology, drill hole spacing and geostatistical analysis of the data. The resources were classified according to their proximity to the sample locations and are reported, as required by NI 43-101, according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (May, 2014).

The mineral resource has been estimated in conformity with generally accepted CIM Estimation of Mineral Resources and Mineral Reserves Best Practices Guidelines (CIM 2019) and is reported in accordance with NI 43-101. Mineral resources are not mineral reserves and they do not have demonstrated economic viability.

This report includes estimates for mineral resources only. There are no mineral reserves reported for the Peñoles project.

There has been no significant work undertaken on the property since 2015. Therefore the effective of date of the resources is April 16 2015.

### 14.2 Available Data

There are a total of 81 drill holes in the El Capitan/Jesus Maria database with a total core length of 10,265 m. Fifty holes were drilled to test the El Capitan target, and 30 holes were drilled on the

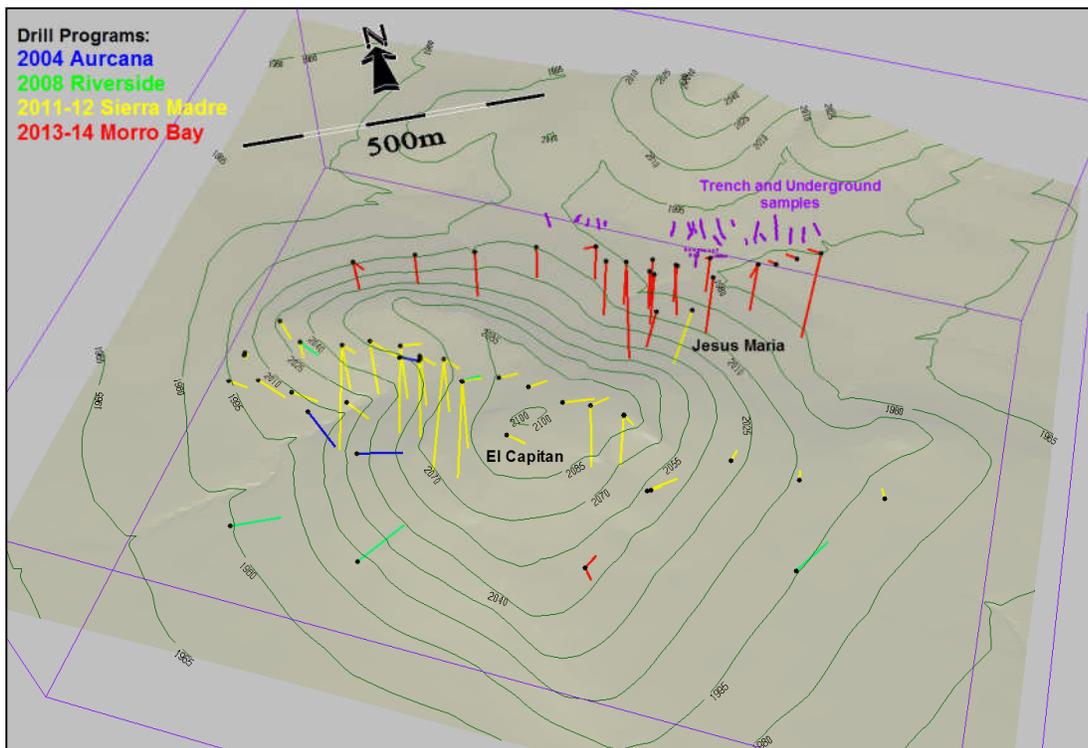
Jesus Maria deposit. One drill hole was exploratory in nature, testing for satellite deposits, and did not influence the resource model.

Drilling was conducted by the following operators as described in Section 10 Drilling:

- 2004 by Aurcana Corporation (4 holes)
- 2008 by Riverside Resources Inc. (5 holes)
- 2011, 2012, and 2013 by Sierra Madre Developments Inc. (49 holes)
- 2014 by Morro Bay Resource Ltd. (23 holes).

Also included in the database are chip-channel samples from Jesus Maria collected by Sierra Madre Developments Inc. (Sierra Madre) from 20 cross-cutting surface trenches and 3 underground drift areas (from historic production located 20–25 m below surface). The chip-channel data compares reasonably well with proximal drill holes and it provides additional near-surface information on the nature of mineralization at the Jesus Maria deposit. The location of the chip-channel data and the distribution of drilling by vintage are shown in Figure 16. A comparison of the various drilling programs shows similar results. Although the sample data collected during the 2004 and 2008 campaigns is not supported by robust QA/QC programs, the older data is supported by proximal newer drilling and is considered sufficient to validate this data for use in a resource estimate. Note: Only five holes drilled in 2004 and 2008 intersect the main mineralized zone at El Capitan and, therefore, contribute to the estimate of mineral resources.

Figure 16: Distribution of Drill Holes by Vintage



The distribution of gold grades in drill holes and chip-channel data is shown in Figure 17 and Figure 18. The distribution of silver grades is shown in

Figure 20 and Figure 19. Note: El Capitan has relatively high gold grades and low silver grades, and Jesus Maria is primarily a silver deposit, with minor gold grades.

Sample grades identified as being below the detection limits for gold and silver have been assigned values equal to one half the detection limit. All unsampled intervals, except for a few short drill holes that were abandoned due to drilling issues, were assigned zero grades for gold and silver – these were not sampled as a cost cutting measure because there were no visible indications of significant mineralization present. Although this represents approximately 1,500 m of unsampled zero-grade drilling, these intervals tended to be outside of the trends of mineralization and, therefore, had little or no influence on the resource estimate.

Figure 17: Distribution of Gold Sample Data (isometric view looking north)

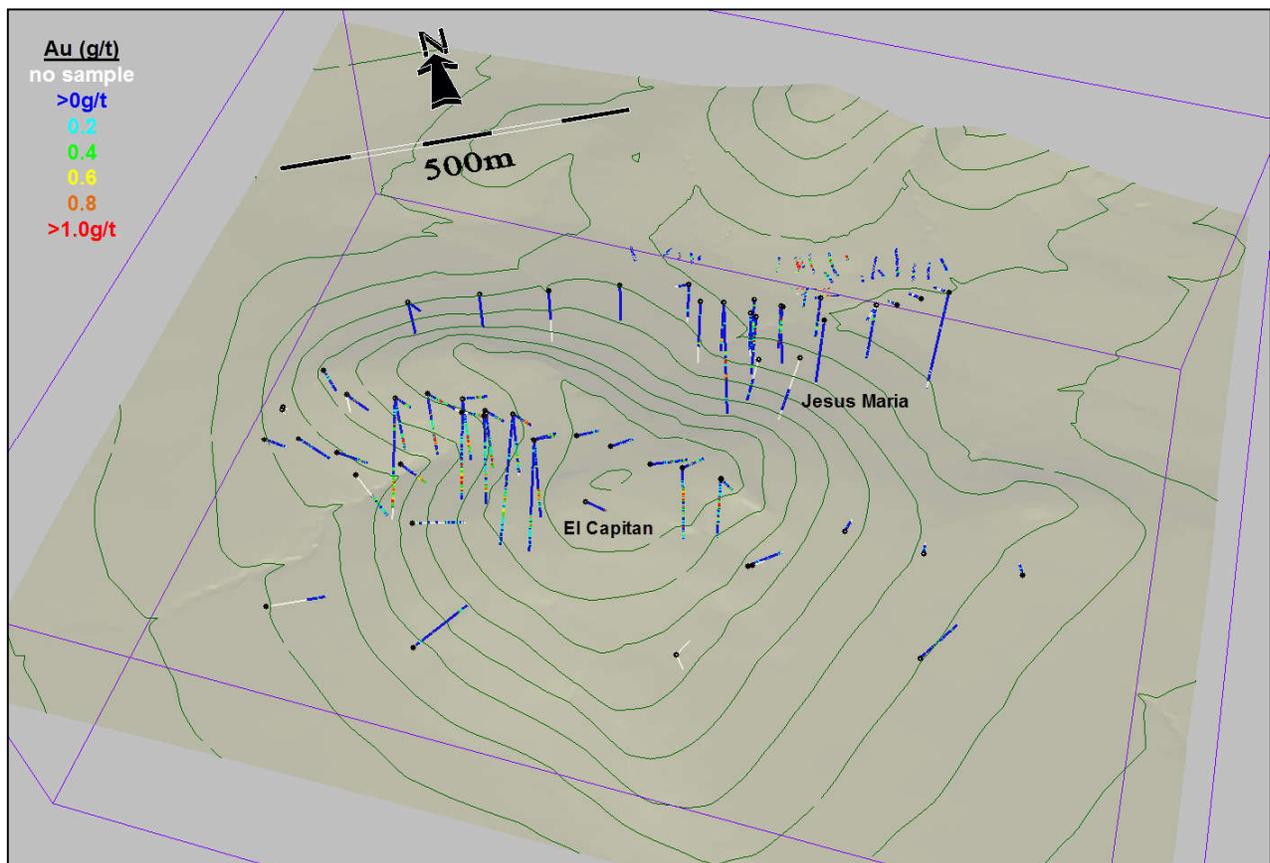


Figure 18: Distribution of Gold Sample Data (isometric view looking southwest)

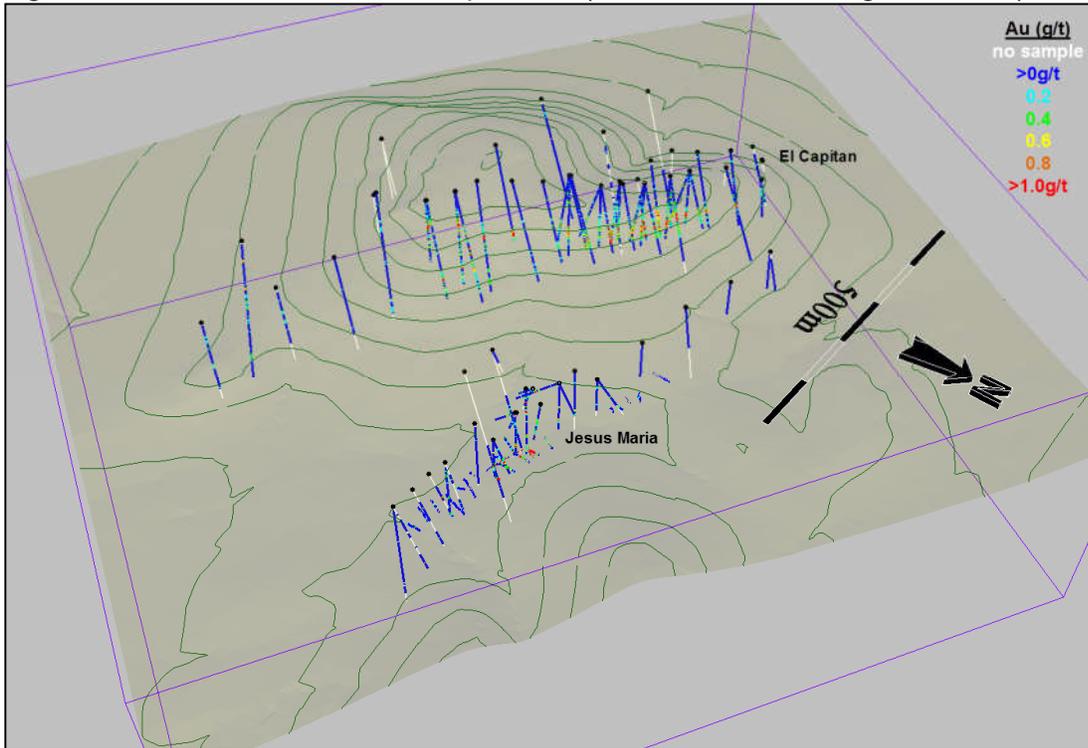


Figure 19: Distribution of Silver Sample Data (isometric view looking north)

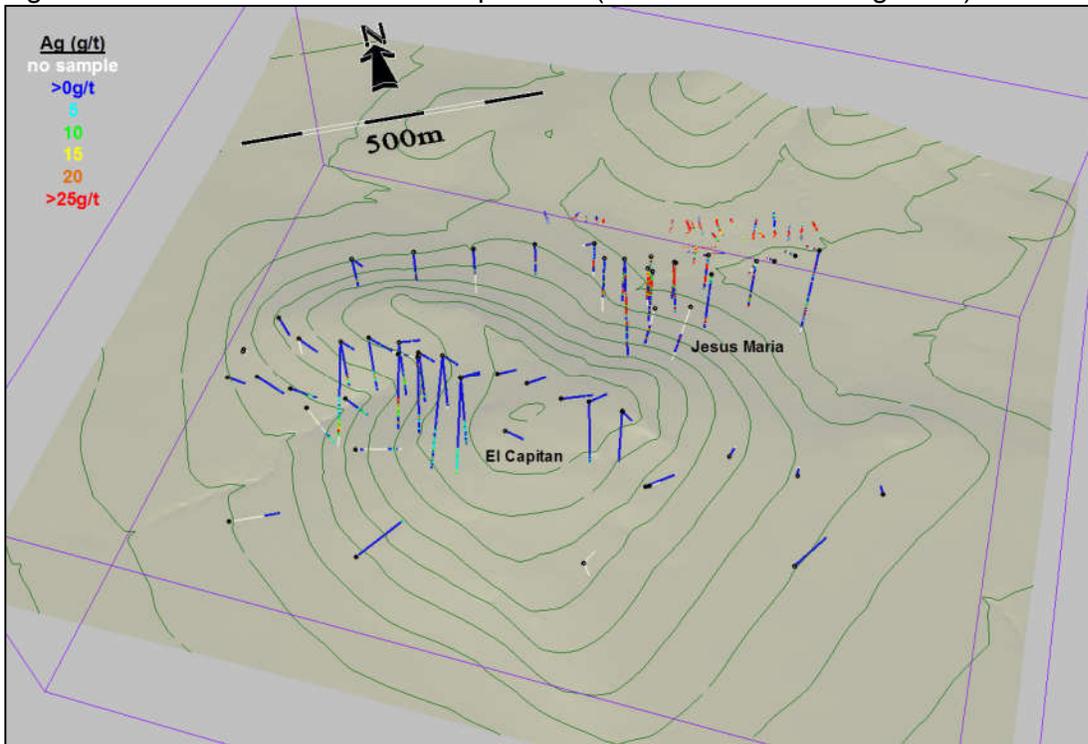
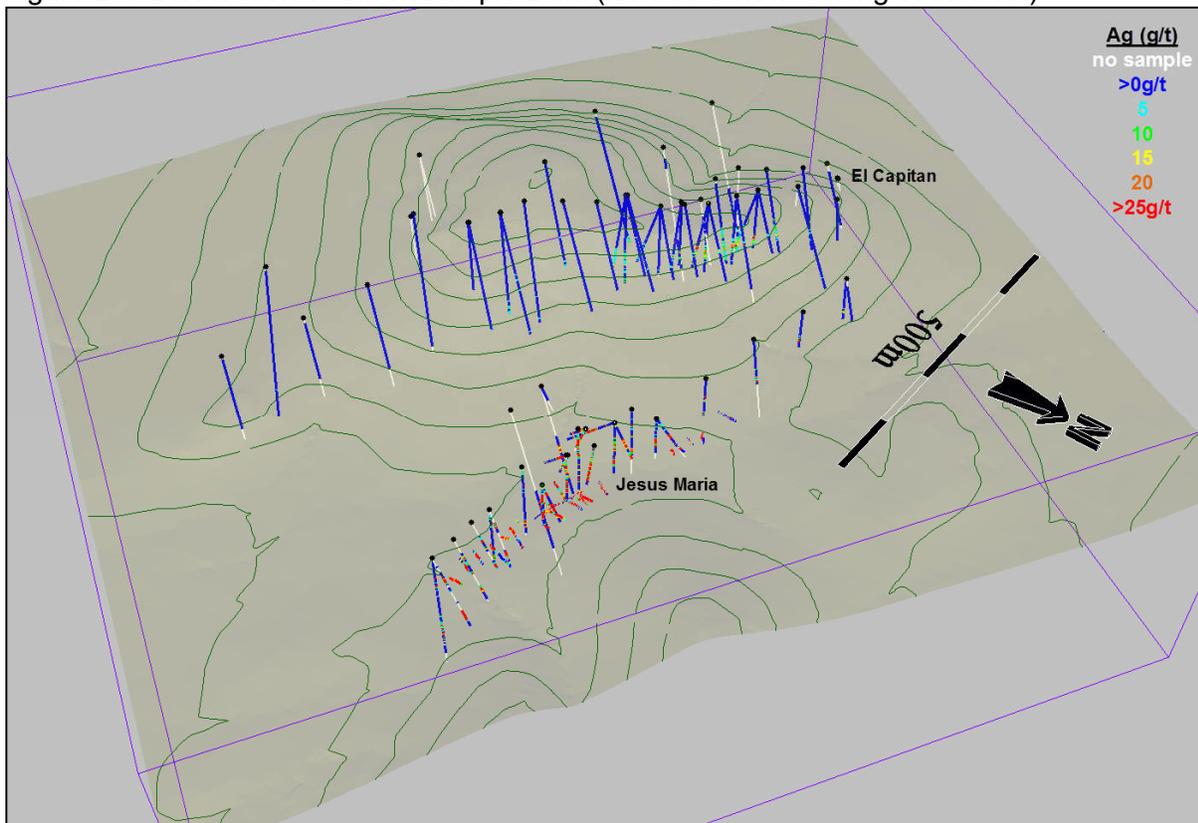


Figure 20: Distribution of Silver Sample Data (isometric view looking southwest)



The relatively rugged terrain in the project area has locally influenced the distribution of drill holes intersecting the deposits, especially at El Capitan. It is common to have two or more holes “fanned” from a single drilling setup intersecting the mineralized horizon at angles ranging from 90 degrees to as shallow as 45 degrees in some of the deeper holes. Several holes at Jesus Maria have been drilled down the dip of the currently interpreted south-dipping mineralized structure. At this time, the geologic interpretation at Jesus Maria is not well understood and is subject to potential changes with additional drilling. The current interpretation is considered the simplest, and it still honours all of the current drilling results.

The majority of the deposits have been tested with drill holes on vertical cross sections spaced at 40 m intervals oriented roughly perpendicular to the general strike of the zone; at El Capitan, drill sections are oriented at a 30 degree azimuth, and at Jesus Maria they are oriented at a 10 degree azimuth. The spacing of drill hole pierce points on-section typically averages about 50 m, but it can vary from 25 m to 80 m or more in some areas.

There are 4,432 individual samples in the original drilling database. Sample intervals range from 0.1 m to a maximum of 6.1 m long, with an average of 1.86 m. The standard sample interval is 2 m long, but this varies in response to the geology encountered in drilling. The basic statistical summary of the drill hole sample data is shown in Table 25.

Table 25: Statistical Summary of Drilling Sample Database

Element	Deposit	Number of Samples	Total Sample Length (m)	Min	Max	Mean	Standard Deviation
Gold (g/t)	El Capitan	3,254	6,594	0	13.649	0.220	0.485
	Jesus Maria	1,243	3,114	0	2.302	0.079	0.198
	Both	4,497	9,708	0	13.649	0.173	0.420
Silver (g/t)	El Capitan	3,254	6,594	0	160.2	1.65	5.97
	Jesus Maria	1,243	3,114	0	3,409.1	21.88	101.04
	Both	4,497	9,708	0	3,409.1	8.14	58.21

Note: Weighted by sample length

### 14.3 Geological Model

Epithermal-type gold and silver mineralization, present in the El Capitan and Jesus Maria deposits, is roughly associated with silica flooding and minor sulphide emplacement along pronounced structural features. The trends of the mineralization are evident in Figure 17 to Figure 20. At El Capitan, the mineralized structure occurs at roughly the interface between underlying sedimentary units and overlying volcanic rocks. The general trend of the mineralized zones has a strike of 120 degrees azimuth and dips at -30 degrees to the south-southwest. The thickness of the mineralized zone typically ranges between 40 m and 60 m, but it approaches 140 m in some areas.

The main mineralized structure at Jesus Maria has a strike of about 100 degrees azimuth and dips at -55 degrees to the south. The current interpretation, based on limited drilling, curves and flattens to the west and ultimately merges with the El Capitan structure on the west end of the resource area. Silver-rich mineralization at Jesus Maria has been encountered in drilling ranging from 10 m to approaching 80 m in true thickness in some areas. The host rocks at Jesus Maria are primarily sedimentary in nature (shale), intercalated with porphyritic dacite dykes that are typically less than 5 m thick. Geologic interpretation of the relatively thin dacite dykes, based on the current data, is not possible.

Observations during drilling indicate that the El Capitan deposit occurs above the local water table in rocks that are extensively oxidized throughout. During drilling at Jesus Maria, water was encountered at a depth of about 30 m to 40 m below the valley floor at approximately 1,950 m elevation (one of the old underground workings is a water source for the nearby town). Visible sulphides are common in drilling at Jesus Maria. It is likely that the oxide-sulphide interface is roughly coincident with the top of the current water table. There is relatively little overburden in the area of the mineral resource and, as a result, there have been no adjustments made to account for overburden in the model.

## 14.4 Bulk Density Data

A series of 41 drill core samples were tested at the Inspectorate Laboratories using the *specific gravity with wax* method. Core samples are sealed with wax and then weighed in air ( $W_{\text{air}}$ ) and again while submerged in water ( $W_{\text{water}}$ ). The density of the sample is determined as the ratio of  $W_{\text{air}}/W_{\text{water}}$ , assuming the density of water is equal to 1 g/cc.

Specific gravity (SG) values range from 2.04 t/m<sup>3</sup> to 2.60 t/m<sup>3</sup>, with an average of 2.40 t/m<sup>3</sup>. Exclusion of several anomalously low values increases this average to 2.45 t/m<sup>3</sup>.

A metallurgical testing report, conducted by Inspectorate (August, 2013), states two specific gravity measurements from composited rock samples from El Capitan, 2.62 t/m<sup>3</sup> and 2.66 t/m<sup>3</sup>. There is no description of the method used in the report.

At this stage, specific gravity measurements are insufficient to estimate (interpolate) density values in the block model. There is some variability in the current (limited) data. A value of 2.50 t/m<sup>3</sup> is considered to be a reasonable average density to determine resource tonnage from the block model. It is recommended that a program is implemented to conduct density measurements on available drill core.

## 14.5 Compositing

Compositing of drill hole samples is carried out in order to standardize the database for further statistical evaluation. This step eliminates any effect related to the sample length which might exist in the data.

Drill hole composites are weighted by the length of the original sample interval and have been generated *down-the-hole*; this means that composites begin at the top of each hole and are generated at 2-m intervals down the length of the hole. Several holes were randomly selected and the composited values were checked for accuracy. No errors were found.

## 14.6 Exploratory Data Analysis

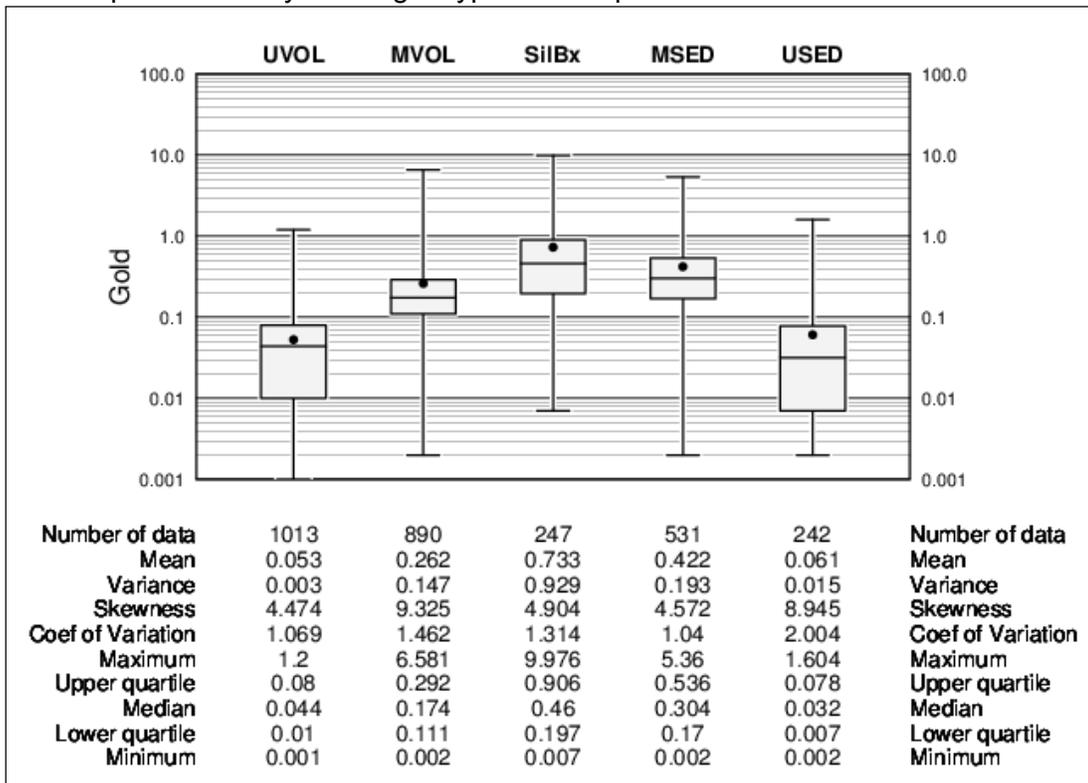
Exploratory data analysis (EDA) involves the statistical summarization of the database in order to better understand the characteristics of the data that might control grade. One of the main purposes of this exercise is to determine if there is evidence of spatial distinctions in grade which could require the separation and isolation of domains during interpolation. The application of separate domains prevents unwanted mixing of data during grade interpolation so that the resulting grade model will better reflect the unique properties of the deposit. However, applying domain boundaries in areas where the data are not statistically unique could impose a bias in the distribution of grades in the model.

A domain boundary, which segregates the data during interpolation, is typically applied if the average grade in one domain is significantly different from that of another domain. A boundary might also be applied where there is evidence that a significant change in the grade distribution exists across a geologic contact.

### 14.6.1 Basic Statistics by Domain

As stated previously, mineralization at El Capitan generally occurs at the interface between an upper volcanic sequence and a lower sedimentary package of rocks. The basic statistics for the distribution of gold by lithologic type is shown in a boxplot in Figure 21. Note: the original lithologic types have been broken into five types: mineralized volcanic (MVOL), unmineralized volcanic (UVOL), “main silicified breccia” zone (SILBx), mineralized sediments (MSED) and unmineralized sediments (USED). Gold grades tend to be highest in the silicified breccia zone, but there is significant overlap between this and the mineralized volcanic and sediments.

Figure 21: Boxplot of Gold by Lithologic Type at El Capitan



At Jesus Maria, approximately 15% of the rocks intersected in drilling consist of dacite porphyry and the remaining rocks are sedimentary in nature. The dacite dykes are mineralized, but they tend to contain, on average, slightly lower grades compared to the sedimentary rocks.

### 14.6.2 Contact Profiles

Contact profiles evaluate the nature of grade trends between two domains: they graphically display the average grades at increasing distances from the contact boundary. Those contact profiles that show a marked difference in grade across a domain boundary indicate that the two datasets should be isolated during interpolation. Conversely, if a more gradual change in grade occurs across a contact, the introduction of a hard boundary (e.g., segregation during interpolation) might result in a much different trend in the grade model; in this case, the change in grade between domains in the model is often more abrupt than the trends seen in the raw data. Finally, a flat contact profile

indicates no grade changes across the boundary; in this case, hard or soft domain boundaries will produce similar results in the model.

A series of contact profiles were generated to evaluate the nature of gold across the lithologic types at El Capitan. The two examples shown in Figure 22 and Figure 23 show some moderate differences in grade between the silicified breccia zone versus the surrounding mineralized volcanic and sediments. The gold grades tend to build up close to the contact and are more transitional rather than abrupt.

Figure 22: Contact Profile for Gold in Mineralized Volcanics vs. Silicified Breccia Zone at El Capitan

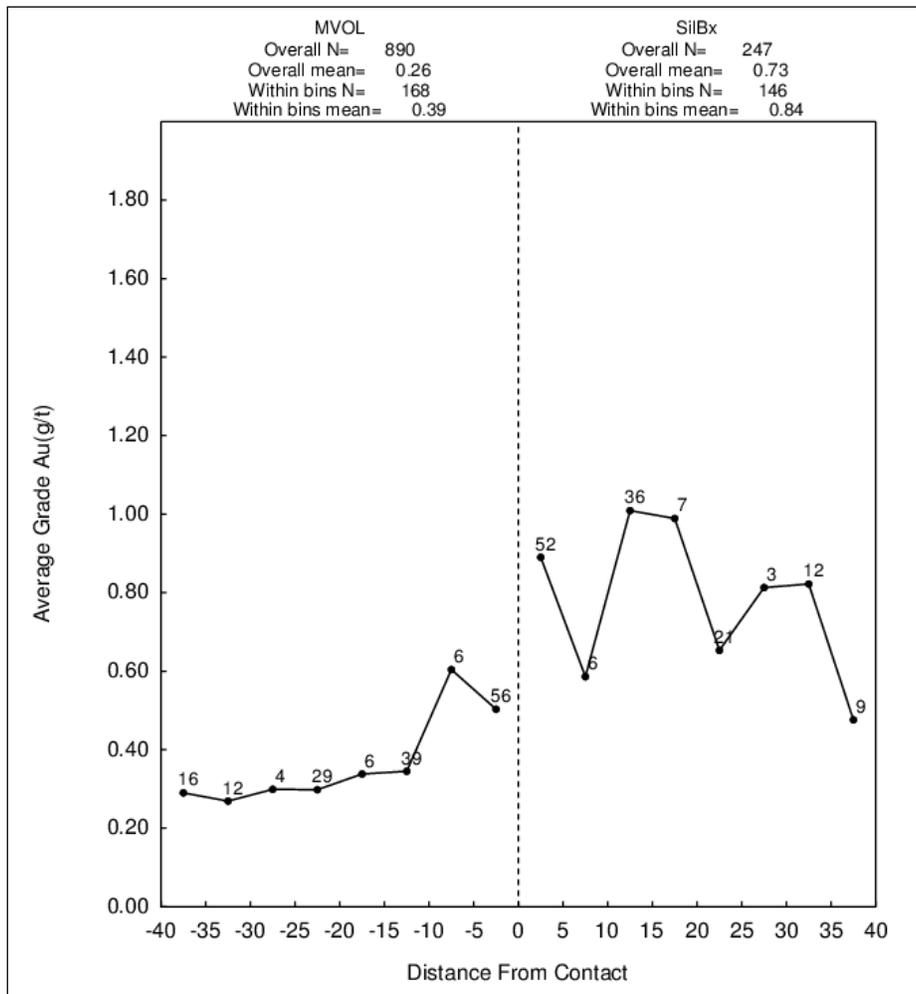
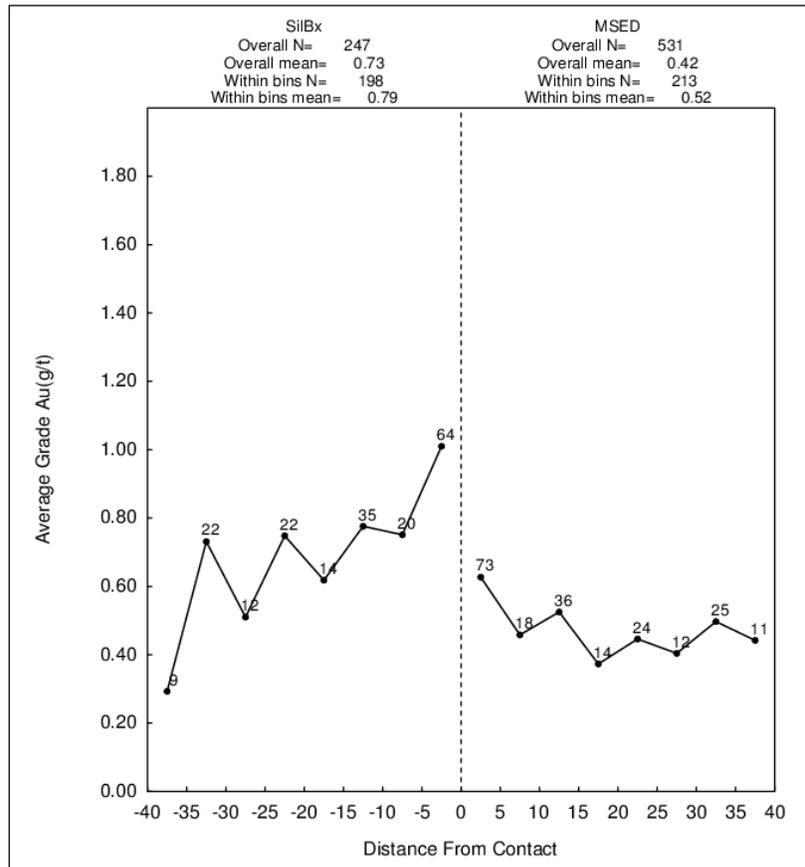


Figure 23: Contact Profile for Gold in Silicified Breccia Zone vs. Mineralized Sediments at El Capitan



### 14.6.3 Conclusions and Modeling Implications

The results of the EDA at El Capitan indicate that some differences exist in the gold (and silver) content of the main silicified breccia zone compared to the surrounding rock types. However, following visual inspection of the distribution of gold (and silver) in the various lithologic types, it appears that the mineralized sediments and volcanics tend to be intercalated with the intervals logged as silicified breccia. In many areas the gold (and silver) grades tend to be somewhat continuous across all three lithologic types. This trend suggests that the samples should not be segregated during model grade interpolations.

At Jesus Maria, there is no evidence of lithologic controls of the distribution of silver or gold.

### 14.7 Development of Probability Shells

In the absence of a geologic model, a probability shell approach has been taken to help segregate mineralized from unmineralized rocks during the development of the resource model. A threshold grade of 0.1 g/t gold is derived from visual observations of the *natural* increase in gold grade in drill holes and is supported by an inflection in the distribution of gold sample data on a cumulative probability plot. Similarly, a threshold grade of 1.0 g/t Ag was selected from the distribution of silver grades.

Indicator variables were assigned to samples above and below the threshold grade, and indicator variograms were developed for use during ordinary kriging of probability estimates in the model.

The mineralized trends inherent in the deposits are retained in the block model through the use of a dynamic search approach during all probability and grade interpolations. Several 3D planes have been interpreted that represent the overall trend of the gold and silver mineralization. These *trend planes* are then used to orient search directions so that samples of a similar nature are related during interpolations in the block model. This approach introduces a dynamic, anisotropic search process that reproduces the locally complex, undulating, and banded nature of the mineralization in the block model that would otherwise be impossible to achieve using traditionally-oriented search ellipses. The trends of mineralization, shown in Figure 24 and Figure 25, are similar for gold and silver at Jesus Maria. At El Capitan, the trends have similar orientation, but gold mineralization tends to be (stratigraphically) slightly higher than the silver trend.

Figure 24: Interpreted Gold Trend Planes used to Control Dynamic Search Orientations during Model Interpolations

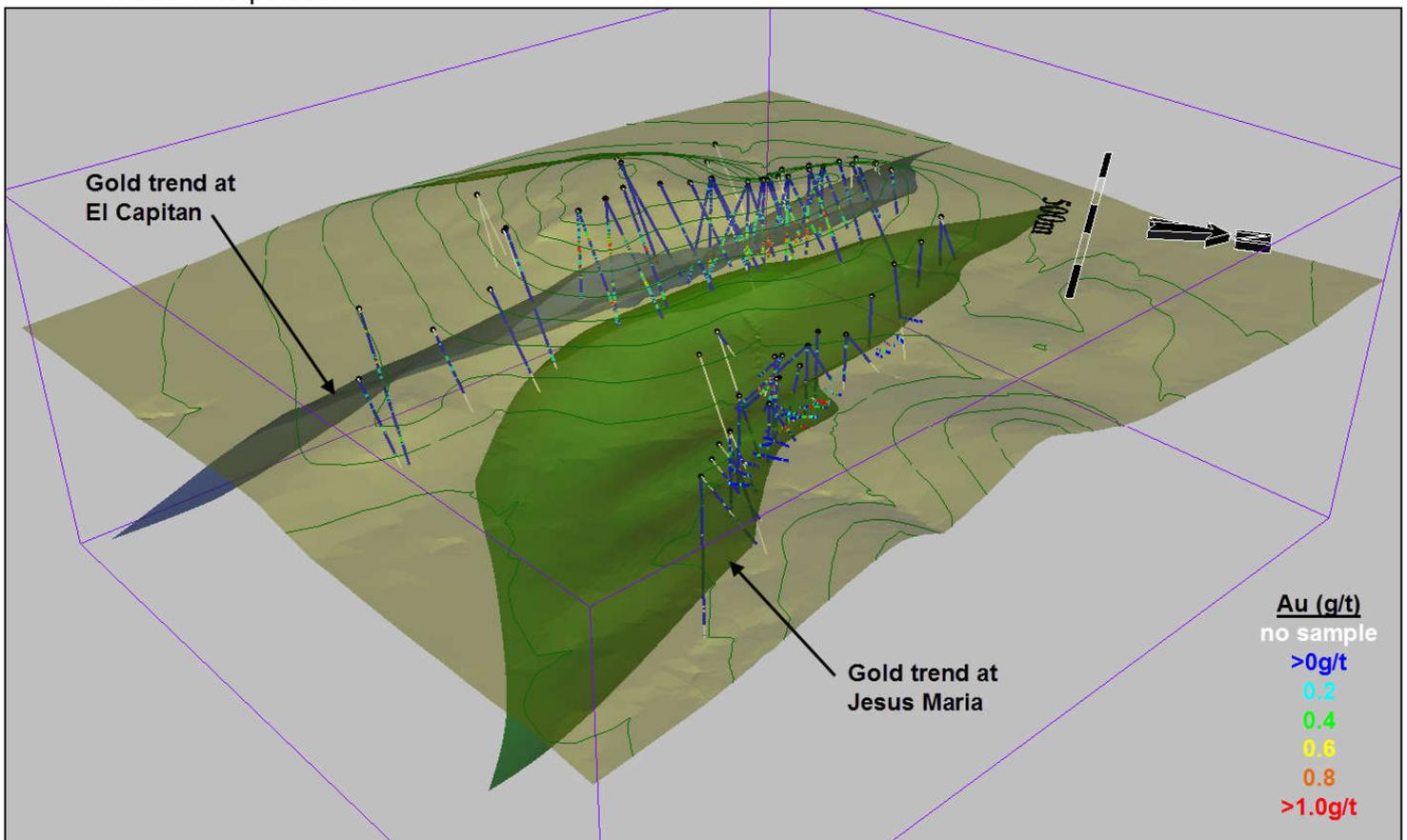
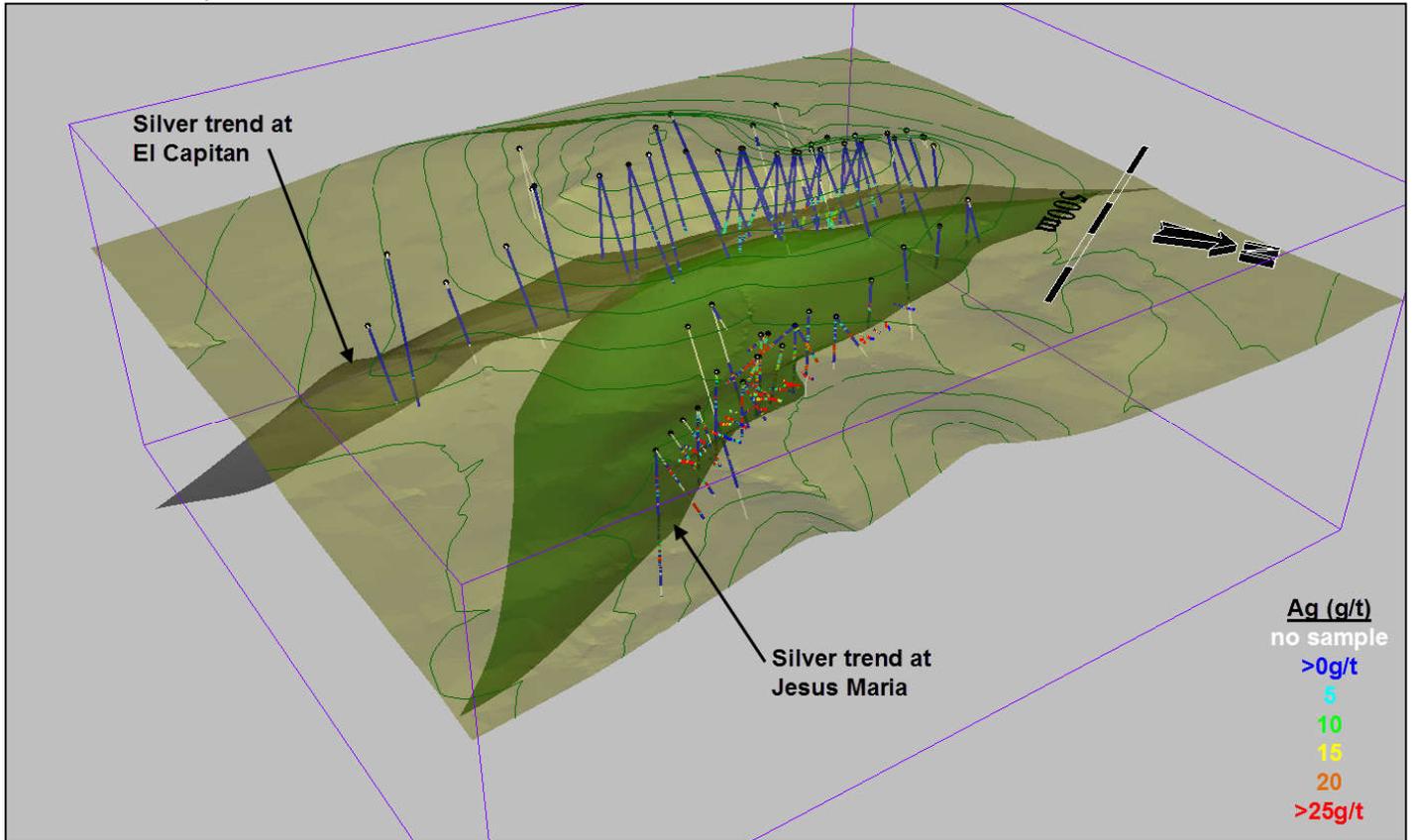


Figure 25: Interpreted Silver Trend Planes used to Control Dynamic Search Orientations during Model Interpolations



A 50% probability threshold was selected in the development of the probability shells. This means that there is a >50% probability that the grade in the gold shell will be above 0.1 g/t Au or, the grade in the silver shell will be above 1.0 g/t Ag. The distributions of the probability shells are shown in Figure 26 and Figure 27. As stated previously, the gold mineralization at El Capitan tends to be at a slightly higher stratigraphic elevation compared to the presence of silver. At Jesus Maria, gold mineralization tends to be restricted to only the centre part of the deposit. Note: The silver shell is interpreted to join between El Capitan and Jesus Maria on the western side of the model.

Figure 26: Isometric View Looking Northwest of the Gold and Silver Probability Shells

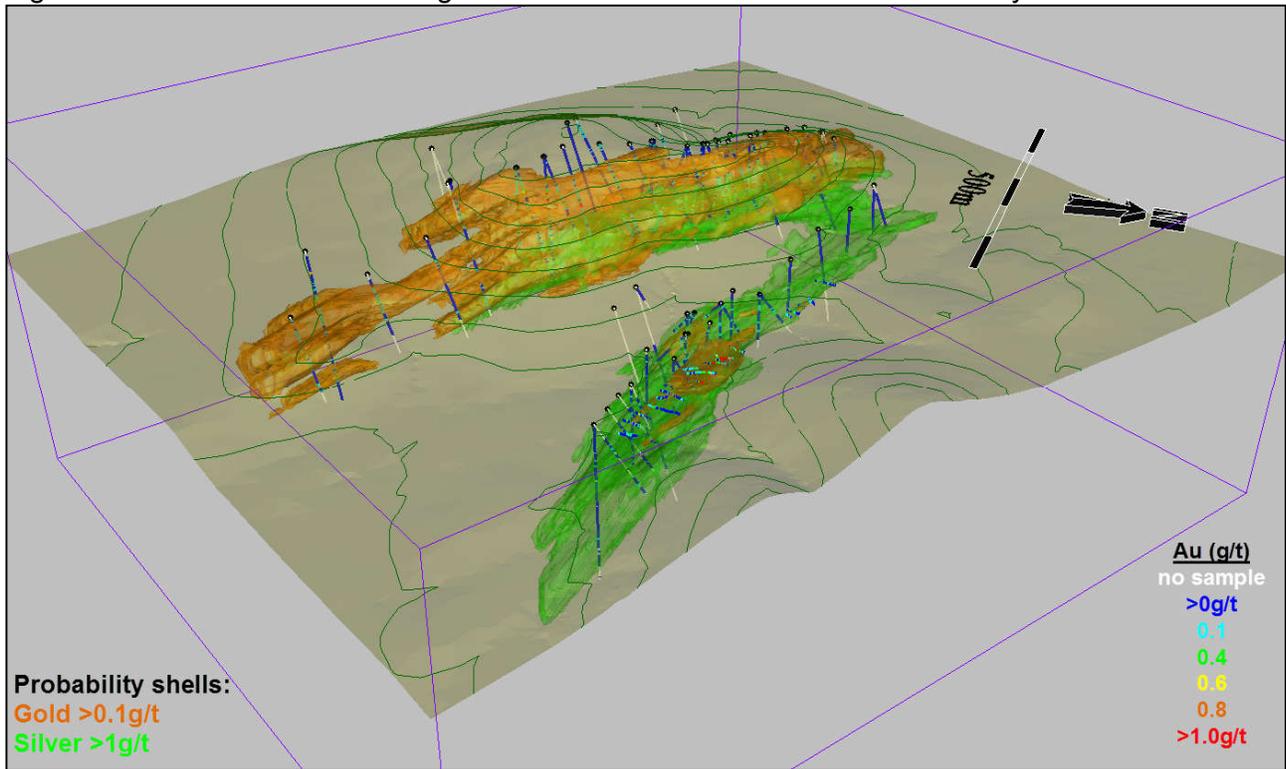


Figure 27: Isometric View Looking Southwest of the Gold and Silver Probability Shells

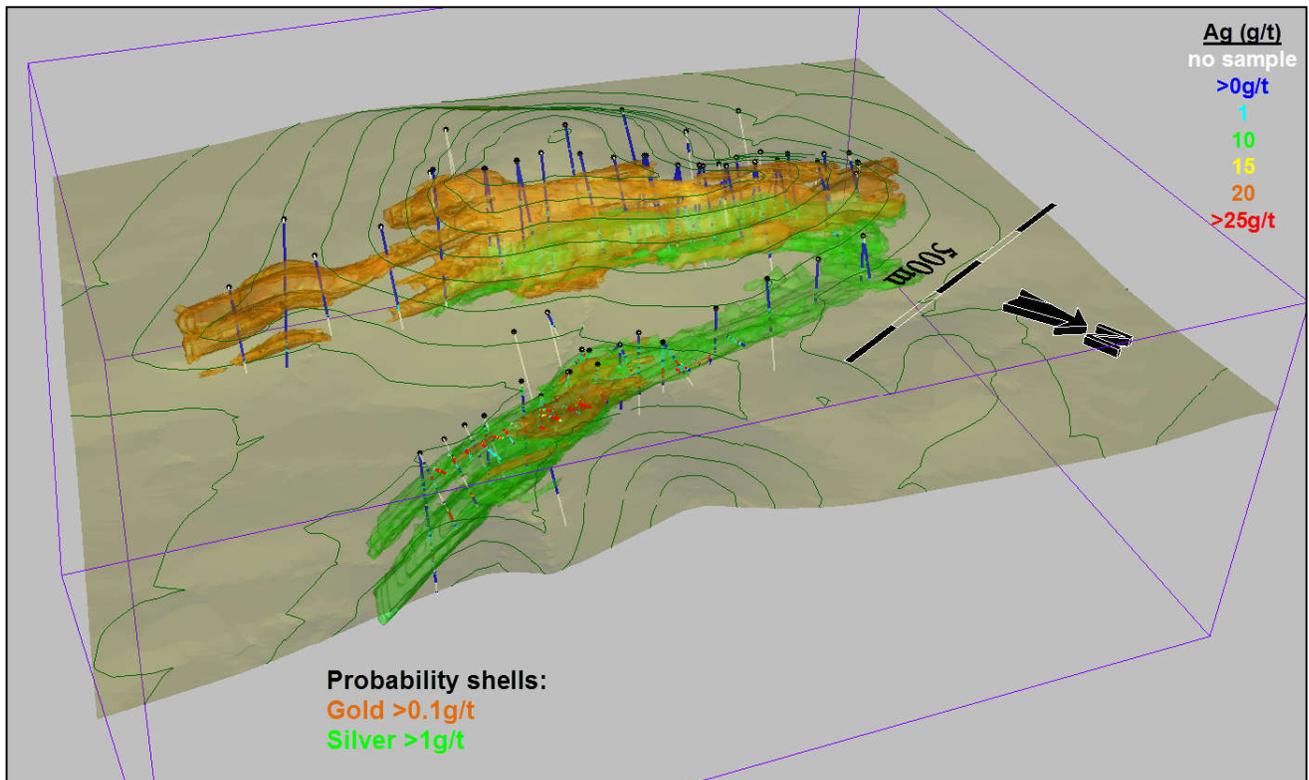


Table 26 shows a summary of composited sample data occurring inside and outside of the probability shells. There are significant differences in the mean grade of samples inside vs. outside of the shell domains. Data is not mixed between these domains during block grade interpolations.

Table 26: Statistical Summary of Composited Sample Database Inside/Outside of the Probability Shell Domains

Element	Deposit	Domain	Number of Composites	Total Length (m)	Min	Max	Mean	Standard Deviation
Gold (g/t)	El Capitan	Inside gold shell	1,645	3,285	0	9.976	0.388	0.552
		Outside gold shell	1,655	3,308	0	1.577	0.049	0.078
	Jesus Maria	Inside gold shell	328	576	0	6.272	0.481	0.631
		Outside gold shell	1,510	2,957	0	1.022	0.042	0.087
Silver (g/t)	El Capitan	Inside silver shell	892	1,779	0	114.3	5.37	8.58
		Outside silver shell	2,408	4,815	0	81.70	0.27	1.78
	Jesus Maria	Inside silver shell	1,079	2,018	0	2,152.2	53.75	134.37
		Outside silver shell	762	1,518	0	421.7	1.50	18.43

Note: Weighted by sample length

#### 14.8 Evaluation of Outlier Grades

Histograms and probability plots were reviewed to identify the presence of anomalous outlier sample data (sample data composited to 2 m intervals). Following a review of the physical location of potentially erratic samples in relation to the surrounding sample data, it was decided that these would be controlled during block grade interpolations using a combination of traditional top cutting plus the use of an outlier limitation. An outlier limitation controls the distance of influence of samples above a defined grade threshold during block grade interpolations. Samples above the outlier threshold grades are limited to a maximum distance of 25 m during grade estimates in the block model. Table 27 lists the top-cut and outlier thresholds and the resulting effects on the resource model.

Table 27: Summary of Outlier Grade Controls

Metal	Area	Top-Cut Limit (g/t per number of composites affected)	Outlier Limit <sup>1</sup> (g/t)	Metal Lost in Model (%)
Gold	El Capitan Inside Shell	5.0 / 5.0	3	14
	El Capitan Outside Shell	0.5 / 8.0	0.3	
	JM Inside Shell	4.0 / 4.0	2.5	20
	JM Outside Shell	0.7 / 3.0	0.5	
Silver	El Capitan Inside Shell	100 / 1	30	17
	El Capitan Outside Shell	10 / 2	5	
	JM Inside Shell	1,200 / 2	800	25
	JM Outside Shell	30 / 5	8	

Note: 1 - Samples above threshold limited to maximum distance of 35 m during interpolation.

The amount of metal lost due to these measures is relatively high due to a combination of a skewed database for both gold and silver and a lack of drilling in some areas. One very high-grade sample in a widely spaced drill hole can have a significant effect on a resource model without these control measures in place. These results indicate that additional, more closely spaced drilling is required to increase the confidence in the resource estimate.

## 14.9 Variography

The degree of spatial variability in a mineral deposit depends on both the distance and direction between points of comparison. Typically, the variability between samples increases as the distance between those samples increases. If the degree of variability is related to the direction of comparison, then the deposit is said to exhibit *anisotropic* tendencies which can be summarized with the search ellipse. The semi-variogram is a common function used to measure the spatial variability within a deposit.

The components of the variogram include the *nugget*, the *sill* and the *range*. Often samples compared over very short distances, even samples compared from the *same* location, show some degree of variability. As a result, the curve of the variogram often begins at some point on the y-axis above the origin: this point is called the nugget. The nugget is a measure of not only the natural variability of the data over very short distances, but it also is a measure of the variability which can be introduced due to errors during sample collection, preparation and the assay process.

The amount of variability between samples typically increases as the distance between the samples increases. Eventually, the degree of variability between samples reaches a constant, maximum

value; this is called the sill, and the distance between samples at which this occurs is called the range.

The spatial evaluation of the data in this report was conducted using a correlogram rather than the traditional variogram. The correlogram is normalized to the variance of the data and is less sensitive to outlier values, generally giving better results.

Correlograms were generated using the commercial software package SAGE2001<sup>®</sup> developed by Isaaks & Co. Multidirectional correlograms were generated for composited gold and silver sample data inside of the probability shells in each deposit area. These correlograms were used to estimate grades both inside and outside of the shell domains. Correlograms are generated using Z-coordinates relative to the trend planes described in *Section 14.7*. The results are summarized in Table 28.

Table 28: Variogram Parameters

Deposit	Element	Nugget	Sill 1	Sill 2	1st Structure			2nd Structure		
					Range (m)	Azimuth	Dip	Range (m)	Azimuth	Dip
El Capitan	Gold	0.451	0.323	0.226	33	102	16	263	319	-5
		Spherical			14	359	37	117	49	-1
		Spherical			8	211	49	36	327	84
	Silver	0.264	0.353	0.382	34	134	17	186	135	-6
		Spherical			24	87	-66	31	47	16
		Spherical			5	39	17	18	206	73
Jesus Maria	Gold	0.068	0.896	0.036	47	104	-8	61	20	35
		Spherical			40	20	35	36	104	-8
		Spherical			2	183	54	7	183	54
	Silver	0.056	0.722	0.222	30	355	48	30	355	48
		Spherical			16	94	8	15	94	8
		Spherical			3	191	41	3	191	41

Note: Correlograms conducted on 2 m drill hole composite data. Elevations (Z coordinate) are relative to the trend of the mineralization.

## 14.10 Model Setup and Limits

A block model was initialized in MinePlan® and the dimensions are shown in Table 29. The selection of a nominal block size measuring 10 m x 5 m x 10 m is considered appropriate with respect to the current drill hole spacing as well as the selective mining unit (SMU) size typical of an operation of this type and scale. The block model is horizontally rotated by 30 degrees so that the X-axis is parallel to the general strike of the mineralization at 120 degrees. The origin of the rotation in UTM coordinates is 545230E, 2837100N (NAD27 Zone13). The extents of the block model limits are represented by the purple rectangle shown in Figure 16 through Figure 20.

Table 29: Block Model Limits

Direction	Minimum	Maximum	Block Size (m)	# Blocks
X (Az120°)	0	1400	10	140
Y (Az30°)	0	1200	5	240
Z (elevation)	1600	2150	10	55

Note: A 30 degree horizontal rotation about origin at 545230E, 2837100N.

Blocks in the model were assigned integer codes on a majority basis inside/outside of the probability shell domains. Blocks are also assigned values representing the percentage below the topography; this is used as a weighting item when determining resources.

## 14.11 Interpolation Parameters

The block model grades for gold and silver have been estimated using ordinary kriging (“OK”). The results of the OK estimations were compared with the *Hermitian Polynomial Change of Support* model (also referred to as the Discrete Gaussian correction). This method is described in more detail in *Section 14.12*.

The El Capitan OK model was generated with a relatively limited number of samples to match the change of support or “Hercó” (HERmitian COrrrection) grade distribution. This approach reduces the amount of smoothing or averaging in the model and, while there might be some uncertainty on a localized scale, this approach produces reliable estimations of the recoverable grade and tonnage for the overall deposit.

During grade estimations, the search orientations dynamically follow the mineralization *trend* planes described previously. Secondary elevation values, relative to these trend planes, are assigned to composited samples and model blocks, and grade interpolations are conducted using these *relative* elevations as surrogate Z-coordinates. This approach adjusts the search orientations dynamically, resulting in a resource model that exhibits the undulations and banded nature seen in the drill holes.

The interpolation parameters for gold and silver are summarized in Table 30.

Table 30: Interpolation Parameters

Deposit	Element/ Domain	Search Ellipse Range (m)			Number of Composites <sup>2</sup>			Other
		X	Y	Z <sup>1</sup>	Min/block	Max/block	Max/hole	
El Capitan	Gold inside shell	200	200	7	3	21	7	1 DH per octant
	Gold outside shell	200	200	7	3	28	7	1 DH per octant
	Silver Inside shell	200	200	7	3	21	7	1 DH per octant
	Silver outside shell	200	200	7	3	28	7	1 DH per octant
Jesus Maria	Gold inside shell	200	200	7	3	21	7	1 DH per octant
	Gold outside shell	200	200	7	3	28	7	1 DH per octant
	Silver Inside shell	200	200	7	3	15	5	1 DH per octant
	Silver outside shell	200	200	7	3	28	7	1 DH per octant

Notes: <sup>1</sup> Z range relative to trend planes.

<sup>2</sup> 2-m composite length.

## 14.12 Validation

The results of the modeling process were validated using several methods. These include a thorough visual review of the model grades in relation to the underlying drill hole sample grades, comparisons with the change of support model, comparisons with other estimation methods, and grade distribution comparisons using swath plots.

### 14.12.1 Visual Inspection

A detailed visual inspection of the block model was conducted in both section and plan to ensure the desired results following interpolation. This included confirmation of the proper coding of blocks within the probability shell domains. The gold and silver grades in the model appear to be a valid representation of the underlying drill hole sample data.

### 14.12.2 Model Checks for Change of Support

The relative degree of smoothing in the block model estimates was evaluated using the *Discrete Gaussian Correction*; it is also referred to as the *Hermitian Polynomial Change of Support* method

(Rossi and Deutsch, 2014). With this method, the distribution of the hypothetical block grades can be directly compared to the estimated (“OK”) model through the use of pseudo-grade/tonnage curves. Adjustments are made to the block model interpolation parameters until an acceptable match is made with the “Herco” (HERmitian COrrrection) distribution. In general, the estimated model should be slightly higher in tonnage and slightly lower in grade when compared to the Herco distribution at the projected cut-off grade. These differences account for selectivity and other potential ore-handling issues which commonly occur during mining.

The Herco distribution is derived from the declustered composite grades which have been adjusted to account for the change in support moving from smaller drill hole composite samples to the larger blocks in the model. The transformation results in a less skewed distribution but with the same mean as the original declustered samples.

Examples of Herco plots for gold and silver for the two deposits, El Capitan and Jesus Maria, are shown in Figure 28 and

Figure 29, respectively. The fit for gold is very good. The somewhat erratic but acceptable fit for silver is the result of the relative lack of data.

Figure 28: El Capitan Herco Grade/Tonnage Plot for Gold and Silver

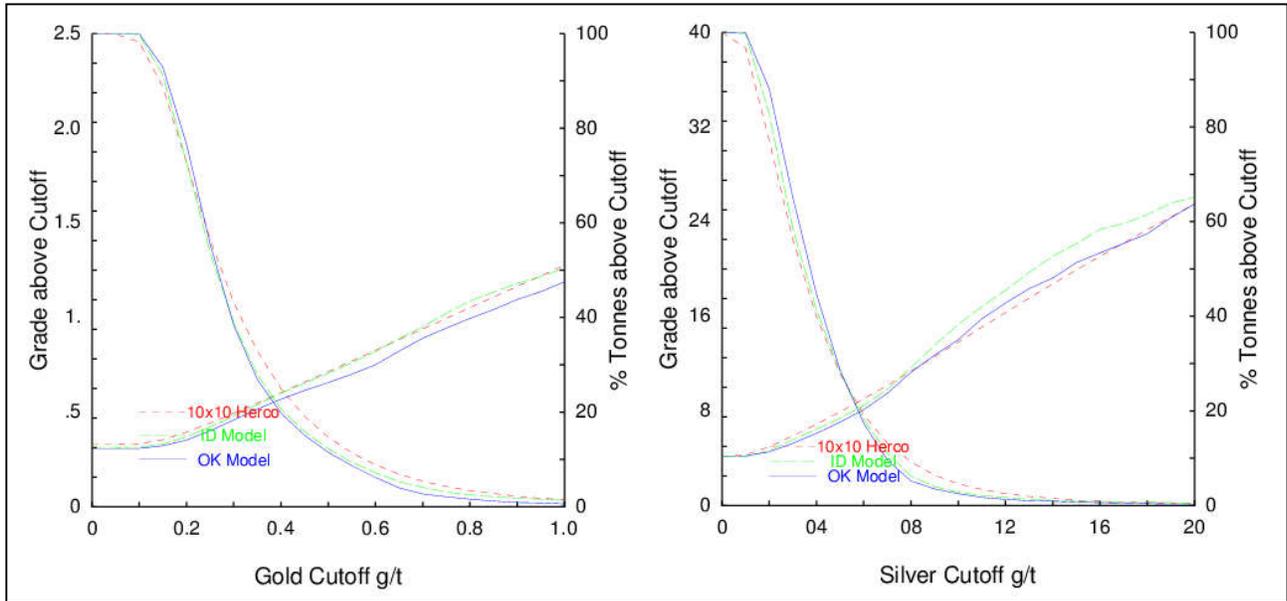
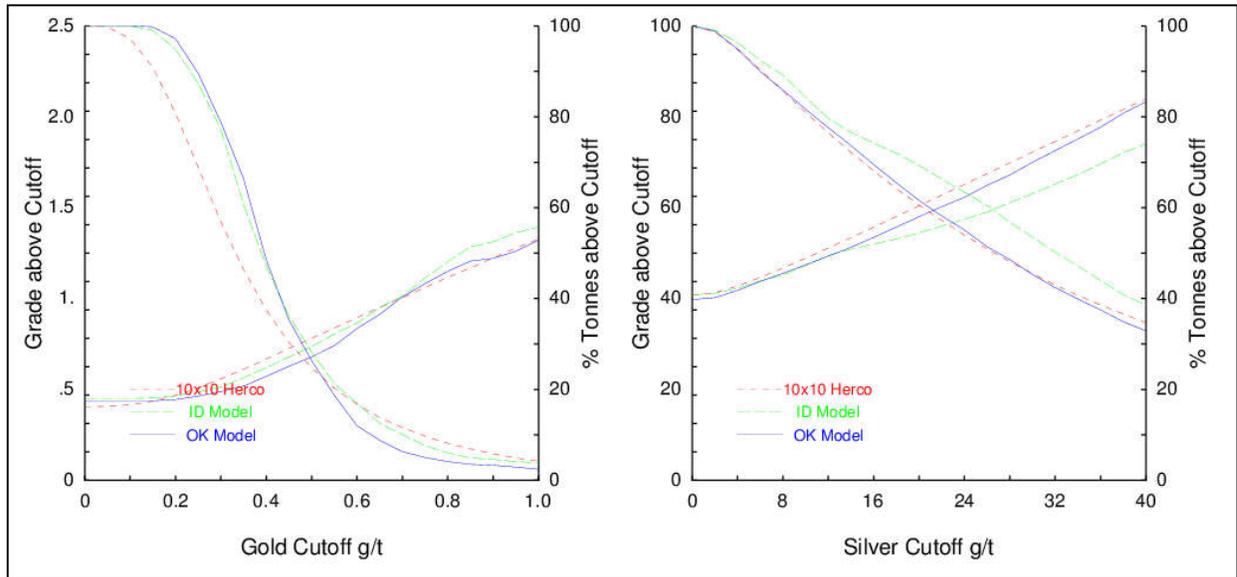


Figure 29: Jesus Maria Herco Grade/Tonnage Plot for Gold and Silver



### 14.12.3 Comparison of Interpolation Methods

For comparison purposes, additional models for gold and silver were generated using both the inverse distance weighted (IDW) and nearest neighbour (NN) interpolation methods. Note: The NN model was made using data composited to 5 m intervals. Comparisons are made between these models on grade/tonnage curves as shown in Figure 30 and Figure 31. There is good correlation between all models throughout the range of cut-off grades. The low silver at El Capitan and low gold at Jesus Maria are very evident in in Figure 30 and Figure 31.

Figure 30: El Capitan Grade/Tonnage Comparison of Gold and Silver Models

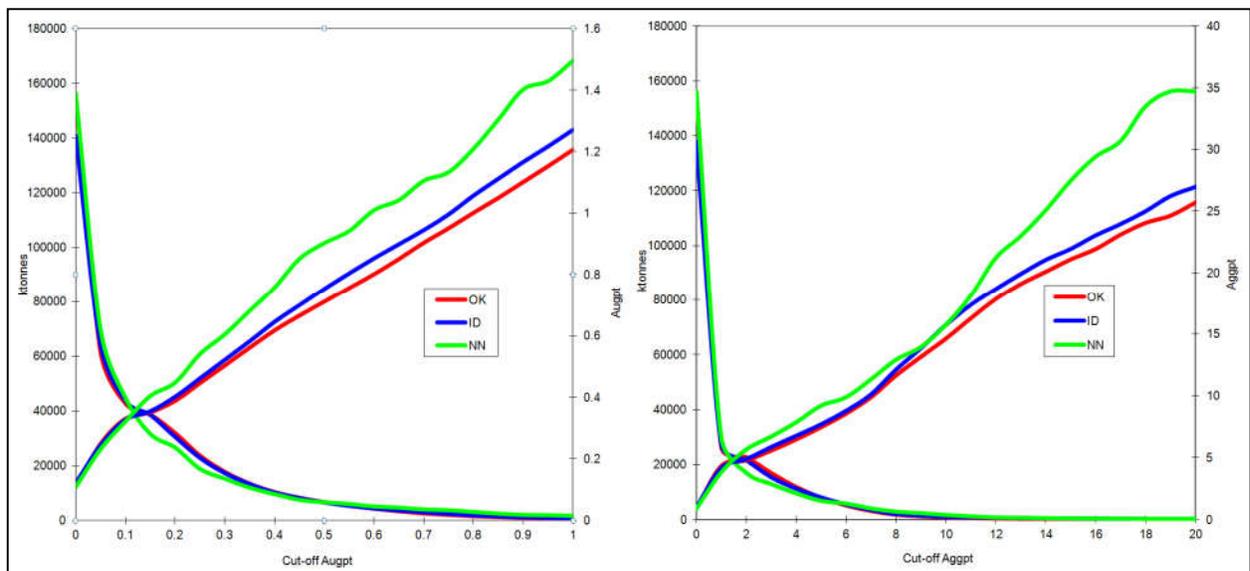
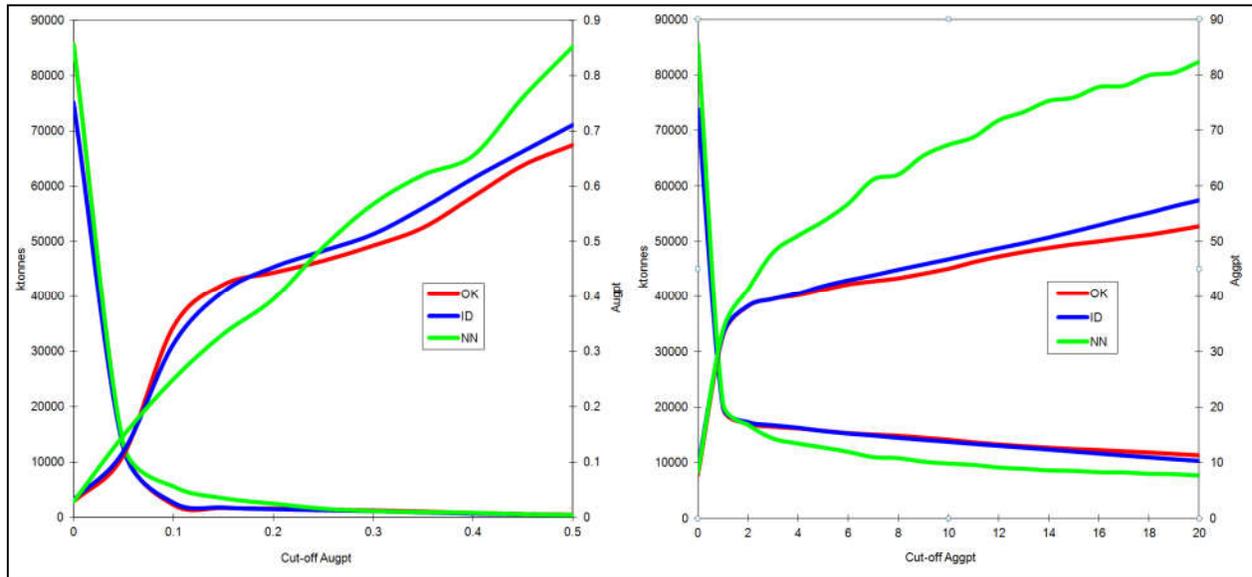


Figure 31: Jesus Maria Grade/Tonnage Comparison of Gold and Silver Models



#### 14.12.4 Swath Plots (Drift Analysis)

A swath plot is a graphical display of the grade distribution derived from a series of bands, or swaths, generated in several directions through the deposit. Using the swath plot, grade variations from the OK model are compared to the distribution derived from the declustered NN grade model.

On a local scale, the NN model does not provide reliable estimations of grade, but, on a much larger scale, it represents an unbiased estimate of the grade distribution based on the underlying data. Therefore, if the OK model is unbiased, the grade trends might show local fluctuations on a swath plot, but the overall trend should be similar to the NN distribution of grade.

Swath plots were generated in three orthogonal directions for both gold and silver models. Examples by easting (north-south swaths) are shown in Figure 32 and Figure 33.

There is good correspondence between the models in most areas. The degree of smoothing in the OK model is evident in the peaks and valleys shown in the swath plots. Deviations tend to occur in areas near the flanks of the deposit where the density of drilling decreases.

Figure 32: El Capitan Swath Plot of Gold and Silver Models by Easting

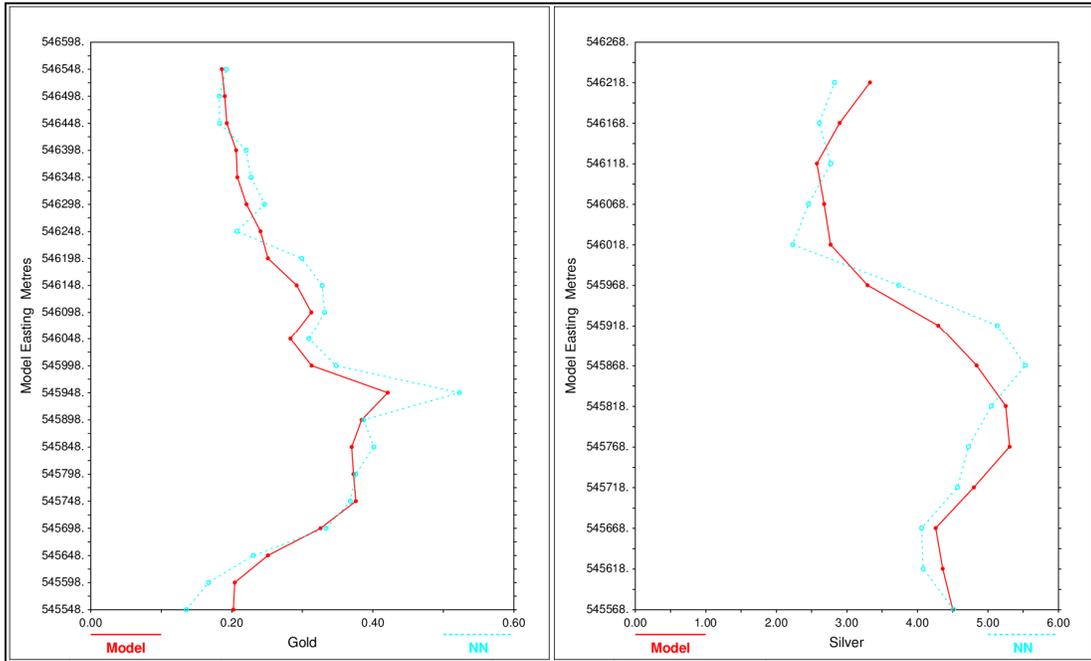
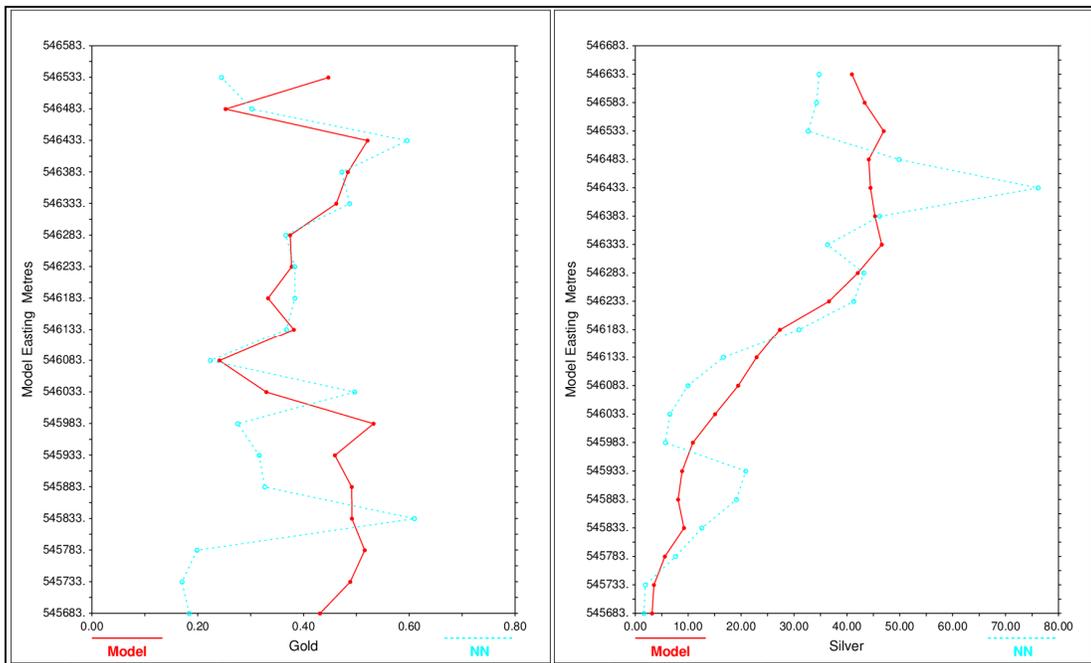


Figure 33: Jesus Maria Swath Plot of Gold and Silver Models by Easting



### 14.13 Resource Classification

The mineral resources at the El Capitan and Jesus Maria deposits were classified in accordance with the CIM *Definition* Definition Standards For Mineral Resources and Mineral Reserves (May 10

, 2014). The classification parameters are defined in relation to the distance between sample data and are intended to encompass zones of reasonably continuous mineralization.

Both deposits are at a relatively early stage of evaluation by drilling and, as a result, some assumptions have to be made using the available data. Classification at El Capitan is primarily influenced by the nature of gold in the deposit. Similarly, classification at Jesus Maria is primarily driven by the distribution of silver in the deposit. Studies of indicator variogram ranges suggest that zones of continuous, potentially economic, mineralization can be inferred when drill holes are spaced at a maximum distance of 150 m; therefore, blocks in the model within a maximum distance of 75 m from a drill hole have been included in the Inferred category.

At this stage there are no resources that meet the degree of confidence required to be included in the Indicated category.

#### 14.14 Mineral Resources

As defined by the CIM Definition Standards (May, 2014), a mineral resource must exhibit reasonable prospects for eventual economic extraction. The size, type and location of these deposits suggest that they are primarily amenable to open-pit extraction methods. A series of projected technical and economic parameters have been applied to generate “floating cone” pit shells in order to evaluate what parts of the deposits meet these criteria and what parts of the deeper mineralization might not be economic due to the increased waste stripping requirements.

The following assumptions were used for open pit mining at El Capitan with cyanide heap-leach extraction that requires some crushing:

- Mining \$2/t
- Process \$6/t
- G&A \$1/t
- Gold recovery 70%
- Silver recovery 45%
- Pit slope 45 degrees
- Metal price \$1,500/oz Au, \$20/oz Ag
- Projected cut-off grade 0.25 g/t Au

The following assumptions were used for open pit mining at Jesus Maria with the production of a sulphide flotation concentrate containing silver and gold:

- Mining \$2/t
- Process \$15/t
- G&A \$1/t
- Gold recovery 75%
- Silver recovery 85%
- Pit slope 45 degrees
- Metal price \$1,500/oz Au, \$20/oz Ag

- Projected cut-off grade 30 g/t Ag

The pit shells generated at both El Capitan and Jesus Maria, shown in Figures 14-19 and 14-20, extend for most of the strike length of the deposits and reach depths of 150 m below surface. Based on the results, mineral resources at El Capitan and Jesus Maria meet the following criteria:

- These deposits are at a relatively early stage of evaluation and the quantity and grade of the resource is based on limited geologic evidence and sampling. Resources can only be included in the Inferred category.
- Based on the current data, these deposits form relatively continuous zones of mineralization that are potentially amenable to open-pit extraction methods.
- Tests based on reasonably applicable technical and economic parameters indicate that mineralization extending to maximum depths of 150m below surface exhibit reasonable prospects for eventual economic extraction if the grade is above 0.25 g/t gold at El Capitan or above 30 g/t silver at Jesus Maria.

Figure 34: Isometric View of Grade Shells at Projected Cut-Off Grades Relative to Floating Cone Pit Shells

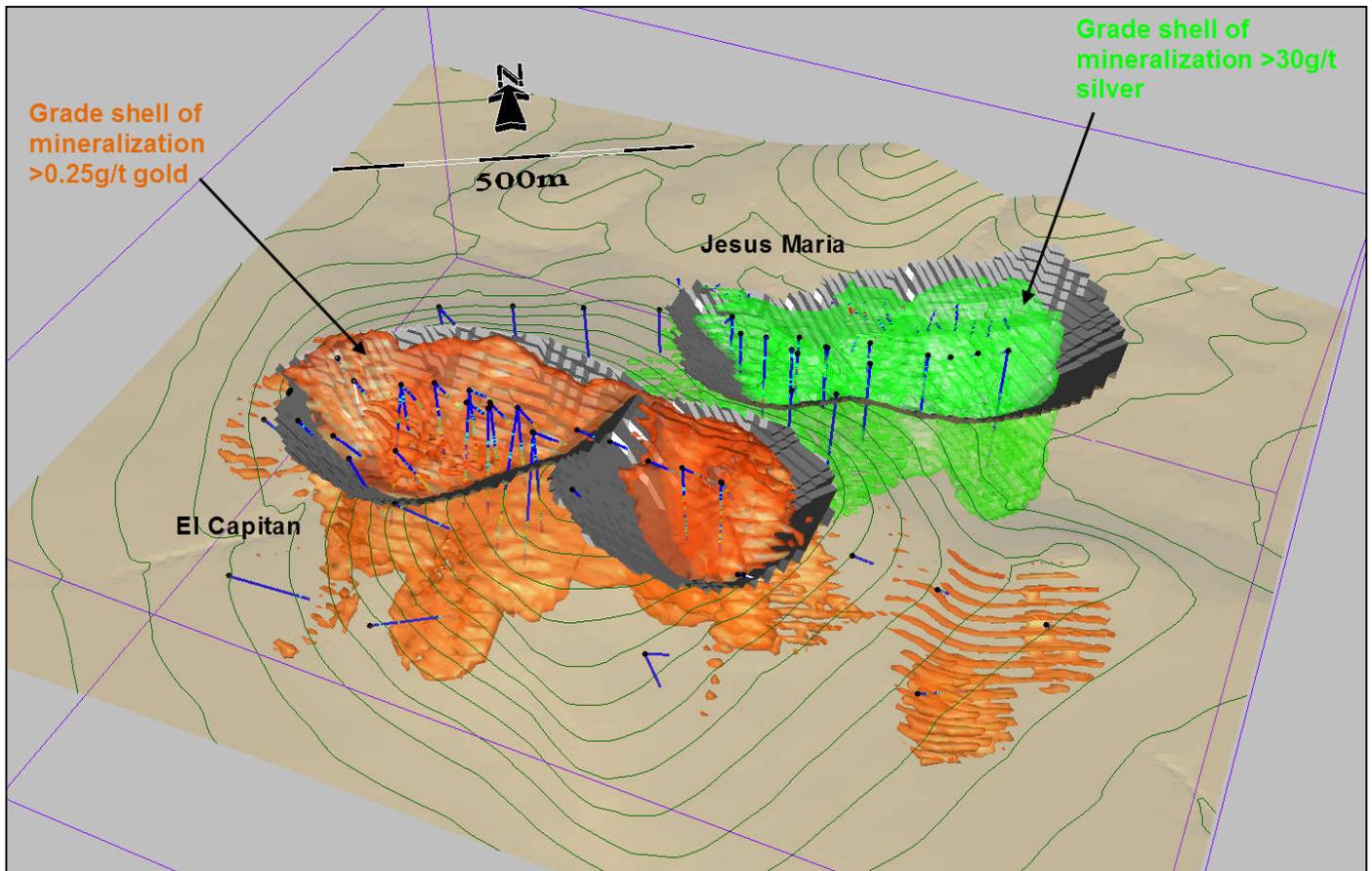
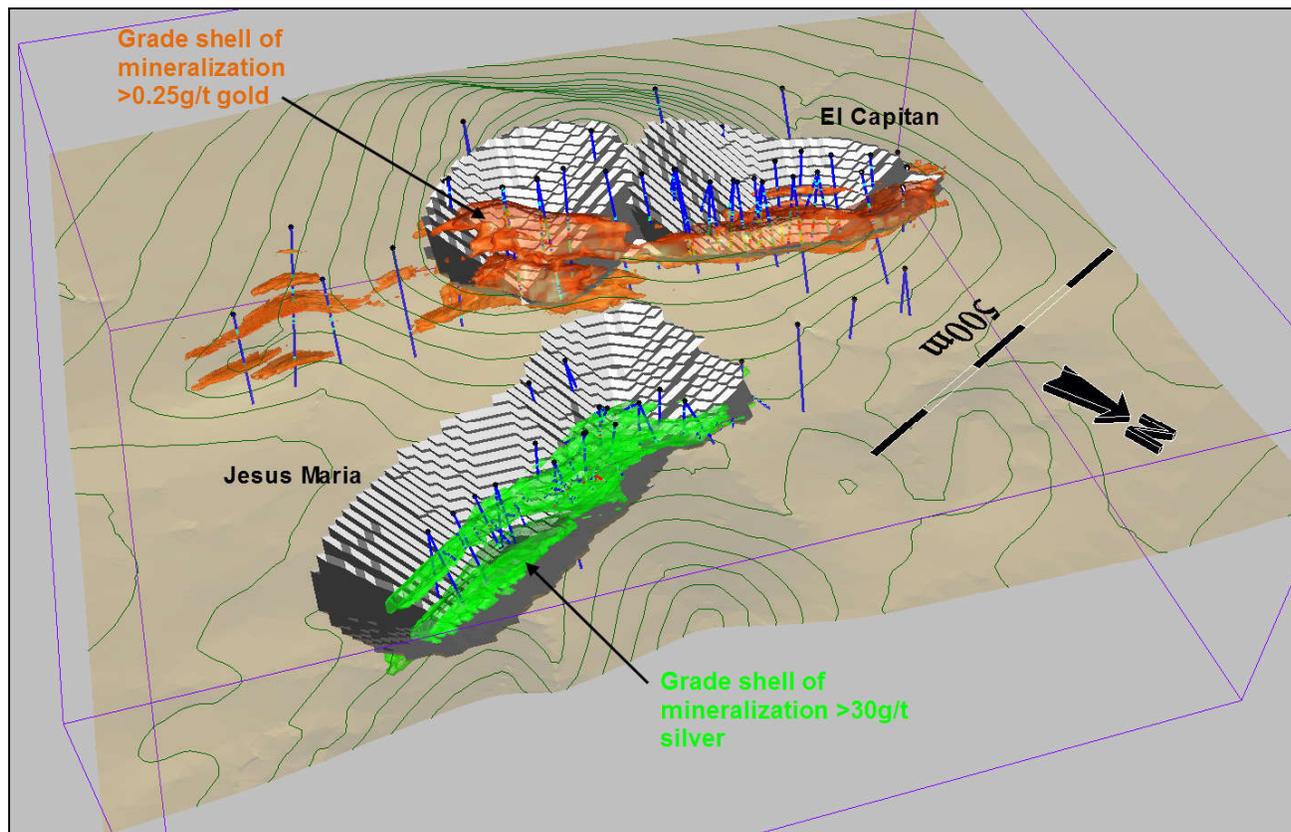


Figure 35: Isometric View of Grades Shells at Projected Cut-Off Grades Relative to Floating Cone Pit Shells



The Mineral Resource statement for the El Capitan and Jesus Maria deposits is listed in Table 14.7. It must be stressed that mineral resources are not constrained within pit shells but include mineralization, above the cut-off grade, that is within a maximum depth of 150 m below surface. There are no adjustments for recovery or dilution in the statement of mineral resources. It is important to realize that the results in Table 31 list mineral resources only, these are not mineral reserves, as the economic viability has not been demonstrated.

There has been some historical underground mining that has occurred (near surface) at the Jesus Maria deposit. There are no records of the volume or grade of this production. The full extent of the historic mine workings is unknown, but mining appears to have been selective and limited to within approximately 100 m of surface. Based on observations of the accessible underground workings and the volume of material present in surface dumps, the author believes that the volume of historic production is likely to be between 5,000 tonnes and 15,000 tonnes, but probably not more than 50,000 tonnes. There have been no adjustments to the resource estimate at Jesus Maria to account for this material.

There are no known factors related to environmental, permitting, legal, title, taxation, socio-economic, marketing or political issues which could materially affect the mineral resource. It is reasonable to expect that a majority of mineral resources in the Inferred category will be upgraded to Indicated or Measured mineral resources with additional exploration.

Table 31: Inferred Estimate of Mineral Resources

Deposit	ktonnes	Gold (g/t)	Silver (g/t)	Contained Gold (koz)	Contained Silver (koz)
El Capitan	20,722	0.458	2.8	305	1,832
Jesus Maria	7,573	0.105	62.3	26	15,158
<b>Combined</b>	<b>28,295</b>	<b>0.364</b>	<b>18.7</b>	<b>331</b>	<b>16,990</b>

Notes: “Base case” cut-off grade for El Capitan is 0.25 g/t Au and for Jesus Maria is 30 g/t Ag  
 Mineral resources occur within a maximum depth of 150 m below surface  
 Resources are not mineral reserves as the economic viability has not been demonstrated

The “base case” cut-off grades of 0.25 g/t Au at El Capitan and 30 g/t Ag at Jesus Maria, are based on projected metal prices of \$1,500/oz Au and \$20/oz Ag. Variations in these projected prices results in changes to the cut-off grades. The sensitivity of mineral resources to cut-off grade is shown in Table 32 and Table 33.

Table 32: Sensitivity of El Capitan Mineral Resource to Gold Cut-Off Grade

Cut-Off Grade (Au g/t)	ktonnes	Au (g/t)	Ag (g/t)	Contained Gold (koz)	Contained Silver (koz)
0.15	33,101	0.362	2.0	385	2,150
0.20	27,388	0.401	2.3	353	2,043
<b>0.25 (Base Case)</b>	<b>20,722</b>	<b>0.458</b>	<b>2.8</b>	<b>305</b>	<b>1,832</b>
0.30	15,726	0.517	3.2	261	1,608
0.35	12,236	0.572	3.5	225	1,393
0.40	9,648	0.626	3.9	194	1,207
0.45	7,879	0.671	4.2	170	1,054
0.50	6,477	0.714	4.4	149	912

Notes: “Base case” cut-off grade of 0.25 g/t Au using a price of \$1,500/oz Au is highlighted in the table  
 Resources are not mineral reserves as the economic viability has not been demonstrated

Table 33: Sensitivity of Jesus Maria Mineral Resource to Silver Cut-Off Grade

Cut-Off Grade (Ag g/t)	ktonnes	Au (g/t)	Ag (g/t)	Contained Silver (koz)	Contained Gold (koz)
15	10,764	50.6	0.095	17,507	33
20	9,836	53.7	0.099	16,983	31
25	8,740	57.6	0.102	16,192	29
<b>30 (Base Case)</b>	<b>7,573</b>	<b>62.3</b>	<b>0.105</b>	<b>15,158</b>	<b>26</b>
35	6,425	67.6	0.109	13,960	23
40	5,493	72.7	0.113	12,840	20
45	4,566	78.9	0.120	11,577	18
50	3,896	84.3	0.124	10,561	16

Notes: "Base case" cut-off grade of 30 g/t Ag using a \$20/oz Ag price is highlighted in the table  
Resources are not mineral reserves as the economic viability has not been demonstrated

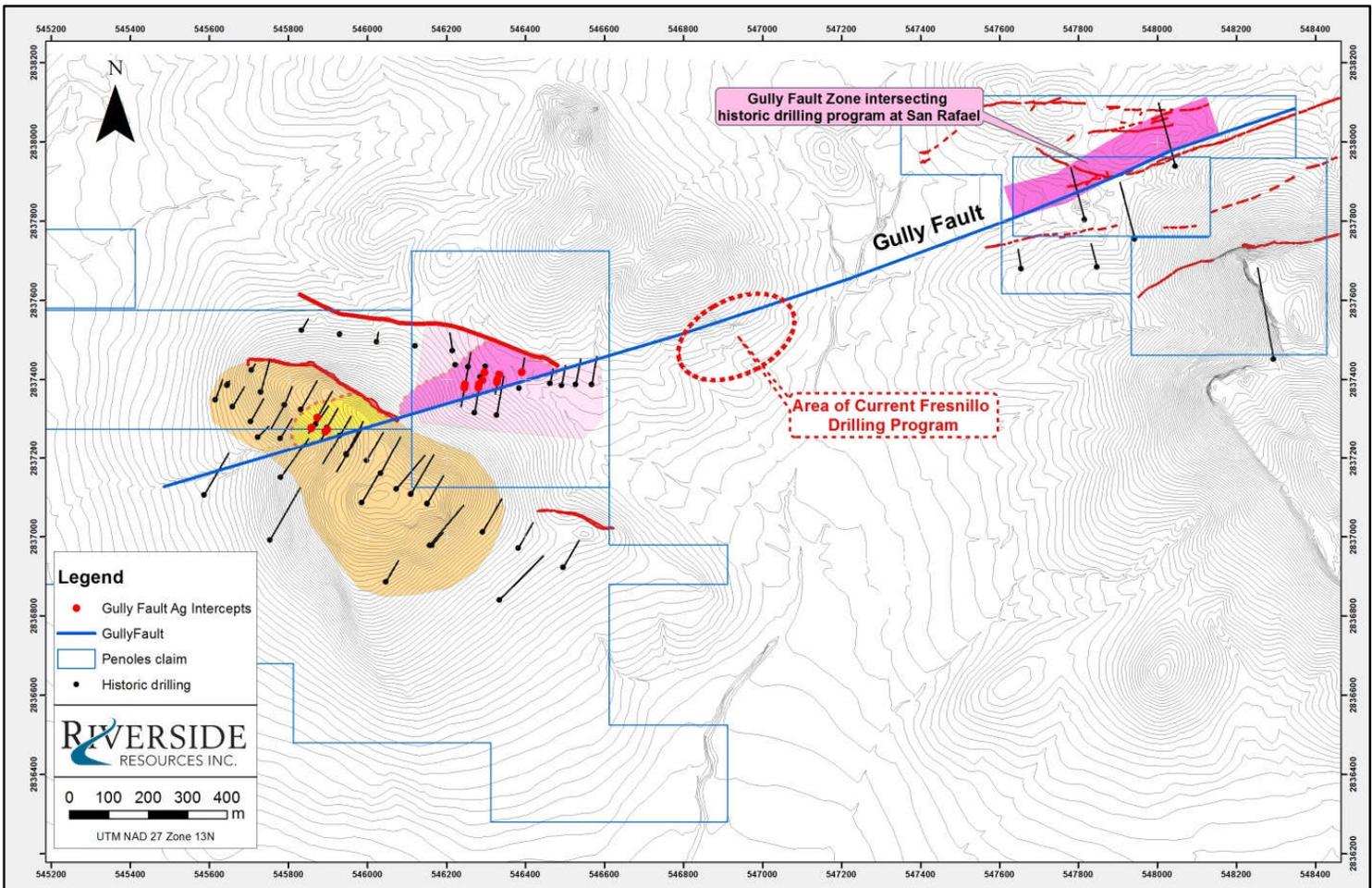
## 15 THROUGH 22 ARE NOT APPLICABLE TO THIS REPORT

Items 15 through 22 of Form 43-101F1 do not apply to the Property that is the subject of this technical report as this is not an advanced property.

## 23 ADJACENT PROPERTIES

Minera La Parreña, a subsidiary of Fresnillo plc, retains concessions of 2,652.8 ha, which are surrounded by the concessions staked by Riverside Resources Inc. and undertook a drill program sometime in the recent past. The program was between Jesus Maria mine area and El Capitan area (Figure 36) along the Gully Fault. The exact details of this exploration program are unknown. All that is known is that Riverside Resources Inc. workers identified several drill collars.

Figure 36: Adjacent Property Drilling



## 24 OTHER RELEVANT DATA AND INFORMATION

The Authors are not aware of any additional relevant data, or information not addressed in this report, which could have an impact on the results of the resource estimate, or the conclusions expressed herein.

## 25 INTERPRETATION AND CONCLUSIONS

In summary, drilling to date on the Peñoles Project has defined significant intervals of near-surface, silver-gold mineralization at Jesus Maria, and defined wide intervals of near-surface gold-silver mineralization at El Capitan that could potentially be amenable to open-pit extraction methods.

In the authors' opinions, the Peñoles Project has sufficient merit to warrant further exploration work. To date, the limits of the mineralized zones remain "open" in some areas and there is potential to increase the resources with additional drilling both along strike and at depth at El Capitan and Jesus Maria. There is also potential for the discovery of additional mineralized zones in other areas of the Peñoles property.

There are three features that control the epithermal mineralization on the Peñoles property. It is unclear which feature is most influential, but it is clear that all three play a part. First, structurally controlled conduit pathways for hydrothermal fluids mark the vein emplacement in the Jesus Maria area (Daniels, 2011; Lambeck, 2014). Second, the Jesus Maria area has carbonate-rich sedimentary rock horizons, which have provided a buffering of the acidic hydrothermal fluids, and show hornfels skarn affinities; this might extend mineralization laterally along bedding planes (Myers et al. 2014). Lastly, the angular unconformity surface between the sedimentary rocks and the overlying UVS rhyolites at El Capitan, which is a more passive fluid flow conduit, are similar to the mineralization controls identified at La Preciosa silver-gold deposit (Whiting 2008; Whiting 2013) and La Pitarrilla silver-gold deposit (McCrea 2006; Boychuck et al. 2012).

According to Myers et al. (2014), the 2013 and 2014 drill programs partially tested a 750 m long portion of the mineralization in the Jesus Maria Silver Zone. Two types of mineralization were intersected in this drilling. One mineralization style is a gold-silver zone, possibly controlled by a north-northeast-trending porphyritic monzonitic dike, or a district-scale, east-northeast-trending fault zone. The other mineralization style hosts gold-silver-zinc-lead and occurs as skarn or replacement-type zones in the carbonate-rich beds of the Indidura Formation. The skarn/replacement zones are up to 30 m wide, true width in drill holes, and have been tested as deep as 160 m from the surface. The same zone outcrops at the surface giving a down-dip length of 200 m. This zone is expected to continue at depth. The base and precious metal target type and the gold-silver zone have been minimally tested along strike and remain open to depth and to the east and west. Other carbonate-rich beds occur in this portion of the Indidura Formation and represent very favourable and, currently, untested targets.

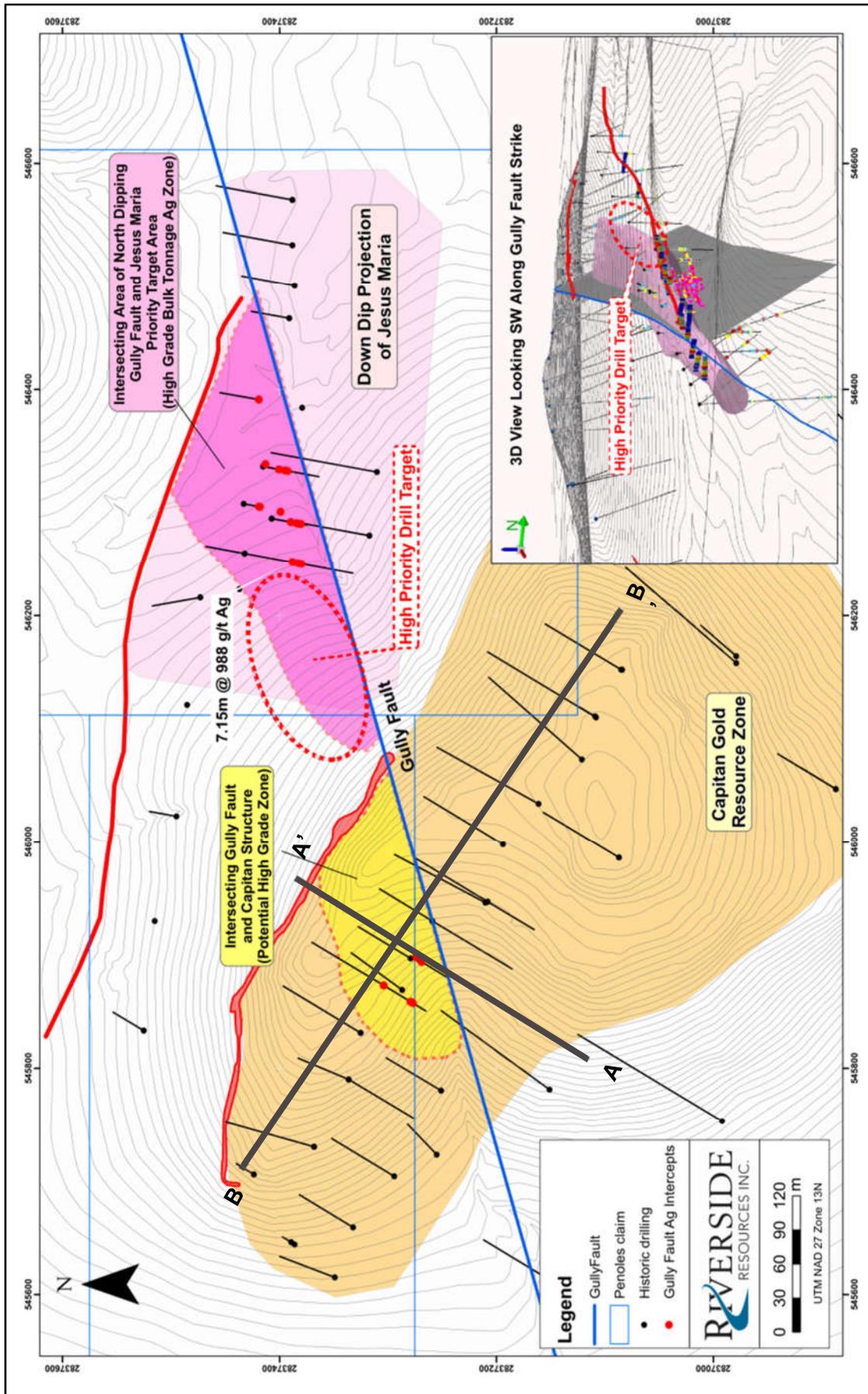
Recent work completed by Lex Lambeck has identified a NE – SW trending fault that intersects the sub E-W Jesus Maria vein and the sub E-W Capitan vein (**Error! Reference source not found.**).

The high grade disseminated mineralization associated with these intersections suggests that the Gully Fault is a conduit and potential driver of mineralizing fluid for these historic deposits.

The Gully Fault forms a gully that is mostly float covered; however, clear zones of oxidation and altered porphyry intrusions and noted in outcropping areas. Results from field mapping returned strike and dip data that appears to be correlated with the high grade mineralized intercept in hole JM-DDH-14-24 (7.15m @ 988 g/t Ag, 1.24 g/t Au), which further validates the importance of the authors recommendations for drill testing between the current western limit of the Jesus Maria Silver Zone and the El Capitan Gold Zone (Whiting, Sim, 2015). High grade mineralization at Jesus Maria and El Capitan appears to be associated with zones of increased silicification and suggests a strong down-dip potential for future drill holes. Drill targets are suggested 40 – 50m down dip from current Jesus Maria high grade intersections in addition to step testing along strike of the Gully Fault to the northeast and southwest 50m from hole JM-DDH-14-24.

The Gully Fault strike has also been mapped across the extent of the project and appears to be associated with a recent drilling campaign by Minera Peñoles, in addition to intersections at San Rafael that could suggest further mineralization potential in the historic mine (Figure 36). Riverside Resources Inc. drill holes intersect a similar porphyry unit at San Rafael that is observed in Gully Fault outcrop at El Capitan.

Figure 37: Gully Fault interpretation and targeting including 3D wireframing (2018)

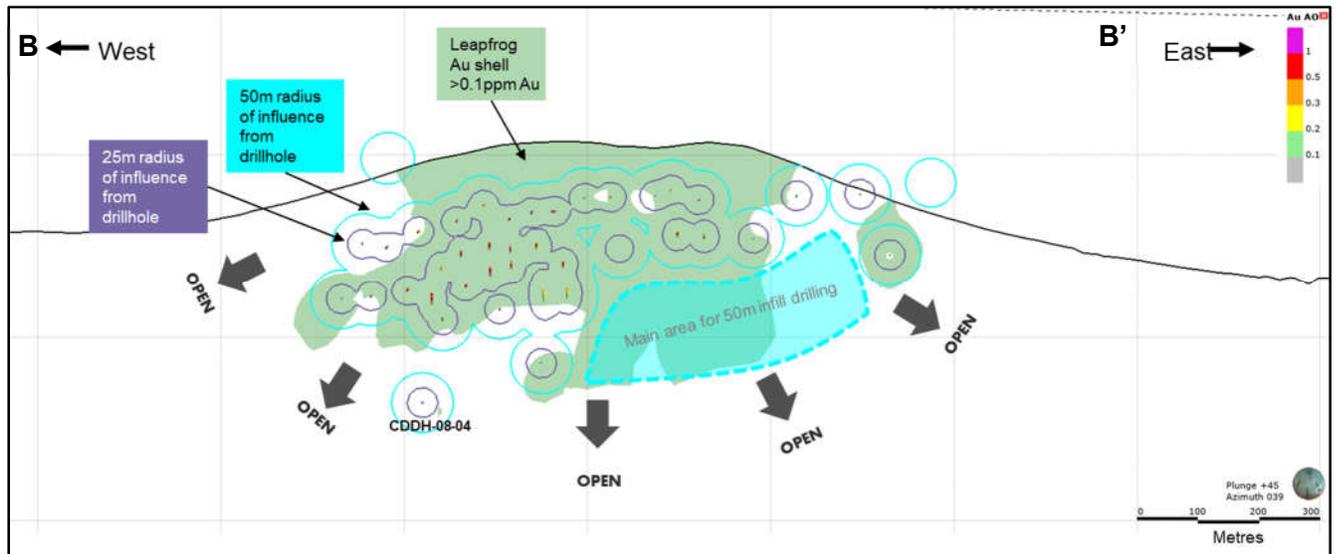


## 26 RECOMMENDATIONS

It is recommended that Capitan Mining Inc. complete a trenching program and 5,500 m of drilling to test the continuity and further extensions of the Jesus Maria silver deposit. The next stage of drilling should also include step-out holes drilled between the current western limit of the Jesus Maria Silver Zone and the El Capitan Gold Zone (Gully Fault target) to determine whether the two zones merge into a single mineralized zone. It is also recommended to drill the 'wedge' between the north dipping Gully Fault and the South dipping Jesus Maria structure.

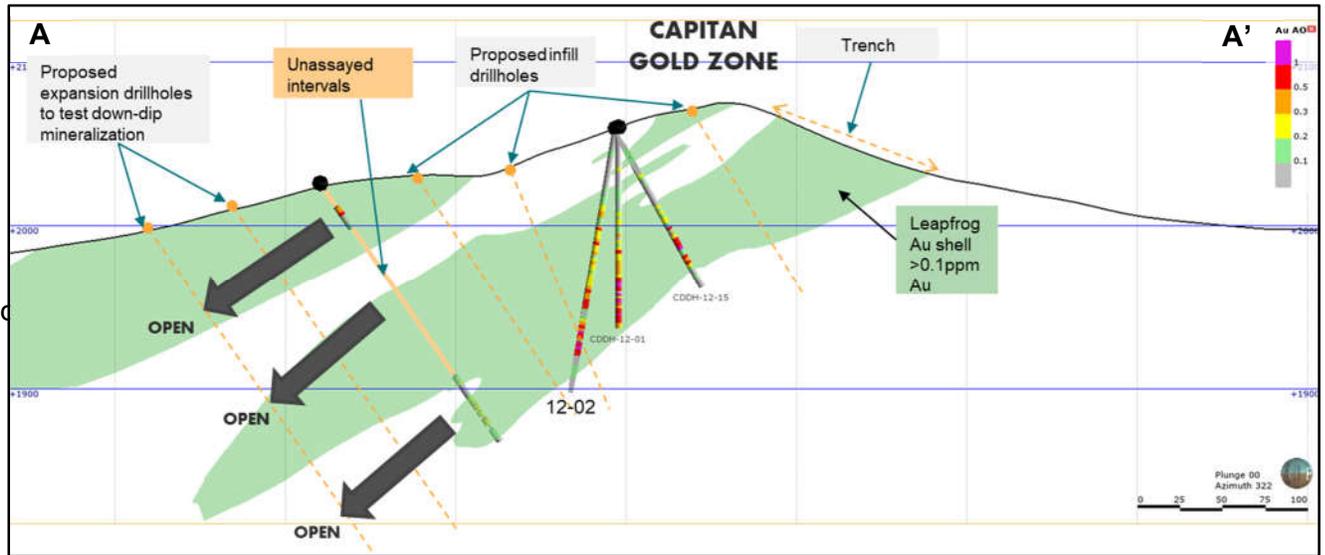
It is also recommended that Capitan Mining Inc. conduct additional metallurgical test work on both the Jesus Maria and El Capitan mineralized zones. This test work involves a 2,000 m drill program specifically for metallurgical sampling. On completion of the planned drill program and metallurgical test work, the results could be used to calculate updated resource estimates and, if warranted, proceed to PEA-level assessments for both the Jesus Maria and El Capitan deposits.

Figure 38: Long section of the Capitan zone looking north



The long section is oriented with a plunge of +45 towards and azimuth of 039, perpendicular to the attitude of the mineralized zone. The long section shows the Leapfrog >0.1ppm Au shell, intersection of drill holes and radius of influence of 25- and 50-m around each drill hole to show for areas of gaps and potential for continuity of mineralization. Note zones for infill drilling, as well as for testing extensions downdip and on strike (Source: Riverside Resources Inc., 2019).

Figure 39: Cross section of El Capitán zone looking west.



The cross section has a strike of 045 and shows the Leapfrog >0.1ppm Au shell. The section shows three different areas of potential: 1) 50m infill drilling to test continuity of mineralization and improve resource classification; 2) Down-dip drilling to test for expansion of the mineralization to the south; and 3) Assaying of previously unassayed drill intervals that could identify new mineralized zones. While these intervals were originally not assayed for saving costs, they could still be favorable for continuity of mineralization (Source: Riverside Resources Inc., 2019).

There are no known factors related to environmental, permitting, legal, title, taxation, socio-economic, marketing or political issues which could materially affect the mineral resource. It is reasonable to expect that a majority of mineral resources in the Inferred category will be upgraded to Indicated or Measured mineral resources with additional exploration.

The total cost of the proposed exploration program, including applicable permitting costs and concession taxes payable up to December 31, 2020, is estimated at CDN\$2,255,000 see Table 34.

Table 34: Proposed Exploration Program and further work

Item	Cost (CDN\$)
<b>PHASE 1 EXPLORATION PROGRAM</b>	
Concession taxes	\$ 35,000
Environmental permitting (IP for SEMARNAT)	\$ 40,000
Geological work and mapping	\$ 40,000
Drilling in Capitán, Jesus María and Gully Fault zones 1,500m	\$ 300,000
Trenching and sampling	\$ 50,000
Assays for 1,500m not previously assayed	\$ 35,000
<b>TOTAL PHASE 1</b>	<b>\$ 500,000</b>

Phase two contingent on the results of phase one.

Item	Cost (CDN\$)
<b>PHASE 2 EXPLORATION PROGRAM</b>	
Infill Drilling (5,000 m) (Including 50m infills, down-dip and on strike extensions)	\$ 1,000,000
Drilling for metallurgical tests (2,000m)	\$ 450,000
Metallurgical testing	\$ 80,000
Initial Water Resource Assessment	\$ 50,000
Site Operations	\$ 50,000
Access and Reclamation	\$ 25,000
<b>OTHER EXPLORATION WORK</b>	
Further mapping sampling and geological studies of surrounding prospective areas	\$ 100,000
<b>TOTAL PHASE 2</b>	<b>\$ 1,755,000</b>
<b>Total</b>	<b>\$ 2,255,000</b>

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## 28 CERTIFICATE OF AUTHORS

I, Derrick Strickland, do hereby certify as follows:

I am a consulting geologist at 1251 Cardero Street, Vancouver, B.C.

**This certificate applies to the technical report entitled “NI 43-101 Technical Report on Peñoles Gold-Silver Project Durango Mexico At 104° 31’ 45” Longitude and 25° 39’ 01” with an effective date of January 12, 2020.**

I am a graduate of Concordia University of Montreal, Quebec, with a B.Sc. in Geology, 1993. I am a Practicing Member in good standing of the Engineers and Geoscientist, British Columbia, license number 278779, since 2003. I have been practicing my profession continuously since 1993 and have been working in mineral exploration since 1986 in gold, precious, base metal, and coal mineral exploration, throughout Canada, United States, China, Mongolia, South America, South East Asia, Ireland, West Africa, Papua New Guinea and Pakistan.

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional organization (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

I visited the Peñoles Project on December 22, 2019.

I am co-author and responsible for sections 1 to 13 and 23 to 27 of the report entitled “ NI 43-101 Technical Report on Peñoles Gold-Silver Project. The author relied on a legal opinion with respect to mineral title dated January 3, 2020 written by Alberto M. Vazquez of VHG Servicios Legales, S.C with address at . Av. Paseo de las Palmas 755, Lomas de Chapultepec, Miguel Hidalgo, 11000 Ciudad de México, CDMX, Mexico for Rios de Suerte, S.A. de C.V.

I am independent of Capitan Mining Inc. and Riverside Resources Inc. in applying the tests in section 1.5 of National Instrument 43-101. For greater clarity, I do not hold, nor do I expect to receive, any securities of any other interest in any corporate entity, private or public, with interests in the Peñoles Property. The Peñoles Project that is the subject of this report, nor do I have any business relationship with any such entity apart from a professional consulting relationship with Company and Peñoles Property.

To the best of my knowledge, I have no prior involvement with the Property that is the subject of the Technical Report.

I have read National Instrument 43-101, Form 43-101F1, and this technical report and this report has been prepared in compliance with the Instrument.

As of the effective date of this technical report I am not aware of any information or omission of such information that would make this Technical Report misleading. This Technical Report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

The NI 43-101 Technical Report on Peñoles Gold-Silver Project Durango Mexico at 104° 31’ 45” Longitude and 25° 39’ 01” technical report with effective date January 12<sup>th</sup>, 2020 is signed

*“Original Signed and Sealed”*

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On this day January 12<sup>th</sup>, 2020  
Derrick Strickland P. Geo.

**Robert Sim, P. Geo., SIM Geological Inc.**

I, Robert Sim, P. Geo., do hereby certify that:

1. I am an independent consultant of:  
  
SIM Geological Inc.  
508 – 1950 Robson St  
Vancouver, British Columbia, Canada V6G 1E8
2. I graduated from Lakehead University with an Honours Bachelor of Science (Geology) in 1984.
3. I am a member, in good standing, of the Engineers and Geoscientists of British Columbia, License Number 24076.
4. I have practiced my profession continuously for 35 years and have been involved in mineral exploration, mine site geology and operations, mineral resource and reserve estimations and feasibility studies on numerous underground and open pit base metal and gold deposits in Canada, the United States, Central and South America, Europe, Asia, Africa and Australia.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
6. I am a co-author of the technical report titled *NI 43-101 Technical Report on the Penoles Gold-Silver Project, Durango, Mexico*, dated January 12, 2020, with an effective date of January 12, 2020 (the Technical Report), and accept professional responsibility for Section 14. I visited the property on June 12, 2012 and again on May 8, 2014.
7. I have had prior involvement with the Property that is the subject of the Technical Report. I was a co-author of the technical report titled *NI 43-101 Technical Report, Mineral Resource Estimates for the El Capitan & Jesus Maria deposits, Peñoles Gold-Silver Project, Durango State, Mexico*, dated April 16, 2015, with an effective date of March 2, 2015.
8. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. I am independent of Capitan Mining Inc. and Riverside Resources Inc. applying all of the tests in Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 12<sup>th</sup> day of January, 2020.

*“Original Signed and Sealed”*

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Robert Sim, P. Geo.